

38CKE
Export 50Hz Air Conditioner
With R-410a Refrigerant
Single and Three Phase
1-1/2 To 5 Tons



Product Data



Model 38CKE 50 Hertz energy efficient air conditioner incorporates innovative technology to provide reliable summer cooling performance. Built into these units are the features most desired by customers today, including EER ratings of up to 11.5 when used with components designated by manufacturer.

FEATURES AND BENEFITS

AVAILABLE SIZES:

Nominal sizes are available from 018 through 060 to meet the needs of residential and light commercial applications.

CERTIFICATION:

All models are listed with UL. Sizes 048 and 060 are CE certified.

ELECTRICAL RANGE:

Units offered in single phase 230v are 018-036, three phase 400v in 036-060.

FAN MOTOR:

The totally enclosed ball bearing fan motor provides greater reliability under adverse conditions and dependable performance for many years. The permanent split capacitor type motor is designed for optimum efficiency. The motor is then qualified under extreme conditions to help ensure a long, reliable life.

CABINET:

A weather protective cabinet of pre-painted steel is protected underneath by a galvanized coating and treated with a layer of zinc phosphate for a finish that will last for many years. All screws on cabinet exterior are coated for a long-lasting, rust-resistant, quality appearance.

UNIT DESIGN:

Aluminum fin material is pre-coated on both sides with a corrosion protective coating, capable of 1000 hr salt spray exposure per ASTM B117 test.

The copper tube, with enhanced sine wave coated aluminum fin coil, is designed for optimum heat transfer and corrosion protection. Vertical air discharge carries sound and hot condenser air up and away from adjacent patio areas and foliage. The base pan is designed for easy removal of water, dirt, and leaves.

DENSE GRILLE:

A narrow spaced coil grille is factory supplied for improved coil protection.

COMPRESSOR:

Each compressor is protected with internal temperature- and current-sensitive overloads. An internal pressure relief valve provides high pressure protection to the refrigerant system. For improved serviceability, all models are equipped with a compressor terminal plug.

FEATURES AND BENEFITS (CONT.)

SERVICE VALVES:

Both service valves are brass, front seating type with sweat connections. Valves are externally located so refrigerant tube connections can be made quickly and easily. Each valve has a service port for ease of checking operating refrigerant pressures.

SERVICEABILITY:

One access panel provides access to electrical controls. Removal of top gives access to fan motor, compressor, and condenser coil.

OPERATING RANGE:

Minimum outdoor operating ambient in cooling mode is 55°F (13°C), maximum is 125°F (52°C).

THREE PHASE MONITOR BOARD:

Control board that monitors the electrical phase and prevents reverse rotation of the compressor. Standard on all three phase units.

PRESSURE SWITCHES:

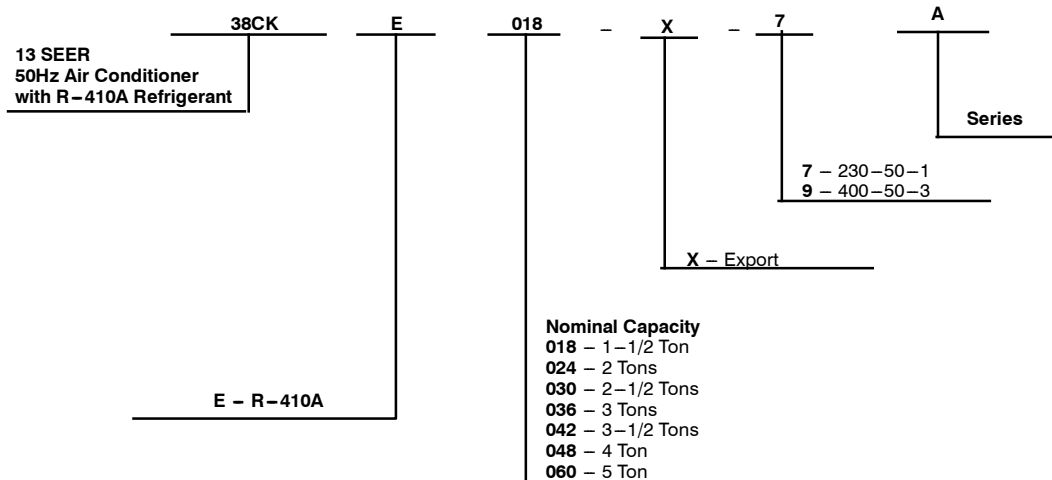
All units are equipped with high and low pressure switches.

FILTER DRIER:

Filter drier is factory supplied (field installed) for all sizes.

38CKE

PRODUCT NUMBER NOMENCLATURE



IP24
(048 & 060 sizes only)



ISO 9001
QMI-SAI Global



SPECIFICATIONS

UNIT SIZE	018	024	030	036	042	048	060
SERIES	B	B	B	B	B	B	B
40 ft HC Container Loading (Units per container)	171	171	171	114	84	56	84
ELECTRICAL							
Unit Volts—Hertz—Phase	230—50—1		230—50—1		400—50—3		400—50—3
Operating Voltage Range*	207/253						
Compressor—Rated Load Amps	9.0	10.9	13.5	16.0	6.2	7.8	9.7
Locked Rotor Amps	52.0	60.0	67.0	87.0	43.0	52.0	64.0
Condenser Fan Motor— Full Load Amps	0.52	0.52	1.5	1.5	0.8	0.8	0.8
Min Unit Ampacity for Wire Sizing	11.8	14.1	18.4	21.5	8.3	10.6	12.9
Min Wire Size (60°/75° Copper) AWG**	14	14	14	12	14	14	14
Max Wire Length (75°) ft (m)†	62 (18.9)	50 (15.2)	39 (11.9)	54 (16.5)	83 (25.3)	60 (20.7)	58 (17.7)
Max Branch Circuit Fuse Size†	15	20	25	30	15	15	20
COMPRESSOR AND REFRIGERANT							
Type	Scroll						
Temperature and Current Protection	Internal Line Break						
R-410A Refrigerant— Amount Lb (kg) @ 15 ft (4.6 m)	3.15 (1.43)	3.15 (1.43)	3.63 (1.65)	5.57 (2.53)	7.26 (3.29)	8.10 (3.67)	8.92 (4.05)
Refrigerant Tubes (In. OD) †† Rated Vapor and Maximum Liquid	3/4 and 3/8		7/8 and 3/8		1 - 1/8 and 3/8		
CONDENSER COIL AND FAN							
Coil Face Area (Sq Ft)	8.4	8.4	9.8	12.60	17.3	21.63	15.14
Fan Motor—HP, Type, and RPM	1/10 PSC and 940						
Volts—Hertz—Phase	230—50—1						
Condenser Airflow (CFM)	2000	2500		3000			
OPTIONAL EQUIPMENT							
Cycle Protector	KSACY0101AAA						
Start Assist—PTC Type	KAACS0201PTC		N/A		N/A		
Start Assist—Capacitor/Relay Type	KSAHS1501AAA		KSAHS1701AAA		N/A		
MotorMaster® Control	KSALA0601AAA		KSALA0701AAA				
Compressor Sound Hood	KSASH1801COP		KSASH0601COP				
Time—Delay Relay	KAATD0101TDR		KAATD0101TDR				
Low—Ambient Pressure Switch Kit	KSALA0301410						
Winter Start Control	KAAWS0101AAA						
Evaporator Freeze Thermostat	KAAFT0101AAA						
Compressor Crankcase Heater	KAACH1401AAA						
Liquid Line Solenoid Valve	KAALS0201LLS						
TXV (Hard Shutoff)	KSATX0201PUR	KSATX0301PUR		KSATX0401PUR			
Outdoor Sensor	TSTATXXSEN01—B						

N/A — Not applicable in this application.

* Permissible limits of the voltage range at which unit will operate satisfactorily. Operation outside these limits may result in unit failure.

† Time—delay fuse or circuit breaker.

‡ Length shown is as measured 1 way along wire path between unit and service panel for voltage drop not to exceed 2%.

** If wire is applied at ambient greater than 30° C, consult Table 310—16 of the NEC (ANSI/NFPA 70). The ampacity of nonmetallic—sheathed cable (NM), trade name ROMEX, shall be that of 60° C conductors, per the NEC (ANSI/NFPA 70) Article 336—26.


†† Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.



DIMENSIONS - ENGLISH

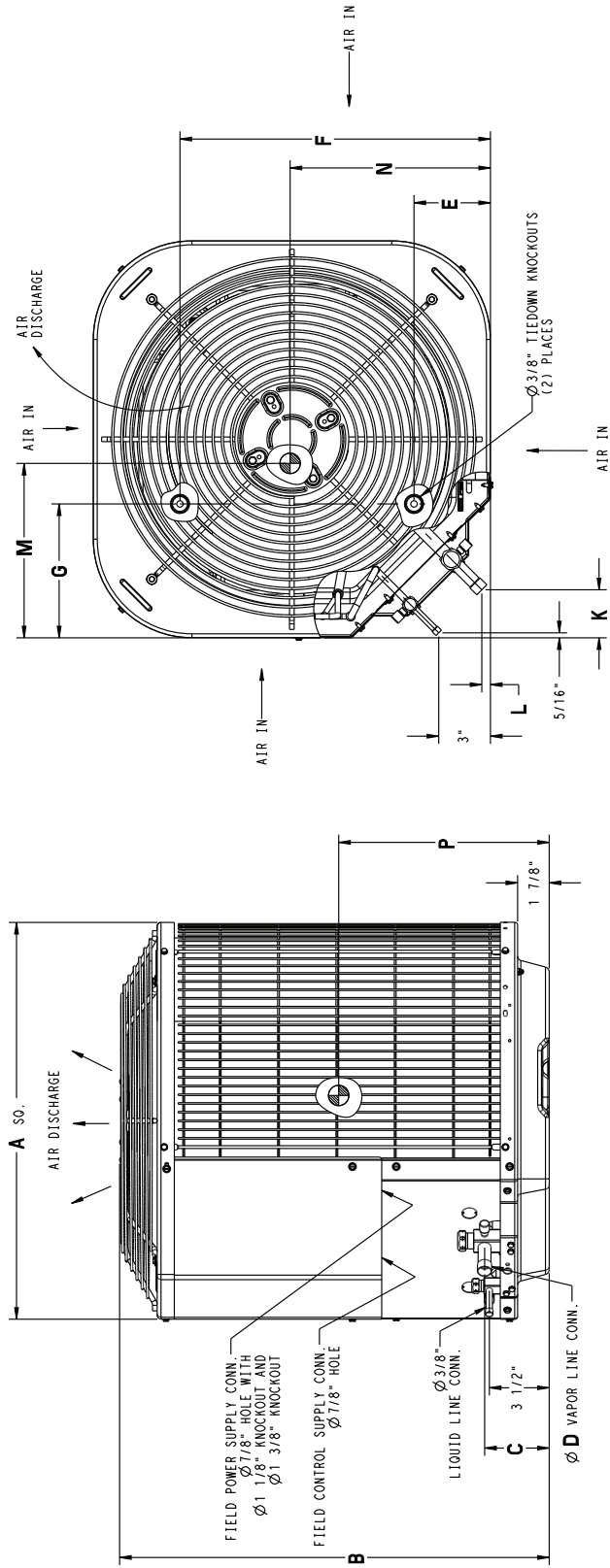
UNIT	SERIES	ELECTRICAL CHARACTERISTICS		A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (LBS/WEIGHT (LBS)	SHIPPING DIMENSIONS (L x W x H)
38CKE018	B	X	0	0	23 1/8"	24 13/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	12"	11 3/4"	11 7/8"	108	24 1/8" X 24 1/8" X 27 3/16"
38CKE024	B	X	0	0	23 1/8"	24 13/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	12"	11 3/4"	11 7/8"	111	24 1/8" X 24 1/8" X 27 3/16"
38CKE030	B	X	0	0	23 1/8"	28 7/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	12"	11 3/4"	12 1/2"	114	24 1/8" X 24 1/8" X 30 5/8"
38CKE036	B	X	X	0	23 1/8"	35 3/16"	3 7/8"	7/8"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	12"	11 3/4"	13 3/4"	127	24 1/8" X 24 1/8" X 37 7/16"
38CKE042	B	0	X	0	31 3/16"	31 13/16"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	16"	15 1/2"	13 3/4"	172	32 3/16" X 32 3/16" X 34"
38CKE048	B	0	X	0	31 3/16"	38 5/8"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	16"	15 1/2"	15 1/2"	190	32 3/16" X 32 3/16" X 40 13/16"
38CKE060	B	0	X	0	31 3/16"	28 7/16"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	16"	15 1/2"	12 3/4"	198	32 3/16" X 32 3/16" X 30 5/8"

NOTES:

1. ALLOW 30" CLEARANCE TO SERVICE SIDE OF UNIT, 48" ABOVE UNIT, 6" ON ONE SIDE, 12" ON REMAINING SIDE, AND 24" BETWEEN UNITS FOR PROPER AIRFLOW.
2. MINIMUM OUTDOOR OPERATING AMBIENT IN COOLING MODE IS 55 F., MAX. 125 F.
3. SERIES DESIGNATION IS THE 13TH POSITION OF THE UNIT MODEL NUMBER.
4. CENTER OF GRAVITY 
5. ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

X = YES
0 = NO

230-150	.
400-350	.




UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18, 24, 30, 36	23 1/2" X 23 1/2"
42, 48, 60	31 1/2" X 31 1/2"

DIMENSIONS - SI

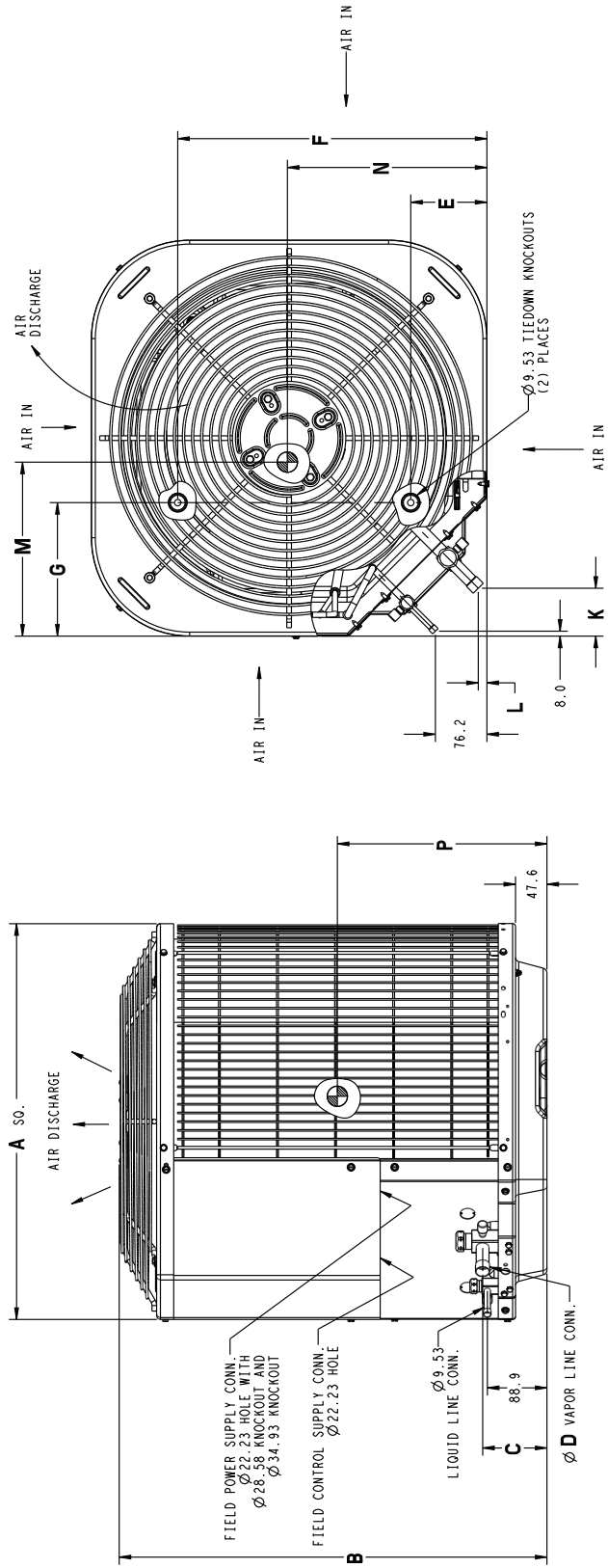
UNIT	SERIES	ELECTRICAL CHARACTERISTICS		A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (Kgs)	SHIPPING WEIGHT (Kgs)	SHIPPING DIMENSIONS (L x W x H)		
38CKE018	B	X	0	0	587.4	630.2	95.2	19.0	112.7	458.8	198.4	71.4	304.8	298.4	301.6	49.0	56.2	612.8	612.8	690.6
38CKE024	B	X	0	0	587.4	630.2	95.2	19.0	112.7	458.8	198.4	71.4	304.8	298.4	301.6	50.3	57.6	612.8	612.8	690.6
38CKE030	B	X	0	0	587.4	722.3	95.2	19.0	112.7	458.8	198.4	71.4	304.8	298.4	317.5	51.7	59.0	612.8	612.8	777.9
38CKE036	B	X	X	0	587.4	893.8	96.4	22.2	112.7	458.8	198.4	71.4	304.8	298.4	349.2	57.6	65.3	612.8	612.8	950.9
38CKE042	B	0	X	0	792.2	808.0	98.4	22.2	166.7	627.1	231.8	74.6	406.4	393.7	349.2	78.0	88.4	817.6	817.6	863.6
38CKE048	B	0	X	0	792.2	981.1	98.4	22.2	166.7	627.1	231.8	74.6	406.4	393.7	393.7	86.2	98.4	817.6	817.6	1036.6
38CKE060	B	0	X	0	792.2	722.3	98.4	22.2	166.7	627.1	231.8	74.6	406.4	393.7	323.8	89.8	101.6	817.6	817.6	777.9

NOTES:

1. ALLOW 762.0 CLEARANCE TO SERVICE SIDE OF UNIT, 1219.2 ABOVE UNIT, 152.4 ON ONE SIDE, 304.8 ON REMAINING SIDE, AND 609.6 BETWEEN UNITS FOR PROPER AIRFLOW.
2. MINIMUM OUTDOOR OPERATING AMBIENT IN COOLING MODE IS 13°C, MAX. 52°C.
3. SERIES DESIGNATION IS THE 14TH POSITION OF THE UNIT MODEL NUMBER.
4. CENTER OF GRAVITY 
5. ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.

X = YES
0 = NO

230-150	400-350	.
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UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18, 24, 30, 36	596.9 X 596.9
42, 48, 60	800.1 X 800.1

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A-WEIGHTED SOUND POWER (dBA)

Unit Size	Sound Level (dBA) With Sound Shield	Sound Level (dBA) Without Sound Shield	Typical Octave Band Spectrum (dBA without tone adjustment)						
			125	250	500	1000	2000	4000	8000
38CKE018-X-7	68	69	52.0	57.5	62.0	65.0	62.0	57.5	49.5
38CKE024-X-7	69	70	52.5	62.0	62.0	64.5	62.5	59.0	53.0
38CKE030-X-7	71	72	56.5	63.0	65.0	67.0	63.0	59.5	55.0
38CKE036-X-7/9	73	74	55.0	62.0	65.0	69.0	66.0	59.0	55.5
38CKE042-X-9	74	75	53.5	65.0	67.5	70.0	65.5	62.5	59.0
38CKE048-X-9	76	78	57.0	66.5	69.5	73.5	68.0	64.0	57.0
38CKE060-X-9	76	78	60.5	67.5	69.0	70.5	67.0	63.0	57.0

NOTE: Tested in accordance with ARI Standard 270-95 (not listed in ARI).

METERING DEVICE

Unit	Piston Identification (factory supplied)	Required Subcooling °F (°C) (for field installed TXV)
38CKE018-X-7	52	15 (8.3)
38CKE024-X-7	55	15 (8.3)
38CKE030-X-7	59	15 (8.3)
38CKE036-X-7/9	65	15 (8.3)
38CKE042-X-9	70	15 (8.3)
38CKE048-X-9	76	15 (8.3)
38CKE060-X-9	86	15 (8.3)

REFRIGERANT CHARGE ADJUSTMENTS

Liquid Line Size	R-410A Charge oz/ft (g/m)
3/8	0.60 (17.7) (Factory charge for lineset = 9 oz (266.2))
5/16	0.40 (11.8)
1/4	0.27 (8.0)

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz (266.2 g). When using other length or diameter liquid lines, charge adjustments are required per the chart above.

Charging Formula:

[(Lineset oz/ft x total length) – (factory charge for lineset)] = charge adjustment

Example 1: System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula: (.27 oz/ft x 15ft) – (9 oz) = -4.95 oz.
(8.0 g/m x 4.6 m) - (266.2 g) = -229.4 g

Net result is to remove 4.95 oz of refrigerant from the system

Example 2: System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula: (.40 oz/ft. x 45ft) – (9 oz.) = 9 oz.
(11.8 g/m x 13.7m) - 266.2 g) = -104.5 g

Net result is to add 9 oz of refrigerant to the system

LONG LINE APPLICATIONS

An application is considered Long Line, when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. See Accessory Usage Guideline table for required accessories. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Air Conditioner systems, the chart below shows when an application is considered Long Line.

AC WITH R-410A REFRIGERANT LONG LINE DESCRIPTION ft (m)

Beyond these lengths, long line accessories are required

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
1/4	No accessories needed within allowed lengths	No accessories needed within allowed lengths	175 (53.3)
5/16	120 (36.6)	50 (15.2)	120 (36.6)
3/8	80 (24.4)	35 (10.7)	80 (24.4)

Note: See Long Line Guideline for details

VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for AC systems with R-410A refrigerant:

Unit Nominal Size (Btuh)	Maximum Liquid Line Diameters (In. OD)	Vapor Line Diameters (In. OD)	Cooling Capacity Loss (%)								
			Total Equivalent Line Length ft. (m)								
			26-50 (7.9-15.2)	51-80 (15.5-24.4)	81-100 (24.7-30.5)	101-125 (30.8-38.1)	126-150 (38.4-45.7)	151-175 (46.0-53.3)	176-200 (53.6-61.0)	201-225 (61.3-68.6)	226-250 (68.9-76.2)
18000 1 Stage AC with R-410A	3/8	1/2	1	2	3	5	6	7	8	9	11
		5/8	0	1	1	1	2	2	2	3	3
		3/4	0	0	0	0	1	1	1	1	1
24000 1 Stage AC with R-410A	3/8	5/8	0	1	2	2	3	3	4	5	5
		3/4	0	0	1	1	1	1	1	2	2
		7/8	0	0	0	0	0	1	1	1	1
30000 1 Stage AC with R-410A	3/8	5/8	1	2	3	3	4	5	6	7	8
		3/4	0	0	1	1	1	2	2	2	3
		7/8	0	0	0	0	1	1	1	1	1
36000 1 Stage AC with R-410A	3/8	5/8	1	2	4	5	6	8	9	10	12
		3/4	0	1	1	2	2	3	3	4	4
		7/8	0	0	0	1	1	1	1	2	2
42000 1 Stage AC with R-410A	3/8	3/4	0	1	2	2	3	4	4	5	6
		7/8	0	0	1	1	1	2	2	2	3
		1 1/8	0	0	0	0	0	0	0	0	0
48000 1 Stage AC with R-410A	3/8	3/4	0	1	2	3	4	5	5	6	7
		7/8	0	0	1	1	2	2	2	3	3
		1 1/8	0	0	0	0	0	0	0	1	1
60000 1 Stage AC with R-410A	3/8	3/4	1	2	4	5	6	7	9	10	11
		7/8	0	1	2	2	3	4	4	5	5
		1 1/8	0	0	0	1	1	1	1	1	1

Applications in this area may be long line and may have height restrictions. See the Residential Piping and Long Line Guideline.

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ACCESSORY USAGE GUIDELINE

ACCESSORY	REQUIRED FOR LOW AMBIENT COOLING APPLICATIONS (Below 55°F / 22.8°C)	REQUIRED FOR LONG LINE APPLICATIONS* (Over 80 Ft./24.4 m)	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles/3.2 km)
Ball Bearing Fan Motor	Yes†	No	No
Compressor Start Assist Capacitor and Relay	Yes	Yes (Single-Phase Only)	No
Crankcase Heater	Yes	Yes	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shut-Off TXV	Yes	Yes	Yes
Liquid Line Solenoid Valve	No	See Long-Line Application Guideline	No
Low Ambient Kit (Pressure Switch)	Yes	No	No
Support Feet	Recommended	No	Recommended
Winter Start Control	Yes	No	No

* For tubing line sets between 80 and 200 ft. (24.4 and 76.2 m) and/or 20 ft. (6.1 m) vertical differential, refer to Residential Split-System Longline Application Guideline.

† Required for Low Ambient Controller (full modulation feature) and MotorMaster® Control only.

Accessory Description and Usage (Listed Alphabetically)

1. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a "hard" boost to compressor motor at each start up.

Usage Guideline:

Required for reciprocating compressors in the following applications:

- Long line
- Low ambient cooling
- Hard shut off expansion valve on indoor coil
- Liquid line solenoid on indoor coil

Required for single-phase scroll compressors in the following applications:

- Long line
- Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

2. Compressor Start Assist — PTC Type

Solid state electrical device which gives a "soft" boost to the compressor at each start-up.

