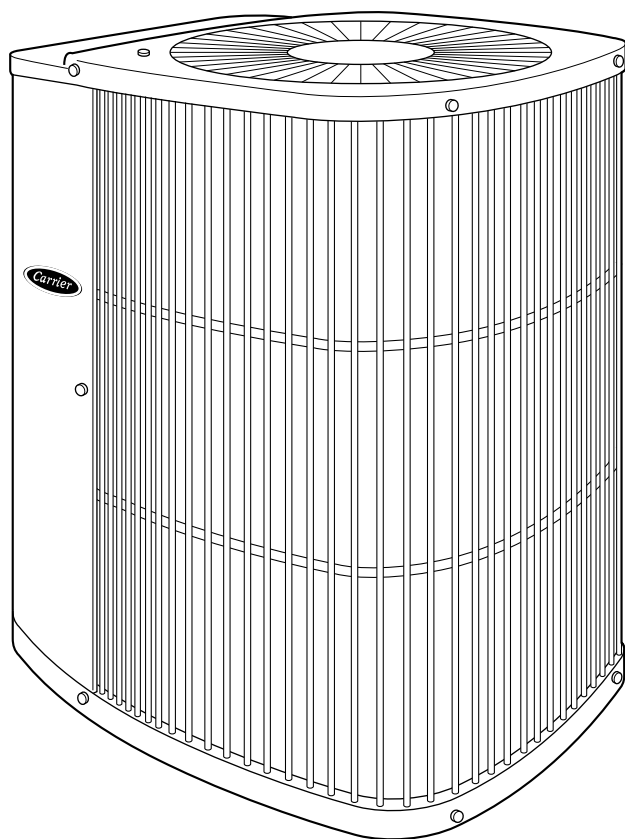




Product Data

38YKB (60 Hz) Heat Pump

Sizes 018 thru 060



The 38YKB Outdoor Sections of Split-System Heat Pumps are designed for quiet, reliable heating during the winter and cooling during the summer. These heat pump systems provide economy of operation through energy conservation. They recover heat for indoor comfort from outdoor air during the heating season and, by automatically reversing the refrigerant cycle, remove indoor heat and excess humidity during the cooling season. All models are listed with ARI, UL, CSA and CEC. All models are offered in 208/230v.

FEATURES/BENEFITS

Compressor — All models feature the scroll compressor with the exception of the 018-31 which has a reciprocating compressor. Each compressor is mounted on rubber isolators for additional sound reduction. The scroll compressor will start under most system loads, thus eliminating the need for start assistance components. Continuous operation is approved down to -30°F (-34.4°C) in the heating mode and down to 55°F (12.8°C) in the cooling mode. (See heating and cooling performance tables.)

Built-In-Reliability Components — Includes a suction accumulator that keeps liquid refrigerant from reaching the compressor; a discharge thermostat on 024 through 042 sizes to protect the scroll compressor from excessive internal discharge temperatures under extreme operating conditions, i.e. loss of

charge; failure of evaporator fan; built-in compressor internal pressure equalization (018, 048, 060 sizes) to limit excessive pressure build-up; a high-pressure switch for high-pressure protection on units equipped with scroll compressors; and defrost board for time/temperature defrost function and compressor time delay (5 minute).

Defrost Control Board —

Incorporates a built-in 5-minute compressor time delay, a defrost relay, defrost timer, and low-voltage wire leads. The defrost control is a time/temperature initiation/termination control which includes 3 field-selectable time periods of 30, 50, and 90 minutes.

Weather-Protective Cabinet —

Steel is protected with a heavy

coating commonly called “galvanizing,” and coated with a layer of zinc phosphate. A coat of modified polyester powder is then applied and baked-on, providing each unit with a hard, smooth finish that will last for many years. All screws on cabinet exterior are coated for a long-lasting rust-resistant, quality appearance.

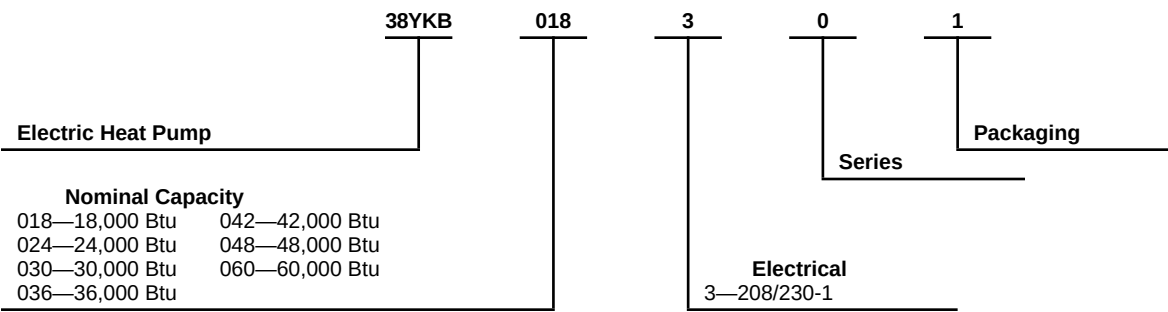
Unit Design — All units are equipped with totally enclosed fan motors for greater reliability under rain and snow conditions. The large, wraparound coil uses copper tube and enhanced sine wave aluminum fin and is designed for optimum heat transfer during heating and cooling. The vertical air discharge carries the sound and air up and away from

adjacent patio areas and foliage. Coil can be cleaned with a common garden hose.

External Service Valves — Both service valves are brass, front seating type with sweat connections. Each valve has a service port for ease of checking operating refrigerant pressures. Valves are externally located so refrigerant tube connections can be made quickly and easily. A third service port is located on the service panel for ease of checking operating suction pressure in the heating mode.

Warranty — Standard 1-year on all parts, with an additional 4-years on compressor.

Model number nomenclature





CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI.

Physical data

MODEL 38YKB	018-30/31	024-30/31	030-30/31	036-30/31	042-30/31	048-30/31	060-30/31
OPER. WEIGHT (lb)	139	142	183	206	216	266	293
COMPRESSOR MFR.	Copeland Scroll/ Tecumseh Recip						
REFRIGERANT Control Charge (lb)	3.76/4.13	3.76	4.88	22 Piston 6.38	8.01	11.51	12.38
CONDENSER FAN Air Discharge Air Qty (Cfm) Motor Rpm (60 Hz)	Vertical 1900 1075 2400 825 2900 1100						3100
CONDENSER COIL Face Area (sq. ft)	8.75	12.12	15.15	12.12	15.15	18.18	
CONNECTION (in. ID) Vapor Liquid	5/8	3/4	Sweat 3/8	7/8			
REFRIGERANT TUBES* (in. OD) Vapor Liquid	5/8	3/4	3/8	7/8	1-1/8		

NOTE: See unit Installation Instructions for proper installation.

* Tube sizes are for runs up to 50 ft.

For tube set over 50 ft, consult Long-Line Application Guideline.

METERING DEVICE

SIZE	SERIES	OUTDOOR PISTON*	INDOOR PISTON†
018	30, 31	42	55
024	30, 31	49	61
030	30, 31	59	70
036	30, 31	61	78
042	30, 31	63	82
048	30, 31	70	88
060	30, 31	78	98

* Chatleff-type piston on -30 series units. AccuRater® type on -31 series units.

† Piston shipped with outdoor unit and must be installed in approved indoor coil.

Accessories

ORDERING NUMBER	DESCRIPTION
KSALA0101AAA	Low-Ambient Controller*
KAAFT0101AAA	Evaporator Freeze Thermostat†
KHAIR0101AAA	Isolation Relay‡
N/A	Start Capacitor and Relay — Sizes 018 (301) and 024–060 (301, 311)
KSAHS0601AAA	Start Capacitor and Relay — Size 018 (311)
Standard	Crankcase Heater — Size 018 (311)
KAACH1201AAA	Crankcase Heater — Sizes 018 (301) and 024-060 (301, 311)
KSASH1801COP	Sound Blanket — Sizes 018 (301), 024
KSASH0601COP	Sound Blanket — Sizes 030–042
KSASH1701COP	Sound Blanket — Sizes 048, 060
KSASH0201TEC	Sound Blanket — Size 018 (311)
KHAOT0301FST	Outdoor Thermostat
KHAOT0201SEC	Secondary Outdoor Thermostat
KHASA0101AAA	Service Alarm†
KHAIC0101AAA	Furnace Interface Control (Optimizer II)
KHAIC0201AAA	Furnace Interface Control (Outdoor Thermostat/Lockout Relay)
KHATX0901HSO	Bi-flow TXV (Hard Shut-off) — Size 018**
KHATX1001HSO	Bi-flow TXV (Hard Shut-off) — Size 024
KHATX1101HSO	Bi-flow TXV (Hard Shut-off) — Sizes 030
KHATX1201HSO	Bi-flow TXV (Hard Shut-off) — Sizes 036–042
KHATX1301HSO	Bi-flow TXV (Hard Shut-off) — Sizes 048
KHATX1401HSO	Bi-flow TXV (Hard Shut-off) — Sizes 060
Standard	Low-Pressure Switch — Size 018 (311)
KHALP0101LPS	Low-Pressure Switch — Sizes 018 (301) and 024-060 (301, 311)
Standard	High-Pressure Switch — Sizes 018 (301) and 024–060 (301, 311)
KSAHI0201HPS	High-Pressure Switch — Size 018 (311)
P504-8083S	Refrigerant Filter Drier-Biflow (Sizes 018–036)
P504-8163S	Refrigerant Filter Drier-Biflow (Sizes 042–060)
KHALS0101LLS	Liquid Solenoid Valve
KSASF0101AAA	Support Feet — 4 in. (4)
KHASS0106MPK	Snow Rack — Sizes 018, 024
KHASS0206MPK	Snow Rack — Sizes 030 — 060
KAATD0101TDR	Time-Delay Relay

N/A = Not applicable in this application.

* Isolation relay required.

† For indicator light function, thermostat specified must be used and wired according to service alarm Installation Instructions.

‡ Consult low-ambient controller Installation Instructions for application.

