

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



Turn to the experts

Product Data



Model 38CKM 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 13 at the T1 condition when used with components designated by the manufacturer.

FEATURES AND BENEFITS

AVAILABLE SIZES:

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

ELECTRICAL RANGE:

Units offered in single phase 230v and 240v (sizes 018-036), three phase 400v and 415v (sizes 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 prepainted 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 (12.8°C), maximum is 125.6°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.

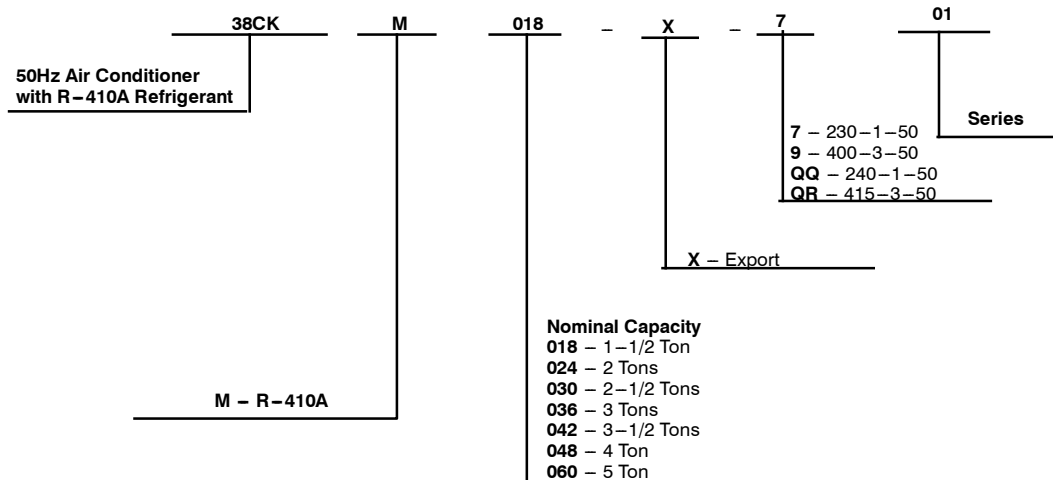
PRESSURE SWITCHES:

All units are equipped with high and low pressure switches.

FILTER DRIER:

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

PRODUCT NUMBER NOMENCLATURE



ISO 9001
QMI-SAI Global

REFRIGERANT PIPING LENGTH LIMITATIONS

Maximum Total Equivalent Length Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/ TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit BELOW Indoor Vertical Separation ft (m)								
			0-5 (0-1.5)	6-10 (1.8-3.0)	11-20 (3.4-6.1)	21-30 (6.4-9.1)	31-40 (9.4-12.2)	41-50 (12.5-15.2)	51-60 (15.5-18.3)	61-70 (18.6-21.3)	71-80 (21.6-24.4)
			18	3/8	1/4	150	150	125	100	100	75
		5/16	250*	250*	250*	250*	250*	250*	250*	225*	150
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
24	3/8	1/4	75	75	75	50	50	--	--	--	--
		5/16	250*	250*	250*	250*	250*	225*	175	125	100
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
30	3/8	1/4	30	--	--	--	--	--	--	--	--
		5/16	175	225*	200	175	125	100	75	--	--
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
36	3/8	5/16	175	150	150	100	100	100	75	--	--
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
42	3/8	5/16	125	100	100	75	75	50	--	--	--
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	150
48	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	--
60	3/8	3/8	250*	250*	250*	225*	190	150	110	--	--

* Maximum actual length not to exceed 200 ft (61 m)

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

-- = outside acceptable range

Maximum Total Equivalent Length Outdoor Unit ABOVE Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/ TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit ABOVE Indoor Vertical Separation ft (m)							
			25 (7.6)	26-50 (7.9-15.2)	51-75 (15.5-22.9)	76-100 (23.2-30.5)	101-125 (30.8-38.1)	126-150 (38.4-45.7)	151-175 (46.0-53.3)	176-200 (53.6-61.0)
			18	3/8	1/4	175	250*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
24	3/8	1/4	100	125	175	200	225*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
30	3/8	1/4	30	--	--	--	--	--	--	--
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
36	3/8	5/16	225*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
42	3/8	5/16	175	200	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
48	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
60	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*

* Maximum actual length not to exceed 200 ft (61 m)

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

-- = outside acceptable range

REFRIGERANT CHARGE ADJUSTMENTS

Liquid Line Size	Puron Charge oz/ft (g/m)
3/8	0.60 (17.74) (Factory charge for lineset = 9 oz / 266.16 g)
5/16	0.40 (11.83)
1/4	0.27 (7.98)

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

Charging Formula:

$[(\text{Lineset oz/ft} \times \text{total length}) - (\text{factory charge for lineset})] = \text{charge adjustment}$

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

Formula: $(.27 \text{ oz/ft} \times 15\text{ft}) - (9 \text{ oz}) = (-4.95) \text{ oz.}$

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: $(.40 \text{ oz/ft.} \times 45\text{ft}) - (9 \text{ oz.}) = 9 \text{ oz.}$

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

NOTE: Conditions must be favorable for charging by subcooling method. Indoor temperature must be 70°F to 80°F (21.1°C to 26.7°C), and outdoor temperature must be 70°F to 100°F (21.1°C to 37.8°C). If outside these conditions, adjust charge for long line sets by weigh-in method.

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 Puron® Refrigerant Long Line Description ft (m) Beyond these lengths, a TXV is required

Total Length	Outdoor Unit Above or Below Indoor Unit
TXV required beyond 50 ft. (15.2 m)	TXV required beyond 20 ft. (6.1 m)

AC with Puron® 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 + TXV	No accessories needed within allowed lengths	No accessories needed within allowed lengths	175 (53.3)
5/16 + TXV	120 (36.6)	50 (15.2) vertical or 120 (36.6) total	120 (36.6)
3/8 + TXV	80 (24.4)	35 (10.7) vertical or 80 (24.4) total	80 (24.4)

Note: See Residential Piping and 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 Puron refrigerant:

Vapor Line Sizing and Cooling Capacity Losses — Puron® Refrigerant 1-Stage Air Conditioner Applications

Unit Nominal Size (Btuh)	Maximum Liquid Line Diameters (In. OD)	Vapor Line Diameters (In. OD)	Cooling Capacity Loss (%)								
			Total Equivalent Line Length ft. (m)								
			1-Stage AC with Puron								
			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)
18	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
24	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
30	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
36	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
42	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
48	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	0	1
60	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.

SPECIFICATIONS

UNIT SIZE	018	024	030	036	042	048	060
40 ft HC Container Loading (Units per container)	153	153	84	84	84	84	56
ELECTRICAL							
Unit Volts—Hertz—Phase	230–50–1 240–50–1			400–50–3 415–50–3			
Operating Voltage Range*	208–240			380–420			
PF Correction @ T3	N/A	N/A	N/A	N/A	0.902	0.923	0.904
Compressor—Rated Load Amps	9.0	10.9	13.5	16.0	7.0	8.0	11.0
Locked Rotor Amps	52.0	60.0	67.0	87.0	48.6	43.0	67.1
Condenser Fan Motor— Full Load Amps	0.52	0.52	1.2	1.2	0.56	0.56	0.65
Min Unit Ampacity for Wire Sizing	11.8	14.1	18.4	21.5	8.3	8.6	12.9
COMPRESSOR AND REFRIGERANT							
Type	Scroll						
Temperature and Current Protection	Internal Line Break						
R–410A Refrigerant— Amount Lb (kg) @ 15 ft (4.6 m)	3.73 (1.69)	4.30 (1.95)	4.67 (2.12)	5.53 (2.51)	7.46 (3.38)	8.33 (3.78)	9.41 (4.27)
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)	9.83	11.47	12.86	15.00	15.00	15.00	17.15
Fan Motor—HP, Type, and RPM	1/10 PSC and 940			1/4 PSC and 940			
Condenser Airflow (CFM)	2000			2500			3000

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.

† Units are rated with 15 ft (4.6 m) of lineset length. See *Vapor Line Sizing and Cooling Capacity Loss* table when using other sizes and lengths of lineset.

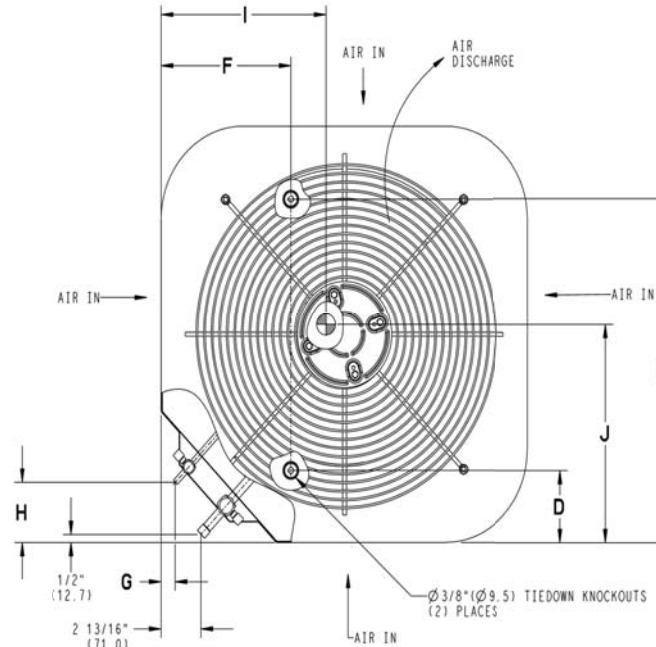
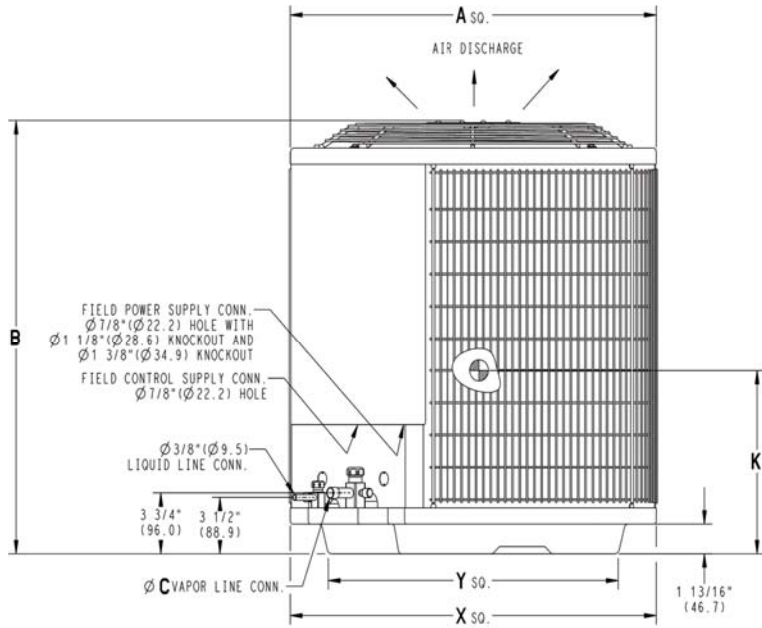
DIMENSIONS

UNIT	SERIES	ELECTRICAL CHARACTERISTICS					A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT										
							INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM					
38CKM018-X-701--	0	Y	N	N	N	25	3/4	654.0	25	5/16	642.4	3/4	19.1	4	7/16	113.0	21	1/4	539.9	9	1/8	231.3	5/16	7.9	3	76.2	13	5/8	346.1	12	1/8	308.0	9	7/8	250.8	120	54.2	133	60.2	26	3/4	679.9	26	15/16	684.8
38CKM024-X-701--	0	Y	N	N	N	25	3/4	654.0	28	11/16	728.7	3/4	19.1	4	7/16	113.0	21	1/4	539.9	9	1/8	231.3	5/16	7.9	3	76.2	14	1/2	368.3	15	1/2	393.7	12	1/2	317.5	126	57.2	138	62.6	26	3/4	679.9	30	3/8	771.2
38CKM030-X-701--	0	Y	N	N	N	31	3/16	792.5	24	7/8	631.6	3/4	19.1	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	15	9/16	395.3	16	1/2	419.1	10	1/4	260.4	143	64.8	160	72.4	32	3/16	817.9	26	7/16	672.1
38CKM036-X-701--	0	Y	N	N	N	31	3/16	792.5	28	1/4	718.0	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	13	330.2	12	304.8	12	1/2	317.5	171	77.4	188	85.2	32	3/16	817.9	29	7/8	758.5		
38CKM036-X-901--	0	N	Y	N	N	31	3/16	792.5	28	1/4	718.0	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	13	330.2	12	304.8	12	1/2	317.5	171	77.4	188	85.2	32	3/16	817.9	29	7/8	758.5		
38CKM042-X-901--	0	N	Y	N	N	31	3/16	792.5	28	1/4	718.0	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	15	7/8	403.2	17	431.8	11	7/8	301.6	196	88.8	213	96.4	32	3/16	817.9	29	7/8	758.5	
38CKM048-X-901--	0	N	Y	N	N	31	3/16	792.5	28	1/4	718.0	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	16	3/16	411.2	16	1/4	412.8	10	1/4	260.4	196	89.0	213	96.8	32	3/16	817.9	29	7/8	758.5
38CKM060-X-901--	0	N	Y	N	N	31	3/16	792.5	31	11/16	804.3	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	15	1/2	393.7	16	406.4	10	7/8	276.2	215	97.4	233	105.6	32	3/16	817.9	33	1/4	844.9	

230-1-50	Y=YES N=NO
400-3-50	
240-1-50	
415-3-50	

NOTES:

1. CENTER OF GRAVITY 



UNIT SIZE	"X" MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		"Y" MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	
18,24	25 3/4	654.0	20 7/16	518.5
30,36,42,48,60	31 3/16	792.5	22 15/16	583.2

NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

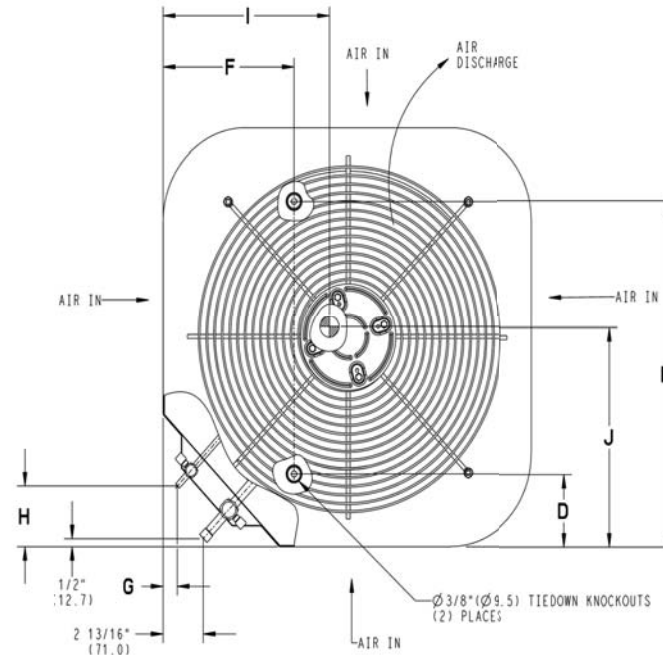
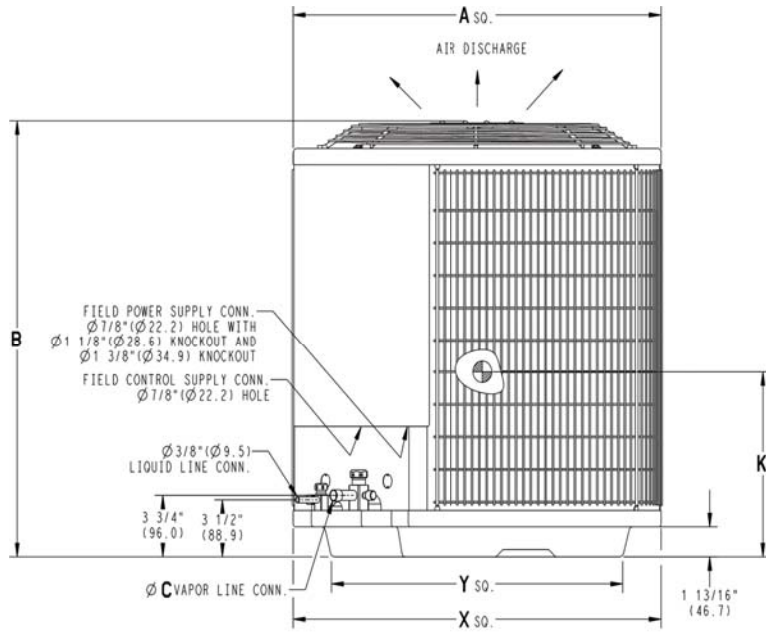
DIMENSIONS

UNIT	SERIES	ELECTRICAL CHARACTERISTICS					A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT										
							INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM									
38CKM018-XQQ01--	0	N	N	Y	N	25	3/4	654.0	25	5/16	642.4	3/4	19.1	4	7/16	113.0	21	1/4	539.9	9	1/8	231.3	5/16	7.9	3	76.2	13	5/8	346.1	12	1/8	308.0	9	7/8	250.8	120	54.2	133	60.2	26	3/4	679.9	26	15/16	684.8
38CKM024-XQQ01--	0	N	N	Y	N	25	3/4	654.0	28	11/16	728.7	3/4	19.1	4	7/16	113.0	21	1/4	539.9	9	1/8	231.3	5/16	7.9	3	76.2	14	1/2	368.3	15	1/2	393.7	12	1/2	317.5	126	57.2	138	62.6	26	3/4	679.9	30	3/8	771.2
38CKM030-XQQ01--	0	N	N	Y	N	31	3/16	792.5	24	7/8	631.6	3/4	19.1	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	15	9/16	395.3	16	1/2	419.1	10	1/4	260.4	143	64.8	160	72.4	32	3/16	817.9	26	7/16	672.1
38CKM036-XQQ01--	0	N	N	Y	N	31	3/16	792.5	28	1/4	718.0	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	13	330.2	12	304.8	12	1/2	317.5	171	77.4	188	85.2	32	3/16	817.9	29	7/8	758.5		
38CKM036-XQR01--	0	N	N	N	Y	31	3/16	792.5	28	1/4	718.0	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	13	330.2	12	304.8	12	1/2	317.5	171	77.4	188	85.2	32	3/16	817.9	29	7/8	758.5		
38CKM042-XQR01--	0	N	N	N	Y	31	3/16	792.5	28	1/4	718.0	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	15	7/8	403.2	17	431.8	11	7/8	301.6	196	88.8	213	96.4	32	3/16	817.9	29	7/8	758.5	
38CKM048-XQR01--	0	N	N	N	Y	31	3/16	792.5	28	1/4	718.0	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	16	3/16	411.2	16	1/4	412.8	10	1/4	260.4	196	89.0	213	96.8	32	3/16	817.9	29	7/8	758.5
38CKM060-XQR01--	0	N	N	N	Y	31	3/16	792.5	31	11/16	804.3	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	5/16	7.9	3	76.2	15	1/2	393.7	16	406.4	10	7/8	276.2	215	97.4	233	105.6	32	3/16	817.9	33	1/4	844.9	

200-1-50	Y=YES N=NO
400-3-50	
240-1-50	
415-3-50	

NOTES:

1. CENTER OF GRAVITY 



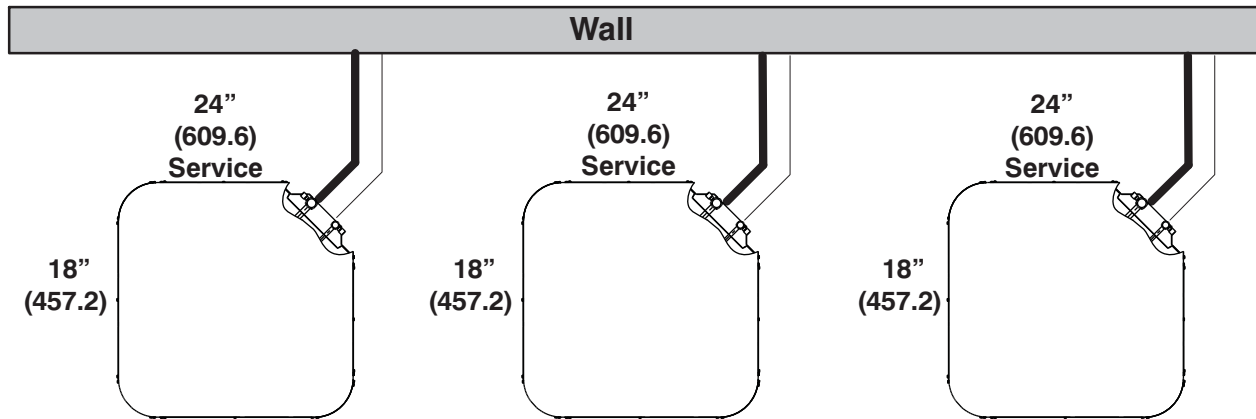
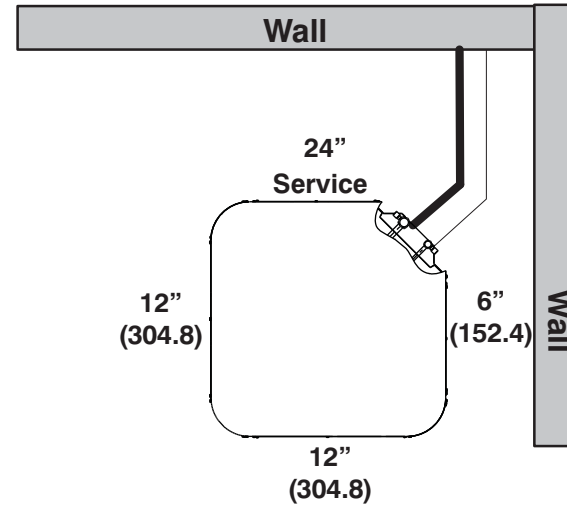
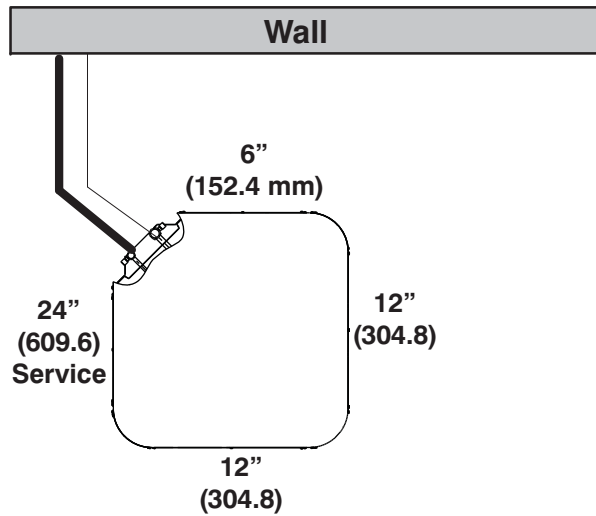
UNIT SIZE	"X"		"Y"	
	MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	
18,24	25 3/4	654.0	20 7/16	518.5
30,36,42,48,60	31 3/16	792.5	22 15/16	583.2

NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

CLEARANCES

Clearances (various examples)



Note: Numbers in () = mm

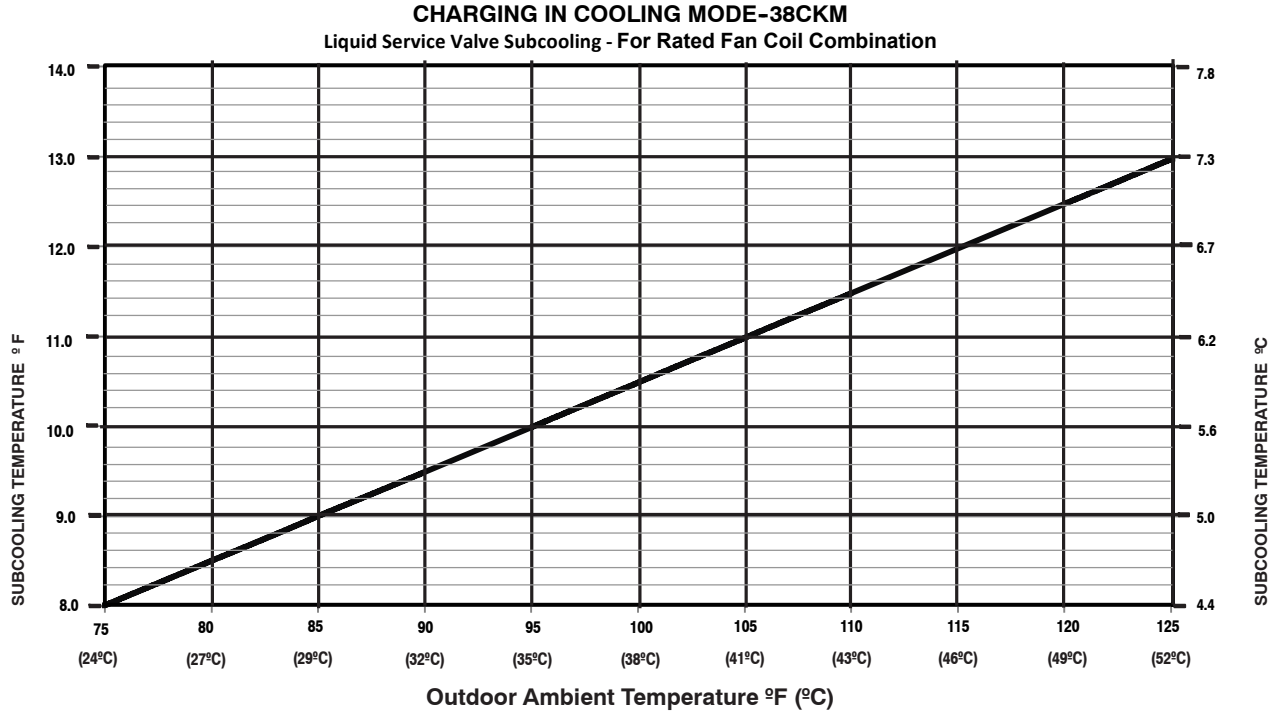
IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

A-WEIGHTED SOUND POWER (dBA)

Unit Size	Sound Level (dBA) With Sound Shield	Sound Level (dBA) W/O Sound Shield	Typical Octave Band Spectrum (dBA without tone adjustment)						
			125	250	500	1000	2000	4000	8000
018	68	69	52.0	57.5	62.0	65.0	62.0	57.5	49.5
024	69	70	52.5	62.0	62.0	64.5	62.5	59.0	53.0
030	71	72	56.5	63.0	65.0	67.0	63.0	59.5	55.0
036	73	74	55.0	62.0	65.0	69.0	66.0	59.0	55.5
042	74	75	53.5	65.0	67.5	70.0	65.5	62.5	59.0
048	76	78	57.0	66.5	69.5	73.5	68.0	64.0	57.0
060	76	78	60.5	67.5	69.0	70.5	67.0	63.0	57.0

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

SUBCOOLING CHART



ACCESSORIES

ACCESSORY NUMBER	DESCRIPTION	Model Size							
		018-701 018-QQ	024-701 024-QQ	030-701 030-QQ	036-701 036-QQ	036-901 036-QR	042-901 042-QR	048-901 048-QR	060-901 060-QR
HC34GR231	MOTOR,FAN	X	X						
HC40GR237	MOTOR,FAN			X	X				
HC40GR403	MOTOR,FAN					X	X		
HC40GR404	MOTOR,FAN							X	X
HH07AT212	BASE,THERM/SUB	X	X	X	X	X	X	X	X
KAACF1001MED	FILTER KIT	X	X	X	X	X			
KAACF1101LRG	FILTER KIT						X	X	X
KAACH1201AAA	CRANKCASE HEATER						X	X	X
KAACH1401AAA	CRANKCASE HEATER	X	X	X	X	X			
KAACS0201PTC	KIT PTC	X	X	X	X				
KAANH0501PUR	HIGH PRESSURE SWITCH	X	X	X	X	X	X	X	X
KAALP0401PUR	LOW PRESSURE SWITCH	X	X	X	X	X	X	X	X
KAALS0201LLS	SOLENOID VALVE KIT	X	X	X	X	X	X	X	X
KAATD0101TDR	TIME DELAY KIT	X	X	X	X	X	X	X	X
KAAWS0101AAA	WINTER START KIT	X	X	X	X	X	X	X	X
KSACY0101AAA	CYCLE PROTECTOR KIT	X	X	X	X	X	X	X	X
KSAFT0101AAA	FREEZE THERM KIT	X	X	X	X	X	X	X	X
KSAHS1501AAA	HARD START KIT	X	X	X	X				
KSALA0301410	LOW AMBIENT KIT	X	X	X	X	X	X	X	X
KSALA0601AAA	MOTORMASTER KIT	X	X	X	X				
KSALA0701AAA	MOTORMASTER KIT					X	X	X	X
KSASH0601COP	SOUND BLKT KIT				X	X	X	X	X
KSASH1801COP	SOUND BLKT KIT	X	X	X					
TSTATXXSEN01	SENSOR	X	X	X	X	X	X	X	X

X = Accessory

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
TXV	Yes	Yes	Yes
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.