Usage Guideline:

Suggested in single-phase installations with marginal power supply.

3. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

- Required in low ambient cooling applications.
- Required in long line applications.

4. Cycle Protector

The cycle protector is designed to prevent compressor short cycling. This control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including power outage, protector control trip, thermostat jiggling, or normal cycling.

Suggested in all commercial applications.

5. Evaporator Freeze Thermostat

An SPST temperature actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

6. Low Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits (approximately 100 psig to 225 psig). The control will maintain working head pressure at low ambient temperatures down to 0°F/-17.8°C when properly installed.

Usage Guideline:

A Low Ambient Pressure Switch or MotorMaster® Low Ambient Controller must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

Suggested for all commercial applications.

7. Support Feet

Four stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

- Coastal installations.
- Windy areas or where debris is normally circulating.
- Rooftop installations.
- For improved sound ratings.

8. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

NOTE: When using a hard shut off TXV with single phase reciprocating compressors, a Compressor Start Assist Capacitor and Relay is required.

Usage Guideline:

- Required to achieve ARI ratings in certain equipment combinations. Refer to combination ratings.
- Hard shut off TXV or LLS required in air conditioner long line applications.
- Required for use on all zoning systems.

9. Winter Start Control

This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

COMBINATION RATINGS

Outdoor Unit	Indoor Unit	Nominal Airflow		Cooling Ratings @35° C (95° F)								Cooling Ratings @46° C (115° F)							
		CFM	L/S	Capacity BTUH	Capacity kW	Power kW	EER	SEER*	COP (w/w)	kW/ton	Capacity BTUH	Capacity kW	Power kW	EER	COP (w/w)	kW/ton			
38CKE018-X-7	FB4BSF018	600	283	17600	5.16	1.60	11.0	12.5	3.22	1.09	14400	4.22	2.08	6.9	2.02	1.73			
	FB4BSF024	600	283	18000	5.28	1.57	11.5	13.5	3.36	1.05	15300	4.48	2.04	7.5	2.20	1.60			
	FSQX418	562	265	17800	5.22	1.55	11.5		3.36	1.05	15147	4.44	2.02	7.5	2.20	1.60			
38CKE024-X-7	FSQX424	651	307	18500	5.42	1.59	11.7		3.42	1.03	15759	4.62	2.06	7.6	2.24	1.57			
	FB4BSF024	800	378	22600	6.62	2.05	11.0	13.0	3.22	1.09	19000	5.57	2.53	7.5	2.20	1.60			
	FB4BSF030	800	378	23000	6.74	2.09	11.0	13.5	3.22	1.09	19100	5.60	2.55	7.5	2.20	1.60			
38CKE030-X-7	FSQX424	651	307	21800	6.39	1.90	11.5		3.36	1.05	18145	5.32	2.32	7.8	2.28	1.53			
	FSQX430	848	400	23000	6.74	1.96	11.7		3.42	1.03	19100	5.60	2.40	8.0	2.34	1.51			
	FB4BSF030	1000	472	28400	8.32	2.71	10.5	13.0	3.06	1.15	24000	7.03	3.46	6.9	2.04	1.73			
38CKE036-X-7	FB4BSF036	1000	472	28800	8.44	2.74	10.5	13.3	3.08	1.14	24400	7.15	3.49	7.0	2.04	1.72			
	FSQX430	937	442	27600	8.09	2.55	10.8		3.16	1.11	23424	6.86	3.25	7.2	2.12	1.66			
	FSQX436	1076	508	28600	8.38	2.74	10.4		3.06	1.15	24156	7.08	3.49	6.9	2.02	1.73			
38CKE036-X-7	FB4BSF036	1200	566	33600	9.85	3.21	10.5	12.7	3.06	1.15	28500	8.35	3.90	7.3	2.14	1.64			
	FB4BS(FB)042	1200	566	34000	9.96	3.15	10.8	13.0	3.16	1.11	29000	8.50	3.82	7.6	2.22	1.58			
	FSQX436	1076	508	32200	9.44	3.12	10.3		3.02	1.16	27550	8.07	3.78	7.3	2.12	1.65			
38CKE036-X-9	FSQX442	1126	531	33400	9.79	3.02	11.0		3.24	1.09	28420	8.33	3.67	7.7	2.26	1.55			
	FB4BSF036	1200	566	33600	9.85	3.21	10.5	12.7	3.06	1.15	28500	8.35	3.90	7.3	2.14	1.64			
	FB4BS(FB)042	1200	566	34000	9.96	3.15	10.8	13.0	3.16	1.11	29000	8.50	3.82	7.6	2.22	1.58			
38CKE042-X-9	FSQX436	1076	508	32400	9.50	3.15	10.3		3.02	1.17	27550	8.07	3.78	7.3	2.12	1.65			
	FSQX442	1126	531	33400	9.79	3.02	11.0		3.24	1.09	28420	8.33	3.67	7.7	2.26	1.55			
	FB4BS(FB)042	1450	684	40000	11.72	3.64	11.0	13.0	3.22	1.09	34400	10.08	4.46	7.7	2.26	1.55			
38CKE042-X-9	FB4BS(FB)048	1450	684	41000	12.02	3.57	11.5	13.5	3.36	1.04	35000	10.26	4.37	8.0	2.34	1.50			
	FSQX442	1277	603	38500	11.28	3.36	11.5		3.36	1.05	32900	9.64	4.11	8.0	2.34	1.50			
	FSQX448	1477	697	40000	11.72	3.32	12.0		3.52	1.00	34300	10.05	4.06	8.4	2.46	1.42			
38CKE048-X-9	FB4BS(FB)048	1600	755	47000	13.77	4.36	10.8	13.0	3.16	1.11	41400	12.13	5.38	7.7	2.26	1.56			
	FB4BS(FB)060	1600	755	48000	14.07	4.36	11.0	13.5	3.22	1.09	42000	12.31	5.38	7.8	2.28	1.54			
	FSQX448	1477	697	45000	13.19	3.92	11.5		3.36	1.05	39480	11.57	4.84	8.2	2.38	1.47			
38CKE060-X-9	FSQX460	1629	769	47000	13.77	4.10	11.5		3.36	1.05	41160	12.06	5.06	8.1	2.38	1.47			
	FB4BS(FB)060	1900	897	57500	16.85	5.58	10.3	12.0	3.02	1.17	49000	14.36	6.49	7.6	2.20	1.59			
	FB4BS5070	1900	897	58500	17.14	5.57	10.5	12.5	3.08	1.14	50000	14.65	6.49	7.7	2.26	1.56			
	FSQX460	2025	956	57000	16.71	5.18	11.0		3.22	1.09	48500	14.21	6.04	8.0	2.34	1.49			

* Rated With Hard Shutoff TXV (see optional equipment section for recommended field installed kits)

CFM — Cubic Feet Per Minute

COP — Coefficient of Performance

EER — Energy Efficiency Ratio

L/S — Liters Per Second

SEER — Seasonal Energy Efficiency Ratio



38CKE

DETAILED COOLING CAPACITIES# - ENGLISH

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
CFM	EWB	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
38CKE018-X-7 Outdoor Section With FB4BSF024 Indoor Section																			
525	57	16.89	16.89	1.13	16.12	16.12	1.30	15.28	15.28	1.48	14.37	14.37	1.70	13.37	13.37	1.95	12.28	12.28	2.24
	62	17.86	15.92	1.13	16.86	15.39	1.31	15.79	14.81	1.49	14.63	14.18	1.71	13.40	13.40	1.95	12.31	12.31	2.24
	67	19.68	13.51	1.15	18.74	13.10	1.33	17.60	12.58	1.54	16.35	12.00	1.76	15.00	11.39	2.01	13.53	10.75	2.29
	72	21.31	10.94	1.18	20.58	10.65	1.36	19.56	10.24	1.57	18.31	9.73	1.82	16.88	9.15	2.08	15.35	8.56	2.37
600	57	17.70	17.70	1.15	16.89	16.89	1.33	16.00	16.00	1.52	15.03	15.03	1.74	13.98	13.98	1.99	12.84	12.84	2.29
	62	18.32	17.06	1.16	17.32	16.54	1.33	16.21	15.91	1.53	15.06	15.06	1.74	14.00	14.00	1.99	12.86	12.86	2.29
	67	20.07	14.29	1.18	19.16	13.93	1.36	18.00	13.42	1.57	16.70	12.84	1.79	15.30	12.22	2.04	13.79	11.56	2.33
	72	21.62	11.94	1.21	20.94	11.11	1.39	19.95	10.74	1.60	18.69	10.25	1.84	17.21	9.67	2.11	15.64	9.07	2.41
675	57	18.35	18.35	1.17	17.53	17.53	1.36	16.60	16.60	1.56	15.59	15.59	1.78	14.49	14.49	2.03	13.31	13.31	2.33
	62	18.70	18.10	1.18	17.70	17.56	1.36	16.62	16.62	1.56	15.61	15.61	1.78	14.51	14.51	2.03	13.33	13.33	2.33
	67	20.35	14.99	1.20	19.47	14.70	1.38	18.30	14.23	1.59	16.96	13.63	1.82	15.53	13.00	2.07	13.99	12.33	2.36
	72	21.83	11.69	1.23	21.18	11.52	1.42	20.23	11.20	1.63	18.96	10.74	1.87	17.47	10.16	2.15	15.86	9.55	2.44

COOLING INDOOR MODEL			CAPACITY			POWER		
		FB4BSF018			0.98			1.02
		FS3QX418			0.99			0.99
		FS3QX424			1.03			1.01

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
CFM	EWB	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW	Capacity MBtuh		Total System KW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
38CKE024-X-7 Outdoor Section With FB4BSF030 Indoor Section																			
700	57	22.42	22.42	1.66	21.17	21.17	1.83	19.87	19.87	2.01	18.48	18.48	2.21	16.99	16.99	2.45	15.39	15.39	2.72
	62	23.30	21.09	1.67	21.77	20.33	1.84	20.19	19.50	2.01	18.52	18.52	2.22	17.02	17.02	2.45	15.41	15.41	2.72
	67	25.75	17.83	1.68	24.22	17.21	1.86	22.52	16.50	2.06	20.70	15.71	2.27	18.74	14.88	2.51	16.63	13.99	2.77
	72	28.11	14.36	1.71	26.74	13.89	1.88	25.11	13.31	2.08	23.26	12.63	2.32	21.19	11.85	2.58	18.97	11.04	2.85
800	57	23.45	23.45	1.69	22.15	22.15	1.87	20.78	20.78	2.06	19.32	19.32	2.27	17.75	17.75	2.51	16.07	16.07	2.78
	62	23.89	22.63	1.70	22.35	21.83	1.87	20.81	20.81	2.06	19.35	19.35	2.27	17.78	17.78	2.51	16.09	16.09	2.78
	67	26.27	18.93	1.71	24.73	18.34	1.89	23.00	17.65	2.09	21.11	16.84	2.31	19.10	15.99	2.55	16.94	15.07	2.81
	72	28.56	14.96	1.74	27.19	14.53	1.91	25.57	13.99	2.12	23.70	13.33	2.35	21.58	12.55	2.63	19.31	11.73	2.90
900	57	24.28	24.28	1.73	22.96	22.96	1.90	21.54	21.54	2.10	20.01	20.01	2.31	18.39	18.39	2.56	16.63	16.63	2.83
	62	24.41	24.19	1.73	23.00	23.00	1.90	21.57	21.57	2.10	20.04	20.04	2.31	18.42	18.42	2.56	16.66	16.66	2.83
	67	26.63	19.94	1.75	25.11	19.42	1.92	23.35	18.73	2.12	21.43	17.92	2.35	19.37	17.04	2.59	17.18	16.08	2.85
	72	28.87	15.50	1.77	27.52	15.12	1.95	25.90	14.62	2.15	24.02	13.98	2.39	21.90	13.24	2.66	19.56	12.38	2.94