** Start capacitor and relay required on 018-311.

THERMOSTAT/SUBBASE PKG	DESCRIPTION
--HH--07AT-175	Thermostat, 2-Stage Heat, 1-Stage Cool, Auto/Manual Changeover — °F
--HH--07AT-165	Thermostat, 2-Stage Heat, 1-Stage Cool, Auto/Manual Changeover — °C
--HH--93AZ-195	Subbase for Manual Changeover Thermostat
--HH--93AZ-196	Subbase for Auto Changeover Thermostat
--HH--07ZE-001	Thermostat (1 Piece) 2-Stage Heat, 1-Stage Cool, Auto Changeover — °F
--HH--07ZE-004	Thermostat (1 Piece) 2-Stage Heat, 1-Stage Cool, Manual Changeover — °F
1F92-071 (RCD)	Thermostat (1 Piece) Night Setback, 2-Stage Heat, 1-Stage Cool — °F/°C Option 5-2 Day Programmable

Accessory Description and Usage

1. Low-Ambient Controller

This solid-state head pressure controller is a cycle control device activated by a temperature sensor. It is specifically designed to control outdoor fan motor run time in response to saturated condensing temperature. For outdoor air temperatures between 55°F and 0°F (12.8°C and -17.8°C), it maintains condensing temperature at 75°F and 130°F (23.8°C and 54.4°C).

SUGGESTED USE: Cooling operation at outdoor temperatures below 55°F (12.8°C).

2. Evaporator Freeze Thermostat

A SPST temperature actuated switch which stops unit operation when evaporator reaches freeze-up conditions.

SUGGESTED USE: With low-ambient controller (Item 1).

3. Isolation Relay

A SPDT relay which switches the low-ambient controller out of the outdoor fan motor circuit when the heat pump switches to heating mode.

SUGGESTED USE: All heat pumps where low-ambient controller (Item 1) has been added.

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.

When unit will be operated below 55°F (12.8°C) outdoor air temperature. (Use with low-ambient controller, Item 1.)

All commercial installations.

5. Sound Blanket

Wrap around sound attenuation cover for the compressor. Reduces the sound level by about 0.2 bels.

SUGGESTED USE: Unit installed closer than 15 ft to quiet areas—bedrooms, etc.

Unit installed between 2 houses less than 10 ft apart.

6. Outdoor Thermostat

A SPDT temperature actuated switch which turns on supplemental electric heaters when outdoor air temperature drops below set point.

SUGGESTED USE: Heat pump installations with multiple-stage supplemental heaters.

7. Secondary Outdoor Thermostat

A SPDT temperature actuated switch which turns on a third-stage of supplemental electric heaters when outdoor air temperature drops below the second stage set point.

SUGGESTED USE: Heat pump installations where 3-stage operation of supplemental heaters is desired.

8. Service Alarm

A current-sensing lockout relay which provides immediate notification that compressor is not operating during a call for heating or cooling. Used with proper room thermostat, the thermostat light is turned on signifying service is required. This can minimize electrical cost increase due to operation of supplemental heaters only.

SUGGESTED USE: As a feature to notify owner immediately when the system is not operating most efficiently.

9. Interface Control

An electric control for controlling a heat pump and gas or oil furnace system for maximum energy savings. It allows heat pump to operate down to a predetermined economic balance point temperature, then switches to allow furnace operation only below that temperature. KHAIC0101AAA requires outdoor thermostat (Item 6).

SUGGESTED USE: All heat pump and gas- or oil-fired furnace combination systems.

10. Thermostatic Expansion Valve (TXV) Kits

A 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 (bi-flow with integral check valve), adapter tubes and external equalizer tube.

SUGGESTED USE: For improved system performance in cooling mode.

All commercial installations.

11. Low-Pressure Switch

Auto reset SPST switch activated by refrigerant pressure in liquid line of refrigerant circuit. Cycles compressor off if refrigerant charge is lost.

SUGGESTED USE: Switch opens at 7 psig (+/- 3).

12. Liquid Solenoid Valve

An electrically operated shut-off valve 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.

SUGGESTED USE: In certain long-line applications. (Refer to Long-Line Application Guideline.)

13. Support Feet

Four stick-on plastic feet which raise the unit 4 in. 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.

Sub-freezing climates.

14. Snow Rack

Coated wire rack which supports unit 18 in. above mounting pad to allow for drainage from unit base.

SUGGESTED USE: Heat pump installations in heavy snowfall areas.

Heat pump installations in snowdrift locations.

Heat pump installations in areas of prolonged subfreezing temperatures.

All commercial installations.

15. Time-Delay Relay

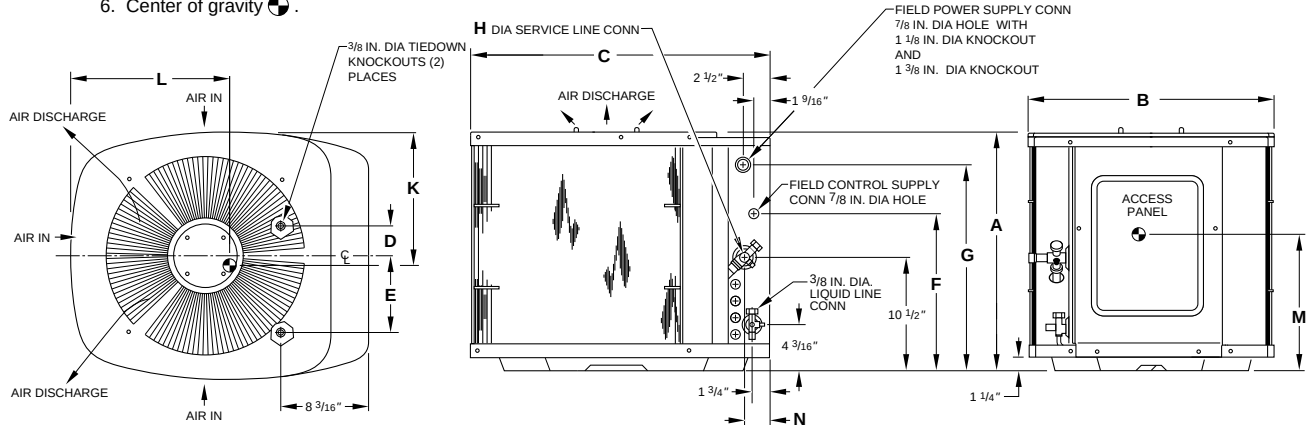
A SPST delay relay which briefly continues operation of the indoor blower motor to provide additional cooling after the compressor cycles off.

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

Dimensions

NOTES:

1. Allow 30 in. clearance to service side of unit, 48 in. above unit, 6 in. on one side, 12 in. on remaining side, and 24 in. between units for proper airflow.
2. Minimum outdoor operating ambient in cooling mode is 55°F (unless low ambient control is used) max 125°F.
3. Maximum outdoor operating ambient in heating mode is 66°F.
5. Series designation is the 13th position of the unit model number.
6. Center of gravity .



A92499

UNIT SIZE	SERIES	A	B	C	D	E	F	G	H	K	L	M	N
		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
018	0, 1	25-7/8	22-1/2	27-1/2	2-13/16	6-15/16	15-1/2	21-7/8	5/8	12	13-3/4	9-3/4	2-3/8
024	0, 1	25-7/8	22-1/2	27-1/2	2-13/16	6-15/16	15-1/2	21-7/8	5/8	12	13-3/4	9-3/4	2-3/8
030	0, 1	25-7/8	30	34-15/16	4	9-3/4	15-1/2	21-7/8	3/4	15-1/8	17-1/4	13-1/8	2-15/16
036	0, 1	31-7/8	30	34-15/16	4	9-3/4	21-1/2	27-7/8	7/8	13-3/4	18	13	2-15/16
042	0, 1	25-7/8	30	34-15/16	4	9-3/4	15-1/2	21-7/8	7/8	16-1/2	18-3/4	13-3/8	2-15/16
048	0, 1	31-7/8	30	34-15/16	4	9-3/4	21-1/2	27-7/8	7/8	14-1/8	19	14	2-15/16
060	0, 1	37-7/8	30	34-15/16	4	9-3/4	27-1/2	33-7/8	7/8	14-1/8	19-1/2	15-1/2	2-15/16

Electrical data

OUTDOOR UNIT	V/PH 60 Hz	OPER VOLTS*		COMPR		FAN FLA	MCA	MIN WIRE SIZE** 60°C/75°C	MAX LENGTH (Ft)† 60C/75C	MAX FUSE† OR HACR TYPE CKT BKR AMPS
		Max	Min	LRA	RLA					
018-30	208/230/1	253	187	50.0	9.9	0.8	13.3	14/14	61/58	20
018-31				49.0	8.9	0.8	11.9	14/14	65/60	20
024-30, 31				62.5	11.5	0.8	15.3	14/14	53/50	25
030-30, 31				90.5	17.9	0.9	23.3	12/12	55/52	40
036-30, 31				107.0	20.7	1.4	27.3	10/10	74/70	40
042-30, 31				107.0	22.8	1.4	29.9	10/10	67/63	50
048-30, 31				129.0	28.7	1.4	37.3	8/8	84/80	60
060-30, 31				169.0	31.1	1.4	40.3	6/8	160/90	60

FLA — Full Load Amps
HACR — Heating, Air Conditioning, Refrigeration
LRA — Locked Rotor Amps
MCA — Minimum Circuit Amps
RLA — Rated Load Amps

* 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 the wire path between the unit and the service panel for a voltage drop not to exceed 2%.

NOTE: Control circuit is 24v on all units and requires external power source.

**The ampacity of non-metallic (NM) sheathed cable shall be that of 60°C (140°F) conductors per NEC 1993, Article 336-26. If wire used is other than specified in chart, refer to applicable tables available in 1993 NEC. Copper wire must be used from disconnect to unit. All motors/compressors contain internal overload protection.

Combination ratings

OUTDOOR UNIT AND SOUND RATING (Bels)	INDOOR UNIT	ARI STANDARD RATINGS*									
		Cooling					Heating				
		TC	Seasonal Efficiency			High-Temp		Low-Temp		Seasonal Efficiency	
			Factory- Supplied Enhance- ment	Standard Rating	Field-Supplied Accessory**						
TDR	TXV	TC			COP	TC	COP	HSPF			
018-30 <											

See notes on pg. 9.

