



Product Data

38ARZ007-012

38ARS012

38ARD012-024

38AKS014-024

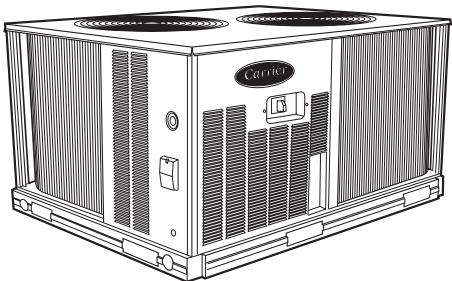
with 40RM007-028

Commercial Air-Cooled

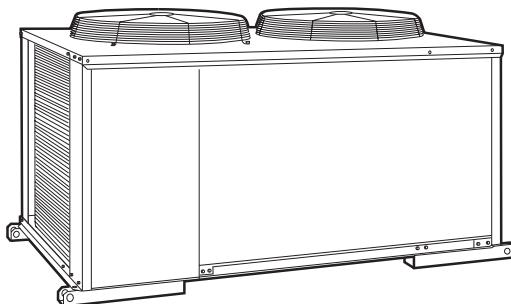
Split Systems

50 Hz

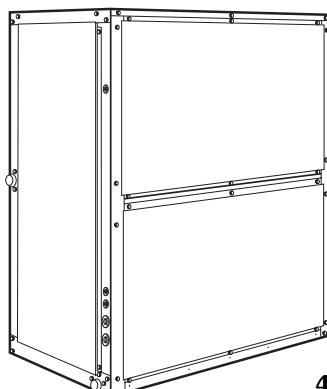
19.0 to 64.3 kW (5.3 to 20 Tons)



38ARZ007-012
38ARS012
38ARD012



38AKS014-024
38ARD024



40RM007-012

Features/Benefits

These dependable split systems match Carrier's indoor-air handlers and direct-expansion coils with outdoor condensing units for a wide selection of commercial cooling solutions.

Constructed for long life

The 38ARZ (single circuit, scroll compressor), 38ARS (single circuit semi-hermetic compressor), 38ARD (dual circuit, scroll compressor) and 38AKS (single circuit semi-hermetic compressor) models are designed and built to last. The copper tube-aluminum fin outdoor coil construction provides years of trouble-free operation. Where conditions require, a range of *Enviro-Shield™* coil protection options are available. Cabinets are constructed of prepainted galvanized steel, delivering unparalleled protection from the environment. Inside and outside surfaces are protected to ensure long life, good looks, and reliable operation. Safety controls are used for enhanced system protection and reliability.

Factory-installed options (FIOPs)

Factory-installed options (FIOPs) allow units to be installed in less time, thereby reducing installed cost. FIOPs include:

- low ambient controls
- non-fused disconnect
- *Enviro-Shield* coil protection

Efficient operation

Building owners will appreciate the high unit EERs (Energy Efficiency Ratios) offered by the 38AR and 38AKS units. These units provide greater efficiency than similar units



in the marketplace, which translates into year-round operating savings.

Controls for performance dependability

The 38AR and 38AKS condensing units offer the building owner operating controls and components designed for performance dependability. The highly efficient hermetic and semi-hermetic compressors are engineered for long life and durability. The compressors include overload protection and vibration isolation for enhancement of quiet operation. The high-pressure switch protects the entire refrigeration system from abnormally high operating pressures. A low-pressure switch protects the system from loss of charge. These units also include anti-short-cycling protection which helps to protect the units against compressor failure.

The 38ARD012-024 units feature 2 compressors and 2 refrigerant circuits that provide continuous air conditioning and design flexibility.

All units include a crankcase heater to eliminate liquid slugging at start-up. Units with semi-hermetic compressors are also equipped with an oil-level sight glass.

Latest safety standards for 38AR and 38AKS units are assured through UL, Canada approvals.

Innovative Carrier 40RM packaged air handlers are custom matched to 38AR and 38AKS condensing units

The 40RM Series has excellent fan performance, efficient direct-expansion (DX) coils, a unique combination of indoor-air quality features, and easy installation. Its versatility and state-of-the-art features help to ensure that your split system provides economical performance now and in the future.

Indoor-air quality (IAQ) features —

The unique combination of IAQ features in the 40RM Series air handlers help to ensure that only clean, fresh, conditioned air is delivered to the occupied space.

Direct-expansion (DX) cooling coils prevent the build-up of humidity in the room, even during part-load conditions. Unit sizes of 10 tons and above feature dual-circuit coils for improved temperature control.

Standard 2-in. disposable filters remove dust and airborne particles from the occupied space for cleaner air.

The pitched, non-corroding drain pan can be adjusted for a right- or left-hand connection to suit many applications and provide positive drainage and to prevent standing condensate.

The 40RM accessory economizer can provide ventilation air to improve indoor-air quality by using demand control ventilation. When used in conjunction with Carrier Comfort System or PremierLink™ controls and CO₂ sensors, the economizer admits fresh outdoor air to replace stale, recirculated indoor air.

Economy — The 40RM Series packaged air handlers have low initial costs, and they continue to save money by providing reduced installation expense and energy-efficient performance.

Quick installation is ensured by the multipoise design. Units can be installed in either the horizontal or vertical configuration without modifications. Fan motors and contactors are prewired and thermostatic expansion valves (TXVs) are factory-installed on all 40RM models.

High efficiency, precision-balanced fans minimize air turbulence, surging, and unbalanced operation, cutting operation expenses.

The economizer accessory precisely controls the blend of outdoor air and room air to achieve comfort levels. When the outside air enthalpy is suitable, outside air dampers can fully open to provide "free" cooling without energizing mechanical cooling.

Rugged dependability — The 40RM series units are made to last. The die-formed galvanized steel panels ensure structural integrity under all operating conditions. Galvanized steel fan housings are securely mounted to a die-formed galvanized steel fan deck.

Rugged pillow-block bearings (40RM014-034) are securely fastened to the solid steel fan shaft with split collets and clamp locking devices. Smaller unit sizes have spider-type bearings.

Coil flexibility — Model 40RM direct-expansion coils have galvanized steel casings; inlet and outlet connections are on the same end. The coils are designed for use with Refrigerant 22 and have 3/8-in. diameter copper tubes mechanically bonded to aluminum sine-wave fins. The coils include matched, factory-installed thermostatic expansion valves (TXVs) with matching distributor nozzles.

Easier installation and service — The multipoise design and component layout help you to get the unit installed and running quickly. Units can be converted from horizontal to vertical operation by simply repositioning the unit. Drain pan connections are duplicated on both sides of the unit. The filters, motor, drive, TXVs, and coil connections are all easily accessed by removing a single side panel.

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38AR007-012

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40RM007-028

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Capacity ratings



| CONDENSING UNIT | AIR HANDLER/ INDOOR COIL | SYSTEM GROSS CAPACITY | | CONDENSING UNIT ONLY GROSS CAPACITY | |
|-----------------|--------------------------|-----------------------|---------|-------------------------------------|---------|
| | | kW* | Btuh† | kW** | Btuh†† |
| 38ARZ007 | 40RM007 | 18.4 | 62,200 | 18.0 | 60,300 |
| | 40RM007H | 19.1 | 64,400 | | |
| | 40RM008 | 19.0 | 64,300 | | |
| | 40RM008H | 19.9 | 69,700 | | |
| 38ARZ008 | 40RM007 | 23.3 | 78,700 | 25.0 | 83,900 |
| | 40RM007H | 24.5 | 82,700 | | |
| | 40RM008 | 24.0 | 81,400 | | |
| | 40RM008H | 25.3 | 85,600 | | |
| | 40RM012 | 25.4 | 86,100 | | |
| | 40RM012H | 26.9 | 91,300 | | |
| 38ARZ012 | 40RM008 | 30.1 | 102,000 | 33.2 | 112,000 |
| | 40RM008H | 31.9 | 108,000 | | |
| | 40RM012 | 31.9 | 108,000 | | |
| | 40RM012H | 33.6 | 114,100 | | |
| | 40RM014 | 33.4 | 113,000 | | |
| | 40RM014H | 34.9 | 118,200 | | |
| 38ARS012 | 40RM008 | 28.7 | 97,300 | 30.9 | 104,000 |
| | 40RM008H | 30.4 | 103,100 | | |
| | 40RM012 | 30.7 | 104,000 | | |
| | 40RM012H | 32.1 | 108,300 | | |
| | 40RM014 | 32.2 | 109,000 | | |
| | 40RM014H | 32.2 | 109,000 | | |
| 38ARD012 | 40RM012 | 30.7 | 104,000 | 31.0 | 104,000 |
| | 40RM012H | 32.1 | 109,000 | | |
| | 40RM014 | 31.9 | 108,000 | | |
| | 40RM014H | 33.4 | 113,000 | | |
| 38AKS014 | 40RM012 | 35.4 | 120,000 | 37.8 | 127,000 |
| | 40RM012H | 37.1 | 125,000 | | |
| | 40RM014 | 37.5 | 127,000 | | |
| | 40RM014H | 38.8 | 131,000 | | |
| | 40RM016 | 39.4 | 134,000 | | |
| | 40RM016H | 39.9 | 135,000 | | |
| 38ARD014 | 40RM012 | 36.6 | 123,000 | 38.9 | 130,000 |
| | 40RM012H | 38.5 | 130,000 | | |
| | 40RM014 | 38.5 | 130,000 | | |
| | 40RM014H | 40.6 | 137,000 | | |
| | 40RM016 | 40.5 | 137,000 | | |
| | 40RM016H | 42.8 | 145,000 | | |
| 38AKS016 | 40RM014 | 46.4 | 157,000 | 50.2 | 169,000 |
| | 40RM014H | 49.0 | 166,000 | | |
| | 40RM016 | 49.2 | 167,000 | | |
| | 40RM016H | 49.8 | 169,000 | | |
| | 40RM024 | 52.1 | 176,000 | | |
| | 40RM024H | 54.8 | 186,000 | | |
| 38ARD016 | 40RM014 | 46.9 | 159,000 | 50.3 | 169,000 |
| | 40RM014H | 49.3 | 167,000 | | |
| | 40RM016 | 49.7 | 168,000 | | |
| | 40RM016H | 52.5 | 178,000 | | |
| | 40RM024 | 52.4 | 177,000 | | |
| | 40RM024H | 55.3 | 187,000 | | |
| 38AKS024 | 40RM016 | 58.2 | 197,000 | 62.5 | 210,000 |
| | 40RM016H | 58.9 | 200,000 | | |
| | 40RM024 | 62.1 | 210,000 | | |
| | 40RM024H | 65.3 | 221,000 | | |
| | 40RM028 | 64.7 | 219,000 | | |
| | 40RM028H | 67.9 | 230,000 | | |
| 38ARD024 | 40RM016 | 59.8 | 203,000 | 64.6 | 218,000 |
| | 40RM016H | 60.5 | 205,000 | | |
| | 40RM024 | 63.4 | 215,000 | | |
| | 40RM024H | 66.1 | 224,000 | | |
| | 40RM028 | 65.9 | 223,000 | | |
| | 40RM028H | 68.8 | 233,000 | | |

LEGEND

db — Dry Bulb
wb — Wet Bulb
SST — Saturated Suction Temperature

*System gross capacities are rated according to indoor unit airflow, 35 C air temperature entering condenser, and 20 C wb air temperature entering evaporator.

†System gross capacities are rated according to indoor unit airflow, 95 F air temperature entering condenser, and 67 F wb air temperature entering evaporator.

**Condensing unit gross capacity based on 36 C air temperature entering condenser and 8 C SST.

††Condensing unit gross capacity based on 95 F air temperature entering condenser and 45 F SST.

SOUND LEVELS, dB — 38AR, AKS UNITS

| UNIT 38 | SOUND RATING (60 Hz) dB (A) | OCTAVE BANDS | | | | | | | |
|---------|-----------------------------|--------------|------|------|------|------|------|------|------|
| | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| ARZ | 007 | 80.0 | 71.5 | 76.8 | 75.3 | 74.0 | 73.9 | 74.1 | 73.5 |
| | 008 | 84.0 | 84.1 | 84.5 | 80.4 | 78.6 | 77.2 | 76.9 | 78.8 |
| | 012 | 85.0 | 88.7 | 85.4 | 81.7 | 80.9 | 82.1 | 76.2 | 73.6 |
| ARS | 012 | 83.0 | 78.0 | 82.6 | 84.9 | 78.6 | 79.5 | 72.1 | 69.9 |
| AKS | 014 | 86.2 | — | 93.0 | 86.0 | 83.0 | 80.0 | 78.0 | 73.0 |
| | 016 | 86.2 | — | 93.0 | 86.0 | 83.0 | 80.0 | 78.0 | 73.0 |
| | 024 | 90.0 | 83.5 | 81.5 | 88.5 | 86.5 | 85.5 | 82.5 | 76.5 |
| ARD | 012 | 85.0 | 87.3 | 84.1 | 85.9 | 79.2 | 77.6 | 75.3 | 75.0 |
| | 014 | 86.9 | — | 90.9 | 86.1 | 83.1 | 84.0 | 73.5 | 71.7 |
| | 016 | 87.5 | — | 90.9 | 86.1 | 83.4 | 84.5 | 76.6 | 73.2 |
| | 024 | 88.0 | — | 90.9 | 86.1 | 83.8 | 84.5 | 79.2 | 74.3 |
| | | | | | | | | | 65.5 |

ESTIMATED SOUND POWER LEVELS (Lw) — 40RM007-034

| UNIT | CFM | dB(A) | OCTAVE BAND CENTER FREQUENCY | | | | | | |
|---------|-------|-------|------------------------------|-------|------|------|------|------|------|
| | | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| 40RM007 | 2400 | 86.3 | 93.2 | 89.2 | 85.2 | 84.2 | 80.2 | 78.2 | 74.2 |
| 40RM008 | 3000 | 88.3 | 95.3 | 91.3 | 87.3 | 86.3 | 82.3 | 80.3 | 76.3 |
| 40RM012 | 4000 | 91.6 | 98.6 | 94.6 | 90.6 | 89.6 | 85.6 | 83.6 | 79.6 |
| 40RM014 | 5000 | 91.1 | 97.3 | 93.3 | 89.3 | 90.3 | 84.3 | 82.3 | 78.3 |
| 40RM016 | 6000 | 92.7 | 98.9 | 94.9 | 90.9 | 91.9 | 85.9 | 83.9 | 79.9 |
| 40RM024 | 8000 | 96.4 | 102.6 | 98.6 | 94.6 | 95.6 | 89.6 | 87.6 | 83.6 |
| 40RM028 | 10000 | 96.2 | 102.5 | 98.5 | 94.5 | 95.5 | 89.5 | 87.5 | 83.5 |
| 40RM034 | 12000 | 98.5 | 104.7 | 100.7 | 96.7 | 97.7 | 91.7 | 89.7 | 85.7 |

NOTE: Since this data is calculated, these sound power levels may be different than the actual sound power levels. The acoustic center of the unit is located at geometric center of the unit.

Options and accessories



38AR, 38AKS options

Enviro-Shield™ condenser options offer pre-coated coils that provide protection in mild coastal environments. Several options are available to match coil protection to site conditions for optimum durability. See table below. Consult your Carrier representative for further information.

E-coated aluminum-fin coils have a flexible and durable epoxy coating uniformly applied to all coil surfaces. Unlike brittle phenolic dip and bake coatings, E-coating provides superior protection with unmatched flexibility, edge coverage, metal adhesion, thermal performance, and most importantly, corrosion resistance.

E-coated coils provide this protection since all coil surfaces are completely encapsulated from environmental contamination. This coating is especially suitable in industrial environments.

E-coated copper-fin coils (size 014-024 only) have the same flexible and durable epoxy coating as E-coated aluminum-fin coils. However, this option combines the natural salt and environmental resistance of all-copper construction with high levels of corrosion protection. This coating is recommended in harsh combinations of coastal and industrial environments.

Pre-coated coils provide protection in mild coastal environments.

-20 F low-ambient temperature kit option (Motor-master® 38ARZ007-012, ARS012, 38ARD012-024) controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

Non-fused disconnect switch to remove power locally at the condensing unit. This switch also includes a power

lockout capability to protect the service person. This lockout switch saves the service person time and effort because there is no need to access a distant disconnect switch while servicing the unit.

38AR, 38AKS accessories

Electric unloader package (38ARS012, 38AKS014-024) includes hardware and solenoid valve to convert a pressure-operated unloader to electric unloading.

-20 F low-ambient temperature kit accessory (Motormaster) controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

Gage panel package provides a suction and a discharge pressure gage for the refrigerant circuit.

Hail guard package (38ARZ007-012, 38ARS012, 38ARD012) protects coils against damage from flying debris and hail.

Condenser coil grille package protects condensing unit coil from impact by large objects and vandalism.

Carrier's line of thermostats provide both programmable and non-programmable capability with the new **Debonair®** line of commercial programmable thermostats. The **Commercial Electronic** thermostats provide 7-day programmable capability for economical applications.

PremierLink™ Controller is a field retrofit split system control compatible with the Carrier Comfort Network (CCN) and other building automation systems (BAS). This control is designed to allow users the access and ability to change factory-defined settings thus expanding the function of the standard unit.

CONDENSER COIL OPTIONS

| COPPER-TUBE COILS WITH ENVIRO-SHIELD OPTION | ENVIRONMENT | | | | | |
|---|-------------|-----------------|---------------------|-------------------|------------|--------------------------------|
| | Standard | Mild Coastal | Moderate Coastal | Severe Coastal | Industrial | Combined Industrial Coastal |
| Al Fins (Standard Coils) | X | | | | | |
| Cu Fins | | | X | | | |
| Al Fins, E-Coated | | | | | X | |
| Cu Fins, E-Coated* | | | | X | | X |
| Al Fins, Pre-Coated | | X | | | | |

LEGEND

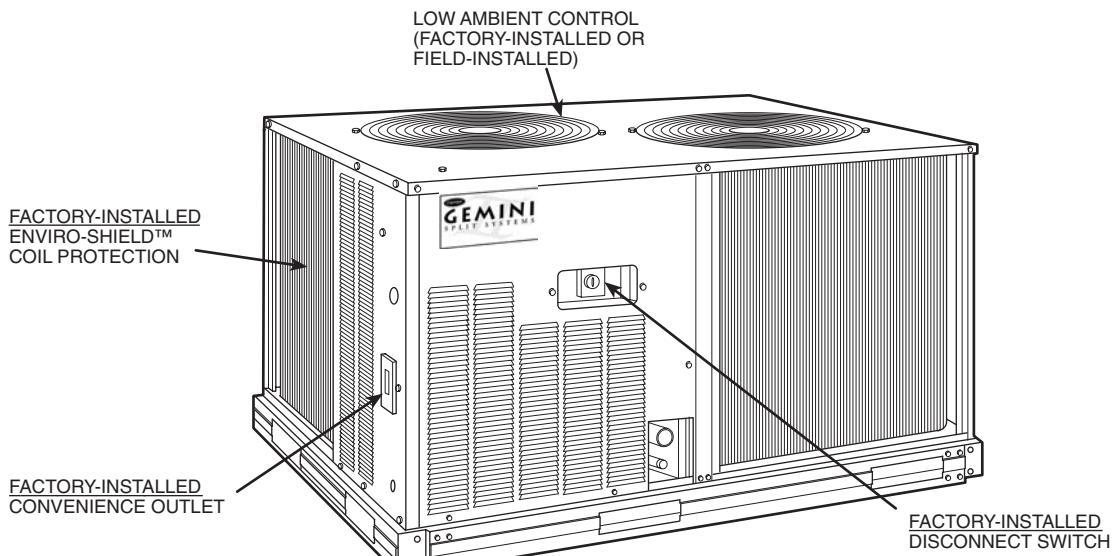
Al — Aluminum
Cu — Copper

*Option only available on unit sizes 014-024.

Options and accessories (cont)



38ARZ, ARS, ARD012



40RM options

Alternate fan motors and drives are available to provide the widest possible range of performance.

High-capacity 4-row evaporator coils are available to provide increased latent and sensible capacities.

Units constructed of prepainted steel are available from the factory for applications that require painted units. Unit color is American Sterling Gray.

40RM accessories

Two-row hot water coils have copper tubes mechanically bonded to aluminum plate fins. Coils have non-ferrous headers.

One-row steam coil has copper tube and aluminum fins. The Inner Distributing Tube (IDT) design provides uniform temperatures across the coil face. The IDT steam coils are especially suited to applications where sub-freezing air enters the unit.

Electric resistance heat coils have an open-wire design and are mounted in a rigid frame. Safety cutouts for high temperature conditions are standard.

Economizer (enthalpy controlled) provides ventilation air and provides "free" cooling if outside ambient temperature and humidity are suitable. The economizer can also be used in conjunction with Carrier Comfort System thermostats, PremierLink™ Controller and CO₂ sensors to help meet indoor air quality requirements.

Discharge plenum directs the air discharge directly into the occupied space; integral horizontal and vertical louvers enable redirection of airflow. Accessory is available unpainted or painted.

Return-air grille provides a protective barrier over the return-air opening and gives a finished appearance to units installed in the occupied space. Accessory is available unpainted or painted.

Subbase provides a stable, raised platform and room for condensate drain connection for floor-mounted units. Accessory is available unpainted or painted.

Overhead suspension package includes necessary brackets to support units in horizontal ceiling installations.

Condensate drain trap includes an overflow shutoff switch than can be wired to turn off the unit if the trap becomes plugged. Kit also includes a wire harness that can be connected to an alarm if desired. The transparent trap is designed for easy service and maintenance.

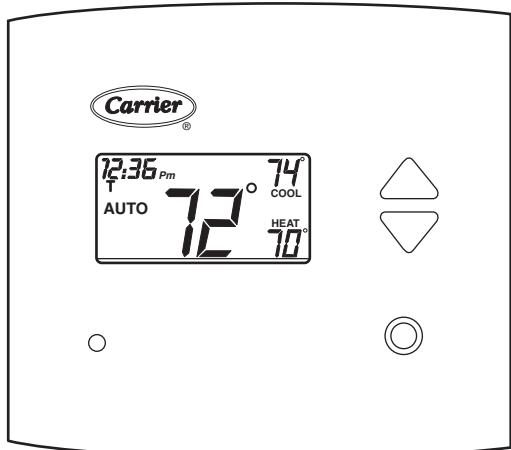
CO₂ sensors can be used in conjunction with the economizer accessory to help meet indoor air quality requirements. The sensor signals the economizer to open when the CO₂ level in the space exceeds the set point. A Carrier Comfort System programmable thermostat can also be used to override the sensor if the outside air temperature is too high or too low.

UV-C germicidal lamps kill mold and fungus, which may grow on evaporator coil and condensate pan surfaces. The use of UV-C germicidal lamps eliminates the foul odors that result from this growth of mold and fungus. It also provides a self-cleaning function for the evaporator coil and drain pan.

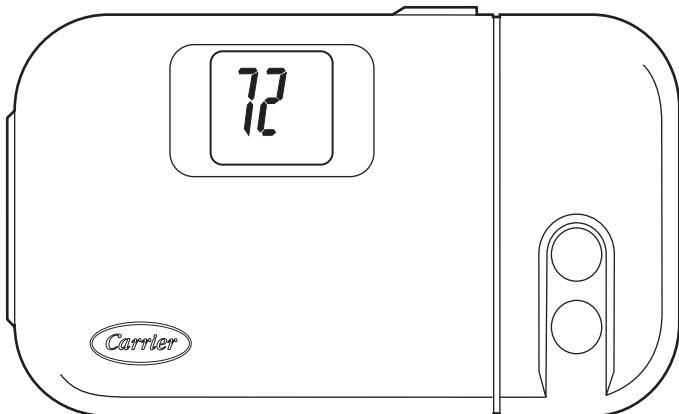


CARRIER CONTROLS

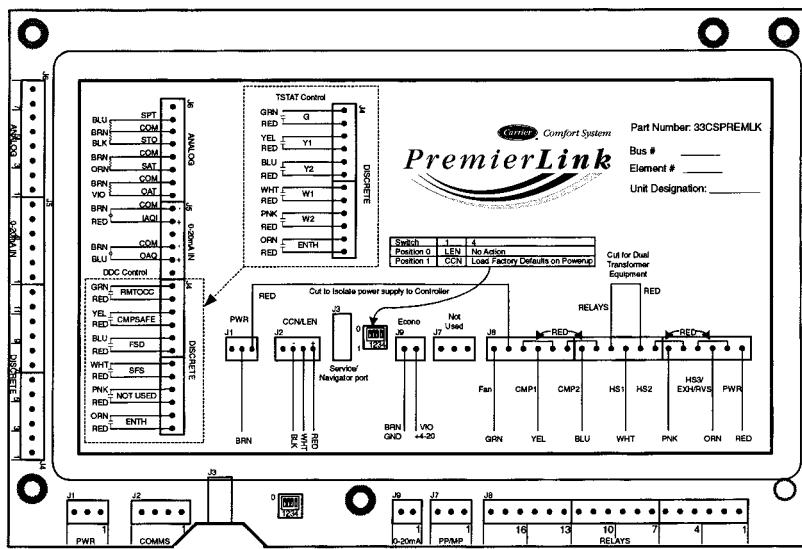
DEBONAIR® COMMERCIAL PROGRAMMABLE THERMOSTAT



COMMERCIAL ELECTRONIC THERMOSTAT



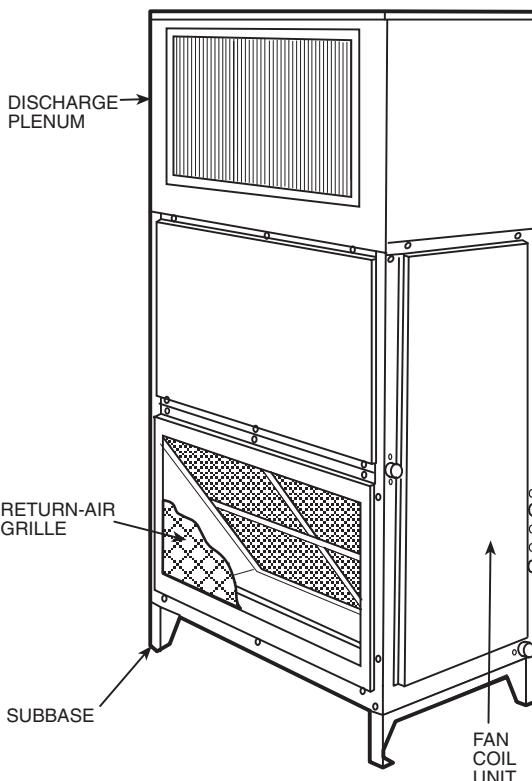
PREMIERLINK™ COMMUNICATING CONTROLS



Options and accessories (cont)



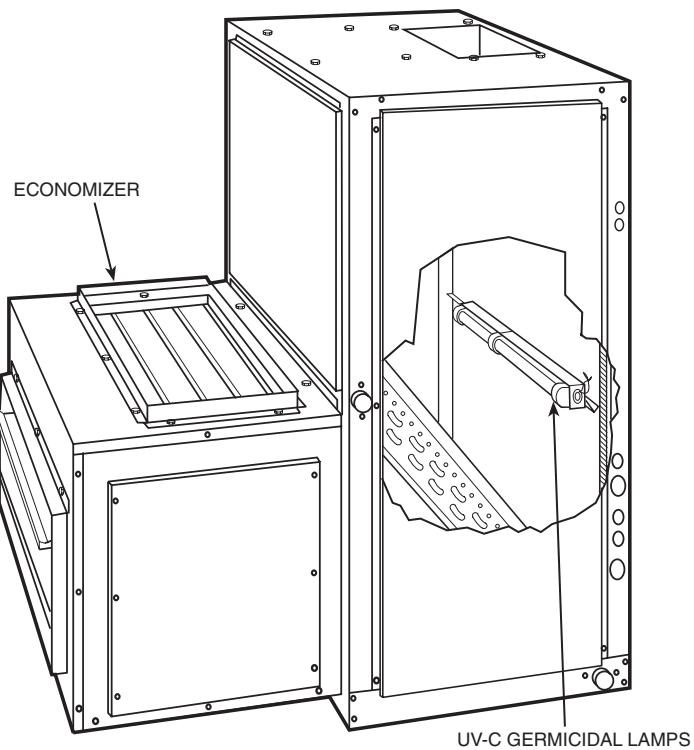
40RM WITH DISCHARGE PLENUM, RETURN GRILLE, AND SUBBASE



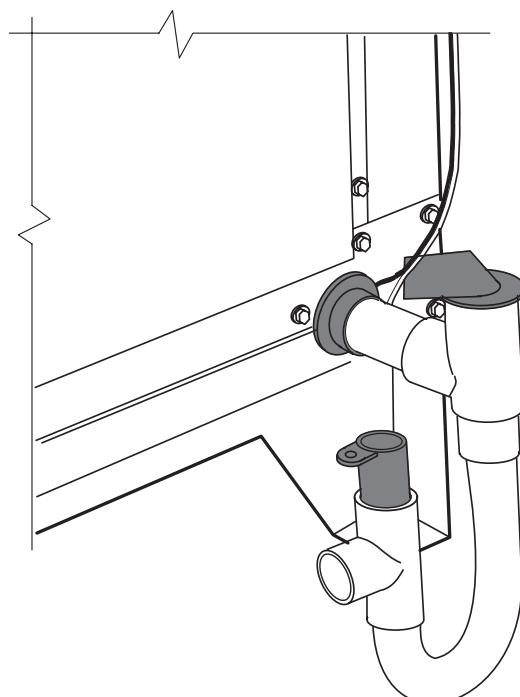
40RM WITH HOT WATER OR STEAM COIL



40RM WITH ECONOMIZER AND UV-C GERMICIDAL LAMPS



40RM WITH CONDENSATE TRAP



Selection procedure — SI



I Determine cooling load, evaporator-air temperature, and quantity.

Given:

| | |
|---------------------------|--------------------------|
| Total Cooling Capacity | |
| Required (TC) | 33.0 kW |
| Sensible Heat Capacity | |
| Required (SHC) | 24.0 kW |
| Compressor Type | Scroll |
| Temperature Air Entering | |
| Condenser (Edb) | 36 C |
| Temperature Air Entering | |
| Evaporator (db/wb) | 26.7 C db, 20 C wb |
| Evaporator Air Quantity | 1900 L/s |
| External Static Pressure | 50 Pa |
| Length of Interconnecting | |
| Refrigerant Piping | 6 m (Linear) |
| Power Supply (V-Ph-Hz) | 400-3-50 |

II Select condensing unit air-handler combination.

For this example, select a 38ARZ012 matched with a 40RM012 with high capacity 4-row coil. This 38ARZ012/40RM012 condensing unit air-handler combination provides 33.6 kW of total cooling capacity and 25.6 kW of sensible capacity at the given conditions. If other temperatures or airflow values are required, interpolate the values from the combination ratings.

III Determine sizes of liquid and suction lines.

Enter Refrigerant Piping Sizes table. The sizes shown are based on an equivalent length of pipe.

This equivalent length is equal to the linear length of pipe indicated at the top of each sizing column, plus a 50% allowance for fitting losses. (For a more accurate determination of actual equivalent length in place of using the estimated 50% value, refer to Carrier System Design Manual.) For this example, note in the linear length column that the proper pipe size is 1/2 in. for the liquid line and 1 3/8 in. for the suction line.

IV Determine fan r/s and kW.

At the Air Handler Fan Performance table enter at 40RM012 with high capacity coil at 1890 L/s (approx 1900 L/s) and move to the 50 Pa External Static Pressure (ESP) column. Note that the conditions require 12.31 r/s at 1.15 kW.

V Determine motor and drive.

Enter the Fan Motor Data tables and find the standard motor for 40RM012 unit rated at 2.16 kW. Since the kW required is 1.15, a standard motor satisfies the requirement and should be used.

Next, find the type of drive that satisfies the 12.31 r/s requirement in the Drive Data tables. For the 40RM012 unit, the Standard Drive table on shows a range of 10.1 to 13.1 r/s. Since the r/s required is 12.31, the standard drive satisfies the requirement and should be used. Select the standard motor and standard drive combination (option code GC or ED).

Selection procedure — English



I Determine cooling load, evaporator-air temperature, and quantity.

Given:

| | |
|---------------------------|------------------------|
| Total Cooling Capacity | |
| Required (TC) | 108,000 Btuh |
| Sensible Heat Capacity | |
| Required (SHC) | 76,500 Btuh |
| Compressor Type | Scroll |
| Temperature Air Entering | |
| Condenser (Edb) | 95 F |
| Temperature Air Entering | |
| Evaporator (db/wb) | 80 F db, 67 F wb |
| Evaporator Air Quantity | 3,000 cfm |
| External Static Pressure | 0.4 in. wg |
| Length of Interconnecting | |
| Refrigerant Piping | 25 ft (Linear) |
| Power Supply (V-Ph-Hz) | 400-3-50 |

II Select condensing unit air-handler combination.

For this example, select a 38ARZ012 matched with a 40RM012 with high capacity 4-row coil. This 38ARZ012/40RM012 condensing unit air-handler combination provides 110,200 Btuh of total cooling capacity and 79,400 Btuh of sensible capacity at the given conditions. If other temperatures or airflow values are required, interpolate the values from the combination ratings.

III Determine sizes of liquid and suction lines.

Enter Refrigerant Piping Sizes table. The sizes shown are based on an equivalent length of pipe.

This equivalent length is equal to the linear length of pipe indicated at the top of each sizing column, plus a 50% allowance for fitting losses. (For a more accurate determination of actual equivalent length in place of using the estimated 50% value, refer to Carrier System Design Manual.) For this example, note in the linear length column that the proper pipe size is 1/2 in. for the liquid line and 13/8 in. for the suction line.

IV Determine fan rpm and bhp.

At the Air Handler Fan Performance table enter at 40RM012 with high capacity coil at 3000 cfm and move to the 0.4 in. wg External Static Pressure (ESP) column. Note that the conditions require 670 rpm at 0.9 Bhp.

V Determine motor and drive.

Enter the Fan Motor Data tables and find the standard motor for 40RM012 unit rated at 2.9 Bhp. Since the Bhp required is 0.9, a standard motor satisfies the requirement and should be used.

Next, find the type of drive that satisfies the 670 rpm requirement in the Drive Data tables. For the 40RM012 unit, the Standard Drive table on shows an rpm range of 606 to 784 rpm. Since the rpm required is 670, the standard drive satisfies the requirement and should be used. Select the standard motor and standard drive combination (option code GC or ED).

Controls



Operating sequences

38ARZ007-012, 38ARS012 — At start-up, the thermostat calls for cooling. With all safety devices satisfied, the compressor contactor and fan contactor energize, causing the compressor and outdoor-fan motor to operate. Thermostat contacts energize, allowing the field-supplied and -installed indoor-fan contactor to function. A field-supplied and -installed liquid line valve also opens, allowing the system to function in Cooling mode. As cooling demand is satisfied, the thermostat contacts break, deenergizing the contactor and causing the system to shut off. The liquid line solenoid valve closes, minimizing the potential for refrigerant migration. The compressor does not restart until the thermostat again calls for cooling. The system is protected with a safety circuit so that the system will not start if a fault exists (i.e., high or low pressure fault). To reset the safety circuit, set the thermostat to eliminate the cooling demand, then return to original set point. This should be done only once, and if system shuts down due to the same fault, determine the problem before attempting to restart the system.

38AKS014-024 — When the first stage of cooling thermostat closes, the timer starts. After approximately 3 seconds, the timer activates the compressor and fan motor no. 1 contactors. When the liquid pressure builds to approximately 257 psig, fan motor no. 2 is energized.

When there is demand for additional cooling capacity, the second stage of the cooling thermostat closes, energizing a field-supplied liquid line solenoid (LLS) valve, which opens. This increases the suction pressure, causing the compressor to operate at higher capacity (compressor loads).

When the fan switch is set at AUTO, the indoor-air fan cycles with the compressor. When the switch is set at CONT, the indoor-air fan runs continuously.

At shutdown, the Time Guard II timer prevents the compressor from restarting for approximately 5 minutes.

In addition, an LLS valve wired in parallel with the compressor contactor coil shuts off the liquid line to prevent refrigerant migration back to the compressor during the off cycle.

38ARD012 — When the thermostat calls for stage one cooling at start-up, and all safety devices are satisfied, the compressor contactor 1 (C1) energizes causing compressor no. 1 and outdoor-fan motor no. 1 to start (the indoor-fan contactor should be wired to start at the same time as the compressor). The liquid line solenoid (LLS) valve will open when compressor no. 1 starts, allowing refrigerant to flow in the system.

When the thermostat calls for stage two cooling, compressor contactor no. 2 (C2) energizes causing compressor no. 2 and outdoor-fan motor no. 2 to start. As the cooling demand decreases, stage two on the thermostat opens, causing compressor no. 2 and outdoor-fan motor no. 2 to shut down. As the cooling continues to decrease, stage one of the thermostat opens causing compressor no. 1 and outdoor-fan motor no. 1 to shut down. The LLS valve for each compressor will close when the associated

compressor stops, minimizing the potential for refrigerant migration during the off cycle.

The indoor-fan motor will stop if the thermostat is set to AUTO and will continue to operate if the thermostat is set to CONT. Each compressor is protected with a Cycle-LOC™ device so that the compressor will not operate if there is a high-pressure fault, low pressure fault, or a compressor is off due to internal line break overcurrent/over temperature protection. To reset the Cycle-LOC device, set the thermostat higher to remove the cooling demand, then return to the original set point. This should be done only once. If the system shuts down with the same fault, the cause for the fault should be determined and corrected before the a Cycle-LOC device is reset again.

38ARD014-024 — At start-up, when the thermostat calls for first stage cooling and all safety devices are satisfied, the compressor contactor (C1) energizes causing compressor no. 1 and fan motor no. 1 to start. Fan motor no. 2 will start when the fan cycling pressure switch (FCPS) closes as discharge pressure builds (refer to physical data table for FCPS specifications). With the indoor-fan contactor wired to TB2-4 and TB2-9 contacts on the terminal block, the indoor-fan will also start with the compressor. The liquid line solenoid (LLS) valve will open when compressor no. 1 starts, allowing refrigerant to flow in the system.

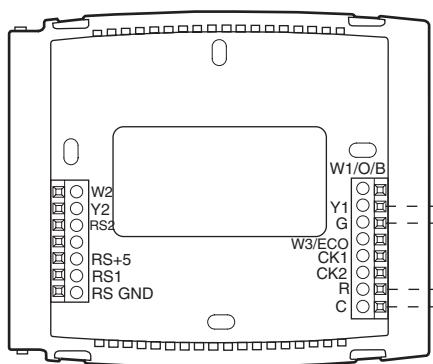
When the thermostat calls for stage two cooling, compressor contactor no. 2 (C2) energizes causing compressor no. 2 to start. As the cooling demand decreases, stage two on the thermostat opens, causing compressor no. 2 to shut down. As the cooling continues to decrease, stage one of the thermostat opens causing compressor no. 1 and outdoor-fan motor to shut down. The LLS valve for each compressor will close when the associated compressor stops, minimizing the potential for refrigerant migration during the off cycle.

The indoor-fan motor will stop if the thermostat is set to AUTO and will continue to operate if the thermostat is set on CONT. Each compressor is controlled by the thermostat so they will not start until there is a demand from the thermostat. Each compressor is protected with a Cycle-LOC device so that the compressor will not operate if there is a high-pressure fault, low-pressure fault, or compressor is off due to internal line break overcurrent/overtemperature protection. To reset the a Cycle-LOC device, set the thermostat higher to remove the cooling demand, then return to the original set point. This should be done only once. If the system shuts down with the same fault, the cause for the fault should be determined and corrected before the a Cycle-LOC device is reset again.

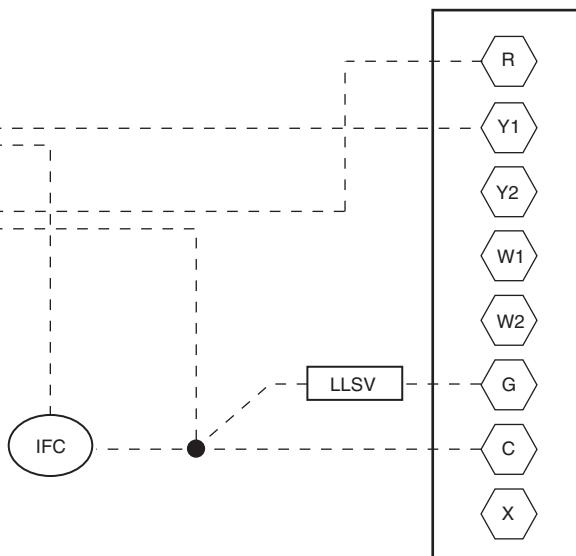
Typical control wiring



DEBONAIR® APPLICATIONS — 38ARZ, ARS



38ARZ,ARS
TERMINAL
BOARD (TB)



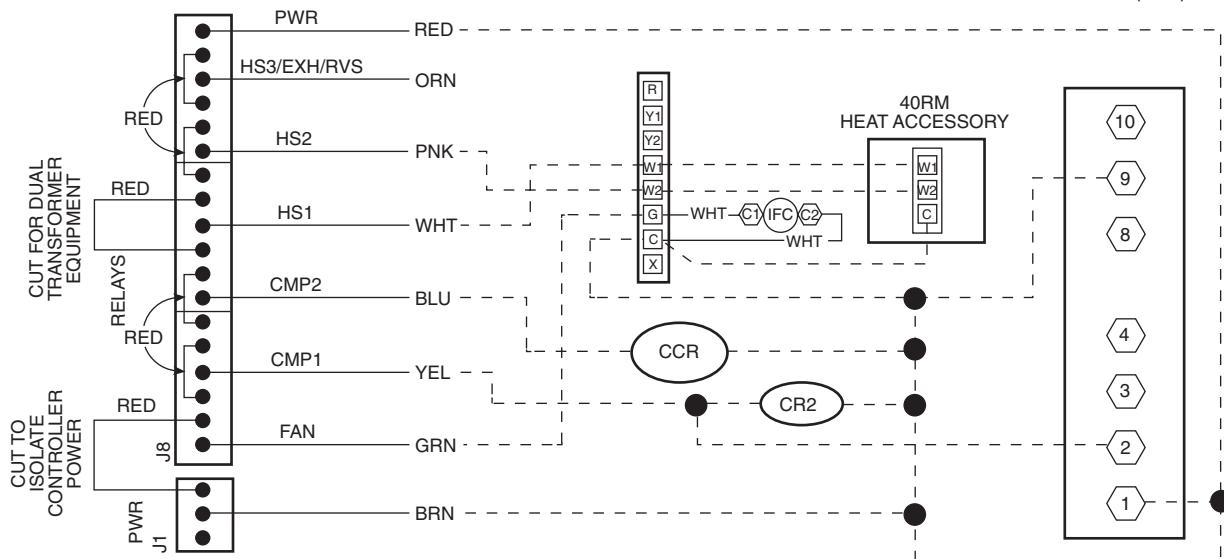
LEGEND

IFC — Indoor-Fan Contactor
LLSV — Liquid Line Solenoid Valve

PREMIERLINK™ APPLICATIONS — 38AKS014-024

40RM CONNECTIONS

38AKS
TERMINAL
BOARD (TB2)



LEGEND

CCR — Capacity Control Relay (If equipped)
CCSV — Capacity Control Valve, Indoor Coil (if equipped)
CR2 — Control Relay No. 2 (Liquid Line Solenoid Valve)
IFC — Indoor-Fan Contactor
LLSV — Liquid Line Solenoid Valve

Typical wiring schematic



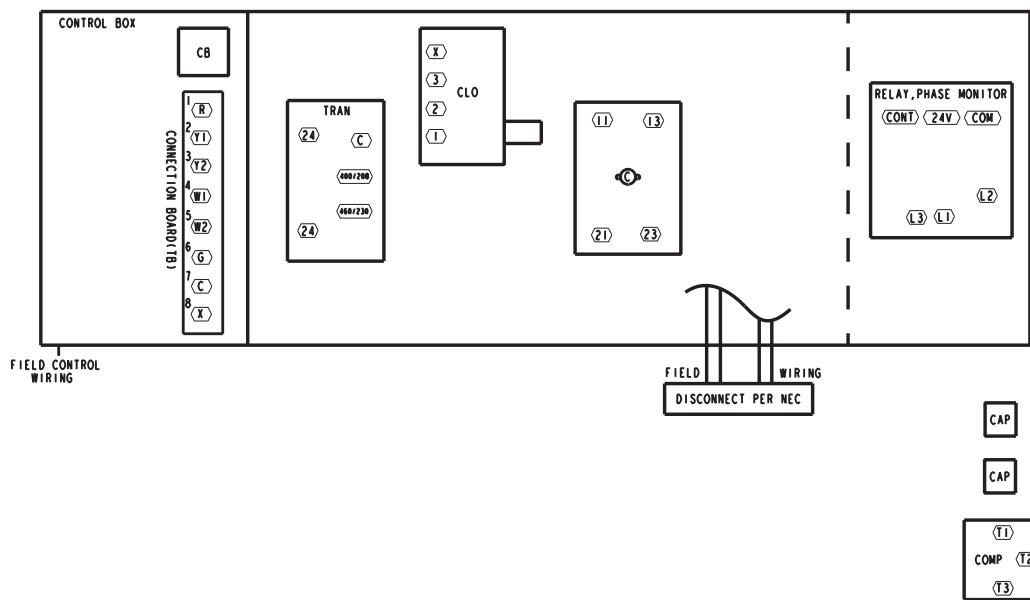
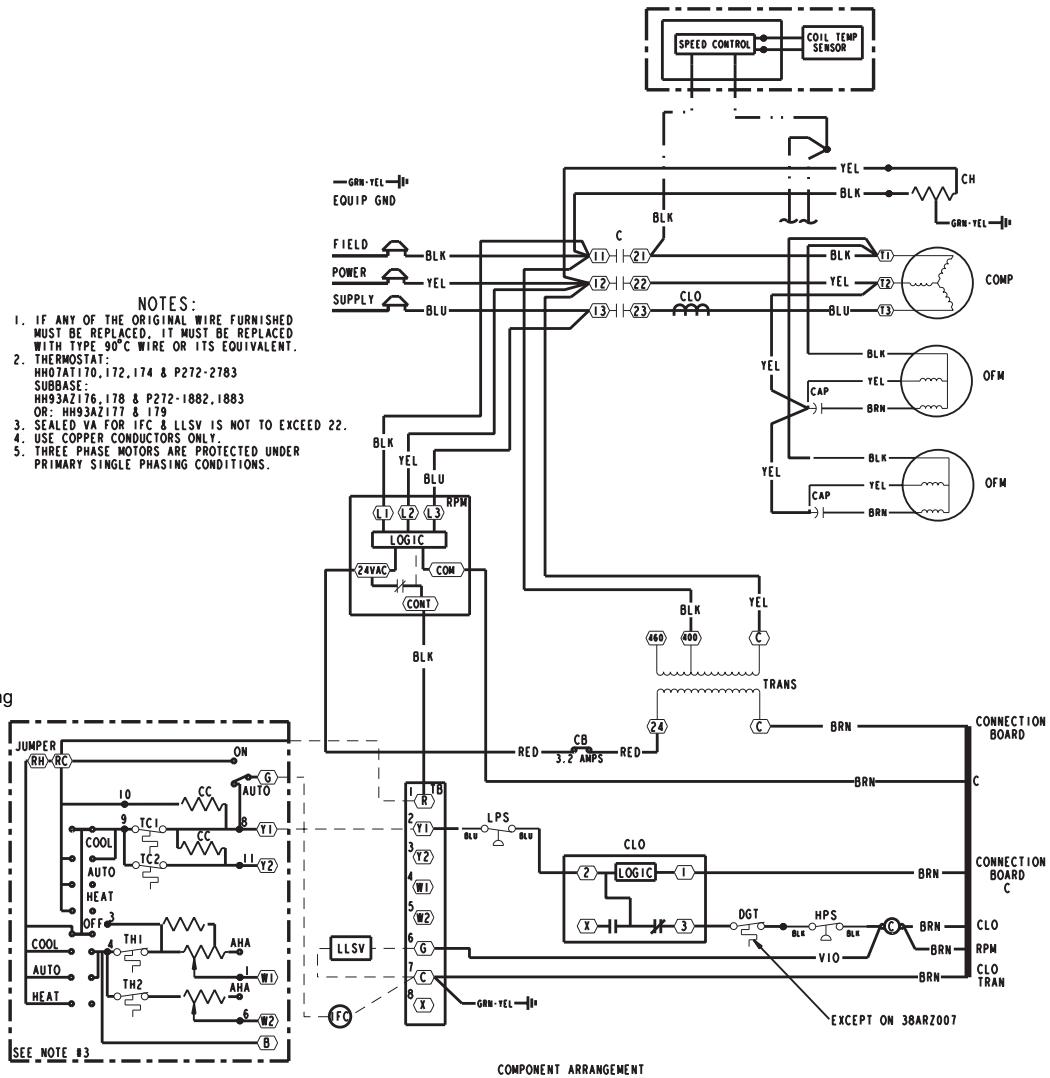
38ARZ007, 400-3-50/460-3-60 UNITS

LEGEND

| | |
|-------|-------------------------------|
| AHA | — Adjustable Heat Anticipator |
| C | — Contactor, Compressor |
| CAP | — Capacitor |
| CC | — Cooling Compensator |
| CH | — Crankcase Heater |
| CLO | — Compressor Lockout |
| COMP | — Compressor Motor |
| EQUIP | — Equipment |
| FU | — Fuse |
| GND | — Ground |
| HPS | — High-Pressure Switch |
| IFC | — Indoor-Fan Contactor |
| LLSV | — Liquid Line Solenoid Valve |
| LPS | — Low-Pressure Switch |
| NEC | — National Electrical Code |
| OFM | — Outdoor-Fan Motor |
| TB | — Terminal Block |
| TC | — Thermostat-Cooling |
| TH | — Thermostat-Heating |
| TRAN | — Transformer |
| | Field Splice |
| | Marked Wire |
| | Terminal (Marked) |
| | Terminal (Unmarked) |
| | Terminal Block |
| ● | Splice |
| — | Factory Wiring |
| — — | Field Control Wiring |
| — — — | Field Power Wiring |
| — · — | Accessory or Optional Wiring |

To Indicate Common Potential Only,
Not Represent Wiring

- NOTES:
1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE 90°C WIRE OR ITS EQUIVALENT.
 2. THERMOSTAT:
HH07AT170, 172, 174 & P272-1882, 1883
SUBBASE:
HH93AZ176, 178 & P272-1882, 1883
OR: HH93AZ177, 179 & P272-1883
 3. SEALANT FOR IFC & LLSV IS NOT TO EXCEED 22.
 4. USE COPPER CONDUCTORS ONLY.
 5. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS.



Typical wiring schematic (cont)



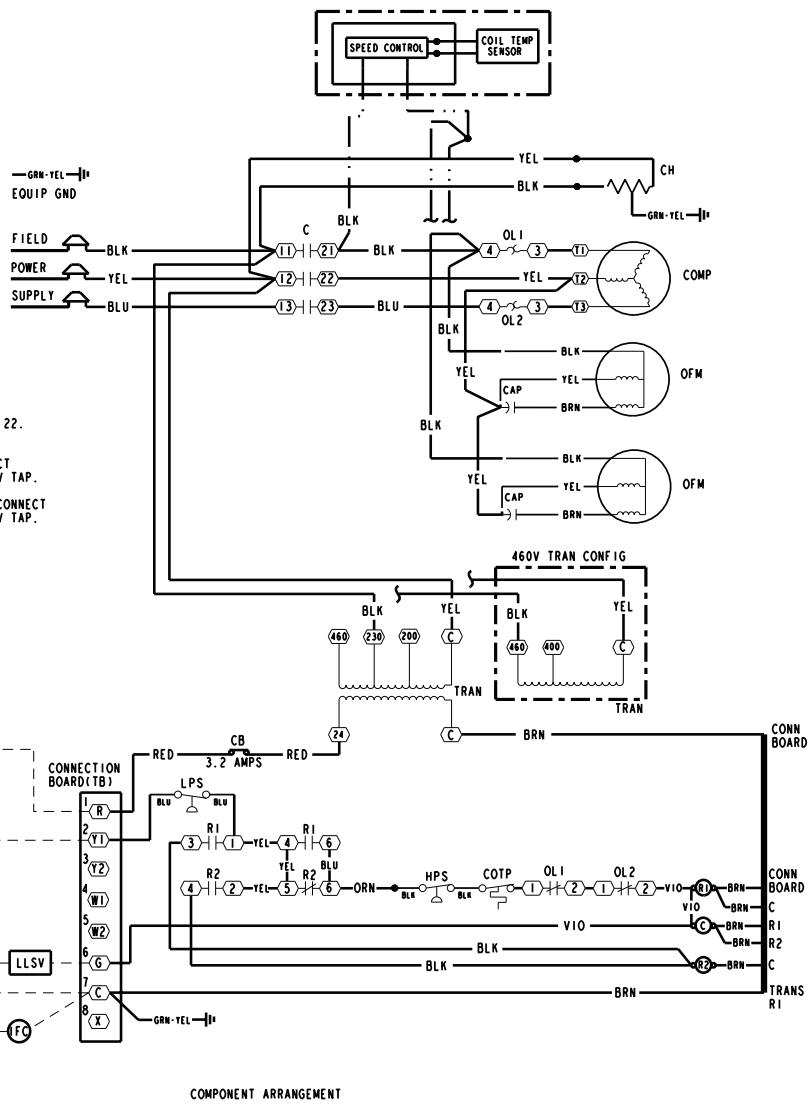
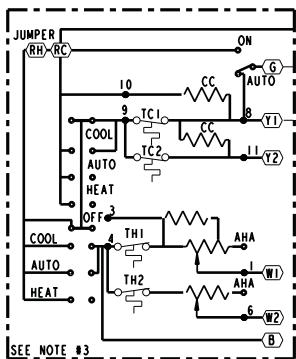
38ARS012, 400/460-3-50/60 UNITS

| LEGEND | |
|--------|---|
| AHA | — Adjustable Heat |
| C | — Contactor |
| CAP | — Capacitor |
| CB | — Circuit Breaker |
| CC | — Cooling Compensator |
| CH | — Crankcase Heater |
| COMP | — Compressor Motor |
| COTP | — Compressor Over Temperature Protection |
| EQUIP | — Equipment |
| GND | — Ground |
| HPS | — High-Pressure Switch |
| IFC | — Indoor-Fan Contactor |
| LLSV | — Liquid Line Solenoid Valve |
| LPS | — Low-Pressure Switch |
| NEC | — National Electrical Code |
| OFM | — Outdoor-Fan Motor |
| OL | — Overload Relay |
| R | — Relay |
| TB | — Terminal Block |
| TC | — Thermostat-Cooling |
| TH | — Thermostat-Heating |
| TRAN | — Transformer |
| | Field Splice |
| X | — Marked Wire |
| X | — Terminal (Marked) |
| O | — Terminal (Unmarked) |
| X | Terminal Block |
| ● | Splice |
| — | Factory Wiring |
| — | Field Control Wiring |
| — | Field Power Wiring |
| — | Accessory or Optional Wiring |
| — | To Indicate Common Potential Only, Not Represent Wiring |

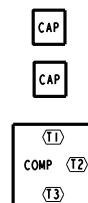
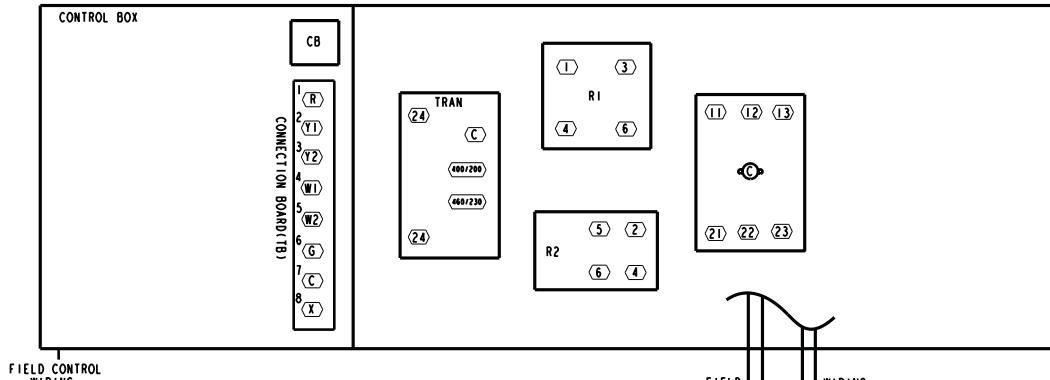
NOTES:

1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE 90°C WIRE OR ITS EQUIVALENT.
2. THERMOSTAT:
SUBBASE HHO3A710, 172, 174 & P272-2783
HH93A716, 178 & P272-1883
OR: HH93A7177 & 179
3. SEALED VA FOR IFC & LLSV IS NOT TO EXCEED 22.
4. USE COPPER CONDUCTORS ONLY.
5. UNIT IS WIRED FOR 230V UNIT, IF UNIT IS TO BE RUN WITH 200V POWER SUPPLY DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 200V TAP.
6. IF TRAN IS WIRED FOR 460-3-60V & UNIT IS TO BE RUN WITH 400-3-50V POWER SUPPLY DISCONNECT BLK WIRE FROM 460V TAP AND CONNECT TO 400V TAP.
7. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS.

| VOLTAGE RATING | CB MFG. PART NO. | MUST |
|----------------|--------------------|-----------|
| 24V | POTTER & BRUMFIELD | TRIP AMPS |
| | W28X-1024-3.2 | 3.2 |



COMPONENT ARRANGEMENT



Model number nomenclature — 38ARZ007-012, 38ARS012 and 38ARD012



38ARZ007-012

38AR – Commercial Air-Cooled Condensing Units

Z – Single Circuit Scroll Compressor
S – Single Circuit Semi-Hermetic Compressor
D – Dual Circuit Scroll Compressor

Nominal kW (Tons)

007 – 18.0 (5.0)
008 – 25.0 (7.0)
012 – 33.2 (9.3) (38ARZ)
30.9 (8.7) (38ARS)
31.0 (8.7) (38ARD)

Not Used

Condenser Coil Fin Material

A – Aluminum (Standard)
C – Copper
K – Pre-Coated Aluminum Fins
E – E-Coated Al Fin/Cu Tube

007 – – –
6 0 1 – –

Factory-Installed Options (FIOPs)*

Packaging
0 – Base Unit
1 – Domestic
3 – Export

Revision Number
0 – Original

Voltage Designation
6 – 400/460-3-50/60
9 – 400-3-50

*Refer to 38AR price pages for FIOP codes or contact your local Carrier representative.

Quality Assurance

Certified to ISO 9001:2000

38ARZ, ARS, ARD UNITS

Physical data



38ARZ007-012, 38ARS008-012, 38ARD012 UNITS — SI

38AR007-012

| UNIT SIZE 38AR | Z007 | Z008 | Z012 | S012 | D012 |
|--------------------------------------|-----------|------------|--------------|---------------|------------|
| NOMINAL CAPACITY (kW) | 18.0 | 25.0 | 33.2 | 30.9 | 31.0 |
| OPERATING WEIGHT (kg) | | | | | |
| Aluminum-Fin Coils (Standard) | 136.4 | 174.1 | 195.5 | 261.4 | 221.0 |
| Copper-Fin Coils (Optional) | 160.0 | 220.0 | 241.4 | 307.3 | 267.0 |
| REFRIGERANT TYPE* | | | R-22 | | |
| Operating Charge, Typical (kg)† | 5.5 | 9.2 | 9.9 | 10.9 | 5/Circuit |
| Shipping Charge (kg) | 1 | 1 | 1 | 1 | 1 |
| COMPRESSOR | | Scroll | | Reciprocating | Scroll |
| Qty...Model | 1...SR_68 | 1...SR_94 | 1...ZR125 | 1...06DH825 | 2...SR_60 |
| Oil Charge (L) | 2.6 | 2.7 | 3.3 | 3.8 | 2.1 (ea) |
| No. Cylinders | | N/A | | 6 | N/A |
| Speed (r/s) | | 48.4 | | 24.2 | 48.4 |
| CONDENSER FANS | | | | | |
| Qty...r/s | 2...11.8 | | 2...115.3 | 2...15.3 | 2...15.3 |
| Diameter (mm) | 560 | | 560 | 560 | 560 |
| Nominal kW | 0.1 | | 0.2 | 0.2 | 0.2 |
| Nominal Airflow (L/s) | 2360 | | 2735 | 2735 | 2735 |
| Watts (Total) | 330 | | 505 | 505 | 505 |
| CONDENSER COIL (Qty) | | 2 | | 2 | 2 |
| Face Area (sq m total) | 2.7 | | 2.7 | 2.7 | 2.7 |
| Rows...Fins/m | 1...670 | | 2...670 | 2...670 | 2...670 |
| Storage Capacity (kg)** | 7.7 | | 15.5 | 15.5 | 7.8 (ea) |
| CONTROLS | | | | | |
| Pressurestat Settings (kPa) | | | | | |
| High Open | | 2950 ± 70 | | 2950 ± 70 | 2950 ± 70 |
| Close | | 2200 ± 138 | | 2200 ± 138 | 2200 ± 138 |
| Low Open | | 186 ± 21 | | 186 ± 21 | 186 ± 21 |
| Close | | 303 ± 34 | | 303 ± 34 | 303 ± 34 |
| DISCHARGE GAS THERMOSTAT (°C) | | | | | |
| Cutout | — | 132 ± 5 | 132 ± 5 | — | — |
| Cut-in | | 88 ± 7 | 88 ± 7 | — | — |
| PRESSURE RELIEF | | | Suction Line | | |
| Location | | | 93 | | |
| Temperature (C) | | | | | |
| PIPING CONNECTIONS (in. ODM) | | | | | |
| Qty...Suction | 1...1 1/8 | 1...1 1/8 | 1...1 3/8 | 1...1 3/8 | 2...1 1/8 |
| Qty...Liquid | 1...3/8 | 1...3/8 | 1...1/2 | 1...1/2 | 2...3/8 |

*Unit is factory-supplied with holding charge only.

†Typical operating charge with 7.6 m of interconnecting piping.

**Storage capacity of condenser coil with coil 80% full of liquid at 36 C.

NOTE: Unit 38ARS012 has one step of unloading. Full load is at 100% of capacity, and one step of unloading is 67% capacity. Unit 38ARS012 has the following unloader settings: load is 483 ± 6.9 kPa and unload is 414 ± 13.8 kPa.



38ARZ007-012, 38ARS012, 38ARD012 UNITS — ENGLISH

38AR007-012

| UNIT SIZE 38AR | Z007 | Z008 | Z012 | S012 | D012 |
|---------------------------------|-----------|-----------|-----------|---------------|------------|
| NOMINAL CAPACITY (tons) | 5.0 | 7.0 | 9.3 | 8.7 | 8.7 |
| OPERATING WEIGHT (lb) | | | | | |
| Aluminum-Fin Coils (Standard) | 300 | 383 | 430 | 575 | 488 |
| Copper-Fin Coils (Optional) | 352 | 484 | 531 | 676 | 589 |
| REFRIGERANT TYPE* | | | R-22 | | |
| Operating Charge, Typical (lb)† | 12 | 20 | 22 | 24 | 11/Circuit |
| Shipping Charge (lb) | | | 2 | | |
| COMPRESSOR | | Scroll | | Reciprocating | Scroll |
| Qty...Model | 1...SR_68 | 1...SR_94 | 1...ZR125 | 1...06DH825 | 2...SR_60 |
| Oil Charge (oz) | 88 | 90 | 110 | 128 | 72 (ea) |
| No. Cylinders | | N/A | | 6 | N/A |
| Speed (rpm) | | 2900 | | 1450 | 2900 |
| CONDENSER FANS | | | | | |
| Qty...Rpm | 2...700 | | 2...920 | 2...920 | 2...920 |
| Diameter (in.) | | 22 | | 22 | 22 |
| Nominal HP | 1/8 | | 1/4 | 1/4 | 1/4 |
| Nominal Airflow (cfm total) | 5000 | | 5800 | 5800 | 5800 |
| Watts (total) | 330 | | 505 | 505 | 505 |
| CONDENSER COIL (Qty) | | 2 | | 2 | 2 |
| Face Area (sq ft total) | | 29.2 | | 29.2 | 29.2 |
| Rows...Fins/in. | 1...17 | | 2...17 | 2...17 | 2...17 |
| Storage Capacity (lb)** | 17.3 | | 34.2 | 34.2 | 17.1 (ea) |
| CONTROLS | | | | | |
| Pressurestat Settings (psig) | | | | | |
| High Open | | 428 ± 10 | | 428 ± 10 | 428 ± 10 |
| Close | | 320 ± 20 | | 320 ± 20 | 320 ± 20 |
| Low Open | | 27 ± 3 | | 27 ± 3 | 27 ± 3 |
| Close | | 44 ± 5 | | 44 ± 5 | 44 ± 5 |
| DISCHARGE GAS THERMOSTAT (°C) | | | | | |
| Cutout | — | 270 ± 9 | 270 ± 9 | — | — |
| Cut-in | — | 190 ± 13 | 190 ± 13 | — | — |
| PRESSURE RELIEF | | | | Suction Line | |
| Location | | | | 200 | |
| Temperature (F) | | | | | |
| PIPING CONNECTIONS (in. ODM) | | | | | |
| Qty...Suction | 1...1 1/8 | 1...1 1/8 | 1...1 3/8 | 1...1 3/8 | 2...1 1/8 |
| Qty...Liquid | 1...3/8 | 1...3/8 | 1...1/2 | 1...1/2 | 2...3/8 |

*Unit is factory-supplied with holding charge only.

†Typical operating charge with 25 ft of interconnecting piping.

**Storage capacity of condenser coil with coil 80% full of liquid R-22 at 95 F.

NOTE: Unit 38ARS012 has one step of unloading. Full load is at 100% of capacity, and one step of unloading is 67% capacity. Unit 38ARS012 has the following unloader settings: load is 70 ± 1 psig and unload is 60 ± 2 psig.

Dimensions

Carrier
®

38AR007-012

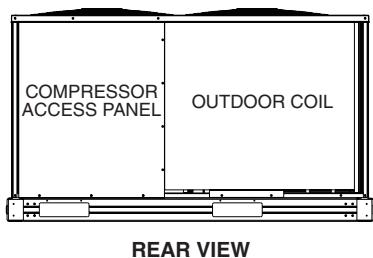
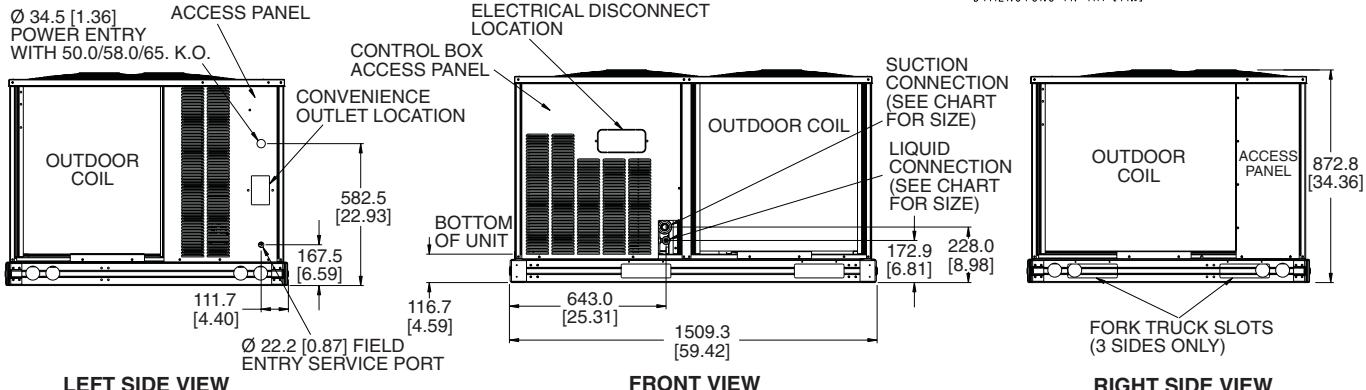
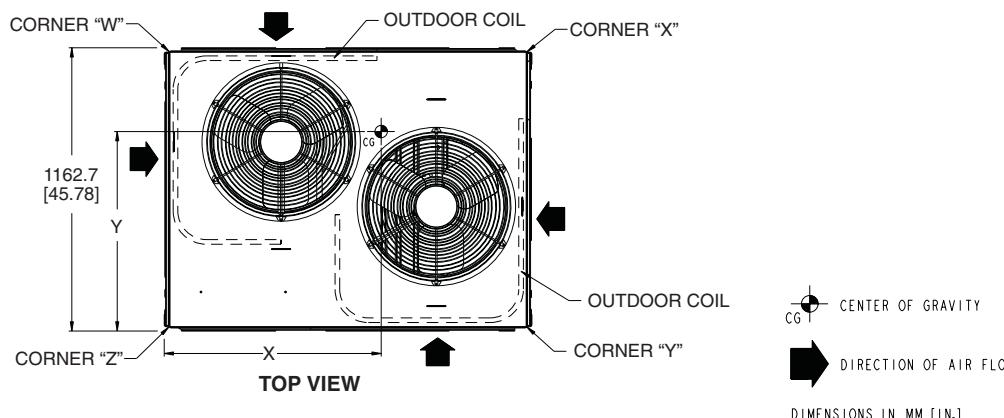
38ARZ007-012, 38ARS012

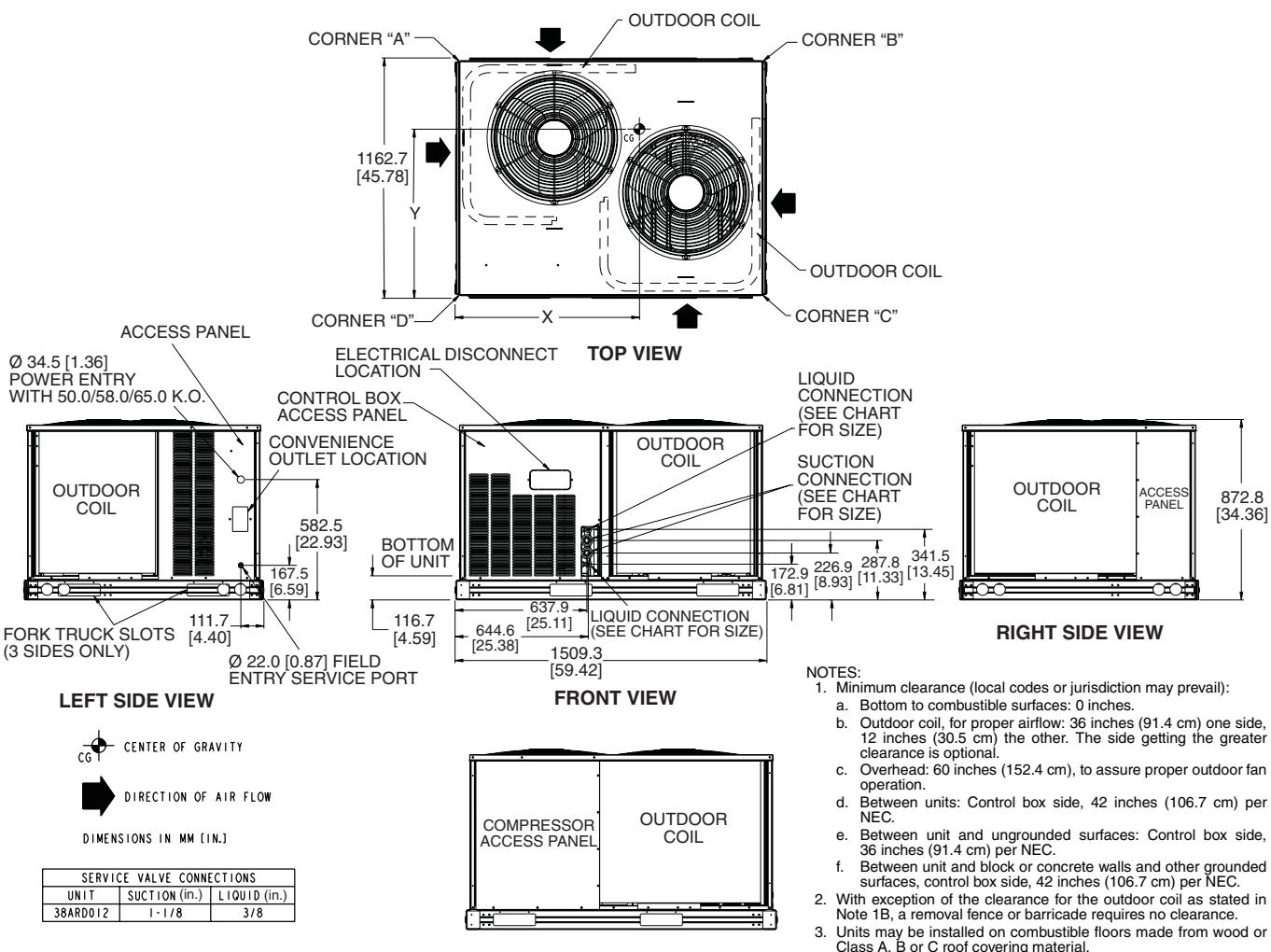
| UNIT 38AR | ALUMINUM COIL | | | | | | | | | | | | COPPER COILS | | | | | | | | | | | |
|--------------|---------------|-----|----------|----|----------|-----|----------|----|----------|----|-------------------|------------------|--------------|-----|----------|----|----------|-----|----------|----|----------|----|-------------------|------------------|
| | Std Unit Wt | | Corner W | | Corner X | | Corner Y | | Corner Z | | Center of Gravity | | Std Unit Wt | | Corner W | | Corner X | | Corner Y | | Corner Z | | Center of Gravity | |
| | Lb | Kg | Lb | Kg | Lb | Kg | Lb | Kg | Lb | Kg | X [mm (in.)] | Y [mm (in.)] | Lb | Kg | Lb | Kg | Lb | Kg | Lb | Kg | Lb | Kg | X [mm (in.)] | Y [mm (in.)] |
| Z007 | 300 | 136 | 62 | 28 | 103 | 47 | 62 | 28 | 72 | 33 | 831.9 [32.75] | 641.4 [25.25] | 352 | 160 | 95 | 43 | 92 | 42 | 92 | 42 | 72 | 33 | 799.7 [31.09] | 619.3 [24.38] |
| Z008 | 383 | 174 | 86 | 39 | 123 | 56 | 85 | 39 | 89 | 40 | 822.3 [32.38] | 635.0 [25.00] | 484 | 220 | 122 | 55 | 137 | 62 | 122 | 55 | 104 | 47 | 806.5 [31.75] | 621.8 [24.48] |
| Z012 | 430 | 195 | 84 | 38 | 166 | 75 | 66 | 30 | 114 | 52 | 812.8 [32.00] | 676.3 [26.63] | 531 | 241 | 121 | 55 | 178 | 81 | 103 | 47 | 128 | 58 | 800.1 [31.50] | 656.3 [25.84] |
| S012 | 575 | 261 | 55 | 25 | 265 | 120 | 88 | 40 | 167 | 76 | 927.1 [36.50] | 647.7 [25.50] | 676 | 307 | 94 | 43 | 276 | 125 | 127 | 58 | 179 | 81 | 900.2 [35.44] | 636.3 [25.05] |

| SERVICE VALVE CONNECTIONS | | |
|---------------------------|---------------------|--------------------|
| Unit 38AR | Suction mm (in.) | Liquid mm (in.) |
| Z007 | 28.6 [1 1/8] | 9.5 [3/8] |
| Z008 | 28.6 [1 1/8] | 9.5 [3/8] |
| Z012 | 34.9 [1 3/8] | 12.7 [1 1/2] |
| S012 | 34.9 [1 3/8] | 12.7 [1 1/2] |

NOTES:

1. Minimum clearance (local codes or jurisdiction may prevail):
 - a. Bottom to combustible surfaces: 0 inches.
 - b. Outdoor coil, for proper airflow: 36 inches (91.4 cm) one side, 12 inches (30.5 cm) the other. The side getting the greater clearance is optional.
 - c. Overhead: 60 inches (152.4 cm), to assure proper outdoor fan operation.
 - d. Between units: Control box side, 42 inches (106.7 cm) per NEC.
 - e. Between unit and ungrounded surfaces: Control box side, 36 inches (91.4 cm) per NEC.
 - f. Between unit and block or concrete walls and other grounded surfaces, control box side, 42 inches (106.7 cm) per NEC.
2. With exception of the clearance for the outdoor coil as stated in Note 1B, a removal fence or barricade requires no clearance.
3. Units may be installed on combustible floors made from wood or Class A, B or C roof covering material.