‡ Required if Low Pressure Switch is factory or field installed.

ACCESSORY DESCRIPTION AND USAGE

1. Ball-Bearing Fan Motor

A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.

Usage Guideline:

Required on all units when MotorMaster® is used.

2. 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.

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. 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.

5. Thermostatic Expansion Valve (XV)

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.

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

Usage Guideline:

TXV or LLS required in air conditioner long line applications.

Required for use on all zoning systems.

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. 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.

EQUIPMENT RATED SYSTEM MATCH AND PERFORMANCE INFORMATION

OUTDOOR PRODUCT NUMBER	INDOOR PRODUCT NUMBER	Rated Voltage/Phase/Frequency			CHARGE		TYPE	OPERATING WEIGHT OUTDOOR UNIT		COOLING CAPACITY (Btu/h)		POWER INPUT (W)		COOLING CURRENT INPUT (A)		COOLING EER (Btu/h/W)		MAX CURRENT INPUT (A)	MAX POWER INPUT (W)	POWER FACTOR (kW/kVA)
		VOLTS	Ph	Hz	lb	kg		lb	kg	T1	T3	T1	T3	T1	T3	T1	T3			
38CKM018-X-701--	FB4CSL018L00EAAA	230	1	50	3.73	1.69	R-410A	119.5	54.2	19,160	16,150	1,462	1,842	6.9	8.6	13.10	8.77	9.2	2,200	0.996
38CKM024-X-701--	FB4CSL024L00EAAA	230	1	50	4.3	1.95	R-410A	126.1	57.2	22,670	20,350	1,804	2,258	8.1	10.5	12.57	9.01	11.4	2,710	0.991
38CKM030-X-701--	FB4CSL030L00EAAA	230	1	50	4.67	2.12	R-410A	142.9	64.8	30,790	28,800	2,376	3,034	11.6	14.6	12.96	8.83	14.8	3,540	0.980
38CKM036-X-701--	FB4CSL036L00EAAA	230	1	50	5.53	2.51	R-410A	170.6	77.4	35,750	31,900	2,784	3,582	13.3	16.7	12.84	8.91	18.7	4,110	0.939
38CKM036-X-901--	FB4CSL037L00EAAA	400	3	50	5.53	2.51	R-410A	170.6	77.4	35,230	31,120	2,780	3,504	4.9	5.8	12.67	8.88	6.4	4,000	0.902
38CKM042-X-901--	FB4CSL042L00EAAA	400	3	50	7.46	3.38	R-410A	195.8	88.8	41,000	36,500	3,208	4,016	5.1	6.4	12.78	9.09	7.0	4,600	0.923
38CKM048-X-901--	FB4CSL048L00EAAA	400	3	50	8.33	3.78	R-410A	196.2	89	48,410	41,490	3,808	4,671	6.1	7.4	12.71	8.88	8.1	5,300	0.904
38CKM060-X-901--	FB4CSL060L00EAAA	400	3	50	9.41	4.27	R-410A	214.7	97.4	58,920	51,680	4,656	5,706	7.7	9.2	12.65	9.06	10.1	6,500	0.901
38CKM018-X-701--	42TPM018-7NECRE	230	1	50	4.37	1.98	R-410A	119.5	54.2	19,000	17,500	1,570	1,944	6.9	8.7	12.10	9.00	10.6	2,188	0.980
38CKM024-X-701--	42TPM024-7NECRE	230	1	50	4.70	2.13	R-410A	126.1	57.2	26,000	24,000	2,000	2,500	8.5	10.5	13.00	9.60	11.3	2,878	0.999
38CKM030-X-701--	42TPM030-7NECRE	230	1	50	6.61	3.00	R-410A	142.9	64.8	32,500	30,000	2,500	3,226	11.0	14.2	13.00	9.30	15.5	3,547	0.980
38CKM036-X-701--	42TPM036-7NECRE	230	1	50	7.50	3.40	R-410A	170.6	77.4	40,000	35,000	3,077	3,763	13.9	17.1	13.00	9.30	18.2	4,320	0.960
38CKM036-X-901--	42TPM036-7NECRE	400	3	50	7.05	3.20	R-410A	170.6	77.4	38,000	33,000	3,040	3,667	5.3	6.1	12.50	9.00	6.7	4,103	0.940
38CKM042-X-901--	42TPM042-7NECRE	400	3	50	9.92	4.50	R-410A	195.8	88.8	46,000	41,000	3,286	4,100	5.3	6.4	14.00	10.00	6.7	4,563	0.910
38CKM048-X-901--	42TPM048-7NECRE	400	3	50	8.60	3.90	R-410A	196.2	89.0	48,000	45,000	3,840	4,688	6.3	7.5	12.50	9.60	8.0	5,329	0.900
38CKM060-X-901--	42TPM060-7NECRE	400	3	50	10.58	4.80	R-410A	214.7	97.4	63,000	57,000	4,667	5,700	7.8	9.3	13.50	10.00	11.0	6,379	0.900
38CKM018-X-701--	42TKS018-71UCR1	230	1	50	3.73	1.69	R-410A	119.5	54.2	19,960	18,173	1,696	2,184	7.3	9.4	11.77	8.32	10.0	2,539	0.98
38CKM024-X-701--	42TKS024-71UCR1	230	1	50	4.30	1.95	R-410A	126.1	57.2	24,687	19,319	1,949	2,322	8.6	10.3	12.67	8.32	12.1	2,727	0.97
38CKM030-X-701--	42TKS030-71UCR1	230	1	50	6.62	3.00	R-410A	142.9	64.8	30,173	26,342	2,445	3,008	10.5	14.3	12.34	8.76	15.5	3,280	0.98
38CKM036-X-701--	42TKS036-71UCR1	230	1	50	7.50	3.40	R-410A	170.6	77.4	36,647	28,074	3,118	3,365	14.6	16.5	11.75	8.34	17.5	3,799	0.95
38CKM036-X-901--	42TKS036-71UCR1	400	3	50	7.06	3.20	R-410A	170.6	77.4	35,728	30,992	2,997	3,542	5.0	5.9	11.92	8.75	7.2	3,918	0.86
38CKM042-X-901--	42TKS042-71UCR1	400	3	50	7.45	3.38	R-410A	195.8	88.8	41,294	36,692	3,359	4,188	5.4	6.4	12.29	8.76	8.0	4,613	0.91
38CKM048-X-901--	42TKS048-71UCR1	400	3	50	8.60	3.90	R-410A	196.2	89.0	47,035	41,422	3,991	4,949	6.4	8.2	11.79	8.37	10.0	5,544	0.89
38CKM060-X-901--	42TKS060-71UCR1	400	3	50	9.42	4.27	R-410A	214.7	97.4	58,022	46,754	4,833	5,601	8.1	8.7	12.01	8.35	11.2	6,285	0.93

OUTDOOR PRODUCT NUMBER	INDOOR PRODUCT NUMBER	Rated Voltage/Phase/Frequency			REFRIGERANT CHARGE		TYPE	OPERATING WEIGHT OUTDOOR UNIT		COOLING CAPACITY (Btu/h)			POWER INPUT (W)			COOLING CURRENT INPUT (A)			COOLING EER (Btu/h/W)			MAX CURRENT INPUT (A)	MAX POWER INPUT (W)
		VOLTS	Ph	Hz	lb	kg		lb	kg	T1	T3	T4	T1	T3	T4	T1	T3	T4	T1	T3	T4		
38CKM018-XQQ01--	FB4CQL018L00EAAA	240	1	50	3.73	1.69	R-410A	119.5	54.2	19,160	16,150	15,875	1,462	1,842	1,964	6.9	8.6	9.2	13.10	8.77	8.08	9.2	2,200
38CKM024-XQQ01--	FB4CQL024L00EAAA	240	1	50	4.3	1.95	R-410A	126.1	57.2	22,670	20,350	19,313	1,804	2,258	2,406	8.1	10.5	10.5	12.57	9.01	8.03	11.4	2,710
38CKM030-XQQ01--	FB4CQL030L00EAAA	240	1	50	4.67	2.12	R-410A	142.9	64.8	30,790	26,800	25,550	2,376	3,034	3,168	11.6	14.6	15.1	12.96	8.83	8.07	14.8	3,540
38CKM036-XQQ01--	FB4CQL036L00EAAA	240	1	50	5.53	2.51	R-410A	170.6	77.4	35,750	31,900	31,005	2,784	3,582	3,837	13.3	16.7	17.4	12.84	8.91	8.08	18.7	4,110
38CKM036-XQR01--	FB4CQL037L00EAAA	415	3	50	5.53	2.51	R-410A	170.6	77.4	35,230	31,120	30,522	2,780	3,504	3,706	4.9	5.8	8.0	12.67	8.88	8.24	6.4	4,000
38CKM042-XQR01--	FB4CQL042L00EAAA	415	3	50	7.46	3.38	R-410A	195.8	88.8	41,000	36,500	35,646	3,208	4,016	4,259	5.1	6.4	9.1	12.78	9.09	8.37	7.0	4,600
38CKM048-XQR01--	FB4CQL048L00EAAA	415	3	50	8.33	3.78	R-410A	196.2	89	48,410	41,490	40,031	3,808	4,671	4,940	6.1	7.4	10.6	12.71	8.88	8.10	8.1	5,300
38CKM060-XQR01--	FB4CQL060L00EAAA	415	3	50	9.41	4.27	R-410A	214.7	97.4	58,920	51,680	50,962	4,656	5,706	6,022	7.7	9.2	12.9	12.65	9.06	8.46	10.1	6,500

Engineered in USA, assembled in Mexico

Country of Origin: Mexico

Brand: Carrier / Address: 7310 W Morris Street, Indianapolis, IN 46231

DETAILED COOLING CAPACITIES# - ENGLISH

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)																	
CFM	EWB ° F (° C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM018-X(-7,QQ) Outdoor Section With FB4C(S,Q)L018 Indoor Section																			
525	57 (13.9)	18.23	18.23	1.13	17.63	17.63	1.28	16.97	16.97	1.45	16.26	16.26	1.63	15.48	15.48	1.84	14.62	14.62	2.08
	62 (16.7)	19.02	16.94	1.13	18.28	16.53	1.28	17.49	16.07	1.45	16.64	15.60	1.63	15.81	15.07	1.84	14.97	14.43	2.07
	67 (19.4)	20.77	14.50	1.13	19.90	14.12	1.28	18.98	13.72	1.45	17.98	13.29	1.64	16.92	12.82	1.84	15.79	12.31	2.08
	72 (22.2)	22.79	11.94	1.13	21.81	11.57	1.29	20.77	11.17	1.46	19.67	10.74	1.65	18.51	10.29	1.86	17.27	9.80	2.09
600	57 (13.9)	19.04	19.04	1.14	18.39	18.39	1.29	17.68	17.68	1.46	16.92	16.92	1.64	16.08	16.08	1.85	15.18	15.18	2.09
	62 (16.7)	19.61	18.09	1.14	18.84	17.66	1.29	18.07	17.16	1.46	17.25	16.54	1.64	16.47	15.83	1.85	15.49	14.93	2.08
	67 (19.4)	21.26	15.44	1.14	20.34	15.05	1.30	19.37	14.63	1.46	18.35	14.19	1.65	17.26	13.71	1.86	16.09	13.20	2.09
	72 (22.2)	23.30	12.56	1.14	22.17	12.13	1.30	21.20	11.77	1.47	20.06	11.33	1.66	18.85	10.87	1.87	17.55	10.35	2.10
675	57 (13.9)	19.74	19.74	1.15	19.04	19.04	1.31	18.29	18.29	1.47	17.48	17.48	1.66	16.60	16.63	1.87	15.64	15.67	2.10
	62 (16.7)	20.16	19.11	1.15	19.41	18.57	1.30	18.66	17.96	1.47	17.78	17.17	1.65	16.63	16.63	1.87	15.67	15.67	2.10
	67 (19.4)	21.63	16.34	1.15	20.68	15.94	1.31	19.68	15.50	1.48	18.62	15.04	1.66	17.49	14.61	1.87	16.32	14.06	2.10
	72 (22.2)	23.68	13.14	1.15	22.53	12.71	1.31	21.50	12.32	1.48	20.32	11.88	1.67	19.13	11.43	1.88	17.22	10.68	2.11