Combination ratings continued

OUTDOOR UNIT AND SOUND RATING (Bels)	INDOOR UNIT	ARI STANDARD RATINGS*									
		Cooling					Heating				
		TC	Seasonal Efficiency			High-Temp		Low-Temp		Seasonal Efficiency HSPF	
			Factory- Supplied Enhance- ment	Standard Rating	Field-Supplied Accessory**						
TDR	TXV	TC			COP	TC	COP				
036-30,-31	FB(4,5)AN(A,F)036†	36,000	TDR	10.00	—	10.00	39,000	3.08	25,600	2.24	7.20
	F(A,B)4ANF036	36,000	TDR	10.00	—	10.00	39,000	3.08	25,600	2.24	7.20
	FB4AN(A,F,M)042	36,000	TDR	10.00	—	10.00	39,500	3.12	25,600	2.24	7.20
	F(A,B)4AN(F,B)042	36,000	TDR	10.00	—	10.00	39,500	3.12	25,600	2.24	7.20
	FB5AN(A,F)042	36,000	TDR	10.00	—	10.00	39,500	3.12	25,600	2.24	7.20
	FK4ANF004	37,000	TDR & TXV	11.00	—	—	39,000	3.40	25,000	2.40	7.80
	FC4BNF033	36,800	TDR & TXV	10.50	—	—	40,500	3.16	25,600	2.38	7.30
	FC4BNF036	36,000	TDR & TXV	10.00	—	—	39,000	3.08	25,600	2.24	7.20
	FC4BNF038	38,000	TDR & TXV	10.50	—	—	37,000	3.20	25,800	2.34	7.50
	FC4BN(F,B)042	36,000	TDR & TXV	10.00	—	—	39,500	3.12	25,600	2.24	7.20
	FG3AAA036	35,000	NONE	—	10.00	10.00	39,000	3.06	25,200	2.24	7.20
	CC5A/CD5AA036	36,000	NONE	—	10.00	10.00	39,000	3.14	25,400	2.26	7.20
	CC5A/CD5AA042	36,000	NONE	—	10.00	10.00	39,000	3.10	25,400	2.24	7.20
	CC5A/CD5AW042	36,000	NONE	—	10.00	10.00	39,000	3.10	25,400	2.24	7.20
	CC5A/CD5AA043	36,000	NONE	—	10.00	10.00	39,000	3.14	25,400	2.26	7.20
	CC5A/CD5AW043	36,000	NONE	—	10.00	10.00	39,000	3.14	25,400	2.26	7.20
	CD5AW036	36,000	NONE	—	10.00	10.00	39,000	3.14	25,400	2.26	7.20
	CD3(A,B)A036	36,000	NONE	—	10.00	10.00	39,000	3.14	25,400	2.26	7.20
	CD3(A,B)A042	36,000	NONE	—	10.00	10.00	39,000	3.10	25,400	2.24	7.20
	CF5AA036	36,000	NONE	—	10.00	10.00	39,000	3.10	25,400	2.26	7.20
	CE3AA036	36,000	NONE	—	10.00	10.00	39,000	3.08	25,400	2.24	7.20
	CE3AA042	36,000	NONE	—	10.00	10.00	39,000	3.12	25,400	2.26	7.20
042-30,-31	FB4AN(A,F,M)042†	39,000	TDR	10.50	—	10.50	42,000	3.24	26,600	2.32	7.30
	F(A,B)4AN(F,B)042	39,000	TDR	10.50	—	10.50	42,000	3.24	26,600	2.32	7.30
	FB5AN(A,F)042	39,000	TDR	10.50	—	10.50	42,000	3.24	26,600	2.32	7.30
	FB4AN(A,F,M)048	40,000	TDR	11.00	—	11.00	42,500	3.38	26,600	2.40	7.50
	F(A,B)4AN(F,B)048	40,000	TDR	11.00	—	11.00	42,500	3.38	26,600	2.40	7.50
	FB5AN(A,F)048	40,000	TDR	11.00	—	11.00	42,500	3.38	26,600	2.40	7.50
	FK4ANF005	40,500	TDR & TXV	11.50	—	—	42,500	3.46	27,000	2.42	7.80
	FC4BN(F,B)042	39,000	TDR & TXV	10.50	—	—	42,000	3.24	26,600	2.32	7.30
	FC4BN(F,B)048	40,000	TDR & TXV	11.00	—	—	42,500	3.38	26,600	2.40	7.50
	FC4BNF038	41,000	TDR & TXV	11.00	—	—	43,000	3.44	26,800	2.40	7.60
	FG3AAA048	39,500	NONE	10.50	11.00	11.00	42,000	3.34	26,400	2.38	7.50
	CC5/CD5AA042	39,000	NONE	10.00	10.50	10.50	41,500	3.22	26,200	2.34	7.20
	CC5/CD5AW042	39,000	NONE	10.00	10.50	10.50	41,500	3.22	26,200	2.34	7.20
	CC5/CD5AA043	39,000	NONE	10.00	10.50	10.50	41,500	3.26	26,200	2.36	7.20
	CC5/CD5AW043	39,000	NONE	10.00	10.50	10.50	41,500	3.26	26,200	2.36	7.20
	CC5/CD5AC048	39,500	NONE	10.00	10.50	10.50	41,500	3.18	26,200	2.32	7.20
	CC5/CD5AW048	39,500	NONE	10.00	10.50	10.50	42,000	3.30	26,400	2.38	7.50
	CD5AA048	39,500	NONE	10.00	10.50	10.50	42,000	3.30	26,400	2.38	7.50
	CD3(A,B)A042	39,000	NONE	10.50	11.00	11.00	41,500	3.22	26,200	2.34	7.20
	CD3(A,B)A048	39,500	NONE	10.50	11.00	11.00	42,000	3.30	26,400	2.38	7.50
	CF5AA048	40,000	NONE	10.00	10.50	10.50	42,000	3.28	26,400	2.36	7.50
	CE3AA042	39,000	NONE	10.00	10.50	10.50	41,500	3.26	26,200	2.34	7.20
CE3AA048	40,000	NONE	10.00	10.50	10.50	42,000	3.34	26,400	2.40	7.50	
048-30,-31	FB4AN(A,F,M)048†	46,000	TDR	10.50	—	10.50	50,000	3.28	32,400	2.38	7.80
	F(A,B)4AN(F,B)048	46,000	TDR	10.50	—	10.50	50,000	3.28	32,400	2.38	7.80
	FB5AN(A,F)048	46,000	TDR	10.50	—	10.50	50,000	3.28	32,400	2.38	7.80
	FB4AN(A,F,M)060	47,500	TDR	10.50	—	10.50	50,500	3.32	32,800	2.40	8.00
	F(A,B)4AN(F,B)060	47,500	TDR	10.50	—	10.50	50,500	3.32	32,800	2.40	8.00
	FB5AN(A,F)060	47,500	TDR	10.50	—	10.50	50,500	3.32	32,800	2.40	8.00
	FK4ANF006	48,500	TDR & TXV	11.50	—	—	49,500	3.60	32,000	2.56	8.50
	FC4BN(F,B)048	46,000	TDR & TXV	10.50	—	—	50,000	3.28	32,400	2.38	7.80
	FC4BN(F,B)060	47,500	TDR & TXV	10.50	—	—	50,500	3.32	32,800	2.40	8.00
	FC4BNB054	48,000	TDR & TXV	11.00	—	—	50,000	3.50	32,600	2.48	8.20
	FG3AAA048	45,500	NONE	10.20	10.50	10.50	49,500	3.22	32,000	2.36	7.50
	FG3AAA060	47,000	NONE	10.70	11.00	11.00	49,500	3.26	32,200	2.40	7.50
	CC5/CD5AC048	45,500	NONE	10.20	10.50	10.50	49,000	3.06	31,800	2.30	7.50
	CC5/CD5AW048	45,500	NONE	10.20	10.50	10.50	49,500	3.18	32,000	2.34	7.50
	CD5AA048	45,500	NONE	10.20	10.50	10.50	49,500	3.18	32,000	2.34	7.50
	CC5/CD5AA060	46,000	NONE	10.30	10.60	10.60	49,000	3.16	32,000	2.34	7.50
	CC5/CD5AW060	47,000	NONE	10.70	11.00	11.00	49,500	3.30	32,200	2.42	8.00
	CD3(A,B)A048	45,500	NONE	10.20	10.50	10.50	49,500	3.18	32,000	2.34	7.50
	CD3(A,B)A060	46,000	NONE	10.30	10.60	10.60	49,000	3.16	32,000	2.34	7.50
	CF5AA048	46,000	NONE	10.20	10.50	10.50	49,000	3.18	32,000	2.34	7.50
	CE3AA048	46,000	NONE	10.30	10.60	10.60	49,500	3.22	32,000	2.36	7.50
	CE3AA060	47,000	NONE	10.70	11.00	11.00	49,500	3.30	32,200	2.42	8.00
060-30,-31	FB4AN(A,F,M)060†	56,500	TDR	10.60	—	10.60	61,000	3.26	39,500	2.40	7.60
	F(A,B)4AN(F,B)060	56,500	TDR	10.60	—	10.60	61,000	3.26	39,500	2.40	7.60
	FB5AN(A,F)060	56,500	TDR	10.60	—	10.60	61,000	3.26	39,500	2.40	7.60
	FB4AN(F,M)070	58,000	TDR	11.00	—	11.00	61,000	3.40	39,500	2.48	8.00
	FB4ANB070	58,000	TDR	11.00	—	11.00	61,000	3.40	39,500	2.48	8.00
	FK4ANF006	57,500	TDR & TXV	11.00	—	—	61,000	3.40	39,500	2.46	8.00

See notes on pg. 9.

Combination ratings continued

OUTDOOR UNIT AND SOUND RATING (Bels)	INDOOR UNIT	ARI STANDARD RATINGS*									
		Cooling					Heating				
		TC	Seasonal Efficiency			High-Temp		Low-Temp		Seasonal Efficiency HSPF	
			Factory- Supplied Enhance- ment	Standard Rating	Field-Supplied Accessory**						
TDR	TXV	TC			COP	TC	COP				
060-30,-31	FC4BN(F,B)060	56,500	TDR & TXV	10.60	—	—	61,000	3.26	39,500	2.40	7.60
	FG3AAA060	56,000	NONE	10.60	11.00	11.00	59,500	3.20	38,500	2.40	7.50
	CC5/CD5AA060	55,000	NONE	10.20	10.60	10.60	59,000	3.06	38,500	2.34	7.20
8.0/7.8	CC5/CD5AW060	56,000	NONE	10.60	11.00	11.00	59,500	3.24	38,500	2.42	7.50
	CD3(A,B)A060	55,000	NONE	10.20	10.60	10.60	59,000	3.06	38,500	2.34	7.20
	CE3AA060	57,000	NONE	10.60	11.00	11.00	60,000	3.26	38,500	2.42	7.50

COP — Coefficient of Performance

HSPF — Heating Seasonal Performance Factor

TC — Total Capacity (Btuh)

* 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.

