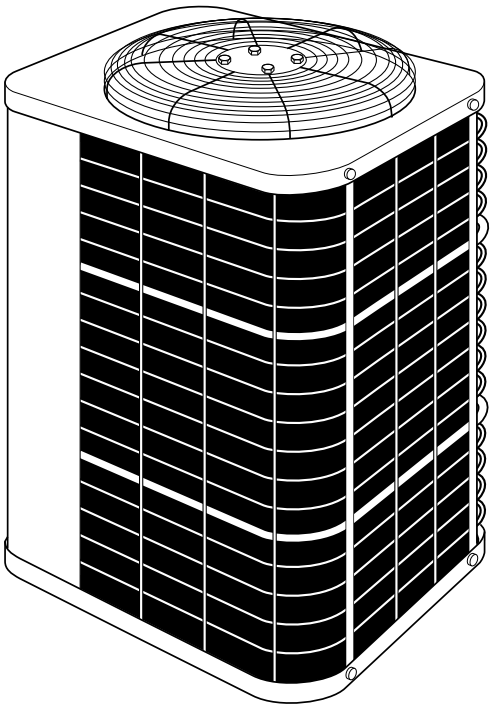
Day & Night Heating & Cooling ®

SPLIT-SYSTEM HEAT PUMP UNITS

693D (60 Hz)

Sizes 018 thru 060



The 693D 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 economical operation through energy conservation. They provide SEER ratings up to 11.5 and HSPF up to 8.5 when used with components designated by manufacturer. 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 UL, c-UL, ARI, CEC, and CSA-EEV.

FEATURES

ELECTRICAL RANGE—All units are offered in single-phase 208/230v.

COMPRESSOR—Each compressor is mounted on rubber isolators for additional sound reduction. 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 tube accumulator that minimizes the amount of liquid refrigerant that reaches the compressor; loss of charge protection; start thermistor and crankcase heater on 018-042 sizes; and defrost board for time/temperature defrost function. All units are equipped with a discharge muffler to minimize gas pulsation in heating mode.

DEFROST CONTROL BOARD (048 and 060)—Incorporates a built-in 5-minute compressor time-delay relay, 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 galvanized and coated with a layer of zinc phosphate. A polyester powder coating 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 tubes and enhanced aluminum fins 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. Coils can be cleaned with a common garden hose.

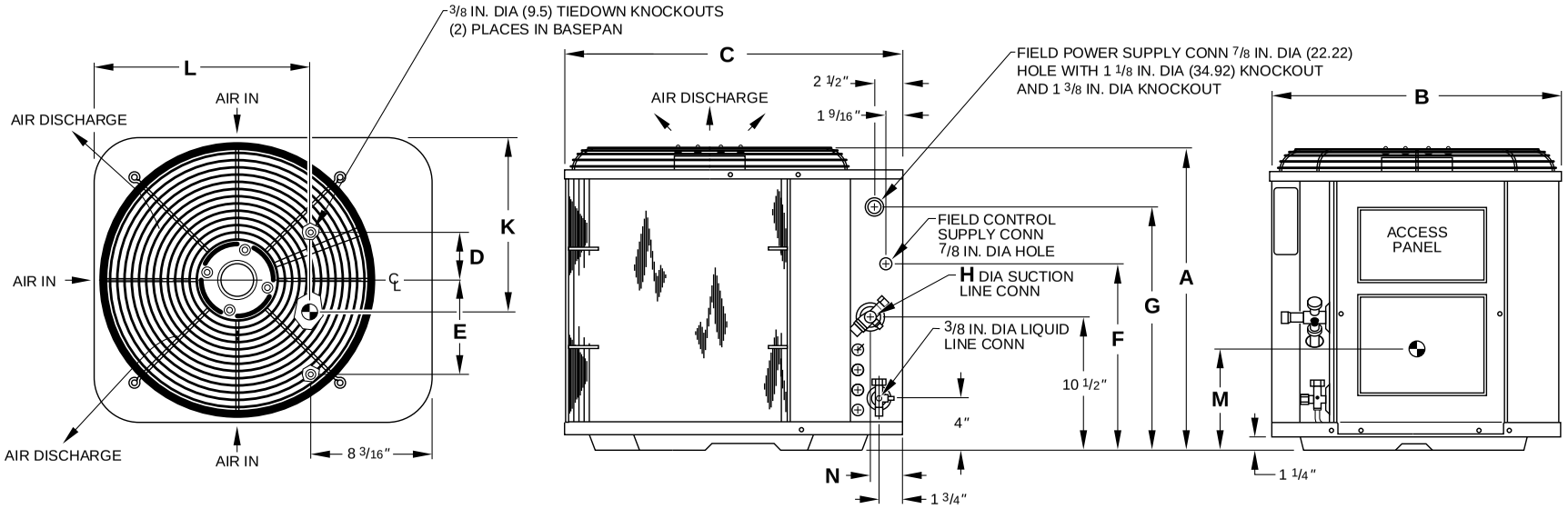
EXTERNAL SERVICE VALVES—Both service valves are brass, front seating type with sweat connections. Each valve has a service port for ease of checking operating refrigerant pressures. Valves are externally located so refrigerant tube connections can be made quickly and easily. A third service port is located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

WARRANTY—Standard 1-year warranty on all parts, with an additional 4-year warranty on compressor.

Form No. PDS 693D.18.2D

NOTES:

1. Allow 30 in. clearance to service end 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.
4. Series designation is the 14th position of the unit model number.
5. Center of gravity ⊕ .



A94148

DIMENSIONS (IN.)

