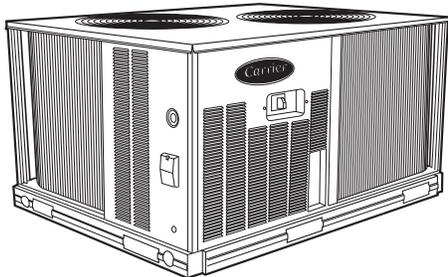




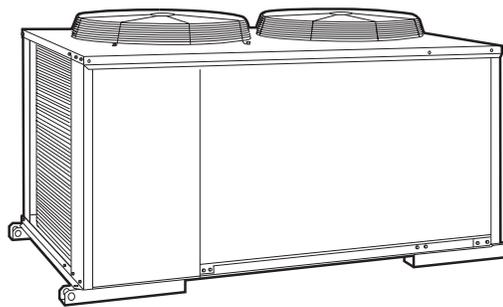
Product Data

**38ARZ007-012
38ARS008-012
38ARD012-024
38AKS014-024
with 40RM007-028
Commercial Air-Cooled
Split Systems
50 Hz**

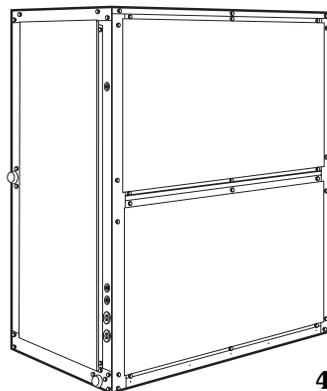
19.0 to 64.3 kW (5.3 to 20 Nominal Tons)



**38ARZ007-012
38ARS008-012
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 PVC 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 collars 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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Capacity summary



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		
38ARS008	40RM007	23.2	78,400	24.3	81,800
	40RM007H	24.4	82,400		
	40RM008	23.7	80,400		
	40RM008H	25.1	85,200		
	40RM012	25.6	86,600		
	40RM012H	27.1	91,300		
38ARS009	40RM008	28.3	95,800	30.4	102,400
	40RM008H	29.9	101,600		
	40RM012	30.2	102,400		
	40RM012H	31.6	106,700		
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.

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 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 (Motormaster® 38ARZ,ARS007-012, 38ARD012-024) controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

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, 38ARS008-012, 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

Options and accessories (cont)



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. 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.

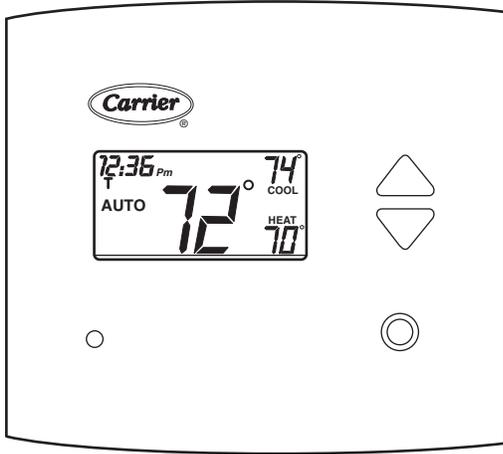
Condensate drain trap includes an overflow shutoff switch that can be wired to turn off the unit if the trap becomes plugged. Kit also includes a wire harness that can be connected to an alarm if desired. The transparent trap is designed for easy service and maintenance.

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.

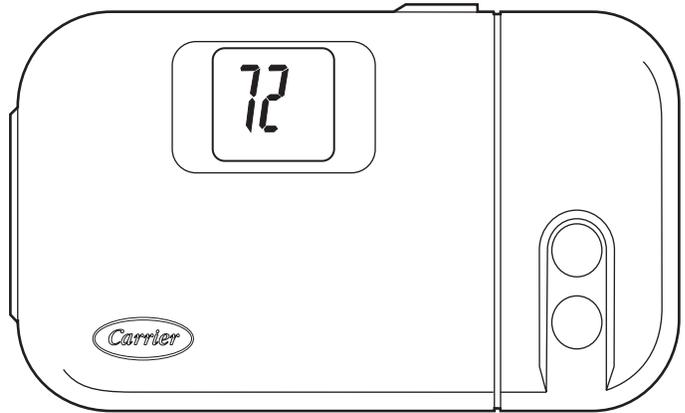
UV-C germicidal lamps kill mold and fungus, which may grow on evaporator coil and condensate pan surfaces. The use of UV-C germicidal lamps eliminates the foul odors that result from this growth of mold and fungus. It also provides a self-cleaning function for the evaporator coil and drain pan.

CARRIER CONTROLS

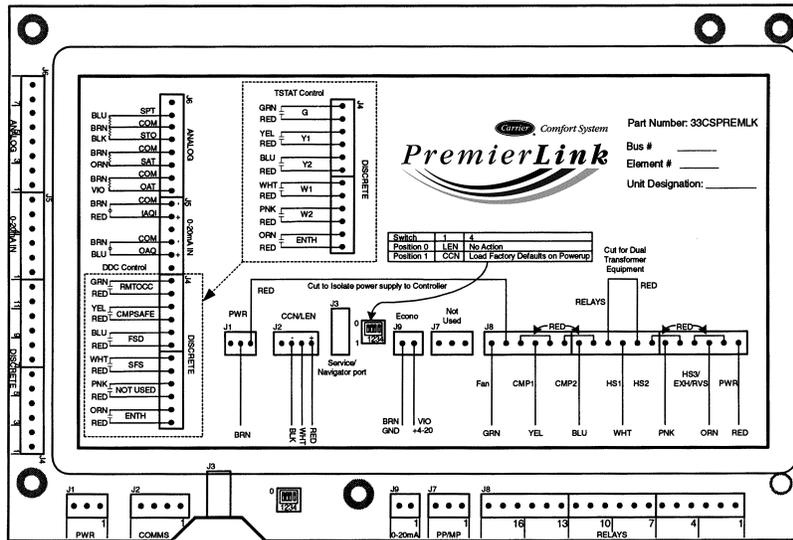
DEBONAIR® COMMERCIAL PROGRAMMABLE THERMOSTAT



COMMERCIAL ELECTRONIC THERMOSTAT



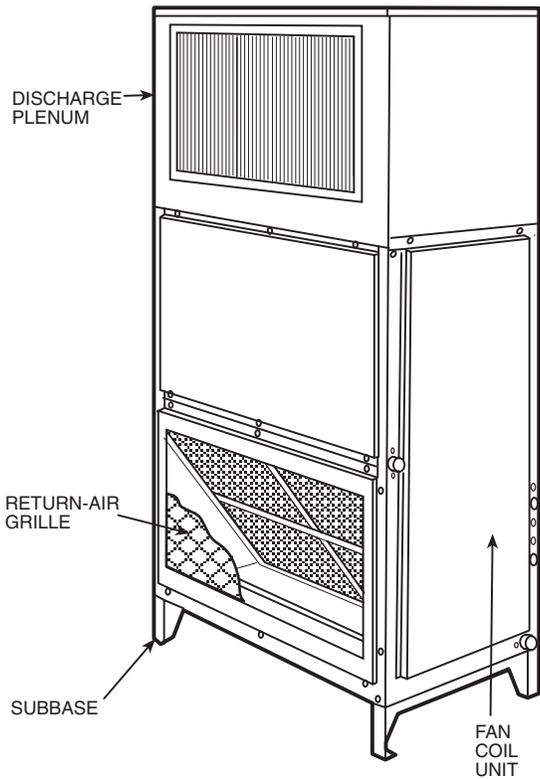
PREMIERLINK™ COMMUNICATING CONTROLS



Options and accessories (cont)



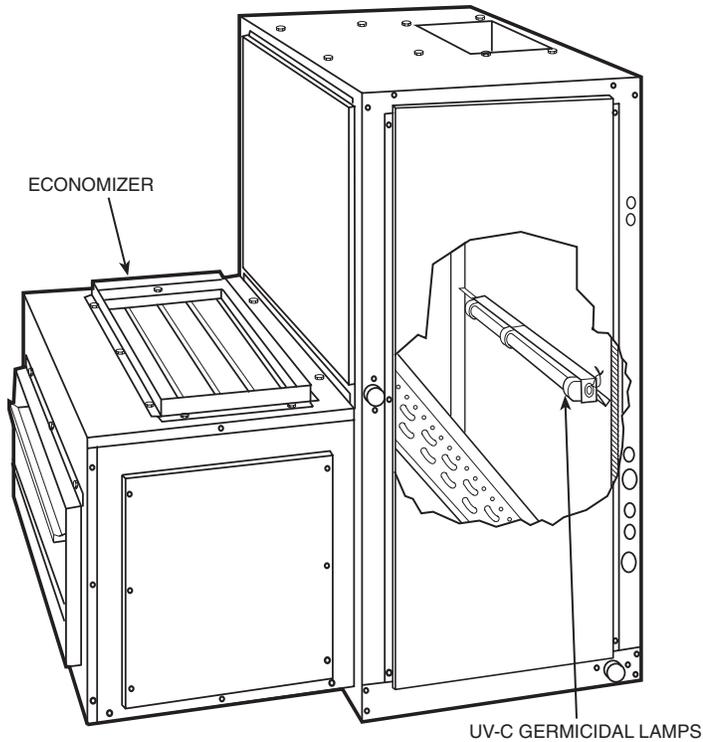
40RM WITH DISCHARGE PLENUM, RETURN GRILLE, AND SUBBASE



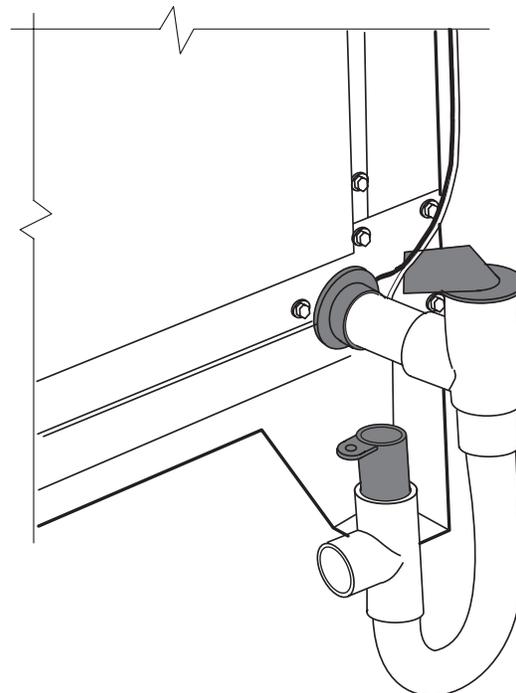
40RM WITH HOT WATER OR STEAM COIL



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 air-flow 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 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).

Operating sequences

38ARZ007-012, 38ARS008-012 — 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.

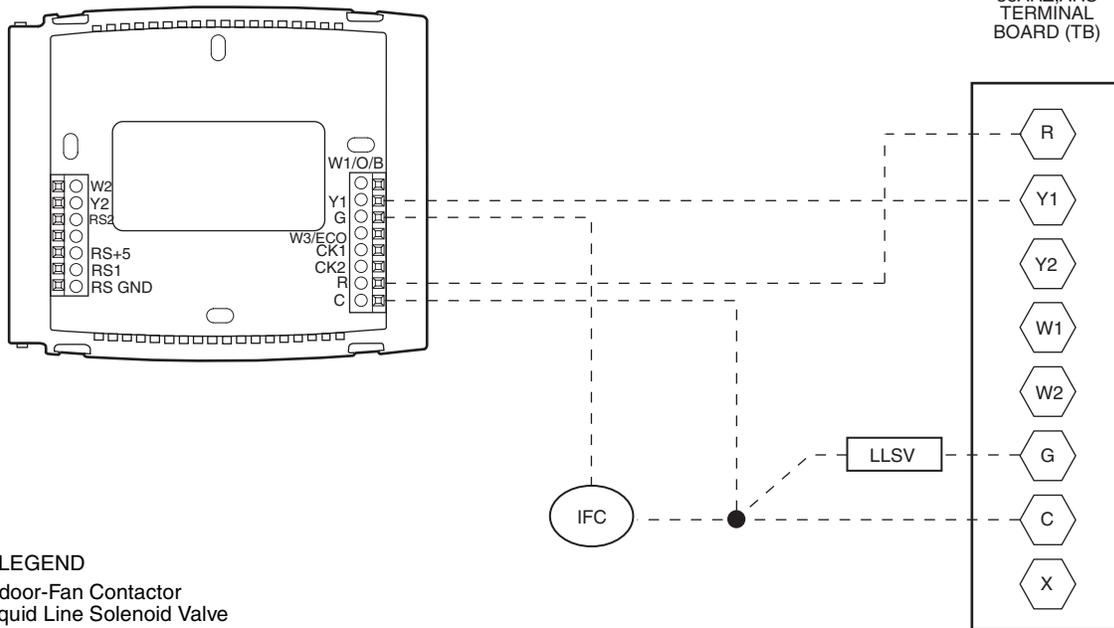
When the thermostat calls for stage two cooling, compressor contactor no. 2 (C2) energizes causing compressor no. 2 to start. As the cooling demand decreases, stage two on the thermostat opens, causing compressor no. 2 to shut down. As the cooling continues to decrease, stage one of the thermostat opens 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/over temperature 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.

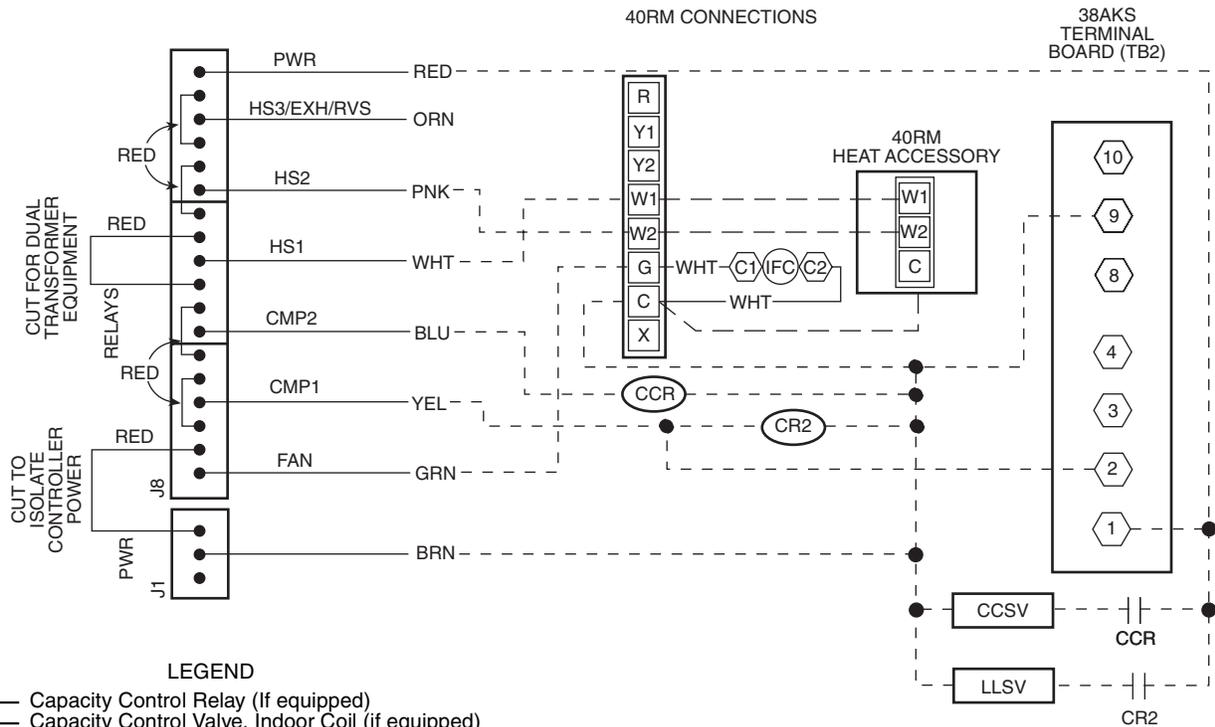
Typical control wiring



DEBONAIR® APPLICATIONS — 38ARZ, ARS007-012



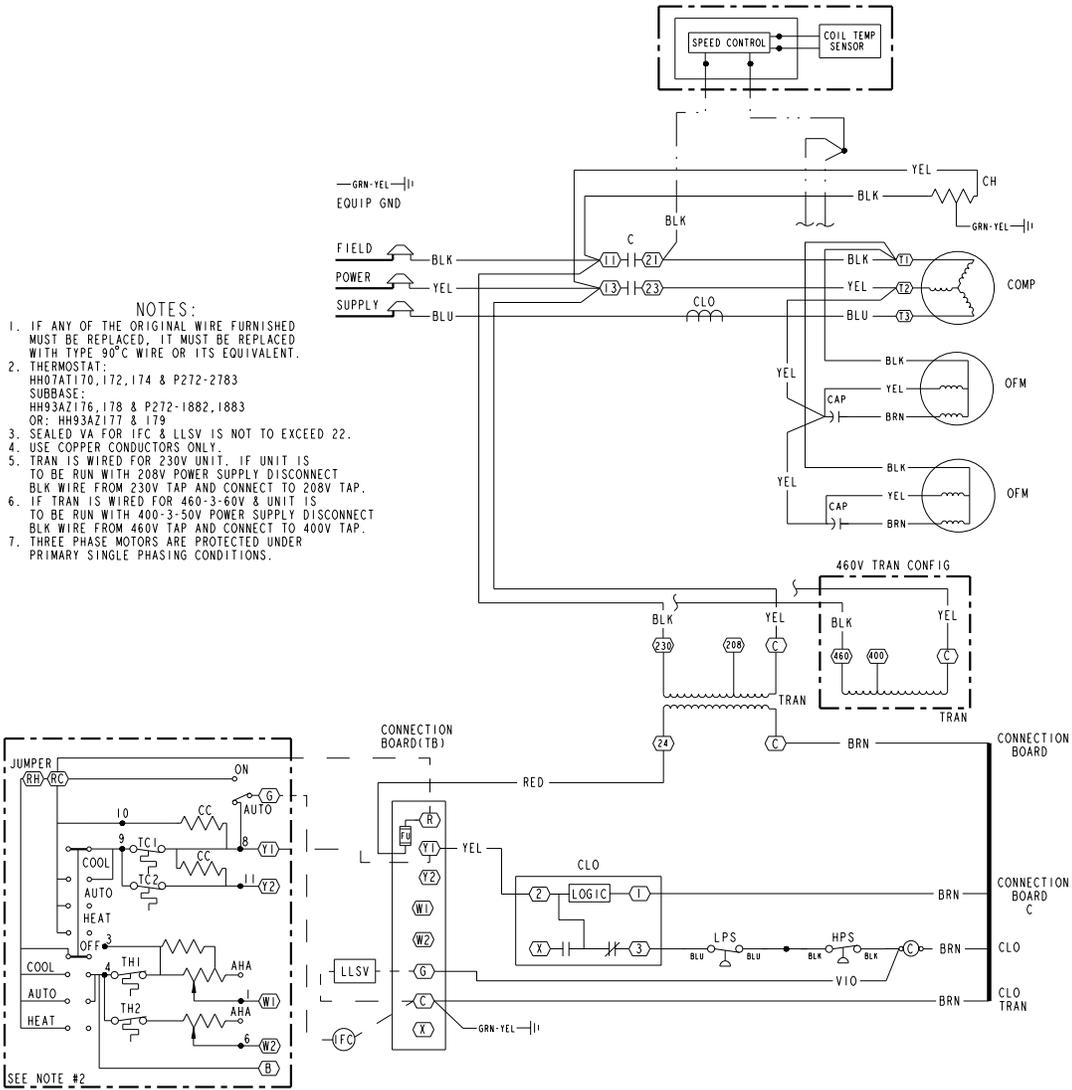
PREMIERLINK™ APPLICATIONS — 38AKS014-024



Typical wiring schematic



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



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 & P272-2783
SUBBASE:
HH93AZ176, 178 & P272-1882, 1883
OR: HH93AZ177 & 179
3. SEALED VA FOR IFC & LLSV IS NOT TO EXCEED 22.
4. USE COPPER CONDUCTORS ONLY.
5. TRAN IS WIRED FOR 230V UNIT. IF UNIT IS TO BE RUN WITH 208V POWER SUPPLY DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 208V 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.

LEGEND

- | | |
|--|--|
| AHA — Adjustable Heat Anticipator | Field Splice |
| C — Contactor, Compressor | Marked Wire |
| CAP — Capacitor | Terminal (Marked) |
| CC — Cooling Compensator | Terminal (Unmarked) |
| CH — Crankcase Heater | Terminal Block |
| CLO — Compressor Lockout | Splice |
| COMP — Compressor Motor | Factory Wiring |
| EQUIP — Equipment | Field Control Wiring |
| FU — Fuse | Field Power Wiring |
| GND — Ground | Accessory or Optional Wiring |
| HPS — High-Pressure Switch | To Indicates Common Potential Only, Not Represent Wiring |
| 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 | |

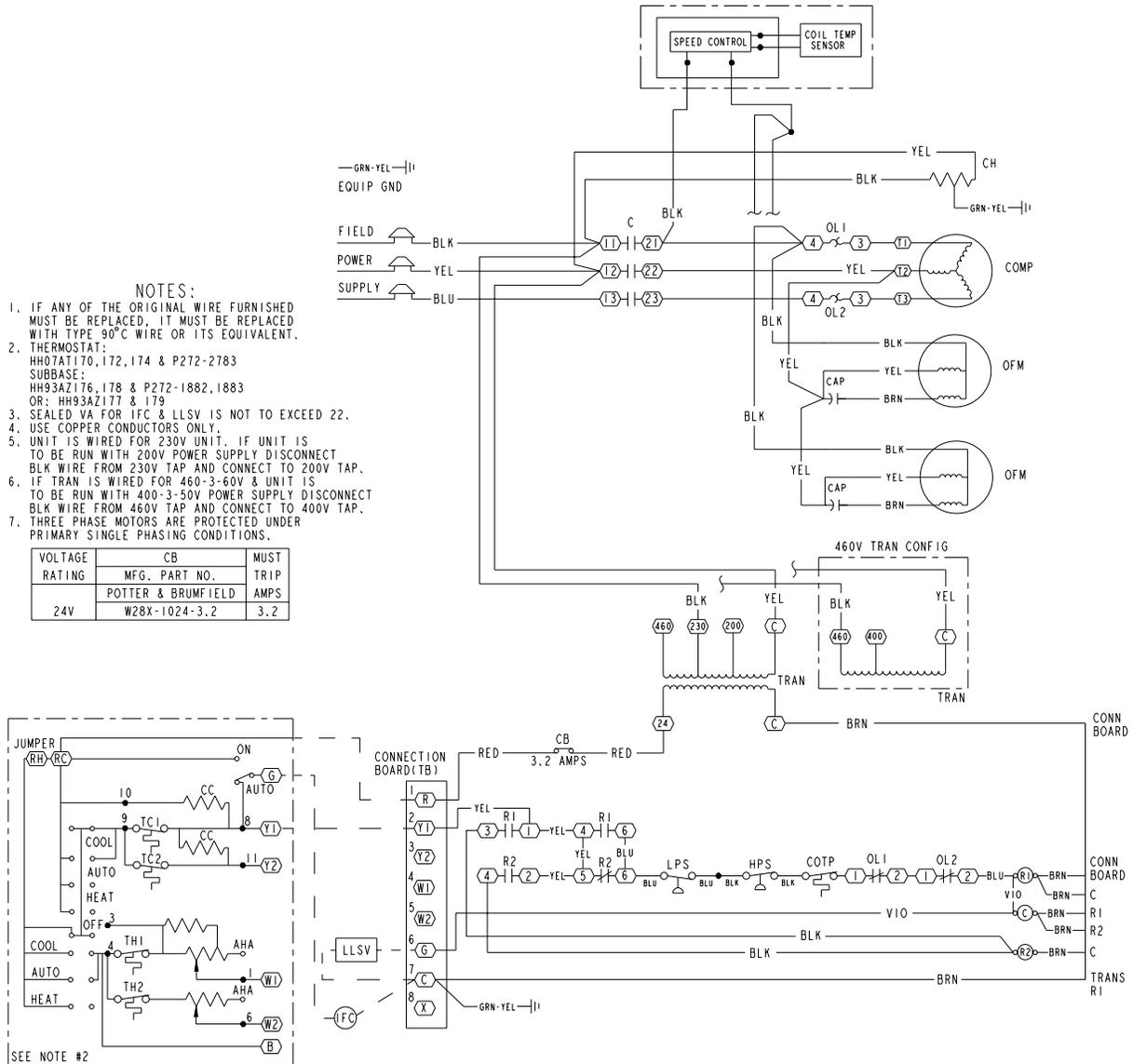
Typical wiring schematic (cont)



38ARS008-012, 400/460-3-50/60 UNITS

- NOTES:**
- IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE 90°C WIRE OR ITS EQUIVALENT.
 - THERMOSTAT:
HH07AT170, 172, 174 & P272-2783
SUBBASE:
HH93AZ176, 178 & P272-1882, 1883
OR: HH93AZ177 & 179
 - SEALED VA FOR IFC & LLSV IS NOT TO EXCEED 22.
 - USE COPPER CONDUCTORS ONLY.
 - 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.
 - 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.
 - THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS.

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



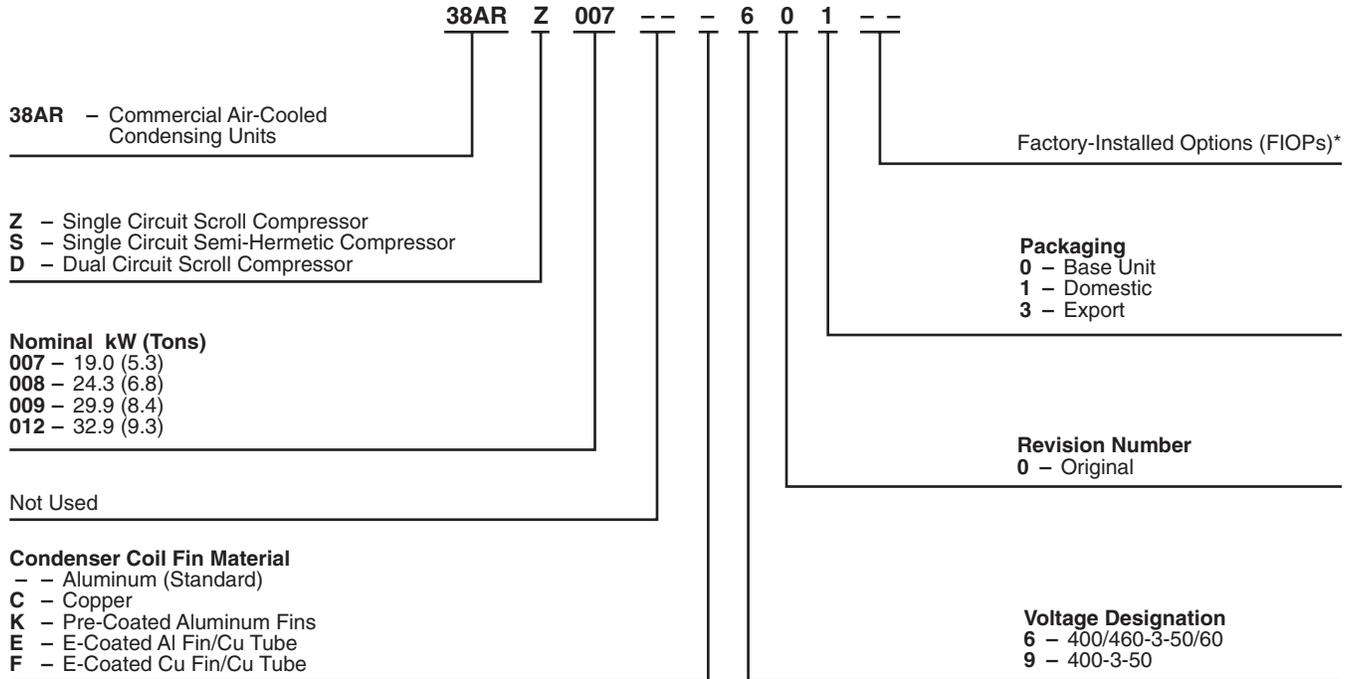
LEGEND

- | | |
|--|---|
| AHA — Adjustable Heat Anticipator | Field Splice |
| C — Contactor, Compressor | Marked Wire |
| CAP — Capacitor | Terminal (Marked) |
| CB — Circuit Breaker | Terminal (Unmarked) |
| CC — Cooling Compensator | Terminal Block |
| CH — Crankcase Heater | Splice |
| COMP — Compressor Motor | Factory Wiring |
| COTP — Compressor Over Temperature Protection | Field Control Wiring |
| EQUIP — Equipment | Field Power Wiring |
| GND — Ground | Accessory or Optional Wiring |
| HPS — High-Pressure Switch | To Indicate Common Potential Only, Not Represent Wiring |
| 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 | |

Model number nomenclature — 38ARZ007-012, 38ARS008-012 and 38ARD012



38AR007-012



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

Quality Assurance



Certification No FM 22838
38ARZ,ARS,ARD UNITS

Approvals:
 ISO 9001
 EN 29002
 BS5750 PART 2
 ANSI/ASQC Q92

Physical data



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

38AR007-012

UNIT SIZE 38AR	Z007	Z008	Z012	S008	S009	S012	D012
NOMINAL CAPACITY (kW)	18.0	25.0	33.2	24.3	30.4	30.9	31.0
OPERATING WEIGHT (kg)							
Aluminum-Fin Coils (Standard)	136.4	174.1	195.5	250.0	261.4	261.4	215.9
Copper-Fin Coils (Optional)	160.0	220.0	241.4	295.9	307.3	307.3	261.8
REFRIGERANT TYPE*	R-22						
Operating Charge, Typical (kg)†	5.5	9.2	9.9	9.3	10.9	10.9	5/Circuit
Shipping Charge (kg)				1			
COMPRESSOR		Scroll			Reciprocating		Scroll
Qty...Model	1...SR_68	1...SR_94	1...ZR125	1...06DA818	1...06DA824	1...06DH824	2...SR_60
Oil Charge (L)	2.6	2.7	3.3	2.6	3.8	3.8	2.1 (ea)
No. Cylinders		N/A		4	6	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
PRESSURE RELIEF							
Location				Suction Line			
Temperature (C)				93			
PIPING CONNECTIONS (in. ODM)							
Qty...Suction	1...1 ¹ / ₈	1...1 ¹ / ₈	1...1 ³ / ₈	1...1 ¹ / ₈	1...1 ³ / ₈	1...1 ³ / ₈	2...1 ¹ / ₈
Qty...Liquid	1...3 ¹ / ₈	1...3 ¹ / ₈	1...1 ¹ / ₂	1...3 ¹ / ₈	1...1 ¹ / ₂	1...1 ¹ / ₂	2...3 ¹ / 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, 38ARS008-012, 38ARD012 UNITS — ENGLISH

38AR007-012

UNIT SIZE 38AR	Z007	Z008	Z012	S008	S009	S012	D012
NOMINAL CAPACITY (tons)	5.0	7.0	9.3	6.8	8.5	8.7	8.7
OPERATING WEIGHT (lb)							
Aluminum-Fin Coils (Standard)	300	383	430	550	575	575	475
Copper-Fin Coils (Optional)	352	484	531	651	676	676	576
REFRIGERANT TYPE*				R-22			
Operating Charge, Typical (lb)†	12	20	22	20	24	24	11/Circuit
Shipping Charge (lb)				2			
COMPRESSOR		Scroll			Reciprocating		Scroll
Qty...Model	1...SR_68	1...SR_94	1...ZR125	1...06DA818	1...06DA824	1...06DH824	2...SR_60
Oil Charge (oz)	88	90	110	88	128	128	72 (ea)
No. Cylinders		N/A		4	6	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
PRESSURE RELIEF							
Location				Suction Line			
Temperature (F)				200			
PIPING CONNECTIONS (in. ODM)							
Qty...Suction	1...1 ¹ / ₈	1...1 ¹ / ₈	1...1 ³ / ₈	1...1 ¹ / ₈	1...1 ³ / ₈	1...1 ³ / ₈	2...1 ¹ / ₈
Qty...Liquid	1...3 ³ / ₈	1...3 ³ / ₈	1...1 ¹ / ₂	1...3 ³ / ₈	1...1 ¹ / ₂	1...1 ¹ / ₂	2...3 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.

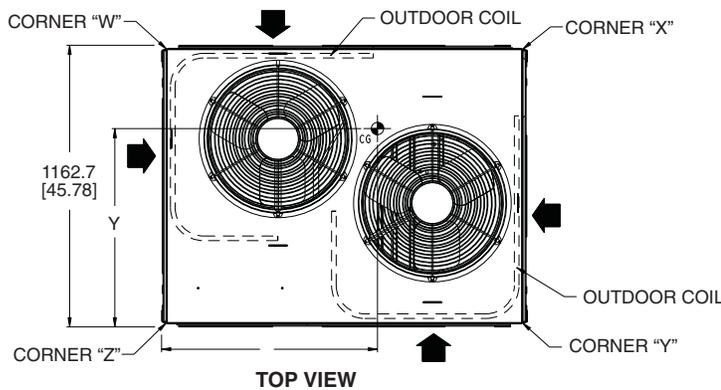
38ARZ007-012, 38ARS008-012, 38ARD012

UNIT 38AR	ELECTRICAL CHARACTERISTICS	ALUMINUM COIL											
		Std. Unit Wt.		Corner W		Corner X		Corner Y		Corner Z		Center of Gravity	
		lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	X	Y
Z007	208/230-3-60, 400/460-3-50/60, 575-3-60	300	136	62	28	103	47	62	28	72	33	831.9 [32.75]	641.4 [25.25]
Z008	208/230-3-60, 400/460-3-50/60, 575-3-60	383	174	86	39	123	56	85	39	89	40	822.3 [32.38]	635.0 [25.00]
Z012	208/230-3-60, 400/460-3-50/60, 575-3-60	430	195	84	38	166	75	66	30	114	52	812.8 [32.00]	676.3 [26.63]
S008	208/230-3-60, 400/460-3-50/60, 575-3-60	550	249	49	22	262	119	75	34	165	75	924.1 [36.38]	657.3 [25.88]
S009	208/230-3-60, 400/460-3-50/60, 575-3-60	575	261	55	25	265	120	88	40	167	76	927.1 [36.50]	647.7 [25.50]
S012	208/230-3-60, 400/460-3-50/60, 575-3-60	575	261	55	25	265	120	88	40	167	76	927.1 [36.50]	647.7 [25.50]

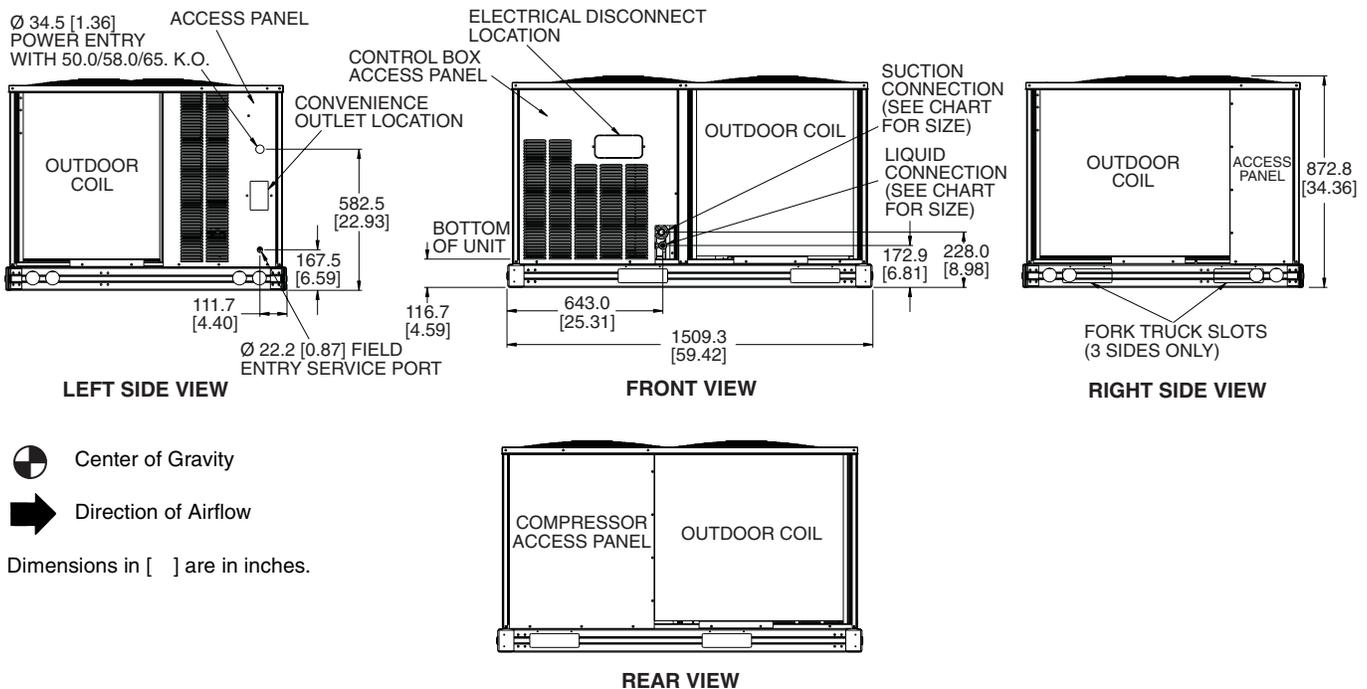
UNIT 38AR	ELECTRICAL CHARACTERISTICS	COPPER COILS											
		Std. Unit Wt.		Corner W		Corner X		Corner Y		Corner Z		Center of Gravity	
		lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	X	Y
Z007	208/230-3-60, 400/460-3-50/60, 575-3-60	352	160	95	43	92	42	92	42	72	33	789.7 [31.09]	619.3 [24.38]
Z008	208/230-3-60, 400/460-3-50/60, 575-3-60	484	220	122	55	137	62	122	55	104	47	806.5 [31.75]	621.8 [24.48]
Z012	208/230-3-60, 400/460-3-50/60, 575-3-60	531	241	121	55	178	81	103	47	128	58	800.1 [31.50]	656.3 [25.84]
S008	208/230-3-60, 400/460-3-50/60, 575-3-60	651	295	88	40	273	124	114	52	177	80	896.4 [35.29]	644.1 [25.36]
S009	208/230-3-60, 400/460-3-50/60, 575-3-60	676	307	94	43	276	125	127	58	179	81	900.2 [35.44]	636.3 [25.05]
S012	208/230-3-60, 400/460-3-50/60, 575-3-60	676	307	94	43	276	125	127	58	179	81	900.2 [35.44]	636.3 [25.05]

NOTES:

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


SERVICE VALVE CONNECTIONS

Unit 38AR	Suction	Liquid
Z007	28.6 [1 ¹ / ₈]	9.5 [3 ⁷ / ₈]
Z008	28.6 [1 ¹ / ₈]	9.5 [3 ⁷ / ₈]
Z012	34.9 [1 ³ / ₈]	12.7 [1 ¹ / ₂]
S008	28.6 [1 ¹ / ₈]	9.5 [3 ⁷ / ₈]
S009	34.9 [1 ³ / ₈]	12.7 [1 ¹ / ₂]
S012	34.9 [1 ³ / ₈]	12.7 [1 ¹ / ₂]



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

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

38ARS008								
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

38ARS008								
SST (C)		Air Temperature Entering Condenser (C)						
		28	32	36	40	44	48	52
-4	TC	16.70	15.70	14.70	13.70	12.70	11.70	10.70
	kW	4.63	4.90	5.13	5.34	5.51	5.68	5.84
	SDT	37.5	41.5	45.5	49.5	53.5	57.4	61.4
-2	TC	18.30	17.30	16.20	15.20	14.10	13.10	12.00
	kW	4.71	5.00	5.27	5.51	5.71	5.91	6.11
	SDT	37.5	41.5	45.5	49.5	53.5	57.5	61.5
0	TC	19.90	18.90	17.80	16.70	15.60	14.50	13.40
	kW	4.79	5.11	5.40	5.67	5.90	6.14	6.37
	SDT	37.7	41.6	45.6	49.5	53.5	57.5	61.5
2	TC	21.60	20.50	19.40	18.20	17.10	15.90	14.80
	kW	4.87	5.21	5.52	5.81	6.08	6.35	6.61
	SDT	38.1	41.9	45.7	49.6	53.5	57.5	61.5
4	TC	23.30	22.10	21.00	19.80	18.70	17.50	16.30
	kW	4.96	5.32	5.65	5.97	6.26	6.54	6.83
	SDT	38.7	42.4	46.2	49.9	53.7	57.6	61.4
6	TC	25.00	23.80	22.60	21.40	20.20	19.00	17.90
	kW	5.04	5.42	5.78	6.12	6.44	6.75	7.05
	SDT	39.4	43.0	46.7	50.4	54.2	57.9	61.6
8	TC	26.80	25.60	24.30	23.10	21.90	20.60	19.40
	kW	5.12	5.53	5.91	6.28	6.62	6.95	7.28
	SDT	40.1	43.7	47.4	51.0	54.7	58.4	62.1
10	TC	28.70	27.40	26.10	24.80	23.50	22.20	20.90
	kW	5.19	5.63	6.04	6.43	6.79	7.16	7.52
	SDT	40.8	44.4	48.1	51.7	55.4	59.0	62.7

LEGEND

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

Performance data (cont)



CONDENSING UNIT RATINGS — SI (cont)

38AR007-012

38ARS009								
SST (C)		Air Temperature Entering Condenser (C)						
		28	32	36	40	44	48	52
-4	TC	20.80	19.50	18.10	16.80	15.50	14.20	12.90
	kW	6.20	6.60	6.80	7.10	7.30	7.50	7.70
	SDT	40.3	44.3	48.3	52.3	56.3	60.3	64.3
-2	TC	22.90	21.50	20.10	18.60	17.20	15.90	14.50
	kW	6.40	6.70	7.10	7.30	7.60	7.80	8.00
	SDT	40.5	44.4	48.3	52.3	56.3	60.3	64.3
0	TC	24.90	23.40	22.10	20.60	19.10	17.60	16.30
	kW	6.50	6.90	7.30	7.60	7.90	8.10	8.40
	SDT	40.7	44.6	48.5	52.4	56.4	60.3	64.3
2	TC	27.10	25.50	24.00	22.60	21.10	19.50	18.00
	kW	6.70	7.10	7.50	7.80	8.10	8.40	8.70
	SDT	41.1	44.9	48.8	52.6	56.5	60.4	64.3
4	TC	29.30	27.70	26.10	24.60	23.00	21.50	19.90
	kW	6.80	7.30	7.70	8.00	8.40	8.70	9.10
	SDT	41.8	45.5	49.2	53.0	56.8	60.6	64.4
6	TC	31.40	29.80	28.30	26.70	25.00	23.40	21.90
	kW	7.00	7.50	7.90	8.30	8.70	9.00	9.40
	SDT	42.5	46.2	49.8	53.5	57.2	60.9	64.6
8	TC	33.80	32.10	30.40	28.80	27.10	25.40	23.80
	kW	7.20	7.60	8.10	8.50	8.90	9.30	9.70
	SDT	43.3	46.9	50.5	54.2	57.8	61.5	65.1
10	TC	36.10	34.40	32.60	30.90	29.20	27.50	25.80
	kW	7.30	7.80	8.30	8.80	9.20	9.60	10.00
	SDT	44.2	47.8	51.4	54.9	58.5	62.1	65.7

38ARD012								
SST (C)		Air Temperature Entering Condenser (C)						
		28	32	36	40	44	48	52
-4	TC	21.60	20.70	19.70	18.70	17.70	16.60	15.60
	kW	6.61	7.12	7.67	8.25	8.85	9.45	10.10
	SDT	39.1	43.1	47.1	51.1	55.1	59.1	63.1
-2	TC	23.40	22.50	21.40	20.40	19.30	18.30	17.20
	kW	6.61	7.12	7.68	8.26	8.87	9.49	10.10
	SDT	39.1	43.1	47.1	51.1	55.1	59.1	63.1
0	TC	25.30	24.30	23.20	22.20	21.10	19.90	18.80
	kW	6.61	7.13	7.68	8.27	8.89	9.52	10.10
	SDT	39.1	43.1	47.1	51.1	55.1	59.1	63.1
2	TC	27.20	26.20	25.10	24.00	22.80	21.70	20.50
	kW	6.62	7.13	7.69	8.28	8.91	9.54	10.20
	SDT	39.2	43.2	47.2	51.2	55.1	59.1	63.1
4	TC	29.20	28.10	27.00	25.90	24.70	23.50	22.30
	kW	6.64	7.15	7.71	8.30	8.93	9.56	10.20
	SDT	39.5	43.4	47.3	51.3	55.2	59.2	63.1
6	TC	31.30	30.10	29.00	27.80	26.60	25.40	24.10
	kW	6.69	7.20	7.75	8.34	8.96	9.60	10.20
	SDT	39.9	43.8	47.7	51.6	55.5	59.4	63.2
8	TC	33.40	32.20	31.00	29.80	28.50	27.30	26.00
	kW	6.75	7.25	7.81	8.39	9.02	9.65	10.30
	SDT	40.3	44.2	48.1	51.9	55.8	59.6	63.5
10	TC	35.50	34.30	33.10	31.80	30.50	29.20	27.90
	kW	6.81	7.32	7.88	8.46	9.09	9.73	10.40
	SDT	40.9	44.7	48.6	52.4	56.2	60.1	63.9

LEGEND

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

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	41.8	45.5	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



COMBINATION RATINGS — SI

38AR007-012

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	17.0	17.1	18.9	20.0	18.5	18.4	19.6	20.7	19.4	19.4	20.2	21.3
	SHC	17.00	16.50	13.00	10.90	18.50	18.60	15.20	12.40	19.40	19.40	17.00	13.90
	kW	4.16	4.16	4.27	4.34	4.23	4.24	4.32	4.39	4.30	4.30	4.35	4.41
36	TC	16.7	16.8	18.5	19.5	18.1	18.0	19.1	20.2	19.0	19.0	19.6	20.6
	SHC	16.70	16.20	12.80	10.70	18.10	18.10	15.00	12.20	19.00	19.00	16.80	13.60
	kW	4.49	4.49	4.60	4.68	4.58	4.57	4.64	4.72	4.65	4.64	4.69	4.75
40	TC	16.2	16.4	17.9	18.9	17.6	17.6	18.5	19.7	18.6	18.6	19.1	20.1
	SHC	16.20	15.90	12.70	10.50	17.60	17.70	14.70	12.00	18.60	18.60	16.60	13.40
	kW	4.85	4.86	4.97	5.04	4.94	4.94	5.01	5.08	5.01	5.01	5.04	5.11
44	TC	15.9	15.9	17.4	18.4	17.2	17.1	18.0	19.0	18.0	18.0	18.5	19.4
	SHC	15.90	15.70	12.50	10.30	17.20	17.30	14.50	11.80	18.00	18.00	16.40	13.20
	kW	5.22	5.24	5.33	5.41	5.32	5.31	5.38	5.45	5.39	5.38	5.42	5.49
48	TC	15.5	15.5	16.8	17.9	16.8	16.7	17.4	18.5	17.6	17.6	17.9	18.9
	SHC	15.50	15.40	12.30	10.10	16.80	16.80	14.30	11.70	17.60	17.60	16.20	13.00
	kW	5.59	5.59	5.70	5.78	5.69	5.69	5.75	5.82	5.76	5.76	5.78	5.86
52	TC	15.2	15.1	16.4	17.3	16.3	16.3	16.9	17.8	17.2	17.1	17.4	18.3
	SHC	15.20	15.20	12.00	9.90	16.30	16.30	14.10	11.50	17.20	17.10	16.00	12.80
	kW	5.97	5.97	6.07	6.15	6.05	6.06	6.11	6.19	6.12	6.12	6.15	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	16.3	16.5	18.2	19.3	17.7	17.7	18.9	20.0	18.6	18.6	19.4	20.5
	SHC	16.30	15.80	12.50	10.50	17.70	17.70	14.50	11.90	18.60	18.60	16.20	13.20
	kW	4.11	4.12	4.22	4.29	4.18	4.19	4.26	4.33	4.24	4.24	4.29	4.36
36	TC	16.0	16.2	17.8	18.8	17.3	17.3	18.4	19.5	18.2	18.2	18.9	19.9
	SHC	16.00	15.60	12.30	10.30	17.30	17.30	14.30	11.70	18.20	18.20	16.00	13.00
	kW	4.44	4.45	4.55	4.62	4.52	4.52	4.59	4.66	4.58	4.58	4.63	4.69
40	TC	15.6	15.8	17.3	18.3	16.9	16.9	17.9	19.0	17.8	17.8	18.4	19.4
	SHC	15.60	15.30	12.20	10.10	16.90	16.90	14.10	11.50	17.80	17.80	15.80	12.80
	kW	4.81	4.82	4.92	4.99	4.89	4.89	4.96	5.03	4.95	4.95	4.99	5.06
44	TC	15.3	15.4	16.8	17.8	16.5	16.5	17.4	18.4	17.3	17.3	17.9	18.8
	SHC	15.30	15.10	12.00	9.95	16.50	16.50	13.90	11.30	17.30	17.30	15.60	12.60
	kW	5.18	5.19	5.29	5.36	5.27	5.26	5.33	5.40	5.33	5.32	5.36	5.43
48	TC	14.9	15.0	16.3	17.3	16.1	16.1	16.9	17.9	16.9	16.9	17.3	18.3
	SHC	14.90	14.80	11.80	9.77	16.10	16.10	13.70	11.20	16.90	16.90	15.40	12.40
	kW	5.55	5.55	5.66	5.73	5.64	5.64	5.70	5.77	5.70	5.69	5.73	5.80
52	TC	14.6	14.6	15.9	16.8	15.7	15.7	16.4	17.3	16.5	16.4	16.8	17.7
	SHC	14.60	14.60	11.60	9.59	15.70	15.70	13.50	11.00	16.50	16.40	15.20	12.20
	kW	5.92	5.92	6.03	6.10	6.01	6.01	6.06	6.14	6.07	6.06	6.10	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

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	18.2	18.1	19.7	20.8	19.6	19.6	20.4	21.4	20.7	20.7	21.0	21.9
	SHC	18.20	18.20	14.40	11.90	19.60	19.60	17.10	13.90	20.70	20.70	19.30	15.70
	kW	4.22	4.22	4.31	4.38	4.31	4.31	4.37	4.43	4.37	4.37	4.40	4.46
36	TC	17.8	17.7	19.1	20.3	19.2	19.2	19.9	20.9	20.2	20.2	20.4	21.3
	SHC	17.80	17.80	14.20	11.70	19.20	19.20	16.90	13.60	20.20	20.20	19.00	15.50
	kW	4.57	4.56	4.65	4.73	4.65	4.65	4.70	4.77	4.72	4.72	4.74	4.79
40	TC	17.3	17.3	18.6	19.6	18.7	18.7	19.2	20.2	19.7	19.7	19.8	20.6
	SHC	17.30	17.40	14.00	11.40	18.70	18.70	16.60	13.40	19.70	19.70	18.70	15.20
	kW	4.91	4.92	5.00	5.09	5.02	5.02	5.06	5.13	5.08	5.09	5.09	5.16
44	TC	16.9	16.8	18.1	19.1	18.2	18.2	18.7	19.7	19.2	19.2	19.2	20.0
	SHC	16.90	17.00	13.80	11.30	18.20	18.20	16.40	13.20	19.20	19.20	18.40	15.00
	kW	5.29	5.29	5.39	5.46	5.40	5.39	5.42	5.50	5.47	5.47	5.46	5.53
48	TC	16.5	16.4	17.5	18.6	17.8	17.8	18.1	19.0	18.6	18.6	18.7	19.4
	SHC	16.50	16.60	13.60	11.10	17.80	17.80	16.10	13.00	18.60	18.60	18.10	14.80
	kW	5.66	5.66	5.75	5.83	5.77	5.77	5.80	5.88	5.84	5.84	5.85	5.90
52	TC	16.0	16.0	16.8	17.9	17.3	17.3	17.5	18.4	18.0	18.0	18.0	18.8
	SHC	16.00	16.10	13.30	10.90	17.30	17.30	15.90	12.90	18.00	18.00	17.80	14.60
	kW	6.01	6.02	6.11	6.19	6.15	6.14	6.16	6.23	6.21	6.20	6.20	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	17.3	17.3	18.8	19.9	18.6	18.6	19.5	20.5	19.6	19.6	20.0	20.9
	SHC	17.30	17.20	13.70	11.30	18.60	18.60	16.10	13.10	19.60	19.60	18.10	14.70
	kW	4.16	4.16	4.25	4.32	4.24	4.24	4.30	4.36	4.30	4.30	4.33	4.39
36	TC	16.9	16.9	18.3	19.4	18.2	18.2	19.0	20.0	19.1	19.1	19.5	20.4
	SHC	16.90	16.90	13.50	11.10	18.20	18.20	15.90	12.90	19.10	19.10	17.80	14.50
	kW	4.50	4.50	4.59	4.66	4.58	4.58	4.63	4.70	4.64	4.64	4.66	4.72
40	TC	16.5	16.5	17.8	18.8	17.8	17.8	18.4	19.4	18.7	18.7	18.9	19.8
	SHC	16.50	16.50	13.30	10.90	17.80	17.80	15.70	12.70	18.70	18.70	17.50	14.30
	kW	4.86	4.87	4.95	5.03	4.95	4.95	5.00	5.07	5.01	5.01	5.03	5.09
44	TC	16.1	16.1	17.3	18.3	17.3	17.3	17.9	18.9	18.2	18.2	18.4	19.2
	SHC	16.10	16.10	13.10	10.80	17.30	17.30	15.50	12.50	18.20	18.20	17.30	14.10
	kW	5.23	5.23	5.32	5.40	5.33	5.32	5.36	5.44	5.39	5.39	5.40	5.46
48	TC	15.7	15.7	16.8	17.8	16.9	16.9	17.4	18.3	17.7	17.7	17.9	18.6
	SHC	15.70	15.70	12.90	10.60	16.90	16.90	15.20	12.30	17.70	17.70	17.00	13.90
	kW	5.60	5.60	5.69	5.76	5.70	5.70	5.73	5.81	5.76	5.76	5.77	5.83
52	TC	15.3	15.3	16.2	17.2	16.5	16.5	16.8	17.7	17.2	17.2	17.3	18.1
	SHC	15.30	15.3	12.70	10.40	16.50	16.50	15.00	12.20	17.20	17.20	16.70	13.70
	kW	5.96	5.97	6.05	6.13	6.08	6.07	6.10	6.17	6.13	6.14	6.14	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	20.4	21.3	23.9	25.4	22.6	22.8	25.1	26.6	24.1	24.0	26.0	27.5
	SHC	20.30	19.00	15.10	12.90	22.60	21.80	17.30	14.40	24.10	24.10	19.30	15.80
	kW	5.37	5.37	5.45	5.51	5.40	5.41	5.50	5.57	5.46	5.45	5.55	5.60
36	TC	20.0	20.7	23.3	24.8	22.1	22.3	24.5	26.1	23.6	23.5	25.2	26.6
	SHC	19.90	18.60	14.80	12.70	22.00	21.50	17.00	14.20	23.60	23.70	19.10	15.50
	kW	5.81	5.80	5.89	5.95	5.84	5.85	5.94	6.01	5.90	5.90	5.98	6.04
40	TC	19.6	20.2	22.7	24.1	21.5	21.6	23.9	25.2	22.9	22.8	24.5	25.9
	SHC	19.50	18.30	14.60	12.40	21.50	21.10	16.80	13.90	22.90	23.00	18.80	15.30
	kW	6.26	6.26	6.37	6.42	6.32	6.32	6.41	6.49	6.37	6.37	6.45	6.51
44	TC	19.1	19.6	22.0	23.4	21.0	21.1	23.1	24.5	22.4	22.2	23.7	25.1
	SHC	18.90	18.00	14.30	12.20	21.00	20.80	16.40	13.70	22.40	22.40	18.40	15.10
	kW	6.74	6.73	6.84	6.91	6.79	6.79	6.90	6.96	6.85	6.84	6.92	7.00
48	TC	18.6	19.0	21.4	22.8	20.4	20.5	22.3	23.7	21.8	21.6	23.1	24.3
	SHC	18.50	17.70	14.00	11.80	20.40	20.30	16.20	13.40	21.80	21.80	18.20	14.80
	kW	7.21	7.20	7.30	7.38	7.28	7.26	7.36	7.44	7.32	7.31	7.40	7.48
52	TC	18.1	18.5	20.7	22.1	19.9	20.0	21.7	23.1	21.2	21.1	22.4	23.6
	SHC	18.00	17.40	13.70	11.70	19.90	19.90	15.90	13.10	21.20	21.20	17.90	14.60
	kW	7.69	7.68	7.78	7.83	7.76	7.74	7.82	7.91	7.79	7.78	7.87	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	19.5	20.3	22.8	24.2	21.4	21.7	23.9	25.3	22.8	22.8	24.7	26.0
	SHC	19.40	18.10	14.40	12.30	21.40	20.70	16.40	13.70	22.80	22.70	18.20	15.00
	kW	5.39	5.41	5.51	5.57	5.45	5.46	5.56	5.63	5.51	5.51	5.60	5.66
36	TC	19.1	19.8	22.2	23.6	21.0	21.2	23.3	24.7	22.3	22.3	24.0	25.4
	SHC	19.00	17.80	14.10	12.10	20.90	20.40	16.10	13.50	22.30	22.30	18.00	14.70
	kW	5.83	5.85	5.96	6.02	5.90	5.91	6.01	6.08	5.96	5.96	6.05	6.11
40	TC	18.7	19.3	21.6	23.0	20.4	20.6	22.7	24.0	21.7	21.7	23.3	24.7
	SHC	18.60	17.50	13.90	11.80	20.40	20.00	15.90	13.20	21.70	21.70	17.70	14.50
	kW	6.29	6.32	6.44	6.51	6.38	6.39	6.49	6.57	6.44	6.44	6.53	6.60
44	TC	18.2	18.7	21.0	22.3	19.9	20.1	22.0	23.3	21.2	21.1	22.6	23.9
	SHC	18.10	17.20	13.60	11.60	19.90	19.70	15.60	13.00	21.20	21.10	17.40	14.30
	kW	6.76	6.80	6.92	7.00	6.86	6.87	6.98	7.06	6.93	6.92	7.02	7.10
48	TC	17.8	18.2	20.4	21.7	19.4	19.5	21.3	22.6	20.6	20.5	22.0	23.2
	SHC	17.70	16.90	13.40	11.30	19.40	19.30	15.40	12.70	20.60	20.50	17.20	14.00
	kW	7.23	7.27	7.40	7.49	7.34	7.35	7.46	7.55	7.41	7.40	7.50	7.59
52	TC	17.3	17.7	19.8	21.1	18.9	19.0	20.7	22.0	20.1	20.0	21.3	22.5
	SHC	17.20	16.60	13.10	11.10	18.90	18.90	15.10	12.50	20.10	20.00	16.90	13.80
	kW	7.70	7.74	7.89	7.97	7.82	7.83	7.94	8.04	7.89	7.88	7.99	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
32	TC	21.9	22.4	24.8	26.2	24.1	24.0	26.1	27.5	25.5	25.5	26.6	28.2
	SHC	21.90	20.80	16.40	13.80	24.00	24.00	19.10	15.70	25.50	25.60	21.70	17.50
	kW	5.38	5.40	5.49	5.55	5.45	5.45	5.55	5.61	5.52	5.52	5.57	5.64
36	TC	21.5	21.9	24.2	25.6	23.5	23.5	25.3	26.9	25.0	24.8	25.9	27.2
	SHC	21.40	20.50	16.10	13.60	23.50	23.50	18.90	15.50	25.00	24.90	21.30	17.30
	kW	5.82	5.84	5.92	6.00	5.90	5.89	5.98	6.04	5.96	5.96	6.02	6.07
40	TC	20.9	21.2	23.6	25.0	22.9	22.9	24.5	25.9	24.3	24.3	25.3	26.4
	SHC	20.90	20.20	15.90	13.40	22.90	23.00	18.60	15.20	24.30	24.30	21.00	16.90
	kW	6.30	6.30	6.40	6.46	6.37	6.36	6.45	6.51	6.44	6.43	6.49	6.55
44	TC	20.4	20.7	22.8	24.2	22.4	22.3	23.9	25.1	23.7	23.6	24.5	25.7
	SHC	20.40	19.90	15.50	13.00	22.40	22.40	18.40	15.00	23.70	23.70	20.80	16.70
	kW	6.77	6.77	6.88	6.95	6.86	6.85	6.92	6.99	6.92	6.92	6.95	7.03
48	TC	19.9	20.0	22.2	23.6	21.8	21.7	23.1	24.4	23.1	23.0	23.8	25.0
	SHC	19.90	19.50	15.30	12.80	21.80	21.80	18.10	14.70	23.10	23.10	20.40	16.50
	kW	7.24	7.23	7.35	7.43	7.32	7.32	7.41	7.47	7.40	7.39	7.44	7.51
52	TC	19.4	19.4	21.5	22.8	21.2	21.1	22.4	23.7	22.4	22.4	23.1	24.2
	SHC	19.40	19.10	15.00	12.50	21.20	21.20	17.80	14.50	22.40	22.50	20.10	16.20
	kW	7.72	7.70	7.80	7.90	7.80	7.80	7.87	7.94	7.88	7.87	7.91	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
32	TC	20.8	21.3	23.6	25.0	22.8	22.8	24.7	26.0	24.1	24.1	25.3	26.7
	SHC	20.80	19.80	15.60	13.10	22.70	22.60	18.10	14.90	24.10	24.10	20.40	16.50
	kW	5.43	5.45	5.55	5.61	5.51	5.51	5.60	5.66	5.57	5.57	5.63	5.69
36	TC	20.4	20.8	23.0	24.4	22.2	22.3	24.0	25.4	23.6	23.5	24.7	26.0
	SHC	20.30	19.50	15.30	12.90	22.20	22.20	17.90	14.70	23.60	23.50	20.10	16.30
	kW	5.87	5.89	5.99	6.06	5.96	5.96	6.05	6.11	6.02	6.02	6.08	6.14
40	TC	19.9	20.2	22.4	23.7	21.7	21.7	23.3	24.6	23.0	23.0	24.0	25.2
	SHC	19.90	19.20	15.10	12.70	21.70	21.70	17.60	14.40	23.00	23.00	19.80	16.00
	kW	6.35	6.36	6.48	6.55	6.44	6.44	6.53	6.60	6.51	6.51	6.57	6.64
44	TC	19.4	19.7	21.7	23.0	21.2	21.2	22.7	23.9	22.4	22.4	23.3	24.5
	SHC	19.40	18.90	14.80	12.40	21.20	21.20	17.40	14.20	22.40	22.40	19.60	15.80
	kW	6.83	6.84	6.96	7.04	6.93	6.93	7.02	7.09	7.00	7.00	7.05	7.13
48	TC	18.9	19.1	21.1	22.4	20.6	20.6	22.0	23.2	21.8	21.8	22.6	23.8
	SHC	18.90	18.60	14.60	12.20	20.60	20.60	17.10	13.90	21.80	21.80	19.30	15.60
	kW	7.30	7.32	7.45	7.53	7.41	7.41	7.51	7.58	7.49	7.49	7.54	7.62
52	TC	18.4	18.5	20.5	21.7	20.1	20.0	21.3	22.5	21.2	21.2	21.9	23.0
	SHC	18.40	18.20	14.30	11.90	20.10	20.00	16.80	13.70	21.20	21.20	19.00	15.30
	kW	7.78	7.80	7.93	8.02	7.90	7.90	7.99	8.07	7.98	7.97	8.03	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	25.1	25.0	26.8	28.2	26.7	26.7	27.6	29.1	27.8	27.8	28.5	29.6
	SHC	25.10	25.00	20.10	16.50	26.70	26.70	23.10	18.60	27.80	27.80	25.70	20.70
	kW	5.49	5.50	5.58	5.65	5.57	5.57	5.62	5.68	5.62	5.62	5.64	5.71
36	TC	24.4	24.4	26.2	27.5	25.9	25.9	26.9	28.4	27.2	27.2	27.8	28.8
	SHC	24.40	24.50	19.90	16.20	25.90	25.90	22.80	18.30	27.20	27.20	25.20	20.50
	kW	5.93	5.93	6.02	6.09	6.01	6.01	6.06	6.12	6.07	6.07	6.09	6.14
40	TC	23.8	23.8	25.3	26.8	25.3	25.3	26.2	27.6	26.5	26.5	27.0	28.0
	SHC	23.80	23.80	19.50	15.90	25.30	25.30	22.50	18.20	26.50	26.50	24.90	20.10
	kW	6.42	6.41	6.51	6.56	6.50	6.50	6.54	6.59	6.55	6.55	6.57	6.62
44	TC	23.2	23.2	24.6	26.0	24.7	24.7	25.4	26.6	25.7	25.7	26.1	27.0
	SHC	23.20	23.30	19.20	15.70	24.70	24.70	22.10	17.80	25.70	25.70	24.40	19.80
	kW	6.89	6.90	6.97	7.04	6.98	6.98	7.01	7.08	7.04	7.03	7.04	7.10
48	TC	22.6	22.6	23.8	25.2	24.0	24.1	24.6	25.7	25.0	24.9	25.1	26.1
	SHC	22.60	22.70	19.00	15.40	24.00	24.10	21.80	17.50	25.00	24.90	24.00	19.60
	kW	7.37	7.37	7.44	7.52	7.45	7.46	7.49	7.56	7.51	7.51	7.53	7.58
52	TC	22.0	21.9	23.0	24.5	23.4	23.4	23.8	25.0	24.3	24.3	24.4	25.4
	SHC	22.00	22.00	18.60	15.20	23.40	23.40	21.40	17.30	24.30	24.30	23.60	19.30
	kW	7.84	7.85	7.91	7.99	7.92	7.93	7.96	8.02	7.99	7.98	7.99	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	23.6	23.6	25.3	26.7	25.0	25.0	26.1	27.4	26.0	26.0	26.7	27.9
	SHC	23.60	23.50	18.90	15.50	25.00	25.00	21.60	17.40	26.00	26.00	23.80	19.20
	kW	5.54	5.55	5.63	5.69	5.61	5.61	5.66	5.73	5.66	5.66	5.69	5.75
36	TC	23.0	23.0	24.7	26.0	24.4	24.4	25.4	26.7	25.4	25.4	26.0	27.1
	SHC	23.00	23.00	18.70	15.30	24.40	24.40	21.30	17.20	25.40	25.40	23.40	19.00
	kW	5.99	5.99	6.08	6.15	6.06	6.06	6.12	6.18	6.12	6.11	6.14	6.20
40	TC	22.4	22.5	24.0	25.3	23.8	23.8	24.7	25.9	24.8	24.8	25.2	26.3
	SHC	22.40	22.40	18.40	15.00	23.80	23.80	21.00	17.00	24.80	24.80	23.10	18.70
	kW	6.48	6.48	6.57	6.64	6.56	6.56	6.61	6.67	6.61	6.61	6.64	6.70
44	TC	21.9	21.9	23.2	24.5	23.2	23.2	23.9	25.1	24.1	24.1	24.5	25.5
	SHC	21.90	21.90	18.10	14.80	23.20	23.20	20.70	16.70	24.10	24.10	22.70	18.40
	kW	6.97	6.97	7.05	7.13	7.05	7.05	7.10	7.17	7.11	7.10	7.13	7.19
48	TC	21.3	21.3	22.5	23.8	22.6	22.6	23.2	24.3	23.5	23.4	23.7	24.7
	SHC	21.30	21.30	17.90	14.50	22.60	22.60	20.40	16.40	23.50	23.40	22.30	18.20
	kW	7.46	7.46	7.54	7.62	7.54	7.55	7.59	7.66	7.60	7.60	7.62	7.68
52	TC	20.7	20.7	21.8	23.1	22.0	22.0	22.5	23.6	22.8	22.8	23.0	23.9
	SHC	20.70	20.70	17.60	14.30	22.00	22.00	20.10	16.20	22.80	22.80	21.90	17.90
	kW	7.94	7.95	8.03	8.11	8.03	8.04	8.08	8.15	8.10	8.09	8.11	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)

