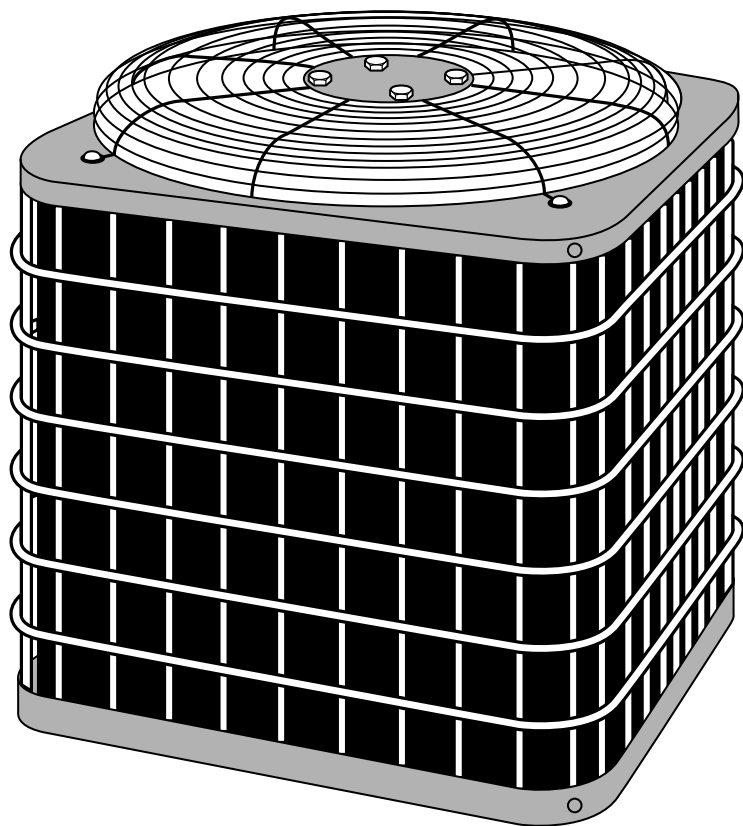




# Product Data

## 38BYB (60 Hz) Heat Pump

Sizes 018 thru 060



The 38BYB Outdoor Sections of Split-System Heat Pumps are designed for quiet, reliable heating during the winter and cooling during the summer. With a SEER of up to 14.0 and HSPF of up to 8.3, 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 system, remove indoor heat and excess humidity during the cooling season. All models are listed with UL, c-UL, CEC, and ARI.

### FEATURES/BENEFITS

**Electrical Range** — All units are offered in single phase 208–230v.

**Size Range** — 38BYB is available in 7 nominal sizes from 018 through 060 to meet the needs of residential and light commercial applications.

**Compressor** — This unit features a scroll compressor (except 018 size) which is significantly more efficient than conventional compressors. Its simple design offers improved reliability. Each compressor is mounted on rubber isolators for additional sound reduction. For improved serviceability, the 018 through 042 models are equipped with a compressor terminal plug. Continuous operation is approved down to  $-30^{\circ}\text{F}$  ( $-34.4^{\circ}\text{C}$ ) in the heating mode and down to  $55^{\circ}\text{F}$  ( $12.8^{\circ}\text{C}$ ) in the cooling mode. (See heating and cooling performance tables.)

**Built-in-Reliable Components** — Includes a suction-tube accumulator that reduces the amount of liquid refrigerant reaching the compressor, a high-pressure switch for high-pressure protection (except 018, 048, and 060 size), and a loss of charge switch.

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

**Thermostatic Expansion**

**Valve (TXV)** — This unit must be installed with a TXV on the indoor coil. The FC4 and FK4 indoor fan coils come factory equipped with a bi-flow TXV. When installed in this application, no further change is

required. If any other indoor fan coil or furnace coil is used, an accessory bi-flow TXV must be installed. See accessory list in this publication for correct part no.

**Discharge Muffler** — Incorporated to minimize low frequency sound and pressure pulsation generated by compressor discharge gas.

**Weather-Protective Cabinet** —

Steel is protected with a galvanized coating and treated 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.

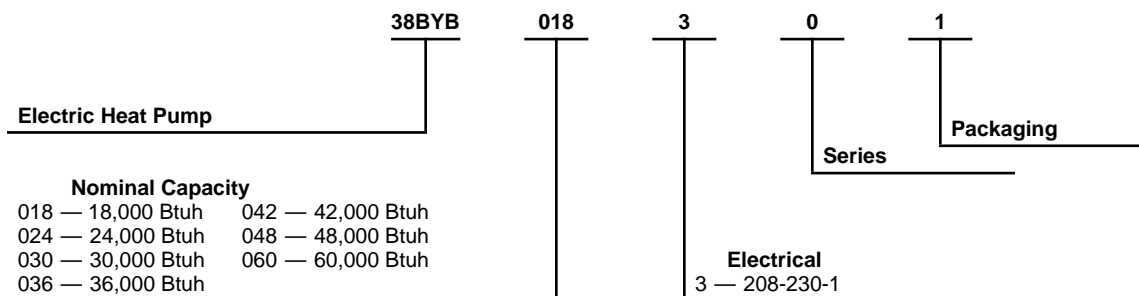
**Unit Design** — All units are equipped with totally enclosed fan motors for

greater reliability under rain and snow conditions. The large, wraparound coil uses copper tube and enhanced 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. The condenser coil can be cleaned with a common garden hose.

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

**Limited Warranty** — Standard 1 year on parts, additional 4 years on compressor.

## Model number nomenclature





APPROVALS  
ISO 9001  
EN 29001  
BS 5750 PART 1  
ANSI/ASQC Q91

CERTIFICATE NO. FM 28768

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

CERTIFICATION OF MANUFACTURING SITE.

## Physical data

UNIT SIZE	018	024	030	036	042	048	060
OPERATING WT (Lb)	139	166	188	208	209	250	278
COMPRESSOR Manufacturer Type	Bristol Reciprocating		Copeland Scroll				
REFRIGERANT Control Charge (Lb)	6.00	6.06	7.13	11.00 22 TXV	10.38	11.75	14.0
CONDENSER FAN Air Discharge Air Qty (CFM) Motor RPM (60 Hz)	1700 1100	Propeller Type, Direct Drive Vertical			3000 825	3300 1125	
CONDENSER COIL Face Area (Sq ft)	14.07	14.93	22.40	16.18		18.67	22.40
CONNECTION VALVE (In. ID) Liquid Vapor	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.

## METERING DEVICE

UNIT SIZE	SERIES	OUTDOOR PISTON	INDOOR TXV*
018	30	43	KHATX0901HSO
024	30	52	KHATX1001HSO
030	30	55	KHATX1101HSO
036	30	63	KHATX1201HSO
042	30	65	KHATX1201HSO
048	31	73	KHATX1301HSO
060	31	78	KHATX1401HSO

\* TXV must be ordered separately when indoor coil is not equipped with a TXV. TXV is listed for any approved coil combination. All TXVs are bi-flow, hard shutoff.

# Accessories

ORDERING NUMBER	DESCRIPTION
KAATD0101TDR	Time-Delay Relay — All Sizes
P251-0083 (RCD)*	Low-Ambient Controller — All Sizes
KAAFT0101AAA†	Evaporator Freeze Thermostat — All Sizes
KHAIR0101AAA†	Isolation Relay — All Sizes
Standard	Cycle Protector — All Sizes
Standard	Compressor Start Assist — Capacitor/Relay — Size 018
KSAHS0401AAA	Compressor Start Assist — Capacitor/Relay — Sizes 024-060
KSAHS0801AAA	Compressor Start Assist — Capacitor/Relay — Size 048 (31)
N/A	Compressor Start Assist — PTC — Size 018
KAACS0201PTC	Compressor Start Assist — PTC — Sizes 024-060
Standard	Crankcase Heater — Size 018, 048, 060
KAACH1201AAA	Crankcase Heater — Sizes 024-042
KSASH1501BRL	Sound Blanket — Size 018
KSASH1801COP	Sound Blanket — Sizes 024, 030
KSASH0601COP	Sound Blanket — Sizes 036, 042
KSASH1701COP	Sound Blanket — Sizes 048, 060
KHAOT0301FST	Outdoor Thermostat — All Sizes
KHAOT0201SEC	Secondary Outdoor Thermostat — All Sizes
KHASA0101AAA	Service Alarm — All Sizes
KHAIC0101AAA**	Interface Control (Optimizer II) — All Sizes
KHAIC0201AAA	Interface Control (Outdoor Thermostat and Lockout Relay) — All Sizes
KHATX0901HSO	Thermostatic Expansion Valve (Hard Shutoff) — Size 018
KHATX1001HSO	Thermostatic Expansion Valve (Hard Shutoff) — Size 024
KHATX1101HSO	Thermostatic Expansion Valve (Hard Shutoff) — Size 030
KHATX1201HSO	Thermostatic Expansion Valve (Hard Shutoff) — Sizes 036, 042
KHATX1301HSO	Thermostatic Expansion Valve (Hard Shutoff) — Size 048
KHATX1401HSO	Thermostatic Expansion Valve (Hard Shutoff) — Size 060
Standard	Low-Pressure Switch — All Sizes
KHAHI0201HPS	High-Pressure Switch — Sizes 018, 048, 060
Standard	High-Pressure Switch — Sizes 024-042
P504-8083S (RCD)	Filter Drier (Bi-flow) — Sizes 018-036
P504-8163S (RCD)	Filter Drier (Bi-flow) — Sizes 042-060
KHALS0101LLS	Liquid Solenoid Valve (LSV) — All Sizes
P165-0001 (RCD) (2 REQ'D/UNIT)	Heat Pump Risers — All Sizes
32LT660004‡	MotorMaster® Control — All Sizes
HC34GE231	Ball Bearing Fan Motor — Size 018
HC38GE230	Ball Bearing Fan Motor — Size 024-048
HC40GE230	Ball Bearing Fan Motor — Size 060

\* Isolation relay required.

† Use with low-ambient controller.

‡ Fan motor with ball bearings required.

\*\* Requires outdoor thermostat.

N/A — Not Applicable

THERMOSTAT PKG	DESCRIPTION
TSTATCCNHP01-A	Thermostat, Auto Changeover, Non-Programmable, °F /°C, 2-Stage Heat, 1-Stage Cool
TSTATCCPHP01-A	Thermostat, Auto Changeover, 7-Day Programmable, °F /°C, 2-Stage Heat, 1-Stage Cool
--HH--07AT-215	Thermostat, Manual Changeover, Non-Programmable, °F, 2-Stage Heat, 1-Stage Cool
TSTATCCSEN01	Outdoor Sensor
TSTATCCPDF01-A*	Thermostat, Auto Changeover, 7-Day Programmable, °F/°C, Dual Fuel Thermostat, Must be used with Outdoor Sensor (TSTATCCSEN01)

\* High-pressure switch must be added if not supplied with the system.

## Accessory Description and Usage

### 1. 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).

All commercial installations.

### 2. Evaporator Freeze Thermostat

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

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

### 3. Filter Drier — Bi-flow

A device for removing contaminants from refrigerant circulating in an air conditioner or heat pump system; bi-flow for heat pumps.

SUGGESTED USE: All field-connected split-system units.

### 4. Heat Pump Risers

Six-in. tall plastic rails that are used to elevate outdoor units above mounting pad. The risers are adjustable from 24- to 34-in. long.

SUGGESTED USE: Heat pump installations in light to moderate snowfall areas.

Coastal installations.

Windy areas or where debris can circulate.

Rooftop installations.

### 5. High-Pressure Switch

Auto reset SPST switch activated by refrigerant pressure on high side of refrigerant circuit. Cycles compressor off if refrigerant pressure rises to about 425 psig.

Provides additional protection against compressor damage due to loss of outdoor airflow.

SUGGESTED USE: Installations exposed to very “dirty” outdoor air.

Installations where condenser inlet air temperature exceeds 125°F (51.7°C).

### 6. 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 pre-determined economic balance point temperature, then switches to allow furnace operation only below that temperature. KHAIC0101AAA requires outdoor thermostat (item 11) to be adjusted for economic balance point temperature.

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

### 7. Isolation Relay

An 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 has been added.

### 8. Liquid Solenoid Valve (LSV)

An electrically operated shutoff valve installed at the outdoor unit 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: 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 Long-Line Application Guideline.)