High Temperature Heating Standard: 70°F (21°C) db indoor entering air temperature and 47°F (8°C) db 43°F (6°C) wb air entering outdoor unit.

Low Temperature Heating Standard: 70°F (21°C) db indoor entering air temperature and 17°F (–8°C) db 15°F (–11°C) wb air entering outdoor unit.

† Outdoor section/indoor section combination tested in accordance with DOE test procedures for heat pumps. Ratings for other combinations are determined under DOE computer simulation procedures.

‡ Rating without/with accessory sound blanket.

** Refer to TDR table prior to utilizing accessory TDR.

FIELD-SUPPLIED TDR TABLE

METHOD	PART/MODEL NO.
Time-Delay Relay	KAATD0101TDR
Furnaces with TDR	58SX, 58DX, 58SXA, 58SXB, 58DXA, 58DXC, 58SSC, 58DHC, 58WAV, 58ZAV, 58PAV, 58PAP, 58RAP, 58RAV, 58EJA

NOTE: most cases, only 1 of the above should be used to achieve TDR function. More than 1 of the methods listed above in a system may cause degradation in performance.

Detailed cooling capacities*

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F											
		85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38YKB018-30 Outdoor Section With FB(4,5)AN(A,F)018 Indoor Section													
500	72	18.1	8.91	1.65	17.5	8.72	1.82	16.8	8.48	1.99	15.9	8.17	2.19
	67	16.8	11.4	1.64	16.0	11.1	1.79	15.2	10.8	1.97	14.4	10.5	2.15
	63††	15.5	11.1	1.62	14.8	10.8	1.77	14.1	10.4	1.94	13.3	10.1	2.13
	62	15.2	13.7	1.61	14.5	13.3	1.77	13.8	13.0	1.94	13.1	12.6	2.12
	57	14.6	14.6	1.60	14.1	14.1	1.76	13.5	13.5	1.93	12.9	12.9	2.12
575	72	18.4	9.28	1.69	17.8	9.11	1.85	17.1	8.87	2.03	16.2	8.57	2.22
	67	17.1	12.1	1.67	16.3	11.8	1.83	15.5	11.5	2.00	14.6	11.1	2.19
	63††	15.8	11.7	1.65	15.1	11.4	1.80	14.3	11.1	1.97	13.5	10.7	2.16
	62	15.6	14.6	1.65	14.8	14.2	1.80	14.1	13.8	1.97	13.4	13.4	2.16
	57	15.2	15.2	1.64	14.6	14.6	1.80	14.0	14.0	1.97	13.4	13.4	2.15
650	72	18.6	9.60	1.72	18.0	9.47	1.88	17.3	9.24	2.06	16.3	8.94	2.25
	67	17.4	12.8	1.70	16.5	12.5	1.86	15.7	12.1	2.03	14.8	11.8	2.22
	63††	16.1	12.3	1.68	15.3	12.0	1.83	14.5	11.7	2.00	13.7	11.3	2.19
	62	15.9	15.4	1.68	15.2	15.0	1.83	14.5	14.5	2.00	13.8	13.8	2.19
	57	15.7	15.7	1.67	15.1	15.1	1.83	14.5	14.5	2.00	13.8	13.8	2.19

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB(4,5)AN(A,F)	018	1.00	1.00	FG3AAA	024	1.03	1.02
	024	1.03	1.03		018	1.01	1.02
F(A,B)4ANF	018	1.00	1.00	CC5A/CD5AA	024	1.03	1.02
FF1ANA	018	1.00	0.98		018	1.01	1.02
FD3ANA	024	1.03	1.01	CD3(A,B)A	024	1.03	1.02
	018	1.00	1.00		024	1.03	1.02
FC4BNF	024	1.03	1.03	CE3AA	024	1.03	1.02
	018	1.00	1.00		—	—	—

38YKB018-31 Outdoor Section With F(A,B)4ANF018 Indoor Section

600	72	19.1	9.51	1.80	18.2	9.22	1.92	17.2	8.88	2.03	16.1	8.51	2.14
	67	17.8	12.4	1.76	16.8	12.0	1.87	15.7	11.6	1.97	14.5	11.1	2.06
	63††	16.6	12.0	1.72	15.5	11.6	1.82	14.4	11.1	1.92	13.3	10.6	2.00
	62	16.2	14.9	1.71	15.2	14.4	1.81	14.2	13.9	1.91	13.2	13.2	2.00
	57	15.7	15.7	1.70	14.9	14.9	1.80	14.0	14.0	1.90	13.2	13.2	2.00
650	72	19.1	9.66	1.82	18.3	9.40	1.94	17.3	9.08	2.05	16.2	8.73	2.16
	67	18.0	12.7	1.78	17.0	12.4	1.89	15.8	12.0	2.00	14.6	11.5	2.09
	63††	16.7	12.4	1.75	15.7	12.0	1.85	14.5	11.5	1.94	13.4	11.0	2.03
	62	16.4	15.5	1.74	15.4	14.9	1.84	14.4	14.3	1.93	13.5	13.5	2.03
	57	16.1	16.1	1.73	15.2	15.2	1.83	14.3	14.3	1.93	13.5	13.5	2.03
700	72	19.2	9.79	1.83	18.4	9.58	1.96	17.4	9.28	2.07	16.3	8.94	2.18
	67	18.1	13.1	1.81	17.1	12.8	1.92	16.0	12.4	2.02	14.7	11.9	2.11
	63††	16.9	12.8	1.77	15.8	12.4	1.87	14.6	11.9	1.96	13.5	11.4	2.05
	62	16.6	16.0	1.76	15.6	15.4	1.86	14.6	14.6	1.96	13.7	13.7	2.06
	57	16.4	16.4	1.76	15.5	15.5	1.86	14.6	14.6	1.96	13.7	13.7	2.06

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	018	1.00	1.00	FB(5,4)AN(A,F)	018	1.00	1.00
	024	1.03	1.03		024	1.03	1.03
CC5A/CD5A/ CD5BA	018	1.00	1.01	FC4BNF	024	1.03	1.02
	024	1.03	1.02		018	1.00	1.03
CD3(A,B)A	018	1.00	1.01	FD3ANA	024	1.03	1.00
	024	1.03	1.02		018	1.00	0.97
CE3AA	024	1.03	1.02	FF1ANA	024	1.03	1.02
CF5AA	024	1.03	1.02		024	1.03	1.02

See notes on pg. 16.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F											
		85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38YKB024-30, 31 Outdoor Section With FB(4,5)AN(A,F)024 Indoor Section													
650	72	24.7	12.3	2.05	23.8	12.1	2.27	22.9	11.7	2.52	21.7	11.3	2.80
	67	22.8	15.9	2.03	21.7	15.5	2.25	20.7	15.1	2.49	19.6	14.6	2.76
	63††	21.0	15.4	2.01	20.1	15.0	2.22	19.1	14.5	2.46	18.1	14.1	2.73
	62	20.7	19.1	2.01	19.8	18.7	2.22	18.8	18.2	2.45	17.9	17.7	2.73
	57	20.1	20.1	2.00	19.4	19.4	2.21	18.6	18.6	2.45	17.8	17.8	2.72
750	72	25.1	12.9	2.09	24.2	12.7	2.32	23.2	12.4	2.57	22.1	12.0	2.85
	67	23.2	17.0	2.07	22.1	16.6	2.29	21.0	16.1	2.53	20.0	15.7	2.81
	63††	21.4	16.4	2.06	20.5	16.0	2.27	19.4	15.5	2.50	18.4	15.1	2.78
	62	21.2	20.5	2.05	20.3	20.0	2.26	19.4	19.4	2.50	18.5	18.5	2.78
	57	20.9	20.9	2.05	20.2	20.2	2.26	19.4	19.4	2.50	18.5	18.5	2.78
850	72	25.3	13.4	2.14	24.5	13.3	2.36	23.5	13.0	2.61	22.3	12.6	2.90
	67	23.5	17.9	2.11	22.4	17.6	2.33	21.3	17.2	2.58	20.2	16.7	2.85
	63††	21.8	17.4	2.10	20.7	17.0	2.31	19.7	16.5	2.55	18.7	16.1	2.82
	62	21.7	21.7	2.10	20.8	20.8	2.31	20.0	20.0	2.55	19.1	19.1	2.83
	57	21.7	21.7	2.10	20.8	20.8	2.31	20.0	20.0	2.55	19.1	19.1	2.83
Multipliers for Determining the Performance With Other Indoor Sections													
Indoor Section	Size	Cooling		Indoor Section	Size	Cooling							
		Capacity	Power			Capacity	Power						
FB(4,5)AN(A,F)	024	1.00	1.00	FC4BNF	024	1.00	1.00						
FB4AN(A,F)	030	1.02	1.00		030	1.02	1.00						
FB5AN(A,F)	030	1.00	1.00	FG3AAA	024	0.98	1.00						
F(A,B)4ANF	024	1.00	1.00	CC5A/CD5AA	024	1.00	1.00						
	030	1.02	1.00		030	1.02	1.00						
FB5BNA	030	1.02	1.00	CC5A/CD5AW	030	1.02	1.00						
FK4ANF	002	1.03	0.95	CD3(A,B)A	024	1.00	1.00						
FF1ANA	024	1.00	1.00		030	1.02	1.00						
	030	1.02	1.03	CF5AA	024	1.01	1.00						
FD3ANA	024	0.98	0.99	CE3AA	024	1.01	1.00						
	030	1.01	1.03		030	1.02	1.00						