38ARD012


| UNIT | ALUMINUM COIL | | | | | | | | | | | | COPPER COIL | | | | | | | | | | | |
|----------|---------------|-----|----------|----|----------|----|----------|----|----------|----|-------------------|--------------|---------------|-----|----------|----|----------|----|----------|----|--------------|--------------|-------------------|--------------|
| | Std. Unit Wt. | | Corner A | | Corner B | | Corner C | | Corner D | | Center of Gravity | | Std. Unit Wt. | | Corner A | | Corner B | | Corner C | | Corner D | | Center of Gravity | |
| | lb | kg | lb | kg | lb | kg | lb | kg | lb | kg | X [mm (in.)] | Y [mm (in.)] | lb | kg | lb | kg | lb | kg | lb | kg | X [mm (in.)] | Y [mm (in.)] | | |
| 38ARD012 | 488 | 221 | 102 | 46 | 143 | 65 | 139 | 63 | 104 | 47 | 873.8 [34.4] | 591.8 [23.3] | 589 | 267 | 129 | 59 | 166 | 75 | 164 | 74 | 130 | 59 | 845.8 [33.3] | 579.1 [22.8] |

Performance data



CONDENSING UNIT RATINGS — SI

38AR007-012

38ARZ007

| SST (C) | | Air Temperature Entering Condenser (C) | | | | | | |
|------------|-----|--|-------|-------|-------|-------|-------|-------|
| | | 28 | 32 | 36 | 40 | 44 | 48 | 52 |
| -4 | TC | 12.90 | 12.40 | 11.90 | 11.40 | 10.90 | 10.40 | 9.85 |
| | kW | 3.60 | 3.91 | 4.23 | 4.58 | 4.93 | 5.28 | 5.63 |
| | SDT | 39.0 | 42.9 | 46.8 | 50.8 | 54.7 | 58.7 | 62.6 |
| -2 | TC | 13.90 | 13.40 | 12.80 | 12.30 | 11.70 | 11.20 | 10.70 |
| | kW | 3.65 | 3.95 | 4.27 | 4.62 | 4.98 | 5.33 | 5.68 |
| | SDT | 39.4 | 43.3 | 47.3 | 51.2 | 55.1 | 59.0 | 63.0 |
| 0 | TC | 14.90 | 14.30 | 13.80 | 13.20 | 12.60 | 12.10 | 11.50 |
| | kW | 3.69 | 4.00 | 4.32 | 4.67 | 5.02 | 5.38 | 5.73 |
| | SDT | 39.9 | 43.8 | 47.7 | 51.6 | 55.5 | 59.4 | 63.3 |
| 2 | TC | 15.90 | 15.30 | 14.80 | 14.20 | 13.60 | 13.00 | 12.40 |
| | kW | 3.74 | 4.05 | 4.37 | 4.73 | 5.08 | 5.43 | 5.78 |
| | SDT | 40.5 | 44.4 | 48.3 | 52.1 | 56.0 | 59.9 | 63.8 |
| 4 | TC | 17.00 | 16.40 | 15.80 | 15.20 | 14.50 | 13.90 | 13.30 |
| | kW | 3.80 | 4.11 | 4.43 | 4.79 | 5.14 | 5.49 | 5.84 |
| | SDT | 41.1 | 45.0 | 48.8 | 52.7 | 56.6 | 60.4 | 64.3 |
| 6 | TC | 18.10 | 17.50 | 16.90 | 16.20 | 15.50 | 14.90 | 14.20 |
| | kW | 3.87 | 4.18 | 4.50 | 4.85 | 5.21 | 5.56 | 5.91 |
| | SDT | 41.8 | 45.6 | 49.5 | 53.3 | 57.2 | 61.0 | 64.9 |
| 8 | TC | 19.30 | 18.60 | 18.00 | 17.30 | 16.60 | 15.90 | 15.20 |
| | kW | 3.94 | 4.25 | 4.57 | 4.92 | 5.28 | 5.63 | 5.99 |
| | SDT | 42.5 | 46.3 | 50.1 | 53.9 | 57.8 | 61.6 | 65.4 |
| 10 | TC | 20.50 | 19.80 | 19.10 | 18.40 | 17.70 | 16.90 | 16.20 |
| | kW | 4.01 | 4.32 | 4.64 | 5.00 | 5.35 | 5.71 | 6.06 |
| | SDT | 43.2 | 47.0 | 50.8 | 54.6 | 58.4 | 62.2 | 66.0 |

38ARZ008

| SST (C) | | Air Temperature Entering Condenser (C) | | | | | | |
|------------|-----|--|-------|-------|-------|-------|-------|-------|
| | | 28 | 32 | 36 | 40 | 44 | 48 | 52 |
| -4 | TC | 17.60 | 16.80 | 16.00 | 15.10 | 14.20 | 13.30 | 12.40 |
| | kW | 4.92 | 5.33 | 5.76 | 6.21 | 6.68 | 7.15 | 7.62 |
| | SDT | 38.2 | 42.2 | 46.2 | 50.2 | 54.2 | 58.2 | 62.3 |
| -2 | TC | 19.10 | 18.30 | 17.40 | 16.50 | 15.60 | 14.60 | 13.70 |
| | kW | 4.94 | 5.34 | 5.78 | 6.23 | 6.71 | 7.20 | 7.68 |
| | SDT | 38.4 | 42.3 | 46.3 | 50.2 | 54.2 | 58.2 | 62.3 |
| 0 | TC | 20.60 | 19.70 | 18.80 | 17.90 | 17.00 | 16.00 | 15.10 |
| | kW | 4.97 | 5.38 | 5.82 | 6.27 | 6.76 | 7.24 | 7.73 |
| | SDT | 38.6 | 42.5 | 46.5 | 50.4 | 54.4 | 58.3 | 62.3 |
| 2 | TC | 22.10 | 21.20 | 20.30 | 19.40 | 18.40 | 17.40 | 16.50 |
| | kW | 5.02 | 5.43 | 5.87 | 6.32 | 6.81 | 7.30 | 7.79 |
| | SDT | 39.1 | 43.0 | 46.8 | 50.7 | 54.6 | 58.5 | 62.4 |
| 4 | TC | 23.70 | 22.80 | 21.80 | 20.90 | 19.90 | 18.90 | 17.90 |
| | kW | 5.08 | 5.49 | 5.94 | 6.40 | 6.89 | 7.38 | 7.88 |
| | SDT | 39.7 | 43.5 | 47.4 | 51.2 | 55.1 | 58.9 | 62.7 |
| 6 | TC | 25.30 | 24.40 | 23.40 | 22.40 | 21.30 | 20.30 | 19.30 |
| | kW | 5.15 | 5.57 | 6.01 | 6.48 | 6.97 | 7.47 | 7.97 |
| | SDT | 40.3 | 44.1 | 48.0 | 51.8 | 55.6 | 59.4 | 63.2 |
| 8 | TC | 27.00 | 26.00 | 25.00 | 23.90 | 22.90 | 21.80 | 20.70 |
| | kW | 5.23 | 5.64 | 6.09 | 6.56 | 7.07 | 7.57 | 8.08 |
| | SDT | 41.0 | 44.8 | 48.6 | 52.4 | 56.2 | 60.0 | 63.8 |
| 10 | TC | 28.70 | 27.70 | 26.60 | 25.60 | 24.40 | 23.30 | 22.20 |
| | kW | 5.30 | 5.72 | 6.18 | 6.65 | 7.16 | 7.68 | 8.19 |
| | SDT | 41.7 | 45.5 | 49.3 | 53.1 | 56.9 | 60.6 | 64.4 |

38ARZ012

| SST (C) | | Air Temperature Entering Condenser (C) | | | | | | |
|------------|-----|--|-------|-------|-------|-------|-------|-------|
| | | 28 | 32 | 36 | 40 | 44 | 48 | 52 |
| -4 | TC | 24.50 | 23.50 | 22.50 | 21.50 | 20.40 | 19.30 | 18.20 |
| | kW | 6.78 | 7.22 | 7.68 | 8.18 | 8.70 | 9.22 | 9.74 |
| | SDT | 39.6 | 43.6 | 47.6 | 51.6 | 55.5 | 59.5 | 63.5 |
| -2 | TC | 26.20 | 25.20 | 24.10 | 23.10 | 21.90 | 20.80 | 19.70 |
| | kW | 6.89 | 7.31 | 7.77 | 8.25 | 8.76 | 9.27 | 9.78 |
| | SDT | 39.9 | 43.8 | 47.8 | 51.7 | 55.6 | 59.6 | 63.5 |
| 0 | TC | 28.00 | 26.90 | 25.80 | 24.70 | 23.50 | 22.30 | 21.20 |
| | kW | 7.02 | 7.44 | 7.88 | 8.34 | 8.84 | 9.34 | 9.84 |
| | SDT | 40.3 | 44.2 | 48.0 | 51.9 | 55.8 | 59.7 | 63.6 |
| 2 | TC | 29.90 | 28.70 | 27.60 | 26.40 | 25.10 | 23.90 | 22.60 |
| | kW | 7.17 | 7.58 | 8.01 | 8.46 | 8.95 | 9.43 | 9.92 |
| | SDT | 40.8 | 44.6 | 48.4 | 52.3 | 56.1 | 59.9 | 63.8 |
| 4 | TC | 31.80 | 30.60 | 29.40 | 28.10 | 26.80 | 25.50 | 24.20 |
| | kW | 7.34 | 7.75 | 8.18 | 8.62 | 9.09 | 9.56 | 10.00 |
| | SDT | 41.3 | 45.2 | 49.0 | 52.8 | 56.5 | 60.3 | 64.1 |
| 6 | TC | 33.80 | 32.60 | 31.30 | 30.00 | 28.60 | 27.20 | 25.80 |
| | kW | 7.52 | 7.93 | 8.36 | 8.80 | 9.26 | 9.72 | 10.20 |
| | SDT | 42.0 | 45.8 | 49.6 | 53.3 | 57.1 | 60.8 | 64.6 |
| 8 | TC | 35.80 | 34.60 | 33.20 | 31.80 | 30.40 | 29.00 | 27.50 |
| | kW | 7.71 | 8.13 | 8.56 | 9.00 | 9.45 | 9.90 | 10.40 |
| | SDT | 42.7 | 46.5 | 50.2 | 54.0 | 57.7 | 61.4 | 65.1 |
| 10 | TC | 37.80 | 36.60 | 35.30 | 33.80 | 32.30 | 30.80 | 29.30 |
| | kW | 7.91 | 8.34 | 8.77 | 9.21 | 9.66 | 10.10 | 10.60 |
| | SDT | 43.4 | 47.2 | 50.9 | 54.6 | 58.3 | 62.0 | 65.7 |

38ARS012

| SST (C) | | Air Temperature Entering Condenser (C) | | | | | | |
|------------|-----|--|-------|-------|-------|-------|-------|-------|
| | | 28 | 32 | 36 | 40 | 44 | 48 | 52 |
| -4 | TC | 21.10 | 19.80 | 18.40 | 17.10 | 15.70 | 14.40 | 13.10 |
| | kW | 6.34 | 6.65 | 6.94 | 7.19 | 7.39 | 7.58 | 7.78 |
| | SDT | 40.3 | 44.3 | 48.3 | 52.3 | 56.3 | 60.3 | 64.3 |
| -2 | TC | 23.20 | 21.80 | 20.40 | 18.90 | 17.50 | 16.10 | 14.70 |
| | kW | 6.49 | 6.83 | 7.16 | 7.44 | 7.69 | 7.92 | 8.16 |
| | SDT | 40.5 | 44.4 | 48.3 | 52.3 | 56.3 | 60.3 | 64.3 |
| 0 | TC | 25.30 | 23.80 | 22.40 | 20.90 | 19.40 | 17.90 | 16.50 |
| | kW | 6.64 | 7.01 | 7.37 | 7.69 | 7.97 | 8.25 | 8.52 |
| | SDT | 40.7 | 44.6 | 48.5 | 52.4 | 56.4 | 60.3 | 64.3 |
| 2 | TC | 27.50 | 25.90 | 24.40 | 22.90 | 21.40 | 19.80 | 18.30 |
| | kW | 6.79 | 7.19 | 7.58 | 7.93 | 8.25 | 8.56 | 8.87 |
| | SDT | 41.1 | 44.9 | 48.8 | 52.6 | 56.5 | 60.4 | 64.3 |
| 4 | TC | 29.70 | 28.10 | 26.50 | 25.00 | 23.40 | 21.80 | 20.20 |
| | kW | 6.95 | 7.38 | 7.79 | 8.17 | 8.52 | 8.87 | 9.21 |
| | SDT | 41.3 | 45.1 | 49.2 | 53.0 | 56.8 | 60.6 | 64.4 |
| 6 | TC | 31.90 | 30.30 | 28.70 | 27.10 | 25.40 | 23.80 | 22.20 |
| | kW | 7.11 | 7.57 | 8.01 | 8.42 | 8.80 | 9.17 | 9.54 |
| | SDT | 42.5 | 46.2 | 49.8 | 53.5 | 57.2 | 60.9 | 64.6 |
| 8 | TC | 34.30 | 32.60 | 30.90 | 29.20 | 27.50 | 25.80 | 24.20 |
| | kW | 7.28 | 7.76 | 8.23 | 8.68 | 9.08 | 9.48 | 9.88 |
| | SDT | 43.3 | 46.9 | 50.5 | 54.2 | 57.8 | 61.5 | 65.1 |
| 10 | TC | 36.70 | 34.90 | 33.10 | 31.40 | 29.60 | 27.90 | 26.20 |
| | kW | 7.44 | 7.96 | 8.46 | 8.93 | 9.36 | 9.79 | 10.20 |
| | SDT | 44.2 | 47.8 | 51.4 | 54.9 | 58.5 | 62.1 | 65.7 |

LEGEND

kW — Compressor Power
SDT — Saturated Discharge Temperature (C)
SST — Saturated Suction Temperature (C)
TC — Gross Cooling Capacity (kW)



COMBINATION RATINGS — SI

38ARZ007/40RM007H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 850 | | | | 1150 | | | | 1450 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 17.0 17.00 4.16 | 17.1 16.50 4.16 | 18.9 13.00 4.27 | 20.0 10.90 4.34 | 18.5 18.50 4.23 | 18.4 18.60 4.24 | 19.6 15.20 4.32 | 20.7 12.40 4.39 | 19.4 19.40 4.30 | 19.4 19.40 4.30 | 20.2 17.00 4.35 | 21.3 13.90 4.41 |
| 36 | TC SHC kW | 16.7 16.70 4.49 | 16.8 16.20 4.49 | 18.5 12.80 4.60 | 19.5 10.70 4.68 | 18.1 18.10 4.58 | 18.0 18.10 4.57 | 19.1 15.00 4.64 | 20.2 12.20 4.72 | 19.0 19.00 4.65 | 19.0 19.00 4.64 | 19.6 16.80 4.69 | 20.6 13.60 4.75 |
| 40 | TC SHC kW | 16.2 16.20 4.85 | 16.4 15.90 4.86 | 17.9 12.70 4.97 | 18.9 10.50 5.04 | 17.6 17.60 4.94 | 17.6 17.70 4.94 | 18.5 14.70 5.01 | 19.7 12.00 5.08 | 18.6 18.60 5.01 | 18.6 18.60 5.01 | 19.1 16.60 5.04 | 20.1 13.40 5.11 |
| 44 | TC SHC kW | 15.9 15.90 5.22 | 15.9 15.70 5.24 | 17.4 12.50 5.33 | 18.4 10.30 5.41 | 17.2 17.20 5.32 | 17.1 17.30 5.31 | 18.0 14.50 5.38 | 19.0 11.80 5.45 | 18.0 18.00 5.39 | 18.0 18.00 5.38 | 18.5 16.40 5.42 | 19.4 13.20 5.49 |
| 48 | TC SHC kW | 15.5 15.50 5.59 | 15.5 15.40 5.59 | 16.8 12.30 5.70 | 17.9 10.10 5.78 | 16.8 16.80 5.69 | 16.7 16.80 5.69 | 17.4 14.30 5.75 | 18.5 11.70 5.82 | 17.6 17.60 5.76 | 17.6 17.60 5.76 | 17.9 16.20 5.78 | 18.9 13.00 5.86 |
| 52 | TC SHC kW | 15.2 15.20 5.97 | 15.1 15.20 5.97 | 16.4 12.00 6.07 | 17.3 9.90 6.15 | 16.3 16.30 6.05 | 16.3 16.30 6.06 | 16.9 14.10 6.11 | 17.8 11.50 6.19 | 17.2 17.20 6.12 | 17.1 17.10 6.12 | 17.4 16.00 6.15 | 18.3 12.80 6.22 |

38ARZ007/40RM007 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 850 | | | | 1150 | | | | 1450 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 16.3 16.30 4.11 | 16.5 15.80 4.12 | 18.2 12.50 4.22 | 19.3 10.50 4.29 | 17.7 17.70 4.18 | 17.7 17.70 4.19 | 18.9 14.50 4.26 | 20.0 11.90 4.33 | 18.6 18.60 4.24 | 18.6 18.60 4.24 | 19.4 16.20 4.29 | 20.5 13.20 4.36 |
| 36 | TC SHC kW | 16.0 16.00 4.44 | 16.2 15.60 4.45 | 17.8 12.30 4.55 | 18.8 10.30 4.62 | 17.3 17.30 4.52 | 17.3 17.30 4.52 | 18.4 14.30 4.59 | 19.5 11.70 4.66 | 18.2 18.20 4.58 | 18.2 18.20 4.58 | 18.9 16.00 4.63 | 19.9 13.00 4.69 |
| 40 | TC SHC kW | 15.6 15.60 4.81 | 15.8 15.30 4.82 | 17.3 12.20 4.92 | 18.3 10.10 4.99 | 16.9 16.90 4.89 | 16.9 16.90 4.89 | 17.9 14.10 4.96 | 19.0 11.50 5.03 | 17.8 17.80 4.95 | 17.8 17.80 4.95 | 18.4 15.80 4.99 | 19.4 12.80 5.06 |
| 44 | TC SHC kW | 15.3 15.30 5.18 | 15.4 15.10 5.19 | 16.8 12.00 5.29 | 17.8 9.95 5.36 | 16.5 16.50 5.27 | 16.5 16.50 5.26 | 17.4 13.90 5.33 | 18.4 11.30 5.40 | 17.3 17.30 5.33 | 17.3 17.30 5.33 | 17.9 15.60 5.36 | 18.8 12.60 5.43 |
| 48 | TC SHC kW | 14.9 14.90 5.55 | 15.0 14.80 5.55 | 16.3 11.80 5.66 | 17.3 9.77 5.73 | 16.1 16.10 5.64 | 16.1 16.10 5.64 | 16.9 13.70 5.70 | 17.9 11.20 5.77 | 16.9 16.90 5.70 | 16.9 16.90 5.69 | 17.3 15.40 5.73 | 18.3 12.40 5.80 |
| 52 | TC SHC kW | 14.6 14.60 5.92 | 14.6 14.60 5.92 | 15.9 11.60 6.03 | 16.8 9.59 6.10 | 15.7 15.70 6.01 | 15.7 15.70 6.01 | 16.4 13.50 6.06 | 17.3 11.00 6.14 | 16.5 16.50 6.07 | 16.4 16.40 6.06 | 16.8 15.20 6.10 | 17.7 12.20 6.17 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross

38AR007-012

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38AR007-012

38ARZ007/40RM008H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1000 | | | | 1400 | | | | 1800 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 18.2 18.20 4.22 | 18.1 18.20 4.22 | 19.7 14.40 4.31 | 20.8 11.90 4.38 | 19.6 19.60 4.31 | 19.6 19.60 4.31 | 20.4 17.10 4.37 | 21.4 13.90 4.43 | 20.7 20.70 4.37 | 20.7 20.70 4.37 | 21.0 19.30 4.40 | 21.9 15.70 4.46 |
| 36 | TC SHC kW | 17.8 17.80 4.57 | 17.7 17.80 4.56 | 19.1 14.20 4.65 | 20.3 11.70 4.73 | 19.2 19.20 4.65 | 19.2 19.20 4.65 | 19.9 16.90 4.70 | 20.9 13.60 4.77 | 20.2 20.20 4.72 | 20.2 20.20 4.72 | 20.4 19.00 4.74 | 21.3 15.50 4.79 |
| 40 | TC SHC kW | 17.3 17.30 4.91 | 17.3 17.40 4.92 | 18.6 14.00 5.00 | 19.6 11.40 5.09 | 18.7 18.70 5.02 | 18.7 18.70 5.02 | 19.2 16.60 5.06 | 20.2 13.40 5.13 | 19.7 19.70 5.08 | 19.7 19.70 5.09 | 19.8 18.70 5.09 | 20.6 15.20 5.16 |
| 44 | TC SHC kW | 16.9 16.90 5.29 | 16.8 17.00 5.29 | 18.1 13.80 5.39 | 19.1 11.30 5.46 | 18.2 18.20 5.40 | 18.2 18.20 5.39 | 18.7 16.40 5.42 | 19.7 13.20 5.50 | 19.2 19.20 5.47 | 19.2 19.20 5.47 | 19.2 18.40 5.46 | 20.0 15.00 5.53 |
| 48 | TC SHC kW | 16.5 16.50 5.66 | 16.4 16.60 5.66 | 17.5 13.60 5.75 | 18.6 11.10 5.83 | 17.8 17.80 5.77 | 17.8 17.80 5.77 | 18.1 16.10 5.80 | 19.0 13.00 5.88 | 18.6 18.60 5.84 | 18.6 18.60 5.84 | 18.7 18.10 5.85 | 19.4 14.80 5.90 |
| 52 | TC SHC kW | 16.0 16.00 6.01 | 16.0 16.10 6.02 | 16.8 13.30 6.11 | 17.9 10.90 6.19 | 17.3 17.30 6.15 | 17.3 17.30 6.14 | 17.5 15.90 6.16 | 18.4 12.90 6.23 | 18.0 18.00 6.21 | 18.0 18.00 6.21 | 18.0 17.80 6.20 | 18.8 14.60 6.27 |

38ARZ007/40RM008 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1000 | | | | 1400 | | | | 1800 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 17.3 17.30 4.16 | 17.3 17.20 4.16 | 18.8 13.70 4.25 | 19.9 11.30 4.32 | 18.6 18.60 4.24 | 18.6 18.60 4.24 | 19.5 16.10 4.30 | 20.5 13.10 4.36 | 19.6 19.60 4.30 | 19.6 19.60 4.30 | 20.0 18.10 4.33 | 20.9 14.70 4.39 |
| 36 | TC SHC kW | 16.9 16.90 4.50 | 16.9 16.90 4.50 | 18.3 13.50 4.59 | 19.4 11.10 4.66 | 18.2 18.20 4.58 | 18.2 18.20 4.58 | 19.0 15.90 4.63 | 20.0 12.90 4.70 | 19.1 19.10 4.64 | 19.1 19.10 4.64 | 19.5 17.80 4.66 | 20.4 14.50 4.72 |
| 40 | TC SHC kW | 16.5 16.50 4.86 | 16.5 16.50 4.87 | 17.8 13.30 4.95 | 18.8 10.90 5.03 | 17.8 17.80 4.95 | 17.8 17.80 4.95 | 18.4 15.70 5.00 | 19.4 12.70 5.07 | 18.7 18.70 5.01 | 18.7 18.70 5.01 | 18.9 17.50 5.03 | 19.8 14.30 5.09 |
| 44 | TC SHC kW | 16.1 16.10 5.23 | 16.1 16.10 5.23 | 17.3 13.10 5.32 | 18.3 10.80 5.40 | 17.3 17.30 5.33 | 17.3 17.30 5.32 | 17.9 15.50 5.36 | 18.9 12.50 5.44 | 18.2 18.20 5.39 | 18.2 18.20 5.39 | 18.4 17.30 5.40 | 19.2 14.10 5.46 |
| 48 | TC SHC kW | 15.7 15.70 5.60 | 15.7 15.70 5.60 | 16.8 12.90 5.69 | 17.8 10.60 5.76 | 16.9 16.90 5.70 | 16.9 16.90 5.70 | 17.4 15.20 5.73 | 18.3 12.30 5.81 | 17.7 17.70 5.76 | 17.7 17.70 5.76 | 17.9 17.00 5.77 | 18.6 13.90 5.83 |
| 52 | TC SHC kW | 15.3 15.30 5.96 | 15.3 15.30 5.97 | 16.2 12.70 6.05 | 17.2 10.40 6.13 | 16.5 16.50 6.08 | 16.5 16.50 6.07 | 16.8 15.00 6.10 | 17.7 12.20 6.17 | 17.2 17.20 6.13 | 17.2 17.20 6.14 | 17.3 16.70 6.14 | 18.1 13.70 6.20 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38AR007-012
38ARZ008/40RM007H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 850 | | | | 1150 | | | | 1450 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 20.4 20.30 5.37 | 21.3 19.00 5.37 | 23.9 15.10 5.45 | 25.4 12.90 5.51 | 22.6 22.60 5.40 | 22.8 21.80 5.41 | 25.1 17.30 5.50 | 26.6 14.40 5.57 | 24.1 24.10 5.46 | 24.0 24.10 5.45 | 26.0 19.30 5.55 | 27.5 15.80 5.60 |
| 36 | TC SHC kW | 20.0 19.90 5.81 | 20.7 18.60 5.80 | 23.3 14.80 5.89 | 24.8 12.70 5.95 | 22.1 22.00 5.84 | 22.3 21.50 5.85 | 24.5 17.00 5.94 | 26.1 14.20 6.01 | 23.6 23.60 5.90 | 23.5 23.70 5.90 | 25.2 19.10 5.98 | 26.6 15.50 6.04 |
| 40 | TC SHC kW | 19.6 19.50 6.26 | 20.2 18.30 6.26 | 22.7 14.60 6.37 | 24.1 12.40 6.42 | 21.5 21.50 6.32 | 21.6 21.10 6.32 | 23.9 16.80 6.41 | 25.2 13.90 6.49 | 22.9 22.90 6.37 | 22.8 23.00 6.37 | 24.5 18.80 6.45 | 25.9 15.30 6.51 |
| 44 | TC SHC kW | 19.1 18.90 6.74 | 19.6 18.00 6.73 | 22.0 14.30 6.84 | 23.4 12.20 6.91 | 21.0 21.00 6.79 | 21.1 20.80 6.79 | 23.1 16.40 6.90 | 24.5 13.70 6.96 | 22.4 22.40 6.85 | 22.2 22.40 6.84 | 23.7 18.40 6.92 | 25.1 15.10 7.00 |
| 48 | TC SHC kW | 18.6 18.50 7.21 | 19.0 17.70 7.20 | 21.4 14.00 7.30 | 22.8 11.80 7.38 | 20.4 20.40 7.28 | 20.5 20.30 7.26 | 22.3 16.20 7.36 | 23.7 13.40 7.44 | 21.8 21.80 7.32 | 21.6 21.80 7.31 | 23.1 18.20 7.40 | 24.3 14.80 7.48 |
| 52 | TC SHC kW | 18.1 18.00 7.69 | 18.5 17.40 7.68 | 20.7 13.70 7.78 | 22.1 11.70 7.83 | 19.9 19.90 7.76 | 20.0 19.90 7.74 | 21.7 15.90 7.82 | 23.1 13.10 7.91 | 21.2 21.20 7.79 | 21.1 21.20 7.78 | 22.4 17.90 7.87 | 23.6 14.60 7.94 |

38ARZ008/40RM007 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 850 | | | | 1150 | | | | 1450 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 19.5 19.40 5.39 | 20.3 18.10 5.41 | 22.8 14.40 5.51 | 24.2 12.30 5.57 | 21.4 21.40 5.45 | 21.7 20.70 5.46 | 23.9 16.40 5.56 | 25.3 13.70 5.63 | 22.8 22.80 5.51 | 22.8 22.70 5.51 | 24.7 18.20 5.60 | 26.0 15.00 5.66 |
| 36 | TC SHC kW | 19.1 19.00 5.83 | 19.8 17.80 5.85 | 22.2 14.10 5.96 | 23.6 12.10 6.02 | 21.0 20.90 5.90 | 21.2 20.40 5.91 | 23.3 16.10 6.01 | 24.7 13.50 6.08 | 22.3 22.30 5.96 | 22.3 22.30 5.96 | 24.0 18.00 6.05 | 25.4 14.70 6.11 |
| 40 | TC SHC kW | 18.7 18.60 6.29 | 19.3 17.50 6.32 | 21.6 13.90 6.44 | 23.0 11.80 6.51 | 20.4 20.40 6.38 | 20.6 20.00 6.39 | 22.7 15.90 6.49 | 24.0 13.20 6.57 | 21.7 21.70 6.44 | 21.7 21.70 6.44 | 23.3 17.70 6.53 | 24.7 14.50 6.60 |
| 44 | TC SHC kW | 18.2 18.10 6.76 | 18.7 17.20 6.80 | 21.0 13.60 6.92 | 22.3 11.60 7.00 | 19.9 19.90 6.86 | 20.1 19.70 6.87 | 22.0 15.60 6.98 | 23.3 13.00 7.06 | 21.2 21.20 6.93 | 21.1 21.10 6.92 | 22.6 17.40 7.02 | 23.9 14.30 7.10 |
| 48 | TC SHC kW | 17.8 17.70 7.23 | 18.2 16.90 7.27 | 20.4 13.40 7.40 | 21.7 11.30 7.49 | 19.4 19.40 7.34 | 19.5 19.30 7.35 | 21.3 15.40 7.46 | 22.6 12.70 7.55 | 20.6 20.60 7.41 | 20.5 20.50 7.40 | 22.0 17.20 7.50 | 23.2 14.00 7.59 |
| 52 | TC SHC kW | 17.3 17.20 7.70 | 17.7 16.60 7.74 | 19.8 13.10 7.89 | 21.1 11.10 7.97 | 18.9 18.90 7.82 | 19.0 18.90 7.83 | 20.7 15.10 7.94 | 22.0 12.50 8.04 | 20.1 20.10 7.89 | 20.0 20.00 7.88 | 21.3 16.90 7.99 | 22.5 13.80 8.08 |

LEGEND

- Edb — Entering Dry Bulb
 Ewb — Entering Wet Bulb
 kW — Compressor Motor Power Input
 SHC — Sensible Heat Capacity (kW) Gross
 TC — Total Capacity (kW) Gross

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38AR007-012

38ARZ008/40RM008H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | | |
|--|------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
| | | 1000 | | | | 1400 | | | | 1800 | | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 22 | |
| 32 | TC SHC kW | 21.9 21.90 5.38 | 22.4 20.80 5.40 | 24.8 16.40 5.49 | 26.2 13.80 5.55 | 24.1 24.00 5.45 | 24.0 19.10 5.45 | 26.1 15.70 5.55 | 27.5 25.50 5.61 | 25.5 25.60 5.52 | 26.6 21.70 5.57 | 28.2 17.50 5.64 | | |
| 36 | TC SHC kW | 21.5 21.40 5.82 | 21.9 20.50 5.84 | 24.2 16.10 5.92 | 25.6 13.60 6.00 | 23.5 23.50 5.90 | 23.5 23.50 5.98 | 25.3 18.90 6.04 | 26.9 15.50 5.96 | 25.0 25.00 5.96 | 24.8 24.90 5.96 | 25.9 21.30 6.02 | 27.2 17.30 6.07 | |
| 40 | TC SHC kW | 20.9 20.90 6.30 | 21.2 20.20 6.30 | 23.6 15.90 6.40 | 25.0 13.40 6.46 | 22.9 22.90 6.37 | 22.9 23.00 6.36 | 24.5 18.60 6.45 | 25.9 15.20 6.51 | 24.3 24.30 6.44 | 24.3 21.00 6.43 | 25.3 16.90 6.55 | 26.4 16.90 6.55 | |
| 44 | TC SHC kW | 20.4 20.40 6.77 | 20.7 19.90 6.77 | 22.8 15.50 6.88 | 24.2 13.00 6.95 | 22.4 22.40 6.86 | 22.3 22.40 6.85 | 23.9 18.40 6.92 | 25.1 15.00 6.99 | 23.7 23.70 6.92 | 23.6 23.70 6.92 | 24.5 20.80 6.95 | 25.7 16.70 7.03 | |
| 48 | TC SHC kW | 19.9 19.90 7.24 | 20.0 19.50 7.23 | 22.2 15.30 7.35 | 23.6 12.80 7.43 | 21.8 21.80 7.32 | 21.7 21.80 7.32 | 23.1 18.10 7.41 | 24.4 14.70 7.47 | 23.1 23.10 7.40 | 23.0 23.10 7.39 | 23.8 20.40 7.44 | 25.0 16.50 7.51 | |
| 52 | TC SHC kW | 19.4 19.40 7.72 | 19.4 19.10 7.70 | 21.5 15.00 7.80 | 22.8 12.50 7.90 | 21.2 21.20 7.80 | 21.1 21.20 7.80 | 22.4 17.80 7.87 | 23.7 14.50 7.94 | 22.4 22.40 7.88 | 22.4 22.50 7.87 | 23.1 20.10 7.91 | 24.2 16.20 7.98 | |

38ARZ008/40RM008 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | | |
|--|------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
| | | 1000 | | | | 1400 | | | | 1800 | | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 22 | |
| 32 | TC SHC kW | 20.8 20.80 5.43 | 21.3 19.80 5.45 | 23.6 15.60 5.55 | 25.0 13.10 5.61 | 22.8 22.70 5.51 | 22.8 22.60 5.51 | 24.7 18.10 5.60 | 26.0 14.90 5.66 | 24.1 24.10 5.57 | 24.1 24.10 5.57 | 25.3 20.40 5.63 | 26.7 16.50 5.69 | |
| 36 | TC SHC kW | 20.4 20.30 5.87 | 20.8 19.50 5.89 | 23.0 15.30 5.99 | 24.4 12.90 6.06 | 22.2 22.20 5.96 | 22.3 22.20 5.96 | 24.0 17.90 6.05 | 25.4 14.70 6.11 | 23.6 23.60 6.02 | 23.5 23.50 6.02 | 24.7 20.10 6.08 | 26.0 16.30 6.14 | |
| 40 | TC SHC kW | 19.9 19.90 6.35 | 20.2 19.20 6.36 | 22.4 15.10 6.48 | 23.7 12.70 6.55 | 21.7 21.70 6.44 | 21.7 21.70 6.44 | 23.3 17.60 6.53 | 24.6 14.40 6.60 | 23.0 23.00 6.51 | 23.0 23.00 6.51 | 24.0 19.80 6.57 | 25.2 16.00 6.64 | |
| 44 | TC SHC kW | 19.4 19.40 6.83 | 19.7 18.90 6.84 | 21.7 14.80 6.96 | 23.0 12.40 7.04 | 21.2 21.20 6.93 | 21.2 21.20 6.93 | 22.7 17.40 7.02 | 23.9 14.20 7.09 | 22.4 22.40 7.00 | 22.4 22.40 7.00 | 23.3 19.60 7.05 | 24.5 15.80 7.13 | |
| 48 | TC SHC kW | 18.9 18.90 7.30 | 19.1 18.60 7.32 | 21.1 14.60 7.45 | 22.4 12.20 7.53 | 20.6 20.60 7.41 | 20.6 20.60 7.41 | 22.0 17.10 7.51 | 23.2 13.90 7.58 | 21.8 21.80 7.49 | 21.8 21.80 7.49 | 22.6 19.30 7.54 | 23.8 15.60 7.62 | |
| 52 | TC SHC kW | 18.4 18.40 7.78 | 18.5 18.20 7.80 | 20.5 14.30 7.93 | 21.7 11.90 8.02 | 20.1 20.10 7.90 | 20.0 20.00 7.90 | 21.3 16.80 7.99 | 22.5 13.70 8.07 | 21.2 21.20 7.98 | 21.2 21.20 7.98 | 21.9 19.00 8.03 | 23.0 15.30 8.11 | |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38AR007-012
38ARZ008/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1450 | | | | 1900 | | | | 2350 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 25.1 25.10 5.49 | 25.0 25.00 5.50 | 26.8 20.10 5.58 | 28.2 16.50 5.65 | 26.7 26.70 5.57 | 26.7 23.10 5.62 | 27.6 18.60 5.68 | 29.1 27.80 5.62 | 27.8 27.80 5.62 | 27.8 27.80 5.64 | 28.5 25.70 5.71 | 29.6 20.70 5.71 |
| 36 | TC SHC kW | 24.4 24.40 5.93 | 24.4 24.50 5.93 | 26.2 19.90 6.02 | 27.5 16.20 6.09 | 25.9 25.90 6.01 | 25.9 22.80 6.06 | 26.9 18.30 6.12 | 28.4 27.20 6.07 | 27.2 27.20 6.07 | 27.2 27.20 6.09 | 27.8 25.20 6.14 | 28.8 20.50 6.14 |
| 40 | TC SHC kW | 23.8 23.80 6.42 | 23.8 23.80 6.41 | 25.3 19.50 6.51 | 26.8 15.90 6.56 | 25.3 25.30 6.50 | 25.3 22.50 6.54 | 26.2 18.20 6.59 | 27.6 26.50 6.55 | 26.5 26.50 6.55 | 26.5 26.50 6.57 | 27.0 24.90 6.62 | 28.0 20.10 6.62 |
| 44 | TC SHC kW | 23.2 23.20 6.89 | 23.2 23.30 6.90 | 24.6 19.20 6.97 | 26.0 15.70 7.04 | 24.7 24.70 6.98 | 24.7 24.70 6.98 | 25.4 22.10 7.01 | 26.6 17.80 7.08 | 25.7 25.70 7.04 | 25.7 25.70 7.03 | 26.1 24.40 7.04 | 27.0 19.80 7.10 |
| 48 | TC SHC kW | 22.6 22.60 7.37 | 22.6 22.70 7.37 | 23.8 19.00 7.44 | 25.2 15.40 7.52 | 24.0 24.00 7.45 | 24.1 24.10 7.46 | 24.6 21.80 7.49 | 25.7 17.50 7.56 | 25.0 25.00 7.51 | 24.9 24.90 7.53 | 25.1 24.00 7.58 | 26.1 19.60 7.58 |
| 52 | TC SHC kW | 22.0 22.00 7.84 | 21.9 22.00 7.85 | 23.0 18.60 7.91 | 24.5 15.20 7.99 | 23.4 23.40 7.92 | 23.4 23.40 7.93 | 23.8 21.40 7.96 | 25.0 17.30 8.02 | 24.3 24.30 7.99 | 24.3 24.30 7.99 | 24.4 23.60 8.05 | 25.4 19.30 8.05 |

38ARZ008/40RM012 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1450 | | | | 1900 | | | | 2350 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 23.6 23.60 5.54 | 23.6 23.50 5.55 | 25.3 18.90 5.63 | 26.7 15.50 5.69 | 25.0 25.00 5.61 | 25.0 25.00 5.61 | 26.1 21.60 5.66 | 27.4 17.40 5.73 | 26.0 26.00 5.66 | 26.0 26.00 5.66 | 26.7 23.80 5.75 | 27.9 19.20 5.75 |
| 36 | TC SHC kW | 23.0 23.00 5.99 | 23.0 23.00 5.99 | 24.7 18.70 6.08 | 26.0 15.30 6.15 | 24.4 24.40 6.06 | 24.4 24.40 6.06 | 25.4 21.30 6.12 | 26.7 17.20 6.18 | 25.4 25.40 6.12 | 25.4 25.40 6.11 | 26.0 23.40 6.14 | 27.1 19.00 6.20 |
| 40 | TC SHC kW | 22.4 22.40 6.48 | 22.5 22.40 6.48 | 24.0 18.40 6.57 | 25.3 15.00 6.64 | 23.8 23.80 6.56 | 23.8 23.80 6.56 | 24.7 21.00 6.61 | 25.9 17.00 6.67 | 24.8 24.80 6.61 | 24.8 24.80 6.61 | 25.2 23.10 6.64 | 26.3 18.70 6.70 |
| 44 | TC SHC kW | 21.9 21.90 6.97 | 21.9 21.90 6.97 | 23.2 18.10 7.05 | 24.5 14.80 7.13 | 23.2 23.20 7.05 | 23.2 23.20 7.05 | 23.9 20.70 7.10 | 25.1 16.70 7.17 | 24.1 24.10 7.11 | 24.1 24.10 7.10 | 24.5 22.70 7.13 | 25.5 18.40 7.19 |
| 48 | TC SHC kW | 21.3 21.30 7.46 | 21.3 21.30 7.46 | 22.5 17.90 7.54 | 23.8 14.50 7.62 | 22.6 22.60 7.54 | 22.6 22.60 7.55 | 23.2 20.40 7.59 | 24.3 16.40 7.66 | 23.5 23.50 7.60 | 23.4 23.40 7.60 | 23.7 22.30 7.62 | 24.7 18.20 7.68 |
| 52 | TC SHC kW | 20.7 20.70 7.94 | 20.7 20.70 7.95 | 21.8 17.60 8.03 | 23.1 14.30 8.11 | 22.0 22.00 8.03 | 22.0 22.00 8.04 | 22.5 20.10 8.08 | 23.6 16.20 8.15 | 22.8 22.80 8.10 | 22.8 22.80 8.09 | 23.0 21.90 8.11 | 23.9 17.90 8.18 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38ARZ012/40RM008H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1000 | | | | 1400 | | | | 1800 | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 |
| 32 | TC SHC kW | 26.5 26.30 7.43 | 27.7 24.20 7.51 | 31.1 19.00 7.76 | 32.7 16.40 7.91 | 29.4 29.30 7.62 | 29.8 28.10 7.66 | 32.6 22.00 7.90 | 34.6 18.50 8.06 | 31.4 31.40 7.77 | 31.4 31.10 7.77 | 33.7 24.70 8.00 | 35.7 20.30 8.16 |
| 36 | TC SHC kW | 26.0 25.80 7.93 | 27.1 23.70 7.99 | 30.2 18.70 8.23 | 32.0 16.00 8.38 | 28.8 28.70 8.12 | 29.1 27.70 8.13 | 31.9 21.70 8.39 | 33.5 18.20 8.54 | 30.6 30.60 8.27 | 30.6 30.50 8.28 | 33.0 24.30 8.47 | 34.9 19.90 8.63 |
| 40 | TC SHC kW | 25.3 25.20 8.43 | 26.3 23.30 8.50 | 29.4 18.40 8.74 | 31.2 15.70 8.89 | 28.0 28.00 8.65 | 28.3 27.10 8.65 | 30.9 21.30 8.90 | 32.5 17.70 9.05 | 29.8 29.80 8.79 | 29.8 29.80 8.80 | 31.9 23.90 8.99 | 33.6 19.60 9.14 |
| 44 | TC SHC kW | 24.8 24.60 8.96 | 25.6 22.90 9.01 | 28.5 17.90 9.25 | 30.1 15.40 9.38 | 27.3 27.20 9.16 | 27.5 26.60 9.16 | 29.9 20.90 9.39 | 31.7 17.40 9.53 | 29.0 29.00 9.30 | 29.0 29.10 9.30 | 30.9 23.50 9.48 | 32.4 19.30 9.64 |
| 48 | TC SHC kW | 24.1 24.00 9.48 | 24.9 22.40 9.51 | 27.7 17.60 9.74 | 29.3 15.00 9.89 | 26.5 26.50 9.67 | 26.7 26.10 9.68 | 29.0 20.50 9.88 | 30.5 17.10 10.05 | 28.2 28.20 9.82 | 28.1 28.20 9.80 | 29.9 23.10 9.98 | 31.6 18.80 10.13 |
| 52 | TC SHC kW | 23.6 23.50 10.01 | 24.1 22.00 10.05 | 26.7 17.30 10.21 | 28.4 14.60 10.41 | 25.8 25.80 10.20 | 25.9 25.40 10.19 | 28.0 20.20 10.43 | 29.6 16.70 10.51 | 27.3 27.30 10.35 | 27.3 27.40 10.34 | 28.9 22.70 10.53 | 30.3 18.50 10.61 |

38ARZ012/40RM008 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1000 | | | | 1400 | | | | 1800 | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 |
| 32 | TC SHC kW | 24.9 24.70 7.31 | 26.1 22.70 7.39 | 29.3 17.90 7.64 | 30.9 15.40 7.79 | 27.5 27.40 7.49 | 28.0 26.20 7.54 | 30.8 20.50 7.78 | 32.5 17.30 7.94 | 29.3 29.30 7.64 | 29.4 28.90 7.65 | 31.8 23.00 7.88 | 33.5 18.90 8.04 |
| 36 | TC SHC kW | 24.4 24.20 7.78 | 25.5 22.30 7.85 | 28.5 17.60 8.10 | 30.2 15.10 8.25 | 26.9 26.80 7.96 | 27.4 25.80 8.00 | 30.1 20.20 8.24 | 31.7 17.00 8.41 | 28.6 28.60 8.11 | 28.7 28.40 8.12 | 31.0 22.60 8.34 | 32.7 18.60 8.50 |
| 40 | TC SHC kW | 23.8 23.70 8.28 | 24.8 21.90 8.35 | 27.8 17.30 8.59 | 29.4 14.80 8.74 | 26.2 26.20 8.46 | 26.6 25.30 8.49 | 29.2 19.90 8.73 | 30.8 16.60 8.89 | 27.9 27.90 8.60 | 28.0 27.80 8.61 | 30.1 22.30 8.82 | 31.7 18.30 8.98 |
| 44 | TC SHC kW | 23.3 23.10 8.78 | 24.2 21.50 8.84 | 27.0 16.90 9.07 | 28.5 14.50 9.22 | 25.6 25.50 8.95 | 25.9 24.80 8.98 | 28.3 19.50 9.21 | 29.9 16.30 9.37 | 27.2 27.20 9.09 | 27.2 27.20 9.09 | 29.2 21.90 9.30 | 30.7 18.00 9.46 |
| 48 | TC SHC kW | 22.7 22.60 9.28 | 23.5 21.10 9.33 | 26.2 16.60 9.56 | 27.7 14.10 9.70 | 24.9 24.90 9.45 | 25.2 24.40 9.47 | 27.5 19.20 9.69 | 29.0 16.00 9.86 | 26.5 26.50 9.58 | 26.4 26.40 9.58 | 28.3 21.60 9.77 | 29.8 17.60 9.94 |
| 52 | TC SHC kW | 22.2 22.10 9.79 | 22.8 20.70 9.83 | 25.4 16.30 10.00 | 26.9 13.80 10.20 | 24.3 24.30 9.95 | 24.4 23.90 9.96 | 26.6 18.90 10.20 | 28.1 15.70 10.30 | 25.7 25.70 10.10 | 25.7 25.70 10.10 | 27.4 21.20 10.30 | 28.8 17.30 10.40 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross



COMBINATION RATINGS — SI (cont)

38AR007-012

38ARZ012/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1450 | | | | 1900 | | | | 2350 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 30.3 30.20 7.71 | 30.8 29.10 7.76 | 33.7 22.80 8.04 | 35.4 19.10 8.21 | 32.6 32.60 7.93 | 32.6 32.40 7.91 | 34.8 25.90 8.14 | 36.7 21.30 8.33 | 33.9 33.90 8.08 | 33.9 34.20 8.06 | 35.5 28.80 8.22 | 37.2 23.30 8.40 |
| 36 | TC SHC kW | 29.7 29.60 8.18 | 29.9 28.40 8.21 | 32.7 22.40 8.50 | 34.6 18.80 8.67 | 31.8 31.80 8.40 | 31.8 31.80 8.40 | 33.6 25.60 8.61 | 35.6 20.90 8.79 | 33.2 33.20 8.55 | 33.2 33.50 8.55 | 34.6 28.50 8.69 | 36.2 23.00 8.87 |
| 40 | TC SHC kW | 29.0 28.90 8.68 | 29.0 27.90 8.70 | 31.8 22.00 8.95 | 33.6 18.30 9.19 | 30.8 30.80 8.88 | 30.8 31.10 8.87 | 32.8 25.20 9.06 | 34.6 20.60 9.26 | 32.3 32.30 9.05 | 32.3 32.30 9.05 | 33.6 28.10 9.03 | 35.2 22.70 9.32 |
| 44 | TC SHC kW | 28.0 27.90 9.16 | 28.2 27.40 9.18 | 30.6 21.60 9.46 | 32.4 18.00 9.63 | 30.1 30.10 9.40 | 29.9 30.30 9.37 | 31.5 24.80 9.57 | 33.3 20.10 9.74 | 31.3 31.30 9.61 | 31.3 31.30 9.60 | 32.4 27.70 9.63 | 34.2 22.20 9.80 |
| 48 | TC SHC kW | 27.3 27.20 9.61 | 27.4 26.90 9.63 | 29.7 21.20 9.94 | 31.4 17.60 10.11 | 29.3 29.30 9.89 | 28.9 29.40 9.87 | 30.8 24.30 10.05 | 32.3 19.80 10.18 | 30.4 30.40 10.00 | 30.4 30.40 10.00 | 31.4 27.30 10.12 | 32.9 21.90 10.28 |
| 52 | TC SHC kW | 26.5 26.50 10.09 | 26.3 26.40 10.09 | 28.6 20.90 10.38 | 30.5 17.10 10.49 | 28.2 28.20 10.38 | 28.1 28.40 10.38 | 29.6 24.00 10.48 | 31.1 19.40 10.68 | 29.6 29.60 10.48 | 29.6 29.60 10.48 | 30.2 26.70 10.58 | 31.8 21.40 10.78 |

38ARZ012/40RM012 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1450 | | | | 1900 | | | | 2350 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 28.5 28.40 7.57 | 29.0 27.30 7.61 | 31.7 21.50 7.87 | 33.4 18.00 8.03 | 30.5 30.50 7.75 | 30.6 30.30 7.75 | 32.8 24.30 7.97 | 34.5 19.90 8.13 | 31.9 31.90 7.88 | 31.9 31.90 7.88 | 33.5 26.80 8.04 | 35.2 21.70 8.20 |
| 36 | TC SHC kW | 27.9 27.80 8.04 | 28.2 26.90 8.07 | 30.9 21.10 8.33 | 32.6 17.70 8.49 | 29.8 29.80 8.22 | 29.8 29.70 8.22 | 31.9 24.00 8.43 | 33.6 19.60 8.60 | 31.2 31.20 8.35 | 31.2 31.20 8.35 | 32.6 26.50 8.50 | 34.2 21.40 8.66 |
| 40 | TC SHC kW | 27.2 27.10 8.54 | 27.5 26.40 8.56 | 30.0 20.80 8.80 | 31.6 17.30 8.97 | 29.0 29.00 8.71 | 29.0 29.00 8.71 | 31.0 23.60 8.91 | 32.6 19.30 9.08 | 30.3 30.30 8.84 | 30.3 30.30 8.84 | 31.6 26.10 8.98 | 33.2 21.10 9.14 |
| 44 | TC SHC kW | 26.5 26.40 9.03 | 26.7 25.90 9.05 | 29.1 20.40 9.28 | 30.7 17.00 9.45 | 28.3 28.30 9.20 | 28.2 28.20 9.19 | 30.0 23.20 9.39 | 31.6 18.90 9.56 | 29.5 29.50 9.33 | 29.5 29.50 9.32 | 30.7 25.70 9.45 | 32.2 20.70 9.62 |
| 48 | TC SHC kW | 25.8 25.70 9.52 | 25.9 25.40 9.54 | 28.2 20.00 9.75 | 29.7 16.60 9.93 | 27.5 27.50 9.70 | 27.4 27.40 9.68 | 29.1 22.80 9.86 | 30.6 18.60 10.00 | 28.7 28.70 9.81 | 28.7 28.70 9.81 | 29.7 25.30 9.93 | 31.2 20.40 10.1 |
| 52 | TC SHC kW | 25.1 25.10 10.00 | 25.1 24.90 10.00 | 27.3 19.70 10.20 | 28.8 16.20 10.40 | 26.7 26.70 10.20 | 26.6 26.60 10.20 | 28.1 22.50 10.30 | 29.6 18.20 10.50 | 27.8 27.80 10.50 | 27.8 27.80 10.50 | 28.7 24.90 10.40 | 30.1 20.00 10.60 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38AR007-012

38ARZ012/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1750 | | | | 2350 | | | | 2950 | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 22 |
| 32 | TC SHC kW | 32.1 32.00 7.90 | 32.0 31.60 7.90 | 34.8 24.80 8.17 | 36.7 20.50 8.35 | 34.4 34.40 8.12 | 34.2 34.40 8.10 | 35.8 28.70 8.28 | 37.6 23.10 8.46 | 35.6 35.60 8.27 | 35.6 35.60 8.26 | 36.9 32.00 8.36 | 38.2 25.60 8.53 |
| 36 | TC SHC kW | 31.1 31.00 8.36 | 31.2 30.90 8.36 | 33.9 24.30 8.63 | 35.6 20.20 8.82 | 33.6 33.60 8.58 | 33.3 33.40 8.58 | 34.9 28.40 8.75 | 36.8 22.80 8.94 | 34.7 34.70 8.74 | 34.7 34.70 8.73 | 35.6 31.40 8.83 | 37.4 25.20 8.99 |
| 40 | TC SHC kW | 30.3 30.30 8.83 | 30.4 30.30 8.83 | 32.9 23.90 9.13 | 34.6 19.70 9.31 | 32.6 32.60 9.05 | 32.3 32.60 9.05 | 33.9 28.00 9.23 | 35.5 22.40 9.41 | 34.1 34.10 9.21 | 34.1 34.10 9.21 | 34.5 31.10 9.31 | 36.1 24.90 9.48 |
| 44 | TC SHC kW | 29.5 29.50 9.37 | 29.6 29.50 9.36 | 31.6 23.60 9.59 | 33.5 19.30 9.78 | 31.6 31.60 9.55 | 31.6 31.60 9.55 | 32.8 27.40 9.71 | 34.4 22.00 9.89 | 32.9 32.90 9.69 | 32.9 32.90 9.69 | 33.5 30.50 9.78 | 34.9 24.50 9.96 |
| 48 | TC SHC kW | 28.7 28.70 9.84 | 28.4 29.00 9.85 | 30.9 23.20 10.07 | 32.4 18.90 10.28 | 30.7 30.70 10.05 | 30.7 30.70 10.05 | 31.8 26.90 10.19 | 33.3 21.60 10.38 | 32.0 32.00 10.19 | 32.0 32.00 10.19 | 32.4 29.90 10.29 | 33.8 24.00 10.48 |
| 52 | TC SHC kW | 28.0 28.00 10.28 | 27.6 27.90 10.28 | 29.6 22.80 10.58 | 31.2 18.60 10.78 | 29.7 29.70 10.58 | 29.9 29.90 10.57 | 30.4 26.40 10.68 | 32.3 21.20 10.88 | 30.8 30.80 10.68 | 30.9 30.90 10.68 | 31.4 29.60 10.78 | 32.5 23.70 10.88 |

38ARZ012/40RM014 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1750 | | | | 2350 | | | | 2950 | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 22 |
| 32 | TC SHC kW | 30.3 30.20 7.73 | 30.5 29.70 7.75 | 33.3 23.40 8.01 | 35.0 19.40 8.19 | 32.4 32.40 7.93 | 32.4 32.40 7.93 | 34.3 26.70 8.12 | 36.1 21.70 8.29 | 33.8 33.80 8.07 | 33.8 33.80 8.07 | 35.1 29.70 8.19 | 36.7 23.90 8.36 |
| 36 | TC SHC kW | 29.6 29.50 8.19 | 29.7 29.10 8.21 | 32.4 23.00 8.47 | 34.1 19.10 8.65 | 31.6 31.60 8.39 | 31.6 31.60 8.40 | 33.4 26.40 8.58 | 35.1 21.40 8.76 | 33.0 33.00 8.54 | 33.0 33.00 8.53 | 34.1 29.20 8.65 | 35.7 23.50 8.82 |
| 40 | TC SHC kW | 28.8 28.80 8.68 | 28.9 28.50 8.69 | 31.4 22.60 8.94 | 33.1 18.70 9.13 | 30.8 30.80 8.88 | 30.8 30.80 8.88 | 32.4 26.00 9.05 | 34.0 21.00 9.23 | 32.1 32.10 9.02 | 32.1 32.10 9.02 | 32.1 32.10 9.02 | 34.6 28.80 9.13 |
| 44 | TC SHC kW | 28.0 28.00 9.17 | 28.1 27.90 9.18 | 30.4 22.30 9.41 | 32.0 18.30 9.60 | 29.9 29.90 9.37 | 29.9 29.90 9.37 | 31.3 25.60 9.53 | 32.9 20.70 9.71 | 31.2 31.20 9.51 | 31.2 31.20 9.51 | 31.2 31.20 9.51 | 33.5 28.30 9.60 |
| 48 | TC SHC kW | 27.2 27.20 9.65 | 27.2 27.20 9.66 | 29.4 21.90 9.89 | 31.0 17.90 10.10 | 29.0 29.00 9.86 | 29.0 29.00 9.86 | 30.3 25.20 10.00 | 31.9 20.30 10.20 | 30.3 30.30 10.00 | 30.3 30.30 10.00 | 30.3 30.30 10.00 | 32.4 27.90 10.30 |
| 52 | TC SHC kW | 26.5 26.50 10.10 | 26.4 26.40 10.10 | 28.4 21.50 10.40 | 30.0 17.60 10.60 | 28.2 28.20 10.40 | 28.2 28.20 10.30 | 29.2 24.70 10.50 | 30.8 19.90 10.70 | 29.3 29.30 10.50 | 29.3 29.30 10.50 | 29.4 29.40 10.60 | 31.3 27.40 10.70 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross



COMBINATION RATINGS — SI (cont)

38AR007-012

38ARS012/40RM008H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1000 | | | | 1400 | | | | 1800 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 25.1 24.90 7.10 | 26.1 23.20 7.19 | 29.7 18.60 7.49 | 31.8 16.10 7.66 | 28.1 28.00 7.36 | 28.4 27.40 7.38 | 31.5 21.80 7.64 | 33.8 18.30 7.81 | 30.3 30.30 7.53 | 30.2 30.30 7.52 | 32.8 24.50 7.74 | 35.1 20.30 7.91 |
| 36 | TC SHC kW | 24.4 24.20 7.57 | 25.3 22.80 7.66 | 28.7 18.20 7.98 | 30.7 15.60 8.18 | 27.3 27.30 7.84 | 27.5 26.70 7.86 | 30.4 21.30 8.16 | 32.5 17.90 8.34 | 29.3 29.30 8.05 | 29.2 29.40 8.04 | 31.7 24.10 8.26 | 33.8 19.80 8.45 |
| 40 | TC SHC kW | 23.6 23.50 8.01 | 24.4 22.20 8.09 | 27.7 17.70 8.47 | 29.7 15.20 8.69 | 26.4 26.40 8.33 | 26.6 26.10 8.34 | 29.3 20.90 8.66 | 31.2 17.40 8.88 | 28.4 28.40 8.56 | 28.3 28.50 8.56 | 30.4 23.60 8.78 | 32.4 19.40 8.99 |
| 44 | TC SHC kW | 22.9 22.80 8.45 | 23.4 21.70 8.53 | 26.6 17.30 8.95 | 28.5 14.70 9.19 | 25.6 25.50 8.82 | 25.6 25.40 8.80 | 28.1 20.30 9.16 | 30.2 17.00 9.38 | 27.4 27.40 9.05 | 27.4 27.50 9.04 | 29.2 23.20 9.29 | 31.0 18.90 9.53 |
| 48 | TC SHC kW | 22.1 22.00 8.90 | 22.5 21.10 8.97 | 25.5 16.90 9.43 | 27.5 14.40 9.72 | 24.7 24.70 9.29 | 24.6 24.70 9.28 | 27.0 19.90 9.64 | 28.8 16.50 9.92 | 26.5 26.50 9.56 | 26.4 26.50 9.54 | 28.0 22.60 9.80 | 29.9 18.50 10.05 |
| 52 | TC SHC kW | 21.4 21.30 9.35 | 21.7 20.60 9.43 | 24.5 16.40 9.92 | 26.4 14.00 10.21 | 23.8 23.80 9.78 | 23.6 23.70 9.75 | 25.8 19.40 10.15 | 27.7 16.10 10.41 | 25.5 25.50 10.06 | 25.4 25.40 10.03 | 26.8 22.20 10.32 | 28.5 18.10 10.61 |

38ARS012/40RM008 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|
| | 1000 | | | | 1400 | | | | 1800 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 23.5 23.40 6.99 | 24.6 21.80 7.08 | 28.0 17.50 7.38 | 30.0 15.10 7.55 | 26.3 26.20 7.23 | 26.7 25.50 7.27 | 29.8 20.30 7.53 | 31.7 17.10 7.70 | 28.3 28.30 7.40 | 28.3 28.20 7.41 | 30.9 22.80 7.62 | 32.9 18.90 7.79 |
| 36 | TC SHC kW | 22.9 22.70 7.43 | 23.8 21.40 7.52 | 27.1 17.10 7.85 | 29.0 14.70 8.05 | 25.5 25.50 7.69 | 25.9 24.90 7.73 | 28.7 19.90 8.02 | 30.7 16.70 8.21 | 27.4 27.40 7.89 | 27.4 27.40 7.89 | 29.8 22.40 8.13 | 31.7 18.50 8.32 |
| 40 | TC SHC kW | 22.2 22.10 7.86 | 23.0 20.90 7.94 | 26.2 16.70 8.32 | 28.0 14.30 8.54 | 24.7 24.70 8.15 | 25.0 24.30 8.18 | 27.7 19.50 8.50 | 29.6 16.30 8.72 | 26.6 26.60 8.37 | 26.6 26.60 8.37 | 28.7 22.00 8.62 | 30.6 18.10 8.83 |
| 44 | TC SHC kW | 21.5 21.40 8.28 | 22.1 20.40 8.37 | 25.2 16.30 8.78 | 27.0 13.90 9.03 | 24.0 23.90 8.62 | 24.1 23.70 8.63 | 26.6 19.00 8.98 | 28.5 15.90 9.22 | 25.7 25.70 8.85 | 25.7 25.70 8.84 | 27.6 21.60 8.91 | 29.4 17.70 9.35 |
| 48 | TC SHC kW | 20.8 20.70 8.71 | 21.3 19.90 8.80 | 24.2 15.90 9.25 | 26.0 13.60 9.53 | 23.2 23.20 9.08 | 23.2 23.10 9.08 | 25.6 18.60 9.45 | 27.4 15.50 9.73 | 24.9 24.90 9.33 | 24.8 24.80 9.32 | 26.5 21.10 9.60 | 28.2 17.30 9.86 |
| 52 | TC SHC kW | 20.1 20.00 9.14 | 20.5 19.40 9.23 | 23.3 15.50 9.71 | 25.0 13.20 10.00 | 22.4 22.40 9.54 | 22.3 22.30 9.53 | 24.5 18.20 9.93 | 26.3 15.10 10.20 | 24.0 24.00 9.81 | 23.9 23.90 9.80 | 25.4 20.70 10.10 | 27.1 16.90 10.40 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38ARS007-012

38ARS012/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1450 | | | | 1900 | | | | 2350 | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 |
| 32 | TC SHC kW | 28.8 28.80 7.40 | 29.2 28.00 7.43 | 32.2 22.20 7.70 | 34.4 18.70 7.89 | 31.0 31.00 7.62 | 31.2 31.30 7.61 | 33.4 25.50 7.81 | 35.6 21.00 8.00 | 32.8 32.80 7.76 | 32.8 32.80 7.76 | 34.2 28.30 7.89 | 36.3 23.10 8.04 |
| 36 | TC SHC kW | 28.0 28.00 7.88 | 28.0 27.20 7.92 | 31.1 21.80 8.21 | 33.0 18.20 8.43 | 30.3 30.30 8.13 | 30.1 30.10 8.12 | 32.2 25.00 8.33 | 34.4 20.50 8.54 | 31.8 31.80 8.30 | 31.8 31.80 8.30 | 33.2 28.10 8.42 | 35.1 22.70 8.60 |
| 40 | TC SHC kW | 27.0 26.90 8.38 | 27.0 26.60 8.40 | 30.0 21.30 8.73 | 31.9 17.80 8.96 | 29.2 29.20 8.64 | 29.2 29.50 8.64 | 30.8 24.50 8.86 | 32.9 20.10 9.08 | 30.8 30.80 8.83 | 30.8 30.80 8.83 | 31.8 27.30 8.96 | 33.5 22.20 9.19 |
| 44 | TC SHC kW | 26.1 26.10 8.86 | 26.1 25.90 8.87 | 28.9 20.80 9.23 | 30.7 17.40 9.51 | 28.3 28.30 9.15 | 28.0 28.30 9.15 | 29.6 24.00 9.40 | 31.6 19.70 9.55 | 29.7 29.70 9.33 | 29.7 29.70 9.32 | 30.7 26.90 9.50 | 32.3 21.80 9.63 |
| 48 | TC SHC kW | 25.3 25.30 9.33 | 25.1 25.20 9.32 | 27.8 20.40 9.77 | 29.3 17.00 10.04 | 27.4 27.40 9.68 | 27.4 27.40 9.68 | 28.7 23.60 9.90 | 30.4 19.10 10.16 | 28.7 28.70 9.97 | 28.7 28.70 10.03 | 29.2 26.40 10.29 | 31.0 21.40 10.29 |
| 52 | TC SHC kW | 24.4 24.40 9.84 | 24.2 24.30 9.84 | 26.2 20.00 10.28 | 28.1 16.40 10.58 | 26.2 26.20 10.16 | 26.2 26.20 10.16 | 27.3 23.10 10.38 | 29.0 18.70 10.68 | 27.7 27.70 10.38 | 27.7 27.70 10.38 | 28.3 26.00 10.58 | 29.6 26.00 10.78 |

38ARS012/40RM012 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1450 | | | | 1900 | | | | 2350 | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 |
| 32 | TC SHC kW | 27.3 27.30 7.32 | 27.7 26.60 7.35 | 30.7 21.20 7.61 | 32.7 17.80 7.78 | 29.5 29.50 7.51 | 29.5 29.50 7.51 | 31.9 24.10 7.71 | 33.9 19.90 7.88 | 31.1 31.10 7.64 | 31.1 31.10 7.64 | 32.7 26.80 7.78 | 34.6 21.80 7.94 |
| 36 | TC SHC kW | 26.5 26.50 7.79 | 26.8 26.00 7.82 | 29.6 20.80 8.11 | 31.6 17.40 8.31 | 28.6 28.60 8.01 | 28.6 28.60 8.01 | 30.7 23.70 8.22 | 32.7 19.50 8.41 | 30.1 30.10 8.16 | 30.1 30.10 8.16 | 31.5 26.30 8.30 | 33.4 21.40 8.48 |
| 40 | TC SHC kW | 25.7 25.60 8.26 | 25.8 25.30 8.28 | 28.5 20.30 8.60 | 30.4 17.00 8.82 | 27.7 27.70 8.50 | 27.7 27.70 8.50 | 29.6 23.30 8.72 | 31.5 19.10 8.94 | 29.1 29.10 8.67 | 29.1 29.10 8.67 | 30.3 25.80 8.81 | 32.1 21.00 9.01 |
| 44 | TC SHC kW | 24.8 24.80 8.73 | 24.9 24.70 8.74 | 27.4 19.90 9.09 | 29.3 16.60 9.33 | 26.8 26.80 8.99 | 26.8 26.80 8.99 | 28.4 22.80 9.22 | 30.2 18.70 9.46 | 28.2 28.20 9.18 | 28.2 28.20 9.18 | 29.2 25.40 9.32 | 30.9 20.60 9.54 |
| 48 | TC SHC kW | 24.0 24.00 9.19 | 24.0 24.00 9.20 | 26.3 19.50 9.58 | 28.1 16.20 9.85 | 25.9 25.90 9.49 | 25.9 25.90 9.49 | 27.3 22.40 9.71 | 29.0 18.20 9.98 | 27.2 27.20 9.69 | 27.2 27.20 9.69 | 28.0 24.90 9.84 | 29.6 20.20 10.10 |
| 52 | TC SHC kW | 23.2 23.20 9.66 | 23.1 23.10 9.66 | 25.2 19.10 10.10 | 26.9 15.70 10.40 | 25.0 25.00 9.98 | 25.0 25.00 9.98 | 26.1 21.90 10.20 | 27.8 17.80 10.50 | 26.2 26.20 10.20 | 26.2 26.20 10.20 | 26.8 24.40 10.40 | 28.4 19.80 10.60 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38AR007-012
38ARS012/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1750 | | | | 2350 | | | | 2950 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 30.9 30.90 7.62 | 31.0 30.70 7.62 | 33.7 24.50 7.86 | 36.0 20.40 8.05 | 33.5 33.50 7.83 | 33.3 28.40 7.84 | 35.1 23.20 7.99 | 37.2 23.20 8.14 | 35.4 35.40 7.97 | 35.4 35.40 7.97 | 36.0 31.70 8.05 | 38.1 25.80 8.20 |
| 36 | TC SHC kW | 30.1 29.90 8.13 | 29.8 30.00 8.13 | 32.5 24.00 8.40 | 34.8 19.90 8.60 | 32.2 32.20 8.37 | 32.2 27.90 8.52 | 33.9 22.60 8.72 | 35.9 32.60 9.27 | 34.0 32.90 9.10 | 34.0 34.00 9.08 | 35.0 31.30 9.20 | 36.6 25.30 9.35 |
| 40 | TC SHC kW | 28.8 28.80 8.65 | 28.9 29.10 8.63 | 31.3 23.50 8.91 | 33.3 19.50 9.12 | 31.3 31.30 8.91 | 31.3 31.30 8.90 | 32.6 27.50 9.06 | 34.4 22.20 9.27 | 32.9 32.90 9.10 | 32.9 32.90 9.08 | 33.5 30.80 9.20 | 34.9 24.90 9.35 |
| 44 | TC SHC kW | 28.1 28.10 9.15 | 27.6 28.20 9.13 | 30.3 23.10 9.44 | 32.3 19.00 9.68 | 30.2 30.20 9.45 | 30.2 30.20 9.44 | 31.4 26.90 9.67 | 33.2 21.80 9.81 | 31.8 31.80 9.58 | 31.8 31.80 9.58 | 32.2 29.90 9.67 | 33.6 24.40 9.89 |
| 48 | TC SHC kW | 27.0 27.00 9.72 | 26.9 26.90 9.61 | 29.0 22.60 9.93 | 30.7 18.50 10.19 | 29.1 29.10 9.92 | 28.9 28.90 9.91 | 29.8 26.50 10.09 | 31.6 21.30 10.48 | 30.6 30.60 10.12 | 30.6 30.60 10.12 | 30.9 29.50 10.19 | 32.4 23.90 10.58 |
| 52 | TC SHC kW | 26.0 26.00 10.20 | 25.9 25.90 10.18 | 27.8 22.20 10.38 | 29.5 18.10 10.87 | 28.1 28.10 10.47 | 28.1 28.10 10.47 | 28.7 25.90 10.58 | 30.3 20.90 10.97 | 29.4 29.40 10.78 | 29.4 29.40 10.78 | 29.6 28.90 10.77 | 30.8 23.40 11.07 |

38ARS012/40RM014 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1750 | | | | 2350 | | | | 2950 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 29.1 29.10 7.48 | 29.3 28.90 7.49 | 32.2 23.10 7.73 | 34.3 19.30 7.91 | 31.5 31.50 7.67 | 31.5 31.50 7.68 | 33.4 26.60 7.84 | 35.5 21.80 8.01 | 33.1 33.10 7.81 | 33.1 33.10 7.81 | 34.3 29.70 7.91 | 36.2 24.10 8.07 |
| 36 | TC SHC kW | 28.3 28.20 7.97 | 28.3 28.20 7.98 | 31.0 22.70 8.25 | 33.1 18.80 8.45 | 30.5 30.50 8.19 | 30.5 30.50 8.20 | 32.2 26.20 8.37 | 34.2 21.30 8.56 | 32.0 32.00 8.35 | 32.0 32.00 8.35 | 33.0 29.10 8.45 | 34.9 23.60 8.63 |
| 40 | TC SHC kW | 27.3 27.30 8.46 | 27.4 27.30 8.46 | 29.8 22.20 8.75 | 31.8 18.40 8.98 | 29.5 29.50 8.71 | 29.5 29.50 8.70 | 30.9 25.70 8.88 | 32.9 20.90 9.09 | 30.9 30.90 8.88 | 30.9 30.90 8.87 | 31.8 28.50 8.97 | 33.5 23.20 9.17 |
| 44 | TC SHC kW | 26.4 26.40 8.95 | 26.4 26.40 8.94 | 28.6 21.80 9.25 | 30.6 18.00 9.50 | 28.5 28.50 9.22 | 28.5 28.50 9.21 | 29.7 25.20 9.39 | 31.5 20.50 9.63 | 29.8 29.80 9.40 | 29.8 29.80 9.40 | 30.5 27.90 9.49 | 32.2 22.70 9.71 |
| 48 | TC SHC kW | 25.5 25.50 9.44 | 25.4 25.40 9.42 | 27.5 21.30 9.74 | 29.3 17.50 10.00 | 27.4 27.40 9.73 | 27.4 27.40 9.72 | 28.4 24.70 9.90 | 30.2 20.00 10.20 | 28.7 28.70 9.93 | 28.7 28.70 9.93 | 29.2 27.30 10.00 | 30.8 22.30 10.30 |
| 52 | TC SHC kW | 24.6 24.60 9.92 | 24.5 24.50 9.90 | 26.3 20.90 10.20 | 28.1 17.10 10.60 | 26.4 26.40 10.20 | 26.4 26.40 10.20 | 27.2 24.20 10.40 | 28.9 19.60 10.70 | 27.7 27.70 10.50 | 27.7 27.70 10.50 | 27.9 26.70 10.50 | 29.4 21.80 10.80 |

LEGEND

- Edb — Entering Dry Bulb
 Ewb — Entering Wet Bulb
 kW — Compressor Motor Power Input
 SHC — Sensible Heat Capacity (kW) Gross
 TC — Total Capacity (kW) Gross

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38ARD007-012

38ARD012/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1450 | | | | 1900 | | | | 2350 | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 |
| 32 | TC SHC kW | 28.8 28.70 7.33 | 29.1 28.00 7.34 | 31.9 22.10 7.46 | 33.8 18.50 7.55 | 31.0 31.00 7.42 | 31.0 25.40 7.51 | 33.0 20.80 7.60 | 34.9 20.50 7.49 | 32.5 32.50 7.49 | 32.5 32.50 7.55 | 33.8 28.30 7.55 | 35.6 23.00 7.63 |
| 36 | TC SHC kW | 28.1 28.10 7.88 | 28.4 27.60 7.89 | 31.0 21.80 8.02 | 32.9 18.20 8.11 | 30.3 30.30 7.98 | 30.3 30.30 7.98 | 32.1 25.00 8.07 | 33.9 20.50 8.16 | 31.8 31.80 8.05 | 31.8 31.80 8.11 | 32.9 27.90 8.11 | 34.6 22.60 8.20 |
| 40 | TC SHC kW | 27.5 27.40 8.49 | 27.6 27.10 8.49 | 30.1 21.50 8.62 | 32.0 17.90 8.72 | 29.5 29.50 8.59 | 29.5 29.50 8.59 | 31.2 24.70 8.68 | 33.0 20.10 8.77 | 31.0 31.00 8.66 | 31.0 31.00 8.66 | 32.0 27.50 8.72 | 33.6 22.30 8.81 |
| 44 | TC SHC kW | 26.8 26.80 9.10 | 26.9 26.50 9.09 | 29.2 21.10 9.22 | 31.0 17.50 9.33 | 28.8 28.80 9.20 | 28.8 28.80 9.20 | 30.3 24.30 9.29 | 32.0 19.80 9.38 | 30.2 30.20 9.28 | 30.1 30.10 9.27 | 31.0 27.10 9.32 | 32.6 22.00 9.42 |
| 48 | TC SHC kW | 26.1 26.10 9.70 | 26.1 26.00 9.69 | 28.4 20.80 9.83 | 30.1 17.20 9.94 | 28.0 28.00 9.81 | 28.0 28.00 9.81 | 29.3 24.00 9.89 | 31.0 19.50 10.00 | 29.3 29.30 9.89 | 29.3 29.30 9.93 | 30.1 26.80 10.00 | 31.6 21.60 10.00 |
| 52 | TC SHC kW | 25.4 25.40 10.30 | 25.4 25.40 10.30 | 27.5 20.40 10.40 | 29.2 16.90 10.50 | 27.2 27.20 10.40 | 27.3 27.30 10.40 | 28.4 23.60 10.50 | 30.0 19.20 10.60 | 28.5 28.50 10.50 | 28.5 28.50 10.50 | 29.1 26.40 10.50 | 30.6 21.30 10.60 |

38ARD012/40RM012 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1450 | | | | 1900 | | | | 2350 | | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 |
| 32 | TC SHC kW | 27.3 27.30 7.27 | 27.7 26.60 7.29 | 30.4 21.00 7.39 | 32.2 17.60 7.48 | 29.4 29.40 7.35 | 29.4 29.40 7.35 | 31.5 23.90 7.44 | 33.3 19.60 7.53 | 30.8 30.80 7.41 | 30.8 30.80 7.41 | 32.2 26.50 7.47 | 33.9 21.50 7.55 |
| 36 | TC SHC kW | 26.8 26.70 7.82 | 27.0 26.10 7.84 | 29.6 20.70 7.95 | 31.4 17.30 8.03 | 28.7 28.70 7.91 | 28.7 28.70 7.91 | 30.7 23.60 8.00 | 32.4 19.40 8.09 | 30.1 30.10 7.97 | 30.1 30.10 7.97 | 31.4 26.20 8.03 | 33.1 21.30 8.12 |
| 40 | TC SHC kW | 26.1 26.10 8.42 | 26.3 25.70 8.44 | 28.8 20.40 8.55 | 30.6 17.00 8.64 | 28.0 28.00 8.51 | 28.0 28.00 8.52 | 29.8 23.30 8.60 | 31.5 19.10 8.69 | 29.4 29.40 8.58 | 29.4 29.40 8.58 | 30.5 25.90 8.64 | 32.1 21.00 8.73 |
| 44 | TC SHC kW | 25.5 25.50 9.03 | 25.7 25.20 9.04 | 28.0 20.10 9.16 | 29.7 16.70 9.25 | 27.3 27.30 9.12 | 27.4 27.40 9.12 | 29.0 23.00 9.21 | 30.6 18.80 9.30 | 28.6 28.60 9.19 | 28.6 28.60 9.19 | 29.6 25.50 9.25 | 31.2 20.60 9.34 |
| 48 | TC SHC kW | 24.9 24.90 9.63 | 25.0 24.70 9.63 | 27.2 19.80 9.76 | 28.9 16.40 9.85 | 26.7 26.70 9.72 | 26.7 26.70 9.73 | 28.1 22.70 9.81 | 29.7 18.50 9.91 | 27.9 27.90 9.80 | 27.9 27.90 9.80 | 28.8 25.10 9.85 | 30.3 20.30 9.95 |
| 52 | TC SHC kW | 24.3 24.30 10.20 | 24.3 24.30 10.20 | 26.4 19.50 10.40 | 28.0 16.10 10.50 | 26.0 26.00 10.30 | 26.0 26.00 10.30 | 27.2 22.30 10.40 | 28.8 18.20 10.50 | 27.2 27.20 10.40 | 27.2 27.20 10.40 | 27.9 24.80 10.50 | 29.4 20.00 10.60 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross



COMBINATION RATINGS — SI (cont)

38ARD012/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1750 | | | | 2350 | | | | 2950 | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 |
| 32 | TC SHC kW | 30.4 30.40 7.40 | 30.6 30.10 7.40 | 33.1 24.20 7.52 | 35.1 20.00 7.61 | 32.8 32.80 7.50 | 32.8 28.00 7.57 | 34.3 22.80 7.66 | 36.2 34.80 7.59 | 34.8 34.80 7.59 | 34.8 34.80 7.62 | 35.4 31.70 7.71 |
| 36 | TC SHC kW | 29.7 29.70 7.95 | 29.9 29.50 7.96 | 32.3 23.80 8.08 | 34.1 19.70 8.17 | 32.0 32.00 8.06 | 32.0 27.70 8.13 | 33.4 22.40 8.23 | 35.2 34.00 8.16 | 34.0 34.00 8.16 | 34.0 34.40 8.18 | 36.1 31.40 8.27 |
| 40 | TC SHC kW | 29.0 29.00 8.56 | 29.1 28.80 8.57 | 31.3 23.50 8.68 | 33.2 19.30 8.78 | 31.2 31.20 8.68 | 31.2 27.30 8.74 | 32.5 22.10 8.84 | 34.2 33.10 8.78 | 33.1 33.10 8.78 | 33.4 30.90 8.79 | 35.0 24.80 8.89 |
| 44 | TC SHC kW | 28.3 28.30 9.17 | 28.4 28.20 9.17 | 30.4 23.10 9.29 | 32.2 19.00 9.40 | 30.4 30.40 9.29 | 30.4 30.40 9.35 | 31.5 26.90 9.45 | 33.2 21.80 9.45 | 32.3 32.30 9.40 | 32.3 32.30 9.40 | 32.5 30.50 9.40 |
| 48 | TC SHC kW | 27.6 27.60 9.78 | 27.6 27.50 9.78 | 29.5 22.80 9.90 | 31.3 18.70 10.00 | 29.6 29.60 9.90 | 29.6 26.50 9.96 | 30.6 21.40 10.10 | 32.2 31.40 10.10 | 31.4 31.40 10.00 | 31.4 30.10 10.00 | 32.9 24.10 10.10 |
| 52 | TC SHC kW | 26.9 26.90 10.40 | 26.9 26.90 10.40 | 28.6 22.40 10.50 | 30.3 18.40 10.60 | 28.8 28.80 10.50 | 28.8 28.80 10.60 | 29.6 26.10 10.60 | 31.2 21.10 10.70 | 30.5 30.50 10.60 | 30.6 30.60 10.60 | 31.9 29.70 10.70 |

38ARD012/40RM014 WITH STANDARD 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1750 | | | | 2350 | | | | 2950 | | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | | | | |
| | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | 14 | 16 | 20 | 22 | |
| 32 | TC SHC kW | 28.9 28.80 7.33 | 29.1 28.50 7.34 | 31.7 22.90 7.45 | 33.5 18.90 7.54 | 31.0 31.00 7.42 | 31.1 31.00 7.42 | 32.8 26.30 7.50 | 34.6 21.40 7.59 | 33.0 33.00 7.51 | 32.9 32.90 7.50 | 33.8 29.60 7.55 | 35.6 23.80 7.63 |
| 36 | TC SHC kW | 28.2 28.20 7.89 | 28.4 27.90 7.89 | 30.8 22.50 8.01 | 32.7 18.60 8.10 | 30.3 30.30 7.98 | 30.3 30.30 7.98 | 31.9 25.90 8.06 | 33.7 21.10 8.15 | 32.2 32.20 8.07 | 32.2 32.20 8.07 | 32.9 29.20 8.10 | 34.6 23.50 8.19 |
| 40 | TC SHC kW | 27.5 27.50 8.49 | 27.7 27.30 8.50 | 29.9 22.20 8.61 | 31.7 18.30 8.71 | 29.6 29.60 8.59 | 29.6 29.60 8.59 | 31.0 25.60 8.66 | 32.7 20.80 8.76 | 31.4 31.40 8.68 | 31.4 31.40 8.68 | 31.9 28.80 8.71 | 33.6 23.10 8.80 |
| 44 | TC SHC kW | 26.9 26.90 9.10 | 26.9 26.70 9.10 | 29.1 21.90 9.22 | 30.8 18.00 9.32 | 28.8 28.80 9.20 | 28.8 28.80 9.20 | 30.1 25.20 9.27 | 31.8 20.40 9.37 | 30.5 30.50 9.30 | 30.6 30.60 9.30 | 31.0 28.40 9.31 | 32.6 22.80 9.41 |
| 48 | TC SHC kW | 26.2 26.20 9.70 | 26.2 26.10 9.70 | 28.2 21.50 9.82 | 29.9 17.70 9.92 | 28.1 28.10 9.81 | 28.1 28.10 9.81 | 29.2 24.80 9.87 | 30.8 20.10 9.98 | 29.7 29.70 9.91 | 29.7 29.70 9.92 | 30.0 28.00 9.92 | 31.6 22.50 10.00 |
| 52 | TC SHC kW | 25.5 25.50 10.30 | 25.5 25.50 10.30 | 27.3 21.20 10.40 | 29.0 17.40 10.50 | 27.3 27.30 10.40 | 27.3 27.30 10.40 | 28.2 24.50 10.50 | 29.8 19.80 10.60 | 28.9 28.90 10.50 | 28.9 28.90 10.50 | 29.1 27.60 10.50 | 30.5 22.10 10.60 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross

38ARD007-012

Performance data (cont)



CONDENSING UNIT RATINGS — ENGLISH

38AR007-012

38ARZ007

| | SST (F) | Air Temperature Entering Condenser (F) | | | | | |
|----|-----------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 80 | 85 | 95 | 100 | 105 | 115 |
| 25 | TC kW SDT | 44.80 3.50 99.8 | 43.60 3.72 105.0 | 41.20 4.15 115.0 | 40.00 4.39 120.0 | 38.80 4.63 124.0 | 36.30 5.12 134.0 |
| 30 | TC kW SDT | 49.40 3.56 101.0 | 48.20 3.78 106.0 | 45.60 4.20 116.0 | 44.30 4.45 121.0 | 43.00 4.69 125.0 | 40.40 5.18 135.0 |
| 35 | TC kW SDT | 54.30 3.63 102.0 | 52.90 3.85 107.0 | 50.30 4.28 117.0 | 48.90 4.52 122.0 | 47.50 4.77 127.0 | 44.70 5.25 136.0 |
| 40 | TC kW SDT | 59.50 3.71 104.0 | 58.00 3.93 109.0 | 55.10 4.36 118.0 | 53.70 4.60 123.0 | 52.20 4.85 128.0 | 49.20 5.34 138.0 |
| 45 | TC kW SDT | 65.00 3.81 106.0 | 63.40 4.02 110.0 | 60.30 4.45 120.0 | 58.70 4.70 125.0 | 57.10 4.94 130.0 | 54.00 5.44 139.0 |
| 50 | TC kW SDT | 70.70 3.91 108.0 | 69.10 4.12 112.0 | 65.80 4.56 122.0 | 64.10 4.80 127.0 | 62.40 5.05 131.0 | 59.00 5.54 141.0 |

38ARZ008

| | SST (F) | Air Temperature Entering Condenser (F) | | | | | |
|----|-----------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 80 | 85 | 95 | 100 | 105 | 115 |
| 25 | TC kW SDT | 61.30 4.79 98.5 | 59.40 5.07 103.0 | 55.50 5.65 113.0 | 53.40 5.96 118.0 | 51.40 6.27 123.0 | 47.10 6.93 133.0 |
| 30 | TC kW SDT | 68.30 4.81 98.8 | 66.40 5.09 104.0 | 62.30 5.68 114.0 | 60.20 5.99 119.0 | 58.00 6.31 123.0 | 53.60 6.99 133.0 |
| 35 | TC kW SDT | 75.50 4.88 99.9 | 73.50 5.15 105.0 | 69.30 5.74 114.0 | 67.10 6.06 119.0 | 64.90 6.38 124.0 | 60.30 7.06 134.0 |
| 40 | TC kW SDT | 83.00 4.97 101.0 | 80.80 5.24 106.0 | 76.40 5.84 116.0 | 74.10 6.16 121.0 | 71.80 6.48 125.0 | 67.00 7.17 135.0 |
| 45 | TC kW SDT | 90.90 5.06 103.0 | 88.60 5.34 108.0 | 83.90 5.94 117.0 | 81.50 6.27 122.0 | 79.10 6.59 127.0 | 74.10 7.29 136.0 |
| 50 | TC kW SDT | 99.20 5.17 105.0 | 96.80 5.45 110.0 | 91.80 6.06 119.0 | 89.20 6.39 124.0 | 86.70 6.72 128.0 | 81.40 7.43 138.0 |

38ARZ012

| | SST (F) | Air Temperature Entering Condenser (F) | | | | | |
|----|-----------------|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | 80 | 85 | 95 | 100 | 105 | 115 |
| 25 | TC kW SDT | 85.00 6.64 101.0 | 82.70 6.94 106.0 | 77.90 7.57 116.0 | 75.50 7.90 121.0 | 73.10 8.25 126.0 | 67.90 8.98 136.0 |
| 30 | TC kW SDT | 93.30 6.81 102.0 | 90.90 7.09 107.0 | 85.80 7.69 116.0 | 83.20 8.01 121.0 | 80.50 8.35 126.0 | 75.10 9.06 136.0 |
| 35 | TC kW SDT | 102.00 7.01 103.0 | 99.50 7.29 108.0 | 94.00 7.87 117.0 | 91.20 8.18 122.0 | 88.40 8.50 127.0 | 82.60 9.18 136.0 |
| 40 | TC kW SDT | 111.00 7.24 104.0 | 108.00 7.52 109.0 | 103.00 8.11 119.0 | 99.70 8.41 123.0 | 96.70 8.72 128.0 | 90.40 9.37 138.0 |
| 45 | TC kW SDT | 121.00 7.49 106.0 | 118.00 7.78 111.0 | 112.00 8.37 120.0 | 109.00 8.67 125.0 | 105.00 8.98 130.0 | 98.70 9.61 139.0 |
| 50 | TC kW SDT | 130.00 7.76 108.0 | 128.00 8.06 113.0 | 121.00 8.66 122.0 | 118.00 8.96 127.0 | 115.00 9.27 131.0 | 107.00 9.90 140.0 |

38ARS012

| | SST (F) | Air Temperature Entering Condenser (F) | | | | | |
|----|-----------------|--|-------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| | | 80 | 85 | 95 | 100 | 105 | 115 |
| 25 | TC kW SDT | 74.10 6.24 102.0 | 70.80 6.47 107.0 | 64.40 6.89 117.0 | 61.20 7.07 122.0 | 58.00 7.24 127.0 | 51.60 7.51 137.0 |
| 30 | TC kW SDT | 83.90 6.43 103.0 | 80.50 6.69 107.0 | 73.70 7.17 117.0 | 70.20 7.40 122.0 | 66.80 7.60 127.0 | 60.00 7.95 137.0 |
| 35 | TC kW SDT | 94.10 6.62 104.0 | 90.60 6.91 108.0 | 83.40 7.45 118.0 | 79.80 7.71 123.0 | 76.20 7.94 127.0 | 69.00 8.37 137.0 |
| 40 | TC kW SDT | 105.00 6.84 105.0 | 101.00 7.15 110.0 | 93.40 7.74 119.0 | 89.70 8.02 124.0 | 86.00 8.28 128.0 | 78.50 8.77 138.0 |
| 45 | TC kW SDT | 116.00 7.05 107.0 | 112.00 7.39 112.0 | 104.00 8.04 121.0 | 99.80 8.34 125.0 | 96.00 8.64 130.0 | 88.10 9.17 139.0 |
| 50 | TC kW SDT | 127.00 7.27 109.0 | 123.00 7.63 114.0 | 115.00 8.34 123.0 | 110.00 8.67 127.0 | 106.00 8.99 132.0 | 98.00 9.59 141.0 |

38ARD012

| | SST (F) | Air Temperature Entering Condenser (F) | | | | | |
|----|-----------------|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | 80 | 85 | 95 | 100 | 105 | 115 |
| 25 | TC kW SDT | 75.20 6.45 100.0 | 73.00 6.79 105.0 | 68.50 7.52 115.0 | 66.10 7.93 120.0 | 63.70 8.33 125.0 | 58.70 9.17 135.0 |
| 30 | TC kW SDT | 83.80 6.44 100.0 | 81.50 6.79 105.0 | 76.70 7.54 115.0 | 74.20 7.94 120.0 | 71.70 8.35 125.0 | 66.50 9.21 135.0 |
| 35 | TC kW SDT | 92.90 6.45 100.0 | 90.50 6.79 105.0 | 85.40 7.54 115.0 | 82.80 7.95 120.0 | 80.20 8.36 125.0 | 74.80 9.24 135.0 |
| 40 | TC kW SDT | 102.00 6.48 101.0 | 99.90 6.83 106.0 | 94.60 7.57 116.0 | 91.90 7.98 120.0 | 89.10 8.39 125.0 | 83.40 9.27 135.0 |
| 45 | TC kW SDT | 112.00 6.55 102.0 | 110.00 6.90 107.0 | 104.00 7.63 116.0 | 101.00 8.04 121.0 | 98.40 8.45 126.0 | 92.50 9.32 136.0 |
| 50 | TC kW SDT | 123.00 6.65 103.0 | 120.00 6.99 108.0 | 114.00 7.73 118.0 | 111.00 8.14 123.0 | 108.00 8.54 127.0 | 102.00 9.43 137.0 |

LEGEND

- TC — Gross Cooling Capacity (1000 Btuh)
- kW — Compressor Power
- SDT — Saturated Discharge Temperature (F)
- SST — Saturated Suction Temperature (F)



COMBINATION RATINGS — ENGLISH

38ARZ007/40RM007H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1800 | | | | 2400 | | | | 3000 | | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | |
| 80 | TC SHC kW | 59.5 59.50 3.71 | 60.7 56.80 3.72 | 65.4 47.30 3.81 | 70.9 37.30 3.90 | 64.5 64.50 3.79 | 64.4 64.80 3.79 | 68.1 54.70 3.86 | 73.5 41.70 3.95 | 68.0 68.00 3.85 | 68.0 68.00 3.85 | 69.9 61.50 3.89 | 75.2 46.20 3.98 |
| 85 | TC SHC kW | 58.7 58.70 3.94 | 59.6 56.20 3.95 | 64.3 46.90 4.03 | 69.7 36.80 4.14 | 63.6 63.60 4.02 | 63.4 63.80 4.02 | 66.9 54.30 4.07 | 72.2 41.30 4.18 | 66.9 66.90 4.09 | 67.0 67.00 4.08 | 68.6 61.00 4.11 | 73.7 45.70 4.21 |
| 95 | TC SHC kW | 57.1 57.10 4.38 | 57.7 55.20 4.39 | 62.0 46.00 4.48 | 67.4 35.90 4.58 | 61.7 61.70 4.47 | 61.5 62.00 4.47 | 64.4 53.20 4.52 | 69.7 40.50 4.63 | 64.9 64.90 4.53 | 64.9 64.90 4.53 | 66.1 59.90 4.55 | 71.1 44.90 4.66 |
| 100 | TC SHC kW | 56.2 56.20 4.64 | 56.6 54.60 4.66 | 60.7 45.50 4.73 | 66.0 35.40 4.83 | 60.5 60.50 4.72 | 60.4 60.90 4.72 | 63.1 52.80 4.78 | 68.3 40.10 4.87 | 63.7 63.70 4.79 | 63.7 63.70 4.79 | 64.8 59.30 4.82 | 69.7 44.40 4.91 |
| 105 | TC SHC kW | 55.2 55.20 4.89 | 55.6 54.00 4.90 | 59.6 45.00 4.98 | 64.7 34.900 5.09 | 59.5 59.50 4.98 | 59.4 59.80 4.98 | 61.8 52.20 5.03 | 66.9 39.60 5.13 | 62.6 62.60 5.05 | 62.6 62.60 5.06 | 63.5 58.70 5.06 | 68.3 44.00 5.17 |
| 115 | TC SHC kW | 53.4 53.40 5.42 | 53.6 52.80 5.42 | 57.2 44.00 5.49 | 62.1 34.10 5.60 | 57.5 57.50 5.49 | 57.4 57.40 5.50 | 59.2 51.30 5.54 | 64.0 38.70 5.64 | 60.4 60.40 5.64 | 60.4 60.40 5.57 | 60.9 57.60 5.58 | 65.4 43.10 5.68 |

