Carrier®
HEATING & COOLING

Product Data

38CKC 50 Hz Air Conditioner

Sizes 018 thru 060

Model 38CKC 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 9.5 when used with components designated by manufacturer.

FEATURES

Electrical Range — Single phase units are available in 018, 024, 030, and 036 sizes in 230v. Three-phase units are available in 036, 042, 048, and 060 sizes in 400v.

Wide Range of Sizes — The 38CKC is available in nominal sizes 018, 024, 030, 036, 042, 048, and 060 to meet the needs of residential and light commercial applications.

Weather Armor II Cabinet — A weather protective cabinet of prepainted steel is protected underneath by a zinc galvanized coating for a finish that will last for many years.

All screws on cabinet exterior are coated for a long-lasting, rust-resistant, quality appearance.

Totally Enclosed Fan Motor — Means greater reliability under adverse weather conditions and dependable performance for many years. The permanent-split-capacitor type motor was designed for optimum efficiency. The motor was tested and qualified under extreme conditions to ensure the greatest reliability.

Unit Design — Copper tube, epoxy coated, enhanced sine wave 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. Heat pump style drain pan allows for easy removal of water, dirt, and leaves.

Application Versatility — The unit can be combined with a wide variety of evaporator coils and blower packages to provide quiet, dependable comfort. Unit can be installed on a roof or at ground level.

External Service Valves — Both service valves are brass, front seating type. The 38CKC has sweat field 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.

Easy Serviceability — One access panel provides access to electrical controls and compressor. Removal of wire dome gives access to fan motor and removal of the top gives access to the coil.

Pressure Switches — All units are equipped with high and low pressure switches.

Additional Compressor Protection — Each compressor is protected with internal temperature- and current-sensitive overloads.

Sound Hood — 38CKC Sizes 036 through 060 have a compressor sound hood for noise attenuation.

3-Phase Monitor Board — Control board that monitors the electrical phase and prevents operation if wired incorrectly. The board is standard on the 048 and 060 3 phase equipment.

Operating Range— Minimum outdoor operating ambient in cooling mode is 55ºF (12.8ºC), maximum 125ºF (51.7ºC).

Quality Assurance

ISO 9001:2000

QMI REGISTERED

REGISTERED QUALITY SYSTEM

Model number nomenclature

38CKC **018** **7** **A** **3**

Electric Air Conditioner

Nominal Capacity

018 — 18,000 Btuh (5.3 kW)
024 — 24,000 Btuh (7.0 kW)
030 — 30,000 Btuh (8.8 kW)
036 — 36,000 Btuh (10.6 kW)
042 — 42,000 Btuh (12.3 kW)
048 — 48,000 Btuh (14.1 kW)
060 — 60,000 Btuh (17.6 kW)

Electrical

7 — 230-1-50
9 — 400-3-50

Series

Packaging

The data in this publication is displayed for all series, however, every series may not be available from manufacturer.

Physical data

UNIT SIZE / SERIES	018-7A	024-7A	030-7A	036-7A, 9A	042-9A	048-7A, 9A	060-9A
OPERATING WT (Lb/Kg)	120 / 54.5	130 / 59.1	140 / 63.6	152 / 69.1	175 / 79.5	213 / 96.8	219 / 99.5
COMPRESSOR							
Type	Recip	Recip	Recip	Recip	Scroll	Scroll	Scroll
REFRIGERANT	R-22						
Control	AccuRater®						
Charge (Lb/Kg) @ 15 ft / 4.6m	3.76 / 1.71	3.41 / 1.55	5.00 / 2.27	4.84/2.20	6.25 / 2.84	6.25/2.83	9.10/4.13
COND FAN	Propeller Type, Direct Drive						
Air Discharge	Vertical						
Air Qty (CFM / L/S)	1600 / 755	2000/944				3200 / 1510	
COND COIL							
Face Area (Sq ft / m²)	6.2 / 0.58	7.5 / 0.70	9.1 / 0.85	12.4 / 1.15	12.4 / 1.15	14.8 / 1.37	22.2 / 2.06
VALVE CONNECT. (In./mm ID)	Sweat						
Vapor	5/8 / 15.88		3/4 / 19.05	3/4 / 19.05	7/8 / 22.23		
Liquid				3/8 / 9.53			
REFRIG TUBES* (In./mm OD)							
Vapor	5/8 / 15.88		3/4 / 19.05	3/4 / 19.05	7/8 / 22.23		1-1/8 / 28.58
Liquid				3/8 / 9.53			

* Tube sizes are for runs up to 50 ft (15.24m). For tube set over 50 ft (15.24m), consult Residential Split-System Long-Line Application Guideline.
NOTE: See unit Installation Instructions for proper installation.

ACCURATER® PISTON CHART

UNIT SIZE	PISTON IDENTIFICATION NO.*
018-7A	57
024-7A	63
030-7A	70
036-7A, 9A	73
042-9A	78
048-7A, 9A	90
060-9A	98

* Piston listed is for any approved non-capillary tube coil combination. Piston is shipped with outdoor unit and must be installed in an approved indoor coil.

Accessories

PART NO.	DESCRIPTION
KSAHS1001AAA	Start Assist — Capacitor/Relay — Sizes 018, 024
KSAHS1301AAA	Start Assist — Capacitor/Relay — Size 030, 036 (7A)
KSAHS1601AAA	Start Assist — Capacitor/Relay — Size 048 (7A)
KAACS0101PTC	Start Assist — PTC — Sizes 018, 024
KAACS0201PTC	Start Assist — PTC — Sizes 030, 036, 048 (7A)
KAALS0101LLS*	Liquid Solenoid Valve — All Sizes
KSACY0101AAA	Cycle Protector — All Sizes
KAAWS0101AAA	Winter Start Control — All Sizes
KAAFT0101AAA	Evaporator Freeze Thermostat — All Sizes
KAATD0101TDR	Time-Delay Relay — All Sizes
KSASF0101AAA	Support Feet — All Sizes
KAACH1001AAA	Crankcase Heater — Sizes 018, 024, 030, 036 (7A)
KAACH1101AAA	Crankcase Heater— Sizes 036 (9A)
KAACH1201AAA	Crankcase Heater— Size 048 (7A)
KAACH1301AAA	Crankcase Heater— Sizes 042, 048 (9A), 060
KAACF0701SML	Coastal Filter — Size 018
KAACF1001MED	Coastal Filter — Sizes 024, 030, 036
KAACF1101LRG	Coastal Filter — Sizes 042, 048, 060
KAATX0201RPB	Thermostatic Expansion Valve (RPB) — Size 018
KAATX0301RPB	Thermostatic Expansion Valve (RPB) — Size 024
KAATX0401RPB	Thermostatic Expansion Valve (RPB) — Size 030
KAATX0501RPB	Thermostatic Expansion Valve (RPB) — Size 036, 042
KAATX0601RPB	Thermostatic Expansion Valve (RPB) — Size 048
KAATX0701RPB	Thermostatic Expansion Valve (RPB) — Size 060
KSATX0601HSO*	Thermostatic Expansion Valve (Hard Shutoff) — Sizes 018, 024, 030, 036, 042
KSATX0701HSO*	Thermostatic Expansion Valve (Hard Shutoff) — Size 048
KSATX1001HSO*	Thermostatic Expansion Valve (Hard Shutoff) — Size 060
KSALA0201R22	Low-Ambient Pressure Switch (R22) — All Sizes
KSALA0401AAA	MotorMaster® Control — 024, 030, 036 (7A), 048 (7A)
KSALA0501AAA	MotorMaster® Control — 036 (9A), 042, 048 (9A), 060
KH45LD060	Filter Drier — 018–042
KH45LE062	Filter Drier — 048, 060

* Do not use hard shutoff TXV with liquid solenoid valve.

THERMOSTAT	DESCRIPTION
TSTATCCNAC01-C	Thermostat, Auto Changeover, Non-Programmable, °F/°C, 1-Stage Heat, 1-Stage Cool
TSTATCCPAC01-B	Thermostat, Auto Changeover, 7-Day Programmable, °F/°C, 1-Stage Heat, 1-Stage Cool
TSTATCCBAC01-B	Builder's Thermostat, Manual Changeover, Non-Programmable, °F/°C, 1-Stage Heat, 1-Stage Cool
TSTATCCPRH01-B	Thermidistat, Programmable/Non-Programmable Thermostat with Humidity Control
TSTATCCSAC01	Thermostat, Manual Changeover, 5-2 Day Programmable, °F/°C, 1-Stage Heat/1-Stage Cool, 50/60 Hz, 24 Vac
TSTATXXSEN01-B	Outdoor Air Temperature Sensor
TSTATXXNBP01	Backplate for Non-Programmable Thermostat
TSTATXXPBP01	Backplate for Programmable Thermostat
TSTATXXBBP01	Backplate for Builder's Thermostat
TSTATXXSBP01	Backplate for Standard Programmable Thermostat
TSTATXXCNV10	Thermostat Conversion Kit (4 to 5 Wire) — 10 Pack

Accessory usage guideline

ACCESSORY	REQUIRED FOR LOW-AMBIENT APPLICATIONS (Below 55°F) (12.8°C)	REQUIRED FOR LONG-LINE APPLICATIONS* (Over 50 Ft) (15.24m)	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 Mi) (3.2km)
Crankcase Heater	Yes	Yes	No
Evaporator Freeze Thermostat	Yes	No	No
Winter Start Control	Yes†	No	No
Accumulator	No	No	No
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Low Ambient Controller or MotorMaster® Control	Yes	No	No
Wind Baffle	See low-ambient Instructions	No	No
Coastal Filter	No	No	Yes
Support Feet	Recommended	No	Recommended
Liquid-Line Solenoid Valve or Hard Shutoff TXV	No	See Long-Line Application Guideline	No

* For tubing line sets between 50 (15.24m) and 175 ft (53.34m), refer to Residential Split System Long-Line Application Guideline.
† Only when low-pressure switch is used.

Accessory description and usage (Listed alphabetically)

1. **Coastal Filter**
   A mesh screen inserted under the top cover and inside the base pan to protect the condenser coil from salt damage without restricting airflow.
SUGGESTED USE: In geographic areas where salt damage could occur.

2. **Compressor Start Assist — Capacitor/Relay Type**
   Start capacitor and start relay gives ''hard'' boost to compressor motor at each start-up.
SUGGESTED USE: Installations where interconnecting tube length exceeds 50 ft (15.24m).
Installations where outdoor design temperature exceeds 105°F (40.6°C).
Replacement installations with hard shutoff expansion valve on indoor coil.

3. **Compressor Start Assist — PTC Type**
   Solid-state electrical device which gives a ''soft'' boost to the compressor at each start-up.
SUGGESTED USE: Installations with marginal power supply.
Replacement installations with rapid pressure balance (RPB) expansion valve on indoor coil.