38AR007-012

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
32	TC	26.5	27.7	31.1	32.7	29.4	29.8	32.6	34.6	31.4	31.4	33.7	35.7
	SHC	26.30	24.20	19.00	16.40	29.30	28.10	22.00	18.50	31.40	31.10	24.70	20.30
	kW	7.43	7.51	7.76	7.91	7.62	7.66	7.90	8.06	7.77	7.77	8.00	8.16
36	TC	26.0	27.1	30.2	32.0	28.8	29.1	31.9	33.5	30.6	30.6	33.0	34.9
	SHC	25.80	23.70	18.70	16.00	28.70	27.70	21.70	18.20	30.60	30.50	24.30	19.90
	kW	7.93	7.99	8.23	8.38	8.12	8.13	8.39	8.54	8.27	8.28	8.47	8.63
40	TC	25.3	26.3	29.4	31.2	28.0	28.3	30.9	32.5	29.8	29.8	31.9	33.6
	SHC	25.20	23.30	18.40	15.70	28.00	27.10	21.30	17.70	29.80	29.80	23.90	19.60
	kW	8.43	8.50	8.74	8.89	8.65	8.65	8.90	9.05	8.79	8.80	8.99	9.14
44	TC	24.8	25.6	28.5	30.1	27.3	27.5	29.9	31.7	29.0	29.0	30.9	32.4
	SHC	24.60	22.90	17.90	15.40	27.20	26.60	20.90	17.40	29.00	29.10	23.50	19.30
	kW	8.96	9.01	9.25	9.38	9.16	9.16	9.39	9.53	9.30	9.30	9.48	9.64
48	TC	24.1	24.9	27.7	29.3	26.5	26.7	29.0	30.5	28.2	28.1	29.9	31.6
	SHC	24.00	22.40	17.60	15.00	26.50	26.10	20.50	17.10	28.20	28.20	23.10	18.80
	kW	9.48	9.51	9.74	9.89	9.67	9.68	9.88	10.05	9.82	9.80	9.98	10.13
52	TC	23.6	24.1	26.7	28.4	25.8	25.9	28.0	29.6	27.3	27.3	28.9	30.3
	SHC	23.50	22.00	17.30	14.60	25.80	25.40	20.20	16.70	27.30	27.40	22.70	18.50
	kW	10.01	10.05	10.21	10.41	10.20	10.19	10.43	10.51	10.35	10.34	10.53	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
32	TC	24.9	26.1	29.3	30.9	27.5	28.0	30.8	32.5	29.3	29.4	31.8	33.5
	SHC	24.70	22.70	17.90	15.40	27.40	26.20	20.50	17.30	29.30	28.90	23.00	18.90
	kW	7.31	7.39	7.64	7.79	7.49	7.54	7.78	7.94	7.64	7.65	7.88	8.04
36	TC	24.4	25.5	28.5	30.2	26.9	27.4	30.1	31.7	28.6	28.7	31.0	32.7
	SHC	24.20	22.30	17.60	15.10	26.80	25.80	20.20	17.00	28.60	28.40	22.60	18.60
	kW	7.78	7.85	8.10	8.25	7.96	8.00	8.24	8.41	8.11	8.12	8.34	8.50
40	TC	23.8	24.8	27.8	29.4	26.2	26.6	29.2	30.8	27.9	28.0	30.1	31.7
	SHC	23.70	21.90	17.30	14.80	26.20	25.30	19.90	16.60	27.90	27.80	22.30	18.30
	kW	8.28	8.35	8.59	8.74	8.46	8.49	8.73	8.89	8.60	8.61	8.82	8.98
44	TC	23.3	24.2	27.0	28.5	25.6	25.9	28.3	29.9	27.2	27.2	29.2	30.7
	SHC	23.10	21.50	16.90	14.50	25.50	24.80	19.50	16.30	27.20	27.20	21.90	18.00
	kW	8.78	8.84	9.07	9.22	8.95	8.98	9.21	9.37	9.09	9.09	9.30	9.46
48	TC	22.7	23.5	26.2	27.7	24.9	25.2	27.5	29.0	26.5	26.4	28.3	29.8
	SHC	22.60	21.10	16.60	14.10	24.90	24.40	19.20	16.00	26.50	26.40	21.60	17.60
	kW	9.28	9.33	9.56	9.70	9.45	9.47	9.69	9.86	9.58	9.58	9.77	9.94
52	TC	22.2	22.8	25.4	26.9	24.3	24.4	26.6	28.1	25.7	25.7	27.4	28.8
	SHC	22.10	20.70	16.30	13.80	24.30	23.90	18.90	15.70	25.70	25.70	21.20	17.30
	kW	9.79	9.83	10.00	10.20	9.95	9.96	10.20	10.30	10.10	10.10	10.30	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	30.3	30.8	33.7	35.4	32.6	32.6	34.8	36.7	33.9	33.9	35.5	37.2
	SHC	30.20	29.10	22.80	19.10	32.60	32.40	25.90	21.30	33.90	34.20	28.80	23.30
	kW	7.71	7.76	8.04	8.21	7.93	7.91	8.14	8.33	8.08	8.06	8.22	8.40
36	TC	29.7	29.9	32.7	34.6	31.8	31.8	33.6	35.6	33.2	33.2	34.6	36.2
	SHC	29.60	28.40	22.40	18.80	31.80	31.80	25.60	20.90	33.20	33.50	28.50	23.00
	kW	8.18	8.21	8.50	8.67	8.40	8.40	8.61	8.79	8.55	8.55	8.69	8.87
40	TC	29.0	29.0	31.8	33.6	30.8	30.8	32.8	34.6	32.3	32.3	33.6	35.2
	SHC	28.90	27.90	22.00	18.30	30.80	31.10	25.20	20.60	32.30	32.30	28.10	22.70
	kW	8.68	8.70	8.95	9.19	8.88	8.87	9.06	9.26	9.05	9.03	9.13	9.32
44	TC	28.0	28.2	30.6	32.4	30.1	29.9	31.5	33.3	31.3	31.3	32.4	34.2
	SHC	27.90	27.40	21.60	18.00	30.10	30.30	24.80	20.10	31.30	31.30	27.70	22.20
	kW	9.16	9.18	9.46	9.63	9.40	9.37	9.57	9.74	9.61	9.60	9.63	9.80
48	TC	27.3	27.4	29.7	31.4	29.3	28.9	30.8	32.3	30.4	30.4	31.4	32.9
	SHC	27.20	26.90	21.20	17.60	29.30	29.40	24.30	19.80	30.40	30.40	27.30	21.90
	kW	9.61	9.63	9.94	10.11	9.89	9.87	10.05	10.18	10.00	10.00	10.12	10.28
52	TC	26.5	26.3	28.6	30.5	28.2	28.1	29.6	31.1	29.6	29.6	30.2	31.8
	SHC	26.50	26.40	20.90	17.10	28.20	28.40	24.00	19.40	29.60	29.60	26.70	21.40
	kW	10.09	10.09	10.38	10.49	10.38	10.38	10.48	10.68	10.48	10.48	10.58	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	28.5	29.0	31.7	33.4	30.5	30.6	32.8	34.5	31.9	31.9	33.5	35.2
	SHC	28.40	27.30	21.50	18.00	30.50	30.30	24.30	19.90	31.90	31.90	26.80	21.70
	kW	7.57	7.61	7.87	8.03	7.75	7.75	7.97	8.13	7.88	7.88	8.04	8.20
36	TC	27.9	28.2	30.9	32.6	29.8	29.8	31.9	33.6	31.2	31.2	32.6	34.2
	SHC	27.80	26.90	21.10	17.70	29.80	29.70	24.00	19.60	31.20	31.20	26.50	21.40
	kW	8.04	8.07	8.33	8.49	8.22	8.22	8.43	8.60	8.35	8.35	8.50	8.66
40	TC	27.2	27.5	30.0	31.6	29.0	29.0	31.0	32.6	30.3	30.3	31.6	33.2
	SHC	27.10	26.40	20.80	17.30	29.00	29.00	23.60	19.30	30.30	30.30	26.10	21.10
	kW	8.54	8.56	8.80	8.97	8.71	8.71	8.91	9.08	8.84	8.84	8.98	9.14
44	TC	26.5	26.7	29.1	30.7	28.3	28.2	30.0	31.6	29.5	29.5	30.7	32.2
	SHC	26.40	25.90	20.40	17.00	28.30	28.20	23.20	18.90	29.50	29.50	25.70	20.70
	kW	9.03	9.05	9.28	9.45	9.20	9.19	9.39	9.56	9.33	9.32	9.45	9.62
48	TC	25.8	25.9	28.2	29.7	27.5	27.4	29.1	30.6	28.7	28.7	29.7	31.2
	SHC	25.70	25.40	20.00	16.60	27.50	27.40	22.80	18.60	28.70	28.70	25.30	20.40
	kW	9.52	9.54	9.75	9.93	9.70	9.68	9.86	10.00	9.81	9.81	9.93	10.1
52	TC	25.1	25.1	27.3	28.8	26.7	26.6	28.1	29.6	27.8	27.8	28.7	30.1
	SHC	25.10	24.90	19.70	16.20	26.70	26.60	22.50	18.20	27.80	27.80	24.90	20.00
	kW	10.00	10.00	10.20	10.40	10.20	10.20	10.30	10.50	10.30	10.30	10.40	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
32	TC	32.1	32.0	34.8	36.7	34.4	34.2	35.8	37.6	35.6	35.6	36.9	38.2
	SHC	32.00	31.60	24.80	20.50	34.40	34.40	28.70	23.10	35.60	35.60	32.00	25.60
	kW	7.90	7.90	8.17	8.35	8.12	8.10	8.28	8.46	8.27	8.26	8.36	8.53
36	TC	31.1	31.2	33.9	35.6	33.6	33.3	34.9	36.8	34.7	34.7	35.6	37.4
	SHC	31.00	30.90	24.30	20.20	33.60	33.40	28.40	22.80	34.70	34.70	31.40	25.20
	kW	8.36	8.36	8.63	8.82	8.58	8.58	8.75	8.94	8.74	8.73	8.83	8.99
40	TC	30.3	30.4	32.9	34.6	32.6	32.3	33.9	35.5	34.1	34.1	34.5	36.1
	SHC	30.30	30.30	23.90	19.70	32.60	32.60	28.00	22.40	34.10	34.10	31.10	24.90
	kW	8.83	8.83	9.13	9.31	9.05	9.05	9.23	9.41	9.21	9.21	9.31	9.48
44	TC	29.5	29.6	31.6	33.5	31.6	31.6	32.8	34.4	32.9	32.9	33.5	34.9
	SHC	29.50	29.50	23.60	19.30	31.60	31.60	27.40	22.00	32.90	32.90	30.50	24.50
	kW	9.37	9.36	9.59	9.78	9.55	9.55	9.71	9.89	9.69	9.69	9.78	9.96
48	TC	28.7	28.4	30.9	32.4	30.7	30.7	31.8	33.3	32.0	32.0	32.4	33.8
	SHC	28.70	29.00	23.20	18.90	30.70	30.70	26.90	21.60	32.00	32.00	29.90	24.00
	kW	9.84	9.85	10.07	10.28	10.05	10.05	10.19	10.38	10.19	10.19	10.29	10.48
52	TC	28.0	27.6	29.6	31.2	29.7	29.9	30.4	32.3	30.8	30.9	31.4	32.5
	SHC	28.00	27.90	22.80	18.60	29.70	29.90	26.40	21.20	30.80	30.90	29.60	23.70
	kW	10.28	10.28	10.58	10.78	10.58	10.57	10.68	10.88	10.68	10.68	10.78	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
32	TC	30.3	30.5	33.3	35.0	32.4	32.4	34.3	36.1	33.8	33.8	35.1	36.7
	SHC	30.20	29.70	23.40	19.40	32.40	32.40	26.70	21.70	33.80	33.80	29.70	23.90
	kW	7.73	7.75	8.01	8.19	7.93	7.93	8.12	8.29	8.07	8.07	8.19	8.36
36	TC	29.6	29.7	32.4	34.1	31.6	31.6	33.4	35.1	33.0	33.0	34.1	35.7
	SHC	29.50	29.10	23.00	19.10	31.60	31.60	26.40	21.40	33.00	33.00	29.20	23.50
	kW	8.19	8.21	8.47	8.65	8.39	8.40	8.58	8.76	8.54	8.53	8.65	8.82
40	TC	28.8	28.9	31.4	33.1	30.8	30.8	32.4	34.0	32.1	32.1	33.0	34.6
	SHC	28.80	28.50	22.60	18.70	30.80	30.80	26.00	21.00	32.10	32.10	28.80	23.20
	kW	8.68	8.69	8.94	9.13	8.88	8.88	9.05	9.23	9.02	9.02	9.13	9.3
44	TC	28.0	28.1	30.4	32.0	29.9	29.9	31.3	32.9	31.2	31.2	32.0	33.5
	SHC	28.00	27.90	22.30	18.30	29.90	29.90	25.60	20.70	31.20	31.20	28.30	22.80
	kW	9.17	9.18	9.41	9.60	9.37	9.37	9.53	9.71	9.51	9.51	9.60	9.78
48	TC	27.2	27.2	29.4	31.0	29.0	29.0	30.3	31.9	30.3	30.3	30.9	32.4
	SHC	27.20	27.20	21.90	17.90	29.00	29.00	25.20	20.30	30.30	30.30	27.90	22.40
	kW	9.65	9.66	9.89	10.10	9.86	9.86	10.00	10.20	10.00	10.00	10.10	10.30
52	TC	26.5	26.4	28.4	30.0	28.2	28.2	29.2	30.8	29.3	29.4	29.9	31.3
	SHC	26.50	26.40	21.50	17.60	28.20	28.20	24.70	19.90	29.30	29.40	27.40	22.10
	kW	10.10	10.10	10.40	10.60	10.40	10.30	10.50	10.70	10.50	10.50	10.60	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

38ARS008/40RM007H 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	20.2	21.1	23.9	25.5	22.5	22.7	25.2	26.9	24.1	24.0	26.1	27.9
	SHC	20.10	18.90	15.10	13.00	22.50	21.80	17.30	14.50	24.10	24.10	19.40	16.10
	kW	5.12	5.15	5.31	5.41	5.22	5.25	5.39	5.48	5.31	5.31	5.44	5.53
36	TC	19.7	20.4	23.2	24.8	21.9	22.1	24.4	26.2	23.3	23.3	25.2	26.7
	SHC	19.60	18.50	14.80	12.70	21.80	21.40	17.00	14.20	23.30	23.50	19.10	15.80
	kW	5.47	5.50	5.69	5.80	5.59	5.61	5.78	5.89	5.69	5.70	5.84	5.95
40	TC	19.1	19.8	22.3	23.9	21.2	21.3	23.5	25.1	22.7	22.6	24.4	25.9
	SHC	19.10	18.10	14.50	12.40	21.20	20.90	16.70	13.90	22.70	22.80	18.80	15.50
	kW	5.80	5.82	6.05	6.17	5.96	5.95	6.14	6.28	6.07	6.06	6.21	6.33
44	TC	18.5	19.0	21.6	23.1	20.5	20.6	22.7	24.3	22.1	21.9	23.4	24.9
	SHC	18.50	17.70	14.20	12.10	20.50	20.40	16.30	13.60	22.10	22.10	18.40	15.10
	kW	6.15	6.16	6.42	6.57	6.31	6.31	6.53	6.67	6.44	6.44	6.59	6.74
48	TC	18.0	18.4	20.9	22.3	19.9	19.9	21.8	23.3	21.3	21.2	22.6	24.0
	SHC	17.90	17.30	13.80	11.70	19.90	19.90	16.00	13.30	21.30	21.30	18.10	14.80
	kW	6.49	6.50	6.78	6.94	6.69	6.67	6.89	7.06	6.83	6.82	6.98	7.15
52	TC	17.5	17.7	20.0	21.5	19.3	19.2	21.0	22.5	20.7	20.5	21.7	23.1
	SHC	17.40	16.80	13.50	11.40	19.30	19.30	15.70	12.90	20.70	20.70	17.80	14.50
	kW	6.84	6.85	7.14	7.32	7.06	7.04	7.27	7.46	7.20	7.19	7.37	7.55

38ARS008/40RM007 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	19.3	20.1	22.8	24.3	21.3	21.6	24.0	25.6	22.8	22.8	24.8	26.4
	SHC	19.20	18.00	14.40	12.40	21.30	20.70	16.40	13.80	22.80	22.70	18.30	15.20
	kW	5.14	5.19	5.36	5.46	5.27	5.29	5.44	5.53	5.36	5.36	5.49	5.58
36	TC	18.8	19.5	22.1	23.6	20.8	21.0	23.2	24.8	22.1	22.1	24.0	25.5
	SHC	18.70	17.70	14.10	12.10	20.70	20.30	16.10	13.50	22.10	22.10	18.00	14.90
	kW	5.49	5.54	5.75	5.86	5.64	5.66	5.84	5.95	5.75	5.75	5.90	6.01
40	TC	18.3	18.9	21.3	22.8	20.1	20.3	22.4	23.9	21.5	21.5	23.2	24.7
	SHC	18.20	17.30	13.80	11.80	20.10	19.80	15.80	13.20	21.50	21.50	17.70	14.60
	kW	5.83	5.88	6.12	6.26	6.01	6.02	6.22	6.36	6.14	6.13	6.29	6.42
44	TC	17.7	18.2	20.6	22.0	19.5	19.6	21.6	23.1	20.9	20.8	22.3	23.8
	SHC	17.70	16.90	13.50	11.50	19.50	19.40	15.50	12.90	20.90	20.80	17.40	14.30
	kW	6.17	6.22	6.50	6.66	6.37	6.39	6.61	6.77	6.52	6.52	6.69	6.84
48	TC	17.2	17.6	19.9	21.3	18.9	19.0	20.8	22.2	20.2	20.1	21.5	22.9
	SHC	17.10	16.50	13.20	11.20	18.90	18.90	15.20	12.60	20.20	20.10	17.10	14.00
	kW	6.51	6.56	6.87	7.05	6.74	6.75	6.99	7.17	6.91	6.90	7.08	7.26
52	TC	16.7	16.9	19.1	20.5	18.3	18.3	20.0	21.4	19.6	19.5	20.7	22.0
	SHC	16.60	16.10	12.90	10.90	18.30	18.30	14.90	12.30	19.60	19.50	16.80	13.70
	kW	6.85	6.91	7.24	7.45	7.11	7.12	7.38	7.58	7.29	7.28	7.48	7.68

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

38ARS008/40RM008H 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	21.7	22.2	24.8	26.4	24.0	24.0	25.9	27.8	25.5	25.4	26.8	28.6
	SHC	21.60	20.60	16.40	13.80	24.00	23.80	19.20	15.80	25.50	25.60	21.70	17.60
	kW	5.29	5.32	5.48	5.58	5.43	5.42	5.55	5.64	5.52	5.51	5.60	5.68
36	TC	21.1	21.4	24.0	25.6	23.3	23.2	25.1	26.7	24.8	24.7	26.0	27.7
	SHC	21.00	20.20	16.00	13.60	23.30	23.30	18.90	15.50	24.80	24.90	21.30	17.30
	kW	5.66	5.70	5.88	6.00	5.83	5.81	5.97	6.08	5.94	5.94	6.02	6.12
40	TC	20.4	20.8	23.2	24.8	22.5	22.4	24.3	25.7	24.0	24.0	25.0	26.6
	SHC	20.40	19.90	15.70	13.30	22.50	22.60	18.50	15.20	24.00	24.10	20.90	17.00
	kW	6.03	6.06	6.28	6.42	6.24	6.22	6.39	6.52	6.37	6.37	6.45	6.58
44	TC	19.9	20.0	22.3	23.9	21.9	21.8	23.4	24.9	23.3	23.2	24.1	25.5
	SHC	19.80	19.50	15.40	12.90	21.90	22.00	18.20	14.90	23.30	23.30	20.60	16.70
	kW	6.40	6.42	6.68	6.83	6.63	6.61	6.79	6.94	6.77	6.77	6.86	7.01
48	TC	19.2	19.3	21.4	23.0	21.2	21.0	22.5	23.9	22.5	22.5	23.2	24.7
	SHC	19.20	19.00	15.10	12.60	21.20	21.20	17.80	14.60	22.50	22.50	20.10	16.40
	kW	6.76	6.78	7.06	7.26	7.02	7.01	7.20	7.37	7.19	7.18	7.28	7.44
52	TC	18.6	18.6	20.6	22.1	20.4	20.3	21.6	23.0	21.7	21.7	22.2	23.6
	SHC	18.60	18.60	14.70	12.30	20.40	20.40	17.50	14.30	21.70	21.70	19.80	16.00
	kW	7.13	7.16	7.47	7.68	7.42	7.40	7.63	7.81	7.60	7.59	7.70	7.88

38ARS008/40RM008 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	20.4	20.9	23.4	24.9	22.4	22.5	24.5	26.1	23.8	23.8	25.3	26.8
	SHC	20.30	19.40	15.40	13.00	22.40	22.20	17.90	14.80	23.80	23.80	20.20	16.40
	kW	5.21	5.24	5.40	5.50	5.34	5.34	5.47	5.56	5.43	5.43	5.52	5.60
36	TC	19.8	20.2	22.7	24.2	21.8	21.8	23.7	25.2	23.2	23.2	24.5	26.0
	SHC	19.70	19.00	15.10	12.80	21.80	21.70	17.60	14.50	23.20	23.20	19.80	16.10
	kW	5.56	5.60	5.79	5.91	5.72	5.72	5.87	5.99	5.83	5.83	5.93	6.03
40	TC	19.2	19.6	21.9	23.4	21.1	21.1	22.9	24.4	22.5	22.5	23.6	25.1
	SHC	19.20	18.70	14.80	12.50	21.10	21.10	17.30	14.20	22.50	22.50	19.50	15.90
	kW	5.92	5.95	6.17	6.31	6.10	6.10	6.27	6.40	6.23	6.23	6.33	6.46
44	TC	18.7	18.9	21.1	22.6	20.5	20.5	22.1	23.5	21.8	21.8	22.8	24.2
	SHC	18.60	18.30	14.50	12.20	20.50	20.50	17.00	14.00	21.80	21.80	19.20	15.60
	kW	6.27	6.30	6.55	6.71	6.48	6.48	6.66	6.82	6.62	6.62	6.73	6.88
48	TC	18.1	18.2	20.3	21.8	19.9	19.8	21.3	22.7	21.1	21.1	21.9	23.3
	SHC	18.10	17.90	14.20	11.90	19.90	19.80	16.70	13.70	21.10	21.10	18.80	15.30
	kW	6.62	6.65	6.93	7.12	6.86	6.86	7.06	7.23	7.02	7.02	7.13	7.30
52	TC	17.5	17.6	19.6	21.0	19.2	19.2	20.5	21.8	20.4	20.4	21.1	22.4
	SHC	17.50	17.50	13.90	11.60	19.20	19.20	16.40	13.40	20.40	20.40	18.50	15.00
	kW	6.97	7.00	7.31	7.52	7.24	7.23	7.46	7.65	7.41	7.41	7.53	7.72

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

38ARS008/40RM012H 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	25.0	24.9	27.0	28.6	26.9	26.9	27.9	29.4	28.6	28.5	28.9	30.3
	SHC	25.00	24.90	20.20	16.60	26.90	26.90	23.30	18.90	28.60	28.50	26.50	21.20
	kW	5.49	5.49	5.59	5.68	5.60	5.60	5.65	5.72	5.71	5.71	5.70	5.76
36	TC	24.2	24.3	25.9	27.7	26.2	26.2	27.1	28.4	27.8	27.8	27.9	29.3
	SHC	24.20	24.30	19.90	16.30	26.20	26.20	22.90	18.60	27.80	27.80	26.10	20.90
	kW	5.91	5.90	6.04	6.13	6.03	6.03	6.10	6.19	6.17	6.18	6.16	6.24
40	TC	23.6	23.5	25.0	26.8	25.3	25.3	26.1	27.3	27.0	27.0	27.0	28.3
	SHC	23.60	23.60	19.40	15.90	25.30	25.30	22.50	18.30	27.00	27.00	25.60	20.50
	kW	6.32	6.32	6.45	6.58	6.47	6.47	6.53	6.65	6.62	6.62	6.61	6.70
44	TC	22.8	22.7	24.2	25.6	24.5	24.5	25.0	26.5	26.2	26.2	25.9	27.3
	SHC	22.80	22.90	19.10	15.60	24.50	24.50	22.10	17.80	26.20	26.20	25.20	20.20
	kW	6.72	6.72	6.86	7.01	6.90	6.90	6.96	7.10	7.07	7.07	7.05	7.17
48	TC	22.0	22.0	23.2	24.6	23.6	23.6	24.1	25.4	25.1	25.1	25.1	26.0
	SHC	22.00	22.10	18.80	15.30	23.60	23.60	21.80	17.50	25.10	25.10	24.80	19.90
	kW	7.13	7.12	7.28	7.47	7.33	7.33	7.39	7.53	7.51	7.51	7.49	7.62
52	TC	21.3	21.3	22.2	23.7	22.8	22.8	23.1	24.2	24.3	24.3	23.9	24.9
	SHC	21.30	21.30	18.30	15.00	22.80	22.80	21.30	17.20	24.30	24.30	24.30	19.60
	kW	7.54	7.53	7.70	7.91	7.75	7.77	7.83	8.00	7.96	7.95	7.94	8.08

38ARS008/40RM012 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	23.6	23.6	25.5	27.1	25.3	25.3	26.4	27.9	27.1	27.0	27.4	28.8
	SHC	23.60	23.50	19.10	15.70	25.30	25.30	21.90	17.80	27.10	27.00	24.70	19.80
	kW	5.42	5.42	5.53	5.62	5.52	5.52	5.58	5.66	5.63	5.63	5.63	5.70
36	TC	22.9	23.0	24.7	26.2	24.6	24.6	25.6	27.0	26.3	26.3	26.4	27.8
	SHC	22.90	22.90	18.80	15.40	24.60	24.60	21.50	17.50	26.30	26.30	24.30	19.50
	kW	5.82	5.81	5.95	6.05	5.94	5.94	6.01	6.11	6.07	6.07	6.07	6.16
40	TC	22.3	22.3	23.8	25.3	23.9	23.9	24.7	26.1	25.4	25.4	25.5	26.8
	SHC	22.30	22.30	18.40	15.10	23.90	23.90	21.20	17.20	25.40	25.40	23.90	19.20
	kW	6.21	6.21	6.35	6.48	6.35	6.35	6.42	6.54	6.50	6.50	6.50	6.60
44	TC	21.6	21.6	23.0	24.4	23.1	23.1	23.8	25.1	24.6	24.6	24.6	25.8
	SHC	21.60	21.60	18.10	14.80	23.10	23.10	20.80	16.80	24.60	24.60	23.50	18.90
	kW	6.60	6.60	6.75	6.90	6.77	6.77	6.84	6.98	6.93	6.93	6.93	7.05
48	TC	20.9	20.9	22.1	23.5	22.3	22.3	22.9	24.2	23.8	23.8	23.7	24.8
	SHC	20.90	20.90	17.80	14.50	22.30	22.30	20.50	16.50	23.80	23.80	23.20	18.60
	kW	7.00	6.99	7.16	7.33	7.18	7.18	7.26	7.41	7.36	7.36	7.36	7.49
52	TC	20.2	20.2	21.2	22.6	21.6	21.6	22.0	23.2	23.0	23.0	22.7	23.8
	SHC	20.20	20.20	17.40	14.20	21.60	21.60	20.10	16.20	23.00	23.00	22.70	18.30
	kW	7.39	7.39	7.56	7.75	7.59	7.59	7.67	7.85	7.79	7.79	7.78	7.94

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

38ARS009/40RM008H 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	24.7	25.7	29.2	31.3	27.7	28.0	31.0	33.3	29.8	29.7	32.3	34.5
	SHC	24.60	22.90	18.30	15.80	27.60	27.00	21.40	18.00	29.80	29.90	24.20	20.00
	kW	7.00	7.10	7.40	7.50	7.20	7.30	7.50	7.70	7.40	7.40	7.60	7.80
36	TC	24.0	24.9	28.3	30.3	26.9	27.1	29.9	32.0	28.9	28.8	31.2	33.3
	SHC	23.80	22.40	17.90	15.40	26.90	26.30	21.00	17.60	28.90	29.00	23.70	19.50
	kW	7.50	7.50	7.90	8.10	7.70	7.70	8.00	8.20	7.90	7.90	8.10	8.30
40	TC	23.3	24.0	27.3	29.3	26.0	26.2	28.9	30.8	28.0	27.9	29.9	31.9
	SHC	23.20	21.90	17.50	14.90	26.00	25.70	20.60	17.10	28.00	28.10	23.30	19.10
	kW	7.90	8.00	8.30	8.60	8.20	8.20	8.50	8.70	8.40	8.40	8.70	8.90
44	TC	22.5	23.0	26.2	28.1	25.2	25.2	27.7	29.7	27.0	27.0	28.8	30.5
	SHC	22.40	21.40	17.00	14.50	25.10	25.00	20.00	16.70	27.00	27.10	22.80	18.60
	kW	8.30	8.40	8.80	9.10	8.70	8.70	9.00	9.20	8.90	8.90	9.10	9.40
48	TC	21.8	22.2	25.2	27.0	24.3	24.2	26.6	28.4	26.1	26.0	27.6	29.4
	SHC	21.70	20.80	16.60	14.20	24.30	24.40	19.60	16.30	26.10	26.10	22.30	18.20
	kW	8.80	8.80	9.30	9.60	9.20	9.10	9.50	9.80	9.40	9.40	9.70	9.90
52	TC	21.0	21.4	24.1	26.0	23.4	23.3	25.4	27.3	25.1	25.0	26.4	28.1
	SHC	20.90	20.30	16.20	13.80	23.40	23.40	19.10	15.80	25.10	25.10	21.80	17.80
	kW	9.20	9.30	9.80	10.10	9.60	9.60	10.00	10.30	9.90	9.90	10.20	10.50

38ARS009/40RM008 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	23.1	24.2	27.6	29.6	25.9	26.3	29.4	31.2	27.9	27.9	30.4	32.4
	SHC	23.00	21.50	17.20	14.90	25.80	25.10	20.00	16.80	27.90	27.80	22.50	18.60
	kW	6.90	7.00	7.30	7.40	7.10	7.20	7.40	7.60	7.30	7.30	7.50	7.70
36	TC	22.6	23.4	26.7	28.6	25.1	25.5	28.3	30.2	27.0	27.0	29.4	31.2
	SHC	22.40	21.10	16.80	14.50	25.10	24.50	19.60	16.40	27.00	27.00	22.10	18.20
	kW	7.30	7.40	7.70	7.90	7.60	7.60	7.90	8.10	7.80	7.80	8.00	8.20
40	TC	21.9	22.7	25.8	27.6	24.3	24.6	27.3	29.2	26.2	26.2	28.3	30.1
	SHC	21.80	20.60	16.40	14.10	24.30	23.90	19.20	16.10	26.20	26.20	21.70	17.80
	kW	7.70	7.80	8.20	8.40	8.00	8.10	8.40	8.60	8.20	8.20	8.50	8.70
44	TC	21.2	21.8	24.8	26.6	23.6	23.7	26.2	28.1	25.3	25.3	27.2	29.0
	SHC	21.10	20.10	16.10	13.70	23.50	23.30	18.70	15.70	25.30	25.30	21.30	17.40
	kW	8.20	8.20	8.60	8.90	8.50	8.50	8.80	9.10	8.70	8.70	9.00	9.20
48	TC	20.5	21.0	23.8	25.6	22.9	22.9	25.2	27.0	24.5	24.4	26.1	27.8
	SHC	20.40	19.60	15.70	13.40	22.90	22.80	18.30	15.30	24.50	24.40	20.80	17.00
	kW	8.60	8.70	9.10	9.40	8.90	8.90	9.30	9.60	9.20	9.20	9.50	9.70
52	TC	19.8	20.2	23.0	24.6	22.1	22.0	24.1	25.9	23.6	23.5	25.0	26.7
	SHC	19.70	19.10	15.30	13.00	22.10	22.00	17.90	14.90	23.60	23.50	20.40	16.60
	kW	9.00	9.10	9.60	9.90	9.40	9.40	9.80	10.00	9.70	9.70	9.90	10.20

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

38ARS009/40RM012H 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	28.4	28.7	31.7	33.9	30.5	30.8	32.9	35.1	32.3	32.3	33.7	35.7
	SHC	28.40	27.60	21.90	18.40	30.50	30.80	25.10	20.60	32.30	32.30	27.90	22.70
	kW	7.30	7.30	7.60	7.80	7.50	7.50	7.70	7.90	7.60	7.60	7.80	7.90
36	TC	27.6	27.6	30.6	32.6	29.9	29.6	31.7	33.9	31.3	31.3	32.7	34.5
	SHC	27.60	26.80	21.50	18.00	29.90	29.70	24.60	20.20	31.30	31.30	27.60	22.30
	kW	7.80	7.80	8.10	8.30	8.00	8.00	8.20	8.40	8.20	8.20	8.30	8.50
40	TC	26.6	26.6	29.6	31.4	28.8	28.8	30.4	32.4	30.4	30.4	31.3	33.0
	SHC	26.50	26.20	21.00	17.50	28.80	29.00	24.20	19.80	30.40	30.40	26.90	21.90
	kW	8.30	8.30	8.60	8.80	8.50	8.50	8.70	8.90	8.70	8.70	8.80	9.10
44	TC	25.7	25.7	28.4	30.3	27.9	27.6	29.2	31.2	29.2	29.2	30.2	31.8
	SHC	25.70	25.50	20.50	17.10	27.90	27.90	23.60	19.40	29.20	29.20	26.50	21.40
	kW	8.70	8.70	9.10	9.40	9.00	9.00	9.30	9.40	9.20	9.20	9.40	9.50
48	TC	24.9	24.7	27.3	28.8	27.0	27.0	28.3	29.9	28.2	28.2	28.8	30.5
	SHC	24.90	24.80	20.10	16.70	27.00	27.00	23.20	18.80	28.20	28.20	26.00	21.00
	kW	9.20	9.20	9.60	9.90	9.50	9.50	9.70	10.00	9.80	9.80	9.90	10.10
52	TC	24.0	23.8	25.8	27.7	25.8	25.8	26.9	28.6	27.3	27.3	27.8	29.1
	SHC	24.00	23.90	19.70	16.20	25.80	25.80	22.70	18.40	27.30	27.30	25.60	20.60
	kW	9.70	9.70	10.10	10.40	10.00	10.00	10.20	10.50	10.20	10.20	10.40	10.60

38ARS009/40RM012 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	26.9	27.3	30.2	32.2	29.1	29.1	31.4	33.4	30.6	30.6	32.2	34.1
	SHC	26.90	26.20	20.90	17.50	29.10	29.10	23.70	19.60	30.60	30.60	26.40	21.50
	kW	7.20	7.20	7.50	7.70	7.40	7.40	7.60	7.80	7.50	7.50	7.70	7.80
36	TC	26.1	26.4	29.2	31.1	28.2	28.2	30.2	32.2	29.6	29.6	31.0	32.9
	SHC	26.10	25.60	20.50	17.10	28.20	28.20	23.30	19.20	29.60	29.60	25.90	21.10
	kW	7.70	7.70	8.00	8.20	7.90	7.90	8.10	8.30	8.00	8.00	8.20	8.40
40	TC	25.3	25.4	28.1	29.9	27.3	27.3	29.2	31.0	28.7	28.7	29.8	31.6
	SHC	25.20	24.90	20.00	16.70	27.30	27.30	23.00	18.80	28.70	28.70	25.40	20.70
	kW	8.10	8.20	8.50	8.70	8.40	8.40	8.60	8.80	8.50	8.50	8.70	8.90
44	TC	24.4	24.5	27.0	28.9	26.4	26.4	28.0	29.7	27.8	27.8	28.8	30.4
	SHC	24.40	24.30	19.60	16.40	26.40	26.40	22.50	18.40	27.80	27.80	25.00	20.30
	kW	8.60	8.60	9.00	9.20	8.90	8.90	9.10	9.30	9.00	9.00	9.20	9.40
48	TC	23.6	23.6	25.9	27.7	25.5	25.5	26.9	28.6	26.8	26.8	27.6	29.2
	SHC	23.60	23.60	19.20	16.00	25.50	25.50	22.10	17.90	26.80	26.80	24.50	19.90
	kW	9.10	9.10	9.40	9.70	9.30	9.30	9.60	9.80	9.50	9.50	9.70	9.90
52	TC	22.9	22.8	24.8	26.5	24.6	24.6	25.7	27.4	25.8	25.8	26.4	28.0
	SHC	22.90	22.80	18.80	15.50	24.60	24.60	21.60	17.50	25.80	25.80	24.00	19.50
	kW	9.50	9.50	9.90	10.20	9.80	9.80	10.00	10.30	10.00	10.00	10.20	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)

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	25.1	26.1	29.7	31.8	28.1	28.4	31.5	33.8	30.3	30.2	32.8	35.1
	SHC	24.90	23.20	18.60	16.10	28.00	27.40	21.80	18.30	30.30	30.30	24.50	20.30
	kW	7.10	7.19	7.49	7.66	7.36	7.38	7.64	7.81	7.53	7.52	7.74	7.91
36	TC	24.4	25.3	28.7	30.7	27.3	27.5	30.4	32.5	29.3	29.2	31.7	33.8
	SHC	24.20	22.80	18.20	15.60	27.30	26.70	21.30	17.90	29.30	29.40	24.10	19.80
	kW	7.57	7.66	7.98	8.18	7.84	7.86	8.16	8.34	8.05	8.04	8.26	8.45
40	TC	23.6	24.4	27.7	29.7	26.4	26.6	29.3	31.2	28.4	28.3	30.4	32.4
	SHC	23.50	22.20	17.70	15.20	26.40	26.10	20.90	17.40	28.40	28.50	23.60	19.40
	kW	8.01	8.09	8.47	8.69	8.33	8.34	8.66	8.88	8.56	8.56	8.78	8.99
44	TC	22.9	23.4	26.6	28.5	25.6	25.6	28.1	30.2	27.4	27.4	29.2	31.0
	SHC	22.80	21.70	17.30	14.70	25.50	25.40	20.30	17.00	27.40	27.50	23.20	18.90
	kW	8.45	8.53	8.95	9.19	8.82	8.80	9.16	9.38	9.05	9.04	9.29	9.53
48	TC	22.1	22.5	25.5	27.5	24.7	24.6	27.0	28.8	26.5	26.4	28.0	29.9
	SHC	22.00	21.10	16.90	14.40	24.70	24.70	19.90	16.50	26.50	26.50	22.60	18.50
	kW	8.90	8.97	9.43	9.72	9.29	9.28	9.64	9.92	9.56	9.54	9.80	10.05
52	TC	21.4	21.7	24.5	26.4	23.8	23.6	25.8	27.7	25.5	25.4	26.8	28.5
	SHC	21.30	20.60	16.40	14.00	23.80	23.70	19.40	16.10	25.50	25.40	22.20	18.10
	kW	9.35	9.43	9.92	10.21	9.78	9.75	10.15	10.41	10.06	10.03	10.32	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	23.5	24.6	28.0	30.0	26.3	26.7	29.8	31.7	28.3	28.3	30.9	32.9
	SHC	23.40	21.80	17.50	15.10	26.20	25.50	20.30	17.10	28.30	28.20	22.80	18.90
	kW	6.99	7.08	7.38	7.55	7.23	7.27	7.53	7.70	7.40	7.41	7.62	7.79
36	TC	22.9	23.8	27.1	29.0	25.5	25.9	28.7	30.7	27.4	27.4	29.8	31.7
	SHC	22.70	21.40	17.10	14.70	25.50	24.90	19.90	16.70	27.40	27.40	22.40	18.50
	kW	7.43	7.52	7.85	8.05	7.69	7.73	8.02	8.21	7.89	7.89	8.13	8.32
40	TC	22.2	23.0	26.2	28.0	24.7	25.0	27.7	29.6	26.6	26.6	28.7	30.6
	SHC	22.10	20.90	16.70	14.30	24.70	24.30	19.50	16.30	26.60	26.60	22.00	18.10
	kW	7.86	7.94	8.32	8.54	8.15	8.18	8.50	8.72	8.37	8.37	8.62	8.83
44	TC	21.5	22.1	25.2	27.0	24.0	24.1	26.6	28.5	25.7	25.7	27.6	29.4
	SHC	21.40	20.40	16.30	13.90	23.90	23.70	19.00	15.90	25.70	25.70	21.60	17.70
	kW	8.28	8.37	8.78	9.03	8.62	8.63	8.98	9.22	8.85	8.84	9.11	9.35
48	TC	20.8	21.3	24.2	26.0	23.2	23.2	25.6	27.4	24.9	24.8	26.5	28.2
	SHC	20.70	19.90	15.90	13.60	23.20	23.10	18.60	15.50	24.90	24.80	21.10	17.30
	kW	8.71	8.80	9.25	9.53	9.08	9.08	9.45	9.73	9.33	9.32	9.60	9.86
52	TC	20.1	20.5	23.3	25.0	22.4	22.3	24.5	26.3	24.0	23.9	25.4	27.1
	SHC	20.00	19.40	15.50	13.20	22.40	22.30	18.20	15.10	24.00	23.90	20.70	16.90
	kW	9.14	9.23	9.71	10.00	9.54	9.53	9.93	10.20	9.81	9.80	10.10	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

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
32	TC	28.8	29.2	32.2	34.4	31.0	31.2	33.4	35.6	32.8	32.8	34.2	36.3
	SHC	28.80	28.00	22.20	18.70	31.00	31.30	25.50	21.00	32.80	32.80	28.30	23.10
	kW	7.40	7.43	7.70	7.89	7.62	7.61	7.81	8.00	7.76	7.76	7.89	8.04
36	TC	28.0	28.0	31.1	33.0	30.3	30.1	32.2	34.4	31.8	31.8	33.2	35.1
	SHC	28.00	27.20	21.80	18.20	30.30	30.10	25.00	20.50	31.80	31.80	28.10	22.70
	kW	7.88	7.92	8.21	8.43	8.13	8.12	8.33	8.54	8.30	8.30	8.42	8.60
40	TC	27.0	27.0	30.0	31.9	29.2	29.2	30.8	32.9	30.8	30.8	31.8	33.5
	SHC	26.90	26.60	21.30	17.80	29.20	29.50	24.50	20.10	30.80	30.80	27.30	22.20
	kW	8.38	8.40	8.73	8.96	8.64	8.64	8.86	9.08	8.83	8.83	8.96	9.19
44	TC	26.1	26.1	28.9	30.7	28.3	28.0	29.6	31.6	29.7	29.7	30.7	32.3
	SHC	26.10	25.90	20.80	17.40	28.30	28.30	24.00	19.70	29.70	29.70	26.90	21.80
	kW	8.86	8.87	9.23	9.51	9.15	9.15	9.40	9.55	9.33	9.32	9.50	9.63
48	TC	25.3	25.1	27.8	29.3	27.4	27.4	28.7	30.4	28.7	28.7	29.2	31.0
	SHC	25.30	25.20	20.40	17.00	27.40	27.40	23.60	19.10	28.70	28.70	26.40	21.40
	kW	9.33	9.32	9.77	10.04	9.68	9.68	9.90	10.16	9.97	9.97	10.03	10.29
52	TC	24.4	24.2	26.2	28.1	26.2	26.2	27.3	29.0	27.7	27.7	28.3	29.6
	SHC	24.40	24.30	20.00	16.40	26.20	26.20	23.10	18.70	27.70	27.70	26.00	20.90
	kW	9.84	9.84	10.28	10.58	10.16	10.16	10.38	10.68	10.38	10.38	10.58	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
32	TC	27.3	27.7	30.7	32.7	29.5	29.5	31.9	33.9	31.1	31.1	32.7	34.6
	SHC	27.30	26.60	21.20	17.80	29.50	29.50	24.10	19.90	31.10	31.10	26.80	21.80
	kW	7.32	7.35	7.61	7.78	7.51	7.51	7.71	7.88	7.64	7.64	7.78	7.94
36	TC	26.5	26.8	29.6	31.6	28.6	28.6	30.7	32.7	30.1	30.1	31.5	33.4
	SHC	26.50	26.00	20.80	17.40	28.60	28.60	23.70	19.50	30.10	30.10	26.30	21.40
	kW	7.79	7.82	8.11	8.31	8.01	8.01	8.22	8.41	8.16	8.16	8.30	8.48
40	TC	25.7	25.8	28.5	30.4	27.7	27.7	29.6	31.5	29.1	29.1	30.3	32.1
	SHC	25.60	25.30	20.30	17.00	27.70	27.70	23.30	19.10	29.10	29.10	25.80	21.00
	kW	8.26	8.28	8.60	8.82	8.50	8.50	8.72	8.94	8.67	8.67	8.81	9.01
44	TC	24.8	24.9	27.4	29.3	26.8	26.8	28.4	30.2	28.2	28.2	29.2	30.9
	SHC	24.80	24.70	19.90	16.60	26.80	26.80	22.80	18.70	28.20	28.20	25.40	20.60
	kW	8.73	8.74	9.09	9.33	8.99	9.00	9.22	9.46	9.18	9.18	9.32	9.54
48	TC	24.0	24.0	26.3	28.1	25.9	25.9	27.3	29.0	27.2	27.2	28.0	29.6
	SHC	24.00	24.00	19.50	16.20	25.90	25.90	22.40	18.20	27.20	27.20	24.90	20.20
	kW	9.19	9.20	9.58	9.85	9.49	9.49	9.71	9.98	9.69	9.69	9.84	10.10
52	TC	23.2	23.1	25.2	26.9	25.0	25.0	26.1	27.8	26.2	26.2	26.8	28.4
	SHC	23.20	23.10	19.10	15.70	25.00	25.00	21.90	17.80	26.20	26.20	24.40	19.80
	kW	9.66	9.66	10.10	10.40	9.98	9.98	10.20	10.50	10.20	10.20	10.40	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

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	30.9	31.0	33.7	36.0	33.5	33.3	35.1	37.2	35.4	35.4	36.0	38.1
	SHC	30.90	30.70	24.50	20.40	33.50	33.50	28.40	23.20	35.40	35.40	31.70	25.80
	kW	7.62	7.62	7.86	8.05	7.83	7.84	7.99	8.14	7.97	7.97	8.05	8.20
36	TC	30.1	29.8	32.5	34.8	32.2	32.2	33.9	35.9	34.0	34.0	35.0	36.6
	SHC	29.90	30.00	24.00	19.90	32.20	32.20	27.90	22.60	34.00	34.00	31.30	25.30
	kW	8.13	8.13	8.40	8.60	8.37	8.37	8.52	8.72	8.53	8.53	8.61	8.78
40	TC	28.8	28.9	31.3	33.3	31.3	31.3	32.6	34.4	32.9	32.9	33.5	34.9
	SHC	28.80	29.10	23.50	19.50	31.30	31.30	27.50	22.20	32.90	32.90	30.80	24.90
	kW	8.65	8.63	8.91	9.12	8.91	8.90	9.06	9.27	9.10	9.08	9.20	9.35
44	TC	28.1	27.6	30.3	32.3	30.2	30.2	31.4	33.2	31.8	31.8	32.2	33.6
	SHC	28.10	28.20	23.10	19.00	30.20	30.20	26.90	21.80	31.80	31.80	29.90	24.40
	kW	9.15	9.13	9.44	9.68	9.45	9.44	9.67	9.81	9.58	9.58	9.67	9.89
48	TC	27.0	26.9	29.0	30.7	29.1	28.9	29.8	31.6	30.6	30.6	30.9	32.4
	SHC	27.00	26.90	22.60	18.50	29.10	28.90	26.50	21.30	30.60	30.60	29.50	23.90
	kW	9.72	9.61	9.93	10.19	9.92	9.91	10.09	10.48	10.12	10.12	10.19	10.58
52	TC	26.0	25.9	27.8	29.5	28.1	28.1	28.7	30.3	29.4	29.4	29.6	30.8
	SHC	26.00	25.90	22.20	18.10	28.10	28.10	25.90	20.90	29.40	29.40	28.90	23.40
	kW	10.20	10.18	10.38	10.87	10.47	10.47	10.58	10.97	10.78	10.78	10.77	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	29.1	29.3	32.2	34.3	31.5	31.5	33.4	35.5	33.1	33.1	34.3	36.2
	SHC	29.10	28.90	23.10	19.30	31.50	31.50	26.60	21.80	33.10	33.10	29.70	24.10
	kW	7.48	7.49	7.73	7.91	7.67	7.68	7.84	8.01	7.81	7.81	7.91	8.07
36	TC	28.3	28.3	31.0	33.1	30.5	30.5	32.2	34.2	32.0	32.0	33.0	34.9
	SHC	28.20	28.20	22.70	18.80	30.50	30.50	26.20	21.30	32.00	32.00	29.10	23.60
	kW	7.97	7.98	8.25	8.45	8.19	8.20	8.37	8.56	8.35	8.35	8.45	8.63
40	TC	27.3	27.4	29.8	31.8	29.5	29.5	30.9	32.9	30.9	30.9	31.8	33.5
	SHC	27.30	27.30	22.20	18.40	29.50	29.50	25.70	20.90	30.90	30.90	28.50	23.20
	kW	8.46	8.46	8.75	8.98	8.71	8.70	8.88	9.09	8.88	8.87	8.97	9.17
44	TC	26.4	26.4	28.6	30.6	28.5	28.5	29.7	31.5	29.8	29.8	30.5	32.2
	SHC	26.40	26.40	21.80	18.00	28.50	28.50	25.20	20.50	29.80	29.80	27.90	22.70
	kW	8.95	8.94	9.25	9.50	9.22	9.21	9.39	9.63	9.40	9.40	9.49	9.71
48	TC	25.5	25.4	27.5	29.3	27.4	27.4	28.4	30.2	28.7	28.7	29.2	30.8
	SHC	25.50	25.40	21.30	17.50	27.40	27.40	24.70	20.00	28.70	28.70	27.30	22.30
	kW	9.44	9.42	9.74	10.00	9.73	9.72	9.90	10.20	9.93	9.93	10.00	10.30
52	TC	24.6	24.5	26.3	28.1	26.4	26.4	27.2	28.9	27.7	27.7	27.9	29.4
	SHC	24.60	24.50	20.90	17.10	26.40	26.40	24.20	19.60	27.70	27.70	26.70	21.80
	kW	9.92	9.90	10.20	10.60	10.20	10.20	10.40	10.70	10.50	10.50	10.50	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



COMBINATION RATINGS — SI (cont)