38ARZ007/40RM007 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1800 | | | | 2400 | | | | 3000 | | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | |
| 80 | TC SHC kW | 57.2 57.20 3.67 | 58.5 54.50 3.69 | 63.1 45.40 3.77 | 68.4 35.80 3.86 | 61.8 61.80 3.75 | 61.9 61.80 3.75 | 65.6 52.30 3.81 | 70.9 40.00 3.90 | 65.1 65.10 3.80 | 65.1 65.10 3.80 | 67.3 58.50 3.84 | 72.5 44.00 3.93 |
| 85 | TC SHC kW | 56.4 56.40 3.90 | 57.5 54.00 3.92 | 62.0 45.00 3.99 | 67.3 35.40 4.09 | 60.9 60.90 3.97 | 61.0 60.90 3.98 | 64.5 51.90 4.03 | 69.7 39.60 4.13 | 64.1 64.10 4.03 | 64.1 64.10 4.03 | 66.1 58.00 4.06 | 71.2 43.60 4.16 |
| 95 | TC SHC kW | 54.8 54.80 4.35 | 55.7 53.00 4.36 | 59.9 44.20 4.44 | 65.1 34.60 4.54 | 59.2 59.20 4.43 | 59.2 59.20 4.43 | 62.2 51.00 4.48 | 67.3 38.80 4.58 | 62.1 62.10 4.48 | 62.2 62.20 4.48 | 63.8 57.00 4.51 | 68.7 42.80 4.61 |
| 100 | TC SHC kW | 54.0 54.00 4.61 | 54.7 52.50 4.62 | 58.8 43.70 4.70 | 63.9 34.10 4.79 | 58.2 58.20 4.68 | 58.2 58.20 4.68 | 61.0 50.50 4.74 | 66.0 38.40 4.83 | 61.1 61.10 4.74 | 61.1 61.10 4.74 | 62.6 56.50 4.77 | 67.4 42.40 4.86 |
| 105 | TC SHC kW | 53.1 53.10 4.86 | 53.7 51.90 4.87 | 57.7 43.30 4.95 | 62.6 33.70 5.05 | 57.2 57.20 4.94 | 57.2 57.20 4.94 | 59.9 50.00 4.99 | 64.7 38.00 5.09 | 60.1 60.10 5.00 | 60.1 60.10 5.00 | 61.4 55.90 5.02 | 66.1 42.00 5.12 |
| 115 | TC SHC kW | 51.4 51.40 5.38 | 51.7 50.80 5.38 | 55.5 42.40 5.46 | 60.2 32.90 5.56 | 55.3 55.30 5.46 | 55.3 55.30 5.46 | 57.5 49.10 5.50 | 62.1 37.10 5.60 | 58.0 58.00 5.52 | 58.0 58.00 5.51 | 58.9 54.90 5.53 | 63.4 41.10 5.63 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

38AR007-012

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

38ARZ007/40RM008H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | 2250 | | | | 3000 | | | | 3750 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 72 | 72 |
| 80 | TC SHC kW | 64.4 64.40 3.79 | 64.5 64.30 3.79 | 68.6 53.80 3.86 | 74.2 41.30 3.96 | 69.3 69.30 3.88 | 69.3 62.60 3.92 | 71.0 47.00 4.01 | 76.3 72.40 3.93 | 72.4 72.40 3.93 | 72.8 70.10 3.95 | 77.6 52.50 4.03 | |
| 85 | TC SHC kW | 63.5 63.50 4.02 | 63.5 63.40 4.02 | 67.3 53.30 4.08 | 72.8 40.90 4.19 | 68.2 68.20 4.10 | 68.2 68.20 4.10 | 69.7 62.10 4.13 | 74.9 46.50 4.22 | 71.2 71.20 4.16 | 71.5 69.50 4.17 | 76.2 52.10 4.26 | |
| 95 | TC SHC kW | 61.7 61.70 4.47 | 61.4 61.90 4.47 | 64.8 52.40 4.53 | 70.2 39.90 4.64 | 66.0 66.00 4.56 | 65.9 65.90 4.56 | 67.1 61.10 4.58 | 72.2 45.70 4.68 | 68.9 68.90 4.62 | 68.9 68.90 4.61 | 69.0 68.10 4.71 | 73.2 51.10 4.71 |
| 100 | TC SHC kW | 60.6 60.60 4.72 | 60.3 60.90 4.73 | 63.7 51.80 4.80 | 68.8 39.50 4.90 | 64.7 64.70 4.82 | 64.8 64.80 4.84 | 65.7 60.50 4.93 | 70.7 45.30 4.87 | 67.7 67.70 4.87 | 67.7 67.70 4.87 | 67.7 67.20 4.96 | 71.8 50.70 4.96 |
| 105 | TC SHC kW | 59.5 59.50 4.98 | 59.4 60.00 4.98 | 62.3 51.30 5.04 | 67.5 39.00 5.15 | 63.7 63.70 5.07 | 63.7 63.70 5.07 | 64.4 59.90 5.09 | 69.2 44.70 5.19 | 66.4 66.40 5.13 | 66.4 66.40 5.13 | 66.3 66.50 5.13 | 70.3 50.20 5.22 |
| 115 | TC SHC kW | 57.4 57.40 5.49 | 57.2 57.70 5.49 | 59.7 50.30 5.56 | 64.7 38.20 5.67 | 61.3 61.30 5.60 | 61.4 61.40 5.59 | 61.7 58.80 5.60 | 66.2 43.80 5.70 | 64.0 64.00 5.65 | 64.0 64.00 5.64 | 63.6 64.80 5.63 | 67.3 49.20 5.73 |

38ARZ007/40RM008 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | 2250 | | | | 3000 | | | | 3750 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 72 | 72 |
| 80 | TC SHC kW | 61.3 61.30 3.74 | 61.5 60.90 3.74 | 65.5 51.10 3.81 | 70.9 39.30 3.90 | 65.6 65.60 3.81 | 65.6 65.60 3.81 | 67.8 59.00 3.85 | 73.0 44.40 3.94 | 68.6 68.60 3.86 | 68.6 68.60 3.86 | 69.4 65.60 3.88 | 74.2 49.20 3.96 |
| 85 | TC SHC kW | 60.4 60.40 3.96 | 60.6 60.10 3.97 | 64.4 50.60 4.03 | 69.7 38.90 4.13 | 64.7 64.70 4.04 | 64.7 64.70 4.04 | 66.6 58.50 4.07 | 71.7 44.00 4.16 | 67.5 67.50 4.09 | 67.5 67.50 4.09 | 68.3 65.00 4.10 | 72.9 48.80 4.19 |
| 95 | TC SHC kW | 58.7 58.70 4.42 | 58.7 58.70 4.42 | 62.1 49.80 4.48 | 67.3 38.10 4.58 | 62.7 62.70 4.49 | 62.7 62.70 4.49 | 64.3 57.60 4.52 | 69.2 43.20 4.62 | 65.4 65.40 4.55 | 65.4 65.40 4.54 | 65.9 63.80 4.55 | 70.3 47.90 4.64 |
| 100 | TC SHC kW | 57.7 57.70 4.67 | 57.7 57.70 4.68 | 61.0 49.30 4.74 | 66.0 37.70 4.84 | 61.6 61.60 4.75 | 61.6 61.60 4.75 | 63.0 57.00 4.78 | 67.8 42.80 4.87 | 64.3 64.30 4.80 | 64.3 64.30 4.80 | 64.7 63.00 4.81 | 68.9 47.50 4.89 |
| 105 | TC SHC kW | 56.7 56.70 4.93 | 56.8 56.80 4.93 | 59.8 48.80 4.99 | 64.7 37.20 5.09 | 60.6 60.60 5.01 | 60.6 60.60 5.01 | 61.8 56.50 5.03 | 66.5 42.30 5.13 | 63.2 63.20 5.06 | 63.2 63.20 5.06 | 63.4 62.30 5.06 | 67.5 47.10 5.15 |
| 115 | TC SHC kW | 54.8 54.80 5.44 | 54.8 54.80 5.44 | 57.4 47.90 5.50 | 62.1 36.40 5.61 | 58.5 58.50 5.53 | 58.5 58.50 5.53 | 59.3 55.40 5.54 | 63.8 41.50 5.64 | 61.0 61.00 5.58 | 61.0 61.00 5.58 | 61.0 60.80 5.57 | 64.8 46.20 5.66 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (1000 Btuh) Gross
- TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

38ARZ008/40RM007H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1800 | | | | 2400 | | | | 3000 | | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | |
| 80 | TC SHC kW | 71.6 71.60 4.79 | 76.1 64.50 4.82 | 82.8 54.50 4.87 | 90.1 44.30 4.95 | 79.0 79.00 4.84 | 80.6 74.70 4.85 | 87.1 62.20 4.91 | 94.0 49.00 5.00 | 83.9 83.90 4.89 | 84.3 83.10 4.88 | 90.1 69.40 4.96 | 97.4 53.20 5.03 |
| 85 | TC SHC kW | 70.5 70.70 5.09 | 74.8 63.80 5.11 | 81.4 53.90 5.16 | 88.5 43.70 5.24 | 77.8 77.80 5.12 | 79.3 74.00 5.14 | 85.6 61.70 5.21 | 93.0 48.50 5.29 | 82.6 82.60 5.18 | 82.9 82.10 5.18 | 88.2 68.70 5.24 | 94.9 52.60 5.32 |
| 95 | TC SHC kW | 68.4 68.60 5.68 | 72.1 62.50 5.68 | 78.7 52.70 5.75 | 85.5 42.50 5.83 | 75.4 75.40 5.72 | 76.5 72.50 5.72 | 82.7 60.50 5.80 | 89.3 47.30 5.89 | 80.2 80.20 5.76 | 80.1 80.20 5.76 | 85.1 67.60 5.83 | 91.6 51.70 5.91 |
| 100 | TC SHC kW | 67.4 67.40 6.01 | 70.7 61.80 6.01 | 77.2 52.10 6.08 | 84.0 42.00 6.17 | 74.1 74.10 6.05 | 75.2 71.70 6.05 | 80.9 59.80 6.13 | 87.7 46.70 6.21 | 78.8 78.80 6.09 | 78.6 79.10 6.09 | 83.4 66.80 6.15 | 89.8 51.00 6.25 |
| 105 | TC SHC kW | 66.2 66.20 6.34 | 69.2 61.10 6.34 | 75.7 51.40 6.41 | 82.3 41.40 6.49 | 72.8 72.80 6.39 | 73.7 70.90 6.38 | 79.3 59.20 6.45 | 86.1 46.10 6.42 | 77.4 77.40 6.42 | 77.1 77.80 6.43 | 81.7 66.20 6.48 | 88.2 50.40 6.58 |
| 115 | TC SHC kW | 64.0 64.00 7.00 | 66.5 59.70 7.00 | 72.6 50.10 7.05 | 79.1 40.20 7.15 | 70.3 70.30 7.06 | 70.8 69.30 7.04 | 75.9 57.90 7.10 | 82.7 44.80 7.21 | 74.7 74.70 7.21 | 74.4 75.00 7.08 | 78.2 65.00 7.14 | 84.7 49.20 7.24 |

38ARZ008/40RM007 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1800 | | | | 2400 | | | | 3000 | | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | |
| 80 | TC SHC kW | 68.3 68.30 4.81 | 72.6 61.50 4.85 | 79.0 52.00 4.92 | 85.7 42.20 5.00 | 74.9 74.90 4.88 | 76.8 70.80 4.89 | 82.9 59.00 4.96 | 89.6 46.50 5.05 | 79.4 79.40 4.93 | 80.0 78.30 5.00 | 85.5 65.50 5.08 | 92.1 50.40 5.08 |
| 85 | TC SHC kW | 67.4 67.40 5.11 | 71.4 60.90 5.15 | 77.7 51.40 5.22 | 84.3 41.70 5.30 | 73.8 73.80 5.17 | 75.5 70.20 5.19 | 81.5 58.40 5.27 | 88.1 46.00 5.35 | 78.2 78.20 5.23 | 78.7 77.40 5.30 | 84.0 64.90 5.38 | 90.5 49.80 5.38 |
| 95 | TC SHC kW | 65.4 65.40 5.71 | 68.9 59.70 5.74 | 75.0 50.30 5.82 | 81.5 40.60 5.91 | 71.6 71.60 5.77 | 72.9 68.80 5.79 | 78.7 57.30 5.87 | 85.1 44.90 5.96 | 75.9 75.90 5.83 | 76.1 75.60 5.90 | 81.0 63.80 5.90 | 87.4 48.80 5.99 |
| 100 | TC SHC kW | 64.4 64.40 6.03 | 67.6 59.10 6.07 | 73.6 49.70 6.15 | 80.0 40.00 6.25 | 70.4 70.40 6.11 | 71.6 68.10 6.12 | 77.1 56.70 6.20 | 83.5 44.30 6.30 | 74.6 74.60 6.17 | 74.7 74.50 6.17 | 79.4 63.10 6.24 | 85.7 48.20 6.34 |
| 105 | TC SHC kW | 63.3 63.30 6.36 | 66.2 58.40 6.40 | 72.2 49.10 6.49 | 78.5 39.50 6.59 | 69.2 69.20 6.44 | 70.2 67.30 6.46 | 75.6 56.10 6.54 | 81.9 43.80 6.64 | 73.3 73.30 6.50 | 73.3 73.30 6.50 | 77.8 62.50 6.57 | 84.1 47.70 6.68 |
| 115 | TC SHC kW | 61.2 61.20 7.01 | 63.6 57.10 7.06 | 69.3 47.90 7.15 | 75.5 38.30 7.27 | 66.8 66.80 7.11 | 67.4 65.80 7.12 | 72.4 54.90 7.21 | 78.7 42.60 7.33 | 70.7 70.70 7.17 | 70.6 70.60 7.17 | 74.5 61.30 7.25 | 80.7 46.50 7.36 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38ARZ008/40RM008H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | 2250 | | | | 3000 | | | | 3750 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 72 |
| 80 | TC SHC kW | 78.0 78.00 4.83 | 80.4 73.00 4.85 | 86.7 60.90 4.91 | 93.5 48.20 4.99 | 84.8 84.80 4.88 | 84.9 83.80 4.89 | 90.5 69.90 4.96 | 97.6 53.60 5.04 | 89.2 89.20 4.94 | 89.0 89.40 4.94 | 92.6 78.20 4.98 | 99.7 58.70 5.07 |
| 85 | TC SHC kW | 76.8 76.80 5.13 | 79.0 72.30 5.15 | 85.3 60.30 5.20 | 91.8 47.60 5.29 | 83.5 83.50 5.18 | 83.6 82.70 5.18 | 88.9 69.30 5.24 | 96.1 53.10 5.33 | 87.9 87.90 5.24 | 87.6 88.00 5.23 | 90.8 77.40 5.28 | 97.2 58.20 5.35 |
| 95 | TC SHC kW | 74.5 74.50 5.72 | 76.2 70.90 5.72 | 82.4 59.10 5.79 | 89.3 46.50 5.88 | 80.9 80.90 5.77 | 80.8 80.80 5.77 | 85.6 68.10 5.84 | 92.3 52.00 5.92 | 85.1 85.10 5.83 | 85.0 85.20 5.81 | 87.8 76.10 5.87 | 94.0 57.10 5.95 |
| 100 | TC SHC kW | 73.3 73.30 6.05 | 74.8 70.20 6.04 | 80.7 58.40 6.13 | 87.5 45.90 6.22 | 79.6 79.60 6.10 | 79.4 79.60 6.11 | 83.9 67.50 6.16 | 90.5 51.40 6.25 | 83.7 83.70 6.15 | 83.5 83.60 6.15 | 86.2 75.40 6.18 | 92.1 56.50 6.28 |
| 105 | TC SHC kW | 72.1 72.10 6.38 | 73.3 69.30 6.38 | 79.2 57.80 6.44 | 85.8 45.30 6.55 | 78.2 78.20 6.43 | 78.1 78.50 6.43 | 82.2 66.90 6.49 | 88.7 50.90 6.49 | 82.3 82.30 6.49 | 82.0 82.20 6.49 | 84.4 74.60 6.52 | 90.4 55.90 6.61 |
| 115 | TC SHC kW | 69.7 69.70 7.03 | 70.5 67.90 7.02 | 75.9 56.50 7.09 | 82.5 44.10 7.21 | 75.5 75.50 7.10 | 75.2 75.60 7.10 | 79.0 65.70 7.15 | 85.2 49.60 7.24 | 79.2 79.20 7.16 | 79.2 79.40 7.16 | 81.0 73.30 7.18 | 87.0 54.80 7.27 |

38ARZ008/40RM008 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | 2250 | | | | 3000 | | | | 3750 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 72 |
| 80 | TC SHC kW | 74.1 74.10 4.87 | 76.4 69.40 4.89 | 82.5 57.90 4.96 | 89.1 45.80 5.04 | 80.2 80.20 4.93 | 80.6 79.10 4.94 | 85.7 66.10 5.00 | 92.3 50.80 5.08 | 84.3 84.30 4.98 | 84.3 84.30 4.98 | 88.0 73.70 5.03 | 94.4 55.40 5.11 |
| 85 | TC SHC kW | 73.0 73.00 5.17 | 75.1 68.70 5.19 | 81.1 57.30 5.26 | 87.6 45.20 5.34 | 79.0 79.00 5.23 | 79.3 78.20 5.24 | 84.3 65.60 5.30 | 90.8 50.30 5.39 | 83.1 83.10 5.29 | 83.0 83.00 5.28 | 86.4 83.00 5.33 | 92.8 73.10 5.41 |
| 95 | TC SHC kW | 70.9 70.90 5.76 | 72.6 67.40 5.78 | 78.3 56.20 5.86 | 84.8 44.20 5.96 | 76.6 76.60 5.84 | 76.7 76.40 5.84 | 81.4 64.50 5.91 | 87.8 49.30 6.00 | 80.5 80.50 5.90 | 80.5 80.50 5.89 | 83.4 71.90 5.94 | 89.6 53.90 6.03 |
| 100 | TC SHC kW | 69.7 69.70 6.10 | 71.2 66.70 6.11 | 76.8 55.60 6.20 | 83.2 43.60 6.30 | 75.3 75.30 6.17 | 75.4 75.20 6.18 | 79.8 63.90 6.25 | 86.1 48.70 6.34 | 79.2 79.20 6.23 | 79.1 79.10 6.23 | 81.8 71.20 6.27 | 87.8 53.30 6.37 |
| 105 | TC SHC kW | 68.6 68.60 6.43 | 69.8 66.00 6.45 | 75.3 55.00 6.53 | 81.6 43.00 6.64 | 74.0 74.00 6.51 | 74.1 74.10 6.51 | 78.2 63.30 6.58 | 84.4 48.10 6.68 | 77.8 77.80 6.57 | 77.7 77.70 6.57 | 80.1 70.50 6.61 | 86.1 52.80 6.71 |
| 115 | TC SHC kW | 66.3 66.30 7.09 | 67.1 64.60 7.11 | 72.3 53.80 7.21 | 78.4 41.90 7.32 | 71.5 71.50 7.19 | 71.4 71.40 7.19 | 75.0 62.10 7.26 | 80.9 46.90 7.36 | 75.0 75.00 7.25 | 75.0 75.00 7.25 | 76.9 69.20 7.29 | 82.6 51.70 7.39 |

LEGEND

Edb — Entering Dry Bulb
 Ewb — Entering Wet Bulb
 kW — Compressor Motor Power Input
 SHC — Sensible Heat Capacity (1000 Btuh) Gross
 TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38ARZ008/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|
| | 3000 | | | | 4000 | | | | 5000 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 |
| 80 | TC SHC kW | 87.5 87.50 4.92 | 87.7 86.70 4.92 | 93.2 72.40 4.99 | 99.9 55.50 5.08 | 93.8 93.80 5.00 | 93.8 83.90 5.03 | 96.0 62.80 5.10 | 103.3 97.90 5.04 | 97.9 97.90 5.04 | 97.9 94.10 5.05 | 99.0 94.10 5.13 |
| 85 | TC SHC kW | 86.1 86.10 5.21 | 86.3 85.70 5.21 | 91.4 71.80 5.28 | 98.3 54.80 5.37 | 92.1 92.10 5.29 | 92.1 83.30 5.32 | 94.4 62.20 5.40 | 101.6 96.60 5.34 | 96.6 96.50 5.35 | 96.5 92.90 5.35 | 97.4 103.2 5.42 |
| 95 | TC SHC kW | 83.6 83.60 5.81 | 83.4 83.60 5.80 | 88.0 70.50 5.87 | 95.1 53.70 5.96 | 89.2 89.20 5.88 | 89.2 81.90 5.91 | 91.3 61.20 6.00 | 98.3 93.40 5.93 | 93.4 93.30 5.93 | 93.3 91.20 5.94 | 94.3 68.20 6.02 |
| 100 | TC SHC kW | 82.1 82.10 6.13 | 81.9 82.30 6.14 | 86.4 69.80 6.20 | 93.3 53.10 6.29 | 87.8 87.80 6.21 | 87.8 81.10 6.24 | 89.5 60.50 6.33 | 95.6 91.60 6.27 | 91.6 91.60 6.27 | 91.6 90.10 6.27 | 92.2 67.50 6.35 |
| 105 | TC SHC kW | 80.5 80.50 6.46 | 80.6 80.90 6.47 | 84.6 69.00 6.52 | 91.3 52.50 6.62 | 86.1 86.10 6.55 | 86.2 86.20 6.55 | 87.5 80.40 6.57 | 93.8 59.90 6.66 | 89.8 89.80 6.60 | 89.7 89.70 6.61 | 89.6 66.90 6.68 |
| 115 | TC SHC kW | 77.7 77.70 7.13 | 77.5 78.00 7.13 | 81.0 67.50 7.17 | 87.6 51.30 7.29 | 83.0 83.00 7.21 | 83.0 83.00 7.21 | 83.8 78.60 7.23 | 89.8 58.60 7.31 | 86.6 86.60 7.31 | 86.3 86.30 7.27 | 86.4 86.90 7.34 |

38ARZ008/40RM012 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 3000 | | | | 4000 | | | | 5000 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 |
| 80 | TC SHC kW | 82.4 82.40 4.96 | 82.7 81.60 4.96 | 87.9 68.20 5.03 | 94.6 52.30 5.11 | 87.9 87.90 5.03 | 87.9 87.90 5.06 | 90.8 78.50 5.14 | 97.2 58.80 5.07 | 91.7 91.70 5.07 | 91.7 91.70 5.09 | 92.9 87.10 5.16 |
| 85 | TC SHC kW | 81.1 81.10 5.26 | 81.4 80.60 5.26 | 86.3 67.60 5.33 | 93.0 51.70 5.42 | 86.6 86.60 5.33 | 86.6 86.60 5.37 | 89.2 77.90 5.45 | 95.5 58.30 5.45 | 90.3 90.30 5.38 | 90.2 90.20 5.38 | 91.3 86.40 5.47 |
| 95 | TC SHC kW | 78.7 78.70 5.87 | 78.7 78.60 5.87 | 83.3 66.40 5.93 | 89.8 50.60 6.03 | 83.8 83.80 5.94 | 83.8 83.80 5.94 | 86.1 76.60 5.98 | 92.2 57.30 6.07 | 87.4 87.40 5.99 | 87.3 87.30 5.99 | 88.1 84.80 6.09 |
| 100 | TC SHC kW | 77.3 77.30 6.21 | 77.3 77.30 6.21 | 81.6 65.08 6.27 | 88.0 50.10 6.37 | 82.4 82.40 6.28 | 82.4 82.40 6.32 | 84.3 75.90 6.41 | 90.3 56.60 6.34 | 85.8 85.80 6.34 | 85.8 85.80 6.35 | 86.4 83.80 6.43 |
| 105 | TC SHC kW | 75.9 75.90 6.54 | 76.0 76.00 6.55 | 79.9 65.10 6.61 | 86.3 49.50 6.71 | 80.9 80.90 6.62 | 80.9 80.90 6.63 | 82.6 75.20 6.66 | 88.5 56.00 6.75 | 84.3 84.30 6.68 | 84.2 84.20 6.68 | 84.7 82.80 6.77 |
| 115 | TC SHC kW | 73.2 73.20 7.22 | 73.2 73.20 7.22 | 76.6 63.80 7.28 | 82.7 48.30 7.40 | 78.0 78.00 7.31 | 78.0 78.00 7.31 | 79.2 73.70 7.34 | 84.7 54.80 7.43 | 81.2 81.20 7.37 | 81.1 81.10 7.37 | 81.3 80.80 7.46 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

38ARZ012/40RM008H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|
| | | 2250 | | | | 3000 | | | | 3750 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 |
| 80 | TC SHC kW | 94.6 94.20 6.82 | 100.3 83.50 6.94 | 108.2 70.50 7.12 | 116.5 57.40 7.33 | 103.3 103.30 7.00 | 106.2 96.70 7.07 | 113.2 80.30 7.25 | 122.6 63.30 7.46 | 109.2 109.20 7.14 | 110.9 107.20 7.15 | 116.7 89.10 7.33 | 125.7 68.60 7.54 |
| 85 | TC SHC kW | 93.1 92.80 7.17 | 98.6 82.80 7.28 | 107.0 69.70 7.45 | 115.5 56.60 7.66 | 101.8 101.80 7.34 | 104.3 95.90 7.39 | 111.2 79.50 7.58 | 119.5 62.60 7.79 | 108.0 108.00 7.48 | 108.7 105.70 7.50 | 115.9 88.30 7.65 | 123.7 67.90 7.87 |
| 95 | TC SHC kW | 90.3 90.30 7.82 | 95.1 81.20 7.92 | 102.9 68.20 8.10 | 111.4 55.00 8.31 | 98.7 98.70 8.02 | 100.8 94.00 8.04 | 108.0 78.00 8.24 | 116.1 61.10 8.46 | 104.4 104.40 8.15 | 104.9 103.50 8.17 | 111.2 86.70 8.31 | 119.7 66.40 8.54 |
| 100 | TC SHC kW | 88.9 88.90 8.20 | 93.2 80.20 8.27 | 100.8 67.30 8.45 | 108.9 54.20 8.66 | 97.0 97.00 8.38 | 98.7 92.90 8.40 | 105.6 77.10 8.58 | 114.3 60.20 8.80 | 102.5 102.50 8.51 | 102.9 101.80 8.52 | 109.0 85.70 8.67 | 116.0 65.30 8.89 |
| 105 | TC SHC kW | 87.4 87.40 8.56 | 91.4 79.20 8.63 | 98.8 66.40 8.79 | 106.7 53.40 9.01 | 95.2 95.20 8.73 | 96.6 91.70 8.76 | 103.3 76.00 8.93 | 110.5 59.30 9.15 | 100.7 100.70 8.87 | 100.9 100.40 9.02 | 106.8 84.60 9.02 | 114.4 64.40 9.24 |
| 115 | TC SHC kW | 84.5 84.50 9.27 | 87.8 77.30 9.34 | 94.4 64.60 9.51 | 102.4 51.60 9.71 | 91.8 91.80 9.46 | 92.7 89.10 9.46 | 98.8 74.20 9.63 | 106.4 57.60 9.86 | 96.9 96.90 9.58 | 96.9 97.00 9.56 | 101.5 82.70 9.71 | 109.6 62.80 9.93 |

38ARZ012/40RM008 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|
| | | 2250 | | | | 3000 | | | | 3750 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 |
| 80 | TC SHC kW | 88.7 88.40 6.71 | 94.4 78.50 6.83 | 102.0 66.30 7.01 | 110.0 54.00 7.22 | 96.6 96.60 6.88 | 99.8 90.10 6.96 | 107.0 74.90 7.14 | 115.0 59.20 7.35 | 102.0 102.00 7.02 | 104.0 99.60 7.04 | 110.0 82.80 7.22 | 118.0 63.90 7.43 |
| 85 | TC SHC kW | 87.4 87.20 7.04 | 92.9 77.80 7.15 | 101.0 65.60 7.33 | 109.0 53.30 7.54 | 95.2 95.20 7.20 | 98.1 89.30 7.27 | 105.0 74.20 7.45 | 113.0 58.50 7.67 | 101.0 101.00 7.34 | 102.0 98.50 7.36 | 109.0 82.10 7.53 | 116.0 63.30 7.75 |
| 95 | TC SHC kW | 84.8 84.80 7.68 | 89.8 76.30 7.78 | 97.3 64.20 7.96 | 105.0 51.90 8.17 | 92.5 92.50 7.84 | 94.8 87.60 7.89 | 102.0 72.80 8.09 | 110.0 57.20 8.31 | 97.8 97.80 7.97 | 98.5 96.50 7.99 | 105.0 80.70 8.16 | 113.0 61.90 8.39 |
| 100 | TC SHC kW | 83.5 83.50 8.03 | 88.1 75.40 8.12 | 95.4 63.40 8.29 | 103.0 51.20 8.51 | 91.0 91.00 8.19 | 93.0 86.60 8.23 | 99.9 72.00 8.42 | 108.0 56.40 8.65 | 96.1 96.10 8.32 | 96.6 95.20 8.33 | 103.0 79.80 8.50 | 110.0 61.10 8.73 |
| 105 | TC SHC kW | 82.2 82.20 8.38 | 86.4 74.50 8.46 | 93.6 62.60 8.63 | 101.0 50.40 8.84 | 89.4 89.40 8.53 | 91.1 85.60 8.57 | 97.8 71.20 8.75 | 105.0 55.60 8.98 | 94.5 94.50 8.66 | 94.8 94.00 8.67 | 101.0 79.00 8.83 | 108.0 60.30 9.06 |
| 115 | TC SHC kW | 79.5 79.50 9.07 | 83.0 72.80 9.14 | 89.8 61.00 9.31 | 97.1 48.80 9.51 | 86.4 86.40 9.22 | 87.5 83.70 9.25 | 93.8 69.50 9.42 | 101.0 54.10 9.66 | 91.1 91.10 9.34 | 91.1 91.10 9.34 | 96.3 77.30 9.50 | 104.0 58.80 9.73 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (1000 Btuh) Gross
- TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

38ARZ012/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | | |
|--|--------------------------|-------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | 3000 | | | | 4000 | | | | 5000 | | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | |
| 80 | TC SHC kW | 105.6 105.60 7.07 | 108.2 98.90 7.14 | 117.1 81.90 7.37 | 125.0 64.50 7.60 | 114.2 114.20 7.30 | 115.1 113.40 7.30 | 121.0 94.10 7.47 | 129.9 72.10 7.73 | 119.1 119.10 7.46 | 119.1 120.10 7.44 | 124.0 105.70 7.56 | 132.0 79.20 7.78 |
| 85 | TC SHC kW | 104.2 104.20 7.39 | 107.3 97.10 7.46 | 114.2 81.10 7.67 | 123.0 63.70 7.92 | 112.2 112.20 7.61 | 113.1 111.40 7.62 | 118.1 93.30 7.79 | 127.0 71.20 8.03 | 118.2 118.20 7.78 | 117.1 118.00 7.77 | 122.0 104.80 7.88 | 130.0 78.50 8.11 |
| 95 | TC SHC kW | 101.3 101.30 8.03 | 102.4 95.10 8.08 | 110.2 79.40 8.29 | 119.1 62.30 8.59 | 108.3 108.30 8.25 | 108.2 109.40 8.24 | 114.1 91.80 8.40 | 123.0 69.70 8.66 | 114.1 114.10 8.42 | 114.1 114.10 8.41 | 118.0 103.10 8.48 | 125.0 77.00 8.74 |
| 100 | TC SHC kW | 98.8 98.80 8.37 | 100.5 94.20 8.41 | 107.3 78.40 8.65 | 116.2 61.30 8.89 | 106.3 106.30 8.62 | 106.2 107.30 8.60 | 111.3 90.80 8.76 | 120.1 68.80 9.00 | 111.2 111.20 8.82 | 111.2 111.20 8.82 | 114.1 102.20 8.84 | 123.0 76.10 9.07 |
| 105 | TC SHC kW | 97.2 97.20 8.67 | 98.6 93.30 8.71 | 105.3 77.50 8.98 | 114.2 60.50 9.22 | 104.9 104.90 8.95 | 103.8 105.80 8.94 | 110.2 89.80 9.10 | 117.1 67.90 9.33 | 109.2 109.20 9.08 | 109.2 109.20 9.08 | 112.1 101.20 9.17 | 119.1 75.00 9.40 |
| 115 | TC SHC kW | 93.5 93.50 9.36 | 93.9 91.20 9.38 | 100.2 75.60 9.64 | 109.2 58.60 9.79 | 100.4 100.40 9.63 | 100.1 101.00 9.61 | 104.5 88.00 9.76 | 112.3 66.20 10.00 | 105.5 105.50 9.76 | 105.5 105.50 9.75 | 106.2 98.40 9.83 | 115.2 73.20 10.07 |

38ARZ012/40RM012 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | | |
|--|--------------------------|-----------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|
| | 3000 | | | | 4000 | | | | 5000 | | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | |
| 80 | TC SHC kW | 99.3 99.30 6.94 | 102.0 92.70 7.01 | 110.0 77.20 7.21 | 118.0 60.80 7.43 | 107.0 107.00 7.13 | 108.0 106.00 7.15 | 114.0 88.10 7.31 | 122.0 67.50 7.54 | 112.0 112.00 7.27 | 112.0 112.00 7.27 | 117.0 98.20 7.39 | 125.0 73.70 7.60 |
| 85 | TC SHC kW | 97.9 97.90 7.26 | 101.0 91.90 7.33 | 108.0 76.40 7.52 | 116.0 60.10 7.75 | 105.0 105.00 7.45 | 106.0 104.00 7.46 | 112.0 87.40 7.63 | 120.0 66.80 7.85 | 111.0 111.00 7.59 | 110.0 110.00 7.59 | 115.0 97.30 7.70 | 123.0 73.00 7.92 |
| 95 | TC SHC kW | 95.0 95.00 7.90 | 97.1 90.10 7.95 | 104.0 74.90 8.15 | 112.0 58.70 8.39 | 102.0 102.00 8.09 | 102.0 102.00 8.09 | 108.0 85.90 8.26 | 116.0 65.40 8.49 | 107.0 107.00 8.23 | 107.0 107.00 8.23 | 111.0 95.60 8.34 | 118.0 71.60 8.57 |
| 100 | TC SHC kW | 93.4 93.40 8.25 | 95.2 89.10 8.29 | 102.0 74.00 8.48 | 110.0 57.90 8.72 | 100.0 100.00 8.43 | 100.0 100.00 8.43 | 106.0 85.00 8.59 | 114.0 64.60 8.83 | 105.0 105.00 8.57 | 105.0 105.00 8.57 | 108.0 94.70 8.67 | 116.0 70.80 8.90 |
| 105 | TC SHC kW | 91.8 91.80 8.59 | 93.3 88.10 8.63 | 100.0 73.20 8.81 | 108.0 57.10 9.05 | 98.6 98.60 8.78 | 98.5 98.50 8.77 | 104.0 84.10 8.93 | 111.0 63.80 9.16 | 103.0 103.00 8.91 | 103.0 103.00 8.91 | 106.0 93.70 9.00 | 113.0 69.90 9.23 |
| 115 | TC SHC kW | 88.5 88.50 9.28 | 89.5 86.10 9.30 | 95.8 71.40 9.47 | 103.0 55.40 9.71 | 95.0 95.00 9.46 | 94.7 94.70 9.44 | 99.2 82.40 9.44 | 107.0 62.10 9.59 | 99.2 99.20 9.59 | 99.2 99.20 9.58 | 101.0 91.70 9.66 | 109.0 68.30 9.90 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

38ARZ012/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|------------------------|--------------------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | 3750 | | | | 5000 | | | | 6250 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 72 |
| 80 | TC SHC kW | 112.2 112.20 7.27 | 113.3 109.40 7.30 | 121.3 90.10 7.50 | 130.1 69.70 7.74 | 121.1 121.20 7.50 | 120.2 105.00 7.48 | 125.3 78.30 7.61 | 133.2 78.30 7.86 | 125.2 125.20 7.64 | 125.2 125.20 7.63 | 128.1 116.20 7.69 | 135.2 86.50 7.92 |
| 85 | TC SHC kW | 110.3 110.30 7.58 | 111.3 107.40 7.60 | 119.3 89.20 7.81 | 127.2 69.00 8.06 | 119.1 119.10 7.80 | 118.2 118.20 7.79 | 122.2 104.10 7.93 | 132.1 77.60 8.19 | 123.2 123.20 7.96 | 123.2 123.20 7.96 | 125.2 116.30 8.01 | 134.1 85.70 8.24 |
| 95 | TC SHC kW | 106.3 106.30 8.21 | 107.3 105.80 8.23 | 115.3 87.50 8.48 | 123.2 67.40 8.72 | 115.3 115.30 8.43 | 114.3 102.50 8.58 | 118.2 76.10 8.83 | 126.2 120.10 8.60 | 120.1 120.10 8.59 | 120.1 114.30 8.65 | 121.2 84.30 8.89 | 129.2 84.30 8.89 |
| 100 | TC SHC kW | 104.9 104.90 8.60 | 105.3 103.60 8.60 | 111.3 86.50 8.80 | 120.2 66.50 9.05 | 113.2 113.20 8.78 | 113.2 113.20 8.78 | 116.2 100.60 8.91 | 124.3 75.10 9.16 | 117.2 117.20 8.92 | 117.2 117.20 8.92 | 118.2 112.20 8.98 | 126.2 83.30 9.23 |
| 105 | TC SHC kW | 103.1 103.10 8.92 | 102.7 103.20 8.94 | 110.3 85.70 9.13 | 118.3 65.60 9.38 | 111.2 111.20 9.12 | 111.2 111.20 9.12 | 113.2 99.60 9.24 | 121.2 74.20 9.26 | 115.2 115.20 9.26 | 115.2 115.20 9.26 | 116.2 110.30 9.31 | 123.2 82.40 9.56 |
| 115 | TC SHC kW | 99.4 99.40 9.59 | 98.6 99.60 9.60 | 104.3 83.80 9.78 | 112.4 63.80 10.04 | 105.3 105.30 9.80 | 106.2 106.20 9.88 | 107.3 97.40 9.90 | 116.2 72.50 10.15 | 110.3 110.30 9.94 | 110.3 110.30 9.94 | 111.3 109.30 9.97 | 117.3 80.60 10.27 |

38ARZ012/40RM014 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|------------------------|--------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | 3750 | | | | 5000 | | | | 6250 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 72 |
| 80 | TC SHC kW | 106.0 106.00 7.12 | 108.0 103.00 7.16 | 116.0 85.10 7.36 | 124.0 66.10 7.59 | 114.0 114.00 7.32 | 114.0 114.00 7.46 | 120.0 97.60 7.46 | 128.0 73.70 7.70 | 119.0 119.00 7.45 | 119.0 119.00 7.45 | 122.0 108.00 7.53 | 130.0 80.70 7.76 |
| 85 | TC SHC kW | 105.0 105.00 7.43 | 106.0 101.00 7.47 | 114.0 84.30 7.67 | 122.0 65.40 7.91 | 112.0 112.00 7.63 | 112.0 112.00 7.78 | 117.0 96.70 7.78 | 126.0 73.00 8.02 | 117.0 117.00 7.77 | 117.0 117.00 7.77 | 120.0 108.00 7.85 | 128.0 80.00 8.08 |
| 95 | TC SHC kW | 101.0 101.00 8.07 | 102.0 99.40 8.10 | 110.0 82.70 8.30 | 118.0 63.90 8.55 | 109.0 109.00 8.27 | 109.0 109.00 8.27 | 113.0 95.10 8.41 | 121.0 71.50 8.66 | 113.0 113.00 8.42 | 113.0 113.00 8.41 | 116.0 106.00 8.48 | 124.0 78.50 8.72 |
| 100 | TC SHC kW | 99.6 99.60 8.41 | 100.0 98.10 8.43 | 107.0 81.70 8.63 | 115.0 63.00 8.88 | 107.0 107.00 8.61 | 107.0 107.00 8.74 | 111.0 94.10 8.74 | 119.0 70.60 8.99 | 111.0 111.00 8.75 | 111.0 111.00 8.75 | 113.0 104.00 8.81 | 121.0 77.60 9.06 |
| 105 | TC SHC kW | 97.8 97.80 8.75 | 98.3 96.80 8.77 | 105.0 80.80 8.96 | 113.0 62.10 9.21 | 105.0 105.00 8.95 | 105.0 105.00 8.95 | 108.0 93.10 9.07 | 116.0 69.70 9.32 | 109.0 109.00 9.09 | 109.0 109.00 9.09 | 111.0 103.00 9.14 | 118.0 76.80 9.39 |
| 115 | TC SHC kW | 94.1 94.10 9.42 | 94.2 94.20 9.43 | 100.0 78.90 9.61 | 108.0 60.30 9.87 | 100.0 100.00 9.63 | 100.0 100.00 9.63 | 103.0 91.10 9.73 | 111.0 68.00 9.98 | 105.0 105.00 9.77 | 105.0 105.00 9.77 | 106.0 101.00 9.80 | 113.0 75.10 10.10 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

38ARS012/40RM008H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|
| | 2250 | | | | 3000 | | | | 3750 | | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | |
| 80 | TC SHC kW | 90.2 90.20 6.54 | 95.7 81.60 6.65 | 104.9 69.30 6.82 | 114.4 56.70 7.01 | 99.9 99.90 6.72 | 102.2 95.20 6.77 | 110.0 79.70 6.94 | 121.5 63.00 7.12 | 106.7 106.70 6.86 | 106.6 105.80 6.85 | 114.5 88.90 7.00 | 125.7 68.90 7.20 |
| 85 | TC SHC kW | 88.4 88.40 6.87 | 93.5 80.50 6.99 | 102.6 68.30 7.16 | 112.3 55.70 7.39 | 98.0 98.00 7.07 | 99.9 94.00 7.10 | 108.0 78.70 7.30 | 118.5 62.10 7.51 | 104.5 104.50 7.22 | 104.7 103.90 7.23 | 111.6 87.80 7.37 | 122.7 67.90 7.58 |
| 95 | TC SHC kW | 84.9 84.90 7.50 | 89.1 78.40 7.61 | 97.7 66.30 7.85 | 107.2 53.70 8.11 | 94.0 94.00 7.75 | 95.2 91.50 7.79 | 103.1 76.60 8.00 | 111.9 60.10 8.26 | 100.2 100.20 7.92 | 100.1 100.50 7.93 | 105.9 85.70 8.10 | 116.5 65.90 8.35 |
| 100 | TC SHC kW | 83.2 83.20 7.82 | 86.7 77.30 7.92 | 95.2 65.30 8.19 | 104.7 52.70 8.47 | 91.9 91.90 8.09 | 92.8 90.20 8.11 | 100.2 75.40 8.34 | 110.1 59.10 8.62 | 97.9 97.90 8.27 | 97.9 98.20 8.27 | 103.6 84.60 8.44 | 112.9 64.70 8.72 |
| 105 | TC SHC kW | 81.3 81.30 8.13 | 84.5 76.10 8.23 | 92.7 64.20 8.51 | 102.0 51.80 8.83 | 89.8 89.80 8.42 | 90.4 88.70 8.44 | 97.5 74.30 8.68 | 106.3 58.10 8.99 | 95.7 95.70 8.63 | 95.6 95.90 8.62 | 100.8 83.40 8.80 | 110.2 63.70 9.09 |
| 115 | TC SHC kW | 77.8 77.80 8.75 | 80.1 73.90 8.86 | 87.6 62.00 9.18 | 96.8 49.70 9.54 | 85.6 85.60 9.10 | 85.7 85.40 9.08 | 92.0 72.20 9.36 | 101.1 56.00 9.36 | 91.2 91.20 9.72 | 91.0 91.10 9.32 | 95.0 81.10 9.29 | 104.0 61.80 9.50 |

38ARS012/40RM008 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | | |
|--|--------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|------------------------|
| | 2250 | | | | 3000 | | | | 3750 | | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | |
| 80 | TC SHC kW | 84.6 84.60 6.44 | 90.1 76.70 6.55 | 98.9 65.20 6.72 | 108.0 53.30 6.91 | 93.4 93.40 6.61 | 96.0 88.70 6.67 | 104.0 74.30 6.84 | 114.0 59.00 7.02 | 99.7 99.70 6.74 | 100.0 98.30 6.75 | 108.0 82.70 6.90 | 118.0 64.20 7.09 |
| 85 | TC SHC kW | 83.0 83.00 6.74 | 88.1 75.70 6.86 | 96.8 64.30 7.05 | 106.0 52.40 7.27 | 91.6 91.60 6.93 | 93.9 87.60 6.99 | 102.0 73.40 7.17 | 112.0 58.10 7.39 | 97.7 97.70 7.08 | 98.3 96.80 7.09 | 105.0 81.70 7.25 | 115.0 63.30 7.46 |
| 95 | TC SHC kW | 79.8 79.80 7.36 | 84.1 73.70 7.47 | 92.4 62.40 7.71 | 101.0 50.60 7.97 | 88.1 88.10 7.58 | 89.6 85.30 7.64 | 97.3 71.50 7.85 | 106.0 56.30 8.11 | 93.9 93.90 7.75 | 94.0 93.70 7.76 | 100.0 79.80 7.95 | 110.0 61.50 8.20 |
| 100 | TC SHC kW | 78.2 78.20 7.66 | 82.0 72.70 7.77 | 90.1 61.50 8.03 | 99.1 49.70 8.32 | 86.2 86.20 7.91 | 87.4 84.10 7.95 | 94.8 70.50 8.18 | 104.0 55.40 8.47 | 91.8 91.80 8.09 | 91.9 91.80 8.09 | 97.9 78.80 8.28 | 107.0 60.50 8.56 |
| 105 | TC SHC kW | 76.5 76.50 7.96 | 79.9 71.60 8.07 | 87.8 60.50 8.35 | 96.6 48.80 8.66 | 84.3 84.30 8.23 | 85.2 82.80 8.26 | 92.3 69.60 8.51 | 101.0 54.50 8.82 | 89.8 89.80 8.42 | 89.8 89.80 8.42 | 95.3 77.80 8.62 | 104.0 59.60 8.92 |
| 115 | TC SHC kW | 73.2 73.20 8.56 | 75.7 69.60 8.67 | 83.3 58.60 8.99 | 91.8 47.00 9.35 | 80.6 80.60 8.87 | 80.9 80.30 8.88 | 87.4 67.60 9.16 | 96.0 52.60 9.53 | 85.8 85.80 9.09 | 85.6 85.60 9.07 | 90.2 75.80 9.29 | 98.7 57.80 9.64 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38ARS007-012

38ARS012/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | 3000 | | | | 4000 | | | | 5000 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| | | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 |
| 80 | TC SHC kW | 101.5 101.50 6.75 | 104.0 96.10 6.80 | 112.2 80.30 6.97 | 123.1 63.70 7.18 | 110.3 110.30 6.93 | 111.2 110.40 6.93 | 117.2 93.20 7.07 | 128.1 71.50 7.28 | 116.2 116.20 7.06 | 116.2 116.20 7.06 | 120.2 104.00 7.14 | 131.1 79.00 7.31 |
| 85 | TC SHC kW | 99.6 99.60 7.08 | 100.8 94.40 7.14 | 110.3 79.10 7.32 | 119.2 62.60 7.56 | 108.2 108.20 7.29 | 108.3 107.40 7.29 | 114.2 91.90 7.43 | 125.1 70.40 7.66 | 114.2 114.20 7.44 | 114.2 114.20 7.44 | 118.1 103.90 7.51 | 128.1 78.00 7.71 |
| 95 | TC SHC kW | 95.0 95.00 7.77 | 96.4 92.20 7.81 | 104.9 77.10 8.04 | 114.2 60.50 8.32 | 103.6 103.60 8.01 | 103.6 104.60 8.01 | 108.3 89.50 8.18 | 118.2 68.40 8.43 | 110.2 110.20 8.19 | 110.2 110.20 8.19 | 112.2 100.60 8.25 | 121.2 75.80 8.54 |
| 100 | TC SHC kW | 93.2 93.20 8.10 | 94.1 90.80 8.14 | 102.3 75.90 8.39 | 111.2 59.50 8.72 | 101.4 101.40 8.36 | 100.6 101.50 8.37 | 105.3 88.30 8.56 | 115.2 67.40 8.74 | 106.3 106.30 8.53 | 106.3 106.30 8.52 | 109.2 99.40 8.65 | 118.2 74.80 8.82 |
| 105 | TC SHC kW | 91.3 91.30 8.44 | 91.4 89.50 8.44 | 99.9 74.80 8.76 | 108.4 58.50 9.08 | 99.3 99.30 8.73 | 99.3 99.30 8.73 | 103.7 87.20 8.90 | 112.2 66.30 9.20 | 104.4 104.40 9.00 | 104.4 104.40 9.00 | 105.3 98.30 9.00 | 115.2 73.80 9.28 |
| 115 | TC SHC kW | 86.9 86.90 9.12 | 86.9 86.60 9.13 | 92.9 72.70 9.43 | 102.5 56.50 9.79 | 94.0 94.00 9.42 | 94.0 94.00 9.42 | 97.5 85.00 9.58 | 106.4 64.10 9.93 | 99.7 99.70 9.63 | 99.7 99.70 9.62 | 101.1 96.20 9.71 | 108.3 71.70 10.02 |

38ARS012/40RM012 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|
| | | 3000 | | | | 4000 | | | | 5000 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| | | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 |
| 80 | TC SHC kW | 96.1 96.10 6.67 | 98.7 91.30 6.72 | 107.0 76.50 6.89 | 117.0 60.70 7.08 | 105.0 105.00 6.83 | 105.0 104.00 6.84 | 112.0 88.10 6.98 | 122.0 67.90 7.17 | 110.0 110.00 6.95 | 110.0 110.00 6.95 | 115.0 98.50 7.04 | 125.0 74.60 7.22 |
| 85 | TC SHC kW | 94.2 94.20 7.00 | 96.4 90.20 7.05 | 105.0 75.50 7.23 | 114.0 59.70 7.45 | 102.0 102.00 7.18 | 103.0 102.00 7.19 | 109.0 87.10 7.33 | 119.0 66.90 7.54 | 108.0 108.00 7.31 | 108.0 108.00 7.31 | 112.0 97.40 7.40 | 122.0 73.60 7.60 |
| 95 | TC SHC kW | 90.5 90.50 7.66 | 92.0 87.80 7.70 | 99.7 73.50 7.92 | 109.0 57.80 8.19 | 98.3 98.30 7.88 | 98.3 98.30 7.88 | 104.0 85.00 8.05 | 113.0 65.00 8.30 | 104.0 104.00 8.04 | 104.0 104.00 8.04 | 107.0 95.10 8.12 | 116.0 71.70 8.37 |
| 100 | TC SHC kW | 88.6 88.60 7.98 | 89.7 86.50 8.02 | 97.1 72.50 8.26 | 106.0 56.90 8.55 | 96.1 96.10 8.22 | 96.2 96.20 8.23 | 101.0 83.90 8.39 | 110.0 64.10 8.66 | 101.0 101.00 8.39 | 101.0 101.00 8.39 | 104.0 93.90 8.48 | 113.0 70.80 8.74 |
| 105 | TC SHC kW | 86.6 86.60 8.31 | 87.4 85.20 8.33 | 94.6 71.50 8.59 | 104.0 55.90 8.91 | 94.0 94.00 8.56 | 94.0 94.00 8.57 | 98.5 82.80 8.73 | 107.0 63.10 9.03 | 99.1 99.10 8.75 | 99.1 99.10 8.75 | 101.0 92.70 8.83 | 110.0 69.80 9.11 |
| 115 | TC SHC kW | 82.7 82.70 8.95 | 82.9 82.50 8.96 | 89.4 69.50 9.26 | 98.2 54.00 9.62 | 89.6 89.60 9.25 | 89.6 89.60 9.25 | 93.1 80.70 9.41 | 102.0 61.20 9.76 | 94.4 94.40 9.46 | 94.4 94.40 9.46 | 95.9 90.40 9.54 | 104.0 67.90 9.85 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (1000 Btuh) Gross
- TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38ARS012/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | |
|--|--------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | 3750 | | | | 5000 | | | | 6250 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 |
| 80 | TC SHC kW | 109.3 109.30 6.94 | 111.2 107.40 6.96 | 118.3 89.50 7.12 | 129.2 69.80 7.33 | 119.2 119.20 7.12 | 118.2 104.20 7.22 | 124.2 79.00 7.39 | 134.1 126.00 7.23 | 126.0 126.00 7.23 | 126.0 116.30 7.28 | 127.1 116.30 7.45 |
| 85 | TC SHC kW | 107.3 107.30 7.30 | 107.3 106.00 7.31 | 115.2 88.40 7.49 | 126.1 68.90 7.71 | 115.2 115.20 7.50 | 115.2 103.00 7.49 | 121.1 78.10 7.81 | 131.2 122.10 7.63 | 122.1 122.10 7.62 | 122.1 116.30 7.66 | 125.0 113.30 7.85 |
| 95 | TC SHC kW | 102.4 102.40 8.03 | 102.8 103.00 8.02 | 110.3 86.20 8.22 | 120.3 66.70 8.47 | 111.2 111.20 8.26 | 111.2 100.80 8.26 | 115.2 76.00 8.36 | 124.3 117.10 8.42 | 117.1 117.10 8.41 | 117.1 113.30 8.48 | 126.2 113.30 8.68 |
| 100 | TC SHC kW | 101.3 101.30 8.38 | 99.6 101.10 8.37 | 108.2 85.00 8.59 | 118.2 65.60 8.88 | 108.2 108.20 8.63 | 108.2 99.60 8.79 | 112.1 74.90 8.99 | 121.1 115.10 8.75 | 115.1 115.10 8.75 | 115.1 115.10 8.80 | 115.2 111.40 9.06 |
| 105 | TC SHC kW | 98.2 98.20 8.79 | 98.1 98.20 8.70 | 104.7 84.00 8.92 | 114.3 64.50 9.25 | 106.3 106.30 8.95 | 105.3 105.30 8.94 | 108.2 98.60 9.06 | 117.2 73.90 9.44 | 112.1 112.10 9.12 | 112.1 112.10 9.12 | 112.1 110.30 9.52 |
| 115 | TC SHC kW | 93.7 93.70 9.47 | 93.3 93.30 9.45 | 99.1 81.70 9.60 | 108.3 62.50 10.06 | 101.5 101.50 9.74 | 101.4 101.40 9.73 | 102.7 95.80 9.77 | 111.3 71.70 10.18 | 106.1 106.10 9.93 | 106.0 106.00 9.93 | 106.1 107.30 9.95 |

38ARS012/40RM014 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | |
|--|--------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|
| | 3750 | | | | 5000 | | | | 6250 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 |
| 80 | TC SHC kW | 103.0 103.00 6.81 | 105.0 101.00 6.84 | 113.0 84.60 7.00 | 123.0 66.20 7.20 | 112.0 112.00 6.98 | 112.0 112.00 6.98 | 118.0 97.70 7.09 | 128.0 74.30 7.27 | 118.0 118.00 7.09 | 118.0 118.00 7.09 | 121.0 109.00 7.33 |
| 85 | TC SHC kW | 101.0 101.00 7.16 | 102.0 99.60 7.18 | 110.0 83.50 7.36 | 120.0 65.20 7.58 | 109.0 109.00 7.34 | 109.0 109.00 7.34 | 115.0 96.60 7.46 | 125.0 73.40 7.67 | 115.0 115.00 7.47 | 115.0 115.00 7.46 | 118.0 108.00 7.72 |
| 95 | TC SHC kW | 97.1 97.10 7.85 | 97.5 96.60 7.86 | 105.0 81.40 8.07 | 115.0 63.10 8.34 | 105.0 105.00 8.07 | 105.0 105.00 8.07 | 109.0 94.30 8.19 | 119.0 71.40 8.45 | 110.0 110.00 8.22 | 110.0 110.00 8.22 | 112.0 105.00 8.51 |
| 100 | TC SHC kW | 95.0 95.00 8.19 | 95.2 94.70 8.19 | 102.0 80.30 8.41 | 112.0 62.10 8.71 | 102.0 102.00 8.42 | 102.0 102.00 8.42 | 106.0 93.10 8.54 | 115.0 70.30 8.82 | 108.0 108.00 8.58 | 108.0 108.00 8.58 | 109.0 104.00 8.89 |
| 105 | TC SHC kW | 92.8 92.80 8.53 | 92.8 92.80 8.53 | 99.4 79.20 8.75 | 109.0 61.10 9.08 | 100.0 100.00 8.78 | 100.0 100.00 8.77 | 103.0 91.90 8.89 | 112.0 69.30 9.19 | 105.0 105.00 8.95 | 105.0 105.00 8.95 | 106.0 102.00 8.98 |
| 115 | TC SHC kW | 88.5 88.50 9.21 | 88.2 88.20 9.19 | 93.8 77.00 9.43 | 103.0 59.00 9.81 | 95.3 95.30 9.49 | 95.2 95.20 9.48 | 97.4 89.40 9.60 | 106.0 67.20 9.93 | 99.9 99.90 9.68 | 99.8 99.80 9.68 | 100.0 99.00 9.70 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

38AR007-012

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38ARD012/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| | | 3000 | | | | 4000 | | | | 5000 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 |
| 80 | TC SHC kW | 100.0 100.00 6.61 | 102.0 95.70 6.63 | 110.0 79.50 6.71 | 120.0 62.60 6.83 | 109.0 109.00 6.70 | 109.0 92.20 6.70 | 115.0 70.40 6.77 | 124.0 6.88 | 115.0 115.00 6.77 | 115.0 104.00 6.80 | 118.0 77.80 6.92 | 126.0 77.80 6.92 |
| 85 | TC SHC kW | 98.9 98.90 6.98 | 101.0 94.80 7.00 | 108.0 78.80 7.09 | 118.0 61.90 7.21 | 107.0 107.00 7.07 | 107.0 91.30 7.14 | 113.0 69.60 7.26 | 122.0 7.15 | 113.0 113.00 7.14 | 113.0 103.00 7.18 | 116.0 77.10 7.29 | 124.0 77.10 7.29 |
| 95 | TC SHC kW | 96.0 96.00 7.72 | 97.2 93.00 7.74 | 104.0 77.20 7.84 | 113.0 60.40 7.96 | 104.0 104.00 7.82 | 104.0 104.00 7.83 | 109.0 89.70 7.89 | 117.0 68.20 8.02 | 109.0 109.00 7.90 | 109.0 109.00 7.93 | 112.0 101.00 8.05 | 120.0 75.60 8.05 |
| 100 | TC SHC kW | 94.4 94.40 8.14 | 95.4 92.00 8.16 | 102.0 76.40 8.25 | 111.0 59.60 8.38 | 102.0 102.00 8.25 | 102.0 102.00 8.31 | 106.0 88.90 8.44 | 115.0 67.40 8.44 | 107.0 107.00 8.33 | 107.0 107.00 8.36 | 109.0 100.00 8.48 | 117.0 74.90 8.48 |
| 105 | TC SHC kW | 92.8 92.80 8.57 | 93.5 91.00 8.57 | 100.0 75.60 8.67 | 109.0 58.80 8.81 | 10.00 100.00 8.67 | 100.0 100.00 8.67 | 104.0 88.00 8.74 | 113.0 66.60 8.87 | 105.0 105.00 8.75 | 105.0 105.00 8.78 | 107.0 99.00 8.90 | 115.0 74.10 8.90 |
| 115 | TC SHC kW | 89.7 89.70 9.41 | 89.8 88.90 9.40 | 96.3 73.90 9.51 | 105.0 57.30 9.66 | 96.6 96.60 9.52 | 96.7 96.70 9.52 | 100.0 86.30 9.58 | 108.0 65.10 9.72 | 102.0 102.00 9.60 | 101.0 101.00 9.60 | 103.0 97.00 9.62 | 110.0 72.50 9.75 |

38ARD012/40RM012 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|
| | | 3000 | | | | 4000 | | | | 5000 | | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 |
| 80 | TC SHC kW | 95.2 95.20 6.55 | 97.4 90.70 6.58 | 105.0 75.60 6.66 | 114.0 59.50 6.76 | 103.0 103.00 6.63 | 103.0 103.00 6.63 | 109.0 86.90 6.70 | 118.0 66.50 6.81 | 108.0 108.00 6.69 | 108.0 108.00 6.69 | 112.0 97.00 6.73 | 120.0 73.00 6.84 |
| 85 | TC SHC kW | 93.9 93.90 6.92 | 95.9 89.80 6.95 | 103.0 74.90 7.03 | 112.0 58.80 7.13 | 101.0 101.00 7.01 | 102.0 101.00 7.01 | 107.0 86.20 7.07 | 116.0 65.80 7.19 | 107.0 107.00 7.07 | 107.0 107.00 7.07 | 110.0 96.20 7.11 | 118.0 72.30 7.22 |
| 95 | TC SHC kW | 91.2 91.20 7.67 | 92.7 88.20 7.69 | 99.8 73.40 7.77 | 108.0 57.50 7.89 | 98.5 98.50 7.76 | 98.5 98.50 7.76 | 104.0 84.70 7.82 | 112.0 64.50 7.94 | 103.0 103.00 7.82 | 103.0 103.00 7.86 | 106.0 94.60 7.97 | 114.0 71.00 7.97 |
| 100 | TC SHC kW | 89.8 89.80 8.08 | 91.0 87.20 8.10 | 97.9 72.70 8.19 | 106.0 56.80 8.31 | 96.8 96.80 8.18 | 96.8 96.80 8.24 | 102.0 83.90 8.37 | 110.0 63.80 8.24 | 102.0 102.00 8.24 | 102.0 102.00 8.24 | 104.0 93.80 8.28 | 112.0 70.30 8.40 |
| 105 | TC SHC kW | 88.3 88.30 8.50 | 89.3 86.30 8.52 | 96.0 72.00 8.61 | 104.0 56.00 8.73 | 95.2 95.20 8.60 | 95.2 95.20 8.66 | 99.6 83.20 8.79 | 108.0 63.10 8.67 | 99.9 99.90 8.67 | 99.9 99.90 8.67 | 102.0 92.90 8.70 | 110.0 69.60 8.82 |
| 115 | TC SHC kW | 85.4 85.40 9.34 | 86.0 84.40 9.35 | 92.2 70.50 9.44 | 100.0 54.60 9.57 | 91.9 91.90 9.43 | 92.0 92.00 9.44 | 95.6 81.60 9.50 | 103.0 61.70 9.63 | 96.4 96.40 9.51 | 96.4 96.40 9.51 | 98.1 91.10 9.54 | 105.0 68.20 9.67 |

LEGEND

Edb — Entering Dry Bulb
 Ewb — Entering Wet Bulb
 kW — Compressor Motor Power Input
 SHC — Sensible Heat Capacity (1000 Btuh) Gross
 TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38ARD012/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | |
|--|--------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | 3750 | | | | 5000 | | | | 6250 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 |
| 80 | TC SHC kW | 107.0 107.00 6.68 | 108.0 105.00 6.68 | 115.0 87.90 6.77 | 124.0 68.00 6.89 | 115.0 115.00 6.77 | 115.0 102.00 6.82 | 119.0 77.10 6.94 | 128.0 122.00 6.86 | 122.0 122.00 6.86 | 122.0 116.00 6.87 | 123.0 116.00 6.99 |
| 85 | TC SHC kW | 105.0 105.00 7.05 | 106.0 103.00 7.06 | 113.0 87.10 7.15 | 122.0 67.30 7.27 | 113.0 113.00 7.15 | 113.0 101.00 7.20 | 117.0 76.30 7.32 | 126.0 121.00 7.24 | 121.0 121.00 7.24 | 121.0 115.00 7.25 | 129.0 85.20 7.37 |
| 95 | TC SHC kW | 102.0 102.00 7.80 | 103.0 101.00 7.81 | 109.0 85.50 7.90 | 118.0 65.80 8.03 | 110.0 110.00 7.91 | 110.0 110.00 7.91 | 113.0 99.60 7.95 | 122.0 74.90 8.08 | 117.0 117.00 8.01 | 117.0 113.00 8.01 | 125.0 83.70 8.13 |
| 100 | TC SHC kW | 100.0 100.00 8.22 | 101.0 99.30 8.23 | 107.0 84.60 8.32 | 116.0 65.00 8.45 | 108.0 108.00 8.34 | 108.0 108.00 8.34 | 111.0 98.70 8.38 | 119.0 74.10 8.51 | 115.0 115.00 8.44 | 115.0 115.00 8.44 | 114.0 112.00 8.43 |
| 105 | TC SHC kW | 98.6 98.60 8.65 | 99.1 97.80 8.65 | 105.0 83.80 8.74 | 113.0 64.30 8.88 | 106.0 106.00 8.76 | 106.0 106.00 8.76 | 109.0 97.80 8.80 | 117.0 73.30 8.94 | 113.0 113.00 8.86 | 113.0 113.00 8.87 | 112.0 111.00 8.85 |
| 115 | TC SHC kW | 95.3 95.30 9.49 | 95.4 94.90 9.49 | 100.0 82.10 9.59 | 109.0 62.70 9.73 | 102.0 102.00 9.61 | 102.0 102.00 9.61 | 104.0 95.90 9.65 | 112.0 71.80 9.79 | 108.0 108.00 9.72 | 109.0 109.00 9.73 | 108.0 108.00 9.70 |

38ARD012/40RM014 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | | | |
|--|--------------------------|-------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|
| | 3750 | | | | 5000 | | | | 6250 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | | | |
| | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 | 57 | 62 | 67 | 72 |
| 80 | TC SHC kW | 101.0 101.00 6.61 | 103.0 99.00 6.63 | 110.0 83.10 6.71 | 119.0 64.50 6.82 | 109.0 109.00 6.70 | 109.0 109.00 6.70 | 114.0 95.90 6.76 | 123.0 72.50 6.87 | 116.0 116.00 6.78 | 116.0 116.00 6.80 | 117.0 108.00 6.92 |
| 85 | TC SHC kW | 99.8 99.80 6.99 | 101.0 97.80 7.00 | 108.0 82.30 7.08 | 117.0 63.80 7.20 | 107.0 107.00 7.08 | 107.0 107.00 7.08 | 112.0 95.10 7.13 | 121.0 71.80 7.25 | 114.0 114.00 7.16 | 114.0 114.00 7.15 | 115.0 107.00 7.29 |
| 95 | TC SHC kW | 96.8 96.80 7.74 | 97.6 95.40 7.75 | 104.0 80.80 7.83 | 113.0 62.40 7.95 | 104.0 104.00 7.83 | 104.0 104.00 7.83 | 108.0 93.40 7.88 | 117.0 70.40 8.01 | 111.0 111.00 7.92 | 111.0 111.00 7.91 | 111.0 105.00 7.93 |
| 100 | TC SHC kW | 95.2 95.20 8.16 | 95.8 94.00 8.16 | 102.0 80.00 8.25 | 111.0 61.60 8.38 | 102.0 102.00 8.25 | 102.0 102.00 8.25 | 106.0 92.50 8.30 | 114.0 69.60 8.43 | 109.0 109.00 8.34 | 109.0 109.00 8.34 | 109.0 104.00 8.48 |
| 105 | TC SHC kW | 93.6 93.60 8.58 | 94.1 92.60 8.58 | 100.0 79.20 8.67 | 109.0 60.90 8.8 | 101.0 101.00 8.68 | 101.0 101.00 8.68 | 104.0 91.60 8.72 | 112.0 68.90 8.85 | 107.0 107.00 8.77 | 107.0 107.00 8.77 | 107.0 103.00 8.90 |
| 115 | TC SHC kW | 90.4 90.40 9.42 | 90.7 89.80 9.41 | 95.9 77.60 9.51 | 104.0 59.40 9.65 | 97.0 97.00 9.52 | 97.0 97.00 9.52 | 99.4 89.80 9.56 | 107.0 67.40 9.70 | 103.0 103.00 9.62 | 103.0 103.00 9.63 | 102.0 101.00 9.61 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

38ARD007-012

Electrical data



38ARZ007-012, 38ARS012, 38ARD012

38AR007-012

| UNIT SIZE 38AR | NOMINAL VOLTAGE | VOLTAGE RANGE* | | COMPRESSOR | | FAN MOTORS (Qty 2) | | POWER SUPPLY | | |
|-------------------|-----------------|----------------|-----|------------|------|--------------------|----------|--------------|------|------|
| | | V-Ph-Hz | MIN | MAX | RLA | LRA | FLA (ea) | LRA (ea) | MCA | MOCP |
| Z007 | 460-3-60 | | 418 | 506 | 9.6 | 73 | 0.4 | 0.9 | 12.8 | 20 |
| | 400-3-50 | | 360 | 440 | 9.6 | 73 | 0.4 | 0.9 | 12.8 | 20 |
| Z008 | 460-3-60 | | 418 | 506 | 12.8 | 95 | 0.7 | 1.9 | 17.4 | 30 |
| | 400-3-50 | | 360 | 440 | 12.8 | 95 | 0.7 | 1.9 | 17.4 | 30 |
| Z012 | 460-3-60 | | 418 | 506 | 17.2 | 125 | 0.7 | 1.9 | 22.9 | 30 |
| | 400-3-50 | | 360 | 440 | 17.2 | 125 | 0.7 | 1.9 | 22.9 | 30 |
| S012 | 460-3-60 | | 418 | 506 | 18 | 99 | 0.7 | 1.9 | 23.9 | 35 |
| | 400-3-50 | | 360 | 440 | 18 | 99 | 0.7 | 1.9 | 23.9 | 35 |
| D012 | 460-3-60 | | 418 | 506 | 8 | 66.5 | 0.7 | 1.9 | 19.4 | 25 |
| | 400-3-50 | | 360 | 440 | 8 | 66.5 | 0.7 | 1.9 | 19.4 | 25 |

LEGEND

FLA — Full Load Amps
LRA — Locked Rotor Amps
MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
NEC — National Electrical Code
RLA — Rated Load Amps



*Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed limits.

NOTES:

1. The MCA and MOCP values are calculated in accordance with the NEC, Article 440.
2. Motor RLA and LRA values are established in accordance with Underwriters' Laboratories (UL), Standard 1995 (U.S.A standard).

Application data

Operating limits — SI (English)

Maximum outdoor temperature 46 C (115 F)
 Minimum return-air temperature 13 C (55 F)
 Maximum return-air temperature 35 C (95 F)
 Range of acceptable saturation suction temperature. -4 to 13 C (25 to 55 F)
 Maximum discharge temperature 135 C (275 F)
 Minimum discharge superheat 16 C (60 F)

NOTES:

1. Select air handler at no less than 40 L/s per kW (300 cfm/ton) (nominal condensing unit capacity).
2. Total combined draw of the field-supplied liquid line solenoid valve and air handler fan contactor must not exceed 22 va. If the specified va must be exceeded, use a remote relay to control the load.

Liquid line

For applications with liquid lift greater than 6 m (20 ft), use 5/8 in. liquid line. The maximum liquid lift is 18 m (60 ft).

MAXIMUM REFRIGERANT CHARGE

| UNIT 38AR | R-22 | |
|--------------|---------|----------|
| | kg | lb |
| Z007 | 7.7 | 17.3 |
| Z008 | 15.5 | 34.2 |
| Z012 | 15.5 | 34.2 |
| S012 | 15.5 | 34.2 |
| D012 | (2) 7.8 | (2) 17.1 |

MINIMUM OUTDOOR-AIR OPERATING TEMPERATURE

| UNIT 38AR | COMPR CAPACITY | COND TEMP C (F) | MINIMUM OUTDOOR TEMP C (F) | |
|--------------|-------------------|-----------------------|-------------------------------|------------------------------|
| | | | Std | With Motormaster® Control |
| Z007 | 100% | 32 (90) | 12 (53) | |
| Z008 | 100% | 32 (90) | 15 (60) | |
| Z012 | 100% | 32 (90) | 11 (52) | |
| S012* | 100% 67% | 32 (90) 27 (80) | 9 (48) 11 (52) | -29 (-20) |
| D012 | 100% | 32 (90) | 10 (50) | |

*Unit has one step of unloading.

Refrigerant piping

It is recommended that the refrigerant piping for all commercial split systems include a liquid line solenoid valve, a liquid line filter drier and a sight glass.

For refrigerant lines longer than 75 lineal ft (22.4 m), a liquid line solenoid and a suction accumulator are required. Refer to the refrigerant specialties table.

REFRIGERANT PIPING SIZES

| UNIT 38AR | LINEAR LENGTH OF PIPING — M (FT) | | | | | | | |
|--------------|----------------------------------|-----------|------------------|-----------|-------------------|-----------|--------------------|-----------|
| | 0-7.6 (0-25) | | 7.6-15.2 (25-50) | | 15.2-22.4 (50-75) | | 29.9-30.5 (75-100) | |
| | Line Size (in. OD) | | | | | | | |
| L | S | L | S | L | S | L | S | L |
| Z007 | 3/8 | 1 1/8 | 3/8 | 1 1/8 | 3/8 | 1 1/8 | 3/8 | 1 1/8 |
| Z008 | 3/8 | 1 1/8 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 1/2 | 1 1/8 |
| Z012 | 1/2 | 1 3/8 | 1/2 | 1 3/8 | 1/2 | 1 3/8 | 1/2 | 1 3/8 |
| S012 | 1/2 | 1 3/8 | 1/2 | 1 3/8 | 1/2 | 1 3/8 | 1/2 | 1 3/8 |
| D012 | (2) 3/8 | (2) 1 1/8 | (2) 3/8 | (2) 1 1/8 | (2) 3/8 | (2) 1 1/8 | (2) 3/8 | (2) 1 1/8 |

LEGEND

L — Liquid Line S — Suction Line

NOTES:

1. Pipe sizes are based on a 2° F loss for liquid and suction lines.
2. Pipe sizes are based on the maximum linear length, shown for each column, plus a 50% allowance for fittings.
3. Charge units with R-22 in accordance with unit installation instructions.

REFRIGERANT SPECIALTIES PART NUMBERS

| UNIT | LIQUID LINE SIZE (in.) | LIQUID LINE SOLENOID VALVE (LLSV) | LLSV COIL | SIGHT GLASS | FILTER DRIER | SUCTION LINE ACCUMULATOR |
|----------|---------------------------|--------------------------------------|---------------|----------------|-------------------|-----------------------------|
| 38ARZ007 | 3/8 | 200RB5T3M | AMG/24V | AMI-1TT3 | P502-8304S* | S-7063S* |
| 38ARZ008 | 3/8 | 200RB5T3M | AMG/24V | AMI-1TT3 | P502-8304S* | S-7063S* |
| 38ARZ012 | 1/2 | 200RB5T4M | AMG/24V | AMI-1TT4 | P502-8304S | S-7063S* |
| 38ARS012 | 1/2 | 200RB6T4M | AMG/24V | AMI-1TT4 | P502-8307S* | S-7063 |
| 38ARD012 | 3/8 | 200RB5T3M Qty 2 | AMG/24V Qty 2 | AMI-1TT3 Qty 2 | P502-8304S* Qty 2 | S-7061 Qty 2 |

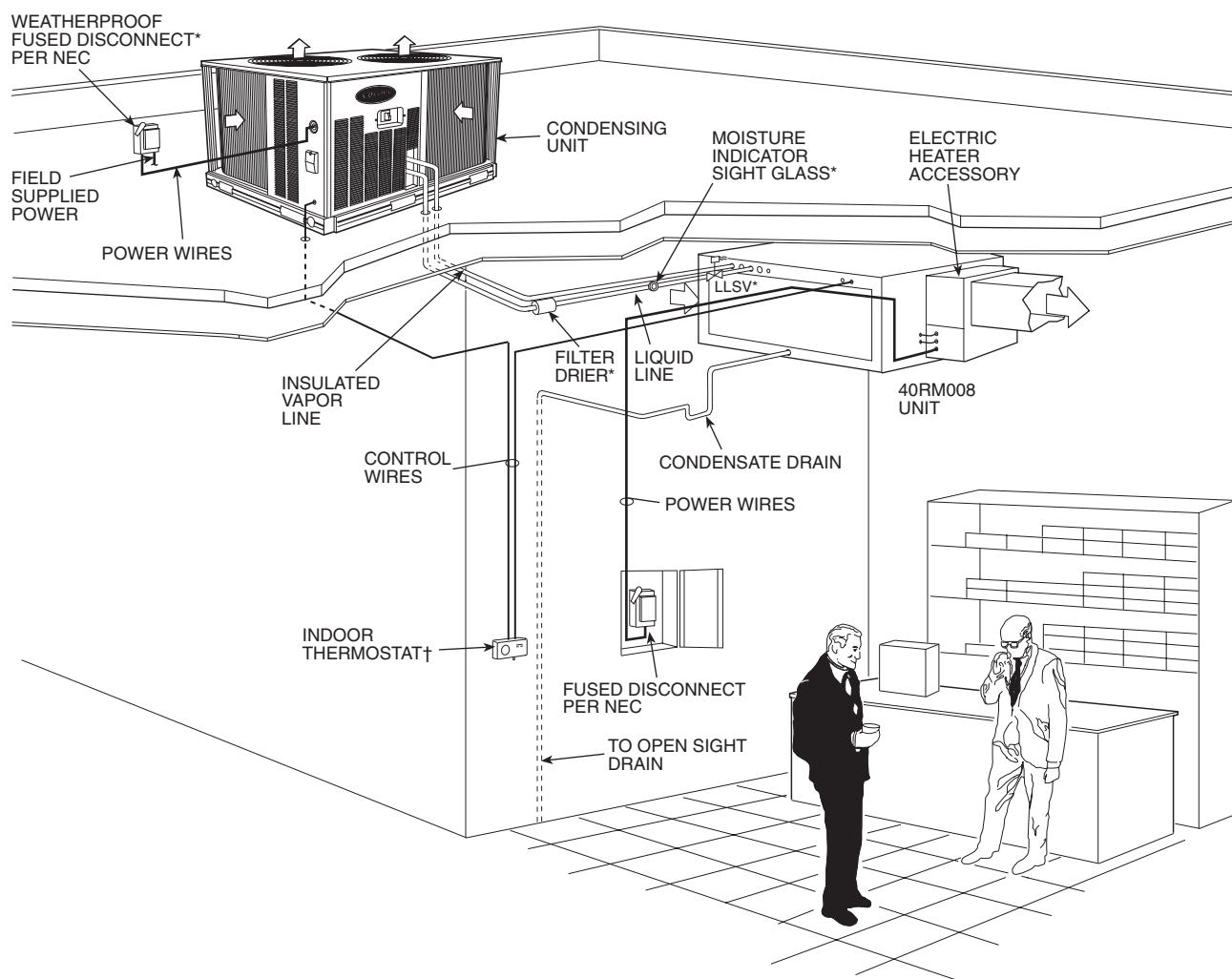
*Bushings required.

Typical piping and wiring



38AR007-012

ROOFTOP INSTALLATION — 38ARZ007-012, 38ARS012, 38ARD012



LEGEND

LLSV — Liquid Line Solenoid Valve
 NEC — National Electrical Code
 TXV — Thermostatic Expansion Valve

*Field supplied. (See Refrigerant Specialties table on page 48.)

†Accessory item.

NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor.
5. Internal factory-supplied TXVs not shown.

Guide specifications — 38ARZ007-012, 38ARS012

Carrier
®

Commercial Air-Cooled Condensing Units

HVAC Guide Specifications

Size Range: **19 to 32.9 kW (5.3 to 9.3 Tons)
Nominal**

Carrier Model Numbers: **38ARZ, Sizes 007-012
38ARS, Size 012**

Part 1 — General

1.01 SYSTEM DESCRIPTION

Outdoor-mounted, air-cooled condensing unit suitable for on-the-ground or rooftop installation. Unit shall consist of a reciprocating or scroll air-conditioning compressor assembly, an air-cooled coil, propeller-type condenser fans, and a control box. Unit shall discharge supply air upward as shown on contract drawings. Unit shall be used in a refrigeration circuit matched with a packaged air-handling unit.

1.02 QUALITY ASSURANCE

- A. Unit shall be rated in accordance with ARI Standard 210/240 (U.S.A. standards), 1994.
- B. Unit construction shall comply with ANSI/ASHRAE (U.S.A. standards) 15 safety code latest revision and comply with NEC (U.S.A. standard).
- C. Unit shall be constructed in accordance with UL 1995 standard (U.S.A. standard) and shall carry the UL and UL, Canada label.
- D. Unit cabinet shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen) (U.S.A. standard).
- E. Air-cooled condenser coils shall be leak tested at 1034 kPag (150 psig) and pressure tested at 2950 kPag (428 psig).
- F. Unit shall be manufactured in a facility registered to ISO 9001:2000 manufacturing quality standard.

1.03 DELIVERY, STORAGE, AND HANDLING

Unit shall be shipped as single package only, and shall be stored and handled according to unit manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER.)

Part 2 — Products

2.01 EQUIPMENT

A. General:

Factory-assembled, single piece, air-cooled condensing unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressor, holding charge (R-22), and special features required prior to field start-up.

B. Unit Cabinet:

1. Unit cabinet shall be constructed of galvanized steel, bonderized and coated with a prepainted baked enamel finish.
2. A heavy-gage roll-formed perimeter base rail with forklift slots and lifting holes shall be provided to facilitate rigging.

C. Fans:

1. Condenser fans shall be direct driven, propeller-type, discharging air vertically upward.
2. Fan blades shall be balanced.
3. Condenser fan discharge openings shall be equipped with PVC coated steel wire safety guards.
4. Condenser fan and motor shaft shall be corrosion resistant.

D. Compressor:

1. Compressor shall be of the hermetic scroll type (ARZ) or semi-hermetic reciprocating type (ARS).
2. Compressor shall be mounted on vibration isolators.
3. Compressors shall include overload protection.
4. Compressors shall be equipped with a crank-case heater.
5. Compressor shall be equipped with high discharge temperature protection (38ARZ007 only).
6. Compressor shall unload using suction cutoff unloading (38ARS012). Electric solenoid unloading available as an accessory.

E. Condenser Coil:

1. Condenser coil shall be air-cooled and circuited for integral subcooler.
2. Coil shall be constructed of aluminum fins (copper fins optional) mechanically bonded to internally grooved seamless copper tubes which are then cleaned, dehydrated, and sealed.

F. Refrigeration Components:

Refrigeration circuit components shall include liquid line service valve, suction line service valve, a full charge of compressor oil, and a holding charge of refrigerant. Units with semi-hermetic compressors (38ARS) shall have oil-level sight glass.

G. Controls and Safeties:

1. Minimum control functions shall include:
 - a. Control wire terminal blocks.
 - b. Compressor lockout on auto-reset safety until reset from thermostat.
 - c. High discharge temperature cutout (38ARZ008 and 012 only).
2. Minimum safety devices which are equipped with automatic reset (after resetting first at thermostat), shall include:
 - a. High discharge pressure cutout.
 - b. Low-pressure cutout.

H. Operating Characteristics:

1. The capacity of the condensing unit shall meet or exceed _____ kW at a suction temperature of _____. The power consumption at full load shall not exceed _____ kW.

2. The combination of the condensing unit and the evaporator or fan coil unit shall have a total net cooling capacity of _____ kW or greater at conditions of _____ L/s entering-air temperature at the evaporator at _____ wet bulb and _____ dry bulb, and air entering the condensing unit at _____.
3. The system shall have an EER of _____ or greater at standard ARI conditions (U.S.A. Standard).

I. Electrical Requirements:

1. Nominal unit electrical characteristics shall be _____ v, 3-ph, 50 or 50/60 Hz. The unit shall be capable of satisfactory operation within voltage limits of _____ v to _____ v.
2. Unit electrical power shall be single-point connection.
3. Unit control circuit shall contain a 24-v transformer for unit control.

J. Special Features:

1. Low-Ambient Temperature Control:

A low-ambient temperature control shall be available as a factory-installed option or as a field-installed accessory. This low-ambient control shall regulate speed of the condenser-fan motors in response to the saturated condensing temperature of the unit. The control shall maintain correct condensing pressure at outdoor temperatures down to -29°C (-20°F).

2. Gage Panel Package:

Gage panel package shall include a suction and discharge pressure gage.

3. Optional Condenser Coil Materials:

a. Pre-Coated Aluminum-Fin Coils:

Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.

b. Copper-Fin Coils:

Shall be constructed of copper-fins mechanically bonded to copper-tubes and copper tube sheets. Galvanized steel tube sheets shall not be acceptable. A polymer strip shall prevent coil assembly from contacting sheet metal coil pan to minimize potential for galvanic corrosion between the coil and pan. All copper construction shall provide protection in moderate coastal environments.

c. E-Coated Aluminum-Fin Coils:

Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil

encapsulation. Color shall be high gloss black with gloss requirements of 60° of 65 to 90% per ASTM D523-89 (U.S.A. standard). Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges. Superior hardness characteristics of 2H per ASTM D3363-92A (U.S.A. Standard) and cross hatch adhesion of 4B-5B per ASTM D3359-93 (U.S.A. Standard). Impact resistance shall be up to 4 m/k (ASTM D2794-93) (U.S.A. standard). Humidity and water immersion resistance shall be up to a minimum of 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92) (U.S.A. standards). Corrosion durability shall be confirmed through testing to no less than 1000 hours salt spray per ASTM B117-90 (U.S.A. standard). Coil construction shall be aluminum fins mechanically bonded to copper tubes.

4. Thermostat Controls:

a. Programmable multi-stage thermostat with 7-day clock, holiday scheduling, large backlit display, remote sensor capability, and Title 24 compliance.

b. Commercial Electronic Thermostat with 7-day timeclock, auto-changeover, multi-stage capability, and large LCD temperature display.

c. Carrier PremierLink™ Controller:

This control will function with CCN and ComfortVIEW™ software. It shall also be compatible with ComfortLink™ controllers. It shall be ASHRAE 62-99 (U.S.A. standard) compliant and Internet ready. It shall accept a CO₂ sensor in the conditioned space and be Demand Control Ventilation (DCV) ready. The communication rate must be 38.4K or faster. It shall include an integrated economizer controller.

5. Hail Guard Package:

Hail guard package shall protect coils against damage from hail and other flying debris.

6. Condenser Coil Grille:

Grille shall add decorative appearance to unit and protect condenser coil after installation.

7. Electric Solenoid Unloader:

Electric unloader valve piston, coil, and hardware shall be supplied to convert the pressure-operated compressor unloader to electric unloading (38ARS012 only).

8. Non-Fused Disconnect Switch:

Shall be factory-installed, internally mounted, NEC and UL approved non-fused switch shall provide unit power shutoff. Shall be accessible from outside the unit and shall provide power off lockout capability.

Guide specifications — 38ARD012



Commercial Air-Cooled Condensing Units

HVAC Guide Specifications

Size Range: **32.9 kW (9.3 Tons), Nominal**

Carrier Model Number: **38ARD, Size 012**

Part 1 — General

1.01 SYSTEM DESCRIPTION

Outdoor-mounted, air-cooled condensing unit suitable for on-the-ground or rooftop installation. Unit shall have 2 independent refrigeration circuits. Unit shall consist of dual scroll compressors, air-cooled coils, propeller-type condenser fans, and a control box. Unit shall discharge supply air upward as shown on contract drawings. Unit shall be used in a refrigeration circuit matched with a packaged air-handling unit.

1.02 QUALITY ASSURANCE

- A. Unit shall be rated in accordance with ARI Standard 210/240 (U.S.A. standards), 1994.
- B. Unit construction shall comply with ANSI/ASHRAE (U.S.A. standards) 15 safety code latest revision and comply with NEC (U.S.A. standard).
- C. Unit shall be constructed in accordance with UL 1995 standard (U.S.A. standard) and shall carry the UL and UL, Canada label.
- D. Unit cabinet shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (U.S.A. standard) (scribed specimen).
- E. Air-cooled condenser coils shall be leak tested at 1034 kPa (150 psig), and pressure tested at 2950 kPag (428 psig).
- F. Unit shall be manufactured in a facility registered to ISO 9001:2000 manufacturing quality standard.