UNIT SIZE	SERIES	UNIT DIMENSIONS												MINIMUM MOUNTING PAD DIMENSIONS	
		A	B	C	D	E	F	G	H	K	L	M	N	Support Feet	Snow Stand
018	A	27-13/16	22-1/2	26-3/16	4-1/8	7-1/8	15-15/16	22-3/8	5/8	12	13-3/4	10-3/4	2-3/8	20 x 27	24 x 28
024	A	33-13/16	22-1/2	26-3/16	4-1/8	7-1/8	21-15/16	28-3/8	5/8	12	13-3/4	12-1/2	2-3/8	20 x 27	24 x 28
030	A	27-13/16	30	33	5-1/16	9-11/16	15-15/16	22-3/8	3/4	15-3/4	19	10	2-15/16	26 x 32	31 x 35
036	A	39-13/16	30	33	5-1/16	9-11/16	27-15/16	34-3/8	3/4	15-3/4	19	16	2-15/16	26 x 32	31 x 35
042	A	27-13/16	30	33	5-1/16	9-11/16	15-15/16	22-3/8	7/8	15-3/4	19	10	2-15/16	26 x 32	31 x 35
048	A	33-13/16	30	33	5-1/16	9-11/16	21-15/16	28-3/8	7/8	14-1/8	19	15	2-15/16	26 x 32	31 x 35
060	A	39-13/16	30	33	5-1/16	9-11/16	27-15/16	34-3/8	7.8	14-1/8	19-1/2	16-1/2	2-15/16	26 x 32	31 x 35

RECOMMENDED TUBE DIAMETERS

SIZE	TUBE LENGTH (FT)*	LIQUID TUBE DIAMETER	VAPOR TUBE DIAMETER (IN.)
018, 024	0 to 50	3/8	5/8
030, 036			3/4
042, 048			7/8
060			1-1/8

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

METERING DEVICE

SIZE	SERIES	OUTDOOR PISTON	INDOOR* PISTON
018	A	42	55
024	A	46	65
030	A	52	70
036	A	61	76
042	A	63	80
048	A	70	88
060	A	78	98

*Shipped with outdoor unit and must be installed in approved indoor unit.

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

Carrier Corporation
ISO 9001 #A2934
CERTIFICATE NO. FM 28768

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

CERTIFICATION OF MANUFACTURING SITE

SPECIFICATIONS

UNIT SIZE	018-A	024-A	030-A	036-A	042-A
OPERATING WEIGHT (Lb)	139	165	199	215	229
ELECTRICAL					
Unit Volts—Hertz—Phase	208/230—60—1				
Operating Voltage Range*	187—253				
Unit Ampacity for Wire Sizing	11.9	14.8	19.0	21.7	27.5
Min Wire Size (60°C Copper) (AWG)†	14			12	10
Min Wire Size (75°C Copper) (AWG)†	14			12	10
Max Wire Length (60°C Copper) (Ft)‡	66	53	41	57	71
Max Wire Length (75°C Copper) (Ft)‡	62	50	39	54	68
Max Branch Circuit Fuse Size (Amps)**	20	25	30		40
Compressor Rated Load Amps	8.9	11.2	14.4	16.2	20.9
Locked Rotor Amps	49.0	61.0	84.0	96.0	102.0
Fan Motor HP and RPM	1/10 and 1100		1/8 and 825	1/4 and 1100	
Full Load Amps	0.8		1.0	1.4	
COMPRESSOR AND REFRIGERANT					
Compressor	Reciprocating				
Refrigerant Charge (Lb)††	4.13	4.38	4.88	7.13	8.13
OUTDOOR COIL and FAN					
Coil Face Area (Sq Ft)	8.79	10.99	12.17	18.25	12.17
Rated Airflow (CFM)	1900		2400	3100	2900
OPTIONAL EQUIPMENT					
Support Feet Kit—4 in. (4)	KSASF0101AAA				
Snow Stand—18 in.	KHASS0106MPK		KHASS0206MPK		
Coastal Filter	KAACF0601SML		KAACF0401MED		
Time-Delay Relay	KAATD0101TDR				
Furnace Interface Control (EnergyMinder/Outdoor Thermostat and Lockout Relay)	KHAIC0101AAA/KHAIC0201AAA				
Service Alarm‡‡	KHASA0101AAA				
Outdoor Thermostat	KHAOT0301FST				
Secondary Outdoor Thermostat	KHAOT0201SEC				
Cycle Protector	KSACY0101AAA				
Crankcase Heater	Standard				
Start Assist—Capacitor/Relay Type	KSAHS060AAA			KSAHS0701AAA	
Sound Hood	KSASH1301TEC	KSASH1201COP		Standard	KSASH1201COP
Bi-Flow TXV (Hard Shutoff)	KHATX0901HSO	KHATX1001HSO	KHATX1101HSO	KHATX1201HSO	
Low-Pressure Switch	Standard				
High-Pressure Switch	KSAHI0201HPS				
Refrigerant Filter Drier (Bi-Flow)	P504-8083 (RCD)				P504-8163 (RCD)
Evaporator Freeze Thermostat***	KAAFT0101AAA				
Isolation Relay***	KHAIR0101AAA				
Liquid Solenoid Valve	KHALS0101LLS				
Low-Ambient Controller	P251-0083 (RCD)				
Thermostat, Manual Changeover, Non-Programmable, °F, 2-Stage Heat, 1-Stage Cool	HH07AT214				

See notes on page 5.

SPECIFICATIONS Continued

UNIT SIZE	048-A	060-A
OPERATING WEIGHT (Lb)	268	293
ELECTRICAL		
Unit Volts—Hertz—Phase	208/230—60—1	
Operating Voltage Range*	187—253	
Unit Ampacity for Wire Sizing	37.3	40.3
Min Wire Size (60°C Copper) (AWG)†	8	
Min Wire Size (75°C Copper) (AWG)†	8	
Max Wire Length (60°C Copper) (Ft)‡	82	78
Max Wire Length (75°C Copper) (Ft)‡	78	74
Max Branch Circuit Fuse Size (Amps)**	60	
Compressor Rated Load Amps	28.7	31.1
Locked Rotor Amps	129.0	169.0
Fan Motor HP and RPM	1/4 and 1100	
Full Load Amps	1.4	
COMPRESSOR AND REFRIGERANT		
Compressor	Scroll	
Refrigerant Charge (Lb)††	11.51	12.38
OUTDOOR COIL and FAN		
Coil Face Area (Sq Ft)	15.21	18.25
Rated Airflow (CFM)	2900	3100
OPTIONAL EQUIPMENT		
Support Feet Kit—4 in. (4)	KSASF0101AAA	
Snow Stand—18 in.	KHASS0206MPK	
Coastal Filter	KAACF0401MED	
Time-Delay Relay	KAATD0101TDR	
Furnace Interface Control (EnergyMinder/Outdoor Thermostat and Lockout Relay)	KHAIC0101AAA/KHAIC0201AAA	
Service Alarm‡‡	KHASA0101AAA	
Outdoor Thermostat	KHAOT0301FST	
Secondary Outdoor Thermostat	KHAOT0201SEC	
Cycle Protector	Standard	
Crankcase Heater	KAACH1201AAA	
Start Assist—Capacitor/Relay Type	N/A	
Sound Hood	KSASH1701COP	
Bi-Flow TXV (Hard Shutoff)	KHATX1301HSO	KHATX1401HSO
Low-Pressure Switch	Standard	
High-Pressure Switch	KSAHI0201HPS	
Refrigerant Filter Drier (Bi-Flow)	P504-8163 (RCD)	
Evaporator Freeze Thermostat***	KAAFT0101AAA	
Isolation Relay***	KHAIR0101AAA	
Liquid Solenoid Valve	KHALS0101LLS	
Low-Ambient Controller	P251-0083 (RCD)	
Thermostat, Manual Changeover, Non-Programmable, °F, 2-Stage Heat, 1-Stage Cool	HH07AT214	

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

† 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).
Copper wire must be used from service disconnect to unit.