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)																	
CFM	EWB ° F (° C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM024-X(-7,QQ) Outdoor Section With FB4C(S,Q)L024 Indoor Section																			
700	57 (13.9)	22.12	22.12	1.46	21.37	21.37	1.62	20.58	20.58	1.79	19.71	19.71	1.99	18.27	18.27	2.22	17.19	17.19	2.48
	62 (16.7)	22.81	21.02	1.46	21.91	20.54	1.61	21.09	20.04	1.79	20.08	19.29	1.99	18.68	18.04	2.22	17.30	17.19	2.48
	67 (19.4)	24.82	18.01	1.46	23.81	17.58	1.62	22.70	17.11	1.79	21.51	16.60	1.99	19.66	15.79	2.23	18.22	15.19	2.49
	72 (22.2)	27.28	14.69	1.46	26.13	14.26	1.62	24.90	13.80	1.79	23.63	13.32	2.00	22.21	12.79	2.23	20.67	12.20	2.49
800	57 (13.9)	23.00	23.00	1.48	22.21	22.21	1.64	21.37	21.37	1.82	20.43	20.43	2.02	18.94	18.94	2.25	17.78	17.78	2.51
	62 (16.7)	23.48	22.35	1.48	22.62	21.72	1.64	21.86	21.07	1.81	20.69	20.16	2.02	19.05	18.96	2.25	17.81	17.81	2.51
	67 (19.4)	25.29	19.17	1.48	24.23	18.73	1.64	23.10	18.24	1.82	21.84	17.71	2.02	19.96	16.93	2.25	18.57	16.21	2.51
	72 (22.2)	27.78	15.45	1.48	26.58	15.01	1.64	25.31	14.54	1.82	23.98	14.04	2.02	21.98	13.28	2.26	20.41	12.69	2.52
900	57 (13.9)	23.76	23.76	1.51	22.92	22.92	1.66	22.03	22.03	1.84	21.05	21.05	2.04	19.49	19.52	2.27	18.29	18.31	2.54
900	62 (16.7)	24.20	23.34	1.51	23.24	22.55	1.66	22.47	21.57	1.84	21.24	20.77	2.04	19.52	19.52	2.27	18.31	18.31	2.54
	67 (19.4)	25.65	20.28	1.51	24.52	19.81	1.66	23.33	19.35	1.84	22.13	18.78	2.04	20.29	17.85	2.27	18.86	17.10	2.53
	72 (22.2)	28.17	16.18	1.51	26.93	15.73	1.66	25.62	15.24	1.84	24.26	14.73	2.04	22.23	13.97	2.28	20.61	13.34	2.54

See notes on page 20

DETAILED COOLING CAPACITIES# - ENGLISH

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)																	
CFM	EWB ° F (° C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM030-X(-7,QQ) Outdoor Section With FB4C(S,Q)L030 Indoor Section																			
875	57 (13.9)	29.27	29.27	1.84	28.13	28.13	2.06	27.08	27.08	2.32	25.90	25.90	2.60	24.63	24.63	2.93	23.24	23.24	3.31
	62 (16.7)	30.65	26.58	1.85	29.21	25.82	2.07	27.86	25.11	2.32	26.51	24.29	2.61	25.04	23.32	2.93	23.75	22.04	3.31
	67 (19.4)	33.53	22.87	1.86	31.90	22.22	2.09	30.39	21.60	2.34	28.78	20.94	2.62	27.03	20.21	2.94	25.12	19.42	3.32
	72 (22.2)	36.97	18.83	1.89	35.17	18.19	2.11	33.53	17.61	2.36	31.62	16.93	2.64	29.48	16.16	2.97	27.41	15.41	3.33
1000	57 (13.9)	30.59	30.59	1.87	29.37	29.37	2.10	28.22	28.22	2.35	26.99	26.99	2.63	25.63	25.63	2.96	24.15	24.19	3.34
	62 (16.7)	31.48	28.34	1.88	30.05	27.49	2.10	28.73	26.60	2.35	27.38	25.54	2.64	25.87	25.62	2.96	24.19	24.19	3.34
	67 (19.4)	34.28	24.36	1.89	32.57	23.68	2.12	31.01	23.04	2.37	29.34	22.36	2.65	27.50	21.64	2.97	25.60	20.82	3.34
	72 (22.2)	37.71	19.79	1.92	35.88	19.15	2.14	34.17	18.55	2.39	32.32	17.90	2.68	30.33	17.19	3.00	28.19	16.41	3.37
1125	57 (13.9)	31.71	31.71	1.90	30.42	30.42	2.13	29.21	29.21	2.38	27.91	27.91	2.67	26.48	26.52	2.99	24.92	24.95	3.37
	62 (16.7)	32.29	29.76	1.91	30.82	28.73	2.13	29.49	27.73	2.39	28.40	26.29	2.67	26.52	26.52	2.99	24.95	24.95	3.37
	67 (19.4)	34.86	25.78	1.92	33.10	25.09	2.15	31.46	24.44	2.40	29.75	23.74	2.68	27.98	22.92	3.00	26.05	21.99	3.37
	72 (22.2)	38.37	20.75	1.95	36.60	20.13	2.18	34.71	19.47	2.43	32.80	18.80	2.71	30.74	18.06	3.03	28.58	17.28	3.40

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)																	
CFM	EWB ° F (° C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM036-X(-7,QQ) Outdoor Section With FB4C(S,Q)L036 Indoor Section																			
1050	57 (13.9)	34.70	34.70	2.18	33.34	33.34	2.44	31.88	31.88	2.72	30.31	30.31	3.04	28.64	28.64	3.41	26.88	26.88	3.82
	62 (16.7)	35.95	32.27	2.19	34.32	31.41	2.44	32.69	30.35	2.72	31.00	29.16	3.05	29.35	27.69	3.41	26.89	26.89	3.82
	67 (19.4)	39.39	27.64	2.21	37.47	26.84	2.46	35.41	25.98	2.74	33.26	25.08	3.06	31.00	24.18	3.43	28.72	23.26	3.84
	72 (22.2)	43.44	22.62	2.23	41.29	21.82	2.48	39.02	20.99	2.76	36.63	20.12	3.09	34.15	19.21	3.45	31.61	18.29	3.86
1200	57 (13.9)	36.24	36.24	2.23	34.80	34.80	2.49	33.23	33.23	2.77	31.54	31.54	3.09	29.75	29.81	3.46	27.88	27.92	3.87
	62 (16.7)	37.15	34.36	2.24	35.54	33.28	2.49	33.94	31.98	2.77	32.20	30.42	3.10	29.81	29.81	3.46	27.92	27.92	3.87
	67 (19.4)	40.19	29.47	2.25	38.26	28.68	2.50	36.09	27.84	2.79	33.86	26.92	3.11	31.60	25.93	3.47	29.28	24.86	3.89
	72 (22.2)	44.36	23.85	2.27	42.13	23.04	2.53	39.77	22.19	2.81	37.30	21.31	3.13	34.73	20.39	3.50	31.57	19.25	3.90
1350	57 (13.9)	37.56	37.56	2.28	36.03	36.03	2.53	34.36	34.36	2.82	32.58	32.58	3.14	30.73	30.73	3.51	28.76	28.76	3.92
	62 (16.7)	38.29	36.02	2.28	36.75	34.56	2.54	34.72	34.41	2.82	32.65	32.58	3.14	30.73	30.73	3.51	28.76	28.76	3.92
	67 (19.4)	40.86	31.28	2.30	38.80	30.45	2.55	36.67	29.54	2.83	34.43	28.54	3.15	32.09	27.47	3.52	29.71	26.36	3.93
	72 (22.2)	45.05	25.01	2.32	42.57	24.13	2.57	40.14	23.26	2.85	37.37	22.28	3.17	34.72	21.33	3.54	32.33	20.45	3.95
38CKM036-X(-9,QR) Outdoor Section With FB4C(S,Q)L037 Indoor Section																			
1050	57 (13.9)	34.11	34.11	2.18	32.78	32.78	2.43	31.34	31.34	2.71	29.80	29.80	3.03	28.16	28.16	3.40	26.43	26.43	3.81
	62 (16.7)	35.35	31.76	2.18	33.75	30.93	2.43	32.14	29.88	2.72	30.49	28.72	3.04	28.88	27.28	3.41	26.62	26.62	3.81
	67 (19.4)	38.73	27.21	2.20	36.85	26.43	2.45	34.83	25.58	2.73	32.71	24.69	3.05	30.48	23.81	3.42	28.25	22.90	3.83
	72 (22.2)	42.71	22.27	2.22	40.60	21.49	2.47	38.37	20.67	2.75	36.02	19.81	3.08	33.20	18.78	3.44	31.08	18.00	3.85
1200	57 (13.9)	35.63	35.63	2.22	34.21	34.21	2.48	32.67	32.67	2.76	31.02	31.02	3.08	29.26	29.26	3.45	27.42	27.42	3.86
	62 (16.7)	36.53	33.83	2.23	34.94	32.76	2.48	33.38	31.49	2.76	31.28	29.65	3.08	28.95	28.95	3.45	27.46	27.46	3.86
	67 (19.4)	39.54	29.03	2.24	37.62	28.24	2.49	35.49	27.41	2.78	33.30	26.51	3.10	31.08	25.53	3.46	28.80	24.48	3.87
	72 (22.2)	43.62	23.48	2.26	41.42	22.69	2.52	39.10	21.85	2.80	36.68	20.98	3.12	34.13	20.06	3.49	31.59	19.15	3.90
1350	57 (13.9)	36.94	36.94	2.27	35.42	35.42	2.52	33.78	33.78	2.81	32.03	32.10	3.13	30.18	30.22	3.50	28.28	28.28	3.91
	62 (16.7)	37.65	35.46	2.27	36.13	34.03	2.53	34.33	32.57	2.81	32.10	32.10	3.13	30.22	30.22	3.50	28.28	28.28	3.91
	67 (19.4)	40.18	30.79	2.29	38.15	29.98	2.54	36.06	29.08	2.82	33.85	28.10	3.14	31.56	27.05	3.51	29.24	25.97	3.92
	72 (22.2)	44.30	24.62	2.31	41.92	23.77	2.56	39.57	22.93	2.85	37.05	22.03	3.17	34.61	21.18	3.53	31.96	20.24	3.94

See notes on page 20

DETAILED COOLING CAPACITIES# - ENGLISH

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)																	
CFM	EWB ° F (° C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM042-X(-9,QR) Outdoor Section With FB4C(S,Q)L042 Indoor Section																			
1225	57 (13.9)	41.15	41.15	2.55	39.47	39.47	2.84	37.44	37.44	3.17	35.50	35.50	3.54	33.44	33.44	3.97	31.30	31.30	4.45
	62 (16.7)	42.19	35.91	2.55	40.39	34.74	2.84	38.43	33.20	3.17	36.20	31.53	3.54	33.47	33.47	3.97	31.32	31.32	4.45
	67 (19.4)	45.53	30.77	2.57	43.25	29.89	2.86	40.43	28.80	3.18	38.01	27.95	3.56	35.38	26.86	3.98	32.45	25.53	4.46
	72 (22.2)	50.07	24.79	2.59	47.52	23.94	2.88	44.53	22.94	3.21	41.75	22.01	3.58	38.85	21.03	4.01	35.88	19.99	4.48
1400	57 (13.9)	42.80	42.80	2.60	41.02	41.02	2.89	38.87	38.87	3.22	36.80	36.80	3.60	34.62	34.62	4.02	32.35	32.35	4.50
	62 (16.7)	43.78	37.77	2.61	42.03	36.26	2.90	39.39	39.01	3.23	36.85	36.85	3.60	34.67	34.67	4.03	32.39	32.39	4.50
	67 (19.4)	46.37	32.92	2.62	44.02	32.03	2.91	41.31	30.94	3.24	38.75	29.85	3.61	36.09	28.70	4.04	33.41	27.47	4.51
	72 (22.2)	50.81	26.12	2.64	48.36	25.33	2.94	45.37	24.34	3.26	42.23	23.26	3.64	39.46	22.36	4.06	36.36	21.27	4.54
1575	57 (13.9)	44.22	44.22	2.66	42.32	42.32	2.95	40.06	40.06	3.28	37.89	37.89	3.65	35.60	35.64	4.08	33.22	33.26	4.56
	62 (16.7)	44.25	44.22	2.66	42.51	42.43	2.95	40.12	40.12	3.28	37.94	37.94	3.66	35.64	35.64	4.08	33.26	33.26	4.56
	67 (19.4)	47.08	34.89	2.67	44.73	33.93	2.96	41.95	32.75	3.29	39.32	31.60	3.67	36.61	30.38	4.09	33.69	28.80	4.57
	72 (22.2)	51.69	27.52	2.70	49.00	26.64	2.99	45.87	25.61	3.32	42.89	24.63	3.69	39.83	23.59	4.11	36.75	22.52	4.59