4. **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 chance of refrigerant slugging. May or may not include a thermostat control.
SUGGESTED USE: When interconnecting tube length exceeds 50 ft (15.24m).
When unit will be operated below 55°F (12.8°C) outdoor air temperature. (Use with low-ambient controller.)
All commercial installations.

5. **Cycle Protector**
   Solid-state timing device which prevents compressor rapid recycling. Control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including normal room thermostat cycling.
SUGGESTED USE: Installations in areas where power interruptions are frequent.
Where user is likely to ''play'' with the room thermostat.
All commercial installations.
Installations where interconnecting tube length exceeds 50 ft (15.24m).
High-rise applications.

6. **Evaporator Freeze Thermostat**
   A SPST temperature actuated switch which stops unit operation when evaporator reaches freeze-up conditions.
SUGGESTED USE: All units where winter start control has been added.

7. **Liquid Solenoid Valve (LSV)**
   An electrically operated shutoff valve to be installed at the outdoor or indoor unit (depending on tubing configuration) which stops and starts refrigerant liquid flow in response to compressor operation. Maintains a column of refrigerant liquid ready for action at next compressor operation cycle.
   NOTE: Compressor start assist–capacitor/relay type must also be used.
SUGGESTED USE: For improved system performance in air conditioners for certain combinations of indoor and outdoor units. (Refer to ARI Unitary Directory.)
In certain long-line applications. Refer to Residential Split System Long-Line Application Guideline.

8. **Low-Ambient Pressure Switch**
   A long-life pressure switch that maintains head pressure by turning the fan OFF and ON.
SUGGESTED USE: Cooling operation at outdoor temperatures below 55°F.
All commercial applications.

9. **MotorMaster® Control**
   A fan speed control device activated by a temperature sensor.Designed to control condenser fan motor speed n response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to –20°F (–28.9°C), it maintains condensing temperature at 100°F±10°F (37.8°C ± –12.2°C).
SUGGESTED USE: Cooling operation at outdoor temperatures below 55°F (12.8°C).
All commercial installations.

10. **Support Feet**
    Four stick-on plastic feet which raise the unit 4 in. (10.16cm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base; minimizes corrosion
SUGGESTED USE: Coastal installations.
Windy areas or where debris is normally circulating.
Rooftop installations.

Accessory description and usage (Listed alphabetically) continued

11. 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. Both hard shutoff and RPB valves are available.

SUGGESTED USE: For improved system performance in cooling mode for certain combinations of indoor and outdoor units. Refer to ARI Unitary Directory.

12. Time-Delay Relay

A SPST delay relay which briefly continues operation of the indoor blower motor to provide additional cooling after the compressor cycles off.

SUGGESTED USE: For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to ARI Unitary Directory.

13. Winter Start Control

A SPST delay relay which bypasses the low-pressure switch for approximately 3 minutes to permit start-up for cooling operation under low-load conditions.

SUGGESTED USE: All air conditioners where low-ambient controller has been added.

Electrical data

UNIT SIZE-SERIES	V/PH	OPER VOLTS*		COMPRESSOR		FAN FLA	MCA	MIN WIRE SIZE 60°C/75°C**	MAX LENGTH (Ft) 60°C/75°C‡	MAX LENGTH (m) 60°C/75°C‡	MAX FUSE† OR CKT BKR AMPS
		Max	Min	LRA	RLA						
018-7A	230-1	253	207	55.0	9.9	0.80	13.2	14	59/56	18.0/17.1	20
024-7A				68.0	11.6	0.52	15.0	14	53/50	16.2/15.2	25
030-7A				75.1	12.1	0.52	15.6	14	49/47	14.9/14.3	25
036-7A				94.0	17.7	0.52	22.6	12	55/52	16.8/15.8	35
048-7A				150.0	25.6	1.60	33.6	8/10	91/56	27.7/17.0	50
036-9A	400-3	440	360	42.0	6.4	0.30	8.3	14	202/192	61.8/58.7	15
042-9A				46.0	6.4	0.70	8.7	14	202/192	61.8/58.7	15
048-9A				63.0	7.9	0.70	10.7	14	165/157	50.3/47.9	15
060-9A				74.0	9.0	0.70	11.9	14	152/144	46.4/44	20

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

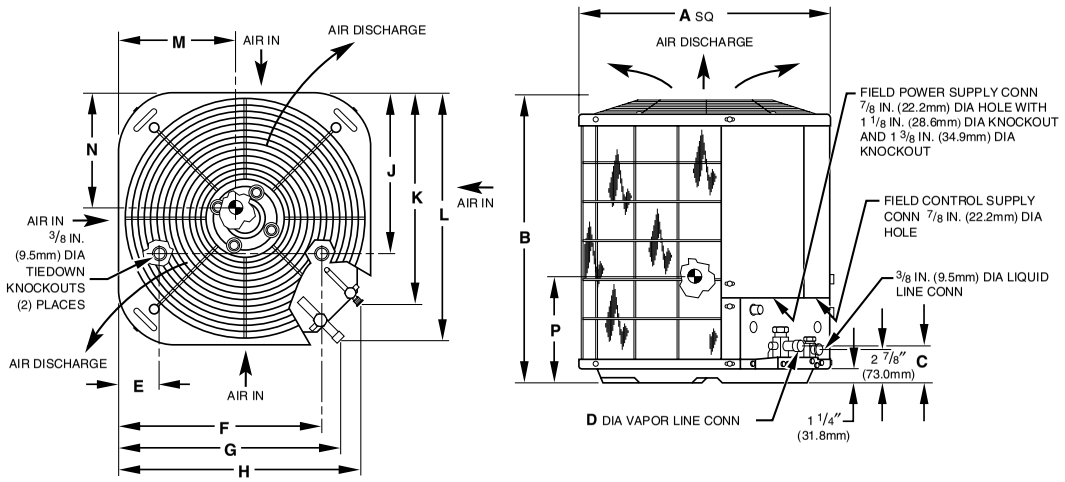
† Time-delay fuse.

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

** If wire is applied at ambient greater than 30°C (86°F), 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 (140°F) conductors, per the NEC (ANSI/NFPA 70) Article 336-26. If other than uncoated (non-plated), 60 or 75°C (140 or 167°F) insulation, copper wire (solid wire for 10 AWG and smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the NEC (ANSI/NFPA 70).

FLA — Full Load Amps
LRA — Locked Rotor Amps
MCA — Minimum Circuit Amps
RLA — Rated Load Amps

NOTES: 1. Control circuit is 24v on all units and requires external power source.
2. Copper wire must be used from service disconnect to unit.
3. All motors/compressors contain internal overload protection.



UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS (mm)	MINUMUM MOUNTING PAD DIMENSIONS (In.)
018	457.2 x 457.2	18 x 18
024, 030, 036, 042	571.5 x 571.5	22. 1/2 x 22 1/2
048, 060	762.0 x 762.0	30 x 30

NOTES:

1. Allow 30 In. (762.0mm) clearance to service side of unit, 48 In. (1219.2mm) above unit, 6 In. (152.4mm) on one side, 12 In. (308.8mm) on remaining side, and 24In. (609.6mm) between units for proper airflow.
2. Minimum outdoor operating abient in cooing mode is 55°F(13°C), max 125°F(52°C).
3. Series designation is the 13th position of the unit model number.
4. Center of gravity.

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S.I.

UNIT	SERIES	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	N mm	P mm	SHIPPING WEIGHT kg
38CKC018	A	457.2	608.8	81.0	15.9	76.2	381.0	414.3	450.9	258.8	409.6	446.1	200.2	212.7	257.2	54.1
38CKC024	A	571.5	557.2	81.0	15.9	93.7	460.4	501.7	565.2	365.1	496.9	560.4	263.5	206.4	273.1	59.4
38CKC030	A	571.5	658.8	81.0	19.1	93.7	460.4	501.7	565.2	365.1	496.9	560.9	263.5	206.4	273.1	61.8
38CKC036	A	571.5	862.0	81.0	19.1	93.7	460.4	501.7	565.2	365.1	496.9	560.4	263.5	273.1	273.1	64.9
38CKC042	A	571.5	862.0	81.0	22.2	93.7	460.4	501.7	565.2	365.1	496.9	560.4	263.5	273.1	273.1	74.1
38CKC048	A	762.0	709.6	82.6	22.2	165.1	596.9	692.2	755.7	508.0	687.4	750.9	381.0	330.2	368.3	98.6
38CKC060	A	762.0	1014.4	82.6	22.2	165.1	596.9	692.2	755.7	508.0	687.4	750.9	393.7	374.7	381.0	101.4

ENGLISH

UNIT	SERIES	A In.	B In.	C In.	D In.	E In.	F In.	G In.	H In.	J In.	K In.	L In.	M In.	N In.	P In.	SHIPPING WEIGHT Lb.
38CKC018	A	18	23-15/16	3-3/16	5/8	3	15	16-5/16	17-3/4	10-3/16	16-1/8	17-9/16	7-7/8	8- 3/8	10-1/8	119
38CKC024	A	22-1/2	21-15/16	3-3/16	5/8	3-11/16	18-1/8	19-3/4	22-1/4	14-3/8	19-9/16	22-1/16	10-3/8	10-1/4	10-3/4	131
38CKC030	A	22-1/2	25-15/16	3-3/16	3/4	3-11/16	18-1/8	19-3/4	22-1/4	14-3/8	19-9/16	22-1/16	10-3/8	10-1/4	10-3/4	136
38CKC036	A	22 1/2	33-15/16	3-3/16	3/4	3-11/16	18-1/8	19-3/4	22-1/4	14-3/8	19-9/16	22-1/16	10-3/8	10-3/4	10-3/4	143
38CKC042	A	22-1/2	33-15/16	3-1/4	7/8	3-11/16	18-1/8	19-3/4	22-1/4	14-3/8	19-9/16	22-1/16	10-3/8	10-3/4	10-3/4	163
38CKC048	A	30	27-15/16	3-1/4	7/8	6-1/2	23-1/2	27-1/4	29-3/4	20	27-1/16	29-9/16	15	13	14-1/2	217
38CKB060	A	30	39-15/16	3-1/4	7/8	6-1/2	23-1/2	27-1/4	29-3/4	20	27-1/16	29-9/16	15-1/2	14-3/4	15	223