See notes on pg. 16.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F											
		85			95			105			115		
CFM	EWB	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38YKB030-30, 31 Outdoor Section With FB4AN(A,F)030 Indoor Section													
950	72	33.2	16.6	2.98	32.0	16.1	3.29	30.6	15.7	3.62	29.0	15.1	3.98
	67	31.1	21.5	2.94	29.7	21.0	3.24	28.1	20.4	3.56	26.5	19.7	3.91
	63††	28.9	20.9	2.90	27.5	20.3	3.19	26.1	19.7	3.50	24.5	19.1	3.84
	62	28.3	26.0	2.89	27.0	25.3	3.17	25.7	24.6	3.49	24.3	23.8	3.83
	57	27.5	27.5	2.87	26.4	26.4	3.16	25.3	25.3	3.48	24.1	24.1	3.83
1050	72	33.5	17.0	3.03	32.3	16.6	3.33	30.9	16.2	3.67	29.3	15.7	4.03
	67	31.4	22.4	2.98	30.0	21.9	3.28	28.4	21.3	3.60	26.7	20.7	3.95
	63††	29.2	21.8	2.94	27.8	21.2	3.23	26.3	20.6	3.55	24.8	19.9	3.89
	62	28.8	27.2	2.93	27.4	26.5	3.22	26.1	25.7	3.54	24.7	24.7	3.89
	57	28.2	28.2	2.92	27.1	27.1	3.21	26.0	26.0	3.53	24.7	24.7	3.88
1150	72	33.8	17.5	3.07	32.6	17.1	3.38	31.1	16.7	3.71	29.5	16.2	4.07
	67	31.6	23.2	3.02	30.2	22.7	3.32	28.7	22.3	3.65	27.0	21.6	4.00
	63††	29.5	22.7	2.99	28.1	22.1	3.27	26.6	21.4	3.59	25.0	20.8	3.93
	62	29.2	28.4	2.98	27.9	27.6	3.27	26.5	26.5	3.59	25.2	25.2	3.94
	57	28.9	28.9	2.97	27.7	27.7	3.26	26.5	26.5	3.59	25.2	25.2	3.94

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4AN(A,F)	030	1.00	1.00	FG3AAA	036	1.00	1.01
FB5AN(A,F)	030	0.98	1.00	CC5A/CD5AA	030	1.00	1.01
FB(4,5)AN(A,F)	036	1.00	1.03		036	1.01	1.01
F(A,B)4ANF	030	1.00	1.00	CC5A/CD5AW	030	1.00	1.01
	036	1.00	1.03	CD5AW	036	1.01	1.01
FB5BNA	030	1.00	1.00	CD3(A,B)A	030	1.00	1.01
FK4ANF	003	1.01	0.96		036	1.01	1.01
FF1ANA	030	1.00	1.03	CF5AA	036	1.01	1.01
FC4BNF	030	1.00	1.00	CE3AA	030	1.00	1.00
	033	1.03	1.01		036	1.01	1.01
	036	1.00	1.03		—	—	—

See notes on pg. 16.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F											
		85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38YKB036-30, 31 Outdoor Section With FB(4,5)AN(A,F)036 Indoor Section													
1150	72	40.0	20.0	3.76	38.5	19.5	4.13	36.8	19.0	4.53	34.9	18.3	4.97
	67	37.3	26.1	3.70	35.6	25.5	4.06	33.8	24.8	4.45	31.8	24.0	4.87
	63††	34.7	25.4	3.65	33.0	24.7	4.00	31.3	24.0	4.38	29.4	23.2	4.79
	62	34.1	31.7	3.64	32.6	30.9	3.99	30.9	30.0	4.37	29.2	29.0	4.78
	57	33.3	33.3	3.62	32.0	32.0	3.97	30.6	30.6	4.36	29.1	29.1	4.78
1250	72	40.4	20.5	3.81	38.8	20.0	4.18	37.1	19.5	4.59	35.2	18.9	5.02
	67	37.7	27.1	3.75	36.0	26.5	4.11	34.1	25.8	4.51	32.1	25.0	4.93
	63††	35.0	26.4	3.70	33.4	25.7	4.05	31.6	24.9	4.43	29.7	24.1	4.85
	62	34.6	33.0	3.69	33.0	32.1	4.04	31.4	31.1	4.43	29.7	29.7	4.85
	57	34.0	34.0	3.68	32.7	32.7	4.03	31.2	31.2	4.42	29.7	29.7	4.85
1350	72	40.6	21.0	3.86	39.1	20.5	4.23	37.3	20.0	4.64	35.4	19.4	5.08
	67	38.0	28.1	3.81	36.3	27.5	4.17	34.3	26.8	4.56	32.3	26.0	4.98
	63††	35.4	27.3	3.75	33.6	26.6	4.10	31.8	25.8	4.49	29.9	25.0	4.90
	62	35.0	34.1	3.74	33.4	33.1	4.10	31.8	31.8	4.49	30.2	30.2	4.91
	57	34.6	34.6	3.74	33.3	33.3	4.09	31.8	31.8	4.49	30.2	30.2	4.91

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB(4,5)AN(A,F)	036	1.00	1.00	CC5A/CD5AA	036	1.00	0.99
FB4AN(A,F,M)	042	1.00	1.01		042	1.00	0.99
FB5AN(A,F)	042	1.00	1.01		043	1.00	0.99
F(A,B)4ANF	036	1.00	1.00	CC5A/CD5AW	042	1.00	0.99
F(A,B)4AN(F,B)	042	1.00	1.01		043	1.00	0.99
FK4ANF	004	1.03	0.95	CD5AW	036	1.00	0.99
FC4BNF	033	1.02	1.00	CD3(A,B)A	036	1.00	0.99
	036	1.00	1.00		042	1.00	0.99
	038	1.06	1.01	CF5AA	036	1.00	0.99
FC4BN(B,F)	042	1.00	1.01	CE3AA	036	1.00	0.99
FG3AAA	036	0.97	0.99		042	1.00	0.99

See notes on pg. 16.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F											
		85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38YKB042-30, 31 Outdoor Section With FB4AN(A,F,M)042 Indoor Section													
1350	72	43.7	22.3	3.67	42.3	21.9	4.03	40.5	21.4	4.41	38.4	20.6	4.82
	67	40.5	29.4	3.63	38.7	28.7	3.97	36.8	28.0	4.34	34.8	27.2	4.74
	63††	37.5	28.5	3.60	35.9	27.8	3.93	34.0	27.0	4.29	32.2	26.2	4.68
	62	37.1	35.6	3.59	35.5	34.8	3.92	33.9	33.7	4.29	32.3	32.3	4.69
	57	36.6	36.6	3.58	35.2	35.2	3.92	33.8	33.8	4.29	32.3	32.3	4.69
1450	72	43.9	22.8	3.72	42.6	22.5	4.07	40.8	21.9	4.46	38.6	21.2	4.87
	67	40.8	30.4	3.68	39.0	29.7	4.02	37.0	29.0	4.39	35.0	28.2	4.79
	63††	37.8	29.4	3.65	36.1	28.7	3.98	34.3	27.9	4.34	32.3	27.1	4.73
	62	37.5	36.8	3.64	35.9	35.8	3.97	34.4	34.4	4.34	32.8	32.8	4.74
	57	37.2	37.2	3.64	35.8	35.8	3.97	34.3	34.3	4.34	32.8	32.8	4.74
1550	72	44.2	23.3	3.77	42.8	23.0	4.12	41.0	22.5	4.51	38.8	21.8	4.92
	67	41.0	31.3	3.73	39.3	30.7	4.07	37.2	29.9	4.44	35.2	29.1	4.84
	63††	38.1	30.3	3.69	36.3	29.6	4.03	34.4	28.8	4.39	32.6	28.0	4.78
	62	37.9	37.8	3.69	36.4	36.4	4.03	34.9	34.9	4.40	33.3	33.3	4.80
	57	37.8	37.8	3.69	36.4	36.4	4.03	34.9	34.9	4.40	33.3	33.3	4.80

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4AN(A,F,M)	042	1.00	1.00	CC5A/CD5AA	042	1.00	0.98
	048	1.03	0.99		043	1.00	0.98
FB5AN(A,F)	042	1.00	1.00	CC5A/CD5AW	042	1.00	0.98
	048	1.03	0.99		043	1.00	0.98
F(A,B)4AN(F,B)	042	1.00	1.00	CC5A/CD5AC	048	1.01	0.98
	048	1.03	0.99		048	1.01	0.98
FK4ANF	005	1.04	0.97	CD5AA	048	1.01	0.98
FC4BNF	038	1.05	1.01	CD3(A,B)A	042	1.00	0.98
FC4BN(F,B)	042	1.00	1.00		048	1.01	0.98
	048	1.03	0.99	CF5AA	048	1.03	0.98
FG3AAA	048	1.01	0.98	CE3AA	042	1.00	0.98
	—	—	—		048	1.03	0.98

See notes on pg. 16.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F											
		85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38YKB048-30, 31 Outdoor Section With FB4AN(A,F,M)048 Indoor Section													
1500	72	51.7	26.1	4.45	49.8	25.6	4.89	47.6	24.8	5.36	45.1	23.9	5.87
	67	47.7	34.0	4.39	45.6	33.2	4.82	43.2	32.2	5.28	40.9	31.3	5.77
	63††	44.3	33.0	4.35	42.2	32.1	4.76	40.1	31.2	5.20	37.9	30.3	5.69
	62	43.6	41.2	4.33	41.7	40.2	4.75	39.7	39.1	5.20	37.8	37.7	5.68
	57	42.8	42.8	4.32	41.2	41.2	4.74	39.5	39.5	5.19	37.8	37.8	5.68
1650	72	52.2	26.9	4.53	50.3	26.4	4.96	48.1	25.7	5.44	45.4	24.8	5.95
	67	48.2	35.5	4.47	46.0	34.7	4.89	43.6	33.8	5.35	41.2	32.8	5.84
	63††	44.7	34.4	4.42	42.6	33.5	4.83	40.5	32.6	5.28	38.3	31.7	5.76
	62	44.3	43.1	4.41	42.3	41.9	4.83	40.5	40.5	5.28	38.6	38.6	5.77
	57	43.9	43.9	4.41	42.2	42.2	4.82	40.4	40.4	5.28	38.6	38.6	5.77
1800	72	52.6	27.8	4.60	50.7	27.2	5.04	48.4	26.6	5.52	45.7	25.7	6.03
	67	48.7	37.0	4.54	46.4	36.2	4.97	43.9	35.3	5.43	41.5	34.3	5.92
	63††	45.2	35.8	4.49	43.0	34.9	4.91	40.8	34.0	5.36	38.5	33.0	5.84
	62	44.9	44.7	4.49	43.0	43.0	4.91	41.3	41.3	5.37	39.4	39.4	5.86
	57	44.8	44.8	4.49	43.1	43.1	4.91	41.3	41.3	5.37	39.3	39.3	5.86

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4AN(A,F,M)	048	1.00	1.00	CC5A/CD5AC	048	0.99	0.98
	060	1.03	1.03		048	0.99	0.98
FB5AN(A,F)	048	1.00	1.00	CD5AA	060	1.02	0.99
	060	1.03	1.03		048	0.99	0.98
F(A,B)4AN(F,B)	048	1.00	1.00	CC5A/CD5AA	060	1.00	0.99
	060	1.03	1.03		048	0.99	0.98
FK4ANF	006	1.05	0.97	CD3(A,B)A	060	1.00	0.99
FC4BN(F,B)	048	1.00	1.00		048	1.00	0.99
	060	1.03	1.03	CE3AA	048	1.00	0.99
FC4BNB	054	1.04	1.00		060	1.02	0.99
FG3AAA	048	0.99	0.98		—	—	—
	060	1.02	0.99				

See notes on pg. 16.