1.03 DELIVERY, STORAGE, AND HANDLING

Unit shall be shipped as single package only, and shall be stored and handled according to unit manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER)

Part 2 — Products

2.01 EQUIPMENT

A. General:

Factory-assembled, single piece, air-cooled condensing unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressor, holding charge (R-22), and special features required prior to field start-up.

B. Unit Cabinet:

1. Unit cabinet shall be constructed of galvanized steel, bonderized and coated with a prepainted baked enamel finish.
2. A heavy-gage roll-formed perimeter base rail with forklift slots and lifting holes shall be provided to facilitate rigging.

C. Fans:

1. Condenser fans shall be direct driven, propeller-type, discharging air vertically upward.
2. Fan blades shall be balanced.

3. Condenser fan discharge openings shall be equipped with PVC coated steel wire safety guards.

4. Condenser fan and motor shaft shall be corrosion resistant.

D. Compressor:

1. Compressors shall be of the hermetic scroll type.
2. Compressors shall be mounted on vibration isolators.
3. Compressors shall include overload protection.
4. Compressors shall be equipped with a crank-case heater.
5. Compressors shall be equipped with high discharge temperature protection.

E. Condenser Coil:

1. Condenser coil shall be air-cooled and circuited for integral subcooler.
2. Coil shall be constructed of aluminum fins (copper fins optional) mechanically bonded to internally grooved seamless copper tubes which are then cleaned, dehydrated, and sealed.

F. Refrigeration Components:

Refrigeration circuit components shall include liquid line service valve, suction line service valve, a full charge of compressor oil, and a holding charge of refrigerant.

G. Controls and Safeties:

1. Minimum control functions shall include:
 - a. Control wire terminal blocks.
 - b. Compressor lockout on auto-reset safety until reset from thermostat.
2. Minimum safety devices which are equipped with automatic reset (after resetting first at thermostat), shall include:
 - a. High discharge pressure cutout.
 - b. Low-pressure cutout.

H. Operating Characteristics:

1. The capacity of the condensing unit shall meet or exceed ____ kW at a suction temperature of ____ . The power consumption at full load shall not exceed ____ kW.

2. The combination of the condensing unit and the evaporator or fan coil unit shall have a total net cooling capacity of ____ kW or greater at conditions of ____ cfm entering-air temperature at the evaporator at ____ wet bulb and ____ dry bulb, and air entering the condensing unit at ____ .

3. The system shall have an EER of ____ or greater at standard ARI conditions.

I. Electrical Requirements:

1. Nominal unit electrical characteristics shall be ____ v, 3-ph, 50 or 50/60 Hz. The unit shall be capable of satisfactory operation within voltage limits of ____ v to ____ v.

2. Unit electrical power shall be single-point connection.
3. Unit control circuit shall contain a 24-v transformer for unit control.

J. Special Features:

1. Low-Ambient Temperature Control:

A low-ambient temperature control shall be available as a factory-installed option or as a field-installed accessory. This low-ambient control shall regulate speed of the condenser-fan motors in response to the saturated condensing temperature of the unit. The control shall maintain correct condensing pressure at outdoor temperatures down to -29 C (-20 F).

2. Gage Panel Package:

Gage panel package shall include a suction and discharge pressure gage.

3. Optional Condenser Coil Materials:

a. Pre-Coated Aluminum-Fin Coils:

Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.

b. Copper-Fin Coils:

Shall be constructed of copper-fins mechanically bonded to copper-tubes and copper tube sheets. Galvanized steel tube sheets shall not be acceptable. A polymer strip shall prevent coil assembly from contacting sheet metal coil pan to minimize potential for galvanic corrosion between the coil and pan. All copper construction shall provide protection in moderate coastal environments.

c. E-Coated Aluminum-Fin Coils:

Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation. Color shall be high gloss black with gloss requirements of 60° of 65 to 90% per ASTM D523-89 (U.S.A.

standard). Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges. Superior hardness characteristics of 2H per ASTM D3363-92A and cross hatch adhesion of 4B-5B per ASTM D3359-93 (U.S.A. standard). Impact resistance shall be up to 4 m/kg. (ASTM D2794-93) (U.S.A. standard). Humidity and water immersion resistance shall be up to a minimum of 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92) (U.S.A. standards). Corrosion durability shall be confirmed through testing to no less than 1000 hours salt spray per ASTM B117-90 (U.S.A. standard). Coil construction shall be aluminum fins mechanically bonded to copper tubes.

4. Thermostat Controls:

a. Programmable multi-stage thermostat with 7-day clock, holiday scheduling, large backlit display, remote sensor capability, and Title 24 compliance.

b. Commercial Electronic Thermostat with 7-day timeclock, auto-changeover, multi-stage capability, and large LCD temperature display.

c. Carrier PremierLink™ Controls:

This control will function with CCN and ComfortVIEW™ software. It shall also be compatible with ComfortLink™ controllers. It shall be ASHRAE 62-99 (U.S.A. standard) compliant and Internet ready. It shall accept a CO₂ sensor in the conditioned space and be Demand Control Ventilation (DCV) ready. The communication rate must be 38.4K or faster. It shall include an integrated economizer controller.

5. Hail Guard Package:

Hail guard package shall protect coils against damage from hail and other flying debris.

6. Non-Fused Disconnect Switch:

Shall be factory-installed, internally mounted, NEC and UL approved non-fused switch shall provide unit power shutoff. Shall be accessible from outside the unit and shall provide power off lockout capability.

Model number nomenclature — 38ARD,AKS014-024 units



38ARD – Commercial Air-Cooled
Condensing Units Dual
Circuit Scroll Compressor
38AKS – Commercial Air-Cooled
Condensing Units (Semi-Hermetic)

Nominal Capacity – kW (Tons)
38ARD **38AKS**
014 – 38.9 (10.8) **014** – 37.8 (10.6)
016 – 50.3 (14.0) **016** – 50.2 (14.0)
024 – 64.6 (18.1) **024** – 62.5 (17.5)

Not Used

Condenser Coil Fin Material
— – Aluminum (Standard)
C – Copper
K – Pre-Coated Aluminum Fins
E – E-Coated Al Fin/Cu Tube
F – E-Coated Cu Fin/Cu Tube

38AKS 014 -- - 8 0 1 --

Factory-Installed Options

Packaging
0 – Base Unit
1 – Domestic
3 – Export

Revision Number
0 – Original

Voltage Designation
8 – 230-5-50
9 – 400-3-50

LEGEND

Al — Aluminum
Cu — Copper

Quality Assurance

Certified to ISO 9001:2000

Physical data



38ARD014-024 UNITS — SI

| UNIT SIZE 38AR | D014 | D016 | D024 |
|---------------------------------|-------------------------------|--------------|-------------|
| NOMINAL CAPACITY (kW) | 38.9 | 50.3 | 64.6 |
| OPERATING WEIGHTS (kg) | | | |
| Aluminum-Fin Coil (Standard) | 307 | 336 | 347 |
| Copper-Fin Coil (Optional) | 373 | 402 | 410 |
| REFRIGERANT TYPE* | R-22 | | |
| Operating Charge, Typical (kg)† | 5.25/Circuit | 5.25/Circuit | 6.3/Circuit |
| Shipping Charge (kg) | 1.4 | | |
| COMPRESSOR | Scroll | | |
| Qty...Model | 2...ZR72 | 2...ZR94 | 2...ZR125 |
| Oil Charge (L) | 1.8 (ea) | 2.5 (ea) | 3.3 (ea) |
| Speed (r/s) | 48.3 | 48.3 | 48.3 |
| Crankcase Heater Watts | 70 | | |
| CONDENSER FANS | | | |
| Qty...r/s | 2...15 | | |
| Diameter (mm) | 660 | | |
| Nominal kW | 0.37 | | |
| Nominal Airflow (L/s total) | 4346 | | |
| Watts (total) | 1050 | | |
| CONDENSER COIL | | | |
| Face Area (sq m total) | 2.71 | | |
| Rows...Fins/m | 3...590 | | |
| Storage Capacity (kg)** | 21.8 | | |
| CONTROLS | | | |
| Pressurestat Settings (kPa) | | | |
| High Open | 2937 ± 48 | | |
| Close | 2206 ± 138 | | |
| Low Open | 186 ± 28 | | |
| Close | 462 ± 48 | | |
| FAN CYCLING CONTROLS | | | |
| Operating Pressure (kPa) | | | |
| No. 2 Fan, Close | 1758 ± 69 | | |
| Open | 1103 ± 69 | | |
| PRESSURE RELIEF | | | |
| Location | Liquid Line | | |
| Temperature (C) | 93 | | |
| PIPING CONNECTIONS (in. O.D.) | | | |
| Suction | 1 ³ / ₈ | | |
| Liquid | 1 ¹ / ₂ | | |
| Hot Gas Stub | 3/ ₈ | | |

*Unit is factory-supplied with holding charge only.

†Typical operating charge with 7.6 m of interconnecting piping. Operating charge is approximate for maximum system capacity.

**Storage capacity is measured at liquid saturated temperatures of 50 C.

38ARD,AKS014-024

Physical data (cont)



38AKS014-024 UNITS — SI

| UNIT 38AK | S014 | S016 | S024 |
|-------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| NOMINAL CAPACITY (kW) | 37.8 | 50.2 | 62.5 |
| OPERATING WEIGHT (kg) | | | |
| Aluminum-Fin Coil (Standard) | 353 | 358 | 422 |
| Copper-Fin Coil (Optional) | 417 | 421 | 472 |
| REFRIGERANT TYPE* | | R-22 | |
| Operating Charge, Typical (kg)† | 10.4 | 10.4 | 12.7 |
| Shipping Charge (kg) | 1.40 | 1.40 | 1.40 |
| COMPRESSOR | | | |
| Qty...Model | 1...06DD328 | Reciprocating, Semi-Hermetic | |
| Oil Change (L) | 4.73 | 1...06DD537 | 1...06EA250 |
| No. Cylinders | 6 | 6 | 7.33 |
| Speed (r/s) | | 24.2 | 4 |
| Capacity Steps | | | |
| Accessory | 33**,66,100 | 33**,66,100 | — |
| Standard | 66,100 | 66,100 | 50,100 |
| Unloader Setting (kPa) | | | |
| Load | | 483 ± 6.9 | |
| Unload | | 414 ± 13.8 | |
| Crankcase Heater Watts | | 125 | |
| CONDENSER FANS | | Axial Flow, Direct Drive | |
| Qty...r/s | | 2...15.0 | |
| Qty...Diameter (mm) | | 660 | |
| Nominal kW | | 0.37 | |
| Nominal Airflow (L/s, total) | | 4660 | |
| Watts (total) | | 1050 | |
| CONDENSER COIL | | Copper Tubes, Aluminum Fins | |
| Face Area (sq m, total) | 2.71 | 2.71 | 2.71 |
| Rows...Fins/m | 3...590 | 3...590 | 3...590 |
| Storage Capacity (kg)†† | 18.3 | 18.1 | 18.1 |
| CONTROLS | | | |
| Pressurestat Settings (kPa) | | | |
| High Open | | 2937 ± 48 | |
| Close | | 2206 ± 138 | |
| Low Open | | 186 ± 28 | |
| Close | | 462 ± 48 | |
| FAN CYCLING CONTROLS | | | |
| Operating Pressure (kPa) | | | |
| No. 2 Fan, Close | | 1758 ± 69 | |
| Open | | 1103 ± 69 | |
| PRESSURE RELIEF | | | |
| Location | | Liquid Line | |
| Temperature (C) | 93.3 | 93.3 | 98.9 |
| PIPING CONNECTIONS (in. ODM) | | | |
| Suction | 1 ³ / ₈ | 1 ³ / ₈ | 1 ⁵ / ₈ |
| Liquid | | 5/ ₈ | |
| Hot Gas Stub | | 3/ ₈ | |

*Unit is factory supplied with holding charge only.

†Typical operating charge with 7.6 m of interconnecting piping. Operating charge is approximate for maximum system capacity.

**Indicates capacity step (%) with electric unloader accessory.

††Storage capacity is measured at liquid saturated temperatures of 50.6 C.



38ARD014-024 UNITS — ENGLISH

| UNIT SIZE 38AR | D014 | D016 | D024 |
|---------------------------------|-------------------------------|--------------|------------|
| NOMINAL CAPACITY (tons) | 10.8 | 14.0 | 18.1 |
| OPERATING WEIGHTS (lb) | | | |
| Aluminum-Fin Coil (Standard) | 676 | 740 | 764 |
| Copper-Fin Coil (Optional) | 822 | 886 | 904 |
| REFRIGERANT TYPE* | R-22 | | |
| Operating Charge, Typical (lb)† | 11.5/Circuit | 11.5/Circuit | 14/Circuit |
| Shipping Charge (lb) | 3.1 | | |
| COMPRESSOR | Scroll | | |
| Qty...Model | 2...ZR72 | 2...ZR94 | 2...ZR125 |
| Oil Charge (oz) | 64 (ea) | 85 (ea) | 110 (ea) |
| Speed (rpm) | 2900 | 2900 | 2900 |
| Crankcase Heater Watts | 70 | | |
| CONDENSER FANS | | | |
| Qty...Rpm | 2...900 | | |
| Diameter (in.) | 26 | | |
| Nominal Hp | 1/2 | | |
| Nominal Airflow (cfm, total) | 9210 | | |
| Watts (total) | 1050 | | |
| CONDENSER COIL | | | |
| Face Area (sq ft total) | 29.2 | | |
| Rows...Fins/in. | 3...15 | | |
| Storage Capacity (lb)** | 48 | | |
| CONTROLS | | | |
| Pressurestat Settings (psig) | | | |
| High Open | 426 ± 7 | | |
| Close | 320 ± 20 | | |
| Low Open | 27 ± 4 | | |
| Close | 67 ± 7 | | |
| FAN CYCLING CONTROLS | | | |
| Operating Pressure (psig) | | | |
| No. 2 Fan, Close | 255 ± 10 | | |
| Open | 160 ± 10 | | |
| PRESSURE RELIEF | | | |
| Location | Liquid Line | | |
| Temperature (F) | 200 | | |
| PIPING CONNECTIONS (in. O.D.) | | | |
| Suction | 1 ³ / ₈ | | |
| Liquid | 1 ¹ / ₂ | | |
| Hot Gas Stub | 3/ ₈ | | |

*Unit is factory-supplied with holding charge only.

†Typical operating charge with 25 ft of interconnecting piping. Operating charge is approximate for maximum system capacity.

**Storage capacity is measured at liquid saturated temperatures of 120 F.

38ARD,AKS014-024

Physical data (cont)



38AKS014-024 UNITS — ENGLISH

| UNIT SIZE 38AK | S014 | S016 | S024 |
|-------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| NOMINAL CAPACITY (tons) | 10.6 | 14.0 | 17.5 |
| OPERATING WEIGHTS (lb) | | | |
| Aluminum-Fin Coil (Standard) | 779 | 789 | 929 |
| Copper-Fin Coil (Optional) | 919 | 929 | 1040 |
| REFRIGERANT TYPE* | R-22 | | |
| Operating Charge, Typical (lb)† | 23 | 23 | 28 |
| Shipping Charge (lb) | 3.1 | 3.1 | 3.1 |
| COMPRESSOR | | Reciprocating, Semi-Hermetic | |
| Qty...Model | 1...06DD328 | 1...06DD537 | 1...06E4250 |
| Oil Charge (pt) | 10 | 10 | 15.5 |
| No. Cylinders | 6 | 6 | 4 |
| Speed (rpm) | | 1450 | |
| Capacity Steps | | | |
| Accessory | 33**, 66, 100 | 33**, 66, 100 | — |
| Standard | 66, 100 | 66, 100 | 50, 100 |
| Unloader Setting (psig) | | | |
| Load | | 70 ± 1 | |
| Unload | | 60 ± 2 | |
| Crankcase Heater Watts | | 125 | |
| CONDENSER FANS | | Axial Flow, Direct Drive | |
| Qty...Rpm | | 2...900 | |
| Diameter (in.) | | 26 | |
| Nominal Hp | | 1/2 | |
| Nominal Airflow (cfm, total) | | 9210 | |
| Watts (total) | | 1050 | |
| CONDENSER COIL | | Copper Tubes, Aluminum Fins | |
| Face Area (sq ft total) | 29.2 | 29.2 | 29.2 |
| Rows...Fins/in. | 3...15 | 3...15 | 3...15 |
| Storage Capacity (lb)†† | 40.0 | 39.8 | 39.8 |
| CONTROLS | | | |
| Pressurestat Settings (psig) | | | |
| High Open | | 426 ± 10 | |
| Close | | 320 ± 20 | |
| Low Open | | 27 ± 4 | |
| Close | | 67 ± 7 | |
| FAN CYCLING CONTROLS | | | |
| Operating Pressure (psig) | | | |
| No. 2 Fan, Close | | 255 ± 10 | |
| Open | | 160 ± 10 | |
| PRESSURE RELIEF | | | |
| Location | | Liquid Line | |
| Temperature (F) | 200 | 200 | 210 |
| PIPING CONNECTIONS (in. ODM) | | | |
| Suction | 1 ³ / ₈ | 1 ³ / ₈ | 1 ⁵ / ₈ |
| Liquid | | 5/8 | |
| Hot Gas Stub | | 3/8 | |

*Unit is factory-supplied with holding charge only.

†Typical operating charge with 25 ft of interconnecting piping. Operating charge is approximate for maximum system capacity.

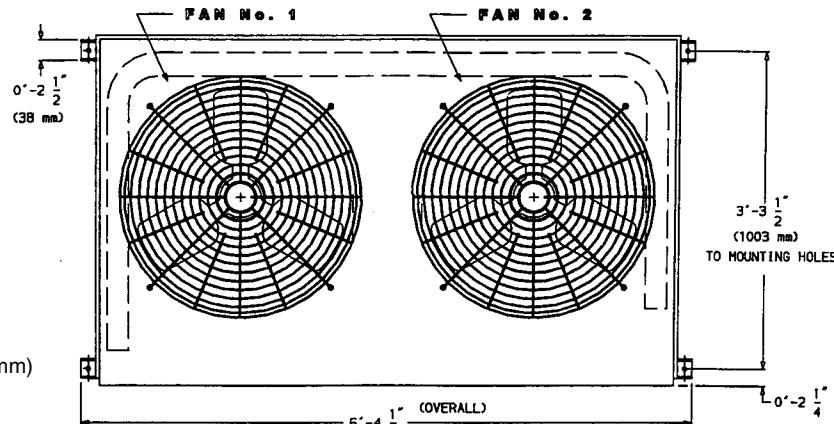
**Indicates capacity step (%) with electric unloader accessory.

††Storage capacity is measured at liquid saturated temperatures of 120 F.

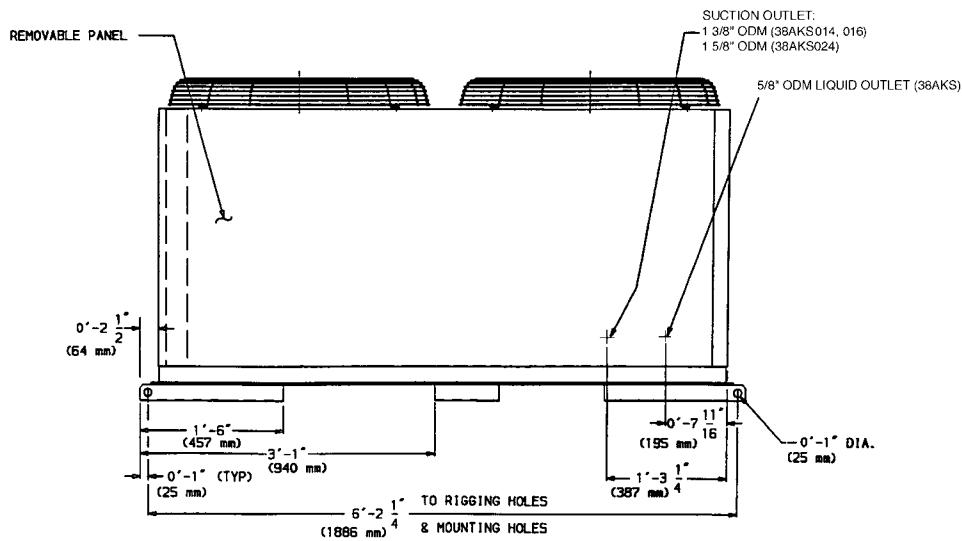
Dimensions

Carrier
®

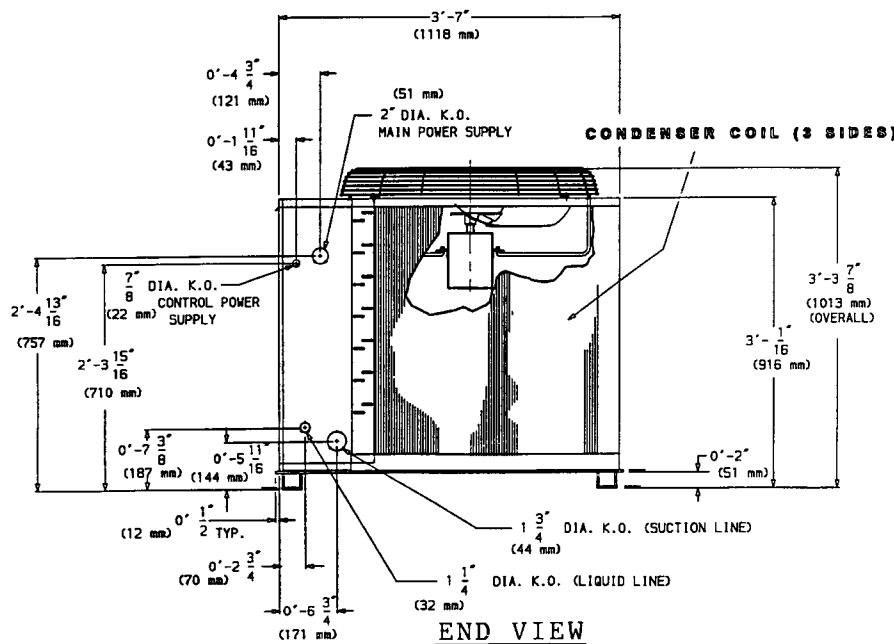
38AKS014-024



TOP VIEW



SIDE VIEW



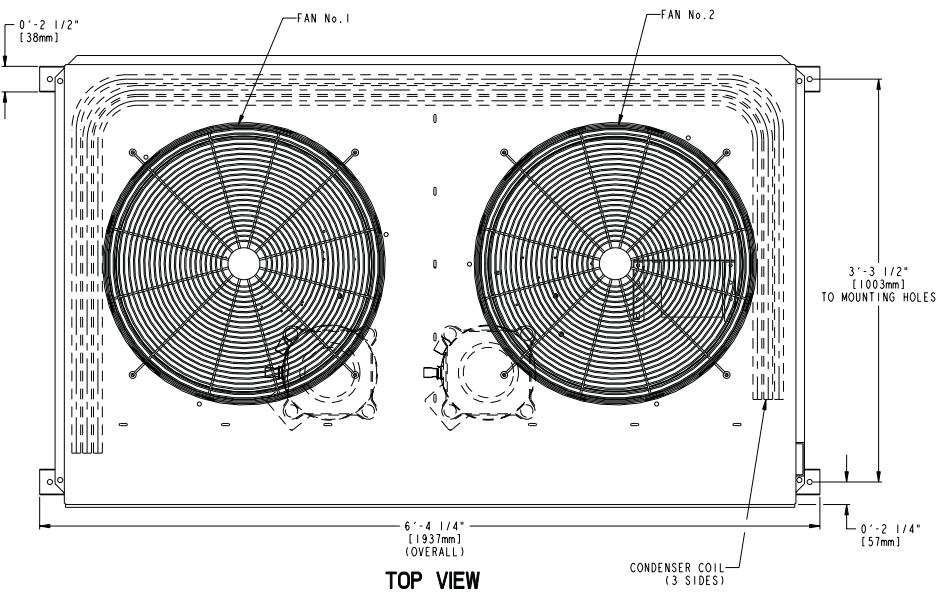
END VIEW

38ARD,AKS014-024

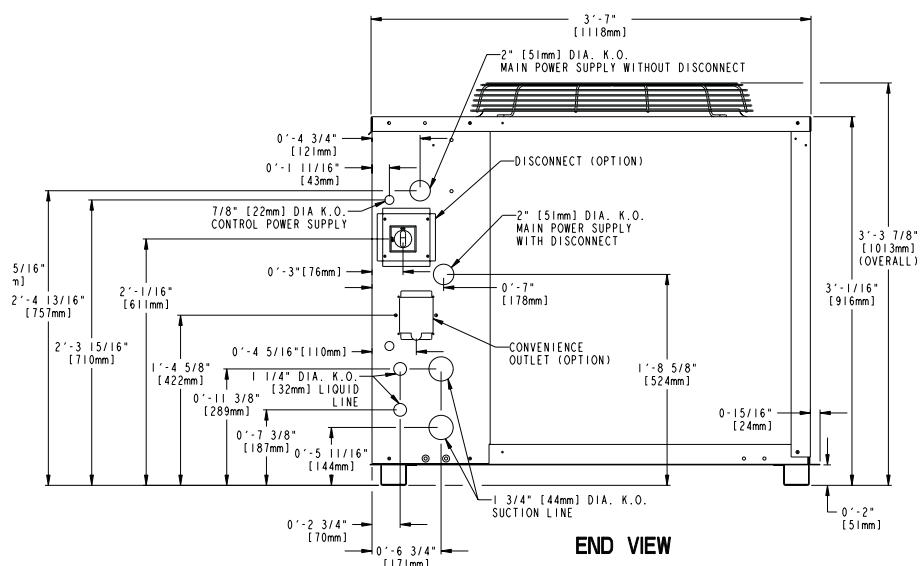
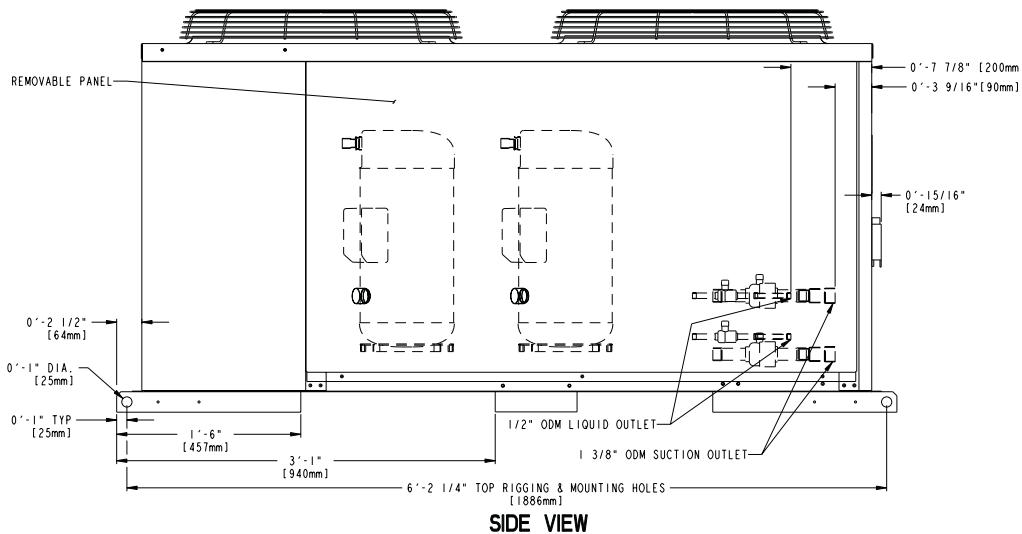
Dimensions (cont)

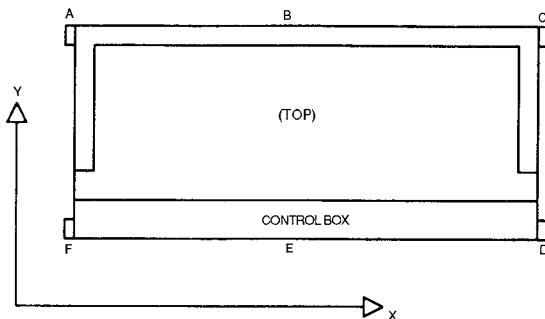


38ARD014-024



38ARD,AKS014-024



38ARD014-024, 38AKS014-024

38ARD014-024

| UNIT 38AR | ALUMINUM COIL | | | | | | COPPER COIL | | | | | | | |
|--------------|-------------------------------|-----------------------------------|----------|---------|---------|-----------|-------------------------------|-----------------------------------|----------|-----------|----------|---------|-----------|----------|
| | Standard Weight lb (kg) | Operational Weight Points lb (kg) | | | | | Standard Weight lb (kg) | Operational Weight Points lb (kg) | | | | | | |
| | | A | B | C | D | E | | A | B | C | D | E | | |
| D014 | 676 (307) | 84 (38) | 168 (76) | 72 (33) | 78 (35) | 183 (83) | 91 (41) | 822 (373) | 118 (54) | 219 (100) | 103 (47) | 90 (41) | 190 (86) | 102 (46) |
| D016 | 740 (336) | 86 (39) | 186 (85) | 71 (32) | 82 (37) | 216 (98) | 99 (45) | 886 (403) | 119 (54) | 238 (129) | 102 (46) | 95 (43) | 221 (100) | 111 (50) |
| D024 | 764 (347) | 87 (40) | 192 (87) | 72 (33) | 85 (39) | 226 (103) | 102 (46) | 904 (411) | 120 (55) | 243 (110) | 102 (46) | 96 (44) | 230 (105) | 113 (51) |

| UNIT 38AR | CENTER OF GRAVITY in. (mm) | | | |
|--------------|----------------------------|----------|-------------|----------|
| | Aluminum Coil | | Copper Coil | |
| | X | Y | X | Y |
| D014 | 35 (889) | 19 (483) | 35 (889) | 21 (533) |
| D016 | 35 (889) | 18 (457) | 35 (889) | 21 (533) |
| D024 | 35 (889) | 18 (457) | 35 (889) | 20 (508) |

38AKS014-024

| UNIT 38AK | ALUMINUM COIL | | | | | | COPPER COIL | | | | | | | |
|--------------|-------------------------------|-----------------------------------|-----------|---------|----------|-----------|-------------------------------|-----------------------------------|----------|-----------|----------|----------|-----------|----------|
| | Standard Weight lb (kg) | Operational Weight Points lb (kg) | | | | | Standard Weight lb (kg) | Operational Weight Points lb (kg) | | | | | | |
| | | A | B | C | D | E | | A | B | C | D | E | | |
| S014 | 779 (354) | 70 (32) | 177 (80) | 68 (31) | 100 (45) | 261 (119) | 103 (47) | 919 (418) | 99 (45) | 224 (102) | 96 (44) | 114 (52) | 268 (122) | 118 (54) |
| S016 | 789 (359) | 70 (32) | 180 (82) | 69 (31) | 101 (46) | 265 (120) | 104 (47) | 929 (422) | 99 (45) | 228 (104) | 96 (44) | 115 (52) | 273 (124) | 118 (54) |
| S024 | 929 (422) | 84 (38) | 234 (106) | 82 (37) | 108 (49) | 310 (141) | 111 (50) | 1040 (473) | 110 (50) | 283 (129) | 107 (49) | 116 (53) | 305 (139) | 119 (54) |

| UNIT 38AK | CENTER OF GRAVITY in. (mm) | | | |
|--------------|----------------------------|----------|-------------|----------|
| | Aluminum Coil | | Copper Coil | |
| | X | Y | X | Y |
| S014 | 38 (965) | 16 (406) | 38 (965) | 18 (457) |
| S016 | 38 (965) | 16 (406) | 38 (965) | 18 (457) |
| S024 | 37 (940) | 17 (432) | 37 (940) | 19 (483) |

NOTES:

1. Corner weights are approximate.
2. Actual support weights depend on level of unit and evenness of support posts.
3. Total weights represent approximate unit weights without shipping package.
4. Bottom or top skid is NOT included in the weights.

Performance data



CONDENSING UNIT RATINGS — SI

38ARD014

| SST (C) | Air Temperature Entering Condenser (C) | | | | | | | |
|------------|--|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|
| | 28 | 32 | 36 | 40 | 44 | 48 | 52 | |
| -4 | TC kW SDT | 27.10 8.04 40.8 | 26.10 8.75 44.8 | 25.00 9.51 52.8 | 23.80 10.30 56.8 | 22.70 11.20 60.8 | 21.50 12.10 64.8 | 20.30 13.00 64.8 |
| -2 | TC kW SDT | 29.30 8.07 40.8 | 28.20 8.78 44.8 | 27.00 9.54 52.8 | 25.90 10.40 56.8 | 24.70 11.20 60.8 | 23.40 12.10 64.8 | 22.20 13.10 64.8 |
| 0 | TC kW SDT | 31.60 8.10 40.8 | 30.40 8.81 44.8 | 29.20 9.57 52.8 | 28.00 10.40 56.8 | 26.70 11.30 60.8 | 25.40 12.20 64.8 | 24.10 13.20 64.8 |
| 2 | TC kW SDT | 33.90 8.13 40.8 | 32.70 8.84 44.8 | 31.40 9.60 52.8 | 30.20 10.40 56.8 | 28.80 11.30 60.8 | 27.50 12.20 64.8 | 26.10 13.20 64.8 |
| 4 | TC kW SDT | 36.40 8.17 40.8 | 35.10 8.88 44.8 | 33.80 9.64 52.8 | 32.50 10.50 56.8 | 31.10 11.40 60.8 | 29.70 12.30 64.8 | 28.30 13.30 64.8 |
| 6 | TC kW SDT | 39.10 8.21 40.8 | 37.70 8.92 44.8 | 36.30 9.67 52.8 | 34.90 10.50 56.8 | 33.50 11.40 60.8 | 32.00 12.30 64.8 | 30.50 13.30 64.8 |
| 8 | TC kW SDT | 41.80 8.27 40.8 | 40.40 8.97 44.8 | 38.90 9.72 52.8 | 37.40 10.60 56.8 | 35.90 11.40 60.8 | 34.40 12.40 64.8 | 32.80 13.30 64.8 |
| 10 | TC kW SDT | 44.60 8.33 40.9 | 43.10 9.03 44.9 | 41.60 9.78 52.9 | 40.10 10.60 56.8 | 38.50 11.50 60.8 | 36.90 12.40 64.8 | 35.20 13.40 64.8 |

38ARD016

| SST (C) | Air Temperature Entering Condenser (C) | | | | | | | |
|------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 28 | 32 | 36 | 40 | 44 | 48 | 52 | |
| -4 | TC kW SDT | 37.10 10.60 39.5 | 35.60 11.30 43.5 | 33.90 12.00 47.4 | 32.20 12.70 51.4 | 30.50 13.50 55.3 | 28.60 14.20 59.2 | 26.40 14.70 63.2 |
| -2 | TC kW SDT | 39.70 10.80 40.0 | 38.10 11.50 43.9 | 36.40 12.10 47.8 | 34.70 12.90 51.7 | 32.90 13.60 55.6 | 30.90 14.30 59.5 | 28.90 15.00 63.4 |
| 0 | TC kW SDT | 42.40 11.00 40.5 | 40.80 11.60 44.4 | 39.00 12.30 48.2 | 37.20 13.10 52.1 | 35.30 13.80 55.9 | 33.30 14.50 59.8 | 31.30 15.30 63.6 |
| 2 | TC kW SDT | 45.20 11.20 41.1 | 43.50 11.90 45.0 | 41.60 12.50 48.8 | 39.70 13.30 52.6 | 37.80 14.00 56.4 | 35.70 14.70 60.2 | 33.70 15.50 64.0 |
| 4 | TC kW SDT | 48.10 11.40 41.8 | 46.30 12.10 45.6 | 44.40 12.80 49.4 | 42.40 13.50 53.2 | 40.30 14.20 56.9 | 38.20 15.00 60.7 | 36.10 15.70 64.5 |
| 6 | TC kW SDT | 51.10 11.70 42.5 | 49.30 12.30 46.3 | 47.30 13.00 50.0 | 45.20 13.80 53.8 | 43.00 14.50 57.5 | 40.80 15.20 61.3 | 38.60 16.00 65.0 |
| 8 | TC kW SDT | 54.20 11.90 43.2 | 52.30 12.60 47.0 | 50.30 13.30 50.7 | 48.10 14.00 54.5 | 45.80 14.80 58.2 | 43.50 15.50 61.9 | 41.20 16.20 65.6 |
| 10 | TC kW SDT | 57.30 12.20 44.0 | 55.40 12.90 47.7 | 53.40 13.60 51.5 | 51.10 14.30 55.2 | 48.70 15.10 58.9 | 46.30 15.80 62.5 | 43.80 16.50 66.2 |

38ARD024

| SST (C) | Air Temperature Entering Condenser (C) | | | | | | | |
|------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 28 | 32 | 36 | 40 | 44 | 48 | 52 | |
| -4 | TC kW SDT | 48.70 14.10 42.0 | 46.90 15.00 45.8 | 45.00 15.90 49.7 | 43.00 16.90 53.5 | 41.00 17.90 57.4 | 38.50 18.70 61.2 | 35.70 19.40 65.0 |
| -2 | TC kW SDT | 51.90 14.40 42.7 | 50.00 15.20 46.5 | 48.00 16.10 50.3 | 45.90 17.10 54.1 | 43.80 18.10 57.9 | 41.40 19.00 61.7 | 38.80 19.90 65.4 |
| 0 | TC kW SDT | 55.20 14.70 43.4 | 53.10 15.60 47.2 | 51.00 16.40 51.0 | 48.80 17.40 54.7 | 46.60 18.40 58.5 | 44.30 19.30 62.2 | 41.80 20.30 65.9 |
| 2 | TC kW SDT | 58.60 15.10 44.2 | 56.40 15.90 47.9 | 54.20 16.80 51.7 | 51.90 17.70 55.4 | 49.50 18.70 59.1 | 47.10 19.70 62.8 | 44.60 20.60 66.5 |
| 4 | TC kW SDT | 62.20 15.50 45.1 | 59.90 16.30 48.8 | 57.50 17.20 52.4 | 55.00 18.10 56.1 | 52.50 19.00 59.8 | 50.00 20.00 63.5 | 47.50 21.00 67.2 |
| 6 | TC kW SDT | 65.90 15.90 46.0 | 63.50 16.70 49.6 | 61.00 17.60 53.3 | 58.40 18.50 56.9 | 55.70 19.40 60.6 | 53.10 20.40 64.2 | 50.40 21.30 67.9 |
| 8 | TC kW SDT | 69.70 16.40 46.9 | 67.20 17.20 50.5 | 64.60 18.00 54.2 | 61.80 18.90 57.8 | 59.00 19.80 61.4 | 56.20 20.80 65.0 | 53.40 21.70 68.6 |
| 10 | TC kW SDT | 73.60 16.80 47.8 | 71.00 17.70 51.5 | 68.30 18.50 55.1 | 65.40 19.40 58.7 | 62.50 20.30 62.2 | 59.50 21.20 65.8 | 56.50 22.20 69.4 |

LEGEND

kW — Compressor Power
 SDT — Saturated Discharge Temperature (C)
 SST — Saturated Suction Temperature (C)
 TC — Gross Cooling Capacity (kW)

38AKS014

| SST (C) | Air Temperature Entering Condenser (C) | | | | | | | |
|------------|--|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|
| | 28 | 32 | 36 | 40 | 44 | 48 | 52 | |
| -4 | TC kW SDT | 24.10 7.26 35.7 | 22.70 7.66 39.7 | 21.30 8.05 43.7 | 19.90 8.46 48.0 | 18.50 8.84 52.4 | 17.00 9.20 56.8 | 15.60 9.54 61.4 |
| -2 | TC kW SDT | 27.10 7.38 36.4 | 25.60 7.82 40.3 | 24.10 8.24 44.3 | 22.60 8.67 48.5 | 21.10 9.08 52.8 | 19.60 9.47 57.2 | 18.00 9.84 61.6 |
| 0 | TC kW SDT | 30.00 7.51 37.1 | 28.40 7.98 41.0 | 26.80 8.43 44.9 | 25.20 8.89 49.0 | 23.70 9.32 53.2 | 22.10 9.74 57.5 | 20.50 10.10 61.8 |
| 2 | TC kW SDT | 32.90 7.63 37.8 | 31.20 8.13 41.7 | 29.60 8.62 45.5 | 27.90 9.11 49.6 | 26.20 9.57 53.7 | 24.60 10.00 57.8 | 22.90 10.40 62.1 |
| 4 | TC kW SDT | 35.80 7.76 38.5 | 34.00 8.29 42.3 | 32.30 8.81 46.1 | 30.60 9.33 50.1 | 28.80 9.81 54.1 | 27.10 10.30 58.2 | 25.40 10.70 62.3 |
| 6 | TC kW SDT | 38.70 7.89 39.2 | 36.90 8.45 43.0 | 35.00 9.00 46.7 | 33.20 9.54 50.6 | 31.40 10.10 54.5 | 29.60 10.60 58.5 | 27.80 11.00 62.5 |
| 8 | TC kW SDT | 41.60 8.01 39.9 | 39.70 8.61 43.6 | 37.80 9.19 47.4 | 35.90 9.76 51.1 | 34.00 10.30 55.0 | 32.10 10.80 58.8 | 30.20 11.30 62.7 |
| 10 | TC kW SDT | 44.50 8.14 40.6 | 42.50 8.77 44.3 | 40.50 9.38 48.0 | 38.50 9.98 51.7 | 36.60 10.50 55.4 | 34.60 11.10 59.2 | 32.70 11.60 62.9 |

38AKS016

| SST (C) | Air Temperature Entering Condenser (C) | | | | | | | |
|------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 28 | 32 | 36 | 40 | 44 | 48 | 52 | |
| -4 | TC kW SDT | 33.40 10.40 38.0 | 31.80 10.90 41.8 | 30.30 11.40 45.7 | 28.70 11.90 49.5 | 27.10 12.30 53.4 | 25.60 12.80 57.4 | 24.00 13.20 61.3 |
| -2 | TC kW SDT | 36.90 10.70 39.0 | 35.20 11.20 42.8 | 33.70 11.80 46.6 | 31.90 12.30 50.4 | 30.20 12.80 54.2 | 28.60 13.30 58.1 | 26.90 13.80 62.0 |
| 0 | TC kW SDT | 40.50 11.00 40.0 | 38.70 11.60 43.7 | 37.00 12.20 47.5 | 35.10 12.80 51.3 | 33.30 13.30 55.1 | 31.50 13.80 58.9 | 29.80 14.30 62.7 |
| 2 | TC kW SDT | 44.10 11.30 40.9 | 42.10 12.00 44.6 | 40.30 12.60 48.4 | 38.30 13.20 52.1 | 36.40 13.80 55.9 | 34.50 14.40 59.7 | 32.70 14.90 63.4 |
| 4 | TC kW SDT | 47.60 11.60 41.9 | 45.60 12.30 45.6 | 43.60 13.00 49.3 | 41.50 13.70 53.0 | 39.50 14.30 56.7 | 37.50 14.90 64.2 | 35.50 15.50 64.2 |
| 6 | TC kW SDT | 51.20 12.00 42.9 | 49.00 12.70 46.5 | 46.90 13.40 50.2 | 44.80 14.10 53.8 | 42.60 14.80 57.5 | 40.50 15.40 61.2 | 38.40 16.10 64.9 |
| 8 | TC kW SDT | 54.80 12.30 43.9 | 52.50 13.10 47.5 | 50.20 13.80 51.1 | 48.00 14.60 54.7 | 45.70 15.20 58.3 | 43.50 15.90 62.0 | 41.30 16.60 65.6 |
| 10 | TC kW SDT | 58.30 12.60 44.9 | 56.00 13.40 48.4 | 53.60 14.20 52.0 | 51.20 15.00 55.5 | 48.80 15.70 59.1 | 46.50 16.50 62.7 | 44.20 17.20 66.3 |

38AKS024

| SST (C) | Air Temperature Entering Condenser (C) | | | | | | | |
|------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 28 | 32 | 36 | 40 | 44 | 48 | 52 | |
| -4 | TC kW SDT | 42.20 13.60 40.2 | 39.90 14.20 43.8 | 37.70 14.80 47.5 | 35.70 15.30 51.1 | 33.70 15.80 54.9 | 31.70 16.30 58.7 | 29.70 16.80 62.4 |
| -2 | TC kW SDT | 46.60 14.20 41.4 | 44.20 14.80 45.0 | 41.90 15.40 48.6 | 39.60 16.00 52.2 | 37.50 16.50 55.9 | 35.30 17.10 59.7 | 33.20 17.60 63.4 |
| 0 | TC kW SDT | 51.00 14.70 42.6 | 48.50 15.40 46.1 | 46.00 16.00 49.7 | 43.60 16.70 53.3 | 41.30 17.20 57.0 | 39.00 17.80 64.3 | 36.60 18.40 64.3 |
| 2 | TC kW SDT | 55.40 15.20 43.8 | 52.80 16.00 47.3 | 50.10 16.70 50.8 | 47.60 17.30 54.4 | 45.10 18.00 58.0 | 42.60 18.60 61.6 | 40.10 19.20 65.3 |
| 4 | TC | | | | | | | |



COMBINATION RATINGS — SI

38ARD014/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1450 | | | 1900 | | | 2350 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| | | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 35.8 32.80 6.68 | 40.5 25.60 6.79 | 43.1 22.00 6.90 | 37.9 37.90 6.72 | 42.4 29.00 6.84 | 45.1 24.40 6.94 | 39.7 39.70 6.77 | 43.7 32.20 6.87 | 46.3 26.60 6.93 |
| 28 | TC SHC kW | 34.2 32.00 8.11 | 38.7 24.90 8.20 | 41.2 21.30 8.25 | 36.3 36.30 8.15 | 40.5 28.30 8.24 | 43.0 23.70 8.29 | 38.2 38.20 8.19 | 41.7 31.50 8.25 | 44.2 25.90 8.32 |
| 32 | TC SHC kW | 33.4 31.50 8.86 | 37.8 24.50 8.92 | 40.3 20.90 8.97 | 35.5 35.50 8.89 | 39.5 27.90 8.96 | 42.0 23.30 9.01 | 37.5 37.50 8.92 | 40.7 31.10 8.98 | 43.1 25.60 9.04 |
| 36 | TC SHC kW | 32.6 31.10 9.63 | 36.9 24.10 9.68 | 39.3 20.50 9.72 | 34.7 34.70 9.66 | 38.5 27.50 9.72 | 41.0 22.90 9.77 | 36.7 36.70 9.68 | 39.6 30.70 9.73 | 42.0 25.20 9.79 |
| 40 | TC SHC kW | 31.8 30.70 10.50 | 35.9 23.80 10.50 | 38.3 20.20 10.60 | 33.8 33.80 10.50 | 37.5 27.10 10.50 | 39.9 22.50 10.60 | 35.9 35.90 10.50 | 38.6 30.30 10.60 | 40.9 24.80 10.60 |
| 44 | TC SHC kW | 30.9 30.20 11.40 | 34.9 23.40 11.40 | 37.2 19.80 11.50 | 32.9 32.90 11.40 | 36.4 26.70 11.40 | 38.7 22.10 11.50 | 35.0 35.00 11.40 | 37.4 29.80 11.50 | 39.7 24.40 11.50 |
| 48 | TC SHC kW | 30.0 29.70 12.30 | 33.9 22.90 12.40 | 36.1 19.40 12.40 | 32.1 32.10 12.30 | 35.3 26.30 12.40 | 37.5 21.70 12.40 | 34.1 34.10 12.40 | 36.3 29.40 12.40 | 38.4 24.00 12.50 |
| 52 | TC SHC kW | 29.1 29.10 13.30 | 32.8 22.50 13.40 | 35.0 19.00 13.40 | 31.3 31.30 13.30 | 34.2 25.90 13.40 | 36.3 21.30 13.40 | 33.2 33.20 13.40 | 35.1 28.90 13.40 | 37.2 23.50 13.50 |

38ARD014/40RM012 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1450 | | | 1900 | | | 2350 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| | | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 33.8 31.00 6.71 | 38.3 24.20 6.77 | 40.7 20.80 6.82 | 35.8 35.50 6.73 | 40.1 27.30 6.81 | 42.6 23.00 6.87 | 37.3 37.30 6.72 | 41.3 30.20 6.83 | 43.7 25.00 6.88 |
| 28 | TC SHC kW | 32.4 30.30 8.10 | 36.7 23.60 8.16 | 39.1 20.20 8.20 | 34.3 34.30 8.12 | 38.4 26.70 8.19 | 40.8 22.30 8.24 | 35.9 35.90 8.14 | 39.5 29.50 8.20 | 41.9 24.30 8.25 |
| 32 | TC SHC kW | 31.7 29.90 8.83 | 35.9 23.30 8.88 | 38.2 19.80 8.93 | 33.6 33.60 8.85 | 37.5 26.30 8.92 | 39.9 22.00 8.96 | 35.2 35.20 8.88 | 38.6 29.10 8.93 | 40.9 24.00 8.98 |
| 36 | TC SHC kW | 30.9 29.50 9.60 | 35.1 22.90 9.65 | 37.3 19.50 9.69 | 32.8 32.80 9.62 | 36.6 26.00 9.68 | 38.90 21.70 9.72 | 34.5 34.50 9.65 | 37.6 28.80 9.69 | 39.9 23.70 9.74 |
| 40 | TC SHC kW | 30.2 29.10 10.40 | 34.2 22.60 10.50 | 36.4 19.20 10.50 | 32.0 32.00 10.50 | 35.7 25.60 10.50 | 37.9 21.30 10.50 | 33.8 33.80 10.50 | 36.6 28.40 10.50 | 38.9 23.30 10.60 |
| 44 | TC SHC kW | 29.3 28.60 11.30 | 33.2 22.20 11.40 | 35.5 18.80 11.40 | 31.2 31.20 11.40 | 34.7 25.20 11.40 | 36.9 20.90 11.40 | 33.0 33.00 11.40 | 35.6 28.00 11.40 | 37.8 22.90 11.50 |
| 48 | TC SHC kW | 28.5 28.20 12.30 | 32.3 21.80 12.30 | 34.4 18.40 12.40 | 30.4 30.40 12.30 | 33.6 24.80 12.30 | 35.8 20.60 12.40 | 32.2 32.20 12.30 | 34.5 27.60 12.40 | 36.7 22.60 12.40 |
| 52 | TC SHC kW | 27.7 27.70 13.30 | 31.3 21.40 13.30 | 33.4 18.00 13.40 | 29.5 29.50 13.30 | 32.6 24.40 13.30 | 34.7 20.20 13.40 | 31.3 31.30 13.30 | 33.4 27.10 13.40 | 35.5 22.20 13.40 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (kW) Gross
- TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38ARD014/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1750 | | | 2350 | | | 2950 | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | |
| 20 | TC SHC kW | 38.0 36.70 6.73 | 42.8 28.30 6.83 | 45.5 23.90 6.93 | 40.4 40.40 6.77 | 44.7 32.60 6.88 | 47.3 27.00 6.98 | 43.0 43.00 6.87 | 45.9 36.60 6.92 | 48.5 29.80 7.03 |
| 28 | TC SHC kW | 36.3 35.80 8.15 | 40.9 27.50 8.24 | 43.5 23.20 8.31 | 38.9 38.90 8.19 | 42.7 31.80 8.27 | 45.2 26.30 8.36 | 41.4 41.40 8.26 | 43.8 35.80 8.31 | 46.3 29.10 8.40 |
| 32 | TC SHC kW | 35.5 35.40 8.88 | 39.9 27.20 8.97 | 42.5 22.90 9.04 | 38.1 38.10 8.93 | 41.6 31.50 9.00 | 44.1 25.90 9.08 | 40.6 40.60 8.99 | 42.8 35.30 9.03 | 45.2 28.70 9.11 |
| 36 | TC SHC kW | 34.6 34.60 9.64 | 39.0 26.80 9.74 | 41.5 22.50 9.80 | 37.3 37.30 9.70 | 40.6 31.10 9.77 | 43.0 25.50 9.83 | 39.7 39.70 9.75 | 41.7 34.90 9.79 | 44.0 28.40 9.87 |
| 40 | TC SHC kW | 33.7 33.70 10.50 | 37.9 26.40 10.60 | 40.4 22.10 10.60 | 36.5 36.50 10.50 | 39.5 30.60 10.60 | 41.9 25.10 10.70 | 38.8 38.80 10.60 | 40.6 34.40 10.60 | 42.9 28.00 10.70 |
| 44 | TC SHC kW | 32.8 32.80 11.40 | 36.9 26.00 11.50 | 39.3 21.70 11.50 | 35.7 35.70 11.40 | 38.4 30.20 11.50 | 40.7 24.70 11.60 | 37.9 37.90 11.50 | 39.4 33.90 11.50 | 41.6 27.50 11.60 |
| 48 | TC SHC kW | 31.9 31.90 12.30 | 35.8 25.50 12.40 | 38.1 21.30 12.50 | 34.8 34.80 12.40 | 37.2 29.70 12.40 | 39.4 24.30 12.50 | 36.9 36.90 12.40 | 38.2 33.40 12.50 | 40.3 27.10 12.50 |
| 52 | TC SHC kW | 30.9 30.90 13.30 | 34.6 25.10 13.40 | 36.9 20.90 13.50 | 33.9 33.90 13.40 | 36.0 29.30 13.40 | 38.2 23.90 13.50 | 35.9 35.90 13.40 | 36.9 32.90 13.40 | 39.0 26.00 13.50 |

38ARD014/40RM014 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1750 | | | 2350 | | | 2950 | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | |
| 20 | TC SHC kW | 36.0 34.50 6.71 | 40.7 26.70 6.79 | 43.2 22.70 6.85 | 38.2 38.20 6.74 | 42.4 30.60 6.84 | 45.0 25.30 6.89 | 40.3 40.30 6.88 | 43.6 34.00 6.86 | 46.2 27.80 6.93 |
| 28 | TC SHC kW | 34.4 33.70 8.12 | 38.9 26.00 8.20 | 41.4 22.00 8.26 | 36.6 36.60 8.16 | 40.5 29.80 8.22 | 43.0 24.70 8.28 | 38.8 38.80 8.21 | 41.6 33.30 8.25 | 44.1 27.10 8.31 |
| 32 | TC SHC kW | 33.6 33.30 8.86 | 38.0 25.60 8.93 | 40.4 21.60 8.98 | 35.8 35.80 8.90 | 39.5 29.40 8.95 | 42.0 24.30 9.01 | 38.0 38.00 8.94 | 40.6 32.80 8.97 | 43.1 26.80 9.04 |
| 36 | TC SHC kW | 32.8 32.80 9.63 | 37.0 25.30 9.70 | 39.4 21.30 9.73 | 35.1 35.10 9.67 | 38.5 29.10 9.72 | 41.0 24.00 9.77 | 37.2 37.20 9.71 | 39.6 32.40 9.73 | 42.0 26.40 9.79 |
| 40 | TC SHC kW | 32.0 32.00 10.50 | 36.0 24.90 10.50 | 38.4 20.90 10.60 | 34.3 34.30 10.50 | 37.5 28.70 10.50 | 39.9 23.60 10.60 | 36.4 36.40 10.50 | 38.5 32.00 10.60 | 40.8 26.00 10.60 |
| 44 | TC SHC kW | 31.1 31.10 11.40 | 35.0 24.50 11.40 | 37.3 20.50 11.50 | 33.5 33.50 11.40 | 36.4 28.20 11.40 | 38.7 23.20 11.50 | 35.5 35.50 11.40 | 37.4 31.50 11.50 | 39.6 25.60 11.50 |
| 48 | TC SHC kW | 30.2 30.20 12.30 | 34.0 24.10 12.40 | 36.2 20.10 12.40 | 32.7 32.70 12.40 | 35.3 27.80 12.40 | 37.5 22.80 12.40 | 34.6 34.60 12.40 | 36.2 31.10 12.40 | 38.4 25.20 12.50 |
| 52 | TC SHC kW | 29.4 29.40 13.30 | 32.9 23.70 13.40 | 35.1 19.70 13.40 | 31.9 31.90 13.40 | 34.2 27.40 13.40 | 36.3 22.40 13.40 | 33.7 33.70 13.40 | 35.1 30.60 13.40 | 37.1 24.80 13.50 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38ARD014/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | | |
| 20 | TC SHC kW | 40.7 40.70 6.82 | 45.5 31.80 6.93 | 48.2 26.60 7.00 | 43.9 43.90 6.86 | 47.2 36.80 6.97 | 49.8 30.10 7.08 | 46.6 46.60 6.94 | 48.4 41.40 7.02 | 50.9 33.50 7.15 |
| 28 | TC SHC kW | 39.0 39.00 8.19 | 43.4 31.00 8.30 | 46.1 25.80 8.39 | 42.3 42.30 8.26 | 45.0 36.00 8.35 | 47.6 29.40 8.45 | 44.7 44.70 8.33 | 46.2 40.50 8.39 | 48.5 32.70 8.49 |
| 32 | TC SHC kW | 38.2 38.20 8.91 | 42.4 30.60 9.02 | 45.0 25.40 9.11 | 41.4 41.40 8.99 | 43.9 35.60 9.08 | 46.4 29.00 9.17 | 43.8 40.00 9.06 | 45.1 40.00 9.11 | 47.3 32.30 9.21 |
| 36 | TC SHC kW | 37.3 37.30 9.68 | 41.3 30.20 9.78 | 43.9 25.00 9.86 | 40.6 40.60 9.77 | 42.8 35.20 9.84 | 45.2 28.60 9.93 | 42.8 42.80 9.82 | 43.9 39.40 9.87 | 46.1 31.90 9.96 |
| 40 | TC SHC kW | 36.4 36.40 10.50 | 40.2 29.80 10.60 | 42.7 24.60 10.70 | 39.6 39.60 10.60 | 41.6 34.70 10.70 | 44.0 28.20 10.80 | 41.8 41.80 10.60 | 42.7 38.90 10.70 | 44.8 31.50 10.80 |
| 44 | TC SHC kW | 35.6 35.60 11.40 | 39.0 29.30 11.50 | 41.4 24.20 11.60 | 38.7 38.70 11.50 | 40.4 34.20 11.60 | 42.7 27.70 11.60 | 40.7 40.70 11.60 | 41.5 38.20 11.60 | 43.5 31.10 11.70 |
| 48 | TC SHC kW | 34.7 34.70 12.40 | 37.8 28.90 12.50 | 40.2 23.80 12.50 | 37.6 37.60 12.40 | 39.1 33.70 12.50 | 41.3 27.30 12.60 | 39.6 39.60 12.50 | 40.3 37.50 12.50 | 42.1 30.60 12.60 |
| 52 | TC SHC kW | 33.8 33.80 13.40 | 36.6 28.40 13.50 | 38.8 23.30 13.50 | 36.6 36.60 13.40 | 37.9 33.20 13.50 | 40.0 26.80 13.60 | 38.5 38.50 13.50 | 39.0 36.60 13.50 | 40.7 30.10 13.60 |

38ARD014/40RM016 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | | |
| 20 | TC SHC kW | 38.4 38.40 6.78 | 43.1 29.90 6.87 | 45.7 25.10 6.95 | 41.2 41.20 6.83 | 44.7 34.40 6.90 | 47.3 28.20 7.00 | 43.6 43.60 6.83 | 45.8 38.30 6.95 | 48.4 31.10 7.04 |
| 28 | TC SHC kW | 36.8 36.80 8.17 | 41.1 29.20 8.24 | 43.7 24.30 8.30 | 39.6 39.60 8.20 | 42.6 33.60 8.27 | 45.2 27.50 8.35 | 41.9 41.90 8.25 | 43.7 37.40 8.30 | 46.1 30.40 8.39 |
| 32 | TC SHC kW | 36.0 36.00 8.89 | 40.1 28.80 8.96 | 42.7 24.00 9.03 | 38.8 38.80 8.93 | 41.6 33.20 9.00 | 44.1 27.10 9.08 | 41.0 41.00 8.98 | 42.6 37.00 9.02 | 45.0 30.00 9.11 |
| 36 | TC SHC kW | 35.2 35.20 9.66 | 39.1 28.40 9.72 | 41.6 23.60 9.79 | 38.0 38.00 9.70 | 40.5 32.70 9.75 | 42.9 26.70 9.84 | 40.1 40.10 9.74 | 41.5 36.50 9.78 | 43.8 29.60 9.86 |
| 40 | TC SHC kW | 34.3 34.30 10.50 | 38.1 28.00 10.50 | 40.5 23.20 10.60 | 37.2 37.20 10.50 | 39.4 32.30 10.60 | 41.8 26.30 10.70 | 39.2 39.20 10.60 | 40.4 35.90 10.60 | 42.6 29.20 10.70 |
| 44 | TC SHC kW | 33.5 33.50 11.40 | 36.9 27.60 11.40 | 39.3 22.80 11.50 | 36.2 36.20 11.40 | 38.2 31.80 11.50 | 40.5 25.90 11.60 | 38.2 38.20 11.50 | 39.2 35.40 11.50 | 41.3 28.80 11.60 |
| 48 | TC SHC kW | 32.6 32.60 12.30 | 35.8 27.10 12.40 | 38.1 22.40 12.50 | 35.3 35.30 12.40 | 37.1 31.40 12.40 | 39.3 25.50 12.50 | 37.2 37.20 12.40 | 38.0 34.70 12.50 | 40.0 28.30 12.50 |
| 52 | TC SHC kW | 31.8 31.80 13.30 | 34.7 26.70 13.40 | 36.9 21.90 13.50 | 34.4 34.40 13.40 | 35.8 30.90 13.40 | 37.9 25.00 13.50 | 36.1 36.10 13.40 | 36.8 34.10 13.50 | 38.7 27.90 13.50 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38ARD016/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1750 | | | 2350 | | | 2950 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 46.4 41.00 9.70 | 52.1 32.20 10.10 | 55.1 27.70 10.30 | 49.2 47.70 9.92 | 54.7 36.50 10.30 | 57.6 30.70 10.50 | 51.3 51.30 10.10 | 56.3 40.60 10.40 | 59.3 33.60 10.70 |
| 28 | TC SHC kW | 44.2 39.90 11.10 | 49.7 31.20 11.60 | 52.7 26.70 11.80 | 46.9 46.50 11.30 | 52.1 35.50 11.80 | 55.1 29.80 12.00 | 49.1 49.10 11.50 | 53.7 39.60 11.90 | 56.6 32.60 12.10 |
| 32 | TC SHC kW | 43.1 39.30 11.80 | 48.5 30.60 12.30 | 51.4 26.20 12.60 | 45.7 45.70 12.10 | 50.8 35.00 12.50 | 53.7 29.30 12.80 | 47.9 47.90 12.20 | 52.3 39.10 12.60 | 55.2 32.10 12.90 |
| 36 | TC SHC kW | 41.9 38.70 12.60 | 47.1 30.10 13.00 | 50.0 25.70 13.30 | 44.4 44.40 12.80 | 49.3 34.40 13.20 | 52.2 28.70 13.50 | 46.7 46.70 13.00 | 50.8 38.50 13.40 | 53.6 31.60 13.60 |
| 40 | TC SHC kW | 40.6 38.00 13.30 | 45.7 29.50 13.80 | 48.5 25.10 14.10 | 43.0 43.00 13.60 | 47.8 33.80 14.00 | 50.6 28.20 14.30 | 45.5 45.50 13.80 | 49.1 37.90 14.20 | 51.9 31.00 14.40 |
| 44 | TC SHC kW | 39.2 37.40 14.10 | 44.2 28.90 14.60 | 46.9 24.50 14.90 | 41.6 41.60 14.40 | 46.1 33.20 14.80 | 48.8 27.50 15.10 | 44.2 44.20 14.60 | 47.4 37.20 14.90 | 50.1 30.40 15.20 |
| 48 | TC SHC kW | 37.8 36.70 14.90 | 42.6 28.20 15.40 | 45.2 23.90 15.70 | 40.3 40.30 15.20 | 44.4 32.50 15.60 | 47.0 26.90 15.90 | 42.8 42.80 15.40 | 45.6 36.50 15.70 | 48.2 29.80 16.00 |
| 52 | TC SHC kW | 36.4 35.90 15.80 | 40.9 27.60 16.20 | 43.5 23.20 16.50 | 38.9 38.90 16.00 | 42.6 31.90 16.40 | 45.2 26.30 16.70 | 41.4 41.40 16.30 | 43.8 35.80 16.60 | 46.2 29.10 16.80 |

38ARD016/40RM014 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1750 | | | 2350 | | | 2950 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 44.1 38.80 9.58 | 49.6 30.50 9.95 | 52.5 26.30 10.20 | 46.6 44.70 9.74 | 52.1 34.40 10.10 | 55 29.00 10.40 | 48.6 48.60 9.89 | 53.7 38.00 10.20 | 56.6 31.50 10.50 |
| 28 | TC SHC kW | 42.0 37.70 11.00 | 47.3 29.50 11.40 | 50.2 25.40 11.60 | 44.4 43.50 11.10 | 49.6 33.40 11.60 | 52.5 28.10 11.80 | 46.3 46.30 11.30 | 51.1 37.00 11.70 | 54.0 30.60 11.90 |
| 32 | TC SHC kW | 40.9 37.10 11.70 | 46.1 29.00 12.10 | 48.9 24.90 12.30 | 43.2 42.90 11.90 | 48.3 32.90 12.30 | 51.1 27.60 12.50 | 45.1 45.10 12.00 | 49.8 36.50 12.40 | 52.6 30.10 12.70 |
| 36 | TC SHC kW | 39.7 36.50 12.40 | 44.9 28.50 12.80 | 47.6 24.30 13.10 | 42.0 42.00 12.60 | 46.9 32.40 13.00 | 49.7 27.10 13.30 | 44.0 44.00 12.70 | 48.3 35.90 13.20 | 51.1 29.60 13.40 |
| 40 | TC SHC kW | 38.5 35.90 13.10 | 43.5 27.90 13.60 | 46.1 23.80 13.80 | 40.8 40.80 13.30 | 45.4 31.80 13.80 | 48.1 26.50 14.00 | 42.7 42.70 13.50 | 46.7 35.30 13.90 | 49.5 29.00 14.20 |
| 44 | TC SHC kW | 37.3 35.30 13.90 | 42.0 27.30 14.40 | 44.6 23.20 14.70 | 39.5 39.50 14.10 | 43.9 31.20 14.60 | 46.5 25.90 14.80 | 41.5 41.50 14.30 | 45.1 34.70 14.70 | 47.7 28.40 15.00 |
| 48 | TC SHC kW | 36.0 34.60 14.80 | 40.6 26.70 15.20 | 43.0 22.60 15.50 | 38.2 38.20 15.00 | 42.3 30.50 15.40 | 44.8 25.30 15.60 | 40.2 40.20 15.20 | 43.4 34.00 15.50 | 45.9 27.80 15.80 |
| 52 | TC SHC kW | 34.6 33.90 15.60 | 39.1 26.10 16.00 | 41.4 22.00 16.30 | 36.8 36.80 15.80 | 40.6 29.90 16.20 | 43.0 24.70 16.50 | 39.0 39.00 16.00 | 41.7 33.40 16.30 | 44.1 27.20 16.60 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38ARD016/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 50.0 46.60 9.99 | 55.9 36.00 10.40 | 59.0 30.50 10.60 | 52.8 52.80 10.20 | 58.1 41.10 10.60 | 61.2 34.10 10.80 | 55.5 55.50 10.40 | 59.6 45.90 10.70 | 62.7 37.60 10.90 |
| 28 | TC SHC kW | 47.6 45.40 11.40 | 53.3 34.90 11.90 | 56.4 29.50 12.10 | 50.5 50.50 11.60 | 55.4 40.10 12.00 | 58.5 33.10 12.30 | 53.3 53.30 11.90 | 56.9 44.80 12.20 | 59.8 36.60 12.40 |
| 32 | TC SHC kW | 46.4 44.80 12.10 | 51.9 34.40 12.60 | 54.9 29.00 12.90 | 49.2 49.20 12.40 | 54.0 39.50 12.80 | 57.0 32.60 13.10 | 52.2 52.20 12.60 | 55.4 44.30 12.90 | 58.3 36.00 13.20 |
| 36 | TC SHC kW | 45.1 44.10 12.80 | 50.4 33.80 13.30 | 53.4 28.50 13.60 | 48.0 48.00 13.10 | 52.5 38.90 13.50 | 55.4 32.10 13.80 | 50.9 50.90 13.40 | 53.8 43.60 13.70 | 56.6 35.50 13.90 |
| 40 | TC SHC kW | 43.6 43.40 13.60 | 48.9 33.20 14.10 | 51.8 27.90 14.40 | 46.7 46.70 13.90 | 50.8 38.30 14.30 | 53.6 31.50 14.60 | 49.5 49.50 14.20 | 52.1 43.00 14.40 | 54.8 34.90 14.70 |
| 44 | TC SHC kW | 42.2 42.20 14.40 | 47.2 32.50 14.90 | 50.0 27.20 15.20 | 45.3 45.30 14.70 | 48.9 37.60 15.10 | 51.7 30.80 15.40 | 48.0 48.00 15.00 | 50.2 42.20 15.20 | 52.9 34.20 15.50 |
| 48 | TC SHC kW | 40.7 40.70 15.20 | 45.4 31.80 15.70 | 48.1 26.50 16.00 | 43.9 43.90 15.50 | 47.1 36.80 15.90 | 49.8 30.10 16.20 | 46.5 46.50 15.80 | 48.3 41.40 16.00 | 50.8 33.50 16.30 |
| 52 | TC SHC kW | 39.1 39.10 16.00 | 43.6 31.10 16.50 | 46.2 25.90 16.80 | 42.4 42.40 16.40 | 45.1 36.10 16.70 | 47.7 29.40 17.00 | 44.8 44.80 16.70 | 46.3 40.60 16.90 | 48.7 32.80 17.10 |

38ARD016/40RM016 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 47.3 43.80 9.78 | 53.0 33.90 10.20 | 56.0 28.80 10.40 | 49.8 49.80 9.96 | 55.2 38.50 10.40 | 58.2 32.00 10.50 | 52.1 52.10 10.10 | 56.6 42.60 10.50 | 59.6 34.90 10.70 |
| 28 | TC SHC kW | 45.0 42.60 11.20 | 50.5 32.90 11.60 | 53.5 27.90 11.90 | 47.6 47.60 11.40 | 52.6 37.40 11.80 | 55.5 31.10 12.00 | 50.0 50.00 11.60 | 53.9 41.60 11.90 | 56.9 34.00 12.20 |
| 32 | TC SHC kW | 43.8 42.00 11.90 | 49.2 32.40 12.40 | 52.1 27.40 12.60 | 46.4 46.40 12.10 | 51.2 36.90 12.50 | 54.1 30.60 12.80 | 48.8 48.80 12.30 | 52.5 41.00 12.60 | 55.4 33.50 12.90 |
| 36 | TC SHC kW | 42.6 41.40 12.60 | 47.8 31.80 13.10 | 50.7 26.90 13.40 | 45.1 45.10 12.80 | 49.7 36.30 13.30 | 52.6 30.00 13.50 | 47.6 47.60 13.10 | 51.0 40.40 13.40 | 53.8 33.00 13.70 |
| 40 | TC SHC kW | 41.3 40.70 13.40 | 46.3 31.20 13.90 | 49.1 26.30 14.10 | 43.8 43.80 13.60 | 48.1 35.70 14.00 | 50.9 29.40 14.30 | 46.3 46.30 13.90 | 49.3 39.80 14.20 | 52.1 32.40 14.40 |
| 44 | TC SHC kW | 39.9 39.90 14.20 | 44.7 30.60 14.70 | 47.4 25.70 14.90 | 42.5 42.50 14.40 | 46.4 35.00 14.80 | 49.1 28.80 15.10 | 44.9 44.90 14.70 | 47.5 39.00 14.90 | 50.2 31.70 15.20 |
| 48 | TC SHC kW | 38.5 38.50 15.00 | 43.1 30.00 15.50 | 45.7 25.00 15.70 | 41.2 41.20 15.30 | 44.6 34.40 15.60 | 47.2 28.20 15.90 | 43.5 43.50 15.50 | 45.7 38.30 15.80 | 48.2 31.10 16.00 |
| 52 | TC SHC kW | 37.1 37.10 15.80 | 41.4 29.30 16.30 | 43.9 24.40 16.60 | 39.9 39.90 16.10 | 42.8 33.70 16.50 | 45.3 27.50 16.70 | 42.1 42.10 16.40 | 43.9 37.60 16.60 | 46.3 30.40 16.90 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38ARD016/40RM024H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 2900 | | | 3800 | | | 4700 | | |
| | Evaporator Air — Ewb (C) | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 54.2 54.20 10.30 | 59.4 42.50 10.70 | 62.6 35.20 10.90 | 57.9 57.90 10.50 | 61.3 48.90 10.80 | 64.3 39.70 11.00 | 60.7 60.70 10.80 | 62.6 54.50 10.90 |
| 28 | TC SHC kW | 51.8 51.80 11.70 | 56.7 41.50 12.10 | 59.8 34.20 12.40 | 55.5 55.50 12.00 | 58.4 47.70 12.30 | 61.4 38.70 12.50 | 58.2 58.20 12.30 | 59.7 53.20 12.40 |
| 32 | TC SHC kW | 50.5 50.50 12.50 | 55.2 40.90 12.90 | 58.2 33.70 13.20 | 54.3 54.30 12.80 | 56.9 47.10 13.00 | 59.8 38.20 13.30 | 56.9 56.90 13.00 | 58.2 52.40 13.20 |
| 36 | TC SHC kW | 49.2 49.20 13.20 | 53.6 40.30 13.60 | 56.6 33.10 13.90 | 53.0 53.00 13.60 | 55.3 46.50 13.80 | 58.1 37.60 14.10 | 55.4 55.40 13.80 | 56.5 51.60 13.90 |
| 40 | TC SHC kW | 47.9 47.90 14.00 | 51.9 39.60 14.40 | 54.8 32.50 14.70 | 51.5 51.50 14.40 | 53.4 45.70 14.60 | 56.2 37.00 14.90 | 53.8 53.80 14.60 | 54.7 50.70 14.70 |
| 44 | TC SHC kW | 46.5 46.50 14.80 | 50.0 38.90 15.20 | 52.8 31.80 15.50 | 49.9 49.90 15.20 | 51.5 44.90 15.40 | 54.2 36.30 15.70 | 52.1 52.10 15.40 | 52.8 49.40 15.50 |
| 48 | TC SHC kW | 45.0 45.00 15.70 | 48.1 38.20 16.00 | 50.8 31.10 16.30 | 48.2 48.20 16.00 | 49.6 44.00 16.20 | 52.0 35.60 16.50 | 50.3 50.30 16.30 | 50.9 47.90 16.60 |
| 52 | TC SHC kW | 43.5 43.50 16.50 | 46.1 37.40 16.80 | 48.6 30.40 17.10 | 46.5 46.50 16.90 | 47.5 43.10 17.00 | 49.8 34.80 17.30 | 48.4 48.40 17.10 | 48.9 46.30 17.20 |

38ARD016/40RM024 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 2900 | | | 3800 | | | 4700 | | |
| | Evaporator Air — Ewb (C) | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 51.4 51.40 10.10 | 56.5 40.30 10.40 | 59.5 33.30 10.70 | 54.6 54.60 10.30 | 58.2 45.90 10.60 | 61.2 37.30 10.80 | 57.2 57.20 10.50 | 59.4 50.90 10.70 |
| 28 | TC SHC kW | 49.1 49.10 11.50 | 53.8 39.20 11.90 | 56.8 32.40 12.20 | 52.4 52.40 11.80 | 55.5 44.80 12.00 | 58.4 36.40 12.30 | 54.8 54.80 12.00 | 56.6 49.60 12.10 |
| 32 | TC SHC kW | 47.9 47.90 12.20 | 52.4 38.70 12.60 | 55.3 31.90 12.90 | 51.2 51.20 12.50 | 54.0 44.20 12.80 | 56.8 35.90 13.00 | 53.6 53.60 12.70 | 55.1 48.90 12.90 |
| 36 | TC SHC kW | 46.6 46.60 13.00 | 50.9 38.10 13.40 | 53.8 31.30 13.70 | 49.9 49.90 13.30 | 52.4 43.60 13.50 | 55.2 35.30 13.80 | 52.2 52.20 13.50 | 53.6 48.10 13.60 |
| 40 | TC SHC kW | 45.3 45.30 13.80 | 49.2 37.40 14.20 | 52.0 30.70 14.40 | 48.5 48.50 14.10 | 50.7 42.80 14.30 | 53.4 34.70 14.60 | 50.7 50.70 14.30 | 51.8 47.20 14.40 |
| 44 | TC SHC kW | 44.0 44.00 14.60 | 47.5 36.80 14.90 | 50.2 30.10 15.20 | 47.1 47.10 14.90 | 48.9 42.10 15.10 | 51.4 34.10 15.40 | 49.1 49.10 15.10 | 50.0 46.20 15.20 |
| 48 | TC SHC kW | 42.7 42.70 15.40 | 45.7 36.10 15.70 | 48.3 29.50 16.00 | 45.6 45.60 15.70 | 47.1 41.30 15.90 | 49.4 33.40 16.20 | 47.5 47.50 15.90 | 48.2 45.00 16.00 |
| 52 | TC SHC kW | 41.3 41.30 16.30 | 43.9 35.40 16.60 | 46.3 28.80 16.80 | 44.0 44.00 16.60 | 45.2 40.40 16.70 | 47.4 32.70 17.00 | 45.8 45.80 16.80 | 46.3 43.70 16.80 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38ARD024/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 56.9 49.20 12.90 | 63.7 38.80 13.60 | 67.5 33.50 13.90 | 60.1 56.70 13.20 | 67.0 43.70 13.90 | 70.6 36.90 14.30 | 62.6 62.60 13.40 | 69.0 48.20 14.10 | 72.7 40.00 14.50 |
| 28 | TC SHC kW | 54.3 47.90 14.60 | 60.9 37.60 15.40 | 64.5 32.30 15.80 | 57.4 55.30 15.00 | 63.9 42.40 15.70 | 67.4 35.70 16.10 | 59.8 59.80 15.20 | 65.8 46.90 15.90 | 69.3 38.90 16.30 |
| 32 | TC SHC kW | 53.0 47.20 15.60 | 59.5 36.90 16.30 | 62.9 31.70 16.70 | 55.9 54.50 15.90 | 62.2 41.80 16.60 | 65.7 35.10 17.00 | 58.3 58.30 16.20 | 64.0 46.20 16.80 | 67.5 38.20 17.30 |
| 36 | TC SHC kW | 51.6 46.50 16.50 | 57.9 36.30 17.20 | 61.3 31.10 17.60 | 54.5 53.70 16.80 | 60.5 41.10 17.60 | 63.9 34.40 18.00 | 56.8 56.80 17.10 | 62.2 45.50 17.80 | 65.6 37.60 18.20 |
| 40 | TC SHC kW | 50.2 45.80 17.50 | 56.2 35.60 18.20 | 59.5 30.40 18.60 | 52.9 52.80 17.80 | 58.7 40.40 18.50 | 62.0 33.70 19.00 | 55.3 55.30 18.10 | 60.3 44.80 18.70 | 63.6 36.90 19.20 |
| 44 | TC SHC kW | 48.6 45.00 18.60 | 54.5 34.80 19.30 | 57.6 29.70 19.70 | 51.3 51.30 18.90 | 56.8 39.60 19.60 | 60.0 33.00 20.00 | 53.7 53.70 19.20 | 58.3 44.00 19.80 | 61.5 36.10 20.20 |
| 48 | TC SHC kW | 47.0 44.20 19.70 | 52.7 34.10 20.30 | 55.7 28.90 20.70 | 49.6 49.60 20.00 | 54.8 38.80 20.60 | 57.9 32.20 21.00 | 52.1 52.10 20.30 | 56.2 43.20 20.80 | 59.3 35.40 21.20 |
| 52 | TC SHC kW | 45.4 43.30 20.80 | 50.8 33.30 21.40 | 53.7 28.20 21.80 | 47.9 47.90 21.10 | 52.8 38.00 21.70 | 55.7 31.50 22.10 | 50.5 50.50 21.40 | 54.1 42.40 21.90 | 57.0 34.60 22.30 |

38ARD024/40RM016 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 56.3 48.50 12.80 | 63.1 38.30 13.50 | 66.9 33.10 13.90 | 59.4 55.70 13.10 | 66.3 42.90 13.80 | 70.1 36.40 14.20 | 61.9 61.90 13.40 | 68.5 47.30 14.10 | 72.2 39.40 14.50 |
| 28 | TC SHC kW | 53.6 47.10 14.60 | 60.3 37.00 15.30 | 63.8 31.90 15.70 | 56.7 54.20 14.90 | 63.2 41.70 15.60 | 66.8 35.20 16.00 | 59.0 59.00 15.10 | 65.2 46.00 15.90 | 68.7 38.20 16.30 |
| 32 | TC SHC kW | 52.3 46.40 15.50 | 58.8 36.40 16.20 | 62.2 31.30 16.60 | 55.2 53.40 15.80 | 61.6 41.00 16.50 | 65.0 34.60 17.00 | 57.5 57.50 16.10 | 63.4 45.30 16.80 | 66.9 37.50 17.20 |
| 36 | TC SHC kW | 50.9 45.70 16.40 | 57.2 35.70 17.20 | 60.6 30.60 17.60 | 53.7 52.60 16.70 | 59.8 40.30 17.50 | 63.2 33.90 17.90 | 55.9 55.90 17.00 | 61.6 44.60 17.70 | 65.0 36.90 18.10 |
| 40 | TC SHC kW | 49.5 45.00 16.40 | 55.5 35.00 17.40 | 58.8 29.90 18.50 | 52.1 51.70 17.70 | 58.0 39.60 18.40 | 61.3 33.20 18.90 | 54.4 54.40 18.00 | 59.6 43.80 18.70 | 62.9 36.10 19.10 |
| 44 | TC SHC kW | 48.0 44.20 18.50 | 53.8 34.30 19.20 | 56.9 29.20 19.60 | 50.6 50.60 18.80 | 56.1 38.90 19.50 | 59.2 32.40 19.90 | 52.8 52.80 19.10 | 57.6 43.10 19.70 | 60.8 35.40 20.10 |
| 48 | TC SHC kW | 46.4 43.40 19.60 | 52.0 33.50 20.30 | 55.0 28.50 20.60 | 48.9 48.90 19.00 | 54.1 38.10 20.50 | 57.1 31.70 20.90 | 51.2 51.20 20.20 | 55.5 42.30 20.70 | 58.6 34.60 21.10 |
| 52 | TC SHC kW | 44.8 42.60 20.70 | 50.2 32.80 21.40 | 53.1 27.80 21.70 | 47.3 47.30 21.00 | 52.2 37.30 21.60 | 55.1 30.90 22.00 | 49.7 49.70 21.30 | 53.5 41.50 21.80 | 56.3 33.90 22.20 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38ARD024/40RM024H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2900 | | | 3800 | | | 4700 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| | | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 64.1 61.20 13.60 | 71.0 46.90 14.30 | 75.0 39.60 14.80 | 67.2 67.20 13.90 | 73.7 53.30 14.60 | 77.6 44.00 15.00 | 70.7 70.70 14.30 | 75.4 59.20 14.80 | 79.2 48.30 15.20 |
| 28 | TC SHC kW | 60.9 59.50 15.40 | 67.7 45.50 16.10 | 71.4 38.30 16.60 | 64.3 64.30 15.70 | 70.0 51.90 16.40 | 73.7 42.70 16.90 | 67.7 67.70 16.10 | 71.6 57.70 16.60 | 75.2 46.90 17.10 |
| 32 | TC SHC kW | 59.3 58.60 16.30 | 65.9 44.80 17.10 | 69.5 37.60 17.50 | 62.8 62.80 16.70 | 68.1 51.10 17.30 | 71.7 42.00 17.80 | 66.2 66.20 17.10 | 69.6 56.90 17.50 | 73.1 46.20 18.00 |
| 36 | TC SHC kW | 57.7 57.70 17.20 | 64.0 44.10 18.00 | 67.5 36.80 18.40 | 61.2 61.20 17.60 | 66.1 50.40 18.30 | 69.6 41.30 18.70 | 64.5 64.50 18.10 | 67.6 56.10 18.50 | 71.0 45.40 18.90 |
| 40 | TC SHC kW | 56.0 56.00 18.20 | 62.0 43.30 19.00 | 65.4 36.10 19.40 | 59.6 59.60 18.70 | 64.0 49.50 19.20 | 67.4 40.50 19.70 | 62.7 62.70 19.10 | 65.4 55.20 19.40 | 68.6 44.70 19.90 |
| 44 | TC SHC kW | 54.3 54.30 19.20 | 59.8 42.50 20.00 | 63.1 35.30 20.40 | 57.9 57.90 19.70 | 61.8 48.70 20.20 | 65.0 39.70 20.70 | 60.8 60.80 20.10 | 63.1 54.20 20.40 | 66.2 43.80 20.90 |
| 48 | TC SHC kW | 52.5 52.50 20.30 | 57.7 41.60 21.00 | 60.9 34.50 21.40 | 56.1 56.10 20.80 | 59.5 47.80 21.20 | 62.6 38.90 21.70 | 58.9 58.90 21.20 | 60.7 53.20 21.40 | 63.7 43.00 21.90 |
| 52 | TC SHC kW | 50.7 50.70 21.40 | 55.4 40.80 22.00 | 58.5 33.60 22.50 | 54.3 54.30 21.90 | 57.1 46.90 22.30 | 60.1 38.00 22.70 | 56.9 56.90 22.30 | 58.3 52.20 22.50 | 61.1 42.10 22.90 |