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

** Single-phase units may use time-delay fuses or HACR-type circuit breakers (U.S.A. only) of same size noted.

†† The factory refrigerant charge is sufficient for systems requiring up to 15 ft of interconnecting tubing. For tubing lengths other than 15 ft, see Long-Line Application Guideline for additional refrigerant requirements.

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

*** Used with low-ambient controller.

N/A—Not Applicable

ACCESSORY DESCRIPTION AND USAGE (Listed Alphabetically)

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

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

3. **Crankcase Heater**
   An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes 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.

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

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

6. **Filter Drier—Bi-Flow**
   A device for removing contaminants from refrigerant circulating in a heat pump system: 2-direction flow.
SUGGESTED USE: Split-system heat pumps.

7. **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 protection against compressor damage due to loss of outdoor airflow. To prevent rapid compressor recycling, compressor cycle protector can be used with this switch.
SUGGESTED USE: Installations exposed to very "dirty" outdoor air.
Installations where condenser inlet air temperature exceeds 125°F (51.7°C).

8. **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 to be adjusted for economic balance point temperature.
SUGGESTED USE: All heat pump and gas- or oil-fired furnace combination systems.

9. **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.

10. **Liquid Solenoid Valve**
    An electrically operated shutoff valve to be installed at the outdoor or indoor unit (depending on tubing configuration) which stops and starts refrigerant liquid flow in response to compressor operation. Maintains a column of refrigerant liquid ready for action at next compressor operation cycle.
    Note: Compressor start assist-capacitor and relay must also be used on units with reciprocating compressors.
SUGGESTED USE: In certain long-line applications. (Refer to Long-Line Application Guideline.)

11. **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).

12. **Outdoor Thermostat**
    An 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.

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

14. **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.

15. **Snow Stand**
    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.

16. **Sound Hood**
    Wraparound 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.

17. **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.

18. **Thermostatic Expansion Valve (TXV)**
    A modulating flow control valve which meters refrigerant 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 for certain combinations of indoor and outdoor units. (Refer to ARI Unitary Directory.)
All commercial applications.

19. **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.)