### 9. Low-Ambient Controller

Head pressure controller is a cycle control device activated by a temperature sensor mounted on a header tube of the outdoor coil. It is designed to cycle the outdoor fan motor in order to maintain condensing temperature within operating limits (approximately 100°F high and 60°F low). The control will maintain working head pressure at low-ambient temperatures down to -20°F when properly installed.

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

### 10. MotorMaster® Control

A fan speed control device activated by a temperature sensor. Designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to -20°F, it maintains condensing temperature at 100°F ± 10°F.

SUGGESTED USE: Cooling operation at outdoor temperatures below 55°F.

All commercial installations.

### 11. Outdoor Thermostat

An SPDT temperature actuated switch which turns on supplemental electric heaters when outdoor air temperature drops below setpoint.

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

Used with KHAIC0101AAA (Interface Control).

### 12. Secondary Outdoor Thermostat

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

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

### 13. 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.

### 14. Sound Blanket

Wraparound sound attenuation cover for the compressor. Reduces the sound level by about 2 dBA.

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

Unit installed between 2 houses less than 10 ft apart.

### 15. 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.)

### 16. Time-Delay Relay

An 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.)

# Electrical data

UNIT SIZE	V/PH 60 Hz	OPER VOLTS*		COMPRESSOR		FAN FLA	MCA	MIN WIRE SIZE** 60°C/75°C	MAX LENGTH (Ft) 60°C/75°C†	MAX FUSE† OR HCR TYPE CKT BKR AMPS
		Max	Min	LRA	RLA					
018	208-230/1	253	197	48.0	8.5	0.5	11.1	14/14	71/66	15
024				62.5	11.5	0.9	15.3	14/14	51/49	25
030				76.0	14.3	0.9	18.8	14/14	42/40	30
036				90.5	17.9	0.9	23.3	12/12	54/51	40
042				107.0	22.5	0.9	29.0	10/10	69/65	50
048				129.0	25.3	0.9	32.5	8/10	95/58	55
060				169.0	32.1	1.4	41.5	6/8	126/71	60

\* 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 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 336-30. 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

HACR — Heating, Air Conditioning, Refrigeration

LRA — Locked Rotor Amps

MCA — Minimum Circuit Amps

RLA — Rated Load Amps

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



# Combination ratings continued

UNIT SIZE-SERIES	INDOOR UNIT	ARI STANDARD RATINGS*										
		Cooling					Heating					
		TC	Factory-Supplied Enhancement	Seasonal Efficiency SEER			High-Temp		Low-Temp		Seasonal Efficiency HSPF	Sound Rating (dBA)
				Standard Rating	Field-Supplied Accessory		TC	COP	TC	COP		
TXV‡	TXV & TDR**											
<b>030-30</b>												
<b>COILS + 58U(H,X)V080-16 FURNACE</b>												
	CC5A/CD5A/CD5BA036	28,800	None	—	13.50	—	29,000	3.42	17,900	2.52	7.80	78
	CD5A/CD5BW036	28,800	None	—	13.50	—	29,000	3.42	17,900	2.52	7.80	78
	CD3(A,B)A036	28,800	None	—	13.50	—	29,000	3.42	17,900	2.52	7.80	78
	CE3AA036	28,400	None	—	13.30	—	28,800	3.34	17,900	2.48	7.80	78
	F(A,B)4AN(F,B)042†	33,800	TDR	—	12.10	—	35,800	3.40	22,800	2.42	8.00	78
	F(A,B)4ANF036	33,000	TDR	—	11.70	—	36,000	3.32	22,800	2.36	7.60	78
	FC4BNF036	33,000	TDR & TXV	11.70	—	—	36,000	3.32	22,800	2.36	7.60	78
	FC4BN(F,B)042	33,800	TDR & TXV	12.10	—	—	35,800	3.40	22,800	2.42	8.00	78
	FG3AAA036	33,000	None	—	—	12.00	35,800	3.38	22,600	2.42	7.70	78
	FK4CNF001	33,200	TDR & TXV	12.20	—	—	35,000	3.38	22,200	2.46	7.80	78
	FK4CNF002	33,400	TDR & TXV	12.30	—	—	35,000	3.52	22,200	3.44	8.00	78
	FK4CNF003	33,600	TDR & TXV	13.00	—	—	35,000	3.46	22,200	2.48	8.00	78
	FK4CNF005	35,000	TDR & TXV	14.00	—	—	35,000	3.80	22,000	2.68	8.00	78
	CC5A/CD5A/CD5BA036	33,600	None	—	—	12.10	35,800	3.38	22,600	2.42	7.70	78
	CD5A/CD5BW036	33,600	None	—	—	12.10	35,800	3.38	22,600	2.42	7.70	78
	CD3(A,B)A036	33,600	None	—	—	12.10	35,800	3.38	22,600	2.42	7.70	78
	CC5A/CD5A/CD5BA042	33,600	None	—	—	12.10	35,800	3.38	22,600	2.42	7.70	78
	CD3(A,B)A042	33,600	None	—	—	12.10	35,800	3.38	22,600	2.42	7.70	78
	CC5A/CD5A/CD5BW042	33,400	None	—	—	12.10	35,800	3.34	22,600	2.40	7.60	78
	CE3AA036	33,200	None	—	—	12.00	35,600	3.32	22,600	2.38	7.60	78
	CE3AA042	33,800	None	—	—	12.10	36,000	3.44	22,800	2.44	7.70	78
	CF5AA036	33,400	None	—	—	12.10	35,800	3.36	22,600	2.40	7.70	78
	CG5AA036	33,400	TXV	12.00	—	12.10	35,800	3.36	22,600	2.40	7.70	78
<b>036-30</b>												
<b>COILS + 58U(H,X)V060-12 FURNACE</b>												
	CC5A/CD5A/CD5BA042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CC5A/CD5A/CD5BW042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CD3(A,B)A042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CE3AA042	33,800	None	—	13.00	—	35,400	3.46	22,200	2.50	8.00	78
<b>COILS + 58U(H,X)V080-16 FURNACE</b>												
	CC5A/CD5A/CD5BA042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CC5A/CD5A/CD5BW042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CD3(A,B)A042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CE3AA042	33,800	None	—	13.00	—	35,400	3.46	22,200	2.50	8.00	78
<b>COILS + 58U(H,X)V100-20 FURNACE</b>												
	CC5A/CD5A/CD5BA042	33,600	None	—	13.50	—	35,000	3.48	21,800	2.54	8.00	78
	CC5A/CD5A/CD5BW042	33,600	None	—	13.50	—	35,000	3.48	21,800	2.54	8.00	78
	CD3(A,B)A042	33,600	None	—	13.50	—	35,000	3.48	21,800	2.54	8.00	78
	CE3AA042	33,800	None	—	13.50	—	35,200	3.54	22,000	2.56	8.20	78
<b>COILS + 58U(H,X)V120-20 FURNACE</b>												
	CC5A/CD5A/CD5BA042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CC5A/CD5A/CD5BW042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CD3(A,B)A042	33,600	None	—	13.00	—	35,200	3.40	22,000	2.48	7.80	78
	CE3AA042	33,800	None	—	13.00	—	35,400	3.46	22,200	2.50	8.00	78
<b>042-30</b>												
	F(A,B)4AN(F,B)048†	40,000	TDR	—	12.00	—	43,000	3.46	27,800	2.54	8.00	78
	F(A,B)4ANF042	39,500	TDR	—	11.70	—	42,500	3.32	27,600	2.48	7.60	78
	FC4BNF038	40,500	TDR & TXV	12.00	—	—	43,000	3.54	28,000	2.56	8.00	78
	FC4BN(F,B)042	39,500	TDR & TXV	11.70	—	—	42,500	3.32	27,600	2.48	7.60	78
	FC4BN(F,B)048	40,000	TDR & TXV	12.00	—	—	43,000	3.46	27,800	2.54	8.00	78
	FG3AAA048	39,500	None	—	—	11.70	42,500	3.46	27,400	2.56	7.70	78
	FK4CNF003	39,500	TDR & TXV	13.00	—	—	41,500	3.40	26,400	2.60	7.80	78
	FK4CNF005	41,500	TDR & TXV	13.50	—	—	42,000	3.70	26,600	2.74	8.00	78
	FK4CNB006	42,000	TDR & TXV	14.00	—	—	42,000	3.86	26,600	2.82	8.30	78
	CC5A/CD5A/CD5BA042	39,000	None	—	—	12.00	42,000	3.32	27,200	2.50	7.50	78
	CD3(A,B)A042	39,000	None	—	—	12.00	42,000	3.32	27,200	2.50	7.50	78
	CC5A/CD5A/CD5BW042	39,000	None	—	—	11.80	43,500	3.28	27,200	2.48	7.50	78
	CD5A/CD5BA048	40,000	None	—	—	12.00	42,500	3.38	27,400	2.52	7.60	78
	CD3(A,B)A048	40,000	None	—	—	11.90	42,500	3.38	27,400	2.52	7.60	78
	CC5A/CD5A/CD5BC048	39,000	None	—	—	11.80	42,000	3.24	27,200	2.46	7.50	78
	CC5A/CD5A/CD5BW048	40,000	None	—	—	12.00	42,500	3.38	27,400	2.52	7.60	78
	CE3AA042	39,500	None	—	—	12.00	42,500	3.38	27,400	2.52	7.60	78
	CE3AA048	40,000	None	—	—	12.00	42,500	3.42	27,400	2.54	7.70	78
	CF5AA048	40,000	None	—	—	12.00	42,000	3.36	27,400	2.52	7.60	78
	CG5AA048	40,000	TXV	11.70	—	12.00	42,000	3.36	27,400	2.52	7.60	78
<b>COILS + 58U(H,X)V080-16 FURNACE</b>												
	CD5A/CD5BA048	39,500	None	—	13.00	—	42,000	3.38	26,400	2.58	7.80	78
	CC5A/CD5A/CD5BW048	39,500	None	—	13.00	—	42,000	3.38	26,400	2.58	7.80	78
	CC5A/CD5A/CD5BC048	39,000	None	—	13.00	—	41,500	3.24	26,400	2.50	7.70	78
	CD3(A,B)A048	39,500	None	—	13.00	—	42,000	3.38	26,400	2.58	7.80	78
	CE3AA048	39,500	None	—	13.00	—	42,000	3.42	26,600	2.58	7.80	78

See notes on pg. 10.