38ARD024/40RM024 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2900 | | | 3800 | | | 4700 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| | | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 61.4 58.50 13.30 | 68.3 44.90 14.00 | 72.1 38.00 14.40 | 64.4 64.40 13.60 | 70.7 50.80 14.30 | 74.5 42.00 14.70 | 67.5 67.50 13.90 | 72.3 56.20 14.50 | 76.1 45.90 14.90 |
| 28 | TC SHC kW | 58.4 56.90 15.10 | 64.9 43.60 15.80 | 68.6 36.70 16.30 | 61.6 61.60 15.40 | 67.2 49.50 16.10 | 70.8 40.70 16.50 | 64.6 64.60 15.80 | 68.7 54.70 16.30 | 72.3 44.50 16.70 |
| 32 | TC SHC kW | 56.9 56.00 16.00 | 63.2 42.90 16.70 | 66.8 36.00 17.20 | 60.1 60.10 16.40 | 65.4 48.80 17.00 | 68.9 40.10 17.40 | 63.1 63.10 16.70 | 66.8 54.00 17.20 | 70.3 43.90 17.60 |
| 36 | TC SHC kW | 55.4 55.10 16.90 | 61.4 42.20 17.70 | 64.9 35.30 18.10 | 58.5 58.50 17.30 | 63.4 48.00 17.90 | 66.9 39.40 18.40 | 61.5 61.50 17.70 | 64.8 53.20 18.10 | 68.2 43.20 18.50 |
| 40 | TC SHC kW | 53.8 53.80 17.90 | 59.5 41.50 18.60 | 62.8 34.60 19.10 | 57.0 57.00 18.30 | 61.4 47.20 18.90 | 64.7 38.60 19.30 | 59.8 59.80 18.70 | 62.7 52.30 19.10 | 66.0 42.40 19.50 |
| 44 | TC SHC kW | 52.2 52.20 19.00 | 57.5 40.70 19.70 | 60.7 33.80 20.10 | 55.4 55.40 19.40 | 59.3 46.40 19.90 | 62.5 37.90 20.30 | 58.1 58.10 19.70 | 60.6 51.40 20.10 | 63.6 41.60 20.50 |
| 48 | TC SHC kW | 50.5 50.50 20.10 | 55.5 40.00 20.70 | 58.6 33.10 21.10 | 53.8 53.80 20.50 | 57.2 45.60 20.90 | 60.2 37.10 21.30 | 56.4 56.40 21.30 | 58.4 50.50 21.10 | 61.2 40.80 21.50 |
| 52 | TC SHC kW | 48.8 48.80 21.20 | 53.5 39.10 21.80 | 56.4 32.30 22.20 | 52.1 52.10 21.60 | 55.0 44.70 22.00 | 57.9 44.70 22.40 | 54.5 54.50 21.90 | 56.2 54.50 22.10 | 58.9 49.50 22.50 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38ARD024/40RM028H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 3500 | | | 4700 | | | 5900 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 67.4 67.40 13.90 | 74.2 52.00 14.70 | 78.1 43.10 15.10 | 72.0 72.00 14.50 | 76.8 60.20 15.00 | 80.7 49.00 15.40 | 75.8 75.80 14.90 | 78.5 67.50 15.10 | 82.1 54.50 15.60 |
| 28 | TC SHC kW | 64.2 64.20 15.70 | 70.6 50.60 16.50 | 74.4 41.90 17.00 | 69.0 69.00 16.30 | 72.9 58.70 16.80 | 76.6 47.70 17.20 | 72.5 72.50 16.70 | 74.5 65.70 17.00 | 77.9 53.10 17.40 |
| 32 | TC SHC kW | 62.6 62.60 16.70 | 68.7 49.80 17.40 | 72.4 41.20 17.90 | 67.4 67.40 17.20 | 70.8 57.90 17.70 | 74.4 47.00 18.10 | 70.7 70.70 17.70 | 72.5 64.80 17.90 | 75.7 52.40 18.30 |
| 36 | TC SHC kW | 60.9 60.90 17.60 | 66.7 49.10 18.30 | 70.3 40.40 18.80 | 65.7 65.70 18.20 | 68.8 57.10 18.60 | 72.2 46.20 19.10 | 68.8 68.80 18.60 | 70.3 63.80 18.80 | 73.4 51.60 19.20 |
| 40 | TC SHC kW | 59.3 59.30 18.60 | 64.5 48.30 19.30 | 68.0 39.60 19.80 | 63.8 63.80 19.20 | 66.5 56.20 19.60 | 69.8 45.40 20.00 | 66.9 66.90 19.60 | 68.0 62.60 19.80 | 71.0 50.80 20.20 |
| 44 | TC SHC kW | 57.6 57.60 19.70 | 62.2 47.40 20.30 | 65.6 38.80 20.80 | 61.9 61.90 20.20 | 64.1 55.20 20.60 | 67.3 44.50 21.00 | 64.7 64.70 20.60 | 65.7 61.20 20.80 | 68.4 49.90 21.20 |
| 48 | TC SHC kW | 55.8 55.80 20.70 | 59.9 46.50 21.30 | 63.1 38.00 21.80 | 59.9 59.90 21.30 | 61.7 54.10 21.60 | 64.7 43.70 22.00 | 62.5 62.50 21.70 | 63.3 59.50 21.80 | 65.7 48.90 22.20 |
| 52 | TC SHC kW | 54.0 54.00 21.80 | 57.5 45.60 22.30 | 60.6 37.10 22.80 | 57.8 57.80 22.40 | 59.3 53.10 22.60 | 62.0 42.80 23.00 | 60.2 60.20 22.70 | 60.9 57.60 22.80 | 63.0 47.90 23.20 |

38ARD024/40RM028 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 3500 | | | 4700 | | | 5900 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 64.1 64.10 13.60 | 71.1 49.20 14.30 | 74.9 41.00 14.80 | 68.2 68.20 14.00 | 73.4 56.50 14.60 | 77.3 46.10 15.00 | 71.8 71.80 14.40 | 75.0 62.90 14.80 | 78.8 50.90 15.20 |
| 28 | TC SHC kW | 61.2 61.20 15.40 | 67.6 47.90 16.10 | 71.3 39.70 16.60 | 65.3 65.30 15.90 | 69.8 55.00 16.40 | 73.4 44.80 16.80 | 68.6 68.60 16.30 | 71.3 61.30 16.60 | 74.8 49.50 17.00 |
| 32 | TC SHC kW | 59.7 59.70 16.30 | 65.8 47.20 17.10 | 69.4 39.10 17.50 | 63.9 63.90 16.80 | 67.9 54.30 17.30 | 71.4 44.10 17.70 | 67.0 67.00 17.20 | 69.3 60.40 17.50 | 72.7 48.80 17.90 |
| 36 | TC SHC kW | 58.2 58.20 17.30 | 63.9 46.50 18.00 | 67.4 38.40 18.40 | 62.3 62.30 17.80 | 65.9 53.50 18.20 | 69.3 43.40 18.70 | 65.3 65.30 18.20 | 67.3 59.50 18.40 | 70.5 48.10 18.80 |
| 40 | TC SHC kW | 56.6 56.60 18.30 | 61.9 45.70 18.90 | 65.3 37.60 19.40 | 60.7 60.70 18.80 | 63.8 52.70 19.20 | 67.1 42.70 19.60 | 63.5 63.50 19.20 | 65.2 58.50 19.40 | 68.2 47.30 19.80 |
| 44 | TC SHC kW | 54.9 54.90 19.30 | 59.8 44.90 20.00 | 63.1 36.90 20.40 | 58.9 58.90 19.80 | 61.6 51.80 20.20 | 64.7 41.90 20.60 | 61.6 61.60 20.20 | 62.9 57.30 20.40 | 65.8 46.50 20.80 |
| 48 | TC SHC kW | 53.3 53.30 20.40 | 57.6 44.10 21.00 | 60.8 36.10 21.40 | 57.1 57.10 20.90 | 59.3 50.80 21.20 | 62.3 41.10 21.70 | 59.6 59.60 21.30 | 60.7 56.10 21.40 | 63.3 45.70 21.80 |
| 52 | TC SHC kW | 51.7 51.70 21.50 | 55.4 43.20 22.00 | 58.4 35.30 22.50 | 55.2 55.20 22.00 | 57.1 49.80 22.30 | 59.8 40.20 22.70 | 57.6 57.60 22.40 | 58.4 54.70 22.50 | 60.8 44.80 22.80 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38AKS014/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1450 | | | 1900 | | | 2350 | | |
| | Evaporator Air — Ewb (C) | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 35.6 31.80 6.55 | 40.2 25.30 6.62 | 42.9 21.80 6.71 | 38.1 36.20 6.58 | 42.2 28.60 6.70 | 44.9 24.10 6.76 | 39.9 39.70 6.64 | 43.5 31.70 6.72 |
| 28 | TC SHC kW | 33.6 30.60 7.68 | 37.9 24.40 7.85 | 40.4 20.80 7.96 | 35.9 34.80 7.77 | 39.7 27.60 7.93 | 42.2 23.10 8.04 | 37.8 37.70 7.84 | 40.8 30.60 7.98 |
| 32 | TC SHC kW | 32.6 30.00 8.24 | 36.7 23.90 8.45 | 39.1 20.40 8.58 | 34.9 34.00 8.35 | 38.4 27.10 8.54 | 40.8 22.60 8.68 | 36.7 36.70 8.45 | 39.5 30.10 8.60 |
| 36 | TC SHC kW | 31.6 29.40 8.80 | 35.5 23.40 9.04 | 37.9 19.90 9.20 | 33.8 33.30 8.93 | 37.1 26.60 9.15 | 39.5 22.20 9.32 | 35.6 35.60 9.05 | 38.1 29.60 9.22 |
| 40 | TC SHC kW | 30.5 28.70 9.35 | 34.2 22.90 9.63 | 36.6 19.40 9.82 | 32.7 32.50 9.51 | 35.8 26.10 9.75 | 38.1 21.70 9.95 | 34.5 34.50 9.65 | 36.8 29.00 9.83 |
| 44 | TC SHC kW | 29.5 28.10 9.89 | 33.0 22.40 10.20 | 35.3 18.90 10.40 | 31.6 31.50 10.10 | 34.4 25.60 10.30 | 36.7 21.20 10.60 | 33.4 33.40 10.30 | 35.4 28.50 10.40 |
| 48 | TC SHC kW | 28.4 27.40 10.40 | 31.7 21.90 10.80 | 34.0 18.40 11.00 | 30.5 30.50 10.70 | 33.1 25.10 10.90 | 35.3 20.70 11.20 | 32.3 32.30 10.90 | 34.0 27.90 11.00 |
| 52 | TC SHC kW | 27.4 26.80 11.00 | 30.5 21.40 11.40 | 32.6 18.00 11.60 | 29.5 29.50 11.20 | 31.8 24.50 11.50 | 33.9 20.20 11.80 | 31.2 31.20 11.40 | 32.6 27.40 11.60 |

38AKS014/40RM012 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 1450 | | | 1900 | | | 2350 | | |
| | Evaporator Air — Ewb (C) | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 34.0 30.40 6.56 | 38.4 24.20 6.59 | 40.9 20.80 6.67 | 36.3 34.50 6.58 | 40.2 27.30 6.63 | 42.7 23.00 6.70 | 37.9 37.60 6.56 | 41.4 30.10 6.67 |
| 28 | TC SHC kW | 32.1 29.30 7.63 | 36.2 23.30 7.78 | 38.6 19.90 7.88 | 34.3 33.10 7.71 | 37.9 26.40 7.85 | 40.3 22.10 7.95 | 35.9 35.80 7.77 | 39.0 29.20 7.90 |
| 32 | TC SHC kW | 31.2 28.70 8.17 | 35.1 22.90 8.36 | 37.4 19.50 8.49 | 33.3 32.40 8.27 | 36.7 25.90 8.45 | 39.0 21.60 8.58 | 34.9 34.90 8.36 | 37.7 28.70 8.51 |
| 36 | TC SHC kW | 30.2 28.10 8.72 | 33.9 22.40 8.95 | 36.2 19.10 9.09 | 32.2 31.70 8.84 | 35.4 25.40 9.04 | 37.7 21.20 9.19 | 33.9 33.90 8.95 | 36.5 28.20 9.11 |
| 40 | TC SHC kW | 29.2 27.50 9.25 | 32.8 22.00 9.52 | 35.0 18.60 9.70 | 31.2 31.00 9.40 | 34.2 25.00 9.63 | 36.5 20.70 9.81 | 32.9 32.90 9.53 | 35.2 27.70 9.71 |
| 44 | TC SHC kW | 28.3 26.90 9.78 | 31.6 21.50 10.10 | 33.8 18.20 10.30 | 30.2 30.10 9.97 | 33.0 24.50 10.20 | 35.2 20.30 10.40 | 31.9 31.90 10.10 | 33.9 27.20 10.30 |
| 48 | TC SHC kW | 27.3 26.30 10.30 | 30.5 21.00 10.70 | 32.6 17.70 10.90 | 29.2 29.20 10.50 | 31.7 24.00 10.80 | 33.8 19.80 11.00 | 30.9 30.90 10.70 | 32.6 26.60 10.90 |
| 52 | TC SHC kW | 26.3 25.70 10.80 | 29.3 20.60 11.20 | 31.4 17.30 11.50 | 28.2 28.20 11.10 | 30.5 23.50 11.40 | 32.5 19.30 11.60 | 29.8 29.80 11.30 | 31.3 26.10 11.50 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38AKS014/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|
| | | 1750 | | | 2350 | | | 2950 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 37.9 35.20 6.60 | 42.3 27.80 6.70 | 44.9 23.60 6.75 | 40.5 40.20 6.64 | 44.1 32.00 6.73 | 46.8 26.50 6.80 | 42.7 42.70 6.69 | 45.4 35.80 6.76 | 48.0 29.20 6.81 |
| 28 | TC SHC kW | 35.8 33.90 7.76 | 39.8 26.90 7.93 | 42.3 22.60 8.04 | 38.3 38.30 7.87 | 41.5 31.00 8.01 | 44.00 25.50 8.12 | 40.5 40.50 7.96 | 42.6 34.70 8.06 | 45.1 28.20 8.16 |
| 32 | TC SHC kW | 34.7 33.30 8.34 | 38.5 26.40 8.55 | 41.0 22.20 8.69 | 37.2 37.20 8.48 | 40.1 30.50 8.64 | 42.6 25.10 8.77 | 39.3 39.30 8.60 | 41.2 34.10 8.70 | 43.6 27.70 8.83 |
| 36 | TC SHC kW | 33.6 32.60 8.92 | 37.2 25.90 9.16 | 39.7 21.70 9.33 | 36.2 36.20 9.09 | 38.8 29.90 9.27 | 41.2 24.60 9.43 | 38.2 38.20 9.23 | 39.0 33.50 9.34 | 42.1 27.20 9.49 |
| 40 | TC SHC kW | 32.5 31.90 9.49 | 36.0 25.40 9.77 | 38.3 21.20 9.96 | 35.1 35.10 9.70 | 37.4 29.40 9.89 | 39.7 24.10 10.10 | 37.0 37.00 9.85 | 38.4 32.90 9.97 | 40.6 26.70 10.10 |
| 44 | TC SHC kW | 31.4 31.10 10.10 | 34.7 24.90 10.40 | 37.0 20.70 10.60 | 34.0 34.00 10.30 | 36.1 28.90 10.50 | 38.3 23.60 10.70 | 35.8 35.80 10.50 | 37.00 32.30 10.60 | 39.1 26.20 10.80 |
| 48 | TC SHC kW | 30.4 30.30 10.60 | 33.4 24.40 11.00 | 35.6 20.20 11.20 | 32.9 32.90 10.90 | 34.7 28.30 11.10 | 36.8 23.10 11.30 | 34.6 34.60 11.10 | 35.6 31.70 11.20 | 37.6 25.70 11.40 |
| 52 | TC SHC kW | 29.3 29.30 11.20 | 32.1 23.90 11.60 | 34.2 19.80 11.80 | 31.8 31.80 11.50 | 33.3 27.80 11.70 | 35.3 22.60 12.00 | 33.5 33.50 11.70 | 34.2 31.10 11.80 | 36.1 25.20 12.10 |

38AKS014/40RM014 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1750 | | | 2350 | | | 2950 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 36.5 33.80 6.57 | 40.9 26.80 6.67 | 43.5 22.80 6.72 | 39.0 38.40 6.61 | 42.8 30.70 6.72 | 45.4 25.50 6.77 | 41.0 41.00 6.65 | 44.0 34.10 6.74 | 46.7 27.90 6.79 |
| 28 | TC SHC kW | 34.4 32.50 7.71 | 38.5 25.80 7.88 | 41.0 21.80 7.99 | 36.8 36.70 7.81 | 40.2 29.60 7.95 | 42.7 24.50 8.06 | 38.9 38.90 7.89 | 41.3 33.00 8.00 | 43.8 26.90 8.11 |
| 32 | TC SHC kW | 33.4 31.90 8.28 | 37.3 25.30 8.48 | 39.7 21.30 8.62 | 35.8 35.70 8.40 | 38.8 29.10 8.57 | 41.3 24.00 8.70 | 37.8 37.80 8.51 | 39.9 32.40 8.63 | 42.3 26.40 8.76 |
| 36 | TC SHC kW | 32.3 31.20 8.84 | 36.0 24.80 9.08 | 38.4 20.90 9.24 | 34.7 34.70 9.00 | 37.5 28.60 9.18 | 39.9 23.50 9.35 | 36.7 36.70 9.12 | 38.5 31.90 9.25 | 40.9 25.90 9.41 |
| 40 | TC SHC kW | 31.3 30.50 9.40 | 34.8 24.40 9.68 | 37.1 20.40 9.87 | 33.7 33.70 9.59 | 36.2 28.10 9.79 | 38.5 23.00 9.97 | 35.5 35.50 9.73 | 37.2 35.50 9.87 | 39.4 25.40 10.00 |
| 44 | TC SHC kW | 30.2 29.80 9.96 | 33.5 23.90 10.30 | 35.8 19.90 10.50 | 32.6 32.60 10.20 | 34.8 27.50 10.40 | 37.1 22.50 10.60 | 34.4 34.40 10.30 | 35.8 30.70 10.50 | 37.9 24.90 10.70 |
| 48 | TC SHC kW | 29.1 29.00 10.50 | 32.2 23.40 10.80 | 34.4 19.40 11.10 | 31.5 31.50 10.80 | 33.5 27.00 11.00 | 35.6 22.10 11.20 | 33.2 33.20 10.90 | 34.4 30.10 11.10 | 36.4 24.40 11.30 |
| 52 | TC SHC kW | 28.1 28.10 11.10 | 30.9 22.90 11.40 | 33.1 19.00 11.70 | 30.5 30.50 11.40 | 32.1 26.50 11.60 | 34.2 21.60 11.80 | 32.1 32.10 11.50 | 33.0 29.50 11.70 | 34.9 23.90 11.90 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38AKS014/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| | | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 39.7 38.60 6.64 | 43.8 30.50 6.72 | 46.5 25.50 6.79 | 42.5 42.50 6.70 | 45.4 35.10 6.77 | 48.1 28.70 6.82 | 44.7 44.70 6.74 | 46.5 39.10 6.78 | 49.1 31.70 6.83 |
| 28 | TC SHC kW | 37.5 37.00 7.83 | 41.1 29.50 7.99 | 43.7 24.50 8.10 | 40.3 40.20 7.96 | 42.6 33.90 8.06 | 45.1 27.70 8.16 | 42.3 42.30 8.05 | 43.7 37.90 8.10 | 46.1 30.70 8.20 |
| 32 | TC SHC kW | 36.4 36.20 8.43 | 39.8 28.90 8.62 | 42.3 24.00 8.76 | 39.1 39.10 8.59 | 41.3 33.40 8.70 | 43.6 27.20 8.83 | 41.1 41.10 8.70 | 42.3 37.20 8.76 | 44.5 30.20 8.88 |
| 36 | TC SHC kW | 35.4 35.30 9.03 | 38.5 28.40 9.24 | 40.9 23.50 9.41 | 38.0 38.00 9.22 | 39.9 32.80 9.34 | 42.2 26.70 9.49 | 39.9 39.90 9.34 | 40.9 36.50 9.41 | 43.0 29.70 9.55 |
| 40 | TC SHC kW | 34.3 34.30 9.63 | 37.2 27.90 9.86 | 39.5 23.00 10.10 | 36.9 36.90 9.84 | 38.5 32.30 9.97 | 40.7 26.20 10.20 | 38.6 38.60 9.99 | 39.5 35.80 10.10 | 41.5 29.10 10.20 |
| 44 | TC SHC kW | 33.2 33.20 10.20 | 35.8 27.40 10.50 | 38.1 22.50 10.70 | 35.7 35.70 10.50 | 37.1 31.70 10.60 | 39.2 25.70 10.80 | 37.4 37.40 10.60 | 38.0 35.00 10.70 | 39.9 28.60 10.90 |
| 48 | TC SHC kW | 32.2 32.20 10.80 | 34.4 26.90 11.10 | 36.6 22.00 11.30 | 34.5 34.50 11.10 | 35.7 31.10 11.20 | 37.7 25.20 11.40 | 36.1 36.10 11.30 | 36.6 34.20 11.30 | 38.4 28.10 11.50 |
| 52 | TC SHC kW | 31.1 31.10 11.40 | 33.1 26.30 11.70 | 35.2 21.50 12.00 | 33.3 33.30 11.70 | 34.3 30.50 11.80 | 36.2 24.70 12.10 | 34.8 34.80 11.90 | 35.2 33.40 11.90 | 36.8 27.60 12.20 |

38AKS014/40RM016 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| | | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 39.3 37.90 6.63 | 43.4 30.00 6.71 | 46.2 25.20 6.78 | 42.0 41.90 6.69 | 45.1 34.50 6.77 | 47.8 28.20 6.81 | 44.1 44.10 6.72 | 46.2 38.30 6.78 | 48.8 31.10 6.83 |
| 28 | TC SHC kW | 37.0 36.40 7.81 | 40.7 29.00 7.98 | 43.3 24.10 8.09 | 39.7 39.70 7.93 | 42.2 33.30 8.04 | 44.8 27.20 8.15 | 41.7 41.70 8.02 | 43.3 37.10 8.09 | 45.8 30.10 8.19 |
| 32 | TC SHC kW | 35.9 35.60 8.40 | 39.4 28.40 8.06 | 41.9 23.60 8.74 | 38.6 38.50 8.55 | 40.8 32.70 8.68 | 43.3 26.70 8.81 | 40.5 40.50 8.66 | 41.9 36.40 8.74 | 44.2 29.50 8.86 |
| 36 | TC SHC kW | 34.8 34.70 9.00 | 38.1 27.90 9.22 | 40.5 23.10 9.38 | 37.4 37.40 9.17 | 39.4 32.20 9.31 | 41.8 26.20 9.47 | 39.3 39.30 9.30 | 40.4 35.80 9.38 | 42.7 29.00 9.53 |
| 40 | TC SHC kW | 33.7 33.70 9.59 | 36.7 27.40 9.82 | 39.1 22.60 10.00 | 36.3 36.30 9.80 | 38.0 31.60 9.94 | 40.3 25.70 10.10 | 38.0 38.00 9.94 | 39.0 35.10 10.00 | 41.1 28.50 10.20 |
| 44 | TC SHC kW | 32.6 32.60 10.20 | 35.3 26.90 10.40 | 37.6 22.10 10.60 | 35.1 35.10 10.40 | 36.6 31.00 10.50 | 38.8 25.20 10.80 | 36.7 36.70 10.60 | 37.5 34.30 10.60 | 39.5 27.90 10.80 |
| 48 | TC SHC kW | 31.6 31.60 10.80 | 33.9 26.30 11.00 | 36.2 21.60 11.30 | 33.9 33.90 11.00 | 35.1 30.40 11.20 | 37.2 24.60 11.40 | 35.5 35.50 11.20 | 36.1 33.50 11.30 | 37.9 27.40 11.50 |
| 52 | TC SHC kW | 30.5 30.50 11.40 | 32.5 25.80 11.60 | 34.7 21.10 11.90 | 32.7 32.70 11.60 | 33.7 29.80 11.80 | 35.7 24.10 12.00 | 34.2 34.20 11.80 | 34.6 32.70 11.90 | 36.4 26.90 12.10 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38AKS016/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1750 | | | 2350 | | | 2950 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 46.4 40.50 9.78 | 52.2 32.20 10.20 | 55.5 27.80 10.40 | 49.7 46.50 10.00 | 55.0 36.60 10.30 | 58.3 30.90 10.60 | 52.2 51.40 10.20 | 56.8 40.80 10.50 | 60.1 33.80 10.70 |
| 28 | TC SHC kW | 44.0 39.10 11.30 | 49.5 31.00 11.80 | 52.6 26.70 12.10 | 47.2 44.90 11.60 | 52.0 35.50 12.00 | 55.2 29.80 12.30 | 49.5 49.30 11.80 | 53.7 39.50 12.20 | 56.8 32.70 12.50 |
| 32 | TC SHC kW | 42.9 38.40 12.00 | 48.1 30.50 12.60 | 51.2 26.10 12.90 | 45.9 44.10 12.40 | 50.5 34.90 12.90 | 53.6 29.20 13.20 | 48.2 48.20 12.60 | 52.1 38.90 13.00 | 55.1 32.10 13.30 |
| 36 | TC SHC kW | 41.7 37.70 12.80 | 46.7 29.90 13.40 | 49.7 25.50 13.80 | 44.6 43.30 13.10 | 49.0 34.30 13.70 | 52.0 28.60 14.00 | 47.0 47.00 13.40 | 50.5 38.30 13.90 | 53.4 31.50 14.20 |
| 40 | TC SHC kW | 40.5 37.00 13.50 | 45.3 29.30 14.20 | 48.2 25.00 14.60 | 43.3 42.40 13.90 | 47.5 33.70 14.50 | 50.3 28.00 14.90 | 45.7 45.70 14.20 | 48.9 37.70 14.70 | 51.7 30.90 15.10 |
| 44 | TC SHC kW | 39.2 36.30 14.20 | 43.9 28.70 15.00 | 46.7 24.40 15.40 | 42.0 41.50 14.70 | 45.9 33.00 15.30 | 48.7 27.40 15.70 | 44.4 44.40 15.00 | 47.2 37.00 15.50 | 49.9 30.30 15.90 |
| 48 | TC SHC kW | 38.0 35.50 14.90 | 42.4 28.10 15.70 | 45.1 23.80 16.20 | 40.7 40.50 15.40 | 44.3 32.40 16.10 | 47.0 26.80 16.50 | 43.0 43.00 15.80 | 45.5 36.40 16.30 | 48.2 29.70 16.80 |
| 52 | TC SHC kW | 36.7 34.80 15.60 | 41.0 27.50 16.50 | 43.6 23.20 17.00 | 39.4 39.40 16.20 | 42.7 31.80 16.90 | 45.3 26.20 17.40 | 41.7 41.70 16.60 | 43.9 35.70 17.10 | 46.4 29.10 17.60 |

38AKS016/40RM014 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 1750 | | | 2350 | | | 2950 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 43.8 38.10 9.60 | 49.4 30.40 9.98 | 52.5 26.30 10.20 | 46.8 43.50 9.81 | 52.1 34.30 10.20 | 55.2 29.10 10.40 | 49.0 47.80 9.95 | 53.9 37.90 10.30 | 57.0 31.60 10.50 |
| 28 | TC SHC kW | 41.6 36.80 11.00 | 46.9 29.30 11.50 | 49.8 25.20 11.80 | 44.4 42.00 11.30 | 49.3 33.20 11.80 | 52.3 28.00 12.10 | 46.6 45.90 11.50 | 50.9 36.80 11.90 | 53.9 30.50 12.20 |
| 32 | TC SHC kW | 40.4 36.10 11.80 | 45.6 28.70 12.30 | 48.5 24.70 12.60 | 43.2 41.20 12.10 | 47.9 32.60 12.60 | 50.8 27.40 12.90 | 45.3 45.00 12.30 | 49.4 36.20 12.70 | 52.3 29.90 13.00 |
| 36 | TC SHC kW | 39.3 35.50 12.50 | 44.3 28.20 13.10 | 47.1 24.10 13.40 | 42.0 40.40 12.80 | 46.4 32.10 13.40 | 49.3 26.90 13.70 | 44.1 44.00 13.10 | 47.8 35.60 13.50 | 50.7 29.40 13.90 |
| 40 | TC SHC kW | 38.2 34.80 13.20 | 42.9 27.60 13.80 | 45.7 23.60 14.20 | 40.8 39.60 13.50 | 45.0 31.50 14.10 | 47.7 26.30 14.50 | 42.8 42.80 13.80 | 46.3 35.00 14.30 | 49.1 28.80 14.70 |
| 44 | TC SHC kW | 37.0 34.10 13.90 | 41.5 27.10 14.60 | 44.2 23.00 15.00 | 39.5 38.70 14.30 | 43.5 30.90 14.90 | 46.2 25.70 15.30 | 41.6 41.60 14.60 | 44.7 34.40 15.01 | 47.4 28.20 15.50 |
| 48 | TC SHC kW | 35.8 33.40 14.60 | 40.2 26.50 15.30 | 42.8 22.50 15.80 | 38.3 37.80 15.00 | 42.0 30.30 15.70 | 44.6 25.20 16.10 | 40.3 40.30 15.40 | 43.1 33.80 15.90 | 45.7 27.60 16.30 |
| 52 | TC SHC kW | 34.6 32.70 15.30 | 38.8 25.90 16.10 | 41.3 22.00 16.60 | 37.0 37.00 15.70 | 40.5 29.80 16.40 | 43.0 24.60 16.90 | 39.1 39.10 16.10 | 41.6 33.20 16.60 | 44.1 27.00 17.10 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38AKS016/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 48.0 43.50 9.88 | 53.6 34.40 10.30 | 56.8 29.30 10.50 | 51.1 49.50 10.10 | 55.9 39.20 10.40 | 59.2 32.60 10.60 | 53.6 53.50 10.20 | 53.6 43.50 10.50 | 57.5 35.70 10.70 |
| 28 | TC SHC kW | 45.6 42.10 11.40 | 50.7 33.30 11.90 | 53.8 28.20 12.20 | 48.5 47.70 11.70 | 52.9 38.00 12.10 | 56.0 31.50 12.40 | 51.0 51.00 11.90 | 54.3 42.30 12.20 | 57.4 34.60 12.50 |
| 32 | TC SHC kW | 44.4 41.40 12.20 | 49.3 32.70 12.70 | 52.3 27.70 13.00 | 47.2 46.70 12.50 | 51.3 37.40 12.90 | 54.4 30.90 13.30 | 49.7 49.70 12.80 | 52.7 41.60 13.10 | 55.7 34.00 13.40 |
| 36 | TC SHC kW | 43.1 40.60 12.90 | 47.9 32.10 13.50 | 50.8 27.10 13.90 | 45.9 45.70 13.30 | 49.8 36.80 13.80 | 52.7 30.40 14.10 | 48.4 48.40 13.60 | 51.1 41.00 13.90 | 54.0 33.40 14.30 |
| 40 | TC SHC kW | 41.9 39.90 13.70 | 46.4 31.50 14.30 | 49.3 26.50 14.70 | 44.7 44.60 14.10 | 48.2 36.20 14.60 | 51.1 29.80 15.00 | 47.1 47.10 14.40 | 49.5 40.30 14.80 | 52.2 32.80 15.10 |
| 44 | TC SHC kW | 40.6 39.10 14.40 | 44.9 30.90 15.10 | 47.7 25.90 15.60 | 43.4 43.30 14.90 | 46.6 35.60 15.40 | 49.4 29.20 15.80 | 45.7 45.70 15.20 | 47.8 39.70 15.60 | 50.5 32.20 16.00 |
| 48 | TC SHC kW | 39.3 38.30 15.20 | 43.4 30.30 15.90 | 46.1 25.40 16.40 | 42.1 42.10 15.70 | 45.0 34.90 16.20 | 47.7 28.60 16.70 | 44.3 44.30 16.10 | 46.1 39.00 16.40 | 48.7 31.60 16.80 |
| 52 | TC SHC kW | 38.0 37.50 15.90 | 41.9 29.70 16.70 | 44.5 24.80 17.20 | 40.9 40.80 16.50 | 43.4 34.30 17.00 | 45.9 28.00 17.50 | 43.0 43.00 16.90 | 44.5 38.30 17.20 | 46.9 31.00 17.70 |

38AKS016/40RM016 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2100 | | | 2800 | | | 3500 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 47.4 42.90 9.84 | 53.1 33.90 10.20 | 56.3 29.00 10.40 | 50.4 48.60 10.10 | 55.5 38.50 10.40 | 58.8 32.20 10.60 | 52.8 52.70 10.20 | 57 42.60 10.50 | 60.4 35.10 10.70 |
| 28 | TC SHC kW | 45.0 41.40 11.40 | 50.2 32.70 11.90 | 53.3 27.80 12.10 | 47.8 46.80 11.60 | 52.4 37.30 12.10 | 55.5 31.00 12.30 | 50.2 50.20 11.90 | 53.8 41.40 12.20 | 56.9 33.90 12.50 |
| 32 | TC SHC kW | 43.7 40.70 12.10 | 48.8 32.10 12.70 | 51.8 27.20 13.00 | 46.5 45.90 12.40 | 50.8 36.70 12.90 | 53.9 30.40 13.20 | 48.9 48.90 12.70 | 52.2 40.70 13.00 | 55.2 33.30 13.30 |
| 36 | TC SHC kW | 42.5 39.90 12.90 | 47.3 31.50 13.50 | 50.2 26.70 13.80 | 45.2 44.90 13.20 | 49.2 36.00 13.70 | 52.2 29.80 14.10 | 47.6 47.60 14.10 | 50.5 40.10 13.50 | 53.5 32.70 14.20 |
| 40 | TC SHC kW | 41.2 39.10 13.60 | 45.8 30.90 14.20 | 48.7 26.10 14.70 | 43.9 43.80 14.00 | 47.6 35.40 14.50 | 50.5 29.20 14.90 | 46.3 46.30 14.30 | 48.9 39.40 14.70 | 51.7 32.10 15.10 |
| 44 | TC SHC kW | 39.9 38.30 14.30 | 44.3 30.30 15.00 | 47.1 25.50 15.50 | 42.6 42.50 14.80 | 46.0 34.80 15.30 | 48.8 28.60 15.70 | 44.9 44.90 15.10 | 47.2 38.70 15.50 | 49.9 31.50 15.90 |
| 48 | TC SHC kW | 38.6 37.50 15.10 | 42.7 29.80 15.80 | 45.4 24.90 16.30 | 41.3 41.30 15.50 | 44.4 34.10 16.10 | 47.1 28.00 16.60 | 43.5 43.50 15.90 | 45.5 38.00 16.30 | 48.1 30.90 16.70 |
| 52 | TC SHC kW | 37.3 36.70 15.80 | 41.2 29.20 16.60 | 43.8 24.30 17.10 | 40.1 40.10 16.30 | 42.7 33.50 16.90 | 45.3 27.40 17.40 | 42.1 42.10 16.70 | 43.8 37.30 17.10 | 46.3 30.30 17.60 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38AKS016/40RM024H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2900 | | | 3800 | | | 4700 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 54.9 53.80 10.30 | 59.9 42.60 10.60 | 63.5 35.40 10.80 | 58.6 58.60 10.50 | 62.0 48.80 10.70 | 65.4 39.80 10.90 | 61.4 61.40 10.70 | 63.5 54.40 10.80 | 66.7 44.00 11.00 |
| 28 | TC SHC kW | 52.1 51.60 12.00 | 56.6 41.20 12.40 | 59.9 34.10 12.70 | 55.7 55.70 12.30 | 58.4 47.40 12.50 | 61.6 38.50 12.80 | 58.2 58.20 12.50 | 59.8 52.70 12.60 | 62.7 42.70 12.90 |
| 32 | TC SHC kW | 50.7 50.50 12.80 | 54.8 40.60 13.20 | 58.1 33.50 13.60 | 54.2 54.20 13.20 | 56.6 46.70 13.40 | 59.7 37.90 13.70 | 56.6 56.60 13.40 | 58.0 51.90 13.60 | 60.8 42.00 13.80 |
| 36 | TC SHC kW | 49.3 49.30 13.70 | 53.1 39.90 14.10 | 56.2 32.80 14.50 | 52.7 52.70 14.10 | 54.8 46.00 14.30 | 57.8 37.20 14.70 | 55.0 55.00 14.30 | 56.1 51.00 14.50 | 58.8 41.30 14.80 |
| 40 | TC SHC kW | 47.9 47.90 14.50 | 51.4 39.20 15.00 | 54.4 32.20 15.40 | 51.1 51.10 14.90 | 53.0 45.20 15.20 | 55.8 36.60 15.60 | 53.3 53.30 15.20 | 54.3 50.00 15.40 | 56.7 40.60 15.70 |
| 44 | TC SHC kW | 46.5 46.50 15.30 | 49.6 38.50 15.80 | 52.5 31.50 16.20 | 49.6 49.60 16.80 | 51.1 44.40 16.10 | 53.8 35.90 16.40 | 51.7 51.70 16.10 | 52.4 48.90 16.20 | 54.7 39.90 16.60 |
| 48 | TC SHC kW | 45.0 45.00 16.20 | 47.8 37.80 16.60 | 50.6 30.90 17.10 | 48.0 48.00 16.70 | 49.3 43.60 16.90 | 51.9 35.20 17.30 | 50.0 50.00 17.00 | 50.6 47.70 17.10 | 52.7 39.20 17.50 |
| 52 | TC SHC kW | 43.6 43.60 17.00 | 46.0 37.10 17.50 | 48.7 30.20 18.00 | 46.4 46.40 17.50 | 47.4 42.80 17.80 | 49.9 34.60 18.20 | 48.3 48.30 17.90 | 48.7 46.50 18.00 | 50.6 38.40 18.30 |

38AKS016/40RM024 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2900 | | | 3800 | | | 4700 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 |
| 20 | TC SHC kW | 52.2 50.90 10.20 | 57.0 40.30 10.50 | 60.4 33.60 10.70 | 55.4 55.40 10.40 | 58.9 46.10 10.60 | 62.2 37.60 10.80 | 58.0 58.00 10.50 | 60.2 50.90 10.70 | 63.4 41.30 10.90 |
| 28 | TC SHC kW | 49.5 48.90 11.80 | 53.7 39.10 12.20 | 56.9 32.40 12.50 | 52.7 52.70 12.10 | 55.5 44.70 12.30 | 58.6 36.30 12.60 | 55.0 55.00 12.30 | 56.7 49.40 12.40 | 59.7 40.00 12.70 |
| 32 | TC SHC kW | 48.1 47.80 12.60 | 52.1 38.50 13.00 | 55.2 31.80 13.30 | 51.3 51.30 12.90 | 53.8 44.00 13.20 | 56.8 35.70 13.50 | 53.5 53.50 13.20 | 55.0 53.50 13.20 | 57.8 48.60 13.60 |
| 36 | TC SHC kW | 46.8 46.70 13.40 | 50.5 37.80 13.90 | 53.5 31.20 14.20 | 49.9 49.90 13.80 | 52.1 43.30 14.00 | 55.0 35.10 14.40 | 52.0 52.00 14.00 | 53.3 47.80 14.20 | 55.9 38.70 14.50 |
| 40 | TC SHC kW | 45.4 45.40 14.20 | 48.8 37.20 14.70 | 51.7 30.50 15.10 | 48.4 48.40 14.60 | 50.4 42.50 14.90 | 53.1 34.50 15.30 | 50.4 50.40 14.90 | 51.5 46.90 15.00 | 54.0 38.10 15.40 |
| 44 | TC SHC kW | 44.1 44.10 15.00 | 47.1 36.50 15.50 | 49.9 29.90 15.90 | 46.9 46.90 15.40 | 48.6 41.80 15.70 | 51.2 33.90 16.10 | 48.9 48.90 15.70 | 49.7 45.90 15.90 | 52.1 37.40 16.20 |
| 48 | TC SHC kW | 42.8 42.80 15.80 | 45.4 35.90 16.30 | 48.1 29.30 16.70 | 45.4 45.40 16.30 | 46.8 41.00 16.50 | 49.3 33.20 17.00 | 47.3 47.30 16.60 | 48.0 44.90 16.70 | 50.1 36.80 17.10 |
| 52 | TC SHC kW | 41.4 41.40 16.60 | 43.7 35.20 17.10 | 46.3 28.70 17.60 | 43.9 43.90 17.10 | 45.0 40.30 17.30 | 47.4 32.60 17.80 | 45.7 45.70 17.40 | 46.2 43.80 17.60 | 48.2 36.10 18.00 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38AKS024/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | |
|--|--------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 2100 | | | 2800 | | | 3500 | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | |
| 20 | TC SHC kW | 56.0 48.30 13.20 | 63.1 38.50 13.90 | 67.1 33.40 14.30 | 59.9 55.00 13.60 | 66.6 43.40 14.20 | 70.6 36.90 14.60 | 62.8 60.70 13.90 | 68.9 47.90 14.50 | 72.8 40.00 14.80 |
| 28 | TC SHC kW | 53.0 46.50 14.90 | 59.7 37.00 15.70 | 63.4 31.90 16.20 | 56.6 53.00 15.40 | 62.8 41.90 16.10 | 66.6 35.40 16.60 | 59.3 58.20 15.70 | 64.8 46.40 16.40 | 68.6 38.50 16.80 |
| 32 | TC SHC kW | 51.5 45.60 15.70 | 57.9 36.30 16.70 | 61.6 31.20 17.20 | 55.0 52.00 16.30 | 60.8 41.10 17.10 | 64.5 34.60 17.60 | 57.6 57.00 16.60 | 62.8 45.60 17.30 | 66.5 37.80 17.80 |
| 36 | TC SHC kW | 49.9 44.70 16.60 | 56.2 35.50 17.60 | 59.7 30.50 18.10 | 53.3 51.00 17.10 | 58.9 40.30 18.00 | 62.5 33.80 18.50 | 55.9 55.60 17.50 | 60.7 44.80 18.30 | 64.3 37.00 18.80 |
| 40 | TC SHC kW | 48.4 43.80 17.40 | 54.3 34.70 18.50 | 57.8 29.70 19.00 | 51.6 49.90 18.00 | 56.9 39.60 18.90 | 60.4 33.10 19.50 | 54.2 54.10 18.50 | 58.6 44.00 19.20 | 62.1 36.20 19.80 |
| 44 | TC SHC kW | 46.8 42.90 18.20 | 52.50 34.00 19.30 | 55.8 29.00 20.00 | 49.9 48.80 18.90 | 54.9 38.80 19.80 | 58.2 32.30 20.50 | 52.6 52.50 19.40 | 56.5 43.10 20.10 | 59.8 35.40 20.80 |
| 48 | TC SHC kW | 45.2 41.90 19.10 | 50.6 33.20 20.20 | 53.9 28.20 20.90 | 48.3 47.60 19.70 | 52.9 37.90 20.70 | 56.1 31.50 21.40 | 50.9 50.90 20.30 | 54.4 42.30 21.00 | 57.6 34.60 21.70 |
| 52 | TC SHC kW | 43.7 41.00 19.90 | 48.8 32.40 21.10 | 51.9 27.50 21.80 | 46.6 46.50 20.60 | 50.8 37.10 21.60 | 54.0 30.80 22.30 | 49.3 49.30 21.20 | 52.2 41.40 21.90 | 55.3 33.80 22.70 |

38AKS024/40RM016 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | | |
|--|--------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 2100 | | | 2800 | | | 3500 | | | |
| | Evaporator Air — Ewb (C) | | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 | |
| 20 | TC SHC kW | 55.3 47.50 13.10 | 62.5 37.90 13.90 | 66.5 32.90 14.20 | 59.1 54.00 13.50 | 66.0 42.70 14.20 | 70.0 36.30 14.60 | 62.0 59.50 13.80 | 68.3 47.00 14.40 | 72.4 39.40 14.80 |
| 28 | TC SHC kW | 52.2 45.70 14.80 | 59.0 36.40 15.70 | 62.7 31.50 16.10 | 55.8 52.00 15.30 | 62.1 41.10 16.10 | 65.9 34.80 16.50 | 58.5 57.10 15.60 | 64.2 45.40 16.30 | 68.0 37.80 16.80 |
| 32 | TC SHC kW | 50.7 44.80 15.60 | 57.2 35.70 16.60 | 60.9 30.70 17.10 | 54.2 51.00 16.10 | 60.2 40.30 17.00 | 63.9 34.00 17.50 | 56.8 55.80 16.50 | 62.1 44.60 17.20 | 65.8 37.00 17.80 |
| 36 | TC SHC kW | 49.2 43.90 16.50 | 55.4 34.90 17.50 | 59.0 30.00 18.00 | 52.5 49.90 17.00 | 58.2 39.50 17.90 | 61.8 33.30 18.40 | 55.0 54.50 17.40 | 60.0 43.80 18.20 | 63.6 36.20 18.70 |
| 40 | TC SHC kW | 47.6 43.00 17.30 | 53.6 34.10 18.30 | 57.0 29.20 18.90 | 50.8 48.90 17.90 | 56.2 38.70 18.80 | 59.7 32.50 19.40 | 53.3 53.10 18.30 | 57.9 43.00 19.10 | 61.4 35.50 19.70 |
| 44 | TC SHC kW | 46.1 42.10 18.10 | 51.7 33.40 19.20 | 55.1 28.50 19.80 | 49.1 47.70 18.70 | 54.2 37.90 19.70 | 57.5 31.70 20.30 | 51.6 51.50 19.20 | 55.7 42.10 20.00 | 59.1 34.70 20.60 |
| 48 | TC SHC kW | 44.5 41.10 18.90 | 49.9 32.60 20.10 | 53.10 27.70 20.70 | 47.4 46.60 19.50 | 52.1 37.10 20.60 | 55.4 30.90 21.20 | 49.9 49.90 20.10 | 53.6 41.30 20.90 | 56.8 33.90 21.60 |
| 52 | TC SHC kW | 42.9 40.20 19.80 | 48.0 31.80 20.90 | 51.1 27.00 21.70 | 45.7 45.40 20.40 | 50.1 36.30 21.40 | 53.2 30.10 22.20 | 48.2 48.20 21.00 | 51.4 40.50 21.80 | 54.6 33.10 22.50 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross


COMBINATION RATINGS — SI (cont)
38AKS024/40RM024H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2900 | | | 3800 | | | 4700 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| | | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 64.6 59.90 14.10 | 71.7 47.20 14.70 | 75.9 39.90 15.10 | 68.5 67.90 14.40 | 74.5 53.60 15.00 | 78.7 44.40 15.40 | 72.1 72.00 14.80 | 76.4 59.60 15.20 | 80.6 48.70 15.60 |
| 28 | TC SHC kW | 60.9 57.60 15.90 | 67.3 45.50 16.70 | 71.4 38.30 17.20 | 64.8 64.60 16.40 | 70.0 51.90 17.00 | 74.0 42.80 17.50 | 68.1 68.10 16.80 | 71.7 57.80 17.20 | 75.6 47.00 17.70 |
| 32 | TC SHC kW | 59.1 56.40 16.80 | 65.2 44.60 17.70 | 69.1 37.40 18.20 | 62.9 62.90 17.40 | 67.6 51.00 18.00 | 71.5 41.90 18.50 | 66.1 66.10 17.80 | 69.3 56.80 18.20 | 73.0 46.10 18.70 |
| 36 | TC SHC kW | 57.3 55.30 17.70 | 63.0 43.70 18.60 | 66.8 36.60 19.20 | 61.1 61.10 18.30 | 65.3 50.10 19.00 | 69.1 41.10 19.50 | 64.2 64.20 18.80 | 66.9 55.80 19.20 | 70.5 45.30 19.80 |
| 40 | TC SHC kW | 55.4 54.00 18.60 | 60.7 42.90 19.60 | 64.5 35.70 20.20 | 59.2 59.20 19.30 | 63.0 49.20 20.00 | 66.6 40.20 20.60 | 62.1 62.10 19.80 | 64.5 54.80 20.20 | 67.9 44.40 20.80 |
| 44 | TC SHC kW | 53.5 52.70 19.60 | 58.5 42.00 20.50 | 62.1 34.90 21.20 | 57.3 57.30 20.30 | 60.6 48.30 20.90 | 64.1 39.40 21.50 | 60.1 60.10 20.80 | 62.0 53.80 21.20 | 65.3 43.50 21.80 |
| 48 | TC SHC kW | 51.7 51.40 20.50 | 56.3 41.10 21.40 | 59.7 34.10 22.20 | 55.4 55.40 21.20 | 58.2 47.30 21.80 | 61.5 38.50 22.50 | 58.0 58.00 21.80 | 59.6 52.80 22.10 | 62.7 42.70 22.80 |
| 52 | TC SHC kW | 49.8 49.80 21.40 | 54.1 40.30 22.40 | 57.4 33.20 23.10 | 53.5 53.50 22.20 | 55.8 46.40 22.80 | 59.0 37.60 23.50 | 56.0 56.00 22.80 | 57.2 51.70 23.10 | 60.1 41.80 23.80 |

38AKS024/40RM024 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | | Evaporator Air — L/s | | | | | | | | |
|--|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | 2900 | | | 3800 | | | 4700 | | |
| | | Evaporator Air — Ewb (C) | | | | | | | | |
| | | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 61.3 56.80 13.70 | 68.1 44.80 14.40 | 72.2 37.90 14.80 | 65.0 63.90 14.10 | 70.9 50.80 14.70 | 75.0 42.10 15.10 | 67.9 67.90 14.40 | 72.6 56.10 14.80 | 76.8 45.90 15.20 |
| 28 | TC SHC kW | 57.8 54.60 15.50 | 64.0 43.20 16.30 | 67.9 36.30 16.80 | 61.3 60.90 15.90 | 66.5 49.00 16.60 | 70.4 40.40 17.10 | 64.3 64.30 16.30 | 68.1 54.20 16.80 | 71.9 44.20 17.20 |
| 32 | TC SHC kW | 56.1 53.50 16.40 | 61.9 42.30 17.20 | 65.7 35.50 17.70 | 59.5 59.40 16.90 | 64.3 48.10 17.50 | 68.0 39.60 18.00 | 62.5 62.50 17.30 | 65.8 53.30 17.70 | 69.5 43.40 18.20 |
| 36 | TC SHC kW | 54.4 52.30 17.30 | 59.9 41.50 18.20 | 63.5 34.70 18.70 | 57.7 57.70 17.80 | 62.1 47.30 18.50 | 65.7 38.80 19.00 | 60.6 60.60 18.30 | 63.5 52.40 18.70 | 67.1 42.50 19.20 |
| 40 | TC SHC kW | 52.6 51.10 18.20 | 57.8 40.70 19.10 | 61.3 34.00 19.70 | 56.0 56.00 18.70 | 59.8 46.40 19.40 | 63.3 38.00 20.00 | 58.7 58.70 19.20 | 61.2 51.40 19.70 | 64.6 41.70 20.20 |
| 44 | TC SHC kW | 50.9 49.90 19.10 | 55.7 39.90 20.00 | 59.1 33.10 20.60 | 54.2 54.20 19.70 | 57.6 45.50 20.30 | 61.0 37.20 21.00 | 56.8 56.80 20.20 | 58.9 50.40 20.60 | 62.2 40.90 21.20 |
| 48 | TC SHC kW | 49.2 48.70 19.90 | 53.6 39.00 20.90 | 56.8 32.30 21.60 | 52.5 52.50 20.60 | 55.4 44.70 21.30 | 58.6 36.30 21.90 | 54.9 54.90 21.10 | 56.6 49.40 21.50 | 59.7 40.00 22.10 |
| 52 | TC SHC kW | 47.5 47.50 20.80 | 51.5 38.20 21.70 | 54.6 31.50 22.50 | 50.7 50.70 21.60 | 53.2 43.80 22.20 | 56.2 35.50 22.80 | 52.9 52.90 22.10 | 54.3 48.40 22.40 | 57.3 39.20 23.10 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — SI (cont)

38AKS024/40RM028H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 3500 | | | 4700 | | | 5900 | | |
| | Evaporator Air — Ewb (C) | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 68.3 66.40 14.40 | 74.9 52.20 15.00 | 79.3 43.60 15.50 | 73.1 60.40 14.90 | 77.6 49.30 15.30 | 81.9 76.90 15.70 | 76.9 76.90 15.20 | 79.6 67.80 15.50 |
| 28 | TC SHC kW | 64.5 63.70 16.30 | 70.3 50.40 17.00 | 74.4 41.80 17.50 | 69.2 69.10 16.90 | 72.8 58.50 17.40 | 76.8 47.60 17.80 | 72.6 72.60 17.30 | 74.6 65.50 17.60 |
| 32 | TC SHC kW | 62.5 62.20 17.30 | 68 49.50 18.00 | 72.0 40.90 18.60 | 67.1 67.10 17.90 | 70.4 57.50 18.40 | 74.2 46.70 18.90 | 70.4 70.40 18.40 | 72.1 64.40 18.60 |
| 36 | TC SHC kW | 60.6 60.60 18.30 | 65.6 48.60 19.00 | 69.5 40.10 19.60 | 65.1 65.10 18.90 | 67.9 56.50 19.40 | 71.6 45.80 19.90 | 68.2 68.20 19.40 | 69.6 63.20 19.60 |
| 40 | TC SHC kW | 58.7 58.70 19.20 | 63.3 47.70 20.00 | 67.0 39.20 20.60 | 63.0 63.00 20.40 | 65.4 55.50 20.40 | 68.9 44.90 20.90 | 65.9 65.90 20.40 | 67.1 61.80 20.60 |
| 44 | TC SHC kW | 56.9 56.90 20.20 | 60.9 46.80 20.90 | 64.5 38.40 21.60 | 60.9 60.90 21.00 | 62.9 54.50 21.30 | 66.3 44.00 22.00 | 63.7 63.70 21.50 | 64.6 60.30 21.60 |
| 48 | TC SHC kW | 55.0 55.00 21.20 | 58.5 45.80 21.90 | 62.0 37.50 22.60 | 58.8 58.80 22.00 | 60.5 53.40 22.30 | 63.6 43.20 23.00 | 61.4 61.40 22.50 | 62.1 58.70 22.60 |
| 52 | TC SHC kW | 53.1 53.10 22.10 | 56.2 44.90 22.80 | 59.4 36.60 23.60 | 56.7 56.70 22.90 | 58.0 52.40 23.30 | 60.9 42.30 23.00 | 59.2 59.20 23.50 | 59.6 57.10 23.60 |

38AKS024/40RM028 WITH STANDARD CAPACITY 3-ROW COIL

| Temp (C) Air Entering Condenser (Edb) | Evaporator Air — L/s | | | | | | | | |
|--|--------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|
| | 3500 | | | 4700 | | | 5900 | | |
| | Evaporator Air — Ewb (C) | | | | | | | | |
| | 16 | 20 | 22 | 16 | 20 | 22 | 16 | 20 | 22 |
| 20 | TC SHC kW | 64.8 62.30 14.10 | 71.4 49.20 14.70 | 75.6 41.20 15.10 | 69.0 69.00 14.50 | 74.1 56.40 14.90 | 78.3 46.20 15.30 | 72.4 72.40 14.80 | 75.8 62.90 15.10 |
| 28 | TC SHC kW | 61.1 59.80 15.90 | 67.0 47.50 16.60 | 71.0 39.50 17.10 | 65.3 65.20 16.40 | 69.3 54.60 16.90 | 73.3 44.60 17.40 | 68.4 68.40 16.80 | 71.0 60.80 17.10 |
| 32 | TC SHC kW | 59.3 58.50 16.80 | 64.8 46.60 17.60 | 68.6 38.70 18.10 | 63.4 63.40 17.40 | 67.0 53.70 17.90 | 70.8 43.70 18.40 | 66.4 66.40 17.80 | 68.6 59.70 18.10 |
| 36 | TC SHC kW | 57.5 57.20 17.80 | 62.6 45.80 18.60 | 66.3 37.80 19.10 | 61.5 61.50 18.40 | 64.7 52.80 18.90 | 68.3 42.90 19.40 | 64.4 64.40 18.80 | 66.2 58.60 19.10 |
| 40 | TC SHC kW | 55.7 55.70 18.70 | 60.4 44.90 19.50 | 63.9 37.00 20.10 | 59.7 59.70 19.40 | 62.4 51.80 19.80 | 65.80 42.00 20.40 | 62.3 62.30 19.80 | 63.8 57.50 20.10 |
| 44 | TC SHC kW | 54.0 54.00 19.60 | 58.2 44.10 20.40 | 61.6 36.20 21.10 | 57.7 57.70 20.40 | 60.1 50.90 21.40 | 63.4 41.20 21.40 | 60.3 60.30 20.80 | 61.5 56.20 21.10 |
| 48 | TC SHC kW | 52.2 52.20 20.60 | 56.0 43.20 21.30 | 59.3 35.40 22.00 | 55.8 55.80 21.30 | 57.8 49.90 21.70 | 60.9 40.40 22.40 | 58.2 58.20 21.80 | 59.1 55.00 22.00 |
| 52 | TC SHC kW | 50.5 50.50 21.50 | 53.8 42.40 22.30 | 57.0 34.50 23.00 | 53.9 53.90 22.30 | 55.5 48.90 22.70 | 58.4 39.50 23.40 | 56.1 56.10 22.80 | 56.8 53.70 23.00 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (kW) Gross
TC — Total Capacity (kW) Gross



CONDENSING UNIT RATINGS — ENGLISH

38ARD014

| SST (F) | Air Temperature Entering Condenser (F) | | | | | | | |
|------------|--|------------------------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 70 | 85 | 95 | 100 | 115 | 125 | | |
| 25 | TC kW SDT | 99.20 6.91 93.0 | 91.70 8.28 108.0 | 86.60 9.31 118.0 | 83.90 9.86 123.0 | 75.80 11.70 138.0 | 70.10 13.00 148.0 | |
| | 30 | TC kW SDT | 110.00 6.95 93.0 | 102.00 8.32 108.0 | 96.40 9.35 118.0 | 93.60 9.91 123.0 | 84.90 11.70 138.0 | 78.90 13.00 148.0 |
| | 35 | TC kW SDT | 121.00 7.00 93.0 | 113.00 8.36 108.0 | 107.00 9.40 118.0 | 104.00 9.95 123.0 | 94.80 11.80 138.0 | 88.40 13.10 148.0 |
| 40 | TC kW SDT | 134.00 7.06 93.0 | 125.00 8.41 108.0 | 118.00 9.44 118.0 | 115.00 10.00 123.0 | 105.00 11.80 138.0 | 98.50 13.20 148.0 | |
| | 45 | TC kW SDT | 147.00 7.13 93.0 | 137.00 8.47 108.0 | 130.00 9.50 118.0 | 127.00 10.10 123.0 | 117.00 11.90 138.0 | 109.00 13.20 148.0 |
| | 50 | TC kW SDT | 161.00 7.25 93.5 | 150.00 8.56 108.0 | 143.00 9.58 118.0 | 140.00 10.10 123.0 | 128.00 11.90 138.0 | 121.00 13.30 148.0 |

38ARD016

| SST (F) | Air Temperature Entering Condenser (F) | | | | | | | |
|------------|--|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 70 | 85 | 95 | 100 | 115 | 125 | | |
| 25 | TC kW SDT | 136.00 9.55 91.1 | 125.00 10.90 106.0 | 118.00 11.80 116.0 | 114.00 12.30 121.0 | 101.00 13.90 135.0 | 91.10 14.70 145.0 | |
| | 30 | TC kW SDT | 149.00 9.79 92.4 | 138.00 11.10 107.0 | 130.00 12.00 117.0 | 125.00 12.50 121.0 | 112.00 14.10 136.0 | 103.00 15.10 146.0 |
| | 35 | TC kW SDT | 162.00 10.10 93.9 | 151.00 11.40 108.0 | 142.00 12.30 118.0 | 138.00 12.80 123.0 | 124.00 14.30 137.0 | 114.00 15.40 146.0 |
| 40 | TC kW SDT | 176.00 10.30 95.6 | 164.00 11.70 110.0 | 155.00 12.70 119.0 | 151.00 13.10 124.0 | 136.00 14.70 138.0 | 126.00 15.70 148.0 | |
| | 45 | TC kW SDT | 190.00 10.70 97.4 | 179.00 12.10 112.0 | 169.00 13.00 121.0 | 164.00 13.50 126.0 | 148.00 15.00 140.0 | 138.00 16.10 149.0 |
| | 50 | TC kW SDT | 205.00 11.00 99.3 | 194.00 12.40 114.0 | 184.00 13.40 123.0 | 179.00 13.90 128.0 | 162.00 15.40 141.0 | 150.00 16.50 151.0 |

38ARD024

| SST (F) | Air Temperature Entering Condenser (F) | | | | | | | |
|------------|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 70 | 85 | 95 | 100 | 115 | 125 | | |
| 25 | TC kW SDT | 177.00 12.70 95.9 | 165.00 14.00 110.0 | 156.00 15.60 120.0 | 151.00 16.30 125.0 | 137.00 18.40 139.0 | 123.00 19.40 148.0 | |
| | 30 | TC kW SDT | 193.00 13.20 97.7 | 180.00 14.80 112.0 | 170.00 16.00 121.0 | 165.00 16.70 126.0 | 150.00 18.80 140.0 | 138.00 20.00 150.0 |
| | 35 | TC kW SDT | 210.00 13.70 99.8 | 195.00 15.30 114.0 | 185.00 16.50 123.0 | 179.00 17.10 128.0 | 163.00 19.10 142.0 | 151.00 20.50 151.0 |
| 40 | TC kW SDT | 227.00 14.20 102.0 | 212.00 15.90 116.0 | 201.00 17.00 125.0 | 195.00 17.60 130.0 | 177.00 19.60 143.0 | 165.00 21.00 153.0 | |
| | 45 | TC kW SDT | 246.00 14.80 104.0 | 230.00 16.50 118.0 | 218.00 17.60 127.0 | 211.00 18.20 132.0 | 192.00 20.10 145.0 | 179.00 21.50 154.0 |
| | 50 | TC kW SDT | 265.00 15.40 107.0 | 248.00 17.10 121.0 | 235.00 18.30 130.0 | 229.00 18.90 134.0 | 208.00 20.80 147.0 | 194.00 22.10 156.0 |

LEGEND

- kW** — Compressor Power
- SDT** — Saturated Discharge Temperature (F)
- SST** — Saturated Suction Temperature (F)
- TC** — Gross Cooling Capacity (1000 Btu/h)

38AKS014

| SST (F) | Air Temperature Entering Condenser (F) | | | | | | | |
|------------|--|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|--------------------------|
| | 70 | 85 | 95 | 100 | 115 | 125 | | |
| 25 | TC kW SDT | 91.30 6.54 84.2 | 81.20 7.41 98.9 | 74.50 7.97 109.0 | 71.20 8.24 114.0 | 60.90 9.05 130.0 | 54.10 9.53 142.0 | |
| | 30 | TC kW SDT | 106.00 6.64 86.1 | 94.80 7.61 101.0 | 87.60 8.22 110.0 | 84.00 8.52 115.0 | 73.00 9.41 131.0 | 65.70 10.40 142.0 |
| | 35 | TC kW SDT | 120.00 6.74 88.1 | 108.00 7.80 102.0 | 101.00 8.47 112.0 | 96.80 8.80 117.0 | 85.10 9.77 132.0 | 77.30 10.40 143.0 |
| 40 | TC kW SDT | 135.00 6.84 90.0 | 122.00 7.99 104.0 | 114.00 8.73 114.0 | 110.00 9.09 118.0 | 97.10 10.10 133.0 | 88.90 10.80 144.0 | |
| | 45 | TC kW SDT | 149.00 6.93 91.9 | 136.00 8.18 106.0 | 127.00 8.98 115.0 | 122.00 9.37 120.0 | 109.00 10.50 134.0 | 100.00 11.20 144.0 |
| | 50 | TC kW SDT | 164.00 7.03 93.9 | 149.00 8.37 108.0 | 140.00 9.23 117.0 | 135.00 9.65 121.0 | 121.00 10.80 135.0 | 112.00 11.60 145.0 |

38AKS016

| SST (F) | Air Temperature Entering Condenser (F) | | | | | | | |
|------------|--|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 70 | 85 | 95 | 100 | 115 | 125 | | |
| 25 | TC kW SDT | 126.00 9.47 89.2 | 112.00 10.60 103.0 | 106.00 11.30 113.0 | 102.00 11.70 118.0 | 90.30 12.60 132.0 | 83.00 13.20 142.0 | |
| | 30 | TC kW SDT | 143.00 9.80 91.8 | 129.00 11.00 105.0 | 121.00 11.90 115.0 | 117.00 12.20 120.0 | 105.00 13.30 134.0 | 96.70 14.00 144.0 |
| | 35 | TC kW SDT | 161.00 10.10 94.3 | 146.00 11.50 108.0 | 137.00 12.40 117.0 | 133.00 12.80 122.0 | 119.00 14.00 136.0 | 110.00 14.80 145.0 |
| 40 | TC kW SDT | 178.00 10.50 96.8 | 163.00 12.00 110.0 | 153.00 12.90 119.0 | 148.00 13.40 124.0 | 134.00 14.70 138.0 | 124.00 15.60 147.0 | |
| | 45 | TC kW SDT | 195.00 10.80 99.3 | 179.00 12.40 113.0 | 169.00 13.50 122.0 | 164.00 14.00 126.0 | 148.00 15.40 140.0 | 138.00 16.40 149.0 |
| | 50 | TC kW SDT | 213.00 11.10 102.0 | 196.00 12.90 115.0 | 185.00 14.00 124.0 | 179.00 14.60 128.0 | 162.00 16.10 142.0 | 151.00 17.10 151.0 |

38AKS024

| SST (F) | Air Temperature Entering Condenser (F) | | | | | | | |
|------------|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 70 | 85 | 95 | 100 | 115 | 125 | | |
| 25 | TC kW SDT | 158.00 12.60 93.2 | 142.00 13.90 107.0 | 131.00 14.70 116.0 | 126.00 15.10 120.0 | 112.00 16.10 135.0 | 103.00 16.80 144.0 | |
| | 30 | TC kW SDT | 180.00 13.30 96.4 | 163.00 14.70 110.0 | 151.00 15.50 119.0 | 146.00 16.00 123.0 | 130.00 17.10 137.0 | 119.00 17.90 146.0 |
| | 35 | TC kW SDT | 202.00 13.90 99.6 | 183.00 15.40 113.0 | 171.00 16.40 122.0 | 165.00 16.90 126.0 | 147.00 18.20 140.0 | 136.00 19.00 149.0 |
| 40 | TC kW SDT | 224.00 14.50 103.0 | 204.00 16.20 116.0 | 191.00 17.30 124.0 | 184.00 17.80 129.0 | 165.00 19.20 142.0 | 152.00 20.10 151.0 | |
| | 45 | TC kW SDT | 247.00 15.20 106.0 | 225.00 17.00 119.0 | 210.00 18.10 127.0 | 203.00 18.70 132.0 | 182.00 20.20 145.0 | 169.00 21.30 153.0 |
| | 50 | TC kW SDT | 269.00 15.80 109.0 | 245.00 17.70 122.0 | 230.00 19.00 130.0 | 223.00 19.60 134.0 | 200.00 21.30 147.0 | 185.00 22.40 156.0 |

Performance data (cont)



COMBINATION RATINGS — ENGLISH

38ARD014/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | | 3000 | | | 4000 | | | 5000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 120.0 104.00 7.89 | 130.0 87.80 7.94 | 142.0 71.00 8.03 | 127.0 121.00 7.93 | 137.0 101.00 7.99 | 149.0 79.20 8.07 | 133.0 133.00 7.97 | 141.0 113.00 8.00 | 153.0 86.90 8.09 |
| 85 | TC SHC kW | 118.0 103.00 8.38 | 128.0 87.00 8.43 | 140.0 70.10 8.50 | 125.0 120.00 8.42 | 134.0 100.00 8.48 | 146.0 78.40 8.54 | 131.0 131.00 8.46 | 139.0 112.00 8.48 | 151.0 86.10 8.57 |
| 95 | TC SHC kW | 114.0 101.00 9.43 | 124.0 85.20 9.47 | 135.0 68.50 9.52 | 121.0 118.00 9.47 | 130.0 98.30 9.51 | 142.0 76.60 9.57 | 128.0 128.00 9.49 | 134.0 110.00 9.52 | 145.0 84.30 9.60 |
| 100 | TC SHC kW | 112.0 100.00 9.99 | 122.0 84.30 10.00 | 133.0 67.60 10.10 | 119.0 117.00 10.00 | 128.0 97.40 10.10 | 139.0 75.70 10.10 | 125.0 125.00 10.00 | 131.0 109.00 10.10 | 143.0 83.40 10.20 |
| 105 | TC SHC kW | 110.0 99.40 10.60 | 119.0 83.30 10.60 | 131.0 66.70 10.70 | 117.0 115.00 10.60 | 125.0 96.40 10.70 | 136.0 74.80 10.70 | 123.0 123.00 10.60 | 129.0 108.00 10.70 | 140.0 82.50 10.70 |
| 115 | TC SHC kW | 105.0 97.40 11.80 | 115.0 81.40 11.90 | 126.0 64.80 11.90 | 112.0 112.00 11.90 | 120.0 94.40 11.90 | 131.0 72.90 12.00 | 119.0 119.00 11.90 | 124.0 106.00 11.90 | 134.0 80.60 12.00 |
| 125 | TC SHC kW | 101.0 95.20 13.20 | 110.0 79.40 13.30 | 120.0 62.90 13.30 | 108.0 108.00 13.30 | 115.0 92.40 13.30 | 125.0 70.90 13.40 | 115.0 115.00 13.30 | 118.0 104.00 13.30 | 128.0 78.60 13.40 |

38ARD014/40RM012 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | | 3000 | | | 4000 | | | 5000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 113.0 98.80 7.87 | 123.0 83.30 7.91 | 135.0 67.30 7.98 | 120.0 114.00 7.90 | 130.0 95.20 7.95 | 141.0 74.70 8.02 | 125.0 125.00 7.92 | 133.0 106.00 7.96 | 145.0 81.50 8.03 |
| 85 | TC SHC kW | 112.0 97.90 8.36 | 122.0 82.50 8.39 | 133.0 66.50 8.46 | 118.0 113.00 8.38 | 128.0 94.40 8.43 | 139.0 74.00 8.49 | 124.0 123.00 8.40 | 131.0 105.00 8.44 | 143.0 80.80 8.51 |
| 95 | TC SHC kW | 108.0 96.10 9.40 | 118.0 80.90 9.43 | 129.0 65.00 9.49 | 115.0 111.00 9.42 | 123.0 92.80 9.47 | 134.0 72.40 9.52 | 120.0 120.00 9.46 | 127.0 104.00 9.48 | 138.0 79.20 9.54 |
| 100 | TC SHC kW | 106.0 95.20 9.97 | 116.0 80.00 9.99 | 127.0 64.20 10.10 | 113.0 110.00 9.99 | 121.0 91.90 10.00 | 132.0 71.60 10.10 | 118.0 118.00 10.00 | 125.0 103.00 10.00 | 136.0 78.40 10.10 |
| 105 | TC SHC kW | 104.0 94.30 10.60 | 114.0 79.20 10.60 | 124.0 63.40 10.60 | 111.0 108.00 10.60 | 119.0 91.10 10.60 | 130.0 70.80 10.70 | 116.0 116.00 10.60 | 122.0 102.00 10.60 | 133.0 77.50 10.70 |
| 115 | TC SHC kW | 100.0 92.30 11.80 | 109.0 77.40 11.90 | 120.0 61.70 11.90 | 107.0 106.00 11.80 | 114.0 89.20 11.90 | 125.0 69.00 11.90 | 112.0 112.00 11.90 | 118.0 99.80 11.90 | 128.0 75.80 11.90 |
| 125 | TC SHC kW | 96.2 90.20 13.20 | 105.0 75.50 13.20 | 115.0 59.90 13.30 | 102.0 102.00 13.20 | 109.0 87.20 13.20 | 119.0 67.20 13.20 | 108.0 108.00 13.20 | 112.0 97.60 13.20 | 122.0 74.00 13.30 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38ARD014/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | | 3750 | | | 5000 | | | 6250 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 128.0 119.00 7.93 | 138.0 99.00 7.99 | 151.0 78.40 8.09 | 136.0 136.00 7.97 | 144.0 115.00 8.02 | 157.0 88.10 8.14 | 143.0 143.00 8.04 | 148.0 129.00 8.05 | 160.0 97.20 8.18 |
| 85 | TC SHC kW | 126.0 118.00 8.42 | 136.0 98.10 8.48 | 148.0 77.50 8.57 | 134.0 134.00 8.46 | 142.0 114.00 8.51 | 154.0 87.20 8.62 | 141.0 141.00 8.52 | 146.0 128.00 8.53 | 158.0 96.40 8.66 |
| 95 | TC SHC kW | 122.0 115.00 9.46 | 132.0 96.30 9.52 | 144.0 75.80 9.61 | 130.0 130.00 9.51 | 137.0 112.00 9.55 | 149.0 85.40 9.64 | 137.0 137.00 9.54 | 141.0 126.00 9.56 | 152.0 94.60 9.67 |
| 100 | TC SHC kW | 119.0 114.00 10.00 | 129.0 95.30 10.10 | 141.0 74.90 10.20 | 128.0 128.00 10.10 | 135.0 111.00 10.10 | 146.0 84.50 10.20 | 135.0 135.00 10.10 | 138.0 125.00 10.10 | 149.0 93.70 10.20 |
| 105 | TC SHC kW | 117.0 113.00 10.60 | 127.0 94.30 10.70 | 138.0 73.90 10.80 | 126.0 126.00 10.70 | 132.0 110.00 10.70 | 143.0 83.60 10.80 | 133.0 133.00 10.70 | 136.0 123.00 10.70 | 146.0 92.70 10.80 |
| 115 | TC SHC kW | 113.0 111.00 11.90 | 122.0 92.30 11.90 | 133.0 72.00 12.00 | 121.0 121.00 11.90 | 127.0 108.00 11.90 | 138.0 81.70 12.00 | 128.0 128.00 12.00 | 130.0 121.00 12.00 | 140.0 90.80 12.10 |
| 125 | TC SHC kW | 108.0 108.00 13.30 | 116.0 90.20 13.30 | 127.0 70.10 13.40 | 117.0 117.00 13.30 | 121.0 105.00 13.30 | 131.0 79.70 13.40 | 123.0 123.00 13.30 | 124.0 118.00 13.30 | 134.0 88.80 13.50 |

38ARD014/40RM014 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | | 3750 | | | 5000 | | | 6250 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 121.0 112.00 7.90 | 131.0 93.40 7.95 | 143.0 74.10 8.03 | 128.0 127.00 7.93 | 137.0 107.00 7.98 | 149.0 82.70 8.06 | 135.0 135.00 7.99 | 141.0 120.00 8.00 | 153.0 90.70 8.09 |
| 85 | TC SHC kW | 119.0 111.00 8.39 | 129.0 92.50 8.44 | 141.0 73.30 8.52 | 126.0 126.00 8.42 | 135.0 106.00 8.46 | 147.0 82.00 8.54 | 133.0 133.00 8.46 | 138.0 119.00 8.48 | 150.0 89.90 8.57 |
| 95 | TC SHC kW | 115.0 109.00 9.44 | 125.0 90.80 9.49 | 136.0 71.70 9.54 | 122.0 122.00 9.48 | 130.0 105.00 9.51 | 142.0 80.20 9.57 | 129.0 129.00 9.51 | 134.0 117.00 9.52 | 145.0 88.20 9.60 |
| 100 | TC SHC kW | 113.0 107.00 10.00 | 123.0 89.90 10.00 | 134.0 70.80 10.10 | 120.0 120.00 10.00 | 128.0 104.00 10.10 | 139.0 79.40 10.10 | 127.0 127.00 10.10 | 131.0 116.00 10.10 | 142.0 87.30 10.20 |
| 105 | TC SHC kW | 111.0 106.00 10.60 | 120.0 89.00 10.60 | 132.0 69.90 10.70 | 118.0 118.00 10.60 | 125.0 103.00 10.60 | 136.0 78.50 10.70 | 125.0 125.00 10.70 | 129.0 115.00 10.70 | 140.0 86.40 10.70 |
| 115 | TC SHC kW | 107.0 104.00 11.80 | 116.0 87.00 11.90 | 126.0 68.10 11.90 | 114.0 114.00 11.90 | 120.0 101.00 11.90 | 131.0 76.60 12.00 | 120.0 120.00 11.90 | 123.0 112.00 11.90 | 134.0 84.50 12.00 |
| 125 | TC SHC kW | 103.0 101.00 13.20 | 111.0 85.20 13.30 | 121.0 66.10 13.30 | 110.0 110.00 13.30 | 115.0 98.50 13.30 | 125.0 74.70 13.40 | 116.0 116.00 13.30 | 118.0 110.00 13.30 | 128.0 82.50 13.40 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38ARD014/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 137.0 134.00 7.98 | 147.0 112.00 8.05 | 160.0 86.90 8.17 | 147.00 131.00 8.04 | 153.0 98.70 8.09 | 165.0 155.00 8.24 | 155.0 155.00 8.11 | 157.0 147.00 8.13 | 168.0 110.00 8.28 |
| 85 | TC SHC kW | 135.0 133.00 8.45 | 144.0 111.00 8.52 | 157.0 86.00 8.65 | 145.0 145.00 8.53 | 150.0 130.00 8.57 | 162.0 97.80 8.72 | 152.0 152.00 8.59 | 154.0 146.00 8.61 | 165.0 109.00 8.75 |
| 95 | TC SHC kW | 131.0 130.00 9.49 | 140.0 109.00 9.56 | 152.0 84.20 9.68 | 141.0 141.00 9.57 | 145.0 127.00 9.61 | 156.0 95.90 9.74 | 148.0 148.00 9.63 | 149.0 143.00 9.65 | 159.0 107.00 9.78 |
| 100 | TC SHC kW | 128.0 128.00 10.10 | 137.0 108.00 10.10 | 149.0 83.20 10.20 | 138.0 138.00 10.10 | 142.0 126.00 10.20 | 153.0 95.00 10.30 | 145.0 145.00 10.20 | 146.0 142.00 10.20 | 156.0 106.00 10.30 |
| 105 | TC SHC kW | 126.0 126.00 10.70 | 134.0 107.00 10.70 | 146.0 82.20 10.80 | 136.0 136.00 10.70 | 139.0 125.00 10.80 | 150.0 94.00 10.90 | 143.0 143.00 10.80 | 143.0 140.00 10.90 | 153.0 105.00 10.90 |
| 115 | TC SHC kW | 122.0 122.00 11.90 | 129.0 105.00 12.00 | 140.0 80.20 12.10 | 131.0 131.00 12.00 | 134.0 123.00 12.00 | 144.0 91.90 12.10 | 137.0 137.00 12.00 | 138.0 137.00 12.10 | 147.0 103.00 12.20 |
| 125 | TC SHC kW | 117.0 117.00 13.30 | 123.0 102.00 13.40 | 134.0 78.10 13.50 | 126.0 126.00 13.40 | 128.0 120.00 13.40 | 138.0 89.80 13.50 | 132.0 132.00 13.40 | 132.0 132.00 13.40 | 140.0 101.00 13.50 |

38ARD014/40RM016 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 129.0 126.00 7.95 | 139.0 105.00 7.99 | 151.0 81.90 8.09 | 138.0 138.00 7.98 | 144.0 122.00 8.02 | 157.0 92.30 8.14 | 145.0 145.00 8.02 | 148.0 136.00 8.06 | 160.0 102.00 8.17 |
| 85 | TC SHC kW | 127.0 124.00 8.43 | 137.0 104.00 8.47 | 149.0 81.00 8.56 | 136.0 136.00 8.46 | 142.0 121.00 8.50 | 154.0 91.40 8.61 | 143.0 143.00 8.51 | 146.0 135.00 8.53 | 157.0 101.00 8.64 |
| 95 | TC SHC kW | 123.0 122.00 9.46 | 132.0 102.00 9.50 | 144.0 79.30 9.60 | 132.0 132.00 9.51 | 137.0 119.00 9.53 | 149.0 89.70 9.66 | 139.0 139.00 9.54 | 141.0 132.00 9.56 | 152.0 99.20 9.67 |
| 100 | TC SHC kW | 121.0 120.00 10.00 | 130.0 101.00 10.10 | 141.0 78.40 10.20 | 130.0 130.00 10.10 | 135.0 117.00 10.10 | 146.0 88.70 10.20 | 136.0 136.00 10.10 | 138.0 131.00 10.10 | 149.0 98.30 10.20 |
| 105 | TC SHC kW | 119.0 119.00 10.60 | 127.0 100.00 10.60 | 139.0 77.40 10.70 | 128.0 128.00 10.70 | 132.0 116.00 10.70 | 143.0 87.80 10.80 | 134.0 134.00 10.70 | 135.0 129.00 10.70 | 146.0 97.40 10.80 |
| 115 | TC SHC kW | 115.0 115.00 11.90 | 122.0 98.40 11.90 | 133.0 75.50 12.00 | 123.0 123.00 11.90 | 126.0 114.00 11.90 | 137.0 85.80 12.00 | 129.0 129.00 12.00 | 130.0 126.00 12.00 | 140.0 95.40 12.10 |
| 125 | TC SHC kW | 111.0 111.00 13.30 | 117.0 96.30 13.30 | 127.0 73.50 13.40 | 119.0 119.00 13.30 | 121.0 112.00 13.30 | 131.0 83.80 13.40 | 124.0 124.00 13.30 | 124.0 123.00 13.40 | 133.0 93.40 13.40 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38ARD016/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 3750 | | | 5000 | | | 6250 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 155.0 132.00 11.00 | 168.0 112.00 11.30 | 182.0 90.30 11.60 | 164.0 153.00 11.20 | 177.0 128.00 11.50 | 191.0 100.00 11.80 | 171.0 170.00 11.30 | 182.0 142.00 11.60 | 196.0 109.00 11.90 |
| 85 | TC SHC kW | 153.0 131.00 11.50 | 166.0 110.00 11.80 | 180.0 89.20 12.10 | 161.0 152.00 11.70 | 174.0 126.00 12.00 | 188.0 98.90 12.30 | 168.0 168.00 11.80 | 179.0 141.00 12.10 | 193.0 108.00 12.40 |
| 95 | TC SHC kW | 147.0 128.00 12.50 | 160.0 108.00 12.80 | 173.0 86.70 13.20 | 156.0 149.00 12.70 | 167.0 124.00 13.00 | 181.0 96.50 13.40 | 163.0 163.00 12.90 | 172.0 138.00 13.10 | 185.0 106.00 13.50 |
| 100 | TC SHC kW | 144.0 127.00 13.00 | 156.0 106.00 13.30 | 170.0 85.40 13.70 | 152.0 147.00 13.20 | 163.0 122.00 13.50 | 177.0 95.20 13.90 | 160.0 160.00 13.40 | 168.0 137.00 13.60 | 181.0 104.00 14.00 |
| 105 | TC SHC kW | 141.0 125.00 13.50 | 153.0 105.00 13.80 | 166.0 84.00 14.20 | 149.0 145.00 13.70 | 160.0 121.00 14.10 | 173.0 93.80 14.40 | 156.0 156.00 13.90 | 164.0 135.00 14.20 | 177.0 103.00 14.60 |
| 115 | TC SHC kW | 134.0 122.00 14.60 | 146.0 102.00 15.00 | 158.0 81.10 15.30 | 142.0 141.00 14.80 | 152.0 118.00 15.10 | 165.0 90.80 15.50 | 150.0 150.00 15.10 | 156.0 132.00 15.30 | 169.0 100.00 15.70 |
| 125 | TC SHC kW | 127.0 119.00 15.80 | 138.0 98.80 16.10 | 150.0 78.10 16.50 | 135.0 135.00 16.00 | 144.0 114.00 16.30 | 156.0 87.80 16.70 | 143.0 143.00 16.30 | 148.0 129.00 16.40 | 159.0 96.90 16.80 |

38ARD016/40RM014 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|
| | | 3750 | | | 5000 | | | 6250 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 148.0 125.00 10.80 | 160.0 106.00 11.10 | 174.0 85.70 11.40 | 156.0 144.00 11.00 | 168.0 120.00 11.30 | 182.0 94.50 11.60 | 162.0 159.00 11.10 | 173.0 133.00 11.40 | 187.0 103.00 11.70 |
| 85 | TC SHC kW | 145.0 124.00 11.30 | 158.0 104.00 11.60 | 171.0 84.60 11.90 | 153.0 142.00 11.50 | 165.0 119.00 11.80 | 179.0 93.30 12.10 | 159.0 157.00 11.60 | 170.0 132.00 11.90 | 184.0 101.00 12.20 |
| 95 | TC SHC kW | 140.0 121.00 12.30 | 152.0 102.00 12.60 | 165.0 82.30 12.90 | 147.0 139.00 12.50 | 159.0 116.00 12.80 | 172.0 91.00 13.10 | 153.0 153.00 12.60 | 164.0 129.00 12.90 | 177.0 99.00 13.30 |
| 100 | TC SHC kW | 137.0 120.00 12.80 | 149.0 101.00 13.10 | 161.0 81.00 13.50 | 144.0 138.00 13.00 | 155.0 115.00 13.30 | 168.0 89.70 13.60 | 150.0 150.00 13.10 | 160.0 128.00 13.40 | 173.0 97.70 13.80 |
| 105 | TC SHC kW | 134.0 118.00 13.30 | 145.0 99.20 13.60 | 158.0 79.60 14.00 | 141.0 136.00 13.50 | 152.0 113.00 13.80 | 165.0 88.30 14.20 | 147.0 147.00 13.70 | 156.0 126.00 13.90 | 169.0 96.30 14.30 |
| 115 | TC SHC kW | 128.0 115.00 14.40 | 139.0 96.50 14.70 | 151.0 76.90 15.10 | 135.0 132.00 14.60 | 144.0 110.00 14.90 | 157.0 85.50 15.30 | 141.0 141.00 14.80 | 148.0 123.00 15.00 | 161.0 93.50 15.40 |
| 125 | TC SHC kW | 121.0 112.00 15.60 | 132.0 93.60 15.90 | 143.0 74.10 16.30 | 128.0 127.00 15.80 | 137.0 107.00 16.10 | 148.0 82.70 16.40 | 135.0 135.00 16.00 | 140.0 120.00 16.20 | 152.0 90.60 16.60 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38ARD016/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 167.0 150.00 11.20 | 181.0 125.00 11.50 | 195.0 99.70 11.90 | 177.0 174.00 11.50 | 188.0 145.00 11.70 | 203.0 112.00 12.10 | 186.0 186.00 11.70 | 193.0 162.00 11.80 | 207.0 123.00 12.20 |
| 85 | TC SHC kW | 164.0 149.00 11.70 | 177.0 124.00 12.10 | 192.0 98.50 12.40 | 174.0 172.00 12.00 | 185.0 143.00 12.20 | 199.0 110.00 12.60 | 183.0 183.00 12.20 | 190.0 161.00 12.40 | 204.0 122.00 12.70 |
| 95 | TC SHC kW | 158.0 146.00 12.70 | 171.0 121.00 13.10 | 185.0 96.00 13.50 | 168.0 168.00 13.00 | 178.0 141.00 13.30 | 192.0 108.00 13.70 | 177.0 177.00 13.20 | 183.0 158.00 13.40 | 196.0 119.00 13.80 |
| 100 | TC SHC kW | 155.0 144.00 13.30 | 167.0 120.00 13.60 | 181.0 94.60 14.00 | 165.0 165.00 13.50 | 174.0 139.00 13.80 | 188.0 106.00 14.20 | 173.0 173.00 13.80 | 179.0 157.00 13.90 | 192.0 118.00 14.30 |
| 105 | TC SHC kW | 151.0 143.00 13.80 | 163.0 118.00 14.10 | 177.0 93.10 14.60 | 161.0 161.00 14.10 | 170.0 138.00 14.30 | 184.0 105.00 14.80 | 170.0 170.00 14.30 | 174.0 155.00 14.50 | 187.0 116.00 14.90 |
| 115 | TC SHC kW | 144.0 139.00 14.90 | 155.0 115.00 15.30 | 169.0 90.00 15.70 | 154.0 154.00 15.20 | 161.0 134.00 15.40 | 174.0 102.00 15.90 | 162.0 162.00 15.50 | 166.0 151.00 15.60 | 178.0 113.00 16.00 |
| 125 | TC SHC kW | 137.0 135.00 16.10 | 147.0 112.00 16.40 | 159.0 86.80 16.80 | 147.0 147.00 16.40 | 152.0 131.00 16.60 | 165.0 98.60 17.00 | 154.0 154.00 16.60 | 156.0 147.00 16.70 | 168.0 110.00 17.10 |