COOLING INDOOR MODEL			CAPACITY			POWER		
		FB4BSF024			0.98			0.98
		FS3QX424			0.95			0.91
		FS3QX430			1.00			0.94

See notes on page 13

DETAILED COOLING CAPACITIES# - ENGLISH (CONTINUED)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F																	
		75			85			95			105			115			125		
		Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW
		38CKE030-X-7 Outdoor Section With FB4BSF036 Indoor Section																	
875	EWB	27.53	27.53	2.03	26.23	26.23	2.30	24.82	24.82	2.59	23.29	23.29	2.93	21.62	21.62	3.33	19.79	19.79	3.79
		28.68	25.62	2.05	27.07	24.79	2.32	25.33	23.85	2.61	23.47	22.79	2.94	21.66	21.66	3.33	19.82	19.82	3.79
		31.52	21.73	2.09	29.96	21.09	2.37	28.15	20.31	2.69	26.10	19.40	3.03	23.87	18.44	3.42	21.43	17.40	3.87
		34.21	17.64	2.15	32.88	17.14	2.43	31.20	16.51	2.76	29.20	15.75	3.14	26.87	14.85	3.56	24.30	13.89	4.01
1000	EWB	28.79	28.79	2.09	27.47	27.47	2.37	25.99	25.99	2.67	24.39	24.39	3.01	22.63	22.63	3.41	20.71	20.71	3.87
		29.45	27.44	2.10	27.85	26.60	2.37	26.11	25.95	2.67	24.42	24.42	3.01	22.67	22.67	3.41	20.74	20.74	3.88
		32.19	23.05	2.14	30.65	22.47	2.42	28.80	21.72	2.74	26.70	20.80	3.10	24.40	19.81	3.49	21.89	18.74	3.93
		34.80	18.39	2.20	33.50	17.96	2.49	31.83	17.37	2.81	29.81	16.64	3.19	27.44	15.74	3.63	24.80	14.77	4.08
1125	EWB	29.84	29.84	2.14	28.50	28.50	2.42	26.99	26.99	2.74	25.32	25.32	3.09	23.50	23.50	3.49	21.49	21.49	3.95
		30.12	29.05	2.15	28.56	28.56	2.42	27.03	27.03	2.74	25.35	25.35	3.09	23.53	23.53	3.49	21.52	21.52	3.96
		32.72	24.29	2.19	31.18	23.77	2.47	29.32	23.06	2.79	27.18	22.15	3.16	24.84	21.13	3.55	22.28	20.00	3.99
		35.26	19.09	2.25	33.98	18.72	2.54	32.32	18.18	2.86	30.29	17.48	3.24	27.90	16.61	3.69	25.20	15.62	4.14

COOLING INDOOR MODEL		CAPACITY		POWER	
FB4BSF030		0.99		0.99	
FS3QX430		0.96		0.93	
FS3QX436		0.99		1.00	

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F																	
		75			85			95			105			115			125		
		Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW
		38CKE036-X-7 Outdoor Section With FB4BS(FB)042 Indoor Section																	
1050	EWB	32.36	32.36	2.47	30.99	30.99	2.72	29.46	29.46	2.99	27.78	27.78	3.30	25.96	25.96	3.66	23.95	23.95	4.06
		33.66	30.61	2.48	31.87	29.89	2.74	29.93	29.03	3.01	27.85	27.85	3.31	26.00	26.00	3.66	23.99	23.99	4.06
		37.19	25.85	2.52	35.44	25.28	2.79	33.36	24.56	3.09	31.03	23.69	3.40	28.51	22.75	3.75	25.78	21.73	4.13
		40.51	20.76	2.58	39.02	20.33	2.85	37.11	19.72	3.15	34.82	18.96	3.50	32.18	18.04	3.89	29.30	17.06	4.28
1200	EWB	33.77	33.77	2.53	32.36	32.36	2.80	30.74	30.74	3.08	28.96	28.96	3.39	27.04	27.04	3.75	24.92	24.92	4.15
		34.47	32.73	2.54	32.69	31.99	2.80	30.80	30.80	3.08	29.01	29.01	3.39	27.08	27.08	3.75	24.96	24.96	4.15
		37.88	27.35	2.58	36.12	26.88	2.85	34.00	26.20	3.15	31.59	25.34	3.47	29.00	24.38	3.82	26.19	23.33	4.20
		41.07	21.55	2.64	39.62	21.21	2.91	37.71	20.66	3.21	35.40	19.95	3.56	32.71	19.06	3.96	29.73	18.06	4.35
1350	EWB	34.92	34.92	2.59	33.48	33.48	2.86	31.80	31.80	3.16	29.96	29.96	3.47	27.94	27.94	3.83	25.73	25.73	4.23
		35.18	34.57	2.59	33.53	33.53	2.86	31.85	31.85	3.16	30.00	30.00	3.47	27.97	27.97	3.83	25.76	25.76	4.24
		38.39	28.78	2.64	36.63	28.40	2.90	34.49	27.77	3.20	32.03	26.92	3.54	29.39	25.94	3.88	26.52	24.83	4.27
		41.47	22.28	2.70	40.06	22.03	2.96	36.17	21.56	3.27	35.83	20.89	3.62	33.13	20.07	4.01	30.08	19.04	4.42

COOLING INDOOR MODEL		CAPACITY		POWER	
FB4BSF036		0.99		1.02	
FS3QX436		0.95		0.99	
FS3QX442		0.98		0.96	

See notes on page 13



DETAILED COOLING CAPACITIES# - ENGLISH (CONTINUED)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F																		
		75			85			95			105			115			125			
		CFM	EWB	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW		
38CKE036 - X-9 Outdoor Section With FB4BS (FB)042 Indoor Section																				
1050	57		32.36	32.36	2.47	30.99	30.99	2.72	29.46	29.46	2.99	27.78	27.78	3.30	25.96	25.96	3.66	23.95	23.95	4.06
	62		33.66	30.61	2.48	31.87	29.89	2.74	29.93	29.03	3.01	27.85	27.85	3.31	26.00	26.00	3.66	23.99	23.99	4.06
	67		37.19	25.85	2.52	35.44	25.28	2.79	33.36	24.56	3.09	31.03	23.69	3.40	28.51	22.75	3.75	25.78	21.73	4.13
	72		40.51	20.76	2.58	39.02	20.33	2.85	37.11	19.72	3.15	34.82	18.96	3.50	32.18	18.04	3.89	29.30	17.06	4.28
1200	57		33.77	33.77	2.53	32.36	32.36	2.80	30.74	30.74	3.08	28.96	28.96	3.39	27.04	27.04	3.75	24.92	24.92	4.15
	62		34.47	32.73	2.54	32.69	31.99	2.80	30.80	30.80	3.08	29.01	29.01	3.39	27.08	27.08	3.75	24.96	24.96	4.15
	67		37.88	27.35	2.58	36.12	26.88	2.85	34.00	26.20	3.15	31.59	25.34	3.47	29.00	24.38	3.82	26.19	23.33	4.20
	72		41.07	21.55	2.64	39.62	21.21	2.91	37.71	20.66	3.21	35.40	19.95	3.56	32.71	19.06	3.96	29.73	18.06	4.35
1350	57		34.92	34.92	2.59	33.48	33.48	2.86	31.80	31.80	3.16	29.96	29.96	3.47	27.94	27.94	3.83	25.73	25.73	4.23
	62		35.18	34.57	2.59	33.53	33.53	2.86	31.85	31.85	3.16	30.00	30.00	3.47	27.97	27.97	3.83	25.76	25.76	4.24
	67		38.39	28.78	2.64	36.63	28.40	2.90	34.49	27.77	3.20	32.03	26.92	3.54	29.39	25.94	3.88	26.52	24.83	4.27
	72		41.47	22.28	2.70	40.06	22.03	2.96	38.17	21.56	3.27	35.83	20.89	3.62	33.13	20.07	4.01	30.08	19.04	4.42
COOLING INDOOR MODEL																				
FB4BSF036																				
FS3QX436																				
FS3QX442																				
CAPACITY																				
0.99																				
0.99																				
0.96																				
POWER																				
1.02																				
0.99																				
0.96																				

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F																		
		75			85			95			105			115			125			
		CFM	EWB	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW		
38CKE042 - X-9 Outdoor Section With FB4BS (FB)048 Indoor Section																				
1225	57		39.33	39.33	2.81	37.54	37.54	3.10	35.60	35.60	3.41	33.51	33.51	3.78	31.22	31.22	4.21	28.81	28.81	4.72
	62		40.83	37.19	2.83	38.59	36.27	3.12	36.18	35.19	3.42	33.65	33.47	3.78	31.28	31.28	4.22	28.86	28.86	4.72
	67		44.99	31.33	2.86	42.78	30.62	3.16	40.22	29.71	3.50	37.40	28.64	3.87	34.39	27.50	4.30	31.20	26.30	4.79
	72		48.91	25.11	2.91	47.04	24.60	3.21	44.66	23.85	3.55	41.92	22.95	3.95	38.81	21.88	4.42	35.48	20.72	4.92
1400	57		41.02	41.02	2.88	39.18	39.18	3.18	37.14	37.14	3.50	34.92	34.92	3.87	32.53	32.53	4.31	30.02	30.02	4.81
	62		41.80	39.79	2.89	39.55	38.84	3.18	37.20	37.20	3.50	34.98	34.98	3.87	32.58	32.58	4.31	30.07	30.07	4.81
	67		45.80	33.17	2.93	43.60	32.58	3.22	41.00	31.73	3.57	38.08	30.65	3.95	35.00	29.50	4.37	31.73	28.26	4.86
	72		49.57	26.08	2.98	47.74	25.67	3.27	45.39	25.01	3.61	42.62	24.15	4.01	39.49	23.14	4.48	36.04	21.95	5.00
1575	57		42.39	42.39	2.95	40.52	40.52	3.25	38.41	38.41	3.59	36.10	36.10	3.96	33.64	33.64	4.40	31.04	31.04	4.90
	62		42.62	42.01	2.95	40.58	40.58	3.25	38.46	38.46	3.59	36.15	36.15	3.96	33.69	33.69	4.40	31.08	31.08	4.90
	67		46.36	34.87	2.99	44.19	34.41	3.28	41.56	33.60	3.62	38.60	32.56	4.02	35.46	31.38	4.45	32.15	30.09	4.94
	72		50.04	26.95	3.04	48.23	26.64	3.33	45.90	26.07	3.67	43.12	25.26	4.07	39.96	24.28	4.54	36.45	23.11	5.07
COOLING INDOOR MODEL																				
FB4BS(FB)042																				
FS3QX442																				
FS3QX448																				
CAPACITY																				
0.98																				
0.94																				
0.93																				
POWER																				
1.02																				
0.94																				
0.93																				

DETAILED COOLING CAPACITIES# - ENGLISH (CONTINUED)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F																	
		75			85			95			105			115			125		
		CFM	EWB	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW
38CKE048-X-9 Outdoor Section With FB4BS(FB)060 Indoor Section																			
1400	57		3.30	44.88	44.88	43.22	43.22	41.47	41.47	39.46	39.46	4.63	37.17	37.17	5.15	34.50	34.50	5.69	
	62		3.32	46.79	41.84	44.60	41.17	3.73	42.30	40.40	4.16	39.74	39.40	4.64	37.23	37.23	34.57	34.57	5.69
	67		3.38	51.59	35.32	49.46	34.08	3.80	47.07	34.08	4.28	44.37	33.22	4.77	41.24	32.21	37.61	31.00	5.80
	72		3.46	56.28	28.47	54.46	28.02	3.87	52.29	27.41	4.35	49.72	26.65	4.87	46.63	25.69	42.91	24.48	5.99
	57		3.39	46.80	46.80	45.10	45.10	3.82	43.25	43.25	4.27	41.19	41.19	4.76	38.80	38.80	36.03	36.03	5.83
	62		3.41	47.89	47.89	45.68	44.17	3.83	43.35	43.35	4.27	41.25	41.25	4.76	38.86	38.86	36.09	36.09	5.83
	67		3.46	52.97	37.46	50.42	37.02	3.88	48.00	36.38	4.36	45.20	35.57	4.88	42.00	34.57	38.27	33.36	5.90
1600	72		3.55	57.12	29.82	55.32	29.27	3.96	53.18	28.75	4.44	50.57	28.04	4.96	47.45	27.13	43.69	25.99	6.09
	57		3.48	48.41	48.41	46.69	46.69	3.91	44.76	44.76	4.39	42.63	42.63	4.88	40.17	40.17	37.30	37.30	5.95
	62		3.49	48.82	47.51	46.74	46.74	3.92	44.83	44.83	4.39	42.69	42.69	4.88	40.23	40.23	37.36	37.36	5.95
	67		3.55	53.26	39.44	51.12	39.12	3.97	48.67	38.56	4.45	45.85	37.81	4.97	42.56	36.80	38.79	35.57	6.01
	72		3.63	57.72	30.67	55.94	30.42	4.05	53.77	29.98	4.52	51.17	29.33	5.05	48.02	28.47	44.22	27.38	6.18
COOLING INDOOR MODEL																			
												CAPACITY							
												POWER							
												FB4BS(FB)048							
												FS3QX448							
												FS3QX460							