38AR007-012

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
32	TC	28.8	29.1	31.9	33.8	31.0	31.0	33.0	34.9	32.5	32.5	33.8	35.6
	SHC	28.70	28.00	22.10	18.50	31.00	31.00	25.40	20.80	32.50	32.50	28.30	23.00
	kW	7.33	7.34	7.46	7.55	7.42	7.42	7.51	7.60	7.49	7.49	7.55	7.63
36	TC	28.1	28.4	31.0	32.9	30.3	30.3	32.1	33.9	31.8	31.8	32.9	34.6
	SHC	28.10	27.60	21.80	18.20	30.30	30.30	25.00	20.50	31.80	31.80	27.90	22.60
	kW	7.88	7.89	8.02	8.11	7.98	7.98	8.07	8.16	8.05	8.05	8.11	8.20
40	TC	27.5	27.6	30.1	32.0	29.5	29.5	31.2	33.0	31.0	31.0	32.0	33.6
	SHC	27.40	27.10	21.50	17.90	29.50	29.50	24.70	20.10	31.00	31.00	27.50	22.30
	kW	8.49	8.49	8.62	8.72	8.59	8.59	8.68	8.77	8.66	8.66	8.72	8.81
44	TC	26.8	26.9	29.2	31.0	28.8	28.8	30.3	32.0	30.2	30.1	31.0	32.6
	SHC	26.80	26.50	21.10	17.50	28.80	28.80	24.30	19.80	30.20	30.10	27.10	22.00
	kW	9.10	9.09	9.22	9.33	9.20	9.20	9.29	9.38	9.28	9.27	9.32	9.42
48	TC	26.1	26.1	28.4	30.1	28.0	28.0	29.3	31.0	29.3	29.3	30.1	31.6
	SHC	26.10	26.00	20.80	17.20	28.00	28.00	24.00	19.50	29.30	29.30	26.80	21.60
	kW	9.70	9.69	9.83	9.94	9.81	9.81	9.89	10.00	9.89	9.89	9.93	10.00
52	TC	25.4	25.4	27.5	29.2	27.2	27.2	28.4	30.0	28.5	28.5	29.1	30.6
	SHC	25.40	25.40	20.40	16.90	27.20	27.30	23.60	19.20	28.50	28.50	26.40	21.30
	kW	10.30	10.30	10.40	10.50	10.40	10.40	10.50	10.60	10.50	10.50	10.50	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
32	TC	27.3	27.7	30.4	32.2	29.4	29.4	31.5	33.3	30.8	30.8	32.2	33.9
	SHC	27.30	26.60	21.00	17.60	29.40	29.40	23.90	19.60	30.80	30.80	26.50	21.50
	kW	7.27	7.29	7.39	7.48	7.35	7.35	7.44	7.53	7.41	7.41	7.47	7.55
36	TC	26.8	27.0	29.6	31.4	28.7	28.7	30.7	32.4	30.1	30.1	31.4	33.1
	SHC	26.70	26.10	20.70	17.30	28.70	28.70	23.60	19.40	30.10	30.10	26.20	21.30
	kW	7.82	7.84	7.95	8.03	7.91	7.91	8.00	8.09	7.97	7.97	8.03	8.12
40	TC	26.1	26.3	28.8	30.6	28.0	28.0	29.8	31.5	29.4	29.4	30.5	32.1
	SHC	26.10	25.70	20.40	17.00	28.00	28.00	23.30	19.10	29.40	29.40	25.90	21.00
	kW	8.42	8.44	8.55	8.64	8.51	8.52	8.60	8.69	8.58	8.58	8.64	8.73
44	TC	25.5	25.7	28.0	29.7	27.3	27.4	29.0	30.6	28.6	28.6	29.6	31.2
	SHC	25.50	25.20	20.10	16.70	27.30	27.40	23.00	18.80	28.60	28.60	25.50	20.60
	kW	9.03	9.04	9.16	9.25	9.12	9.12	9.21	9.30	9.19	9.19	9.25	9.34
48	TC	24.9	25.0	27.2	28.9	26.7	26.7	28.1	29.7	27.9	27.9	28.8	30.3
	SHC	24.90	24.70	19.80	16.40	26.70	26.70	22.70	18.50	27.90	27.90	25.10	20.30
	kW	9.63	9.63	9.76	9.85	9.72	9.73	9.81	9.91	9.80	9.80	9.85	9.95
52	TC	24.3	24.3	26.4	28.0	26.0	26.0	27.2	28.8	27.2	27.2	27.9	29.4
	SHC	24.30	24.30	19.50	16.10	26.00	26.00	22.30	18.20	27.20	27.20	24.80	20.00
	kW	10.20	10.20	10.40	10.50	10.30	10.30	10.40	10.50	10.40	10.40	10.50	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

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	30.4	30.6	33.1	35.1	32.8	32.8	34.3	36.2	34.8	34.8	35.4	37.1
	SHC	30.40	30.10	24.20	20.00	32.80	32.80	28.00	22.80	34.80	34.80	31.70	25.50
	kW	7.40	7.40	7.52	7.61	7.50	7.50	7.57	7.66	7.59	7.59	7.62	7.71
36	TC	29.7	29.9	32.3	34.1	32.0	32.0	33.4	35.2	34.0	34.0	34.4	36.1
	SHC	29.70	29.50	23.80	19.70	32.00	32.00	27.70	22.40	34.00	34.00	31.40	25.10
	kW	7.95	7.96	8.08	8.17	8.06	8.06	8.13	8.23	8.16	8.16	8.18	8.27
40	TC	29.0	29.1	31.3	33.2	31.2	31.2	32.5	34.2	33.1	33.1	33.4	35.0
	SHC	29.00	28.80	23.50	19.30	31.20	31.20	27.30	22.10	33.10	33.10	30.90	24.80
	kW	8.56	8.57	8.68	8.78	8.68	8.68	8.74	8.84	8.78	8.78	8.79	8.89
44	TC	28.3	28.4	30.4	32.2	30.4	30.4	31.5	33.2	32.3	32.3	32.5	34.0
	SHC	28.30	28.20	23.10	19.00	30.40	30.40	26.90	21.80	32.30	32.30	30.50	24.50
	kW	9.17	9.17	9.29	9.40	9.29	9.29	9.35	9.45	9.39	9.40	9.40	9.50
48	TC	27.6	27.6	29.5	31.3	29.6	29.6	30.6	32.2	31.4	31.4	31.5	32.9
	SHC	27.60	27.50	22.80	18.70	29.60	29.60	26.50	21.40	31.40	31.40	30.10	24.10
	kW	9.78	9.78	9.90	10.00	9.90	9.90	9.96	10.10	10.00	10.00	10.00	10.10
52	TC	26.9	26.9	28.6	30.3	28.8	28.8	29.6	31.2	30.5	30.6	30.5	31.9
	SHC	26.90	26.90	22.40	18.40	28.80	28.80	26.10	21.10	30.50	30.60	29.70	23.80
	kW	10.40	10.40	10.50	10.60	10.50	10.50	10.60	10.70	10.60	10.60	10.60	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	28.9	29.1	31.7	33.5	31.0	31.1	32.8	34.6	33.0	32.9	33.8	35.6
	SHC	28.80	28.50	22.90	18.90	31.00	31.00	26.30	21.40	33.00	32.90	29.60	23.80
	kW	7.33	7.34	7.45	7.54	7.42	7.42	7.50	7.59	7.51	7.50	7.55	7.63
36	TC	28.2	28.4	30.8	32.7	30.3	30.3	31.9	33.7	32.2	32.2	32.9	34.6
	SHC	28.20	27.90	22.50	18.60	30.30	30.30	25.90	21.10	32.20	32.20	29.20	23.50
	kW	7.89	7.89	8.01	8.10	7.98	7.98	8.06	8.15	8.07	8.07	8.10	8.19
40	TC	27.5	27.7	29.9	31.7	29.6	29.6	31.0	32.7	31.4	31.4	31.9	33.6
	SHC	27.50	27.30	22.20	18.30	29.60	29.60	25.60	20.80	31.40	31.40	28.80	23.10
	kW	8.49	8.50	8.61	8.71	8.59	8.59	8.66	8.76	8.68	8.68	8.71	8.80
44	TC	26.9	26.9	29.1	30.8	28.8	28.8	30.1	31.8	30.5	30.6	31.0	32.6
	SHC	26.90	26.70	21.90	18.00	28.80	28.80	25.20	20.40	30.50	30.60	28.40	22.80
	kW	9.10	9.10	9.22	9.32	9.20	9.20	9.27	9.37	9.30	9.30	9.31	9.41
48	TC	26.2	26.2	28.2	29.9	28.1	28.1	29.2	30.8	29.7	29.7	30.0	31.6
	SHC	26.20	26.10	21.50	17.70	28.10	28.10	24.80	20.10	29.70	29.70	28.00	22.50
	kW	9.70	9.70	9.82	9.92	9.81	9.81	9.87	9.98	9.91	9.92	9.92	10.00
52	TC	25.5	25.5	27.3	29.0	27.3	27.3	28.2	29.8	28.9	28.9	29.1	30.5
	SHC	25.50	25.50	21.20	17.40	27.30	27.30	24.50	19.80	28.90	28.90	27.60	22.10
	kW	10.30	10.30	10.40	10.50	10.40	10.40	10.50	10.60	10.50	10.50	10.50	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



CONDENSING UNIT RATINGS — ENGLISH

38AR007-012

38ARZ007							
SST (F)		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
25	TC	44.80	43.60	41.20	40.00	38.80	36.30
	kW	3.50	3.72	4.15	4.39	4.63	5.12
	SDT	99.8	105.0	115.0	120.0	124.0	134.0
30	TC	49.40	48.20	45.60	44.30	43.00	40.40
	kW	3.56	3.78	4.20	4.45	4.69	5.18
	SDT	101.0	106.0	116.0	121.0	125.0	135.0
35	TC	54.30	52.90	50.30	48.90	47.50	44.70
	kW	3.63	3.85	4.28	4.52	4.77	5.25
	SDT	102.0	107.0	117.0	122.0	127.0	136.0
40	TC	59.50	58.00	55.10	53.70	52.20	49.20
	kW	3.71	3.93	4.36	4.60	4.85	5.34
	SDT	104.0	109.0	118.0	123.0	128.0	138.0
45	TC	65.00	63.40	60.30	58.70	57.10	54.00
	kW	3.81	4.02	4.45	4.70	4.94	5.44
	SDT	106.0	110.0	120.0	125.0	130.0	139.0
50	TC	70.70	69.10	65.80	64.10	62.40	59.00
	kW	3.91	4.12	4.56	4.80	5.05	5.54
	SDT	108.0	112.0	122.0	127.0	131.0	141.0

38ARS008							
SST (F)		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
25	TC	58.50	56.10	51.40	49.00	46.60	41.90
	kW	4.55	4.74	5.08	5.23	5.38	5.61
	SDT	97.1	102.0	112.0	117.0	122.0	132.0
30	TC	66.10	63.60	58.50	56.00	53.40	48.30
	kW	4.64	4.86	5.26	5.44	5.62	5.92
	SDT	97.2	102.0	112.0	117.0	122.0	132.0
35	TC	73.90	71.30	66.10	63.50	60.80	55.30
	kW	4.75	4.98	5.42	5.63	5.83	6.19
	SDT	98.2	103.0	112.0	117.0	122.0	132.0
40	TC	81.90	79.20	73.80	71.10	68.30	62.80
	kW	4.86	5.11	5.60	5.82	6.05	6.45
	SDT	99.7	104.0	114.0	118.0	123.0	132.0
45	TC	90.30	87.50	81.80	78.90	76.00	70.20
	kW	4.96	5.24	5.77	6.02	6.27	6.72
	SDT	101.0	106.0	115.0	120.0	124.0	134.0
50	TC	99.20	96.20	90.10	87.10	84.00	77.90
	kW	5.05	5.35	5.94	6.21	6.48	6.99
	SDT	103.0	108.0	117.0	121.0	126.0	135.0

38ARZ008							
SST (F)		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
25	TC	61.30	59.40	55.50	53.40	51.40	47.10
	kW	4.79	5.07	5.65	5.96	6.27	6.93
	SDT	98.5	103.0	113.0	118.0	123.0	133.0
30	TC	68.30	66.40	62.30	60.20	58.00	53.60
	kW	4.81	5.09	5.68	5.99	6.31	6.99
	SDT	98.8	104.0	114.0	119.0	123.0	133.0
35	TC	75.50	73.50	69.30	67.10	64.90	60.30
	kW	4.88	5.15	5.74	6.06	6.38	7.06
	SDT	99.9	105.0	114.0	119.0	124.0	134.0
40	TC	83.00	80.80	76.40	74.10	71.80	67.00
	kW	4.97	5.24	5.84	6.16	6.48	7.17
	SDT	101.0	106.0	116.0	121.0	125.0	135.0
45	TC	90.90	88.60	83.90	81.50	79.10	74.10
	kW	5.06	5.34	5.94	6.27	6.59	7.29
	SDT	103.0	108.0	117.0	122.0	127.0	136.0
50	TC	99.20	96.80	91.80	89.20	86.70	81.40
	kW	5.17	5.45	6.06	6.39	6.72	7.43
	SDT	105.0	110.0	119.0	124.0	128.0	138.0

38ARS009							
SST (F)		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
25	TC	73.00	69.70	63.40	60.30	57.10	50.80
	kW	6.10	6.40	6.80	7.00	7.10	7.40
	SDT	102.0	107.0	117.0	122.0	127.0	137.0
30	TC	82.60	79.30	72.60	69.10	65.80	59.10
	kW	6.30	6.60	7.10	7.30	7.50	7.80
	SDT	103.0	107.0	117.0	122.0	127.0	137.0
35	TC	92.70	89.20	82.10	78.60	75.10	68.00
	kW	6.50	6.80	7.30	7.60	7.80	8.20
	SDT	104.0	108.0	118.0	123.0	127.0	137.0
40	TC	103.40	99.50	92.00	88.40	84.70	77.30
	kW	6.70	7.00	7.60	7.90	8.20	8.60
	SDT	105.0	110.0	119.0	124.0	128.0	138.0
45	TC	114.30	110.30	102.40	98.30	94.60	86.80
	kW	6.90	7.30	7.90	8.20	8.50	9.00
	SDT	107.0	112.0	121.0	125.0	130.0	139.0
50	TC	125.10	121.20	113.30	108.40	104.40	96.50
	kW	7.20	7.50	8.20	8.50	8.90	9.40
	SDT	109.0	114.0	123.0	127.0	132.0	141.0

LEGEND

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

38ARZ012							
SST (F)		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
25	TC	85.00	82.70	77.90	75.50	73.10	67.90
	kW	6.64	6.94	7.57	7.90	8.25	8.98
	SDT	101.0	106.0	116.0	121.0	126.0	136.0
30	TC	93.30	90.90	85.80	83.20	80.50	75.10
	kW	6.81	7.09	7.69	8.01	8.35	9.06
	SDT	102.0	107.0	116.0	121.0	126.0	136.0
35	TC	102.00	99.50	94.00	91.20	88.40	82.60
	kW	7.01	7.29	7.87	8.18	8.50	9.18
	SDT	103.0	108.0	117.0	122.0	127.0	136.0
40	TC	111.00	108.00	103.00	99.70	96.70	90.40
	kW	7.24	7.52	8.11	8.41	8.72	9.37
	SDT	104.0	109.0	119.0	123.0	128.0	138.0
45	TC	121.00	118.00	112.00	109.00	105.00	98.70
	kW	7.49	7.78	8.37	8.67	8.98	9.61
	SDT	106.0	111.0	120.0	125.0	130.0	139.0
50	TC	130.00	128.00	121.00	118.00	115.00	107.00
	kW	7.76	8.06	8.66	8.96	9.27	9.90
	SDT	108.0	113.0	122.0	127.0	131.0	140.0

Performance data (cont)



CONDENSING UNIT RATINGS — ENGLISH (cont)

38AR007-012

38ARS012							
SST (F)		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
25	TC	74.10	70.80	64.40	61.20	58.00	51.60
	kW	6.24	6.47	6.89	7.07	7.24	7.51
	SDT	102.0	107.0	117.0	122.0	127.0	137.0
30	TC	83.90	80.50	73.70	70.20	66.80	60.00
	kW	6.43	6.69	7.17	7.40	7.60	7.95
	SDT	103.0	107.0	117.0	122.0	127.0	137.0
35	TC	94.10	90.60	83.40	79.80	76.20	69.00
	kW	6.62	6.91	7.45	7.71	7.94	8.37
	SDT	104.0	108.0	118.0	123.0	127.0	137.0
40	TC	105.00	101.00	93.40	89.70	86.00	78.50
	kW	6.84	7.15	7.74	8.02	8.28	8.77
	SDT	105.0	110.0	119.0	124.0	128.0	138.0
45	TC	116.00	112.00	104.00	99.80	96.00	88.10
	kW	7.05	7.39	8.04	8.34	8.64	9.17
	SDT	107.0	112.0	121.0	125.0	130.0	139.0
50	TC	127.00	123.00	115.00	110.00	106.00	98.00
	kW	7.27	7.63	8.34	8.67	8.99	9.59
	SDT	109.0	114.0	123.0	127.0	132.0	141.0

38ARD012							
SST (F)		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
25	TC	75.20	73.00	68.50	66.10	63.70	58.70
	kW	6.45	6.79	7.52	7.93	8.33	9.17
	SDT	100.0	105.0	115.0	120.0	125.0	135.0
30	TC	83.80	81.50	76.70	74.20	71.70	66.50
	kW	6.44	6.79	7.54	7.94	8.35	9.21
	SDT	100.0	105.0	115.0	120.0	125.0	135.0
35	TC	92.90	90.50	85.40	82.80	80.20	74.80
	kW	6.45	6.79	7.54	7.95	8.36	9.24
	SDT	100.0	105.0	115.0	120.0	125.0	135.0
40	TC	102.00	99.90	94.60	91.90	89.10	83.40
	kW	6.48	6.83	7.57	7.98	8.39	9.27
	SDT	101.0	106.0	116.0	120.0	125.0	135.0
45	TC	112.00	110.00	104.00	101.00	98.40	92.50
	kW	6.55	6.90	7.63	8.04	8.45	9.32
	SDT	102.0	107.0	116.0	121.0	126.0	136.0
50	TC	123.00	120.00	114.00	111.00	108.00	102.00
	kW	6.65	6.99	7.73	8.14	8.54	9.43
	SDT	103.0	108.0	118.0	123.0	127.0	137.0

LEGEND

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



COMBINATION RATINGS — ENGLISH

38AR007-012

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	59.5	60.7	65.4	70.9	64.5	64.4	68.1	73.5	68.0	68.0	69.9	75.2
	SHC	59.50	56.80	47.30	37.30	64.50	64.80	54.70	41.70	68.00	68.00	61.50	46.20
	kW	3.71	3.72	3.81	3.90	3.79	3.79	3.86	3.95	3.85	3.85	3.89	3.98
85	TC	58.7	59.6	64.3	69.7	63.6	63.4	66.9	72.2	66.9	67.0	68.6	73.7
	SHC	58.70	56.20	46.90	36.80	63.60	63.80	54.30	41.30	66.90	67.00	61.00	45.70
	kW	3.94	3.95	4.03	4.14	4.02	4.02	4.07	4.18	4.09	4.08	4.11	4.21
95	TC	57.1	57.7	62.0	67.4	61.7	61.5	64.4	69.7	64.9	64.9	66.1	71.1
	SHC	57.10	55.20	46.00	35.90	61.70	62.00	53.20	40.50	64.90	64.90	59.90	44.90
	kW	4.38	4.39	4.48	4.58	4.47	4.47	4.52	4.63	4.53	4.53	4.55	4.66
100	TC	56.2	56.6	60.7	66.0	60.5	60.4	63.1	68.3	63.7	63.7	64.8	69.7
	SHC	56.20	54.60	45.50	35.40	60.50	60.90	52.80	40.10	63.70	63.70	59.30	44.40
	kW	4.64	4.66	4.73	4.83	4.72	4.72	4.78	4.87	4.79	4.79	4.82	4.91
105	TC	55.2	55.6	59.6	64.7	59.5	59.4	61.8	66.9	62.6	62.6	63.5	68.3
	SHC	55.20	54.00	45.00	34.900	59.50	59.80	52.20	39.60	62.60	62.60	58.70	44.00
	kW	4.89	4.90	4.98	5.09	4.98	4.98	5.03	5.13	5.05	5.06	5.06	5.17
115	TC	53.4	53.6	57.2	62.1	57.5	57.4	59.2	64.0	60.4	60.4	60.9	65.4
	SHC	53.40	52.80	44.00	34.10	57.50	57.40	51.30	38.70	60.40	60.40	57.60	43.10
	kW	5.42	5.42	5.49	5.60	5.49	5.50	5.54	5.64	5.56	5.57	5.58	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	57.2	58.5	63.1	68.4	61.8	61.9	65.6	70.9	65.1	65.1	67.3	72.5
	SHC	57.20	54.50	45.40	35.80	61.80	61.80	52.30	40.00	65.10	65.10	58.50	44.00
	kW	3.67	3.69	3.77	3.86	3.75	3.75	3.81	3.90	3.80	3.80	3.84	3.93
85	TC	56.4	57.5	62.0	67.3	60.9	61.0	64.5	69.7	64.1	64.1	66.1	71.2
	SHC	56.40	54.00	45.00	35.40	60.90	60.90	51.90	39.60	64.10	64.10	58.00	43.60
	kW	3.90	3.92	3.99	4.09	3.97	3.98	4.03	4.13	4.03	4.03	4.06	4.16
95	TC	54.8	55.7	59.9	65.1	59.2	59.2	62.2	67.3	62.1	62.2	63.8	68.7
	SHC	54.80	53.00	44.20	34.60	59.20	59.20	51.00	38.80	62.10	62.20	57.00	42.80
	kW	4.35	4.36	4.44	4.54	4.43	4.43	4.48	4.58	4.48	4.48	4.51	4.61
100	TC	54.0	54.7	58.8	63.9	58.2	58.2	61.0	66.0	61.1	61.1	62.6	67.4
	SHC	54.00	52.50	43.70	34.10	58.20	58.20	50.50	38.40	61.10	61.10	56.50	42.40
	kW	4.61	4.62	4.70	4.79	4.68	4.68	4.74	4.83	4.74	4.74	4.77	4.86
105	TC	53.1	53.7	57.7	62.6	57.2	57.2	59.9	64.7	60.1	60.1	61.4	66.1
	SHC	53.10	51.90	43.30	33.70	57.20	57.20	50.00	38.00	60.10	60.10	55.90	42.00
	kW	4.86	4.87	4.95	5.05	4.94	4.94	4.99	5.09	5.00	5.00	5.02	5.12
115	TC	51.4	51.7	55.5	60.2	55.3	55.3	57.5	62.1	58.0	58.0	58.9	63.4
	SHC	51.40	50.80	42.40	32.90	55.30	55.30	49.10	37.10	58.00	58.00	54.90	41.10
	kW	5.38	5.38	5.46	5.56	5.46	5.46	5.50	5.60	5.52	5.51	5.53	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

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
80	TC	64.4	64.5	68.6	74.2	69.3	69.3	71.0	76.3	72.4	72.4	72.8	77.6
	SHC	64.40	64.30	53.80	41.30	69.30	69.30	62.60	47.00	72.40	72.40	70.10	52.50
	kW	3.79	3.79	3.86	3.96	3.88	3.88	3.92	4.01	3.93	3.93	3.95	4.03
85	TC	63.5	63.5	67.3	72.8	68.2	68.2	69.7	74.9	71.2	71.2	71.5	76.2
	SHC	63.50	63.40	53.30	40.90	68.20	68.20	62.10	46.50	71.20	71.20	69.50	52.10
	kW	4.02	4.02	4.08	4.19	4.10	4.10	4.13	4.22	4.16	4.16	4.17	4.26
95	TC	61.7	61.4	64.8	70.2	66.0	65.9	67.1	72.2	68.9	68.9	69.0	73.2
	SHC	61.70	61.90	52.40	39.90	66.00	65.90	61.10	45.70	68.90	68.90	68.10	51.10
	kW	4.47	4.47	4.53	4.64	4.56	4.56	4.58	4.68	4.62	4.61	4.61	4.71
100	TC	60.6	60.3	63.7	68.8	64.7	64.8	65.7	70.7	67.7	67.7	67.7	71.8
	SHC	60.60	60.90	51.80	39.50	64.70	64.80	60.50	45.30	67.70	67.70	67.20	50.70
	kW	4.72	4.73	4.80	4.90	4.82	4.81	4.84	4.93	4.87	4.87	4.87	4.96
105	TC	59.5	59.4	62.3	67.5	63.7	63.7	64.4	69.2	66.4	66.4	66.3	70.3
	SHC	59.50	60.00	51.30	39.00	63.70	63.70	59.90	44.70	66.40	66.40	66.50	50.20
	kW	4.98	4.98	5.04	5.15	5.07	5.07	5.09	5.19	5.13	5.13	5.13	5.22
115	TC	57.4	57.2	59.7	64.7	61.3	61.4	61.7	66.2	64.0	64.0	63.6	67.3
	SHC	57.40	57.70	50.30	38.20	61.30	61.40	58.80	43.80	64.00	64.00	64.80	49.20
	kW	5.49	5.49	5.56	5.67	5.60	5.59	5.60	5.70	5.65	5.64	5.63	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
80	TC	61.3	61.5	65.5	70.9	65.6	65.6	67.8	73.0	68.6	68.6	69.4	74.2
	SHC	61.30	60.90	51.10	39.30	65.60	65.60	59.00	44.40	68.60	68.60	65.60	49.20
	kW	3.74	3.74	3.81	3.90	3.81	3.81	3.85	3.94	3.86	3.86	3.88	3.96
85	TC	60.4	60.6	64.4	69.7	64.7	64.7	66.6	71.7	67.5	67.5	68.3	72.9
	SHC	60.40	60.10	50.60	38.90	64.70	64.70	58.50	44.00	67.50	67.50	65.00	48.80
	kW	3.96	3.97	4.03	4.13	4.04	4.04	4.07	4.16	4.09	4.09	4.10	4.19
95	TC	58.7	58.7	62.1	67.3	62.7	62.7	64.3	69.2	65.4	65.4	65.9	70.3
	SHC	58.70	58.70	49.80	38.10	62.70	62.70	57.60	43.20	65.40	65.40	63.80	47.90
	kW	4.42	4.42	4.48	4.58	4.49	4.49	4.52	4.62	4.55	4.54	4.55	4.64
100	TC	57.7	57.7	61.0	66.0	61.6	61.6	63.0	67.8	64.3	64.3	64.7	68.9
	SHC	57.70	57.70	49.30	37.70	61.60	61.60	57.00	42.80	64.30	64.30	63.00	47.50
	kW	4.67	4.68	4.74	4.84	4.75	4.75	4.78	4.87	4.80	4.80	4.81	4.89
105	TC	56.7	56.8	59.8	64.7	60.6	60.6	61.8	66.5	63.2	63.2	63.4	67.5
	SHC	56.70	56.80	48.80	37.20	60.60	60.60	56.50	42.30	63.20	63.20	62.30	47.10
	kW	4.93	4.93	4.99	5.09	5.01	5.01	5.03	5.13	5.06	5.06	5.06	5.15
115	TC	54.8	54.8	57.4	62.1	58.5	58.5	59.3	63.8	61.0	61.0	61.0	64.8
	SHC	54.80	54.80	47.90	36.40	58.50	58.50	55.40	41.50	61.00	61.00	60.80	46.20
	kW	5.44	5.44	5.50	5.61	5.53	5.52	5.54	5.64	5.58	5.58	5.57	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	71.6	76.1	82.8	90.1	79.0	80.6	87.1	94.0	83.9	84.3	90.1	97.4
	SHC	71.60	64.50	54.50	44.30	79.00	74.70	62.20	49.00	83.90	83.10	69.40	53.20
	kW	4.79	4.82	4.87	4.95	4.84	4.85	4.91	5.00	4.89	4.88	4.96	5.03
85	TC	70.5	74.8	81.4	88.5	77.8	79.3	85.6	93.0	82.6	82.9	88.2	94.9
	SHC	70.70	63.80	53.90	43.70	77.80	74.00	61.70	48.50	82.60	82.10	68.70	52.60
	kW	5.09	5.11	5.16	5.24	5.12	5.14	5.21	5.29	5.18	5.18	5.24	5.32
95	TC	68.4	72.1	78.7	85.5	75.4	76.5	82.7	89.3	80.2	80.1	85.1	91.6
	SHC	68.60	62.50	52.70	42.50	75.40	72.50	60.50	47.30	80.20	80.20	67.60	51.70
	kW	5.68	5.68	5.75	5.83	5.72	5.72	5.80	5.89	5.76	5.76	5.83	5.91
100	TC	67.4	70.7	77.2	84.0	74.1	75.2	80.9	87.7	78.8	78.6	83.4	89.8
	SHC	67.40	61.80	52.10	42.00	74.10	71.70	59.80	46.70	78.80	79.10	66.80	51.00
	kW	6.01	6.01	6.08	6.17	6.05	6.05	6.13	6.21	6.09	6.09	6.15	6.25
105	TC	66.2	69.2	75.7	82.3	72.8	73.7	79.3	86.1	77.4	77.1	81.7	88.2
	SHC	66.20	61.10	51.40	41.40	72.80	70.90	59.20	46.10	77.40	77.80	66.20	50.40
	kW	6.34	6.34	6.41	6.49	6.39	6.38	6.45	6.54	6.42	6.43	6.48	6.58
115	TC	64.0	66.5	72.6	79.1	70.3	70.8	75.9	82.7	74.7	74.4	78.2	84.7
	SHC	64.00	59.70	50.10	40.20	70.30	69.30	57.90	44.80	74.70	75.00	65.00	49.20
	kW	7.00	7.00	7.05	7.15	7.06	7.04	7.10	7.21	7.08	7.08	7.14	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	68.3	72.6	79.0	85.7	74.9	76.8	82.9	89.6	79.4	80.0	85.5	92.1
	SHC	68.30	61.50	52.00	42.20	74.90	70.80	59.00	46.50	79.40	78.30	65.50	50.40
	kW	4.81	4.85	4.92	5.00	4.88	4.89	4.96	5.05	4.93	4.93	5.00	5.08
85	TC	67.4	71.4	77.7	84.3	73.8	75.5	81.5	88.1	78.2	78.7	84.0	90.5
	SHC	67.40	60.90	51.40	41.70	73.80	70.20	58.40	46.00	78.20	77.40	64.90	49.80
	kW	5.11	5.15	5.22	5.30	5.17	5.19	5.27	5.35	5.23	5.23	5.30	5.38
95	TC	65.4	68.9	75.0	81.5	71.6	72.9	78.7	85.1	75.9	76.1	81.0	87.4
	SHC	65.40	59.70	50.30	40.60	71.60	68.80	57.30	44.90	75.90	75.60	63.80	48.80
	kW	5.71	5.74	5.82	5.91	5.77	5.79	5.87	5.96	5.83	5.83	5.90	5.99
100	TC	64.4	67.6	73.6	80.0	70.4	71.6	77.1	83.5	74.6	74.7	79.4	85.7
	SHC	64.40	59.10	49.70	40.00	70.40	68.10	56.70	44.30	74.60	74.50	63.10	48.20
	kW	6.03	6.07	6.15	6.25	6.11	6.12	6.20	6.30	6.17	6.17	6.24	6.34
105	TC	63.3	66.2	72.2	78.5	69.2	70.2	75.6	81.9	73.3	73.3	77.8	84.1
	SHC	63.30	58.40	49.10	39.50	69.20	67.30	56.10	43.80	73.30	73.30	62.50	47.70
	kW	6.36	6.40	6.49	6.59	6.44	6.46	6.54	6.64	6.50	6.50	6.57	6.68
115	TC	61.2	63.6	69.3	75.5	66.8	67.4	72.4	78.7	70.7	70.6	74.5	80.7
	SHC	61.20	57.10	47.90	38.30	66.80	65.80	54.90	42.60	70.70	70.60	61.30	46.50
	kW	7.01	7.06	7.15	7.27	7.11	7.12	7.21	7.33	7.17	7.17	7.25	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)

38AR007-012

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
80	TC	78.0	80.4	86.7	93.5	84.8	84.9	90.5	97.6	89.2	89.0	92.6	99.7
	SHC kW	78.00 4.83	73.00 4.85	60.90 4.91	48.20 4.99	84.80 4.88	83.80 4.89	69.90 4.96	53.60 5.04	89.20 4.94	89.40 4.94	78.20 4.98	58.70 5.07
85	TC	76.8	79.0	85.3	91.8	83.5	83.6	88.9	96.1	87.9	87.6	90.8	97.2
	SHC kW	76.80 5.13	72.30 5.15	60.30 5.20	47.60 5.29	83.50 5.18	82.70 5.18	69.30 5.24	53.10 5.33	87.90 5.24	88.00 5.23	77.40 5.28	58.20 5.35
95	TC	74.5	76.2	82.4	89.3	80.9	80.8	85.6	92.3	85.1	85.0	87.8	94.0
	SHC kW	74.50 5.72	70.90 5.72	59.10 5.79	46.50 5.88	80.90 5.77	80.80 5.77	68.10 5.84	52.00 5.92	85.10 5.83	85.20 5.81	76.10 5.87	57.10 5.95
100	TC	73.3	74.8	80.7	87.5	79.6	79.4	83.9	90.5	83.7	83.5	86.2	92.1
	SHC kW	73.30 6.05	70.20 6.04	58.40 6.13	45.90 6.22	79.60 6.10	79.60 6.11	67.50 6.16	51.40 6.25	83.70 6.15	83.60 6.15	75.40 6.18	56.50 6.28
105	TC	72.1	73.3	79.2	85.8	78.2	78.1	82.2	88.7	82.3	82.0	84.4	90.4
	SHC kW	72.10 6.38	69.30 6.38	57.80 6.44	45.30 6.55	78.20 6.43	78.50 6.43	66.90 6.49	50.90 6.58	82.30 6.49	82.20 6.49	74.60 6.52	55.90 6.61
115	TC	69.7	70.5	75.9	82.5	75.5	75.2	79.0	85.2	79.2	79.2	81.0	87.0
	SHC kW	69.70 7.03	67.90 7.02	56.50 7.09	44.10 7.21	75.50 7.10	75.60 7.10	65.70 7.15	49.60 7.24	79.20 7.16	79.40 7.16	73.30 7.18	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
80	TC	74.1	76.4	82.5	89.1	80.2	80.6	85.7	92.3	84.3	84.3	88.0	94.4
	SHC kW	74.10 4.87	69.40 4.89	57.90 4.96	45.80 5.04	80.20 4.93	79.10 4.94	66.10 5.00	50.80 5.08	84.30 4.98	84.30 4.98	73.70 5.03	55.40 5.11
85	TC	73.0	75.1	81.1	87.6	79.0	79.3	84.3	90.8	83.1	83.0	86.4	92.8
	SHC kW	73.00 5.17	68.70 5.19	57.30 5.26	45.20 5.34	79.00 5.23	78.20 5.24	65.60 5.30	50.30 5.39	83.10 5.29	83.00 5.28	73.10 5.33	54.90 5.41
95	TC	70.9	72.6	78.3	84.8	76.6	76.7	81.4	87.8	80.5	80.5	83.4	89.6
	SHC kW	70.90 5.76	67.40 5.78	56.20 5.86	44.20 5.96	76.60 5.84	76.40 5.84	64.50 5.91	49.30 6.00	80.50 5.90	80.50 5.89	71.90 5.94	53.90 6.03
100	TC	69.7	71.2	76.8	83.2	75.3	75.4	79.8	86.1	79.2	79.1	81.8	87.8
	SHC kW	69.70 6.10	66.70 6.11	55.60 6.20	43.60 6.30	75.30 6.17	75.20 6.18	63.90 6.25	48.70 6.34	79.20 6.23	79.10 6.23	71.20 6.27	53.30 6.37
105	TC	68.6	69.8	75.3	81.6	74.0	74.1	78.2	84.4	77.8	77.7	80.1	86.1
	SHC kW	68.60 6.43	66.00 6.45	55.00 6.53	43.00 6.64	74.00 6.51	74.10 6.51	63.30 6.58	48.10 6.68	77.80 6.57	77.70 6.57	70.50 6.61	52.80 6.71
115	TC	66.3	67.1	72.3	78.4	71.5	71.4	75.0	80.9	75.0	75.0	76.9	82.6
	SHC kW	66.30 7.09	64.60 7.11	53.80 7.21	41.90 7.32	71.50 7.19	71.40 7.19	62.10 7.26	46.90 7.36	75.00 7.25	75.00 7.25	69.20 7.29	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)

38AR007-012

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	87.5	87.7	93.2	99.9	93.8	93.8	96.0	103.3	97.9	97.9	99.0	104.9
	SHC	87.50	86.70	72.40	55.50	93.80	93.80	83.90	62.80	97.90	97.90	94.10	69.90
	kW	4.92	4.92	4.99	5.08	5.00	5.00	5.03	5.10	5.04	5.04	5.05	5.13
85	TC	86.1	86.3	91.4	98.3	92.1	92.1	94.4	101.6	96.6	96.5	97.4	103.2
	SHC	86.10	85.70	71.80	54.80	92.10	92.10	83.30	62.20	96.60	96.50	92.90	69.20
	kW	5.21	5.21	5.28	5.37	5.29	5.29	5.32	5.40	5.34	5.35	5.35	5.42
95	TC	83.6	83.4	88.0	95.1	89.2	89.2	91.3	98.3	93.4	93.3	94.3	99.8
	SHC	83.60	83.60	70.50	53.70	89.20	89.20	81.90	61.20	93.40	93.30	91.20	68.20
	kW	5.81	5.80	5.87	5.96	5.88	5.88	5.91	6.00	5.93	5.93	5.94	6.02
100	TC	82.1	81.9	86.4	93.3	87.8	87.8	89.5	95.6	91.6	91.6	92.2	96.9
	SHC	82.10	82.30	69.80	53.10	87.80	87.80	81.10	60.50	91.60	91.60	90.10	67.50
	kW	6.13	6.14	6.20	6.29	6.21	6.21	6.24	6.33	6.27	6.27	6.27	6.35
105	TC	80.5	80.6	84.6	91.3	86.1	86.2	87.5	93.8	89.8	89.7	89.6	95.0
	SHC	80.50	80.90	69.00	52.50	86.10	86.20	80.40	59.90	89.80	89.70	89.10	66.90
	kW	6.46	6.47	6.52	6.62	6.55	6.55	6.57	6.66	6.60	6.60	6.61	6.68
115	TC	77.7	77.5	81.0	87.6	83.0	83.0	83.8	89.8	86.6	86.3	86.4	91.5
	SHC	77.70	78.00	67.50	51.30	83.00	83.00	78.60	58.60	86.60	86.30	86.90	65.60
	kW	7.13	7.13	7.17	7.29	7.21	7.21	7.23	7.31	7.27	7.27	7.26	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	82.4	82.7	87.9	94.6	87.9	87.9	90.8	97.2	91.7	91.7	92.9	98.8
	SHC	82.40	81.60	68.20	52.30	87.90	87.90	78.50	58.80	91.70	91.70	87.10	64.90
	kW	4.96	4.96	5.03	5.11	5.03	5.03	5.06	5.14	5.07	5.07	5.09	5.16
85	TC	81.1	81.4	86.3	93.0	86.6	86.6	89.2	95.5	90.3	90.2	91.3	97.1
	SHC	81.10	80.60	67.60	51.70	86.60	86.60	77.90	58.30	90.30	90.20	86.40	64.30
	kW	5.26	5.26	5.33	5.42	5.33	5.33	5.37	5.45	5.38	5.38	5.39	5.47
95	TC	78.7	78.7	83.3	89.8	83.8	83.8	86.1	92.2	87.4	87.3	88.1	93.7
	SHC	78.70	78.60	66.40	50.60	83.80	83.80	76.60	57.30	87.40	87.30	84.80	63.30
	kW	5.87	5.87	5.93	6.03	5.94	5.94	5.98	6.07	5.99	5.99	6.01	6.09
100	TC	77.3	77.3	81.6	88.0	82.4	82.4	84.3	90.3	85.8	85.8	86.4	91.7
	SHC	77.30	77.30	65.08	50.10	82.40	82.40	75.90	56.60	85.80	85.80	83.80	62.70
	kW	6.21	6.21	6.27	6.37	6.28	6.28	6.32	6.41	6.34	6.34	6.35	6.43
105	TC	75.9	76.0	79.9	86.3	80.9	80.9	82.6	88.5	84.3	84.2	84.7	89.8
	SHC	75.90	76.00	65.10	49.50	80.90	80.90	75.20	56.00	84.30	84.20	82.80	62.10
	kW	6.54	6.55	6.61	6.71	6.62	6.63	6.66	6.75	6.68	6.68	6.69	6.77
115	TC	73.2	73.2	76.6	82.7	78.0	78.0	79.2	84.7	81.2	81.1	81.3	86.0
	SHC	73.20	73.20	63.80	48.30	78.00	78.00	73.70	54.80	81.20	81.10	80.80	60.90
	kW	7.22	7.22	7.28	7.40	7.31	7.31	7.34	7.43	7.37	7.37	7.37	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
80	TC	94.6	100.3	108.2	116.5	103.3	106.2	113.2	122.6	109.2	110.9	116.7	125.7
	SHC	94.20	83.50	70.50	57.40	103.30	96.70	80.30	63.30	109.20	107.20	89.10	68.60
	kW	6.82	6.94	7.12	7.33	7.00	7.07	7.25	7.46	7.14	7.15	7.33	7.54
85	TC	93.1	98.6	107.0	115.5	101.8	104.3	111.2	119.5	108.0	108.7	115.9	123.7
	SHC	92.80	82.80	69.70	56.60	101.80	95.90	79.50	62.60	108.00	105.70	88.30	67.90
	kW	7.17	7.28	7.45	7.66	7.34	7.39	7.58	7.79	7.48	7.50	7.65	7.87
95	TC	90.3	95.1	102.9	111.4	98.7	100.8	108.0	116.1	104.4	104.9	111.2	119.7
	SHC	90.30	81.20	68.20	55.00	98.70	94.00	78.00	61.10	104.40	103.50	86.70	66.40
	kW	7.82	7.92	8.10	8.31	8.02	8.04	8.24	8.46	8.15	8.17	8.31	8.54
100	TC	88.9	93.2	100.8	108.9	97.0	98.7	105.6	114.3	102.5	102.9	109.0	116.0
	SHC	88.90	80.20	67.30	54.20	97.00	92.90	77.10	60.20	102.50	101.80	85.70	65.30
	kW	8.20	8.27	8.45	8.66	8.38	8.40	8.58	8.80	8.51	8.52	8.67	8.89
105	TC	87.4	91.4	98.8	106.7	95.2	96.6	103.3	110.5	100.7	100.9	106.8	114.4
	SHC	87.40	79.20	66.40	53.40	95.20	91.70	76.00	59.30	100.70	100.40	84.60	64.40
	kW	8.56	8.63	8.79	9.01	8.73	8.76	8.93	9.15	8.87	8.87	9.02	9.24
115	TC	84.5	87.8	94.4	102.4	91.8	92.7	98.8	106.4	96.9	96.9	101.5	109.6
	SHC	84.50	77.30	64.60	51.60	91.80	89.10	74.20	57.60	96.90	97.00	82.70	62.80
	kW	9.27	9.34	9.51	9.71	9.46	9.46	9.63	9.86	9.58	9.56	9.71	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
80	TC	88.7	94.4	102.0	110.0	96.6	99.8	107.0	115.0	102.0	104.0	110.0	118.0
	SHC	88.40	78.50	66.30	54.00	96.60	90.10	74.90	59.20	102.00	99.60	82.80	63.90
	kW	6.71	6.83	7.01	7.22	6.88	6.96	7.14	7.35	7.02	7.04	7.22	7.43
85	TC	87.4	92.9	101.0	109.0	95.2	98.1	105.0	113.0	101.0	102.0	109.0	116.0
	SHC	87.20	77.80	65.60	53.30	95.20	89.30	74.20	58.50	101.00	98.50	82.10	63.30
	kW	7.04	7.15	7.33	7.54	7.20	7.27	7.45	7.67	7.34	7.36	7.53	7.75
95	TC	84.8	89.8	97.3	105.0	92.5	94.8	102.0	110.0	97.8	98.5	105.0	113.0
	SHC	84.80	76.30	64.20	51.90	92.50	87.60	72.80	57.20	97.80	96.50	80.70	61.90
	kW	7.68	7.78	7.96	8.17	7.84	7.89	8.09	8.31	7.97	7.99	8.16	8.39
100	TC	83.5	88.1	95.4	103.0	91.0	93.0	99.9	108.0	96.1	96.6	103.0	110.0
	SHC	83.50	75.40	63.40	51.20	91.00	86.60	72.00	56.40	96.10	95.20	79.80	61.10
	kW	8.03	8.12	8.29	8.51	8.19	8.23	8.42	8.65	8.32	8.33	8.50	8.73
105	TC	82.2	86.4	93.6	101.0	89.4	91.1	97.8	105.0	94.5	94.8	101.0	108.0
	SHC	82.20	74.50	62.60	50.40	89.40	85.60	71.20	55.60	94.50	94.00	79.00	60.30
	kW	8.38	8.46	8.63	8.84	8.53	8.57	8.75	8.98	8.66	8.67	8.83	9.06
115	TC	79.5	83.0	89.8	97.1	86.4	87.5	93.8	101.0	91.1	91.1	96.3	104.0
	SHC	79.50	72.80	61.00	48.80	86.40	83.70	69.50	54.10	91.10	91.10	77.30	58.80
	kW	9.07	9.14	9.31	9.51	9.22	9.25	9.42	9.66	9.34	9.34	9.50	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	105.6	108.2	117.1	125.0	114.2	115.1	121.0	129.9	119.1	119.1	124.0	132.0
	SHC	105.60	98.90	81.90	64.50	114.20	113.40	94.10	72.10	119.10	120.10	105.70	79.20
	kW	7.07	7.14	7.37	7.60	7.30	7.30	7.47	7.73	7.46	7.44	7.56	7.78
85	TC	104.2	107.3	114.2	123.0	112.2	113.1	118.1	127.0	118.2	117.1	122.0	130.0
	SHC	104.20	97.10	81.10	63.70	112.20	111.40	93.30	71.20	118.20	118.00	104.80	78.50
	kW	7.39	7.46	7.67	7.92	7.61	7.62	7.79	8.03	7.78	7.77	7.88	8.11
95	TC	101.3	102.4	110.2	119.1	108.3	108.2	114.1	123.0	114.1	114.1	118.0	125.0
	SHC	101.30	95.10	79.40	62.30	108.30	109.40	91.80	69.70	114.10	114.10	103.10	77.00
	kW	8.03	8.08	8.29	8.59	8.25	8.24	8.40	8.66	8.42	8.41	8.48	8.74
100	TC	98.8	100.5	107.3	116.2	106.3	106.2	111.3	120.1	111.2	111.2	114.1	123.0
	SHC	98.80	94.20	78.40	61.30	106.30	107.30	90.80	68.80	111.20	111.20	102.20	76.10
	kW	8.37	8.41	8.65	8.89	8.62	8.60	8.76	9.00	8.82	8.82	8.84	9.07
105	TC	97.2	98.6	105.3	114.2	104.9	103.8	110.2	117.1	109.2	109.2	112.1	119.1
	SHC	97.20	93.30	77.50	60.50	104.90	105.80	89.80	67.90	109.20	109.20	101.20	75.00
	kW	8.67	8.71	8.98	9.22	8.95	8.94	9.10	9.33	9.08	9.08	9.17	9.40
115	TC	93.5	93.9	100.2	109.2	100.4	100.1	104.5	112.3	105.5	105.5	106.2	115.2
	SHC	93.50	91.20	75.60	58.60	100.40	101.00	88.00	66.20	105.50	105.50	98.40	73.20
	kW	9.36	9.38	9.64	9.79	9.63	9.61	9.76	10.00	9.76	9.75	9.83	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	99.3	102.0	110.0	118.0	107.0	108.0	114.0	122.0	112.0	112.0	117.0	125.0
	SHC	99.30	92.70	77.20	60.80	107.00	106.00	88.10	67.50	112.00	112.00	98.20	73.70
	kW	6.94	7.01	7.21	7.43	7.13	7.15	7.31	7.54	7.27	7.27	7.39	7.60
85	TC	97.9	101.0	108.0	116.0	105.0	106.0	112.0	120.0	111.0	110.0	115.0	123.0
	SHC	97.90	91.90	76.40	60.10	105.00	104.00	87.40	66.80	111.00	110.00	97.30	73.00
	kW	7.26	7.33	7.52	7.75	7.45	7.46	7.63	7.85	7.59	7.59	7.70	7.92
95	TC	95.0	97.1	104.0	112.0	102.0	102.0	108.0	116.0	107.0	107.0	111.0	118.0
	SHC	95.00	90.10	74.90	58.70	102.00	102.00	85.90	65.40	107.00	107.00	95.60	71.60
	kW	7.90	7.95	8.15	8.39	8.09	8.09	8.26	8.49	8.23	8.23	8.34	8.57
100	TC	93.4	95.2	102.0	110.0	100.0	100.0	106.0	114.0	105.0	105.0	108.0	116.0
	SHC	93.40	89.10	74.00	57.90	100.00	100.00	85.00	64.60	105.00	105.00	94.70	70.80
	kW	8.25	8.29	8.48	8.72	8.43	8.43	8.59	8.83	8.57	8.57	8.67	8.90
105	TC	91.8	93.3	100.0	108.0	98.6	98.5	104.0	111.0	103.0	103.0	106.0	113.0
	SHC	91.80	88.10	73.20	57.10	98.60	98.50	84.10	63.80	103.00	103.00	93.70	69.90
	kW	8.59	8.63	8.81	9.05	8.78	8.77	8.93	9.16	8.91	8.91	9.00	9.23
115	TC	88.5	89.5	95.8	103.0	95.0	94.7	99.2	107.0	99.2	99.2	101.0	109.0
	SHC	88.50	86.10	71.40	55.40	95.00	94.70	82.40	62.10	99.20	99.20	91.70	68.30
	kW	9.28	9.30	9.47	9.71	9.46	9.44	9.59	9.83	9.59	9.58	9.66	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
80	TC	112.2	113.3	121.3	130.1	121.1	120.2	125.3	133.2	125.2	125.2	128.1	135.2
	SHC	112.20	109.40	90.10	69.70	121.10	121.20	105.00	78.30	125.20	125.20	116.20	86.50
	kW	7.27	7.30	7.50	7.74	7.50	7.48	7.61	7.86	7.64	7.63	7.69	7.92
85	TC	110.3	111.3	119.3	127.2	119.1	118.2	122.2	132.1	123.2	123.2	125.2	134.1
	SHC	110.30	107.40	89.20	69.00	119.10	118.20	104.10	77.60	123.20	123.20	116.30	85.70
	kW	7.58	7.60	7.81	8.06	7.80	7.79	7.93	8.19	7.96	7.96	8.01	8.24
95	TC	106.3	107.3	115.3	123.2	115.3	114.3	118.2	126.2	120.1	120.1	121.2	129.2
	SHC	106.30	105.80	87.50	67.40	115.30	115.30	102.50	76.10	120.10	120.10	114.30	84.30
	kW	8.21	8.23	8.48	8.72	8.43	8.43	8.58	8.83	8.60	8.59	8.65	8.89
100	TC	104.9	105.3	111.3	120.2	113.2	113.2	116.2	124.3	117.2	117.2	118.2	126.2
	SHC	104.90	103.60	86.50	66.50	113.20	113.20	100.60	75.10	117.20	117.20	112.20	83.30
	kW	8.60	8.60	8.80	9.05	8.78	8.78	8.91	9.16	8.92	8.92	8.98	9.23
105	TC	103.1	102.7	110.3	118.3	111.2	111.2	113.2	121.2	115.2	115.2	116.2	123.2
	SHC	103.10	103.20	85.70	65.60	111.20	111.20	99.60	74.20	115.20	115.20	110.30	82.40
	kW	8.92	8.94	9.13	9.38	9.12	9.12	9.24	9.49	9.26	9.26	9.31	9.56
115	TC	99.4	98.6	104.3	112.4	105.3	106.2	107.3	116.2	110.3	110.3	111.3	117.3
	SHC	99.40	99.60	83.80	63.80	105.30	106.20	97.40	72.50	110.30	110.30	109.30	80.60
	kW	9.59	9.60	9.78	10.04	9.80	9.88	9.90	10.15	9.94	9.94	9.97	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
80	TC	106.0	108.0	116.0	124.0	114.0	114.0	120.0	128.0	119.0	119.0	122.0	130.0
	SHC	106.00	103.00	85.10	66.10	114.00	114.00	97.60	73.70	119.00	119.00	108.00	80.70
	kW	7.12	7.16	7.36	7.59	7.32	7.32	7.46	7.70	7.45	7.45	7.53	7.76
85	TC	105.0	106.0	114.0	122.0	112.0	112.0	117.0	126.0	117.0	117.0	120.0	128.0
	SHC	105.00	101.00	84.30	65.40	112.00	112.00	96.70	73.00	117.00	117.00	108.00	80.00
	kW	7.43	7.47	7.67	7.91	7.63	7.63	7.78	8.02	7.77	7.77	7.85	8.08
95	TC	101.0	102.0	110.0	118.0	109.0	109.0	113.0	121.0	113.0	113.0	116.0	124.0
	SHC	101.00	99.40	82.70	63.90	109.00	109.00	95.10	71.50	113.00	113.00	106.00	78.50
	kW	8.07	8.10	8.30	8.55	8.27	8.27	8.41	8.66	8.42	8.41	8.48	8.72
100	TC	99.6	100.0	107.0	115.0	107.0	107.0	111.0	119.0	111.0	111.0	113.0	121.0
	SHC	99.60	98.10	81.70	63.00	107.00	107.00	94.10	70.60	111.00	111.00	104.00	77.60
	kW	8.41	8.43	8.63	8.88	8.61	8.61	8.74	8.99	8.75	8.75	8.81	9.06
105	TC	97.8	98.3	105.0	113.0	105.0	105.0	108.0	116.0	109.0	109.0	111.0	118.0
	SHC	97.80	96.80	80.80	62.10	105.00	105.00	93.10	69.70	109.00	109.00	103.00	76.80
	kW	8.75	8.77	8.96	9.21	8.95	8.95	9.07	9.32	9.09	9.09	9.14	9.39
115	TC	94.1	94.2	100.0	108.0	100.0	100.0	103.0	111.0	105.0	105.0	106.0	113.0
	SHC	94.10	94.20	78.90	60.30	100.00	100.00	91.10	68.00	105.00	105.00	101.00	75.10
	kW	9.42	9.43	9.61	9.87	9.63	9.63	9.73	9.98	9.77	9.77	9.80	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

38ARS008/40RM007H 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	71.3	76.0	83.3	91.2	79.1	80.9	87.9	95.7	84.4	84.9	91.1	99.4
	SHC	71.30	64.60	54.80	44.80	79.10	75.20	62.70	49.70	84.40	83.80	70.20	54.20
	kW	4.65	4.70	4.78	4.87	4.73	4.76	4.83	4.92	4.79	4.80	4.88	4.95
85	TC	69.9	74.4	81.6	89.3	77.7	79.3	86.0	94.2	82.9	83.1	89.0	96.6
	SHC	70.10	63.70	54.10	44.00	77.70	74.10	62.10	49.00	82.90	82.50	69.40	53.50
	kW	4.89	4.94	5.03	5.15	4.97	5.00	5.10	5.21	5.05	5.06	5.14	5.24
95	TC	67.4	71.1	78.1	85.6	74.8	75.9	82.4	89.9	79.9	79.7	84.9	92.4
	SHC	67.50	62.20	52.60	42.60	74.80	72.30	60.60	47.60	79.90	80.00	67.90	52.20
	kW	5.38	5.41	5.56	5.70	5.49	5.51	5.64	5.79	5.59	5.59	5.69	5.83
100	TC	66.2	69.4	76.3	83.8	73.3	74.1	80.3	87.9	78.2	78.0	83.0	90.3
	SHC	66.20	61.30	51.90	42.00	73.30	71.30	59.80	46.90	78.20	78.60	67.10	51.40
	kW	5.62	5.66	5.81	5.97	5.73	5.75	5.90	6.05	5.84	5.84	5.94	6.11
105	TC	64.8	67.7	74.5	81.8	71.8	72.4	78.3	85.7	76.6	76.3	80.8	88.1
	SHC	64.80	60.50	51.10	41.20	71.80	70.40	59.10	46.10	76.60	77.00	66.20	50.60
	kW	5.85	5.90	6.06	6.23	6.00	6.00	6.14	6.33	6.11	6.10	6.21	6.39
115	TC	62.1	64.3	70.8	77.9	68.8	68.9	74.4	81.5	73.4	73.0	76.7	83.8
	SHC	62.10	58.80	49.50	39.80	68.80	68.50	57.50	44.60	73.40	73.60	64.60	49.20
	kW	6.34	6.37	6.56	6.76	6.51	6.50	6.66	6.89	6.62	6.61	6.74	6.95

38ARS008/40RM007 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	68.0	72.5	79.4	86.8	75.0	77.1	83.7	91.2	79.9	80.6	86.5	94.0
	SHC	68.00	61.60	52.30	42.70	75.00	71.20	59.50	47.20	79.90	78.90	66.20	51.30
	kW	4.67	4.73	4.83	4.92	4.77	4.80	4.88	4.97	4.83	4.85	4.92	5.00
85	TC	66.8	71.0	77.8	85.1	73.7	75.5	81.9	89.3	78.5	78.9	84.7	92.1
	SHC	66.80	60.80	51.60	42.00	73.70	70.30	58.80	46.50	78.50	77.70	65.50	50.60
	kW	4.91	4.98	5.09	5.21	5.02	5.05	5.16	5.27	5.10	5.11	5.20	5.30
95	TC	64.4	67.9	74.5	81.6	71.0	72.3	78.4	85.6	75.6	75.7	80.9	88.1
	SHC	64.40	59.40	50.20	40.70	71.00	68.60	57.40	45.20	75.60	75.40	64.00	49.30
	kW	5.40	5.47	5.62	5.78	5.54	5.57	5.71	5.86	5.65	5.65	5.76	5.91
100	TC	63.2	66.3	72.8	79.8	69.6	70.6	76.5	83.6	74.0	74.1	79.0	86.1
	SHC	63.20	58.60	49.50	40.00	69.60	67.70	56.70	44.50	74.00	74.00	63.30	48.60
	kW	5.64	5.71	5.88	6.05	5.79	5.82	5.97	6.14	5.91	5.91	6.03	6.20
105	TC	61.9	64.7	71.1	78.0	68.2	69.0	74.6	81.6	72.5	72.5	77.0	84.0
	SHC	61.90	57.80	48.80	39.30	68.20	66.80	56.00	43.80	72.50	72.50	62.50	47.90
	kW	5.87	5.95	6.14	6.33	6.05	6.07	6.23	6.43	6.18	6.17	6.30	6.49
115	TC	59.4	61.5	67.6	74.3	65.3	65.6	70.9	77.6	69.5	69.3	73.1	79.9
	SHC	59.40	56.20	47.30	37.90	65.30	65.00	54.50	42.40	69.50	69.30	61.00	46.50
	kW	6.35	6.42	6.65	6.88	6.56	6.58	6.76	7.00	6.71	6.70	6.84	7.07

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

38ARS008/40RM008H 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	77.7	80.3	87.3	94.9	84.9	85.2	90.8	99.6	89.8	89.5	93.7	102.1
	SHC	77.70	72.80	61.00	48.70	84.90	84.00	70.40	54.30	89.80	90.30	78.60	59.50
	kW	4.82	4.86	4.95	5.02	4.91	4.92	4.98	5.07	4.97	4.97	5.01	5.09
85	TC	76.2	78.5	85.4	93.0	83.4	83.4	89.0	96.7	88.1	87.8	91.8	99.9
	SHC	76.20	71.90	60.20	47.90	83.40	82.80	69.60	53.70	88.10	88.50	77.70	58.80
	kW	5.08	5.12	5.22	5.33	5.20	5.18	5.28	5.38	5.27	5.27	5.31	5.41
95	TC	73.4	75.0	81.5	89.3	80.2	79.9	85.2	92.4	84.7	84.4	87.5	95.0
	SHC	73.40	70.20	58.70	46.50	80.20	80.30	68.00	52.20	84.70	85.00	76.00	57.40
	kW	5.60	5.64	5.78	5.93	5.76	5.74	5.86	6.01	5.86	5.86	5.91	6.05
100	TC	72.1	73.2	79.5	87.0	78.5	78.1	83.0	90.5	82.9	82.8	85.4	92.4
	SHC	72.10	69.20	58.00	45.70	78.50	78.80	67.20	51.40	82.90	83.10	75.10	56.60
	kW	5.87	5.89	6.06	6.22	6.04	6.02	6.14	6.30	6.14	6.14	6.19	6.35
105	TC	70.5	71.4	77.6	84.9	76.8	76.5	80.8	87.9	81.0	80.9	83.2	90.5
	SHC	70.50	68.20	57.20	45.00	76.80	77.20	66.30	50.60	81.00	81.20	74.10	55.80
	kW	6.12	6.15	6.32	6.53	6.30	6.30	6.42	6.61	6.42	6.42	6.49	6.66
115	TC	67.6	68.0	73.4	80.7	73.4	73.0	76.6	83.6	77.4	77.4	78.7	85.5
	SHC	67.60	66.30	55.50	43.50	73.40	73.30	64.70	49.20	77.40	77.50	72.40	54.30
	kW	6.64	6.66	6.87	7.10	6.86	6.83	6.98	7.20	6.99	6.98	7.04	7.26