38ARD016/40RM016 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 158.0 141.00 11.00 | 171.0 118.00 11.30 | 185.0 94.20 11.70 | 167.0 162.00 11.20 | 178.0 135.00 11.50 | 192.0 105.00 11.80 | 174.0 174.00 11.40 | 183.0 151.00 11.60 | 197.0 114.00 11.90 |
| 85 | TC SHC kW | 156.0 140.00 11.50 | 168.0 117.00 11.80 | 182.0 93.10 12.20 | 164.0 160.00 11.70 | 175.0 134.00 12.00 | 189.0 103.00 12.30 | 172.0 172.00 11.90 | 180.0 149.00 12.10 | 194.0 113.00 12.50 |
| 95 | TC SHC kW | 150.0 137.00 12.50 | 162.0 114.00 12.80 | 176.0 90.60 13.20 | 158.0 156.00 12.70 | 168.0 131.00 13.00 | 182.0 101.00 13.40 | 166.0 166.00 12.90 | 173.0 146.00 13.10 | 186.0 111.00 13.50 |
| 100 | TC SHC kW | 147.0 135.00 13.00 | 158.0 113.00 13.40 | 172.0 89.30 13.70 | 155.0 154.00 13.30 | 165.0 130.00 13.50 | 178.0 99.60 13.90 | 163.0 163.00 13.50 | 169.0 145.00 13.70 | 182.0 109.00 14.00 |
| 105 | TC SHC kW | 143.0 134.00 13.60 | 155.0 111.00 13.90 | 168.0 87.90 14.30 | 152.0 151.00 13.80 | 161.0 128.00 14.10 | 174.0 98.20 14.50 | 159.0 159.00 14.00 | 165.0 143.00 14.20 | 178.0 108.00 14.60 |
| 115 | TC SHC kW | 137.0 130.00 14.70 | 147.0 108.00 15.00 | 160.0 84.90 15.40 | 145.0 145.00 14.90 | 153.0 125.00 15.20 | 165.0 95.20 15.60 | 152.0 152.00 15.20 | 157.0 140.00 15.30 | 169.0 105.00 15.70 |
| 125 | TC SHC kW | 130.0 126.00 15.80 | 140.0 105.00 16.10 | 151.0 81.90 16.50 | 138.0 138.00 16.10 | 145.0 122.00 16.30 | 156.0 92.20 16.70 | 145.0 145.00 16.30 | 148.0 136.00 16.40 | 160.0 102.00 16.80 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38ARD016/40RM024H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 6,000 | | | 8,000 | | | 10,000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 180.0 177.00 11.50 | 191.0 147.00 11.80 | 206.0 113.00 12.20 | 192.0 171.00 11.80 | 198.0 129.00 12.00 | 212.0 12.30 | 201.0 201.00 12.00 | 203.0 192.00 12.10 | 216.0 144.00 12.40 |
| 85 | TC SHC kW | 177.0 176.00 12.00 | 188.0 146.00 12.30 | 203.0 112.00 12.70 | 189.0 189.00 12.30 | 195.0 170.00 12.50 | 209.0 128.00 12.80 | 198.0 198.00 12.60 | 199.0 191.00 12.60 | 212.0 142.00 12.90 |
| 95 | TC SHC kW | 171.0 171.00 13.10 | 181.0 143.00 13.40 | 195.0 110.00 13.80 | 183.0 183.00 13.40 | 187.0 167.00 13.50 | 201.0 125.00 13.90 | 191.0 191.00 13.60 | 192.0 187.00 13.70 | 204.0 140.00 14.00 |
| 100 | TC SHC kW | 167.0 167.00 13.60 | 177.0 142.00 13.90 | 191.0 108.00 14.30 | 179.0 179.00 14.00 | 183.0 165.00 14.10 | 196.0 124.00 14.50 | 187.0 187.00 14.20 | 188.0 184.00 14.20 | 200.0 138.00 14.60 |
| 105 | TC SHC kW | 164.0 164.00 14.20 | 173.0 140.00 14.40 | 187.0 107.00 14.90 | 175.0 175.00 14.50 | 179.0 163.00 14.60 | 192.0 122.00 15.00 | 183.0 183.00 14.80 | 184.0 182.00 14.80 | 195.0 137.00 15.10 |
| 115 | TC SHC kW | 157.0 157.00 15.30 | 164.0 136.00 15.50 | 177.0 104.00 16.00 | 168.0 168.00 15.60 | 170.0 159.00 15.70 | 182.0 119.00 16.10 | 175.0 175.00 15.90 | 175.0 175.00 15.90 | 185.0 133.00 16.20 |
| 125 | TC SHC kW | 149.0 149.00 16.50 | 155.0 133.00 16.70 | 167.0 100.00 17.10 | 159.0 159.00 16.80 | 160.0 155.00 16.80 | 171.0 116.00 17.20 | 166.0 166.00 17.00 | 166.0 166.00 17.00 | 174.0 130.00 17.30 |

38ARD016/40RM024 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 6,000 | | | 8,000 | | | 10,000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 171.0 167.00 11.30 | 182.0 139.00 11.60 | 196.0 107.00 11.90 | 181.0 181.00 11.60 | 188.0 161.00 11.70 | 202.0 121.00 12.10 | 189.0 189.00 11.80 | 192.0 179.00 11.80 | 205.0 134.00 12.10 |
| 85 | TC SHC kW | 168.0 165.00 11.80 | 179.0 138.00 12.10 | 193.0 106.00 12.40 | 179.0 179.00 12.10 | 185.0 160.00 12.20 | 198.0 120.00 12.60 | 186.0 186.00 12.30 | 189.0 178.00 12.30 | 202.0 133.00 12.70 |
| 95 | TC SHC kW | 162.0 161.00 12.80 | 172.0 135.00 13.10 | 186.0 104.00 13.50 | 173.0 173.00 13.10 | 177.0 157.00 13.30 | 191.0 118.00 13.60 | 180.0 180.00 13.30 | 182.0 174.00 13.40 | 194.0 131.00 13.70 |
| 100 | TC SHC kW | 158.0 158.00 13.40 | 168.0 134.00 13.60 | 182.0 102.00 14.00 | 169.0 169.00 13.70 | 174.0 155.00 13.80 | 187.0 116.00 14.20 | 176.0 176.00 13.90 | 178.0 172.00 13.90 | 190.0 129.00 14.30 |
| 105 | TC SHC kW | 155.0 155.00 13.90 | 164.0 132.00 14.20 | 177.0 101.00 14.60 | 166.0 166.00 14.20 | 169.0 153.00 14.30 | 182.0 115.00 14.70 | 173.0 173.00 14.40 | 174.0 169.00 14.50 | 185.0 128.00 14.80 |
| 115 | TC SHC kW | 149.0 149.00 15.00 | 156.0 129.00 15.30 | 168.0 98.00 15.70 | 158.0 158.00 15.30 | 161.0 149.00 15.40 | 173.0 112.00 15.80 | 165.0 165.00 15.60 | 165.0 164.00 15.60 | 175.0 125.00 15.90 |
| 125 | TC SHC kW | 142.0 142.00 16.20 | 147.0 126.00 16.40 | 159.0 95.00 16.80 | 151.0 151.00 16.50 | 152.0 145.00 16.60 | 163.0 109.00 16.90 | 157.0 157.00 16.70 | 157.0 157.00 16.70 | 166.0 121.00 17.00 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (1000 Btuh) Gross
- TC — Total Capacity (1000 Btuh) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38ARD024/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 191.0 159.00 14.50 | 206.0 134.00 15.00 | 223.0 109.00 15.50 | 201.0 183.00 14.80 | 217.0 153.00 15.30 | 234.0 121.00 15.90 | 209.0 203.00 15.10 | 223.0 169.00 15.50 | 240.0 131.00 16.10 |
| 85 | TC SHC kW | 188.0 157.00 15.10 | 203.0 133.00 15.60 | 220.0 108.00 16.10 | 198.0 181.00 15.40 | 213.0 151.00 15.90 | 230.0 119.00 16.50 | 206.0 201.00 15.70 | 219.0 168.00 16.10 | 236.0 129.00 16.70 |
| 95 | TC SHC kW | 181.0 154.00 16.40 | 196.0 130.00 16.90 | 212.0 105.00 17.50 | 191.0 178.00 16.70 | 205.0 148.00 17.20 | 221.0 116.00 17.80 | 199.0 196.00 17.00 | 211.0 164.00 17.40 | 227.0 126.00 18.00 |
| 100 | TC SHC kW | 178.0 153.00 17.10 | 192.0 128.00 17.60 | 208.0 103.00 18.10 | 187.0 176.00 17.40 | 201.0 146.00 17.90 | 217.0 114.00 18.50 | 195.0 194.00 17.70 | 207.0 163.00 18.10 | 223.0 125.00 18.70 |
| 105 | TC SHC kW | 174.0 151.00 17.80 | 188.0 127.00 18.30 | 204.0 102.00 18.80 | 183.0 174.00 18.10 | 197.0 144.00 18.60 | 212.0 113.00 19.20 | 191.0 190.00 18.40 | 202.0 161.00 18.80 | 218.0 123.00 19.40 |
| 115 | TC SHC kW | 167.0 147.00 19.30 | 180.0 123.00 19.70 | 195.0 98.30 20.30 | 175.0 169.00 19.60 | 188.0 141.00 20.00 | 202.0 109.00 20.60 | 183.0 183.00 19.80 | 193.0 157.00 20.20 | 207.0 119.00 20.80 |
| 125 | TC SHC kW | 159.0 143.00 20.80 | 171.0 119.00 21.20 | 185.0 94.80 21.80 | 167.0 164.00 21.10 | 178.0 137.00 21.50 | 192.0 106.00 22.00 | 175.0 175.00 21.40 | 183.0 153.00 21.70 | 196.0 116.00 22.20 |

38ARD024/40RM016 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 189.0 157.00 14.40 | 204.0 133.00 14.90 | 221.0 108.00 15.40 | 199.0 180.00 14.70 | 215.0 150.00 15.20 | 232.0 119.00 15.80 | 207.0 199.00 15.00 | 221.0 166.00 15.40 | 238.0 129.00 16.00 |
| 85 | TC SHC kW | 185.0 155.00 15.00 | 201.0 131.00 15.50 | 218.0 107.00 16.10 | 196.0 178.00 15.30 | 211.0 148.00 15.90 | 228.0 117.00 16.40 | 203.0 197.00 15.60 | 217.0 164.00 16.10 | 234.0 127.00 16.70 |
| 95 | TC SHC kW | 179.0 152.00 16.30 | 194.0 128.00 16.80 | 210.0 104.00 17.40 | 188.0 174.00 16.60 | 203.0 145.00 17.10 | 219.0 114.00 17.70 | 196.0 192.00 16.90 | 209.0 161.00 17.30 | 225.0 124.00 17.90 |
| 100 | TC SHC kW | 175.0 150.00 17.00 | 190.0 126.00 17.50 | 205.0 102.00 18.00 | 185.0 172.00 17.30 | 199.0 143.00 17.80 | 214.0 113.00 18.40 | 192.0 190.00 17.60 | 204.0 159.00 18.00 | 220.0 122.00 18.60 |
| 105 | TC SHC kW | 172.0 148.00 17.70 | 186.0 124.00 18.20 | 201.0 100.00 18.70 | 181.0 170.00 18.00 | 194.0 142.00 18.50 | 210.0 111.00 19.10 | 188.0 187.00 18.30 | 200.0 157.00 18.70 | 215.0 121.00 19.30 |
| 115 | TC SHC kW | 164.0 145.00 19.20 | 178.0 121.00 19.60 | 192.0 96.80 20.20 | 173.0 166.00 19.50 | 185.0 138.00 19.90 | 200.0 107.00 20.50 | 180.0 180.00 19.70 | 190.0 154.00 20.10 | 205.0 117.00 20.70 |
| 125 | TC SHC kW | 157.0 141.00 20.70 | 169.0 117.00 21.20 | 183.0 93.40 21.70 | 165.0 161.00 21.00 | 176.0 134.00 21.40 | 190.0 104.00 22.00 | 172.0 172.00 21.30 | 181.0 150.00 21.60 | 194.0 113.00 22.10 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38ARD024/40RM024H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 6,000 | | | 8,000 | | | 10,000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 213.0 194.00 15.20 | 229.0 161.00 15.70 | 247.0 127.00 16.30 | 224.0 223.00 15.50 | 237.0 186.00 16.00 | 255.0 143.00 16.60 | 235.0 235.00 15.90 | 243.0 208.00 16.20 | 260.0 157.00 16.80 |
| 85 | TC SHC kW | 209.0 192.00 15.80 | 225.0 160.00 16.30 | 242.0 126.00 16.90 | 220.0 220.00 16.20 | 233.0 184.00 16.60 | 250.0 141.00 17.30 | 231.0 231.00 16.60 | 239.0 207.00 16.80 | 256.0 155.00 17.40 |
| 95 | TC SHC kW | 201.0 188.00 17.10 | 216.0 156.00 17.60 | 233.0 122.00 18.20 | 213.0 213.00 17.50 | 224.0 181.00 17.90 | 241.0 138.00 18.50 | 223.0 223.00 17.90 | 229.0 203.00 18.10 | 245.0 152.00 18.70 |
| 100 | TC SHC kW | 197.0 186.00 17.70 | 211.0 154.00 18.30 | 228.0 121.00 18.90 | 209.0 209.00 18.20 | 219.0 179.00 18.60 | 235.0 136.00 19.20 | 219.0 219.00 18.60 | 224.0 201.00 18.80 | 240.0 150.00 19.40 |
| 105 | TC SHC kW | 193.0 184.00 18.40 | 207.0 152.00 18.90 | 223.0 119.00 19.60 | 205.0 205.00 18.90 | 214.0 177.00 19.20 | 230.0 134.00 19.90 | 215.0 215.00 19.30 | 219.0 198.00 19.40 | 234.0 148.00 20.10 |
| 115 | TC SHC kW | 184.0 179.00 19.90 | 197.0 148.00 20.40 | 212.0 115.00 21.00 | 196.0 196.00 20.30 | 204.0 172.00 20.60 | 219.0 130.00 21.30 | 205.0 205.00 20.70 | 208.0 194.00 20.80 | 223.0 144.00 21.40 |
| 125 | TC SHC kW | 175.0 174.00 21.40 | 186.0 144.00 21.80 | 201.0 111.00 22.40 | 187.0 187.00 21.80 | 193.0 168.00 22.10 | 207.0 126.00 22.70 | 195.0 195.00 22.20 | 197.0 188.00 22.30 | 210.0 141.00 22.80 |

38ARD024/40RM024 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 6,000 | | | 8,000 | | | 10,000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 204.0 186.00 14.90 | 219.0 155.00 15.40 | 237.0 122.00 16.00 | 215.0 212.00 15.20 | 228.0 177.00 15.70 | 245.0 136.00 16.30 | 224.0 224.00 15.60 | 233.0 198.00 15.90 | 250.0 149.00 16.40 |
| 85 | TC SHC kW | 200.0 184.00 15.50 | 216.0 153.00 16.00 | 233.0 121.00 16.60 | 211.0 209.00 15.80 | 224.0 176.00 16.30 | 241.0 135.00 16.90 | 221.0 221.00 16.20 | 229.0 196.00 16.50 | 246.0 148.00 17.10 |
| 95 | TC SHC kW | 193.0 180.00 16.80 | 207.0 150.00 17.30 | 224.0 117.00 17.90 | 203.0 203.00 17.10 | 215.0 172.00 17.60 | 231.0 131.00 18.20 | 213.0 213.00 17.50 | 220.0 192.00 17.70 | 236.0 144.00 18.40 |
| 100 | TC SHC kW | 189.0 178.00 17.50 | 203.0 148.00 18.00 | 219.0 116.00 18.60 | 200.0 200.00 17.80 | 210.0 170.00 18.20 | 226.0 130.00 18.80 | 209.0 209.00 18.20 | 215.0 190.00 18.40 | 231.0 143.00 19.00 |
| 105 | TC SHC kW | 185.0 176.00 18.20 | 198.0 146.00 18.60 | 214.0 114.00 19.20 | 196.0 196.00 18.50 | 205.0 168.00 18.90 | 221.0 128.00 19.50 | 205.0 205.00 18.90 | 210.0 188.00 19.10 | 225.0 141.00 19.70 |
| 115 | TC SHC kW | 177.0 171.00 19.60 | 189.0 143.00 20.10 | 204.0 110.00 20.60 | 188.0 188.00 20.00 | 196.0 164.00 20.30 | 210.0 124.00 20.90 | 196.0 196.00 20.30 | 200.0 183.00 20.50 | 214.0 137.00 21.10 |
| 125 | TC SHC kW | 169.0 166.00 21.10 | 180.0 139.00 21.60 | 194.0 107.00 22.10 | 180.0 180.00 21.60 | 186.0 160.00 21.80 | 199.0 121.00 22.40 | 187.0 187.00 21.90 | 190.0 178.00 22.00 | 203.0 133.00 22.50 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38ARD024/40RM028H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 7,500 | | | 10,000 | | | 12,500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 225.0 220.00 15.60 | 240.0 183.00 16.10 | 258.0 141.00 16.70 | 239.0 239.00 16.10 | 247.0 212.00 16.30 | 265.0 160.00 17.00 | 250.0 250.00 16.40 | 253.0 237.00 16.50 | 270.0 177.00 17.10 |
| 85 | TC SHC kW | 221.0 218.00 16.20 | 235.0 181.00 16.70 | 253.0 139.00 17.30 | 236.0 236.00 16.70 | 243.0 210.00 17.00 | 260.0 158.00 17.60 | 246.0 246.00 17.10 | 249.0 235.00 17.20 | 265.0 176.00 17.80 |
| 95 | TC SHC kW | 213.0 212.00 17.50 | 226.0 177.00 18.00 | 243.0 136.00 18.60 | 227.0 227.00 18.00 | 233.0 206.00 18.30 | 250.0 154.00 18.50 | 237.0 237.00 18.40 | 239.0 230.00 18.90 | 254.0 172.00 19.10 |
| 100 | TC SHC kW | 209.0 209.00 18.20 | 221.0 175.00 18.60 | 238.0 134.00 19.30 | 223.0 223.00 18.70 | 228.0 204.00 18.90 | 244.0 153.00 19.60 | 232.0 232.00 19.10 | 233.0 227.00 19.10 | 248.0 170.00 19.70 |
| 105 | TC SHC kW | 205.0 205.00 18.90 | 216.0 173.00 19.30 | 232.0 132.00 20.00 | 218.0 218.00 19.40 | 223.0 202.00 19.60 | 238.0 151.00 20.20 | 227.0 227.00 19.80 | 228.0 224.00 19.80 | 242.0 168.00 20.40 |
| 115 | TC SHC kW | 196.0 196.00 20.30 | 205.0 169.00 20.70 | 221.0 128.00 21.30 | 209.0 209.00 20.80 | 212.0 197.00 21.00 | 226.0 147.00 21.60 | 217.0 217.00 21.20 | 217.0 217.00 21.20 | 230.0 164.00 21.70 |
| 125 | TC SHC kW | 187.0 187.00 21.80 | 194.0 165.00 22.10 | 209.0 124.00 22.80 | 198.0 198.00 22.30 | 200.0 192.00 22.40 | 213.0 143.00 22.40 | 206.0 206.00 22.70 | 206.0 206.00 22.70 | 216.0 160.00 23.10 |

38ARD024/40RM028 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 7,500 | | | 10,000 | | | 12,500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 215.0 208.00 15.20 | 229.0 173.00 15.70 | 247.0 134.00 16.30 | 227.0 227.00 15.60 | 237.0 199.00 16.00 | 254.0 150.00 16.60 | 237.0 237.00 16.00 | 242.0 221.00 16.20 | 259.0 165.00 16.70 |
| 85 | TC SHC kW | 211.0 206.00 15.90 | 225.0 171.00 16.30 | 243.0 132.00 17.00 | 223.0 223.00 16.30 | 232.0 197.00 16.60 | 250.0 148.00 17.20 | 233.0 233.00 16.60 | 238.0 219.00 16.80 | 254.0 164.00 17.40 |
| 95 | TC SHC kW | 204.0 201.00 17.10 | 217.0 168.00 17.60 | 233.0 129.00 18.20 | 216.0 216.00 17.60 | 223.0 193.00 17.90 | 240.0 145.00 18.50 | 225.0 225.00 17.90 | 228.0 215.00 18.10 | 244.0 160.00 18.70 |
| 100 | TC SHC kW | 200.0 198.00 17.80 | 212.0 166.00 18.30 | 228.0 127.00 18.90 | 212.0 212.00 18.30 | 219.0 191.00 18.50 | 234.0 144.00 19.20 | 221.0 221.00 18.60 | 223.0 212.00 18.70 | 238.0 159.00 19.30 |
| 105 | TC SHC kW | 195.0 195.00 18.50 | 207.0 164.00 19.00 | 223.0 125.00 19.60 | 208.0 208.00 19.00 | 214.0 189.00 19.20 | 229.0 142.00 19.80 | 216.0 216.00 19.30 | 218.0 210.00 19.40 | 233.0 157.00 20.00 |
| 115 | TC SHC kW | 187.0 187.00 20.00 | 197.0 160.00 20.40 | 213.0 122.00 21.00 | 199.0 199.00 20.40 | 203.0 185.00 20.60 | 218.0 138.00 21.20 | 207.0 207.00 20.80 | 208.0 204.00 20.80 | 221.0 153.00 21.40 |
| 125 | TC SHC kW | 179.0 179.00 21.50 | 187.0 156.00 21.80 | 201.0 118.00 22.40 | 190.0 190.00 22.00 | 193.0 180.00 22.10 | 206.0 134.00 22.60 | 197.0 197.00 22.30 | 197.0 196.00 22.30 | 209.0 149.00 22.80 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38AKS014/40RM012H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | | 3000 | | | 4000 | | | 5000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 117.0 102.00 7.50 | 128.0 86.00 7.61 | 140.0 69.70 7.76 | 124.0 118.00 7.57 | 134.0 98.80 7.69 | 146.0 77.60 7.84 | 130.0 130.00 7.65 | 139.0 110.00 7.74 | 151.0 84.90 7.88 |
| 85 | TC SHC kW | 114.0 101.00 7.89 | 125.0 84.90 8.03 | 137.0 68.60 8.19 | 121.0 117.00 7.99 | 131.0 97.60 8.11 | 143.0 76.40 8.28 | 128.0 128.00 8.06 | 135.0 109.00 8.18 | 147.0 83.70 8.34 |
| 95 | TC SHC kW | 109.0 98.00 8.68 | 119.0 82.60 8.84 | 131.0 66.30 9.06 | 116.0 114.00 8.79 | 125.0 95.20 8.96 | 137.0 74.10 9.18 | 123.0 123.00 8.90 | 129.0 107.00 9.03 | 140.0 81.40 9.25 |
| 100 | TC SHC kW | 106.0 96.80 9.06 | 116.0 81.40 9.24 | 128.0 65.20 9.49 | 114.0 112.00 9.19 | 122.0 94.00 9.37 | 133.0 73.00 9.61 | 120.0 120.00 9.33 | 126.0 105.00 9.45 | 137.0 80.20 9.69 |
| 105 | TC SHC kW | 104.0 95.50 9.43 | 114.0 80.20 9.64 | 125.0 64.10 9.91 | 111.0 110.00 9.59 | 119.0 92.70 9.78 | 130.0 71.80 10.10 | 117.0 117.00 9.74 | 123.0 104.00 9.86 | 134.0 79.10 10.10 |
| 115 | TC SHC kW | 98.7 92.80 10.20 | 108.0 77.80 10.40 | 118.0 61.80 10.80 | 106.0 106.00 10.40 | 113.0 90.20 10.60 | 123.0 69.50 10.90 | 112.0 112.00 10.60 | 116.0 101.00 10.70 | 127.0 76.70 11.00 |
| 125 | TC SHC kW | 93.5 90.20 10.90 | 102.0 75.50 11.20 | 112.0 59.50 11.60 | 101.0 101.00 11.20 | 107.0 87.70 11.40 | 117.0 67.10 11.80 | 107.0 107.00 11.40 | 110.0 98.70 11.50 | 120.0 74.40 11.90 |

38AKS014/40RM012 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|
| | | 3000 | | | 4000 | | | 5000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 111.0 97.60 7.46 | 122.0 82.40 7.55 | 133.0 66.70 7.68 | 118.0 113.00 7.52 | 128.0 94.30 7.62 | 140.0 74.00 7.76 | 124.0 123.00 7.57 | 132.0 105.00 7.67 | 144.0 80.70 7.80 |
| 85 | TC SHC kW | 109.0 96.40 7.83 | 119.0 81.40 7.95 | 131.0 65.60 8.11 | 116.0 111.00 7.91 | 125.0 93.30 8.04 | 137.0 73.00 8.19 | 121.0 121.00 7.99 | 129.0 104.00 8.09 | 140.0 79.70 8.25 |
| 95 | TC SHC kW | 104.0 94.00 8.59 | 114.0 79.20 8.76 | 125.0 63.60 8.95 | 111.0 108.00 8.70 | 120.0 91.00 8.85 | 131.0 70.80 9.05 | 117.0 117.00 8.80 | 123.0 102.00 8.92 | 134.0 77.50 9.13 |
| 100 | TC SHC kW | 102.0 92.80 8.96 | 112.0 78.10 9.15 | 122.0 62.50 9.37 | 108.0 107.00 9.09 | 117.0 89.90 9.26 | 128.0 69.80 9.49 | 114.0 114.00 9.21 | 120.0 100.00 9.33 | 131.0 76.40 9.56 |
| 105 | TC SHC kW | 99.5 91.60 9.33 | 109.0 77.00 9.55 | 119.0 61.50 9.79 | 106.0 105.00 9.48 | 114.0 88.80 9.67 | 125.0 68.70 9.92 | 112.0 112.00 9.62 | 117.0 99.20 9.74 | 128.0 75.40 10.00 |
| 115 | TC SHC kW | 94.7 89.10 10.10 | 103.0 74.80 10.30 | 114.0 59.40 10.60 | 101.0 101.00 10.30 | 108.0 86.00 10.50 | 118.0 66.50 10.80 | 107.0 107.00 10.40 | 111.0 96.60 10.50 | 121.0 73.20 10.80 |
| 125 | TC SHC kW | 89.9 86.50 10.80 | 98.0 72.60 11.10 | 108.0 57.20 11.40 | 96.3 96.30 11.00 | 102.0 84.00 11.20 | 112.0 64.40 11.60 | 102.0 102.00 11.20 | 105.0 94.10 11.40 | 115.0 71.00 11.70 |

LEGEND

- Edb** — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AKS014/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | |
|--|--------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | 3750 | | | 5000 | | | 6250 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 124.0 116.00 7.57 | 135.0 96.70 7.70 | 147.0 76.50 7.84 | 132.0 132.00 7.67 | 141.0 112.00 7.77 | 153.0 85.80 7.91 | 139.0 139.00 7.75 | 145.0 125.00 7.81 | 156.0 94.40 7.95 |
| 85 | TC SHC kW | 122.0 114.00 7.98 | 132.0 95.50 8.12 | 144.0 75.40 8.30 | 130.0 130.00 8.09 | 138.0 110.00 8.20 | 149.0 84.60 8.37 | 137.0 137.00 8.19 | 141.0 124.00 8.26 | 153.0 93.30 8.42 |
| 95 | TC SHC kW | 116.0 111.00 8.79 | 126.0 93.10 8.97 | 138.0 73.10 9.19 | 125.0 125.00 8.94 | 131.0 108.00 9.07 | 143.0 82.30 9.29 | 131.0 131.00 9.07 | 135.0 121.00 9.14 | 146.0 90.90 9.34 |
| 100 | TC SHC kW | 114.0 110.00 9.18 | 123.0 91.90 9.38 | 134.0 72.00 9.64 | 122.0 122.00 9.36 | 128.0 107.00 9.50 | 139.0 81.20 9.74 | 129.0 129.00 9.51 | 132.0 119.00 9.57 | 142.0 89.80 9.81 |
| 105 | TC SHC kW | 111.0 108.00 9.58 | 120.0 90.70 9.80 | 131.0 70.90 10.10 | 119.0 119.00 9.79 | 125.0 105.00 9.93 | 136.0 80.10 10.20 | 126.0 126.00 9.94 | 128.0 118.00 10.00 | 139.0 88.60 10.30 |
| 115 | TC SHC kW | 106.0 105.00 10.40 | 114.0 88.30 10.60 | 125.0 68.60 11.00 | 114.0 114.00 10.60 | 119.0 103.00 10.80 | 129.0 77.70 11.10 | 120.0 120.00 10.80 | 122.0 115.00 10.90 | 131.0 86.20 11.20 |
| 125 | TC SHC kW | 100.0 100.00 11.20 | 108.0 85.90 11.50 | 118.0 66.30 11.80 | 109.0 109.00 11.50 | 112.0 100.00 11.60 | 122.0 75.30 11.90 | 114.0 114.00 11.70 | 115.0 112.00 11.70 | 124.0 83.90 12.00 |

38AKS014/40RM014 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | |
|--|--------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | 3750 | | | 5000 | | | 6250 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 120.0 111.00 7.53 | 131.0 92.90 7.65 | 142.0 73.70 7.79 | 127.0 126.00 7.61 | 136.0 107.00 7.72 | 148.0 82.30 7.86 | 134.0 134.00 7.68 | 140.0 119.00 7.76 | 152.0 90.10 7.90 |
| 85 | TC SHC kW | 117.0 109.00 7.93 | 128.0 91.70 8.07 | 139.0 72.60 8.23 | 125.0 124.00 8.02 | 133.0 105.00 8.14 | 145.0 81.10 8.31 | 131.0 131.00 8.12 | 137.0 118.00 8.19 | 148.0 88.90 8.36 |
| 95 | TC SHC kW | 112.0 107.00 8.71 | 122.0 89.40 8.89 | 133.0 70.40 9.11 | 119.0 119.00 8.85 | 127.0 103.00 8.99 | 138.0 78.80 9.21 | 126.0 126.00 8.97 | 130.0 115.00 9.05 | 142.0 86.60 9.27 |
| 100 | TC SHC kW | 109.0 105.00 9.10 | 119.0 88.20 9.30 | 130.0 69.30 9.54 | 117.0 117.00 9.26 | 124.0 102.00 9.40 | 135.0 77.80 9.65 | 123.0 123.00 9.40 | 127.0 113.00 9.48 | 138.0 85.50 9.72 |
| 105 | TC SHC kW | 107.0 104.00 9.49 | 116.0 87.00 9.71 | 127.0 68.20 9.98 | 115.0 115.00 9.67 | 121.0 100.00 9.82 | 132.0 76.50 10.10 | 121.0 121.00 9.82 | 124.0 112.00 9.90 | 135.0 84.30 10.20 |
| 115 | TC SHC kW | 102.0 100.00 10.30 | 110.0 84.60 10.50 | 121.0 65.90 10.80 | 109.0 109.00 10.50 | 114.0 97.90 10.60 | 125.0 74.30 11.00 | 115.0 115.00 10.70 | 118.0 109.00 10.70 | 127.0 82.00 11.00 |
| 125 | TC SHC kW | 96.4 96.40 11.00 | 104.0 82.30 11.30 | 114.0 63.60 11.70 | 104.0 104.00 11.30 | 108.0 95.20 11.40 | 118.0 72.10 11.80 | 110.0 110.00 11.50 | 111.0 106.00 11.60 | 120.0 79.60 11.90 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38AKS014/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 130.0 127.00 7.64 | 140.0 106.00 7.76 | 152.0 82.60 7.90 | 139.0 123.00 7.75 | 145.0 93.20 7.82 | 157.0 146.00 7.95 | 146.0 146.00 7.83 | 149.0 137.00 7.86 | 160.0 103.00 7.99 |
| 85 | TC SHC kW | 127.0 125.00 8.06 | 136.0 105.00 8.19 | 148.0 81.40 8.36 | 136.0 136.00 8.19 | 142.0 122.00 8.26 | 153.0 92.00 8.42 | 143.0 143.00 8.29 | 145.0 136.00 8.32 | 156.0 102.00 8.46 |
| 95 | TC SHC kW | 122.0 122.00 8.89 | 130.0 103.00 9.05 | 142.0 79.10 9.27 | 131.0 131.00 9.07 | 135.0 119.00 9.15 | 146.0 89.70 9.35 | 137.0 137.00 9.19 | 139.0 133.00 9.22 | 149.0 99.50 9.40 |
| 100 | TC SHC kW | 119.0 119.00 9.31 | 127.0 101.00 9.47 | 139.0 78.00 9.72 | 128.0 128.00 9.51 | 132.0 118.00 9.58 | 143.0 88.50 9.81 | 134.0 134.00 9.64 | 136.0 131.00 9.66 | 145.0 98.40 9.87 |
| 105 | TC SHC kW | 117.0 117.00 9.73 | 124.0 100.00 9.90 | 135.0 76.80 10.20 | 126.0 126.00 9.94 | 129.0 116.00 10.00 | 139.0 87.40 10.30 | 132.0 132.00 10.10 | 132.0 129.00 10.10 | 142.0 97.20 10.30 |
| 115 | TC SHC kW | 112.0 112.00 10.60 | 118.0 97.60 10.70 | 128.0 74.50 11.10 | 120.0 120.00 10.80 | 122.0 113.00 10.90 | 132.0 85.00 11.20 | 125.0 125.00 11.00 | 126.0 125.00 11.00 | 134.0 94.80 11.20 |
| 125 | TC SHC kW | 107.0 107.00 11.40 | 111.0 95.00 11.60 | 121.0 72.10 11.90 | 114.0 114.00 11.70 | 116.0 110.00 11.70 | 125.0 82.70 12.10 | 119.0 119.00 11.90 | 119.0 119.00 11.80 | 127.0 92.50 12.10 |

38AKS014/40RM016 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 128.0 125.00 7.62 | 138.0 105.00 7.74 | 151.0 81.40 7.88 | 137.0 137.00 7.73 | 144.0 121.00 7.81 | 156.0 91.60 7.94 | 144.0 144.00 7.81 | 147.0 135.00 7.85 | 159.0 101.00 7.98 |
| 85 | TC SHC kW | 125.0 123.00 8.03 | 135.0 103.00 8.17 | 147.0 80.20 8.34 | 134.0 134.00 8.16 | 140.0 119.00 8.24 | 152.0 90.40 8.41 | 141.0 141.00 8.26 | 144.0 133.00 8.30 | 155.0 99.80 8.45 |
| 95 | TC SHC kW | 120.0 119.00 8.85 | 129.0 101.00 9.02 | 141.0 77.80 9.24 | 129.0 129.00 9.02 | 134.0 117.00 9.11 | 145.0 88.00 9.33 | 135.0 135.00 9.15 | 137.0 130.00 9.19 | 148.0 97.40 9.38 |
| 100 | TC SHC kW | 117.0 117.00 9.27 | 126.0 99.50 9.44 | 137.0 76.60 9.69 | 126.0 126.00 9.46 | 130.0 115.00 9.54 | 141.0 86.90 9.79 | 132.0 132.00 9.60 | 134.0 128.00 9.62 | 144.0 96.20 9.85 |
| 105 | TC SHC kW | 115.0 115.00 9.68 | 122.0 98.20 9.86 | 134.0 75.50 10.10 | 124.0 124.00 9.89 | 127.0 114.00 9.98 | 138.0 85.60 10.20 | 129.0 129.00 10.00 | 131.0 126.00 10.10 | 140.0 95.00 10.30 |
| 115 | TC SHC kW | 110.0 110.00 10.50 | 116.0 95.70 10.70 | 127.0 73.10 11.00 | 118.0 118.00 10.70 | 120.0 111.00 10.80 | 130.0 83.20 11.10 | 123.0 123.00 10.90 | 124.0 122.00 10.90 | 133.0 92.50 11.20 |
| 125 | TC SHC kW | 105.0 105.00 11.30 | 109.0 93.10 11.50 | 120.0 70.70 11.90 | 112.0 112.00 11.60 | 114.0 108.00 11.70 | 123.0 80.80 12.00 | 117.0 117.00 11.80 | 117.0 117.00 11.80 | 125.0 90.10 12.10 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AKS016/40RM014H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 3750 | | | 5000 | | | 6250 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 154.0 132.00 11.10 | 168.0 111.00 11.50 | 183.0 90.30 11.80 | 163.0 153.00 11.30 | 176.0 127.00 11.70 | 191.0 100.00 12.10 | 171.0 169.00 11.50 | 182.0 142.00 11.80 | 197.0 109.00 12.20 |
| 85 | TC SHC kW | 151.0 130.00 11.60 | 165.0 110.00 12.00 | 179.0 89.00 12.40 | 160.0 151.00 11.90 | 173.0 126.00 12.30 | 188.0 98.90 12.70 | 168.0 167.00 12.10 | 178.0 141.00 12.40 | 193.0 108.00 12.80 |
| 95 | TC SHC kW | 145.0 127.00 12.60 | 158.0 107.00 13.10 | 172.0 86.30 13.60 | 154.0 148.00 13.00 | 166.0 123.00 13.40 | 180.0 96.20 13.90 | 161.0 161.00 13.20 | 171.0 138.00 13.50 | 185.0 105.00 14.00 |
| 100 | TC SHC kW | 142.0 126.00 13.10 | 155.0 106.00 13.70 | 169.0 84.90 14.20 | 151.0 146.00 13.50 | 162.0 122.00 13.90 | 176.0 94.80 14.50 | 158.0 158.00 13.80 | 167.0 136.00 14.10 | 181.0 104.00 14.60 |
| 105 | TC SHC kW | 139.0 124.00 13.70 | 151.0 104.00 14.20 | 165.0 83.60 14.80 | 147.0 144.00 14.00 | 159.0 120.00 14.50 | 172.0 93.40 15.00 | 155.0 155.00 14.30 | 163.0 135.00 14.70 | 177.0 102.00 15.20 |
| 115 | TC SHC kW | 133.0 121.00 14.70 | 145.0 101.00 15.30 | 158.0 80.90 15.90 | 141.0 140.00 15.10 | 151.0 117.00 15.60 | 164.0 90.60 16.20 | 149.0 149.00 15.50 | 156.0 131.00 15.80 | 168.0 99.60 16.40 |
| 125 | TC SHC kW | 127.0 118.0 15.60 | 138.0 98.60 16.30 | 150.0 78.10 17.00 | 135.0 135.00 16.10 | 144.0 114.00 16.70 | 156.0 87.80 17.40 | 143.0 143.00 16.60 | 148.0 128.00 16.90 | 160.0 96.80 17.60 |

38AKS016/40RM014 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|
| | | 3750 | | | 5000 | | | 6250 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 145.0 124.00 10.90 | 159.0 105.00 11.20 | 173.0 85.40 11.60 | 154.0 143.00 11.10 | 167.0 119.00 11.40 | 181.0 94.20 11.80 | 161.0 157.00 11.30 | 172.0 132.00 11.60 | 187.0 102.00 11.90 |
| 85 | TC SHC kW | 143.0 122.00 11.40 | 156.0 104.00 11.80 | 170.0 84.10 12.20 | 151.0 141.00 11.60 | 164.0 118.00 12.00 | 178.0 93.00 12.40 | 158.0 155.00 11.80 | 169.0 131.00 12.10 | 183.0 101.00 12.50 |
| 95 | TC SHC kW | 137.0 120.00 12.40 | 150.0 101.00 12.80 | 163.0 81.50 13.30 | 145.0 138.00 12.60 | 157.0 115.00 13.10 | 171.0 90.30 13.50 | 151.0 151.00 12.90 | 162.0 128.00 13.20 | 175.0 98.30 13.70 |
| 100 | TC SHC kW | 134.0 118.00 12.80 | 147.0 99.60 13.30 | 160.0 80.30 13.80 | 142.0 136.00 13.20 | 154.0 114.00 13.60 | 167.0 89.00 14.10 | 148.0 148.00 13.40 | 158.0 127.00 13.80 | 172.0 96.90 14.30 |
| 105 | TC SHC kW | 131.0 117.00 13.30 | 143.0 98.30 13.80 | 156.0 78.90 14.40 | 139.0 134.00 13.70 | 150.0 112.00 14.10 | 163.0 87.60 14.70 | 145.0 145.00 13.90 | 155.0 125.00 14.30 | 168.0 95.50 14.90 |
| 115 | TC SHC kW | 125.0 114.00 14.30 | 137.0 95.60 14.90 | 149.0 76.40 15.50 | 133.0 130.00 14.70 | 143.0 110.00 15.20 | 156.0 85.00 15.80 | 140.0 140.00 15.00 | 147.0 122.00 15.40 | 160.0 92.80 16.00 |
| 125 | TC SHC kW | 120.0 111.00 15.30 | 130.0 92.90 15.90 | 143.0 73.80 16.60 | 127.0 127.00 15.70 | 136.0 107.00 16.20 | 148.0 82.30 16.90 | 134.0 134.00 16.10 | 140.0 119.00 16.40 | 152.0 90.10 17.10 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38AKS016/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 159.0 143.00 11.02 | 172.0 120.00 11.60 | 187.0 95.40 11.90 | 168.0 164.00 11.50 | 180.0 137.00 11.80 | 194.0 106.00 12.10 | 176.0 176.00 11.70 | 184.0 153.00 11.90 | 199.0 116.00 12.20 |
| 85 | TC SHC kW | 156.0 141.00 11.70 | 169.0 118.00 12.10 | 183.0 94.00 12.50 | 165.0 162.00 12.00 | 176.0 136.00 12.30 | 191.0 105.00 12.80 | 173.0 173.00 12.20 | 181.0 152.00 12.50 | 195.0 115.00 12.90 |
| 95 | TC SHC kW | 149.0 138.00 12.80 | 162.0 115.00 13.20 | 176.0 91.40 13.70 | 158.0 158.00 13.10 | 169.0 133.00 13.50 | 183.0 102.00 14.00 | 167.0 167.00 13.40 | 173.0 149.00 13.60 | 187.0 112.00 14.10 |
| 100 | TC SHC kW | 146.0 137.00 13.30 | 159.0 114.00 13.80 | 172.0 90.00 14.30 | 155.0 155.00 13.70 | 165.0 131.00 14.00 | 179.0 101.00 14.60 | 164.0 164.00 14.00 | 169.0 147.00 14.20 | 183.0 111.00 14.70 |
| 105 | TC SHC kW | 143.0 135.00 13.80 | 155.0 113.00 14.30 | 169.0 88.60 14.90 | 152.0 152.00 14.20 | 161.0 130.00 14.60 | 175.0 99.40 15.20 | 160.0 160.00 14.60 | 166.0 145.00 14.80 | 179.0 109.00 15.30 |
| 115 | TC SHC kW | 137.0 131.00 14.90 | 148.0 110.00 15.40 | 161.0 85.90 16.10 | 146.0 146.00 15.30 | 154.0 127.00 15.70 | 167.0 96.60 16.30 | 154.0 154.00 15.70 | 158.0 142.00 15.90 | 170.0 106.00 16.50 |
| 125 | TC SHC kW | 131.0 128.00 15.90 | 141.0 107.00 16.50 | 153.0 83.20 17.20 | 140.0 140.00 16.40 | 146.0 124.00 16.80 | 158.0 93.70 17.50 | 147.0 147.00 16.90 | 150.0 139.00 17.00 | 162.0 104.00 17.70 |

38AKS016/40RM016 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 157.0 140.00 11.20 | 170.0 118.00 11.50 | 185.0 94.00 11.90 | 165.0 161.00 11.40 | 178.0 135.00 11.70 | 193.0 104.00 12.10 | 173.0 173.00 11.60 | 183.0 150.00 11.80 | 198.0 114.00 12.20 |
| 85 | TC SHC kW | 153.0 139.00 11.70 | 167.0 116.00 12.10 | 181.0 92.70 12.50 | 162.0 159.00 11.90 | 174.0 133.00 12.30 | 189.0 103.00 12.70 | 170.0 170.00 12.20 | 179.0 148.00 12.40 | 194.0 113.00 12.80 |
| 95 | TC SHC kW | 147.0 136.00 12.70 | 160.0 113.00 13.20 | 174.0 89.90 13.70 | 156.0 155.00 13.00 | 167.0 130.00 13.04 | 181.0 100.00 13.90 | 164.0 164.00 13.30 | 171.0 145.00 13.60 | 185.0 110.00 14.00 |
| 100 | TC SHC kW | 144.0 134.00 13.20 | 157.0 112.00 13.70 | 170.0 88.60 14.20 | 153.0 152.00 13.60 | 163.0 129.00 14.00 | 177.0 98.90 14.50 | 161.0 161.00 14.50 | 167.0 144.00 14.10 | 181.0 108.00 14.70 |
| 105 | TC SHC kW | 141.0 132.00 13.70 | 153.0 110.00 14.20 | 167.0 87.20 14.80 | 150.0 150.00 14.10 | 159.0 127.00 14.50 | 173.0 97.50 15.10 | 158.0 158.00 14.40 | 163.0 142.00 14.70 | 177.0 107.00 15.20 |
| 115 | TC SHC kW | 135.0 129.00 14.07 | 146.0 108.00 15.30 | 159.0 84.40 15.90 | 144.0 144.00 15.20 | 152.0 124.00 15.60 | 165.0 94.60 16.20 | 151.0 151.00 15.60 | 156.0 139.00 15.80 | 168.0 104.00 16.40 |
| 125 | TC SHC kW | 128.0 125.00 15.70 | 139.0 105.00 16.40 | 151.0 81.60 17.10 | 137.0 137.00 16.30 | 144.0 121.00 16.70 | 156.0 91.80 17.40 | 145.0 145.00 16.70 | 148.0 135.00 16.90 | 160.0 101.00 17.60 |

LEGEND

- Edb — Entering Dry Bulb
- Ewb — Entering Wet Bulb
- kW — Compressor Motor Power Input
- SHC — Sensible Heat Capacity (1000 Btuh) Gross
- TC — Total Capacity (1000 Btuh) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AKS016/40RM024H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 6,000 | | | 8,000 | | | 10,000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 179.0 176.00 11.70 | 191.0 146.00 12.00 | 207.0 113.00 12.40 | 191.0 191.00 12.00 | 198.0 170.00 12.20 | 214.0 128.00 12.50 | 201.0 201.00 12.20 | 203.0 191.00 12.30 | 217.0 143.00 12.60 |
| 85 | TC SHC kW | 175.0 174.00 12.30 | 187.0 145.00 12.60 | 203.0 112.00 13.00 | 188.0 188.00 12.60 | 194.0 169.00 12.80 | 209.0 127.00 13.20 | 197.0 197.00 12.90 | 199.0 189.00 12.90 | 213.0 141.00 13.30 |
| 95 | TC SHC kW | 168.0 168.00 13.40 | 179.0 142.00 13.80 | 194.0 109.00 14.30 | 181.0 181.00 13.80 | 186.0 165.00 14.00 | 200.0 124.00 14.50 | 189.0 189.00 14.10 | 191.0 184.00 14.20 | 203.0 138.00 14.60 |
| 100 | TC SHC kW | 165.0 165.00 14.00 | 175.0 140.00 14.40 | 190.0 107.00 14.90 | 177.0 177.00 14.50 | 181.0 163.00 14.60 | 195.0 122.00 15.10 | 185.0 185.00 14.80 | 186.0 182.00 14.80 | 198.0 137.00 15.20 |
| 105 | TC SHC kW | 162.0 162.00 14.60 | 171.0 138.00 15.00 | 185.0 106.00 15.50 | 174.0 174.00 15.10 | 177.0 162.00 15.20 | 190.0 121.00 15.70 | 181.0 181.00 15.40 | 182.0 179.00 15.40 | 194.0 135.00 15.90 |
| 115 | TC SHC kW | 155.0 155.00 15.70 | 163.0 135.00 16.10 | 176.0 103.00 16.70 | 166.0 166.00 16.30 | 169.0 158.00 16.40 | 181.0 118.00 17.00 | 173.0 173.00 16.60 | 174.0 173.00 16.60 | 184.0 132.00 17.10 |
| 125 | TC SHC kW | 149.0 149.00 16.90 | 154.0 132.00 17.20 | 167.0 99.70 18.00 | 159.0 159.00 17.50 | 160.0 154.00 17.60 | 172.0 115.00 18.20 | 165.0 165.00 17.80 | 165.0 165.00 17.80 | 174.0 129.00 18.30 |

38AKS016/40RM024 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | TC SHC kW | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 6,000 | | | 8,000 | | | 10,000 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 170.0 166.00 11.50 | 182.0 139.00 11.80 | 197.0 108.00 12.20 | 181.0 181.00 11.80 | 188.0 161.00 12.00 | 203.0 121.00 12.30 | 190.0 190.00 12.00 | 193.0 179.00 12.10 | 207.0 134.00 12.40 |
| 85 | TC SHC kW | 166.0 164.00 12.10 | 178.0 138.00 12.40 | 193.0 106.00 12.80 | 178.0 178.00 12.40 | 184.0 159.00 12.60 | 199.0 120.00 13.00 | 186.0 186.00 12.60 | 189.0 177.00 12.70 | 202.0 132.00 13.10 |
| 95 | TC SHC kW | 160.0 159.00 13.20 | 170.0 134.00 13.50 | 185.0 103.00 14.00 | 171.0 171.00 13.60 | 176.0 155.00 13.70 | 190.0 117.00 14.20 | 179.0 179.00 13.80 | 181.0 173.00 13.90 | 193.0 130.00 14.30 |
| 100 | TC SHC kW | 157.0 157.00 13.70 | 166.0 133.00 14.10 | 181.0 102.00 14.60 | 168.0 168.00 14.10 | 172.0 154.00 14.30 | 186.0 116.00 14.80 | 175.0 175.00 14.40 | 177.0 170.00 14.50 | 189.0 128.00 14.90 |
| 105 | TC SHC kW | 154.0 154.00 14.30 | 163.0 131.00 14.60 | 176.0 100.00 15.20 | 164.0 164.00 14.70 | 168.0 152.00 14.90 | 181.0 114.00 15.40 | 171.0 171.00 15.00 | 173.0 168.00 15.10 | 184.0 127.00 15.50 |
| 115 | TC SHC kW | 147.0 147.00 15.40 | 155.0 128.00 15.70 | 168.0 97.50 16.40 | 157.0 157.00 15.90 | 160.0 148.00 16.00 | 172.0 111.00 16.60 | 164.0 164.00 16.20 | 165.0 163.00 16.20 | 175.0 124.00 16.70 |
| 125 | TC SHC kW | 141.0 141.00 16.50 | 147.0 125.00 16.80 | 159.0 94.60 17.50 | 150.0 150.00 17.00 | 152.0 144.00 17.10 | 163.0 108.00 17.80 | 157.0 157.00 17.40 | 156.0 156.00 17.40 | 166.0 121.00 17.90 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38AKS024/40RM016H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 186.0 156.00 14.70 | 202.0 133.00 15.30 | 220.0 108.00 15.90 | 197.0 180.00 15.10 | 213.0 151.00 15.70 | 231.0 120.00 16.30 | 205.0 200.00 15.40 | 220.0 167.00 15.90 | 238.0 130.00 16.60 |
| 85 | TC SHC kW | 182.0 154.00 15.30 | 198.0 131.00 16.00 | 216.0 106.00 16.60 | 193.0 178.00 15.80 | 209.0 149.00 16.40 | 227.0 118.00 17.00 | 201.0 198.00 16.10 | 215.0 166.00 16.60 | 233.0 128.00 17.30 |
| 95 | TC SHC kW | 174.0 151.00 16.50 | 190.0 127.00 17.20 | 207.0 103.00 17.90 | 185.0 174.00 17.00 | 200.0 145.00 17.60 | 217.0 114.00 18.40 | 193.0 192.00 17.30 | 206.0 162.00 17.90 | 223.0 124.00 18.70 |
| 100 | TC SHC kW | 170.0 149.00 17.10 | 186.0 125.00 17.80 | 202.0 101.00 18.60 | 181.0 172.00 17.60 | 195.0 143.00 18.30 | 212.0 112.00 19.10 | 189.0 188.00 18.00 | 201.0 160.00 18.60 | 218.0 123.00 19.30 |
| 105 | TC SHC kW | 167.0 147.00 17.60 | 182.0 124.00 18.40 | 198.0 99.40 19.30 | 176.0 170.00 18.20 | 190.0 142.00 18.90 | 207.0 111.00 19.70 | 185.0 185.00 18.60 | 196.0 158.00 19.20 | 212.0 121.00 20.00 |
| 115 | TC SHC kW | 159.0 143.00 18.80 | 173.0 120.00 19.60 | 188.0 95.90 20.60 | 168.0 165.00 19.40 | 181.0 138.00 20.10 | 196.0 107.00 21.00 | 177.0 177.00 19.90 | 186.0 154.00 20.40 | 202.0 117.00 21.30 |
| 125 | TC SHC kW | 151.0 139.00 19.90 | 164.0 116.00 20.90 | 179.0 92.40 21.90 | 160.0 160.00 20.60 | 171.0 134.00 21.40 | 186.0 103.00 22.40 | 169.0 169.00 21.20 | 176.0 150.00 21.70 | 191.0 113.00 22.70 |

38AKS024/40RM016 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 4500 | | | 6000 | | | 7500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 183.0 154.00 14.70 | 200.0 130.00 15.30 | 218.0 107.00 15.90 | 194.0 177.00 15.10 | 211.0 148.00 15.60 | 229.0 118.00 16.30 | 203.0 196.00 15.30 | 218.0 164.00 15.90 | 236.0 128.00 16.50 |
| 85 | TC SHC kW | 179.0 152.00 15.20 | 196.0 129.00 15.90 | 214.0 105.00 16.50 | 190.0 175.00 15.70 | 206.0 146.00 16.30 | 224.0 116.00 16.90 | 198.0 193.00 16.00 | 213.0 162.00 16.50 | 231.0 126.00 17.20 |
| 95 | TC SHC kW | 172.0 148.00 16.40 | 188.0 125.00 17.10 | 205.0 101.00 17.80 | 182.0 170.00 16.90 | 197.0 142.00 17.50 | 214.0 112.00 18.30 | 190.0 188.00 17.20 | 203.0 158.00 17.80 | 221.0 122.00 18.60 |
| 100 | TC SHC kW | 168.0 146.00 16.90 | 183.0 123.00 17.70 | 200.0 99.70 18.50 | 178.0 168.00 17.50 | 193.0 140.00 18.20 | 209.0 110.00 19.00 | 186.0 185.00 17.80 | 198.0 156.00 18.40 | 215.0 120.00 19.20 |
| 105 | TC SHC kW | 164.0 144.00 17.50 | 179.0 121.00 18.30 | 195.0 97.90 19.10 | 174.0 166.00 18.00 | 188.0 139.00 18.80 | 204.0 109.00 19.60 | 182.0 181.00 18.40 | 193.0 154.00 19.10 | 210.0 118.00 19.90 |
| 115 | TC SHC kW | 156.0 140.00 18.60 | 170.0 118.00 19.50 | 186.0 94.30 20.40 | 165.0 161.00 19.20 | 178.0 135.00 20.00 | 194.0 105.00 20.90 | 173.0 173.00 19.70 | 183.0 150.00 20.30 | 199.0 115.00 21.20 |
| 125 | TC SHC kW | 148.0 136.00 19.80 | 162.0 114.00 20.70 | 176.0 90.70 21.70 | 157.0 156.00 20.30 | 169.0 131.00 21.20 | 184.0 101.00 22.20 | 165.0 165.00 20.90 | 173.0 146.00 21.50 | 188.0 111.00 22.50 |

LEGEND

- Edb** — Entering Dry Bulb
- Ewb** — Entering Wet Bulb
- kW** — Compressor Motor Power Input
- SHC** — Sensible Heat Capacity (1000 Btuh) Gross
- TC** — Total Capacity (1000 Btuh) Gross

38ARD,AKS014-024

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AKS024/40RM024H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 6,000 | | | 8,000 | | | 10,000 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 210.0 193.00 15.60 | 228.0 161.00 16.20 | 247.0 128.00 16.90 | 223.0 222.00 16.00 | 237.0 186.00 16.50 | 256.0 143.00 17.20 | 235.0 235.00 16.50 | 244.0 209.00 16.80 | 262.0 157.00 17.40 |
| 85 | TC SHC kW | 206.0 191.00 16.20 | 223.0 159.00 16.90 | 242.0 126.00 17.60 | 218.0 218.00 16.70 | 232.0 184.00 17.20 | 251.0 141.00 17.90 | 230.0 230.00 17.20 | 238.0 207.00 17.50 | 256.0 155.00 18.10 |
| 95 | TC SHC kW | 197.0 186.00 17.50 | 212.0 155.00 18.20 | 231.0 122.00 19.00 | 210.0 210.00 18.10 | 221.0 180.00 18.60 | 239.0 137.00 19.30 | 221.0 221.00 18.60 | 227.0 202.00 18.80 | 244.0 151.00 19.60 |
| 100 | TC SHC kW | 192.0 184.00 18.10 | 207.0 153.00 18.90 | 225.0 120.00 19.70 | 205.0 205.00 18.80 | 216.0 177.00 19.30 | 233.0 135.00 20.10 | 216.0 216.00 19.30 | 221.0 199.00 19.05 | 238.0 149.00 20.30 |
| 105 | TC SHC kW | 188.0 181.00 18.70 | 202.0 151.00 19.50 | 220.0 118.00 20.40 | 201.0 201.00 19.40 | 210.0 175.00 19.90 | 227.0 133.00 20.70 | 211.0 211.00 20.00 | 216.0 197.00 20.20 | 232.0 147.00 21.00 |
| 115 | TC SHC kW | 179.0 176.00 20.00 | 192.0 147.00 20.80 | 208.0 114.00 21.70 | 192.0 192.00 20.80 | 199.0 171.00 21.20 | 215.0 129.00 22.10 | 201.0 201.00 21.30 | 204.0 192.00 21.50 | 219.0 143.00 22.40 |
| 125 | TC SHC kW | 169.0 169.00 21.20 | 181.0 143.00 22.10 | 197.0 110.00 23.10 | 183.0 183.00 22.10 | 188.0 166.00 22.50 | 203.0 125.00 23.50 | 192.0 192.00 22.70 | 193.0 187.00 22.90 | 207.0 139.00 23.80 |

38AKS024/40RM024 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | Evaporator Air — Cfm | | | | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 6,000 | | | 8,000 | | | 10,000 | | | |
| | Evaporator Air — Ewb (F) | | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 200.0 183.00 15.20 | 216.0 153.00 15.80 | 235.0 121.00 16.50 | 211.0 209.00 15.60 | 225.0 176.00 16.10 | 244.0 135.00 16.80 | 222.0 222.00 16.00 | 231.0 196.00 16.30 | 250.0 148.00 17.00 |
| 85 | TC SHC kW | 195.0 181.00 15.90 | 212.0 151.00 16.50 | 230.0 119.00 17.10 | 207.0 206.00 16.30 | 220.0 174.00 16.80 | 239.0 133.00 17.50 | 217.0 217.00 16.70 | 226.0 194.00 17.00 | 244.0 146.00 17.70 |
| 95 | TC SHC kW | 187.0 176.00 17.10 | 202.0 147.00 17.80 | 219.0 116.00 18.50 | 198.0 198.00 17.60 | 210.0 170.00 18.10 | 227.0 129.00 18.80 | 209.0 209.00 18.00 | 215.0 189.00 18.30 | 232.0 142.00 19.10 |
| 100 | TC SHC kW | 183.0 174.00 17.70 | 197.0 145.00 18.40 | 214.0 114.00 19.20 | 194.0 194.00 18.20 | 205.0 167.00 18.70 | 222.0 128.00 19.50 | 204.0 204.00 18.70 | 210.0 187.00 19.00 | 227.0 140.00 19.80 |
| 105 | TC SHC kW | 178.0 172.00 18.30 | 192.0 143.00 19.00 | 209.0 112.00 19.90 | 190.0 190.00 18.90 | 200.0 165.00 19.40 | 216.0 126.00 20.20 | 200.0 200.00 19.40 | 205.0 185.00 19.60 | 221.0 138.00 20.40 |
| 115 | TC SHC kW | 170.0 167.00 19.50 | 183.0 139.00 20.20 | 198.0 108.00 21.20 | 182.0 182.00 20.20 | 189.0 161.00 20.60 | 205.0 122.00 21.50 | 190.0 190.00 20.70 | 194.0 180.00 20.90 | 209.0 135.00 21.80 |
| 125 | TC SHC kW | 162.0 162.00 20.70 | 173.0 135.00 21.40 | 188.0 104.00 22.50 | 173.0 173.00 21.50 | 179.0 157.00 21.90 | 194.0 118.00 21.90 | 181.0 181.00 22.80 | 183.0 175.00 22.00 | 197.0 131.00 23.10 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross



COMBINATION RATINGS — ENGLISH (cont)

38AKS024/40RM028H WITH HIGH-CAPACITY 4-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 7,500 | | | 10,000 | | | 12,500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 223.0 219.00 16.00 | 239.0 182.00 16.60 | 259.0 141.00 17.30 | 238.0 238.00 16.60 | 248.0 212.00 16.90 | 267.0 160.00 17.50 | 250.0 250.00 17.00 | 254.0 237.00 17.10 | 271.0 177.00 17.70 |
| 85 | TC SHC kW | 218.0 216.00 16.70 | 233.0 180.00 17.30 | 253.0 139.00 18.00 | 234.0 234.00 17.30 | 242.0 209.00 17.60 | 260.0 158.00 18.30 | 245.0 245.00 17.70 | 248.0 234.00 17.80 | 265.0 175.00 18.40 |
| 95 | TC SHC kW | 209.0 209.00 18.00 | 223.0 176.00 18.60 | 241.0 135.00 19.40 | 224.0 224.00 18.70 | 230.0 204.00 19.00 | 248.0 153.00 19.70 | 234.0 234.00 19.20 | 236.0 228.00 19.20 | 252.0 171.00 19.90 |
| 100 | TC SHC kW | 204.0 204.00 18.70 | 217.0 173.00 19.30 | 235.0 133.00 20.10 | 219.0 219.00 19.40 | 225.0 202.00 19.70 | 242.0 151.00 20.50 | 229.0 229.00 19.90 | 231.0 225.00 19.90 | 246.0 169.00 20.60 |
| 105 | TC SHC kW | 200.0 200.00 19.40 | 212.0 171.00 20.00 | 229.0 131.00 20.90 | 214.0 214.00 20.10 | 219.0 199.00 20.30 | 235.0 149.00 21.20 | 224.0 224.00 20.60 | 225.0 221.00 20.60 | 239.0 166.00 21.30 |
| 115 | TC SHC kW | 191.0 191.00 20.70 | 200.0 167.00 21.30 | 217.0 127.00 22.20 | 204.0 204.00 21.50 | 207.0 194.00 21.70 | 223.0 145.00 22.60 | 213.0 213.00 22.00 | 213.0 213.00 22.00 | 226.0 162.00 22.70 |
| 125 | TC SHC kW | 182.0 182.00 22.10 | 189.0 162.00 22.60 | 205.0 123.00 23.60 | 194.0 194.00 22.90 | 196.0 189.00 23.00 | 210.0 141.00 24.00 | 202.0 202.00 23.40 | 202.0 202.00 23.40 | 213.0 158.00 24.20 |

38AKS024/40RM028 WITH STANDARD 3-ROW COIL

| Temp (F) Air Entering Condenser (Edb) | | Evaporator Air — Cfm | | | | | | | | |
|--|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | 7,500 | | | 10,000 | | | 12,500 | | |
| | | Evaporator Air — Ewb (F) | | | | | | | | |
| | | 62 | 67 | 72 | 62 | 67 | 72 | 62 | 67 | 72 |
| 80 | TC SHC kW | 212.0 205.00 15.60 | 227.0 171.00 16.20 | 247.0 133.00 16.90 | 225.0 225.00 16.10 | 236.0 197.00 16.50 | 255.0 149.00 17.10 | 236.0 236.00 16.50 | 241.0 220.00 16.70 | 259.0 164.00 17.30 |
| 85 | TC SHC kW | 207.0 202.00 16.30 | 222.0 169.00 16.90 | 241.0 131.00 17.60 | 221.0 221.00 16.80 | 230.0 195.00 17.20 | 249.0 147.00 17.80 | 231.0 231.00 17.20 | 236.0 217.00 17.40 | 253.0 162.00 18.00 |
| 95 | TC SHC kW | 198.0 197.00 17.60 | 212.0 165.00 18.20 | 230.0 127.00 19.00 | 212.0 212.00 18.20 | 219.0 191.00 18.50 | 237.0 143.00 19.20 | 221.0 221.00 18.60 | 224.0 212.00 18.70 | 241.0 158.00 19.40 |
| 100 | TC SHC kW | 194.0 193.00 18.20 | 207.0 163.00 18.80 | 224.0 125.00 19.60 | 207.0 207.00 18.80 | 214.0 188.00 19.20 | 231.0 141.00 20.00 | 217.0 217.00 19.30 | 219.0 209.00 19.40 | 235.0 156.00 20.10 |
| 105 | TC SHC kW | 190.0 190.00 18.90 | 202.0 161.00 19.50 | 219.0 124.00 20.30 | 203.0 203.00 19.50 | 209.0 186.00 19.80 | 225.0 140.00 20.60 | 212.0 212.00 20.00 | 214.0 206.00 20.10 | 229.0 154.00 20.80 |
| 115 | TC SHC kW | 181.0 181.00 20.20 | 192.0 157.00 20.70 | 207.0 120.00 21.70 | 194.0 194.00 20.90 | 198.0 181.00 21.10 | 213.0 136.00 22.00 | 202.0 202.00 21.40 | 203.0 199.00 21.40 | 217.0 150.00 22.20 |
| 125 | TC SHC kW | 173.0 173.00 21.50 | 181.0 153.00 22.00 | 196.0 116.00 23.00 | 184.0 184.00 22.20 | 187.0 176.00 22.40 | 201.0 132.00 23.40 | 192.0 192.00 22.70 | 192.0 192.00 22.70 | 204.0 146.00 23.60 |

LEGEND

Edb — Entering Dry Bulb
Ewb — Entering Wet Bulb
kW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

Electrical data



38ARD014-024

| UNIT 38AR | NOMINAL VOLTAGE (3 Ph, 50 Hz) | VOLTAGE RANGE* | | COMPRESSOR 1 | | COMPRESSOR 2 | | FAN MOTORS (Qty 2) | | POWER SUPPLY | | | |
|--------------|-------------------------------------|-------------------|-----|--------------|-----|--------------|-----|-----------------------|-----|--------------|------|-----|-----|
| | | Min | Max | RLA | LRA | RLA | LRA | FLA (ea) | | | | | |
| | | 1 | 2 | | | kW | MCA | MOCP† | ICF | | | | |
| D014 | 230 | 198 | 242 | 20.7 | 172 | 20.7 | 172 | 3.5 | 2.9 | 1.1 | 51.2 | 70 | 197 |
| | 400 | 360 | 440 | 10.0 | 74 | 10.0 | 74 | 3.5 | 2.9 | 1.1 | 31.5 | 40 | 93 |
| D016 | 230 | 198 | 242 | 32.1 | 203 | 32.1 | 203 | 3.5 | 2.9 | 1.1 | 76.8 | 100 | 240 |
| | 400 | 360 | 440 | 16.4 | 95 | 16.4 | 95 | 3.5 | 2.9 | 1.1 | 45.9 | 60 | 120 |
| D024 | 230 | 198 | 242 | 42.0 | 239 | 42.0 | 239 | 3.5 | 2.9 | 1.1 | 99.1 | 70 | 286 |
| | 400 | 360 | 440 | 19.2 | 118 | 19.2 | 118 | 3.5 | 2.9 | 1.1 | 52.2 | 70 | 146 |

38AKS014-024

| UNIT 38AK | NOMINAL VOLTAGE (3 ph, 50 Hz) | VOLTAGE RANGE* | | COMPRESSOR | | FAN MOTORS (Qty 2) | | POWER SUPPLY | | |
|--------------|----------------------------------|----------------|------------|--------------|------------|-----------------------|------------|--------------|--------------|-----------|
| | | Min | Max | RLA | LRA | FLA (ea) | | | | |
| | | 1 | 2 | | | kW | MCA | MOCP† | | |
| S014 | 230 400 | 198 342 | 264 457 | 35.7 22.1 | 143 83 | 3.5 3.5 | 2.9 2.9 | 1.1 1.1 | 51.0 34.0 | 80 50 |
| S016 | 230 400 | 198 342 | 264 457 | 47.9 29.3 | 200 115 | 3.5 3.5 | 2.9 2.9 | 1.1 1.1 | 66.9 43.0 | 100 70 |
| S024 | 230 400 | 198 342 | 254 440 | 67.9 34.6 | 207 173 | 3.5 3.5 | 2.9 2.9 | 1.1 1.1 | 88.1 49.3 | 150 80 |

LEGEND

- FLA — Full Load Amps
- HACR — Heating, Air Conditioning, Refrigeration
- ICF — Maximum Instantaneous Current Flow
During Start-Up (LRA of compressor
plus total FLA of fan motors)
- LRA — Locked Rotor Amps
- MCA — Minimum Circuit Amps per NEC Section 430-24
- MOCP — Maximum Overcurrent Protection
- RLA — Rated Load Amps (Compressor)

*Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed limit.

†Fuse or HACR circuit breaker.

NOTES:

1. MCA and MOCP values are calculated in accordance with NEC (National Electric Code) (U.S.A. standard), Article 440.
2. Motor FLA and RLA values are established in accordance with UL (Underwriters' Laboratories) Standard 1995 (U.S.A. standard).



Application data



Installation

Select equipment to match or to be slightly less than peak load. This provides better humidity control, less unit cycling, and less part-load operation.

When selecting vapor line sizes, oil return must be evaluated, particularly at part-load conditions.

The indoor fan must always be operating when outdoor unit is operating.

Ductwork should be sized according to unit size, not building load.

To minimize the possibility of air recirculation, avoid the use of concentric supply/return grilles.

Indoor equipment should be selected at no less than 40 L/s per kW (300 cfm/ton).

OPERATING LIMITS

| | |
|---|--|
| Maximum Outdoor Temperature | 46 C (115 F) |
| Minimum Outdoor Ambient | See Minimum Outdoor-Air Operating Temperature table below. |
| Minimum Return-Air Temperature | 13 C (55 F) |
| Maximum Return-Air Temperature | 35 C (95 F) |
| Normal Acceptable Saturation Suction Temperature Range | -4 to 13 C (25 to 55 F) |
| Maximum Discharge Temperature | 146 C (295 F) |
| Minimum Discharge Superheat | 16 C (60 F) |

MINIMUM OUTDOOR-AIR OPERATING TEMPERATURE — 38AKS014-024 UNITS

| UNIT 38AKS | NO. OF CYLINDERS | FULL LOAD CAPACITY (%) | MINIMUM OUTDOOR-AIR OPERATING TEMPERATURE (F) | |
|---------------|---------------------|------------------------------|--|--------------------------------|
| | | | Base Unit | With Low-Ambient Control |
| 014 | 6 | 100 | -7 (20) | -29 (-20) |
| | 4 | 67 | 0 (31) | |
| | 2* | 33* | 4 (40) | |
| 016 | 6 | 100 | -7 (20) | -29 (-20) |
| | 4 | 67 | 1 (33) | |
| | 2* | 33* | 8 (47) | |
| 024 | 4 | 100 | -9 (15) | -29 (-20) |
| | 2 | 50 | -7 (20) | |

*Requires field-installed unloader.

REFRIGERANT SPECIALTIES PART NUMBERS

| UNIT | LIQUID LINE SIZE (in.) | LIQUID LINE SOLENOID VALVE (LLSV) | LLSV COIL | SIGHT GLASS | FILTER DRIER | SUCTION LINE ACCUMULATOR |
|----------|---------------------------|--------------------------------------|---------------|----------------|------------------|-----------------------------|
| 38AKS014 | 1/2 | 200RB7T4M | AMG/24V | AMI-1TT4 | P502-8757S* | S-7063 |
| | 5/8 | 200RA8T5M | AMG/24V | AMI-1TT5 | P502-8757S* | S-7063 |
| 38AKS016 | 1/2 | 200RB7T4M | AMG/24V | AMI-1TT4 | P502-8757S* | S-7721 |
| | 5/8 | 240RA8T5M | AMG/24V | AMI-1TT5 | P502-8757S* | S-7721 |
| 38AKS024 | 1/2 | 240RA9T5M | AMG/24V | AMI-1TT7 | P502-8757S | S-7721 |
| | 7/8 | 240RA9T7M | AMG/24V | AMI-1TT7 | P502-8757S | S-7721 |
| 38ARD014 | 1/2 | 200RB5T4M Qty 2 | AMG/24V Qty 2 | AMI-1TT4 Qty 2 | P502-8304S Qty 2 | S-7063S* Qty 2 |
| | 5/8 | 200RB5T4M Qty 2 | AMG/24V Qty 2 | AMI-1TT4 Qty 2 | P502-8304S Qty 2 | S-7063S Qty 2 |
| 38ARD016 | 1/2 | 200RB5T5M Qty 2 | AMG/24V Qty 2 | AMI-1TT5 Qty 2 | P502-8304S Qty 2 | S-7063S Qty 2 |
| | 5/8 | 200RB6T4M Qty 2 | AMG/24V Qty 2 | AMI-1TT5 Qty 2 | P502-8307S* | S-7063S Qty 2 |
| 38ARD024 | 1/2 | 200RB6T5M Qty 2 | AMG/24V Qty 2 | AMI-1TT5 Qty 2 | P502-8307S* | S-7063S Qty 2 |
| | 5/8 | 200RB6T5M Qty 2 | AMG/24V Qty 2 | AMI-1TT5 Qty 2 | P502-8307S* | S-7063S Qty 2 |

*Bushings required.

38ARD,AKS014-024

MINIMUM OUTDOOR-AIR OPERATING TEMPERATURE — 38ARD014-024 UNITS

| UNIT 38ARD | FULL LOAD CAPACITY (%) | SATURATED COND TEMPERATURE C (F) | MINIMUM OUTDOOR-AIR TEMPERATURE C (F) | |
|---------------|------------------------------|-------------------------------------|---|--------------------------------|
| | | | Base Unit | With Low-Ambient Control |
| 014 | 100/50 | 32 (90) | 10 (50) | -29 (-20) |
| 016 | | | | |
| 024 | | | | |

LIQUID LINE DATA — 38AKS014-024 UNITS

| UNIT 38AKS | MAX ALLOW. LIFT M (FT) | LIQUID LINE | |
|---------------|---------------------------------|---|-------------------------------------|
| | | Max Allow. Pressure Drop kPa (psi) | Max Allow. Temp Loss C (F) |
| 014 | 20.4 (67) | 48.3 (7) | 1.1 (2) |
| 016 | 25.0 (82) | | |
| 024 | 26.5 (87) | | |

NOTE: Data above is for units operating at 7 C (45 F) saturated suction and 35 C (95 F) entering air.

LIQUID LINE DATA — 38ARD014-024 UNITS

| UNIT 38ARD | MAX ALLOW. LIFT M (FT) | LIQUID LINE | |
|---------------|---------------------------------|---|-------------------------------------|
| | | Max Allow. Pressure Drop kPa (psi) | Max Allow. Temp Loss C (F) |
| 014 | 18 (60) | 48.3 (7) | 1.1 (2) |
| 016 | | | |
| 024 | | | |

Refrigerant piping

It is recommended that the refrigerant piping for all commercial split systems include a liquid line solenoid valve, a liquid line filter drier and a sight glass.

For refrigerant lines longer than 75 lineal ft (22.4 m), a liquid line solenoid and a suction accumulator are required. Refer to the refrigerant specialties table.

Application data (cont)



REFRIGERANT PIPING SIZES 38AKS014-024 50 HZ UNITS

| COND UNIT 38AKS | LENGTH OF INTERCONNECTING PIPING M (FT) | | | | | | | | | |
|-----------------------|---|-------|--------------------|-------|-------------------|-------|------------------|--------|-------------------|--------|
| | 0-4.5 (0-15) | | 4.5-7.5 (15-25) | | 7.5-15 (25-50) | | 15-23 (50-75) | | 23-30 (75-100) | |
| | Line Size (in. OD) | | | | | | | | | |
| 014 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 5/8 | 1 5/8* | 5/8 | 1 5/8* |
| 016 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 5/8 | 1 5/8 | 5/8 | 1 5/8 | 3/4 | 1 5/8 |
| 024 | 1/2 | 1 1/8 | 5/8 | 1 5/8 | 5/8 | 1 5/8 | 5/8 | 2 1/8 | 3/4 | 2 1/8 |

38ARD014-024 50 HZ UNITS

| UNIT 38ARD | LENGTH OF INTERCONNECTING PIPING M (FT) | | | | | | | | | |
|---------------|---|-------|--------------------|-------|-------------------|-------|------------------|-------|-------------------|-------|
| | 0-4.5 (0-15) | | 4.5-7.5 (15-25) | | 7.5-15 (25-50) | | 15-23 (50-75) | | 23-30 (75-100) | |
| | Line Size (in. OD) | | | | | | | | | |
| 014 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 1/2 | 1 1/8 |
| 016 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 1/2 | 1 1/8 | 1/2 | 1 3/8 | 5/8 | 1 3/8 |
| 024 | 1/2 | 1 1/8 | 1/2 | 1 3/8 | 1/2 | 1 3/8 | 5/8 | 1 3/8 | 5/8 | 1 3/8 |

LEGEND

L — Liquid
S — Suction

*Requires a double suction riser if 2 unloaders are used and the evaporator is below the condensing unit. See Refrigerant Piping Sizes — Double Suction Risers table and Suction Line Piping figure at right for more information.

NOTES:

1. Pipe sizes are based on a 2° F loss for liquid lines and a 1.5° F loss for suction lines.
2. Pipe sizes are based on an equivalent length equal to the maximum length of interconnecting piping plus 50% for fittings. A more accurate estimate may result in smaller sizes.

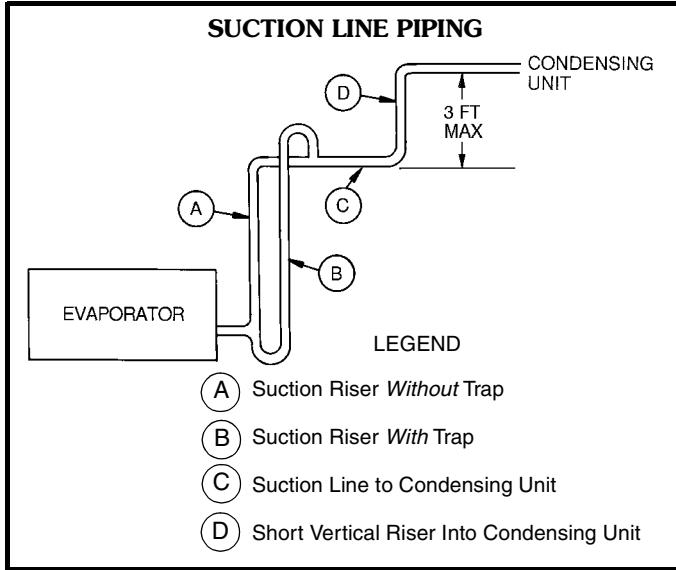
REFRIGERANT PIPING SIZES — DOUBLE SUCTION RISERS

| UNIT 38AKS | LENGTH OF INTERCONNECTING PIPING M (FT) | | | | | |
|---------------|---|-------|-------|----------------|-------|-------|
| | 15-23 (51-75) | | | 23-30 (76-100) | | |
| | Line Size (in. OD) | | | | | |
| 014 | 1 1/8 | 1 1/8 | 1 5/8 | 1 1/8 | 1 1/8 | 1 5/8 |

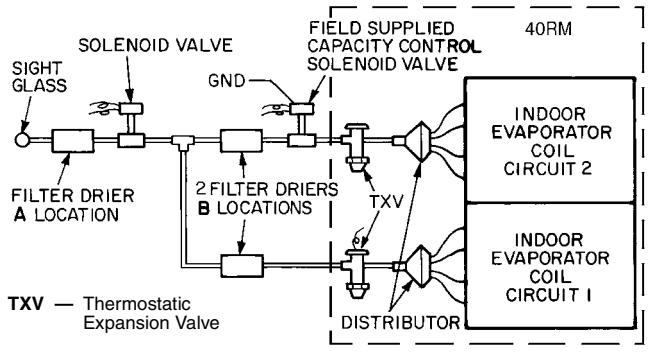
NOTES:

1. See Suction Line Piping figure below for "A," "B," and "C" dimensions.
2. No double suction risers are needed for unit sizes 016 or 024.