Combination ratings*

OUTDOOR UNIT SIZE-SERIES	INDOOR UNIT	NOMINAL AIRFLOW		COOLING CAP @ 95°F (35°C)				COOLING CAP@115°F (46°C)		
				Rated Capacity		Power kW	Rated EER	Rated Capacity		Power kW
		CFM	L/S	BTUH	kW			BTUH	kW	
018-7A	FB4BSF018 FB4BSF024	600 600	280 280	18000 19000	5.27 5.57	2.00 2.00	9.00 9.50	14600 15600	4.28 4.57	2.25 2.40
024-7A	FB4BSF024 FB4BSF030	800 800	380 380	24000 24800	7.03 7.27	2.67 2.76	9.00 9.00	19500 20000	5.71 5.86	3.00 3.08
030-7A	FB4BSF030 FB4BSF036	1000 1000	467 467	29000 29800	8.50 8.73	3.22 3.31	9.00 9.00	24400 24700	7.17 7.24	3.59 3.63
036-7A, 9A	FB4BSF036 FB4BS(F,B)042	1200 1200	550 550	35000 35500	10.25 10.40	3.89 3.94	9.00 9.00	29100 29800	8.53 8.73	4.28 4.26
042-9A	FB4BS(F,B)042 FB4BS(F,B)048	1400 1400	653 653	39000 40000	11.43 11.72	4.33 4.21	9.00 9.50	33400 34100	9.79 9.99	5.14 5.01
048-7A, 9A	FB4BS(F,B)048 FB4BS(F,B)060	1600 1600	750 750	47000 48500	13.77 14.21	5.22 5.11	9.00 9.50	44700 45500	13.10 13.33	6.39 6.50
060-9A	FB4BS(F,B)060 FB4BSF070	1850 1850	850 850	60000 62500	17.58 18.31	6.67 6.58	9.00 9.50	54300 55100	15.91 16.14	7.76 7.35

* Ratings are net values reflecting the effects of circulating fan heat. Supplemental electric heat is not included. Ratings are based on: **Cooling Standard:** 80°F (27°C) db 67°F (19°C) wb indoor entering air temperature and 95°F (35°C) db air entering outdoor unit.

A-weighted sound power (dBA)

UNIT SIZE	SOUND RATING (dBA)	TYPICAL OCTAVE BAND SPECTRUM (WITHOUT TONE ADJUSTMENT) (Hz)						
		125	250	500	1000	2000	4000	8000
018-7A	77	59.0	66.0	69.0	71.5	70.0	65.0	58.5
024-7A	77	52.0	65.5	67.0	69.0	68.0	68.5	63.0
030-7A	77	55.0	64.5	71.0	72.0	70.5	69.0	62.5
036-7A	75	54.0	65.0	66.5	69.5	67.0	66.5	60.5
036-9A	78	59.0	68.0	68.0	72.5	73.0	71.0	67.0
042-7A	78	59.0	66.5	68.5	75.5	74.5	73.0	65.5
048-7A, 9A	77	52.0	64.0	69.5	70.5	68.5	66.5	63.0
060-9A	76	54.5	61.0	66.5	69.5	68.5	68.0	63.5

Detailed cooling capacities* (S.I.)

EVAP AIR		CONDENSER ENTERING AIR TEMPERATURES °C																	
		24			29			35			41			46			52		
L/S	(C) EWB	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**
38CKC018-7A Outdoor Section With FB4BSF018 Indoor Section																			
250	14	5.08	5.08	1.61	4.71	4.71	1.73	4.34	4.34	1.85	3.98	3.98	1.97	3.63	3.63	2.10	3.28	3.28	2.23
	17	5.47	4.66	1.64	5.03	4.39	1.77	4.57	4.12	1.88	4.12	3.84	1.99	3.68	3.57	2.11	3.28	3.28	2.23
	19	5.96	3.96	1.67	5.60	3.78	1.82	5.15	3.56	1.96	4.66	3.31	2.08	4.18	3.07	2.20	3.70	2.84	2.32
	22	6.30	3.20	1.70	6.07	3.10	1.86	5.71	2.95	2.02	5.26	2.75	2.17	4.76	2.53	2.32	4.25	2.32	2.44
285	14	5.32	5.32	1.65	4.94	4.94	1.78	4.56	4.56	1.90	4.17	4.17	2.03	3.80	3.80	2.16	3.43	3.43	2.29
	17	5.60	4.95	1.67	5.17	4.69	1.81	4.71	4.40	1.93	4.24	4.11	2.04	3.80	3.80	2.16	3.43	3.43	2.29
	19	6.05	4.12	1.70	5.72	3.99	1.85	5.27	3.77	2.00	4.78	3.52	2.13	4.28	3.27	2.25	3.79	3.03	2.37
	22	6.36	3.27	1.72	6.15	3.20	1.89	5.81	3.06	2.05	5.37	2.88	2.21	4.87	2.67	2.37	4.35	2.45	2.50
320	14	5.51	5.51	1.68	5.14	5.14	1.83	4.74	4.74	1.96	4.34	4.34	2.08	3.94	3.94	2.21	3.56	3.56	2.35
	17	5.70	5.20	1.70	5.28	4.96	1.84	4.82	4.66	1.97	4.34	4.34	2.08	3.94	3.94	2.21	3.56	3.56	2.35
	19	6.11	4.27	1.73	5.81	4.17	1.88	5.37	3.97	2.03	4.87	3.72	2.18	4.35	3.46	2.29	3.85	3.21	2.41
	22	6.39	3.33	1.75	6.19	3.27	1.91	5.88	3.16	2.08	5.45	3.00	2.24	4.96	2.79	2.41	4.42	2.57	2.54

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BSF	024	1.05	1.00	—	—	—	—

38CKC024-7A Outdoor Section With FB4BSF024 Indoor Section																			
330	14	6.82	6.82	2.12	6.34	6.34	2.26	5.85	5.85	2.42	5.36	5.36	2.58	4.90	4.90	2.75	4.44	4.44	2.93
	17	7.32	6.26	2.17	6.72	5.89	2.34	6.12	5.53	2.47	5.53	5.17	2.62	4.97	4.82	2.77	4.44	4.44	2.93
	19	8.08	5.38	2.25	7.48	5.08	2.43	6.85	4.76	2.62	6.21	4.43	2.78	5.58	4.12	2.93	4.98	3.82	3.09
	22	8.70	4.41	2.32	8.21	4.20	2.52	7.62	3.95	2.72	6.99	3.68	2.92	6.34	3.40	3.12	5.68	3.12	3.30
380	14	7.17	7.17	2.19	6.66	6.66	2.36	6.14	6.14	2.51	5.63	5.63	2.67	5.14	5.14	2.85	4.66	4.66	3.03
	17	7.53	6.69	2.22	6.92	6.32	2.39	6.30	5.94	2.54	5.70	5.55	2.69	5.14	5.14	2.85	4.66	4.66	3.03
	19	8.26	5.67	2.30	7.67	5.39	2.48	7.03	5.07	2.67	6.36	4.73	2.85	5.71	4.41	3.00	5.09	4.10	3.16
	22	8.82	4.55	2.36	8.35	4.36	2.56	7.78	4.12	2.77	7.15	3.86	2.97	6.49	3.59	3.18	5.82	3.30	3.38
425	14	7.45	7.45	2.25	6.93	6.93	2.43	6.39	6.39	2.60	5.86	5.86	2.76	5.34	5.34	2.93	4.84	4.84	3.12
	17	7.70	7.10	2.27	7.09	6.71	2.45	6.47	6.30	2.62	5.86	5.86	2.76	5.34	5.34	2.93	4.84	4.84	3.12
	19	8.38	5.94	2.34	7.81	5.68	2.53	7.17	5.37	2.72	6.49	5.03	2.91	5.82	4.69	3.07	5.18	4.36	3.23
	22	8.90	4.68	2.40	8.44	4.50	2.61	7.89	4.28	2.81	7.26	4.03	3.02	6.60	3.76	3.23	5.93	3.48	3.43

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BSF	030	1.03	1.03	—	—	—	—

38CKC030-7A Outdoor Section With FB4BSF030 Indoor Section																			
415	14	8.24	8.24	2.60	7.76	7.76	2.79	7.28	7.28	2.97	6.79	6.79	3.15	6.30	6.30	3.34	5.81	5.81	3.52
	17	8.66	7.68	2.65	8.07	7.35	2.84	7.48	7.01	3.00	6.88	6.67	3.17	6.30	6.30	3.34	5.81	5.81	3.52
	19	9.54	6.55	2.74	8.94	6.27	2.95	8.32	5.98	3.16	7.66	5.67	3.34	7.01	5.36	3.51	6.37	5.07	3.68
	22	10.34	5.33	2.82	9.81	5.12	3.05	9.21	4.88	3.27	8.56	4.62	3.50	7.88	4.34	3.71	7.19	4.06	3.92
470	14	8.62	8.62	2.68	8.13	8.13	2.89	7.62	7.62	3.08	7.10	7.10	3.26	6.59	6.59	3.45	6.07	6.07	3.64
	17	8.88	8.23	2.71	8.29	7.88	2.91	7.70	7.52	3.10	7.10	7.10	3.26	6.58	6.58	3.45	6.07	6.07	3.64
	19	9.73	6.94	2.79	9.13	6.67	3.01	8.50	6.38	3.22	7.82	6.06	3.43	7.15	5.75	3.59	6.49	5.44	3.76
	22	10.49	5.53	2.87	9.97	5.34	3.10	9.37	5.11	3.34	8.72	4.86	3.56	8.03	4.59	3.78	7.32	4.31	3.99
530	14	8.94	8.94	2.75	8.43	8.43	2.96	7.90	7.90	3.18	7.36	7.36	3.36	6.82	6.82	3.55	6.29	6.29	3.75
	17	9.07	8.72	2.76	8.48	8.35	2.97	7.91	7.91	3.18	7.36	7.36	3.36	6.82	6.82	3.55	6.29	6.29	3.75
	19	9.88	7.29	2.84	9.28	7.04	3.06	8.63	6.75	3.28	7.96	6.44	3.49	7.26	6.11	3.66	6.59	5.79	3.83
	22	10.59	5.71	2.92	10.08	5.54	3.16	9.49	5.32	3.39	8.83	5.07	3.62	8.14	4.81	3.84	7.42	4.53	4.05

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BSF	036	1.03	1.03	—	—	—	—

See notes on pg. 11.

Detailed cooling capacities* (S.I.)