38ARS008/40RM008 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	72.9	75.6	82.3	89.6	79.4	80.0	85.9	93.4	83.9	83.9	88.3	95.8
	SHC	72.90	68.40	57.40	45.80	79.40	78.20	65.60	50.80	83.90	83.90	73.10	55.50
	kW	4.74	4.78	4.87	4.95	4.83	4.84	4.91	5.00	4.89	4.89	4.94	5.02
85	TC	71.6	74.0	80.6	87.8	78.0	78.4	84.1	91.4	82.4	82.4	86.4	93.7
	SHC	71.60	67.60	56.70	45.10	78.00	77.10	64.90	50.20	82.40	82.40	72.30	54.90
	kW	4.99	5.03	5.14	5.25	5.10	5.10	5.19	5.30	5.17	5.17	5.23	5.33
95	TC	69.0	70.8	77.1	84.2	75.1	75.2	80.4	87.6	79.3	79.3	82.6	89.7
	SHC	69.00	66.00	55.30	43.80	75.10	74.90	63.50	48.90	79.30	79.30	70.80	53.50
	kW	5.50	5.54	5.68	5.83	5.63	5.63	5.75	5.90	5.73	5.73	5.80	5.94
100	TC	67.7	69.2	75.3	82.3	73.6	73.6	78.5	85.5	77.7	77.7	80.7	87.6
	SHC	67.70	65.10	54.60	43.10	73.60	73.50	62.80	48.20	77.70	77.70	70.00	52.90
	kW	5.75	5.78	5.94	6.11	5.90	5.90	6.02	6.19	6.00	6.00	6.07	6.23
105	TC	66.3	67.5	73.5	80.4	72.1	72.1	76.5	83.5	76.0	76.0	78.7	85.4
	SHC	66.30	64.20	53.90	42.40	72.10	72.10	62.10	47.50	76.00	76.00	69.20	52.20
	kW	5.99	6.03	6.20	6.40	6.16	6.16	6.29	6.48	6.27	6.27	6.35	6.53
115	TC	63.6	64.3	69.8	76.6	69.1	68.9	72.7	79.4	72.8	72.8	74.7	81.2
	SHC	63.60	62.50	52.40	41.10	69.10	68.90	60.60	46.20	72.80	72.80	67.60	50.80
	kW	6.49	6.52	6.73	6.96	6.69	6.68	6.83	7.06	6.82	6.82	6.89	7.12

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

38ARS008/40RM012H 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	87.8	88.0	94.5	102.1	95.2	95.0	97.9	105.3	101.5	100.7	101.4	108.3
	SHC	87.80	87.10	72.70	56.20	95.20	95.00	85.10	64.00	101.50	100.70	97.70	71.80
	kW	4.95	4.95	5.01	5.09	5.04	5.03	5.06	5.12	5.12	5.10	5.10	5.15
85	TC	86.2	86.2	91.4	100.1	93.4	93.3	95.9	103.0	99.7	99.2	99.3	106.3
	SHC	86.20	85.90	72.00	55.50	93.40	93.30	84.20	63.30	99.70	99.20	96.80	71.00
	kW	5.23	5.24	5.31	5.41	5.33	5.33	5.36	5.45	5.43	5.43	5.40	5.48
95	TC	82.8	82.7	87.7	96.0	89.4	89.4	91.3	97.9	96.0	96.0	95.1	101.6
	SHC	82.80	83.10	70.30	54.10	89.40	89.40	82.30	61.70	96.00	96.00	94.40	69.50
	kW	5.81	5.81	5.90	6.05	5.95	5.95	5.98	6.11	6.08	6.08	6.04	6.15
100	TC	81.0	80.8	85.4	92.9	87.5	87.5	88.6	96.5	94.2	94.2	92.2	99.2
	SHC	81.00	81.30	69.50	53.10	87.50	87.50	81.30	60.90	94.20	94.20	93.30	68.70
	kW	6.09	6.09	6.19	6.35	6.24	6.24	6.27	6.42	6.39	6.40	6.34	6.48
105	TC	79.3	79.1	83.2	90.2	85.5	85.6	86.6	93.3	91.2	91.2	90.4	96.0
	SHC	79.30	79.60	68.70	52.40	85.50	85.60	80.30	60.10	91.20	91.20	91.30	67.90
	kW	6.37	6.37	6.47	6.68	6.55	6.55	6.57	6.72	6.70	6.70	6.65	6.80
115	TC	75.8	75.8	78.8	85.9	81.5	81.6	82.1	88.1	87.2	87.3	85.3	90.7
	SHC	75.80	75.80	66.80	50.90	81.50	81.60	78.30	58.50	87.20	87.20	86.70	66.50
	kW	6.94	6.92	7.04	7.28	7.12	7.14	7.16	7.35	7.31	7.31	7.26	7.43

38ARS008/40RM012 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	83.0	83.4	89.2	96.8	89.5	89.4	92.6	100.0	96.0	95.3	96.1	103.0
	SHC	83.00	82.20	68.90	53.30	89.50	89.40	80.00	60.20	96.00	95.30	91.00	67.10
	kW	4.88	4.88	4.95	5.03	4.96	4.95	4.99	5.06	5.04	5.02	5.03	5.09
85	TC	81.5	81.8	87.2	94.8	87.8	87.7	90.6	97.8	94.2	93.7	94.0	101.0
	SHC	81.50	81.00	68.20	52.60	87.80	87.70	79.10	59.50	94.20	93.70	90.10	66.40
	kW	5.15	5.16	5.24	5.34	5.25	5.25	5.29	5.38	5.35	5.34	5.33	5.41
95	TC	78.4	78.5	83.4	90.7	84.4	84.4	86.6	93.5	90.4	90.4	89.8	96.3
	SHC	78.40	78.40	66.70	51.20	84.40	84.40	77.40	58.10	90.40	90.40	88.20	65.00
	kW	5.71	5.71	5.81	5.96	5.84	5.84	5.88	6.01	5.97	5.97	5.94	6.06
100	TC	76.8	76.8	81.3	88.5	82.7	82.7	84.5	91.2	88.5	88.5	87.6	93.9
	SHC	76.80	76.80	65.90	50.40	82.70	82.70	76.50	57.40	88.50	88.50	87.20	64.30
	kW	5.98	5.98	6.09	6.25	6.12	6.12	6.16	6.31	6.26	6.27	6.23	6.37
105	TC	75.2	75.2	79.3	86.3	80.9	80.9	82.4	88.9	86.5	86.5	85.4	91.6
	SHC	75.20	75.20	65.10	49.70	80.90	80.90	75.60	56.70	86.50	86.50	85.40	63.60
	kW	6.25	6.25	6.36	6.55	6.41	6.41	6.45	6.61	6.56	6.56	6.53	6.68
115	TC	72.0	72.0	75.2	82.0	77.3	77.3	78.2	84.4	82.6	82.7	81.1	86.8
	SHC	72.00	72.00	63.50	48.30	77.30	77.30	73.90	55.20	82.60	82.60	81.10	62.20
	kW	6.80	6.79	6.91	7.14	6.98	6.98	7.02	7.22	7.16	7.16	7.12	7.30

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

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

38ARS009/40RM008H 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	88.8	94.3	103.3	112.7	98.4	100.7	108.3	119.7	105.1	105.0	112.8	123.8
	SHC kW	88.80 6.40	80.40 6.60	68.30 6.70	55.90 6.90	98.40 6.60	93.80 6.70	78.50 6.80	62.10 7.00	105.10 6.80	104.20 6.80	87.60 6.90	67.80 7.10
85	TC	87.0	92.1	101.0	110.6	96.5	98.4	106.4	116.7	102.9	103.2	109.9	120.8
	SHC kW	87.00 6.80	79.30 6.90	67.30 7.10	54.90 7.30	96.50 7.00	92.60 7.00	77.50 7.20	61.20 7.40	102.90 7.10	102.40 7.10	86.50 7.30	66.80 7.50
95	TC	83.7	87.7	96.2	105.5	92.6	93.8	101.5	110.2	98.7	98.6	104.3	114.8
	SHC kW	83.70 7.40	77.20 7.50	65.30 7.70	52.90 8.00	92.60 7.60	90.10 7.70	75.40 7.90	59.20 8.10	98.70 7.80	98.90 7.80	84.40 8.00	65.00 8.20
100	TC	82.0	85.4	93.8	103.2	90.5	91.4	98.7	108.4	96.4	96.4	102.1	111.2
	SHC kW	82.00 7.70	76.10 7.80	64.30 8.10	51.90 8.30	90.50 8.00	88.90 8.00	74.30 8.20	58.20 8.50	96.40 8.20	96.70 8.20	83.30 8.30	63.70 8.60
105	TC	80.1	83.3	91.3	100.5	88.4	89.0	96.0	104.7	94.2	94.1	99.3	108.5
	SHC kW	80.10 8.00	74.90 8.10	63.20 8.40	51.00 8.70	88.40 8.30	87.40 8.30	73.20 8.60	57.20 8.90	94.20 8.50	94.50 8.50	82.10 8.70	62.70 9.00
115	TC	76.6	78.9	86.3	95.3	84.4	84.5	90.7	99.6	89.9	89.7	93.6	102.4
	SHC kW	76.60 8.60	72.80 8.70	61.10 9.00	49.00 9.40	84.40 9.00	84.20 8.90	71.10 9.20	55.10 9.60	89.90 9.20	89.80 9.10	79.90 9.40	60.90 9.70

38ARS009/40RM008 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	83.3	88.7	97.4	106.4	92.0	94.6	102.4	112.3	98.2	98.5	106.4	116.2
	SHC kW	83.30 6.30	75.50 6.50	64.20 6.60	52.50 6.80	92.00 6.50	87.40 6.60	73.20 6.70	58.10 6.90	98.20 6.60	96.80 6.60	81.50 6.80	63.20 7.00
85	TC	81.8	86.8	95.3	104.4	90.2	92.5	100.5	110.3	96.2	96.8	103.4	113.3
	SHC kW	81.80 6.60	74.60 6.80	63.30 6.90	51.60 7.20	90.20 6.80	86.30 6.90	72.30 7.10	57.20 7.30	96.20 7.00	95.30 7.00	80.50 7.10	62.40 7.30
95	TC	78.6	82.8	91.0	99.5	86.8	88.3	95.8	104.4	92.5	92.6	98.5	108.4
	SHC kW	78.60 7.20	72.60 7.40	61.50 7.60	49.80 7.90	86.80 7.50	84.00 7.50	70.40 7.70	55.50 8.00	92.50 7.60	92.30 7.60	78.60 7.80	60.60 8.10
100	TC	77.0	80.8	88.7	97.6	84.9	86.1	93.4	102.4	90.4	90.5	96.4	105.4
	SHC kW	77.00 7.50	71.60 7.70	60.60 7.90	49.00 8.20	84.90 7.80	82.80 7.80	69.40 8.10	54.60 8.30	90.40 8.00	90.40 8.00	77.60 8.20	59.60 8.40
105	TC	75.4	78.7	86.5	95.2	83.0	83.9	90.9	99.5	88.5	88.5	93.9	102.4
	SHC kW	75.40 7.80	70.50 7.90	59.60 8.20	48.10 8.50	83.00 8.10	81.60 8.10	68.60 8.40	53.70 8.70	88.50 8.30	88.50 8.30	76.60 8.50	58.70 8.80
115	TC	72.1	74.6	82.1	90.4	79.4	79.7	86.1	94.6	84.5	84.3	88.8	97.2
	SHC kW	72.10 8.40	68.60 8.50	57.70 8.90	46.30 9.20	79.40 8.70	79.10 8.70	66.60 9.00	51.80 9.40	84.50 9.00	84.30 8.90	74.70 9.20	56.90 9.50

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



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

38ARS009/40RM012H 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	100.0	102.4	110.5	121.3	108.7	109.5	115.5	126.2	114.4	114.4	118.4	129.1
	SHC	100.00	94.70	79.10	62.70	108.70	108.70	91.80	70.50	114.40	114.40	102.50	77.80
	kW	6.60	6.70	6.90	7.10	6.80	6.80	7.00	7.20	7.00	7.00	7.00	7.20
85	TC	98.1	99.3	108.6	117.4	106.6	106.7	112.5	123.2	112.5	112.5	116.3	126.1
	SHC	98.10	92.90	77.90	61.70	106.60	105.80	90.50	69.40	112.50	112.50	102.30	76.80
	kW	7.00	7.00	7.20	7.40	7.20	7.20	7.30	7.50	7.30	7.30	7.40	7.60
95	TC	93.6	94.9	103.4	112.5	102.1	102.1	106.7	116.4	108.6	108.6	110.5	119.4
	SHC	93.60	90.90	75.90	59.60	102.10	103.00	88.20	67.30	108.60	108.60	99.10	74.70
	kW	7.70	7.70	7.90	8.20	7.90	7.90	8.10	8.30	8.10	8.10	8.10	8.40
100	TC	91.8	92.7	100.8	109.5	99.9	99.1	103.7	113.5	104.7	104.7	107.6	116.4
	SHC	91.80	89.50	74.80	58.60	99.90	100.00	87.00	66.40	104.70	104.70	97.90	73.70
	kW	8.00	8.00	8.30	8.60	8.20	8.20	8.40	8.60	8.40	8.40	8.50	8.70
105	TC	89.9	90.1	98.4	106.7	97.8	97.8	102.2	110.5	102.8	102.8	103.7	113.5
	SHC	89.90	88.20	73.70	57.70	97.80	97.80	85.90	65.30	102.80	102.80	96.80	72.70
	kW	8.30	8.30	8.60	8.90	8.60	8.60	8.80	9.10	8.90	8.90	8.90	9.10
115	TC	85.6	85.6	91.5	101.0	92.6	92.6	96.0	104.8	98.2	98.2	99.6	106.7
	SHC	85.60	85.30	71.60	55.60	92.60	92.60	83.70	63.20	98.20	98.20	94.80	70.60
	kW	9.00	9.00	9.30	9.60	9.30	9.30	9.40	9.80	9.50	9.50	9.60	9.90

38ARS009/40RM012 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	94.7	97.2	105.4	115.2	103.4	103.4	110.3	120.2	108.4	108.4	113.3	123.1
	SHC	94.70	89.90	75.40	59.80	103.40	102.40	86.80	66.90	108.40	108.40	97.00	73.50
	kW	6.60	6.60	6.80	7.00	6.70	6.70	6.90	7.10	6.80	6.80	6.90	7.10
85	TC	92.8	95.0	103.4	112.3	100.5	101.5	107.4	117.2	106.4	106.4	110.3	120.2
	SHC	92.80	88.80	74.40	58.80	100.50	100.50	85.80	65.90	106.40	106.40	95.90	72.50
	kW	6.90	6.90	7.10	7.30	7.10	7.10	7.20	7.40	7.20	7.20	7.30	7.50
95	TC	89.1	90.6	98.2	107.4	96.8	96.8	102.4	111.3	102.4	102.4	105.4	114.3
	SHC	89.10	86.50	72.40	56.90	96.80	96.80	83.70	64.00	102.40	102.40	93.70	70.60
	kW	7.50	7.60	7.80	8.10	7.80	7.80	7.90	8.20	7.90	7.90	8.00	8.20
100	TC	87.3	88.4	95.6	104.4	94.7	94.8	99.5	108.4	99.5	99.5	102.4	111.3
	SHC	87.30	85.20	71.40	56.00	94.70	94.80	82.60	63.10	99.50	99.50	92.50	69.70
	kW	7.90	7.90	8.10	8.40	8.10	8.10	8.30	8.50	8.30	8.30	8.40	8.60
105	TC	85.3	86.1	93.2	102.4	92.6	92.6	97.0	105.4	97.6	97.6	99.5	108.4
	SHC	85.30	83.90	70.40	55.10	92.60	92.60	81.60	62.20	97.60	97.60	91.30	68.80
	kW	8.20	8.20	8.50	8.80	8.40	8.40	8.60	8.90	8.60	8.60	8.70	9.00
115	TC	81.5	81.7	88.1	96.7	88.3	88.3	91.7	100.5	93.0	93.0	94.5	102.4
	SHC	81.50	81.30	68.50	53.20	88.30	88.30	79.50	60.30	93.00	93.00	89.00	66.90
	kW	8.80	8.80	9.10	9.50	9.10	9.10	9.30	9.60	9.30	9.30	9.40	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

Performance data (cont)



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	90.2	95.7	104.9	114.4	99.9	102.2	110.0	121.5	106.7	106.6	114.5	125.7
	SHC	90.20	81.60	69.30	56.70	99.90	95.20	79.70	63.00	106.70	105.80	88.90	68.90
	kW	6.54	6.65	6.82	7.01	6.72	6.77	6.94	7.12	6.86	6.85	7.00	7.20
85	TC	88.4	93.5	102.6	112.3	98.0	99.9	108.0	118.5	104.5	104.7	111.6	122.7
	SHC	88.40	80.50	68.30	55.70	98.00	94.00	78.70	62.10	104.50	103.90	87.80	67.90
	kW	6.87	6.99	7.16	7.39	7.07	7.10	7.30	7.51	7.22	7.23	7.37	7.58
95	TC	84.9	89.1	97.7	107.2	94.0	95.2	103.1	111.9	100.2	100.1	105.9	116.5
	SHC	84.90	78.40	66.30	53.70	94.00	91.50	76.60	60.10	100.20	100.50	85.70	65.90
	kW	7.50	7.61	7.85	8.11	7.75	7.79	8.00	8.26	7.92	7.93	8.10	8.35
100	TC	83.2	86.7	95.2	104.7	91.9	92.8	100.2	110.1	97.9	97.9	103.6	112.9
	SHC	83.20	77.30	65.30	52.70	91.90	90.20	75.40	59.10	97.90	98.20	84.60	64.70
	kW	7.82	7.92	8.19	8.47	8.09	8.11	8.34	8.62	8.27	8.27	8.44	8.72
105	TC	81.3	84.5	92.7	102.0	89.8	90.4	97.5	106.3	95.7	95.6	100.8	110.2
	SHC	81.30	76.10	64.20	51.80	89.80	88.70	74.30	58.10	95.70	95.90	83.40	63.70
	kW	8.13	8.23	8.51	8.83	8.42	8.44	8.68	8.99	8.63	8.62	8.80	9.09
115	TC	77.8	80.1	87.6	96.8	85.6	85.7	92.0	101.1	91.2	91.0	95.0	104.0
	SHC	77.80	73.90	62.00	49.70	85.60	85.40	72.20	56.00	91.20	91.10	81.10	61.80
	kW	8.75	8.86	9.18	9.54	9.10	9.08	9.36	9.72	9.32	9.29	9.50	9.83

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



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

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	101.5	104.0	112.2	123.1	110.3	111.2	117.2	128.1	116.2	116.2	120.2	131.1
	SHC	101.50	96.10	80.30	63.70	110.30	110.40	93.20	71.50	116.20	116.20	104.00	79.00
	kW	6.75	6.80	6.97	7.18	6.93	6.93	7.07	7.28	7.06	7.06	7.14	7.31
85	TC	99.6	100.8	110.3	119.2	108.2	108.3	114.2	125.1	114.2	114.2	118.1	128.1
	SHC	99.60	94.40	79.10	62.60	108.20	107.40	91.90	70.40	114.20	114.20	103.90	78.00
	kW	7.08	7.14	7.32	7.56	7.29	7.29	7.43	7.66	7.44	7.44	7.51	7.71
95	TC	95.0	96.4	104.9	114.2	103.6	103.6	108.3	118.2	110.2	110.2	112.2	121.2
	SHC	95.00	92.20	77.10	60.50	103.60	104.60	89.50	68.40	110.20	110.20	100.60	75.80
	kW	7.77	7.81	8.04	8.32	8.01	8.01	8.18	8.43	8.19	8.19	8.25	8.54
100	TC	93.2	94.1	102.3	111.2	101.4	100.6	105.3	115.2	106.3	106.3	109.2	118.2
	SHC	93.20	90.80	75.90	59.50	101.40	101.50	88.30	67.40	106.30	106.30	99.40	74.80
	kW	8.10	8.14	8.39	8.72	8.36	8.37	8.56	8.74	8.53	8.52	8.65	8.82
105	TC	91.3	91.4	99.9	108.4	99.3	99.3	103.7	112.2	104.4	104.4	105.3	115.2
	SHC	91.30	89.50	74.80	58.50	99.30	99.30	87.20	66.30	104.40	104.40	98.30	73.80
	kW	8.44	8.44	8.76	9.08	8.73	8.74	8.90	9.20	9.00	9.00	9.00	9.28
115	TC	86.9	86.9	92.9	102.5	94.0	94.0	97.5	106.4	99.7	99.7	101.1	108.3
	SHC	86.90	86.60	72.70	56.50	94.00	94.00	85.00	64.10	99.70	99.70	96.20	71.70
	kW	9.12	9.13	9.43	9.79	9.42	9.42	9.58	9.93	9.63	9.62	9.71	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	96.1	98.7	107.0	117.0	105.0	105.0	112.0	122.0	110.0	110.0	115.0	125.0
	SHC	96.10	91.30	76.50	60.70	105.00	104.00	88.10	67.90	110.00	110.00	98.50	74.60
	kW	6.67	6.72	6.89	7.08	6.83	6.84	6.98	7.17	6.95	6.95	7.04	7.22
85	TC	94.2	96.4	105.0	114.0	102.0	103.0	109.0	119.0	108.0	108.0	112.0	122.0
	SHC	94.20	90.20	75.50	59.70	102.00	102.00	87.10	66.90	108.00	108.00	97.40	73.60
	kW	7.00	7.05	7.23	7.45	7.18	7.19	7.33	7.54	7.31	7.31	7.40	7.60
95	TC	90.5	92.0	99.7	109.0	98.3	98.3	104.0	113.0	104.0	104.0	107.0	116.0
	SHC	90.50	87.80	73.50	57.80	98.30	98.30	85.00	65.00	104.00	104.00	95.10	71.70
	kW	7.66	7.70	7.92	8.19	7.88	7.88	8.05	8.30	8.04	8.04	8.12	8.37
100	TC	88.6	89.7	97.1	106.0	96.1	96.2	101.0	110.0	101.0	101.0	104.0	113.0
	SHC	88.60	86.50	72.50	56.90	96.10	96.20	83.90	64.10	101.00	101.00	93.90	70.80
	kW	7.98	8.02	8.26	8.55	8.22	8.23	8.39	8.66	8.39	8.39	8.48	8.74
105	TC	86.6	87.4	94.6	104.0	94.0	94.0	98.5	107.0	99.1	99.1	101.0	110.0
	SHC	86.60	85.20	71.50	55.90	94.00	94.00	82.80	63.10	99.10	99.10	92.70	69.80
	kW	8.31	8.33	8.59	8.91	8.56	8.57	8.73	9.03	8.75	8.75	8.83	9.11
115	TC	82.7	82.9	89.4	98.2	89.6	89.6	93.1	102.0	94.4	94.4	95.9	104.0
	SHC	82.70	82.50	69.50	54.00	89.60	89.60	80.70	61.20	94.40	94.40	90.40	67.90
	kW	8.95	8.96	9.26	9.62	9.25	9.25	9.41	9.76	9.46	9.45	9.54	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

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

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	109.3	111.2	118.3	129.2	119.2	118.2	124.2	134.1	126.0	126.0	127.1	138.0
	SHC kW	109.30 6.94	107.40 6.96	89.50 7.12	69.80 7.33	119.20 7.12	119.20 7.49	104.20 7.22	79.00 7.39	126.00 7.23	126.00 7.23	116.30 7.28	88.00 7.45
85	TC	107.3	107.3	115.2	126.1	115.2	115.2	121.1	131.2	122.1	122.1	125.0	133.1
	SHC kW	107.30 7.30	106.00 7.31	88.40 7.49	68.90 7.71	115.20 7.50	115.20 7.49	103.00 7.59	78.10 7.81	122.10 7.63	122.10 7.62	116.30 7.66	86.70 7.85
95	TC	102.4	102.8	110.3	120.3	111.2	111.2	115.2	124.3	117.1	117.1	118.1	126.2
	SHC kW	102.40 8.03	103.00 8.02	86.20 8.22	66.70 8.47	111.20 8.26	111.20 8.26	100.80 8.36	76.00 8.62	117.10 8.42	117.10 8.41	113.30 8.48	84.70 8.68
100	TC	101.3	99.6	108.2	118.2	108.2	108.2	112.1	121.1	115.1	115.1	115.2	123.2
	SHC kW	101.30 8.38	101.10 8.37	85.00 8.59	65.60 8.88	108.20 8.63	108.20 8.63	99.60 8.79	74.90 8.99	115.10 8.75	115.10 8.75	111.40 8.80	83.70 9.06
105	TC	98.2	98.1	104.7	114.3	106.3	105.3	108.2	117.2	112.1	112.1	112.1	120.1
	SHC kW	98.20 8.79	98.20 8.70	84.00 8.92	64.50 9.25	106.30 8.95	105.30 8.94	98.60 9.06	73.90 9.44	112.10 9.12	112.10 9.12	110.30 9.15	82.50 9.52
115	TC	93.7	93.3	99.1	108.3	101.5	101.4	102.7	111.3	106.1	106.0	106.1	113.2
	SHC kW	93.70 9.47	93.30 9.45	81.70 9.60	62.50 10.06	101.50 9.74	101.40 9.73	95.80 9.77	71.70 10.18	106.10 9.93	106.00 9.93	107.30 9.95	80.40 10.25

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	103.0	105.0	113.0	123.0	112.0	112.0	118.0	128.0	118.0	118.0	121.0	131.0
	SHC kW	103.00 6.81	101.00 6.84	84.60 7.00	66.20 7.20	112.00 6.98	112.00 6.98	97.70 7.09	74.30 7.27	118.00 7.09	118.00 7.09	109.00 7.15	82.10 7.33
85	TC	101.0	102.0	110.0	120.0	109.0	109.0	115.0	125.0	115.0	115.0	118.0	127.0
	SHC kW	101.00 7.16	99.60 7.18	83.50 7.36	65.20 7.58	109.00 7.34	109.00 7.34	96.60 7.46	73.40 7.67	115.00 7.47	115.00 7.46	108.00 7.52	81.00 7.72
95	TC	97.1	97.5	105.0	115.0	105.0	105.0	109.0	119.0	110.0	110.0	112.0	121.0
	SHC kW	97.10 7.85	96.60 7.86	81.40 8.07	63.10 8.34	105.00 8.07	105.00 8.07	94.30 8.19	71.40 8.45	110.00 8.22	110.00 8.22	105.00 8.27	79.00 8.51
100	TC	95.0	95.2	102.0	112.0	102.0	102.0	106.0	115.0	108.0	108.0	109.0	118.0
	SHC kW	95.00 8.19	94.70 8.19	80.30 8.41	62.10 8.71	102.00 8.42	102.00 8.42	93.10 8.54	70.30 8.82	108.00 8.58	108.00 8.58	104.00 8.63	78.00 8.89
105	TC	92.8	92.8	99.4	109.0	100.0	100.0	103.0	112.0	105.0	105.0	106.0	114.0
	SHC kW	92.80 8.53	92.80 8.53	79.20 8.75	61.10 9.08	100.00 8.78	100.00 8.77	91.90 8.89	69.30 9.19	105.00 8.95	105.00 8.95	102.00 8.98	76.90 9.27
115	TC	88.5	88.2	93.8	103.0	95.3	95.2	97.4	106.0	99.9	99.8	100.0	108.0
	SHC kW	88.50 9.21	88.20 9.19	77.00 9.43	59.00 9.81	95.30 9.49	95.20 9.48	89.40 9.60	67.20 9.93	99.90 9.68	99.80 9.68	99.00 9.70	74.90 10.00

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



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

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
80	TC	100.0	102.0	110.0	120.0	109.0	109.0	115.0	124.0	115.0	115.0	118.0	126.0
	SHC	100.00	95.70	79.50	62.60	109.00	109.00	92.20	70.40	115.00	115.00	104.00	77.80
	kW	6.61	6.63	6.71	6.83	6.70	6.70	6.77	6.88	6.77	6.77	6.80	6.92
85	TC	98.9	101.0	108.0	118.0	107.0	107.0	113.0	122.0	113.0	113.0	116.0	124.0
	SHC	98.90	94.80	78.80	61.90	107.00	107.00	91.30	69.60	113.00	113.00	103.00	77.10
	kW	6.98	7.00	7.09	7.21	7.07	7.07	7.14	7.26	7.15	7.14	7.18	7.29
95	TC	96.0	97.2	104.0	113.0	104.0	104.0	109.0	117.0	109.0	109.0	112.0	120.0
	SHC	96.00	93.00	77.20	60.40	104.00	104.00	89.70	68.20	109.00	109.00	101.00	75.60
	kW	7.72	7.74	7.84	7.96	7.82	7.83	7.89	8.02	7.90	7.90	7.93	8.05
100	TC	94.4	95.4	102.0	111.0	102.0	102.0	106.0	115.0	107.0	107.0	109.0	117.0
	SHC	94.40	92.00	76.40	59.60	102.00	102.00	88.90	67.40	107.00	107.00	100.00	74.90
	kW	8.14	8.16	8.25	8.38	8.25	8.25	8.31	8.44	8.33	8.33	8.36	8.48
105	TC	92.8	93.5	100.0	109.0	100.0	100.0	104.0	113.0	105.0	105.0	107.0	115.0
	SHC	92.80	91.00	75.60	58.80	100.00	100.00	88.00	66.60	105.00	105.00	99.00	74.10
	kW	8.57	8.57	8.67	8.81	8.67	8.67	8.74	8.87	8.75	8.75	8.78	8.90
115	TC	89.7	89.8	96.3	105.0	96.6	96.7	100.0	108.0	102.0	101.0	103.0	110.0
	SHC	89.70	88.90	73.90	57.30	96.60	96.70	86.30	65.10	102.00	101.00	97.00	72.50
	kW	9.41	9.40	9.51	9.66	9.52	9.52	9.58	9.72	9.60	9.60	9.62	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
80	TC	95.2	97.4	105.0	114.0	103.0	103.0	109.0	118.0	108.0	108.0	112.0	120.0
	SHC	95.20	90.70	75.60	59.50	103.00	103.00	86.90	66.50	108.00	108.00	97.00	73.00
	kW	6.55	6.58	6.66	6.76	6.63	6.63	6.70	6.81	6.69	6.69	6.73	6.84
85	TC	93.9	95.9	103.0	112.0	101.0	102.0	107.0	116.0	107.0	107.0	110.0	118.0
	SHC	93.90	89.80	74.90	58.80	101.00	101.00	86.20	65.80	107.00	107.00	96.20	72.30
	kW	6.92	6.95	7.03	7.13	7.01	7.01	7.07	7.19	7.07	7.07	7.11	7.22
95	TC	91.2	92.7	99.8	108.0	98.5	98.5	104.0	112.0	103.0	103.0	106.0	114.0
	SHC	91.20	88.20	73.40	57.50	98.50	98.50	84.70	64.50	103.00	103.00	94.60	71.00
	kW	7.67	7.69	7.77	7.89	7.76	7.76	7.82	7.94	7.82	7.82	7.86	7.97
100	TC	89.8	91.0	97.9	106.0	96.8	96.8	102.0	110.0	102.0	102.0	104.0	112.0
	SHC	89.80	87.20	72.70	56.80	96.80	96.80	83.90	63.80	102.00	102.00	93.80	70.30
	kW	8.08	8.10	8.19	8.31	8.18	8.18	8.24	8.37	8.24	8.24	8.28	8.40
105	TC	88.3	89.3	96.0	104.0	95.2	95.2	99.6	108.0	99.9	99.9	102.0	110.0
	SHC	88.30	86.30	72.00	56.00	95.20	95.20	83.20	63.10	99.90	99.90	92.90	69.60
	kW	8.50	8.52	8.61	8.73	8.60	8.60	8.66	8.79	8.67	8.67	8.70	8.82
115	TC	85.4	86.0	92.2	100.0	91.9	92.0	95.6	103.0	96.4	96.4	98.1	105.0
	SHC	85.40	84.40	70.50	54.60	91.90	92.00	81.60	61.70	96.40	96.40	91.10	68.20
	kW	9.34	9.35	9.44	9.57	9.43	9.44	9.50	9.63	9.51	9.51	9.54	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

Performance data (cont)



COMBINATION RATINGS — ENGLISH (cont)

38AR007-012

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	107.0	108.0	115.0	124.0	115.0	115.0	119.0	128.0	122.0	122.0	123.0	132.0
	SHC	107.00	105.00	87.90	68.00	115.00	115.00	102.00	77.10	122.00	122.00	116.00	86.00
	kW	6.68	6.68	6.77	6.89	6.77	6.77	6.82	6.94	6.86	6.86	6.87	6.99
85	TC	105.0	106.0	113.0	122.0	113.0	113.0	117.0	126.0	121.0	121.0	121.0	129.0
	SHC	105.00	103.00	87.10	67.30	113.00	113.00	101.00	76.30	121.00	121.00	115.00	85.20
	kW	7.05	7.06	7.15	7.27	7.15	7.15	7.20	7.32	7.24	7.24	7.25	7.37
95	TC	102.0	103.0	109.0	118.0	110.0	110.0	113.0	122.0	117.0	117.0	117.0	125.0
	SHC	102.00	101.00	85.50	65.80	110.00	110.00	99.60	74.90	117.00	117.00	113.00	83.70
	kW	7.80	7.81	7.90	8.03	7.91	7.91	7.95	8.08	8.01	8.01	8.01	8.13
100	TC	100.0	101.0	107.0	116.0	108.0	108.0	111.0	119.0	115.0	115.0	114.0	122.0
	SHC	100.00	99.30	84.60	65.00	108.00	108.00	98.70	74.10	115.00	115.00	112.00	83.00
	kW	8.22	8.23	8.32	8.45	8.34	8.34	8.38	8.51	8.44	8.44	8.43	8.56
105	TC	98.6	99.1	105.0	113.0	106.0	106.0	109.0	117.0	113.0	113.0	112.0	120.0
	SHC	98.60	97.80	83.80	64.30	106.00	106.00	97.80	73.30	113.00	113.00	111.00	82.20
	kW	8.65	8.65	8.74	8.88	8.76	8.76	8.80	8.94	8.86	8.87	8.85	8.98
115	TC	95.3	95.4	100.0	109.0	102.0	102.0	104.0	112.0	108.0	109.0	108.0	115.0
	SHC	95.30	94.90	82.10	62.70	102.00	102.00	95.90	71.80	108.00	109.00	108.00	80.60
	kW	9.49	9.49	9.59	9.73	9.61	9.61	9.65	9.79	9.72	9.73	9.70	9.84

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	101.0	103.0	110.0	119.0	109.0	109.0	114.0	123.0	116.0	116.0	117.0	126.0
	SHC	101.00	99.00	83.10	64.50	109.00	109.00	95.90	72.50	116.00	116.00	108.00	80.40
	kW	6.61	6.63	6.71	6.82	6.70	6.70	6.76	6.87	6.78	6.78	6.80	6.92
85	TC	99.8	101.0	108.0	117.0	107.0	107.0	112.0	121.0	114.0	114.0	115.0	124.0
	SHC	99.80	97.80	82.30	63.80	107.00	107.00	95.10	71.80	114.00	114.00	107.00	79.60
	kW	6.99	7.00	7.08	7.20	7.08	7.08	7.13	7.25	7.16	7.15	7.18	7.29
95	TC	96.8	97.6	104.0	113.0	104.0	104.0	108.0	117.0	111.0	111.0	111.0	120.0
	SHC	96.80	95.40	80.80	62.40	104.00	104.00	93.40	70.40	111.00	111.00	105.00	78.20
	kW	7.74	7.75	7.83	7.95	7.83	7.83	7.88	8.01	7.92	7.91	7.93	8.05
100	TC	95.2	95.8	102.0	111.0	102.0	102.0	106.0	114.0	109.0	109.0	109.0	117.0
	SHC	95.20	94.00	80.00	61.60	102.00	102.00	92.50	69.60	109.00	109.00	104.00	77.40
	kW	8.16	8.16	8.25	8.38	8.25	8.25	8.30	8.43	8.34	8.34	8.35	8.48
105	TC	93.6	94.1	100.0	109.0	101.0	101.0	104.0	112.0	107.0	107.0	107.0	115.0
	SHC	93.60	92.60	79.20	60.90	101.00	101.00	91.60	68.90	107.00	107.00	103.00	76.70
	kW	8.58	8.58	8.67	8.8	8.68	8.68	8.72	8.85	8.77	8.77	8.77	8.90
115	TC	90.4	90.7	95.9	104.0	97.0	97.0	99.4	107.0	103.0	103.0	102.0	110.0
	SHC	90.40	89.80	77.60	59.40	97.00	97.00	89.80	67.40	103.00	103.00	101.00	75.10
	kW	9.42	9.41	9.51	9.65	9.52	9.52	9.56	9.70	9.62	9.63	9.61	9.74

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



38ARZ007-012, 38ARS008-012, 38ARD012

38AR007-012

UNIT SIZE 38AR	NOMINAL VOLTAGE V-Ph-Hz	VOLTAGE RANGE*		COMPRESSOR		FAN MOTORS (Qty 2)		POWER SUPPLY	
		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
S008	460-3-60	418	506	14.1	80	0.7	1.9	19.0	25
	400-3-50	360	440	14.1	80	0.7	1.9	19.0	25
S009	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
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	lbs
Z007	7.7	17.3
Z008	15.5	34.2
Z012	15.5	34.2
S008	15.5	34.2
S009	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)	-29 (-20)
Z008	100%		15 (60)	
Z012	100%		11 (52)	
S008	100%		15 (60)	
S009	100%		12 (53)	
S012*	100%	32 (90)	9 (48)	
	67%	27 (80)	11 (52)	
D012	100%	32 (90)	10 (50)	

*Unit has one step of unloading.

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
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
S008	3/8	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8
S009	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 3/8	(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:

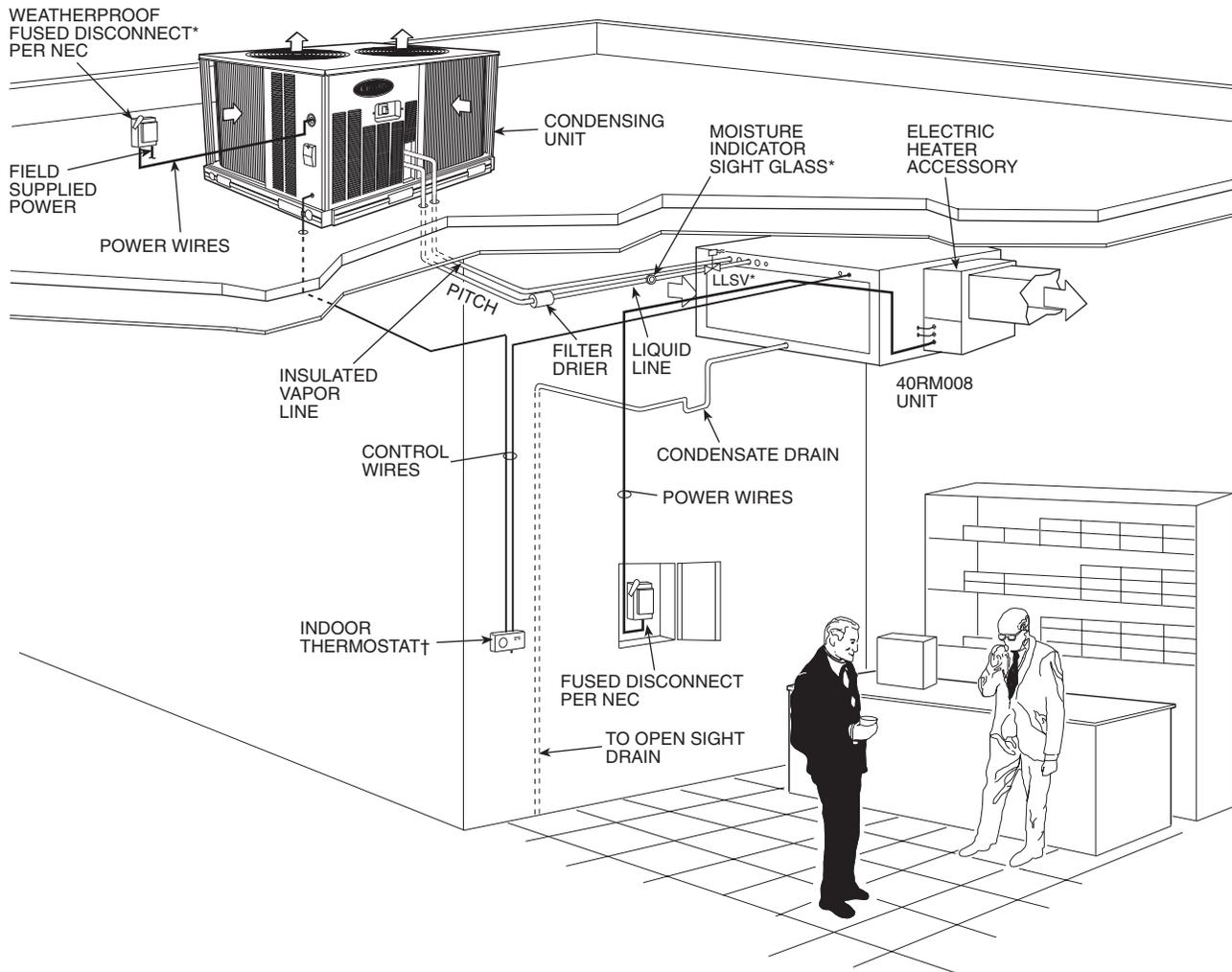
1. Pipe sizes are based on a 2° F loss for liquid and suction lines.
2. Pipe sizes are based on the maximum linear length, shown for each column, plus a 50% allowance for fittings.
3. Charge units with R-22 in accordance with unit installation instructions.

Typical piping and wiring



38AR007-012

ROOFTOP INSTALLATION — 38ARZ007-012, 38ARS008-012, 38ARD012



LEGEND

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

*Field supplied.
†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, 38ARS008-012



38AR007-012

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, Sizes 008-012

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), latest revision.
- 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 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 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.
2. Minimum safety devices which are equipped with automatic reset (after resetting first at thermostat), shall include:
 - a. High discharge pressure cutout.
 - b. Loss-of-charge cutout.

Guide specifications — 38ARZ007-012, 38ARS008-012 (cont)



38AR007-012

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.

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 (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. standards). 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.
- 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).



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), latest revision.
- 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 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.

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. Loss-of-charge 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 160 in./lbs. (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./lbs. (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.

- 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.

Model number nomenclature — 38ARD,AKS014-024 units



38AKS 014 -- -- 8 0 1 --

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

Nominal Capacity – kW (Tons)
014 – 36.6 (10.3)
016 – 45.7 (12.8)
024 – 64.3 (18.0)

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

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



Certificate No FM 21837

Approvals:

ISO 9002
EN 29002
BS5750 PART 2
ANSI/ASQC Q92

38ARD, 38AKS014-024 UNITS

38ARD,AKS014-024

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) Copper-Fin Coil (Optional)	307 373	336 402	347 410
REFRIGERANT TYPE* Operating Charge, Typical (kg)† Shipping Charge (kg)	5.25/Circuit	R-22 5.25/Circuit 1.4	6.3/Circuit
COMPRESSOR Qty...Model Oil Charge (L) Speed (r/s) Crankcase Heater Watts	2...ZR72 1.8 (ea) 48.3	Scroll 2...ZR94 2.5 (ea) 48.3 70	2...ZR125 3.3 (ea) 48.3
CONDENSER FANS Qty...r/s Diameter (mm) Nominal kW Nominal Airflow (L/s total) Watts (total)		2...15 660 0.37 4346 1050	
CONDENSER COIL Face Area (sq m total) Rows...Fins/m Storage Capacity (kg)**		2.71 3...590 21.8	
CONTROLS Pressurestat Settings (kPa) High Open Close Low Open Close		2937 ± 48 2206 ± 138 186 ± 28 462 ± 48	
FAN CYCLING CONTROLS Operating Pressure (kPa) No. 2 Fan, Close Open		1758 ± 69 1103 ± 69	
PRESSURE RELIEF Location Temperature (C)		Liquid Line 93	
PIPING CONNECTIONS (in. ODM) Suction Liquid Hot Gas Stub		1 ³ / ₈ 1/2 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 for 38ARD014 and 54.4 C for 38ARD016 and 024.

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		Reciprocating, Semi-Hermetic	
Qty...Model	1...06DD328	1...06DD537	1...06EA250
Oil Change (L)	4.73	4.73	7.33
No. Cylinders	6	6	4
Speed (r/s)		24.2	
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	
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 ⁵ / ₈	
Hot Gas Stub		3 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 for 38AKS014, and 54.4 C for 38AKS016 and 024.

38AKS014-024



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		2...900	
Qty...Rpm		26	
Diameter (in.)		1/2	
Nominal Hp		9210	
Nominal Airflow (cfm, total)		1050	
Watts (total)			
CONDENSER COIL		29.2	
Face Area (sq ft total)		3...15	
Rows...Fins/in.		48	
Storage Capacity (lb)**			
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. ODM)			
Suction		1 ³ / ₈	
Liquid		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 123 F for 38ARD014 and 130 F for 38ARD016 and 024.

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		Liquid Line	
Location			
Temperature (F)	200	200	210
PIPING CONNECTIONS (in. ODM)			
Suction	1 ³ / ₈	1 ³ / ₈	1 ⁵ / ₈
Liquid		5 ⁵ / ₈	
Hot Gas Stub		3 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.

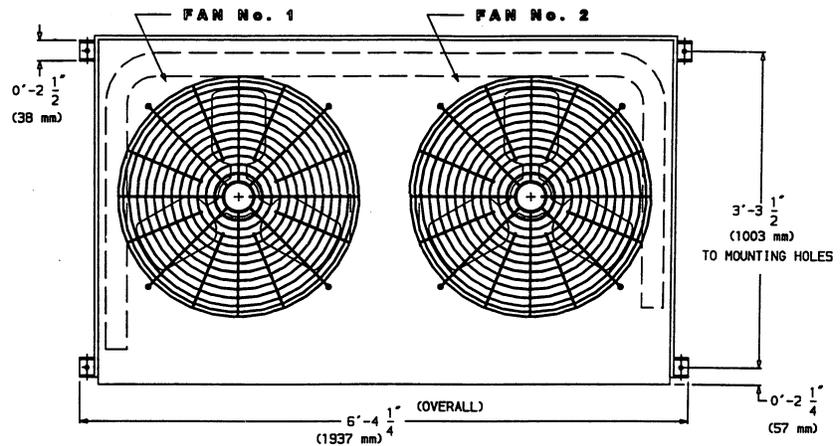
††Storage capacity is measured at liquid saturated temperatures of 123 F for 38AKS014 and 130 F for 38AKS016 and 024.

38AKS014-024

Dimensions



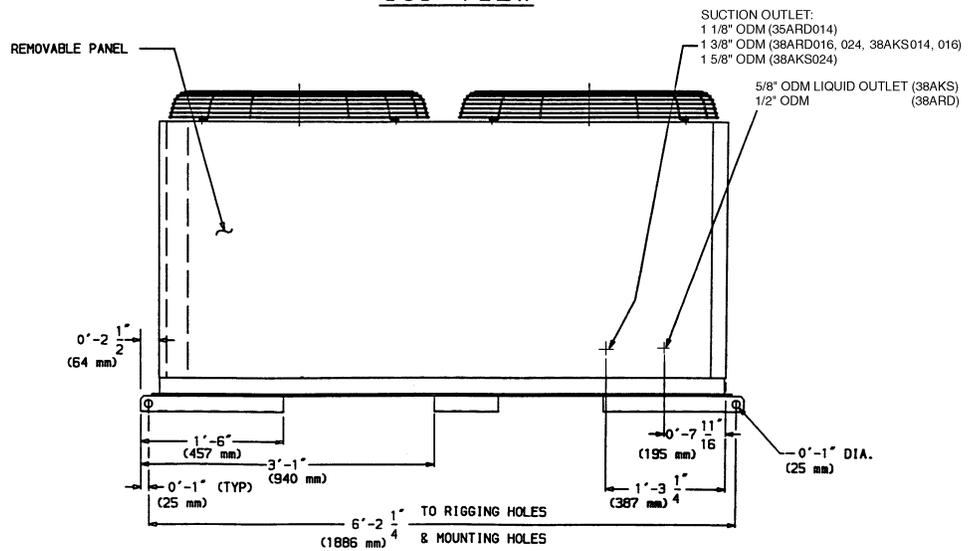
38ARD014-024, 38AKS014-024



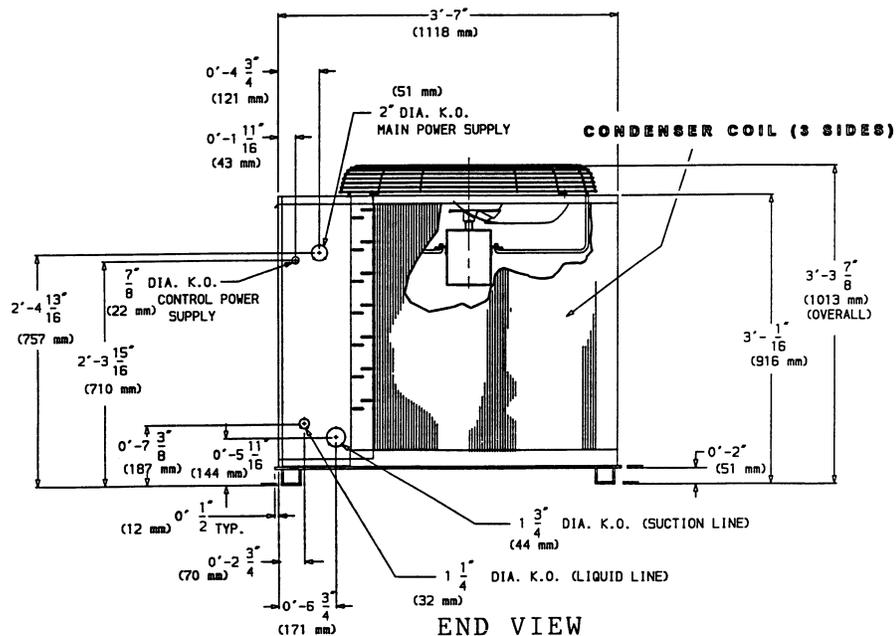
TOP VIEW

NOTES:

- Service clearances are as follows:
 Side (compressor) — 3 1/2 ft (1067 mm)
 Side (opposite compressor) — 3 ft (914 mm)
 Ends — 2 ft (610 mm)
 Top — 5 ft (1524 mm)
- See page 72 for corner weights and unit center of gravity.



SIDE VIEW



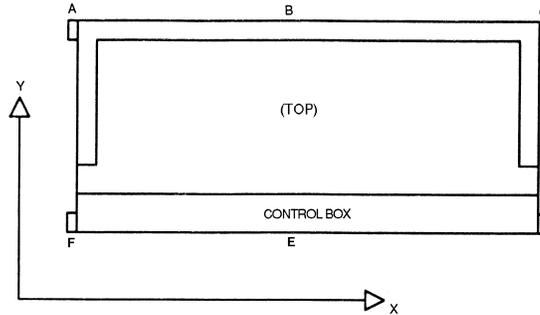
END VIEW

38ARD, AKS014-024

Dimensions (cont)



38ARD014-024, 38AKS014-024 (cont)



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	F		A	B	C	D	E	F
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)

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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	F		A	B	C	D	E	F
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.