COMBINATION RATINGS

OUTDOOR UNIT AND SOUND RATING* (dBA)	INDOOR UNIT	ARI STANDARD RATINGS†									
		Cooling					Heating				
		Seasonal Efficiency					High-Temp		Low-Temp		Seasonal Efficiency HSPF
		TC	Factory-Supplied Enhancement	Standard Rating	Field-Supplied Accessory‡ TDR	Field-Supplied Accessory‡ TXV	TC	COP	TC	COP	
018-A 76 / 76	F(A,B)4ANF018**	17,500	TDR	10.20	—	10.20	18,000	2.96	10,600	2.10	6.80
	F(A,B)4ANF024	17,500	TDR	10.50	—	10.50	18,200	3.10	10,900	2.18	7.00
	FC4BNF024	17,500	TDR & TXV	10.50	—	—	18,200	3.12	10,900	2.18	7.00
	FD3ANA018	17,000	NONE	—	10.00	10.00	18,000	2.90	10,700	2.16	6.80
	FD3ANA024	17,500	NONE	—	10.50	10.50	18,000	3.06	10,700	2.18	7.00
	FF1BNA018	17,000	TDR	10.50	—	10.50	17,900	3.06	10,400	2.18	6.80
	FF1BNA024	17,500	TDR	10.50	—	10.50	18,400	3.12	10,900	2.18	7.00
	FG3AAA024	17,500	NONE	—	10.50	10.50	18,000	3.02	10,700	2.14	6.90
	CC5A/CD5A/CD5BA018	17,000	NONE	—	10.00	10.00	17,900	2.90	10,500	2.16	6.80
	CC5A/CD5A/CD5BA024	17,500	NONE	—	10.50	10.50	18,000	3.02	10,700	2.24	7.00
	CC5A/CD5A/CD5BW024	17,500	NONE	—	10.50	10.50	18,000	3.02	10,700	2.24	7.00
	CD3(A,B)A018	17,000	NONE	—	10.00	10.00	17,900	2.90	10,500	2.16	6.80
	CD3(A,B)A024	17,500	NONE	—	10.50	10.50	18,000	3.02	10,700	2.24	7.00
	CE3AA024	17,500	NONE	—	10.50	10.50	18,000	3.06	10,800	2.16	7.00
	CF5AA024	17,500	NONE	—	10.50	10.50	18,000	3.08	10,800	2.16	7.00
	CJ5A/CK5A/CK5BA018	17,000	NONE	—	10.20	10.20	18,000	3.04	10,800	2.16	7.00
	CJ5A/CK5A/CK5BA024	17,500	NONE	—	10.50	10.50	18,200	3.12	10,900	2.20	7.00
	CJ5A/CK5A/CK5BW024	17,500	NONE	—	10.50	10.50	18,200	3.12	10,900	2.20	7.00
	CK3BA024	17,500	NONE	—	10.50	10.50	18,200	3.12	10,900	2.20	7.00
024-A 80 / 76	F(A,B)4ANF024**	23,400	TDR	10.50	—	10.50	23,400	3.08	13,700	2.12	7.00
	F(A,B)4ANF030	24,000	TDR	10.50	—	10.50	23,400	3.10	13,600	2.14	7.00
	FC4BNF024	23,400	TDR & TXV	10.50	—	—	23,400	3.08	13,700	2.12	7.00
	FC4BNF030	24,000	TDR & TXV	10.50	—	—	23,400	3.10	13,600	2.14	7.00
	FC4BNF033	24,600	TDR & TXV	10.50	—	—	21,800	3.06	13,900	2.16	7.00
	FD3ANA024	23,000	NONE	—	10.50	10.50	23,000	3.02	13,400	2.10	6.80
	FD3ANA030	24,000	NONE	10.00	10.50	10.50	23,600	3.12	13,700	2.14	7.00
	FF1BNA024	23,400	TDR	10.50	—	10.50	23,600	3.08	13,700	2.12	7.00
	FF1BNA030	24,000	TDR	10.50	—	10.50	23,600	3.12	13,800	2.14	7.00
	FG3AAA024	23,000	NONE	—	10.00	10.00	23,000	2.98	13,500	2.08	6.80
	FK4BNF001	24,000	TDR & TXV	11.50	—	—	23,000	3.30	13,400	2.26	7.20
	FK4BNF002	24,000	TDR & TXV	11.50	—	—	22,200	3.30	13,500	2.28	7.50
	FK4CNF001	24,000	TDR & TXV	11.50	—	—	22,600	3.26	13,100	2.26	7.20
	FK4CNF002	24,000	TDR & TXV	11.50	—	—	22,800	3.34	13,200	2.30	7.50
	CC5A/CD5A/CD5BA024	23,400	NONE	—	10.50	10.50	23,000	3.00	13,500	2.08	6.80
	CC5A/CD5A/CD5BW024	23,400	NONE	—	10.50	10.50	23,000	3.00	13,500	2.08	6.80
	CC5A/CD5A/CD5BA030	23,600	NONE	10.00	10.50	10.50	23,000	3.00	13,500	2.10	6.80
	CC5A/CD5A/CD5BW030	23,600	NONE	10.00	10.50	10.50	23,000	3.00	13,500	2.10	6.80
	CD3(A,B)A024	23,400	NONE	—	10.50	10.50	23,000	3.00	13,500	2.08	6.80