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)																	
CFM	EWB ° F (° C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM048-X(-9,QR) Outdoor Section With FB4C(S,Q)L048 Indoor Section																			
1400	57 (13.9)	47.00	47.00	3.03	45.27	45.27	3.36	43.44	43.44	3.72	41.18	41.18	4.12	38.92	38.92	4.57	36.57	36.57	5.06
	62 (16.7)	48.63	42.29	3.04	46.64	41.31	3.37	44.44	40.14	3.73	42.27	38.59	4.13	40.12	36.88	4.58	37.65	34.63	5.07
	67 (19.4)	52.70	35.84	3.06	50.40	34.90	3.39	47.90	33.87	3.76	44.92	32.60	4.15	42.00	31.34	4.60	39.04	30.01	5.09
	72 (22.2)	57.41	29.03	3.08	54.87	28.11	3.42	52.14	27.10	3.79	48.91	25.89	4.19	45.90	24.80	4.64	42.64	23.60	5.13
1600	57 (13.9)	48.89	48.89	3.09	47.07	47.07	3.42	45.12	45.12	3.78	42.72	42.72	4.18	40.31	40.31	4.63	37.82	37.82	5.12
	62 (16.7)	50.07	45.09	3.09	48.18	43.80	3.43	46.18	42.37	3.79	43.85	40.35	4.19	40.81	40.80	4.64	37.87	37.87	5.13
	67 (19.4)	53.58	38.08	3.11	51.36	37.24	3.44	48.84	36.21	3.81	45.73	34.94	4.21	42.74	33.76	4.66	39.77	32.44	5.15
	72 (22.2)	58.55	30.58	3.13	55.92	29.64	3.47	53.10	28.64	3.84	49.76	27.41	4.25	46.46	26.19	4.70	43.23	25.04	5.19
1800	57 (13.9)	50.48	50.48	3.14	48.59	48.59	3.48	46.53	46.53	3.84	44.01	44.26	4.25	41.48	41.54	4.69	38.86	38.91	5.19
	62 (16.7)	51.39	47.04	3.15	49.64	45.47	3.48	47.53	43.76	3.85	44.26	44.26	4.25	41.54	41.54	4.69	38.91	38.91	5.19
	67 (19.4)	54.51	40.40	3.16	52.05	39.44	3.50	49.46	38.46	3.87	46.41	37.18	4.27	43.42	35.81	4.71	40.37	34.37	5.20
	72 (22.2)	59.52	32.08	3.18	56.69	31.08	3.53	53.74	30.06	3.89	50.63	28.98	4.30	47.06	27.62	4.75	43.70	26.39	5.24

See notes on page 20

DETAILED COOLING CAPACITIES# - ENGLISH

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		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**
CFM	EWB ° F (° C)	Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM060-X(-9,QR) Outdoor Section With FB4C(S,Q)L060 Indoor Section																			
1600	57 (13.9)	57.19	57.19	3.61	55.21	55.21	4.04	53.10	53.10	4.53	50.85	50.85	5.08	48.44	48.44	5.69	45.86	45.86	6.38
	62 (16.7)	59.24	51.02	3.64	56.72	49.87	4.06	54.11	48.60	4.54	51.42	47.21	5.09	48.72	45.28	5.70	45.92	45.92	6.39
	67 (19.4)	64.79	43.36	3.71	61.98	42.29	4.14	59.03	41.16	4.62	55.94	40.00	5.16	52.62	38.76	5.77	49.20	37.47	6.45
	72 (22.2)	71.09	35.56	3.80	67.82	34.42	4.23	64.59	33.30	4.72	61.20	32.14	5.26	57.64	30.94	5.87	53.86	29.66	6.54
1750	57 (13.9)	58.76	58.76	3.67	56.70	56.70	4.10	54.48	54.48	4.59	52.13	52.13	5.14	49.61	49.61	5.75	46.92	46.92	6.44
	62 (16.7)	60.16	53.33	3.69	57.62	52.10	4.12	55.01	50.66	4.60	52.45	48.67	5.14	49.67	49.67	5.76	46.97	46.97	6.45
	67 (19.4)	65.66	45.20	3.76	62.76	44.12	4.19	59.72	43.00	4.67	56.49	41.79	5.21	53.16	40.54	5.82	49.63	39.23	6.50
	72 (22.2)	71.80	36.67	3.85	68.63	35.59	4.29	65.31	34.46	4.77	61.82	33.29	5.31	58.18	32.08	5.92	53.96	30.69	6.57
1900	57 (13.9)	60.17	60.17	3.73	58.01	58.01	4.16	55.70	55.70	4.65	53.26	53.28	5.19	50.64	50.70	5.81	47.84	47.89	6.50
	62 (16.7)	61.04	55.45	3.74	58.51	53.96	4.17	56.06	51.96	4.65	53.35	53.28	5.20	50.70	50.70	5.81	47.89	47.89	6.50
	67 (19.4)	66.37	46.99	3.81	63.37	45.89	4.24	60.24	44.73	4.72	57.00	43.52	5.26	53.58	42.26	5.87	50.00	40.94	6.54
	72 (22.2)	72.55	37.81	3.90	69.29	36.72	4.34	65.89	35.59	4.81	62.33	34.41	5.36	58.60	33.18	5.96	54.32	31.79	6.62
2050	57 (13.9)	61.42	61.42	3.78	59.17	59.17	4.22	56.79	56.79	4.7	54.25	54.31	5.25	51.54	51.6	5.87	48.65	48.71	6.56
	62 (16.7)	61.91	57.12	3.79	59.57	55.12	4.22	57.17	52.86	4.71	54.31	54.31	5.25	51.6	51.6	5.87	48.71	48.71	6.56
	67 (19.4)	66.91	48.7	3.86	63.88	47.59	4.29	60.73	46.42	4.77	57.41	45.2	5.31	53.95	43.93	5.92	50.3	42.59	6.59
	72 (22.2)	73.17	38.91	3.95	69.85	37.81	4.38	66.37	36.67	4.87	62.75	35.49	5.41	58.96	34.26	6.01	54.95	32.97	6.68

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DETAILED COOLING CAPACITIES# - SI

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
L/S	EWB	24			29			35			41			46			52		
		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	Sense‡		Total	Sense‡		Total	Sense‡		Total	Sense‡		Total	Sense‡		Total	Sense‡	
38CKM018-X(-7,QQ) Outdoor Section With FB4C(S,Q)L018 Indoor Section																			
250	14	5.34	5.34	1.13	5.17	5.17	1.28	4.97	4.97	1.45	4.76	4.76	1.63	4.53	4.53	1.84	4.28	4.28	2.08
	17	5.57	4.96	1.13	5.36	4.84	1.28	5.12	4.71	1.45	4.88	4.57	1.63	4.63	4.42	1.84	4.39	4.23	2.07
	19	6.09	4.25	1.13	5.83	4.14	1.28	5.56	4.02	1.45	5.27	3.89	1.64	4.96	3.76	1.84	4.63	3.61	2.08
	22	6.68	3.50	1.13	6.39	3.39	1.29	6.09	3.27	1.46	5.76	3.15	1.65	5.42	3.01	1.86	5.06	2.87	2.09
285	14	5.58	5.58	1.14	5.39	5.39	1.29	5.18	5.18	1.46	4.96	4.96	1.64	4.71	4.71	1.85	4.45	4.45	2.09
	17	5.74	5.30	1.14	5.52	5.18	1.29	5.29	5.03	1.46	5.06	4.85	1.64	4.83	4.64	1.85	4.54	4.38	2.08
	19	6.23	4.52	1.14	5.96	4.41	1.30	5.67	4.29	1.46	5.38	4.16	1.65	5.06	4.02	1.86	4.71	3.87	2.09
	22	6.83	3.68	1.14	6.50	3.56	1.30	6.21	3.45	1.47	5.88	3.32	1.66	5.52	3.19	1.87	5.14	3.03	2.10
320	14	5.78	5.78	1.15	5.58	5.58	1.31	5.36	5.36	1.47	5.12	5.12	1.66	4.86	4.86	1.87	4.58	4.58	2.10
	17	5.91	5.60	1.15	5.69	5.44	1.30	5.47	5.26	1.47	5.21	5.03	1.65	4.87	4.87	1.87	4.59	4.59	2.10
	19	6.34	4.79	1.15	6.06	4.67	1.31	5.77	4.54	1.48	5.45	4.41	1.66	5.12	4.28	1.87	4.78	4.12	2.10
	22	6.94	3.85	1.15	6.60	3.72	1.31	6.30	3.61	1.48	5.95	3.48	1.67	5.60	3.35	1.88	5.05	3.13	2.11

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
L/S	EWB °F (°C)	24			29			35			41			46			52		
		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	Sense‡		Total	Sense‡		Total	Sense‡		Total	Sense‡		Total	Sense‡		Total	Sense‡	
38CKM024-X(-7,QQ) Outdoor Section With FB4C(S,Q)L024 Indoor Section																			
330	14	6.48	6.48	1.46	6.26	6.26	1.62	6.03	6.03	1.79	5.78	5.78	1.99	5.35	5.35	2.22	5.04	5.04	2.48
	17	6.68	6.16	1.46	6.42	6.02	1.61	6.18	5.87	1.79	5.88	5.65	1.99	5.47	5.29	2.22	5.07	5.04	2.48
	19	7.27	5.28	1.46	6.98	5.15	1.62	6.65	5.01	1.79	6.30	4.86	1.99	5.76	4.63	2.23	5.34	4.45	2.49
	22	7.99	4.30	1.46	7.66	4.18	1.62	7.30	4.04	1.79	6.92	3.90	2.00	6.51	3.75	2.23	6.06	3.58	2.49
380	14	6.74	6.74	1.48	6.51	6.51	1.64	6.26	6.26	1.82	5.99	5.99	2.02	5.55	5.56	2.25	5.21	5.22	2.51
	17	6.88	6.55	1.48	6.63	6.36	1.64	6.40	6.17	1.81	6.06	5.91	2.02	5.58	5.56	2.25	5.22	5.22	2.51
	19	7.41	5.62	1.48	7.10	5.49	1.64	6.77	5.34	1.82	6.40	5.19	2.02	5.85	4.96	2.25	5.44	4.75	2.51
425	22	8.14	4.53	1.48	7.79	4.40	1.64	7.42	4.26	1.82	7.03	4.11	2.02	6.44	3.89	2.26	5.98	3.72	2.52
	14	6.96	6.96	1.51	6.71	6.71	1.66	6.45	6.45	1.84	6.17	6.17	2.04	5.71	5.72	2.27	5.36	5.36	2.54
	17	7.09	6.84	1.51	6.81	6.61	1.66	6.58	6.32	1.84	6.22	6.09	2.04	5.72	5.72	2.27	5.36	5.36	2.54
	19	7.52	5.94	1.51	7.18	5.80	1.66	6.84	5.67	1.84	6.48	5.50	2.04	5.94	5.23	2.27	5.53	5.01	2.53
	22	8.25	4.74	1.51	7.89	4.61	1.66	7.51	4.47	1.84	7.11	4.32	2.04	6.51	4.09	2.28	6.04	3.91	2.54

See notes on page 20

DETAILED COOLING CAPACITIES# - SI

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
L/S	EWB	24			29			35			41			46			52		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM030-X(-7,QQ) Outdoor Section With FB4C(S,Q)L030 Indoor Section																			
415	14	8.57	8.57	1.84	8.24	8.24	2.06	7.93	7.93	2.32	7.59	7.59	2.60	7.22	7.22	2.93	6.81	6.81	3.31
	17	8.98	7.79	1.85	8.56	7.57	2.07	8.16	7.36	2.32	7.77	7.12	2.61	7.34	6.83	2.93	6.96	6.46	3.31
	19	9.82	6.70	1.86	9.35	6.51	2.09	8.90	6.33	2.34	8.43	6.13	2.62	7.92	5.92	2.94	7.36	5.69	3.32
	22	10.83	5.52	1.89	10.31	5.33	2.11	9.82	5.16	2.36	9.26	4.96	2.64	8.64	4.74	2.97	8.03	4.51	3.33
470	14	8.96	8.96	1.87	8.61	8.61	2.10	8.27	8.27	2.35	7.91	7.91	2.63	7.51	7.51	2.96	7.08	7.08	3.34
	17	9.22	8.30	1.88	8.81	8.05	2.10	8.42	7.79	2.35	8.02	7.48	2.64	7.58	7.51	2.96	7.09	7.09	3.34
	19	10.04	7.14	1.89	9.54	6.94	2.12	9.09	6.75	2.37	8.60	6.55	2.65	8.06	6.34	2.97	7.50	6.10	3.34
	22	11.05	5.80	1.92	10.51	5.61	2.14	10.01	5.44	2.39	9.47	5.24	2.68	8.89	5.04	3.00	8.26	4.81	3.37
530	14	9.29	9.29	1.90	8.91	8.91	2.13	8.56	8.56	2.38	8.18	8.18	2.67	7.76	7.76	2.99	7.30	7.30	3.37
	17	9.46	8.72	1.91	9.03	8.42	2.13	8.64	8.12	2.39	8.32	7.70	2.67	7.77	7.77	2.99	7.31	7.31	3.37
	19	10.21	7.55	1.92	9.70	7.35	2.15	9.22	7.16	2.40	8.72	6.96	2.68	8.20	6.72	3.00	7.63	6.44	3.37
	22	11.24	6.08	1.95	10.72	5.90	2.18	10.17	5.70	2.43	9.61	5.51	2.71	9.01	5.29	3.03	8.37	5.06	3.40