# Combination ratings continued

UNIT SIZE-SERIES	INDOOR UNIT	ARI STANDARD RATINGS*										
		Cooling					Heating					
		TC	Factory-Supplied Enhancement	Seasonal Efficiency SEER			High-Temp TC	High-Temp COP	Low-Temp TC	Low-Temp COP	Seasonal Efficiency HSPF	Sound Rating (dBA)
				Standard Rating	Field-Supplied Accessory							
			TXV†	TXV & TDR**								
042-30	COILS + 58U(H,X)V100-20 FURNACE											
	CD5A/CD5BA048	40,000	None	—	13.50	—	41,500	3.44	26,200	2.62	8.00	78
	CC5A/CD5A/CD5BW048	40,000	None	—	13.50	—	41,500	3.44	26,200	2.62	8.00	78
	CC5A/CD5A/CD5BC048	39,000	None	—	13.30	—	41,500	3.30	26,200	2.54	7.70	78
	CD3(A,B)A048	40,000	None	—	13.50	—	41,500	3.44	26,200	2.62	8.00	78
	CE3AA048	40,000	None	—	13.50	—	42,000	3.48	26,400	2.62	8.00	78
	COILS + 58U(H,X)V120-20 FURNACE											
	CD5A/CD5BA048	39,500	None	—	13.00	—	42,000	3.38	26,400	2.58	7.80	78
	CC5A/CD5A/CD5BW048	39,500	None	—	13.00	—	42,000	3.38	26,400	2.58	7.80	78
	CC5A/CD5A/CD5BC048	39,000	None	—	13.00	—	41,500	3.24	26,400	2.50	7.70	78
CD3(A,B)A048	39,500	None	—	13.00	—	42,000	3.38	26,400	2.58	7.80	78	
CE3AA048	39,500	None	—	13.00	—	42,000	3.42	26,600	2.58	7.80	78	
048-31	CC5A/CD5A/CD5BA060	46,000	NONE	—	—	11.50	48,000	3.14	32,000	2.34	7.40	78
	CC5A/CD5A/CD5BC048	44,500	NONE	—	—	11.50	48,000	3.00	31,800	2.26	7.00	78
	CC5A/CD5A/CD5BW048	45,500	NONE	—	—	11.50	48,000	3.18	32,200	2.34	7.50	78
	CC5A/CD5A/CD5BW060	47,000	NONE	—	—	12.00	48,000	3.32	32,200	2.40	7.80	78
	CD3(A,B)A048	45,500	NONE	—	—	11.50	48,000	3.20	32,200	2.34	7.50	78
	CD3(A,B)A060	46,000	NONE	—	—	11.50	48,000	3.14	32,000	2.34	7.40	78
	CD5A/CD5BA048	45,500	NONE	—	—	11.50	48,000	3.20	32,200	2.34	7.50	78
	CE3AA048	46,000	NONE	—	—	11.50	48,000	3.26	32,200	2.38	7.60	78
	CE3AA060	47,500	NONE	—	—	12.00	48,000	3.36	32,200	2.42	7.80	78
	CF5AA048	45,000	NONE	—	—	11.50	48,000	3.12	32,000	2.32	7.30	78
	CG5AA048	45,000	TXV	11.50	—	—	48,000	3.12	32,000	2.32	7.30	78
	F(A,B)4AN(F,B,C)048	46,000	TDR	—	11.50	—	48,000	3.32	32,400	2.38	7.60	78
	F(A,B)4AN(F,B,C)060	47,500	TDR	—	11.70	—	48,000	3.38	32,800	2.42	7.80	78
	FB4ANB070	48,000	TDR	—	12.00	—	48,000	3.54	32,600	2.48	8.00	78
	FC4BN(F,B)048	46,000	TDR&TXV	11.50	—	—	48,000	3.32	32,400	2.38	7.60	78
	FC4BN(F,B)060	47,500	TDR&TXV	11.70	—	—	48,000	3.38	32,800	2.42	7.80	78
	FC4BNB054	48,000	TDR&TXV	12.10	—	—	48,000	3.54	32,600	2.50	8.00	78
	FC4BNB070	48,000	TDR&TXV	12.00	—	—	48,000	3.54	32,600	2.48	8.00	78
	FG3AAA048	45,000	NONE	—	—	11.40	48,000	3.24	32,200	2.38	7.50	78
	FG3AAA060	46,000	NONE	—	—	11.80	48,000	3.30	32,200	2.40	7.60	78
	FK4CNB006	48,000	TDR&TXV	13.50	—	—	48,000	3.64	31,400	2.60	8.20	78
	FK4CNF005†	48,000	TDR&TXV	13.00	—	—	48,000	3.48	31,400	2.52	8.00	78
	COILS + 58U(H,X)V080-16 FURNACE											
	CC5A/CD5A/CD5BA060	45,000	TDR	—	12.00	—	48,000	3.10	31,400	2.34	7.50	78
	CC5A/CD5A/CD5BW060	46,500	TDR	—	12.30	—	48,000	3.30	31,400	2.42	7.80	78
	CD3(A,B)A060	45,000	TDR	—	12.00	—	48,000	3.10	31,400	2.34	7.50	78
	CE3AA060	46,500	TDR	—	12.30	—	48,000	3.32	31,600	2.44	7.80	78
	COILS + 58U(H,X)V100-20 FURNACE											
	CC5A/CD5A/CD5BA060	45,500	TDR	—	12.50	—	48,000	3.14	31,000	2.36	7.50	78
	CC5A/CD5A/CD5BW060	47,000	TDR	—	13.00	—	48,000	3.34	31,200	2.46	7.80	78
CD3(A,B)A060	45,500	TDR	—	12.50	—	48,000	3.14	31,000	2.36	7.50	78	
CE3AA060	47,000	TDR	—	13.00	—	48,000	3.38	31,200	2.48	7.80	78	
COILS + 58U(H,X)V120-20 FURNACE												
CC5A/CD5A/CD5BA060	45,000	TDR	—	12.00	—	48,000	3.12	31,200	2.36	7.50	78	
CC5A/CD5A/CD5BW060	47,000	TDR	—	12.50	—	48,000	3.32	31,400	2.44	7.80	78	
CD3(A,B)A060	45,000	TDR	—	12.00	—	48,000	3.12	31,200	2.36	7.50	78	
CE3AA060	47,000	TDR	—	12.50	—	48,000	3.34	31,400	2.46	7.80	78	
060-31	CC5A/CD5A/CD5BA060	55,000	NONE	—	—	11.00	60,000	2.94	39,000	2.24	7.00	80
	CC5A/CD5A/CD5BW060	57,000	NONE	—	—	11.40	60,000	3.08	38,500	2.30	7.40	80
	CD3(A,B)A060	55,000	NONE	—	—	11.00	60,000	2.94	39,000	2.24	7.00	80
	CE3AA060	57,000	NONE	—	—	11.50	60,000	3.12	39,000	2.32	7.40	80
	F(A,B)4AN(F,B,C)060	56,500	TDR	—	11.20	—	60,000	3.16	40,000	2.32	7.50	80
	FB4ANB070	58,000	TDR	—	11.50	—	60,000	3.30	39,500	2.38	7.70	80
	FC4BN(F,B)060	56,500	TDR&TXV	11.20	—	—	60,000	3.16	40,000	2.32	7.50	80
	FC4BNB070	58,000	TDR&TXV	11.50	—	—	60,000	3.30	39,500	2.38	7.70	80
	FG3AAA060	55,500	NONE	—	—	11.30	60,000	3.04	39,000	2.30	7.30	80
	FK4CNB006†	59,000	TDR&TXV	12.00	—	—	60,000	3.40	39,000	2.46	8.00	80
	COILS + 58U(H,X)V100-20 FURNACE											
	CC5A/CD5A/CD5BA060	54,500	TDR	—	11.30	—	60,000	2.94	38,500	2.24	7.20	80
	CC5A/CD5A/CD5BW060	56,500	TDR	—	11.60	—	60,000	3.12	38,500	2.34	7.50	80
	CD3(A,B)A060	54,500	TDR	—	11.30	—	60,000	2.94	38,500	2.24	7.20	80
	CE3AA060	56,500	TDR	—	11.60	—	60,000	3.16	39,000	2.36	7.50	80
COILS + 58U(H,X)V120-20 FURNACE												
CC5A/CD5A/CD5BA060	54,500	TDR	—	11.00	—	60,000	2.90	39,000	2.22	7.00	80	
CC5A/CD5A/CD5BW060	56,000	TDR	—	11.50	—	60,000	3.10	39,000	2.32	7.50	80	
CD3(A,B)A060	54,500	TDR	—	11.00	—	60,000	2.90	39,000	2.22	7.00	80	
CE3AA060	56,000	TDR	—	11.50	—	60,000	3.12	39,000	2.32	7.50	80	

See notes on pg. 10.

- \* 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.
- ‡ Requires hard shutoff TXV; based on computer simulation.
- \*\* TDR is on all furnaces, except 58GFA.
- COP — Coefficient of Performance  
HSPF — Heating Seasonal Performance Factor  
SEER — Seasonal Energy Efficiency Ratio  
TC — Total Capacity (Btuh)  
TDR — Time-Delay Relay  
TXV — Thermostatic Expansion Valve

# Detailed cooling capacities\*

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		85			95			105			115			125		
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**	Capacity MBtu/h†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
<b>38BYB018-30 Outdoor Section with F(A,B)4ANF024 Indoor Section</b>																
550	72	21.3	10.5	1.73	20.2	10.1	1.86	19.1	9.68	1.99	17.9	9.26	2.12	16.7	8.85	2.24
	67	19.3	13.2	1.71	18.3	12.8	1.83	17.2	12.4	1.95	16.1	11.9	2.07	15.0	11.5	2.18
	63††	17.9	12.8	1.69	16.9	12.4	1.80	15.9	11.9	1.92	14.8	11.5	2.02	13.8	11.0	2.13
	62	17.5	15.9	1.68	16.6	15.4	1.80	15.6	14.9	1.91	14.7	14.4	2.02	13.7	13.7	2.13
	57	16.9	16.9	1.67	16.2	16.2	1.79	15.4	15.4	1.90	14.6	14.6	2.02	13.8	13.8	2.13
650	72	21.8	11.1	1.77	20.6	10.7	1.91	19.4	10.3	2.04	18.2	9.88	2.17	17.0	9.45	2.30
	67	19.8	14.3	1.75	18.7	13.9	1.88	17.6	13.4	2.00	16.5	13.0	2.12	15.3	12.6	2.24
	63††	18.3	13.8	1.74	17.3	13.4	1.85	16.2	12.9	1.97	15.1	12.5	2.08	14.0	12.0	2.19
	62	18.1	17.3	1.73	17.1	16.8	1.85	16.2	16.2	1.97	15.3	15.3	2.09	14.4	14.4	2.20
	57	17.8	17.8	1.73	17.0	17.0	1.85	16.2	16.2	1.97	15.3	15.3	2.09	14.4	14.4	2.20
750	72	22.1	11.7	1.82	20.9	11.3	1.96	19.7	10.9	2.09	18.4	10.4	2.22	17.2	10.0	2.35
	67	20.1	15.3	1.80	19.0	14.9	1.93	17.9	14.4	2.05	16.7	14.0	2.17	15.5	13.5	2.29
	63††	18.6	14.8	1.78	17.6	14.3	1.90	16.5	13.9	2.02	15.3	13.4	2.13	14.2	12.9	2.24
	62	18.6	18.5	1.78	17.7	17.7	1.91	16.8	16.8	2.03	15.9	15.9	2.15	14.9	14.9	2.27
	57	18.5	18.5	1.78	17.7	17.7	1.91	16.8	16.8	2.03	15.9	15.9	2.15	14.9	14.9	2.27

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	0.93	0.98	CC5A/CD5A/CD5BA	018	0.95	0.98
	024	1.00	1.00		024	0.99	0.99
FC4BNF	024	1.01	1.00	CD3(A,B)A	018	0.95	0.98
F(A,B)4AN(A,F)	024	1.00	1.00		024	0.99	0.99
FD3ANA	018	0.95	0.99	CE3AA	024	0.99	0.99
	024	0.98	0.97	CF5AA	024	0.99	0.99
FF1(A,B)NA	018	0.94	0.96	CG5AA	024	0.99	0.99
	024	1.01	0.99	<b>COILS + 58U(H,X)V060-12 FURNACE</b>			
FG3AAA	024	0.98	0.99	CC5A/CD5A/CD5BA	024	0.99	0.89
FK4CNF	001	1.01	0.89	CC5A/CD5A/CD5BW	024	0.99	0.89
	002	1.02	0.89	CD3(A,B)	024	0.99	0.89
	—	—	—	CE3AA	024	0.99	0.90

See notes on pg. 17.