EVAP AIR		CONDENSER ENTERING AIR TEMPERATURES °C																	
		24			29			35			41			46			52		
L/S	(C) EWB	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**	Capacity† (kW) Total	Capacity† (kW) Sens‡	Sys. Power kW**
38CKC036-7A, 9A Outdoor Section With FB4BSF036 Indoor Section																			
495	14	10.12	10.12	3.19	9.48	9.48	3.38	8.83	8.83	3.56	8.20	8.20	3.76	7.57	7.57	3.96	6.95	6.95	4.16
	17	10.59	9.51	3.24	9.81	9.04	3.44	9.03	8.57	3.60	8.27	8.10	3.77	7.57	7.57	3.96	6.95	6.95	4.16
	19	11.69	8.10	3.36	10.88	7.71	3.58	10.06	7.31	3.80	9.19	6.89	3.99	8.38	6.49	4.17	7.57	6.10	4.34
	22	12.68	6.57	3.47	11.94	6.27	3.71	11.13	5.94	3.95	10.29	5.59	4.18	9.41	5.23	4.41	8.56	4.89	4.63
565	14	10.57	10.57	3.30	9.90	9.90	3.52	9.22	9.22	3.71	8.55	8.55	3.90	7.89	7.89	4.11	7.24	7.24	4.32
	17	10.86	10.17	3.33	10.07	9.68	3.54	9.28	9.16	3.72	8.54	8.54	3.90	7.89	7.89	4.11	7.24	7.24	4.32
	19	11.92	8.57	3.45	11.10	8.19	3.67	10.25	7.79	3.89	9.37	7.36	4.10	8.53	6.95	4.28	7.70	6.54	4.46
	22	12.84	6.80	3.55	12.12	6.53	3.80	11.31	6.21	4.04	10.46	5.87	4.27	9.57	5.52	4.50	8.69	5.16	4.72
635	14	10.94	10.94	3.40	10.25	10.25	3.63	9.55	9.55	3.85	8.84	8.84	4.04	8.15	8.15	4.25	7.47	7.47	4.46
	17	11.08	10.75	3.42	10.29	10.27	3.63	9.54	9.54	3.85	8.84	8.84	4.04	8.15	8.15	4.25	7.47	7.47	4.46
	19	12.08	9.00	3.53	11.26	8.65	3.75	10.40	8.24	3.98	9.51	7.82	4.19	8.64	7.38	4.38	7.80	6.95	4.56
	22	12.94	7.01	3.62	12.24	6.76	3.88	11.43	6.46	4.12	10.57	6.12	4.36	9.68	5.78	4.59	8.80	5.43	4.81

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BS(F,B)	042	1.01	1.01	—	—	—	—

38CKC042-9A Outdoor Section With FB4BSF042 Indoor Section																			
580	14	11.22	11.22	3.32	10.65	10.65	3.70	10.04	10.04	4.08	9.42	9.42	4.49	8.78	8.78	4.91	8.13	8.13	5.30
	17	11.58	10.62	3.35	10.91	10.21	3.74	10.21	9.78	4.11	9.48	9.31	4.50	8.78	8.78	4.91	8.12	8.12	5.30
	19	12.64	8.96	3.45	11.96	8.63	3.84	11.22	8.27	4.25	10.42	7.88	4.65	9.63	7.50	5.05	8.80	7.10	5.42
	22	13.69	7.20	3.55	13.05	6.94	3.94	12.33	6.65	4.35	11.54	6.33	4.77	10.71	5.99	5.19	9.86	5.65	5.60
660	14	11.64	11.64	3.43	11.06	11.06	3.83	10.42	10.42	4.22	9.77	9.77	4.62	9.12	9.12	5.03	8.44	8.44	5.43
	17	11.83	11.32	3.45	11.16	10.89	3.84	10.43	10.43	4.22	9.77	9.77	4.62	9.12	9.12	5.03	8.44	8.44	5.43
	19	12.86	9.49	3.53	12.17	9.17	3.92	11.43	8.82	4.33	10.60	8.42	4.75	9.79	8.02	5.14	8.94	7.61	5.52
	22	13.85	7.48	3.64	13.22	7.24	4.03	12.50	6.96	4.43	11.71	6.65	4.85	10.86	6.31	5.26	10.00	5.97	5.68
745	14	11.99	11.99	3.53	11.40	11.40	3.93	10.75	10.75	4.34	10.08	10.08	4.74	9.40	9.40	5.14	8.70	8.70	5.54
	17	12.05	11.92	3.53	11.40	11.40	3.93	10.75	10.75	4.34	10.07	10.07	4.74	9.40	9.40	5.14	8.70	8.70	5.54
	19	13.01	9.98	3.61	12.32	9.68	4.00	11.57	9.33	4.41	10.74	8.93	4.82	9.91	8.51	5.23	9.05	8.08	5.61
	22	13.97	7.73	3.72	13.34	7.51	4.11	12.62	7.24	4.51	11.84	6.94	4.93	10.97	6.62	5.34	10.10	6.27	5.75

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BS(F,B)	048	1.02	.97	—	—	—	—

38CKC048-7A, 9A Outdoor Section With FB4BSF048 Indoor Section																			
660	14	12.00	12.00	3.97	11.97	11.97	4.40	11.90	11.90	4.88	11.76	11.76	5.41	11.54	11.54	5.99	11.22	11.22	6.61
	17	12.54	11.17	4.03	12.43	11.32	4.47	12.24	11.41	4.94	11.98	11.45	5.45	11.62	11.43	6.00	11.22	11.22	6.61
	19	13.78	9.52	4.15	13.70	9.63	4.61	13.51	9.69	5.12	13.24	9.71	5.69	12.86	9.69	6.26	12.36	9.62	6.86
	22	14.92	7.72	4.28	14.97	7.83	4.76	14.88	7.88	5.28	14.66	7.88	5.86	14.32	7.83	6.49	13.85	7.74	7.17
755	14	12.52	12.52	4.09	12.50	12.50	4.55	12.41	12.41	5.04	12.26	12.26	5.58	12.03	12.03	6.16	11.69	11.69	6.79
	17	12.82	11.91	4.12	12.74	12.12	4.58	12.55	12.20	5.07	12.27	12.27	5.58	12.03	12.03	6.16	11.69	11.69	6.79
	19	14.04	10.07	4.25	13.97	10.23	4.71	13.77	10.32	5.22	13.50	10.37	5.79	13.10	10.35	6.39	12.58	10.30	6.99
	22	15.12	8.01	4.37	15.19	8.16	4.85	15.12	8.25	5.38	14.90	8.27	5.96	14.56	8.24	6.59	14.08	8.17	7.27
850	14	12.95	12.95	4.20	12.93	12.93	4.66	12.84	12.84	5.19	12.68	12.68	5.74	12.43	12.43	6.32	12.09	12.09	6.95
	17	13.04	12.57	4.21	13.01	12.82	4.67	12.84	12.84	5.19	12.68	12.68	5.74	12.43	12.43	6.32	12.09	12.09	6.95
	19	14.23	10.59	4.33	14.17	10.79	4.80	13.97	10.92	5.31	13.69	10.99	5.88	13.29	11.00	6.50	12.75	10.95	7.11
	22	15.26	8.28	4.45	15.35	8.46	4.94	15.30	8.59	5.47	15.08	8.64	6.05	14.74	8.63	6.68	14.25	8.58	7.37

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BS(F,B)	060	1.03	.98	—	—	—	—

See notes on pg. 11.

Detailed cooling capacities* (S.I.) continued

EVAP AIR		CONDENSER ENTERING AIR TEMPERATURES °C																	
		24			29			35			41			46			52		
L/S	EWB	Capacity† (kW)		Comp. Power kW**	Capacity† (kW)		Comp. Power kW**	Capacity† (kW)		Comp. Power kW**	Capacity† (kW)		Comp. Power kW**	Capacity† (kW)		Comp. Power kW**	Capacity† (kW)		Comp. Power kW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38CKC060-9A Outdoor Section With FB4BNF060 Indoor Section																			
800	14	16.20	16.20	5.37	15.72	15.72	5.85	15.18	15.18	6.34	14.61	14.61	6.88	13.99	13.99	7.41	13.30	13.30	7.94
	17	16.95	15.17	5.40	16.31	14.91	5.93	15.59	14.61	6.40	14.85	14.29	6.91	14.06	13.90	7.42	13.30	13.30	7.94
	19	18.55	12.81	5.52	18.07	12.70	6.03	17.35	12.45	6.59	16.55	12.15	7.14	15.71	11.84	7.65	14.76	11.50	8.17
	22	19.71	10.19	5.64	19.60	10.24	6.17	19.15	10.12	6.72	18.46	9.90	7.29	17.65	9.63	7.87	16.73	9.31	8.46
875	14	16.67	16.67	5.46	16.17	16.17	5.99	15.61	15.61	6.48	15.03	15.03	7.00	14.40	14.40	7.54	13.69	13.69	8.07
	17	17.21	15.83	5.49	16.58	15.58	6.03	15.85	15.27	6.51	15.12	14.92	7.02	14.40	14.40	7.54	13.69	13.69	8.07
	19	18.70	13.21	5.60	18.29	13.18	6.12	17.58	12.96	6.67	16.77	12.67	7.24	15.91	12.36	7.76	14.95	12.02	8.27
	22	19.81	10.37	5.74	19.74	10.47	6.26	19.32	10.40	6.81	18.66	10.21	7.37	17.85	9.95	7.95	16.93	9.64	8.54
945	14	17.06	17.06	5.55	16.58	16.58	6.09	16.00	16.00	6.60	15.41	15.41	7.13	14.76	14.76	7.66	14.04	14.04	8.20
	17	17.43	16.43	5.57	16.83	16.21	6.10	16.10	15.87	6.61	15.41	15.41	7.13	14.76	14.76	7.66	14.04	14.04	8.20
	19	18.82	13.59	5.69	18.46	13.63	6.20	17.77	13.45	6.75	16.95	13.18	7.32	16.08	12.86	7.86	15.11	12.52	8.37
	22	19.87	10.54	5.82	19.84	10.69	6.35	19.45	10.65	6.90	18.82	10.50	7.46	18.01	10.25	8.03	17.08	9.95	8.62

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4BSB	070	1.04	.98	—	—	—	—

* Detailed cooling capacities are based on indoor and outdoor unit at the same elevation and connected by 7.62m of tubing. If other than 7.62m 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 27°C entering air at the indoor coil. For sensible capacities at other than 27°C, deduct 245 kW per 480 L/S of indoor coil air for each degree below 27°C, or add 245 kW per 480 L/S of indoor coil air per degree above 27°C.
When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

** Unit kW is total of indoor and outdoor unit kilowatts.

EWB — Entering Wet Bulb

Detailed cooling capacities* (English)