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F																	
		75			85			95			105			115			125		
		CFM	EWB	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW	Capacity MBtuh Total	Sens	Total System KW
38CKE060-X-9 Outdoor Section With FB4BS(FB)070 Indoor Section																			
1750	57		4.23	56.48	56.48	53.91	53.91	4.65	51.10	51.10	5.13	48.07	48.07	5.67	44.87	44.87	41.47	41.47	6.97
	62		4.25	58.54	51.17	55.36	50.24	4.68	51.86	49.08	5.14	48.17	48.17	5.67	44.95	44.95	41.54	41.54	6.97
	67		4.30	64.84	43.21	61.51	42.37	4.75	57.79	41.34	5.26	53.75	40.14	5.81	49.45	38.82	44.88	37.38	7.09
	72		4.36	71.15	34.81	67.99	34.09	4.81	64.33	33.14	5.31	60.29	32.04	5.89	55.88	30.78	51.14	29.39	7.26
	57		4.32	58.04	58.04	55.35	55.35	4.74	52.46	52.46	5.22	49.36	49.36	5.76	46.06	46.06	42.55	42.55	7.07
	62		4.32	59.41	53.46	56.17	52.49	4.75	52.70	52.40	5.22	49.44	49.44	5.76	46.14	46.14	42.62	42.62	7.07
	67		4.37	65.64	44.86	62.27	44.07	4.81	58.50	43.06	5.32	54.39	41.89	5.89	50.00	40.56	45.35	39.10	7.17
1900	72		4.43	71.88	35.72	68.68	35.04	4.88	65.00	34.14	5.38	60.89	33.06	5.95	56.45	31.82	51.63	30.43	7.33
	57		4.37	59.36	59.36	56.68	56.68	4.83	53.68	53.68	5.31	50.52	50.52	5.85	47.13	47.13	43.52	43.52	7.17
	62		4.38	60.19	55.80	56.96	56.51	4.84	53.77	53.77	5.31	50.60	50.60	5.85	47.21	47.21	43.59	43.59	7.18
	67		4.43	66.30	46.44	62.91	45.71	4.88	59.08	44.72	5.38	54.92	43.58	5.95	50.45	42.24	45.74	40.76	7.25
	72		4.50	72.47	36.58	69.25	35.95	4.94	65.53	35.08	5.45	61.38	34.03	6.02	56.88	32.81	52.02	31.44	7.39
COOLING INDOOR MODEL																			
												CAPACITY							
												POWER							
												FB4BS(FB)060							
												FS3QX460							

Detailed cooling capacities are based on indoor and outdoor unit at the same elevation, per ARI Standard 210/240-94, and connected by 25 ft of tubing. If other than 25 ft of tubing is used and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

† Total and sensible capacities are net capacities. Blower motor heat has been subtracted.

‡ Sensible capacities shown are based on 80° F (27° C) entering air at the indoor coil. For sensible capacities at other than 80° F (27° C), deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80° F (27° C), or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80° F (27° C). When the required data falls between the published data, interpolation may be performed.

EWB – Entering Wet Bulb

CFM – Cubic Feet Per Minute



38CKE

DETAILED COOLING CAPACITIES# - SI

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° C																	
		24			29			35			41			46			52		
L/S	EWB	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
38CKE018-X-7 Outdoor Section With FB4BSF024 Indoor Section																			
	14	4.95	4.95	1.13	4.72	4.72	1.30	4.48	4.48	1.48	4.21	4.21	1.70	3.92	3.92	1.95	3.60	3.60	2.24
260	17	5.23	4.66	1.13	4.94	4.51	1.31	4.63	4.34	1.49	4.29	4.15	1.71	3.93	3.93	1.95	3.61	3.61	2.24
	19	5.77	3.96	1.15	5.49	3.84	1.33	5.16	3.69	1.54	4.79	3.51	1.76	4.39	3.34	2.01	3.97	3.15	2.29
	22	6.24	3.20	1.18	6.03	3.12	1.36	5.73	3.00	1.57	5.36	2.85	1.82	4.95	2.68	2.08	4.50	2.51	2.37
285	14	5.18	5.18	1.15	4.95	4.95	1.33	4.69	4.69	1.52	4.40	4.40	1.74	4.10	4.10	1.99	3.76	3.76	2.29
	17	5.37	5.00	1.16	5.07	4.85	1.33	4.75	4.66	1.53	4.41	4.41	1.74	4.10	4.10	1.99	3.77	3.77	2.29
	19	5.88	4.19	1.18	5.61	4.08	1.36	5.27	3.93	1.57	4.89	3.76	1.79	4.48	3.58	2.04	4.04	3.39	2.33
320	22	6.33	3.32	1.21	6.13	3.26	1.39	5.84	3.15	1.60	5.47	3.00	1.84	5.04	2.83	2.11	4.58	2.66	2.41
	14	5.38	5.38	1.17	5.14	5.14	1.36	4.86	4.86	1.56	4.57	4.57	1.78	4.25	4.25	2.03	3.90	3.90	2.33
	17	5.48	5.30	1.18	5.19	5.15	1.36	4.87	4.87	1.56	4.57	4.57	1.78	4.25	4.25	2.03	3.90	3.90	2.33
	19	5.96	4.39	1.20	5.70	4.31	1.38	5.36	4.17	1.59	4.97	3.99	1.82	4.55	3.81	2.07	4.10	3.61	2.36
	22	6.40	3.42	1.23	6.21	3.38	1.42	5.93	3.28	1.63	5.56	3.15	1.87	5.12	2.98	2.15	4.65	2.80	2.44
COOLING INDOOR MODEL																			
FB4BSF018																			
FS3QX418																			
FS3QX424																			
CAPACITY										POWER									
0.98										1.02									
0.99										0.99									
1.03										1.01									

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° C																	
		24			29			35			41			46			52		
L/S	EWB	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
38CKE024-X-7 Outdoor Section With FB4BSF030 Indoor Section																			
	14	6.57	6.57	1.66	6.20	6.20	1.83	5.82	5.82	2.01	5.41	5.41	2.21	4.98	4.98	2.45	4.51	4.51	2.72
330	17	6.83	6.18	1.67	6.38	5.96	1.84	5.91	5.71	2.01	5.43	5.43	2.22	4.99	4.99	2.45	4.52	4.52	2.72
	19	7.55	5.22	1.68	7.10	5.04	1.86	6.60	4.83	2.06	6.06	4.60	2.27	5.49	4.36	2.51	4.87	4.10	2.77
	22	8.24	4.21	1.71	7.83	4.07	1.88	7.36	3.90	2.08	6.82	3.70	2.32	6.21	3.47	2.58	5.56	3.24	2.85
380	14	6.87	6.87	1.69	6.49	6.49	1.87	6.09	6.09	2.06	5.66	5.66	2.27	5.20	5.20	2.51	4.71	4.71	2.78
	17	7.00	6.63	1.70	6.55	6.40	1.87	6.10	6.10	2.06	5.67	5.67	2.27	5.21	5.21	2.51	4.72	4.72	2.78
	19	7.70	5.55	1.71	7.24	5.37	1.89	6.74	5.17	2.09	6.18	4.94	2.31	5.60	4.69	2.55	4.96	4.42	2.81
425	22	8.37	4.38	1.74	7.97	4.26	1.91	7.49	4.10	2.12	6.94	3.91	2.35	6.32	3.68	2.63	5.66	3.44	2.90
	14	7.11	7.11	1.73	6.73	6.73	1.90	6.31	6.31	2.10	5.86	5.86	2.31	5.39	5.39	2.56	4.87	4.87	2.83
	17	7.15	7.09	1.73	6.74	6.74	1.90	6.32	6.32	2.10	5.87	5.87	2.31	5.40	5.40	2.56	4.88	4.88	2.83
	19	7.80	5.84	1.75	7.36	5.69	1.92	6.84	5.49	2.12	6.28	5.25	2.35	5.68	4.99	2.59	5.03	4.71	2.85
	22	8.46	4.54	1.77	8.06	4.43	1.95	7.59	4.28	2.15	7.04	4.10	2.39	6.42	3.88	2.66	5.73	3.63	2.94
COOLING INDOOR MODEL																			
FB4BSF024																			
FS3QX424																			
FS3QX430																			
CAPACITY										POWER									
0.98										0.98									
0.95										0.91									
1.00										0.94									

See notes on page 17

DETAILED COOLING CAPACITIES# - SI (CONTINUED)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
		24			29			35			41			46			52		
L/S	EWB	Capacity kW		Total System KW	Capacity kW		Total System KW	Capacity kW		Total System KW	Capacity kW		Total System KW	Capacity kW		Total System KW	Capacity kW		Total System KW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
38CKE030-X-7 Outdoor Section With FB4BSF036 Indoor Section																			
	14	8.07	8.07	2.03	7.88	7.88	2.30	7.27	7.27	2.59	6.82	6.82	2.93	6.33	6.33	3.33	5.80	5.80	3.79
415	17	8.40	7.51	2.05	7.93	7.26	2.32	7.42	6.99	2.61	6.88	6.88	2.94	6.34	6.34	3.33	5.81	5.81	3.79
	19	9.23	6.37	2.09	8.78	6.18	2.37	8.25	5.95	2.69	7.65	5.68	3.03	6.99	5.40	3.42	6.28	5.10	3.87
	22	10.02	5.17	2.15	9.63	5.02	2.43	9.14	4.84	2.76	8.56	4.62	3.14	7.87	4.35	3.56	7.12	4.07	4.01
470	14	8.44	8.44	2.09	8.05	8.05	2.37	7.62	7.62	2.67	7.15	7.15	3.01	6.63	6.63	3.41	6.07	6.07	3.87
	17	8.63	8.04	2.10	8.16	7.79	2.37	7.65	7.60	2.67	7.16	7.16	3.01	6.64	6.64	3.41	6.08	6.08	3.88
	19	9.43	6.75	2.14	8.98	6.58	2.42	8.44	6.36	2.74	7.82	6.10	3.10	7.15	5.80	3.49	6.41	5.49	3.93
530	22	10.20	5.39	2.20	9.82	5.26	2.49	9.32	5.09	2.81	8.74	4.88	3.19	8.04	4.61	3.63	7.27	4.33	4.08
	14	8.74	8.74	2.14	8.35	8.35	2.42	7.91	7.91	2.74	7.42	7.42	3.09	6.88	6.88	3.49	6.30	6.30	3.95
	17	8.82	8.51	2.15	8.37	8.37	2.42	7.92	7.92	2.74	7.43	7.43	3.09	6.89	6.89	3.49	6.31	6.31	3.96
22	9.59	7.12	2.19	9.14	6.97	2.47	8.59	6.76	2.79	7.96	6.49	3.16	7.28	6.19	3.55	6.53	5.86	3.99	
	10.33	5.59	2.25	9.96	5.48	2.54	9.47	5.33	2.86	8.88	5.12	3.24	8.17	4.87	3.69	7.38	4.58	4.14	
COOLING INDOOR MODEL												CAPACITY			POWER				
FB4BSF030												0.99			0.99				
FS3QX430												0.96			0.93				
FS3QX436												0.99			1.00				

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
		24			29			35			41			46			52		
L/S	EWB	Capacity kW		Total System KW	Capacity kW		Total System KW	Capacity kW		Total System KW	Capacity kW		Total System KW	Capacity kW		Total System KW	Capacity kW		Total System KW
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens	
38CKE038-X-7 Outdoor Section With FB4BS(FB)042 Indoor Section																			
495	14	9.48	9.48	2.47	9.08	9.08	2.72	8.63	8.63	2.99	8.14	8.14	3.30	7.61	7.61	3.66	7.02	7.02	4.06
	17	9.86	8.97	2.48	9.34	8.76	2.74	8.77	8.50	3.01	8.16	8.16	3.31	7.62	7.62	3.66	7.03	7.03	4.06
	19	10.90	7.57	2.52	10.38	7.41	2.79	9.78	7.20	3.09	9.09	6.94	3.40	8.35	6.67	3.75	7.55	6.37	4.13
565	22	11.87	6.08	2.58	11.43	5.96	2.85	10.87	5.78	3.15	10.20	5.56	3.50	9.43	5.28	3.89	8.58	5.00	4.28
	14	9.90	9.90	2.53	9.48	9.48	2.80	9.01	9.01	3.08	8.49	8.49	3.39	7.92	7.92	3.75	7.30	7.30	4.15
	17	10.10	9.59	2.54	9.58	9.37	2.80	9.02	9.02	3.08	8.50	8.50	3.39	7.93	7.93	3.75	7.31	7.31	4.15
635	19	11.10	8.01	2.58	10.58	7.87	2.85	9.96	7.68	3.15	9.26	7.42	3.47	8.50	7.14	3.82	7.67	6.84	4.20
	22	12.03	6.31	2.64	11.61	6.21	2.91	11.05	6.05	3.21	10.37	5.84	3.56	9.58	5.58	3.96	8.71	5.29	4.35
	14	10.23	10.23	2.59	9.81	9.81	2.86	9.32	9.32	3.16	8.78	8.78	3.47	8.19	8.19	3.83	7.54	7.54	4.23
22	10.31	10.13	2.59	9.82	9.82	2.86	9.33	9.33	3.16	8.79	8.79	3.47	8.20	8.20	3.83	7.55	7.55	4.24	
	11.25	8.43	2.64	10.73	8.32	2.90	10.11	8.14	3.20	9.39	7.89	3.54	8.61	7.60	3.88	7.77	7.28	4.27	
12.15	6.53	2.70	11.74	6.45	2.96	11.18	6.32	3.27	10.50	6.12	3.62	9.71	5.88	4.01	8.81	5.58	4.42		
COOLING INDOOR MODEL												CAPACITY			POWER				
FB4BSF036												0.99			1.02				
FS3QX436												0.95			0.99				
FS3QX442												0.98			0.96				