# Detailed cooling capacities\* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		85			95			105			115			125		
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**	Capacity MBtu/h†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
<b>38BYB024-30 Outdoor Section With F(A,B)4AN(A,F)030 Indoor Section</b>																
725	72	25.7	13.0	1.95	24.7	12.6	2.15	23.7	12.2	2.38	22.7	11.9	2.63	21.6	11.5	2.92
	67	23.6	16.6	1.95	22.7	16.3	2.14	21.7	15.9	2.37	20.7	15.5	2.63	19.8	15.1	2.91
	63††	21.9	16.1	1.95	21.1	15.8	2.14	20.1	15.4	2.37	19.2	15.0	2.62	18.3	14.6	2.90
	62	21.7	20.1	1.94	20.8	19.7	2.14	19.9	19.3	2.37	19.1	18.8	2.62	18.3	18.2	2.90
	57	21.1	21.1	1.94	20.4	20.4	2.14	19.7	19.7	2.37	19.0	19.0	2.62	18.2	18.2	2.90
825	72	26.0	13.5	1.98	25.0	13.1	2.18	24.0	12.8	2.41	22.9	12.4	2.67	21.9	12.1	2.96
	67	24.0	17.6	1.98	23.0	17.2	2.18	22.0	16.9	2.41	21.0	16.5	2.66	20.0	16.1	2.95
	63††	22.3	17.0	1.98	21.4	16.7	2.18	20.4	16.3	2.40	19.5	15.9	2.66	18.5	15.5	2.94
	62	22.1	21.4	1.98	21.2	20.9	2.18	20.4	20.3	2.40	19.6	19.6	2.66	18.8	18.8	2.94
	57	21.9	21.9	1.98	21.1	21.1	2.18	20.4	20.4	2.40	19.6	19.6	2.66	18.8	18.8	2.94
925	72	26.3	14.0	2.01	25.2	13.6	2.22	24.2	13.3	2.44	23.1	12.9	2.70	22.0	12.6	3.00
	67	24.2	18.5	2.01	23.2	18.2	2.21	22.2	17.8	2.44	21.2	17.4	2.70	20.2	17.0	2.99
	63††	22.5	17.9	2.01	21.6	17.5	2.21	20.6	17.1	2.44	19.7	16.7	2.69	18.7	16.4	2.98
	62	22.5	22.4	2.01	21.7	21.7	2.21	20.9	20.9	2.44	20.1	20.1	2.69	19.3	19.3	2.98
	57	22.5	22.5	2.01	21.7	21.7	2.21	20.9	20.9	2.44	20.1	20.1	2.69	19.3	19.3	2.98

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4AN(A,F)	024	0.98	1.01	CC5A/CD5A/ CD5BW	030	0.98	1.01
	030	1.00	1.00				
FC4BNF	024	0.98	1.01	CD3(A,B)A	024	0.97	1.01
	030	1.00	1.01		030	0.98	1.01
FD3ANA	024	0.97	0.99	CD3CA	036	0.98	1.01
	030	1.01	1.00		CE3AA	024	0.98
FF1(A,B)NA	024	0.98	1.02	CF5AA		030	1.00
	030	1.01	1.02		024	0.98	1.01
FG3AAA	024	0.97	1.01	CG5AA	024	0.98	1.01
FK4CNF	001	1.01	0.92	COILS + 58U(H,X)V060-12 FURNACE			
	002	1.03	0.92	CC5A/CD5A/CD5BA	030	0.98	0.92
	003	1.03	0.90	CC5A/CD5A/CD5BW	030	0.98	0.92
CC5A/CD5A/ CD5BA	024	0.97	1.01	CD3(A,B)A	030	0.98	0.92
	030	0.98	1.01	CE3AA	030	1.00	0.92

See notes on pg. 17.

# Detailed cooling capacities\* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F															
		85			95			105			115			125			
		Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	
CFM	EWB	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†
<b>38BYB030-30 Outdoor Section With F(A,B)4ANF036 Indoor Section</b>																	
900	72	31.9	16.1	2.44	30.7	15.7	2.67	29.4	15.3	2.92	28.1	14.8	3.19	26.8	14.3	3.50	
	67	29.4	20.9	2.42	28.2	20.4	2.64	27.0	19.9	2.89	25.8	19.5	3.16	24.5	19.0	3.47	
	63††	27.4	20.3	2.41	26.3	19.8	2.62	25.1	19.3	2.87	24.0	18.8	3.14	22.8	18.3	3.45	
	62	27.1	25.4	2.40	26.0	24.9	2.62	25.0	24.3	2.87	23.9	23.7	3.14	22.8	22.8	3.45	
	57	26.5	26.5	2.40	25.7	25.7	2.62	24.7	24.7	2.86	23.8	23.8	3.14	22.9	22.9	3.45	
950	72	32.1	16.4	2.47	30.8	16.0	2.69	29.6	15.5	2.94	28.2	15.1	3.21	26.9	14.6	3.52	
	67	29.6	21.4	2.45	28.4	20.9	2.67	27.2	20.5	2.91	25.9	20.0	3.19	24.6	19.5	3.49	
	63††	27.5	20.8	2.43	26.4	20.3	2.65	25.3	19.8	2.89	24.1	19.3	3.16	22.9	18.8	3.47	
	62	27.3	26.1	2.43	26.3	25.5	2.65	25.2	24.9	2.89	24.1	24.1	3.16	23.1	23.1	3.47	
	57	26.9	26.9	2.42	26.0	26.0	2.64	25.1	25.1	2.89	24.1	24.1	3.16	23.1	23.1	3.47	
1125	72	32.5	17.3	2.54	31.2	16.9	2.76	29.9	16.4	3.01	28.5	16.0	3.29	27.1	15.5	3.60	
	67	30.0	23.1	2.52	28.8	22.6	2.74	27.5	22.1	2.99	26.3	21.6	3.26	24.9	21.1	3.57	
	63††	28.0	22.3	2.50	26.8	21.9	2.72	25.6	21.4	2.97	24.4	20.8	3.24	23.2	20.3	3.55	
	62	28.0	27.9	2.50	27.0	27.0	2.73	26.0	26.0	2.97	25.0	25.0	3.25	23.9	23.9	3.56	
	57	28.0	28.0	2.50	27.0	27.0	2.73	26.0	26.0	2.97	25.0	25.0	3.25	23.9	23.9	3.56	

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4AN(A,F)	030	0.99	0.98	CD5A/CD5BW	036	1.01	0.99
F(A,B)4ANF	036	1.00	1.00	CE3AA	030	0.99	0.98
FC4BNF	030	0.99	0.98		036	1.00	0.99
		036	1.00	1.03	CF5AA	036	1.00
FD3ANA	030	0.99	1.00	CG5AA	036	1.00	0.99
FF1(A,B)NA	030	0.99	0.99	COILS + 58U(H,X)V060-12 FURNACE			
FG3AAA	036	1.00	0.99	CC5A/CD5A/CD5BA	036	1.01	0.93
FK4CNF	001	1.01	0.92	CD5A/CD5BW	036	1.01	0.93
	002	1.01	0.92	CD3(A,B)A	036	1.01	0.93
	003	1.03	0.90	CE3AA	036	1.00	0.93
CC5A/CD5A/CD5BA	030	0.98	0.98	COILS + 58U(H,X)V080-16 FURNACE			
	036	1.01	0.99	CC5A/CD5A/CD5BA	036	1.01	0.93
CC5A/CD5A/CD5BW	030	0.98	0.98	CD5A/CD5BW	036	1.01	0.93
				CD3(A,B)A	036	1.01	0.93
CD3(A,B)A	030	0.98	0.98	CE3AA	036	1.00	0.93
	036	1.01	0.99		—	—	—

See notes on pg. 17.

# Detailed cooling capacities\* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		85			95			105			115			125		
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**	Capacity MBtu/h†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
<b>38BYB036-30 Outdoor Section With F(A,B)4AN(F,B)042 Indoor Section</b>																
1100	72	37.9	19.4	2.90	36.4	18.9	3.18	34.9	18.4	3.49	33.3	17.8	3.83	31.6	17.2	4.20
	67	34.9	25.1	2.87	33.5	24.6	3.15	32.1	24.0	3.46	30.6	23.5	3.80	29.0	22.8	4.16
	63††	32.6	24.4	2.85	31.3	23.9	3.13	29.9	23.3	3.43	28.5	22.7	3.77	27.0	22.1	4.13
	62	32.2	30.6	2.85	31.0	29.9	3.12	29.7	29.2	3.43	28.4	28.4	3.77	27.2	27.2	4.13
	57	31.7	31.7	2.84	30.7	30.7	3.12	29.6	29.6	3.43	28.4	28.4	3.77	27.2	27.2	4.13
1200	72	38.2	20.0	2.94	36.7	19.5	3.22	35.2	18.9	3.53	33.5	18.4	3.87	31.8	17.8	4.24
	67	35.2	26.2	2.91	33.8	25.6	3.19	32.4	25.1	3.50	30.8	24.5	3.84	29.2	23.8	4.20
	63††	32.9	25.4	2.89	31.6	24.8	3.17	30.2	24.2	3.47	28.7	23.6	3.81	27.2	23.0	4.17
	62	32.7	31.8	2.89	31.5	31.1	3.16	30.2	30.2	3.47	29.0	29.0	3.81	27.7	27.7	4.18
	57	32.4	32.4	2.88	31.3	31.3	3.16	30.2	30.2	3.47	29.0	29.0	3.81	27.7	27.7	4.18
1350	72	38.5	20.8	3.00	37.0	20.3	3.28	35.4	19.8	3.59	33.8	19.2	3.93	32.0	18.7	4.30
	67	35.6	27.6	2.97	34.1	27.1	3.25	32.7	26.5	3.56	31.1	25.9	3.90	29.5	25.3	4.26
	63††	33.2	26.7	2.94	31.9	26.2	3.22	30.5	25.6	3.53	29.0	25.0	3.87	27.4	24.3	4.23
	62	33.3	33.2	2.94	32.1	32.1	3.23	31.0	31.0	3.54	29.7	29.7	3.87	28.3	28.3	4.24
	57	33.3	33.3	2.95	32.1	32.1	3.23	31.0	31.0	3.54	29.7	29.7	3.88	28.3	28.3	4.24

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	036	0.98	1.03	CG5AA	036	0.99	1.01
F(A,B)4AN(F,B)	042	1.00	1.00	COILS + 58U(H,X)V060-12 FURNACE			
FC4BN(F,B)	036	0.98	1.03	CC5A/CD5A/CD5BA	042	0.99	0.94
	042	1.00	1.02	CC5A/CD5A/CD5BW	042	0.99	0.94
FG3AAA	036	0.98	1.00	CD3(A,B)A	042	0.99	0.94
FK4CNF	001	0.98	0.95	CE3AA	042	1.00	0.95
	002	0.99	0.95	COILS + 58U(H,X)V080-16 FURNACE			
	003	0.99	0.95	CC5A/CD5A/CD5BA	042	0.99	0.94
	005	1.04	0.92	CC5A/CD5A/CD5BW	042	0.99	0.94
CC5A/CD5A/CD5BA	036	0.99	1.01	CD3(A,B)A	042	0.99	0.94
				CE3AA	042	1.00	0.95
CD5A/CD5BW	036	0.99	1.01	COILS + 58U(H,X)V100-20 FURNACE			
CD3(A,B)A	036	0.99	1.01	CC5A/CD5A/CD5BA	042	0.99	0.92
	042	0.99	1.01	CC5A/CD5A/CD5BW	042	0.99	0.92
CC5A/CD5A/CD5BA	042	0.99	1.01	CD3(A,B)A	042	0.99	0.92
				CE3AA	042	1.00	0.92
CC5A/CD5A/CD5BW	042	0.99	1.01	COILS + 58U(H,X)V120-20 FURNACE			
CE3AA	036	0.98	1.01	CC5A/CD5A/CD5BA	042	0.99	0.94
	042	1.00	1.01	CC5A/CD5A/CD5BW	042	0.99	0.94
CF5AA	036	0.99	1.01	CD3(A,B)A	042	0.99	0.94
				CE3AA	042	1.00	0.95

See notes on pg. 17.