	CD3(A,B)A030	23,600	NONE	10.00	10.50	10.50	23,000	3.00	13,500	2.10	6.80
	CE3AA024	23,600	NONE	10.00	10.50	10.50	23,200	3.04	13,600	2.10	6.80
	CE3AA030	23,800	NONE	10.00	10.50	10.50	23,600	3.10	13,700	2.12	7.00
	CF5AA024	23,400	NONE	—	10.50	10.50	23,200	3.04	13,600	2.10	6.80
	CJ5A/CK5A/CK5BA024	23,200	NONE	—	10.50	10.50	23,600	3.10	13,800	2.14	7.00
	CJ5A/CK5A/CK5BA030	23,800	NONE	10.00	10.50	10.50	23,400	3.06	13,800	2.14	7.00
	CJ5A/CK5A/CK5BW024	23,200	NONE	—	10.50	10.50	23,600	3.10	13,800	2.14	7.00
	CJ5A/CK5A/CK5BW030	23,800	NONE	10.00	10.50	10.50	23,400	3.06	13,800	2.14	7.00
	CK3BA024	23,200	NONE	—	10.50	10.50	23,600	3.10	13,800	2.14	7.00
	CK3BA030	23,800	NONE	10.00	10.50	10.50	23,400	3.06	13,800	2.14	7.00
030-A 80 / 76	F(A,B)4ANF030**	29,400	TDR	10.50	—	10.50	29,600	3.20	17,500	2.26	7.20
	F(A,B)4ANF036	29,800	TDR	10.50	—	10.50	30,000	3.20	17,800	2.24	7.20
	FC4BNF030	29,400	TDR & TXV	10.50	—	—	29,600	3.20	17,500	2.26	7.20
	FC4BNF033	30,000	TDR & TXV	10.50	—	—	29,600	3.28	17,700	2.28	7.50
	FC4BNF036	29,800	TDR & TXV	10.50	—	—	30,000	3.20	17,800	2.24	7.20
	FD3ANA030	29,400	NONE	—	10.50	10.50	30,000	3.20	17.700	2.24	7.20
	FF1BNA030	29,600	TDR	10.50	—	10.50	30,000	3.22	17,700	2.24	7.20
	FK4BNF001	30,000	TDR & TXV	11.00	—	—	29,800	3.32	17,500	2.32	7.50
	FK4BNF002	30,000	TDR & TXV	11.00	—	—	30,200	3.42	17,700	2.34	7.50
	FK4BNF003	30,000	TDR & TXV	11.50	—	—	29,000	3.44	17,000	2.42	7.50
	FK4CNF001	29,400	TDR & TXV	11.50	—	—	28,800	3.32	16,900	2.36	7.50
	FK4CNF002	29,600	TDR & TXV	11.50	—	—	29,200	3.42	17,000	2.40	7.50
	FK4CNF003	30,000	TDR & TXV	11.70	—	—	28,800	3.42	16,800	2.42	7.50
	CC5A/CD5A/CD5BA030	29,200	NONE	—	10.50	10.50	29,200	3.10	17,400	2.20	7.20
	CC5A/CD5A/CD5BW030	29,200	NONE	—	10.50	10.50	29,200	3.10	17,400	2.20	7.20
	CD3(A,B)A030	29,200	NONE	—	10.50	10.50	29,200	3.10	17,400	2.20	7.20
	CE3AA030	29,400	NONE	—	10.50	10.50	29,800	3.20	17,600	2.24	7.20
	CE3AA036	30,000	NONE	10.00	10.50	10.50	29,800	3.20	17,600	2.26	7.20
	CF5AA036	30,000	NONE	10.00	10.50	10.50	30,000	3.24	17,600	2.26	7.20
	CJ5A/CK5A/CK5BA030	29,400	NONE	—	10.50	10.50	29,600	3.16	17,600	2.26	7.20
	CJ5A/CK5A/CK5BA036	30,000	NONE	10.00	10.50	10.50	30,000	3.28	17,800	2.30	7.50
	CJ5A/CK5A/CK5BN036	30,000	NONE	10.00	10.50	10.50	30,000	3.28	17,800	2.30	7.50
	CJ5A/CK5A/CK5BW030	29,400	NONE	—	10.50	10.50	29,600	3.16	17,600	2.26	7.20
	CJ5A/CK5A/CK5BW036	30,000	NONE	10.00	10.50	10.50	30,000	3.28	17,800	2.30	7.50
	CK3BA030	29,400	NONE	—	10.50	10.50	29,600	3.16	17,600	2.26	7.20
	CK3BA036	30,000	NONE	10.00	10.50	10.50	30,000	3.28	17,800	2.30	7.50
036-A — / 78	F(A,B)4ANF036**	35,400	TDR	10.00	—	10.00	36,000	3.08	21,400	2.22	7.20
	F(A,B)4AN(F,B)042	36,000	TDR	10.50	—	10.50	36,200	3.14	21,400	2.26	7.20
	FC4BNF033	36,000	TDR & TXV	10.50	—	—	36,200	3.14	21,400	2.26	7.20
	FC4BNF036	35,400	TDR & TXV	10.00	—	—	36,000	3.08	21,400	2.22	7.20
	FC4BN(F,B)042	36,000	TDR & TXV	10.50	—	—	36,200	3.14	21,400	2.26	7.20
	FG3AAA036	35,400	NONE	—	10.50	10.50	35,600	3.08	21,200	2.24	7.20

See notes on page 9.