See notes on page 17



38CKE

38CKE

DETAILED COOLING CAPACITIES# - SI (CONTINUED)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																						
L/S	EWB	24			29			35			41			46			52							
		Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW					
38CKE036 - X-9 Outdoor Section With FB4BS(FB)042 Indoor Section																								
	14	9.48	9.48	2.47	9.08	9.08	2.72	8.63	8.63	2.99	8.14	8.14	3.30	7.61	7.61	3.66	7.02	7.02	4.06					
485	17	9.86	8.97	2.48	9.34	8.76	2.74	8.77	8.50	3.01	8.16	8.16	3.31	7.62	7.62	3.66	7.03	7.03	4.06					
	19	10.90	7.57	2.52	10.38	7.41	2.79	9.78	7.20	3.09	9.09	6.94	3.40	8.35	6.67	3.75	7.55	6.37	4.13					
	22	11.87	6.08	2.58	11.43	5.96	2.85	10.87	5.78	3.15	10.20	5.56	3.50	9.43	5.28	3.89	8.58	5.00	4.28					
565	14	9.90	9.90	2.53	9.48	9.48	2.80	9.01	9.01	3.08	8.49	8.49	3.39	7.92	7.92	3.75	7.30	7.30	4.15					
	17	10.10	9.59	2.54	9.58	9.37	2.80	9.02	9.02	3.08	8.50	8.50	3.39	7.93	7.93	3.75	7.31	7.31	4.15					
	19	11.10	8.01	2.58	10.58	7.87	2.85	9.96	7.68	3.15	9.26	7.42	3.47	8.50	7.14	3.82	7.67	6.84	4.20					
635	22	12.03	6.31	2.64	11.61	6.21	2.91	11.05	6.05	3.21	10.37	5.84	3.56	9.58	5.58	3.96	8.71	5.29	4.35					
	14	10.23	10.23	2.59	9.81	9.81	2.86	9.32	9.32	3.16	8.78	8.78	3.47	8.19	8.19	3.83	7.54	7.54	4.23					
	17	10.31	10.13	2.59	9.82	9.82	2.86	9.33	9.33	3.16	8.79	8.79	3.47	8.20	8.20	3.83	7.55	7.55	4.24					
19	11.25	8.43	2.64	10.73	8.32	2.90	10.11	8.14	3.20	9.39	7.89	3.54	8.61	7.60	3.88	7.77	7.28	4.27						
	22	12.15	6.53	2.70	11.74	6.45	2.96	11.18	6.32	3.27	10.50	6.12	3.62	9.71	5.88	4.01	8.81	5.58	4.42					
COOLING INDOOR MODEL																								
															CAPACITY					POWER				
															0.99					1.02				
															0.95					0.99				
															0.98					0.96				

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																						
L/S	EWB	24			29			35			41			46			52							
		Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW	Capacity kW Total	Sens	Total System KW					
38CKE042 - X-9 Outdoor Section With FB4BS(FB)048 Indoor Section																								
580	14	11.52	11.52	2.81	11.00	11.00	3.10	10.43	10.43	3.41	9.82	9.82	3.78	9.15	9.15	4.21	8.44	8.44	4.72					
	17	11.96	10.90	2.83	11.31	10.63	3.12	10.60	10.31	3.42	9.86	9.81	3.78	9.16	9.16	4.22	8.46	8.46	4.72					
	19	13.18	9.18	2.86	12.54	8.97	3.16	11.78	8.70	3.50	10.96	8.39	3.87	10.07	8.06	4.30	9.14	7.70	4.79					
660	22	14.33	7.36	2.91	13.78	7.21	3.21	13.09	6.99	3.55	12.28	6.72	3.95	11.37	6.41	4.42	10.39	6.07	4.92					
	14	12.02	12.02	2.88	11.48	11.48	3.18	10.88	10.88	3.50	10.23	10.23	3.87	9.53	9.53	4.31	8.80	8.80	4.81					
	17	12.25	11.66	2.89	11.59	11.38	3.18	10.90	10.90	3.50	10.25	10.25	3.87	9.55	9.55	4.31	8.81	8.81	4.81					
745	19	13.42	9.72	2.93	12.78	9.55	3.22	12.01	9.30	3.57	11.16	8.98	3.95	10.25	8.64	4.37	9.30	8.28	4.86					
	22	14.52	7.64	2.98	13.99	7.52	3.27	13.30	7.33	3.61	12.49	7.07	4.01	11.57	6.78	4.48	10.56	6.43	5.00					
	14	12.42	12.42	2.95	11.87	11.87	3.25	11.25	11.25	3.59	10.58	10.58	3.96	9.86	9.86	4.40	9.09	9.09	4.90					
17	12.49	12.31	2.95	11.89	11.89	3.25	11.27	11.27	3.59	10.59	10.59	3.96	9.87	9.87	4.40	9.11	9.11	4.90						
	19	13.58	10.22	2.99	12.95	10.08	3.28	12.18	9.85	3.62	11.31	9.54	4.02	10.39	9.19	4.45	9.42	8.82	4.94					
22	14.66	7.90	3.04	14.13	7.81	3.33	13.45	7.64	3.67	12.63	7.40	4.07	11.71	7.12	4.54	10.68	6.77	5.07						
COOLING INDOOR MODEL																								
															CAPACITY					POWER				
															0.98					1.02				
															0.94					0.94				
															0.98					0.93				

See notes on page 17

DETAILED COOLING CAPACITIES# - SI (CONTINUED)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
		24			29			35			41			46			52		
		L/S	EWB	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	
Total	Sens			Total	Sens		Total	Sens		Total	Sens		Total	Sens					
		38CKE048 - X - 9 Outdoor Section With FB4BS(FB)060 Indoor Section																	
	14	13.15	13.15	3.30	3.69	12.15	12.15	4.14	4.63	11.56	11.56	4.63	5.15	10.11	10.11	5.69	5.69		
660	17	13.71	12.26	3.32	3.73	12.39	11.84	4.16	4.64	11.64	11.54	4.64	5.16	10.13	10.13	5.69	5.69		
	19	15.12	10.35	3.38	3.80	13.79	9.98	4.28	4.77	13.00	9.73	4.77	5.28	11.02	9.08	5.80	5.80		
	22	16.49	8.34	3.46	3.87	15.32	8.03	4.35	4.87	14.57	7.81	4.87	5.43	12.57	7.17	5.99	5.99		
755	14	13.71	13.71	3.39	3.82	12.67	12.67	4.27	4.76	12.07	12.07	4.76	5.28	10.56	10.56	5.83	5.83		
	17	14.03	13.14	3.41	3.83	12.70	12.70	4.27	4.76	12.09	11.39	4.76	5.29	10.57	10.57	5.83	5.83		
	19	15.40	10.98	3.46	3.88	14.77	10.85	4.36	4.88	13.24	10.42	4.88	5.38	11.21	9.77	5.90	5.90		
850	22	16.74	8.68	3.55	3.96	15.58	8.42	4.44	4.96	14.82	8.21	4.96	5.52	12.80	7.61	6.09	6.09		
	14	14.18	14.18	3.48	3.91	13.12	13.12	4.39	4.88	12.49	12.49	4.88	5.41	10.93	10.93	5.95	5.95		
	17	14.30	13.92	3.49	3.92	13.14	13.14	4.39	4.88	12.51	12.51	4.88	5.41	10.95	10.95	5.95	5.95		
825	19	15.60	11.56	3.55	3.97	14.26	11.30	4.45	4.97	13.43	11.08	4.97	5.48	11.37	10.42	6.01	6.01		
	22	16.91	8.99	3.63	4.05	15.76	8.78	4.52	5.05	14.99	8.59	5.05	5.60	12.96	8.02	6.18	6.18		
		COOLING INDOOR MODEL												POWER					
														1.00					
														0.90					
														0.94					

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
		24			29			35			41			46			52		
		L/S	EWB	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	Capacity kW		Total System kW	
Total	Sens			Total	Sens		Total	Sens		Total	Sens		Total	Sens					
		38CKE060 - X - 9 Outdoor Section With FB4BS070 Indoor Section																	
	14	16.55	16.55	4.23	4.65	14.97	14.97	5.13	5.67	14.08	14.08	5.67	6.27	12.15	12.15	6.97	6.97		
825	17	17.15	14.99	4.25	4.68	15.19	14.38	5.14	5.67	14.11	14.11	5.67	6.28	12.17	12.17	6.97	6.97		
	19	19.00	12.86	4.30	4.75	16.93	12.11	5.26	5.81	15.75	11.76	5.81	6.41	13.15	10.95	7.09	7.09		
	22	20.85	10.20	4.36	4.81	18.85	9.71	5.31	5.89	17.66	9.39	5.89	6.53	14.99	8.61	7.26	7.26		
895	14	17.01	17.01	4.32	4.74	15.37	15.37	5.22	5.76	14.46	14.46	5.76	6.37	12.47	12.47	7.07	7.07		
	17	17.41	15.88	4.32	4.75	15.44	15.35	5.22	5.76	14.49	14.49	5.76	6.38	12.49	12.49	7.07	7.07		
	19	19.23	13.14	4.37	4.81	17.14	12.62	5.32	5.89	15.94	12.27	5.89	6.49	13.29	11.46	7.17	7.17		
965	22	21.06	10.47	4.43	4.88	19.04	10.00	5.38	5.95	17.84	9.69	5.95	6.60	15.13	8.92	7.33	7.33		
	14	17.39	17.39	4.37	4.83	15.73	15.73	5.31	5.85	14.80	14.80	5.85	6.47	12.75	12.75	7.17	7.17		
	17	17.63	16.29	4.38	4.84	15.75	15.75	5.31	5.85	14.83	14.83	5.85	6.47	12.77	12.77	7.18	7.18		
965	19	19.43	13.61	4.43	4.88	17.31	13.10	5.38	5.95	16.09	12.77	5.95	6.57	13.40	11.94	7.25	7.25		
	22	21.23	10.72	4.50	4.94	19.20	10.28	5.45	6.02	17.99	9.97	6.02	6.67	15.24	9.21	7.39	7.39		
		COOLING INDOOR MODEL												POWER					
														1.00					
														0.97					
														0.93					

NOTE: When the required data fall between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.
 # Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240-08. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.
 † Total and sensible capacities are net capacities. Blower motor heat has been subtracted.
 ‡ Sensible capacities shown are based on 80° F (27° C) entering air at the indoor coil. For sensible capacities at other than 80° F (27° C), deduct 835 Btu/h (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80° F (27° C).
 EWB – Entering Wet Bulb
 L/S – Liters Per Second