# Detailed cooling capacities\* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F															
		85			95			105			115			125			
		Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	Capacity MBtu/h†		Total System Kw**	
CFM	EWB	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡
<b>38BYB042-30 Outdoor Section With F(A,B)4AN(F,B)048 Indoor Section</b>																	
1275	72	44.7	22.9	3.39	42.9	22.3	3.72	41.0	21.6	4.08	39.0	20.9	4.47	36.9	20.2	4.89	
	67	41.2	29.7	3.34	39.5	29.1	3.67	37.7	28.4	4.03	35.8	27.6	4.41	33.9	26.9	4.83	
	63††	38.4	28.9	3.31	36.8	28.2	3.63	35.2	27.5	3.99	33.4	26.7	4.37	31.5	25.9	4.78	
	62	38.0	36.2	3.30	36.5	35.4	3.63	34.9	34.5	3.98	33.3	33.3	4.37	31.8	31.8	4.78	
	57	37.5	37.5	3.30	36.2	36.2	3.62	34.8	34.8	3.98	33.3	33.3	4.37	31.8	31.8	4.78	
1475	72	45.3	24.1	3.47	43.4	23.4	3.80	41.6	22.8	4.17	39.4	22.1	4.56	37.3	21.3	4.98	
	67	41.8	31.8	3.43	40.0	31.1	3.76	38.2	30.4	4.11	36.2	29.6	4.50	34.2	28.9	4.92	
	63††	39.0	30.8	3.40	37.4	30.1	3.72	35.6	29.4	4.07	33.7	28.6	4.45	31.9	27.8	4.87	
	62	38.9	38.6	3.39	37.4	37.4	3.72	36.0	36.0	4.08	34.4	34.4	4.47	32.8	32.8	4.89	
	57	38.8	38.8	3.39	37.4	37.4	3.72	35.9	35.9	4.08	34.4	34.4	4.47	32.8	32.8	4.89	
1675	72	45.8	25.2	3.56	43.7	24.5	3.89	41.8	23.9	4.25	39.6	23.2	4.64	37.4	22.5	5.07	
	67	42.1	33.8	3.52	40.3	33.1	3.84	38.5	32.3	4.20	36.5	31.6	4.59	34.5	30.8	5.01	
	63††	39.4	32.6	3.48	37.7	31.9	3.81	35.9	31.1	4.16	34.0	30.4	4.54	32.1	29.5	4.96	
	62	39.8	39.8	3.49	38.4	38.4	3.82	36.9	36.9	4.18	35.2	35.2	4.57	33.6	33.6	4.99	
	57	39.8	39.8	3.49	38.4	38.4	3.82	36.9	36.9	4.18	35.2	35.2	4.57	33.6	33.6	4.99	

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4AN(F,B)	042	0.99	1.00	CF5AA	048	1.00	0.99
	048	1.00	1.00	CG5AA	048	1.00	0.99
FC4BN(F,B)	038	0.94	1.02	COILS + 58U(H,X)V080-16 FURNACE			
	042	0.99	1.00	CD5A/CD5BA	048	0.99	0.92
	048	1.00	1.00	CC5A/CD5A/CD5BW	048	0.99	0.92
FG3AAA	048	0.99	0.99	CC5A/CD5A/CD5BC	048	0.98	0.91
FK4CNF	003	0.99	0.91	CD3(A,B)A	048	0.99	0.92
	005	1.04	0.91	CE3AA	048	0.99	0.93
	006	1.05	0.90	COILS + 58U(H,X)V100-20 FURNACE			
CC5A/CD5A/CD5BA	042	0.98	0.98	CD5A/CD5BA	048	1.00	0.90
				CC5A/CD5A/CD5BW	048	1.00	0.90
CD3(A,B)A	042	0.98	0.98	CC5A/CD5A/CD5BC	048	0.98	0.90
	048	1.00	0.99	CD3(A,B)A	048	1.00	0.90
CC5A/CD5A/CD5BW	042	0.98	0.98	CE3AA	048	1.00	0.91
	048	1.00	0.99	COILS + 58U(H,X)V120-20 FURNACE			
CD5A/CD5BA	048	1.00	0.99	CD5A/CD5BA	048	0.99	0.92
CC5A/CD5A/CD5BC	048	0.98	0.98	CC5A/CD5A/CD5BW	048	0.99	0.92
				CC5A/CD5A/CD5BC	048	0.98	0.91
CE3AA	042	0.99	0.99	CD3(A,B)A	048	0.99	0.92
	048	1.00	0.99	CE3AA	048	0.99	0.93

See notes on pg. 17.

# Detailed cooling capacities\* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		85			95			105			115			125		
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**	Capacity MBtu/h†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
<b>38BYB048-31 Outdoor Section With FK4CNF005 Indoor Section</b>																
1400	72	54.4	27.4	4.00	51.9	26.4	4.50	49.3	25.5	5.04	46.5	24.5	5.62	43.6	23.5	6.25
	67	50.3	34.8	3.97	48.0	33.9	4.46	45.6	32.9	5.00	43.0	31.9	5.58	40.3	30.8	6.20
	63††	47.1	34.0	3.95	44.9	33.0	4.43	42.6	32.0	4.96	40.2	31.0	5.54	37.7	29.9	6.15
	62	46.4	42.1	3.94	44.3	41.1	4.43	42.0	40.0	4.96	39.8	38.8	5.53	37.4	37.4	6.14
	57	45.0	45.0	3.93	43.3	43.3	4.42	41.4	41.4	4.95	39.5	39.5	5.53	37.5	37.5	6.15
1600	72	55.2	28.6	4.06	52.6	27.7	4.55	49.8	26.7	5.10	46.9	25.7	5.68	43.9	24.6	6.31
	67	51.1	37.0	4.03	48.7	36.0	4.52	46.1	35.0	5.06	43.4	34.0	5.64	40.7	32.9	6.26
	63††	47.9	36.0	4.01	45.6	35.0	4.49	43.2	34.0	5.02	40.7	32.9	5.60	38.1	31.9	6.21
	62	47.4	45.0	4.00	45.2	43.9	4.49	42.9	42.6	5.02	40.7	40.7	5.60	38.6	38.6	6.22
	57	46.7	46.7	3.99	44.8	44.8	4.49	42.8	42.8	5.02	40.8	40.8	5.60	38.6	38.6	6.22
1800	72	55.7	29.8	4.11	53.0	28.8	4.61	50.2	27.8	5.15	47.2	26.8	5.74	44.1	25.8	6.37
	67	51.7	39.1	4.08	49.2	38.1	4.58	46.5	37.1	5.11	43.8	36.0	5.69	41.0	34.9	6.32
	63††	48.4	38.0	4.06	46.1	36.9	4.55	43.6	35.9	5.08	41.0	34.8	5.65	38.4	33.7	6.27
	62	48.1	47.5	4.06	46.0	46.0	4.55	43.9	43.9	5.08	41.8	41.8	5.67	39.5	39.5	6.29
	57	48.0	48.0	4.06	46.1	46.1	4.55	44.0	44.0	5.09	41.8	41.8	5.67	39.6	39.6	6.29

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
CC5A/CD5A/CD5BA	060	0.96	1.05	FG3AAA	048	0.94	1.05
CC5A/CD5A/CD5BC	048	0.93	1.04		060	0.96	1.05
CC5A/CD5A/CD5BW	048	0.95	1.05	FK4CNB	006	1.00	0.99
	060	0.98	1.06	FK4CNF	005	1.00	1.00
CD3(A,B)A	048	0.95	1.05	COILS + 58U(H,X)V080-16 FURNACE			
	060	0.96	1.05	CC5A/CD5A/CD5BA	060	0.94	1.01
CD5A/CD5BA	048	0.95	1.05	CC5A/CD5A/CD5BW	060	0.97	1.01
CE3AA	048	0.96	1.05	CD3(A,B)A	060	0.94	1.01
	060	0.99	1.06	CE3AA	060	0.97	1.01
CF5AA	048	0.94	1.04	COILS + 58U(H,X)V100-20 FURNACE			
CG5AA	048	0.94	1.04	CC5A/CD5A/CD5BA	060	0.95	0.99
F(A,B)4AN(F,B,C)	048	0.96	1.07	CC5A/CD5A/CD5BW	060	0.98	0.99
	060	0.99	1.09	CD3(A,B)A	060	0.95	0.99
FB4ANB	070	1.00	1.07	CE3AA	060	0.98	0.99
FC4BN(F,B)	048	0.96	1.07	COILS + 58U(H,X)V120-20 FURNACE			
	060	0.99	1.09	CC5A/CD5A/CD5BA	060	0.94	1.00
FC4BNB	054	1.00	1.07	CC5A/CD5A/CD5BW	060	0.98	1.00
	070	1.00	1.07	CD3(A,B)A	060	0.94	1.00
	—	—	—	CE3AA	060	0.98	1.00

See notes on pg. 17.



# Detailed cooling capacities\* continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		85			95			105			115			125		
CFM	EWB	Capacity MBtuht†		Total System Kw**	Capacity MBtuht†		Total System Kw**	Capacity MBtuht†		Total System Kw**	Capacity MBtuht†		Total System Kw**	Capacity MBtuht†		Total System Kw**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
<b>38BYB060-31 Outdoor Section With FK4CNF006 Indoor Section</b>																
1750	72	66.7	33.9	5.29	63.7	32.8	5.86	60.5	31.7	6.48	57.2	30.5	7.16	53.6	29.3	7.88
	67	61.8	43.6	5.22	59.0	42.4	5.78	56.0	41.3	6.40	52.9	40.1	7.07	49.7	38.8	7.78
	63††	57.9	42.5	5.16	55.3	41.4	5.72	52.5	40.1	6.33	49.5	38.9	6.99	46.5	37.6	7.69
	62	57.2	53.0	5.15	54.6	51.7	5.71	52.0	50.4	6.32	49.2	48.8	6.98	46.5	46.5	7.70
	57	55.9	55.9	5.13	53.8	53.8	5.70	51.6	51.6	6.32	49.2	49.2	6.98	46.6	46.6	7.70
2000	72	67.8	35.6	5.39	64.7	34.5	5.96	61.5	33.4	6.59	58.1	32.2	7.26	54.4	31.0	7.99
	67	62.6	46.3	5.31	59.7	45.2	5.87	56.6	44.0	6.49	53.4	42.7	7.15	50.0	41.4	7.87
	63††	59.0	45.2	5.26	56.3	44.1	5.82	53.4	42.8	6.44	50.4	41.6	7.09	47.3	40.2	7.80
	62	58.2	56.6	5.24	55.7	55.1	5.80	53.1	53.1	6.42	50.5	50.5	7.09	47.9	47.9	7.81
	57	57.8	57.8	5.24	55.5	55.5	5.80	53.2	53.2	6.42	50.6	50.6	7.10	47.9	47.9	7.82
2250	72	68.3	37.0	5.47	65.5	36.1	6.06	62.2	35.0	6.68	58.7	33.8	7.36	54.6	32.4	8.06
	67	63.5	49.1	5.40	60.6	48.0	5.97	57.4	46.7	6.59	53.8	45.3	7.24	50.4	44.0	7.95
	63††	59.6	47.6	5.34	57.1	46.6	5.92	54.2	45.4	6.53	51.1	44.1	7.19	47.5	42.5	7.88
	62	59.6	59.5	5.34	57.2	57.2	5.91	54.7	54.7	6.53	51.7	51.7	7.20	48.9	48.9	7.92
	57	59.3	59.3	5.34	57.0	57.0	5.90	54.5	54.5	6.53	51.8	51.8	7.20	49.0	49.0	7.92

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Cooling		Indoor Section	Size	Cooling	
		Capacity	Power			Capacity	Power
CC5A/CD5A/CD5BA	060	0.93	1.02	COILS + 58U(H,X)V100-20 FURNACE			
CC5A/CD5A/CD5BW	060	0.97	1.01	CC5A/CD5A/CD5BA	060	0.92	1.00
CD3(A,B)A	060	0.93	1.02	CC5A/CD5A/CD5BW	060	0.96	1.00
CE3AA	060	0.97	1.02	CD3(A,B)A	060	0.92	1.00
F(A,B)4AN(F,B,C)	060	0.96	1.05	CE3AA	060	0.96	1.00
FB4ANB	070	0.98	1.04	COILS + 58U(H,X)V120-20 FURNACE			
FC4BN(F,B)	060	0.96	1.05	CC5A/CD5A/CD5BA	060	0.92	1.02
FC4BNB	070	0.98	1.04	CC5A/CD5A/CD5BW	060	0.95	1.01
FG3AAA	060	0.94	1.02	CD3(A,B)A	060	0.92	1.02
FK4CNB	006	1.00	1.00	CE3AA	060	0.95	1.02

\* Detailed cooling capacities are based on indoor and outdoor unit at same elevation per ARI standard 210/240-89. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

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

‡ Sensible capacities shown are based on 80°F (27°C) entering air at the indoor coil. For sensible capacities at other than 80°F (27°C), deduct 835 Btu/h (245 kw) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80°F (27°C), or add 835 Btu/h (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.