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
L/S	EWB	24			29			35			41			46			52		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM036-X(-7,QQ) Outdoor Section With FB4C(S,Q)L036 Indoor Section																			
495	14	10.17	10.17	2.18	9.77	9.77	2.44	9.34	9.34	2.72	8.88	8.88	3.04	8.39	8.39	3.41	7.87	7.87	3.82
	17	10.53	9.45	2.19	10.06	9.20	2.44	9.58	8.89	2.72	9.08	8.54	3.05	8.60	8.11	3.41	7.88	7.88	3.82
	19	11.54	8.10	2.21	10.98	7.86	2.46	10.38	7.61	2.74	9.75	7.35	3.06	9.08	7.09	3.43	8.42	6.82	3.84
	22	12.73	6.63	2.23	12.10	6.39	2.48	11.43	6.15	2.76	10.73	5.90	3.09	10.01	5.63	3.45	9.26	5.36	3.86
565	14	10.62	10.62	2.23	10.20	10.20	2.49	9.74	9.74	2.77	9.24	9.24	3.09	8.72	8.72	3.46	8.17	8.17	3.87
	17	10.88	10.07	2.24	10.41	9.75	2.49	9.95	9.37	2.77	9.43	8.91	3.10	8.73	8.73	3.46	8.18	8.18	3.87
	19	11.77	8.63	2.25	11.21	8.40	2.50	10.58	8.16	2.79	9.92	7.89	3.11	9.26	7.60	3.47	8.58	7.28	3.89
	22	13.00	6.99	2.27	12.34	6.75	2.53	11.65	6.50	2.81	10.93	6.24	3.13	10.18	5.97	3.50	9.25	5.64	3.90
635	14	11.01	11.01	2.28	10.56	10.56	2.53	10.07	10.07	2.82	9.54	9.54	3.14	8.99	8.99	3.51	8.41	8.41	3.92
	17	11.22	10.55	2.28	10.77	10.13	2.54	10.17	10.08	2.82	9.57	9.57	3.14	9.00	9.00	3.51	8.43	8.43	3.92
	19	11.97	9.16	2.30	11.37	8.92	2.55	10.74	8.65	2.83	10.09	8.36	3.15	9.40	8.05	3.52	8.71	7.72	3.93
	22	13.20	7.33	2.32	12.47	7.07	2.57	11.76	6.82	2.85	10.95	6.53	3.17	10.17	6.25	3.54	9.47	5.99	3.95
38CKM036-X(-9,QR) Outdoor Section With FB4C(S,Q)L037 Indoor Section																			
495	14	10.00	10.00	2.18	9.61	9.61	2.43	9.18	9.18	2.71	8.73	8.73	3.03	8.25	8.25	3.40	7.74	7.74	3.81
	17	10.36	9.31	2.18	9.89	9.06	2.43	9.42	8.75	2.72	8.93	8.41	3.04	8.46	7.99	3.41	7.80	7.80	3.81
	19	11.35	7.97	2.20	10.80	7.74	2.45	10.20	7.50	2.73	9.58	7.24	3.05	8.93	6.98	3.42	8.28	6.71	3.83
	22	12.51	6.52	2.22	11.90	6.30	2.47	11.24	6.05	2.75	10.55	5.80	3.08	9.73	5.50	3.44	9.11	5.28	3.85
565	14	10.44	10.44	2.22	10.02	10.02	2.48	9.57	9.57	2.76	9.09	9.09	3.08	8.57	8.57	3.45	8.03	8.03	3.86
	17	10.70	9.91	2.23	10.24	9.60	2.48	9.78	9.23	2.76	9.16	8.69	3.08	8.48	8.48	3.45	8.04	8.04	3.86
	19	11.59	8.50	2.24	11.02	8.27	2.49	10.40	8.03	2.78	9.76	7.77	3.10	9.11	7.48	3.46	8.44	7.17	3.87
	22	12.78	6.88	2.26	12.14	6.65	2.52	11.46	6.40	2.80	10.75	6.15	3.12	10.00	5.88	3.49	9.26	5.61	3.90
635	14	10.82	10.82	2.27	10.38	10.38	2.52	9.90	9.90	2.81	9.39	9.39	3.13	8.84	8.84	3.50	8.27	8.27	3.91
	17	11.03	10.39	2.27	10.59	9.97	2.53	10.06	9.54	2.81	9.40	9.40	3.13	8.85	8.85	3.50	8.29	8.29	3.91
	19	11.77	9.02	2.29	11.18	8.78	2.54	10.56	8.52	2.82	9.92	8.23	3.14	9.25	7.93	3.51	8.57	7.61	3.92
	22	12.98	7.21	2.31	12.28	6.96	2.56	11.59	6.72	2.85	10.86	6.45	3.17	10.14	6.20	3.53	9.36	5.93	3.94

See notes on page 20

DETAILED COOLING CAPACITIES# - SI

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
L/S	EWB	24			29			35			41			46			52		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM042-X(-9,QR) Outdoor Section With FB4C(S,Q)L042 Indoor Section																			
580	14	12.06	12.06	2.55	11.56	11.56	2.84	10.97	10.97	3.17	10.40	10.40	3.54	9.80	9.80	3.97	9.17	9.17	4.45
	17	12.36	10.52	2.55	11.83	10.18	2.84	11.26	9.73	3.17	10.61	9.24	3.54	9.81	9.81	3.97	9.18	9.18	4.45
	19	13.34	9.01	2.57	12.67	8.76	2.86	11.85	8.44	3.18	11.14	8.19	3.56	10.37	7.87	3.98	9.51	7.48	4.46
	22	14.67	7.26	2.59	13.92	7.02	2.88	13.05	6.72	3.21	12.23	6.45	3.58	11.38	6.16	4.01	10.51	5.86	4.48
660	14	12.54	12.54	2.60	12.02	12.02	2.89	11.39	11.39	3.22	10.78	10.78	3.60	10.14	10.14	4.02	9.48	9.48	4.50
	17	12.83	11.07	2.61	12.31	10.63	2.90	11.54	11.43	3.23	10.80	10.80	3.60	10.16	10.16	4.03	9.49	9.49	4.50
	19	13.59	9.65	2.62	12.90	9.39	2.91	12.10	9.06	3.24	11.35	8.75	3.61	10.58	8.41	4.04	9.79	8.05	4.51
	22	14.89	7.65	2.64	14.17	7.42	2.94	13.29	7.13	3.26	12.37	6.81	3.64	11.56	6.55	4.06	10.65	6.23	4.54
745	14	12.96	12.96	2.66	12.40	12.40	2.95	11.74	11.74	3.28	11.10	11.10	3.65	10.43	10.43	4.08	9.73	9.73	4.56
	17	12.97	12.96	2.66	12.46	12.43	2.95	11.75	11.75	3.28	11.12	11.12	3.66	10.44	10.44	4.08	9.75	9.75	4.56
	19	13.79	10.22	2.67	13.11	9.94	2.96	12.29	9.60	3.29	11.52	9.26	3.67	10.73	8.90	4.09	9.87	8.44	4.57
	22	15.14	8.06	2.70	14.36	7.80	2.99	13.44	7.50	3.32	12.57	7.22	3.69	11.67	6.91	4.11	10.77	6.60	4.59

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
L/S	EWB	24			29			35			41			46			52		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM048-X(-9,QR) Outdoor Section With FB4C(S,Q)L048 Indoor Section																			
660	14	13.77	13.77	3.03	13.26	13.26	3.36	12.73	12.73	3.72	12.07	12.07	4.12	11.40	11.40	4.57	10.72	10.72	5.06
	17	14.25	12.39	3.04	13.66	12.11	3.37	13.02	11.76	3.73	12.39	11.31	4.13	11.76	10.81	4.58	11.03	10.15	5.07
	19	15.44	10.50	3.06	14.77	10.23	3.39	14.03	9.92	3.76	13.16	9.55	4.15	12.31	9.18	4.60	11.44	8.79	5.09
	22	16.82	8.51	3.08	16.08	8.23	3.42	15.28	7.94	3.79	14.33	7.58	4.19	13.45	7.27	4.64	12.49	6.91	5.13
755	14	14.32	14.32	3.09	13.79	13.79	3.42	13.22	13.22	3.78	12.52	12.52	4.18	11.81	11.81	4.63	11.08	11.08	5.12
	17	14.67	13.21	3.09	14.12	12.83	3.43	13.53	12.42	3.79	12.85	11.82	4.19	11.96	11.95	4.64	11.10	11.10	5.13
	19	15.70	11.16	3.11	15.05	10.91	3.44	14.31	10.61	3.81	13.40	10.24	4.21	12.52	9.89	4.66	11.65	9.50	5.15
850	22	17.16	8.96	3.13	16.38	8.69	3.47	15.56	8.39	3.84	14.58	8.03	4.25	13.61	7.67	4.70	12.67	7.34	5.19
	14	14.79	14.79	3.14	14.24	14.24	3.48	13.63	13.63	3.84	12.89	12.89	4.25	12.15	12.15	4.69	11.39	11.39	5.19
	17	15.06	13.78	3.15	14.55	13.32	3.48	13.92	12.82	3.85	12.97	12.97	4.25	12.17	12.17	4.69	11.40	11.40	5.19
	19	15.97	11.84	3.16	15.25	11.56	3.50	14.49	11.27	3.87	13.60	10.89	4.27	12.72	10.49	4.71	11.83	10.07	5.20
	22	17.44	9.40	3.18	16.61	9.11	3.53	15.74	8.81	3.89	14.84	8.49	4.30	13.79	8.09	4.75	12.80	7.73	5.24

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DETAILED COOLING CAPACITIES# - SI

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES deg C																	
L/S	EWB	24			29			35			41			46			52		
		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	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†		Total	Sense†	
38CKM060-X(-9,QR) Outdoor Section With FB4C(S,Q)L060 Indoor Section																			
755	14	16.76	16.76	3.61	16.18	16.18	4.04	15.56	15.56	4.53	14.90	14.90	5.08	14.19	14.19	5.69	13.44	13.44	6.38
	17	17.36	14.95	3.64	16.62	14.61	4.06	15.85	14.24	4.54	15.07	13.83	5.09	14.27	13.27	5.70	13.45	13.45	6.39
	19	18.98	12.70	3.71	18.16	12.39	4.14	17.30	12.06	4.62	16.39	11.72	5.16	15.42	11.36	5.77	14.41	10.98	6.45
	22	20.83	10.42	3.80	19.87	10.08	4.23	18.93	9.76	4.72	17.93	9.42	5.26	16.89	9.06	5.87	15.78	8.69	6.54
825	14	17.22	17.22	3.67	16.61	16.61	4.10	15.96	15.96	4.59	15.27	15.27	5.14	14.54	14.54	5.75	13.75	13.75	6.44
	17	17.63	15.63	3.69	16.88	15.26	4.12	16.12	14.84	4.60	15.37	14.26	5.14	14.55	14.55	5.76	13.76	13.76	6.45
	19	19.24	13.24	3.76	18.39	12.93	4.19	17.50	12.60	4.67	16.55	12.24	5.21	15.58	11.88	5.82	14.54	11.49	6.50
	22	21.04	10.74	3.85	20.11	10.43	4.29	19.13	10.10	4.77	18.11	9.75	5.31	17.05	9.40	5.92	15.81	8.99	6.57
895	14	17.63	17.63	3.73	17.00	17.00	4.16	16.32	16.32	4.65	15.60	15.60	5.19	14.84	14.84	5.81	14.02	14.02	6.50
	17	17.88	16.25	3.74	17.14	15.81	4.17	16.43	15.22	4.65	15.63	15.61	5.20	14.85	14.85	5.81	14.03	14.03	6.50
	19	19.45	13.77	3.81	18.57	13.45	4.24	17.65	13.11	4.72	16.70	12.75	5.26	15.70	12.38	5.87	14.65	12.00	6.54
	22	21.26	11.08	3.90	20.30	10.76	4.34	19.31	10.43	4.81	18.26	10.08	5.36	17.17	9.72	5.96	15.92	9.31	6.62
965	14	17.99	17.99	3.78	17.34	17.34	4.22	16.64	16.64	4.7	15.89	15.89	5.25	15.1	15.1	5.87	14.26	14.26	6.56
	17	18.14	16.74	3.79	17.45	16.15	4.22	16.75	15.49	4.71	15.91	15.91	5.25	15.12	15.12	5.87	14.27	14.27	6.56
	19	19.61	14.27	3.86	18.72	13.94	4.29	17.79	13.6	4.77	16.82	13.24	5.31	15.81	12.87	5.92	14.74	12.48	6.59
	22	21.44	11.4	3.95	20.47	11.08	4.38	19.45	10.74	4.87	18.38	10.4	5.41	17.27	10.04	6.01	16.1	9.66	6.68

NOTE: When the required data falls 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. 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 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).