38CKE

CONDENSER ONLY RATINGS - ENGLISH

SST ° F		CONDENSER ENTERING AIR TEMPERATURES ° F							
		55	65	75	85	95	105	115	125
38CKE018-X-7									
30	TCG	15.50	14.70	13.80	12.90	11.90	10.90	9.90	8.80
	SDT	69.60	79.70	89.80	99.50	109.30	119.10	129.10	139.10
	KW	0.84	0.98	1.12	1.27	1.44	1.64	1.87	2.15
35	TCG	17.60	16.70	15.80	14.80	13.80	12.70	11.50	10.30
	SDT	70.70	80.50	90.40	100.20	110.00	119.80	129.70	139.90
	KW	0.84	0.97	1.12	1.27	1.44	1.64	1.87	2.15
40	TCG	19.50	18.50	17.50	16.40	15.30	14.10	12.90	11.60
	SDT	71.50	81.30	91.10	101.00	110.70	120.60	130.50	140.50
	KW	0.82	0.97	1.11	1.27	1.44	1.64	1.87	2.15
45	TCG	21.50	20.50	19.30	18.20	16.90	15.70	14.40	13.00
	SDT	72.40	82.10	91.90	101.70	111.60	121.40	131.30	141.20
	KW	0.81	0.96	1.11	1.27	1.45	1.65	1.88	2.15
50	TCG	23.60	22.40	21.20	19.90	18.60	17.30	15.90	14.40
	SDT	73.30	83.00	92.80	102.60	112.50	122.20	132.00	141.90
	KW	0.80	0.96	1.11	1.28	1.46	1.66	1.89	2.15
55	TCG	25.60	24.40	23.10	21.70	20.30	18.90	17.40	15.90
	SDT	74.40	84.10	93.80	103.60	113.40	123.10	132.80	142.50
	KW	0.80	0.96	1.12	1.29	1.47	1.67	1.90	2.16
38CKE024-X-7									
30	TCG	18.90	17.80	16.70	15.60	14.40	13.00	11.60	10.00
	SDT	70.70	80.50	90.50	100.50	110.40	120.30	130.30	140.40
	KW	1.16	1.31	1.48	1.67	1.88	2.13	2.42	2.76
35	TCG	21.60	20.40	19.20	18.00	16.70	15.30	13.70	12.00
	SDT	71.60	81.40	91.30	101.30	111.30	121.30	131.30	141.30
	KW	1.16	1.31	1.48	1.67	1.89	2.15	2.44	2.78
40	TCG	23.80	22.60	21.30	20.00	18.60	17.10	15.50	13.70
	SDT	72.60	82.30	92.10	102.20	112.30	122.20	132.20	142.20
	KW	1.16	1.31	1.48	1.67	1.90	2.15	2.45	2.79
45	TCG	26.10	24.80	23.50	22.20	20.70	19.10	17.40	15.50
	SDT	73.70	83.40	93.20	103.10	113.20	123.20	133.10	143.00
	KW	1.16	1.31	1.48	1.67	1.90	2.16	2.46	2.80
50	TCG	28.50	27.10	25.80	24.40	22.90	21.20	19.40	17.50
	SDT	75.10	84.60	94.30	104.10	114.10	124.10	134.00	143.80
	KW	1.16	1.31	1.48	1.67	1.90	2.16	2.46	2.81
55	TCG	30.80	29.40	28.00	26.50	25.00	23.30	21.40	19.40
	SDT	76.50	85.90	95.50	105.20	115.10	125.10	134.90	144.60
	KW	1.15	1.30	1.47	1.67	1.90	2.16	2.46	2.81
38CKE030-X-7									
30	TCG	25.50	23.90	22.30	20.70	19.00	17.20	15.30	13.30
	SDT	71.70	81.50	91.30	101.30	111.20	121.00	130.90	140.90
	KW	1.37	1.59	1.82	2.09	2.39	2.75	3.17	3.69
35	TCG	28.50	26.90	25.30	23.60	21.90	20.00	18.00	15.80
	SDT	72.60	82.30	92.10	102.10	112.20	122.10	132.00	142.00
	KW	1.37	1.59	1.83	2.09	2.40	2.76	3.18	3.70
40	TCG	31.40	29.80	28.10	26.30	24.40	22.50	20.30	18.10
	SDT	73.50	83.30	93.10	103.10	113.20	123.20	133.00	143.00
	KW	1.37	1.60	1.84	2.10	2.41	2.77	3.19	3.70
45	TCG	34.50	32.80	31.00	29.10	27.10	25.00	22.80	20.40
	SDT	74.60	84.40	94.20	104.20	114.20	124.20	134.10	143.90
	KW	1.38	1.61	1.85	2.12	2.43	2.79	3.20	3.70
50	TCG	37.70	35.80	33.90	32.00	29.90	27.70	25.40	22.90
	SDT	75.80	85.60	95.40	105.30	115.30	125.40	135.10	144.90
	KW	1.39	1.63	1.88	2.14	2.45	2.81	3.22	3.71
55	TCG	40.60	38.80	36.80	34.80	32.60	30.30	27.90	25.30
	SDT	77.20	86.90	96.70	106.50	116.40	126.40	136.10	145.90
	KW	1.41	1.65	1.90	2.17	2.48	2.84	3.24	3.72

38CKE

See notes on page 20

CONDENSER ONLY RATINGS - ENGLISH (CONT)

SST ° F		CONDENSER ENTERING AIR TEMPERATURES ° F							
		55	65	75	85	95	105	115	125
38CKE036-X-7(9)									
30	TCG	29.70	27.90	26.00	24.00	22.00	19.90	17.90	15.90
	SDT	72.50	82.40	92.20	102.10	111.90	121.60	131.20	141.00
	KW	1.57	1.82	2.09	2.39	2.73	3.11	3.55	4.06
35	TCG	33.30	31.50	29.50	27.40	25.30	23.10	20.90	18.70
	SDT	73.70	83.40	93.20	103.10	113.00	122.60	132.30	142.10
	KW	1.58	1.83	2.09	2.40	2.74	3.12	3.57	4.09
40	TCG	37.00	35.00	32.90	30.70	28.30	26.00	23.60	21.20
	SDT	74.90	84.60	94.30	104.10	114.10	123.90	133.50	143.20
	KW	1.59	1.83	2.10	2.40	2.75	3.15	3.60	4.12
45	TCG	40.70	38.70	36.40	34.00	31.50	28.90	26.40	23.80
	SDT	76.20	85.90	95.60	105.40	115.20	125.10	134.70	144.30
	KW	1.60	1.84	2.11	2.41	2.76	3.17	3.62	4.14
50	TCG	44.50	42.30	40.00	37.40	34.80	32.00	29.20	26.50
	SDT	77.70	87.30	96.90	106.60	116.40	126.30	135.90	145.40
	KW	1.61	1.86	2.13	2.43	2.78	3.18	3.64	4.16
55	TCG	48.00	45.80	43.30	40.80	37.90	35.00	32.10	29.10
	SDT	79.40	88.90	98.40	108.00	117.70	127.50	137.10	146.50
	KW	1.64	1.88	2.14	2.44	2.79	3.20	3.66	4.18
38CKE042-X-9									
30	TCG	34.70	32.90	30.90	28.90	26.70	24.40	22.10	19.70
	SDT	71.90	81.60	91.40	101.00	110.60	120.30	129.90	139.70
	KW	1.87	2.12	2.39	2.70	3.06	3.49	4.00	4.62
35	TCG	39.20	37.30	35.20	33.00	30.70	28.30	25.70	23.10
	SDT	73.20	82.90	92.60	102.20	111.80	121.40	131.00	140.70
	KW	1.88	2.13	2.41	2.72	3.08	3.50	4.01	4.62
40	TCG	43.40	41.20	39.00	36.60	34.10	31.50	28.80	26.00
	SDT	74.60	84.20	93.80	103.50	113.00	122.50	132.10	141.60
	KW	1.90	2.15	2.42	2.73	3.09	3.51	4.02	4.61
45	TCG	47.70	45.40	43.00	40.40	37.70	35.00	32.10	29.10
	SDT	76.10	85.60	95.10	104.70	114.20	123.60	133.10	142.60
	KW	1.92	2.16	2.44	2.75	3.10	3.52	4.02	4.61
50	TCG	52.20	49.70	47.10	44.30	41.50	38.50	35.50	32.30
	SDT	77.60	87.00	96.40	106.00	115.40	124.70	134.20	143.50
	KW	1.94	2.18	2.45	2.76	3.12	3.53	4.03	4.61
55	TCG	56.70	54.00	51.10	48.20	45.20	42.10	38.80	35.50
	SDT	79.20	88.50	97.80	107.20	116.60	125.90	135.20	144.50
	KW	1.95	2.20	2.47	2.77	3.13	3.54	4.03	4.61
38CKE048-X-9									
30	TCG	44.60	41.00	38.20	35.60	32.90	30.00	26.50	22.60
	SDT	75.70	84.90	94.40	103.90	113.50	122.90	132.10	141.00
	KW	2.23	2.49	2.83	3.23	3.68	4.17	4.67	5.18
35	TCG	49.90	46.20	43.10	40.30	37.50	34.50	30.90	26.90
	SDT	77.20	86.30	95.70	105.20	114.70	124.10	133.40	142.30
	KW	2.26	2.52	2.86	3.26	3.71	4.20	4.72	5.24
40	TCG	54.80	50.70	47.40	44.40	41.40	38.20	34.60	30.50
	SDT	78.80	87.70	97.10	106.50	116.00	125.30	134.60	143.60
	KW	2.29	2.55	2.89	3.29	3.74	4.24	4.76	5.29
45	TCG	59.90	55.50	51.80	48.60	45.50	42.20	38.50	34.30
	SDT	80.50	89.30	98.50	107.90	117.30	126.60	135.80	144.80
	KW	2.33	2.59	2.92	3.32	3.78	4.27	4.80	5.33
50	TCG	65.00	60.40	56.50	53.00	49.70	46.30	42.50	38.20
	SDT	82.20	90.90	100.00	109.30	118.60	128.00	137.10	146.00
	KW	2.37	2.63	2.96	3.36	3.81	4.31	4.83	5.36
55	TCG	70.00	65.20	61.00	57.30	53.90	50.30	46.40	42.10
	SDT	84.00	92.50	101.50	110.80	120.00	129.30	138.40	147.20
	KW	2.42	2.67	3.00	3.40	3.84	4.34	4.86	5.40

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See notes on page 20

CONDENSER ONLY RATINGS - ENGLISH (CONT)

SST ° F		CONDENSER ENTERING AIR TEMPERATURES ° F							
		55	65	75	85	95	105	115	125
38CKE060-X-9									
30	TCG	51.30	49.00	46.40	43.40	40.20	36.70	33.00	29.10
	SDT	77.00	86.80	96.30	105.60	114.90	124.10	133.10	142.10
	KW	2.84	3.22	3.60	4.02	4.49	5.00	5.58	6.21
35	TCG	57.90	55.40	52.60	49.40	46.00	42.30	38.40	34.20
	SDT	78.60	88.40	97.90	107.20	116.40	125.50	134.60	143.50
	KW	2.88	3.25	3.63	4.05	4.52	5.03	5.61	6.26
40	TCG	63.40	60.80	57.80	54.40	50.80	46.90	42.80	38.40
	SDT	80.30	90.00	99.50	108.80	117.90	126.90	135.90	144.80
	KW	2.92	3.27	3.66	4.08	4.54	5.06	5.65	6.29
45	TCG	69.30	66.50	63.20	59.70	55.80	51.70	47.30	42.70
	SDT	82.10	91.70	101.10	110.40	119.50	128.40	137.30	146.10
	KW	2.95	3.30	3.69	4.11	4.57	5.09	5.68	6.33
50	TCG	75.40	72.30	68.80	65.00	60.90	56.50	51.90	47.10
	SDT	84.10	93.50	102.80	112.10	121.10	129.90	138.70	147.40
	KW	2.99	3.33	3.71	4.13	4.60	5.11	5.69	6.36
55	TCG	81.50	78.10	74.30	70.20	65.90	61.20	56.40	51.30
	SDT	86.20	95.40	104.60	113.90	122.80	131.50	140.20	148.80
	KW	3.03	3.36	3.73	4.16	4.62	5.14	5.72	6.39

KW – Total Power (kW)

SDT – Saturated Temperature Leaving Compressor (° F)

SST – Saturated Temperature Entering Compressor (° F)

TCG – Gross Cooling Capacity (1000 Btuh)

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CONDENSER ONLY RATINGS - S.I.