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

EWB — Entering Wet-Bulb

# Heat pump heating performance

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																									
		-3			7			17			27			37			47			57			67				
		Capacity MBtuh		Total Power Kwt	Capacity MBtuh		Total Power Kwt	Capacity MBtuh		Total Power Kwt	Capacity MBtuh		Total Power Kwt	Capacity MBtuh		Total Power Kwt	Capacity MBtuh		Total Power Kwt	Capacity MBtuh		Total Power Kwt	Capacity MBtuh		Total Power Kwt		
EDB	CFM	Total	Integ*	Kwt†	Total	Integ*	Kwt†	Total	Integ*	Kwt†	Total	Integ*	Kwt†	Total	Integ*	Kwt†	Total	Integ*	Kwt†	Total	Integ*	Kwt†	Total	Integ*	Kwt†		
<b>38BYB018-30 Outdoor Section With F(A,B)4ANF024 Indoor Section</b>																											
65	550	7.92	7.29	1.28	9.63	8.85	1.34	11.4	10.4	1.39	13.1	11.6	1.43	14.9	13.6	1.49	16.7	16.7	1.54	18.0	18.0	1.57	18.6	18.6	1.59	18.6	1.59
	650	8.17	7.52	1.33	9.89	9.09	1.38	11.6	10.6	1.42	13.4	11.9	1.46	15.2	13.9	1.51	16.9	16.9	1.54	17.6	17.6	1.55	18.3	18.3	1.57	18.3	1.57
	750	8.38	7.71	1.37	10.1	9.29	1.41	11.9	10.8	1.45	13.7	12.1	1.49	15.5	14.1	1.53	16.8	16.8	1.55	17.8	17.8	1.57	18.2	18.2	1.57	18.2	1.57
70	550	7.55	6.95	1.29	9.31	8.55	1.35	11.0	10.0	1.41	12.8	11.3	1.46	14.5	13.2	1.52	16.3	16.3	1.57	17.9	17.9	1.62	18.8	18.8	1.66	18.8	1.66
	650	7.80	7.18	1.33	9.56	8.79	1.39	11.3	10.3	1.44	13.1	11.6	1.49	14.9	13.5	1.54	16.6	16.6	1.58	17.9	17.9	1.61	18.5	18.5	1.63	18.5	1.63
	750	8.01	7.37	1.38	9.78	8.99	1.43	11.5	10.5	1.48	13.3	11.8	1.52	15.1	13.8	1.56	16.6	16.6	1.59	17.8	17.8	1.62	18.2	18.2	1.62	18.2	1.62
75	550	7.13	6.56	1.30	8.97	8.24	1.36	10.7	9.73	1.43	12.4	11.0	1.48	14.2	12.9	1.54	15.9	15.9	1.61	17.6	17.6	1.67	18.5	18.5	1.70	18.5	1.70
	650	7.38	6.79	1.34	9.22	8.47	1.40	11.0	9.98	1.46	12.7	11.3	1.51	14.5	13.2	1.56	16.3	16.3	1.62	17.7	17.7	1.66	18.4	18.4	1.68	18.4	1.68
	750	7.61	7.00	1.38	9.44	8.67	1.44	11.2	10.2	1.49	13.0	11.5	1.54	14.8	13.4	1.59	16.5	16.5	1.63	17.5	17.5	1.65	18.1	18.1	1.66	18.1	1.66

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	0.97	1.02	CC5A/CD5A/CD5BA	018	0.96	1.03
	024	1.00	1.00		024	0.98	1.00
FC4BNF	024	1.00	1.00	CD3(A,B)A	018	0.96	1.03
F(A,B)4AN(A,F)	024	1.00	1.00		024	0.98	1.00
FD3ANA	018	0.98	1.02	CE3AA	024	0.99	0.99
	024	0.98	0.98		024	0.99	1.00
FF1(A,B)NA	018	0.96	1.00	CG5AA	024	0.99	1.00
	024	0.99	0.98		COILS + 58U(H,X)V060-12 FURNACE		
FG3AAA	024	0.99	0.99	CC5A/CD5A/CD5BA	024	0.92	0.92
FK4CNF	001	0.95	0.89	CC5A/CD5A/CD5BW	024	0.92	0.92
	002	0.95	0.88	CD3(A,B)	024	0.92	0.92
	—	—	—	CE3AA	024	0.93	0.92

**38BYB024-30 Outdoor Section With F(A,B)4AN(A,F)030 Indoor Section**

65	725	9.88	9.09	1.75	12.4	11.4	1.80	14.8	13.5	1.84	17.5	15.5	1.88	20.4	18.5	1.93	23.6	23.6	1.99	27.4	27.4	2.07	31.5	31.5	2.19
	825	10.1	9.26	1.77	12.5	11.5	1.81	15.0	13.7	1.84	17.6	15.7	1.88	20.6	18.8	1.92	23.8	23.8	1.97	27.7	27.7	2.05	31.9	31.9	2.16
	925	10.2	9.41	1.79	12.7	11.7	1.83	15.2	13.8	1.86	17.8	15.8	1.89	20.8	18.9	1.92	24.1	24.1	1.96	27.9	27.9	2.04	32.2	32.2	2.14
70	725	9.56	8.80	1.80	12.1	11.1	1.86	14.6	13.3	1.91	17.3	15.3	1.96	20.2	18.3	2.01	23.4	23.4	2.08	27.0	27.0	2.17	31.1	31.1	2.30
	825	9.76	8.98	1.83	12.3	11.3	1.88	14.8	13.5	1.92	17.4	15.5	1.96	20.4	18.5	2.00	23.6	23.6	2.06	27.3	27.3	2.14	31.5	31.5	2.25
	925	9.93	9.14	1.85	12.5	11.5	1.90	15.0	13.6	1.93	17.6	15.6	1.97	20.6	18.7	2.00	23.8	23.8	2.05	27.6	27.6	2.13	31.8	31.8	2.23
75	725	9.25	8.51	1.86	11.9	10.9	1.93	14.4	13.2	1.99	17.1	15.2	2.04	19.9	18.1	2.10	23.1	23.1	2.18	26.7	26.7	2.27	30.8	30.8	2.41
	825	9.44	8.68	1.88	12.1	11.1	1.94	14.6	13.3	2.00	17.2	15.3	2.04	20.1	18.3	2.09	23.4	23.4	2.15	27.0	27.0	2.24	31.1	31.1	2.36
	925	9.61	8.84	1.91	12.2	11.2	1.96	14.8	13.5	2.01	17.4	15.5	2.05	20.3	18.5	2.09	23.6	23.6	2.14	27.3	27.3	2.22	31.4	31.4	2.33

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
F(A,B)4AN(A,F)	024	1.00	1.01	CC5A/CD5A/CD5BW	030	1.00	1.04
	030	1.00	1.00		CD3(A,B)A	024	1.00
FC4BNF	024	1.00	1.01	CD3CA	030	1.00	1.04
	030	1.00	1.01		036	1.01	1.03
FD3ANA	024	1.00	1.02	CE3AA	024	1.00	1.03
	030	1.00	0.98		030	1.00	1.01
FF1(A,B)NA	024	1.00	1.01	CF5AA	024	1.00	1.04
	030	1.00	0.99		CG5AA	024	1.00
FG3AAA	024	1.00	1.04	COILS + 58U(H,X)V060-12 FURNACE			
FK4CNF	001	1.00	0.97	CC5A/CD5A/CD5BA	030	1.00	1.02
	002	1.00	0.94	CC5A/CD5A/CD5BW	030	1.00	1.02
	003	1.00	0.93	CD3(A,B)	030	1.00	1.02
CC5A/CD5A/CD5BA	024	1.00	1.05	CE3AA	030	1.00	
	030	1.00	1.04			—	

See notes on pg. 21.

# Heat pump heating performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																									
		-3			7			17			27			37			47			57			67				
		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power			
EDB	CFM	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†		
<b>38BYB030-30 Outdoor Section With F(A,B)4ANF036 Indoor Section</b>																											
65	900	12.9	11.8	1.98	15.5	14.3	2.06	18.5	16.9	2.15	21.8	19.4	2.26	25.6	23.3	2.38	29.8	29.8	2.53	35.1	35.1	2.74	40.9	40.9	3.00		
	950	12.9	11.9	1.99	15.6	14.4	2.07	18.6	17.0	2.16	21.9	19.5	2.26	25.7	23.4	2.38	30.0	30.0	2.53	35.3	35.3	2.73	41.1	41.1	2.99		
	1125	13.2	12.2	2.04	15.9	14.6	2.11	18.9	17.2	2.19	22.3	19.8	2.28	26.1	23.8	2.40	30.4	30.4	2.53	35.9	35.9	2.73	41.7	41.7	2.98		
70	900	12.6	11.6	2.05	15.4	14.2	2.15	18.3	16.7	2.24	21.6	19.2	2.35	25.3	23.0	2.48	29.5	29.5	2.63	34.7	34.7	2.85	40.3	40.3	3.12		
	950	12.7	11.7	2.06	15.5	14.2	2.15	18.4	16.8	2.25	21.7	19.2	2.35	25.4	23.1	2.48	29.6	29.6	2.63	34.9	34.9	2.84	40.5	40.5	3.11		
	1125	13.0	12.0	2.11	15.8	14.5	2.19	18.7	17.1	2.28	22.0	19.6	2.37	25.8	23.5	2.49	30.1	30.1	2.63	35.4	35.4	2.84	41.1	41.1	3.09		
75	900	12.4	11.4	2.13	15.3	14.0	2.24	18.2	16.6	2.34	21.4	19.0	2.45	25.0	22.8	2.58	29.1	29.1	2.75	34.2	34.2	2.97	39.8	39.8	3.25		
	950	12.5	11.5	2.14	15.4	14.1	2.24	18.2	16.6	2.34	21.5	19.1	2.45	25.1	22.9	2.58	29.3	29.3	2.74	34.4	34.4	2.96	40.0	40.0	3.23		
	1125	12.8	11.8	2.19	15.6	14.4	2.28	18.5	16.9	2.37	21.8	19.3	2.47	25.5	23.2	2.59	29.7	29.7	2.74	34.9	34.9	2.95	40.6	40.6	3.21		

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
F(A,B)4AN(A,F)	030	0.99	1.00	CD5A/CD5BW	036	0.99	0.98
F(A,B)4ANF	036	1.00	1.00	CE3AA	030	0.99	1.01
FC4BNF	030	0.99	1.00	CF5AA	036	0.99	1.00
	036	1.00	1.00	CG5AA	036	0.99	0.99
FD3ANA	030	1.00	1.00				
FF1(A,B)NA	030	0.99	0.99				
FG3AAA	036	0.99	0.99				
FK4CNF	001	0.98	0.95	CC5A/CD5A/CD5BA	036	0.98	0.95
	002	0.98	0.93	CD5A/CD5BW	036	0.98	0.95
	003	0.97	0.91	CD3(A,B)A	036	0.98	0.95
CC5A/CD5A/CD5BA	030	0.98	1.03				
	036	0.99	0.98	CC5A/CD5A/CD5BA	036	0.98	0.95
CC5A/CD5A/CD5BW	030	0.98	1.03	CD5A/CD5BW	036	0.98	0.95
CD3(A,B)A	030	0.98	1.03	CD3(A,B)A	036	0.98	0.95
	036	0.99	0.98	CE3AA	036	0.97	0.96

## 38BYB036-30 Outdoor Section With F(A,B)4AN(F,B)042 Indoor Section

65	1100	15.7	14.5	2.42	19.2	17.6	2.51	22.7	20.7	2.59	26.5	23.6	2.69	30.9	28.1	2.79	36.0	36.0	2.93	42.3	42.3	3.13	49.0	49.0	3.37
	1200	15.9	14.6	2.44	19.3	17.8	2.52	22.8	20.8	2.60	26.7	23.7	2.69	31.1	28.3	2.79	36.2	36.2	2.92	42.7	42.7	3.11	49.4	49.4	3.34
	1350	16.1	14.8	2.47	19.5	18.0	2.55	23.1	21.1	2.62	27.0	24.0	2.70	31.4	28.6	2.79	36.6	36.6	2.91	43.1	43.1	3.10	49.9	49.9	3.31
70	1100	15.3	14.1	2.51	18.9	17.3	2.61	22.4	20.5	2.71	26.3	23.3	2.81	30.6	27.8	2.92	35.5	35.5	3.06	41.7	41.7	3.27	48.3	48.3	3.51
	1200	15.5	14.2	2.53	19.0	17.5	2.62	22.6	20.6	2.71	26.5	23.5	2.81	30.8	28.0	2.91	35.8	35.8	3.05	42.1	42.1	3.25	48.7	48.7	3.48
	1350	15.7	14.5	2.56	19.3	17.7	2.65	22.8	20.8	2.73	26.7	23.7	2.81	31.1	28.3	2.91	36.2	36.2	3.04	42.5	42.5	3.23	49.3	49.3	3.45
75	1100	14.9	13.7	2.60	18.5	17.0	2.71	22.2	20.2	2.82	26.0	23.1	2.93	30.2	27.5	3.06	35.1	35.1	3.20	41.2	41.2	3.41	47.6	47.6	3.66
	1200	15.1	13.8	2.62	18.7	17.2	2.72	22.3	20.4	2.83	26.2	23.2	2.93	30.5	27.7	3.04	35.4	35.4	3.18	41.5	41.5	3.39	48.0	48.0	3.62
	1350	15.3	14.1	2.66	18.9	17.4	2.75	22.6	20.6	2.85	26.4	23.5	2.94	30.8	28.0	3.04	35.7	35.7	3.17	42.0	42.0	3.36	48.6	48.6	3.59