COMBINATION RATINGS Continued

OUTDOOR UNIT AND SOUND RATING* (dBA)	INDOOR UNIT	ARI STANDARD RATINGS†									
		Cooling					Heating				
		Seasonal Efficiency					High-Temp		Low-Temp		Seasonal Efficiency HSPF
		TC	Factory-Supplied Enhancement	Standard Rating	Field-Supplied Accessory‡ TDR	Field-Supplied Accessory‡ TXV	TC	COP	TC	COP	
	FK4BNF001	35,600	TDR & TXV	10.50	—	—	35,400	3.16	21,000	2.28	7.20
	FK4BNF002	35,600	TDR & TXV	10.50	—	—	36,000	3.22	21,200	2.30	7.50
	FK4BNF003	36,000	TDR & TXV	11.50	—	—	35,200	3.28	20,600	2.38	7.50
	FK4BNF004	36,000	TDR & TXV	11.00	—	—	36,400	3.38	21,200	2.40	7.80
	FK4CNF001	35,200	TDR & TXV	11.00	—	—	34,600	3.16	20,600	2.32	7.20
	FK4CNF002	35,400	TDR & TXV	11.00	—	—	35,200	3.24	20,800	2.36	7.50
	FK4CNF003	36,000	TDR & TXV	11.50	—	—	34,600	3.26	20,400	2.40	7.50
	CC5A/CD5A/CD5BA036	36,000	NONE	—	10.50	10.50	35,800	3.12	21,200	2.26	7.20
	CC5A/CD5A/CD5BA042	36,000	NONE	—	10.50	10.50	36,000	3.14	21,200	2.26	7.20
	CC5A/CD5A/CD5BW042	35,800	NONE	—	10.50	10.50	35,800	3.10	21,200	2.24	7.20
036-A	CC5A/CD5A/CD5BA043	36,000	NONE	—	10.50	10.50	35,800	3.12	21,200	2.26	7.20
	CC5A/CD5A/CD5BW043	36,000	NONE	—	10.50	10.50	35,800	3.12	21,200	2.26	7.20
	CD5A/CD5BW036	36,000	NONE	—	10.50	10.50	35,800	3.12	21,200	2.26	7.20
— / 78	CD3(A,B)A036	36,000	NONE	—	10.50	10.50	35,800	3.12	21,200	2.26	7.20
	CD3(A,B)A042	36,000	NONE	—	10.50	10.50	36,000	3.14	21,200	2.26	7.20
	CE3AA036	35,600	NONE	—	10.50	10.50	35,400	3.08	21,000	2.24	7.20
	CE3AA042	36,000	NONE	—	10.50	10.50	36,200	3.18	21,400	2.28	7.20
	CF5AA036	36,000	NONE	—	10.50	10.50	35,800	3.12	21,200	2.26	7.20
	CJ5A/CK5A/CK5BA036	36,000	NONE	—	10.50	10.50	36,000	3.16	21,400	2.28	7.20
	CJ5A/CK5A/CK5BA042	36,000	NONE	—	10.50	10.50	36,000	3.18	21,600	2.28	7.20
	CJ5A/CK5A/CK5BN036	35,000	NONE	—	10.50	10.50	35,000	3.10	20,800	2.28	7.20
	CJ5A/CK5A/CK5BN042	36,000	NONE	—	10.50	10.50	36,000	3.18	21,600	2.28	7.20
	CJ5A/CK5A/CK5BW036	36,000	NONE	—	10.50	10.50	36,000	3.16	21,400	2.28	7.20
	CK3BA036	36,000	NONE	—	10.50	10.50	36,000	3.16	21,400	2.28	7.20
	CK3BA042	36,000	NONE	—	10.50	10.50	36,000	3.18	21,600	2.28	7.20
	F(A,B)4AN(F,B)042**	42,000	TDR	10.00	—	10.00	43,000	3.18	25,800	2.30	7.20
	F(A,B)4AN(F,B)048	42,000	TDR	10.50	—	10.50	43,500	3.28	26,200	2.34	7.50
	FC4BNF038	43,000	TDR & TXV	10.50	—	—	44,000	3.38	26,400	2.36	7.60
	FC4BN(F,B)042	42,000	TDR & TXV	10.00	—	—	43,000	3.18	25,800	2.30	7.20
	FC4BN(F,B)048	42,000	TDR & TXV	10.50	—	—	43,500	3.28	26,200	2.34	7.50
	FG3AAA048	42,000	NONE	—	10.50	10.50	43,000	3.24	25,800	2.34	7.20
	FK4BNB005	43,000	TDR & TXV	11.00	—	—	43,500	3.52	26,000	2.50	7.60
	FK4BNF003	42,000	TDR & TXV	11.00	—	—	42,000	3.30	25,200	2.40	7.20
	FK4CNF003	41,500	TDR & TXV	11.00	—	—	41,500	3.28	24,800	2.42	7.50
	FK4CNF005	43,000	TDR & TXV	11.50	—	—	42,500	3.50	25,200	2.52	8.00
	CC5A/CD5A/CD5BA042	41,500	NONE	—	10.50	10.50	42,500	3.18	25,600	2.32	8.00
	CC5A/CD5A/CD5BW042	41,000	NONE	—	10.00	10.00	42,000	3.16	25,600	2.30	7.20
042-A	CC5A/CD5A/CD5BA043	41,500	NONE	—	10.00	10.00	42,500	3.18	25,600	2.30	7.20
	CC5A/CD5A/CD5BW043	41,500	NONE	—	10.00	10.00	42,500	3.18	25,600	2.30	7.20
	CC5A/CD5A/CD5BC048	41,000	NONE	—	10.00	10.00	42,000	3.12	25,400	2.28	7.20
80 / 78	CC5A/CD5A/CD5BW048	41,500	NONE	—	10.00	10.00	42,500	3.22	25,600	2.32	7.20
	CD5A/CD5BA048	41,500	NONE	—	10.50	10.50	42,500	3.22	25,600	2.32	7.20
	CD3(A,B)A042	41,500	NONE	—	10.50	10.50	42,500	3.18	25,600	2.32	7.20
	CD3(A,B)A048	41,500	NONE	—	10.50	10.50	42,500	3.22	25,600	2.32	7.20
	CE3AA042	42,000	NONE	—	10.50	10.50	43,000	3.22	25,800	2.34	7.20
	CE3AA048	42,000	NONE	—	10.50	10.50	43,000	3.26	25,800	2.34	7.20
	CF5AA048	42,000	NONE	—	10.50	10.50	42,500	3.20	25,600	2.32	7.20
	CJ5A/CK5A/CK5BA042	41,500	NONE	—	10.00	10.00	42,500	3.22	26,000	2.34	7.20
	CJ5A/CK5A/CK5BA048	42,000	NONE	—	10.50	10.50	43,000	3.26	26,000	2.36	7.50
	CJ5A/CK5A/CK5BN042	41,500	NONE	—	10.00	10.00	42,500	3.22	26,000	2.34	7.20
	CJ5A/CK5A/CK5BN048	42,000	NONE	—	10.50	10.50	43,000	3.26	26,000	2.36	7.50
	CJ5A/CK5A/CK5BW048	42,000	NONE	—	10.50	10.50	43,000	3.26	26,000	2.36	7.50
	CK3BA042	41,500	NONE	—	10.00	10.00	42,500	3.22	26,000	2.34	7.20
	CK3BA048	42,000	NONE	—	10.50	10.50	43,000	3.26	26,000	2.36	7.50
	F(A,B)4AN(F,B)048**	46,000	TDR	10.50	—	10.50	50,000	3.28	32,400	2.38	7.80
	F(A,B)4AN(F,B)060	47,500	TDR	10.50	—	10.50	50,500	3.34	32,600	2.42	8.00
	FB4ANB070	48,500	TDR	11.00	—	11.00	50,500	3.48	32,600	2.48	8.20
	FC4BN(F,B)048	46,000	TDR & TXV	10.50	—	—	50,000	3.28	32,400	2.38	7.80
	FC4BNB054	48,000	TDR & TXV	11.00	—	—	50,000	3.50	32,400	2.50	8.20
	FC4BN(F,B)060	47,500	TDR & TXV	10.50	—	—	50,500	3.34	32,600	2.42	8.00
	FC4BNB070	48,500	TDR & TXV	11.00	—	—	50,500	3.48	32,600	2.48	8.20
	FG3AAA048	45,500	NONE	10.20	10.50	10.50	49,500	3.20	32,000	2.36	7.50
	FG3AAA060	47,000	NONE	10.70	11.00	11.00	49,500	3.24	32,000	2.40	7.50
048-A	FK4BNB006	49,000	TDR & TXV	11.50	—	—	49,500	3.64	31,800	2.60	8.50
	FK4CNF005	47,500	TDR & TXV	11.50	—	—	50,000	3.42	31,400	2.52	8.00
	FK4CNB006	48,500	TDR & TXV	11.70	—	—	50,000	3.60	31,400	2.60	8.50
78 / 76	CC5A/CD5A/CD5BC048	45,000	NONE	10.20	10.50	10.50	49,000	2.96	31,600	2.26	7.50
	CC5A/CD5A/CD5BW048	45,500	NONE	10.20	10.50	10.50	49,000	3.16	32,000	2.34	7.50
	CC5A/CD5A/CD5BA060	46,000	NONE	10.30	10.60	10.60	49,500	3.12	32,000	2.34	7.50
	CC5A/CD5A/CD5BW060	47,000	NONE	10.70	11.00	11.00	49,500	3.30	32,200	2.40	8.00
	CD5A/CD5BA048	45,500	NONE	10.20	10.50	10.50	49,500	3.18	32,000	2.36	7.50
	CD3(A,B)A048	45,500	NONE	10.20	10.50	10.50	49,500	3.18	32,000	2.36	7.50
	CD3(A,B)A060	46,000	NONE	10.30	10.60	10.60	49,000	3.12	32,000	2.34	7.50
	CE3AA048	46,000	NONE	10.30	10.60	10.60	49,500	3.20	32,000	2.38	7.50
	CE3AA060	47,000	NONE	10.70	11.00	11.00	49,500	3.30	32,200	2.42	8.00
	CF5AA048	46,000	NONE	10.20	10.50	10.50	49,000	3.08	31,800	2.32	7.50