Detailed cooling capacities* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F											
		85			95			105			115		
CFM	EWB	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**	Capacity MBtuh†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
38YKB060-30, 31 Outdoor Section With FB4AN(A,F,M)060 Indoor Section													
1800	72	63.8	31.9	5.44	61.2	31.1	5.97	58.4	30.1	6.54	55.1	28.9	7.16
	67	58.7	41.4	5.35	56.0	40.3	5.87	53.0	39.1	6.42	50.1	38.0	7.00
	63††	54.4	40.1	5.29	51.8	39.0	5.78	49.2	37.9	6.32	46.5	36.7	6.89
	62	53.5	50.2	5.27	51.1	49.0	5.77	48.6	47.6	6.30	46.1	46.0	6.89
	57	52.4	52.4	5.25	50.4	50.4	5.75	48.3	48.3	6.30	46.1	46.1	6.88
2000	72	64.4	33.0	5.55	61.9	32.2	6.08	59.0	31.3	6.66	55.6	30.1	7.27
	67	59.3	43.4	5.47	56.5	42.3	5.98	53.5	41.2	6.53	50.5	40.0	7.12
	63††	55.0	42.0	5.40	52.4	40.9	5.89	49.6	39.7	6.43	46.8	38.5	7.01
	62	54.4	52.8	5.39	51.9	51.4	5.88	49.6	49.6	6.43	47.2	47.2	7.02
	57	53.9	53.9	5.38	51.7	51.7	5.88	49.5	49.5	6.43	47.2	47.2	7.02
2200	72	64.9	34.0	5.66	62.4	33.3	6.19	59.4	32.4	6.77	56.0	31.2	7.38
	67	59.9	45.3	5.58	57.0	44.3	6.09	53.9	43.1	6.65	50.9	41.9	7.23
	63††	55.5	43.9	5.51	52.8	42.7	6.00	50.0	41.5	6.54	47.2	40.3	7.12
	62	55.2	55.0	5.50	52.9	52.9	6.01	50.6	50.6	6.56	48.2	48.2	7.16
	57	55.1	55.1	5.50	52.9	52.9	6.01	50.6	50.6	6.56	48.2	48.2	7.16

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
FB4AN(A,F,M)	060	1.00	1.00	FG3AAA	060	0.99	0.96
FB5AN(A,F)	060	1.00	1.00	CC5A/CD5AA	060	0.97	0.95
FB4AN(F,M,B)	070	1.03	0.98	CC5A/CD5AW	060	0.99	0.96
F(A,B)4AN(F,B)	060	1.00	1.00	CD3(A,B)A	060	0.97	0.95
FK4ANF	006	1.02	0.98	CE3AA	060	1.01	0.96
FC4BN(F,B)	060	1.00	1.00		—	—	—

* Detailed cooling capacities are based on indoor and outdoor unit at the same elevation and connected by 15 ft (4.57m) of tubing. If other than 15 ft (4.57m) 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.

†† At TVA rating indoor condition (75°edb/63°ewb). All other indoor air temperatures are at 80°edb.

‡ 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 kilowatts.

EWB = Entering wet bulb

Heat pump heating performance

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																				
		-3			7			17			27			37			47			57		
		Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†
EDB	CFM	Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*	
38YKB018-30 Outdoor Section With FB(4,5)AN(A,F)018 Indoor Section																						
65	500	7.58	6.97	1.48	9.18	8.44	1.52	11.0	10.0	1.56	13.0	11.5	1.61	15.2	13.9	1.68	17.8	17.8	1.76	20.6	20.6	1.86
	575	7.69	7.07	1.49	9.30	8.54	1.52	11.1	10.1	1.56	13.1	11.6	1.60	15.4	14.0	1.66	18.0	18.0	1.73	20.9	20.9	1.83
	650	7.79	7.17	1.50	9.40	8.64	1.53	11.2	10.2	1.56	13.3	11.8	1.60	15.6	14.2	1.65	18.2	18.2	1.72	21.1	21.1	1.82
70	500	7.45	6.85	1.53	9.07	8.34	1.58	10.8	9.89	1.62	12.8	11.4	1.68	15.1	13.7	1.75	17.6	17.6	1.83	20.4	20.4	1.94
	575	7.57	6.97	1.54	9.19	8.44	1.58	11.0	10.0	1.62	13.0	11.5	1.67	15.3	13.9	1.73	17.8	17.8	1.81	20.6	20.6	1.90
	650	7.68	7.06	1.56	9.29	8.54	1.59	11.1	10.1	1.63	13.1	11.6	1.67	15.4	14.0	1.72	18.0	18.0	1.79	20.8	20.8	1.89
75	500	7.30	6.72	1.59	8.96	8.23	1.64	10.7	9.77	1.69	12.7	11.2	1.75	14.9	13.6	1.82	17.4	17.4	1.91	20.2	20.2	2.02
	575	7.42	6.83	1.60	9.07	8.34	1.64	10.9	9.89	1.69	12.8	11.4	1.74	15.1	13.7	1.80	17.6	17.6	1.88	20.4	20.4	1.98
	650	7.54	6.93	1.61	9.18	8.44	1.65	11.0	10.0	1.69	13.0	11.5	1.74	15.2	13.9	1.79	17.8	17.8	1.87	20.6	20.6	1.96

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
FB(4,5)AN(A,F)	018	1.00	1.00	CC5A/CD5AA	018	1.00	1.02
	024	1.01	0.96		024	1.00	0.97
FF1ANA	018	1.00	0.99	CD3(A,B)A	018	1.00	1.02
	024	1.02	0.96		024	1.00	0.97
FD3ANA	024	1.00	0.97	CF5AA	024	1.00	0.95
FC4BNF	018	1.00	1.00	CE3AA	024	1.00	0.96
	024	1.01	0.96		018	1.00	1.00
FG3AAA	024	1.00	0.98	F(A,B)4ANF	024	1.01	0.96

38YKB018-31 Outdoor Section With F(A,B)4ANF018 Indoor Section

65	600	6.98	6.42	1.27	8.79	8.08	1.36	10.8	9.86	1.45	13.0	11.6	1.54	15.5	14.1	1.64	18.2	18.2	1.74	21.1	21.1	1.86
	650	7.07	6.51	1.29	8.89	8.17	1.37	10.9	9.98	1.46	13.2	11.7	1.55	15.7	14.3	1.64	18.4	18.4	1.75	21.3	21.3	1.87
	700	7.16	6.59	1.31	8.99	8.26	1.39	11.1	10.1	1.47	13.3	11.8	1.56	15.8	14.4	1.65	18.6	18.6	1.76	21.5	21.5	1.88
70	600	6.68	6.15	1.28	8.48	7.80	1.37	10.5	9.55	1.47	12.7	11.2	1.56	15.1	13.8	1.66	17.8	17.8	1.77	20.6	20.6	1.90
	650	6.78	6.23	1.30	8.59	7.89	1.39	10.6	9.66	1.48	12.8	11.4	1.57	15.3	13.9	1.67	18.0	18.0	1.78	20.9	20.9	1.90
	700	6.86	6.31	1.32	8.69	7.98	1.40	10.7	9.77	1.49	12.9	11.5	1.58	15.4	14.1	1.68	18.2	18.2	1.79	21.1	21.1	1.91
75	600	6.35	5.84	1.29	8.18	7.51	1.38	10.1	9.24	1.48	12.3	10.9	1.58	14.7	13.4	1.69	17.4	17.4	1.80	20.2	20.2	1.93
	650	6.44	5.93	1.31	8.28	7.61	1.40	10.3	9.35	1.50	12.4	11.0	1.59	14.9	13.5	1.70	17.6	17.6	1.81	20.4	20.4	1.93
	700	6.53	6.01	1.33	8.38	7.70	1.42	10.4	9.45	1.51	12.6	11.2	1.61	15.0	13.7	1.71	17.7	17.7	1.82	20.6	20.6	1.94

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	018	1.00	1.00	FB(5,4)AN(A,F)	018	1.00	1.00
	024	1.01	0.96		024	1.01	0.96
CC5A/CD5A/CD5BA	018	0.99	1.01	FC4BNF	024	1.01	0.96
	024	1.00	0.97		018	1.00	1.01
CD3(A,B)A	018	0.99	1.01	FD3ANA	024	1.00	0.95
	024	1.00	0.97		018	0.99	0.96
CE3AA	024	1.00	0.97	FF1ANA	024	1.02	0.96
CF5AA	024	1.00	0.96		024	1.00	0.97

See notes on pg. 20.