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	036	1.01	1.04				
F(A,B)4AN(F,B)	042	1.00	1.00				
FC4BN(F,B)	036	1.01	1.04	CC5A/CD5A/CD5BA	042	0.98	0.99
	042	1.00	1.01	CC5A/CD5A/CD5BW	042	0.98	0.99
FG3AAA	036	1.00	1.02	CD3(A,B)A	042	0.98	0.99
FK4CNF	001	0.98	1.00	CE3AA	042	0.99	0.98
	002	0.98	0.96				
	003	0.98	0.97	COILS + 58U(H,X)V080-16 FURNACE			
	005	0.98	0.89	CC5A/CD5A/CD5BA	042	0.98	0.99
				CC5A/CD5A/CD5BW	042	0.98	0.99
CC5A/CD5A/CD5BA	036	1.00	1.02	CD3(A,B)A	042	0.98	0.99
	042	1.00	1.02	CE3AA	042	0.99	0.98
CD5A/CD5BW	036	1.00	1.02				
CD3(A,B)A	036	1.00	1.02	COILS + 58U(H,X)V100-20 FURNACE			
	042	1.00	1.02	CC5A/CD5A/CD5BA	042	0.98	0.97
CC5A/CD5A/CD5BW	042	1.00	1.03	CC5A/CD5A/CD5BW	042	0.98	0.97
	036	0.99	1.03	CD3(A,B)A	042	0.98	0.97
CE3AA	036	0.99	1.03	CE3AA	042	0.98	0.96
	042	1.01	1.01				
CF5AA	036	1.00	1.02	COILS + 58U(H,X)V120-20 FURNACE			
CG5AA	036	1.00	1.02	CC5A/CD5A/CD5BA	042	0.98	0.99
				CC5A/CD5A/CD5BW	042	0.98	0.99
				CD3(A,B)A	042	0.98	0.99
				CE3AA	042	0.99	0.98

See notes on pg. 21.

# Heat pump heating performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																										
		-3			7			17			27			37			47			57			67					
		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power		Capacity MBtuh	Total Power				
EDB	CFM	Total	Integ <sup>†</sup>	Kwt	Total	Integ <sup>†</sup>	Kwt	Total	Integ <sup>†</sup>	Kwt	Total	Integ <sup>†</sup>	Kwt	Total	Integ <sup>†</sup>	Kwt	Total	Integ <sup>†</sup>	Kwt	Total	Integ <sup>†</sup>	Kwt	Total	Integ <sup>†</sup>	Kwt			
<b>38BYB042-30 Outdoor Section With F(A,B)4AN(F,B)048 Indoor Section</b>																												
65	1275	19.7	18.1	2.77	23.5	21.6	2.88	27.5	25.1	3.00	31.9	28.4	3.13	36.9	33.6	3.28	43.0	43.0	3.48	50.4	50.4	3.75	58.0	58.0	4.08			
	1475	20.0	18.4	2.82	23.8	21.9	2.92	27.9	25.4	3.03	32.4	28.7	3.15	37.4	34.0	3.29	43.5	43.5	3.47	51.1	51.1	3.73	58.8	58.8	4.05			
	1675	20.4	18.7	2.88	24.1	22.2	2.98	28.3	25.8	3.07	32.7	29.1	3.18	37.8	34.4	3.31	44.0	44.0	3.49	51.6	51.6	3.75	59.2	59.2	4.01			
70	1275	19.2	17.7	2.87	23.2	21.3	3.00	27.2	24.8	3.13	31.6	28.1	3.27	36.5	33.2	3.42	42.4	42.4	3.63	49.7	49.7	3.91	57.3	57.3	4.25			
	1475	19.6	18.1	2.92	23.5	21.6	3.04	27.6	25.2	3.16	32.0	28.4	3.28	37.0	33.7	3.43	43.0	43.0	3.62	50.4	50.4	3.89	58.1	58.1	4.21			
	1675	20.0	18.4	2.98	23.9	21.9	3.10	28.0	25.5	3.20	32.4	28.8	3.32	37.4	34.0	3.45	43.5	43.5	3.64	51.0	51.0	3.89	58.7	58.7	4.22			
75	1275	18.7	17.2	2.97	22.9	21.0	3.12	26.9	24.5	3.26	31.3	27.8	3.41	36.1	32.9	3.58	41.9	41.9	3.79	49.0	49.0	4.08	56.5	56.5	4.42			
	1475	19.1	17.6	3.03	23.2	21.4	3.17	27.3	24.9	3.29	31.7	28.1	3.42	36.6	33.3	3.58	42.5	42.5	3.78	49.7	49.7	4.05	57.3	57.3	4.38			
	1675	19.5	18.0	3.09	23.6	21.7	3.22	27.6	25.2	3.33	32.1	28.5	3.46	37.0	33.7	3.60	43.0	43.0	3.79	50.3	50.3	4.05	57.9	57.9	4.38			

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating			
		Capacity	Power			Capacity	Power		
F(A,B)4AN(F,B)	042	0.99	1.04	CG5AA	048	0.98	1.01		
	048	1.00	1.00						
FC4BN(F,B)	038	0.98	0.96	CD5A/CD5BA	048	0.98	1.01		
	042	0.99	1.04			CC5A/CD5A/CD5BW	048	0.98	1.01
	048	1.00	1.01			CC5A/CD5A/CD5BC	048	0.97	1.04
FG3AA	048	0.99	0.99	CD3(A,B)A	048	0.98	1.01		
FK4CNF	003	0.97	0.99	CE3AA	048	0.98	0.99		
	005	0.98	0.92			COILS + 58U(H,X)V100-20 FURNACE			
	006	0.98	0.88			CD5A/CD5BA	048	0.97	0.98
CC5A/CD5A/CD5BA	042	0.98	1.02	CC5A/CD5A/CD5BW	048	0.97	0.98		
CD3(A,B)A	042	0.98	1.02	CC5A/CD5A/CD5BC	048	0.97	1.02		
	048	0.99	1.02	CD3(A,B)A	048	0.97	0.98		
CC5A/CD5A/CD5BW	042	1.01	1.07	CE3AA	048	0.98	0.98		
	048	0.99	1.02						
CD5A/CD5BA	048	COILS + 58U(H,X)V120-20 FURNAC		0.98	1.01				
		0.99	1.02	CD5A/CD5BA	048	0.98	1.01		
CC5A/CD5A/CD5BC	048	0.98	1.05	CC5A/CD5A/CD5BW	048	0.98	1.01		
CE3AA	042	0.99	1.02	CC5A/CD5A/CD5BC	048	0.97	1.04		
	048	0.99	1.01	CD3(A,B)A	048	0.98	1.01		
CF5AA	048	0.98	1.01	CE3AA	048	0.98	0.99		

**38BYB048-30,31 Outdoor Section With FK4CNF005 Indoor Section**

65	1400	22.2	20.4	3.29	26.6	24.5	3.43	31.3	28.5	3.57	36.2	32.1	3.72	42.0	38.2	3.91	48.6	48.6	4.13	56.2	56.2	4.43	64.5	64.5	4.75
	1600	22.5	20.7	3.30	26.9	24.7	3.42	31.5	28.8	3.55	36.5	32.4	3.68	42.4	38.6	3.84	49.1	49.1	4.05	56.8	56.8	4.32	64.5	64.5	4.57
	1800	22.7	20.9	3.32	27.1	24.9	3.43	31.8	29.0	3.54	36.8	32.7	3.66	42.8	38.9	3.81	49.5	49.5	4.00	57.3	57.3	4.25	64.1	64.1	4.44
70	1400	21.8	20.0	3.45	26.4	24.2	3.62	31.0	28.2	3.77	35.8	31.8	3.93	41.6	37.8	4.13	48.0	48.0	4.36	55.4	55.4	4.67	63.9	63.9	5.07
	1600	22.1	20.3	3.46	26.6	24.5	3.61	31.3	28.5	3.74	36.2	32.1	3.88	42.0	38.2	4.06	48.5	48.5	4.27	56.1	56.1	4.56	64.4	64.4	4.87
	1800	22.3	20.5	3.48	26.8	24.7	3.61	31.5	28.7	3.73	36.5	32.4	3.86	42.3	38.5	4.02	48.9	48.9	4.22	56.6	56.6	4.49	64.3	64.3	4.73
75	1400	21.3	19.6	3.62	26.0	23.9	3.80	30.7	28.0	3.98	35.5	31.5	4.15	41.1	37.4	4.36	47.4	47.4	4.61	54.7	54.7	4.92	63.0	63.0	5.33
	1600	21.6	19.8	3.63	26.3	24.2	3.79	31.0	28.2	3.95	35.8	31.8	4.10	41.5	37.8	4.28	47.9	47.9	4.51	55.4	55.4	4.80	63.8	63.8	5.18
	1800	21.8	20.1	3.64	26.6	24.4	3.80	31.2	28.5	3.93	36.1	32.1	4.07	41.9	38.1	4.24	48.4	48.4	4.45	55.9	55.9	4.73	63.9	63.9	5.00

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
CC5A/CD5A/CD5BA	060	1.00	1.11	FG3AAA	048	1.00	1.07
CC5A/CD5A/CD5BC	048	1.00	1.16				
CC5A/CD5A/CD5BW	048	1.00	1.09	FK4CNB	006	1.00	0.96
	060	1.00	1.05			FK4CNF	005
CD3(A,B)A	048	1.00	1.09	COILS + 58U(H,X)V080-16 FURNACE			
	060	1.00	1.11	CC5A/CD5A/CD5BA	060	1.00	1.12
CD5A/CD5BA	048	1.00	1.09	CC5A/CD5A/CD5BW	060	1.00	1.05
CE3AA	048	1.00	1.07	CD3(A,B)A	060	1.00	1.12
	060	1.00	1.04	CE3AA	060	1.00	1.05
CF5AA	048	1.00	1.12	COILS + 58U(H,X)V100-20 FURNACE			
CG5AA	048	1.00	1.12	CC5A/CD5A/CD5BA	060	1.00	1.11
F(A,B)4AN(F,B,C)	048	1.00	1.05	CC5A/CD5A/CD5BW	060	1.00	1.04
	060	1.00	1.03	CD3(A,B)A	060	1.00	1.11
FB4ANB	070	1.00	0.98	CE3AA	060	1.00	1.03
FC4BN(F,B)	048	1.00	1.05	COILS + 58U(H,X)V120-20 FURNACE			
	060	1.00	1.03	CC5A/CD5A/CD5BA	060	1.00	1.12
FC4BNB	054	1.00	0.98	CC5A/CD5A/CD5BW	060	1.00	1.05
	070	1.00	0.98	CD3(A,B)A	060	1.00	1.12
—	—	—	—	CE3AA	060	1.00	1.04

See notes on pg. 21.