INDOOR COIL AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
CFM	(F) EWB	Capacity† (MBtuh) Total	Capacity† (MBtuh) Sens‡	Comp. Power kW**	Capacity† (MBtuh) Total	Capacity† (MBtuh) Sens‡	Comp. Power kW**	Capacity† (MBtuh) Total	Capacity† (MBtuh) Sens‡	Comp. Power kW**	Capacity† (MBtuh) Total	Capacity† (MBtuh) Sens‡	Comp. Power kW**	Capacity† (MBtuh) Total	Capacity† (MBtuh) Sens‡	Comp. Power kW**	Capacity† (MBtuh) Total	Capacity† (MBtuh) Sens‡	Comp. Power kW**
38CKC018-7A Outdoor Section With FB4BSF018 Indoor Section																			
525	57	17.33	17.33	1.61	16.09	16.09	1.73	14.82	14.82	1.85	13.59	13.59	1.97	12.37	12.37	2.10	11.19	11.19	2.23
	62	18.66	15.89	1.64	17.15	14.99	1.77	15.60	14.05	1.88	14.05	13.12	1.99	12.57	12.18	2.11	11.20	11.20	2.23
	67	20.35	13.51	1.67	19.10	12.92	1.82	17.57	12.14	1.96	15.90	11.30	2.08	14.26	10.48	2.20	12.64	9.68	2.32
	72	21.52	10.91	1.70	20.72	10.58	1.86	19.48	10.06	2.02	17.94	9.40	2.17	16.23	8.65	2.32	14.50	7.93	2.44
600	57	18.15	18.15	1.65	16.87	16.87	1.78	15.55	15.55	1.90	14.24	14.24	2.03	12.96	12.96	2.16	11.70	11.70	2.29
	62	19.12	16.88	1.67	17.64	16.01	1.81	16.07	15.03	1.93	14.47	14.01	2.04	12.97	12.97	2.16	11.70	11.70	2.29
	67	20.66	14.08	1.70	19.52	13.62	1.85	18.00	12.88	2.00	16.30	12.02	2.13	14.60	11.17	2.25	12.92	10.35	2.37
	72	21.70	11.15	1.72	20.98	10.91	1.89	19.83	10.46	2.05	18.32	9.84	2.21	16.62	9.10	2.37	14.84	8.36	2.50
675	57	18.79	18.79	1.68	17.53	17.53	1.83	16.18	16.18	1.96	14.80	14.80	2.08	13.46	13.46	2.21	12.15	12.15	2.35
	62	19.46	17.75	1.70	18.02	16.92	1.84	16.45	15.89	1.97	14.83	14.83	2.08	13.46	13.46	2.21	12.14	12.14	2.35
	67	20.85	14.56	1.73	19.81	14.23	1.88	18.32	13.55	2.03	16.63	12.70	2.18	14.86	11.82	2.29	13.15	10.96	2.41
	72	21.81	11.36	1.75	21.13	11.18	1.91	20.06	10.80	2.08	18.60	10.23	2.24	16.92	9.53	2.41	15.09	8.76	2.54

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BSF	024	1.06	1.00	—	—	—	—

38CKC024-7A Outdoor Section With FB4BSF024 Indoor Section																			
700	57	23.29	23.29	2.12	21.63	21.63	2.26	19.95	19.95	2.42	18.31	18.31	2.58	16.72	16.72	2.75	15.16	15.16	2.93
	62	24.99	21.35	2.17	22.94	20.11	2.34	20.89	18.87	2.47	18.87	17.65	2.62	16.95	16.45	2.77	15.17	15.17	2.93
	67	27.57	18.36	2.25	25.54	17.34	2.43	23.39	16.24	2.62	21.19	15.13	2.78	19.05	14.06	2.93	17.00	13.04	3.09
	72	29.71	15.05	2.32	28.01	14.32	2.52	26.01	13.47	2.72	23.87	12.55	2.92	21.63	11.59	3.12	19.40	10.64	3.30
800	57	24.48	24.48	2.19	22.72	22.72	2.36	20.96	20.96	2.51	19.22	19.22	2.67	17.53	17.53	2.85	15.90	15.90	3.03
	62	25.70	22.84	2.22	23.61	21.57	2.39	21.51	20.26	2.54	19.46	18.94	2.69	17.54	17.54	2.85	15.90	15.90	3.03
	67	28.18	19.35	2.30	26.19	18.40	2.48	24.00	17.31	2.67	21.71	16.15	2.85	19.50	15.04	3.00	17.38	13.98	3.16
	72	30.11	15.54	2.36	28.49	14.88	2.56	26.54	14.07	2.77	24.40	13.18	2.97	22.14	12.24	3.18	19.85	11.26	3.38
900	57	25.44	25.44	2.25	23.64	23.64	2.43	21.82	21.82	2.60	20.00	20.00	2.76	18.22	18.22	2.93	16.51	16.51	3.12
	62	26.29	24.24	2.27	24.18	22.91	2.45	22.07	21.52	2.62	20.01	20.01	2.76	18.22	18.22	2.93	16.51	16.51	3.12
	67	28.61	20.26	2.34	26.67	19.38	2.53	24.48	18.32	2.72	22.17	17.16	2.91	19.86	15.99	3.07	17.68	14.88	3.23
	72	30.39	15.97	2.40	28.82	15.37	2.61	26.92	14.62	2.81	24.79	13.76	3.02	22.54	12.84	3.23	20.22	11.88	3.43

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BSF	030	1.03	1.03	—	—	—	—

38CKC030-7A Outdoor Section With FB4BSF030 Indoor Section																			
875	57	28.11	28.11	2.60	26.50	26.50	2.79	24.83	24.83	2.97	23.17	23.17	3.15	21.51	21.51	3.34	19.84	19.84	3.52
	62	29.54	26.22	2.65	27.55	25.08	2.84	25.52	23.93	3.00	23.48	22.75	3.17	21.52	21.52	3.34	19.84	19.84	3.52
	67	32.55	22.37	2.74	30.51	21.41	2.95	28.39	20.40	3.16	26.15	19.34	3.34	23.92	18.31	3.51	21.74	17.30	3.68
	72	35.31	18.21	2.82	33.48	17.48	3.05	31.42	16.64	3.27	29.23	15.76	3.50	26.90	14.83	3.71	24.54	13.87	3.92
1000	57	29.43	29.43	2.68	27.73	27.73	2.89	26.01	26.01	3.08	24.23	24.23	3.26	22.48	22.48	3.45	20.73	20.73	3.64
	62	30.32	28.08	2.71	28.30	26.91	2.91	26.27	25.66	3.10	24.24	24.24	3.26	22.47	22.47	3.45	20.73	20.73	3.64
	67	33.22	23.68	2.79	31.17	22.76	3.01	29.00	21.76	3.22	26.70	20.68	3.43	24.40	19.61	3.59	22.16	18.57	3.76
	72	35.81	18.89	2.87	34.03	18.23	3.10	31.98	17.44	3.34	29.77	16.57	3.56	27.40	15.65	3.78	25.00	14.71	3.99
1125	57	30.50	30.50	2.75	28.76	28.76	2.96	26.98	26.98	3.18	25.12	25.12	3.36	23.28	23.28	3.55	21.46	21.46	3.75
	62	30.96	29.76	2.76	28.94	28.50	2.97	26.98	26.98	3.18	25.12	25.12	3.36	23.27	23.27	3.55	21.46	21.46	3.75
	67	33.71	24.89	2.84	31.67	24.03	3.06	29.46	23.04	3.28	27.15	21.98	3.49	24.78	20.85	3.66	22.49	19.76	3.83
	72	36.14	19.49	2.92	34.40	18.90	3.16	32.37	18.16	3.39	30.15	17.32	3.62	27.78	16.43	3.84	25.32	15.48	4.05

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling Capacity	Cooling Power	Indoor Section	Size	Cooling Capacity	Cooling Power
FB4BSF	036	1.03	1.03	—	—	—	—

See notes on pg. 14.

Detailed cooling capacities* (English)

INDOOR COIL AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
CFM	(F) EWB	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38CKC036-7A, 9A Outdoor Section With FB4BSF036 Indoor Section																			
1050	57	34.54	34.54	3.19	32.36	32.36	3.38	30.15	30.15	3.56	27.97	27.97	3.76	25.85	25.85	3.96	23.72	23.72	4.16
	62	36.14	32.46	3.24	33.49	30.87	3.44	30.83	29.26	3.60	28.24	27.63	3.77	25.85	25.85	3.96	23.72	23.72	4.16
	67	39.90	27.64	3.36	37.15	26.33	3.58	34.32	24.95	3.80	31.38	23.51	3.99	28.58	22.16	4.17	25.83	20.82	4.34
	72	43.27	22.41	3.47	40.77	21.40	3.71	38.00	20.26	3.95	35.11	19.07	4.18	32.12	17.86	4.41	29.21	16.68	4.63
1200	57	36.09	36.09	3.30	33.80	33.80	3.52	31.48	31.48	3.71	29.17	29.17	3.90	26.93	26.93	4.11	24.70	24.70	4.32
	62	37.07	34.71	3.33	34.38	33.05	3.54	31.68	31.25	3.72	29.16	29.16	3.90	26.92	26.92	4.11	24.69	24.69	4.32
	67	40.67	29.25	3.45	37.90	27.96	3.67	35.00	26.59	3.89	31.99	25.13	4.10	29.10	23.71	4.28	26.28	22.32	4.46
	72	43.81	23.21	3.55	41.37	22.28	3.80	38.60	21.20	4.04	35.69	20.03	4.27	32.65	18.83	4.50	29.67	17.63	4.72
1350	57	37.34	37.34	3.40	35.00	35.00	3.63	32.58	32.58	3.85	30.16	30.16	4.04	27.82	27.82	4.25	25.50	25.50	4.46
	62	37.83	36.69	3.42	35.11	35.05	3.63	32.58	32.58	3.85	30.15	30.15	4.04	27.81	27.81	4.25	25.50	25.50	4.46
	67	41.22	30.72	3.53	38.44	29.51	3.75	35.51	28.14	3.98	32.47	26.68	4.19	29.50	25.18	4.38	26.63	23.72	4.56
	72	44.16	23.93	3.62	41.77	23.08	3.88	39.02	22.04	4.12	36.09	20.90	4.36	33.04	19.74	4.59	30.02	18.53	4.81

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4BS(F,B)	042	1.01	1.01	—	—	—	—