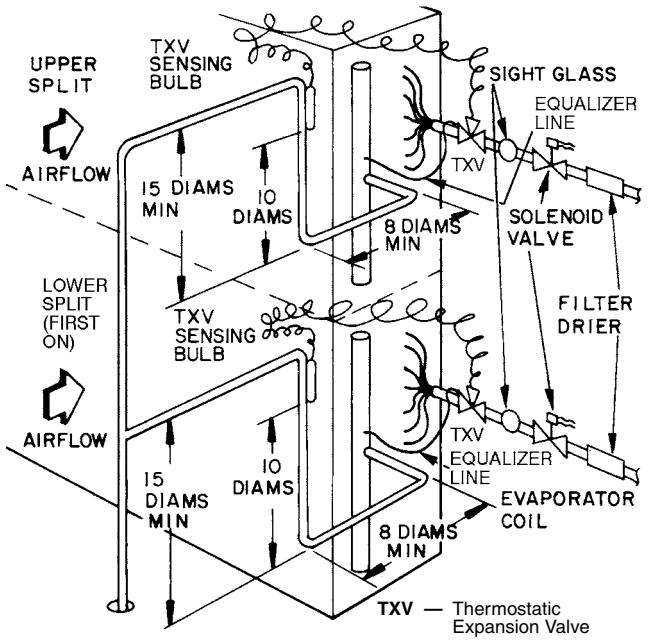
SUCTION LINE PIPING



LOCATION OF ONE LIQUID LINE SOLENOID VALVE SERVING 2 COIL CIRCUITS (Solenoid Drop Control)

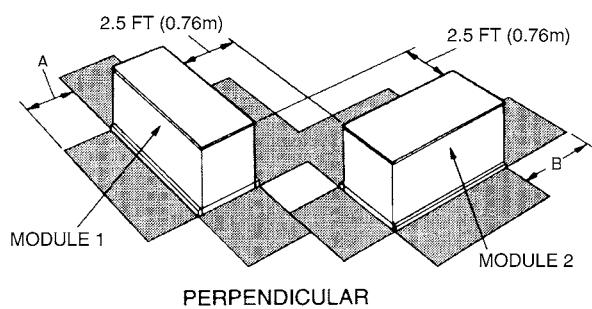


FACE-SPLIT COIL SUCTION AND LIQUID LINE PIPING

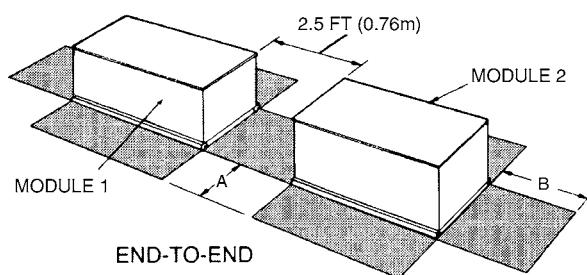


Multiple condensing unit arrangements*

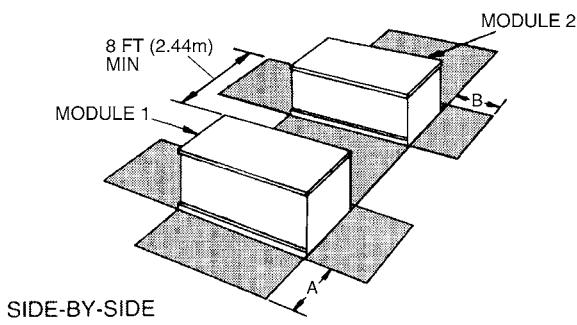
38AKS,ARD014-024



38AKS,ARD014-024



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■ Space for Service and Airflow

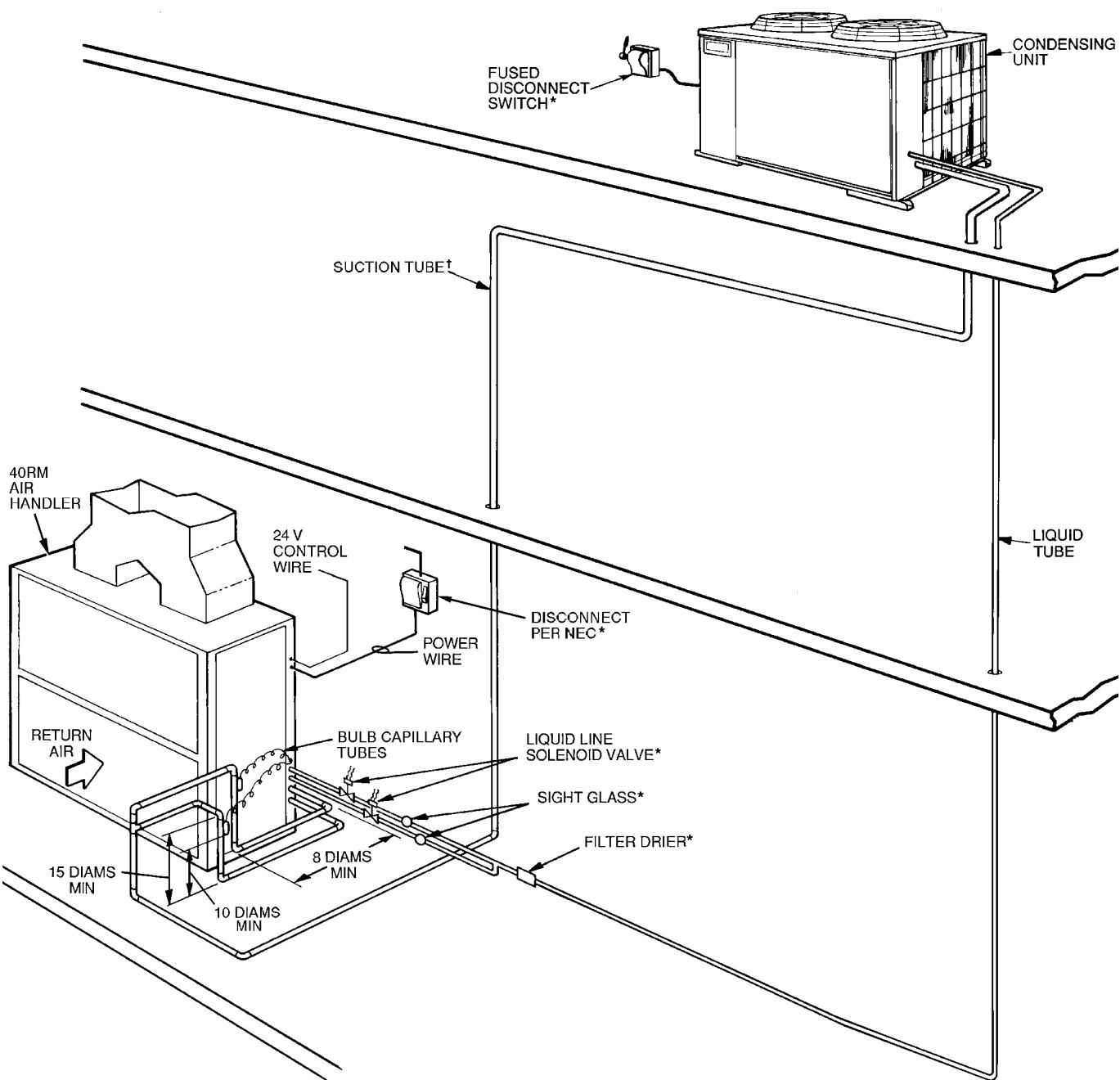
*For clearances between controls and grounded surfaces, check local codes.

| 38AKS,ARD 014-024 | DIMENSIONS IN FT (m) | |
|----------------------|----------------------|---------------|
| | A 4 (1.22) | B 4 (1.22) |

Typical piping and wiring

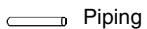
Carrier
®

ROOFTOP INSTALLATION — 38AKS014-024



LEGEND

NEC — National Electrical Code
TXV — Thermostatic Expansion Valve

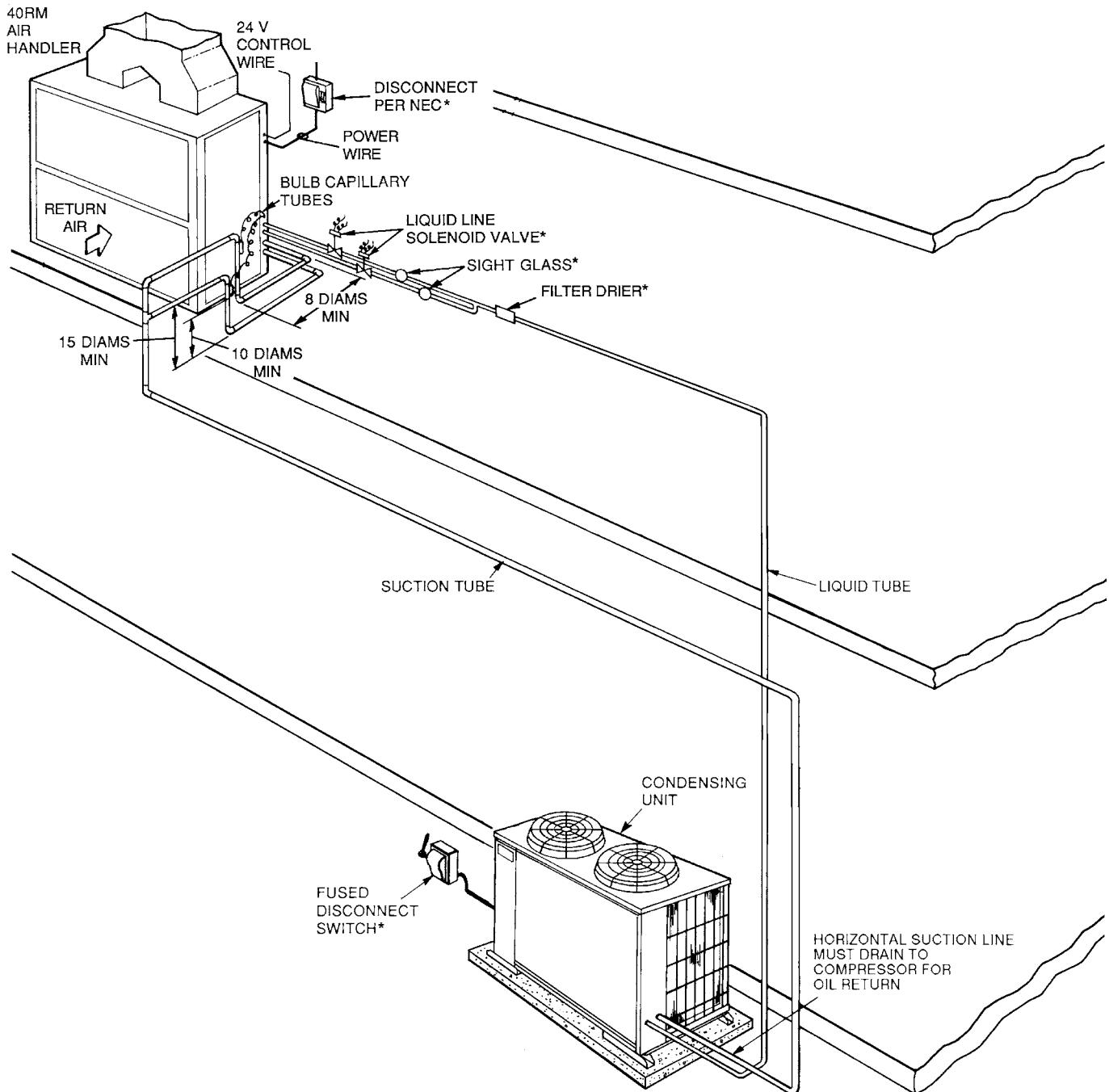


*Field supplied.

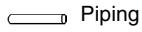
†Double riser may be required. Consult Application section for details.

NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor.
5. Internal factory-supplied TXVs not shown.

GROUND LEVEL INSTALLATION — 38AKS014-024

LEGEND

TXV — Thermostatic Expansion Valve



*Field supplied.

NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor.
5. Internal factory-supplied TXVs not shown.

Guide specifications — 38ARD014-024



Commercial Air-Cooled Condensing Units

HVAC Guide Specifications

Size Range: **38.9 to 64.6 kW (10.8 to 18.1 Tons), Nominal**

Carrier Model Number: **38ARD, Sizes 014-024**

Part 1 — General

1.01 SYSTEM DESCRIPTION

Outdoor-mounted, air-cooled condensing unit suitable for on-the-ground or rooftop installation. Unit shall have 2 independent refrigeration circuits. Unit shall consist of dual scroll compressors, an air-cooled coil, propeller-type condenser fans, and a control box. Unit shall discharge supply air upward as shown on contract drawings. Unit shall be used in a refrigeration circuit matched with a packaged air-handling unit.

1.02 QUALITY ASSURANCE

- A. Unit shall be rated in accordance with ARI Standard 360 (U.S.A. standard) (2000), and shall be certified and listed in the latest ARI directory.
- B. Unit construction shall comply with ANSI/ASHRAE safety code (U.S.A. standard), latest revision, and comply with NEC.
- C. Unit shall be constructed in accordance with UL 1995 standard and shall carry the UL and UL, Canada label.
- D. Unit cabinet shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (U.S.A. standard) (scribed specimen).
- E. Air-cooled condenser coils shall be leak tested at 1034 kPag (150 psig), and pressure tested at 2950 kPag (480 psig).
- F. Unit shall be manufactured in a facility registered to ISO 9001:2000 manufacturing quality standard.

1.03 DELIVERY, STORAGE, AND HANDLING

Unit shall be shipped as single package only, and shall be stored and handled according to unit manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER.)

Part 2 — Products

2.01 EQUIPMENT

A. General:

Factory-assembled, single piece, air-cooled condensing unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressor, holding charge (R-22), and special features required prior to field start-up.

B. Unit Cabinet:

Unit cabinet shall be constructed of G-90 galvanized steel, bonderized and coated with a prepainted baked enamel finish.

C. Fans:

1. Condenser fans shall be direct driven, propeller-type, discharging air vertically upward.
2. Fan blades shall be balanced.
3. Condenser fan discharge openings shall be equipped with PVC-coated steel wire safety guards.
4. Condenser fan and motor shaft shall be corrosion resistant.

D. Compressor:

1. Compressors shall be of the hermetic scroll type.
2. Compressors shall be mounted on vibration isolators.
3. Compressors shall include overload protection.
4. Compressors shall be equipped with a crank-case heater.

E. Condenser Coil:

1. Condenser coil shall be air-cooled and circuated for integral subcooler.
2. Coil shall be constructed of aluminum fins (copper fins optional) mechanically bonded to internally grooved seamless copper tubes which are then cleaned, dehydrated, and sealed.

F. Refrigeration Components:

Refrigeration circuit components shall include high side pressure relief device, liquid line service valve, suction line service valve, a full charge of compressor oil, and a holding charge of refrigerant.

G. Controls and Safeties:

1. Minimum control functions shall include:
 - a. Power and control wire terminal blocks.
 - b. Compressor lockout on auto-reset safety until reset from thermostat.
 - c. Recycle time delay of five minutes to prevent compressor short cycling.

2. Minimum safety devices shall include:

Automatic reset (after resetting first at thermostat):

- a. High discharge pressure cutout.
- b. Loss-of-charge cutout.
- c. Condenser-fan motors to be protected against overload condition by internal overloads.

Manual reset at the unit:

Electrical overload protection through the use of define-purpose contactors and calibrated, ambient compensated, magnetic trip circuit breakers. Circuit breakers shall open all three phases in the event of an overload in any one of the phases or a single-phase condition.

H. Operating Characteristics:

1. The capacity of the condensing unit shall meet or exceed ____ kW at a suction temperature of ____ . The power consumption at full load shall not exceed ____ kW.
2. The combination of the condensing unit and the evaporator or fan coil unit shall have a total net cooling capacity of ____ kW or greater at conditions of ____ entering-air temperature at the evaporator at ____ wet bulb and ____ dry bulb, and air entering the condensing unit at ____ .
3. The system shall have an EER of ____ Btuh/Watt or greater at standard ARI conditions.

I. Electrical Requirements:

1. Nominal unit electrical characteristics shall be ____ v, 3-ph, 50 Hz. The unit shall be capable of satisfactory operation within voltage limits of ____ v to ____ v.
2. Unit electrical power shall be single-point connection.
3. Unit control circuit shall contain a 24-v transformer for unit control.

J. Special Features:

1. Low-Ambient Temperature Control:
A low-ambient temperature control shall be available as a factory-installed option or as a field-installed accessory. This low-ambient control shall regulate speed of the condenser-fan motors in response to the saturated condensing temperature of the unit. The control shall maintain correct condensing pressure at outdoor temperatures down to -29 C (-20 F).
2. Gage Panel Package:
Gage panel package shall include a suction and discharge pressure gage.
3. Optional Condenser Coil Materials:
 - a. Pre-Coated Aluminum-Fin Coils:
Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.
 - b. Copper-Fin Coils:
Shall be constructed of copper-fins mechanically bonded to copper-tubes and copper tube sheets. Galvanized steel tube sheets shall not be acceptable. A polymer strip shall prevent coil assembly from contacting sheet metal coil pan to minimize potential for galvanic corrosion between the coil and pan. All copper construction shall provide protection in moderate coastal environments.

c. E-Coated Aluminum-Fin Coils:

Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation. Color shall be high gloss black with gloss requirements of 60° of 65 to 90% per ASTM D523-89 (U.S.A. standard). Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges. Superior hardness characteristics of 2H per ASTM D3363-92A and cross hatch adhesion of 4B-5B per ASTM D3359-93 (U.S.A. standards). Impact resistance shall be up to 160 in./lb (ASTM D2794-93) (U.S.A. standard). Humidity and water immersion resistance shall be up to a minimum of 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92) (U.S.A. standards). Corrosion durability shall be confirmed through testing to no less than 1000 hours salt spray per ASTM B117-90 (U.S.A. standard). Coil construction shall be aluminum fins mechanically bonded to copper tubes.

d. E-Coated Copper-Fin Coils:

Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation. Color shall be high gloss black with gloss requirements of 60° of 65 to 90% per ASTM D523-89 (U.S.A. standard). Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges. Superior hardness characteristics of 2H per ASTM D3363-92A and cross hatch adhesion of 4B-5B per ASTM D3359-93 (U.S.A. standards). Impact resistance shall be up to 160 in./lb. (ASTM D2794-93) (U.S.A. standard). Humidity and water immersion resistance shall be up to a minimum of 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92) (U.S.A. standards). Corrosion durability shall be confirmed through testing to no less than 1000 hours salt spray per ASTM B117-90 (U.S.A. standard). Coil construction shall be copper-fins mechanically bonded to copper-tubes with copper tube sheets. Galvanized steel tube sheets shall not be acceptable. A polymer strip shall prevent coil assembly from contacting sheet metal coil pan to maintain coating integrity and minimize corrosion potential between the coil and pan.

4. Thermostat Controls:

- a. Programmable multi-stage thermostat with 7-day clock, holiday scheduling, large backlit display, remote sensor capability, and Title 24 compliance.

Guide specifications — 38ARD014-024 (cont)



- b. Commercial Electronic Thermostat with 7-day timeclock, auto-changeover, multi-stage capability, and large LCD temperature display.

- c. Carrier PremierLink™ Controller:

This control will function with CCN and ComfortVIEW™ software. It shall also be compatible with ComfortLink™ controllers. It shall be ASHRAE 62-99 (U.S.A. standard) compliant and Internet ready. It shall accept a CO₂ sensor in the conditioned space and

be Demand Control Ventilation (DCV) ready. The communication rate must be 38.4K or faster. It shall include an integrated economizer controller.

- 5. Non-Fused Disconnect Switch:

Shall be factory-installed, internally mounted, NEC and UL approved non-fused switch shall provide unit power shutoff. Shall be accessible from outside the unit and shall provide power off lockout capability.

Guide specifications — 38AKS014-024

Commercial Air-Cooled Condensing Units

HVAC Guide Specifications

Size Range: **37.8 to 62.5 kW (10.6 to 17.5 Tons), Nominal**

Carrier Model Number: **38AKS, Sizes 014-024**

Part 1 — General

1.01 SYSTEM DESCRIPTION

Outdoor-mounted, air-cooled condensing unit suitable for on-the-ground or rooftop installation. Unit shall have a single refrigeration circuit. Unit shall consist of a semi-hermetic reciprocating compressor, an air-cooled coil, propeller-type condenser fans, and a control box. Unit shall discharge supply air upward as shown on contract drawings. Unit shall be used in a refrigeration circuit to match a packaged fan coil unit.

1.02 QUALITY ASSURANCE

- A. Unit shall be rated in accordance with ARI Standard (U.S.A. standard) 360 (2000), and shall be certified and listed in the latest ARI directory.
- B. Unit shall be manufactured in a facility registered to ISO 9001:2000 manufacturing quality standard.
- C. Unit construction shall comply with latest edition of ANSI/ASHRAE (U.S.A. standard) and with NEC (U.S.A. standard).
- D. Unit shall be constructed in accordance with UL standards and shall carry the UL and UL, Canada label.
- E. Unit cabinet shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen) (U.S.A. standard).
- F. Air-cooled condenser coils shall be leak tested at 1034 kPag (150 psig) and pressure tested at 2950 kPag (480 psig).

1.03 DELIVERY, STORAGE, AND HANDLING

Unit shall be shipped as a single package only, and shall be stored and handled per manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER.)

Part 2 — Products

2.01 EQUIPMENT

A. General:

Factory assembled, single piece, air-cooled condensing unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressor, holding charge (R-22), and special features required prior to field start-up.

B. Unit Cabinet:

Unit cabinet shall be constructed of G-90 galvanized steel, bonderized and coated with a prepainted, baked enamel finish.

C. Fans:

- 1. Condenser fans shall be direct-drive propeller type, discharging air vertically upward.
- 2. Condenser fan motor no. 1 shall be ball bearing type compatible with accessory low-ambient control.
- 3. Shafts shall have inherent corrosion resistance.
- 4. Fan blades shall be statically and dynamically balanced.
- 5. Condenser fan openings shall be equipped with PVC-coated steel wire safety guards.

D. Compressor:

- 1. Compressor shall be serviceable, reciprocating, semi-hermetic type.

Guide specifications — 38AKS014-024 (cont)



2. Compressor shall be equipped with an automatically reversible oil pump, operating oil charge, suction and discharge shutoff valves, and an insert-type, factory-sized crankcase heater to control oil dilution.
3. Compressor shall be mounted on spring vibration isolators with an isolation efficiency of no less than 95%.
4. Compressor speed shall not exceed 1750 rpm.
5. Compressor shall unload using suction cutoff unloading (electrical solenoid unloading shall be available as an accessory).

E. Condenser Coil:

1. Condenser coil shall be air cooled, circuited for integral subcooler.
2. Coil shall be constructed of aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed. Copper fins shall be available as an option.

F. Refrigeration Components:

Refrigeration circuit components shall include hot gas muffler, high-side pressure relief device, liquid line shutoff valve, suction and discharge shutoff valves, holding charge of refrigerant R-22, and compressor oil.

G. Controls and Safeties:

1. Minimum control functions shall include:
 - a. Power and control terminal blocks.
 - b. Five-minute protection to prevent compressor short-cycling.
 - c. Capacity control on the compressor shall be by suction cutoff unloader in response to compressor suction pressure. Electric solenoid unloading shall be available as an accessory.
 - d. Head pressure control by fan cycling. One condenser fan shall be cycled by discharge pressure to maintain proper head pressure.
2. Minimum safety devices shall include:
Automatic reset (after resetting first at thermostat)
 - a. High discharge-pressure cutout.
 - b. Low suction pressure cutout.
 - c. Condenser fan motors to be protected against overload condition by internal overloads.
 - d. Manual reset at the unit.

Electrical overload protection through the use of definite-purpose contactors and calibrated, ambient compensated, magnetic trip circuit breakers. Circuit breakers shall open all phases in the event of an overload in any one of the phases or a single-phase condition.

H. Operating Characteristics:

1. The capacity of the condensing unit shall meet or exceed _____ kW at a suction temperature of _____. The power consumption at full load shall not exceed _____ kW.
2. The combination of the condensing unit and the evaporator or fan coil unit shall have a total net cooling capacity of _____ kW or greater at conditions of _____ L/s entering-air temperature at the evaporator at _____ wet bulb and _____ dry bulb, and air entering the condensing unit at _____.
3. The system shall have an EER of _____ or greater at standard ARI conditions.

I. Electrical Requirements:

1. Nominal unit electrical characteristics shall be _____ v, 3-ph, 50 Hz. The unit shall be capable of satisfactory operation within voltage limits of _____ v to _____ v.
2. Unit electrical power shall be single point connection.
3. Unit control circuit shall contain a 24-v transformer for unit control, with capacity to operate an indoor fan interlock.

J. Special Features:

1. Electric Solenoid Unloader:
Unloader valve piston, coil, and hardware shall be supplied to convert the pressure-operated compressor unloader to electric unloading.
2. Condenser Coil Grille Package:
Grilles shall protect the condenser coils after unit installation.
3. Gage Panel Package:
Gage panel package shall include a suction and discharge pressure gage.
4. Optional Condenser Coil Materials:
 - a. Pre-Coated Aluminum-Fin Coils:
Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.
 - b. Copper-Fin Coils:
Shall be constructed of copper-fins mechanically bonded to copper-tubes and copper tube sheets. Galvanized steel tube sheets shall not be acceptable. A polymer strip shall prevent coil assembly from contacting sheet metal coil pan to minimize potential for galvanic corrosion between the coil and pan. All copper construction shall provide protection in moderate coastal environments.

Guide specifications — 38AKS014-024 (cont)



c. E-Coated Aluminum-Fin Coils:

Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation. Color shall be high gloss black with gloss requirements of 60° of 65 to 90% per ASTM D523-89 (U.S.A. standard). Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges. Superior hardness characteristics of 2H per ASTM D3363-92A and cross hatch adhesion of 4B-5B per ASTM D3359-93 (U.S.A. standards). Impact resistance shall be up to 160 in./lb (ASTM D2794-93) (U.S.A. standard). Humidity and water immersion resistance shall be up to a minimum of 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92) (U.S.A. standards). Corrosion durability shall be confirmed through testing to no less than 1000 hours salt spray per ASTM B117-90 (U.S.A. standard). Coil construction shall be aluminum fins mechanically bonded to copper tubes.

d. E-Coated Copper-Fin Coils:

Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation. Color shall be high gloss black with gloss requirements of 60° of 65 to 90% per ASTM D523-89 (U.S.A. standard). Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges. Superior hardness characteristics of 2H per ASTM D3363-92A and cross hatch adhesion of 4B-5B per ASTM D3359-93 (U.S.A. standard). Impact resistance shall be up to 160 in./lb (ASTM D2794-93) (U.S.A. standard). Humidity and water immersion resistance shall be up to a

minimum of 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92) (U.S.A. standards). Corrosion durability shall be confirmed through testing to no less than 1000 hours salt spray per ASTM B117-90 (U.S.A. standard). Coil construction shall be copper-fins mechanically bonded to copper tubes with copper tube sheets. Galvanized steel tube sheets shall not be acceptable. A polymer strip shall prevent coil assembly from contacting sheet metal coil pan to maintain coating integrity and minimize corrosion potential between the coil and pan.

5. Thermostat Controls:

a. Carrier PremierLink™ Controller:

This control will function with CCN and ComfortVIEW™ software. It shall also be compatible with *ComfortLink*™ controllers. It shall be ASHRAE 62-99 compliant and Internet ready. It shall accept a CO₂ sensor in the conditioned space and be Demand Control Ventilation (DCV) ready. The communication rate must be 38.4K or faster. It shall include an integrated economizer controller.

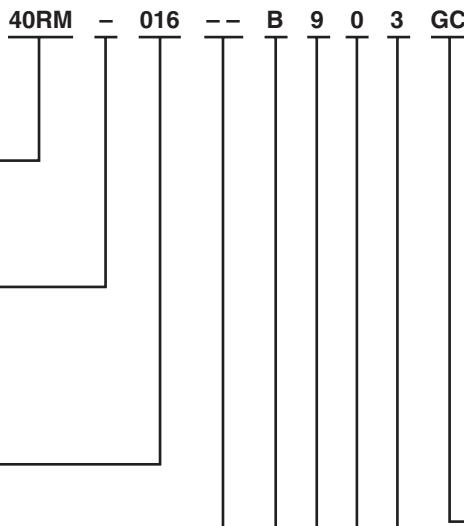
b. Programmable multi-stage thermostat with 7-day clock, holiday scheduling, large backlit display, remote sensor capability, and Title 24 compliance.

c. Commercial Electronic Thermostat with 7-day timeclock, auto-changeover, multi-stage capability, and large LCD temperature display.

6. Non-Fused Disconnect Switch:

Shall be factory-installed, internally mounted, NEC and UL approved non-fused switch shall provide unit power shutoff. Shall be accessible from outside the unit and shall provide power off lockout capability.

Model number nomenclature — 40RM units



Factory-Installed Options

- GC** – Unpainted, Standard Motor, and Standard Drive
- HC** – Unpainted, Standard Motor, and Medium-Static Drive
(Not available for sizes 016-028)
- TC** – Unpainted, Alternate Motor, and Medium-Static Drive
(sizes 016-028 only)
- YC** – Unpainted, Alternate Motor, and High-Static Drive
- ED** – Painted, Standard Motor, and Standard Drive
- FD** – Painted, Standard Motor, and Medium-Static Drive
(Not available for sizes 016-028)
- RD** – Painted, Alternate Motor, and Medium-Static Drive
(sizes 016-028 only)
- WD** – Painted, Alternate Motor, and High-Static Drive

Packaging

- 3** – Export

Revision Number

- 0** – Original

Quality Assurance

Certified to ISO 9001:2000

40RM

Physical data



40RM — SI

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|--|--------------------|-----------|-----------|--|--------------|-----------|--------------------|
| NOMINAL CAPACITY (kW) | 21 | 26 | 35 | 43 | 52 | 70 | 87 |
| OPERATING WEIGHT (kg) | | | | | | | |
| Base Unit with TXV (3-Row/4-Row) | 173/181 | 175/183 | 184/193 | 304/315 | 311/323 | 313/331 | 463/470 |
| Plenum | 80 | 80 | 80 | 102 | 102 | 102 | 148 |
| FANS | | | | | | | |
| Qty...Diam. (mm) | 1...381 | 1...381 | 1...381 | 2...381 | 2...381 | 2...381 | 2...457 |
| Nominal Airflow (L/s) | 1133 | 1604 | 1888 | 2360 | 2831 | 3775 | 4719 |
| Airflow Range (L/s) | 850-1416 | 1203-2006 | 1416-2360 | 1770-2949 | 2124-3539 | 2831-4719 | 3539-5899 |
| Nominal Motor kW (Standard Motor) | | | | | | | |
| 230-3-50, 400-3-50 | 1.79 | 1.79 | 2.16 | 2.16 | 2.16 | 3.73 | 5.60 |
| Motor Speed (r/s) | 230-3-50, 400-3-50 | 23.8 | 23.8 | 23.8 | 23.8 | 23.8 | 23.8 |
| REFRIGERANT | | | | R-22 | | | |
| Operating charge (kg) (approx per circuit)* | 1.36 | 1.36 | 0.68/0.68 | 0.90/0.90 | 1.13/1.13 | 1.59/1.59 | 2.04/2.04 |
| DIRECT-EXPANSION COIL | | | | Enhanced Copper Tubes, Aluminum Sine-Wave Fins | | | |
| Max Working Pressure (kPag) | | | | 2999 | | | |
| Face Area (sq m total) | 0.62 | 0.77 | 0.93 | 0.93 | 1.64 | 1.85 | 2.30 |
| No. of Splits | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Split Type...Percentage | | | | | Face...50/50 | | |
| No. of Circuits per Split (3-Row/4-Row) | 12/12 | 15/15 | 9/9 | 9/16 | 12/16 | 13/18 | 15/20 |
| Fins/m | 591 | 591 | 670 | 591 | 591 | 670 | 591 |
| STEAM COIL | | | | 1207 | | | |
| Max Working Pressure (kPag) | 0.62 | 0.62 | 0.62 | 1.24 | 1.24 | 1.24 | 1.39 |
| Total Face Area (sq m total) | 1...355 | 1...355 | 1...355 | 1...394 | 1...394 | 1...394 | 1...394 |
| Rows...Fins/m | | | | | | | |
| HOT WATER COIL | | | | 1034 | | | |
| Max Working Pressure (kPag) | 0.62 | 0.62 | 0.62 | 1.24 | 1.24 | 1.24 | 1.39 |
| Total Face Area (sq m total) | 2...335 | 2...335 | 2...335 | 2...335 | 2...335 | 2...335 | 2...493 |
| Rows...Fins/m | | | | | | | |
| Water Volume (L) (m³) | | 31.4 | | | 52.6 | | 54.1 |
| | | 0.031 | | | 0.052 | | 0.054 |
| PIPING CONNECTIONS, | | | | | | | |
| Qty...Size (in.) | 1...1 1/8 | 1...1 1/8 | 2...1 1/8 | 2...1 1/8 | 2...1 1/8 | 2...1 1/8 | 2...1 3/8 |
| DX Coil — Suction (ODF) | | 1...5/8 | | | | 2...5/8 | |
| DX Coil — Liquid Refrigerant (ODF) | | 1...2 1/2 | | | | 1...2 1/2 | |
| Steam Coil, In (MPT) | | 1...1 1/2 | | | | 1...2 1/2 | |
| Steam Coil, Out (MPT) | | 1...1 1/2 | | | | 1...2 | |
| Hot Water Coil, In (MPT) | | 1...1 1/2 | 1...1 1/2 | | | 1...2 | |
| Hot Water Coil, Out (MPT) | | 1...1 1/2 | 1...1 1/2 | | | 1...2 | |
| Condensate (Male PVC) | | | | | | 1...1 1/4 | |
| FILTERS | | | | Throwaway — Factory Supplied | | | |
| Qty...Size (mm) | 4...406 x 610 x 51 | | | 4...406 x 508 x 51 | | | 4...508 x 610 x 51 |
| Access Location | | | | 4...406 x 610 x 51 | | | 4...508 x 635 x 51 |
| Right or Left Side | | | | | | | |

LEGEND

DX — Direct Expansion
TXV — Thermostatic Expansion Valve

*Units are shipped without refrigerant charge.



40RM — ENGLISH

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|---|---|--|---|--|--|--|--|
| NOMINAL CAPACITY (Tons) | 6 | 7½ | 10 | 12½ | 15 | 20 | 25 |
| OPERATING WEIGHT (lb) Base Unit with TXV (3-Row/4-Row) Plenum | 381/399 175 | 385/404 175 | 405/425 175 | 670/695 225 | 685/713 225 | 690/730 225 | 1020/1050 325 |
| FANS | | | | | | | |
| Qty...Diam. (in.) Nominal Airflow (cfm) Airflow Range (cfm) Nominal Hp (Standard Motor) 230-3-50, 400-3-50 Speed (rpm) 230-3-50, 400-3-50 | 1...15 2400 1800-3000 | 1...15 3000 2250-3750 | 1...15 4000 3000-5000 | 2...15 5000 3750-6250 | 2...15 6000 4500-7500 | 2...15 8000 6000-10,000 | 2...18 10,000 7500-12,500 |
| REFRIGERANT | | | | | | | |
| Operating charge (lb) (approx per circuit)* | 3.0 | 3.0 | 1.5/1.5 | 2.0/2.0 | 2.5/2.5 | 3.5/3.5 | 4.5/4.5 |
| DIRECT-EXPANSION COIL | | | | | | | |
| Max Working Pressure (psig) Face Area (sq ft total) No. of Splits Split Type...Percentage No. of Circuits per Split (3-Row/4-Row) Fins/in. | | | | | | | |
| | | | | | | | |
| STEAM COIL | | | | | | | |
| Max Working Pressure (psig) Face Area (sq ft total) Rows...Fins/in. | 6.67 1 — 12/12 15 | 6.67 1 — 15/15 15 | 6.67 2 — 9/9 17 | 13.33 2 — 9/12 15 | 13.33 2 — 12/16 15 | 13.33 2 — 13/18 17 | 15.0 2 — 15/20 15 |
| HOT WATER COIL | | | | | | | |
| Max Working Pressure (psig) Face Area (sq ft total) Rows...Fins/in. Water Volume (gal) (ft³) | 6.67 2...8.5 | 6.67 2...8.5 | 6.67 2...8.5 | 13.33 2...8.5 | 13.33 2...8.5 | 13.33 2...8.5 | 15.0 2...12.5 |
| PIPING CONNECTIONS, | | | | | | | |
| Qty...Size (in.) DX Coil — Suction (ODF) DX Coil — Liquid Refrigerant (ODF) Steam Coil, In (MPT) Steam Coil, Out (MPT) Hot Water Coil, In (MPT) Hot Water Coil, Out (MPT) Condensate (PVC) | 1...11/8 1...5/8 1...21/2 1...11/2 1...11/2 1...11/2 1...11/2 | 1...11/8 1 — 1...11/2 1...11/2 1...11/2 1...11/2 | 2...11/8 1...5/8 1...21/2 1...21/2 1...21/2 1...21/2 1...21/2 | 2...11/8 1...21/2 1...21/2 1...21/2 1...21/2 1...21/2 1...21/2 | 2...11/8 1...21/2 1...21/2 1...21/2 1...21/2 1...21/2 1...21/2 | 2...11/8 1...21/2 1...21/2 1...21/2 1...21/2 1...21/2 1...21/2 | 2...13/8 15.0 2...12.5 14.3 1.90 |
| FILTERS | | | | | | | |
| Qty...Size (in.) | | | | | | | |
| Access Location | | | | | | | |
| | | | | | | | |

LEGEND

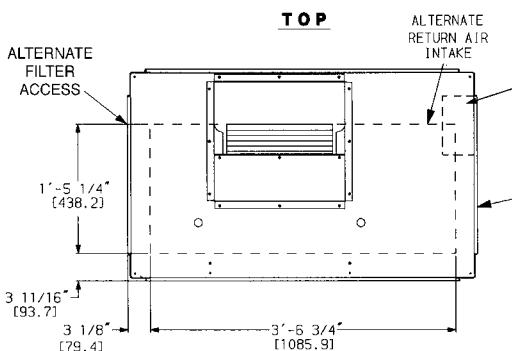
TXV — Thermostatic Expansion Valve

*Units are shipped without refrigerant charge.

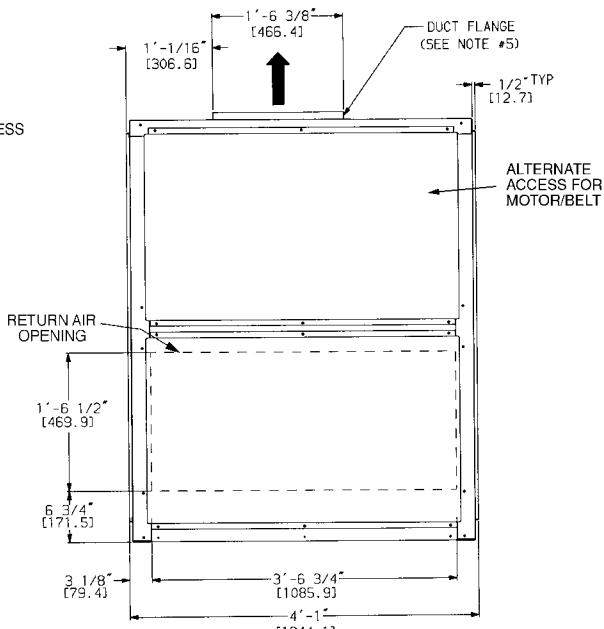
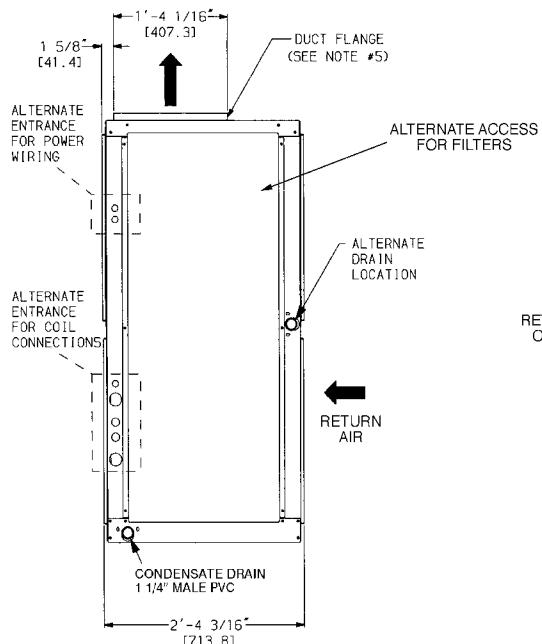
Dimensions

Carrier
®

40RM007-012

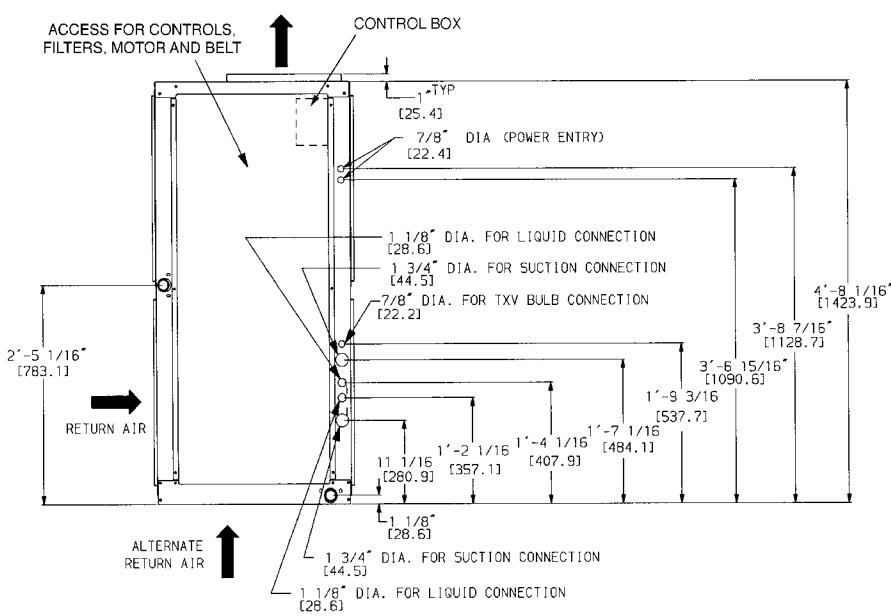


| UNIT 40RM | UNIT WEIGHT | |
|--------------|-------------|-----|
| | lb | kg |
| 007 | 381 | 173 |
| 008 | 385 | 175 |
| 012 | 405 | 184 |
| 007 4 ROW | 399 | 181 |
| 008 4 ROW | 404 | 184 |
| 012 4 ROW | 425 | 193 |



LEFT SIDE

FRONT

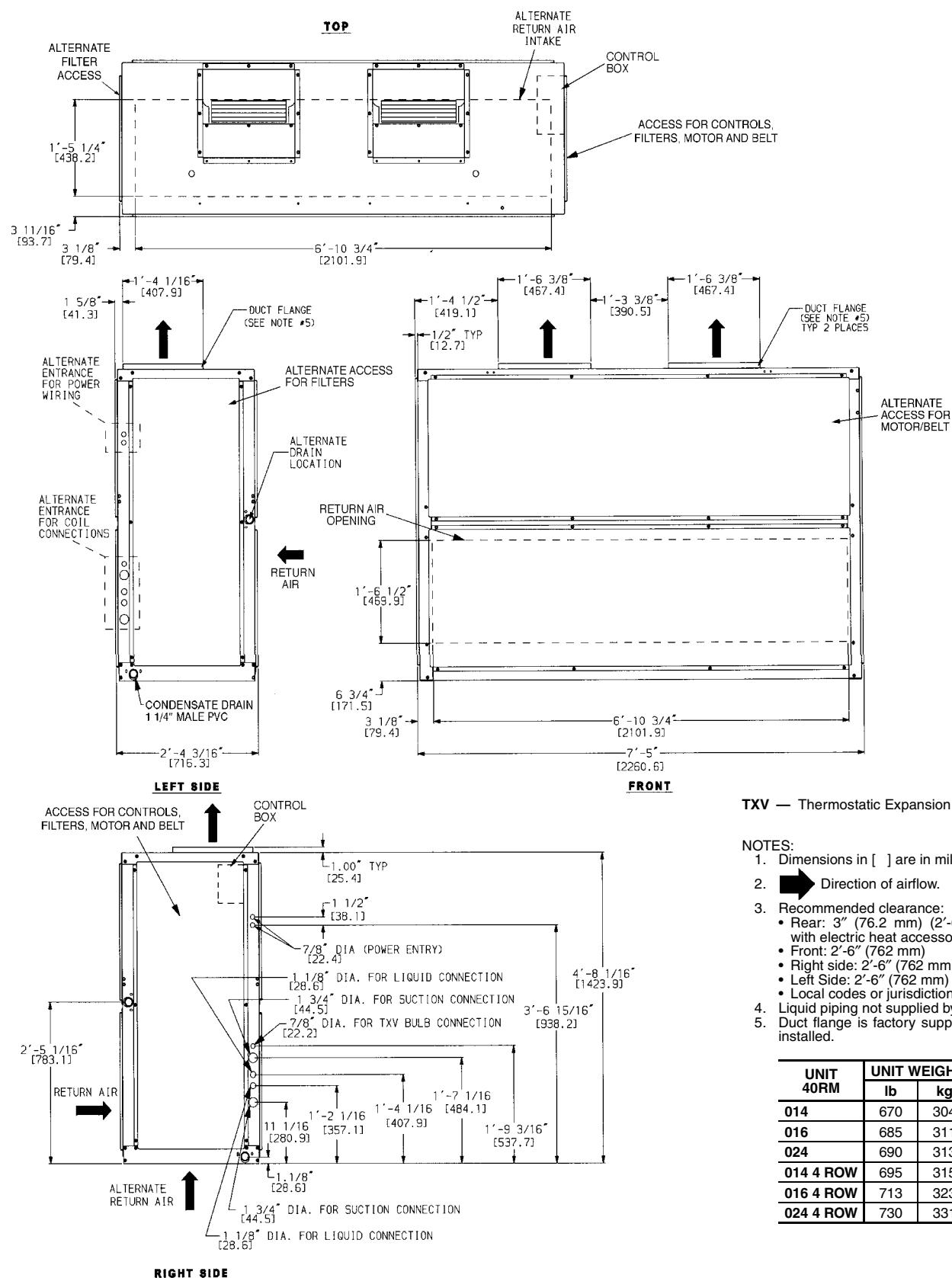


RIGHT SIDE

TXV — Thermostatic Expansion Valve

NOTES:

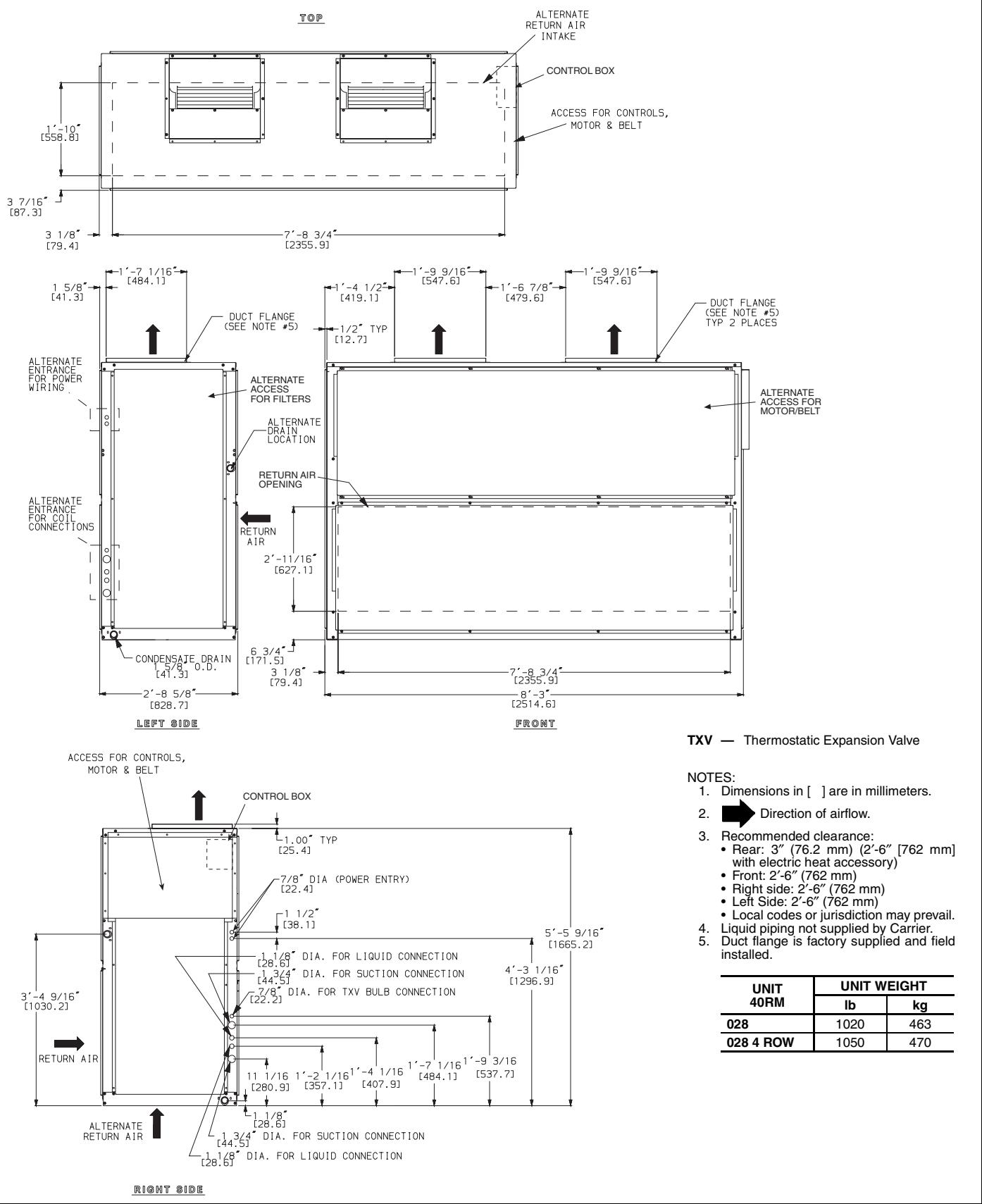
1. Dimensions in [] are in millimeters.
2. ➡ Direction of airflow.
3. Recommended clearance:
 - Rear: 3" (76.2 mm) (2'-6" [762 mm] with electric heat accessory)
 - Front: 2'-6" (762 mm)
 - Right side: 2'-6" (762 mm)
 - Left Side: 2'-6" (762 mm)
 - Local codes or jurisdiction may prevail.
4. Liquid piping not supplied by Carrier.
5. Duct flange is factory supplied and field installed.

40RM014-024


Dimensions (cont)

Carrier
®

40RM028



Performance data



FAN PERFORMANCE DATA — 40RM WITH STANDARD COIL — 0-300 Pa ESP — SI

| UNIT (Standard 3-Row Coil) | AIRFLOW (L/s) | EXTERNAL STATIC PRESSURE (Pa) | | | | | | | | | | | |
|----------------------------------|------------------|-------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 0 | | 50 | | 100 | | 150 | | 200 | | 250 | |
| | | r/s | kW | r/s | kW | r/s | kW | r/s | kW | r/s | kW | r/s | kW |
| 40RM 007 | 850 | 6.64 | 0.14 | 7.56 | 0.18 | 9.13 | 0.26 | 10.56 | 0.35 | 11.88 | 0.45 | 13.08 | 0.55 |
| | 990 | 7.43 | 0.21 | 8.28 | 0.25 | 9.71 | 0.34 | 11.00 | 0.44 | 12.22 | 0.54 | 13.37 | 0.66 |
| | 1130 | 8.30 | 0.30 | 9.02 | 0.35 | 10.36 | 0.45 | 11.55 | 0.55 | 12.67 | 0.66 | 13.73 | 0.78 |
| | 1270 | 9.06 | 0.41 | 9.79 | 0.47 | 11.06 | 0.58 | 12.17 | 0.69 | 13.20 | 0.81 | 14.19 | 0.94 |
| | 1420 | 9.91 | 0.55 | 10.58 | 0.61 | 11.78 | 0.74 | 12.83 | 0.86 | 13.80 | 0.99 | 14.72 | 1.12 |
| 40RM 008 | 1060 | 4.55 | 0.06 | 8.21 | 0.27 | 9.67 | 0.37 | 10.93 | 0.46 | 12.11 | 0.57 | 13.23 | 0.68 |
| | 1230 | 5.37 | 0.11 | 8.99 | 0.38 | 10.37 | 0.49 | 11.55 | 0.60 | 12.62 | 0.71 | 13.65 | 0.84 |
| | 1420 | 9.21 | 0.48 | 9.92 | 0.55 | 11.22 | 0.67 | 12.33 | 0.80 | 13.33 | 0.92 | 14.27 | 1.05 |
| | 1600 | 10.25 | 0.68 | 10.89 | 0.75 | 12.09 | 0.90 | 13.15 | 1.04 | 14.10 | 1.18 | 14.99 | 1.33 |
| | 1770 | 11.18 | 0.90 | 11.76 | 0.98 | 12.88 | 1.14 | 13.90 | 1.30 | 14.82 | 1.45 | 15.67 | 1.61 |
| 40RM 012 | 1420 | 6.65 | 0.22 | 9.55 | 0.51 | 10.89 | 0.64 | 12.04 | 0.77 | 13.06 | 0.89 | 14.02 | 1.02 |
| | 1650 | 10.06 | 0.68 | 10.69 | 0.76 | 11.90 | 0.91 | 13.00 | 1.06 | 13.97 | 1.20 | 14.86 | 1.35 |
| | 1890 | 11.33 | 0.99 | 11.88 | 1.08 | 12.96 | 1.25 | 13.99 | 1.43 | 14.93 | 1.59 | 15.78 | 1.76 |
| | 2120 | 12.61 | 1.38 | 13.11 | 1.49 | 14.08 | 1.68 | 15.02 | 1.88 | 15.92 | 2.07 | 16.74 | 2.26 |
| | 2360 | 13.90 | 1.87 | 14.36 | 1.99 | 15.23 | 2.21 | 16.10 | 2.42 | 16.94 | 2.64 | 17.73 | 2.85 |
| 40RM 014 | 1770 | 6.57 | 0.30 | 7.54 | 0.39 | 9.31 | 0.60 | 10.72 | 0.82 | 11.95 | 1.04 | 13.09 | 1.27 |
| | 2030 | 7.27 | 0.43 | 8.11 | 0.52 | 9.76 | 0.75 | 11.16 | 1.00 | 12.36 | 1.25 | 13.44 | 1.50 |
| | 2360 | 8.20 | 0.64 | 8.92 | 0.74 | 10.38 | 0.98 | 11.73 | 1.26 | 12.91 | 1.55 | 13.97 | 1.84 |
| | 2690 | 9.16 | 0.92 | 9.79 | 1.02 | 11.07 | 1.27 | 12.33 | 1.58 | 13.48 | 1.90 | 14.53 | 2.23 |
| | 2950 | 9.93 | 1.18 | 10.50 | 1.30 | 11.66 | 1.56 | 12.83 | 1.87 | 13.95 | 2.22 | 14.98 | 2.58 |
| 40RM 016 | 2120 | 7.13 | 0.44 | 7.91 | 0.52 | 9.50 | 0.74 | 10.94 | 0.99 | 12.17 | 1.25 | 13.26 | 1.51 |
| | 2500 | 8.13 | 0.68 | 8.80 | 0.78 | 10.15 | 1.00 | 11.48 | 1.27 | 12.70 | 1.57 | 13.78 | 1.87 |
| | 2830 | 9.03 | 0.96 | 9.63 | 1.07 | 10.81 | 1.30 | 12.01 | 1.58 | 13.18 | 1.90 | 14.25 | 2.24 |
| | 3210 | 10.07 | 1.37 | 10.62 | 1.48 | 11.66 | 1.73 | 12.71 | 2.01 | 13.77 | 2.35 | 14.80 | 2.71 |
| | 3540 | 10.99 | 1.81 | 11.50 | 1.93 | 12.45 | 2.20 | 13.40 | 2.49 | 14.35 | 2.83 | 15.31 | 3.20 |
| 40RM 024 | 2830 | 8.86 | 0.94 | 9.48 | 1.04 | 10.65 | 1.26 | 11.84 | 1.53 | 13.01 | 1.85 | 14.10 | 2.19 |
| | 3300 | 10.14 | 1.44 | 10.69 | 1.56 | 11.70 | 1.81 | 12.71 | 2.08 | 13.73 | 2.41 | 14.74 | 2.77 |
| | 3780 | 11.43 | 2.11 | 11.93 | 2.25 | 12.84 | 2.52 | 13.71 | 2.81 | 14.60 | 3.14 | 15.49 | 3.51 |
| | 4250 | 12.74 | 2.96 | 13.19 | 3.12 | 14.02 | 3.43 | 14.81 | 3.74 | 15.59 | 4.08 | 16.37 | 4.45 |
| | 4720 | 14.05 | 4.01 | 14.47 | 4.19 | 15.23 | 4.54 | 15.96 | 4.88 | 16.66 | 5.24 | 17.36 | 5.62 |
| 40RM 028 | 3540 | 7.60 | 0.96 | 8.16 | 1.09 | 9.27 | 1.38 | 10.34 | 1.68 | 11.30 | 1.97 | 12.15 | 2.28 |
| | 4130 | 8.68 | 1.47 | 9.18 | 1.62 | 10.13 | 1.94 | 11.07 | 2.29 | 11.99 | 2.63 | 12.84 | 2.97 |
| | 4720 | 9.78 | 2.15 | 10.23 | 2.32 | 11.07 | 2.67 | 11.89 | 3.05 | 12.72 | 3.45 | 13.53 | 3.84 |
| | 5310 | 10.89 | 3.01 | 11.30 | 3.20 | 12.06 | 3.59 | 12.80 | 4.00 | 13.53 | 4.43 | 14.27 | 4.88 |
| | 5900 | 12.00 | 4.07 | 12.38 | 4.29 | 13.09 | 4.72 | 13.75 | 5.17 | 14.41 | 5.63 | 15.07 | 6.11 |

LEGEND

ESP — External Static Pressure

Bold indicates field-supplied drive is required.

Plain type indicates standard motor and standard drive.

Underline indicates a different motor and drive combination is required. Refer to fan motor and drive tables, pages 131-135, to complete the selection.

NOTES:

1. Maximum allowable fan speed is 1100 rpm (18.3 r/s) for unit size 028; 1200 rpm (20 r/s) for all other sizes.
2. Fan performance is based on deductions for wet coil, clean 51 mm (2-in.) filters, and unit casing. See page 125 for factory-supplied filter pressure drop.
3. The medium-static drive and standard motor combination is NOT AVAILABLE for 40RM016-028 units. Use the alternate motor if medium-static drive is required for these sizes.

Performance data (cont)



FAN PERFORMANCE DATA — 40RM WITH STANDARD COIL — 350-600 Pa ESP — SI

| UNIT (Standard 3-Row Coil) | AIRFLOW (L/s) | EXTERNAL STATIC PRESSURE (Pa) | | | | | | | | | | | |
|----------------------------------|------------------|-------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 350 | | 400 | | 450 | | 500 | | 550 | | 600 | |
| | | r/s | kW | r/s | kW | r/s | kW | r/s | kW | r/s | kW | r/s | kW |
| 40RM 007 | 850 | 15.16 | 0.78 | 16.08 | 0.89 | 16.94 | 1.01 | 17.74 | 1.13 | 18.51 | 1.26 | 19.25 | 1.39 |
| | 990 | 15.44 | 0.90 | 16.38 | 1.03 | 17.25 | 1.16 | 18.07 | 1.30 | 18.84 | 1.43 | 19.58 | 1.57 |
| | 1130 | 15.73 | 1.05 | 16.65 | 1.19 | 17.53 | 1.33 | 18.36 | 1.48 | 19.14 | 1.62 | 19.89 | 1.77 |
| | 1270 | 16.07 | 1.21 | 16.96 | 1.36 | 17.82 | 1.51 | 18.64 | 1.67 | 19.42 | 1.83 | — | — |
| | 1420 | 16.48 | 1.41 | 17.32 | 1.56 | 18.14 | 1.72 | 18.94 | 1.89 | 19.71 | 2.06 | — | — |
| 40RM 008 | 1060 | 15.31 | 0.94 | 16.25 | 1.07 | 17.14 | 1.20 | 17.98 | 1.34 | 18.77 | 1.48 | 19.53 | 1.63 |
| | 1230 | 15.60 | 1.10 | 16.51 | 1.24 | 17.39 | 1.39 | 18.23 | 1.54 | 19.03 | 1.70 | 19.80 | 1.86 |
| | 1420 | 16.05 | 1.33 | 16.90 | 1.48 | 17.74 | 1.64 | 18.54 | 1.80 | 19.32 | 1.97 | — | — |
| | 1600 | 16.64 | 1.62 | 17.42 | 1.78 | 18.20 | 1.94 | 18.95 | 2.11 | 19.69 | 2.29 | — | — |
| | 1770 | 17.23 | 1.93 | 17.97 | 2.09 | 18.70 | 2.26 | 19.41 | 2.44 | — | — | — | — |
| 40RM 012 | 1420 | 15.81 | 1.29 | 16.67 | 1.44 | 17.51 | 1.60 | 18.32 | 1.76 | 19.11 | 1.92 | 19.87 | 2.09 |
| | 1650 | 16.51 | 1.65 | 17.29 | 1.80 | 18.05 | 1.97 | 18.80 | 2.13 | 19.53 | 2.31 | — | — |
| | 1890 | 17.34 | 2.09 | 18.06 | 2.26 | 18.77 | 2.43 | 19.45 | 2.61 | — | — | — | — |
| | 2120 | 18.24 | 2.63 | 18.93 | 2.82 | 19.59 | 3.00 | — | — | — | — | — | — |
| | 2360 | 19.18 | 3.27 | 19.85 | 3.48 | — | — | — | — | — | — | — | — |
| 40RM 014 | 1770 | 15.15 | 1.77 | 16.13 | 2.04 | 17.10 | 2.33 | 18.00 | 2.62 | 18.85 | 2.92 | 19.68 | 3.22 |
| | 2030 | 15.41 | 2.04 | 16.34 | 2.32 | 17.24 | 2.62 | 18.07 | 2.92 | 18.92 | 3.24 | 19.73 | 3.56 |
| | 2360 | 15.84 | 2.43 | 16.70 | 2.74 | 17.54 | 3.05 | 18.35 | 3.38 | 19.14 | 3.71 | 19.83 | 4.06 |
| | 2690 | 16.36 | 2.89 | 17.19 | 3.23 | 17.98 | 3.57 | 18.75 | 3.92 | 19.49 | 4.27 | — | — |
| | 2950 | 16.79 | 3.30 | 17.61 | 3.66 | 18.39 | 4.03 | 19.13 | 4.40 | 19.84 | 4.77 | — | — |
| 40RM 016 | 2120 | 15.20 | 2.05 | 16.12 | 2.33 | 16.98 | 2.62 | 17.83 | 2.92 | 18.67 | 3.24 | 19.47 | 3.57 |
| | 2500 | 15.67 | 2.49 | 16.53 | 2.80 | 17.35 | 3.12 | 18.13 | 3.44 | 18.90 | 3.77 | 19.65 | 4.12 |
| | 2830 | 16.13 | 2.92 | 16.97 | 3.27 | 17.77 | 3.62 | 18.53 | 3.97 | 19.26 | 4.33 | 19.97 | 4.69 |
| | 3210 | 16.66 | 3.48 | 17.50 | 3.87 | 18.29 | 4.26 | 19.03 | 4.65 | 19.75 | 5.04 | — | — |
| | 3540 | 17.13 | 4.02 | 17.97 | 4.45 | 18.75 | 4.88 | 19.50 | 5.30 | — | — | — | — |
| 40RM 024 | 2830 | 15.90 | 2.86 | 16.75 | 3.18 | 17.53 | 3.52 | 18.30 | 3.89 | 19.03 | 4.23 | — | — |
| | 3300 | 16.50 | 3.53 | 17.33 | 3.91 | 18.17 | 4.32 | 18.92 | 4.70 | 19.60 | 5.10 | — | — |
| | 3780 | 17.13 | 4.32 | 17.97 | 4.76 | 18.83 | 5.22 | 19.55 | 5.67 | — | — | — | — |
| | 4250 | 17.88 | 5.30 | 18.67 | 5.76 | 19.48 | 6.24 | — | — | — | — | — | — |
| | 4720 | 18.77 | 6.52 | 19.43 | 6.99 | — | — | — | — | — | — | — | — |
| 40RM 028 | 3540 | 13.85 | 3.29 | 14.50 | 3.80 | 15.22 | 4.40 | 15.83 | 5.13 | 16.42 | 5.74 | — | — |
| | 4130 | 14.31 | 3.71 | 15.01 | 4.17 | 15.74 | 4.79 | 16.33 | 5.37 | 17.00 | 6.04 | — | — |
| | 4720 | 14.99 | 4.62 | 15.65 | 5.02 | 16.27 | 5.46 | 16.88 | 5.97 | 17.50 | 6.57 | — | — |
| | 5310 | 15.68 | 5.77 | 16.34 | 6.20 | 16.95 | 6.64 | 17.53 | 7.09 | 18.09 | 7.58 | — | — |
| | 5900 | 16.39 | 7.10 | 17.03 | 7.60 | 17.64 | 8.08 | 18.22 | 8.57 | — | — | — | — |

LEGEND

ESP — External Static Pressure

Bold indicates field-supplied drive is required.

Plain type indicates standard motor and standard drive.

Underline indicates a different motor and drive combination is required. Refer to fan motor and drive tables, pages 131-135, to complete the selection.

NOTES:

1. Maximum allowable fan speed is 1100 rpm (18.3 r/s) for unit size 028; 1200 rpm (20 r/s) for all other sizes.
2. Fan performance is based on deductions for wet coil, clean 51 mm (2-in.) filters, and unit casing. See page 125 for factory-supplied filter pressure drop.
3. The medium-static drive and standard motor combination is NOT AVAILABLE for 40RM016-028 units. Use the alternate motor if medium-static drive is required for these sizes.



FAN PERFORMANCE DATA — 40RM WITH STANDARD COIL —
0.0-1.2 in. wg ESP — ENGLISH

| UNIT (Standard 3-Row Coil) | AIRFLOW (Cfm) | EXTERNAL STATIC PRESSURE (in. wg) | | | | | | | | | | | |
|----------------------------------|------------------|-----------------------------------|------|-----|------|-----|------|-----|------|------|------|------|------|
| | | 0.0 | | 0.2 | | 0.4 | | 0.6 | | 0.8 | | 1.0 | |
| | | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp |
| 40RM 007 | 1,800 | 399 | 0.19 | 454 | 0.24 | 548 | 0.35 | 634 | 0.47 | 713 | 0.60 | 785 | 0.74 |
| | 2,100 | 446 | 0.28 | 497 | 0.34 | 583 | 0.46 | 660 | 0.59 | 733 | 0.73 | 802 | 0.88 |
| | 2,400 | 498 | 0.40 | 541 | 0.47 | 622 | 0.60 | 693 | 0.74 | 760 | 0.89 | 824 | 1.05 |
| | 2,700 | 544 | 0.55 | 588 | 0.63 | 663 | 0.78 | 730 | 0.93 | 792 | 1.09 | 851 | 1.22 |
| | 3,000 | 594 | 0.73 | 635 | 0.82 | 707 | 0.99 | 770 | 1.15 | 828 | 1.32 | 883 | 1.44 |
| 40RM 008 | 2,250 | 273 | 0.08 | 493 | 0.37 | 580 | 0.49 | 656 | 0.62 | 727 | 0.76 | 794 | 0.92 |
| | 2,600 | 322 | 0.15 | 540 | 0.52 | 622 | 0.66 | 693 | 0.81 | 757 | 0.96 | 819 | 1.12 |
| | 3,000 | 552 | 0.65 | 595 | 0.73 | 673 | 0.91 | 740 | 1.07 | 800 | 1.24 | 856 | 1.41 |
| | 3,400 | 615 | 0.91 | 653 | 1.01 | 726 | 1.21 | 789 | 1.40 | 846 | 1.59 | 899 | 1.78 |
| | 3,750 | 671 | 1.20 | 706 | 1.31 | 773 | 1.53 | 834 | 1.74 | 889 | 1.95 | 940 | 2.16 |
| 40RM 012 | 3,000 | 399 | 0.29 | 573 | 0.69 | 654 | 0.86 | 722 | 1.03 | 784 | 1.19 | 841 | 1.37 |
| | 3,500 | 604 | 0.92 | 641 | 1.02 | 714 | 1.22 | 780 | 1.42 | 838 | 1.61 | 892 | 1.81 |
| | 4,000 | 680 | 1.33 | 713 | 1.45 | 778 | 1.68 | 839 | 1.91 | 896 | 2.14 | 947 | 2.36 |
| | 4,500 | 756 | 1.86 | 787 | 1.99 | 845 | 2.26 | 901 | 2.52 | 955 | 2.78 | 1005 | 3.03 |
| | 5,000 | 834 | 2.51 | 861 | 2.67 | 914 | 2.96 | 966 | 3.25 | 1016 | 3.54 | 1064 | 3.82 |
| 40RM 014 | 3,750 | 394 | 0.40 | 453 | 0.52 | 558 | 0.80 | 643 | 1.10 | 717 | 1.39 | 785 | 1.71 |
| | 4,300 | 436 | 0.57 | 487 | 0.70 | 586 | 1.00 | 670 | 1.34 | 742 | 1.67 | 806 | 2.01 |
| | 5,000 | 492 | 0.86 | 535 | 0.99 | 623 | 1.31 | 704 | 1.69 | 775 | 2.08 | 838 | 2.47 |
| | 5,700 | 550 | 1.23 | 587 | 1.37 | 664 | 1.71 | 740 | 2.11 | 809 | 2.55 | 872 | 2.99 |
| | 6,250 | 596 | 1.59 | 630 | 1.74 | 700 | 2.09 | 770 | 2.51 | 837 | 2.97 | 899 | 3.45 |
| 40RM 016 | 4,500 | 428 | 0.59 | 475 | 0.70 | 570 | 0.99 | 656 | 1.33 | 730 | 1.68 | 796 | 2.02 |
| | 5,300 | 488 | 0.92 | 528 | 1.04 | 609 | 1.34 | 689 | 1.71 | 762 | 2.11 | 827 | 2.51 |
| | 6,000 | 542 | 1.29 | 578 | 1.43 | 649 | 1.74 | 721 | 2.11 | 791 | 2.55 | 855 | 3.00 |
| | 6,800 | 604 | 1.83 | 637 | 1.99 | 700 | 2.32 | 763 | 2.70 | 826 | 3.15 | 888 | 3.64 |
| | 7,500 | 660 | 2.42 | 690 | 2.59 | 747 | 2.95 | 804 | 3.34 | 861 | 3.79 | 919 | 4.29 |
| 40RM 024 | 6,000 | 532 | 1.25 | 569 | 1.39 | 639 | 1.69 | 711 | 2.06 | 781 | 2.48 | 846 | 2.93 |
| | 7,000 | 608 | 1.93 | 641 | 2.09 | 702 | 2.42 | 763 | 2.80 | 824 | 3.23 | 885 | 3.71 |
| | 8,000 | 686 | 2.83 | 716 | 3.01 | 770 | 3.38 | 823 | 3.77 | 876 | 4.21 | 930 | 4.70 |
| | 9,000 | 764 | 3.97 | 791 | 4.18 | 841 | 4.59 | 888 | 5.02 | 935 | 5.47 | 982 | 5.96 |
| | 10,000 | 843 | 5.38 | 868 | 5.62 | 914 | 6.09 | 957 | 6.55 | 1000 | 7.02 | 1042 | 7.53 |
| 40RM 028 | 7,500 | 456 | 1.29 | 490 | 1.47 | 556 | 1.85 | 621 | 2.25 | 678 | 2.64 | 729 | 3.06 |
| | 8,750 | 521 | 1.98 | 551 | 2.18 | 608 | 2.61 | 664 | 3.07 | 720 | 3.53 | 770 | 3.99 |
| | 10,000 | 587 | 2.88 | 614 | 3.11 | 664 | 3.59 | 714 | 4.09 | 763 | 4.62 | 812 | 5.15 |
| | 11,250 | 653 | 4.03 | 678 | 4.29 | 724 | 4.82 | 768 | 5.37 | 812 | 5.95 | 856 | 6.54 |
| | 12,500 | 720 | 5.46 | 743 | 5.75 | 785 | 6.33 | 825 | 6.93 | 865 | 7.55 | 904 | 8.20 |

LEGEND

ESP — External Static Pressure

Bold indicates field-supplied drive is required.

Plain type indicates standard motor and standard drive.

Underline indicates a different motor and drive combination is required. Refer to fan motor and drive tables, pages 131-135, to complete the selection.

NOTES:

1. Maximum allowable fan speed is 1100 rpm (18.3 r/s) for unit size 028; 1200 rpm (20 r/s) for all other sizes.
2. Fan performance is based on deductions for wet coil, clean 51 mm (2-in.) filters, and unit casing. See page 125 for factory-supplied filter pressure drop.
3. The medium-static drive and standard motor combination is NOT AVAILABLE for 40RM016-028 units. Use the alternate motor if medium-static drive is required for these sizes.

40RM

Performance data (cont)



FAN PERFORMANCE DATA — 40RM WITH STANDARD COIL — 1.4-2.4 in. wg ESP — ENGLISH

| UNIT (Standard 3-Row Coil) | AIRFLOW (Cfm) | EXTERNAL STATIC PRESSURE (in. wg) | | | | | | | | | | | |
|----------------------------------|------------------|-----------------------------------|------|------|-------|------|-------|------|-------|------|-------|------|------|
| | | 1.4 | | 1.6 | | 1.8 | | 2.0 | | 2.2 | | 2.4 | |
| | | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp |
| 40RM 007 | 1,800 | 910 | 1.04 | 965 | 1.20 | 1016 | 1.36 | 1065 | 1.52 | 1111 | 1.69 | 1155 | 1.86 |
| | 2,100 | 927 | 1.21 | 983 | 1.38 | 1035 | 1.56 | 1084 | 1.74 | 1131 | 1.92 | 1175 | 2.11 |
| | 2,400 | 944 | 1.41 | 999 | 1.59 | 1052 | 1.78 | 1101 | 1.98 | 1149 | 2.18 | 1193 | 2.38 |
| | 2,700 | 964 | 1.63 | 1018 | 1.82 | 1069 | 2.03 | 1118 | 2.24 | 1165 | 2.45 | — | — |
| | 3,000 | 989 | 1.89 | 1039 | 2.10 | 1089 | 2.31 | 1136 | 2.53 | 1183 | 2.76 | — | — |
| 40RM 008 | 2,250 | 918 | 1.26 | 975 | 1.43 | 1029 | 1.62 | 1079 | 1.80 | 1126 | 1.99 | 1172 | 2.18 |
| | 2,600 | 936 | 1.48 | 991 | 1.67 | 1044 | 1.87 | 1094 | 2.07 | 1142 | 2.28 | 1188 | 2.49 |
| | 3,000 | 963 | 1.79 | 1014 | 1.99 | 1064 | 2.20 | 1113 | 2.42 | 1159 | 2.64 | — | — |
| | 3,400 | 998 | 2.18 | 1045 | 2.39 | 1092 | 2.61 | 1137 | 2.83 | 1182 | 3.07 | — | — |
| | 3,750 | 1034 | 2.58 | 1078 | 2.80 | 1122 | 3.03 | 1164 | 3.27 | — | — | — | — |
| 40RM 012 | 3,000 | 949 | 1.74 | 1000 | 1.93 | 1050 | 2.14 | 1099 | 2.36 | 1147 | 2.58 | 1192 | 2.81 |
| | 3,500 | 990 | 2.21 | 1037 | 2.42 | 1083 | 2.64 | 1128 | 2.86 | 1172 | 3.10 | — | — |
| | 4,000 | 1040 | 2.80 | 1084 | 3.03 | 1126 | 3.26 | 1167 | 3.50 | — | — | — | — |
| | 4,500 | 1094 | 3.53 | 1136 | 3.78 | 1176 | 4.03 | — | — | — | — | — | — |
| | 5,000 | 1151 | 4.39 | 1191 | 4.66 | — | — | — | — | — | — | — | — |
| 40RM 014 | 3,750 | 909 | 2.37 | 968 | 2.74 | 1026 | 3.12 | 1080 | 3.51 | 1131 | 3.92 | 1181 | 4.32 |
| | 4,300 | 925 | 2.73 | 980 | 3.11 | 1034 | 3.52 | 1084 | 3.92 | 1135 | 4.35 | 1184 | 4.78 |
| | 5,000 | 950 | 3.26 | 1002 | 3.67 | 1052 | 4.09 | 1101 | 4.53 | 1148 | 4.98 | 1190 | 5.44 |
| | 5,700 | 981 | 3.88 | 1031 | 4.33 | 1079 | 4.79 | 1125 | 5.25 | 1169 | 5.73 | — | — |
| | 6,250 | 1007 | 4.42 | 1057 | 4.91 | 1103 | 5.40 | 1148 | 5.90 | 1191 | 6.40 | — | — |
| 40RM 016 | 4,500 | 912 | 2.75 | 967 | 3.13 | 1019 | 3.52 | 1070 | 3.92 | 1120 | 4.35 | 1168 | 4.79 |
| | 5,300 | 940 | 3.33 | 992 | 3.75 | 1041 | 4.18 | 1088 | 4.61 | 1134 | 5.06 | 1179 | 5.52 |
| | 6,000 | 968 | 3.92 | 1018 | 4.38 | 1066 | 4.85 | 1112 | 5.32 | 1156 | 5.80 | 1198 | 6.29 |
| | 6,800 | 1000 | 4.67 | 1050 | 5.19 | 1097 | 5.71 | 1142 | 6.23 | 1185 | 6.76 | — | — |
| | 7,500 | 1028 | 5.39 | 1078 | 5.97 | 1125 | 6.54 | 1170 | 7.11 | — | — | — | — |
| 40RM 024 | 6,000 | 954 | 3.83 | 1005 | 4.27 | 1052 | 4.72 | 1098 | 5.22 | 1142 | 5.67 | — | — |
| | 7,000 | 990 | 4.74 | 1040 | 5.24 | 1090 | 5.80 | 1135 | 6.30 | 1176 | 6.84 | — | — |
| | 8,000 | 1028 | 5.79 | 1078 | 6.38 | 1130 | 7.00 | 1173 | 7.60 | — | — | — | — |
| | 9,000 | 1073 | 7.11 | 1120 | 7.72 | 1169 | 8.37 | — | — | — | — | — | — |
| | 10,000 | 1126 | 8.75 | 1166 | 9.37 | — | — | — | — | — | — | — | — |
| 40RM 028 | 7,500 | 831 | 4.41 | 870 | 5.10 | 913 | 5.90 | 950 | 6.88 | 985 | 7.70 | — | — |
| | 8,750 | 859 | 4.97 | 901 | 5.59 | 944 | 6.42 | 980 | 7.20 | 1020 | 8.10 | — | — |
| | 10,000 | 900 | 6.20 | 939 | 6.74 | 976 | 7.33 | 1013 | 8.00 | 1050 | 8.82 | — | — |
| | 11,250 | 941 | 7.73 | 980 | 8.32 | 1017 | 8.90 | 1052 | 9.51 | 1086 | 10.16 | — | — |
| | 12,500 | 984 | 9.53 | 1022 | 10.19 | 1058 | 10.84 | 1093 | 11.49 | — | — | — | — |

LEGEND

ESP — External Static Pressure

Bold indicates field-supplied drive is required.

Plain type indicates standard motor and standard drive.

Underline indicates a different motor and drive combination is required. Refer to fan motor and drive tables, pages 131-135, to complete the selection.

NOTES:

1. Maximum allowable fan speed is 1100 rpm (18.3 r/s) for unit size 028; 1200 rpm (20 r/s) for all other sizes.
2. Fan performance is based on deductions for wet coil, clean 51 mm (2-in.) filters, and unit casing. See page 125 for factory-supplied filter pressure drop.
3. The medium-static drive and standard motor combination is NOT AVAILABLE for 40RM016-028 units. Use the alternate motor if medium-static drive is required for these sizes.



FAN PERFORMANCE DATA — 40RM WITH HIGH-CAPACITY COIL —
0-300 Pa ESP — SI

| UNIT 40RM (High-Capacity 4-Row Coil) | AIRFLOW (L/s) | EXTERNAL STATIC PRESSURE (Pa) | | | | | | | | | | | | | |
|---|------------------|-------------------------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| | | 0 | | 50 | | 100 | | 150 | | 200 | | 250 | | | |
| | | r/s | kW | r/s | kW | r/s | kW | r/s | kW | r/s | kW | r/s | kW | | |
| 007 | 850 | 6.98 | 0.16 | 7.86 | 0.19 | 9.40 | 0.27 | 10.81 | 0.37 | 12.11 | 0.47 | 13.29 | 0.57 | 14.36 | 0.69 |
| | 990 | 7.84 | 0.23 | 8.64 | 0.27 | 10.03 | 0.36 | 11.31 | 0.46 | 12.52 | 0.57 | 13.65 | 0.69 | 14.71 | 0.81 |
| | 1130 | 8.73 | 0.33 | 9.46 | 0.38 | 10.75 | 0.48 | 11.91 | 0.59 | 13.01 | 0.70 | 14.07 | 0.83 | 15.08 | 0.96 |
| | 1270 | 9.63 | 0.45 | <u>10.31</u> | <u>0.51</u> | <u>11.51</u> | <u>0.62</u> | <u>12.58</u> | <u>0.74</u> | <u>13.60</u> | <u>0.86</u> | <u>14.58</u> | <u>0.99</u> | <u>15.53</u> | <u>1.13</u> |
| | 1420 | 10.55 | 0.61 | <u>11.18</u> | <u>0.67</u> | <u>12.30</u> | <u>0.80</u> | <u>13.31</u> | <u>0.92</u> | <u>14.26</u> | <u>1.05</u> | <u>15.17</u> | <u>1.19</u> | <u>16.05</u> | <u>1.33</u> |
| 008 | 1060 | 4.83 | 0.07 | 8.50 | 0.29 | 9.91 | 0.38 | 11.15 | 0.48 | 12.32 | 0.59 | 13.44 | 0.71 | 14.50 | 0.83 |
| | 1230 | 5.81 | 0.14 | 9.35 | 0.41 | 10.67 | 0.52 | <u>11.81</u> | <u>0.63</u> | <u>12.88</u> | <u>0.74</u> | <u>13.90</u> | <u>0.87</u> | <u>14.89</u> | <u>1.00</u> |
| | 1420 | 9.65 | 0.52 | 10.35 | 0.59 | <u>11.59</u> | <u>0.71</u> | <u>12.66</u> | <u>0.84</u> | <u>13.64</u> | <u>0.97</u> | <u>14.57</u> | <u>1.10</u> | <u>15.47</u> | <u>1.24</u> |
| | 1600 | 10.76 | 0.74 | <u>11.39</u> | <u>0.81</u> | <u>12.54</u> | <u>0.96</u> | <u>13.55</u> | <u>1.10</u> | <u>14.48</u> | <u>1.24</u> | <u>15.34</u> | <u>1.39</u> | <u>16.17</u> | <u>1.53</u> |
| | 1770 | 11.74 | 0.97 | <u>12.32</u> | <u>1.06</u> | <u>13.40</u> | <u>1.22</u> | <u>14.37</u> | <u>1.38</u> | <u>15.25</u> | <u>1.53</u> | <u>16.07</u> | <u>1.69</u> | <u>16.86</u> | <u>1.85</u> |
| 012 | 1420 | 7.02 | 0.26 | 9.86 | 0.54 | 11.17 | 0.67 | 12.28 | 0.79 | 13.29 | 0.92 | 14.23 | 1.05 | 15.14 | 1.19 |
| | 1650 | 10.44 | 0.73 | 11.06 | 0.80 | 12.25 | 0.96 | <u>13.31</u> | <u>1.10</u> | <u>14.25</u> | <u>1.25</u> | <u>15.13</u> | <u>1.39</u> | <u>15.96</u> | <u>1.54</u> |
| | 1890 | 11.76 | 1.06 | 12.31 | 1.15 | <u>13.38</u> | <u>1.32</u> | <u>14.37</u> | <u>1.49</u> | <u>15.28</u> | <u>1.66</u> | <u>16.11</u> | <u>1.83</u> | <u>16.89</u> | <u>1.99</u> |
| | 2120 | <u>13.10</u> | <u>1.48</u> | <u>13.59</u> | <u>1.58</u> | <u>14.55</u> | <u>1.78</u> | <u>15.48</u> | <u>1.97</u> | <u>16.34</u> | <u>2.17</u> | <u>17.14</u> | <u>2.35</u> | <u>17.89</u> | <u>2.54</u> |
| | 2360 | 14.45 | <u>2.01</u> | <u>14.89</u> | <u>2.12</u> | <u>15.76</u> | <u>2.34</u> | <u>16.62</u> | <u>2.56</u> | <u>17.43</u> | <u>2.77</u> | <u>18.20</u> | <u>2.98</u> | <u>18.92</u> | <u>3.19</u> |
| 014 | 1770 | 6.84 | 0.32 | 7.78 | 0.41 | 9.46 | 0.62 | 10.82 | 0.83 | <u>12.02</u> | <u>1.05</u> | <u>13.13</u> | <u>1.28</u> | <u>14.19</u> | <u>1.53</u> |
| | 2030 | 7.58 | 0.46 | 8.40 | 0.55 | 9.98 | 0.78 | 11.31 | 1.03 | <u>12.47</u> | <u>1.27</u> | <u>13.52</u> | <u>1.52</u> | <u>14.51</u> | <u>1.78</u> |
| | 2360 | 8.57 | 0.69 | 9.27 | 0.79 | 10.68 | 1.04 | <u>11.96</u> | <u>1.31</u> | <u>13.09</u> | <u>1.60</u> | <u>14.11</u> | <u>1.88</u> | <u>15.05</u> | <u>2.17</u> |
| | 2690 | 9.59 | 0.99 | 10.20 | 1.10 | 11.44 | 1.36 | <u>12.64</u> | <u>1.66</u> | <u>13.74</u> | <u>1.98</u> | <u>14.74</u> | <u>2.30</u> | <u>15.65</u> | <u>2.63</u> |
| | 2950 | 10.40 | 1.28 | 10.96 | 1.39 | <u>12.09</u> | <u>1.67</u> | <u>13.21</u> | <u>1.98</u> | <u>14.27</u> | <u>2.33</u> | <u>15.25</u> | <u>2.68</u> | <u>16.15</u> | <u>3.03</u> |
| 016 | 2120 | 7.28 | 0.45 | 8.05 | 0.54 | 9.60 | 0.75 | 11.00 | 1.00 | <u>12.21</u> | <u>1.26</u> | <u>13.28</u> | <u>1.51</u> | <u>14.27</u> | <u>1.78</u> |
| | 2500 | 8.32 | 0.71 | 8.97 | 0.80 | 10.29 | 1.02 | 11.59 | 1.30 | <u>12.78</u> | <u>1.59</u> | <u>13.84</u> | <u>1.89</u> | <u>14.80</u> | <u>2.19</u> |
| | 2830 | 9.25 | 1.00 | 9.83 | 1.10 | 10.99 | 1.33 | <u>12.16</u> | <u>1.62</u> | <u>13.29</u> | <u>1.93</u> | <u>14.34</u> | <u>2.27</u> | <u>15.30</u> | <u>2.60</u> |
| | 3210 | 10.33 | 1.42 | 10.85 | 1.54 | <u>11.87</u> | <u>1.78</u> | <u>12.90</u> | <u>2.07</u> | <u>13.93</u> | <u>2.40</u> | <u>14.93</u> | <u>2.76</u> | <u>15.87</u> | <u>3.14</u> |
| | 3540 | 11.29 | 1.88 | <u>11.77</u> | <u>2.01</u> | <u>12.69</u> | <u>2.27</u> | <u>13.62</u> | <u>2.56</u> | <u>14.56</u> | <u>2.90</u> | <u>15.49</u> | <u>3.27</u> | <u>16.40</u> | <u>3.67</u> |
| 024 | 2830 | 9.03 | 0.96 | 9.62 | 1.06 | 10.77 | 1.29 | 11.94 | 1.56 | 13.08 | 1.87 | 14.15 | 2.20 | 15.12 | 2.54 |
| | 3300 | 10.34 | 1.48 | 10.86 | 1.60 | 11.85 | 1.85 | 12.84 | 2.12 | 13.85 | 2.45 | 14.84 | 2.80 | 15.78 | 3.18 |
| | 3780 | 11.67 | 2.17 | 12.14 | 2.31 | 13.02 | 2.58 | 13.88 | 2.87 | <u>14.75</u> | <u>3.20</u> | <u>15.63</u> | <u>3.56</u> | <u>16.50</u> | <u>3.96</u> |
| | 4250 | 13.01 | 3.05 | 13.44 | 3.21 | 14.23 | 3.51 | <u>15.00</u> | <u>3.82</u> | <u>15.77</u> | <u>4.16</u> | <u>16.54</u> | <u>4.53</u> | <u>17.32</u> | <u>4.94</u> |
| | 4720 | 14.36 | 4.15 | <u>14.75</u> | 4.32 | <u>15.48</u> | <u>4.66</u> | <u>16.18</u> | <u>4.99</u> | <u>16.87</u> | <u>5.35</u> | <u>17.56</u> | <u>5.73</u> | <u>18.26</u> | <u>6.14</u> |
| 028 | 3540 | 7.94 | 1.04 | 8.51 | 1.18 | 9.65 | 1.48 | 10.73 | 1.79 | <u>11.68</u> | <u>2.10</u> | <u>12.53</u> | <u>2.46</u> | <u>13.40</u> | <u>2.95</u> |
| | 4130 | 9.08 | 1.59 | 9.57 | 1.75 | 10.55 | 2.10 | <u>11.52</u> | <u>2.46</u> | <u>12.45</u> | <u>2.81</u> | <u>13.28</u> | <u>3.17</u> | <u>14.04</u> | <u>3.55</u> |
| | 4720 | 10.24 | 2.33 | 10.68 | 2.51 | <u>11.53</u> | <u>2.88</u> | <u>12.39</u> | <u>3.29</u> | <u>13.24</u> | <u>3.70</u> | <u>14.05</u> | <u>4.11</u> | <u>14.80</u> | <u>4.51</u> |
| | 5310 | 11.42 | 3.26 | <u>11.81</u> | <u>3.46</u> | <u>12.57</u> | <u>3.88</u> | <u>13.33</u> | <u>4.32</u> | <u>14.09</u> | <u>4.77</u> | <u>14.85</u> | <u>5.24</u> | <u>15.58</u> | <u>5.70</u> |
| | 5900 | 12.60 | 4.42 | <u>12.96</u> | 4.64 | 13.65 | 5.09 | 14.33 | 5.57 | <u>15.01</u> | <u>6.07</u> | <u>15.70</u> | <u>6.58</u> | <u>16.38</u> | <u>7.10</u> |

LEGEND

ESP — External Static Pressure

Bold indicates field-supplied drive is required.

Plain type indicates standard motor and standard drive.

Underline indicates a different motor and drive combination other than the standard motor and standard drive combination is required. Refer to fan motor and drive tables, pages 131-135, to complete the selection.

NOTES:

1. Maximum allowable fan speed is 18.3 r/s for unit size 028; 20 r/s for all other sizes.
2. Fan performance is based on deductions for wet coil, clean 51-mm filters, and unit casing. See Fan Performance Data tables on page 125 for Factory-Supplied Filter Pressure Drop.
3. For 50 Hz units, the medium-static drive and standard motor combination is not available for 016-028 sizes. Use alternate motor if medium-static drive is required for these sizes.