# Heat pump heating performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F																									
		-3			7			17			27			37			47			57			67				
		Capacity MBtuh		Total Power	Capacity MBtuh		Total Power	Capacity MBtuh		Total Power	Capacity MBtuh		Total Power	Capacity MBtuh		Total Power	Capacity MBtuh		Total Power	Capacity MBtuh		Total Power	Capacity MBtuh		Total Power		
EDB	CFM	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†	Total	Integ*	Kw†		
<b>38BYB060-31 Outdoor Section With FK4CNB006 Indoor Section</b>																											
65	1750	28.2	26.0	4.20	33.5	30.8	4.37	39.1	35.7	4.55	45.3	40.2	4.75	52.5	47.8	5.00	60.7	60.7	5.30	70.1	70.1	5.69	79.6	79.6	6.03		
	2000	28.6	26.3	4.22	33.8	31.1	4.38	39.5	36.0	4.54	45.7	40.6	4.72	53.0	48.3	4.95	61.3	61.3	5.23	70.7	70.7	5.56	79.4	79.4	5.87		
	2250	28.9	26.6	4.26	34.1	31.3	4.40	39.9	36.3	4.55	46.1	41.0	4.72	53.5	48.7	4.93	61.8	61.8	5.20	70.8	70.8	5.48	78.5	78.5	5.75		
70	1750	27.8	25.5	4.38	33.2	30.5	4.59	38.8	35.4	4.78	44.9	39.8	4.99	52.0	47.3	5.25	60.0	60.0	5.57	69.3	69.3	5.97	79.7	79.7	6.41		
	2000	28.1	25.9	4.41	33.5	30.8	4.59	39.2	35.7	4.77	45.3	40.2	4.96	52.5	47.8	5.20	60.6	60.6	5.49	70.1	70.1	5.87	79.2	79.2	6.18		
	2250	28.5	26.2	4.45	33.8	31.1	4.61	39.5	36.0	4.78	45.7	40.6	4.95	52.9	48.2	5.18	61.1	61.1	5.45	70.4	70.4	5.77	78.5	78.5	6.05		
75	1750	27.2	25.0	4.57	32.9	30.2	4.80	38.5	35.1	5.02	44.4	39.5	5.24	51.4	46.8	5.52	59.3	59.3	5.84	68.5	68.5	6.26	79.0	79.0	6.80		
	2000	27.6	25.4	4.59	33.2	30.5	4.81	38.8	35.4	5.00	44.9	39.8	5.21	52.0	47.3	5.45	60.0	60.0	5.76	69.3	69.3	6.15	79.4	79.4	6.55		
	2250	28.0	25.7	4.63	33.5	30.8	4.83	39.2	35.7	5.01	45.2	40.2	5.20	52.4	47.7	5.43	60.4	60.4	5.71	69.9	69.9	6.09	78.8	78.8	6.39		

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Size	Heating		Indoor Section	Size	Heating	
		Capacity	Power			Capacity	Power
CC5A/CD5A/CD5BA	060	1.00	1.16	COILS + 58U(H,X)V100/20 FURNACE			
CC5A/CD5A/CD5BW	060	1.00	1.10	CC5A/CD5A/CD5BA	060	1.00	1.16
CD3(A,B)A	060	1.00	1.16	CC5A/CD5A/CD5BW	060	1.00	1.09
CE3AA	060	1.00	1.09	CD3(A,B)A	060	1.00	1.16
F(A,B)4AN(F,B,C)	060	1.00	1.08	CE3AA	060	1.00	1.08
FB4ANB	070	1.00	1.03	COILS + 58U(H,X)V120-20 FURNACE			
FC4BN(F,B)	060	1.00	1.08	CC5A/CD5A/CD5BA	060	1.00	1.17
FC4BNB	070	1.00	1.03	CC5A/CD5A/CD5BW	060	1.00	1.10
FG3AAA	060	1.00	1.12	CD3(A,B)A	060	1.00	1.17
FK4CNB	006	1.00	1.00	CE3AA	060	1.00	1.09

\* 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

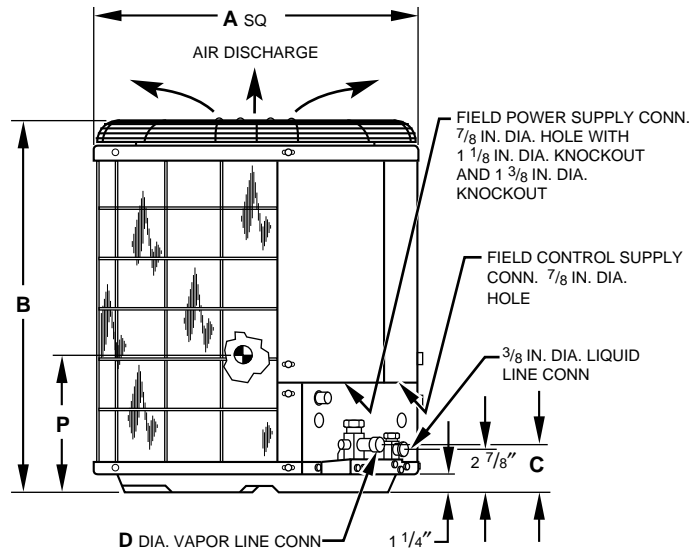
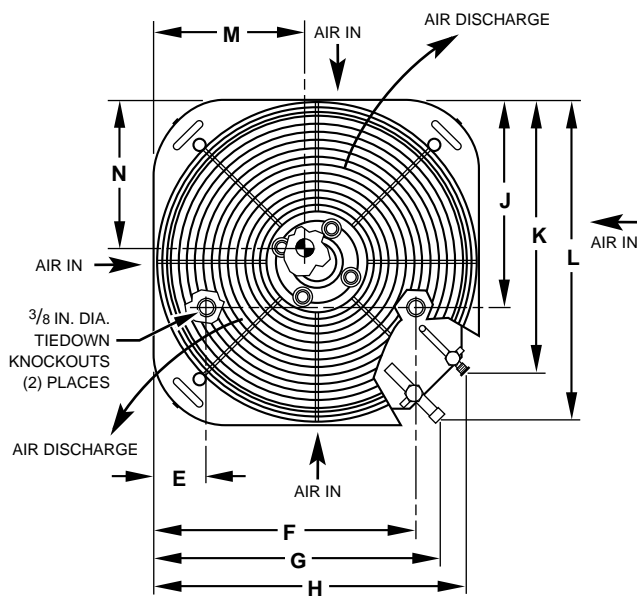
- Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
- Minimum outdoor operating air temperature for cooling mode without low-ambient operation accessory is 55°F (12.8°C).
- Maximum outdoor operating air temperature 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.
- Mixmatches of indoor coil capacity more than 1 size larger than outdoor unit capacity may result in inadequate indoor comfort.

# Dimensions

UNIT	SERIES	ELEC CHAR				A	B	C	D	E	F	G	H	J	K	L	M	N	P	SHIPPING WEIGHT
						In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	Lb.
38BYB018	0	X	O	O	O	22 1/2	37 15/16	3 3/16	5/8	3 11/16	18 1/8	19 3/4	21 5/8	14 3/8	18 7/8	22 1/16	10 3/4	11	14 1/4	144
38BYB024	0	X	O	O	O	30	27 15/16	3 3/16	3/4	6 1/2	23 1/2	27 1/4	29 1/8	20	26 3/8	29 9/16	15 1/2	15	11 3/4	171
38BYB030	0	X	O	O	O	30	39 15/16	3 3/16	3/4	6 1/2	23 1/2	27 1/4	29 1/8	20	26 3/8	29 9/16	15 3/4	14 3/4	16 3/4	193
38BYB036	0	X	O	O	O	30	29 15/16	3 3/16	3/4	6 1/2	23 1/2	27 1/4	29 1/8	20	26 3/8	29 9/16	14 1/4	15	14	213
38BYB042	0	X	O	O	O	30	29 15/16	3 1/4	7/8	6 1/2	23 1/2	27 1/4	29 1/8	20	26 3/8	29 9/16	15 1/2	14 3/4	14 1/4	214
38BYB048	0, 1	X	O	O	O	30	33 15/16	3 1/4	7/8	6 1/2	23 1/2	27 1/4	29 1/8	20	26 3/8	29 9/16	15 1/2	14 1/4	14 1/2	255
38BYB060	0, 1	X	O	O	O	30	39 15/16	3 1/4	7/8	6 1/2	23 1/2	27 1/4	29 1/8	20	26 3/8	29 9/16	14 3/4	13 1/2	15 1/2	283

208-230-1-60	230-1-60	208/230-3-60	460-3-60
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X=YES  
O=NO



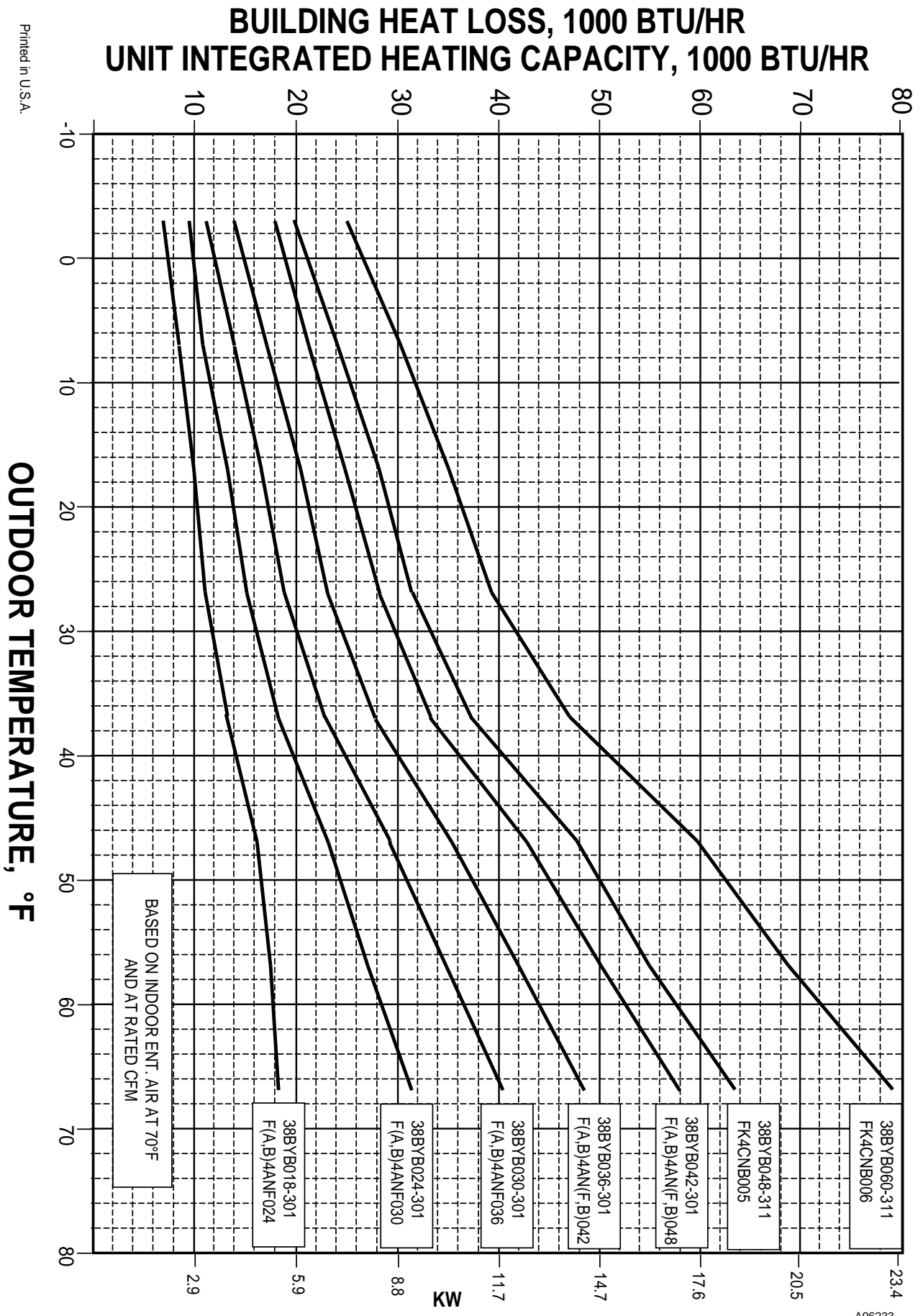
UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS (In.)
18	22 1/2 x 22 1/2
24, 30, 36, 42, 48, 60	30 x 30

## 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, max 125°F.
3. Maximum outdoor operating ambient in heating mode is 66°F.
4. Series designation is the 13th position of the unit model number.
5. Center of gravity

A95305

# 38BYB BALANCE POINT WORKSHEET



A96233

# SERVICE TRAINING

**Packaged Service Training** programs are an excellent way to increase your knowledge of the equipment discussed in this manual, including:

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- Maintenance
- Installation Overview
- Operating Sequence

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