38CKC042-9A Outdoor Section With FB4BSF042 Indoor Section																			
1225	57	38.28	38.28	3.32	36.35	36.35	3.70	34.27	34.27	4.08	32.14	32.14	4.49	29.96	29.96	4.91	27.73	27.73	5.30
	62	39.51	36.24	3.35	37.25	34.85	3.74	34.83	33.36	4.11	32.37	31.78	4.50	29.96	29.96	4.91	27.73	27.73	5.30
	67	43.15	30.58	3.45	40.83	29.46	3.84	38.28	28.23	4.25	35.56	26.90	4.65	32.86	25.59	5.05	30.04	24.23	5.42
	72	46.71	24.56	3.55	44.54	23.68	3.94	42.09	22.69	4.35	39.38	21.60	4.77	36.55	20.46	5.19	33.67	19.30	5.60
1400	57	39.74	39.74	3.43	37.73	37.73	3.83	35.57	35.57	4.22	33.34	33.34	4.62	31.14	31.13	5.03	28.81	28.81	5.43
	62	40.37	38.65	3.45	38.10	37.17	3.84	35.61	35.61	4.22	33.33	33.33	4.62	31.13	31.13	5.03	28.81	28.81	5.43
	67	43.87	32.39	3.53	41.54	31.30	3.92	39.00	30.09	4.33	36.17	28.73	4.75	33.40	27.37	5.14	30.53	25.96	5.52
	72	47.28	25.52	3.64	45.12	24.70	4.03	42.66	23.74	4.43	39.98	22.69	4.85	37.07	21.55	5.26	34.14	20.38	5.68
1575	57	40.92	40.92	3.53	38.89	38.89	3.93	36.68	36.68	4.34	34.39	34.39	4.74	32.10	32.10	5.14	29.70	29.70	5.54
	62	41.12	40.68	3.53	38.91	38.91	3.93	36.67	36.67	4.34	34.38	34.38	4.74	32.09	32.09	5.14	29.69	29.69	5.54
	67	44.39	34.07	3.61	42.05	33.03	4.00	39.49	31.83	4.41	36.65	30.48	4.82	33.81	29.05	5.23	30.90	27.58	5.61
	72	47.68	26.39	3.72	45.51	25.63	4.11	43.06	24.71	4.51	40.39	23.69	4.93	37.44	22.58	5.34	34.48	21.41	5.75

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4BS(F,B)	048	1.03	.97	—	—	—	—

38CKC048-7A, 9A Outdoor Section With FB4BSF048 Indoor Section																			
1400	57	40.95	40.95	3.97	40.87	40.87	4.40	40.63	40.63	4.88	40.14	40.14	5.41	39.38	39.38	5.99	38.29	38.29	6.61
	62	42.79	38.14	4.03	42.41	38.63	4.47	41.78	38.94	4.94	40.87	39.08	5.45	39.66	38.99	6.00	38.29	38.29	6.61
	67	47.02	32.49	4.15	46.74	32.87	4.61	46.10	33.07	5.12	45.20	33.14	5.69	43.89	33.06	6.26	42.17	32.85	6.86
	72	50.91	26.36	4.28	51.08	26.72	4.76	50.77	26.90	5.28	50.02	26.89	5.86	48.89	26.74	6.49	47.26	26.41	7.17
1600	57	42.73	42.73	4.09	42.65	42.65	4.55	42.37	42.37	5.04	41.86	41.86	5.58	41.05	41.05	6.16	39.91	39.91	6.79
	62	43.75	40.63	4.12	43.47	41.35	4.58	42.83	41.65	5.07	41.88	41.88	5.58	41.04	41.04	6.16	39.91	39.91	6.79
	67	47.90	34.37	4.25	47.67	34.90	4.71	47.00	35.21	5.22	46.06	35.38	5.79	44.70	35.34	6.39	42.93	35.17	6.99
	72	51.59	27.35	4.37	51.85	27.85	4.85	51.61	28.15	5.38	50.86	28.22	5.96	49.70	28.14	6.59	48.04	27.87	7.27
1800	57	44.20	44.20	4.20	44.13	44.13	4.66	43.82	43.82	5.19	43.28	43.28	5.74	42.44	42.44	6.32	41.26	41.26	6.95
	62	44.51	42.90	4.21	44.40	43.74	4.67	43.84	43.84	5.19	43.27	43.27	5.74	42.43	42.43	6.32	41.25	41.25	6.95
	67	48.56	36.14	4.33	48.37	36.84	4.80	47.70	37.26	5.31	46.74	37.50	5.88	45.35	37.54	6.50	43.52	37.38	7.11
	72	52.08	28.26	4.45	52.39	28.88	4.94	52.22	29.32	5.47	51.48	29.48	6.05	50.31	29.47	6.68	48.63	29.27	7.37

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4BS(F,B)	060	1.03	.98	—	—	—	—

See notes on pg. 14.

Detailed cooling capacities* (English) continued

INDOOR COIL AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
CFM	(F) EWB	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**	Capacity† (MBtuh)		Comp. Power kW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38CKC060-9A Outdoor Section With FB4BNF060 Indoor Section																			
1700	57	55.30	55.30	5.37	53.65	53.65	5.85	51.82	51.82	6.34	49.86	49.86	6.88	47.74	47.74	7.41	45.40	45.40	7.94
	62	57.86	51.77	5.40	55.67	50.88	5.93	53.20	49.85	6.40	50.69	48.76	6.91	47.98	47.44	7.42	45.39	45.39	7.94
	67	63.31	43.73	5.52	61.68	43.35	6.03	59.20	42.49	6.59	56.49	41.47	7.14	53.61	40.42	7.65	50.38	39.25	8.17
	72	67.26	34.77	5.64	66.88	34.94	6.17	65.35	34.55	6.72	62.99	33.80	7.29	60.24	32.86	7.87	57.10	31.78	8.46
1850	57	56.88	56.88	5.46	55.19	55.19	5.99	53.27	53.27	6.48	51.31	51.31	7.00	49.14	49.14	7.54	46.73	46.73	8.07
	62	58.75	54.01	5.49	56.59	53.18	6.03	54.10	52.11	6.51	51.61	50.91	7.02	49.13	49.13	7.54	46.73	46.73	8.07
	67	63.82	45.08	5.60	62.42	44.97	6.12	60.00	44.24	6.67	57.23	43.24	7.24	54.30	42.20	7.76	51.02	41.02	8.27
	72	67.59	35.40	5.74	67.37	35.75	6.26	65.95	35.49	6.81	63.70	34.86	7.37	60.93	33.95	7.95	57.77	32.90	8.54
2000	57	58.23	58.23	5.55	56.58	56.58	6.09	54.62	54.62	6.60	52.59	52.59	7.13	50.37	50.37	7.66	47.92	47.92	8.20
	62	59.49	56.09	5.57	57.43	55.33	6.10	54.96	54.15	6.61	52.59	52.59	7.13	50.36	50.36	7.66	47.92	47.92	8.20
	67	64.22	46.38	5.69	63.00	46.51	6.20	60.65	45.91	6.75	57.86	44.98	7.32	54.87	43.90	7.86	51.56	42.73	8.37
	72	67.83	35.98	5.82	67.72	36.48	6.35	66.40	36.35	6.90	64.25	35.84	7.46	61.47	34.98	8.03	58.30	33.96	8.62

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4BSB	070	1.04	.99	—	—	—	—

* Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per ARI standard 210/240-94. 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).

When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

** Unit kW is total of indoor and outdoor unit kilowatts.

EWB — Entering Wet Bulb

Condenser only ratings (S.I.)

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKC018-7A									
-1	TCG	5.40	4.90	4.40	4.00	3.50	3.00	2.60	2.10
	SDT	27.00	32.00	37.00	41.00	46.00	50.00	54.00	59.00
	KW	1.29	1.38	1.42	1.47	1.51	1.53	1.54	1.53
2	TCG	6.30	5.60	5.00	4.50	4.10	3.60	3.10	2.60
	SDT	28.00	33.00	38.00	42.00	47.00	51.00	56.00	60.00
	KW	1.32	1.41	1.50	1.54	1.59	1.62	1.64	1.64
4	TCG	7.20	6.40	5.80	5.20	4.70	4.10	3.60	3.10
	SDT	29.00	34.00	39.00	44.00	48.00	53.00	57.00	61.00
	KW	1.34	1.45	1.54	1.63	1.67	1.71	1.74	1.76
7	TCG	8.40	7.40	6.60	5.90	5.30	4.80	4.20	3.60
	SDT	30.00	35.00	40.00	45.00	49.00	54.00	58.00	63.00
	KW	1.36	1.48	1.59	1.68	1.77	1.80	1.84	1.87
10	TCG	10.10	8.50	7.50	6.80	6.10	5.50	4.90	4.20
	SDT	31.00	36.00	41.00	46.00	50.00	55.00	59.00	64.00
	KW	1.36	1.51	1.63	1.74	1.83	1.92	1.95	1.98
13	TCG	11.70	10.00	8.70	7.80	7.00	6.30	5.60	4.90
	SDT	32.00	37.00	42.00	47.00	52.00	56.00	61.00	65.00
	KW	1.38	1.53	1.67	1.79	1.90	1.99	2.07	2.12
38CKC024-7A									
-1	TCG	7.30	6.70	6.00	5.40	4.70	4.10	3.50	2.80
	SDT	31.00	35.00	39.00	43.00	47.00	52.00	56.00	60.00
	KW	1.66	1.74	1.80	1.86	1.91	1.95	1.97	1.97
2	TCG	8.30	7.60	6.90	6.20	5.50	4.90	4.20	3.50
	SDT	32.00	37.00	41.00	45.00	49.00	53.00	58.00	62.00
	KW	1.73	1.84	1.93	1.99	2.05	2.09	2.13	2.15
4	TCG	9.40	8.60	7.80	7.10	6.40	5.60	4.90	4.20
	SDT	34.00	38.00	43.00	47.00	51.00	55.00	59.00	64.00
	KW	1.79	1.92	2.04	2.14	2.19	2.25	2.30	2.33
7	TCG	10.70	9.70	8.80	8.00	7.20	6.50	5.70	5.00
	SDT	35.00	40.00	44.00	49.00	53.00	57.00	61.00	65.00
	KW	1.86	2.00	2.14	2.26	2.37	2.42	2.47	2.52
10	TCG	12.20	11.00	10.00	9.10	8.30	7.40	6.60	5.80
	SDT	37.00	42.00	46.00	50.00	54.00	59.00	63.00	67.00
	KW	1.92	2.08	2.23	2.37	2.49	2.60	2.67	2.73
13	TCG	14.00	12.60	11.40	10.40	9.40	8.50	7.60	6.80
	SDT	38.00	43.00	47.00	52.00	56.00	60.00	64.00	69.00
	KW	1.98	2.16	2.33	2.48	2.62	2.74	2.86	2.96
38CKC030-7A									
-1	TCG	8.30	7.70	7.00	6.40	5.70	5.00	4.30	3.50
	SDT	29.00	33.00	38.00	42.00	47.00	52.00	56.00	61.00
	KW	1.88	2.00	2.12	2.23	2.32	2.39	2.44	2.46
2	TCG	9.30	8.60	7.90	7.20	6.50	5.80	5.10	4.30
	SDT	30.00	35.00	39.00	44.00	49.00	53.00	58.00	62.00
	KW	1.96	2.11	2.23	2.35	2.46	2.55	2.62	2.66
4	TCG	10.40	9.60	8.90	8.20	7.40	6.70	5.90	5.10
	SDT	32.00	36.00	41.00	45.00	50.00	55.00	59.00	64.00
	KW	2.03	2.20	2.37	2.49	2.60	2.71	2.80	2.86
7	TCG	11.50	10.70	10.00	9.20	8.40	7.60	6.80	6.00
	SDT	34.00	38.00	43.00	47.00	52.00	56.00	61.00	65.00
	KW	2.11	2.30	2.47	2.64	2.79	2.88	2.99	3.07
10	TCG	12.80	11.90	11.10	10.20	9.40	8.60	7.70	6.90
	SDT	35.00	40.00	44.00	49.00	53.00	58.00	62.00	67.00
	KW	2.19	2.39	2.58	2.76	2.94	3.10	3.20	3.30
13	TCG	14.30	13.20	12.30	11.40	10.50	9.60	8.70	7.80
	SDT	37.00	42.00	46.00	51.00	55.00	60.00	64.00	69.00
	KW	2.26	2.49	2.69	2.89	3.08	3.25	3.41	3.56

See notes on pg. 17.