38ARD,AKS014-024

Performance data



CONDENSING UNIT RATINGS — SI

38ARD014		Air Temperature Entering Condenser (C)						
SST (C)		28	32	36	40	44	48	52
-4	TC	27.10	26.10	25.00	23.80	22.70	21.50	20.30
	kW	8.04	8.75	9.51	10.30	11.20	12.10	13.00
	SDT	40.8	44.8	48.8	52.8	56.8	60.8	64.8
-2	TC	29.30	28.20	27.00	25.90	24.70	23.40	22.20
	kW	8.07	8.78	9.54	10.40	11.20	12.10	13.10
	SDT	40.8	44.8	48.8	52.8	56.8	60.8	64.8
0	TC	31.60	30.40	29.20	28.00	26.70	25.40	24.10
	kW	8.10	8.81	9.57	10.40	11.30	12.20	13.20
	SDT	40.8	44.8	48.8	52.8	56.8	60.8	64.8
2	TC	33.90	32.70	31.40	30.20	28.80	27.50	26.10
	kW	8.13	8.84	9.60	10.40	11.30	12.20	13.20
	SDT	40.8	44.8	48.8	52.8	56.8	60.8	64.8
4	TC	36.40	35.10	33.80	32.50	31.10	29.70	28.30
	kW	8.17	8.88	9.64	10.50	11.40	12.30	13.30
	SDT	40.8	44.8	48.8	52.8	56.8	60.8	64.8
6	TC	39.10	37.70	36.30	34.90	33.50	32.00	30.50
	kW	8.21	8.92	9.67	10.50	11.40	12.30	13.30
	SDT	40.8	44.8	48.8	52.8	56.8	60.8	64.8
8	TC	41.80	40.40	38.90	37.40	35.90	34.40	32.80
	kW	8.27	8.97	9.72	10.60	11.40	12.40	13.30
	SDT	40.8	44.8	48.8	52.8	56.8	60.8	64.8
10	TC	44.60	43.10	41.60	40.10	38.50	36.90	35.20
	kW	8.33	9.03	9.78	10.60	11.50	12.40	13.40
	SDT	40.9	44.9	48.9	52.9	56.9	60.9	64.9

38AKS014		Air Temperature Entering Condenser (C)						
SST (C)		28	32	36	40	44	48	52
-4	TC	24.10	22.70	21.30	19.90	18.50	17.00	15.60
	kW	7.26	7.66	8.05	8.46	8.84	9.20	9.54
	SDT	35.7	39.7	43.7	48.0	52.4	56.8	61.4
-2	TC	27.10	25.60	24.10	22.60	21.10	19.60	18.00
	kW	7.38	7.82	8.24	8.67	9.08	9.47	9.84
	SDT	36.4	40.3	44.3	48.5	52.8	57.2	61.6
0	TC	30.00	28.40	26.80	25.20	23.70	22.10	20.50
	kW	7.51	7.98	8.43	8.89	9.32	9.74	10.10
	SDT	37.1	41.0	44.9	49.0	53.2	57.5	61.8
2	TC	32.90	31.20	29.60	27.90	26.20	24.60	22.90
	kW	7.63	8.13	8.62	9.11	9.57	10.00	10.40
	SDT	37.8	41.7	45.5	49.6	53.7	57.8	62.1
4	TC	35.80	34.00	32.30	30.60	28.80	27.10	25.40
	kW	7.76	8.29	8.81	9.33	9.81	10.30	10.70
	SDT	38.5	42.3	46.1	50.1	54.1	58.2	62.3
6	TC	38.70	36.90	35.00	33.20	31.40	29.60	27.80
	kW	7.89	8.45	9.00	9.54	10.10	10.60	11.00
	SDT	39.2	43.0	46.7	50.6	54.5	58.5	62.5
8	TC	41.60	39.70	37.80	35.90	34.00	32.10	30.20
	kW	8.01	8.61	9.19	9.76	10.30	10.80	11.30
	SDT	39.9	43.6	47.4	51.1	55.0	58.8	62.7
10	TC	44.50	42.50	40.50	38.50	36.60	34.60	32.70
	kW	8.14	8.77	9.38	9.98	10.50	11.10	11.60
	SDT	40.6	44.3	48.0	51.7	55.4	59.2	62.9

38ARD016		Air Temperature Entering Condenser (C)						
SST (C)		28	32	36	40	44	48	52
-4	TC	37.10	35.60	33.90	32.20	30.50	28.60	26.40
	kW	10.60	11.30	12.00	12.70	13.50	14.20	14.70
	SDT	39.5	43.5	47.4	51.4	55.3	59.2	63.2
-2	TC	39.70	38.10	36.40	34.70	32.90	30.90	28.90
	kW	10.80	11.50	12.10	12.90	13.60	14.30	15.00
	SDT	40.0	43.9	47.8	51.7	55.6	59.5	63.4
0	TC	42.40	40.80	39.00	37.20	35.30	33.30	31.30
	kW	11.00	11.60	12.30	13.10	13.80	14.50	15.30
	SDT	40.5	44.4	48.2	52.1	55.9	59.8	63.6
2	TC	45.20	43.50	41.60	39.70	37.80	35.70	33.70
	kW	11.20	11.90	12.50	13.30	14.00	14.70	15.50
	SDT	41.1	45.0	48.8	52.6	56.4	60.2	64.0
4	TC	48.10	46.30	44.40	42.40	40.30	38.20	36.10
	kW	11.40	12.10	12.80	13.50	14.20	15.00	15.70
	SDT	41.8	45.6	49.4	53.2	56.9	60.7	64.5
6	TC	51.10	49.30	47.30	45.20	43.00	40.80	38.60
	kW	11.70	12.30	13.00	13.80	14.50	15.20	16.00
	SDT	42.5	46.3	50.0	53.8	57.5	61.3	65.0
8	TC	54.20	52.30	50.30	48.10	45.80	43.50	41.20
	kW	11.90	12.60	13.30	14.00	14.80	15.50	16.20
	SDT	43.2	47.0	50.7	54.5	58.2	61.9	65.6
10	TC	57.30	55.40	53.40	51.10	48.70	46.30	43.80
	kW	12.20	12.90	13.60	14.30	15.10	15.80	16.50
	SDT	44.0	47.7	51.5	55.2	58.9	62.5	66.2

38AKS016		Air Temperature Entering Condenser (C)						
SST (C)		28	32	36	40	44	48	52
-4	TC	33.40	31.80	30.30	28.70	27.10	25.60	24.00
	kW	10.40	10.90	11.40	11.90	12.30	12.80	13.20
	SDT	38.0	41.8	45.7	49.5	53.4	57.4	61.3
-2	TC	36.90	35.20	33.70	31.90	30.20	28.60	26.90
	kW	10.70	11.20	11.80	12.30	12.80	13.30	13.80
	SDT	39.0	42.8	46.6	50.4	54.2	58.1	62.0
0	TC	40.50	38.70	37.00	35.10	33.30	31.50	29.80
	kW	11.00	11.60	12.20	12.80	13.30	13.80	14.30
	SDT	40.0	43.7	47.5	51.3	55.1	58.9	62.7
2	TC	44.10	42.10	40.30	38.30	36.40	34.50	32.70
	kW	11.30	12.00	12.60	13.20	13.80	14.30	14.90
	SDT	40.9	44.6	48.4	52.1	55.9	59.7	63.4
4	TC	47.60	45.60	43.60	41.50	39.50	37.50	35.50
	kW	11.60	12.30	13.00	13.70	14.30	14.90	15.50
	SDT	41.9	45.6	49.3	53.0	56.7	60.4	64.2
6	TC	51.20	49.00	46.90	44.80	42.60	40.50	38.40
	kW	12.00	12.70	13.40	14.10	14.80	15.40	16.10
	SDT	42.9	46.5	50.2	53.8	57.5	61.2	64.9
8	TC	54.80	52.50	50.20	48.00	45.70	43.50	41.30
	kW	12.30	13.10	13.80	14.60	15.20	15.90	16.60
	SDT	43.9	47.5	51.1	54.7	58.3	62.0	65.6
10	TC	58.30	56.00	53.60	51.20	48.80	46.50	44.20
	kW	12.60	13.40	14.20	15.00	15.70	16.50	17.20
	SDT	44.9	48.4	52.0	55.5	59.1	62.7	66.3

38ARD024		Air Temperature Entering Condenser (C)						
SST (C)		28	32	36	40	44	48	52
-4	TC	48.70	46.90	45.00	43.00	41.00	38.50	35.70
	kW	14.10	15.00	15.90	16.90	17.90	18.70	19.40
	SDT	42.0	45.8	49.7	53.5	57.4	61.2	65.0
-2	TC	51.90	50.00	48.00	45.90	43.80	41.40	38.80
	kW	14.40	15.20	16.10	17.10	18.10	19.00	19.90
	SDT	42.7	46.5	50.3	54.1	57.9	61.7	65.4
0	TC	55.20	53.10	51.00	48.80	46.60	44.30	41.80
	kW	14.70	15.60	16.40	17.40	18.40	19.30	20.30
	SDT	43.4	47.2	51.0	54.7	58.5	62.2	65.9
2	TC	58.60	56.40	54.20	51.90	49.50	47.10	44.60
	kW	15.10	15.90	16.80	17.70	18.70	19.70	20.60
	SDT	44.2	47.9	51.7	55.4	59.1	62.8	66.5
4	TC	62.20	59.90	57.50	55.00	52.50	50.00	47.50
	kW	15.50	16.30	17.20	18.10	19.00	20.00	21.00
	SDT	45.1	48.8	52.4	56.1	59.8	63.5	67.2
6	TC	65.90	63.50	61.00	58.40	55.70	53.10	50.40
	kW	15.90	16.70	17.60	18.50	19.40	20.40	21.30
	SDT	46.0	49.6	53.3	56.9	60.6	64.2	67.9
8	TC	69.70	67.20	64.60	61.80	59.00	56.20	53.40
	kW	16.40	17.20	18.00	18.90	19.80	20.80	21.70
	SDT	46.9	50.5	54.2	57.8	61.4	65.0	68.6
10	TC	73.60	71.00	68.30	65.40	62.50	59.50	56.50
	kW	16.80	17.70	18.50	19.40	20.30	21.20	22.20
	SDT	47.8	51.5	55.1	58.7	62.2	65.8	69.4

38AKS024		Air Temperature Entering Condenser (C)						
SST (C)		28	32	36	40	44	48	52
-4	TC	42.20	39.90	37.70	35.70	33.70	31.70	29.70
	kW	13.60	14.20	14.80	15.30	15.80	16.30	16.80
	SDT	40.2	43.8					

Performance data (cont)



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	35.8	40.5	43.1	37.9	42.4	45.1	39.7	43.7	46.3
	SHC	32.80	25.60	22.00	37.90	29.00	24.40	39.70	32.20	26.60
	kW	6.68	6.79	6.90	6.72	6.84	6.94	6.77	6.87	6.93
28	TC	34.2	38.7	41.2	36.3	40.5	43.0	38.2	41.7	44.2
	SHC	32.00	24.90	21.30	36.30	28.30	23.70	38.20	31.50	25.90
	kW	8.11	8.20	8.25	8.15	8.24	8.29	8.19	8.25	8.32
32	TC	33.4	37.8	40.3	35.5	39.5	42.0	37.5	40.7	43.1
	SHC	31.50	24.50	20.90	35.50	27.90	23.30	37.50	31.10	25.60
	kW	8.86	8.92	8.97	8.89	8.96	9.01	8.92	8.98	9.04
36	TC	32.6	36.9	39.3	34.7	38.5	41.0	36.7	39.6	42.0
	SHC	31.10	24.10	20.50	34.70	27.50	22.90	36.70	30.70	25.20
	kW	9.63	9.68	9.72	9.66	9.72	9.77	9.68	9.73	9.79
40	TC	31.8	35.9	38.3	33.8	37.5	39.9	35.9	38.6	40.9
	SHC	30.70	23.80	20.20	33.80	27.10	22.50	35.90	30.30	24.80
	kW	10.50	10.50	10.60	10.50	10.50	10.60	10.50	10.60	10.60
44	TC	30.9	34.9	37.2	32.9	36.4	38.7	35.0	37.4	39.7
	SHC	30.20	23.40	19.80	32.90	26.70	22.10	35.00	29.80	24.40
	kW	11.40	11.40	11.50	11.40	11.40	11.50	11.40	11.50	11.50
48	TC	30.0	33.9	36.1	32.1	35.3	37.5	34.1	36.3	38.4
	SHC	29.70	22.90	19.40	32.10	26.30	21.70	34.10	29.40	24.00
	kW	12.30	12.40	12.40	12.30	12.40	12.40	12.40	12.40	12.50
52	TC	29.1	32.8	35.0	31.3	34.2	36.3	33.2	35.1	37.2
	SHC	29.10	22.50	19.00	31.30	25.90	21.30	33.20	28.90	23.50
	kW	13.30	13.40	13.40	13.30	13.40	13.40	13.40	13.40	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	33.8	38.3	40.7	35.8	40.1	42.6	37.3	41.3	43.7
	SHC	31.00	24.20	20.80	35.50	27.30	23.00	37.30	30.20	25.00
	kW	6.71	6.77	6.82	6.73	6.81	6.87	6.72	6.83	6.88
28	TC	32.4	36.7	39.1	34.3	38.4	40.8	35.9	39.5	41.9
	SHC	30.30	23.60	20.20	34.30	26.70	22.30	35.90	29.50	24.30
	kW	8.10	8.16	8.20	8.12	8.19	8.24	8.14	8.20	8.25
32	TC	31.7	35.9	38.2	33.6	37.5	39.9	35.2	38.6	40.9
	SHC	29.90	23.30	19.80	33.60	26.30	22.00	35.20	29.10	24.00
	kW	8.83	8.88	8.93	8.85	8.92	8.96	8.88	8.93	8.98
36	TC	30.9	35.1	37.3	32.8	36.6	38.90	34.5	37.6	39.9
	SHC	29.50	22.90	19.50	32.80	26.00	21.70	34.50	28.80	23.70
	kW	9.60	9.65	9.69	9.62	9.68	9.72	9.65	9.69	9.74
40	TC	30.2	34.2	36.4	32.0	35.7	37.9	33.8	36.6	38.9
	SHC	29.10	22.60	19.20	32.00	25.60	21.30	33.80	28.40	23.30
	kW	10.40	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.60
44	TC	29.3	33.2	35.5	31.2	34.7	36.9	33.0	35.6	37.8
	SHC	28.60	22.20	18.80	31.20	25.20	20.90	33.00	28.00	22.90
	kW	11.30	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.50
48	TC	28.5	32.3	34.4	30.4	33.6	35.8	32.2	34.5	36.7
	SHC	28.20	21.80	18.40	30.40	24.80	20.60	32.20	27.60	22.60
	kW	12.30	12.30	12.40	12.30	12.30	12.40	12.30	12.40	12.40
52	TC	27.7	31.3	33.4	29.5	32.6	34.7	31.3	33.4	35.5
	SHC	27.70	21.40	18.00	29.50	24.40	20.20	31.30	27.10	22.20
	kW	13.30	13.30	13.40	13.30	13.30	13.40	13.30	13.40	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



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	38.0	42.8	45.5	40.4	44.7	47.3	43.0	45.9	48.5
	SHC	36.70	28.30	23.90	40.40	32.60	27.00	43.00	36.60	29.80
	kW	6.73	6.83	6.93	6.77	6.88	6.98	6.87	6.92	7.03
28	TC	36.3	40.9	43.5	38.9	42.7	45.2	41.4	43.8	46.3
	SHC	35.80	27.50	23.20	38.90	31.80	26.30	41.40	35.80	29.10
	kW	8.15	8.24	8.31	8.19	8.27	8.36	8.26	8.31	8.40
32	TC	35.5	39.9	42.5	38.1	41.6	44.1	40.6	42.8	45.2
	SHC	35.40	27.20	22.90	38.10	31.50	25.90	40.60	35.30	28.70
	kW	8.88	8.97	9.04	8.93	9.00	9.08	8.99	9.03	9.11
36	TC	34.6	39.0	41.5	37.3	40.6	43.0	39.7	41.7	44.0
	SHC	34.60	26.80	22.50	37.30	31.10	25.50	39.70	34.90	28.40
	kW	9.64	9.74	9.80	9.70	9.77	9.83	9.75	9.79	9.87
40	TC	33.7	37.9	40.4	36.5	39.5	41.9	38.8	40.6	42.9
	SHC	33.70	26.40	22.10	36.50	30.60	25.10	38.80	34.40	28.00
	kW	10.50	10.60	10.60	10.50	10.60	10.70	10.60	10.60	10.70
44	TC	32.8	36.9	39.3	35.7	38.4	40.7	37.9	39.4	41.6
	SHC	32.80	26.00	21.70	35.70	30.20	24.70	37.90	33.90	27.50
	kW	11.40	11.50	11.50	11.40	11.50	11.60	11.50	11.50	11.60
48	TC	31.9	35.8	38.1	34.8	37.2	39.4	36.9	38.2	40.3
	SHC	31.90	25.50	21.30	34.80	29.70	24.30	36.90	33.40	27.10
	kW	12.30	12.40	12.50	12.40	12.40	12.50	12.40	12.50	12.50
52	TC	30.9	34.6	36.9	33.9	36.0	38.2	35.9	36.9	39.0
	SHC	30.90	25.10	20.90	33.90	29.30	23.90	35.90	32.90	26.00
	kW	13.30	13.40	13.50	13.40	13.40	13.50	13.40	13.40	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	36.0	40.7	43.2	38.2	42.4	45.0	40.3	43.6	46.2
	SHC	34.50	26.70	22.70	38.20	30.60	25.30	40.30	34.00	27.80
	kW	6.71	6.79	6.85	6.74	6.84	6.89	6.88	6.86	6.93
28	TC	34.4	38.9	41.4	36.6	40.5	43.0	38.8	41.6	44.1
	SHC	33.70	26.00	22.00	36.60	29.80	24.70	38.80	33.30	27.10
	kW	8.12	8.20	8.26	8.16	8.22	8.28	8.21	8.25	8.31
32	TC	33.6	38.0	40.4	35.8	39.5	42.0	38.0	40.6	43.1
	SHC	33.30	25.60	21.60	35.80	29.40	24.30	38.00	32.80	26.80
	kW	8.86	8.93	8.98	8.90	8.95	9.01	8.94	8.97	9.04
36	TC	32.8	37.0	39.4	35.1	38.5	41.0	37.2	39.6	42.0
	SHC	32.80	25.30	21.30	35.10	29.10	24.00	37.20	32.40	26.40
	kW	9.63	9.70	9.73	9.67	9.72	9.77	9.71	9.73	9.79
40	TC	32.0	36.0	38.4	34.3	37.5	39.9	36.4	38.5	40.8
	SHC	32.00	24.90	20.90	34.30	28.70	23.60	36.40	32.00	26.00
	kW	10.50	10.50	10.60	10.50	10.50	10.60	10.50	10.60	10.60
44	TC	31.1	35.0	37.3	33.5	36.4	38.7	35.5	37.4	39.6
	SHC	31.10	24.50	20.50	33.50	28.20	23.20	35.50	31.50	25.60
	kW	11.40	11.40	11.50	11.40	11.40	11.50	11.40	11.50	11.50
48	TC	30.2	34.0	36.2	32.7	35.3	37.5	34.6	36.2	38.4
	SHC	30.20	24.10	20.10	32.70	27.80	22.80	34.60	31.10	25.20
	kW	12.30	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.50
52	TC	29.4	32.9	35.1	31.9	34.2	36.3	33.7	35.1	37.1
	SHC	29.40	23.70	19.70	31.90	27.40	22.40	33.70	30.60	24.80
	kW	13.30	13.40	13.40	13.40	13.40	13.40	13.40	13.40	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

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Performance data (cont)



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	40.7	45.5	48.2	43.9	47.2	49.8	46.6	48.4	50.9
	SHC	40.70	31.80	26.60	43.90	36.80	30.10	46.60	41.40	33.50
	kW	6.82	6.93	7.00	6.86	6.97	7.08	6.94	7.02	7.15
28	TC	39.0	43.4	46.1	42.3	45.0	47.6	44.7	46.2	48.5
	SHC	39.00	31.00	25.80	42.30	36.00	29.40	44.70	40.50	32.70
	kW	8.19	8.30	8.39	8.26	8.35	8.45	8.33	8.39	8.49
32	TC	38.2	42.4	45.0	41.4	43.9	46.4	43.8	45.1	47.3
	SHC	38.20	30.60	25.40	41.40	35.60	29.00	43.80	40.00	32.30
	kW	8.91	9.02	9.11	8.99	9.08	9.17	9.06	9.11	9.21
36	TC	37.3	41.3	43.9	40.6	42.8	45.2	42.8	43.9	46.1
	SHC	37.30	30.20	25.00	40.60	35.20	28.60	42.80	39.40	31.90
	kW	9.68	9.78	9.86	9.77	9.84	9.93	9.82	9.87	9.96
40	TC	36.4	40.2	42.7	39.6	41.6	44.0	41.8	42.7	44.8
	SHC	36.40	29.80	24.60	39.60	34.70	28.20	41.80	38.90	31.50
	kW	10.50	10.60	10.70	10.60	10.70	10.80	10.60	10.70	10.80
44	TC	35.6	39.0	41.4	38.7	40.4	42.7	40.7	41.5	43.5
	SHC	35.60	29.30	24.20	38.70	34.20	27.70	40.70	38.20	31.10
	kW	11.40	11.50	11.60	11.50	11.60	11.60	11.60	11.60	11.70
48	TC	34.7	37.8	40.2	37.6	39.1	41.3	39.6	40.3	42.1
	SHC	34.70	28.90	23.80	37.60	33.70	27.30	39.60	37.50	30.60
	kW	12.40	12.50	12.50	12.40	12.50	12.60	12.50	12.50	12.60
52	TC	33.8	36.6	38.8	36.6	37.9	40.0	38.5	39.0	40.7
	SHC	33.80	28.40	23.30	36.60	33.20	26.80	38.50	36.60	30.10
	kW	13.40	13.50	13.50	13.40	13.50	13.60	13.50	13.50	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	38.4	43.1	45.7	41.2	44.7	47.3	43.6	45.8	48.4
	SHC	38.40	29.90	25.10	41.20	34.40	28.20	43.60	38.30	31.10
	kW	6.78	6.87	6.95	6.83	6.90	7.00	6.83	6.95	7.04
28	TC	36.8	41.1	43.7	39.6	42.6	45.2	41.9	43.7	46.1
	SHC	36.80	29.20	24.30	39.60	33.60	27.50	41.90	37.40	30.40
	kW	8.17	8.24	8.30	8.20	8.27	8.35	8.25	8.30	8.39
32	TC	36.0	40.1	42.7	38.8	41.6	44.1	41.0	42.6	45.0
	SHC	36.00	28.80	24.00	38.80	33.20	27.10	41.00	37.00	30.00
	kW	8.89	8.96	9.03	8.93	9.00	9.08	8.98	9.02	9.11
36	TC	35.2	39.1	41.6	38.0	40.5	42.9	40.1	41.5	43.8
	SHC	35.20	28.40	23.60	38.00	32.70	26.70	40.10	36.50	29.60
	kW	9.66	9.72	9.79	9.70	9.75	9.84	9.74	9.78	9.86
40	TC	34.3	38.1	40.5	37.2	39.4	41.8	39.2	40.4	42.6
	SHC	34.30	28.00	23.20	37.20	32.30	26.30	39.20	35.90	29.20
	kW	10.50	10.50	10.60	10.50	10.60	10.70	10.60	10.60	10.70
44	TC	33.5	36.9	39.3	36.2	38.2	40.5	38.2	39.2	41.3
	SHC	33.50	27.60	22.80	36.20	31.80	25.90	38.20	35.40	28.80
	kW	11.40	11.40	11.50	11.40	11.50	11.60	11.50	11.50	11.60
48	TC	32.6	35.8	38.1	35.3	37.1	39.3	37.2	38.0	40.0
	SHC	32.60	27.10	22.40	35.30	31.40	25.50	37.20	34.70	28.30
	kW	12.30	12.40	12.50	12.40	12.40	12.50	12.40	12.50	12.50
52	TC	31.8	34.7	36.9	34.4	35.8	37.9	36.1	36.8	38.7
	SHC	31.80	26.70	21.90	34.40	30.90	25.00	36.10	34.10	27.90
	kW	13.30	13.40	13.50	13.40	13.40	13.50	13.40	13.50	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

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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
20	TC	46.4	52.1	55.1	49.2	54.7	57.6	51.3	56.3	59.3
	SHC	41.00	32.20	27.70	47.70	36.50	30.70	51.30	40.60	33.60
	kW	9.70	10.10	10.30	9.92	10.30	10.50	10.10	10.40	10.70
28	TC	44.2	49.7	52.7	46.9	52.1	55.1	49.1	53.7	56.6
	SHC	39.90	31.20	26.70	46.50	35.50	29.80	49.10	39.60	32.60
	kW	11.10	11.60	11.80	11.30	11.80	12.00	11.50	11.90	12.10
32	TC	43.1	48.5	51.4	45.7	50.8	53.7	47.9	52.3	55.2
	SHC	39.30	30.60	26.20	45.70	35.00	29.30	47.90	39.10	32.10
	kW	11.80	12.30	12.60	12.10	12.50	12.80	12.20	12.60	12.90
36	TC	41.9	47.1	50.0	44.4	49.3	52.2	46.7	50.8	53.6
	SHC	38.70	30.10	25.70	44.40	34.40	28.70	46.70	38.50	31.60
	kW	12.60	13.00	13.30	12.80	13.20	13.50	13.00	13.40	13.60
40	TC	40.6	45.7	48.5	43.0	47.8	50.6	45.5	49.1	51.9
	SHC	38.00	29.50	25.10	43.00	33.80	28.20	45.50	37.90	31.00
	kW	13.30	13.80	14.10	13.60	14.00	14.30	13.80	14.20	14.40
44	TC	39.2	44.2	46.9	41.6	46.1	48.8	44.2	47.4	50.1
	SHC	37.40	28.90	24.50	41.60	33.20	27.50	44.20	37.20	30.40
	kW	14.10	14.60	14.90	14.40	14.80	15.10	14.60	14.90	15.20
48	TC	37.8	42.6	45.2	40.3	44.4	47.0	42.8	45.6	48.2
	SHC	36.70	28.20	23.90	40.30	32.50	26.90	42.80	36.50	29.80
	kW	14.90	15.40	15.70	15.20	15.60	15.90	15.40	15.70	16.00
52	TC	36.4	40.9	43.5	38.9	42.6	45.2	41.4	43.8	46.2
	SHC	35.90	27.60	23.20	38.90	31.90	26.30	41.40	35.80	29.10
	kW	15.80	16.20	16.50	16.00	16.40	16.70	16.30	16.60	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
20	TC	44.1	49.6	52.5	46.6	52.1	55	48.6	53.7	56.6
	SHC	38.80	30.50	26.30	44.70	34.40	29.00	48.60	38.00	31.50
	kW	9.58	9.95	10.20	9.74	10.10	10.40	9.89	10.20	10.50
28	TC	42.0	47.3	50.2	44.4	49.6	52.5	46.3	51.1	54.0
	SHC	37.70	29.50	25.40	43.50	33.40	28.10	46.30	37.00	30.60
	kW	11.00	11.40	11.60	11.10	11.60	11.80	11.30	11.70	11.90
32	TC	40.9	46.1	48.9	43.2	48.3	51.1	45.1	49.8	52.6
	SHC	37.10	29.00	24.90	42.90	32.90	27.60	45.10	36.50	30.10
	kW	11.70	12.10	12.30	11.90	12.30	12.50	12.00	12.40	12.70
36	TC	39.7	44.9	47.6	42.0	46.9	49.7	44.0	48.3	51.1
	SHC	36.50	28.50	24.30	42.00	32.40	27.10	44.00	35.90	29.60
	kW	12.40	12.80	13.10	12.60	13.00	13.30	12.70	13.20	13.40
40	TC	38.5	43.5	46.1	40.8	45.4	48.1	42.7	46.7	49.5
	SHC	35.90	27.90	23.80	40.80	31.80	26.50	42.70	35.30	29.00
	kW	13.10	13.60	13.80	13.30	13.80	14.00	13.50	13.90	14.20
44	TC	37.3	42.0	44.6	39.5	43.9	46.5	41.5	45.1	47.7
	SHC	35.30	27.30	23.20	39.50	31.20	25.90	41.50	34.70	28.40
	kW	13.90	14.40	14.70	14.10	14.60	14.80	14.30	14.70	15.00
48	TC	36.0	40.6	43.0	38.2	42.3	44.8	40.2	43.4	45.9
	SHC	34.60	26.70	22.60	38.20	30.50	25.30	40.20	34.00	27.80
	kW	14.80	15.20	15.50	15.00	15.40	15.60	15.20	15.50	15.80
52	TC	34.6	39.1	41.4	36.8	40.6	43.0	39.0	41.7	44.1
	SHC	33.90	26.10	22.00	36.80	29.90	24.70	39.00	33.40	27.20
	kW	15.60	16.00	16.30	15.80	16.20	16.50	16.00	16.30	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

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Performance data (cont)



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
20	TC	50.0	55.9	59.0	52.8	58.1	61.2	55.5	59.6	62.7
	SHC	46.60	36.00	30.50	52.80	41.10	34.10	55.50	45.90	37.60
	kW	9.99	10.40	10.60	10.20	10.60	10.80	10.40	10.70	10.90
28	TC	47.6	53.3	56.4	50.5	55.4	58.5	53.3	56.9	59.8
	SHC	45.40	34.90	29.50	50.50	40.10	33.10	53.30	44.80	36.60
	kW	11.40	11.90	12.10	11.60	12.00	12.30	11.90	12.20	12.40
32	TC	46.4	51.9	54.9	49.2	54.0	57.0	52.2	55.4	58.3
	SHC	44.80	34.40	29.00	49.20	39.50	32.60	52.20	44.30	36.00
	kW	12.10	12.60	12.90	12.40	12.80	13.10	12.60	12.90	13.20
36	TC	45.1	50.4	53.4	48.0	52.5	55.4	50.9	53.8	56.6
	SHC	44.10	33.80	28.50	48.00	38.90	32.10	50.90	43.60	35.50
	kW	12.80	13.30	13.60	13.10	13.50	13.80	13.40	13.70	13.90
40	TC	43.6	48.9	51.8	46.7	50.8	53.6	49.5	52.1	54.8
	SHC	43.40	33.20	27.90	46.70	38.30	31.50	49.50	43.00	34.90
	kW	13.60	14.10	14.40	13.90	14.30	14.60	14.20	14.40	14.70
44	TC	42.2	47.2	50.0	45.3	48.9	51.7	48.0	50.2	52.9
	SHC	42.20	32.50	27.20	45.30	37.60	30.80	48.00	42.20	34.20
	kW	14.40	14.90	15.20	14.70	15.10	15.40	15.00	15.20	15.50
48	TC	40.7	45.4	48.1	43.9	47.1	49.8	46.5	48.3	50.8
	SHC	40.70	31.80	26.50	43.90	36.80	30.10	46.50	41.40	33.50
	kW	15.20	15.70	16.00	15.50	15.90	16.20	15.80	16.00	16.30
52	TC	39.1	43.6	46.2	42.4	45.1	47.7	44.8	46.3	48.7
	SHC	39.10	31.10	25.90	42.40	36.10	29.40	44.80	40.60	32.80
	kW	16.00	16.50	16.80	16.40	16.70	17.00	16.70	16.90	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
20	TC	47.3	53.0	56.0	49.8	55.2	58.2	52.1	56.6	59.6
	SHC	43.80	33.90	28.80	49.80	38.50	32.00	52.10	42.60	34.90
	kW	9.78	10.20	10.40	9.96	10.40	10.50	10.10	10.50	10.70
28	TC	45.0	50.5	53.5	47.6	52.6	55.5	50.0	53.9	56.9
	SHC	42.60	32.90	27.90	47.60	37.40	31.10	50.00	41.60	34.00
	kW	11.20	11.60	11.90	11.40	11.80	12.00	11.60	11.90	12.20
32	TC	43.8	49.2	52.1	46.4	51.2	54.1	48.8	52.5	55.4
	SHC	42.00	32.40	27.40	46.40	36.90	30.60	48.80	41.00	33.50
	kW	11.90	12.40	12.60	12.10	12.50	12.80	12.30	12.60	12.90
36	TC	42.6	47.8	50.7	45.1	49.7	52.6	47.6	51.0	53.8
	SHC	41.40	31.80	26.90	45.10	36.30	30.00	47.60	40.40	33.00
	kW	12.60	13.10	13.40	12.80	13.30	13.50	13.10	13.40	13.70
40	TC	41.3	46.3	49.1	43.8	48.1	50.9	46.3	49.3	52.1
	SHC	40.70	31.20	26.30	43.80	35.70	29.40	46.30	39.80	32.40
	kW	13.40	13.90	14.10	13.60	14.00	14.30	13.90	14.20	14.40
44	TC	39.9	44.7	47.4	42.5	46.4	49.1	44.9	47.5	50.2
	SHC	39.90	30.60	25.70	42.50	35.00	28.80	44.90	39.00	31.70
	kW	14.20	14.70	14.90	14.40	14.80	15.10	14.70	14.90	15.20
48	TC	38.5	43.1	45.7	41.2	44.6	47.2	43.5	45.7	48.2
	SHC	38.50	30.00	25.00	41.20	34.40	28.20	43.50	38.30	31.10
	kW	15.00	15.50	15.70	15.30	15.60	15.90	15.50	15.80	16.00
52	TC	37.1	41.4	43.9	39.9	42.8	45.3	42.1	43.9	46.3
	SHC	37.10	29.30	24.40	39.90	33.70	27.50	42.10	37.60	30.40
	kW	15.80	16.30	16.60	16.10	16.50	16.70	16.40	16.60	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

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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	54.2	59.4	62.6	57.9	61.3	64.3	60.7	62.6	65.4
	SHC	54.20	42.50	35.20	57.90	48.90	39.70	60.70	54.50	44.00
	kW	10.30	10.70	10.90	10.50	10.80	11.00	10.80	10.90	11.10
28	TC	51.8	56.7	59.8	55.5	58.4	61.4	58.2	59.7	62.4
	SHC	51.80	41.50	34.20	55.50	47.70	38.70	58.20	53.20	42.90
	kW	11.70	12.10	12.40	12.00	12.30	12.50	12.30	12.40	12.60
32	TC	50.5	55.2	58.2	54.3	56.9	59.8	56.9	58.2	60.8
	SHC	50.50	40.90	33.70	54.30	47.10	38.20	56.90	52.40	42.40
	kW	12.50	12.90	13.20	12.80	13.00	13.30	13.00	13.20	13.40
36	TC	49.2	53.6	56.6	53.0	55.3	58.1	55.4	56.5	59.0
	SHC	49.20	40.30	33.10	53.00	46.50	37.60	55.40	51.60	41.80
	kW	13.20	13.60	13.90	13.60	13.80	14.10	13.80	13.90	14.20
40	TC	47.9	51.9	54.8	51.5	53.4	56.2	53.8	54.7	57.1
	SHC	47.90	39.60	32.50	51.50	45.70	37.00	53.80	50.70	41.10
	kW	14.00	14.40	14.70	14.40	14.60	14.90	14.60	14.70	15.00
44	TC	46.5	50.0	52.8	49.9	51.5	54.2	52.1	52.8	55.0
	SHC	46.50	38.90	31.80	49.90	44.90	36.30	52.10	49.40	40.40
	kW	14.80	15.20	15.50	15.20	15.40	15.70	15.40	15.50	15.80
48	TC	45.0	48.1	50.8	48.2	49.6	52.0	50.3	50.9	52.8
	SHC	45.00	38.20	31.10	48.20	44.00	35.60	50.30	47.90	39.60
	kW	15.70	16.00	16.30	16.00	16.20	16.50	16.30	16.30	16.60
52	TC	43.5	46.1	48.6	46.5	47.5	49.8	48.4	48.9	50.6
	SHC	43.50	37.40	30.40	46.50	43.10	34.80	48.40	46.30	38.80
	kW	16.50	16.80	17.10	16.90	17.00	17.30	17.10	17.20	17.40

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	51.4	56.5	59.5	54.6	58.2	61.2	57.2	59.4	62.3
	SHC	51.40	40.30	33.30	54.60	45.90	37.30	57.20	50.90	41.10
	kW	10.10	10.40	10.70	10.30	10.60	10.80	10.50	10.70	10.90
28	TC	49.1	53.8	56.8	52.4	55.5	58.4	54.8	56.6	59.3
	SHC	49.10	39.20	32.40	52.40	44.80	36.40	54.80	49.60	40.10
	kW	11.50	11.90	12.20	11.80	12.00	12.30	12.00	12.10	12.40
32	TC	47.9	52.4	55.3	51.2	54.0	56.8	53.6	55.1	57.8
	SHC	47.90	38.70	31.90	51.20	44.20	35.90	53.60	48.90	39.60
	kW	12.20	12.60	12.90	12.50	12.80	13.00	12.70	12.90	13.10
36	TC	46.6	50.9	53.8	49.9	52.4	55.2	52.2	53.6	56.1
	SHC	46.60	38.10	31.30	49.90	43.60	35.30	52.20	48.10	39.00
	kW	13.00	13.40	13.70	13.30	13.50	13.80	13.50	13.60	13.90
40	TC	45.3	49.2	52.0	48.5	50.7	53.4	50.7	51.8	54.3
	SHC	45.30	37.40	30.70	48.50	42.80	34.70	50.70	47.20	38.40
	kW	13.80	14.20	14.40	14.10	14.30	14.60	14.30	14.40	14.70
44	TC	44.0	47.5	50.2	47.1	48.9	51.4	49.1	50.0	52.3
	SHC	44.00	36.80	30.10	47.10	42.10	34.10	49.10	46.20	37.70
	kW	14.60	14.90	15.20	14.90	15.10	15.40	15.10	15.20	15.50
48	TC	42.7	45.7	48.3	45.6	47.1	49.4	47.5	48.2	50.2
	SHC	42.70	36.10	29.50	45.60	41.30	33.40	47.50	45.00	37.00
	kW	15.40	15.70	16.00	15.70	15.90	16.20	15.90	16.00	16.30
52	TC	41.3	43.9	46.3	44.0	45.2	47.4	45.8	46.3	48.1
	SHC	41.30	35.40	28.80	44.00	40.40	32.70	45.80	43.70	36.30
	kW	16.30	16.60	16.80	16.60	16.70	17.00	16.80	16.80	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

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Performance data (cont)



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
20	TC	56.9	63.7	67.5	60.1	67.0	70.6	62.6	69.0	72.7
	SHC	49.20	38.80	33.50	56.70	43.70	36.90	62.60	48.20	40.00
	kW	12.90	13.60	13.90	13.20	13.90	14.30	13.40	14.10	14.50
28	TC	54.3	60.9	64.5	57.4	63.9	67.4	59.8	65.8	69.3
	SHC	47.90	37.60	32.30	55.30	42.40	35.70	59.80	46.90	38.90
	kW	14.60	15.40	15.80	15.00	15.70	16.10	15.20	15.90	16.30
32	TC	53.0	59.5	62.9	55.9	62.2	65.7	58.3	64.0	67.5
	SHC	47.20	36.90	31.70	54.50	41.80	35.10	58.30	46.20	38.20
	kW	15.60	16.30	16.70	15.90	16.60	17.00	16.20	16.80	17.30
36	TC	51.6	57.9	61.3	54.5	60.5	63.9	56.8	62.2	65.6
	SHC	46.50	36.30	31.10	53.70	41.10	34.40	56.80	45.50	37.60
	kW	16.50	17.20	17.60	16.80	17.60	18.00	17.10	17.80	18.20
40	TC	50.2	56.2	59.5	52.9	58.7	62.0	55.3	60.3	63.6
	SHC	45.80	35.60	30.40	52.80	40.40	33.70	55.30	44.80	36.90
	kW	17.50	18.20	18.60	17.80	18.50	19.00	18.10	18.70	19.20
44	TC	48.6	54.5	57.6	51.3	56.8	60.0	53.7	58.3	61.5
	SHC	45.00	34.80	29.70	51.30	39.60	33.00	53.70	44.00	36.10
	kW	18.60	19.30	19.70	18.90	19.60	20.00	19.20	19.80	20.20
48	TC	47.0	52.7	55.7	49.6	54.8	57.9	52.1	56.2	59.3
	SHC	44.20	34.10	28.90	49.60	38.80	32.20	52.10	43.20	35.40
	kW	19.70	20.30	20.70	20.00	20.60	21.00	20.30	20.80	21.20
52	TC	45.4	50.8	53.7	47.9	52.8	55.7	50.5	54.1	57.0
	SHC	43.30	33.30	28.20	47.90	38.00	31.50	50.50	42.40	34.60
	kW	20.80	21.40	21.80	21.10	21.70	22.10	21.40	21.90	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
20	TC	56.3	63.1	66.9	59.4	66.3	70.1	61.9	68.5	72.2
	SHC	48.50	38.30	33.10	55.70	42.90	36.40	61.90	47.30	39.40
	kW	12.80	13.50	13.90	13.10	13.80	14.20	13.40	14.10	14.50
28	TC	53.6	60.3	63.8	56.7	63.2	66.8	59.0	65.2	68.7
	SHC	47.10	37.00	31.90	54.20	41.70	35.20	59.00	46.00	38.20
	kW	14.60	15.30	15.70	14.90	15.60	16.00	15.10	15.90	16.30
32	TC	52.3	58.8	62.2	55.2	61.6	65.0	57.5	63.4	66.9
	SHC	46.40	36.40	31.30	53.40	41.00	34.60	57.50	45.30	37.50
	kW	15.50	16.20	16.60	15.80	16.50	17.00	16.10	16.80	17.20
36	TC	50.9	57.2	60.6	53.7	59.8	63.2	55.9	61.6	65.0
	SHC	45.70	35.70	30.60	52.60	40.30	33.90	55.90	44.60	36.90
	kW	16.40	17.20	17.60	16.70	17.50	17.90	17.00	17.70	18.10
40	TC	49.5	55.5	58.8	52.1	58.0	61.3	54.4	59.6	62.9
	SHC	45.00	35.00	29.90	51.70	39.60	33.20	54.40	43.80	36.10
	kW	17.40	18.10	18.50	17.70	18.40	18.90	18.00	18.70	19.10
44	TC	48.0	53.8	56.9	50.6	56.1	59.2	52.8	57.6	60.8
	SHC	44.20	34.30	29.20	50.60	38.90	32.40	52.80	43.10	35.40
	kW	18.50	19.20	19.60	18.80	19.50	19.90	19.10	19.70	20.10
48	TC	46.4	52.0	55.0	48.9	54.1	57.1	51.2	55.5	58.6
	SHC	43.40	33.50	28.50	48.90	38.10	31.70	51.20	42.30	34.60
	kW	19.60	20.30	20.60	19.00	20.50	20.90	20.20	20.70	21.10
52	TC	44.8	50.2	53.1	47.3	52.2	55.1	49.7	53.5	56.3
	SHC	42.60	32.80	27.80	47.30	37.30	30.90	49.70	41.50	33.90
	kW	20.70	21.40	21.70	21.00	21.60	22.00	21.30	21.80	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

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COMBINATION RATINGS — SI (cont)

38ARD024/40RM024H 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	64.1	71.0	75.0	67.2	73.7	77.6	70.7	75.4	79.2
	SHC	61.20	46.90	39.60	67.20	53.30	44.00	70.70	59.20	48.30
	kW	13.60	14.30	14.80	13.90	14.60	15.00	14.30	14.80	15.20
28	TC	60.9	67.7	71.4	64.3	70.0	73.7	67.7	71.6	75.2
	SHC	59.50	45.50	38.30	64.30	51.90	42.70	67.70	57.70	46.90
	kW	15.40	16.10	16.60	15.70	16.40	16.90	16.10	16.60	17.10
32	TC	59.3	65.9	69.5	62.8	68.1	71.7	66.2	69.6	73.1
	SHC	58.60	44.80	37.60	62.80	51.10	42.00	66.20	56.90	46.20
	kW	16.30	17.10	17.50	16.70	17.30	17.80	17.10	17.50	18.00
36	TC	57.7	64.0	67.5	61.2	66.1	69.6	64.5	67.6	71.0
	SHC	57.70	44.10	36.80	61.20	50.40	41.30	64.50	56.10	45.40
	kW	17.20	18.00	18.40	17.60	18.30	18.70	18.10	18.50	18.90
40	TC	56.0	62.0	65.4	59.6	64.0	67.4	62.7	65.4	68.6
	SHC	56.00	43.30	36.10	59.60	49.50	40.50	62.70	55.20	44.70
	kW	18.20	19.00	19.40	18.70	19.20	19.70	19.10	19.40	19.90
44	TC	54.3	59.8	63.1	57.9	61.8	65.0	60.8	63.1	66.2
	SHC	54.30	42.50	35.30	57.90	48.70	39.70	60.80	54.20	43.80
	kW	19.20	20.00	20.40	19.70	20.20	20.70	20.10	20.40	20.90
48	TC	52.5	57.7	60.9	56.1	59.5	62.6	58.9	60.7	63.7
	SHC	52.50	41.60	34.50	56.10	47.80	38.90	58.90	53.20	43.00
	kW	20.30	21.00	21.40	20.80	21.20	21.70	21.20	21.40	21.90
52	TC	50.7	55.4	58.5	54.3	57.1	60.1	56.9	58.3	61.1
	SHC	50.70	40.80	33.60	54.30	46.90	38.00	56.90	52.20	42.10
	kW	21.40	22.00	22.50	21.90	22.30	22.70	22.30	22.50	22.90

38ARD024/40RM024 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	61.4	68.3	72.1	64.4	70.7	74.5	67.5	72.3	76.1
	SHC	58.50	44.90	38.00	64.40	50.80	42.00	67.50	56.20	45.90
	kW	13.30	14.00	14.40	13.60	14.30	14.70	13.90	14.50	14.90
28	TC	58.4	64.9	68.6	61.6	67.2	70.8	64.6	68.7	72.3
	SHC	56.90	43.60	36.70	61.60	49.50	40.70	64.60	54.70	44.50
	kW	15.10	15.80	16.30	15.40	16.10	16.50	15.80	16.30	16.70
32	TC	56.9	63.2	66.8	60.1	65.4	68.9	63.1	66.8	70.3
	SHC	56.00	42.90	36.00	60.10	48.80	40.10	63.10	54.00	43.90
	kW	16.00	16.70	17.20	16.40	17.00	17.40	16.70	17.20	17.60
36	TC	55.4	61.4	64.9	58.5	63.4	66.9	61.5	64.8	68.2
	SHC	55.10	42.20	35.30	58.50	48.00	39.40	61.50	53.20	43.20
	kW	16.90	17.70	18.10	17.30	17.90	18.40	17.70	18.10	18.50
40	TC	53.8	59.5	62.8	57.0	61.4	64.7	59.8	62.7	66.0
	SHC	53.80	41.50	34.60	57.00	47.20	38.60	59.80	52.30	42.40
	kW	17.90	18.60	19.10	18.30	18.90	19.30	18.70	19.10	19.50
44	TC	52.2	57.5	60.7	55.4	59.3	62.5	58.1	60.6	63.6
	SHC	52.20	40.70	33.80	55.40	46.40	37.90	58.10	51.40	41.60
	kW	19.00	19.70	20.10	19.40	19.90	20.30	19.70	20.10	20.50
48	TC	50.5	55.5	58.6	53.8	57.2	60.2	56.4	58.4	61.2
	SHC	50.50	40.00	33.10	53.80	45.60	37.10	56.40	50.50	40.80
	kW	20.10	20.70	21.10	20.50	20.90	21.30	20.80	21.10	21.50
52	TC	48.8	53.5	56.4	52.1	55.0	57.9	54.5	56.2	58.9
	SHC	48.80	39.10	32.30	52.10	44.70	36.30	54.50	49.50	40.00
	kW	21.20	21.80	22.20	21.60	22.00	22.40	21.90	22.10	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

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Performance data (cont)



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
20	TC	67.4	74.2	78.1	72.0	76.8	80.7	75.8	78.5	82.1
	SHC	67.40	52.00	43.10	72.00	60.20	49.00	75.80	67.50	54.50
	kW	13.90	14.70	15.10	14.50	15.00	15.40	14.90	15.10	15.60
28	TC	64.2	70.6	74.4	69.0	72.9	76.6	72.5	74.5	77.9
	SHC	64.20	50.60	41.90	69.00	58.70	47.70	72.50	65.70	53.10
	kW	15.70	16.50	17.00	16.30	16.80	17.20	16.70	17.00	17.40
32	TC	62.6	68.7	72.4	67.4	70.8	74.4	70.7	72.5	75.7
	SHC	62.60	49.80	41.20	67.40	57.90	47.00	70.70	64.80	52.40
	kW	16.70	17.40	17.90	17.20	17.70	18.10	17.70	17.90	18.30
36	TC	60.9	66.7	70.3	65.7	68.8	72.2	68.8	70.3	73.4
	SHC	60.90	49.10	40.40	65.70	57.10	46.20	68.80	63.80	51.60
	kW	17.60	18.30	18.80	18.20	18.60	19.10	18.60	18.80	19.20
40	TC	59.3	64.5	68.0	63.8	66.5	69.8	66.9	68.0	71.0
	SHC	59.30	48.30	39.60	63.80	56.20	45.40	66.90	62.60	50.80
	kW	18.60	19.30	19.80	19.20	19.60	20.00	19.60	19.80	20.20
44	TC	57.6	62.2	65.6	61.9	64.1	67.3	64.7	65.7	68.4
	SHC	57.60	47.40	38.80	61.90	55.20	44.50	64.70	61.20	49.90
	kW	19.70	20.30	20.80	20.20	20.60	21.00	20.60	20.80	21.20
48	TC	55.8	59.9	63.1	59.9	61.7	64.7	62.5	63.3	65.7
	SHC	55.80	46.50	38.00	59.90	54.10	43.70	62.50	59.50	48.90
	kW	20.70	21.30	21.80	21.30	21.60	22.00	21.70	21.80	22.20
52	TC	54.0	57.5	60.6	57.8	59.3	62.0	60.2	60.9	63.0
	SHC	54.00	45.60	37.10	57.80	53.10	42.80	60.20	57.60	47.90
	kW	21.80	22.30	22.80	22.40	22.60	23.00	22.70	22.80	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
20	TC	64.1	71.1	74.9	68.2	73.4	77.3	71.8	75.0	78.8
	SHC	64.10	49.20	41.00	68.20	56.50	46.10	71.80	62.90	50.90
	kW	13.60	14.30	14.80	14.00	14.60	15.00	14.40	14.80	15.20
28	TC	61.2	67.6	71.3	65.3	69.8	73.4	68.6	71.3	74.8
	SHC	61.20	47.90	39.70	65.30	55.00	44.80	68.60	61.30	49.50
	kW	15.40	16.10	16.60	15.90	16.40	16.80	16.30	16.60	17.00
32	TC	59.7	65.8	69.4	63.9	67.9	71.4	67.0	69.3	72.7
	SHC	59.70	47.20	39.10	63.90	54.30	44.10	67.00	60.40	48.80
	kW	16.30	17.10	17.50	16.80	17.30	17.70	17.20	17.50	17.90
36	TC	58.2	63.9	67.4	62.3	65.9	69.3	65.3	67.3	70.5
	SHC	58.20	46.50	38.40	62.30	53.50	43.40	65.30	59.50	48.10
	kW	17.30	18.00	18.40	17.80	18.20	18.70	18.20	18.40	18.80
40	TC	56.6	61.9	65.3	60.7	63.8	67.1	63.5	65.2	68.2
	SHC	56.60	45.70	37.60	60.70	52.70	42.70	63.50	58.50	47.30
	kW	18.30	18.90	19.40	18.80	19.20	19.60	19.20	19.40	19.80
44	TC	54.9	59.8	63.1	58.9	61.6	64.7	61.6	62.9	65.8
	SHC	54.90	44.90	36.90	58.90	51.80	41.90	61.60	57.30	46.50
	kW	19.30	20.00	20.40	19.80	20.20	20.60	20.20	20.40	20.80
48	TC	53.3	57.6	60.8	57.1	59.3	62.3	59.6	60.7	63.3
	SHC	53.30	44.10	36.10	57.10	50.80	41.10	59.60	56.10	45.70
	kW	20.40	21.00	21.40	20.90	21.20	21.70	21.30	21.40	21.80
52	TC	51.7	55.4	58.4	55.2	57.1	59.8	57.6	58.4	60.8
	SHC	51.70	43.20	35.30	55.20	49.80	40.20	57.60	54.70	44.80
	kW	21.50	22.00	22.50	22.00	22.30	22.70	22.40	22.50	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



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	35.6	40.2	42.9	38.1	42.2	44.9	39.9	43.5	46.2
	SHC	31.80	25.30	21.80	36.20	28.60	24.10	39.70	31.70	26.30
	kW	6.55	6.62	6.71	6.58	6.70	6.76	6.64	6.72	6.78
28	TC	33.6	37.9	40.4	35.9	39.7	42.2	37.8	40.8	43.4
	SHC	30.60	24.40	20.80	34.80	27.60	23.10	37.70	30.60	25.30
	kW	7.68	7.85	7.96	7.77	7.93	8.04	7.84	7.98	8.09
32	TC	32.6	36.7	39.1	34.9	38.4	40.8	36.7	39.5	41.9
	SHC	30.00	23.90	20.40	34.00	27.10	22.60	36.70	30.10	24.80
	kW	8.24	8.45	8.58	8.35	8.54	8.68	8.45	8.60	8.74
36	TC	31.6	35.5	37.9	33.8	37.1	39.5	35.6	38.1	40.5
	SHC	29.40	23.40	19.90	33.30	26.60	22.20	35.60	29.60	24.30
	kW	8.80	9.04	9.20	8.93	9.15	9.32	9.05	9.22	9.39
40	TC	30.5	34.2	36.6	32.7	35.8	38.1	34.5	36.8	39.1
	SHC	28.70	22.90	19.40	32.50	26.10	21.70	34.50	29.00	23.80
	kW	9.35	9.63	9.82	9.51	9.75	9.95	9.65	9.83	10.00
44	TC	29.5	33.0	35.3	31.6	34.4	36.7	33.4	35.4	37.6
	SHC	28.10	22.40	18.90	31.50	25.60	21.20	33.40	28.50	23.30
	kW	9.89	10.20	10.40	10.10	10.30	10.60	10.30	10.40	10.60
48	TC	28.4	31.7	34.0	30.5	33.1	35.3	32.3	34.0	36.1
	SHC	27.40	21.90	18.40	30.50	25.10	20.70	32.30	27.90	22.80
	kW	10.40	10.80	11.00	10.70	10.90	11.20	10.90	11.00	11.30
52	TC	27.4	30.5	32.6	29.5	31.8	33.9	31.2	32.6	34.7
	SHC	26.80	21.40	18.00	29.50	24.50	20.20	31.20	27.40	22.30
	kW	11.00	11.40	11.60	11.20	11.50	11.80	11.40	11.60	11.90

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	34.0	38.4	40.9	36.3	40.2	42.7	37.9	41.4	43.9
	SHC	30.40	24.20	20.80	34.50	27.30	23.00	37.60	30.10	24.90
	kW	6.56	6.59	6.67	6.58	6.63	6.70	6.56	6.67	6.72
28	TC	32.1	36.2	38.6	34.3	37.9	40.3	35.9	39.0	41.4
	SHC	29.30	23.30	19.90	33.10	26.40	22.10	35.80	29.20	24.00
	kW	7.63	7.78	7.88	7.71	7.85	7.95	7.77	7.90	8.00
32	TC	31.2	35.1	37.4	33.3	36.7	39.0	34.9	37.7	40.0
	SHC	28.70	22.90	19.50	32.40	25.90	21.60	34.90	28.70	23.60
	kW	8.17	8.36	8.49	8.27	8.45	8.58	8.36	8.51	8.64
36	TC	30.2	33.9	36.2	32.2	35.4	37.7	33.9	36.5	38.7
	SHC	28.10	22.40	19.10	31.70	25.40	21.20	33.90	28.20	23.10
	kW	8.72	8.95	9.09	8.84	9.04	9.19	8.95	9.11	9.26
40	TC	29.2	32.8	35.0	31.2	34.2	36.5	32.9	35.2	37.4
	SHC	27.50	22.00	18.60	31.00	25.00	20.70	32.90	27.70	22.70
	kW	9.25	9.52	9.70	9.40	9.63	9.81	9.53	9.71	9.89
44	TC	28.3	31.6	33.8	30.2	33.0	35.2	31.9	33.9	36.0
	SHC	26.90	21.50	18.20	30.10	24.50	20.30	31.90	27.20	22.20
	kW	9.78	10.10	10.30	9.97	10.20	10.40	10.10	10.30	10.50
48	TC	27.3	30.5	32.6	29.2	31.7	33.8	30.9	32.6	34.7
	SHC	26.30	21.00	17.70	29.20	24.00	19.80	30.90	26.60	21.70
	kW	10.30	10.70	10.90	10.50	10.80	11.00	10.70	10.90	11.10
52	TC	26.3	29.3	31.4	28.2	30.5	32.5	29.8	31.3	33.3
	SHC	25.70	20.60	17.30	28.20	23.50	19.30	29.80	26.10	21.30
	kW	10.80	11.20	11.50	11.10	11.40	11.60	11.30	11.50	11.70

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

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Performance data (cont)



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
20	TC	37.9	42.3	44.9	40.5	44.1	46.8	42.7	45.4	48.0
	SHC	35.20	27.80	23.60	40.20	32.00	26.50	42.70	35.80	29.20
	kW	6.60	6.70	6.75	6.64	6.73	6.80	6.69	6.76	6.81
28	TC	35.8	39.8	42.3	38.3	41.5	44.00	40.5	42.6	45.1
	SHC	33.90	26.90	22.60	38.30	31.00	25.50	40.50	34.70	28.20
	kW	7.76	7.93	8.04	7.87	8.01	8.12	7.96	8.06	8.16
32	TC	34.7	38.5	41.0	37.2	40.1	42.6	39.3	41.2	43.6
	SHC	33.30	26.40	22.20	37.20	30.50	25.10	39.30	34.10	27.70
	kW	8.34	8.55	8.69	8.48	8.64	8.77	8.60	8.70	8.83
36	TC	33.6	37.2	39.7	36.2	38.8	41.2	38.2	39.0	42.1
	SHC	32.60	25.90	21.70	36.20	29.90	24.60	38.20	33.50	27.20
	kW	8.92	9.16	9.33	9.09	9.27	9.43	9.23	9.34	9.49
40	TC	32.5	36.0	38.3	35.1	37.4	39.7	37.0	38.4	40.6
	SHC	31.90	25.40	21.20	35.10	29.40	24.10	37.00	32.90	26.70
	kW	9.49	9.77	9.96	9.70	9.89	10.10	9.85	9.97	10.10
44	TC	31.4	34.7	37.0	34.0	36.1	38.3	35.8	37.00	39.1
	SHC	31.10	24.90	20.70	34.00	28.90	23.60	35.80	32.30	26.20
	kW	10.10	10.40	10.60	10.30	10.50	10.70	10.50	10.60	10.80
48	TC	30.4	33.4	35.6	32.9	34.7	36.8	34.6	35.6	37.6
	SHC	30.30	24.40	20.20	32.90	28.30	23.10	34.60	31.70	25.70
	kW	10.60	11.00	11.20	10.90	11.10	11.30	11.10	11.20	11.40
52	TC	29.3	32.1	34.2	31.8	33.3	35.3	33.5	34.2	36.1
	SHC	29.30	23.90	19.80	31.80	27.80	22.60	33.50	31.10	25.20
	kW	11.20	11.60	11.80	11.50	11.70	12.00	11.70	11.80	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
20	TC	36.5	40.9	43.5	39.0	42.8	45.4	41.0	44.0	46.7
	SHC	33.80	26.80	22.80	38.40	30.70	25.50	41.00	34.10	27.90
	kW	6.57	6.67	6.72	6.61	6.72	6.77	6.65	6.74	6.79
28	TC	34.4	38.5	41.0	36.8	40.2	42.7	38.9	41.3	43.8
	SHC	32.50	25.80	21.80	36.70	29.60	24.50	38.90	33.00	26.90
	kW	7.71	7.88	7.99	7.81	7.95	8.06	7.89	8.00	8.11
32	TC	33.4	37.3	39.7	35.8	38.8	41.3	37.8	39.9	42.3
	SHC	31.90	25.30	21.30	35.70	29.10	24.00	37.80	32.40	26.40
	kW	8.28	8.48	8.62	8.40	8.57	8.70	8.51	8.63	8.76
36	TC	32.3	36.0	38.4	34.7	37.5	39.9	36.7	38.5	40.9
	SHC	31.20	24.80	20.90	34.70	28.60	23.50	36.70	31.90	25.90
	kW	8.84	9.08	9.24	9.00	9.18	9.35	9.12	9.25	9.41
40	TC	31.3	34.8	37.1	33.7	36.2	38.5	35.5	37.2	39.4
	SHC	30.50	24.40	20.40	33.70	28.10	23.00	35.50	31.30	25.40
	kW	9.40	9.68	9.87	9.59	9.79	9.97	9.73	9.87	10.00
44	TC	30.2	33.5	35.8	32.6	34.8	37.1	34.4	35.8	37.9
	SHC	29.80	23.90	19.90	32.60	27.50	22.50	34.40	30.70	24.90
	kW	9.96	10.30	10.50	10.20	10.40	10.60	10.30	10.50	10.70
48	TC	29.1	32.2	34.4	31.5	33.5	35.6	33.2	34.4	36.4
	SHC	29.00	23.40	19.40	31.50	27.00	22.10	33.20	30.10	24.40
	kW	10.50	10.80	11.10	10.80	11.00	11.20	10.90	11.10	11.30
52	TC	28.1	30.9	33.1	30.5	32.1	34.2	32.1	33.0	34.9
	SHC	28.10	22.90	19.00	30.50	26.50	21.60	32.10	29.50	23.90
	kW	11.10	11.40	11.70	11.40	11.60	11.80	11.50	11.70	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



COMBINATION RATINGS — SI (cont)

38AKS014/40RM016H 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	39.7	43.8	46.5	42.5	45.4	48.1	44.7	46.5	49.1
	SHC	38.60	30.50	25.50	42.50	35.10	28.70	44.70	39.10	31.70
	kW	6.64	6.72	6.79	6.70	6.77	6.82	6.74	6.78	6.83
28	TC	37.5	41.1	43.7	40.3	42.6	45.1	42.3	43.7	46.1
	SHC	37.00	29.50	24.50	40.20	33.90	27.70	42.30	37.90	30.70
	kW	7.83	7.99	8.10	7.96	8.06	8.16	8.05	8.10	8.20
32	TC	36.4	39.8	42.3	39.1	41.3	43.6	41.1	42.3	44.5
	SHC	36.20	28.90	24.00	39.10	33.40	27.20	41.10	37.20	30.20
	kW	8.43	8.62	8.76	8.59	8.70	8.83	8.70	8.76	8.88
36	TC	35.4	38.5	40.9	38.0	39.9	42.2	39.9	40.9	43.0
	SHC	35.30	28.40	23.50	38.00	32.80	26.70	39.90	36.50	29.70
	kW	9.03	9.24	9.41	9.22	9.34	9.49	9.34	9.41	9.55
40	TC	34.3	37.2	39.5	36.9	38.5	40.7	38.6	39.5	41.5
	SHC	34.30	27.90	23.00	36.90	32.30	26.20	38.60	35.80	29.10
	kW	9.63	9.86	10.10	9.84	9.97	10.20	9.99	10.10	10.20
44	TC	33.2	35.8	38.1	35.7	37.1	39.2	37.4	38.0	39.9
	SHC	33.20	27.40	22.50	35.70	31.70	25.70	37.40	35.00	28.60
	kW	10.20	10.50	10.70	10.50	10.60	10.80	10.60	10.70	10.90
48	TC	32.2	34.4	36.6	34.5	35.7	37.7	36.1	36.6	38.4
	SHC	32.20	26.90	22.00	34.50	31.10	25.20	36.10	34.20	28.10
	kW	10.80	11.10	11.30	11.10	11.20	11.40	11.30	11.30	11.50
52	TC	31.1	33.1	35.2	33.3	34.3	36.2	34.8	35.2	36.8
	SHC	31.10	26.30	21.50	33.30	30.50	24.70	34.80	33.40	27.60
	kW	11.40	11.70	12.00	11.70	11.80	12.10	11.90	11.90	12.20

38AKS014/40RM016 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	39.3	43.4	46.2	42.0	45.1	47.8	44.1	46.2	48.8
	SHC	37.90	30.00	25.20	41.90	34.50	28.20	44.10	38.30	31.10
	kW	6.63	6.71	6.78	6.69	6.77	6.81	6.72	6.78	6.83
28	TC	37.0	40.7	43.3	39.7	42.2	44.8	41.7	43.3	45.8
	SHC	36.40	29.00	24.10	39.70	33.30	27.20	41.70	37.10	30.10
	kW	7.81	7.98	8.09	7.93	8.04	8.15	8.02	8.09	8.19
32	TC	35.9	39.4	41.9	38.6	40.8	43.3	40.5	41.9	44.2
	SHC	35.60	28.40	23.60	38.50	32.70	26.70	40.50	36.40	29.50
	kW	8.40	8.06	8.74	8.55	8.68	8.81	8.66	8.74	8.86
36	TC	34.8	38.1	40.5	37.4	39.4	41.8	39.3	40.4	42.7
	SHC	34.70	27.90	23.10	37.40	32.20	26.20	39.30	35.80	29.00
	kW	9.00	9.22	9.38	9.17	9.31	9.47	9.30	9.38	9.53
40	TC	33.7	36.7	39.1	36.3	38.0	40.3	38.0	39.0	41.1
	SHC	33.70	27.40	22.60	36.30	31.60	25.70	38.00	35.10	28.50
	kW	9.59	9.82	10.00	9.80	9.94	10.10	9.94	10.00	10.20
44	TC	32.6	35.3	37.6	35.1	36.6	38.8	36.7	37.5	39.5
	SHC	32.60	26.90	22.10	35.10	31.00	25.20	36.70	34.30	27.90
	kW	10.20	10.40	10.60	10.40	10.50	10.80	10.60	10.60	10.80
48	TC	31.6	33.9	36.2	33.9	35.1	37.2	35.5	36.1	37.9
	SHC	31.60	26.30	21.60	33.90	30.40	24.60	35.50	33.50	27.40
	kW	10.80	11.00	11.30	11.00	11.20	11.40	11.20	11.30	11.50
52	TC	30.5	32.5	34.7	32.7	33.7	35.7	34.2	34.6	36.4
	SHC	30.50	25.80	21.10	32.70	29.80	24.10	34.20	32.70	26.90
	kW	11.40	11.60	11.90	11.60	11.80	12.00	11.80	11.90	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

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Performance data (cont)