Heat pump heating performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																				
		-3			7			17			27			37			47			57		
EDB	CFM	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†
		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*	
38YKB024-30, 31 Outdoor Section With FB(4,5)AN(A,F)024 Indoor Section																						
65	650	9.57	8.81	1.68	11.7	10.7	1.73	13.7	12.5	1.77	15.8	14.0	1.82	18.1	16.5	1.87	20.6	20.6	1.93	23.3	23.3	2.02
	750	9.76	8.98	1.70	11.8	10.9	1.74	13.9	12.7	1.78	16.0	14.2	1.82	18.3	16.7	1.86	20.8	20.8	1.91	23.6	23.6	1.99
	850	9.94	9.14	1.72	12.0	11.0	1.77	14.1	12.8	1.80	16.2	14.4	1.83	18.5	16.8	1.86	21.0	21.0	1.91	23.9	23.9	1.98
70	650	9.32	8.57	1.73	11.5	10.6	1.79	13.6	12.4	1.85	15.7	13.9	1.90	17.9	16.3	1.95	20.4	20.4	2.02	23.1	23.1	2.11
	750	9.51	8.75	1.75	11.7	10.7	1.81	13.7	12.5	1.85	15.9	14.1	1.90	18.1	16.5	1.94	20.6	20.6	2.00	23.4	23.4	2.08
	850	9.68	8.91	1.78	11.8	10.9	1.83	13.9	12.7	1.87	16.0	14.2	1.90	18.3	16.7	1.94	20.8	20.8	1.99	23.6	23.6	2.06
75	650	9.04	8.31	1.79	11.3	10.4	1.86	13.4	12.2	1.92	15.5	13.8	1.98	17.8	16.2	2.04	20.2	20.2	2.12	22.9	22.9	2.21
	750	9.23	8.49	1.81	11.5	10.5	1.87	13.6	12.4	1.93	15.7	14.0	1.98	18.0	16.4	2.03	20.4	20.4	2.09	23.2	23.2	2.18
	850	9.41	8.66	1.84	11.6	10.7	1.89	13.8	12.5	1.94	15.9	14.1	1.98	18.2	16.5	2.03	20.6	20.6	2.08	23.4	23.4	2.16

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
FB(4,5)AN(A,F)	024	1.00	1.00	FC4BNF	024	1.00	1.00
FB4AN(A,F)	030	1.00	0.99		030	1.00	0.99
FB5AN(A,F)	030	1.00	1.02	FG3AAA	024	1.00	1.03
F(A,B)4ANF	024	1.00	1.00	CC5A/CD5AA	024	1.00	1.03
	030	1.00	0.99		030	0.97	1.00
FB5BNA	030	1.00	0.99	CC5A/CD5AW	030	0.97	1.00
FK4ANF	002	0.96	0.92	CD3(A,B)A	024	1.00	1.03
FF1ANA	024	1.01	1.01		030	0.97	1.00
	030	1.02	1.01	CF5AA	024	1.00	1.01
FD3ANA	024	0.99	1.02	CE3AA	024	1.00	1.01
	030	1.01	1.02		030	1.00	0.99

38YKB030-30, 31 Outdoor Section With FB4AN(A,F)030 Indoor Section

65	950	14.5	13.3	2.46	17.4	16.0	2.54	20.5	18.7	2.60	23.6	21.0	2.67	27.3	24.9	2.76	31.4	31.4	2.86	36.2	36.2	3.00
	1050	14.7	13.5	2.48	17.6	16.1	2.54	21.0	19.2	2.61	23.8	21.1	2.66	27.5	25.1	2.74	31.7	31.7	2.84	36.5	36.5	2.97
	1150	14.8	13.6	2.50	17.7	16.3	2.56	20.8	19.0	2.61	24.0	21.3	2.66	27.7	25.2	2.73	31.9	31.9	2.82	36.8	36.8	2.95
70	950	14.2	13.1	2.56	17.2	15.8	2.64	20.3	18.5	2.72	23.4	20.8	2.79	27.1	24.6	2.88	31.1	31.1	3.00	35.8	35.8	3.14
	1050	14.4	13.2	2.57	17.4	16.0	2.65	21.0	19.1	2.72	23.6	21.0	2.78	27.3	24.8	2.87	31.4	31.4	2.97	36.1	36.1	3.10
	1150	14.5	13.4	2.59	17.5	16.1	2.66	20.6	18.8	2.72	23.8	21.1	2.78	27.5	25.0	2.86	31.6	31.6	2.95	36.4	36.4	3.08
75	950	13.8	12.7	2.65	17.0	15.6	2.74	20.1	18.3	2.84	23.2	20.6	2.92	26.8	24.4	3.02	30.8	30.8	3.13	35.4	35.4	3.28
	1050	14.0	12.9	2.67	17.1	15.8	2.75	20.3	18.5	2.83	23.4	20.8	2.90	27.0	24.6	3.00	31.1	31.1	3.10	35.7	35.7	3.24
	1150	14.2	13.1	2.69	17.3	15.9	2.77	20.4	18.6	2.84	23.6	20.9	2.90	27.2	24.8	2.99	31.3	31.3	3.08	36.0	36.0	3.21

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
FB4AN(A,F)	030	1.00	1.00	FG3AAA	036	1.01	1.00
FB5AN(A,F)	030	0.99	1.03	CC5A/CD5AA	030	1.00	1.03
FB(4,5)AN(A,F)	036	1.02	1.01		036	1.01	0.98
F(A,B)4ANF	030	1.00	1.00	CC5A/CD5AW	030	1.00	1.03
	036	1.02	1.01	CD5AW	036	1.01	0.98
FB5BNA	030	1.00	1.00	CD3(A,B)A	030	1.00	1.03
FK4ANF	003	1.00	0.92		036	1.01	0.98
FF1ANA	030	1.01	1.01	CF5AA	036	1.01	0.99
FC4BNF	030	1.00	1.00	CE3AA	030	1.01	1.01
	033	1.01	0.97		036	1.01	0.99
	036	1.02	1.01		—	—	—

See notes on pg. 20.

Heat pump heating performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																				
		-3			7			17			27			37			47			57		
EDB	CFM	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†
		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*	
38YKB036-30, 31 Outdoor Section With FB(4,5)AN(A,F)036 Indoor Section																						
65	1150	18.5	17.0	3.03	21.9	20.1	3.11	25.7	23.4	3.21	29.5	26.2	3.30	34.1	31.0	3.42	39.1	39.1	3.57	44.9	44.9	3.78
	1250	18.7	17.2	3.06	22.6	20.8	3.14	25.9	23.6	3.21	29.8	26.4	3.30	34.3	31.2	3.41	39.4	39.4	3.56	45.2	45.2	3.76
	1350	18.9	17.3	3.08	22.3	20.5	3.15	26.1	23.8	3.23	29.9	26.6	3.31	34.6	31.4	3.41	39.7	39.7	3.55	45.5	45.5	3.75
70	1150	18.2	16.7	3.14	21.7	19.9	3.24	25.4	23.2	3.34	29.3	26.0	3.44	33.7	30.7	3.57	38.7	38.7	3.73	44.4	44.4	3.94
	1250	18.4	16.9	3.16	22.6	20.8	3.26	25.6	23.3	3.35	29.5	26.2	3.44	34.0	30.9	3.56	39.0	39.0	3.71	44.7	44.7	3.92
	1350	18.6	17.1	3.19	22.0	20.3	3.28	25.8	23.5	3.36	29.7	26.4	3.45	34.2	31.1	3.56	39.3	39.3	3.70	45.0	45.0	3.90
75	1150	17.8	16.4	3.24	21.4	19.7	3.37	25.1	22.9	3.48	29.0	25.7	3.58	33.4	30.4	3.72	38.3	38.3	3.89	43.9	43.9	4.11
	1250	18.0	16.6	3.27	21.6	19.9	3.38	25.3	23.1	3.48	29.2	25.9	3.58	33.7	30.6	3.71	38.6	38.6	3.87	44.2	44.2	4.08
	1350	18.2	16.7	3.29	21.8	20.0	3.40	25.5	23.3	3.50	29.4	26.1	3.59	33.9	30.8	3.71	38.8	38.8	3.86	44.5	44.5	4.06

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
FB(4,5)AN(A,F)	036	1.00	1.00	CC5A/CD5AA	036	1.00	0.98
FB4AN(A,F,M)	042	1.01	1.00		042	1.00	0.99
FB5AN(A,F)	042	1.01	1.00		043	1.00	0.98
F(A,B)4ANF	036	1.00	1.00	CC5A/CD5AW	042	1.00	0.99
F(A,B)4AN(F,B)	042	1.01	1.00		043	1.00	0.98
FK4BNF	004	1.00	0.91	CD5AW	036	1.00	0.98
FC4BNF	033	1.04	1.01	CD3(A,B)A	036	1.00	0.98
	036	1.00	1.00		042	1.00	0.99
	038	0.95	0.91		036	1.00	0.99
FC4BN(F,B)	042	1.01	1.00	CE3AA	036	1.00	1.00
FG3AAA	036	1.00	1.01		042	1.00	0.99

38YKB042-30, 31 Outdoor Section With FB4AN(A,F,M)042 Indoor Section

65	1350	18.9	17.4	3.00	22.6	20.8	3.10	26.7	24.3	3.21	31.2	27.7	3.32	36.4	33.1	3.46	42.2	42.2	3.64	49.0	49.0	3.88
	1450	19.0	17.5	3.03	22.8	20.9	3.13	26.9	24.5	3.23	31.4	27.9	3.34	36.6	33.3	3.47	42.5	42.5	3.65	49.3	49.3	3.88
	1550	19.2	17.7	3.07	22.9	21.1	3.16	27.1	24.7	3.25	31.6	28.1	3.35	36.9	33.5	3.49	42.8	42.8	3.66	49.6	49.6	3.89
70	1350	18.5	17.0	3.10	22.3	20.5	3.23	26.4	24.1	3.34	30.9	27.4	3.46	36.0	32.7	3.61	41.7	41.7	3.80	48.4	48.4	4.04
	1450	18.7	17.2	3.13	23.1	21.2	3.25	26.6	24.3	3.36	31.1	27.6	3.48	36.2	33.0	3.62	42.0	42.0	3.80	48.7	48.7	4.04
	1550	18.9	17.4	3.17	22.7	20.8	3.28	26.8	24.4	3.38	31.3	27.8	3.49	36.4	33.2	3.63	42.3	42.3	3.81	49.0	49.0	4.04
75	1350	18.1	16.6	3.21	22.0	20.3	3.35	26.1	23.8	3.48	30.6	27.1	3.61	35.6	32.4	3.76	41.2	41.2	3.95	47.8	47.8	4.21
	1450	18.3	16.8	3.24	22.2	20.4	3.37	26.3	24.0	3.49	30.8	27.3	3.62	35.8	32.6	3.77	41.5	41.5	3.95	48.1	48.1	4.20
	1550	18.5	17.0	3.27	22.4	20.6	3.40	26.5	24.1	3.52	31.0	27.5	3.64	36.0	32.8	3.78	41.8	41.8	3.96	48.4	48.4	4.20

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
FB4AN(A,F,M)	042	1.00	1.00	CC5A/CD5AA	042	0.99	0.99
	048	1.01	0.97		043	0.99	0.98
FB5AN(A,F)	042	1.00	1.00	CC5A/CD5AW	042	0.99	0.99
	048	1.01	0.97		043	0.99	0.98
F(A,B)4AN(F,B)	042	1.00	1.00	CC5A/CD5AC	048	0.99	1.01
	048	1.01	0.97		048	1.00	0.98
FK4ANF	005	1.01	0.95	CD5AA	048	1.00	0.98
FC4BNF	038	1.02	0.96	CD3(A,B)A	042	0.99	0.99
FC4BN(F,B)	042	1.00	1.00		048	1.00	0.98
	048	1.01	0.97	CF5AA	048	1.00	0.99
FG3AAA	048	1.00	0.97	CE3AA	042	0.99	0.98
	—	—	—		048	1.00	0.97

See notes on pg. 20.