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKE018-X-7									
-1	TCG	4.50	4.30	4.00	3.80	3.50	3.20	2.90	2.60
	SDT	21.00	27.00	32.00	38.00	43.00	48.00	54.00	60.00
	KW	0.84	0.98	1.12	1.27	1.44	1.64	1.87	2.15
2	TCG	5.20	4.90	4.60	4.30	4.00	3.70	3.40	3.00
	SDT	22.00	27.00	32.00	38.00	43.00	49.00	54.00	60.00
	KW	0.84	0.97	1.12	1.27	1.44	1.64	1.87	2.15
4	TCG	5.70	5.40	5.10	4.80	4.50	4.10	3.80	3.40
	SDT	22.00	27.00	33.00	38.00	44.00	49.00	55.00	60.00
	KW	0.82	0.97	1.11	1.27	1.44	1.64	1.87	2.15
7	TCG	6.30	6.00	5.70	5.30	5.00	4.60	4.20	3.80
	SDT	22.00	28.00	33.00	39.00	44.00	50.00	55.00	61.00
	KW	0.81	0.96	1.11	1.27	1.45	1.65	1.88	2.15
10	TCG	6.90	6.60	6.20	5.80	5.50	5.10	4.70	4.20
	SDT	23.00	28.00	34.00	39.00	45.00	50.00	56.00	61.00
	KW	0.80	0.96	1.11	1.28	1.46	1.66	1.89	2.15
13	TCG	7.50	7.10	6.80	6.40	6.00	5.50	5.10	4.70
	SDT	24.00	29.00	34.00	40.00	45.00	51.00	56.00	61.00
	KW	0.80	0.96	1.12	1.29	1.47	1.67	1.90	2.16
38CKE024-X-7									
-1	TCG	5.50	5.20	4.90	4.60	4.20	3.80	3.40	2.90
	SDT	21.00	27.00	32.00	38.00	44.00	49.00	55.00	60.00
	KW	1.16	1.31	1.48	1.67	1.88	2.13	2.42	2.76
2	TCG	6.30	6.00	5.60	5.30	4.90	4.50	4.00	3.50
	SDT	22.00	27.00	33.00	39.00	44.00	50.00	55.00	61.00
	KW	1.16	1.31	1.48	1.67	1.89	2.15	2.44	2.78
4	TCG	7.00	6.60	6.30	5.90	5.50	5.00	4.50	4.00
	SDT	23.00	28.00	33.00	39.00	45.00	50.00	56.00	61.00
	KW	1.16	1.31	1.48	1.67	1.90	2.15	2.45	2.79
7	TCG	7.70	7.30	6.90	6.50	6.10	5.60	5.10	4.60
	SDT	23.00	29.00	34.00	39.00	45.00	51.00	56.00	62.00
	KW	1.16	1.31	1.48	1.67	1.90	2.16	2.46	2.80
10	TCG	8.40	8.00	7.60	7.10	6.70	6.20	5.70	5.10
	SDT	24.00	29.00	35.00	40.00	46.00	51.00	57.00	62.00
	KW	1.16	1.31	1.48	1.67	1.90	2.16	2.46	2.81
13	TCG	9.00	8.60	8.20	7.80	7.30	6.80	6.30	5.70
	SDT	25.00	30.00	35.00	41.00	46.00	52.00	57.00	63.00
	KW	1.15	1.30	1.47	1.67	1.90	2.16	2.46	2.81
38CKE030-X-7									
-1	TCG	7.50	7.00	6.50	6.10	5.60	5.00	4.50	3.90
	SDT	22.00	27.00	33.00	38.00	44.00	49.00	55.00	61.00
	KW	1.37	1.59	1.82	2.09	2.39	2.75	3.17	3.69
2	TCG	8.30	7.90	7.40	6.90	6.40	5.90	5.30	4.60
	SDT	23.00	28.00	33.00	39.00	45.00	50.00	56.00	61.00
	KW	1.37	1.59	1.83	2.09	2.40	2.76	3.18	3.70
4	TCG	9.20	8.70	8.20	7.70	7.20	6.60	6.00	5.30
	SDT	23.00	28.00	34.00	39.00	45.00	51.00	56.00	62.00
	KW	1.37	1.60	1.84	2.10	2.41	2.77	3.19	3.70
7	TCG	10.10	9.60	9.10	8.50	8.00	7.30	6.70	6.00
	SDT	24.00	29.00	35.00	40.00	46.00	51.00	57.00	62.00
	KW	1.38	1.61	1.85	2.12	2.43	2.79	3.20	3.70
10	TCG	11.00	10.50	9.90	9.40	8.80	8.10	7.40	6.70
	SDT	24.00	30.00	35.00	41.00	46.00	52.00	57.00	63.00
	KW	1.39	1.63	1.88	2.14	2.45	2.81	3.22	3.71
13	TCG	11.90	11.40	10.80	10.20	9.60	8.90	8.20	7.40
	SDT	25.00	30.00	36.00	41.00	47.00	52.00	58.00	63.00
	KW	1.41	1.65	1.90	2.17	2.48	2.84	3.24	3.72

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See notes on page 22

CONDENSER ONLY RATINGS - S.I.

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKE036-X-7(9)									
-1	TCG	8.70	8.20	7.60	7.00	6.40	5.80	5.20	4.60
	SDT	23.00	28.00	33.00	39.00	44.00	50.00	55.00	61.00
	KW	1.57	1.82	2.09	2.39	2.73	3.11	3.55	4.06
2	TCG	9.80	9.20	8.60	8.00	7.40	6.80	6.10	5.50
	SDT	23.00	29.00	34.00	39.00	45.00	50.00	56.00	61.00
	KW	1.58	1.83	2.09	2.40	2.74	3.12	3.57	4.09
4	TCG	10.80	10.30	9.60	9.00	8.30	7.60	6.90	6.20
	SDT	24.00	29.00	35.00	40.00	46.00	51.00	56.00	62.00
	KW	1.59	1.83	2.10	2.40	2.75	3.15	3.60	4.12
7	TCG	11.90	11.30	10.70	10.00	9.20	8.50	7.70	7.00
	SDT	25.00	30.00	35.00	41.00	46.00	52.00	57.00	62.00
	KW	1.60	1.84	2.11	2.41	2.76	3.17	3.62	4.14
10	TCG	13.00	12.40	11.70	11.00	10.20	9.40	8.60	7.80
	SDT	25.00	31.00	36.00	41.00	47.00	52.00	58.00	63.00
	KW	1.61	1.86	2.13	2.43	2.78	3.18	3.64	4.16
13	TCG	14.10	13.40	12.70	11.90	11.10	10.30	9.40	8.50
	SDT	26.00	32.00	37.00	42.00	48.00	53.00	58.00	64.00
	KW	1.64	1.88	2.14	2.44	2.79	3.20	3.66	4.18
38CKE042-X-9									
-1	TCG	10.20	9.60	9.10	8.50	7.80	7.20	6.50	5.80
	SDT	22.00	28.00	33.00	38.00	44.00	49.00	54.00	60.00
	KW	1.87	2.12	2.39	2.70	3.06	3.49	4.00	4.62
2	TCG	11.50	10.90	10.30	9.70	9.00	8.30	7.50	6.80
	SDT	23.00	28.00	34.00	39.00	44.00	50.00	55.00	60.00
	KW	1.88	2.13	2.41	2.72	3.08	3.50	4.01	4.62
4	TCG	12.70	12.10	11.40	10.70	10.00	9.20	8.40	7.60
	SDT	24.00	29.00	34.00	40.00	45.00	50.00	56.00	61.00
	KW	1.90	2.15	2.42	2.73	3.09	3.51	4.02	4.61
7	TCG	14.00	13.30	12.60	11.80	11.10	10.20	9.40	8.50
	SDT	24.00	30.00	35.00	40.00	46.00	51.00	56.00	61.00
	KW	1.92	2.16	2.44	2.75	3.10	3.52	4.02	4.61
10	TCG	15.30	14.60	13.80	13.00	12.20	11.30	10.40	9.50
	SDT	25.00	31.00	36.00	41.00	46.00	52.00	57.00	62.00
	KW	1.94	2.18	2.45	2.76	3.12	3.53	4.03	4.61
13	TCG	16.60	15.80	15.00	14.10	13.20	12.30	11.40	10.40
	SDT	26.00	31.00	37.00	42.00	47.00	52.00	57.00	62.00
	KW	1.95	2.20	2.47	2.77	3.13	3.54	4.03	4.61
38CKE048-X-9									
-1	TCG	13.10	12.00	11.20	10.40	9.60	8.80	7.80	6.60
	SDT	24.00	29.00	35.00	40.00	45.00	51.00	56.00	61.00
	KW	2.23	2.49	2.83	3.23	3.68	4.17	4.67	5.18
2	TCG	14.60	13.50	12.60	11.80	11.00	10.10	9.10	7.90
	SDT	25.00	30.00	35.00	41.00	46.00	51.00	56.00	61.00
	KW	2.26	2.52	2.86	3.26	3.71	4.20	4.72	5.24
4	TCG	16.10	14.90	13.90	13.00	12.10	11.20	10.10	8.90
	SDT	26.00	31.00	36.00	41.00	47.00	52.00	57.00	62.00
	KW	2.29	2.55	2.89	3.29	3.74	4.24	4.76	5.29
7	TCG	17.50	16.30	15.20	14.20	13.30	12.40	11.30	10.10
	SDT	27.00	32.00	37.00	42.00	47.00	53.00	58.00	63.00
	KW	2.33	2.59	2.92	3.32	3.78	4.27	4.80	5.33
10	TCG	19.00	17.70	16.50	15.50	14.60	13.60	12.40	11.20
	SDT	28.00	33.00	38.00	43.00	48.00	53.00	58.00	63.00
	KW	2.37	2.63	2.96	3.36	3.81	4.31	4.83	5.36
13	TCG	20.50	19.10	17.90	16.80	15.80	14.70	13.60	12.30
	SDT	29.00	34.00	39.00	44.00	49.00	54.00	59.00	64.00
	KW	2.42	2.67	3.00	3.40	3.84	4.34	4.86	5.40

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See notes on page 22

CONDENSER ONLY RATINGS - S.I.

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKE060-X-9									
-1	TCG	15.00	14.40	13.60	12.70	11.80	10.80	9.70	8.50
	SDT	25.00	30.00	36.00	41.00	46.00	51.00	56.00	61.00
	KW	2.84	3.22	3.60	4.02	4.49	5.00	5.58	6.21
2	TCG	17.00	16.20	15.40	14.50	13.50	12.40	11.20	10.00
	SDT	26.00	31.00	37.00	42.00	47.00	52.00	57.00	62.00
	KW	2.88	3.25	3.63	4.05	4.52	5.03	5.61	6.26
4	TCG	18.60	17.80	16.90	16.00	14.90	13.70	12.50	11.30
	SDT	27.00	32.00	37.00	43.00	48.00	53.00	58.00	63.00
	KW	2.92	3.27	3.66	4.08	4.54	5.06	5.65	6.29
7	TCG	20.30	19.50	18.50	17.50	16.30	15.10	13.90	12.50
	SDT	28.00	33.00	38.00	44.00	49.00	54.00	59.00	63.00
	KW	2.95	3.30	3.69	4.11	4.57	5.09	5.68	6.33
10	TCG	22.10	21.20	20.20	19.00	17.80	16.50	15.20	13.80
	SDT	29.00	34.00	39.00	45.00	49.00	54.00	59.00	64.00
	KW	2.99	3.33	3.71	4.13	4.60	5.11	5.69	6.36
13	TCG	23.90	22.90	21.80	20.60	19.30	17.90	16.50	15.00
	SDT	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00
	KW	3.03	3.36	3.73	4.16	4.62	5.14	5.72	6.39

KW – Total Power (kW)

SDT – Saturated Temperature Leaving Compressor (°C)

SST – Saturated Temperature Entering Compressor (°C)

TCG – Gross Cooling Capacity (1000 kW)

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SYSTEM DESIGN

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature is 125°F (52°C).
4. For reliable operation, unit should be level in all horizontal planes.
5. Maximum elevation of indoor coil above or below base of outdoor unit is: indoor coil above = 80 ft (24.38 m), indoor coil below = 200 ft (60.96 m).
6. For interconnecting refrigerant tube lengths greater than 80 ft (24.38 m) horizontal or 20 ft (6.10 m) vertical differential, consult Residential Split System Long-Line Application Guideline available from equipment distributor.
7. Crankcase heater required when interconnecting refrigerant tube length exceeds 80 ft (24.38 m).
8. If any refrigerant tubing is buried, provide a minimum 6 in (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in (914.4 mm) may be buried without further consideration.
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.

GUIDE SPECIFICATIONS

GENERAL

AIR-COOLED, SPLIT-SYSTEM AIR CONDITIONER 38CKE 1-1/2 TO 5 NOMINAL TONS

System Description

Outdoor-mounted, air-cooled, split-system air conditioner unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, propeller-type condenser fan, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

Quality Assurance

- Unit construction will comply with latest edition of ANSI/ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have c-UL approval and CE certification.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils will be leak tested at 250 psig on the low side and pressure tested at 450 psig on the high side.
- Unit constructed in ISO 9001 approved facility.

Delivery, Storage, and Handling

- Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

PRODUCTS

Equipment

- Factory-assembled, single-piece, air-cooled air conditioner unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge (R-410a), and special features required prior to field start-up.

Unit Cabinet

- Unit cabinet will be constructed of galvanized, prepainted steel.

Fans

- Condenser fan will be direct-drive propeller type, discharging air upward.
- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings. Shafts will be corrosion resistant.
- Fan blades will be statically and dynamically balanced.
- Condenser fan openings will be equipped with coated steel wire safety guards.

Compressor

- Compressor will be hermetically sealed.
- Compressor will be mounted on rubber vibration isolators.

Condenser Coil

- Condenser coil will be air cooled.
- Coil will be constructed of modified polymer coated, aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.
- Coil will be capable of withstanding 1000-hr salt spray test (per ASMB117 test method).

Refrigeration Components

- Refrigeration circuit components will include liquid line shutoff valve with sweat connections, suction line shutoff valves with sweat connections, system charge of R-410a refrigerant, and compressor oil.

Operating Characteristics

- Units suitable for 125°F / 52°C ambient.
- The capacity of the unit will meet or exceed _____ Btuh at a suction temperature of _____ °F (°C). The power consumption at full load will not exceed _____ kW.
- Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of _____ Btuh or greater at conditions of _____ CFM entering air temperature at the evaporator at _____ °F (°C) wet bulb and _____ °F (°C) dry bulb, and air entering the unit at _____ °F (°C).
- The system will have a SEER of _____ Btuh/watt or greater at DOE conditions.

Electrical Requirements

- Nominal unit electrical characteristics will be _____ v, single phase, 50 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- Nominal unit electrical characteristics will be _____ v, three phase, 50 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.
- In 3-phase units, a circuit board will be factory installed to monitor line voltage.

Special Features

- Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.

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