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
20	TC	46.4	52.2	55.5	49.7	55.0	58.3	52.2	56.8	60.1
	SHC	40.50	32.20	27.80	46.50	36.60	30.90	51.40	40.80	33.80
	kW	9.78	10.20	10.40	10.00	10.30	10.60	10.20	10.50	10.70
28	TC	44.0	49.5	52.6	47.2	52.0	55.2	49.5	53.7	56.8
	SHC	39.10	31.00	26.70	44.90	35.50	29.80	49.30	39.50	32.70
	kW	11.30	11.80	12.10	11.60	12.00	12.30	11.80	12.20	12.50
32	TC	42.9	48.1	51.2	45.9	50.5	53.6	48.2	52.1	55.1
	SHC	38.40	30.50	26.10	44.10	34.90	29.20	48.20	38.90	32.10
	kW	12.00	12.60	12.90	12.40	12.90	13.20	12.60	13.00	13.30
36	TC	41.7	46.7	49.7	44.6	49.0	52.0	47.0	50.5	53.4
	SHC	37.70	29.90	25.50	43.30	34.30	28.60	47.00	38.30	31.50
	kW	12.80	13.40	13.80	13.10	13.70	14.00	13.40	13.90	14.20
40	TC	40.5	45.3	48.2	43.3	47.5	50.3	45.7	48.9	51.7
	SHC	37.00	29.30	25.00	42.40	33.70	28.00	45.70	37.70	30.90
	kW	13.50	14.20	14.60	13.90	14.50	14.90	14.20	14.70	15.10
44	TC	39.2	43.9	46.7	42.0	45.9	48.7	44.4	47.2	49.9
	SHC	36.30	28.70	24.40	41.50	33.00	27.40	44.40	37.00	30.30
	kW	14.20	15.00	15.40	14.70	15.30	15.70	15.00	15.50	15.90
48	TC	38.0	42.4	45.1	40.7	44.3	47.0	43.0	45.5	48.2
	SHC	35.50	28.10	23.80	40.50	32.40	26.80	43.00	36.40	29.70
	kW	14.90	15.70	16.20	15.40	16.10	16.50	15.80	16.30	16.80
52	TC	36.7	41.0	43.6	39.4	42.7	45.3	41.7	43.9	46.4
	SHC	34.80	27.50	23.20	39.40	31.80	26.20	41.70	35.70	29.10
	kW	15.60	16.50	17.00	16.20	16.90	17.40	16.60	17.10	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
20	TC	43.8	49.4	52.5	46.8	52.1	55.2	49.0	53.9	57.0
	SHC	38.10	30.40	26.30	43.50	34.30	29.10	47.80	37.90	31.60
	kW	9.60	9.98	10.20	9.81	10.20	10.40	9.95	10.30	10.50
28	TC	41.6	46.9	49.8	44.4	49.3	52.3	46.6	50.9	53.9
	SHC	36.80	29.30	25.20	42.00	33.20	28.00	45.90	36.80	30.50
	kW	11.00	11.50	11.80	11.30	11.80	12.10	11.50	11.90	12.20
32	TC	40.4	45.6	48.5	43.2	47.9	50.8	45.3	49.4	52.3
	SHC	36.10	28.70	24.70	41.20	32.60	27.40	45.00	36.20	29.90
	kW	11.80	12.30	12.60	12.10	12.60	12.90	12.30	12.70	13.00
36	TC	39.3	44.3	47.1	42.0	46.4	49.3	44.1	47.8	50.7
	SHC	35.50	28.20	24.10	40.40	32.10	26.90	44.00	35.60	29.40
	kW	12.50	13.10	13.40	12.80	13.40	13.70	13.10	13.50	13.90
40	TC	38.2	42.9	45.7	40.8	45.0	47.7	42.8	46.3	49.1
	SHC	34.80	27.60	23.60	39.60	31.50	26.30	42.80	35.00	28.80
	kW	13.20	13.80	14.20	13.50	14.10	14.50	13.80	14.30	14.70
44	TC	37.0	41.5	44.2	39.5	43.5	46.2	41.6	44.7	47.4
	SHC	34.10	27.10	23.00	38.70	30.90	25.70	41.60	34.40	28.20
	kW	13.90	14.60	15.00	14.30	14.90	15.30	14.60	15.01	15.50
48	TC	35.8	40.2	42.8	38.3	42.0	44.6	40.3	43.1	45.7
	SHC	33.40	26.50	22.50	37.80	30.30	25.20	40.30	33.80	27.60
	kW	14.60	15.30	15.80	15.00	15.70	16.10	15.40	15.90	16.30
52	TC	34.6	38.8	41.3	37.0	40.5	43.0	39.1	41.6	44.1
	SHC	32.70	25.90	22.00	37.00	29.80	24.60	39.10	33.20	27.00
	kW	15.30	16.10	16.60	15.70	16.40	16.90	16.10	16.60	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

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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
20	TC	48.0	53.6	56.8	51.1	55.9	59.2	53.6	57.5	60.7
	SHC	43.50	34.40	29.30	49.50	39.20	32.60	53.50	43.50	35.70
	kW	9.88	10.30	10.50	10.10	10.40	10.60	10.20	10.50	10.70
28	TC	45.6	50.7	53.8	48.5	52.9	56.0	51.0	54.3	57.4
	SHC	42.10	33.30	28.20	47.70	38.00	31.50	51.00	42.30	34.60
	kW	11.40	11.90	12.20	11.70	12.10	12.40	11.90	12.20	12.50
32	TC	44.4	49.3	52.3	47.2	51.3	54.4	49.7	52.7	55.7
	SHC	41.40	32.70	27.70	46.70	37.40	30.90	49.70	41.60	34.00
	kW	12.20	12.70	13.00	12.50	12.90	13.30	12.80	13.10	13.40
36	TC	43.1	47.9	50.8	45.9	49.8	52.7	48.4	51.1	54.0
	SHC	40.60	32.10	27.10	45.70	36.80	30.40	48.40	41.00	33.40
	kW	12.90	13.50	13.90	13.30	13.80	14.10	13.60	13.90	14.30
40	TC	41.9	46.4	49.3	44.7	48.2	51.1	47.1	49.5	52.2
	SHC	39.90	31.50	26.50	44.60	36.20	29.80	47.10	40.30	32.80
	kW	13.70	14.30	14.70	14.10	14.60	15.00	14.40	14.80	15.10
44	TC	40.6	44.9	47.7	43.4	46.6	49.4	45.7	47.8	50.5
	SHC	39.10	30.90	25.90	43.30	35.60	29.20	45.70	39.70	32.20
	kW	14.40	15.10	15.60	14.90	15.40	15.80	15.20	15.60	16.00
48	TC	39.3	43.4	46.1	42.1	45.0	47.7	44.3	46.1	48.7
	SHC	38.30	30.30	25.40	42.10	34.90	28.60	44.30	39.00	31.60
	kW	15.20	15.90	16.40	15.70	16.20	16.70	16.10	16.40	16.80
52	TC	38.0	41.9	44.5	40.9	43.4	45.9	43.0	44.5	46.9
	SHC	37.50	29.70	24.80	40.80	34.30	28.00	43.00	38.30	31.00
	kW	15.90	16.70	17.20	16.50	17.00	17.50	16.90	17.20	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
20	TC	47.4	53.1	56.3	50.4	55.5	58.8	52.8	57	60.4
	SHC	42.90	33.90	29.00	48.60	38.50	32.20	52.70	42.60	35.10
	kW	9.84	10.20	10.40	10.10	10.40	10.60	10.20	10.50	10.70
28	TC	45.0	50.2	53.3	47.8	52.4	55.5	50.2	53.8	56.9
	SHC	41.40	32.70	27.80	46.80	37.30	31.00	50.20	41.40	33.90
	kW	11.40	11.90	12.10	11.60	12.10	12.30	11.90	12.20	12.50
32	TC	43.7	48.8	51.8	46.5	50.8	53.9	48.9	52.2	55.2
	SHC	40.70	32.10	27.20	45.90	36.70	30.40	48.90	40.70	33.30
	kW	12.10	12.70	13.00	12.40	12.90	13.20	12.70	13.00	13.30
36	TC	42.5	47.3	50.2	45.2	49.2	52.2	47.6	50.5	53.5
	SHC	39.90	31.50	26.70	44.90	36.00	29.80	47.60	40.10	32.70
	kW	12.90	13.50	13.80	13.20	13.70	14.10	13.50	13.90	14.20
40	TC	41.2	45.8	48.7	43.9	47.6	50.5	46.3	48.9	51.7
	SHC	39.10	30.90	26.10	43.80	35.40	29.20	46.30	39.40	32.10
	kW	13.60	14.20	14.70	14.00	14.50	14.90	14.30	14.70	15.10
44	TC	39.9	44.3	47.1	42.6	46.0	48.8	44.9	47.2	49.9
	SHC	38.30	30.30	25.50	42.50	34.80	28.60	44.90	38.70	31.50
	kW	14.30	15.00	15.50	14.80	15.30	15.70	15.10	15.50	15.90
48	TC	38.6	42.7	45.4	41.3	44.4	47.1	43.5	45.5	48.1
	SHC	37.50	29.80	24.90	41.30	34.10	28.00	43.50	38.00	30.90
	kW	15.10	15.80	16.30	15.50	16.10	16.60	15.90	16.30	16.70
52	TC	37.3	41.2	43.8	40.1	42.7	45.3	42.1	43.8	46.3
	SHC	36.70	29.20	24.30	40.10	33.50	27.40	42.10	37.30	30.30
	kW	15.80	16.60	17.10	16.30	16.90	17.40	16.70	17.10	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

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Performance data (cont)



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
20	TC	54.9	59.9	63.5	58.6	62.0	65.4	61.4	63.5	66.7
	SHC	53.80	42.60	35.40	58.60	48.80	39.80	61.40	54.40	44.00
	kW	10.30	10.60	10.80	10.50	10.70	10.90	10.70	10.80	11.00
28	TC	52.1	56.6	59.9	55.7	58.4	61.6	58.2	59.8	62.7
	SHC	51.60	41.20	34.10	55.70	47.40	38.50	58.20	52.70	42.70
	kW	12.00	12.40	12.70	12.30	12.50	12.80	12.50	12.60	12.90
32	TC	50.7	54.8	58.1	54.2	56.6	59.7	56.6	58.0	60.8
	SHC	50.50	40.60	33.50	54.20	46.70	37.90	56.60	51.90	42.00
	kW	12.80	13.20	13.60	13.20	13.40	13.70	13.40	13.60	13.80
36	TC	49.3	53.1	56.2	52.7	54.8	57.8	55.0	56.1	58.8
	SHC	49.30	39.90	32.80	52.70	46.00	37.20	55.00	51.00	41.30
	kW	13.70	14.10	14.50	14.10	14.30	14.70	14.30	14.50	14.80
40	TC	47.9	51.4	54.4	51.1	53.0	55.8	53.3	54.3	56.7
	SHC	47.90	39.20	32.20	51.10	45.20	36.60	53.30	50.00	40.60
	kW	14.50	15.00	15.40	14.90	15.20	15.60	15.20	15.40	15.70
44	TC	46.5	49.6	52.5	49.6	51.1	53.8	51.7	52.4	54.7
	SHC	46.50	38.50	31.50	49.60	44.40	35.90	51.70	48.90	39.90
	kW	15.30	15.80	16.20	15.80	16.10	16.40	16.10	16.20	16.60
48	TC	45.0	47.8	50.6	48.0	49.3	51.9	50.0	50.6	52.7
	SHC	45.00	37.80	30.90	48.00	43.60	35.20	50.00	47.70	39.20
	kW	16.20	16.60	17.10	16.70	16.90	17.30	17.00	17.10	17.50
52	TC	43.6	46.0	48.7	46.4	47.4	49.9	48.3	48.7	50.6
	SHC	43.60	37.10	30.20	46.40	42.80	34.60	48.30	46.50	38.40
	kW	17.00	17.50	18.00	17.50	17.80	18.20	17.90	18.00	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
20	TC	52.2	57.0	60.4	55.4	58.9	62.2	58.0	60.2	63.4
	SHC	50.90	40.30	33.60	55.40	46.10	37.60	58.00	50.90	41.30
	kW	10.20	10.50	10.70	10.40	10.60	10.80	10.50	10.70	10.90
28	TC	49.5	53.7	56.9	52.7	55.5	58.6	55.0	56.7	59.7
	SHC	48.90	39.10	32.40	52.70	44.70	36.30	55.00	49.40	40.00
	kW	11.80	12.20	12.50	12.10	12.30	12.60	12.30	12.40	12.70
32	TC	48.1	52.1	55.2	51.3	53.8	56.8	53.5	55.0	57.8
	SHC	47.80	38.50	31.80	51.30	44.00	35.70	53.50	48.60	39.40
	kW	12.60	13.00	13.30	12.90	13.20	13.50	13.20	13.30	13.60
36	TC	46.8	50.5	53.5	49.9	52.1	55.0	52.0	53.3	55.9
	SHC	46.70	37.80	31.20	49.90	43.30	35.10	52.00	47.80	38.70
	kW	13.40	13.90	14.20	13.80	14.00	14.40	14.00	14.20	14.50
40	TC	45.4	48.8	51.7	48.4	50.4	53.1	50.4	51.5	54.0
	SHC	45.40	37.20	30.50	48.40	42.50	34.50	50.40	46.90	38.10
	kW	14.20	14.70	15.10	14.60	14.90	15.30	14.90	15.00	15.40
44	TC	44.1	47.1	49.9	46.9	48.6	51.2	48.9	49.7	52.1
	SHC	44.10	36.50	29.90	46.90	41.80	33.90	48.90	45.90	37.40
	kW	15.00	15.50	15.90	15.40	15.70	16.10	15.70	15.90	16.20
48	TC	42.8	45.4	48.1	45.4	46.8	49.3	47.3	48.0	50.1
	SHC	42.80	35.90	29.30	45.40	41.00	33.20	47.30	44.90	36.80
	kW	15.80	16.30	16.70	16.30	16.50	17.00	16.60	16.70	17.10
52	TC	41.4	43.7	46.3	43.9	45.0	47.4	45.7	46.2	48.2
	SHC	41.40	35.20	28.70	43.90	40.30	32.60	45.70	43.80	36.10
	kW	16.60	17.10	17.60	17.10	17.30	17.80	17.40	17.60	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

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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	56.0	63.1	67.1	59.9	66.6	70.6	62.8	68.9	72.8
	SHC	48.30	38.50	33.40	55.00	43.40	36.90	60.70	47.90	40.00
	kW	13.20	13.90	14.30	13.60	14.20	14.60	13.90	14.50	14.80
28	TC	53.0	59.7	63.4	56.6	62.8	66.6	59.3	64.8	68.6
	SHC	46.50	37.00	31.90	53.00	41.90	35.40	58.20	46.40	38.50
	kW	14.90	15.70	16.20	15.40	16.10	16.60	15.70	16.40	16.80
32	TC	51.5	57.9	61.6	55.0	60.8	64.5	57.6	62.8	66.5
	SHC	45.60	36.30	31.20	52.00	41.10	34.60	57.00	45.60	37.80
	kW	15.70	16.70	17.20	16.30	17.10	17.60	16.60	17.30	17.80
36	TC	49.9	56.2	59.7	53.3	58.9	62.5	55.9	60.7	64.3
	SHC	44.70	35.50	30.50	51.00	40.30	33.80	55.60	44.80	37.00
	kW	16.60	17.60	18.10	17.10	18.00	18.50	17.50	18.30	18.80
40	TC	48.4	54.3	57.8	51.6	56.9	60.4	54.2	58.6	62.1
	SHC	43.80	34.70	29.70	49.90	39.60	33.10	54.10	44.00	36.20
	kW	17.40	18.50	19.00	18.00	18.90	19.50	18.50	19.20	19.80
44	TC	46.8	52.50	55.8	49.9	54.9	58.2	52.6	56.5	59.8
	SHC	42.90	34.00	29.00	48.80	38.80	32.30	52.50	43.10	35.40
	kW	18.20	19.30	20.00	18.90	19.80	20.50	19.40	20.10	20.80
48	TC	45.2	50.6	53.9	48.3	52.9	56.1	50.9	54.4	57.6
	SHC	41.90	33.20	28.20	47.60	37.90	31.50	50.90	42.30	34.60
	kW	19.10	20.20	20.90	19.70	20.70	21.40	20.30	21.00	21.70
52	TC	43.7	48.8	51.9	46.6	50.8	54.0	49.3	52.2	55.3
	SHC	41.00	32.40	27.50	46.50	37.10	30.80	49.30	41.40	33.80
	kW	19.90	21.10	21.80	20.60	21.60	22.30	21.20	21.90	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	55.3	62.5	66.5	59.1	66.0	70.0	62.0	68.3	72.4
	SHC	47.50	37.90	32.90	54.00	42.70	36.30	59.50	47.00	39.40
	kW	13.10	13.90	14.20	13.50	14.20	14.60	13.80	14.40	14.80
28	TC	52.2	59.0	62.7	55.8	62.1	65.9	58.5	64.2	68.0
	SHC	45.70	36.40	31.50	52.00	41.10	34.80	57.10	45.40	37.80
	kW	14.80	15.70	16.10	15.30	16.10	16.50	15.60	16.30	16.80
32	TC	50.7	57.2	60.9	54.2	60.2	63.9	56.8	62.1	65.8
	SHC	44.80	35.70	30.70	51.00	40.30	34.00	55.80	44.60	37.00
	kW	15.60	16.60	17.10	16.10	17.00	17.50	16.50	17.20	17.80
36	TC	49.2	55.4	59.0	52.5	58.2	61.8	55.0	60.0	63.6
	SHC	43.90	34.90	30.00	49.90	39.50	33.30	54.50	43.80	36.20
	kW	16.50	17.50	18.00	17.00	17.90	18.40	17.40	18.20	18.70
40	TC	47.6	53.6	57.0	50.8	56.2	59.7	53.3	57.9	61.4
	SHC	43.00	34.10	29.20	48.90	38.70	32.50	53.10	43.00	35.50
	kW	17.30	18.30	18.90	17.90	18.80	19.40	18.30	19.10	19.70
44	TC	46.1	51.7	55.1	49.1	54.2	57.5	51.6	55.7	59.1
	SHC	42.10	33.40	28.50	47.70	37.90	31.70	51.50	42.10	34.70
	kW	18.10	19.20	19.80	18.70	19.70	20.30	19.20	20.00	20.60
48	TC	44.5	49.9	53.10	47.4	52.1	55.4	49.9	53.6	56.8
	SHC	41.10	32.60	27.70	46.60	37.10	30.90	49.90	41.30	33.90
	kW	18.90	20.10	20.70	19.50	20.60	21.20	20.10	20.90	21.60
52	TC	42.9	48.0	51.1	45.7	50.1	53.2	48.2	51.4	54.6
	SHC	40.20	31.80	27.00	45.40	36.30	30.10	48.20	40.50	33.10
	kW	19.80	20.90	21.70	20.40	21.40	22.20	21.00	21.80	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

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Performance data (cont)



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	64.6	71.7	75.9	68.5	74.5	78.7	72.1	76.4	80.6
	SHC	59.90	47.20	39.90	67.90	53.60	44.40	72.00	59.60	48.70
	kW	14.10	14.70	15.10	14.40	15.00	15.40	14.80	15.20	15.60
28	TC	60.9	67.3	71.4	64.8	70.0	74.0	68.1	71.7	75.6
	SHC	57.60	45.50	38.30	64.60	51.90	42.80	68.10	57.80	47.00
	kW	15.90	16.70	17.20	16.40	17.00	17.50	16.80	17.20	17.70
32	TC	59.1	65.2	69.1	62.9	67.6	71.5	66.1	69.3	73.0
	SHC	56.40	44.60	37.40	62.90	51.00	41.90	66.10	56.80	46.10
	kW	16.80	17.70	18.20	17.40	18.00	18.50	17.80	18.20	18.70
36	TC	57.3	63.0	66.8	61.1	65.3	69.1	64.2	66.9	70.5
	SHC	55.30	43.70	36.60	61.10	50.10	41.10	64.20	55.80	45.30
	kW	17.70	18.60	19.20	18.30	19.00	19.50	18.80	19.20	19.80
40	TC	55.4	60.7	64.5	59.2	63.0	66.6	62.1	64.5	67.9
	SHC	54.00	42.90	35.70	59.20	49.20	40.20	62.10	54.80	44.40
	kW	18.60	19.60	20.20	19.30	20.00	20.60	19.80	20.20	20.80
44	TC	53.5	58.5	62.1	57.3	60.6	64.1	60.1	62.0	65.3
	SHC	52.70	42.00	34.90	57.30	48.30	39.40	60.10	53.80	43.50
	kW	19.60	20.50	21.20	20.30	20.90	21.50	20.80	21.20	21.80
48	TC	51.7	56.3	59.7	55.4	58.2	61.5	58.0	59.6	62.7
	SHC	51.40	41.10	34.10	55.40	47.30	38.50	58.00	52.80	42.70
	kW	20.50	21.40	22.20	21.20	21.80	22.50	21.80	22.10	22.80
52	TC	49.8	54.1	57.4	53.5	55.8	59.0	56.0	57.2	60.1
	SHC	49.80	40.30	33.20	53.50	46.40	37.60	56.00	51.70	41.80
	kW	21.40	22.40	23.10	22.20	22.80	23.50	22.80	23.10	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	61.3	68.1	72.2	65.0	70.9	75.0	67.9	72.6	76.8
	SHC	56.80	44.80	37.90	63.90	50.80	42.10	67.90	56.10	45.90
	kW	13.70	14.40	14.80	14.10	14.70	15.10	14.40	14.80	15.20
28	TC	57.8	64.0	67.9	61.3	66.5	70.4	64.3	68.1	71.9
	SHC	54.60	43.20	36.30	60.90	49.00	40.40	64.30	54.20	44.20
	kW	15.50	16.30	16.80	15.90	16.60	17.10	16.30	16.80	17.20
32	TC	56.1	61.9	65.7	59.5	64.3	68.0	62.5	65.8	69.5
	SHC	53.50	42.30	35.50	59.40	48.10	39.60	62.50	53.30	43.40
	kW	16.40	17.20	17.70	16.90	17.50	18.00	17.30	17.70	18.20
36	TC	54.4	59.9	63.5	57.7	62.1	65.7	60.6	63.5	67.1
	SHC	52.30	41.50	34.70	57.70	47.30	38.80	60.60	52.40	42.50
	kW	17.30	18.20	18.70	17.80	18.50	19.00	18.30	18.70	19.20
40	TC	52.6	57.8	61.3	56.0	59.8	63.3	58.7	61.2	64.6
	SHC	51.10	40.70	34.00	56.00	46.40	38.00	58.70	51.40	41.70
	kW	18.20	19.10	19.70	18.70	19.40	20.00	19.20	19.70	20.20
44	TC	50.9	55.7	59.1	54.2	57.6	61.0	56.8	58.9	62.2
	SHC	49.90	39.90	33.10	54.20	45.50	37.20	56.80	50.40	40.90
	kW	19.10	20.00	20.60	19.70	20.30	21.00	20.20	20.60	21.20
48	TC	49.2	53.6	56.8	52.5	55.4	58.6	54.9	56.6	59.7
	SHC	48.70	39.00	32.30	52.50	44.70	36.30	54.90	49.40	40.00
	kW	19.90	20.90	21.60	20.60	21.30	21.90	21.10	21.50	22.10
52	TC	47.5	51.5	54.6	50.7	53.2	56.2	52.9	54.3	57.3
	SHC	47.50	38.20	31.50	50.70	43.80	35.50	52.90	48.40	39.20
	kW	20.80	21.70	22.50	21.60	22.20	22.80	22.10	22.40	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

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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	68.3	74.9	79.3	73.1	77.6	81.9	76.9	79.6	83.6
	SHC	66.40	52.20	43.60	73.10	60.40	49.30	76.90	67.80	54.70
	kW	14.40	15.00	15.50	14.90	15.30	15.70	15.20	15.50	15.80
28	TC	64.5	70.3	74.4	69.2	72.8	76.8	72.6	74.6	78.3
	SHC	63.70	50.40	41.80	69.10	58.50	47.60	72.60	65.50	53.00
	kW	16.30	17.00	17.50	16.90	17.40	17.80	17.30	17.60	18.00
32	TC	62.5	68	72.0	67.1	70.4	74.2	70.4	72.1	75.6
	SHC	62.20	49.50	40.90	67.10	57.50	46.70	70.40	64.40	52.10
	kW	17.30	18.00	18.60	17.90	18.40	18.90	18.40	18.60	19.10
36	TC	60.6	65.6	69.5	65.1	67.9	71.6	68.2	69.6	72.9
	SHC	60.60	48.60	40.10	65.10	56.50	45.80	68.20	63.20	51.10
	kW	18.30	19.00	19.60	18.90	19.40	19.90	19.40	19.60	20.10
40	TC	58.7	63.3	67.0	63.0	65.4	68.9	65.9	67.1	70.2
	SHC	58.70	47.70	39.20	63.00	55.50	44.90	65.90	61.80	50.20
	kW	19.20	20.00	20.60	20.00	20.40	20.90	20.40	20.60	21.10
44	TC	56.9	60.9	64.5	60.9	62.9	66.3	63.7	64.6	67.4
	SHC	56.90	46.80	38.40	60.90	54.50	44.00	63.70	60.30	49.20
	kW	20.20	20.90	21.60	21.00	21.30	22.00	21.50	21.60	22.10
48	TC	55.0	58.5	62.0	58.8	60.5	63.6	61.4	62.1	64.7
	SHC	55.00	45.80	37.50	58.80	53.40	43.20	61.40	58.70	48.30
	kW	21.20	21.90	22.60	22.00	22.30	23.00	22.50	22.60	23.20
52	TC	53.1	56.2	59.4	56.7	58.0	60.9	59.2	59.6	61.9
	SHC	53.10	44.90	36.60	56.70	52.40	42.30	59.20	57.10	47.30
	kW	22.10	22.80	23.60	22.90	23.30	24.00	23.50	23.60	24.20

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	64.8	71.4	75.6	69.0	74.1	78.3	72.4	75.8	79.9
	SHC	62.30	49.20	41.20	69.00	56.40	46.20	72.40	62.90	50.90
	kW	14.10	14.70	15.10	14.50	14.90	15.30	14.80	15.10	15.50
28	TC	61.1	67.0	71.0	65.3	69.3	73.3	68.4	71.0	74.8
	SHC	59.80	47.50	39.50	65.20	54.60	44.60	68.40	60.80	49.20
	kW	15.90	16.60	17.10	16.40	16.90	17.40	16.80	17.10	17.60
32	TC	59.3	64.8	68.6	63.4	67.0	70.8	66.4	68.6	72.2
	SHC	58.50	46.60	38.70	63.40	53.70	43.70	66.40	59.70	48.30
	kW	16.80	17.60	18.10	17.40	17.90	18.40	17.80	18.10	18.60
36	TC	57.5	62.6	66.3	61.5	64.7	68.3	64.4	66.2	69.6
	SHC	57.20	45.80	37.80	61.50	52.80	42.90	64.40	58.60	47.40
	kW	17.80	18.60	19.10	18.40	18.90	19.40	18.80	19.10	19.60
40	TC	55.7	60.4	63.9	59.7	62.4	65.80	62.3	63.8	67.0
	SHC	55.70	44.90	37.00	59.70	51.80	42.00	62.30	57.50	46.60
	kW	18.70	19.50	20.10	19.40	19.80	20.40	19.80	20.10	20.60
44	TC	54.0	58.2	61.6	57.7	60.1	63.4	60.3	61.5	64.5
	SHC	54.00	44.10	36.20	57.70	50.90	41.20	60.30	56.20	45.70
	kW	19.60	20.40	21.10	20.40	20.80	21.40	20.80	21.10	21.60
48	TC	52.2	56.0	59.3	55.8	57.8	60.9	58.2	59.1	62.0
	SHC	52.20	43.20	35.40	55.80	49.90	40.40	58.20	55.00	44.80
	kW	20.60	21.30	22.00	21.30	21.70	22.40	21.80	22.00	22.60
52	TC	50.5	53.8	57.0	53.9	55.5	58.4	56.1	56.8	59.4
	SHC	50.50	42.40	34.50	53.90	48.90	39.50	56.10	53.70	43.90
	kW	21.50	22.30	23.00	22.30	22.70	23.40	22.80	23.00	23.60

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

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Performance data (cont)



CONDENSING UNIT RATINGS — ENGLISH

38ARD014							
SST (F)		Air Temperature Entering Condenser (F)					
		70	85	95	100	115	125
25	TC	99.20	91.70	86.60	83.90	75.80	70.10
	kW	6.91	8.28	9.31	9.86	11.70	13.00
	SDT	93.0	108.0	118.0	123.0	138.0	148.0
30	TC	110.00	102.00	96.40	93.60	84.90	78.90
	kW	6.95	8.32	9.35	9.91	11.70	13.00
	SDT	93.0	108.0	118.0	123.0	138.0	148.0
35	TC	121.00	113.00	107.00	104.00	94.80	88.40
	kW	7.00	8.36	9.40	9.95	11.80	13.10
	SDT	93.0	108.0	118.0	123.0	138.0	148.0
40	TC	134.00	125.00	118.00	115.00	105.00	98.50
	kW	7.06	8.41	9.44	10.00	11.80	13.20
	SDT	93.0	108.0	118.0	123.0	138.0	148.0
45	TC	147.00	137.00	130.00	127.00	117.00	109.00
	kW	7.13	8.47	9.50	10.10	11.90	13.20
	SDT	93.0	108.0	118.0	123.0	138.0	148.0
50	TC	161.00	150.00	143.00	140.00	128.00	121.00
	kW	7.25	8.56	9.58	10.10	11.90	13.30
	SDT	93.5	108.0	118.0	123.0	138.0	148.0

38AKS014							
SST (F)		Air Temperature Entering Condenser (F)					
		70	85	95	100	115	125
25	TC	91.30	81.20	74.50	71.20	60.90	54.10
	kW	6.54	7.41	7.97	8.24	9.05	9.53
	SDT	84.2	98.9	109.0	114.0	130.0	142.0
30	TC	106.00	94.80	87.60	84.00	73.00	65.70
	kW	6.64	7.61	8.22	8.52	9.41	9.94
	SDT	86.1	101.0	110.0	115.0	131.0	142.0
35	TC	120.00	108.00	101.00	96.80	85.10	77.30
	kW	6.74	7.80	8.47	8.80	9.77	10.40
	SDT	88.1	102.0	112.0	117.0	132.0	143.0
40	TC	135.00	122.00	114.00	110.00	97.10	88.90
	kW	6.84	7.99	8.73	9.09	10.10	10.80
	SDT	90.0	104.0	114.0	118.0	133.0	144.0
45	TC	149.00	136.00	127.00	122.00	109.00	100.00
	kW	6.93	8.18	8.98	9.37	10.50	11.20
	SDT	91.9	106.0	115.0	120.0	134.0	144.0
50	TC	164.00	149.00	140.00	135.00	121.00	112.00
	kW	7.03	8.37	9.23	9.65	10.80	11.60
	SDT	93.9	108.0	117.0	121.0	135.0	145.0

38ARD016							
SST (F)		Air Temperature Entering Condenser (F)					
		70	85	95	100	115	125
25	TC	136.00	125.00	118.00	114.00	101.00	91.10
	kW	9.55	10.90	11.80	12.30	13.90	14.70
	SDT	91.1	106.0	116.0	121.0	135.0	145.0
30	TC	149.00	138.00	130.00	125.00	112.00	103.00
	kW	9.79	11.10	12.00	12.50	14.10	15.10
	SDT	92.4	107.0	117.0	121.0	136.0	146.0
35	TC	162.00	151.00	142.00	138.00	124.00	114.00
	kW	10.10	11.40	12.30	12.80	14.30	15.40
	SDT	93.9	108.0	118.0	123.0	137.0	146.0
40	TC	176.00	164.00	155.00	151.00	136.00	126.00
	kW	10.30	11.70	12.70	13.10	14.70	15.70
	SDT	95.6	110.0	119.0	124.0	138.0	148.0
45	TC	190.00	179.00	169.00	164.00	148.00	138.00
	kW	10.70	12.10	13.00	13.50	15.00	16.10
	SDT	97.4	112.0	121.0	126.0	140.0	149.0
50	TC	205.00	194.00	184.00	179.00	162.00	150.00
	kW	11.00	12.40	13.40	13.90	15.40	16.50
	SDT	99.3	114.0	123.0	128.0	141.0	151.0

38AKS016							
SST (F)		Air Temperature Entering Condenser (F)					
		70	85	95	100	115	125
25	TC	126.00	112.00	106.00	102.00	90.30	83.00
	kW	9.47	10.60	11.30	11.70	12.60	13.20
	SDT	89.2	103.0	113.0	118.0	132.0	142.0
30	TC	143.00	129.00	121.00	117.00	105.00	96.70
	kW	9.80	11.00	11.90	12.20	13.30	14.00
	SDT	91.8	105.0	115.0	120.0	134.0	144.0
35	TC	161.00	146.00	137.00	133.00	119.00	110.00
	kW	10.10	11.50	12.40	12.80	14.00	14.80
	SDT	94.3	108.0	117.0	122.0	136.0	145.0
40	TC	178.00	163.00	153.00	148.00	134.00	124.00
	kW	10.50	12.00	12.90	13.40	14.70	15.60
	SDT	96.8	110.0	119.0	124.0	138.0	147.0
45	TC	195.00	179.00	169.00	164.00	148.00	138.00
	kW	10.80	12.40	13.50	14.00	15.40	16.40
	SDT	99.3	113.0	122.0	126.0	140.0	149.0
50	TC	213.00	196.00	185.00	179.00	162.00	151.00
	kW	11.10	12.90	14.00	14.60	16.10	17.10
	SDT	102.0	115.0	124.0	128.0	142.0	151.0

38ARD024							
SST (F)		Air Temperature Entering Condenser (F)					
		70	85	95	100	115	125
25	TC	177.00	165.00	156.00	151.00	137.00	123.00
	kW	12.70	14.00	15.60	16.30	18.40	19.40
	SDT	95.9	110.0	120.0	125.0	139.0	148.0
30	TC	193.00	180.00	170.00	165.00	150.00	138.00
	kW	13.20	14.80	16.00	16.70	18.80	20.00
	SDT	97.7	112.0	121.0	126.0	140.0	150.0
35	TC	210.00	195.00	185.00	179.00	163.00	151.00
	kW	13.70	15.30	16.50	17.10	19.10	20.50
	SDT	99.8	114.0	123.0	128.0	142.0	151.0
40	TC	227.00	212.00	201.00	195.00	177.00	165.00
	kW	14.20	15.90	17.00	17.60	19.60	21.00
	SDT	102.0	116.0	125.0	130.0	143.0	153.0
45	TC	246.00	230.00	218.00	211.00	192.00	179.00
	kW	14.80	16.50	17.60	18.20	20.10	21.50
	SDT	104.0	118.0	127.0	132.0	145.0	154.0
50	TC	265.00	248.00	235.00	229.00	208.00	194.00
	kW	15.40	17.10	18.30	18.90	20.80	22.10
	SDT	107.0	121.0	130.0	134.0	147.0	156.0

38AKS024							
SST (F)		Air Temperature Entering Condenser (F)					
		70	85	95	100	115	125
25	TC	158.00	142.00	131.00	126.00	112.00	103.00
	kW	12.60	13.90	14.70	15.10	16.10	16.80
	SDT	93.2	107.0	116.0	120.0	135.0	144.0
30	TC	180.00	163.00	151.00	146.00	130.00	119.00
	kW	13.30	14.70	15.50	16.00	17.10	17.90
	SDT	96.4	110.0	119.0	123.0	137.0	146.0
35	TC	202.00	183.00	171.00	165.00	147.00	136.00
	kW	13.90	15.40	16.40	16.90	18.20	19.00
	SDT	99.6	113.0	122.0	126.0	140.0	149.0
40	TC	224.00	204.00	191.00	184.00	165.00	152.00
	kW	14.50	16.20	17.30	17.80	19.20	20.10
	SDT	103.0	116.0	124.0	129.0	142.0	151.0
45	TC	247.00	225.00	210.00	203.00	182.00	169.00
	kW	15.20	17.00	18.10	18.70	20.20	21.30
	SDT	106.0	119.0	127.0	132.0	145.0	153.0
50	TC	269.00	245.00	230.00	223.00	200.00	185.00
	kW	15.80	17.70	19.00	19.60	21.30	22.40
	SDT	109.0	122.0	130.0	134.0	147.0	156.0

LEGEND

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

38ARD_AKS014-024



COMBINATION RATINGS — ENGLISH

38ARD014/40RM012H 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	120.0	130.0	142.0	127.0	137.0	149.0	133.0	141.0	153.0
	SHC	104.00	87.80	71.00	121.00	101.00	79.20	133.00	113.00	86.90
	KW	7.89	7.94	8.03	7.93	7.99	8.07	7.97	8.00	8.09
85	TC	118.0	128.0	140.0	125.0	134.0	146.0	131.0	139.0	151.0
	SHC	103.00	87.00	70.10	120.00	100.00	78.40	131.00	112.00	86.10
	KW	8.38	8.43	8.50	8.42	8.48	8.54	8.46	8.48	8.57
95	TC	114.0	124.0	135.0	121.0	130.0	142.0	128.0	134.0	145.0
	SHC	101.00	85.20	68.50	118.00	98.30	76.60	128.00	110.00	84.30
	KW	9.43	9.47	9.52	9.47	9.51	9.57	9.49	9.52	9.60
100	TC	112.0	122.0	133.0	119.0	128.0	139.0	125.0	131.0	143.0
	SHC	100.00	84.30	67.60	117.00	97.40	75.70	125.00	109.00	83.40
	KW	9.99	10.00	10.10	10.00	10.10	10.10	10.00	10.10	10.20
105	TC	110.0	119.0	131.0	117.0	125.0	136.0	123.0	129.0	140.0
	SHC	99.40	83.30	66.70	115.00	96.40	74.80	123.00	108.00	82.50
	KW	10.60	10.60	10.70	10.60	10.70	10.70	10.60	10.70	10.70
115	TC	105.0	115.0	126.0	112.0	120.0	131.0	119.0	124.0	134.0
	SHC	97.40	81.40	64.80	112.00	94.40	72.90	119.00	106.00	80.60
	KW	11.80	11.90	11.90	11.90	11.90	12.00	11.90	11.90	12.00
125	TC	101.0	110.0	120.0	108.0	115.0	125.0	115.0	118.0	128.0
	SHC	95.20	79.40	62.90	108.00	92.40	70.90	115.00	104.00	78.60
	KW	13.20	13.30	13.30	13.30	13.30	13.40	13.30	13.30	13.40

38ARD014/40RM012 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	113.0	123.0	135.0	120.0	130.0	141.0	125.0	133.0	145.0
	SHC	98.80	83.30	67.30	114.00	95.20	74.70	125.00	106.00	81.50
	KW	7.87	7.91	7.98	7.90	7.95	8.02	7.92	7.96	8.03
85	TC	112.0	122.0	133.0	118.0	128.0	139.0	124.0	131.0	143.0
	SHC	97.90	82.50	66.50	113.00	94.40	74.00	123.00	105.00	80.80
	KW	8.36	8.39	8.46	8.38	8.43	8.49	8.40	8.44	8.51
95	TC	108.0	118.0	129.0	115.0	123.0	134.0	120.0	127.0	138.0
	SHC	96.10	80.90	65.00	111.00	92.80	72.40	120.00	104.00	79.20
	KW	9.40	9.43	9.49	9.42	9.47	9.52	9.46	9.48	9.54
100	TC	106.0	116.0	127.0	113.0	121.0	132.0	118.0	125.0	136.0
	SHC	95.20	80.00	64.20	110.00	91.90	71.60	118.00	103.00	78.40
	KW	9.97	9.99	10.10	9.99	10.00	10.10	10.00	10.00	10.10
105	TC	104.0	114.0	124.0	111.0	119.0	130.0	116.0	122.0	133.0
	SHC	94.30	79.20	63.40	108.00	91.10	70.80	116.00	102.00	77.50
	KW	10.60	10.60	10.60	10.60	10.60	10.70	10.60	10.60	10.70
115	TC	100.0	109.0	120.0	107.0	114.0	125.0	112.0	118.0	128.0
	SHC	92.30	77.40	61.70	106.00	89.20	69.00	112.00	99.80	75.80
	KW	11.80	11.90	11.90	11.80	11.90	11.90	11.90	11.90	11.90
125	TC	96.2	105.0	115.0	102.0	109.0	119.0	108.0	112.0	122.0
	SHC	90.20	75.50	59.90	102.00	87.20	67.20	108.00	97.60	74.00
	KW	13.20	13.20	13.30	13.20	13.20	13.30	13.20	13.30	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

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Performance data (cont)



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	128.0	138.0	151.0	136.0	144.0	157.0	143.0	148.0	160.0
	SHC	119.00	99.00	78.40	136.00	115.00	88.10	143.00	129.00	97.20
	KW	7.93	7.99	8.09	7.97	8.02	8.14	8.04	8.05	8.18
85	TC	126.0	136.0	148.0	134.0	142.0	154.0	141.0	146.0	158.0
	SHC	118.00	98.10	77.50	134.00	114.00	87.20	141.00	128.00	96.40
	KW	8.42	8.48	8.57	8.46	8.51	8.62	8.52	8.53	8.66
95	TC	122.0	132.0	144.0	130.0	137.0	149.0	137.0	141.0	152.0
	SHC	115.00	96.30	75.80	130.00	112.00	85.40	137.00	126.00	94.60
	KW	9.46	9.52	9.61	9.51	9.55	9.64	9.54	9.56	9.67
100	TC	119.0	129.0	141.0	128.0	135.0	146.0	135.0	138.0	149.0
	SHC	114.00	95.30	74.90	128.00	111.00	84.50	135.00	125.00	93.70
	KW	10.00	10.10	10.20	10.10	10.10	10.20	10.10	10.10	10.20
105	TC	117.0	127.0	138.0	126.0	132.0	143.0	133.0	136.0	146.0
	SHC	113.00	94.30	73.90	126.00	110.00	83.60	133.00	123.00	92.70
	KW	10.60	10.70	10.80	10.70	10.70	10.80	10.70	10.70	10.80
115	TC	113.0	122.0	133.0	121.0	127.0	138.0	128.0	130.0	140.0
	SHC	111.00	92.30	72.00	121.00	108.00	81.70	128.00	121.00	90.80
	KW	11.90	11.90	12.00	11.90	11.90	12.00	12.00	12.00	12.10
125	TC	108.0	116.0	127.0	117.0	121.0	131.0	123.0	124.0	134.0
	SHC	108.00	90.20	70.10	117.00	105.00	79.70	123.00	118.00	88.80
	KW	13.30	13.30	13.40	13.30	13.30	13.40	13.30	13.30	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	121.0	131.0	143.0	128.0	137.0	149.0	135.0	141.0	153.0
	SHC	112.00	93.40	74.10	127.00	107.00	82.70	135.00	120.00	90.70
	KW	7.90	7.95	8.03	7.93	7.98	8.06	7.99	8.00	8.09
85	TC	119.0	129.0	141.0	126.0	135.0	147.0	133.0	138.0	150.0
	SHC	111.00	92.50	73.30	126.00	106.00	82.00	133.00	119.00	89.90
	KW	8.39	8.44	8.52	8.42	8.46	8.54	8.46	8.48	8.57
95	TC	115.0	125.0	136.0	122.0	130.0	142.0	129.0	134.0	145.0
	SHC	109.00	90.80	71.70	122.00	105.00	80.20	129.00	117.00	88.20
	KW	9.44	9.49	9.54	9.48	9.51	9.57	9.51	9.52	9.60
100	TC	113.0	123.0	134.0	120.0	128.0	139.0	127.0	131.0	142.0
	SHC	107.00	89.90	70.80	120.00	104.00	79.40	127.00	116.00	87.30
	KW	10.00	10.00	10.10	10.00	10.10	10.10	10.10	10.10	10.20
105	TC	111.0	120.0	132.0	118.0	125.0	136.0	125.0	129.0	140.0
	SHC	106.00	89.00	69.90	118.00	103.00	78.50	125.00	115.00	86.40
	KW	10.60	10.60	10.70	10.60	10.60	10.70	10.70	10.70	10.70
115	TC	107.0	116.0	126.0	114.0	120.0	131.0	120.0	123.0	134.0
	SHC	104.00	87.00	68.10	114.00	101.00	76.60	120.00	112.00	84.50
	KW	11.80	11.90	11.90	11.90	11.90	12.00	11.90	11.90	12.00
125	TC	103.0	111.0	121.0	110.0	115.0	125.0	116.0	118.0	128.0
	SHC	101.00	85.20	66.10	110.00	98.50	74.70	116.00	110.00	82.50
	KW	13.20	13.30	13.30	13.30	13.30	13.40	13.30	13.30	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

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COMBINATION RATINGS — ENGLISH (cont)

38ARD014/40RM016H 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	137.0	147.0	160.0	147.0	153.0	165.0	155.0	157.0	168.0
	SHC	134.00	112.00	86.90	147.00	131.00	98.70	155.00	147.00	110.00
	KW	7.98	8.05	8.17	8.04	8.09	8.24	8.11	8.13	8.28
85	TC	135.0	144.0	157.0	145.0	150.0	162.0	152.0	154.0	165.0
	SHC	133.00	111.00	86.00	145.00	130.00	97.80	152.00	146.00	109.00
	KW	8.45	8.52	8.65	8.53	8.57	8.72	8.59	8.61	8.75
95	TC	131.0	140.0	152.0	141.0	145.0	156.0	148.0	149.0	159.0
	SHC	130.00	109.00	84.20	141.00	127.00	95.90	148.00	143.00	107.00
	KW	9.49	9.56	9.68	9.57	9.61	9.74	9.63	9.65	9.78
100	TC	128.0	137.0	149.0	138.0	142.0	153.0	145.0	146.0	156.0
	SHC	128.00	108.00	83.20	138.00	126.00	95.00	145.00	142.00	106.00
	KW	10.10	10.10	10.20	10.10	10.20	10.30	10.20	10.20	10.30
105	TC	126.0	134.0	146.0	136.0	139.0	150.0	143.0	143.0	153.0
	SHC	126.00	107.00	82.20	136.00	125.00	94.00	143.00	140.00	105.00
	KW	10.70	10.70	10.80	10.70	10.80	10.90	10.80	10.80	10.90
115	TC	122.0	129.0	140.0	131.0	134.0	144.0	137.0	138.0	147.0
	SHC	122.00	105.00	80.20	131.00	123.00	91.90	137.00	137.00	103.00
	KW	11.90	12.00	12.10	12.00	12.00	12.10	12.00	12.10	12.20
125	TC	117.0	123.0	134.0	126.0	128.0	138.0	132.0	132.0	140.0
	SHC	117.00	102.00	78.10	126.00	120.00	89.80	132.00	132.00	101.00
	KW	13.30	13.40	13.50	13.40	13.40	13.50	13.40	13.40	13.50

38ARD014/40RM016 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	129.0	139.0	151.0	138.0	144.0	157.0	145.0	148.0	160.0
	SHC	126.00	105.00	81.90	138.00	122.00	92.30	145.00	136.00	102.00
	KW	7.95	7.99	8.09	7.98	8.02	8.14	8.02	8.06	8.17
85	TC	127.0	137.0	149.0	136.0	142.0	154.0	143.0	146.0	157.0
	SHC	124.00	104.00	81.00	136.00	121.00	91.40	143.00	135.00	101.00
	KW	8.43	8.47	8.56	8.46	8.50	8.61	8.51	8.53	8.64
95	TC	123.0	132.0	144.0	132.0	137.0	149.0	139.0	141.0	152.0
	SHC	122.00	102.00	79.30	132.00	119.00	89.70	139.00	132.00	99.20
	KW	9.46	9.50	9.60	9.51	9.53	9.66	9.54	9.56	9.67
100	TC	121.0	130.0	141.0	130.0	135.0	146.0	136.0	138.0	149.0
	SHC	120.00	101.00	78.40	130.00	117.00	88.70	136.00	131.00	98.30
	KW	10.00	10.10	10.20	10.10	10.10	10.20	10.10	10.10	10.20
105	TC	119.0	127.0	139.0	128.0	132.0	143.0	134.0	135.0	146.0
	SHC	119.00	100.00	77.40	128.00	116.00	87.80	134.00	129.00	97.40
	KW	10.60	10.60	10.70	10.70	10.70	10.80	10.70	10.70	10.80
115	TC	115.0	122.0	133.0	123.0	126.0	137.0	129.0	130.0	140.0
	SHC	115.00	98.40	75.50	123.00	114.00	85.80	129.00	126.00	95.40
	KW	11.90	11.90	12.00	11.90	11.90	12.00	12.00	12.00	12.10
125	TC	111.0	117.0	127.0	119.0	121.0	131.0	124.0	124.0	133.0
	SHC	111.00	96.30	73.50	119.00	112.00	83.80	124.00	123.00	93.40
	KW	13.30	13.30	13.40	13.30	13.30	13.40	13.30	13.40	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

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Performance data (cont)



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	155.0	168.0	182.0	164.0	177.0	191.0	171.0	182.0	196.0
	SHC	132.00	112.00	90.30	153.00	128.00	100.00	170.00	142.00	109.00
	KW	11.00	11.30	11.60	11.20	11.50	11.80	11.30	11.60	11.90
85	TC	153.0	166.0	180.0	161.0	174.0	188.0	168.0	179.0	193.0
	SHC	131.00	110.00	89.20	152.00	126.00	98.90	168.00	141.00	108.00
	KW	11.50	11.80	12.10	11.70	12.00	12.30	11.80	12.10	12.40
95	TC	147.0	160.0	173.0	156.0	167.0	181.0	163.0	172.0	185.0
	SHC	128.00	108.00	86.70	149.00	124.00	96.50	163.00	138.00	106.00
	KW	12.50	12.80	13.20	12.70	13.00	13.40	12.90	13.10	13.50
100	TC	144.0	156.0	170.0	152.0	163.0	177.0	160.0	168.0	181.0
	SHC	127.00	106.00	85.40	147.00	122.00	95.20	160.00	137.00	104.00
	KW	13.00	13.30	13.70	13.20	13.50	13.90	13.40	13.60	14.00
105	TC	141.0	153.0	166.0	149.0	160.0	173.0	156.0	164.0	177.0
	SHC	125.00	105.00	84.00	145.00	121.00	93.80	156.00	135.00	103.00
	KW	13.50	13.80	14.20	13.70	14.10	14.40	13.90	14.20	14.60
115	TC	134.0	146.0	158.0	142.0	152.0	165.0	150.0	156.0	169.0
	SHC	122.00	102.00	81.10	141.00	118.00	90.80	150.00	132.00	100.00
	KW	14.60	15.00	15.30	14.80	15.10	15.50	15.10	15.30	15.70
125	TC	127.0	138.0	150.0	135.0	144.0	156.0	143.0	148.0	159.0
	SHC	119.00	98.80	78.10	135.00	114.00	87.80	143.00	129.00	96.90
	KW	15.80	16.10	16.50	16.00	16.30	16.70	16.30	16.40	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	148.0	160.0	174.0	156.0	168.0	182.0	162.0	173.0	187.0
	SHC	125.00	106.00	85.70	144.00	120.00	94.50	159.00	133.00	103.00
	KW	10.80	11.10	11.40	11.00	11.30	11.60	11.10	11.40	11.70
85	TC	145.0	158.0	171.0	153.0	165.0	179.0	159.0	170.0	184.0
	SHC	124.00	104.00	84.60	142.00	119.00	93.30	157.00	132.00	101.00
	KW	11.30	11.60	11.90	11.50	11.80	12.10	11.60	11.90	12.20
95	TC	140.0	152.0	165.0	147.0	159.0	172.0	153.0	164.0	177.0
	SHC	121.00	102.00	82.30	139.00	116.00	91.00	153.00	129.00	99.00
	KW	12.30	12.60	12.90	12.50	12.80	13.10	12.60	12.90	13.30
100	TC	137.0	149.0	161.0	144.0	155.0	168.0	150.0	160.0	173.0
	SHC	120.00	101.00	81.00	138.00	115.00	89.70	150.00	128.00	97.70
	KW	12.80	13.10	13.50	13.00	13.30	13.60	13.10	13.40	13.80
105	TC	134.0	145.0	158.0	141.0	152.0	165.0	147.0	156.0	169.0
	SHC	118.00	99.20	79.60	136.00	113.00	88.30	147.00	126.00	96.30
	KW	13.30	13.60	14.00	13.50	13.80	14.20	13.70	13.90	14.30
115	TC	128.0	139.0	151.0	135.0	144.0	157.0	141.0	148.0	161.0
	SHC	115.00	96.50	76.90	132.00	110.00	85.50	141.00	123.00	93.50
	KW	14.40	14.70	15.10	14.60	14.90	15.30	14.80	15.00	15.40
125	TC	121.0	132.0	143.0	128.0	137.0	148.0	135.0	140.0	152.0
	SHC	112.00	93.60	74.10	127.00	107.00	82.70	135.00	120.00	90.60
	KW	15.60	15.90	16.30	15.80	16.10	16.40	16.00	16.20	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

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COMBINATION RATINGS — ENGLISH (cont)

38ARD016/40RM016H 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	167.0	181.0	195.0	177.0	188.0	203.0	186.0	193.0	207.0
	SHC	150.00	125.00	99.70	174.00	145.00	112.00	186.00	162.00	123.00
	KW	11.20	11.50	11.90	11.50	11.70	12.10	11.70	11.80	12.20
85	TC	164.0	177.0	192.0	174.0	185.0	199.0	183.0	190.0	204.0
	SHC	149.00	124.00	98.50	172.00	143.00	110.00	183.00	161.00	122.00
	KW	11.70	12.10	12.40	12.00	12.20	12.60	12.20	12.40	12.70
95	TC	158.0	171.0	185.0	168.0	178.0	192.0	177.0	183.0	196.0
	SHC	146.00	121.00	96.00	168.00	141.00	108.00	177.00	158.00	119.00
	KW	12.70	13.10	13.50	13.00	13.30	13.70	13.20	13.40	13.80
100	TC	155.0	167.0	181.0	165.0	174.0	188.0	173.0	179.0	192.0
	SHC	144.00	120.00	94.60	165.00	139.00	106.00	173.00	157.00	118.00
	KW	13.30	13.60	14.00	13.50	13.80	14.20	13.80	13.90	14.30
105	TC	151.0	163.0	177.0	161.0	170.0	184.0	170.0	174.0	187.0
	SHC	143.00	118.00	93.10	161.00	138.00	105.00	170.00	155.00	116.00
	KW	13.80	14.10	14.60	14.10	14.30	14.80	14.30	14.50	14.90
115	TC	144.0	155.0	169.0	154.0	161.0	174.0	162.0	166.0	178.0
	SHC	139.00	115.00	90.00	154.00	134.00	102.00	162.00	151.00	113.00
	KW	14.90	15.30	15.70	15.20	15.40	15.90	15.50	15.60	16.00
125	TC	137.0	147.0	159.0	147.0	152.0	165.0	154.0	156.0	168.0
	SHC	135.00	112.00	86.80	147.00	131.00	98.60	154.00	147.00	110.00
	KW	16.10	16.40	16.80	16.40	16.60	17.00	16.60	16.70	17.10

38ARD016/40RM016 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	158.0	171.0	185.0	167.0	178.0	192.0	174.0	183.0	197.0
	SHC	141.00	118.00	94.20	162.00	135.00	105.00	174.00	151.00	114.00
	KW	11.00	11.30	11.70	11.20	11.50	11.80	11.40	11.60	11.90
85	TC	156.0	168.0	182.0	164.0	175.0	189.0	172.0	180.0	194.0
	SHC	140.00	117.00	93.10	160.00	134.00	103.00	172.00	149.00	113.00
	KW	11.50	11.80	12.20	11.70	12.00	12.30	11.90	12.10	12.50
95	TC	150.0	162.0	176.0	158.0	168.0	182.0	166.0	173.0	186.0
	SHC	137.00	114.00	90.60	156.00	131.00	101.00	166.00	146.00	111.00
	KW	12.50	12.80	13.20	12.70	13.00	13.40	12.90	13.10	13.50
100	TC	147.0	158.0	172.0	155.0	165.0	178.0	163.0	169.0	182.0
	SHC	135.00	113.00	89.30	154.00	130.00	99.60	163.00	145.00	109.00
	KW	13.00	13.40	13.70	13.30	13.50	13.90	13.50	13.70	14.00
105	TC	143.0	155.0	168.0	152.0	161.0	174.0	159.0	165.0	178.0
	SHC	134.00	111.00	87.90	151.00	128.00	98.20	159.00	143.00	108.00
	KW	13.60	13.90	14.30	13.80	14.10	14.50	14.00	14.20	14.60
115	TC	137.0	147.0	160.0	145.0	153.0	165.0	152.0	157.0	169.0
	SHC	130.00	108.00	84.90	145.00	125.00	95.20	152.00	140.00	105.00
	KW	14.70	15.00	15.40	14.90	15.20	15.60	15.20	15.30	15.70
125	TC	130.0	140.0	151.0	138.0	145.0	156.0	145.0	148.0	160.0
	SHC	126.00	105.00	81.90	138.00	122.00	92.20	145.00	136.00	102.00
	KW	15.80	16.10	16.50	16.10	16.30	16.70	16.30	16.40	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

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Performance data (cont)



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	180.0	191.0	206.0	192.0	198.0	212.0	201.0	203.0	216.0
	SHC	177.00	147.00	113.00	192.00	171.00	129.00	201.00	192.00	144.00
	KW	11.50	11.80	12.20	11.80	12.00	12.30	12.00	12.10	12.40
85	TC	177.0	188.0	203.0	189.0	195.0	209.0	198.0	199.0	212.0
	SHC	176.00	146.00	112.00	189.00	170.00	128.00	198.00	191.00	142.00
	KW	12.00	12.30	12.70	12.30	12.50	12.80	12.60	12.60	12.90
95	TC	171.0	181.0	195.0	183.0	187.0	201.0	191.0	192.0	204.0
	SHC	171.00	143.00	110.00	183.00	167.00	125.00	191.00	187.00	140.00
	KW	13.10	13.40	13.80	13.40	13.50	13.90	13.60	13.70	14.00
100	TC	167.0	177.0	191.0	179.0	183.0	196.0	187.0	188.0	200.0
	SHC	167.00	142.00	108.00	179.00	165.00	124.00	187.00	184.00	138.00
	KW	13.60	13.90	14.30	14.00	14.10	14.50	14.20	14.20	14.60
105	TC	164.0	173.0	187.0	175.0	179.0	192.0	183.0	184.0	195.0
	SHC	164.00	140.00	107.00	175.00	163.00	122.00	183.00	182.00	137.00
	KW	14.20	14.40	14.90	14.50	14.60	15.00	14.80	14.80	15.10
115	TC	157.0	164.0	177.0	168.0	170.0	182.0	175.0	175.0	185.0
	SHC	157.00	136.00	104.00	168.00	159.00	119.00	175.00	175.00	133.00
	KW	15.30	15.50	16.00	15.60	15.70	16.10	15.90	15.90	16.20
125	TC	149.0	155.0	167.0	159.0	160.0	171.0	166.0	166.0	174.0
	SHC	149.00	133.00	100.00	159.00	155.00	116.00	166.00	166.00	130.00
	KW	16.50	16.70	17.10	16.80	16.80	17.20	17.00	17.00	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	171.0	182.0	196.0	181.0	188.0	202.0	189.0	192.0	205.0
	SHC	167.00	139.00	107.00	181.00	161.00	121.00	189.00	179.00	134.00
	KW	11.30	11.60	11.90	11.60	11.70	12.10	11.80	11.80	12.10
85	TC	168.0	179.0	193.0	179.0	185.0	198.0	186.0	189.0	202.0
	SHC	165.00	138.00	106.00	179.00	160.00	120.00	186.00	178.00	133.00
	KW	11.80	12.10	12.40	12.10	12.20	12.60	12.30	12.30	12.70
95	TC	162.0	172.0	186.0	173.0	177.0	191.0	180.0	182.0	194.0
	SHC	161.00	135.00	104.00	173.00	157.00	118.00	180.00	174.00	131.00
	KW	12.80	13.10	13.50	13.10	13.30	13.60	13.30	13.40	13.70
100	TC	158.0	168.0	182.0	169.0	174.0	187.0	176.0	178.0	190.0
	SHC	158.00	134.00	102.00	169.00	155.00	116.00	176.00	172.00	129.00
	KW	13.40	13.60	14.00	13.70	13.80	14.20	13.90	13.90	14.30
105	TC	155.0	164.0	177.0	166.0	169.0	182.0	173.0	174.0	185.0
	SHC	155.00	132.00	101.00	166.00	153.00	115.00	173.00	169.00	128.00
	KW	13.90	14.20	14.60	14.20	14.30	14.70	14.40	14.50	14.80
115	TC	149.0	156.0	168.0	158.0	161.0	173.0	165.0	165.0	175.0
	SHC	149.00	129.00	98.00	158.00	149.00	112.00	165.00	164.00	125.00
	KW	15.00	15.30	15.70	15.30	15.40	15.80	15.60	15.60	15.90
125	TC	142.0	147.0	159.0	151.0	152.0	163.0	157.0	157.0	166.0
	SHC	142.00	126.00	95.00	151.00	145.00	109.00	157.00	157.00	121.00
	KW	16.20	16.40	16.80	16.50	16.60	16.90	16.70	16.70	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