** System kw is total of indoor and outdoor unit power.

EWB – Entering Wet Bulb

L/S – Liters Per Second

CONDENSER ONLY RATINGS - ENGLISH

SST °F (°C)		CONDENSER ENTERING AIR TEMPERATURES °F (°C)							
		55 (12.8)	65 (18.3)	75 (23.9)	85 (29.4)	95 (35)	105 (40.6)	115 (46.1)	125 (51.7)
38CKM018-X(-7,QQ)									
30 (-1.1)	TCG	17.50	16.80	16.00	14.60	13.70	12.80	11.80	10.70
	SDT	65.30	75.00	84.70	94.30	103.90	113.50	123.10	132.70
	KW	0.79	0.92	1.06	1.20	1.36	1.53	1.74	1.99
35 (1.7)	TCG	19.50	18.60	17.80	16.20	15.30	14.20	13.10	12.00
	SDT	66.30	76.00	85.60	95.20	104.80	114.30	123.90	133.40
	KW	0.78	0.92	1.05	1.20	1.36	1.54	1.74	1.99
40 (4.4)	TCG	21.60	20.60	19.60	18.00	16.90	15.80	14.60	13.40
	SDT	67.30	77.00	86.60	96.10	105.60	115.20	124.70	134.20
	KW	0.76	0.91	1.05	1.20	1.36	1.54	1.75	1.99
45 (7.2)	TCG	23.80	22.70	21.60	19.80	18.60	17.40	16.10	14.80
	SDT	68.40	78.00	87.60	97.10	106.60	116.00	125.50	134.90
	KW	0.75	0.90	1.05	1.20	1.37	1.55	1.76	1.99
50 (10)	TCG	26.20	24.90	23.60	21.80	20.40	19.10	17.70	16.30
	SDT	69.60	79.20	88.70	98.10	107.50	116.90	126.30	135.60
	KW	0.74	0.90	1.05	1.21	1.38	1.56	1.76	2.00
55 (12.8)	TCG	28.60	27.20	25.80	23.80	22.30	20.90	19.40	17.80
	SDT	70.80	80.30	89.80	99.10	108.50	117.80	127.10	136.40
	KW	0.74	0.90	1.06	1.22	1.39	1.57	1.78	2.01
38CKM024-X(-7,QQ)									
30 (-1.1)	TCG	19.90	18.90	17.90	16.90	15.80	14.70	13.40	12.00
	SDT	67.60	76.90	86.40	95.80	105.20	114.60	124.00	133.20
	KW	1.01	1.14	1.28	1.43	1.60	1.80	2.02	2.27
35 (1.7)	TCG	22.10	21.00	19.90	18.80	17.60	16.40	15.00	13.60
	SDT	68.90	78.10	87.50	96.90	106.30	115.60	124.90	134.10
	KW	1.02	1.15	1.28	1.44	1.61	1.81	2.03	2.28
40 (4.4)	TCG	24.50	23.20	22.00	20.80	19.50	18.20	16.80	15.20
	SDT	70.20	79.40	88.70	98.00	107.30	116.60	125.90	135.10
	KW	1.03	1.15	1.29	1.44	1.62	1.81	2.04	2.30
45 (7.2)	TCG	27.00	25.60	24.20	22.90	21.50	20.10	18.60	16.90
	SDT	71.70	80.80	90.00	99.20	108.40	117.70	126.90	136.00
	KW	1.03	1.16	1.29	1.45	1.62	1.82	2.05	2.30
50 (10)	TCG	29.60	28.10	26.60	25.20	23.70	22.10	20.40	18.70
	SDT	73.20	82.20	91.30	100.50	109.60	118.80	127.90	137.00
	KW	1.03	1.16	1.29	1.45	1.63	1.82	2.05	2.31
55 (12.8)	TCG	32.50	30.80	29.10	27.50	25.90	24.20	22.40	20.50
	SDT	74.80	83.70	92.70	101.80	110.90	119.90	129.00	138.00
	KW	1.03	1.15	1.29	1.45	1.63	1.83	2.06	2.32
38CKM030-X(-7,QQ)									
30 (-1.1)	TCG	27.20	25.80	24.40	23.00	21.40	19.70	18.00	16.10
	SDT	68.30	77.90	87.40	96.90	106.30	115.70	125.10	134.60
	KW	1.23	1.43	1.63	1.85	2.10	2.39	2.74	3.14
35 (1.7)	TCG	30.10	28.60	27.10	25.50	23.90	22.10	20.20	18.30
	SDT	69.50	79.00	88.50	97.90	107.30	116.70	126.00	135.30
	KW	1.24	1.44	1.64	1.86	2.11	2.40	2.74	3.13
40 (4.4)	TCG	33.20	31.60	30.00	28.30	26.50	24.60	22.60	20.50
	SDT	70.70	80.20	89.60	99.00	108.40	117.70	126.90	136.20
	KW	1.24	1.45	1.66	1.88	2.13	2.41	2.74	3.13
45 (7.2)	TCG	36.50	34.80	33.00	31.20	29.30	27.30	25.10	22.90
	SDT	72.10	81.50	90.90	100.20	109.50	118.80	128.00	137.10
	KW	1.25	1.46	1.67	1.90	2.15	2.43	2.76	3.14
50 (10)	TCG	40.00	38.10	36.20	34.30	32.20	30.10	27.80	25.40
	SDT	73.50	82.90	92.20	101.50	110.80	120.00	129.10	138.20
	KW	1.27	1.48	1.69	1.92	2.17	2.45	2.78	3.15
55 (12.8)	TCG	43.70	41.70	39.60	37.50	35.30	33.00	30.60	28.10
	SDT	75.00	84.30	93.60	102.90	112.10	121.20	130.30	139.30
	KW	1.28	1.50	1.72	1.95	2.20	2.48	2.81	3.18

See notes on page 23

CONDENSER ONLY RATINGS - ENGLISH

SST °F (°C)		CONDENSER ENTERING AIR TEMPERATURES °F (°C)							
		55 (12.8)	65 (18.3)	75 (23.9)	85 (29.4)	95 (35)	105 (40.6)	115 (46.1)	125 (51.7)
38CKM036-X(-7,QQ)									
30 (-1.1)	TCG	31.70	30.10	28.40	26.60	23.90	22.00	20.00	18.00
	SDT	69.60	79.00	88.30	97.70	107.00	116.40	125.80	135.20
	KW	1.46	1.69	1.92	2.18	2.47	2.81	3.19	3.62
35 (1.7)	TCG	35.40	33.60	31.70	29.70	26.90	24.70	22.60	20.40
	SDT	71.00	80.40	89.70	99.00	108.20	117.50	126.80	136.10
	KW	1.47	1.70	1.94	2.20	2.49	2.82	3.20	3.64
40 (4.4)	TCG	39.30	37.30	35.20	33.00	30.00	27.70	25.30	22.90
	SDT	72.60	81.90	91.10	100.30	109.40	118.60	127.90	137.10
	KW	1.49	1.71	1.95	2.21	2.50	2.83	3.21	3.65
45 (7.2)	TCG	43.40	41.20	38.90	36.50	33.30	30.80	28.20	25.60
	SDT	74.30	83.50	92.60	101.80	110.80	119.90	129.00	138.20
	KW	1.51	1.73	1.97	2.23	2.52	2.85	3.23	3.67
50 (10)	TCG	47.70	45.30	42.90	40.20	36.80	34.00	31.20	28.40
	SDT	76.10	85.10	94.20	103.30	112.20	121.20	130.30	139.30
	KW	1.53	1.75	1.99	2.25	2.54	2.87	3.25	3.69
55 (12.8)	TCG	52.20	49.60	46.90	44.10	40.40	37.50	34.40	31.30
	SDT	77.90	86.90	95.90	104.90	113.70	122.70	131.60	140.60
	KW	1.56	1.78	2.01	2.27	2.56	2.90	3.28	3.71
38CKM036-X(-9,QR)									
30 (-1.1)	TCG	33.00	31.50	29.90	28.10	25.60	23.70	21.80	19.90
	SDT	69.50	79.00	88.40	97.80	107.20	116.60	126.10	135.60
	KW	1.50	1.72	1.95	2.21	2.50	2.82	3.20	3.63
35 (1.7)	TCG	36.50	34.80	33.00	31.10	28.40	26.30	24.30	22.20
	SDT	70.90	80.20	89.60	99.00	108.20	117.60	127.00	136.40
	KW	1.51	1.73	1.96	2.22	2.50	2.83	3.21	3.64
40 (4.4)	TCG	40.20	38.30	36.30	34.20	31.30	29.10	26.90	24.60
	SDT	72.30	81.60	90.90	100.20	109.40	118.70	128.00	137.30
	KW	1.52	1.74	1.97	2.23	2.52	2.84	3.22	3.65
45 (7.2)	TCG	44.10	42.10	39.80	37.50	34.40	32.00	29.60	27.20
	SDT	73.80	83.00	92.20	101.50	110.60	119.80	129.10	138.30
	KW	1.54	1.75	1.99	2.24	2.53	2.85	3.23	3.66
50 (10)	TCG	48.30	46.00	43.60	41.00	37.70	35.10	32.50	29.80
	SDT	75.40	84.60	93.70	102.80	111.80	121.00	130.20	139.30
	KW	1.56	1.77	2.00	2.26	2.54	2.87	3.24	3.68
55 (12.8)	TCG	52.70	50.10	47.40	44.70	41.20	38.30	35.50	32.60
	SDT	77.20	86.20	95.20	104.30	113.20	122.30	131.40	140.50
	KW	1.58	1.79	2.02	2.28	2.56	2.89	3.26	3.69
38CKM042-X(-9,QR)									
30 (-1.1)	TCG	38.10	36.40	34.60	32.20	30.20	28.20	26.00	23.70
	SDT	68.90	78.40	87.80	97.10	106.50	115.90	125.20	134.50
	KW	1.70	1.95	2.21	2.49	2.80	3.14	3.53	3.98
35 (1.7)	TCG	42.20	40.20	38.20	35.50	33.30	31.10	28.80	26.30
	SDT	70.30	79.70	89.00	98.20	107.60	116.90	126.20	135.40
	KW	1.70	1.96	2.23	2.51	2.82	3.16	3.56	4.00
40 (4.4)	TCG	46.60	44.30	42.00	39.00	36.70	34.20	31.70	29.10
	SDT	71.80	81.10	90.30	99.40	108.70	118.00	127.10	136.30
	KW	1.71	1.97	2.24	2.52	2.84	3.19	3.58	4.02
45 (7.2)	TCG	51.30	48.60	46.00	42.80	40.20	37.60	34.80	32.10
	SDT	73.40	82.60	91.70	100.70	109.90	119.10	128.20	137.30
	KW	1.70	1.97	2.25	2.53	2.86	3.21	3.60	4.05
50 (10)	TCG	56.20	53.20	50.30	46.80	44.00	41.10	38.20	35.20
	SDT	75.20	84.20	93.20	102.10	111.20	120.30	129.30	138.30
	KW	1.70	1.97	2.26	2.55	2.87	3.23	3.63	4.07
55 (12.8)	TCG	61.50	58.10	54.90	51.10	48.00	44.80	41.70	38.40
	SDT	77.10	85.90	94.80	103.60	112.60	121.50	130.50	139.40
	KW	1.69	1.97	2.26	2.56	2.89	3.25	3.66	4.10

See notes on page 23

CONDENSER ONLY RATINGS - ENGLISH

SST °F (°C)		CONDENSER ENTERING AIR TEMPERATURES °F (°C)							
SST °F (°C)		55 (12.8)	65 (18.3)	75 (23.9)	85 (29.4)	95 (35)	105 (40.6)	115 (46.1)	125 (51.7)
38CKM048-X(-9,QR)									
30 (-1.1)	TCG	43.10	41.10	39.00	36.90	34.60	32.30	29.90	27.50
	SDT	71.30	80.70	90.00	99.30	108.60	117.90	127.10	136.30
	KW	2.06	2.31	2.59	2.89	3.24	3.62	4.06	4.55
35 (1.7)	TCG	47.30	45.10	42.80	40.50	38.10	35.60	33.00	30.30
	SDT	72.90	82.10	91.40	100.60	109.90	119.00	128.20	137.30
	KW	2.09	2.34	2.61	2.92	3.27	3.65	4.09	4.58
40 (4.4)	TCG	51.80	49.40	46.90	44.30	41.70	39.00	36.20	33.30
	SDT	74.50	83.70	92.90	102.10	111.20	120.30	129.30	138.30
	KW	2.11	2.36	2.64	2.95	3.30	3.69	4.13	4.62
45 (7.2)	TCG	56.60	54.00	51.20	48.40	45.60	42.60	39.60	36.40
	SDT	76.30	85.40	94.50	103.60	112.60	121.60	130.60	139.50
	KW	2.14	2.39	2.67	2.98	3.33	3.72	4.16	4.66
50 (10)	TCG	61.80	58.80	55.80	52.80	49.70	46.40	43.10	39.70
	SDT	78.20	87.20	96.20	105.10	114.10	123.00	131.90	140.60
	KW	2.17	2.42	2.70	3.01	3.37	3.76	4.21	4.70
55 (12.8)	TCG	67.20	64.00	60.70	57.40	54.00	50.50	46.90	43.20
	SDT	80.30	89.10	98.00	106.90	115.70	124.50	133.20	141.90
	KW	2.20	2.45	2.73	3.05	3.41	3.80	4.25	4.75
38CKM060-X(-9,QR)									
30 (-1.1)	TCG	55.40	52.70	49.90	46.40	43.40	40.30	36.70	33.30
	SDT	73.70	83.00	92.20	101.30	110.50	119.60	128.60	137.60
	KW	2.39	2.73	3.11	3.51	3.98	4.52	5.15	5.87
35 (1.7)	TCG	60.90	57.80	54.80	51.00	47.80	44.40	40.60	37.00
	SDT	75.50	84.70	93.90	102.80	111.90	120.90	129.90	138.80
	KW	2.44	2.79	3.16	3.57	4.04	4.58	5.20	5.92
40 (4.4)	TCG	66.60	63.30	59.90	55.90	52.40	48.80	44.70	40.80
	SDT	77.40	86.50	95.60	104.40	113.40	122.30	131.20	140.00
	KW	2.49	2.85	3.23	3.63	4.11	4.65	5.27	5.98
45 (7.2)	TCG	72.80	69.10	65.40	61.10	57.30	53.40	49.00	44.80
	SDT	79.50	88.50	97.40	106.10	115.00	123.90	132.60	141.30
	KW	2.56	2.92	3.30	3.71	4.18	4.72	5.34	6.04
50 (10)	TCG	79.20	75.20	71.20	66.60	62.40	58.20	53.60	49.00
	SDT	81.70	90.50	99.40	107.90	116.70	125.40	134.00	142.60
	KW	2.64	3.00	3.38	3.79	4.27	4.81	5.42	6.12
55 (12.8)	TCG	86.00	81.60	77.30	72.30	67.80	63.30	58.30	53.50
	SDT	84.00	92.70	101.50	109.80	118.50	127.10	135.60	144.10
	KW	2.73	3.09	3.48	3.88	4.36	4.90	5.51	6.21

KW – Total Power (kW)

SDT – Saturated Temperature Leaving Compressor (°F)

SST – Saturated Temperature Entering Compressor (°F)

TCG – Gross Cooling Capacity (1000 Btuh)

CONDENSER ONLY RATINGS - S.I.