Condenser only ratings (S.I.)

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKC036-7A, 9A									
-1	TCG	10.40	9.60	8.70	7.90	7.00	6.20	5.30	4.50
	SDT	30.00	34.00	39.00	43.00	48.00	52.00	57.00	61.00
	KW	2.34	2.46	2.58	2.68	2.77	2.84	2.89	2.92
2	TCG	11.70	10.80	9.90	9.00	8.10	7.20	6.30	5.40
	SDT	32.00	36.00	40.00	45.00	49.00	54.00	58.00	63.00
	KW	2.45	2.62	2.74	2.85	2.96	3.05	3.12	3.17
4	TCG	13.00	12.10	11.10	10.20	9.20	8.30	7.40	6.40
	SDT	33.00	38.00	42.00	46.00	51.00	55.00	60.00	64.00
	KW	2.56	2.75	2.93	3.06	3.16	3.27	3.36	3.43
7	TCG	14.60	13.50	12.50	11.40	10.40	9.40	8.50	7.50
	SDT	35.00	40.00	44.00	48.00	53.00	57.00	62.00	66.00
	KW	2.66	2.88	3.07	3.25	3.41	3.51	3.62	3.71
10	TCG	16.50	15.10	13.90	12.80	11.70	10.70	9.60	8.60
	SDT	37.00	41.00	46.00	50.00	55.00	59.00	63.00	68.00
	KW	2.75	3.00	3.23	3.43	3.61	3.78	3.92	4.03
13	TCG	18.60	17.10	15.70	14.40	13.20	12.10	10.90	9.80
	SDT	38.00	43.00	47.00	52.00	56.00	61.00	65.00	70.00
	KW	2.83	3.11	3.36	3.59	3.80	3.99	4.17	4.33
38CKC042-9A									
-1	TCG	10.70	10.10	9.50	8.90	8.20	7.50	6.70	5.80
	SDT	28.00	33.00	38.00	43.00	49.00	54.00	59.00	64.00
	KW	1.87	2.20	2.54	2.92	3.33	3.76	4.18	4.57
2	TCG	11.70	11.20	10.50	9.90	9.10	8.40	7.60	6.70
	SDT	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00
	KW	1.98	2.29	2.64	3.02	3.44	3.88	4.32	4.73
4	TCG	12.90	12.20	11.60	10.90	10.10	9.30	8.50	7.60
	SDT	31.00	36.00	41.00	46.00	51.00	56.00	61.00	66.00
	KW	2.07	2.41	2.78	3.17	3.57	4.01	4.46	4.90
7	TCG	14.20	13.40	12.70	12.00	11.20	10.30	9.50	8.60
	SDT	32.00	37.00	43.00	48.00	53.00	58.00	63.00	67.00
	KW	2.17	2.52	2.91	3.33	3.74	4.18	4.63	5.08
10	TCG	15.60	14.80	14.00	13.20	12.40	11.50	10.60	9.70
	SDT	33.00	39.00	44.00	49.00	54.00	59.00	64.00	68.00
	KW	2.25	2.61	3.00	3.42	3.87	4.35	4.82	5.27
13	TCG	17.30	16.40	15.50	14.60	13.70	12.80	11.80	10.90
	SDT	35.00	40.00	45.00	50.00	55.00	60.00	65.00	69.00
	KW	2.35	2.71	3.10	3.52	3.97	4.44	4.94	5.45
38CKC048-7A, 9A									
-1	TCG	13.50	12.70	11.90	11.10	10.20	9.30	8.20	7.10
	SDT	28.00	33.00	38.00	43.00	48.00	53.00	58.00	63.00
	KW	2.66	2.95	3.28	3.64	4.04	4.46	4.89	5.32
2	TCG	14.90	14.10	13.30	12.40	11.50	10.50	9.50	8.40
	SDT	29.00	34.00	39.00	44.00	49.00	54.00	59.00	64.00
	KW	2.79	3.10	3.42	3.79	4.20	4.64	5.09	5.55
4	TCG	16.50	15.60	14.70	13.80	12.80	11.90	10.80	9.70
	SDT	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00
	KW	2.90	3.23	3.61	3.98	4.40	4.85	5.31	5.79
7	TCG	18.20	17.20	16.30	15.30	14.30	13.30	12.20	11.00
	SDT	32.00	37.00	42.00	47.00	52.00	57.00	62.00	67.00
	KW	3.04	3.38	3.75	4.16	4.63	5.11	5.59	6.08
10	TCG	20.00	19.00	18.00	16.90	15.80	14.70	13.60	12.40
	SDT	34.00	38.00	43.00	48.00	53.00	58.00	63.00	68.00
	KW	3.19	3.53	3.91	4.34	4.80	5.32	5.88	6.44
13	TCG	22.20	21.00	19.80	18.70	17.50	16.30	15.20	14.00
	SDT	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00
	KW	3.32	3.69	4.09	4.52	4.99	5.52	6.08	6.67

See notes on pg. 17.

Condenser only ratings (S.I.) continued

SST °C		CONDENSER ENTERING AIR TEMPERATURES °C							
		13	18	24	29	35	41	46	52
38CKC060-9A									
-1	TCG SDT KW	17.20 28.00 3.29	16.30 33.00 3.79	15.20 38.00 4.25	14.10 43.00 4.77	13.00 48.00 5.34	11.80 53.00 5.93	10.50 58.00 6.51	9.00 63.00 7.07
2	TCG SDT KW	19.30 29.00 3.34	18.10 35.00 3.90	17.00 40.00 4.44	15.80 45.00 4.95	14.70 49.00 5.54	13.40 54.00 6.16	12.10 59.00 6.78	10.60 64.00 7.40
4	TCG SDT KW	21.70 30.00 3.39	20.20 36.00 3.97	18.90 41.00 4.57	17.70 46.00 5.19	16.40 51.00 5.76	15.10 56.00 6.41	13.80 61.00 7.07	12.30 66.00 7.74
7	TCG SDT KW	24.50 31.00 3.43	24.00 35.00 3.91	21.10 42.00 4.66	19.80 47.00 5.31	18.40 52.00 6.01	17.10 57.00 6.68	15.70 62.00 7.37	14.20 67.00 8.06
10	TCG SDT KW	28.10 31.00 3.46	25.50 37.00 4.10	23.70 43.00 4.74	22.10 48.00 5.41	20.60 53.00 6.12	19.20 58.00 6.87	17.80 63.00 7.65	16.20 68.00 8.46
13	TCG SDT KW	34.90 31.00 3.37	28.90 38.00 4.15	26.70 44.00 4.82	24.90 49.00 5.51	23.30 54.00 6.23	21.50 59.00 7.00	20.10 64.00 7.80	18.50 69.00 8.64

SST — Saturated Temperature Entering Compressor (°C)
TCG — Gross Cooling Capacity (kW)
kW — Total Power (kW)
SDT — Saturated Temperature Leaving Compressor (°C)

Condenser only ratings (English)