See notes on page 9.

COMBINATION RATINGS Continued

OUTDOOR UNIT AND SOUND RATING* (dBA)	INDOOR UNIT	ARI STANDARD RATINGS†									
		Cooling					Heating				
		Seasonal Efficiency					High-Temp		Low-Temp		Seasonal Efficiency HSPF
		TC	Factory-Supplied Enhancement	Standard Rating	Field-Supplied Accessory‡		TC	COP	TC	COP	
					TDR	TXV					
	CJ5A/CK5A/CK5BA048	46,000	NONE	10.30	10.60	10.60	49,500	3.22	32,200	2.38	7.50
	CJ5A/CK5A/CK5BA060	47,000	NONE	10.50	10.70	10.70	49,500	3.22	32,200	2.40	7.50
048-A	CJ5A/CK5A/CK5BN048	46,000	NONE	10.30	10.60	10.60	49,500	3.22	32,200	2.38	7.50
	CJ5A/CK5A/CK5BN060	47,000	NONE	10.50	10.70	10.70	49,500	3.22	32,200	2.40	7.50
	CJ5A/CK5A/CK5BW048	46,000	NONE	10.30	10.60	10.60	49,500	3.22	32,200	2.38	7.50
78 / 76	CJ5A/CK5A/CK5BX060	47,500	NONE	10.70	11.00	11.00	50,000	3.36	32,400	2.46	8.00
	CK3BA048	46,000	NONE	10.30	10.60	10.60	49,500	3.22	32,200	2.38	7.50
	CK3BA060	47,000	NONE	10.50	10.70	10.70	49,500	3.22	32,200	2.40	7.50
	F(A,B)4AN(F,B)060**	56,500	TDR	10.60	—	10.60	61,000	3.26	39,500	2.40	7.60
	FB4ANB070	58,000	TDR	11.00	—	11.00	61,000	3.42	39,000	2.48	8.00
	FC4BN(F,B)060	56,500	TDR & TXV	10.60	—	—	61,000	3.26	39,500	2.40	7.60
	FC4BNB070	58,000	TDR & TXV	11.00	—	—	61,000	3.42	39,000	2.48	8.00
	FG3AAA060	56,000	NONE	10.60	11.00	11.00	59,500	3.18	38,500	2.38	7.50
060-A	FK4BNB006	57,500	TDR & TXV	11.00	—	—	60,500	3.46	39,000	2.52	8.00
	FK4CNB006	57,000	TDR & TXV	11.50	—	—	60,000	3.44	38,500	2.56	8.00
	CC5A/CD5A/CD5BA060	54,500	NONE	10.20	10.60	10.60	59,000	2.98	38,000	2.30	7.20
78 / 76	CC5A/CD5A/CD5BW060	56,000	NONE	10.60	11.00	11.00	59,500	3.22	38,500	2.40	7.50
	CD3(A,B)A060	54,500	NONE	10.20	10.60	10.60	59,000	2.98	38,000	2.30	7.20
	CE3AA060	57,000	NONE	10.60	11.00	11.00	60,000	3.24	38,500	2.42	7.50
	CJ5A/CK5A/CK5BA060	55,500	NONE	10.50	11.00	11.00	59,500	3.16	39,000	2.40	7.50
	CK5A/CK5A/CK5BN060	55,500	NONE	10.50	11.00	11.00	59,500	3.16	39,000	2.40	7.50
	CJ5A/CK5A/CK5BX060	57,000	NONE	10.60	11.00	11.00	60,000	3.28	39,000	2.46	7.70
	CK3BA060	55,500	NONE	10.50	11.00	11.00	59,500	3.16	39,000	2.40	7.50

* Rating shown without/with sound hood. Sound hood is standard on 036 size.

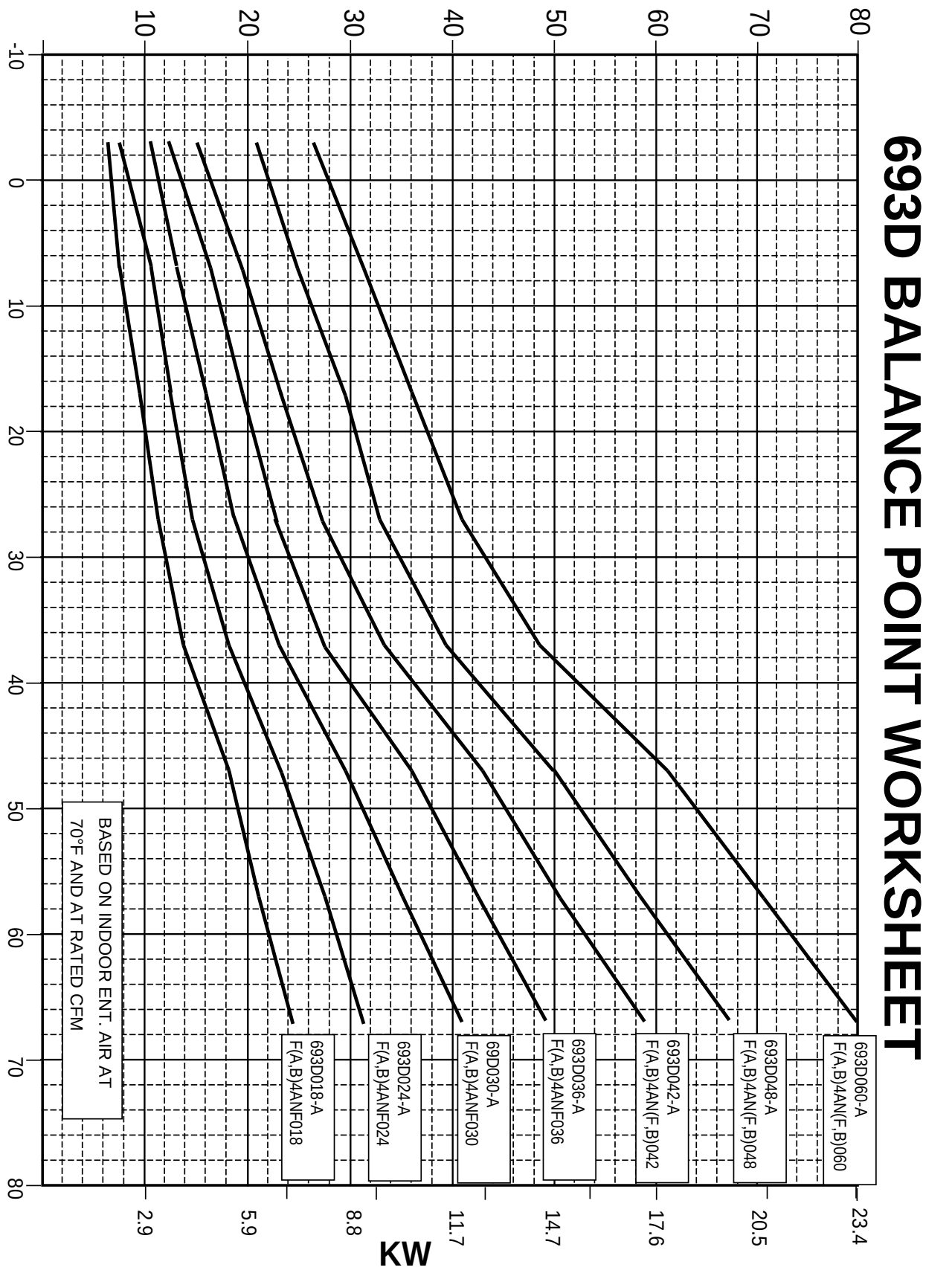
† Ratings are net values reflecting the effects of circulating fan heat. Supplemental electric heat is not included. Ratings are based on:
Cooling Standard: 80°F db (27°C), 67°F (19°C) wb indoor entering air temperature and 95°F (35°C) db air entering outdoor unit.
High-Temperature Heating Standard: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

‡ In most cases, only 1 method should be used to achieve TDR function. Using more than 1 method in a system may cause degradation in performance. Use either the accessory Time-Delay Relay KAATD0101TDR or a furnace equipped with TDR. All Day & Night furnaces are equipped with TDR except for the 394HAD. Requires hard shutoff TXV; based on computer simulation.