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKM018-X(-7,QQ)									
-1	TCG	5.10	4.90	4.70	4.30	4.00	3.70	3.40	3.10
	SDT	18.00	24.00	29.00	35.00	40.00	45.00	51.00	56.00
	KW	0.79	0.92	1.06	1.20	1.36	1.53	1.74	1.99
2	TCG	5.70	5.50	5.20	4.80	4.50	4.20	3.80	3.50
	SDT	19.00	24.00	30.00	35.00	40.00	46.00	51.00	56.00
	KW	0.78	0.92	1.05	1.20	1.36	1.54	1.74	1.99
4	TCG	6.30	6.00	5.70	5.30	5.00	4.60	4.30	3.90
	SDT	20.00	25.00	30.00	36.00	41.00	46.00	51.00	57.00
	KW	0.76	0.91	1.05	1.20	1.36	1.54	1.75	1.99
7	TCG	7.00	6.70	6.30	5.80	5.50	5.10	4.70	4.30
	SDT	20.00	26.00	31.00	36.00	41.00	47.00	52.00	57.00
	KW	0.75	0.90	1.05	1.20	1.37	1.55	1.76	1.99
10	TCG	7.70	7.30	6.90	6.40	6.00	5.60	5.20	4.80
	SDT	21.00	26.00	31.00	37.00	42.00	47.00	52.00	58.00
	KW	0.74	0.90	1.05	1.21	1.38	1.56	1.76	2.00
13	TCG	8.40	8.00	7.60	7.00	6.50	6.10	5.70	5.20
	SDT	22.00	27.00	32.00	37.00	43.00	48.00	53.00	58.00
	KW	0.74	0.90	1.06	1.22	1.39	1.57	1.78	2.01
38CKM024-X(-7,QQ)									
-1	TCG	5.80	5.50	5.20	4.90	4.60	4.30	3.90	3.50
	SDT	20.00	25.00	30.00	35.00	41.00	46.00	51.00	56.00
	KW	1.01	1.14	1.28	1.43	1.60	1.80	2.02	2.27
2	TCG	6.50	6.10	5.80	5.50	5.20	4.80	4.40	4.00
	SDT	20.00	26.00	31.00	36.00	41.00	46.00	52.00	57.00
	KW	1.02	1.15	1.28	1.44	1.61	1.81	2.03	2.28
4	TCG	7.20	6.80	6.40	6.10	5.70	5.30	4.90	4.50
	SDT	21.00	26.00	31.00	37.00	42.00	47.00	52.00	57.00
	KW	1.03	1.15	1.29	1.44	1.62	1.81	2.04	2.30
7	TCG	7.90	7.50	7.10	6.70	6.30	5.90	5.40	5.00
	SDT	22.00	27.00	32.00	37.00	42.00	48.00	53.00	58.00
	KW	1.03	1.16	1.29	1.45	1.62	1.82	2.05	2.30
10	TCG	8.70	8.20	7.80	7.40	6.90	6.50	6.00	5.50
	SDT	23.00	28.00	33.00	38.00	43.00	48.00	53.00	58.00
	KW	1.03	1.16	1.29	1.45	1.63	1.82	2.05	2.31
13	TCG	9.50	9.00	8.50	8.10	7.60	7.10	6.60	6.00
	SDT	24.00	29.00	34.00	39.00	44.00	49.00	54.00	59.00
	KW	1.03	1.15	1.29	1.45	1.63	1.83	2.06	2.32
38CKM030-X(-7,QQ)									
-1	TCG	8.00	7.60	7.20	6.70	6.30	5.80	5.30	4.70
	SDT	20.00	25.00	31.00	36.00	41.00	47.00	52.00	57.00
	KW	1.23	1.43	1.63	1.85	2.10	2.39	2.74	3.14
2	TCG	8.80	8.40	7.90	7.50	7.00	6.50	5.90	5.30
	SDT	21.00	26.00	31.00	37.00	42.00	47.00	52.00	57.00
	KW	1.24	1.44	1.64	1.86	2.11	2.40	2.74	3.13
4	TCG	9.70	9.30	8.80	8.30	7.80	7.20	6.60	6.00
	SDT	22.00	27.00	32.00	37.00	42.00	48.00	53.00	58.00
	KW	1.24	1.45	1.66	1.88	2.13	2.41	2.74	3.13
7	TCG	10.70	10.20	9.70	9.10	8.60	8.00	7.40	6.70
	SDT	22.00	27.00	33.00	38.00	43.00	48.00	53.00	58.00
	KW	1.25	1.46	1.67	1.90	2.15	2.43	2.76	3.14
10	TCG	11.70	11.20	10.60	10.00	9.40	8.80	8.10	7.50
	SDT	23.00	28.00	33.00	39.00	44.00	49.00	54.00	59.00
	KW	1.27	1.48	1.69	1.92	2.17	2.45	2.78	3.15
13	TCG	12.80	12.20	11.60	11.00	10.30	9.70	9.00	8.20
	SDT	24.00	29.00	34.00	39.00	44.00	50.00	55.00	60.00
	KW	1.28	1.50	1.72	1.95	2.20	2.48	2.81	3.18

See notes on page 26

CONDENSER ONLY RATINGS - S.I.

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKM036-X(-7,QQ)									
-1	TCG	9.30	8.80	8.30	7.80	7.00	6.40	5.90	5.30
	SDT	21.00	26.00	31.00	37.00	42.00	47.00	52.00	57.00
	KW	1.46	1.69	1.92	2.18	2.47	2.81	3.19	3.62
2	TCG	10.40	9.90	9.30	8.70	7.90	7.20	6.60	6.00
	SDT	22.00	27.00	32.00	37.00	42.00	47.00	53.00	58.00
	KW	1.47	1.70	1.94	2.20	2.49	2.82	3.20	3.64
4	TCG	11.50	10.90	10.30	9.70	8.80	8.10	7.40	6.70
	SDT	23.00	28.00	33.00	38.00	43.00	48.00	53.00	58.00
	KW	1.49	1.71	1.95	2.21	2.50	2.83	3.21	3.65
7	TCG	12.70	12.10	11.40	10.70	9.80	9.00	8.30	7.50
	SDT	23.00	29.00	34.00	39.00	44.00	49.00	54.00	59.00
	KW	1.51	1.73	1.97	2.23	2.52	2.85	3.23	3.67
10	TCG	14.00	13.30	12.60	11.80	10.80	10.00	9.20	8.30
	SDT	24.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
	KW	1.53	1.75	1.99	2.25	2.54	2.87	3.25	3.69
13	TCG	15.30	14.50	13.80	12.90	11.80	11.00	10.10	9.20
	SDT	26.00	31.00	35.00	41.00	45.00	50.00	55.00	60.00
	KW	1.56	1.78	2.01	2.27	2.56	2.90	3.28	3.71
38CKM036-X(-9,QR)									
-1	TCG	9.70	9.20	8.80	8.20	7.50	7.00	6.40	5.80
	SDT	21.00	26.00	31.00	37.00	42.00	47.00	52.00	58.00
	KW	1.50	1.72	1.95	2.21	2.50	2.82	3.20	3.63
2	TCG	10.70	10.20	9.70	9.10	8.30	7.70	7.10	6.50
	SDT	22.00	27.00	32.00	37.00	42.00	48.00	53.00	58.00
	KW	1.51	1.73	1.96	2.22	2.50	2.83	3.21	3.64
4	TCG	11.80	11.20	10.60	10.00	9.20	8.50	7.90	7.20
	SDT	22.00	28.00	33.00	38.00	43.00	48.00	53.00	59.00
	KW	1.52	1.74	1.97	2.23	2.52	2.84	3.22	3.65
7	TCG	12.90	12.30	11.70	11.00	10.10	9.40	8.70	8.00
	SDT	23.00	28.00	33.00	39.00	44.00	49.00	54.00	59.00
	KW	1.54	1.75	1.99	2.24	2.53	2.85	3.23	3.66
10	TCG	14.20	13.50	12.80	12.00	11.10	10.30	9.50	8.70
	SDT	24.00	29.00	34.00	39.00	44.00	49.00	55.00	60.00
	KW	1.56	1.77	2.00	2.26	2.54	2.87	3.24	3.68
13	TCG	15.40	14.70	13.90	13.10	12.10	11.20	10.40	9.60
	SDT	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
	KW	1.58	1.79	2.02	2.28	2.56	2.89	3.26	3.69
38CKM042-X(-9,QR)									
-1	TCG	11.20	10.70	10.10	9.40	8.90	8.20	7.60	6.90
	SDT	20.00	26.00	31.00	36.00	41.00	47.00	52.00	57.00
	KW	1.70	1.95	2.21	2.49	2.80	3.14	3.53	3.98
2	TCG	12.40	11.80	11.20	10.40	9.80	9.10	8.40	7.70
	SDT	21.00	26.00	32.00	37.00	42.00	47.00	52.00	57.00
	KW	1.70	1.96	2.23	2.51	2.82	3.16	3.56	4.00
4	TCG	13.70	13.00	12.30	11.40	10.70	10.00	9.30	8.50
	SDT	22.00	27.00	32.00	37.00	43.00	48.00	53.00	58.00
	KW	1.71	1.97	2.24	2.52	2.84	3.19	3.58	4.02
7	TCG	15.00	14.20	13.50	12.50	11.80	11.00	10.20	9.40
	SDT	23.00	28.00	33.00	38.00	43.00	48.00	53.00	58.00
	KW	1.70	1.97	2.25	2.53	2.86	3.21	3.60	4.05
10	TCG	16.50	15.60	14.70	13.70	12.90	12.00	11.20	10.30
	SDT	24.00	29.00	34.00	39.00	44.00	49.00	54.00	59.00
	KW	1.70	1.97	2.26	2.55	2.87	3.23	3.63	4.07
13	TCG	18.00	17.00	16.10	15.00	14.10	13.10	12.20	11.30
	SDT	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
	KW	1.69	1.97	2.26	2.56	2.89	3.25	3.66	4.10

See notes on page 26

CONDENSER ONLY RATINGS - S.I.

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKM048-X(-9,QR)									
-1	TCG	12.60	12.00	11.40	10.80	10.10	9.50	8.80	8.00
	SDT	22.00	27.00	32.00	37.00	43.00	48.00	53.00	58.00
	KW	2.06	2.31	2.59	2.89	3.24	3.62	4.06	4.55
2	TCG	13.90	13.20	12.50	11.90	11.20	10.40	9.70	8.90
	SDT	23.00	28.00	33.00	38.00	43.00	48.00	53.00	58.00
	KW	2.09	2.34	2.61	2.92	3.27	3.65	4.09	4.58
4	TCG	15.20	14.50	13.70	13.00	12.20	11.40	10.60	9.80
	SDT	24.00	29.00	34.00	39.00	44.00	49.00	54.00	59.00
	KW	2.11	2.36	2.64	2.95	3.30	3.69	4.13	4.62
7	TCG	16.60	15.80	15.00	14.20	13.40	12.50	11.60	10.70
	SDT	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
	KW	2.14	2.39	2.67	2.98	3.33	3.72	4.16	4.66
10	TCG	18.10	17.20	16.40	15.50	14.50	13.60	12.60	11.60
	SDT	26.00	31.00	36.00	41.00	46.00	51.00	55.00	60.00
	KW	2.17	2.42	2.70	3.01	3.37	3.76	4.21	4.70
13	TCG	19.70	18.80	17.80	16.80	15.80	14.80	13.70	12.70
	SDT	27.00	32.00	37.00	42.00	46.00	51.00	56.00	61.00
	KW	2.20	2.45	2.73	3.05	3.41	3.80	4.25	4.75
38CKM060-X(-9,QR)									
-1	TCG	16.20	15.40	14.60	13.60	12.70	11.80	10.80	9.80
	SDT	23.00	28.00	33.00	38.00	44.00	49.00	54.00	59.00
	KW	2.39	2.73	3.11	3.51	3.98	4.52	5.15	5.87
2	TCG	17.80	16.90	16.00	15.00	14.00	13.00	11.90	10.80
	SDT	24.00	29.00	34.00	39.00	44.00	49.00	54.00	59.00
	KW	2.44	2.79	3.16	3.57	4.04	4.58	5.20	5.92
4	TCG	19.50	18.50	17.60	16.40	15.40	14.30	13.10	11.90
	SDT	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
	KW	2.49	2.85	3.23	3.63	4.11	4.65	5.27	5.98
7	TCG	21.30	20.20	19.20	17.90	16.80	15.60	14.40	13.10
	SDT	26.00	31.00	36.00	41.00	46.00	51.00	56.00	61.00
	KW	2.56	2.92	3.30	3.71	4.18	4.72	5.34	6.04
10	TCG	23.20	22.00	20.90	19.50	18.30	17.10	15.70	14.40
	SDT	28.00	33.00	37.00	42.00	47.00	52.00	57.00	61.00
	KW	2.64	3.00	3.38	3.79	4.27	4.81	5.42	6.12
13	TCG	25.20	23.90	22.60	21.20	19.90	18.50	17.10	15.70
	SDT	29.00	34.00	39.00	43.00	48.00	53.00	58.00	62.00
	KW	2.73	3.09	3.48	3.88	4.36	4.90	5.51	6.21

KW – Total Power (kW)

SDT – Saturated Temperature Leaving Compressor (°C)

SST – Saturated Temperature Entering Compressor (°C)

TCG – Gross Cooling Capacity (1000 kW)

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 125.6°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 38CKM 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

- Units tested and rated as per: ISO 13253:2011 and UAE.S 5010-5/2016
- Unit construction will comply with latest edition of ANSI/ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards.
- 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 125.6°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).

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.