SST °F		CONDENSER ENTERING AIR TEMPERATURES °F							
		55	65	75	85	95	105	115	125
38CKC018-7A									
30	TCG	18.60	16.70	15.10	13.50	11.90	10.40	8.80	7.10
	SDT	80.80	89.70	98.20	106.10	113.90	121.90	129.80	137.60
	KW	1.29	1.38	1.42	1.47	1.51	1.53	1.54	1.53
35	TCG	21.30	19.10	17.20	15.50	13.80	12.10	10.50	8.80
	SDT	82.70	91.50	100.10	108.50	116.40	124.20	132.10	139.90
	KW	1.32	1.41	1.50	1.54	1.59	1.62	1.64	1.64
40	TCG	24.60	21.90	19.70	17.70	15.90	14.10	12.30	10.50
	SDT	84.60	93.50	102.10	110.40	118.70	126.70	134.50	142.40
	KW	1.34	1.45	1.54	1.63	1.67	1.71	1.74	1.76
45	TCG	28.80	25.10	22.50	20.20	18.20	16.20	14.30	12.40
	SDT	86.10	95.50	104.20	112.50	120.70	128.90	137.00	144.80
	KW	1.36	1.48	1.59	1.68	1.77	1.80	1.84	1.87
50	TCG	34.40	29.20	25.80	23.10	20.80	18.70	16.60	14.50
	SDT	87.30	97.30	106.30	114.70	122.90	131.00	139.00	147.00
	KW	1.36	1.51	1.63	1.74	1.83	1.92	1.95	1.98
55	TCG	39.90	34.30	29.70	26.50	23.80	21.40	19.10	16.90
	SDT	89.70	99.00	108.30	116.90	125.10	133.20	141.20	149.00
	KW	1.38	1.53	1.67	1.79	1.90	1.99	2.07	2.12
38CKC024-7A									
30	TCG	25.00	22.80	20.60	18.40	16.20	14.00	11.90	9.60
	SDT	87.50	95.00	102.40	109.90	117.50	125.20	132.90	140.50
	KW	1.66	1.74	1.80	1.86	1.91	1.95	1.97	1.97
35	TCG	28.30	25.80	23.50	21.20	18.90	16.60	14.30	12.00
	SDT	90.40	98.10	105.50	112.90	120.40	128.10	135.80	143.40
	KW	1.73	1.84	1.93	1.99	2.05	2.09	2.13	2.15
40	TCG	32.10	29.20	26.60	24.10	21.70	19.20	16.90	14.50
	SDT	93.10	101.10	108.80	116.20	123.60	131.00	138.70	146.30
	KW	1.79	1.92	2.04	2.14	2.19	2.25	2.30	2.33
45	TCG	36.50	33.10	30.10	27.40	24.70	22.10	19.60	17.10
	SDT	95.90	103.90	111.70	119.40	127.00	134.30	141.80	149.40
	KW	1.86	2.00	2.14	2.26	2.37	2.42	2.47	2.52
50	TCG	41.70	37.70	34.30	31.10	28.20	25.30	22.50	19.90
	SDT	98.60	106.70	114.50	122.20	129.90	137.50	145.10	152.70
	KW	1.92	2.08	2.23	2.37	2.49	2.60	2.67	2.73
55	TCG	47.80	43.00	39.00	35.50	32.20	29.10	26.00	23.10
	SDT	101.30	109.50	117.50	125.10	132.80	140.40	147.90	155.50
	KW	1.98	2.16	2.33	2.48	2.62	2.74	2.86	2.96
38CKC030-7A									
30	TCG	28.40	26.20	24.00	21.70	19.30	17.10	14.70	12.10
	SDT	83.40	91.70	100.10	108.50	116.80	125.20	133.30	141.30
	KW	1.88	2.00	2.12	2.23	2.32	2.39	2.44	2.46
35	TCG	31.80	29.40	27.10	24.70	22.20	19.80	17.40	14.80
	SDT	86.10	94.40	102.80	111.00	119.30	127.70	135.90	144.00
	KW	1.96	2.11	2.23	2.35	2.46	2.55	2.62	2.66
40	TCG	35.40	32.90	30.40	27.90	25.30	22.70	20.20	17.60
	SDT	89.10	97.30	105.60	113.90	122.10	130.30	138.60	146.70
	KW	2.03	2.20	2.37	2.49	2.60	2.71	2.80	2.86
45	TCG	39.30	36.70	34.00	31.30	28.60	25.90	23.20	20.50
	SDT	92.30	100.50	108.60	116.90	125.10	133.20	141.40	149.50
	KW	2.11	2.30	2.47	2.64	2.79	2.88	2.99	3.07
50	TCG	43.70	40.70	37.80	35.00	32.10	29.20	26.40	23.60
	SDT	95.80	103.80	111.90	120.10	128.20	136.30	144.40	152.50
	KW	2.19	2.39	2.58	2.76	2.94	3.10	3.20	3.30
55	TCG	48.80	45.20	42.00	38.90	35.90	32.90	29.70	26.80
	SDT	98.80	107.40	115.50	123.50	131.60	139.70	147.60	155.70
	KW	2.26	2.49	2.69	2.89	3.08	3.25	3.41	3.56
38CKC036-7A, 9A									
30	TCG	35.60	32.70	29.80	26.90	24.00	21.10	18.20	15.20
	SDT	85.70	93.60	101.60	109.60	117.70	125.90	133.90	141.90
	KW	2.34	2.46	2.58	2.68	2.77	2.84	2.89	2.92
35	TCG	39.90	36.80	33.80	30.70	27.60	24.60	21.60	18.50
	SDT	88.70	96.60	104.60	112.50	120.50	128.60	136.70	144.70
	KW	2.45	2.62	2.74	2.85	2.96	3.05	3.12	3.17
40	TCG	44.50	41.20	38.00	34.80	31.50	28.30	25.20	22.00
	SDT	92.10	99.90	107.70	115.70	123.50	131.60	139.60	147.60
	KW	2.56	2.75	2.93	3.06	3.16	3.27	3.36	3.43
45	TCG	49.80	46.00	42.50	39.10	35.60	32.20	28.90	25.60
	SDT	95.20	103.30	111.10	119.00	126.90	134.70	142.80	150.70
	KW	2.66	2.88	3.07	3.25	3.41	3.51	3.62	3.71
50	TCG	56.20	51.60	47.40	43.70	40.10	36.40	32.90	29.40
	SDT	97.70	106.30	114.60	122.50	130.40	138.10	146.10	154.00
	KW	2.75	3.00	3.23	3.43	3.61	3.78	3.92	4.03
55	TCG	63.60	58.30	53.60	49.30	45.20	41.30	37.20	33.60
	SDT	100.30	109.00	117.30	125.50	133.50	141.50	149.40	157.30
	KW	2.83	3.11	3.36	3.59	3.80	3.99	4.17	4.33

See notes on pg. 19.

Condenser only ratings (English)

SST °F		CONDENSER ENTERING AIR TEMPERATURES °F							
		55	65	75	85	95	105	115	125
38CKC042-9A									
30	TCG	36.40	34.60	32.60	30.40	28.10	25.60	22.90	19.80
	SDT	82.70	92.10	101.00	110.20	119.40	128.60	137.60	146.40
	KW	1.87	2.20	2.54	2.92	3.33	3.76	4.18	4.57
35	TCG	40.00	38.10	36.00	33.70	31.20	28.70	25.90	22.70
	SDT	85.20	94.20	103.40	112.50	121.60	130.80	139.90	148.60
	KW	1.98	2.29	2.64	3.02	3.44	3.88	4.32	4.73
40	TCG	43.90	41.80	39.60	37.20	34.60	31.90	29.00	25.80
	SDT	87.70	96.80	105.90	115.00	124.00	133.20	142.20	151.00
	KW	2.07	2.41	2.78	3.17	3.57	4.01	4.46	4.90
45	TCG	48.40	45.90	43.40	40.90	38.10	35.30	32.40	29.20
	SDT	90.10	99.40	108.60	117.70	126.70	135.70	144.60	153.20
	KW	2.17	2.52	2.91	3.33	3.74	4.18	4.63	5.08
50	TCG	53.40	50.60	47.90	45.10	42.30	39.20	36.20	33.00
	SDT	92.10	101.50	110.60	119.70	128.70	137.60	146.30	154.90
	KW	2.25	2.61	3.00	3.42	3.87	4.35	4.82	5.27
55	TCG	59.10	55.90	52.90	49.90	46.90	43.60	40.30	37.00
	SDT	94.20	103.60	112.70	121.70	130.60	139.50	148.20	156.70
	KW	2.35	2.71	3.10	3.52	3.97	4.44	4.94	5.45
38CKC048-7A, 9A									
30	TCG	46.00	43.40	40.60	37.70	34.80	31.60	28.10	24.30
	SDT	81.70	90.60	99.60	108.60	117.70	126.80	135.80	144.60
	KW	2.66	2.95	3.28	3.64	4.04	4.46	4.89	5.32
35	TCG	50.90	48.10	45.20	42.20	39.20	35.90	32.40	28.50
	SDT	84.10	93.00	101.90	110.80	120.00	129.10	138.10	146.90
	KW	2.79	3.10	3.42	3.79	4.20	4.64	5.09	5.55
40	TCG	56.20	53.30	50.20	47.00	43.80	40.50	36.90	32.90
	SDT	86.60	95.40	104.40	113.30	122.40	131.50	140.50	149.30
	KW	2.90	3.23	3.61	3.98	4.40	4.85	5.31	5.79
45	TCG	62.10	58.80	55.60	52.10	48.70	45.20	41.50	37.50
	SDT	89.50	98.20	107.00	115.80	124.90	134.10	143.10	152.00
	KW	3.04	3.38	3.75	4.16	4.63	5.11	5.59	6.08
50	TCG	68.40	64.90	61.40	57.80	53.90	50.30	46.50	42.40
	SDT	92.60	101.20	109.90	118.80	127.60	136.70	145.80	154.70
	KW	3.19	3.53	3.91	4.34	4.80	5.32	5.88	6.44
55	TCG	75.80	71.60	67.70	63.80	59.80	55.80	51.90	47.80
	SDT	95.20	104.20	113.10	121.80	130.60	139.60	148.50	157.20
	KW	3.32	3.69	4.09	4.52	4.99	5.52	6.08	6.67
38CKC060-9A									
30	TCG	58.80	55.50	52.00	48.30	44.40	40.30	35.80	30.80
	SDT	82.90	92.20	101.00	109.80	118.70	127.50	136.20	144.70
	KW	3.29	3.79	4.25	4.77	5.34	5.93	6.51	7.07
35	TCG	65.80	61.70	58.00	54.10	50.10	45.90	41.30	36.30
	SDT	84.40	94.40	103.60	112.30	121.10	129.90	138.70	147.30
	KW	3.34	3.90	4.44	4.95	5.54	6.16	6.78	7.40
40	TCG	73.90	68.90	64.60	60.20	56.00	51.70	47.00	42.00
	SDT	85.90	96.00	105.60	114.90	123.60	132.50	141.30	149.90
	KW	3.39	3.97	4.57	5.19	5.76	6.41	7.07	7.74
45	TCG	83.70	81.90	72.10	67.50	62.70	58.20	53.50	48.40
	SDT	87.20	95.70	107.30	116.60	125.70	134.50	143.30	151.90
	KW	3.43	3.91	4.66	5.31	6.01	6.68	7.37	8.06
50	TCG	95.90	87.00	80.90	75.60	70.40	65.40	60.60	55.40
	SDT	88.30	99.30	109.10	118.40	127.50	136.40	145.10	153.70
	KW	3.46	4.10	4.74	5.41	6.12	6.87	7.65	8.46
55	TCG	119.20	98.60	91.00	84.90	79.40	73.50	68.40	63.10
	SDT	87.30	100.70	110.80	120.20	129.30	138.20	146.90	155.50
	KW	3.37	4.15	4.82	5.51	6.23	7.00	7.80	8.64

SST — Saturated Temperature Entering Compressor (°F)
TCG — Gross Cooling Capacity (1000 Btuh)
kW — Total Power (kW)
SDT— Saturated Temperature Leaving Compressor (°F).

System Design Summary

1. Intended for outdoor installation with free air inlet and outlet.Outdoor an external static pressure available is less than 0.01-in. wg.
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 (51°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 + 50 ft (15.24m), indoor coil below = 150 ft (45.72m). (See items 6 and 7 following.)
6. For interconnecting refrigerant tube lengths between 50 ft (15.24m) and 175 ft (53.3m), consult Residential Split-System Long-Line Application Guideline available from equipment distributor.
7. Crankcase heater required when interconnection refrigerant tube length exceeds 50 ft (15.24m)
8. If any refrigerant tubing is buried, provide a minimum 6 in. (152mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (912mm) may be buried without further consideration. For buried lines longer than 3 ft. (912mm), consult your local distributor.
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

Air-Cooled, Split-System Air Conditioner
38CKC
1-1/2 to 5 Tons Nominal (5.2 to 17.5 kW)

GENERAL

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 shall be manufactured in a facility registered to ISO9001/BS5750 Part II, International Standard for quality systems.

Unit construction will comply with latest edition of ANSI/ASHRAE and with NEC (U.S.A. Standard).

Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test (U.S.A. Standard).

Air-cooled condenser coils will be leak tested at 150 psig (1034 KPa) and pressure tested at 300 psig (2068 KPa).

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 condensing unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge (R-22), 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 PVC-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 enhanced, epoxy coated aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.

Refrigeration Components

Refrigeration circuit components will include liquid line shutoff valve with sweat connections, suction shutoff valves with sweat connections, system charge of refrigerant R-22, and compressor oil.

Operating Characteristics

The capacity of the unit will meet or exceed _____ Btuh (kW) 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 (kW) or greater at conditions of _____ CFM (L/S) 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, __ phase, 50 hertz. 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.

Special Features

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