Heat pump heating performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																				
		-3			7			17			27			37			47			57		
EDB	CFM	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†	Capacity MBtuh		Total Power Kw†
		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*	
38YKB048-30, 31 Outdoor Section With FB4AN(A,F,M)048 Indoor Section																						
65	1500	22.5	20.7	3.59	26.8	24.7	3.69	31.6	28.8	3.80	37.0	32.9	3.93	43.2	39.3	4.09	50.2	50.2	4.29	58.3	58.3	4.58
	1650	22.8	21.0	3.63	27.1	24.9	3.72	31.9	29.1	3.82	37.3	33.2	3.94	43.6	39.6	4.09	50.6	50.6	4.29	58.8	58.8	4.57
	1800	23.0	21.2	3.68	27.4	25.1	3.76	32.2	29.3	3.85	37.6	33.4	3.96	43.9	39.9	4.11	51.0	51.0	4.30	59.2	59.2	4.58
70	1500	22.2	20.5	3.72	26.5	24.4	3.84	31.3	28.5	3.96	36.6	32.5	4.09	42.7	38.8	4.26	49.6	49.6	4.47	57.6	57.6	4.76
	1650	22.5	20.7	3.77	26.8	24.6	3.87	32.4	29.5	3.99	36.9	32.8	4.10	43.0	39.2	4.26	50.0	50.0	4.47	58.1	58.1	4.75
	1800	22.7	20.9	3.81	27.1	24.9	3.91	31.9	29.1	4.01	37.2	33.1	4.13	43.4	39.5	4.28	50.4	50.4	4.47	58.5	58.5	4.75
75	1500	21.8	20.0	3.85	26.2	24.1	3.99	31.0	28.2	4.12	36.2	32.1	4.27	42.2	38.4	4.44	49.0	49.0	4.66	56.8	56.8	4.95
	1650	22.1	20.3	3.89	26.5	24.3	4.02	31.2	28.5	4.14	37.2	33.1	4.28	42.5	38.7	4.44	49.4	49.4	4.65	57.3	57.3	4.94
	1800	22.3	20.5	3.94	26.7	24.6	4.06	31.5	28.7	4.17	36.8	32.7	4.30	42.9	39.0	4.45	49.8	49.8	4.65	57.8	57.8	4.94

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
FB4AN(A,F,M)	048	1.00	1.00	CC5A/CD5AC	048	0.98	1.05
	060	1.01	1.00		048	0.99	1.02
FB5AN(A,F)	048	1.00	1.00	CD5AA	048	0.99	1.02
	060	1.01	1.00		048	0.99	1.02
F(A,B)4AN(F,B)	048	1.00	1.00	CC5A/CD5AA	060	0.98	1.02
	060	1.01	1.00		048	0.99	1.02
FK4ANF	006	0.99	0.90	CD3(A,B)A	060	0.98	1.02
FC4BNB	054	1.00	0.94		060	0.98	1.02
FC4BN(F,B)	048	1.00	1.00	CE3AA	048	0.99	1.01
	060	1.01	1.00		060	0.99	0.98
FG3AAA	048	0.99	1.01		—	—	—
	060	0.99	1.00		—	—	—

38YKB060-30, 31 Outdoor Section With FB4AN(A,F,M)060 Indoor Section																						
65	1800	28.6	26.3	4.27	33.9	31.1	4.43	39.5	36.0	4.59	45.8	40.7	4.77	53.0	48.2	5.00	61.1	61.1	5.26	70.5	70.5	5.61
	2000	29.0	26.7	4.33	34.2	31.5	4.48	39.9	36.4	4.63	46.3	41.1	4.80	53.6	48.7	5.01	61.7	61.7	5.26	71.2	71.2	5.60
	2200	29.4	27.0	4.41	34.6	31.8	4.54	40.3	36.8	4.68	46.7	41.5	4.84	54.0	49.2	5.04	62.3	62.3	5.28	71.8	71.8	5.61
70	1800	28.0	25.8	4.42	33.5	30.8	4.61	39.1	35.6	4.78	45.3	40.3	4.98	52.4	47.7	5.21	60.4	60.4	5.49	69.6	69.6	5.85
	2000	28.5	26.2	4.48	33.9	31.1	4.66	39.5	36.0	4.82	45.8	40.7	5.00	53.0	48.2	5.22	61.0	61.0	5.48	70.4	70.4	5.83
	2200	28.9	26.6	4.56	34.3	31.5	4.72	39.9	36.4	4.87	46.3	41.1	5.04	53.5	48.6	5.25	61.6	61.6	5.50	71.0	71.0	5.83
75	1800	27.4	25.2	4.57	33.1	30.4	4.79	38.7	35.2	4.98	44.9	39.8	5.19	51.8	47.2	5.43	59.7	59.7	5.72	68.7	68.7	6.09
	2000	27.8	25.6	4.64	33.5	30.8	4.84	39.1	35.6	5.02	45.3	40.3	5.21	52.4	47.7	5.44	60.3	60.3	5.71	69.5	69.5	6.07
	2200	28.3	26.0	4.71	33.9	31.1	4.90	39.5	36.0	5.07	45.8	40.7	5.25	52.9	48.1	5.47	60.9	60.9	5.73	70.1	70.1	6.07

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
FB4AN(A,F,M)	060	1.00	1.00	FG3AAA	060	0.98	0.99
FB5AN(A,F)	060	1.00	1.00	CC5A/CD5AA	060	0.97	1.03
FB4AN(F,M,B)	070	1.00	0.96	CC5A/CD5AW	060	0.98	0.98
F(A,B)4AN(F,B)	060	1.00	1.00	CD3(A,B)A	060	0.97	1.03
FK4ANF	006	1.00	0.96	CE3AA	060	0.98	0.98
FC4BN(F,B)	060	1.00	1.00		—	—	—

* The Btuh heating capacity values shown are net "integrated" values from which the defrost effect has been subtracted. The Btuh heating from supplement heaters should be added to those values to obtain total system capacity.

† The kw values include the compressor, outdoor fan motor, and indoor blower motor. The kw from supplement heaters should be added to these values to obtain total system kilowatts.

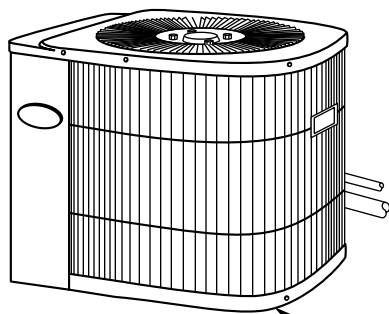
EDB = Entering dry bulb

System Design

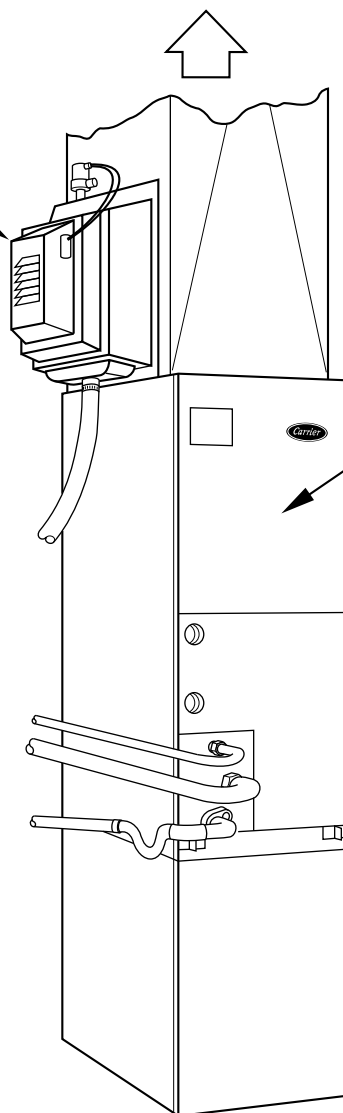
- Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01 in. wc.
- Minimum outdoor operating air temperature for cooling mode without low-ambient operation accessory is 55°F (12.8°C).
- Maximum outdoor operating air temperature for cooling mode is 125°F (51.7°C).
- Minimum outdoor operating air temperature for heating mode is -30°F (-34.4°C).
- Maximum outdoor operating air temperature for heating mode is 66°F (18.9°C).
- For reliable operation, unit should be level in all horizontal planes.
- Maximum elevation of indoor coil above or below base of outdoor unit is: indoor coil above = 50 ft, indoor coil below = 150 ft. (See items 8 and 9 following.)
- For interconnecting refrigerant tube lengths greater than 50 ft, consult Long-Line Application Guideline available from equipment distributor.
- Not more than 36 in. of refrigerant tube should be buried in the ground. If necessary to bury tubes under a sidewalk, provide a minimum 6-in. vertical rise to the valve connections at the unit.
- Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
- Mismatches of indoor coil capacity more than 1 size larger than outdoor unit capacity may result in inadequate indoor comfort.

Matched system

CARRIER HUMIDIFIERS REPLENISH MOISTURE TO DRY, HEATED WINTER AIR. FOR TOP PERFORMANCE, ALWAYS COMPLEMENT A CARRIER SYSTEM WITH CARRIER COMFORT ACCESSORIES.

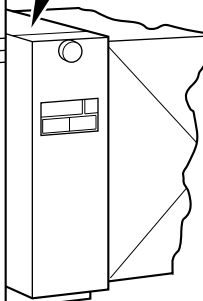


CARRIER STATE-OF-THE-ART HEAT PUMPS PROVIDE HIGH EFFICIENCY HEATING AND COOLING WITH MAXIMUM RELIABILITY FOR YEAR-ROUND COMFORT.



THE F SERIES FAN COILS ARE MATCHED WITH OUR OUTDOOR UNITS FOR TOP PERFORMANCE AND YEARS OF RELIABLE SERVICE.

THE ADDITION OF CARRIER AIR CLEANERS CAN SUBSTANTIALLY IMPROVE COMFORT AND SYSTEM OPERATION BY REMOVING UP TO 95% OF THE AIR BORNE POLLUTANTS IN THE HOME.



A90312