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COMBINATION RATINGS — ENGLISH (cont)

38ARD024/40RM016H 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	191.0	206.0	223.0	201.0	217.0	234.0	209.0	223.0	240.0
	SHC	159.00	134.00	109.00	183.00	153.00	121.00	203.00	169.00	131.00
	KW	14.50	15.00	15.50	14.80	15.30	15.90	15.10	15.50	16.10
85	TC	188.0	203.0	220.0	198.0	213.0	230.0	206.0	219.0	236.0
	SHC	157.00	133.00	108.00	181.00	151.00	119.00	201.00	168.00	129.00
	KW	15.10	15.60	16.10	15.40	15.90	16.50	15.70	16.10	16.70
95	TC	181.0	196.0	212.0	191.0	205.0	221.0	199.0	211.0	227.0
	SHC	154.00	130.00	105.00	178.00	148.00	116.00	196.00	164.00	126.00
	KW	16.40	16.90	17.50	16.70	17.20	17.80	17.00	17.40	18.00
100	TC	178.0	192.0	208.0	187.0	201.0	217.0	195.0	207.0	223.0
	SHC	153.00	128.00	103.00	176.00	146.00	114.00	194.00	163.00	125.00
	KW	17.10	17.60	18.10	17.40	17.90	18.50	17.70	18.10	18.70
105	TC	174.0	188.0	204.0	183.0	197.0	212.0	191.0	202.0	218.0
	SHC	151.00	127.00	102.00	174.00	144.00	113.00	190.00	161.00	123.00
	KW	17.80	18.30	18.80	18.10	18.60	19.20	18.40	18.80	19.40
115	TC	167.0	180.0	195.0	175.0	188.0	202.0	183.0	193.0	207.0
	SHC	147.00	123.00	98.30	169.00	141.00	109.00	183.00	157.00	119.00
	KW	19.30	19.70	20.30	19.60	20.00	20.60	19.80	20.20	20.80
125	TC	159.0	171.0	185.0	167.0	178.0	192.0	175.0	183.0	196.0
	SHC	143.00	119.00	94.80	164.00	137.00	106.00	175.00	153.00	116.00
	KW	20.80	21.20	21.80	21.10	21.50	22.00	21.40	21.70	22.20

38ARD024/40RM016 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	189.0	204.0	221.0	199.0	215.0	232.0	207.0	221.0	238.0
	SHC	157.00	133.00	108.00	180.00	150.00	119.00	199.00	166.00	129.00
	KW	14.40	14.90	15.40	14.70	15.20	15.80	15.00	15.40	16.00
85	TC	185.0	201.0	218.0	196.0	211.0	228.0	203.0	217.0	234.0
	SHC	155.00	131.00	107.00	178.00	148.00	117.00	197.00	164.00	127.00
	KW	15.00	15.50	16.10	15.30	15.90	16.40	15.60	16.10	16.70
95	TC	179.0	194.0	210.0	188.0	203.0	219.0	196.0	209.0	225.0
	SHC	152.00	128.00	104.00	174.00	145.00	114.00	192.00	161.00	124.00
	KW	16.30	16.80	17.40	16.60	17.10	17.70	16.90	17.30	17.90
100	TC	175.0	190.0	205.0	185.0	199.0	214.0	192.0	204.0	220.0
	SHC	150.00	126.00	102.00	172.00	143.00	113.00	190.00	159.00	122.00
	KW	17.00	17.50	18.00	17.30	17.80	18.40	17.60	18.00	18.60
105	TC	172.0	186.0	201.0	181.0	194.0	210.0	188.0	200.0	215.0
	SHC	148.00	124.00	100.00	170.00	142.00	111.00	187.00	157.00	121.00
	KW	17.70	18.20	18.70	18.00	18.50	19.10	18.30	18.70	19.30
115	TC	164.0	178.0	192.0	173.0	185.0	200.0	180.0	190.0	205.0
	SHC	145.00	121.00	96.80	166.00	138.00	107.00	180.00	154.00	117.00
	KW	19.20	19.60	20.20	19.50	19.90	20.50	19.70	20.10	20.70
125	TC	157.0	169.0	183.0	165.0	176.0	190.0	172.0	181.0	194.0
	SHC	141.00	117.00	93.40	161.00	134.00	104.00	172.00	150.00	113.00
	KW	20.70	21.20	21.70	21.00	21.40	22.00	21.30	21.60	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

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Performance data (cont)



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	213.0	229.0	247.0	224.0	237.0	255.0	235.0	243.0	260.0
	SHC	194.00	161.00	127.00	223.00	186.00	143.00	235.00	208.00	157.00
	KW	15.20	15.70	16.30	15.50	16.00	16.60	15.90	16.20	16.80
85	TC	209.0	225.0	242.0	220.0	233.0	250.0	231.0	239.0	256.0
	SHC	192.00	160.00	126.00	220.00	184.00	141.00	231.00	207.00	155.00
	KW	15.80	16.30	16.90	16.20	16.60	17.30	16.60	16.80	17.40
95	TC	201.0	216.0	233.0	213.0	224.0	241.0	223.0	229.0	245.0
	SHC	188.00	156.00	122.00	213.00	181.00	138.00	223.00	203.00	152.00
	KW	17.10	17.60	18.20	17.50	17.90	18.50	17.90	18.10	18.70
100	TC	197.0	211.0	228.0	209.0	219.0	235.0	219.0	224.0	240.0
	SHC	186.00	154.00	121.00	209.00	179.00	136.00	219.00	201.00	150.00
	KW	17.70	18.30	18.90	18.20	18.60	19.20	18.60	18.80	19.40
105	TC	193.0	207.0	223.0	205.0	214.0	230.0	215.0	219.0	234.0
	SHC	184.00	152.00	119.00	205.00	177.00	134.00	215.00	198.00	148.00
	KW	18.40	18.90	19.60	18.90	19.20	19.90	19.30	19.40	20.10
115	TC	184.0	197.0	212.0	196.0	204.0	219.0	205.0	208.0	223.0
	SHC	179.00	148.00	115.00	196.00	172.00	130.00	205.00	194.00	144.00
	KW	19.90	20.40	21.00	20.30	20.60	21.30	20.70	20.80	21.40
125	TC	175.0	186.0	201.0	187.0	193.0	207.0	195.0	197.0	210.0
	SHC	174.00	144.00	111.00	187.00	168.00	126.00	195.00	188.00	141.00
	KW	21.40	21.80	22.40	21.80	22.10	22.70	22.20	22.30	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	204.0	219.0	237.0	215.0	228.0	245.0	224.0	233.0	250.0
	SHC	186.00	155.00	122.00	212.00	177.00	136.00	224.00	198.00	149.00
	KW	14.90	15.40	16.00	15.20	15.70	16.30	15.60	15.90	16.40
85	TC	200.0	216.0	233.0	211.0	224.0	241.0	221.0	229.0	246.0
	SHC	184.00	153.00	121.00	209.00	176.00	135.00	221.00	196.00	148.00
	KW	15.50	16.00	16.60	15.80	16.30	16.90	16.20	16.50	17.10
95	TC	193.0	207.0	224.0	203.0	215.0	231.0	213.0	220.0	236.0
	SHC	180.00	150.00	117.00	203.00	172.00	131.00	213.00	192.00	144.00
	KW	16.80	17.30	17.90	17.10	17.60	18.20	17.50	17.70	18.40
100	TC	189.0	203.0	219.0	200.0	210.0	226.0	209.0	215.0	231.0
	SHC	178.00	148.00	116.00	200.00	170.00	130.00	209.00	190.00	143.00
	KW	17.50	18.00	18.60	17.80	18.20	18.80	18.20	18.40	19.00
105	TC	185.0	198.0	214.0	196.0	205.0	221.0	205.0	210.0	225.0
	SHC	176.00	146.00	114.00	196.00	168.00	128.00	205.00	188.00	141.00
	KW	18.20	18.60	19.20	18.50	18.90	19.50	18.90	19.10	19.70
115	TC	177.0	189.0	204.0	188.0	196.0	210.0	196.0	200.0	214.0
	SHC	171.00	143.00	110.00	188.00	164.00	124.00	196.00	183.00	137.00
	KW	19.60	20.10	20.60	20.00	20.30	20.90	20.30	20.50	21.10
125	TC	169.0	180.0	194.0	180.0	186.0	199.0	187.0	190.0	203.0
	SHC	166.00	139.00	107.00	180.00	160.00	121.00	187.00	178.00	133.00
	KW	21.10	21.60	22.10	21.60	21.80	22.40	21.90	22.00	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

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COMBINATION RATINGS — ENGLISH (cont)

38ARD024/40RM028H 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	225.0	240.0	258.0	239.0	247.0	265.0	250.0	253.0	270.0
	SHC	220.00	183.00	141.00	239.00	212.00	160.00	250.00	237.00	177.00
	KW	15.60	16.10	16.70	16.10	16.30	17.00	16.40	16.50	17.10
85	TC	221.0	235.0	253.0	236.0	243.0	260.0	246.0	249.0	265.0
	SHC	218.00	181.00	139.00	236.00	210.00	158.00	246.00	235.00	176.00
	KW	16.20	16.70	17.30	16.70	17.00	17.60	17.10	17.20	17.80
95	TC	213.0	226.0	243.0	227.0	233.0	250.0	237.0	239.0	254.0
	SHC	212.00	177.00	136.00	227.00	206.00	154.00	237.00	230.00	172.00
	KW	17.50	18.00	18.60	18.00	18.30	18.50	18.40	18.90	19.10
100	TC	209.0	221.0	238.0	223.0	228.0	244.0	232.0	233.0	248.0
	SHC	209.00	175.00	134.00	223.00	204.00	153.00	232.00	227.00	170.00
	KW	18.20	18.60	19.30	18.70	18.90	19.60	19.10	19.10	19.70
105	TC	205.0	216.0	232.0	218.0	223.0	238.0	227.0	228.0	242.0
	SHC	205.00	173.00	132.00	218.00	202.00	151.00	227.00	224.00	168.00
	KW	18.90	19.30	20.00	19.40	19.60	20.20	19.80	19.80	20.40
115	TC	196.0	205.0	221.0	209.0	212.0	226.0	217.0	217.0	230.0
	SHC	196.00	169.00	128.00	209.00	197.00	147.00	217.00	217.00	164.00
	KW	20.30	20.70	21.30	20.80	21.00	21.60	21.20	21.20	21.70
125	TC	187.0	194.0	209.0	198.0	200.0	213.0	206.0	206.0	216.0
	SHC	187.00	165.00	124.00	198.00	192.00	143.00	206.00	206.00	160.00
	KW	21.80	22.10	22.80	22.30	22.40	23.00	22.70	22.70	23.10

38ARD024/40RM028 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	215.0	229.0	247.0	227.0	237.0	254.0	237.0	242.0	259.0
	SHC	208.00	173.00	134.00	227.00	199.00	150.00	237.00	221.00	165.00
	KW	15.20	15.70	16.30	15.60	16.00	16.60	16.00	16.20	16.70
85	TC	211.0	225.0	243.0	223.0	232.0	250.0	233.0	238.0	254.0
	SHC	206.00	171.00	132.00	223.00	197.00	148.00	233.00	219.00	164.00
	KW	15.90	16.30	17.00	16.30	16.60	17.20	16.60	16.80	17.40
95	TC	204.0	217.0	233.0	216.0	223.0	240.0	225.0	228.0	244.0
	SHC	201.00	168.00	129.00	216.00	193.00	145.00	225.00	215.00	160.00
	KW	17.10	17.60	18.20	17.60	17.90	18.50	17.90	18.10	18.70
100	TC	200.0	212.0	228.0	212.0	219.0	234.0	221.0	223.0	238.0
	SHC	198.00	166.00	127.00	212.00	191.00	144.00	221.00	212.00	159.00
	KW	17.80	18.30	18.90	18.30	18.50	19.20	18.60	18.70	19.30
105	TC	195.0	207.0	223.0	208.0	214.0	229.0	216.0	218.0	233.0
	SHC	195.00	164.00	125.00	208.00	189.00	142.00	216.00	210.00	157.00
	KW	18.50	19.00	19.60	19.00	19.20	19.80	19.30	19.40	20.00
115	TC	187.0	197.0	213.0	199.0	203.0	218.0	207.0	208.0	221.0
	SHC	187.00	160.00	122.00	199.00	185.00	138.00	207.00	204.00	153.00
	KW	20.00	20.40	21.00	20.40	20.60	21.20	20.80	20.80	21.40
125	TC	179.0	187.0	201.0	190.0	193.0	206.0	197.0	197.0	209.0
	SHC	179.00	156.00	118.00	190.00	180.00	134.00	197.00	196.00	149.00
	KW	21.50	21.80	22.40	22.00	22.10	22.60	22.30	22.30	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

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Performance data (cont)



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	117.0	128.0	140.0	124.0	134.0	146.0	130.0	139.0	151.0
	SHC	102.00	86.00	69.70	118.00	98.80	77.60	130.00	110.00	84.90
	KW	7.50	7.61	7.76	7.57	7.69	7.84	7.65	7.74	7.88
85	TC	114.0	125.0	137.0	121.0	131.0	143.0	128.0	135.0	147.0
	SHC	101.00	84.90	68.60	117.00	97.60	76.40	128.00	109.00	83.70
	KW	7.89	8.03	8.19	7.99	8.11	8.28	8.06	8.18	8.34
95	TC	109.0	119.0	131.0	116.0	125.0	137.0	123.0	129.0	140.0
	SHC	98.00	82.60	66.30	114.00	95.20	74.10	123.00	107.00	81.40
	KW	8.68	8.84	9.06	8.79	8.96	9.18	8.90	9.03	9.25
100	TC	106.0	116.0	128.0	114.0	122.0	133.0	120.0	126.0	137.0
	SHC	96.80	81.40	65.20	112.00	94.00	73.00	120.00	105.00	80.20
	KW	9.06	9.24	9.49	9.19	9.37	9.61	9.33	9.45	9.69
105	TC	104.0	114.0	125.0	111.0	119.0	130.0	117.0	123.0	134.0
	SHC	95.50	80.20	64.10	110.00	92.70	71.80	117.00	104.00	79.10
	KW	9.43	9.64	9.91	9.59	9.78	10.10	9.74	9.86	10.10
115	TC	98.7	108.0	118.0	106.0	113.0	123.0	112.0	116.0	127.0
	SHC	92.80	77.80	61.80	106.00	90.20	69.50	112.00	101.00	76.70
	KW	10.20	10.40	10.80	10.40	10.60	10.90	10.60	10.70	11.00
125	TC	93.5	102.0	112.0	101.0	107.0	117.0	107.0	110.0	120.0
	SHC	90.20	75.50	59.50	101.00	87.70	67.10	107.00	98.70	74.40
	KW	10.90	11.20	11.60	11.20	11.40	11.80	11.40	11.50	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	111.0	122.0	133.0	118.0	128.0	140.0	124.0	132.0	144.0
	SHC	97.60	82.40	66.70	113.00	94.30	74.00	123.00	105.00	80.70
	KW	7.46	7.55	7.68	7.52	7.62	7.76	7.57	7.67	7.80
85	TC	109.0	119.0	131.0	116.0	125.0	137.0	121.0	129.0	140.0
	SHC	96.40	81.40	65.60	111.00	93.30	73.00	121.00	104.00	79.70
	KW	7.83	7.95	8.11	7.91	8.04	8.19	7.99	8.09	8.25
95	TC	104.0	114.0	125.0	111.0	120.0	131.0	117.0	123.0	134.0
	SHC	94.00	79.20	63.60	108.00	91.00	70.80	117.00	102.00	77.50
	KW	8.59	8.76	8.95	8.70	8.85	9.05	8.80	8.92	9.13
100	TC	102.0	112.0	122.0	108.0	117.0	128.0	114.0	120.0	131.0
	SHC	92.80	78.10	62.50	107.00	89.90	69.80	114.00	100.00	76.40
	KW	8.96	9.15	9.37	9.09	9.26	9.49	9.21	9.33	9.56
105	TC	99.5	109.0	119.0	106.0	114.0	125.0	112.0	117.0	128.0
	SHC	91.60	77.00	61.50	105.00	88.80	68.70	112.00	99.20	75.40
	KW	9.33	9.55	9.79	9.48	9.67	9.92	9.62	9.74	10.00
115	TC	94.7	103.0	114.0	101.0	108.0	118.0	107.0	111.0	121.0
	SHC	89.10	74.80	59.40	101.00	86.00	66.50	107.00	96.60	73.20
	KW	10.10	10.30	10.60	10.30	10.50	10.80	10.40	10.50	10.80
125	TC	89.9	98.0	108.0	96.3	102.0	112.0	102.0	105.0	115.0
	SHC	86.50	72.60	57.20	96.30	84.00	64.40	102.00	94.10	71.00
	KW	10.80	11.10	11.40	11.00	11.20	11.60	11.20	11.40	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

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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	124.0	135.0	147.0	132.0	141.0	153.0	139.0	145.0	156.0
	SHC	116.00	96.70	76.50	132.00	112.00	85.80	139.00	125.00	94.40
	KW	7.57	7.70	7.84	7.67	7.77	7.91	7.75	7.81	7.95
85	TC	122.0	132.0	144.0	130.0	138.0	149.0	137.0	141.0	153.0
	SHC	114.00	95.50	75.40	130.00	110.00	84.60	137.00	124.00	93.30
	KW	7.98	8.12	8.30	8.09	8.20	8.37	8.19	8.26	8.42
95	TC	116.0	126.0	138.0	125.0	131.0	143.0	131.0	135.0	146.0
	SHC	111.00	93.10	73.10	125.00	108.00	82.30	131.00	121.00	90.90
	KW	8.79	8.97	9.19	8.94	9.07	9.29	9.07	9.14	9.34
100	TC	114.0	123.0	134.0	122.0	128.0	139.0	129.0	132.0	142.0
	SHC	110.00	91.90	72.00	122.00	107.00	81.20	129.00	119.00	89.80
	KW	9.18	9.38	9.64	9.36	9.50	9.74	9.51	9.57	9.81
105	TC	111.0	120.0	131.0	119.0	125.0	136.0	126.0	128.0	139.0
	SHC	108.00	90.70	70.90	119.00	105.00	80.10	126.00	118.00	88.60
	KW	9.58	9.80	10.10	9.79	9.93	10.20	9.94	10.00	10.30
115	TC	106.0	114.0	125.0	114.0	119.0	129.0	120.0	122.0	131.0
	SHC	105.00	88.30	68.60	114.00	103.00	77.70	120.00	115.00	86.20
	KW	10.40	10.60	11.00	10.60	10.80	11.10	10.80	10.90	11.20
125	TC	100.0	108.0	118.0	109.0	112.0	122.0	114.0	115.0	124.0
	SHC	100.00	85.90	66.30	109.00	100.00	75.30	114.00	112.00	83.90
	KW	11.20	11.50	11.80	11.50	11.60	11.90	11.70	11.70	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	120.0	131.0	142.0	127.0	136.0	148.0	134.0	140.0	152.0
	SHC	111.00	92.90	73.70	126.00	107.00	82.30	134.00	119.00	90.10
	KW	7.53	7.65	7.79	7.61	7.72	7.86	7.68	7.76	7.90
85	TC	117.0	128.0	139.0	125.0	133.0	145.0	131.0	137.0	148.0
	SHC	109.00	91.70	72.60	124.00	105.00	81.10	131.00	118.00	88.90
	KW	7.93	8.07	8.23	8.02	8.14	8.31	8.12	8.19	8.36
95	TC	112.0	122.0	133.0	119.0	127.0	138.0	126.0	130.0	142.0
	SHC	107.00	89.40	70.40	119.00	103.00	78.80	126.00	115.00	86.60
	KW	8.71	8.89	9.11	8.85	8.99	9.21	8.97	9.05	9.27
100	TC	109.0	119.0	130.0	117.0	124.0	135.0	123.0	127.0	138.0
	SHC	105.00	88.20	69.30	117.00	102.00	77.80	123.00	113.00	85.50
	KW	9.10	9.30	9.54	9.26	9.40	9.65	9.40	9.48	9.72
105	TC	107.0	116.0	127.0	115.0	121.0	132.0	121.0	124.0	135.0
	SHC	104.00	87.00	68.20	115.00	100.00	76.50	121.00	112.00	84.30
	KW	9.49	9.71	9.98	9.67	9.82	10.10	9.82	9.90	10.20
115	TC	102.0	110.0	121.0	109.0	114.0	125.0	115.0	118.0	127.0
	SHC	100.00	84.60	65.90	109.00	97.90	74.30	115.00	109.00	82.00
	KW	10.30	10.50	10.80	10.50	10.60	11.00	10.70	10.70	11.00
125	TC	96.4	104.0	114.0	104.0	108.0	118.0	110.0	111.0	120.0
	SHC	96.40	82.30	63.60	104.00	95.20	72.10	110.00	106.00	79.60
	KW	11.00	11.30	11.70	11.30	11.40	11.80	11.50	11.60	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

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Performance data (cont)



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	130.0	140.0	152.0	139.0	145.0	157.0	146.0	149.0	160.0
	SHC	127.00	106.00	82.60	139.00	123.00	93.20	146.00	137.00	103.00
	KW	7.64	7.76	7.90	7.75	7.82	7.95	7.83	7.86	7.99
85	TC	127.0	136.0	148.0	136.0	142.0	153.0	143.0	145.0	156.0
	SHC	125.00	105.00	81.40	136.00	122.00	92.00	143.00	136.00	102.00
	KW	8.06	8.19	8.36	8.19	8.26	8.42	8.29	8.32	8.46
95	TC	122.0	130.0	142.0	131.0	135.0	146.0	137.0	139.0	149.0
	SHC	122.00	103.00	79.10	131.00	119.00	89.70	137.00	133.00	99.50
	KW	8.89	9.05	9.27	9.07	9.15	9.35	9.19	9.22	9.40
100	TC	119.0	127.0	139.0	128.0	132.0	143.0	134.0	136.0	145.0
	SHC	119.00	101.00	78.00	128.00	118.00	88.50	134.00	131.00	98.40
	KW	9.31	9.47	9.72	9.51	9.58	9.81	9.64	9.66	9.87
105	TC	117.0	124.0	135.0	126.0	129.0	139.0	132.0	132.0	142.0
	SHC	117.00	100.00	76.80	126.00	116.00	87.40	132.00	129.00	97.20
	KW	9.73	9.90	10.20	9.94	10.00	10.30	10.10	10.10	10.30
115	TC	112.0	118.0	128.0	120.0	122.0	132.0	125.0	126.0	134.0
	SHC	112.00	97.60	74.50	120.00	113.00	85.00	125.00	125.00	94.80
	KW	10.60	10.70	11.10	10.80	10.90	11.20	11.00	11.00	11.20
125	TC	107.0	111.0	121.0	114.0	116.0	125.0	119.0	119.0	127.0
	SHC	107.00	95.00	72.10	114.00	110.00	82.70	119.00	119.00	92.50
	KW	11.40	11.60	11.90	11.70	11.70	12.10	11.90	11.80	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	128.0	138.0	151.0	137.0	144.0	156.0	144.0	147.0	159.0
	SHC	125.00	105.00	81.40	137.00	121.00	91.60	144.00	135.00	101.00
	KW	7.62	7.74	7.88	7.73	7.81	7.94	7.81	7.85	7.98
85	TC	125.0	135.0	147.0	134.0	140.0	152.0	141.0	144.0	155.0
	SHC	123.00	103.00	80.20	134.00	119.00	90.40	141.00	133.00	99.80
	KW	8.03	8.17	8.34	8.16	8.24	8.41	8.26	8.30	8.45
95	TC	120.0	129.0	141.0	129.0	134.0	145.0	135.0	137.0	148.0
	SHC	119.00	101.00	77.80	129.00	117.00	88.00	135.00	130.00	97.40
	KW	8.85	9.02	9.24	9.02	9.11	9.33	9.15	9.19	9.38
100	TC	117.0	126.0	137.0	126.0	130.0	141.0	132.0	134.0	144.0
	SHC	117.00	99.50	76.60	126.00	115.00	86.90	132.00	128.00	96.20
	KW	9.27	9.44	9.69	9.46	9.54	9.79	9.60	9.62	9.85
105	TC	115.0	122.0	134.0	124.0	127.0	138.0	129.0	131.0	140.0
	SHC	115.00	98.20	75.50	124.00	114.00	85.60	129.00	126.00	95.00
	KW	9.68	9.86	10.10	9.89	9.98	10.20	10.00	10.10	10.30
115	TC	110.0	116.0	127.0	118.0	120.0	130.0	123.0	124.0	133.0
	SHC	110.00	95.70	73.10	118.00	111.00	83.20	123.00	122.00	92.50
	KW	10.50	10.70	11.00	10.70	10.80	11.10	10.90	10.90	11.20
125	TC	105.0	109.0	120.0	112.0	114.0	123.0	117.0	117.0	125.0
	SHC	105.00	93.10	70.70	112.00	108.00	80.80	117.00	117.00	90.10
	KW	11.30	11.50	11.90	11.60	11.70	12.00	11.80	11.80	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

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COMBINATION RATINGS — ENGLISH (cont)

38AKS016/40RM014H 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	154.0	168.0	183.0	163.0	176.0	191.0	171.0	182.0	197.0
	SHC	132.00	111.00	90.30	153.00	127.00	100.00	169.00	142.00	109.00
	KW	11.10	11.50	11.80	11.30	11.70	12.10	11.50	11.80	12.20
85	TC	151.0	165.0	179.0	160.0	173.0	188.0	168.0	178.0	193.0
	SHC	130.00	110.00	89.00	151.00	126.00	98.90	167.00	141.00	108.00
	KW	11.60	12.00	12.40	11.90	12.30	12.70	12.10	12.40	12.80
95	TC	145.0	158.0	172.0	154.0	166.0	180.0	161.0	171.0	185.0
	SHC	127.00	107.00	86.30	148.00	123.00	96.20	161.00	138.00	105.00
	KW	12.60	13.10	13.60	13.00	13.40	13.90	13.20	13.50	14.00
100	TC	142.0	155.0	169.0	151.0	162.0	176.0	158.0	167.0	181.0
	SHC	126.00	106.00	84.90	146.00	122.00	94.80	158.00	136.00	104.00
	KW	13.10	13.70	14.20	13.50	13.90	14.50	13.80	14.10	14.60
105	TC	139.0	151.0	165.0	147.0	159.0	172.0	155.0	163.0	177.0
	SHC	124.00	104.00	83.60	144.00	120.00	93.40	155.00	135.00	102.00
	KW	13.70	14.20	14.80	14.00	14.50	15.00	14.30	14.70	15.20
115	TC	133.0	145.0	158.0	141.0	151.0	164.0	149.0	156.0	168.0
	SHC	121.00	101.00	80.90	140.00	117.00	90.60	149.00	131.00	99.60
	KW	14.70	15.30	15.90	15.10	15.60	16.20	15.50	15.80	16.40
125	TC	127.0	138.0	150.0	135.0	144.0	156.0	143.0	148.0	160.0
	SHC	118.00	98.60	78.10	135.00	114.00	87.80	143.00	128.00	96.80
	KW	15.60	16.30	17.00	16.10	16.70	17.40	16.60	16.90	17.60

38AKS016/40RM014 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	145.0	159.0	173.0	154.0	167.0	181.0	161.0	172.0	187.0
	SHC	124.00	105.00	85.40	143.00	119.00	94.20	157.00	132.00	102.00
	KW	10.90	11.20	11.60	11.10	11.40	11.80	11.30	11.60	11.90
85	TC	143.0	156.0	170.0	151.0	164.0	178.0	158.0	169.0	183.0
	SHC	122.00	104.00	84.10	141.00	118.00	93.00	155.00	131.00	101.00
	KW	11.40	11.80	12.20	11.60	12.00	12.40	11.80	12.10	12.50
95	TC	137.0	150.0	163.0	145.0	157.0	171.0	151.0	162.0	175.0
	SHC	120.00	101.00	81.50	138.00	115.00	90.30	151.00	128.00	98.30
	KW	12.40	12.80	13.30	12.60	13.10	13.50	12.90	13.20	13.70
100	TC	134.0	147.0	160.0	142.0	154.0	167.0	148.0	158.0	172.0
	SHC	118.00	99.60	80.30	136.00	114.00	89.00	148.00	127.00	96.90
	KW	12.80	13.30	13.80	13.20	13.60	14.10	13.40	13.80	14.30
105	TC	131.0	143.0	156.0	139.0	150.0	163.0	145.0	155.0	168.0
	SHC	117.00	98.30	78.90	134.00	112.00	87.60	145.00	125.00	95.50
	KW	13.30	13.80	14.40	13.70	14.10	14.70	13.90	14.30	14.90
115	TC	125.0	137.0	149.0	133.0	143.0	156.0	140.0	147.0	160.0
	SHC	114.00	95.60	76.40	130.00	110.00	85.00	140.00	122.00	92.80
	KW	14.30	14.90	15.50	14.70	15.20	15.80	15.00	15.40	16.00
125	TC	120.0	130.0	143.0	127.0	136.0	148.0	134.0	140.0	152.0
	SHC	111.00	92.90	73.80	127.00	107.00	82.30	134.00	119.00	90.10
	KW	15.30	15.90	16.60	15.70	16.20	16.90	16.10	16.40	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

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Performance data (cont)



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	159.0	172.0	187.0	168.0	180.0	194.0	176.0	184.0	199.0
	SHC	143.00	120.00	95.40	164.00	137.00	106.00	176.00	153.00	116.00
	KW	11.02	11.60	11.90	11.50	11.80	12.10	11.70	11.90	12.20
85	TC	156.0	169.0	183.0	165.0	176.0	191.0	173.0	181.0	195.0
	SHC	141.00	118.00	94.00	162.00	136.00	105.00	173.00	152.00	115.00
	KW	11.70	12.10	12.50	12.00	12.30	12.80	12.20	12.50	12.90
95	TC	149.0	162.0	176.0	158.0	169.0	183.0	167.0	173.0	187.0
	SHC	138.00	115.00	91.40	158.00	133.00	102.00	167.00	149.00	112.00
	KW	12.80	13.20	13.70	13.10	13.50	14.00	13.40	13.60	14.10
100	TC	146.0	159.0	172.0	155.0	165.0	179.0	164.0	169.0	183.0
	SHC	137.00	114.00	90.00	155.00	131.00	101.00	164.00	147.00	111.00
	KW	13.30	13.80	14.30	13.70	14.00	14.60	14.00	14.20	14.70
105	TC	143.0	155.0	169.0	152.0	161.0	175.0	160.0	166.0	179.0
	SHC	135.00	113.00	88.60	152.00	130.00	99.40	160.00	145.00	109.00
	KW	13.80	14.30	14.90	14.20	14.60	15.20	14.60	14.80	15.30
115	TC	137.0	148.0	161.0	146.0	154.0	167.0	154.0	158.0	170.0
	SHC	131.00	110.00	85.90	146.00	127.00	96.60	154.00	142.00	106.00
	KW	14.90	15.40	16.10	15.30	15.70	16.30	15.70	15.90	16.50
125	TC	131.0	141.0	153.0	140.0	146.0	158.0	147.0	150.0	162.0
	SHC	128.00	107.00	83.20	140.00	124.00	93.70	147.00	139.00	104.00
	KW	15.90	16.50	17.20	16.40	16.80	17.50	16.90	17.00	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	157.0	170.0	185.0	165.0	178.0	193.0	173.0	183.0	198.0
	SHC	140.00	118.00	94.00	161.00	135.00	104.00	173.00	150.00	114.00
	KW	11.20	11.50	11.90	11.40	11.70	12.10	11.60	11.80	12.20
85	TC	153.0	167.0	181.0	162.0	174.0	189.0	170.0	179.0	194.0
	SHC	139.00	116.00	92.70	159.00	133.00	103.00	170.00	148.00	113.00
	KW	11.70	12.10	12.50	11.90	12.30	12.70	12.20	12.40	12.80
95	TC	147.0	160.0	174.0	156.0	167.0	181.0	164.0	171.0	185.0
	SHC	136.00	113.00	89.90	155.00	130.00	100.00	164.00	145.00	110.00
	KW	12.70	13.20	13.70	13.00	13.04	13.90	13.30	13.60	14.00
100	TC	144.0	157.0	170.0	153.0	163.0	177.0	161.0	167.0	181.0
	SHC	134.00	112.00	88.60	152.00	129.00	98.90	161.00	144.00	108.00
	KW	13.20	13.70	14.20	13.60	14.00	14.50	13.90	14.10	14.70
105	TC	141.0	153.0	167.0	150.0	159.0	173.0	158.0	163.0	177.0
	SHC	132.00	110.00	87.20	150.00	127.00	97.50	158.00	142.00	107.00
	KW	13.70	14.20	14.80	14.10	14.50	15.10	14.40	14.70	15.20
115	TC	135.0	146.0	159.0	144.0	152.0	165.0	151.0	156.0	168.0
	SHC	129.00	108.00	84.40	144.00	124.00	94.60	151.00	139.00	104.00
	KW	14.07	15.30	15.90	15.20	15.60	16.20	15.60	15.80	16.40
125	TC	128.0	139.0	151.0	137.0	144.0	156.0	145.0	148.0	160.0
	SHC	125.00	105.00	81.60	137.00	121.00	91.80	145.00	135.00	101.00
	KW	15.70	16.40	17.10	16.30	16.70	17.40	16.70	16.90	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

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COMBINATION RATINGS — ENGLISH (cont)

38AKS016/40RM024H 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	179.0	191.0	207.0	191.0	198.0	214.0	201.0	203.0	217.0
	SHC	176.00	146.00	113.00	191.00	170.00	128.00	201.00	191.00	143.00
	KW	11.70	12.00	12.40	12.00	12.20	12.50	12.20	12.30	12.60
85	TC	175.0	187.0	203.0	188.0	194.0	209.0	197.0	199.0	213.0
	SHC	174.00	145.00	112.00	188.00	169.00	127.00	197.00	189.00	141.00
	KW	12.30	12.60	13.00	12.60	12.80	13.20	12.90	12.90	13.30
95	TC	168.0	179.0	194.0	181.0	186.0	200.0	189.0	191.0	203.0
	SHC	168.00	142.00	109.00	181.00	165.00	124.00	189.00	184.00	138.00
	KW	13.40	13.80	14.30	13.80	14.00	14.50	14.10	14.20	14.60
100	TC	165.0	175.0	190.0	177.0	181.0	195.0	185.0	186.0	198.0
	SHC	165.00	140.00	107.00	177.00	163.00	122.00	185.00	182.00	137.00
	KW	14.00	14.40	14.90	14.50	14.60	15.10	14.80	14.80	15.20
105	TC	162.0	171.0	185.0	174.0	177.0	190.0	181.0	182.0	194.0
	SHC	162.00	138.00	106.00	174.00	162.00	121.00	181.00	179.00	135.00
	KW	14.60	15.00	15.50	15.10	15.20	15.70	15.40	15.40	15.90
115	TC	155.0	163.0	176.0	166.0	169.0	181.0	173.0	174.0	184.0
	SHC	155.00	135.00	103.00	166.00	158.00	118.00	173.00	173.00	132.00
	KW	15.70	16.10	16.70	16.30	16.40	17.00	16.60	16.60	17.10
125	TC	149.0	154.0	167.0	159.0	160.0	172.0	165.0	165.0	174.0
	SHC	149.00	132.00	99.70	159.00	154.00	115.00	165.00	165.00	129.00
	KW	16.90	17.20	18.00	17.50	17.60	18.20	17.80	17.80	18.30

38AKS016/40RM024 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	170.0	182.0	197.0	181.0	188.0	203.0	190.0	193.0	207.0
	SHC	166.00	139.00	108.00	181.00	161.00	121.00	190.00	179.00	134.00
	KW	11.50	11.80	12.20	11.80	12.00	12.30	12.00	12.10	12.40
85	TC	166.0	178.0	193.0	178.0	184.0	199.0	186.0	189.0	202.0
	SHC	164.00	138.00	106.00	178.00	159.00	120.00	186.00	177.00	132.00
	KW	12.10	12.40	12.80	12.40	12.60	13.00	12.60	12.70	13.10
95	TC	160.0	170.0	185.0	171.0	176.0	190.0	179.0	181.0	193.0
	SHC	159.00	134.00	103.00	171.00	155.00	117.00	179.00	173.00	130.00
	KW	13.20	13.50	14.00	13.60	13.70	14.20	13.80	13.90	14.30
100	TC	157.0	166.0	181.0	168.0	172.0	186.0	175.0	177.0	189.0
	SHC	157.00	133.00	102.00	168.00	154.00	116.00	175.00	170.00	128.00
	KW	13.70	14.10	14.60	14.10	14.30	14.80	14.40	14.50	14.90
105	TC	154.0	163.0	176.0	164.0	168.0	181.0	171.0	173.0	184.0
	SHC	154.00	131.00	100.00	164.00	152.00	114.00	171.00	168.00	127.00
	KW	14.30	14.60	15.20	14.70	14.90	15.40	15.00	15.10	15.50
115	TC	147.0	155.0	168.0	157.0	160.0	172.0	164.0	165.0	175.0
	SHC	147.00	128.00	97.50	157.00	148.00	111.00	164.00	163.00	124.00
	KW	15.40	15.70	16.40	15.90	16.00	16.60	16.20	16.20	16.70
125	TC	141.0	147.0	159.0	150.0	152.0	163.0	157.0	156.0	166.0
	SHC	141.00	125.00	94.60	150.00	144.00	108.00	157.00	156.00	121.00
	KW	16.50	16.80	17.50	17.00	17.10	17.80	17.40	17.40	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

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Performance data (cont)



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	186.0	202.0	220.0	197.0	213.0	231.0	205.0	220.0	238.0
	SHC	156.00	133.00	108.00	180.00	151.00	120.00	200.00	167.00	130.00
	KW	14.70	15.30	15.90	15.10	15.70	16.30	15.40	15.90	16.60
85	TC	182.0	198.0	216.0	193.0	209.0	227.0	201.0	215.0	233.0
	SHC	154.00	131.00	106.00	178.00	149.00	118.00	198.00	166.00	128.00
	KW	15.30	16.00	16.60	15.80	16.40	17.00	16.10	16.60	17.30
95	TC	174.0	190.0	207.0	185.0	200.0	217.0	193.0	206.0	223.0
	SHC	151.00	127.00	103.00	174.00	145.00	114.00	192.00	162.00	124.00
	KW	16.50	17.20	17.90	17.00	17.60	18.40	17.30	17.90	18.70
100	TC	170.0	186.0	202.0	181.0	195.0	212.0	189.0	201.0	218.0
	SHC	149.00	125.00	101.00	172.00	143.00	112.00	188.00	160.00	123.00
	KW	17.10	17.80	18.60	17.60	18.30	19.10	18.00	18.60	19.30
105	TC	167.0	182.0	198.0	176.0	190.0	207.0	185.0	196.0	212.0
	SHC	147.00	124.00	99.40	170.00	142.00	111.00	185.00	158.00	121.00
	KW	17.60	18.40	19.30	18.20	18.90	19.70	18.60	19.20	20.00
115	TC	159.0	173.0	188.0	168.0	181.0	196.0	177.0	186.0	202.0
	SHC	143.00	120.00	95.90	165.00	138.00	107.00	177.00	154.00	117.00
	KW	18.80	19.60	20.60	19.40	20.10	21.00	19.90	20.40	21.30
125	TC	151.0	164.0	179.0	160.0	171.0	186.0	169.0	176.0	191.0
	SHC	139.00	116.00	92.40	160.00	134.00	103.00	169.00	150.00	113.00
	KW	19.90	20.90	21.90	20.60	21.40	22.40	21.20	21.70	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	183.0	200.0	218.0	194.0	211.0	229.0	203.0	218.0	236.0
	SHC	154.00	130.00	107.00	177.00	148.00	118.00	196.00	164.00	128.00
	KW	14.70	15.30	15.90	15.10	15.60	16.30	15.30	15.90	16.50
85	TC	179.0	196.0	214.0	190.0	206.0	224.0	198.0	213.0	231.0
	SHC	152.00	129.00	105.00	175.00	146.00	116.00	193.00	162.00	126.00
	KW	15.20	15.90	16.50	15.70	16.30	16.90	16.00	16.50	17.20
95	TC	172.0	188.0	205.0	182.0	197.0	214.0	190.0	203.0	221.0
	SHC	148.00	125.00	101.00	170.00	142.00	112.00	188.00	158.00	122.00
	KW	16.40	17.10	17.80	16.90	17.50	18.30	17.20	17.80	18.60
100	TC	168.0	183.0	200.0	178.0	193.0	209.0	186.0	198.0	215.0
	SHC	146.00	123.00	99.70	168.00	140.00	110.00	185.00	156.00	120.00
	KW	16.90	17.70	18.50	17.50	18.20	19.00	17.80	18.40	19.20
105	TC	164.0	179.0	195.0	174.0	188.0	204.0	182.0	193.0	210.0
	SHC	144.00	121.00	97.90	166.00	139.00	109.00	181.00	154.00	118.00
	KW	17.50	18.30	19.10	18.00	18.80	19.60	18.40	19.10	19.90
115	TC	156.0	170.0	186.0	165.0	178.0	194.0	173.0	183.0	199.0
	SHC	140.00	118.00	94.30	161.00	135.00	105.00	173.00	150.00	115.00
	KW	18.60	19.50	20.40	19.20	20.00	20.90	19.70	20.30	21.20
125	TC	148.0	162.0	176.0	157.0	169.0	184.0	165.0	173.0	188.0
	SHC	136.00	114.00	90.70	156.00	131.00	101.00	165.00	146.00	111.00
	KW	19.80	20.70	21.70	20.30	21.20	22.20	20.90	21.50	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



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	210.0	228.0	247.0	223.0	237.0	256.0	235.0	244.0	262.0
	SHC	193.00	161.00	128.00	222.00	186.00	143.00	235.00	209.00	157.00
	KW	15.60	16.20	16.90	16.00	16.50	17.20	16.50	16.80	17.40
85	TC	206.0	223.0	242.0	218.0	232.0	251.0	230.0	238.0	256.0
	SHC	191.00	159.00	126.00	218.00	184.00	141.00	230.00	207.00	155.00
	KW	16.20	16.90	17.60	16.70	17.20	17.90	17.20	17.50	18.10
95	TC	197.0	212.0	231.0	210.0	221.0	239.0	221.0	227.0	244.0
	SHC	186.00	155.00	122.00	210.00	180.00	137.00	221.00	202.00	151.00
	KW	17.50	18.20	19.00	18.10	18.60	19.30	18.60	18.80	19.60
100	TC	192.0	207.0	225.0	205.0	216.0	233.0	216.0	221.0	238.0
	SHC	184.00	153.00	120.00	205.00	177.00	135.00	216.00	199.00	149.00
	KW	18.10	18.90	19.70	18.80	19.30	20.10	19.30	19.05	20.30
105	TC	188.0	202.0	220.0	201.0	210.0	227.0	211.0	216.0	232.0
	SHC	181.00	151.00	118.00	201.00	175.00	133.00	211.00	197.00	147.00
	KW	18.70	19.50	20.40	19.40	19.90	20.70	20.00	20.20	21.00
115	TC	179.0	192.0	208.0	192.0	199.0	215.0	201.0	204.0	219.0
	SHC	176.00	147.00	114.00	192.00	171.00	129.00	201.00	192.00	143.00
	KW	20.00	20.80	21.70	20.80	21.20	22.10	21.30	21.50	22.40
125	TC	169.0	181.0	197.0	183.0	188.0	203.0	192.0	193.0	207.0
	SHC	169.00	143.00	110.00	183.00	166.00	125.00	192.00	187.00	139.00
	KW	21.20	22.10	23.10	22.10	22.50	23.50	22.70	22.90	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	200.0	216.0	235.0	211.0	225.0	244.0	222.0	231.0	250.0
	SHC	183.00	153.00	121.00	209.00	176.00	135.00	222.00	196.00	148.00
	KW	15.20	15.80	16.50	15.60	16.10	16.80	16.00	16.30	17.00
85	TC	195.0	212.0	230.0	207.0	220.0	239.0	217.0	226.0	244.0
	SHC	181.00	151.00	119.00	206.00	174.00	133.00	217.00	194.00	146.00
	KW	15.90	16.50	17.10	16.30	16.80	17.50	16.70	17.00	17.70
95	TC	187.0	202.0	219.0	198.0	210.0	227.0	209.0	215.0	232.0
	SHC	176.00	147.00	116.00	198.00	170.00	129.00	209.00	189.00	142.00
	KW	17.10	17.80	18.50	17.60	18.10	18.80	18.00	18.30	19.10
100	TC	183.0	197.0	214.0	194.0	205.0	222.0	204.0	210.0	227.0
	SHC	174.00	145.00	114.00	194.00	167.00	128.00	204.00	187.00	140.00
	KW	17.70	18.40	19.20	18.20	18.70	19.50	18.70	19.00	19.80
105	TC	178.0	192.0	209.0	190.0	200.0	216.0	200.0	205.0	221.0
	SHC	172.00	143.00	112.00	190.00	165.00	126.00	200.00	185.00	138.00
	KW	18.30	19.00	19.90	18.90	19.40	20.20	19.40	19.60	20.40
115	TC	170.0	183.0	198.0	182.0	189.0	205.0	190.0	194.0	209.0
	SHC	167.00	139.00	108.00	182.00	161.00	122.00	190.00	180.00	135.00
	KW	19.50	20.20	21.20	20.20	20.60	21.50	20.70	20.90	21.80
125	TC	162.0	173.0	188.0	173.0	179.0	194.0	181.0	183.0	197.0
	SHC	162.00	135.00	104.00	173.00	157.00	118.00	181.00	175.00	131.00
	KW	20.70	21.40	22.50	21.50	21.90	22.80	22.00	22.20	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

38ARD, AKS014-024

Performance data (cont)



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	223.0	239.0	259.0	238.0	248.0	267.0	250.0	254.0	271.0
	SHC	219.00	182.00	141.00	238.00	212.00	160.00	250.00	237.00	177.00
	KW	16.00	16.60	17.30	16.60	16.90	17.50	17.00	17.10	17.70
85	TC	218.0	233.0	253.0	234.0	242.0	260.0	245.0	248.0	265.0
	SHC	216.00	180.00	139.00	234.00	209.00	158.00	245.00	234.00	175.00
	KW	16.70	17.30	18.00	17.30	17.60	18.30	17.70	17.80	18.40
95	TC	209.0	223.0	241.0	224.0	230.0	248.0	234.0	236.0	252.0
	SHC	209.00	176.00	135.00	224.00	204.00	153.00	234.00	228.00	171.00
	KW	18.00	18.60	19.40	18.70	19.00	19.70	19.20	19.20	19.90
100	TC	204.0	217.0	235.0	219.0	225.0	242.0	229.0	231.0	246.0
	SHC	204.00	173.00	133.00	219.00	202.00	151.00	229.00	225.00	169.00
	KW	18.70	19.30	20.10	19.40	19.70	20.50	19.90	19.90	20.60
105	TC	200.0	212.0	229.0	214.0	219.0	235.0	224.0	225.0	239.0
	SHC	200.00	171.00	131.00	214.00	199.00	149.00	224.00	221.00	166.00
	KW	19.40	20.00	20.90	20.10	20.30	21.20	20.60	20.60	21.30
115	TC	191.0	200.0	217.0	204.0	207.0	223.0	213.0	213.0	226.0
	SHC	191.00	167.00	127.00	204.00	194.00	145.00	213.00	213.00	162.00
	KW	20.70	21.30	22.20	21.50	21.70	22.60	22.00	22.00	22.70
125	TC	182.0	189.0	205.0	194.0	196.0	210.0	202.0	202.0	213.0
	SHC	182.00	162.00	123.00	194.00	189.00	141.00	202.00	202.00	158.00
	KW	22.10	22.60	23.60	22.90	23.00	24.00	23.40	23.40	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	212.0	227.0	247.0	225.0	236.0	255.0	236.0	241.0	259.0
	SHC	205.00	171.00	133.00	225.00	197.00	149.00	236.00	220.00	164.00
	KW	15.60	16.20	16.90	16.10	16.50	17.10	16.50	16.70	17.30
85	TC	207.0	222.0	241.0	221.0	230.0	249.0	231.0	236.0	253.0
	SHC	202.00	169.00	131.00	221.00	195.00	147.00	231.00	217.00	162.00
	KW	16.30	16.90	17.60	16.80	17.20	17.80	17.20	17.40	18.00
95	TC	198.0	212.0	230.0	212.0	219.0	237.0	221.0	224.0	241.0
	SHC	197.00	165.00	127.00	212.00	191.00	143.00	221.00	212.00	158.00
	KW	17.60	18.20	19.00	18.20	18.50	19.20	18.60	18.70	19.40
100	TC	194.0	207.0	224.0	207.0	214.0	231.0	217.0	219.0	235.0
	SHC	193.00	163.00	125.00	207.00	188.00	141.00	217.00	209.00	156.00
	KW	18.20	18.80	19.60	18.80	19.20	20.00	19.30	19.40	20.10
105	TC	190.0	202.0	219.0	203.0	209.0	225.0	212.0	214.0	229.0
	SHC	190.00	161.00	124.00	203.00	186.00	140.00	212.00	206.00	154.00
	KW	18.90	19.50	20.30	19.50	19.80	20.60	20.00	20.10	20.80
115	TC	181.0	192.0	207.0	194.0	198.0	213.0	202.0	203.0	217.0
	SHC	181.00	157.00	120.00	194.00	181.00	136.00	202.00	199.00	150.00
	KW	20.20	20.70	21.70	20.90	21.10	22.00	21.40	21.40	22.20
125	TC	173.0	181.0	196.0	184.0	187.0	201.0	192.0	192.0	204.0
	SHC	173.00	153.00	116.00	184.00	176.00	132.00	192.00	192.00	146.00
	KW	21.50	22.00	23.00	22.20	22.40	23.40	22.70	22.70	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

38ARD_AKS014-024

Electrical data



38ARD014-024

UNIT 38AR	NOMINAL VOLTAGE (3Ph, 50 Hz)	VOLTAGE RANGE*		COMPRESSOR 1		COMPRESSOR 2		FAN MOTORS (Qty 2)			POWER SUPPLY		
		Min	Max	RLA	LRA	RLA	LRA	FLA (ea)		kW	MCA	MOCP†	ICF
								1	2				
D014	230	198	242	20.7	172	20.7	172	1.8	1.8	1.41	51.2	70	197
	400	360	440	10.0	74	10.0	74	4.3	3.7	1.41	31.5	40	93
D016	230	198	242	32.1	203	32.1	203	1.8	1.8	1.41	76.8	100	240
	400	360	440	16.4	95	16.4	95	4.3	3.7	1.41	45.9	60	120
D024	230	198	242	42.0	239	42.0	239	1.8	1.8	1.41	99.1	70	286
	400	360	440	19.2	118	19.2	118	4.3	3.7	1.41	52.2	70	146

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



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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)	
	4	67	1 (33)	
	2*	33*	8 (47)	
024	4	100	-9 (15)	
	2	50	-7 (20)	

*Requires field-installed unloader.

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

UNIT 38ARD	FULL LOAD CAPACITY (%)	SATURATED COND TEMPERATURE C (F)	MINIMUM OUTDOOR-AIR OPERATING 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

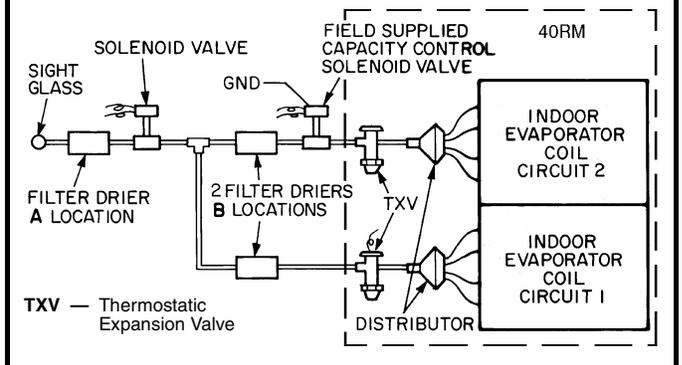
UNIT 38AKS	MAX ALLOW. LIFT M (FT)	LIQUID LINE	
		Max Allow. Pressure Drop kPa (psi)	Max Allow. Temp Loss C (F)
014	20.4 (67)	48.3 (7)	1.1 (2)
016	25.0 (82)		
024	26.5 (87)		

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

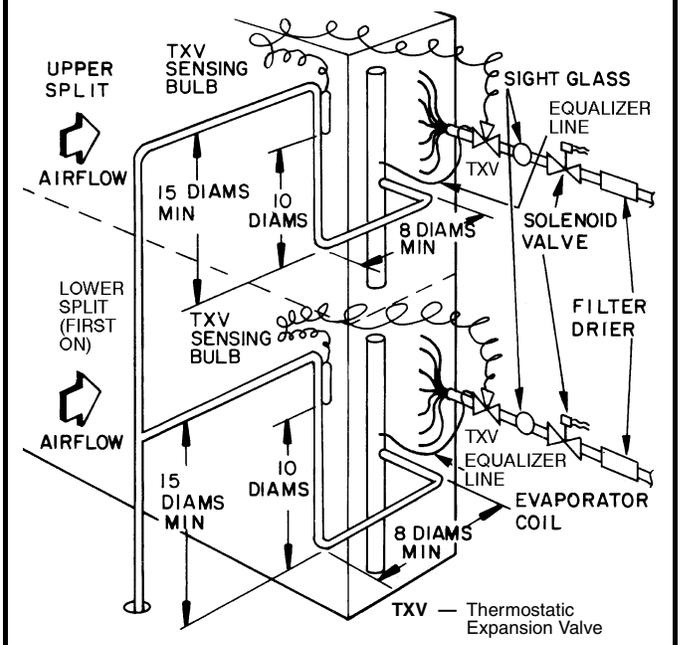
LIQUID LINE DATA — 38ARD014-024 UNITS

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			

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



FACE-SPLIT COIL SUCTION AND LIQUID LINE PIPING



38ARD, AKS014-024



**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)									
	L	S	L	S	L	S	L	S	L	S
014	1/2	1 3/8	1/2	1 3/8	1/2	1 3/8	5/8	1 5/8*	5/8	1 5/8*
016	1/2	1 3/8	1/2	1 3/8	5/8	1 5/8	5/8	1 5/8	3/4	1 5/8
024	1/2	1 3/8	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)									
	L	S	L	S	L	S	L	S	L	S
014	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 3/8
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:

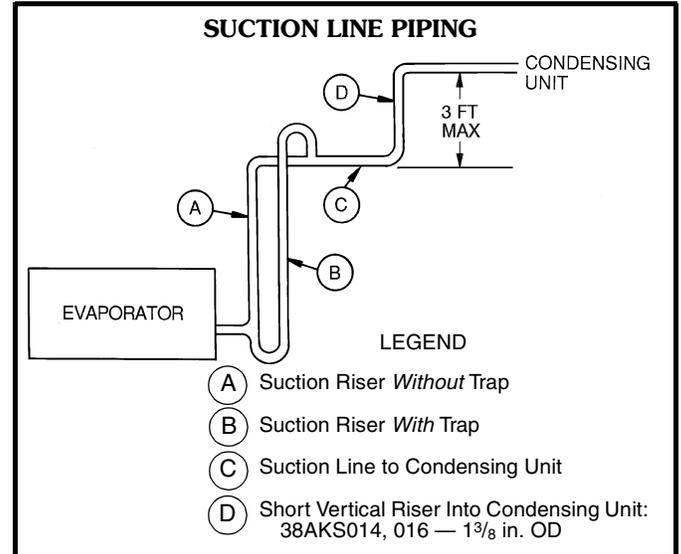
1. Pipe sizes are based on a 2° F loss for liquid lines and a 1.5° F loss for suction lines.
2. Pipe sizes are based on an equivalent length equal to the maximum length of interconnecting piping plus 50% for fittings. A more accurate estimate may result in smaller sizes.

**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)					
	A	B	C	A	B	C
014	1 1/8	1 3/8	1 5/8	1 1/8	1 3/8	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.



38ARD, AKS014-024

Multiple condensing unit arrangements*

38AKS,ARD014-024

PERPENDICULAR

38AKS,ARD014-024

END-TO-END

38AKS,ARD014-024

SIDE-BY-SIDE

Space for Service and Airflow

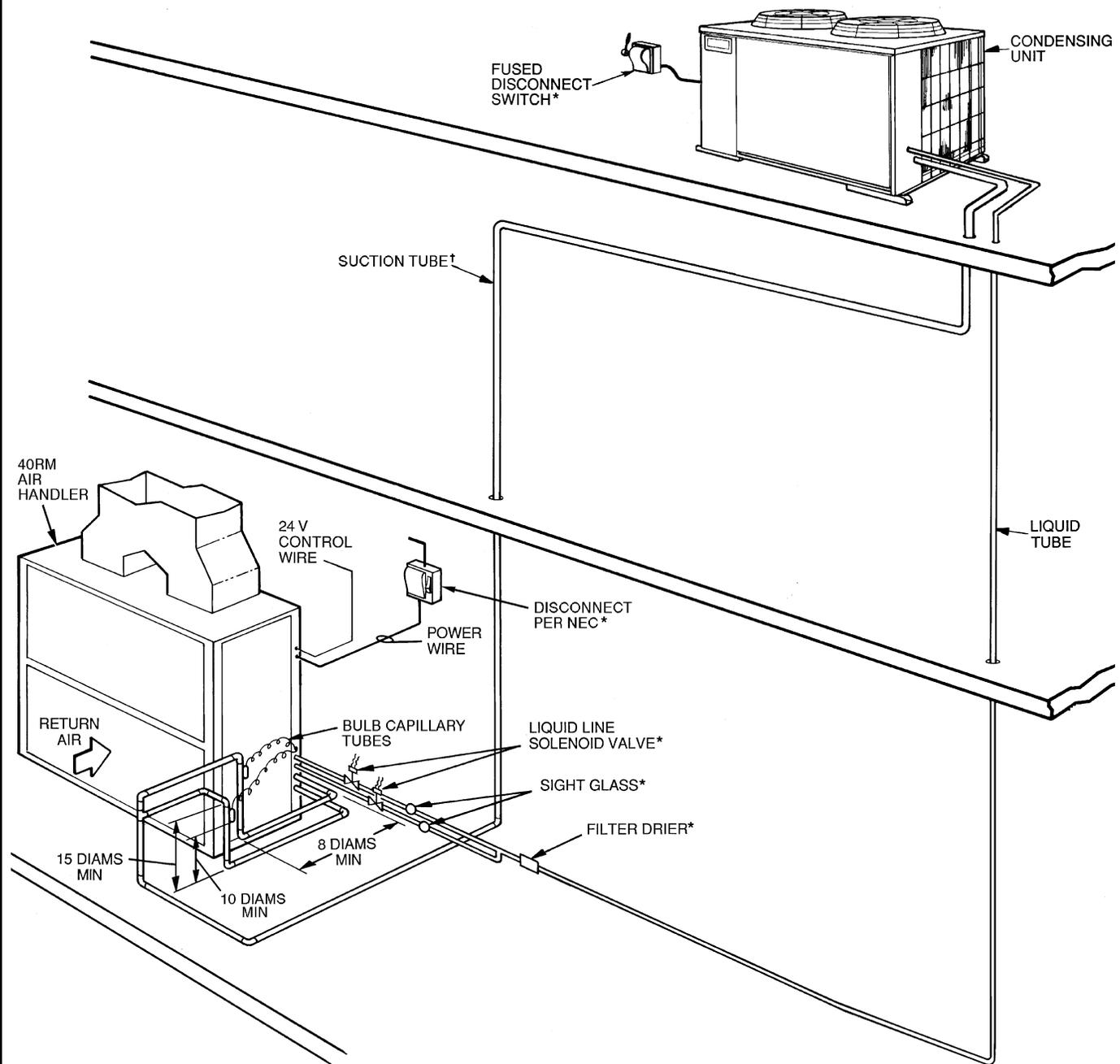
*For clearances between controls and grounded surfaces, check local codes.