40RM

Performance data (cont)



FAN PERFORMANCE DATA — 40RM WITH HIGH-CAPACITY COIL — 350-600 Pa ESP — SI

| UNIT 40RM (High-Capacity 4-Row Coil) | AIRFLOW (L/s) | EXTERNAL STATIC PRESSURE (Pa) | | | | | | | | | | | |
|---|------------------|-------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 350 | | 400 | | 450 | | 500 | | 550 | | 600 | |
| | | r/s | kW | r/s | kW | r/s | kW | r/s | kW | r/s | kW | r/s | kW |
| 007 | 850 | 15.34 | 0.80 | 16.25 | 0.92 | 17.10 | 1.03 | 17.90 | 1.16 | 18.66 | 1.28 | 19.39 | 1.41 |
| | 850 | 15.69 | 0.94 | 16.61 | 1.07 | 17.47 | 1.20 | 18.28 | 1.33 | 19.04 | 1.47 | 19.77 | 1.61 |
| | 1130 | 16.04 | 1.09 | 16.95 | 1.23 | 17.81 | 1.38 | 18.63 | 1.53 | 19.40 | 1.67 | — | — |
| | 1270 | 16.44 | 1.27 | 17.32 | 1.42 | 18.17 | 1.58 | 18.97 | 1.74 | 19.75 | 1.90 | — | — |
| | 1420 | 16.91 | 1.49 | 17.75 | 1.64 | 18.56 | 1.81 | 19.34 | 1.97 | — | — | — | — |
| 008 | 1060 | 15.50 | 0.96 | 16.43 | 1.10 | 17.31 | 1.23 | 18.14 | 1.37 | 18.93 | 1.51 | 19.68 | 1.66 |
| | 1230 | 15.84 | 1.14 | 16.75 | 1.28 | 17.62 | 1.43 | 18.45 | 1.58 | 19.24 | 1.74 | — | — |
| | 1420 | 16.34 | 1.38 | 17.19 | 1.54 | 18.01 | 1.70 | 18.81 | 1.86 | 19.59 | 2.03 | — | — |
| | 1600 | 16.97 | 1.69 | 17.76 | 1.85 | 18.52 | 2.02 | 19.27 | 2.19 | — | — | — | — |
| | 1770 | 17.61 | 2.01 | 18.35 | 2.18 | 19.07 | 2.35 | 19.77 | 2.53 | — | — | — | — |
| 012 | 1420 | 16.02 | 1.33 | 16.87 | 1.48 | 17.71 | 1.64 | 18.52 | 1.80 | 19.30 | 1.97 | — | — |
| | 1650 | 16.76 | 1.70 | 17.53 | 1.85 | 18.29 | 2.02 | 19.04 | 2.19 | 19.77 | 2.37 | — | — |
| | 1890 | 17.64 | 2.16 | 18.35 | 2.33 | 19.05 | 2.51 | 19.74 | 2.69 | — | — | — | — |
| | 2120 | 18.60 | 2.73 | 19.28 | 2.91 | 19.93 | 3.10 | — | — | — | — | — | — |
| | 2360 | 19.61 | 3.40 | — | — | — | — | — | — | — | — | — | — |
| 014 | 1770 | 15.21 | 1.78 | 16.19 | 2.06 | 17.13 | 2.34 | 18.04 | 2.64 | 18.91 | 2.94 | 19.75 | 3.25 |
| | 2030 | 15.46 | 2.05 | 16.37 | 2.33 | 17.26 | 2.63 | 18.12 | 2.94 | 18.96 | 3.26 | 19.78 | 3.59 |
| | 2360 | 15.94 | 2.46 | 16.78 | 2.77 | 17.60 | 3.08 | 18.40 | 3.40 | 19.18 | 3.73 | 19.94 | 4.07 |
| | 2690 | 16.51 | 2.95 | 17.32 | 3.28 | 18.09 | 3.62 | 18.84 | 3.96 | 19.57 | 4.31 | — | — |
| | 2950 | 16.99 | 3.39 | 17.78 | 3.74 | 18.54 | 4.10 | 19.26 | 4.47 | 19.96 | 4.84 | — | — |
| 016 | 2120 | 15.21 | 2.05 | 16.11 | 2.33 | 16.98 | 2.62 | 17.83 | 2.93 | 18.66 | 3.24 | 19.47 | 3.57 |
| | 2500 | 15.69 | 2.49 | 16.54 | 2.80 | 17.35 | 3.12 | 18.14 | 3.44 | 18.90 | 3.77 | 19.64 | 4.11 |
| | 2830 | 16.18 | 2.94 | 17.01 | 3.28 | 17.79 | 3.63 | 18.54 | 3.97 | 19.27 | 4.33 | 19.97 | 4.69 |
| | 3210 | 16.75 | 3.52 | 17.57 | 3.90 | 18.34 | 4.29 | 19.08 | 4.67 | 19.78 | 5.06 | — | — |
| | 3540 | 17.26 | 4.09 | 18.07 | 4.50 | 18.84 | 4.93 | 19.57 | 5.35 | — | — | — | — |
| 024 | 2830 | 16.01 | 2.88 | 16.85 | 3.22 | 17.64 | 3.56 | 18.39 | 3.91 | 19.12 | 4.26 | — | — |
| | 3300 | 16.67 | 3.57 | 17.50 | 3.96 | 18.28 | 4.36 | 19.03 | 4.75 | 19.73 | 5.15 | — | — |
| | 3780 | 17.35 | 4.39 | 18.17 | 4.82 | 18.95 | 5.27 | 19.68 | 5.72 | — | — | — | — |
| | 4250 | 18.11 | 5.37 | 18.88 | 5.83 | 19.63 | 6.31 | — | — | — | — | — | — |
| | 4720 | 18.96 | 6.58 | 19.67 | 7.05 | — | — | — | — | — | — | — | — |
| 028 | 3540 | 14.57 | 3.97 | 14.95 | 4.41 | 15.67 | 5.07 | 16.50 | 5.59 | — | — | — | — |
| | 4130 | 14.76 | 3.99 | 15.51 | 4.57 | 16.36 | 5.46 | 17.00 | 6.04 | — | — | — | — |
| | 4720 | 15.49 | 4.92 | 16.15 | 5.37 | 16.78 | 5.88 | 17.42 | 6.50 | — | — | — | — |
| | 5310 | 16.26 | 6.15 | 16.91 | 6.61 | 17.51 | 7.08 | 18.10 | 7.58 | — | — | — | — |
| | 5900 | 17.04 | 7.61 | 17.68 | 8.11 | 18.28 | 8.62 | — | — | — | — | — | — |

LEGEND

ESP — External Static Pressure

Bold indicates field-supplied drive is required.

Plain type indicates standard motor and standard drive.

Underline indicates a different motor and drive combination other than the standard motor and standard drive combination is required. Refer to fan motor and drive tables, pages 131-135, to complete the selection.

NOTES:

1. Maximum allowable fan speed is 18.3 r/s for unit size 028; 20 r/s for all other sizes.
2. Fan performance is based on deductions for wet coil, clean 51-mm filters, and unit casing. See Fan Performance Data tables on page 125 for Factory-Supplied Filter Pressure Drop.
3. For 50 Hz units, the medium-static drive and standard motor combination is not available for 016-028 sizes. Use alternate motor if medium-static drive is required for these sizes.



**FAN PERFORMANCE DATA — 40RM WITH HIGH-CAPACITY COIL —
0.0-1.2 in. wg ESP — ENGLISH**

| UNIT 40RM (High-Capacity 4-Row Coil) | AIRFLOW (Cfm) | EXTERNAL STATIC PRESSURE (in. wg) | | | | | | | | | | | | | |
|---|------------------|-----------------------------------|-------------|------------|-------------|------------|-------------|------------|------|------|-------------|------------|-------------|------|------|
| | | 0.0 | | 0.2 | | 0.4 | | 0.6 | | 0.8 | | 1.0 | | 1.2 | |
| | | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp |
| 007 | 1,800 | 419 | 0.21 | 471 | 0.26 | 564 | 0.37 | 649 | 0.49 | 727 | 0.63 | 797 | 0.77 | 862 | 0.92 |
| | 2,100 | 471 | 0.31 | 519 | 0.37 | 602 | 0.49 | 679 | 0.62 | 751 | 0.77 | 819 | 0.92 | 882 | 1.09 |
| | 2,400 | 524 | 0.44 | 568 | 0.51 | 645 | 0.64 | 715 | 0.79 | 781 | 0.94 | 844 | 1.11 | 905 | 1.28 |
| | 2,700 | 578 | 0.61 | 619 | 0.69 | 690 | 0.84 | 755 | 0.99 | 816 | 1.15 | 875 | 1.33 | 932 | 1.51 |
| | 3,000 | 633 | 0.81 | 671 | 0.90 | 738 | 1.07 | 799 | 1.24 | 856 | 1.41 | 910 | 1.60 | 963 | 1.79 |
| 008 | 2,250 | 290 | 0.10 | 510 | 0.39 | 594 | 0.51 | 669 | 0.65 | 739 | 0.79 | 806 | 0.95 | 870 | 1.12 |
| | 2,600 | 349 | 0.19 | 561 | 0.55 | 640 | 0.70 | 709 | 0.84 | 773 | 1.00 | 834 | 1.16 | 893 | 1.34 |
| | 3,000 | 579 | 0.70 | 621 | 0.79 | 695 | 0.96 | 759 | 1.12 | 818 | 1.30 | 874 | 1.47 | 928 | 1.66 |
| | 3,400 | 646 | 0.99 | 683 | 1.09 | 752 | 1.29 | 813 | 1.48 | 869 | 1.67 | 920 | 1.86 | 970 | 2.06 |
| | 3,750 | 705 | 1.31 | 739 | 1.42 | 804 | 1.63 | 862 | 1.85 | 915 | 2.05 | 964 | 2.26 | 1011 | 2.48 |
| 012 | 3,000 | 421 | 0.35 | 592 | 0.73 | 670 | 0.90 | 737 | 1.06 | 797 | 1.23 | 854 | 1.41 | 908 | 1.59 |
| | 3,500 | 626 | 0.98 | 664 | 1.08 | 735 | 1.28 | 798 | 1.48 | 855 | 1.67 | 908 | 1.87 | 958 | 2.07 |
| | 4,000 | 706 | 1.42 | 738 | 1.54 | <u>803</u> | 1.77 | 862 | 2.00 | 917 | 2.23 | 967 | 2.45 | 1014 | 2.67 |
| | 4,500 | 786 | 1.99 | 815 | 2.12 | 873 | 2.39 | 929 | 2.65 | 980 | 2.90 | 1028 | 3.16 | 1073 | 3.41 |
| | 5,000 | 867 | 2.70 | 893 | 2.84 | 946 | 3.14 | 997 | 3.43 | 1046 | 3.72 | 1092 | 4.00 | 1135 | 4.28 |
| 014 | 3,750 | 410 | 0.43 | 467 | 0.55 | 567 | 0.83 | 649 | 1.12 | 721 | 1.41 | 788 | 1.72 | 851 | 2.05 |
| | 4,300 | 455 | 0.62 | 504 | 0.74 | 599 | 1.05 | 679 | 1.38 | 748 | 1.70 | 811 | 2.04 | 871 | 2.39 |
| | 5,000 | 514 | 0.92 | 556 | 1.06 | 641 | 1.39 | 718 | 1.76 | 786 | 2.14 | 847 | 2.52 | 903 | 2.91 |
| | 5,700 | 575 | 1.32 | 612 | 1.47 | 686 | 1.82 | 759 | 2.23 | 825 | 2.66 | 884 | 3.09 | 939 | 3.52 |
| | 6,250 | 624 | 1.71 | 657 | 1.87 | <u>725</u> | 2.24 | 793 | 2.66 | 856 | 3.12 | 915 | 3.59 | 969 | 4.06 |
| 016 | 4,500 | 437 | 0.61 | 483 | 0.72 | 576 | 1.01 | 660 | 1.35 | 732 | 1.69 | 797 | 2.03 | 856 | 2.38 |
| | 5,300 | 499 | 0.95 | 538 | 1.07 | 617 | 1.37 | 696 | 1.74 | 767 | 2.13 | 830 | 2.53 | 888 | 2.94 |
| | 6,000 | 555 | 1.34 | 590 | 1.48 | 659 | 1.79 | 730 | 2.17 | 798 | 2.59 | 860 | 3.04 | 918 | 3.49 |
| | 6,800 | 620 | 1.91 | 651 | 2.06 | <u>712</u> | 2.39 | 774 | 2.78 | 836 | 3.22 | 896 | 3.71 | 952 | 4.21 |
| | 7,500 | 677 | 2.52 | <u>706</u> | 2.69 | 761 | 3.04 | 817 | 3.44 | 873 | 3.89 | 929 | 4.39 | 984 | 4.93 |
| 024 | 6,000 | 542 | 1.29 | 577 | 1.42 | 646 | 1.72 | 716 | 2.09 | 785 | 2.51 | 849 | 2.95 | 907 | 3.40 |
| | 7,000 | 620 | 1.99 | 652 | 2.15 | 711 | 2.48 | 771 | 2.85 | 831 | 3.28 | 890 | 3.76 | 947 | 4.27 |
| | 8,000 | 700 | 2.92 | 728 | 3.10 | 781 | 3.46 | 833 | 3.85 | 885 | 4.29 | 938 | 4.78 | 990 | 5.32 |
| | 9,000 | 781 | 4.10 | 806 | 4.30 | 854 | 4.71 | <u>900</u> | 5.13 | 946 | 5.58 | 993 | 6.08 | 1039 | 6.62 |
| | 10,000 | 862 | 5.56 | <u>885</u> | 5.79 | 929 | 6.24 | 971 | 6.70 | 1012 | 7.18 | 1054 | 7.69 | 1096 | 8.24 |
| 028 | 7,500 | 476 | 1.39 | 510 | 1.58 | 579 | 1.99 | 644 | 2.40 | 701 | 2.81 | 752 | 3.29 | 804 | 3.96 |
| | 8,750 | 545 | 2.14 | 574 | 2.35 | 633 | 2.81 | 691 | 3.29 | 747 | 3.77 | 797 | 4.25 | 842 | 4.76 |
| | 10,000 | 615 | 3.12 | 641 | 3.36 | <u>692</u> | 3.87 | 743 | 4.41 | 794 | 4.96 | 843 | 5.51 | 888 | 6.05 |
| | 11,250 | 685 | 4.37 | 709 | 4.64 | 754 | 5.20 | 800 | 5.79 | 845 | 6.40 | 891 | 7.02 | 935 | 7.64 |
| | 12,500 | 756 | 5.92 | 778 | 6.22 | 819 | 6.83 | 860 | 7.47 | 901 | 8.14 | 942 | 8.83 | 983 | 9.52 |

LEGEND

Bhp — Brake Horsepower Input to Fan

ESP — External Static Pressure

Bold indicates field-supplied drive is required.

Plain type indicates standard motor and standard drive.

Underline indicates a different motor and drive combination other than the standard motor and standard drive combination is required. Refer to fan motor and drive tables, pages 131-135, to complete selection.

NOTES:

1. Maximum allowable fan speed is 1100 rpm for unit size 028; 1200 rpm for all other sizes.
2. Fan performance is based on deductions for wet coil, clean 2-in. filters, and unit casing. See Fan Performance Data tables on page 125 for Factory-Supplied Filter Pressure Drop.
3. For 50 Hz units, the medium-static drive and standard motor combination is not available for 016-028 sizes. Use alternate motor if medium-static drive is required for these sizes.

40RM

Performance data (cont)



FAN PERFORMANCE DATA — 40RM WITH HIGH-CAPACITY COIL — 1.4-2.4 in. wg ESP — ENGLISH

| UNIT 40RM (High-Capacity 4-Row Coil) | AIRFLOW (Cfm) | EXTERNAL STATIC PRESSURE (in. wg) | | | | | | | | | | | |
|---|------------------|-----------------------------------|-------|------|-------|------|-------|------|-------|------|------|------|------|
| | | 1.4 | | 1.6 | | 1.8 | | 2.0 | | 2.2 | | 2.4 | |
| | | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp | Rpm | Bhp |
| 007 | 1,800 | 921 | 1.07 | 975 | 1.23 | 1026 | 1.39 | 1074 | 1.55 | 1120 | 1.72 | 1164 | 1.90 |
| | 2,100 | 942 | 1.26 | 997 | 1.43 | 1048 | 1.61 | 1097 | 1.79 | 1143 | 1.97 | 1186 | 2.16 |
| | 2,400 | 963 | 1.47 | 1017 | 1.66 | 1069 | 1.85 | 1118 | 2.05 | 1164 | 2.25 | — | — |
| | 2,700 | 987 | 1.71 | 1039 | 1.91 | 1090 | 2.12 | 1138 | 2.33 | 1185 | 2.55 | — | — |
| | 3,000 | 1015 | 1.99 | 1065 | 2.20 | 1113 | 2.42 | 1161 | 2.65 | — | — | — | — |
| 008 | 2,250 | 930 | 1.29 | 986 | 1.47 | 1039 | 1.65 | 1089 | 1.84 | 1136 | 2.03 | 1181 | 2.22 |
| | 2,600 | 950 | 1.53 | 1005 | 1.72 | 1057 | 1.92 | 1107 | 2.13 | 1154 | 2.33 | — | — |
| | 3,000 | 980 | 1.86 | 1031 | 2.06 | 1081 | 2.27 | 1129 | 2.49 | 1175 | 2.72 | — | — |
| | 3,400 | 1018 | 2.26 | 1065 | 2.48 | 1111 | 2.70 | 1156 | 2.93 | — | — | — | — |
| | 3,750 | 1057 | 2.69 | 1101 | 2.92 | 1144 | 3.15 | 1186 | 3.39 | — | — | — | — |
| 012 | 3,000 | 961 | 1.78 | 1012 | 1.98 | 1062 | 2.19 | 1111 | 2.41 | 1158 | 2.64 | — | — |
| | 3,500 | 1005 | 2.27 | 1052 | 2.49 | 1098 | 2.71 | 1142 | 2.94 | 1186 | 3.18 | — | — |
| | 4,000 | 1058 | 2.90 | 1101 | 3.13 | 1143 | 3.36 | 1184 | 3.60 | — | — | — | — |
| | 4,500 | 1116 | 3.66 | 1157 | 3.91 | 1196 | 4.16 | — | — | — | — | — | — |
| | 5,000 | 1176 | 4.56 | — | — | — | — | — | — | — | — | — | — |
| 014 | 3,750 | 912 | 2.39 | 971 | 2.76 | 1028 | 3.14 | 1083 | 3.54 | 1135 | 3.95 | 1185 | 4.36 |
| | 4,300 | 928 | 2.75 | 982 | 3.13 | 1036 | 3.53 | 1087 | 3.94 | 1138 | 4.37 | 1187 | 4.81 |
| | 5,000 | 956 | 3.30 | 1007 | 3.71 | 1056 | 4.13 | 1104 | 4.56 | 1151 | 5.00 | 1196 | 5.46 |
| | 5,700 | 990 | 3.96 | 1039 | 4.40 | 1086 | 4.85 | 1130 | 5.31 | 1174 | 5.78 | — | — |
| | 6,250 | 1019 | 4.54 | 1067 | 5.02 | 1112 | 5.50 | 1156 | 5.99 | 1198 | 6.49 | — | — |
| 016 | 4,500 | 912 | 2.75 | 967 | 3.12 | 1019 | 3.52 | 1070 | 3.92 | 1120 | 4.35 | 1168 | 4.79 |
| | 5,300 | 942 | 3.34 | 992 | 3.76 | 1041 | 4.18 | 1088 | 4.61 | 1134 | 5.06 | 1179 | 5.52 |
| | 6,000 | 971 | 3.95 | 1020 | 4.40 | 1067 | 4.86 | 1112 | 5.33 | 1156 | 5.81 | 1198 | 6.29 |
| | 6,800 | 1005 | 4.72 | 1054 | 5.23 | 1101 | 5.75 | 1145 | 6.27 | 1187 | 6.79 | — | — |
| | 7,500 | 1036 | 5.48 | 1084 | 6.04 | 1131 | 6.61 | 1174 | 7.17 | — | — | — | — |
| 024 | 6,000 | 961 | 3.86 | 1011 | 4.31 | 1058 | 4.77 | 1104 | 5.24 | 1147 | 5.71 | — | — |
| | 7,000 | 1000 | 4.79 | 1050 | 5.32 | 1097 | 5.85 | 1142 | 6.38 | 1184 | 6.91 | — | — |
| | 8,000 | 1041 | 5.88 | 1090 | 6.47 | 1137 | 7.07 | 1181 | 7.67 | — | — | — | — |
| | 9,000 | 1086 | 7.21 | 1133 | 7.82 | 1178 | 8.47 | — | — | — | — | — | — |
| | 10,000 | 1138 | 8.83 | 1180 | 9.46 | — | — | — | — | — | — | — | — |
| 028 | 7,500 | 874 | 5.33 | 897 | 5.91 | 940 | 6.80 | 990 | 7.50 | — | — | — | — |
| | 8,750 | 886 | 5.36 | 930 | 6.13 | 982 | 7.32 | 1020 | 8.10 | — | — | — | — |
| | 10,000 | 930 | 6.60 | 969 | 7.20 | 1007 | 7.89 | 1045 | 8.71 | — | — | — | — |
| | 11,250 | 976 | 8.25 | 1014 | 8.86 | 1051 | 9.49 | 1086 | 10.17 | — | — | — | — |
| | 12,500 | 1023 | 10.20 | 1061 | 10.88 | 1097 | 11.56 | — | — | — | — | — | — |

LEGEND

Bhp — Brake Horsepower Input to Fan
ESP — External Static Pressure

Bold indicates field-supplied drive is required.

Plain type indicates standard motor and standard drive.

Underline indicates a different motor and drive combination other than the standard motor and standard drive combination is required. Refer to fan motor and drive tables, pages 131-135, to complete selection.

NOTES:

1. Maximum allowable fan speed is 1100 rpm for unit size 028; 1200 rpm for all other sizes.
2. Fan performance is based on deductions for wet coil, clean 2-in. filters, and unit casing. See Fan Performance Data tables on page 125 for Factory-Supplied Filter Pressure Drop.
3. For 50 Hz units, the medium-static drive and standard motor combination is not available for 016-028 sizes. Use alternate motor if medium-static drive is required for these sizes.



FAN PERFORMANCE DATA TABLES

FACTORY-SUPPLIED FILTER PRESSURE DROP — SI

| UNIT 40RM | AIRFLOW (L/s) | PRESSURE DROP (Pa) |
|--------------|------------------|-----------------------|
| 007 | 850 | 13 |
| | 1150 | 20 |
| | 1450 | 28 |
| 008 | 1000 | 17 |
| | 1400 | 27 |
| | 1800 | 38 |
| 012 | 1450 | 28 |
| | 1900 | 42 |
| | 2350 | 56 |
| 014 | 1750 | 15 |
| | 2350 | 24 |
| | 2950 | 33 |
| 016 | 2100 | 20 |
| | 2800 | 30 |
| | 3500 | 42 |
| 024 | 2900 | 32 |
| | 3800 | 47 |
| | 4700 | 64 |
| 028 | 3500 | 36 |
| | 4700 | 55 |
| | 5900 | 76 |

FACTORY-SUPPLIED FILTER PRESSURE DROP — ENGLISH

| UNIT 40RM | AIRFLOW (Cfm) | PRESSURE DROP (in. wg) |
|--------------|------------------|---------------------------|
| 007 | 1,800 | 0.05 |
| | 2,400 | 0.08 |
| | 3,000 | 0.11 |
| 008 | 2,250 | 0.07 |
| | 3,000 | 0.11 |
| | 3,750 | 0.15 |
| 012 | 3,000 | 0.11 |
| | 4,000 | 0.17 |
| | 5,000 | 0.23 |
| 014 | 3,750 | 0.06 |
| | 5,000 | 0.10 |
| | 6,250 | 0.13 |
| 016 | 4,500 | 0.08 |
| | 6,000 | 0.12 |
| | 7,500 | 0.17 |
| 024 | 6,000 | 0.12 |
| | 8,000 | 0.19 |
| | 10,000 | 0.26 |
| 028 | 7,500 | 0.15 |
| | 10,000 | 0.22 |
| | 12,500 | 0.30 |

Performance data (cont)



40RM ACCESSORY PLENUM AIR THROW DATA — SI (m)

| UNIT 40RM | AIRFLOW (L/s) | VANE DEFLECTION | | |
|--------------|------------------|-----------------|-------|-------|
| | | Straight | 22½° | 45° |
| 007 | 1150 | 11.71 | 9.91 | 7.20 |
| 008 | 1400 | 13.87 | 11.71 | 8.63 |
| 012 | 1900 | 16.65 | 13.93 | 9.99 |
| 014 | 2350 | 13.77 | 11.63 | 8.57 |
| 016 | 2800 | 15.41 | 13.25 | 9.55 |
| 024 | 3800 | 18.17 | 15.44 | 11.20 |
| 028 | 4700 | 23.26 | 19.89 | 14.38 |

NOTE: Throw distances shown are for 0.381 m/sec terminal velocity. Use the following multipliers to determine throw values for other terminal velocities.

| TERMINAL VELOCITY (m/sec) | THROW FACTOR |
|------------------------------|--------------|
| 0.254 | X 1.50 |
| 0.508 | X 0.75 |
| 0.762 | X 0.50 |

40RM ACCESSORY PLENUM AIR THROW DATA — ENGLISH (Ft)

| UNIT 40RM | AIRFLOW (Cfm) | VANE DEFLECTION | | |
|--------------|------------------|-----------------|------|-----|
| | | Straight | 22½° | 45° |
| 007 | 2,400 | 39 | 33 | 24 |
| 008 | 3,000 | 45 | 38 | 28 |
| 012 | 4,000 | 55 | 46 | 33 |
| 014 | 5,000 | 45 | 38 | 28 |
| 016 | 6,000 | 50 | 43 | 31 |
| 024 | 8,000 | 60 | 51 | 37 |
| 028 | 10,000 | 76 | 65 | 47 |

NOTE: Throw distances shown are for 75 fpm terminal velocity. Use the following multipliers to determine throw values for other terminal velocities.

| TERMINAL VELOCITY (Fpm) | THROW FACTOR |
|----------------------------|--------------|
| 50 | X 1.50 |
| 100 | X 0.75 |
| 150 | X 0.50 |

40RM ACCESSORY PRESSURE DROP — SI (Pa)

| UNIT 40RM | AIRFLOW (L/s) | DISCHARGE PLENUM | RETURN AIR GRILLE | HEATING COILS | | | ECONOMIZER |
|--------------|------------------|---------------------|----------------------|---------------|-------|----------|------------|
| | | | | Hot Water | Steam | Electric | |
| 007 | 850 | 15 | 2 | 25 | 25 | 9 | 12 |
| | 1150 | 25 | 3 | 41 | 41 | 16 | 18 |
| | 1450 | 36 | 5 | 60 | 60 | 26 | 23 |
| 008 | 1000 | 20 | 2 | 33 | 33 | 12 | 13 |
| | 1400 | 34 | 5 | 57 | 57 | 24 | 22 |
| | 1800 | 51 | 8 | 85 | 85 | 39 | 39 |
| 012 | 1450 | 36 | 5 | 60 | 60 | 26 | 23 |
| | 1900 | 56 | 10 | 93 | 93 | 43 | 43 |
| | 2350 | 79 | 15 | 132 | 132 | 65 | 69 |
| 014 | 1750 | 18 | 2 | 26 | 26 | 10 | 12 |
| | 2350 | 29 | 5 | 43 | 43 | 17 | 17 |
| | 2950 | 43 | 5 | 62 | 62 | 26 | 27 |
| 016 | 2100 | 24 | 2 | 36 | 36 | 14 | 15 |
| | 2800 | 39 | 5 | 57 | 57 | 24 | 22 |
| | 3500 | 56 | 7 | 82 | 82 | 37 | 37 |
| 024 | 2900 | 41 | 5 | 60 | 60 | 26 | 23 |
| | 3800 | 64 | 10 | 93 | 93 | 43 | 43 |
| | 4700 | 91 | 15 | 132 | 132 | 65 | 69 |
| 028 | 3500 | 37 | 5 | 67 | 67 | 22 | 15 |
| | 4700 | 59 | 7 | 109 | 109 | 39 | 22 |
| | 5900 | 86 | 12 | 157 | 157 | 60 | 35 |

40RM ACCESSORY PRESSURE DROP — ENGLISH (in. wg)

| UNIT 40RM | AIRFLOW (Cfm) | DISCHARGE PLENUM | RETURN AIR GRILLE | HEATING COILS | | | ECONOMIZER |
|--------------|------------------|---------------------|----------------------|---------------|-------|----------|------------|
| | | | | Hot Water | Steam | Electric | |
| 007 | 1,800 | 0.06 | 0.01 | 0.10 | 0.10 | 0.04 | 0.05 |
| | 2,400 | 0.10 | 0.01 | 0.16 | 0.16 | 0.06 | 0.07 |
| | 3,000 | 0.14 | 0.02 | 0.23 | 0.23 | 0.10 | 0.09 |
| 008 | 2,250 | 0.09 | 0.01 | 0.15 | 0.15 | 0.06 | 0.06 |
| | 3,000 | 0.14 | 0.02 | 0.23 | 0.23 | 0.10 | 0.09 |
| | 3,750 | 0.21 | 0.03 | 0.35 | 0.35 | 0.15 | 0.15 |
| 012 | 3,000 | 0.14 | 0.02 | 0.23 | 0.23 | 0.10 | 0.09 |
| | 4,000 | 0.22 | 0.04 | 0.37 | 0.37 | 0.17 | 0.17 |
| | 5,000 | 0.32 | 0.06 | 0.53 | 0.53 | 0.26 | 0.28 |
| 014 | 3,750 | 0.07 | 0.01 | 0.11 | 0.11 | 0.04 | 0.05 |
| | 5,000 | 0.12 | 0.02 | 0.17 | 0.17 | 0.07 | 0.07 |
| | 6,250 | 0.17 | 0.02 | 0.25 | 0.25 | 0.11 | 0.11 |
| 016 | 4,500 | 0.10 | 0.01 | 0.15 | 0.15 | 0.06 | 0.06 |
| | 6,000 | 0.16 | 0.02 | 0.23 | 0.23 | 0.10 | 0.09 |
| | 7,500 | 0.23 | 0.03 | 0.33 | 0.33 | 0.15 | 0.15 |
| 024 | 6,000 | 0.16 | 0.02 | 0.23 | 0.23 | 0.10 | 0.09 |
| | 8,000 | 0.26 | 0.04 | 0.37 | 0.37 | 0.17 | 0.17 |
| | 10,000 | 0.37 | 0.06 | 0.53 | 0.53 | 0.26 | 0.28 |
| 028 | 7,500 | 0.15 | 0.02 | 0.28 | 0.28 | 0.09 | 0.06 |
| | 10,000 | 0.24 | 0.03 | 0.44 | 0.44 | 0.16 | 0.09 |
| | 12,500 | 0.34 | 0.05 | 0.63 | 0.63 | 0.24 | 0.14 |

40RM HYDRONIC HEATING CAPACITIES — SI

| UNIT 40RM | AIRFLOW (L/s) | 1-ROW STEAM* | | 2-ROW HOT WATER COIL† | | | |
|--------------|------------------|-----------------|-----|--------------------------|-----|------------------------|------|
| | | Cap. | Ldb | Cap. | Ldb | Water Flow (L/s) | PD |
| 007 | 850 | 43 | 57 | 46 | 59 | 1.0 | 10.2 |
| | 1150 | 53 | 53 | 53 | 53 | 1.2 | 12.8 |
| | 1450 | 62 | 51 | 61 | 50 | 1.3 | 16.0 |
| 008 | 1000 | 48 | 55 | 50 | 56 | 1.1 | 11.5 |
| | 1400 | 59 | 50 | 60 | 50 | 1.3 | 15.3 |
| | 1800 | 71 | 47 | 70 | 47 | 1.5 | 19.5 |
| 012 | 1450 | 62 | 50 | 88 | 65 | 1.9 | 15.0 |
| | 1900 | 72 | 46 | 90 | 54 | 2.0 | 24.7 |
| | 2350 | 82 | 44 | 93 | 48 | 2.0 | 24.5 |
| 014 | 1750 | 108 | 66 | 106 | 65 | 2.3 | 12.4 |
| | 2350 | 122 | 58 | 120 | 57 | 2.6 | 15.2 |
| | 2950 | 136 | 53 | 134 | 52 | 2.9 | 17.9 |
| 016 | 2100 | 117 | 61 | 120 | 62 | 2.6 | 13.3 |
| | 2800 | 129 | 53 | 137 | 55 | 3.0 | 16.2 |
| | 3500 | 140 | 48 | 154 | 51 | 3.3 | 19.5 |
| 024 | 2900 | 135 | 53 | 150 | 58 | 3.3 | 15.6 |
| | 3800 | 140 | 46 | 170 | 52 | 3.7 | 18.6 |
| | 4700 | 146 | 41 | 191 | 49 | 4.1 | 22.3 |
| 028 | 3500 | 149 | 50 | 189 | 60 | 4.1 | 16.9 |
| | 4700 | 166 | 44 | 218 | 53 | 4.7 | 20.8 |
| | 5900 | 183 | 41 | 247 | 50 | 5.4 | 25.4 |

LEGEND

Cap. — Capacity (kW)
 Ldb — Leaving-Air Dry-Bulb Temp (C)
 PD — Pressure Drop (kPa)

*Based on 34.5 kPag steam, 15.6 C entering-air temperature. All steam coils are non-freeze type.

†Based on 93.3 C entering-water temperature, 11.1 C water temperature drop, 15.6 C entering-air temperature.

NOTES:

1. Maximum operating limits for heating coils: 138 kPag at 127 C.

$$2. \text{Leaving db} = \text{ent db (C)} + \frac{\text{Capacity (kW)}}{1.23 \times 10^{-3} \times \text{L/s}}$$

3. See Heating Correction Factors table.

40RM HEATING CORRECTION FACTORS — SI

| HOT WATER COIL | | | | | | | | |
|---------------------------|--------------------------|-----------------------|------|------|------|------|------|------|
| Water Temp Drop (C) | Ent Water Temp (C) | Entering-Air Temp (C) | | | | | | |
| | | 4 | 10 | 16 | 20 | 25 | 30 | 40 |
| 5 | 60 | 0.72 | 0.64 | 0.55 | 0.50 | 0.43 | 0.37 | 0.32 |
| | 70 | 0.87 | 0.79 | 0.71 | 0.65 | 0.58 | 0.51 | 0.45 |
| | 80 | 1.02 | 0.94 | 0.86 | 0.80 | 0.73 | 0.65 | 0.58 |
| | 90 | 1.17 | 1.09 | 1.01 | 0.95 | 0.89 | 0.80 | 0.71 |
| | 100 | 1.32 | 1.24 | 1.16 | 1.10 | 1.04 | 0.95 | 0.86 |
| 11 | 60 | 0.65 | 0.56 | 0.48 | 0.42 | 0.35 | 0.30 | 0.25 |
| | 70 | 0.80 | 0.72 | 0.63 | 0.58 | 0.51 | 0.44 | 0.38 |
| | 80 | 0.95 | 0.87 | 0.79 | 0.73 | 0.66 | 0.58 | 0.51 |
| | 90 | 1.10 | 1.02 | 0.94 | 0.89 | 0.82 | 0.74 | 0.66 |
| | 100 | 1.26 | 1.18 | 1.09 | 1.04 | 0.97 | 0.89 | 0.80 |
| 16 | 60 | 0.56 | 0.48 | 0.39 | 0.33 | 0.26 | 0.21 | 0.16 |
| | 70 | 0.72 | 0.63 | 0.55 | 0.49 | 0.42 | 0.35 | 0.29 |
| | 80 | 0.87 | 0.79 | 0.70 | 0.65 | 0.58 | 0.50 | 0.43 |
| | 90 | 1.02 | 0.94 | 0.86 | 0.81 | 0.74 | 0.66 | 0.58 |
| | 100 | 1.18 | 1.10 | 1.02 | 0.97 | 0.90 | 0.82 | 0.74 |

STEAM COIL

| Steam Pressure (kPag) | Entering-Air Temp (C) | | | | |
|--------------------------|-----------------------|------|------|------|------|
| | 4 | 10 | 16 | 20 | 25 |
| 0 | 1.07 | 0.99 | 0.91 | 0.86 | 0.80 |
| 14 | 1.10 | 1.02 | 0.95 | 0.90 | 0.84 |
| 35 | 1.14 | 1.07 | 0.99 | 0.95 | 0.89 |

NOTE: Multiply capacity given in the Hydronic Heating Capacities table by the correction factor for conditions at which unit is actually operating. Correct leaving-air temperature using formula in Note 2 of Hydronic Heating Capacities table.

40RM HYDRONIC HEATING CAPACITIES — ENGLISH

| UNIT 40RM | AIRFLOW (Cfm) | 1-ROW STEAM* | | 2-ROW HOT WATER COIL† | | | |
|--------------|------------------|-----------------|-----|--------------------------|-----|------------------------|-----|
| | | Cap. | Ldb | Cap. | Ldb | Water Flow (Gpm) | PD |
| 007 | 1,800 | 146 | 134 | 156.0 | 140 | 15.6 | 3.4 |
| | 2,400 | 173 | 126 | 183.0 | 131 | 18.3 | 4.3 |
| | 3,000 | 209 | 123 | 206.0 | 124 | 20.6 | 5.2 |
| 008 | 2,250 | 168 | 129 | 174.0 | 133 | 17.4 | 4.0 |
| | 3,000 | 209 | 123 | 206.0 | 124 | 20.6 | 5.2 |
| | 3,750 | 240 | 117 | 238.0 | 118 | 23.8 | 6.5 |
| 012 | 3,000 | 209 | 123 | 299.0 | 152 | 29.9 | 5.0 |
| | 4,000 | 243 | 115 | 275.0 | 124 | 27.5 | 6.6 |
| | 5,000 | 279 | 111 | 316.0 | 119 | 31.6 | 8.2 |
| 014 | 3,750 | 370 | 150 | 362.0 | 149 | 36.2 | 4.2 |
| | 5,000 | 425 | 137 | 409.0 | 136 | 40.9 | 5.1 |
| | 6,250 | 465 | 128 | 456.0 | 128 | 45.6 | 6.0 |
| 016 | 4,500 | 402 | 141 | 412.0 | 145 | 41.2 | 4.5 |
| | 6,000 | 458 | 129 | 471.0 | 133 | 47.1 | 5.5 |
| | 7,500 | 479 | 118 | 529.0 | 125 | 52.9 | 6.6 |
| 024 | 6,000 | 458 | 129 | 506.0 | 138 | 50.6 | 5.1 |
| | 8,000 | 487 | 115 | 584.0 | 128 | 58.4 | 6.3 |
| | 10,000 | 499 | 105 | 652.0 | 120 | 65.2 | 7.5 |
| 028 | 7,500 | 511 | 122 | 649.0 | 140 | 64.9 | 5.7 |
| | 10,000 | 575 | 112 | 752.0 | 130 | 75.2 | 7.1 |
| | 12,500 | 626 | 106 | 842.0 | 122 | 84.2 | 8.5 |

LEGEND

Cap. — Capacity (Btuh in thousands)
 Ldb — Leaving-Air Dry-Bulb Temp (F)
 PD — Pressure Drop (ft water)

*Based on 5 psig steam, 60 F entering-air temperature. All steam coils are non-freeze type.

†Based on 200 F entering-water temperature, 20 F water temperature drop, 60 F entering-air temperature.

NOTES:

1. Maximum operating limits for heating coils: 20 psig at 260 F.

$$2. \text{Leaving db} = \text{ent db (F)} + \frac{\text{Capacity (Btuh)}}{1.1 \times \text{cfm}}$$

3. See Heating Correction Factors table.

40RM HEATING CORRECTION FACTORS — ENGLISH

| HOT WATER COIL | | | | | | | | |
|---------------------------|--------------------------|-----------------------|------|------|------|------|------|------|
| Water Temp Drop (F) | Ent Water Temp (F) | Entering-Air Temp (F) | | | | | | |
| | | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| 10 | 140 | 0.72 | 0.64 | 0.57 | 0.49 | 0.41 | 0.34 | 0.27 |
| | 160 | 0.89 | 0.81 | 0.74 | 0.66 | 0.58 | 0.50 | 0.43 |
| | 180 | 1.06 | 0.98 | 0.90 | 0.83 | 0.75 | 0.67 | 0.60 |
| | 200 | 1.22 | 1.15 | 1.07 | 1.00 | 0.92 | 0.84 | 0.76 |
| | 220 | 1.39 | 1.32 | 1.24 | 1.17 | 1.09 | 1.01 | 0.93 |
| 20 | 140 | 0.64 | 0.57 | 0.49 | 0.41 | 0.33 | 0.26 | 0.20 |
| | 160 | 0.81 | 0.74 | 0.66 | 0.58 | 0.51 | 0.43 | 0.36 |
| | 180 | 0.98 | 0.91 | 0.83 | 0.75 | 0.67 | 0.60 | 0.53 |
| | 200 | 1.15 | 1.08 | 1.00 | 0.93 | 0.85 | 0.78 | 0.71 |
| | 220 | 1.32 | 1.25 | 1.18 | 1.10 | 1.03 | 0.95 | 0.88 |
| 30 | 140 | 0.56 | 0.49 | 0.41 | 0.33 | 0.24 | 0.18 | 0.13 |
| | 160 | 0.74 | 0.66 | 0.58 | 0.51 | 0.43 | 0.36 | 0.30 |
| | 180 | 0.91 | 0.83 | 0.76 | 0.68 | 0.60 | 0.53 | 0.46 |
| | 200 | 1.08 | 1.00 | 0.93 | 0.85 | 0.78 | 0.71 | 0.64 |
| | 220 | 1.25 | 1.18 | 1.10 | 1.03 | 0.95 | 0.88 | 0.81 |

STEAM COIL

| Steam Pressure (kPag) | Entering-Air Temp (F) | | | | |
|--------------------------|-----------------------|------|------|------|------|
| | 40 | 50 | 60 | 70 | 80 |
| 0 | 1.06 | 0.98 | 0.91 | 0.85 | 0.78 |
| 2 | 1.09 | 1.02 | 0.95 | 0.89 | 0.82 |
| 5 | 1.13 | 1.06 | 1.00 | 0.93 | 0.87 |

NOTE: Multiply capacity given in the Hydronic Heating Capacities table by the correction factor for conditions at which unit is actually operating. Correct leaving-air temperature using formula in Note 2 of Hydronic Heating Capacities table.

Electrical data



40RM STANDARD MOTORS

| UNIT 40RM | V*-PH-Hz | VOLTAGE LIMITS | FAN MOTOR | | POWER SUPPLY | |
|--------------|----------|-------------------|------------|------|----------------------------|------|
| | | | kW (Hp) | FLA | Minimum Circuit Amps | MOCP |
| 007 | 230-3-50 | 207-253 | 1.79 (2.4) | 5.2 | 6.5 | 15 |
| | 400-3-50 | 360-440 | 1.79 (2.4) | 2.6 | 3.3 | 15 |
| 008 | 230-3-50 | 207-253 | 1.79 (2.4) | 5.2 | 6.5 | 15 |
| | 400-3-50 | 360-440 | 1.79 (2.4) | 2.6 | 3.3 | 15 |
| 012 | 230-3-50 | 207-253 | 2.16 (2.9) | 7.5 | 9.4 | 15 |
| | 400-3-50 | 360-440 | 2.16 (2.9) | 3.4 | 4.3 | 15 |
| 014 | 230-3-50 | 207-253 | 2.16 (2.9) | 7.5 | 9.4 | 15 |
| | 400-3-50 | 360-440 | 2.16 (2.9) | 3.4 | 4.3 | 15 |
| 016 | 230-3-50 | 207-253 | 2.16 (2.9) | 7.5 | 9.4 | 15 |
| | 400-3-50 | 360-440 | 2.16 (2.9) | 3.4 | 4.3 | 15 |
| 024 | 230-3-50 | 207-253 | 3.73 (5.0) | 13.2 | 16.5 | 25 |
| | 400-3-50 | 360-440 | 3.73 (5.0) | 7.6 | 9.5 | 15 |
| 028 | 230-3-50 | 207-253 | 5.59 (7.5) | 19.8 | 24.8 | 40 |
| | 400-3-50 | 360-440 | 5.59 (7.5) | 11.4 | 14.3 | 25 |

LEGEND

FLA — Full Load Amps

MOCP — Maximum Overcurrent Protection

*Motors are designed for satisfactory operation within 10% of nominal voltages shown. Voltages should not exceed the limits shown in the Voltage Limits column.



40RM ALTERNATE MOTORS

| UNIT 40RM | V*-PH-Hz | VOLTAGE LIMITS | FAN MOTOR | | POWER SUPPLY | |
|--------------|----------|-------------------|-------------|------|----------------------------|------|
| | | | kW (Hp) | FLA | Minimum Circuit Amps | MOCP |
| 007 | 230-3-50 | 207-253 | 1.79 (2.4) | 5.2 | 6.5 | 15 |
| | 400-3-50 | 360-440 | 1.79 (2.4) | 2.6 | 3.3 | 15 |
| 008 | 230-3-50 | 207-253 | 2.16 (2.9) | 7.5 | 9.4 | 15 |
| | 400-3-50 | 360-440 | 2.16 (2.9) | 3.4 | 4.3 | 15 |
| 012 | 230-3-50 | 207-253 | 3.73 (5.0) | 13.2 | 16.5 | 25 |
| | 400-3-50 | 360-440 | 3.73 (5.0) | 7.6 | 9.5 | 15 |
| 014 | 230-3-50 | 207-253 | 3.73 (5.0) | 15.2 | 19.0 | 30 |
| | 400-3-50 | 360-440 | 3.73 (5.0) | 7.6 | 9.5 | 15 |
| 016 | 230-3-50 | 207-253 | 3.73 (5.0) | 13.2 | 16.5 | 25 |
| | 400-3-50 | 360-440 | 3.73 (5.0) | 7.6 | 9.5 | 15 |
| 024 | 230-3-50 | 207-253 | 5.59 (7.5) | 19.8 | 24.8 | 40 |
| | 400-3-50 | 360-440 | 5.59 (7.5) | 11.4 | 14.3 | 25 |
| 028 | 230-3-50 | 207-253 | 7.46 (10.0) | 28.0 | 35.0 | 60 |
| | 400-3-50 | 360-440 | 7.46 (10.0) | 16.1 | 20.1 | 30 |

LEGEND

FLA — Full Load Amps

MOCP — Maximum Overcurrent Protection

*Motors are designed for satisfactory operation within 10% of nominal voltages shown. Voltages should not exceed the limits shown in the Voltage Limits column.



40RM FAN CONTACTOR COIL

| UNIT 40RM | VOLTAGE (vac) | MAXIMUM HOLDING VA |
|--------------|------------------|--------------------------|
| 007-028 | 24 | 10 |



40RM ELECTRIC HEATER DATA

| UNIT 40RM | HEATER PART NO. | V-PH-Hz | FAN MOTOR | | | Nominal Capacity (kW) | ELECTRIC HEATER(S) | | | FLA | MCA* | MOCP* |
|--------------|--------------------|----------|-----------|------|------|-----------------------------|--------------------|---------|-------|------|-------|-------|
| | | | Hp | kW | FLA | | Stage 1 | Stage 2 | Total | | | |
| 007-012 | CAELHEAT001A00 | 240-3-50 | 2.4 | 1.79 | 5.2 | 5 | 5.0 | — | 5.0 | 12.0 | 21.5 | 25 |
| | | | 2.9 | 2.16 | 7.5 | 5 | 5.0 | — | 5.0 | 12.0 | 24.4 | 25 |
| | | | 5.0 | 3.73 | 15.2 | 5 | 5.0 | — | 5.0 | 12.0 | 34.0 | 40 |
| | CAELHEAT002A00 | 400-3-50 | 2.4 | 1.79 | 2.6 | 5 | 3.5 | — | 3.5 | 5.0 | 9.5 | 15 |
| | | | 2.9 | 2.16 | 3.4 | 5 | 3.5 | — | 3.5 | 5.0 | 10.5 | 15 |
| | | | 5.0 | 3.73 | 7.6 | 5 | 3.5 | — | 3.5 | 5.0 | 15.8 | 20 |
| | CAELHEAT004A00 | 240-3-50 | 2.4 | 1.79 | 5.2 | 10 | 10.0 | — | 10.0 | 24.1 | 36.6 | 40 |
| | | | 2.9 | 2.16 | 7.5 | 10 | 10.0 | — | 10.0 | 24.1 | 39.4 | 40 |
| | | | 5.0 | 3.73 | 15.2 | 10 | 10.0 | — | 10.0 | 24.1 | 49.2 | 50 |
| | CAELHEAT005A00 | 400-3-50 | 2.4 | 1.79 | 2.6 | 10 | 6.9 | — | 6.9 | 10.0 | 15.8 | 20 |
| | | | 2.9 | 2.16 | 3.4 | 10 | 6.9 | — | 6.9 | 10.0 | 16.8 | 20 |
| | | | 5.0 | 3.73 | 7.6 | 10 | 6.9 | — | 6.9 | 10.0 | 22.0 | 25 |
| | CAELHEAT007A00 | 240-3-50 | 2.4 | 1.79 | 5.2 | 15 | 15.0 | — | 15.0 | 36.1 | 51.6 | 60 |
| | | | 2.9 | 2.16 | 7.5 | 15 | 15.0 | — | 15.0 | 36.1 | 54.5 | 60 |
| | | | 5.0 | 3.73 | 15.2 | 15 | 15.0 | — | 15.0 | 36.1 | 64.1 | 70 |
| | CAELHEAT008A00 | 400-3-50 | 2.4 | 1.79 | 2.6 | 15 | 10.4 | — | 10.4 | 15.0 | 22.0 | 25 |
| | | | 2.9 | 2.16 | 3.4 | 15 | 10.4 | — | 10.4 | 15.0 | 23.0 | 25 |
| | | | 5.0 | 3.73 | 7.6 | 15 | 10.4 | — | 10.4 | 15.0 | 28.3 | 30 |
| | CAELHEAT010A00 | 240-3-50 | 2.4 | 1.79 | 5.2 | 25 | 15.0 | 10.0 | 25.0 | 60.1 | 81.7 | 90 |
| | | | 2.9 | 2.16 | 7.5 | 25 | 15.0 | 10.0 | 25.0 | 60.1 | 84.6 | 90 |
| | | | 5.0 | 3.73 | 15.2 | 25 | 15.0 | 10.0 | 25.0 | 60.1 | 94.2 | 100 |
| | CAELHEAT011A00 | 400-3-50 | 2.4 | 1.79 | 2.6 | 25 | 10.4 | 6.9 | 17.4 | 25.1 | 34.6 | 25 |
| | | | 2.9 | 2.16 | 3.4 | 25 | 10.4 | 6.9 | 17.4 | 25.1 | 35.6 | 40 |
| | | | 5.0 | 3.73 | 7.6 | 25 | 10.4 | 6.9 | 17.4 | 25.1 | 40.8 | 50 |
| 008-012 | CAELHEAT013A00 | 240-3-50 | 2.4 | 1.79 | 5.2 | 35 | 20.0 | 15.0 | 35.0 | 84.2 | 111.7 | 125 |
| | | | 2.9 | 2.16 | 7.5 | 35 | 20.0 | 15.0 | 35.0 | 84.2 | 114.6 | 125 |
| | | | 5.0 | 3.73 | 15.2 | 35 | 20.0 | 15.0 | 35.0 | 84.2 | 124.2 | 125 |
| | CAELHEAT014A00 | 400-3-50 | 2.4 | 1.79 | 2.6 | 35 | 13.9 | 10.4 | 24.3 | 35.1 | 47.1 | 50 |
| | | | 2.9 | 2.16 | 3.4 | 35 | 13.9 | 10.4 | 24.3 | 35.1 | 48.1 | 50 |
| | | | 5.0 | 3.73 | 7.6 | 35 | 13.9 | 10.4 | 24.3 | 35.1 | 53.4 | 60 |

LEGEND

FLA — Full Load Amps

Hp — Horsepower

MCA — Minimum Circuit Amps

MOCP — Maximum Overcurrent Protection

*Values shown are for single-point connection of electric heat accessory and air handler.

NOTES:

1. MCA and MOCP values apply to both standard and alternate factory-supplied motors.
2. Electric resistance heaters are rated at 240 v and 480 v. To determine heater capacity (kW) at unit nameplate multiply the 240-v or 480-v capacity (kW) by the multipliers shown in the table below.

| HEATER RATING VOLTAGE | ACTUAL HEATER VOLTAGE AT SITE | | | | | | | |
|-----------------------------|-------------------------------|-------|-------|-----|-------|-------|-------|-----|
| | 200 | 208 | 230 | 240 | 400 | 440 | 460 | 480 |
| 240 | 0.694 | 0.751 | 0.918 | 1.0 | — | — | — | — |
| 480 | — | — | — | — | 0.694 | 0.840 | 0.918 | 1.0 |

3. Heater coils are 24 v and require 8 va holding current.

4. The following equation converts kW of heat energy to Btuh:
$$\text{kW} \times 3,412 = \text{Btuh}$$

5. Approximate shipping weights:

CAELHEAT001A00 – 014A00 = 24.9 kg (54.9 lb) each
CAELHEAT016A00 – 026A00 = 27.2 kg (60.0 lb) each
CAELHEAT028A00 – 038A00 = 34.0 kg (75.0 lb) each



Electrical data (cont)



40RM ELECTRIC HEATER DATA (cont)

| UNIT 40RM | HEATER PART NO. | V-PH-Hz | FAN MOTOR | | | Nominal Capacity (kW) | ELECTRIC HEATER(S) | | | FLA | MCA* | MOCP* | | | | |
|--------------|--------------------|----------|-----------|------|------|-----------------------------|----------------------|---------|-------|-------|-------|-------|--|--|--|--|
| | | | Hp | kW | FLA | | Actual Capacity (kW) | | | | | | | | | |
| | | | | | | | Stage 1 | Stage 2 | Total | | | | | | | |
| 014-024 | CAELHEAT016A00 | 240-3-50 | 2.9 | 2.16 | 7.5 | 10 | 10.0 | — | 10.0 | 24.1 | 39.4 | 40 | | | | |
| | | | 5.0 | 3.73 | 13.2 | 10 | 10.0 | — | 10.0 | 24.1 | 46.6 | 50 | | | | |
| | | | 7.5 | 5.59 | 19.8 | 10 | 10.0 | — | 10.0 | 24.1 | 54.8 | 60 | | | | |
| | CAELHEAT017A00 | 400-3-50 | 2.9 | 2.16 | 3.4 | 10 | 6.9 | — | 6.9 | 10.0 | 16.8 | 20 | | | | |
| | | | 5.0 | 3.73 | 7.6 | 10 | 6.9 | — | 6.9 | 10.0 | 22.0 | 25 | | | | |
| | | | 7.5 | 5.59 | 11.4 | 10 | 6.9 | — | 6.9 | 10.0 | 26.8 | 35 | | | | |
| | CAELHEAT019A00 | 240-3-50 | 2.9 | 2.16 | 7.5 | 20 | 19.9 | — | 19.9 | 47.9 | 69.2 | 70 | | | | |
| | | | 5.0 | 3.73 | 15.2 | 20 | 19.9 | — | 19.9 | 47.9 | 76.3 | 80 | | | | |
| | | | 7.5 | 5.59 | 22.8 | 20 | 19.9 | — | 19.9 | 47.9 | 84.6 | 90 | | | | |
| | CAELHEAT020A00 | 400-3-50 | 2.9 | 2.16 | 3.4 | 20 | 13.9 | — | 13.9 | 20.0 | 29.3 | 30 | | | | |
| | | | 5.0 | 3.73 | 7.6 | 20 | 13.9 | — | 13.9 | 20.0 | 45.1 | 50 | | | | |
| | | | 7.5 | 5.59 | 11.4 | 20 | 13.9 | — | 13.9 | 20.0 | 49.2 | 50 | | | | |
| | CAELHEAT022A00 | 240-3-50 | 2.9 | 2.16 | 7.5 | 30 | 20.0 | 10.0 | 30.0 | 72.2 | 99.6 | 100 | | | | |
| | | | 5.0 | 3.73 | 15.2 | 30 | 20.0 | 10.0 | 30.0 | 72.2 | 106.7 | 110 | | | | |
| | | | 7.5 | 5.59 | 22.8 | 30 | 20.0 | 10.0 | 30.0 | 72.2 | 115.0 | 125 | | | | |
| | CAELHEAT023A00 | 400-3-50 | 2.9 | 2.16 | 3.4 | 30 | 13.9 | 6.9 | 20.8 | 30.1 | 41.8 | 50 | | | | |
| | | | 5.0 | 3.73 | 7.6 | 30 | 13.9 | 6.9 | 20.8 | 30.1 | 47.1 | 50 | | | | |
| | | | 7.5 | 5.59 | 11.4 | 30 | 13.9 | 6.9 | 20.8 | 30.1 | 51.8 | 60 | | | | |
| 016-024 | CAELHEAT025A00 | 240-3-50 | 2.9 | 2.16 | 7.5 | 50 | 30.0 | 20.0 | 50.0 | 120.3 | 159.7 | 175 | | | | |
| | | | 5.0 | 3.73 | 13.2 | 50 | 30.0 | 20.0 | 50.0 | 120.3 | 166.9 | 175 | | | | |
| | | | 7.5 | 5.59 | 19.8 | 50 | 30.0 | 20.0 | 50.0 | 120.3 | 175.1 | 200 | | | | |
| | CAELHEAT026A00 | 400-3-50 | 2.9 | 2.16 | 3.4 | 50 | 20.8 | 13.9 | 34.7 | 50.1 | 66.9 | 70 | | | | |
| | | | 5.0 | 3.73 | 7.6 | 50 | 20.8 | 13.9 | 34.7 | 50.1 | 72.1 | 80 | | | | |
| | | | 7.5 | 5.59 | 11.4 | 50 | 20.8 | 13.9 | 34.7 | 50.1 | 76.9 | 80 | | | | |
| 028 | CAELHEAT028A00 | 240-3-50 | 7.5 | 5.59 | 19.8 | 20 | 19.9 | — | 19.9 | 47.9 | 84.6 | 90 | | | | |
| | | | 10.0 | 7.46 | 28.0 | 20 | 19.9 | — | 19.9 | 47.9 | 94.8 | 110 | | | | |
| | CAELHEAT029A00 | 400-3-50 | 7.5 | 5.59 | 11.4 | 20 | 13.9 | — | 13.9 | 20.0 | 39.3 | 40 | | | | |
| | | | 10.0 | 7.46 | 16.1 | 20 | 13.9 | — | 13.9 | 20.0 | 45.2 | 50 | | | | |
| | CAELHEAT031A00 | 240-3-50 | 7.5 | 5.59 | 19.8 | 40 | 20.0 | 20.0 | 40.0 | 96.2 | 145.0 | 150 | | | | |
| | | | 10.0 | 7.46 | 22.8 | 40 | 20.0 | 20.0 | 40.0 | 96.2 | 155.3 | 175 | | | | |
| | CAELHEAT032A00 | 400-3-50 | 7.5 | 5.59 | 11.4 | 40 | 13.8 | 13.8 | 27.8 | 39.9 | 64.1 | 70 | | | | |
| | | | 10.0 | 7.46 | 16.1 | 40 | 13.8 | 13.8 | 27.8 | 39.9 | 70.0 | 80 | | | | |
| | CAELHEAT034A00 | 240-3-50 | 7.5 | 5.59 | 22.8 | 50 | 30.0 | 20.0 | 50.0 | 120.3 | 175.1 | 200 | | | | |
| | | | 10.0 | 7.46 | 32.2 | 50 | 30.0 | 20.0 | 50.0 | 120.3 | 185.4 | 200 | | | | |
| | CAELHEAT035A00 | 400-3-50 | 7.5 | 5.59 | 11.4 | 50 | 20.8 | 13.9 | 34.7 | 50.1 | 76.9 | 80 | | | | |
| | | | 10.0 | 7.46 | 16.1 | 50 | 20.8 | 13.9 | 34.7 | 50.1 | 82.8 | 90 | | | | |
| | CAELHEAT037A00 | 240-3-50 | 7.5 | 5.59 | 19.8 | 70 | 40.0 | 30.0 | 70.0 | 168.4 | 193.1 | 200 | | | | |
| | | | 10.0 | 7.46 | 28.8 | 70 | 40.0 | 30.0 | 70.0 | 168.4 | 208.4 | 225 | | | | |
| | CAELHEAT038A00 | 400-3-50 | 7.5 | 5.59 | 11.4 | 70 | 27.8 | 20.8 | 48.6 | 70.2 | 84.4 | 90 | | | | |
| | | | 10.0 | 7.46 | 16.1 | 70 | 27.8 | 20.8 | 48.6 | 70.2 | 90.3 | 100 | | | | |

LEGEND

FLA — Full Load Amps
Hp — Horsepower
MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection

*Values shown are for single-point connection of electric heat accessory and air handler.

NOTES:

1. MCA and MOCP values apply to both standard and alternate factory-supplied motors.
2. Electric resistance heaters are rated at 240 v and 480 v. To determine heater capacity (kW) at unit nameplate multiply the 240-v or 480-v capacity (kW) by the multipliers shown in the table below.

| HEATER RATING VOLTAGE | ACTUAL HEATER VOLTAGE AT SITE | | | | | | | |
|-----------------------------|-------------------------------|-------|-------|-----|-------|-------|-------|-----|
| | 200 | 208 | 230 | 240 | 400 | 440 | 460 | 480 |
| 240 | 0.694 | 0.751 | 0.918 | 1.0 | — | — | — | — |
| 480 | — | — | — | — | 0.694 | 0.840 | 0.918 | 1.0 |

3. Heater coils are 24 v and require 8 va holding current.
4. The following equation converts kW of heat energy to Btuh:

$$\text{kW} \times 3,412 = \text{Btuh}$$
5. Approximate shipping weights:
 CAELHEAT001A00 – 014A00 = 24.9 kg (54.9 lb) each
 CAELHEAT016A00 – 026A00 = 27.2 kg (60.0 lb) each
 CAELHEAT028A00 – 038A00 = 34.0 kg (75.0 lb) each



Application data — 40RM



Operating limits

Maximum fan speed —

40RM007-024 20 r/s (1200 rpm)

Maximum fan speed —

40RM028 18.3 r/s (1100 rpm)

General

Select equipment to match or to be slightly less than peak load. This provides better humidity control, less unit cycling, and less part-load operation. Equipment should be selected to perform at no less than 40 L/s per kW (300 cfm/ton).

The air handler fan must always be operating when the condensing unit is operating.

Ductwork should be sized according to unit size, not building load. For larger units with two fans, a split duct transition is recommended at the fan outlets, but a plenum can be used with slight reduction in external static pressure capability.

For variable air volume (VAV) systems with supply-to-return air recycling, use the equipment room as a return air plenum.

40RM FACTORY-INSTALLED NOZZLE AND DISTRIBUTOR DATA

| UNIT 40RM | TXV Qty...Part No. | DISTRIBUTOR Qty...Part No. | FEEDER TUBES PER DISTRIBUTOR* | NOZZLE Qty...Part No. |
|--------------|-----------------------|-------------------------------|----------------------------------|--------------------------|
| 007 | TDEBX8 | 1...1116 | 12 | 1...E5 |
| 008 | TDEBX8 | 1...1126 | 15 | 1...C6 |
| 012 | TDEBX6 | 2...1115 | 9 | 2...E4 |
| 014 | TDEBX8 | 2...1115 | 9 | 2...E5 |
| 016 | TDEBX8 | 2...1116 | 12 | 2...E6 |
| 024 | TDEBXE11 | 2...1116 | 13 | 2...E8 |
| 028 | TDEBX11 | 2...1126 | 15 | 2...C10 |

*Feeder tube size is 6.35 mm (1/4 in.)

NOTE: Hot gas bypass applications require field-supplied auxiliary side connector.

40RM FAN MOTOR DATA STANDARD MOTOR — SI

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|
| 230-3-50 and 400-3-50 | | | | | | | |
| Speed (r/s) | 23.75 | 23.75 | 23.75 | 23.75 | 23.75 | 23.75 | 23.75 |
| Shaft kW | 1.79 | 1.79 | 2.16 | 2.16 | 2.16 | 3.73 | 5.60 |
| Frame (NEMA) | 56Y | 56Y | 56Y | 56Y | 56Y | 184T | S213T |
| Shaft Dia (mm) | 15.9 | 15.9 | 22.2 | 22.2 | 22.2 | 28.6 | 34.9 |

LEGEND

NEMA — National Electrical Manufacturers Association (U.S.A.)

ALTERNATE MOTOR — SI

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|
| 230-3-50 and 400-3-50 | | | | | | | |
| Speed (r/s) | 23.75 | 23.75 | 23.75 | 23.75 | 23.75 | 23.75 | 23.75 |
| Shaft kW | 1.79 | 2.16 | 3.73 | 3.73 | 3.73 | 5.60 | 7.46 |
| Frame (NEMA) | 56Y | 56Y | S184T | S184T | S184T | S213T | S215T |
| Shaft Dia (mm) | 15.9 | 22.2 | 22.2 | 28.6 | 28.6 | 34.9 | 34.9 |

LEGEND

NEMA — National Electrical Manufacturers Association (U.S.A.)

Application data — 40RM (cont)



40RM FAN MOTOR DATA (cont)

STANDARD MOTOR — ENGLISH

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|------------------------------|------|------|------|------|------|-------|-------|
| 230-3-50 and 400-3-50 | | | | | | | |
| Speed (rpm) | 1425 | 1425 | 1425 | 1425 | 1425 | 1425 | 1425 |
| Hp | 2.4 | 2.4 | 2.9 | 2.9 | 2.9 | 5.0 | 7.5 |
| Frame (NEMA) | 56Y | 56Y | 56Y | 56Y | 56Y | 184T | S213T |
| Shaft Dia (in.) | 5/8 | 5/8 | 7/8 | 7/8 | 7/8 | 1 1/8 | 1 3/8 |

LEGEND

NEMA — National Electrical Manufacturers Association (U.S.A.)

ALTERNATE MOTOR — ENGLISH

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|------------------------------|------|------|-------|-------|-------|-------|-------|
| 230-3-50 and 400-3-50 | | | | | | | |
| Speed (rpm) | 1425 | 1425 | 1425 | 1425 | 1425 | 1425 | 1425 |
| Hp | 2.4 | 2.9 | 5.0 | 5.0 | 5.0 | 7.5 | 10.0 |
| Frame (NEMA) | 56Y | 56Y | S184T | S184T | S184T | S213T | S215T |
| Shaft Dia (in.) | 5/8 | 7/8 | 7/8 | 1 1/8 | 1 1/8 | 1 3/8 | 1 3/8 |

LEGEND

NEMA — National Electrical Manufacturers Association (U.S.A.)

40RM DRIVE DATA

STANDARD DRIVE — SI

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|--|---------------|---------------|----------------|----------------|----------------|-----------------|-----------------|
| MOTOR DRIVE | | | | | | | |
| Motor Pulley Pitch Diameter (mm) | 61.0- 86.4 | 71.1- 96.5 | 86.4- 111.8 | 86.4- 111.8 | 86.4- 111.8 | 109.2- 134.6 | 109.2- 134.6 |
| Pulley Factory Setting Full Turns Open | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 3.0 |
| FAN DRIVE | | | | | | | |
| Pulley Pitch Dia (mm) | 203 | 203 | 203 | 229 | 229 | 218 | 279 |
| Pulley Bore (mm) | 25.4 | 25.4 | 25.4 | 36.5 | 36.5 | 36.5 | 49.2 |
| Belt No. — Section | 1—A | 1—A | 1—A | 1—A | 1—A | 1—B | 2—B |
| Belt Pitch (mm) | 998 | 998 | 1024 | 1074 | 1074 | 1062 | 1113 |
| FAN SPEEDS (r/s) | | | | | | | |
| Factory Setting | 8.6 | 9.8 | 11.6 | 10.3 | 10.3 | 13.3 | 10.4 |
| Range | 7.1- 10.1 | 8.3- 11.3 | 10.1- 13.1 | 9.0- 11.6 | 9.0- 11.6 | 11.9- 14.6 | 9.3- 11.5 |
| Max Allowable Speed (r/s) | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 18.3 |
| Change per 1/2 Turn of Moveable Motor Pulley Flange | 0.297 | 0.297 | 0.297 | 0.265 | 0.265 | 0.230 | 0.180 |
| MAX FULL TURNS FROM CLOSED POSITION | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| SHAFTS CENTER DISTANCE (mm) | 265-313 | 265-313 | 265-313 | 265-313 | 265-313 | 232-279 | 169-240 |


40RM DRIVE DATA (cont)
MEDIUM-STATIC DRIVE — SI

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|---|------------|------------|------------|------------|------------|-------------|-------------|
| MOTOR DRIVE | | | | | | | |
| Motor Pulley Pitch Diameter (mm) | 86.4-111.8 | 86.4-111.8 | 86.4-111.8 | 86.4-111.8 | 94.0-119.4 | 101.6-127.0 | 109.2-134.6 |
| Pulley Factory Setting Full Turns Open | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 2.5 | 3.0 |
| FAN DRIVE | | | | | | | |
| Pulley Pitch Dia (mm) | 203 | 178 | 152 | 191 | 201 | 178 | 239 |
| Pulley Bore (mm) | 25.4 | 25.4 | 25.4 | 36.5 | 36.5 | 36.5 | 49.2 |
| Belt No. — Section | 1—A | 1—A | 1—A | 1—A | 1—B | 2—A | 2—B |
| Belt Pitch (mm) | 1024 | 1049 | 947 | 998 | 1011 | 922 | 1011 |
| FAN SPEEDS (r/s) | | | | | | | |
| Factory Setting | 11.6 | 13.2 | 15.4 | 12.4 | 12.6 | 15.3 | 12.1 |
| Range | 10.1-13.1 | 11.5-14.9 | 13.5-17.4 | 10.8-13.9 | 11.1-14.1 | 13.6-17.0 | 10.9-13.4 |
| Max Allowable Speed (r/s) | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 18.3 |
| Change per 1/2 Turn of Moveable Motor Pulley Flange | 0.297 | 0.340 | 0.395 | 0.317 | 0.252 | 0.340 | 0.210 |
| MAX FULL TURNS FROM CLOSED POSITION | | | | | | | |
| SHAFTS CENTER DISTANCE (mm) | 265-313 | 265-313 | 265-313 | 265-313 | 232-279 | 232-279 | 169-240 |

HIGH-STATIC DRIVE — SI

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|---|------------|------------|-------------|------------|-------------|-------------|-------------|
| MOTOR DRIVE | | | | | | | |
| Motor Pulley Pitch Diameter (mm) | 86.4-111.8 | 86.4-111.8 | 101.6-127.0 | 86.4-111.8 | 101.6-127.0 | 101.6-127.0 | 109.2-134.6 |
| Pulley Factory Setting Full Turns Open | 2.5 | 2.5 | 3.0 | 2.5 | 3.0 | 3.0 | 3.0 |
| FAN DRIVE | | | | | | | |
| Pulley Pitch Dia (mm) | 152 | 140 | 140 | 152 | 178 | 163 | 203 |
| Pulley Bore (mm) | 25.4 | 25.4 | 25.4 | 36.5 | 36.5 | 36.5 | 49.2 |
| Belt No. — Section | 1—A | 1—A | 1—A | 2—A | 2—A | 2—A | 2—B |
| Belt Pitch (mm) | 947 | 947 | 922 | 922 | 998 | 871 | 935 |
| FAN SPEEDS (r/s) | | | | | | | |
| Factory Setting | 15.4 | 16.8 | 19.4 | 15.4 | 15.3 | 16.7 | 14.3 |
| Range | 13.5-17.4 | 14.7-19.0 | 17.3-20.0* | 13.5-17.4 | 13.6-17.0 | 14.9-18.6 | 12.8-15.7 |
| Max Allowable Speed (r/s) | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 18.3 |
| Change per 1/2 Turn of Moveable Motor Pulley Flange | 0.395 | 0.432 | 0.360 | 0.395 | 0.283 | 0.308 | 0.247 |
| MAX FULL TURNS FROM CLOSED POSITION | | | | | | | |
| SHAFTS CENTER DISTANCE (mm) | 265-313 | 265-313 | 234-279 | 232-279 | 232-279 | 207-255 | 169-240 |

*It is possible to adjust drive so that fan speed exceeds maximum allowable. DO NOT exceed 20 r/s.

Application data — 40RM (cont)



40RM DRIVE DATA (cont) STANDARD DRIVE — ENGLISH

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|---------------|
| MOTOR DRIVE | | | | | | | |
| Motor Pulley Pitch Diameter (in.) | 2.4-3.4 | 2.8-3.8 | 3.4-4.4 | 3.4-4.4 | 3.4-4.4 | 4.3-5.3 | 4.3-5.3 |
| Pulley Factory Setting Full Turns Open | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 3.0 |
| FAN DRIVE | | | | | | | |
| Pulley Pitch Dia (in.) | 8.0 | 8.0 | 8.0 | 9.0 | 9.0 | 8.6 | 11.0 |
| Pulley Bore (in.) | 1 | 1 | 1 | 17/16 | 17/16 | 17/16 | 115/16 |
| Belt No. — Section | 1—A | 1—A | 1—A | 1—A | 1—A | 1—B | 2—B |
| Belt Pitch (in.) | 39.3 | 39.3 | 40.3 | 42.3 | 42.3 | 41.8 | 43.8 |
| FAN SPEEDS (rpm) | | | | | | | |
| Factory Setting | 517 | 588 | 695 | 618 | 18 | 795 | 622 |
| Range | 428-606 | 499-677 | 606-784 | 538-697 | 538-697 | 713-878 | 557-687 |
| Max Allowable Speed (rpm) | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1100 |
| Change per 1/2 Turn of Moveable Motor Pulley Flange | 17.8 | 17.8 | 17.8 | 15.9 | 15.9 | 13.8 | 10.8 |
| MAX FULL TURNS FROM CLOSED POSITION | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| SHAFTS CENTER DISTANCE (in.) | 10.44- 12.32 | 10.44- 12.32 | 10.44- 12.32 | 10.44- 12.32 | 10.44- 12.32 | 9.12- 10.99 | 6.67- 9.43 |

MEDIUM-STATIC DRIVE — ENGLISH

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|--|-----------------|-----------------|-----------------|-----------------|----------------|----------------|---------------|
| MOTOR DRIVE | | | | | | | |
| Motor Pulley Pitch Diameter (in.) | 3.4-4.4 | 3.4-4.4 | 3.4-4.4 | 3.4-4.4 | 3.7-4.7 | 4.0-5.0 | 4.3-5.3 |
| Pulley Factory Setting Full Turns Open | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 2.5 | 3.0 |
| FAN DRIVE | | | | | | | |
| Pulley Pitch Dia (in.) | 8.0 | 7.0 | 6.0 | 7.5 | 7.9 | 7.0 | 9.4 |
| Pulley Bore (in.) | 1 | 1 | 1 | 17/16 | 17/16 | 17/16 | 115/16 |
| Belt No. — Section | 1—A | 1—A | 1—A | 1—A | 1—B | 2—A | 2—B |
| Belt Pitch (in.) | 40.3 | 41.3 | 37.3 | 39.3 | 39.8 | 36.8 | 39.8 |
| FAN SPEEDS (rpm) | | | | | | | |
| Factory Setting | 695 | 794 | 926 | 741 | 756 | 916 | 728 |
| Range | 606-784 | 692-896 | 808-1045 | 646-836 | 667-848 | 814-1018 | 652-803 |
| Max Allowable Speed (rpm) | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1100 |
| Change per 1/2 Turn of Moveable Motor Pulley Flange | 17.8 | 20.4 | 23.7 | 19.0 | 15.1 | 20.4 | 12.6 |
| MAX FULL TURNS FROM CLOSED POSITION | 5 | 5 | 5 | 5 | 6 | 6 | 6 |
| SHAFTS CENTER DISTANCE (in.) | 10.44- 12.32 | 10.44- 12.32 | 10.44- 12.32 | 10.44- 12.32 | 9.16- 10.99 | 9.16- 10.99 | 6.67- 9.43 |

**40RM DRIVE DATA (cont)****HIGH-STATIC DRIVE DATA**

| UNIT 40RM | 007 | 008 | 012 | 014 | 016 | 024 | 028 |
|--|-----------------|-----------------|----------------|----------------|----------------|----------------|---------------|
| MOTOR DRIVE | | | | | | | |
| Motor Pulley Pitch Diameter (in.) | 3.4-4.4 | 3.4-4.4 | 4.0-5.0 | 3.4-4.4 | 4.0-5.0 | 4.0-5.0 | 4.3-5.3 |
| Pulley Factory Setting Full Turns Open | 2.5 | 2.5 | 3.0 | 2.5 | 3.0 | 3.0 | 3.0 |
| FAN DRIVE | | | | | | | |
| Pulley Pitch Dia (in.) | 6.0 | 5.5 | 5.5 | 6.0 | 7.0 | 6.4 | 8.0 |
| Pulley Bore (in.) | 1 | 1 | 1 | 17/16 | 17/16 | 17/16 | 115/16 |
| Belt No. — Section | 1—A | 1—A | 1—A | 2—A | 2—A | 2—A | 2—B |
| Belt Pitch (in.) | 37.3 | 37.3 | 36.3 | 36.3 | 39.3 | 34.3 | 36.8 |
| FAN SPEEDS (rpm) | | | | | | | |
| Factory Setting | 926 | 1010 | 1166 | 926 | 916 | 1002 | 855 |
| Range | 808-1045 | 881-1140 | 1036-1200* | 808-1045 | 814-1018 | 891-1113 | 766-944 |
| Max Allowable Speed (rpm) | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1100 |
| Change per 1/2 Turn of Moveable Motor Pulley Flange | 23.7 | 25.9 | 21.6 | 23.7 | 17.0 | 18.5 | 14.8 |
| MAX FULL TURNS FROM CLOSED POSITION | 5 | 5 | 6 | 5 | 6 | 6 | 6 |
| SHAFTS CENTER DISTANCE (in.) | 10.44- 12.32 | 10.44- 12.32 | 9.16- 10.99 | 9.16- 10.99 | 9.16- 10.99 | 8.16- 10.02 | 6.67- 9.43 |

*It is possible to adjust drive so that fan speed exceeds maximum allowable. DO NOT exceed 1200 rpm.

Guide specifications — 40RM



Commercial Packaged Air-Handling Unit

HVAC Guide Specifications

Size Range: **1150 to 5650 L/s (2,400 to 10,000 Cfm), Nominal Airflow 21 to 64.3 kW (6 to 25 Tons), Nominal Cooling**

Carrier Model Number: **40RM (Direct-Expansion Coil)**

Part 1 — General

1.01 SYSTEM DESCRIPTION

- A. Indoor, packaged air-handling unit for use in commercial split systems. Unit shall have a multipoise design and shall be capable of horizontal or vertical installation on a floor or in a ceiling, with or without ductwork. (Only vertical units are to be applied without ductwork.)
- B. Unit shall have a direct-expansion coil and shall be used in a refrigerant circuit with a matching air-cooled condensing unit.

1.02 QUALITY ASSURANCE

- A. Coils shall be designed and tested in accordance with ASHRAE 15 Safety Code (U.S.A. standard) for Mechanical Refrigeration, latest edition.
- B. Unit shall be constructed in accordance with ETL and ETL, Canada standards and shall carry the ETL and ETL, Canada labels.
- C. Unit insulation and adhesive shall comply with NFPA-90A (U.S.A. standard) requirements for flame spread and smoke generation. Insulation shall contain an EPA-registered (U.S.A. standard) immobilized antimicrobial agent to effectively resist the growth of bacteria and fungi as proven by tests in accordance with ASTM standards G21 and 22 (U.S.A. standards).
- D. Unit shall be manufactured in a facility registered to the ISO 9001:2000 manufacturing quality standard.
- E. Direct-expansion coils shall be burst tested at 2999 kPag (435 psi) and leak tested at 1034 kPag (150 psi).

1.03 DELIVERY AND STORAGE

Units shall be stored and handled per manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER)

Part 2 — Products

2.01 EQUIPMENT

Indoor mounted, draw-thru, packaged air-handling unit that can be used with or without ductwork in a suspended horizontal configuration or free-standing vertical configuration. Unit shall consist of forward-curved belt-driven centrifugal fan(s), motor and drive assembly, prewired fan motor contactor, factory-installed refrigerant metering devices, cooling coil, 2-in. disposable air filters, and condensate drain pans for vertical or horizontal configurations.

A. Base Unit:

- 1. Cabinet shall be constructed of mill-galvanized steel.
- 2. Cabinet panels shall be fully insulated with 1/2-in. fire-retardant material. Insulation shall contain an EPA-registered (U.S.A. standard) immobilized antimicrobial agent to effectively resist the growth of bacteria and fungi as proven by tests in accordance with ASTM standards G21 and 22 (U.S.A. standards).
- 3. Unit shall contain non-corroding condensate drain pans for both vertical and horizontal applications. Drain pans shall have connections on right and left sides of unit to facilitate field connection. Drain pans shall have the ability to be sloped toward the right or left side of the unit to prevent standing water from accumulating in pans.
- 4. Unit shall have factory-supplied 2-in. throwaway-type filters installed upstream from the cooling coil. Filter access shall be from either the right or left side of the unit.

B. Coils:

Coils shall consist of 3 rows (standard) or 4 rows (high capacity) of 3/8-in. copper tubes with sine-wave aluminum fins bonded to the tubes by mechanical expansion. Coil tubing shall be internally rifled to maximize heat transfer. Suction and liquid line connections shall be made on the same side of the coil. Direct-expansion coils shall feature factory-installed thermostatic expansion valves (TXVs) for refrigerant control. The TXVs shall be capable of external adjustment.

C. Operating Characteristics:

Unit shall be capable of providing _____ L/s airflow at an external static pressure of _____ kPag.

D. Motor:

Fan motor of the size and electrical characteristics specified on the equipment schedule shall be factory supplied and installed.

E. Factory-Installed Options:

1. Alternate Motor and Drive:

An alternate motor and medium- or high-static drive shall be available to meet the airflow and external static pressure requirements specified on the equipment schedule.

2. High-Capacity Coil:

High-capacity coil consisting of 4 rows of 3/8-in. copper tubes with sine-wave aluminum fins bonded to the tubes by mechanical expansion. Coil tubing shall be internally rifled to maximize heat transfer. Suction and liquid line connections shall be made on the same side of the coil. Direct-expansion coils shall feature factory-installed thermostatic expansion valves (TXVs) for refrigerant control. The TXVs shall be capable of external adjustment.

3. External Paint:
Where conditions require, units shall be painted with an American Sterling Gray finish.
- F. Field-Installed Accessories:
1. Hot Water Coil:
Coil shall be 2-row, U-bend coil with copper tubes and aluminum plate fins bonded to the tubes by mechanical expansion. Coil shall be mounted in a galvanized steel housing that shall be fastened to the unit's fan deck for blow-thru heating operation. Coil shall have maximum working pressure of 1034 kPag (150 psig).
 2. Steam Distributing Coil:
Coil shall consist of one row of copper tubes with aluminum plate fins, and shall have inner steam distributing tubes. Coil shall be mounted in a galvanized steel housing and shall be fastened to the unit's fan deck for blow-thru heating operation. Coil shall have maximum working pressure of 138 kPag at 127 C (20 psig at 260 F).
 3. Electric Heaters:
Heaters for nominal 240 or 480-volt, 3-phase, 50 Hz power supply shall be factory-supplied for field installation as shown on the equipment drawings. Electric heat assembly shall be ETL (U.S.A. standard) agency approved, and shall have single-point power wiring. Heater assembly shall include contactors with 24-v coils, power wiring, 24-v control wiring terminal blocks, and a hinged access panel.
 4. Air Discharge Plenum:
Plenum shall be factory supplied to provide free-blow air distribution for vertical floor-mounted units. A grille with moveable vanes for horizontal or vertical airflow adjustment shall be included. Plenum housing shall be field-installed on the unit's fan deck for blow-thru air distribution.
 5. Return-Air Grille:
Grille shall be factory supplied for field installation on the unit's return air opening.
 6. Unit Subbase:
Subbase assembly shall be factory supplied for field installation. Subbase shall elevate floor-mounted vertical units to provide access for correct condensate drain connection.
 7. Economizer:
Economizer for ventilation or "free" cooling shall be factory provided for field installation. For free cooling applications, economizer shall be compatible with factory-supplied thermostat; economizer dampers shall open when outdoor air enthalpy is suitable for free cooling. Economizer shall be compatible with factory-supplied CO₂ sensor; economizer dampers shall open when indoor CO₂ level rises above predetermined set point.
 8. Thermostat Controls:
 - a. Programmable multi-stage thermostat with 7-day clock, holiday scheduling, large backlit display, remote sensor capability, and Title 24 compliance.
 - b. Commercial Electronic Thermostat with 7-day timeclock, auto-changeover, multi-stage capability, and large LCD temperature display.
 - c. Non-programmable thermostat with fan switch subbase.
 9. Overhead Suspension Package:
Package shall include necessary brackets to support units in a horizontal ceiling installation.
 10. CO₂ Sensor:
Sensor shall provide the ability to signal the economizer to open when the space CO₂ level exceeds the predetermined set point.
 11. Condensate Drain Trap:
Trap shall have transparent, serviceable design for easy cleaning. Kit shall include overflow shutoff switch and wiring harness for connection to an alarm if desired.
 12. UV-C Germicidal Lamps:
 - a. UV-C emitters and fixtures shall be specifically designed for use inside an HVAC system. An ASME nozzled test apparatus using a 7.2 C (45 F) airstream moving at not less than 189 liters/sec. (400 fpm) shall measure individual lamp output. Lamp output at 253.7 nm shall not be less than 10 μW/cm² per inch of arc length measured at a distance of one meter.
 - b. UV-C power supplies shall be high efficiency, electric type which are matched to the emitters and are capable of producing the specified output intensity with an input power no more than 80 watts.
 - c. Emitters and fixtures shall be installed in sufficient quantity and arranged so as to provide an equal distribution of UV-C energy on the coil and drain pan.
 - d. The minimum UV-C energy striking the leading edge of the coil fins shall be not less than 820 μW/cm² at the closest point and through placement, not less than 60% of that value at the farthest point. Equal amounts are to strike the drain pan, either directly or indirectly through reflection.
 - e. Emitters and fixtures shall be installed at right angles to the conforming lines of the coil fins, such that through incident angle reflection, UV-C energy strikes all target surfaces of the coil, drain pan, and the available line of sight airstream.

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