38AKS,ARD	DIMENSIONS (ft)	
	A	B
014-024	4	4

Typical piping and wiring



ROOFTOP INSTALLATION — 38AKS014-024



38ARD_AKS014-024

LEGEND

NEC — National Electrical Code
TXV — Thermostatic Expansion Valve

— Piping

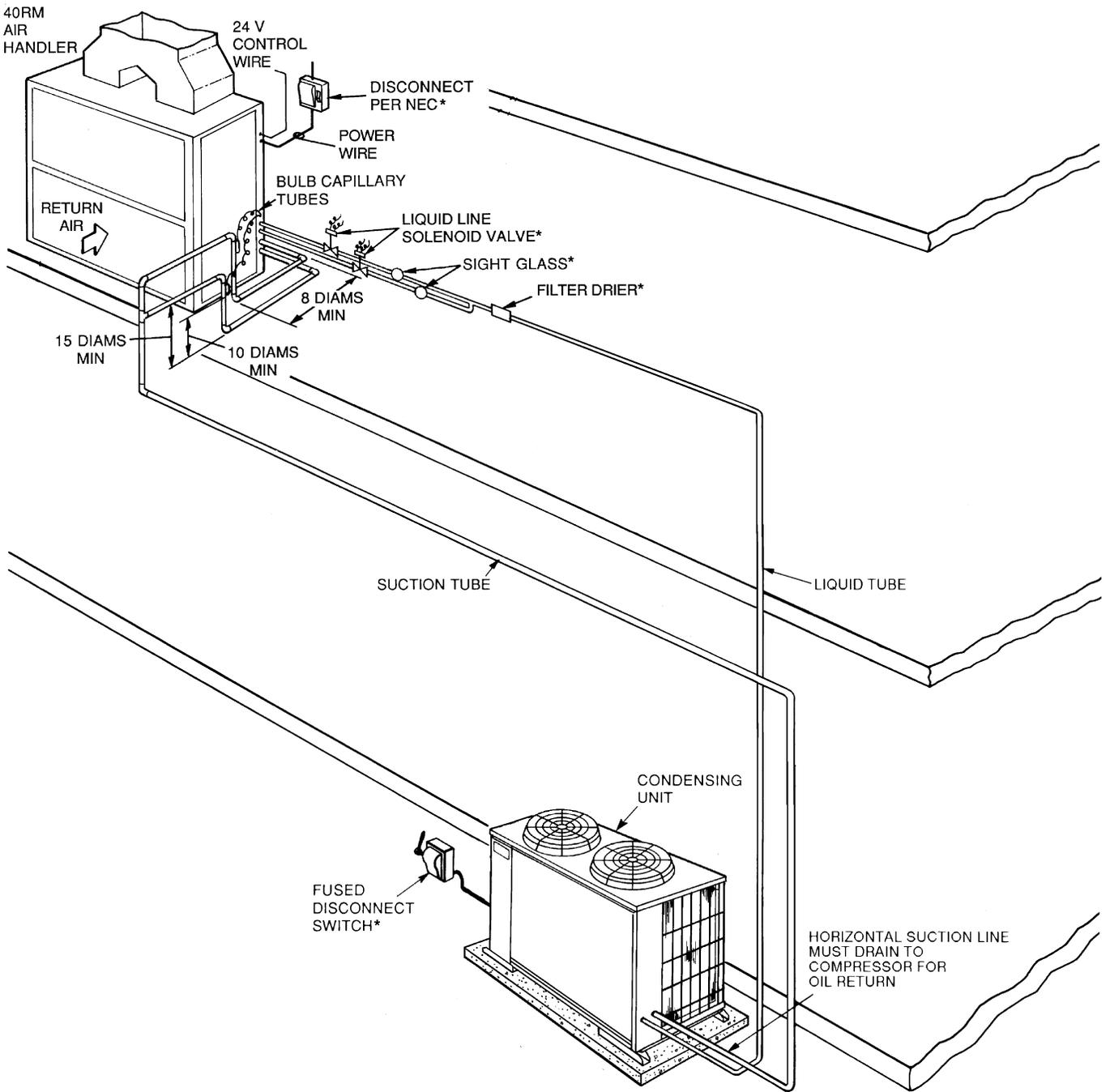
*Field supplied.

†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



38ARD, AKS014-024

LEGEND

TXV — Thermostatic Expansion Valve

Piping

*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.



Commercial Air-Cooled Condensing Units

HVAC Guide Specifications

Size Range: **38.9 to 64.6 kW (12¹/₂ to 20 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) (latest revision), 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 9002 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 pre-painted 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 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 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./lbs. (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./lbs. (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.

Guide specifications — 38AKS014-024

Commercial Air-Cooled Condensing Units HVAC Guide Specifications

Size Range: **37.8 to 62.5 kW (12¹/₂ to 20 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 (latest revision), and shall be certified and listed in the latest ARI directory.
- B. Unit shall be manufactured in a facility registered to ISO 9002 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.
- 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.



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./lbs. (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./lbs. (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.

Model number nomenclature — 40RM units



40RM - 016 - - B 9 0 3 GC

40RM – Commercial Packaged Air Handler

Cooling Coil
 - - Direct Expansion
H – High Capacity

Nominal Capacity – kW (Tons)
 007 – 21 (6) 016 – 52 (15)
 008 – 26 (7-1/2) 024 – 70 (20)
 012 – 35 (10) 028 – 87 (25)
 014 – 43 (12-1/2)

Not Used

Expansion Device
B – Thermostatic Expansion Valves
H – High-Capacity 4-Row Coil

Voltage Designation (V-Ph-Hz)
8 – 230-3-50
9 – 400-3-50

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

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	23.8
REFRIGERANT	R-22						
Operating charge (kg)	1.36	1.36	0.68/0.68	0.90/0.90	1.13/1.13	1.59/1.59	2.04/2.04
(approx per circuit)*							
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)	1207						
Total Face Area (sq m total)	0.62	0.62	0.62	1.24	1.24	1.24	1.39
Rows...Fins/m	1...355	1...355	1...355	1...394	1...394	1...394	1...394
HOT WATER COIL	1034						
Max Working Pressure (kPag)	1034						
Total Face Area (sq m total)	0.62	0.62	0.62	1.24	1.24	1.24	1.39
Rows...Fins/m	2...335	2...335	2...335	2...335	2...335	2...335	2...493
Water Volume							
(L)		31.4			52.6		54.1
(m ³)		0.031			0.052		0.054
PIPING CONNECTIONS,							
Qty...Size (in.)							
DX Coil — Suction (ODF)	1...1 ¹ / ₈	1...1 ¹ / ₈	2...1 ³ / ₈				
DX Coil — Liquid Refrigerant (ODF)	1... ⁵ / ₈				2... ⁵ / ₈		
Steam Coil, In (MPT)	1...2 ¹ / ₂				1...2 ¹ / ₂		
Steam Coil, Out (MPT)	1...1 ¹ / ₂				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

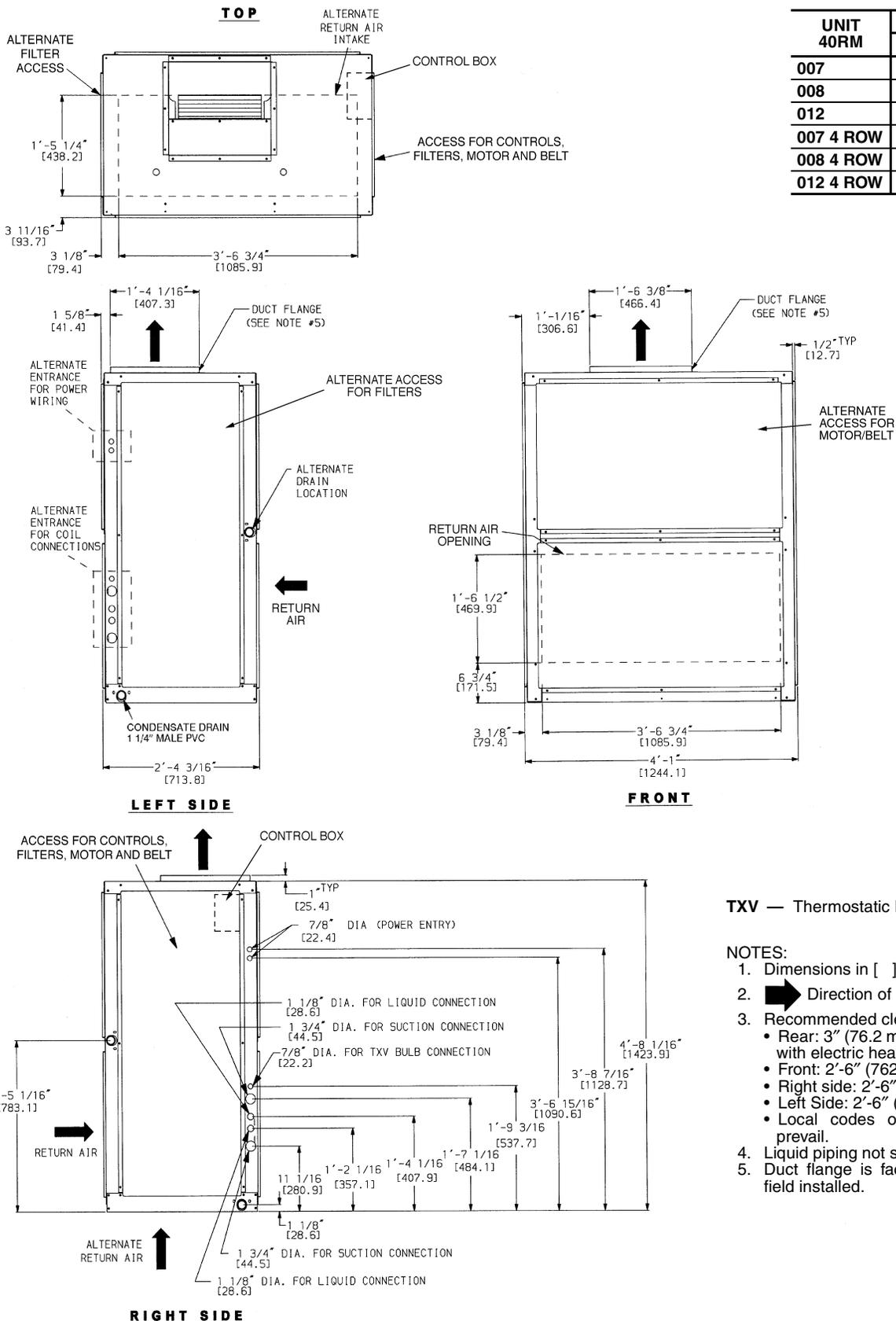
UNIT 40RM	007	008	012	014	016	024	028
NOMINAL CAPACITY (Tons)	6	7½	10	12½	15	20	25
OPERATING WEIGHT (lb)							
Base Unit with TXV (3-Row/4-Row)	381/399	385/404	405/425	670/695	685/713	690/730	1020/1050
Plenum	175	175	175	225	225	225	325
FANS							
Qty...Diam. (in.)	1...15	1...15	1...15	2...15	2...15	2...15	2...18
Nominal Airflow (cfm)	2400	3000	4000	5000	6000	8000	10,000
Airflow Range (cfm)	1800-3000	2250-3750	3000-5000	3750-6250	4500-7500	6000-10,000	7500-12,500
Nominal Hp (Standard Motor)							
230-3-50, 400-3-50	2.4	2.4	2.9	2.9	2.9	5.0	7.5
Speed (rpm)				1425			
230-3-50, 400-3-50							
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)	6.67	8.33	10.0	13.25	17.67	19.88	24.86
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	9/12	12/16	13/18	15/20
Fins/in.	15	15	17	15	15	17	15
STEAM COIL							
Max Working Pressure (psig)					175		
Face Area (sq ft total)	6.67	6.67	6.67	13.33	13.33	13.33	15.0
Rows...Fins/in.	1...9	1...9	1...9	1...10	1...10	1...10	1...10
HOT WATER COIL							
Max Working Pressure (psig)					150		
Face Area (sq ft total)	6.67	6.67	6.67	13.33	13.33	13.33	15.0
Rows...Fins/in.	2...8.5	2...8.5	2...8.5	2...8.5	2...8.5	2...8.5	2...12.5
Water Volume							
(gal)		8.3			13.9		14.3
(ft³)		1.1			1.85		1.90
PIPING CONNECTIONS,							
Qty...Size (in.)							
DX Coil — Suction (ODF)	1...1½	1...1½	2...1½	2...1½	2...1½	2...1½	2...1¾
DX Coil — Liquid Refrigerant (ODF)	1...5/8				1...5/8		
Steam Coil, In (MPT)	1...2½				1...2½		
Steam Coil, Out (MPT)	1...1½				1...2½		
Hot Water Coil, In (MPT)	1...1½		1...1½			1...2	
Hot Water Coil, Out (MPT)	1...1½		1...1½			1...2	
Condensate (PVC)				1...1¼			
FILTERS							
Qty...Size (in.)		4...16 x 24 x 2			4...16 x 20 x 2		4...20 x 24 x 2
Access Location					4...16 x 24 x 2		4...20 x 25 x 2
					Right or Left Side		

LEGEND

TXV — Thermostatic Expansion Valve

*Units are shipped without refrigerant charge.

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

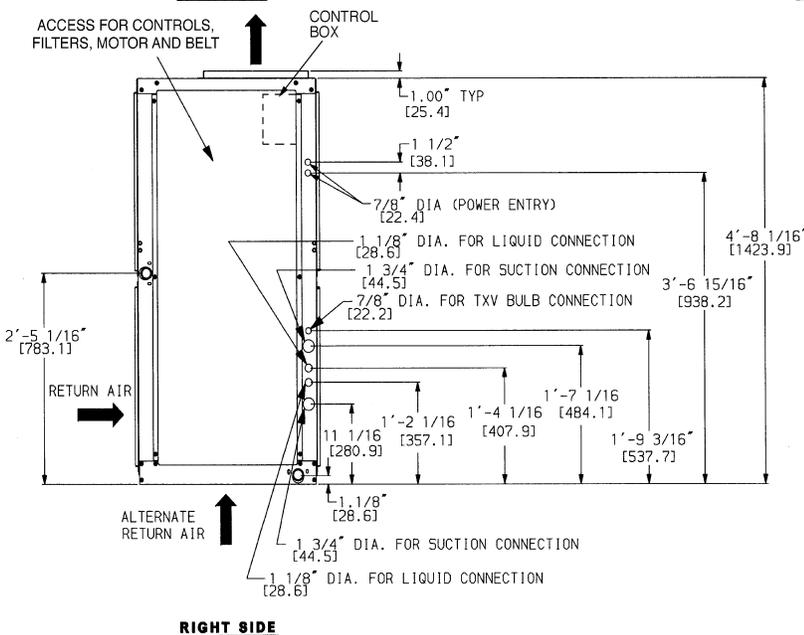
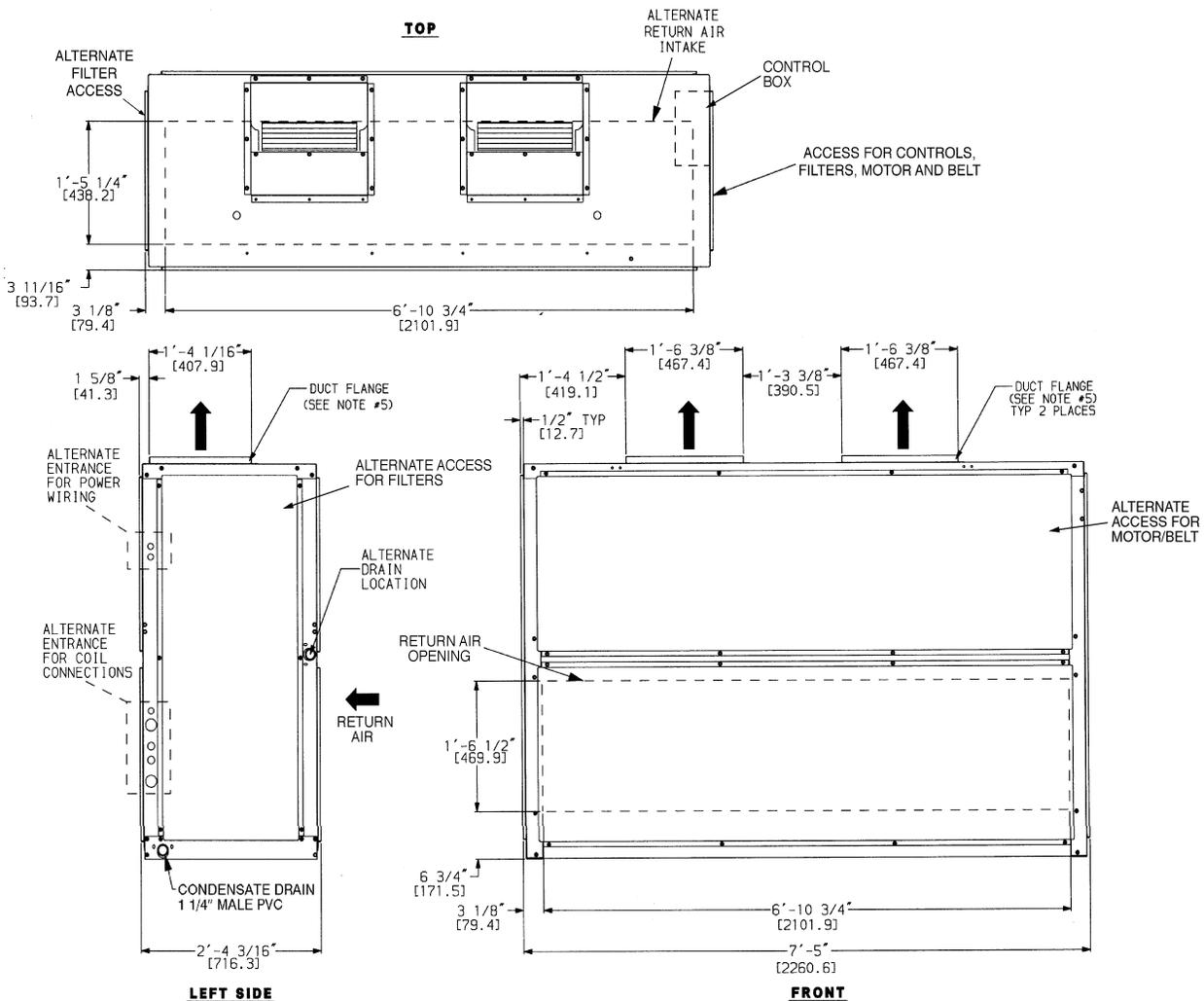
TXV — Thermostatic Expansion Valve

NOTES:

- Dimensions in [] are in millimeters.
- Direction of airflow.
- 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.
- Liquid piping not supplied by Carrier.
- Duct flange is factory supplied and field installed.

40RM

40RM014-024



TXV — Thermostatic Expansion Valve

NOTES:

- Dimensions in [] are in millimeters.
- Direction of airflow.
- 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.
- Liquid piping not supplied by Carrier.
- Duct flange is factory supplied and field installed.

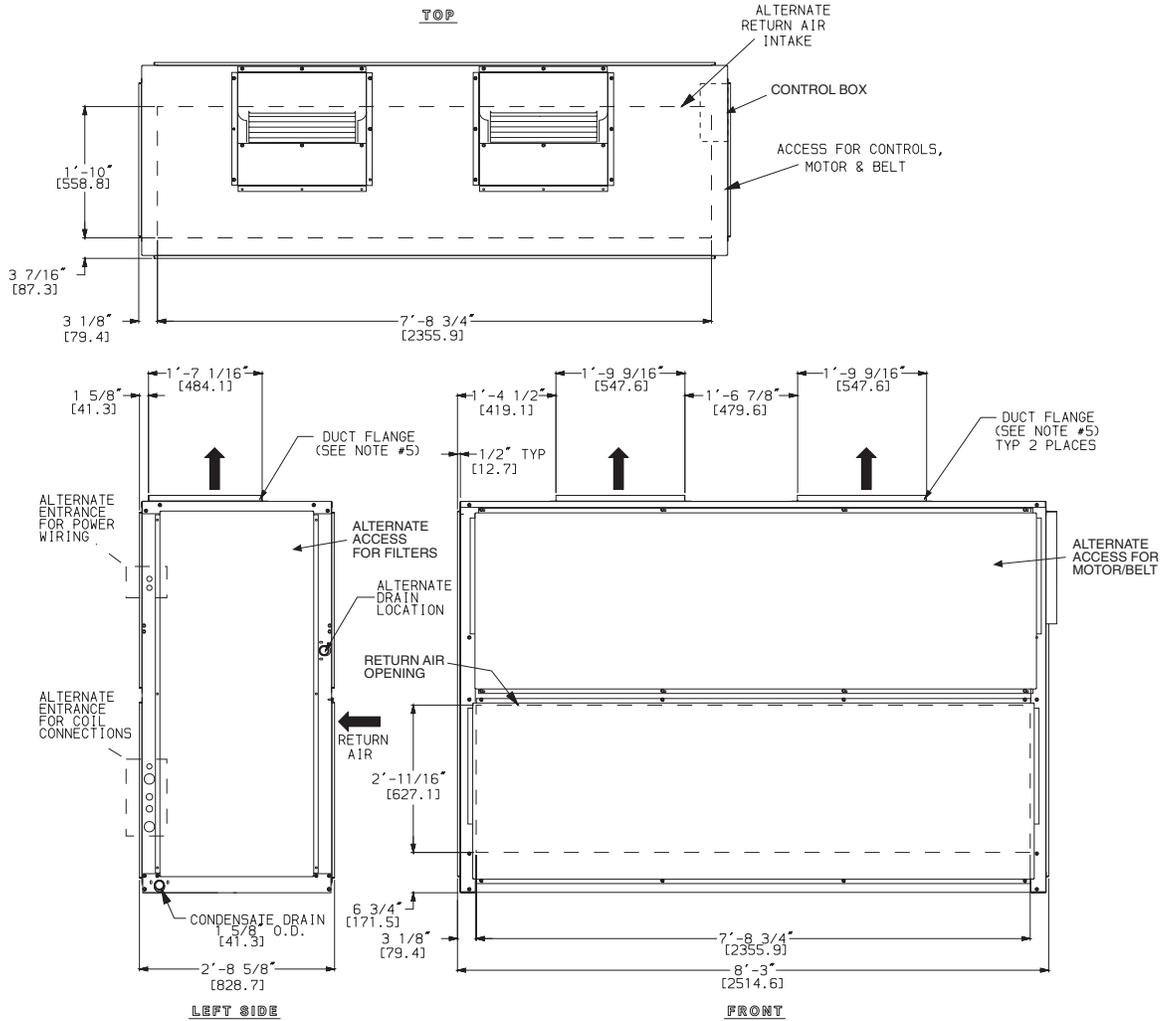
UNIT 40RM	UNIT WEIGHT	
	lb	kg
014	670	304
016	685	311
024	690	313
014 4 ROW	695	315
016 4 ROW	713	323
024 4 ROW	730	331

40RM

Dimensions (cont)



40RM028



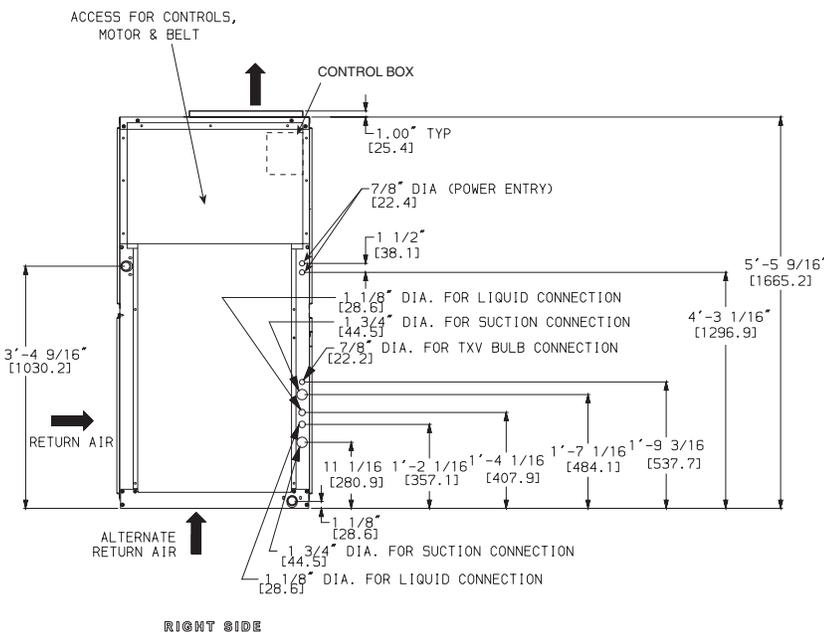
TXV — Thermostatic Expansion Valve

NOTES:

- Dimensions in [] are in millimeters.
- Direction of airflow.
- 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.
- Liquid piping not supplied by Carrier.
- Duct flange is factory supplied and field installed.

UNIT 40RM	UNIT WEIGHT	
	lb	kg
028	1020	463
028 4 ROW	1050	470

40RM



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		300	
		r/s	kW	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	<u>10.56</u>	<u>0.35</u>	<u>11.88</u>	<u>0.45</u>	<u>13.08</u>	<u>0.55</u>	<u>14.16</u>	<u>0.66</u>
	990	7.43	0.21	8.28	0.25	9.71	0.34	<u>11.00</u>	<u>0.44</u>	<u>12.22</u>	<u>0.54</u>	<u>13.37</u>	<u>0.66</u>	<u>14.44</u>	<u>0.78</u>
	1130	8.30	0.30	9.02	0.35	<u>10.36</u>	<u>0.45</u>	<u>11.55</u>	<u>0.55</u>	<u>12.67</u>	<u>0.66</u>	<u>13.73</u>	<u>0.78</u>	<u>14.76</u>	<u>0.91</u>
	1270	9.06	0.41	9.79	0.47	<u>11.06</u>	<u>0.58</u>	<u>12.17</u>	<u>0.69</u>	<u>13.20</u>	<u>0.81</u>	<u>14.19</u>	<u>0.94</u>	<u>15.14</u>	<u>1.07</u>
	1420	9.91	0.55	<u>10.58</u>	<u>0.61</u>	<u>11.78</u>	<u>0.74</u>	<u>12.83</u>	<u>0.86</u>	<u>13.80</u>	<u>0.99</u>	<u>14.72</u>	<u>1.12</u>	<u>15.61</u>	<u>1.26</u>
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	14.30	0.81
	1230	5.37	0.11	8.99	0.38	10.37	0.49	11.55	0.60	<u>12.62</u>	<u>0.71</u>	<u>13.65</u>	<u>0.84</u>	<u>14.64</u>	<u>0.96</u>
	1420	9.21	0.48	9.92	0.55	11.22	0.67	<u>12.33</u>	<u>0.80</u>	<u>13.33</u>	<u>0.92</u>	<u>14.27</u>	<u>1.05</u>	<u>15.17</u>	<u>1.19</u>
	1600	10.25	0.68	10.89	0.75	<u>12.09</u>	<u>0.90</u>	<u>13.15</u>	<u>1.04</u>	<u>14.10</u>	<u>1.18</u>	<u>14.99</u>	<u>1.33</u>	<u>15.83</u>	<u>1.47</u>
	1770	11.18	0.90	<u>11.76</u>	<u>0.98</u>	<u>12.88</u>	<u>1.14</u>	<u>13.90</u>	<u>1.30</u>	<u>14.82</u>	<u>1.45</u>	<u>15.67</u>	<u>1.61</u>	<u>16.46</u>	<u>1.77</u>
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	14.93	1.15
	1650	10.06	0.68	10.69	0.76	11.90	0.91	13.00	1.06	<u>13.97</u>	<u>1.20</u>	<u>14.86</u>	<u>1.35</u>	<u>15.70</u>	<u>1.50</u>
	1890	11.33	0.99	11.88	1.08	12.96	1.25	<u>13.99</u>	<u>1.43</u>	<u>14.93</u>	<u>1.59</u>	<u>15.78</u>	<u>1.76</u>	<u>16.58</u>	<u>1.92</u>
	2120	12.61	1.38	<u>13.11</u>	<u>1.49</u>	<u>14.08</u>	<u>1.68</u>	<u>15.02</u>	<u>1.88</u>	<u>15.92</u>	<u>2.07</u>	<u>16.74</u>	<u>2.26</u>	<u>17.51</u>	<u>2.44</u>
	2360	<u>13.90</u>	<u>1.87</u>	<u>14.36</u>	<u>1.99</u>	<u>15.23</u>	<u>2.21</u>	<u>16.10</u>	<u>2.42</u>	<u>16.94</u>	<u>2.64</u>	<u>17.73</u>	<u>2.85</u>	<u>18.48</u>	<u>3.06</u>
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	14.13	1.52
	2030	7.27	0.43	8.11	0.52	9.76	0.75	11.16	1.00	<u>12.36</u>	<u>1.25</u>	<u>13.44</u>	<u>1.50</u>	<u>14.45</u>	<u>1.76</u>
	2360	8.20	0.64	8.92	0.74	10.38	0.98	11.73	1.26	<u>12.91</u>	<u>1.55</u>	<u>13.97</u>	<u>1.84</u>	<u>14.93</u>	<u>2.13</u>
	2690	9.16	0.92	9.79	1.02	11.07	1.27	<u>12.33</u>	<u>1.58</u>	<u>13.48</u>	<u>1.90</u>	<u>14.53</u>	<u>2.23</u>	<u>15.48</u>	<u>2.56</u>
	2950	9.93	1.18	10.50	1.30	<u>11.66</u>	<u>1.56</u>	<u>12.83</u>	<u>1.87</u>	<u>13.95</u>	<u>2.22</u>	<u>14.98</u>	<u>2.58</u>	<u>15.92</u>	<u>2.94</u>
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	14.26	1.77
	2500	8.13	0.68	8.80	0.78	10.15	1.00	11.48	1.27	<u>12.70</u>	<u>1.57</u>	<u>13.78</u>	<u>1.87</u>	<u>14.76</u>	<u>2.18</u>
	2830	9.03	0.96	9.63	1.07	10.81	1.30	<u>12.01</u>	<u>1.58</u>	<u>13.18</u>	<u>1.90</u>	<u>14.25</u>	<u>2.24</u>	<u>15.23</u>	<u>2.58</u>
	3210	10.07	1.37	10.62	1.48	11.66	1.73	<u>12.71</u>	<u>2.01</u>	<u>13.77</u>	<u>2.35</u>	<u>14.80</u>	<u>2.71</u>	<u>15.76</u>	<u>3.09</u>
	3540	10.99	1.81	11.50	1.93	<u>12.45</u>	<u>2.20</u>	<u>13.40</u>	<u>2.49</u>	<u>14.35</u>	<u>2.83</u>	<u>15.31</u>	<u>3.20</u>	<u>16.24</u>	<u>3.60</u>
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	15.08	2.53
	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	15.71	3.15
	3780	11.43	2.11	11.93	2.25	12.84	2.52	13.71	2.81	14.60	3.14	<u>15.49</u>	<u>3.51</u>	<u>16.39</u>	<u>3.91</u>
	4250	12.74	2.96	13.19	3.12	14.02	3.43	14.81	3.74	15.59	4.08	<u>16.37</u>	<u>4.45</u>	<u>17.17</u>	<u>4.85</u>
	4720	14.05	4.01	14.47	4.19	<u>15.23</u>	<u>4.54</u>	<u>15.96</u>	<u>4.88</u>	<u>16.66</u>	<u>5.24</u>	<u>17.36</u>	<u>5.62</u>	<u>18.07</u>	<u>6.03</u>
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	12.97	2.68
	4130	8.68	1.47	9.18	1.62	10.13	1.94	11.07	2.29	11.99	<u>2.63</u>	<u>12.84</u>	<u>2.97</u>	<u>13.60</u>	<u>3.32</u>
	4720	9.78	2.15	10.23	2.32	11.07	2.67	11.89	3.05	<u>12.72</u>	<u>3.45</u>	<u>13.53</u>	<u>3.84</u>	<u>14.29</u>	<u>4.23</u>
	5310	10.89	3.01	11.30	3.20	<u>12.06</u>	<u>3.59</u>	<u>12.80</u>	<u>4.00</u>	<u>13.53</u>	<u>4.43</u>	<u>14.27</u>	<u>4.88</u>	<u>14.99</u>	<u>5.33</u>
	5900	<u>12.00</u>	<u>4.07</u>	<u>12.38</u>	<u>4.29</u>	<u>13.09</u>	<u>4.72</u>	<u>13.75</u>	<u>5.17</u>	<u>14.41</u>	<u>5.63</u>	<u>15.07</u>	<u>6.11</u>	<u>15.74</u>	<u>6.61</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 is required. Refer to fan motor and drive tables, pages 141-145, 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 135 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 141-145, 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 135 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		1.2	
		Rpm	Bhp	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	<u>634</u>	<u>0.47</u>	<u>713</u>	<u>0.60</u>	<u>785</u>	<u>0.74</u>	<u>850</u>	<u>0.89</u>
	2,100	446	0.28	497	0.34	583	0.46	660	0.59	733	0.73	802	0.88	867	1.05
	2,400	498	0.40	541	0.47	<u>622</u>	<u>0.60</u>	<u>693</u>	<u>0.74</u>	<u>760</u>	<u>0.89</u>	<u>824</u>	<u>1.05</u>	<u>885</u>	<u>1.22</u>
	2,700	544	0.55	588	0.63	<u>663</u>	<u>0.78</u>	<u>730</u>	<u>0.93</u>	<u>792</u>	<u>1.09</u>	<u>851</u>	<u>1.26</u>	<u>909</u>	<u>1.44</u>
	3,000	594	0.73	<u>635</u>	<u>0.82</u>	<u>707</u>	<u>0.99</u>	<u>770</u>	<u>1.15</u>	<u>828</u>	<u>1.32</u>	<u>883</u>	<u>1.50</u>	<u>937</u>	<u>1.69</u>
40RM 008	2,250	273	0.08	493	0.37	580	0.49	656	0.62	727	0.76	794	0.92	858	1.08
	2,600	322	0.15	540	0.52	622	0.66	693	0.81	757	0.96	819	1.12	878	1.29
	3,000	552	0.65	595	0.73	673	0.91	740	1.07	800	1.24	856	1.41	910	1.60
	3,400	615	0.91	653	1.01	<u>726</u>	<u>1.21</u>	<u>789</u>	<u>1.40</u>	<u>846</u>	<u>1.59</u>	<u>899</u>	<u>1.78</u>	<u>950</u>	<u>1.97</u>
	3,750	671	1.20	<u>706</u>	<u>1.31</u>	<u>773</u>	<u>1.53</u>	<u>834</u>	<u>1.74</u>	<u>889</u>	<u>1.95</u>	<u>940</u>	<u>2.16</u>	<u>988</u>	<u>2.37</u>
40RM 012	3,000	399	0.29	573	0.69	654	0.86	722	1.03	784	1.19	841	1.37	896	1.55
	3,500	604	0.92	641	1.02	714	1.22	780	1.42	838	1.61	892	1.81	942	2.01
	4,000	680	1.33	713	1.45	778	1.68	839	1.91	896	2.14	947	2.36	995	2.58
	4,500	756	1.86	<u>787</u>	<u>1.99</u>	<u>845</u>	<u>2.26</u>	<u>901</u>	<u>2.52</u>	<u>955</u>	<u>2.78</u>	<u>1005</u>	<u>3.03</u>	<u>1051</u>	<u>3.28</u>
	5,000	<u>834</u>	<u>2.51</u>	<u>861</u>	<u>2.67</u>	<u>914</u>	<u>2.96</u>	<u>966</u>	<u>3.25</u>	<u>1016</u>	<u>3.54</u>	<u>1064</u>	<u>3.82</u>	<u>1109</u>	<u>4.11</u>
40RM 014	3,750	394	0.40	453	0.52	558	0.80	643	1.10	717	1.39	785	1.71	848	2.04
	4,300	436	0.57	487	0.70	586	1.00	670	1.34	<u>742</u>	<u>1.67</u>	<u>806</u>	<u>2.01</u>	<u>867</u>	<u>2.36</u>
	5,000	492	0.86	535	0.99	623	1.31	704	1.69	775	2.08	838	2.47	896	2.86
	5,700	550	1.23	587	1.37	664	1.71	<u>740</u>	<u>2.11</u>	<u>809</u>	<u>2.55</u>	<u>872</u>	<u>2.99</u>	<u>929</u>	<u>3.43</u>
	6,250	596	1.59	630	1.74	700	2.09	<u>770</u>	<u>2.51</u>	<u>837</u>	<u>2.97</u>	<u>899</u>	<u>3.45</u>	<u>955</u>	<u>3.94</u>
40RM 016	4,500	428	0.59	475	0.70	570	0.99	656	1.33	730	1.68	796	2.02	856	2.38
	5,300	488	0.92	528	1.04	609	1.34	689	1.71	<u>762</u>	<u>2.11</u>	<u>827</u>	<u>2.51</u>	<u>886</u>	<u>2.92</u>
	6,000	542	1.29	578	1.43	649	1.74	721	2.11	791	2.55	855	3.00	914	3.46
	6,800	604	1.83	637	1.99	700	2.32	<u>763</u>	<u>2.70</u>	<u>826</u>	<u>3.15</u>	<u>888</u>	<u>3.64</u>	<u>946</u>	<u>4.15</u>
	7,500	660	2.42	690	2.59	<u>747</u>	<u>2.95</u>	<u>804</u>	<u>3.34</u>	<u>861</u>	<u>3.79</u>	<u>919</u>	<u>4.29</u>	<u>975</u>	<u>4.83</u>
40RM 024	6,000	532	1.25	569	1.39	639	1.69	711	2.06	781	2.48	846	2.93	905	3.39
	7,000	608	1.93	641	2.09	702	2.42	763	2.80	824	3.23	885	3.71	943	4.23
	8,000	686	2.83	716	3.01	770	3.38	823	3.77	876	4.21	930	4.70	983	5.24
	9,000	764	3.97	791	4.18	841	4.59	888	5.02	935	5.47	982	5.96	1030	6.51
	10,000	843	5.38	868	5.62	<u>914</u>	<u>6.09</u>	<u>957</u>	<u>6.55</u>	<u>1000</u>	<u>7.02</u>	<u>1042</u>	<u>7.53</u>	<u>1084</u>	<u>8.08</u>
40RM 028	7,500	456	1.29	490	1.47	556	1.85	621	2.25	678	2.64	<u>729</u>	<u>3.06</u>	<u>778</u>	<u>3.60</u>
	8,750	521	1.98	551	2.18	608	2.61	664	3.07	720	3.53	770	3.99	816	4.45
	10,000	587	2.88	614	3.11	664	3.59	714	4.09	<u>763</u>	<u>4.62</u>	<u>812</u>	<u>5.15</u>	<u>857</u>	<u>5.68</u>
	11,250	653	4.03	678	4.29	724	<u>4.82</u>	<u>768</u>	<u>5.37</u>	<u>812</u>	<u>5.95</u>	<u>856</u>	<u>6.54</u>	<u>899</u>	<u>7.14</u>
	12,500	<u>720</u>	<u>5.46</u>	<u>743</u>	<u>5.75</u>	<u>785</u>	<u>6.33</u>	<u>825</u>	<u>6.93</u>	<u>865</u>	<u>7.55</u>	<u>904</u>	<u>8.20</u>	<u>944</u>	<u>8.86</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 is required. Refer to fan motor and drive tables, pages 141-145, to complete the selection.

NOTES:

- Maximum allowable fan speed is 1100 rpm (18.3 r/s) for unit size 028; 1200 rpm (20 r/s) for all other sizes.
- Fan performance is based on deductions for wet coil, clean 51 mm (2-in.) filters, and unit casing. See page 135 for factory-supplied filter pressure drop.
- 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 — 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 141-145, to complete the selection.

NOTES:

- Maximum allowable fan speed is 1100 rpm (18.3 r/s) for unit size 028; 1200 rpm (20 r/s) for all other sizes.
- Fan performance is based on deductions for wet coil, clean 51 mm (2-in.) filters, and unit casing. See page 135 for factory-supplied filter pressure drop.
- 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		300	
		r/s	kW	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	<u>0.37</u>	<u>12.11</u>	0.47	13.29	<u>0.57</u>	<u>14.36</u>	0.69
	990	7.84	0.23	8.64	0.27	10.03	0.36	11.31	0.46	<u>12.52</u>	0.57	13.65	0.69	14.71	0.81
	1130	8.73	0.33	9.46	0.38	<u>10.75</u>	<u>0.48</u>	11.91	<u>0.59</u>	<u>13.01</u>	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	<u>10.55</u>	<u>0.61</u>	<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	<u>12.32</u>	0.59	13.44	<u>0.71</u>	<u>14.50</u>	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	<u>11.74</u>	<u>0.97</u>	<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	<u>13.29</u>	<u>0.92</u>	<u>14.23</u>	<u>1.05</u>	<u>15.14</u>	<u>1.19</u>
	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	<u>14.45</u>	<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	<u>15.12</u>	<u>2.54</u>
	3300	10.34	1.48	10.86	1.60	11.85	1.85	12.84	2.12	13.85	2.45	<u>14.84</u>	<u>2.80</u>	<u>15.78</u>	<u>3.18</u>
	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>	<u>4.32</u>	<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	<u>12.60</u>	<u>4.42</u>	<u>12.96</u>	<u>4.64</u>	<u>13.65</u>	<u>5.09</u>	<u>14.33</u>	<u>5.57</u>	<u>15.01</u>	<u>6.07</u>	<u>15.70</u>	<u>6.58</u>	16.38	7.10

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 141-145, to complete the selection.

NOTES:

- Maximum allowable fan speed is 18.3 r/s for unit size 028; 20 r/s for all other sizes.
- Fan performance is based on deductions for wet coil, clean 51-mm filters, and unit casing. See Fan Performance Data tables on page 135 for Factory-Supplied Filter Pressure Drop.
- 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 141-145, 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 135 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	<u>727</u>	0.63	797	0.77	862	0.92
	2,100	471	0.31	519	0.37	602	0.49	<u>679</u>	<u>0.62</u>	<u>751</u>	<u>0.77</u>	819	<u>0.92</u>	<u>882</u>	<u>1.09</u>
	2,400	524	0.44	568	0.51	<u>645</u>	<u>0.64</u>	715	0.79	781	0.94	844	1.11	905	1.28
	2,700	578	0.61	<u>619</u>	<u>0.69</u>	<u>690</u>	<u>0.84</u>	<u>755</u>	<u>0.99</u>	<u>816</u>	<u>1.15</u>	875	<u>1.33</u>	<u>932</u>	<u>1.51</u>
	3,000	<u>633</u>	<u>0.81</u>	<u>671</u>	<u>0.90</u>	<u>738</u>	<u>1.07</u>	<u>799</u>	<u>1.24</u>	<u>856</u>	<u>1.41</u>	910	<u>1.60</u>	<u>963</u>	<u>1.79</u>
008	2,250	290	0.10	510	0.39	594	0.51	669	0.65	<u>739</u>	0.79	806	0.95	<u>870</u>	<u>1.12</u>
	2,600	349	0.19	561	0.55	640	0.70	<u>709</u>	<u>0.84</u>	<u>773</u>	1.00	834	1.16	<u>893</u>	<u>1.34</u>
	3,000	579	0.70	621	0.79	<u>695</u>	<u>0.96</u>	759	1.12	818	1.30	874	1.47	<u>928</u>	<u>1.66</u>
	3,400	646	0.99	<u>683</u>	<u>1.09</u>	<u>752</u>	<u>1.29</u>	813	1.48	<u>869</u>	<u>1.67</u>	920	1.86	<u>970</u>	<u>2.06</u>
	3,750	<u>705</u>	<u>1.31</u>	<u>739</u>	<u>1.42</u>	804	<u>1.63</u>	<u>862</u>	<u>1.85</u>	<u>915</u>	<u>2.05</u>	964	<u>2.26</u>	<u>1011</u>	<u>2.48</u>
012	3,000	421	0.35	592	0.73	670	0.90	737	1.06	<u>797</u>	<u>1.23</u>	854	1.41	908	1.59
	3,500	626	0.98	664	1.08	735	1.28	<u>798</u>	<u>1.48</u>	<u>855</u>	<u>1.67</u>	908	<u>1.87</u>	<u>958</u>	<u>2.07</u>
	4,000	706	1.42	738	1.54	<u>803</u>	<u>1.77</u>	<u>862</u>	<u>2.00</u>	<u>917</u>	<u>2.23</u>	967	2.45	<u>1014</u>	<u>2.67</u>
	4,500	<u>786</u>	<u>1.99</u>	<u>815</u>	<u>2.12</u>	<u>873</u>	<u>2.39</u>	<u>929</u>	<u>2.65</u>	<u>980</u>	<u>2.90</u>	1028	3.16	<u>1073</u>	<u>3.41</u>
	5,000	<u>867</u>	<u>2.70</u>	<u>893</u>	<u>2.84</u>	<u>946</u>	<u>3.14</u>	<u>997</u>	<u>3.43</u>	<u>1046</u>	<u>3.72</u>	1092	4.00	<u>1135</u>	<u>4.28</u>
014	3,750	410	0.43	467	0.55	567	0.83	649	1.12	<u>721</u>	1.41	788	1.72	<u>851</u>	<u>2.05</u>
	4,300	455	0.62	504	0.74	599	1.05	679	1.38	<u>748</u>	1.70	811	2.04	<u>871</u>	<u>2.39</u>
	5,000	514	0.92	556	1.06	641	1.39	<u>718</u>	<u>1.76</u>	<u>786</u>	2.14	847	2.52	<u>903</u>	<u>2.91</u>
	5,700	575	1.32	612	1.47	686	1.82	<u>759</u>	<u>2.23</u>	<u>825</u>	<u>2.66</u>	884	3.09	<u>939</u>	<u>3.52</u>
	6,250	624	1.71	657	1.87	<u>725</u>	<u>2.24</u>	<u>793</u>	<u>2.66</u>	<u>856</u>	<u>3.12</u>	915	<u>3.59</u>	<u>969</u>	<u>4.06</u>
016	4,500	437	0.61	483	0.72	576	1.01	660	1.35	<u>732</u>	1.69	797	2.03	<u>856</u>	<u>2.38</u>
	5,300	499	0.95	538	1.07	617	1.37	696	1.74	<u>767</u>	<u>2.13</u>	830	<u>2.53</u>	<u>888</u>	<u>2.94</u>
	6,000	555	1.34	590	1.48	659	1.79	<u>730</u>	<u>2.17</u>	<u>798</u>	<u>2.59</u>	860	3.04	<u>918</u>	<u>3.49</u>
	6,800	620	1.91	651	2.06	<u>712</u>	<u>2.39</u>	<u>774</u>	<u>2.78</u>	<u>836</u>	<u>3.22</u>	896	<u>3.71</u>	<u>952</u>	<u>4.21</u>
	7,500	677	2.52	<u>706</u>	<u>2.69</u>	<u>761</u>	<u>3.04</u>	<u>817</u>	<u>3.44</u>	<u>873</u>	<u>3.89</u>	929	4.39	<u>984</u>	<u>4.93</u>
024	6,000	542	1.29	577	1.42	646	1.72	716	2.09	785	2.51	849	2.95	<u>907</u>	<u>3.40</u>
	7,000	620	1.99	652	2.15	711	2.48	771	2.85	831	3.28	890	3.76	<u>947</u>	<u>4.27</u>
	8,000	700	2.92	728	3.10	781	3.46	833	3.85	<u>885</u>	<u>4.29</u>	938	4.78	<u>990</u>	<u>5.32</u>
	9,000	781	4.10	806	4.30	854	4.71	900	<u>5.13</u>	<u>946</u>	<u>5.58</u>	993	6.08	<u>1039</u>	<u>6.62</u>
	10,000	862	5.56	<u>885</u>	<u>5.79</u>	<u>929</u>	<u>6.24</u>	<u>971</u>	<u>6.70</u>	<u>1012</u>	<u>7.18</u>	1054	<u>7.69</u>	<u>1096</u>	<u>8.24</u>
028	7,500	476	1.39	510	1.58	579	1.99	644	2.40	<u>701</u>	2.81	752	3.29	804	3.96
	8,750	545	2.14	574	2.35	633	2.81	<u>691</u>	<u>3.29</u>	<u>747</u>	<u>3.77</u>	797	4.25	<u>842</u>	<u>4.76</u>
	10,000	615	3.12	641	3.36	<u>692</u>	<u>3.87</u>	<u>743</u>	<u>4.41</u>	<u>794</u>	<u>4.96</u>	843	5.51	<u>888</u>	<u>6.05</u>
	11,250	685	4.37	<u>709</u>	<u>4.64</u>	<u>754</u>	<u>5.20</u>	<u>800</u>	<u>5.79</u>	<u>845</u>	<u>6.40</u>	891	7.02	<u>935</u>	<u>7.64</u>
	12,500	<u>756</u>	<u>5.92</u>	<u>778</u>	<u>6.22</u>	<u>819</u>	<u>6.83</u>	<u>860</u>	<u>7.47</u>	<u>901</u>	<u>8.14</u>	942	8.83	<u>983</u>	<u>9.52</u>

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 141-145, to complete selection.

NOTES:

- Maximum allowable fan speed is 1100 rpm for unit size 028; 1200 rpm for all other sizes.
- Fan performance is based on deductions for wet coil, clean 2-in. filters, and unit casing. See Fan Performance Data tables on page 135 for Factory-Supplied Filter Pressure Drop.
- 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	<u>921</u>	<u>1.07</u>	<u>975</u>	<u>1.23</u>	<u>1026</u>	<u>1.39</u>	1074	1.55	1120	1.72	1164	1.90
	2,100	<u>942</u>	<u>1.26</u>	<u>997</u>	<u>1.43</u>	1048	1.61	1097	1.79	1143	1.97	1186	2.16
	2,400	<u>963</u>	<u>1.47</u>	<u>1017</u>	<u>1.66</u>	1069	1.85	1118	2.05	1164	2.25	—	—
	2,700	<u>987</u>	<u>1.71</u>	<u>1039</u>	<u>1.91</u>	1090	2.12	1138	2.33	1185	2.55	—	—
	3,000	<u>1015</u>	<u>1.99</u>	1065	2.20	1113	2.42	1161	2.65	—	—	—	—
008	2,250	<u>930</u>	<u>1.29</u>	<u>986</u>	<u>1.47</u>	<u>1039</u>	<u>1.65</u>	<u>1089</u>	<u>1.84</u>	<u>1136</u>	<u>2.03</u>	1181	2.22
	2,600	<u>950</u>	<u>1.53</u>	<u>1005</u>	<u>1.72</u>	<u>1057</u>	<u>1.92</u>	<u>1107</u>	<u>2.13</u>	1154	2.33	—	—
	3,000	<u>980</u>	<u>1.86</u>	<u>1031</u>	<u>2.06</u>	<u>1081</u>	<u>2.27</u>	<u>1129</u>	<u>2.49</u>	1175	2.72	—	—
	3,400	<u>1018</u>	<u>2.26</u>	<u>1065</u>	<u>2.48</u>	<u>1111</u>	<u>2.70</u>	1156	2.93	—	—	—	—
	3,750	<u>1057</u>	<u>2.69</u>	<u>1101</u>	<u>2.92</u>	1144	3.15	1186	3.39	—	—	—	—
012	3,000	<u>961</u>	<u>1.78</u>	<u>1012</u>	<u>1.98</u>	<u>1062</u>	<u>2.19</u>	<u>1111</u>	<u>2.41</u>	<u>1158</u>	<u>2.64</u>	—	—
	3,500	<u>1005</u>	<u>2.27</u>	<u>1052</u>	<u>2.49</u>	<u>1098</u>	<u>2.71</u>	<u>1142</u>	<u>2.94</u>	<u>1186</u>	<u>3.18</u>	—	—
	4,000	<u>1058</u>	<u>2.90</u>	<u>1101</u>	<u>3.13</u>	<u>1143</u>	<u>3.36</u>	<u>1184</u>	<u>3.60</u>	—	—	—	—
	4,500	<u>1116</u>	<u>3.66</u>	<u>1157</u>	<u>3.91</u>	<u>1196</u>	<u>4.16</u>	—	—	—	—	—	—
	5,000	<u>1176</u>	<u>4.56</u>	—	—	—	—	—	—	—	—	—	—
014	3,750	<u>912</u>	<u>2.39</u>	<u>971</u>	<u>2.76</u>	<u>1028</u>	<u>3.14</u>	1083	3.54	1135	3.95	1185	4.36
	4,300	<u>928</u>	<u>2.75</u>	<u>982</u>	<u>3.13</u>	<u>1036</u>	<u>3.53</u>	1087	3.94	1138	4.37	1187	4.81
	5,000	<u>956</u>	<u>3.30</u>	<u>1007</u>	<u>3.71</u>	1056	4.13	1104	4.56	1151	5.00	1196	5.46
	5,700	<u>990</u>	<u>3.96</u>	<u>1039</u>	<u>4.40</u>	1086	4.85	1130	5.31	1174	5.78	—	—
	6,250	<u>1019</u>	<u>4.54</u>	1067	5.02	1112	5.50	1156	5.99	1198	6.49	—	—
016	4,500	<u>912</u>	<u>2.75</u>	<u>967</u>	<u>3.12</u>	1019	3.52	1070	3.92	1120	4.35	1168	4.79
	5,300	<u>942</u>	<u>3.34</u>	<u>992</u>	<u>3.76</u>	1041	4.18	1088	4.61	1134	5.06	1179	5.52
	6,000	<u>971</u>	<u>3.95</u>	1020	4.40	1067	4.86	1112	5.33	1156	5.81	1198	6.29
	6,800	<u>1005</u>	<u>4.72</u>	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	<u>961</u>	<u>3.86</u>	<u>1011</u>	<u>4.31</u>	<u>1058</u>	<u>4.77</u>	<u>1104</u>	<u>5.24</u>	1147	5.71	—	—
	7,000	<u>1000</u>	<u>4.79</u>	<u>1050</u>	<u>5.32</u>	<u>1097</u>	<u>5.85</u>	1142	6.38	1184	6.91	—	—
	8,000	<u>1041</u>	<u>5.88</u>	<u>1090</u>	<u>6.47</u>	1137	7.07	1181	7.67	—	—	—	—
	9,000	<u>1086</u>	<u>7.21</u>	1133	7.82	1178	8.47	—	—	—	—	—	—
	10,000	1138	8.83	1180	9.46	—	—	—	—	—	—	—	—
028	7,500	<u>874</u>	<u>5.33</u>	<u>897</u>	<u>5.91</u>	<u>940</u>	<u>6.80</u>	990	7.50	—	—	—	—
	8,750	<u>886</u>	<u>5.36</u>	<u>930</u>	<u>6.13</u>	982	7.32	1020	8.10	—	—	—	—
	10,000	<u>930</u>	<u>6.60</u>	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 141-145, 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 135 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

40RM

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



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:

- Maximum operating limits for heating coils: 1207 kPag at 204.4 C.
- Leaving db = ent db (C) + $\frac{\text{Capacity (kW)}}{1.23 \times 10^{-3} \times \text{L/s}}$
- 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
5	60	0.72	0.64	0.55	0.50	0.43
	70	0.87	0.79	0.71	0.65	0.58
	80	1.02	0.94	0.86	0.80	0.73
	90	1.17	1.09	1.01	0.95	0.89
	100	1.32	1.24	1.16	1.10	1.04
11	60	0.65	0.56	0.48	0.42	0.35
	70	0.80	0.72	0.63	0.58	0.51
	80	0.95	0.87	0.79	0.73	0.66
	90	1.10	1.02	0.94	0.89	0.82
	100	1.26	1.18	1.09	1.04	0.97
16	60	0.56	0.48	0.39	0.33	0.26
	70	0.72	0.63	0.55	0.49	0.42
	80	0.87	0.79	0.70	0.65	0.58
	90	1.02	0.94	0.86	0.81	0.74
	100	1.18	1.10	1.02	0.97	0.90

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:

- Maximum operating limits for heating coils: 175 psig at 400 F.
- Leaving db = ent db (F) + $\frac{\text{Capacity (Btuh)}}{1.1 \times \text{cfm}}$
- 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
10	140	0.72	0.64	0.57	0.49	0.41
	160	0.89	0.81	0.74	0.66	0.58
	180	1.06	0.98	0.90	0.83	0.75
	200	1.22	1.15	1.07	1.00	0.92
	220	1.39	1.32	1.24	1.17	1.09
20	140	0.64	0.57	0.49	0.41	0.33
	160	0.81	0.74	0.66	0.58	0.51
	180	0.98	0.91	0.83	0.75	0.68
	200	1.15	1.08	1.00	0.93	0.85
	220	1.32	1.25	1.17	1.10	1.02
30	140	0.56	0.49	0.41	0.33	0.24
	160	0.74	0.66	0.58	0.51	0.43
	180	0.91	0.83	0.76	0.68	0.60
	200	1.08	1.00	0.93	0.85	0.78
	220	1.25	1.18	1.10	1.03	0.95

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.

40RM

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



40RM ELECTRIC HEATER DATA

UNIT 40RM	HEATER PART NO.	V-PH-Hz	FAN MOTOR			ELECTRIC HEATER(S)					MCA*	MOCP*
			Hp	kW	FLA	Nominal Capacity (kW)	Actual Capacity (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	5.00	9.5	15
			2.9	2.16	3.4	5	3.5	—	3.5	5.00	10.5	15
			5.0	3.73	7.6	5	3.5	—	3.5	5.00	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:
kW x 3,412 = Btuh.
5. Approximate shipping weights:
CAELHEAT001A00 – 014A00 = 24.9 kg each
CAELHEAT016A00 – 026A00 = 27.2 kg each
CAELHEAT028A00 – 038A00 = 34.0 kg each

40RM

Electrical data (cont)



40RM ELECTRIC HEATER DATA (cont)

UNIT 40RM	HEATER PART NO.	V-PH-Hz	FAN MOTOR			ELECTRIC HEATER(S)					MCA*	MOCP*	
			Hp	kW	FLA	Nominal Capacity (kW)	Actual Capacity (kW)			FLA			
							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:
kW x 3,412 = Btuh.
5. Approximate shipping weights:
CAELHEAT001A00 – 014A00 = 24.9 kg each
CAELHEAT016A00 – 026A00 = 27.2 kg each
CAELHEAT028A00 – 038A00 = 34.0 kg each

40RM

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.)

40RM

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



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	5	5	5	5	6	5	6
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	5	5	6	5	6	6	6
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.

40RM

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.



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 9002 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 PVC 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 1207 kPag at 204.4 C (175 psig at 400 F).

3. Electric Heaters:

Heaters for nominal 240, 480, or 575-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 nozzleed 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 μ W/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 μ W/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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