** 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.

COP — Coefficient of Performance
HSPF — Heating Seasonal Performance Factor
TC — Total Capacity (Btuh)
TDR — Time-Delay Relay
TXV — Thermostatic Expansion Valve

693D BALANCE POINT WORKSHEET



A96418

DETAILED COOLING CAPACITIES*

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
		Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**
CFM	EWB	Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
693D018-A Outdoor Section With F(A,B)4ANF018 Indoor Section																			
600	72	19.8	9.75	1.68	19.1	9.51	1.80	18.2	9.22	1.92	17.2	8.88	2.03	16.1	8.51	2.14	14.9	8.13	2.24
	67	18.7	12.6	1.65	17.8	12.4	1.76	16.8	12.0	1.87	15.7	11.6	1.97	14.5	11.1	2.06	13.3	10.6	2.15
	63††	17.4	12.3	1.61	16.6	12.0	1.72	15.5	11.6	1.82	14.4	11.1	1.92	13.3	10.6	2.00	12.1	10.2	2.08
	62	17.1	15.2	1.61	16.2	14.9	1.71	15.2	14.4	1.81	14.2	13.9	1.91	13.2	13.2	2.00	12.3	12.3	2.09
	57	16.5	16.5	1.60	15.7	15.7	1.70	14.9	14.9	1.80	14.0	14.0	1.90	13.2	13.2	2.00	12.3	12.3	2.09
650	72	19.9	9.87	1.70	19.1	9.66	1.82	18.3	9.40	1.94	17.3	9.08	2.05	16.2	8.73	2.16	15.0	8.36	2.26
	67	18.8	13.0	1.67	18.0	12.7	1.78	17.0	12.4	1.89	15.8	12.0	2.00	14.6	11.5	2.09	13.4	11.0	2.17
	63††	17.5	12.7	1.64	16.7	12.4	1.75	15.7	12.0	1.85	14.5	11.5	1.94	13.4	11.0	2.03	12.2	10.5	2.10
	62	17.3	15.8	1.63	16.4	15.5	1.74	15.4	14.9	1.84	14.4	14.3	1.93	13.5	13.5	2.03	12.5	12.5	2.12
	57	16.9	16.9	1.62	16.1	16.1	1.73	15.2	15.2	1.83	14.3	14.3	1.93	13.5	13.5	2.03	12.5	12.5	2.12
700	72	19.9	9.98	1.71	19.2	9.79	1.83	18.4	9.58	1.96	17.4	9.28	2.07	16.3	8.94	2.18	15.1	8.58	2.28
	67	19.0	13.3	1.69	18.1	13.1	1.81	17.1	12.8	1.92	16.0	12.4	2.02	14.7	11.9	2.11	13.5	11.4	2.20
	63††	17.7	13.0	1.66	16.9	12.8	1.77	15.8	12.4	1.87	14.6	11.9	1.96	13.5	11.4	2.05	12.3	10.9	2.13
	62	17.4	16.3	1.65	16.6	16.0	1.76	15.6	15.4	1.86	14.6	14.6	1.96	13.7	13.7	2.06	12.8	12.8	2.15
	57	17.2	17.2	1.65	16.4	16.4	1.76	15.5	15.5	1.86	14.6	14.6	1.96	13.7	13.7	2.06	12.8	12.8	2.15

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Cooling		Indoor Section	Unit Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	018	1.00	1.00	CC5A/CD5A/	024	1.03	1.02
	024	1.03	1.03	CD5BW	018	1.00	1.01
FC4BNF	024	1.03	1.02	CD3(A,B)A	024	1.03	1.02
FD3ANA	018	1.00	1.03		024	1.03	1.02
	024	1.03	1.00	CE3AA	024	1.03	1.02
FF1BNA	018	1.00	0.97	CF5AA	024	1.03	1.02
	024	1.03	1.02	CJ5A/CK5A/	018	1.00	1.01
FG3AAA	024	1.03	1.02	CK5BA	024	1.03	1.02
CC5A/CD5A/	018	1.00	1.01	CJ5A/CK5A/			
CD5BA	024	1.03	1.02	CK5BW	024	1.03	1.02
	—	—	—	CK3BA	024	1.03	1.02

693D024-A Outdoor Section With F(A,B)4ANF024 Indoor Section																			
750	72	28.1	13.8	2.28	26.9	13.4	2.44	25.5	12.9	2.60	23.8	12.3	2.75	22.0	11.7	2.88	20.2	11.1	3.00
	67	26.1	17.7	2.23	24.6	17.1	2.38	23.0	16.5	2.52	21.4	15.9	2.65	19.7	15.2	2.77	18.1	14.6	2.88
	63††	24.1	17.2	2.19	22.7	16.6	2.32	21.2	15.9	2.45	19.7	15.3	2.57	18.1	14.6	2.68	16.4	13.9	2.78
	62	23.7	21.3	2.18	22.2	20.6	2.31	20.8	19.9	2.44	19.4	19.1	2.56	18.1	18.1	2.68	16.7	16.7	2.80
	57	22.7	22.7	2.15	21.6	21.6	2.29	20.5	20.5	2.42	19.3	19.3	2.56	18.1	18.1	2.68	16.8	16.8	2.80
850	72	28.6	14.4	2.33	27.4	14.0	2.50	25.8	13.5	2.65	24.2	13.0	2.80	22.3	12.3	2.94	20.5	11.7	3.06
	67	26.6	18.7	2.28	25.0	18.1	2.43	23.4	17.5	2.57	21.7	16.9	2.70	20.0	16.2	2.82	18.3	15.5	2.93
	63††	24.6	18.2	2.24	23.1	17.5	2.38	21.5	16.9	2.50	20.0	16.2	2.63	18.4	15.5	2.74	16.7	14.8	2.84
	62	24.2	22.6	2.23	22.7	21.9	2.36	21.3	21.1	2.50	20.0	20.0	2.63	18.7	18.7	2.76	17.4	17.4	2.88
	57	23.6	23.6	2.21	22.4	22.4	2.36	21.2	21.2	2.49	20.0	20.0	2.63	18.7	18.7	2.76	17.4	17.4	2.88
950	72	28.9	14.9	2.38	27.7	14.6	2.54	26.0	14.0	2.70	24.4	13.5	2.85	22.6	12.9	2.99	20.7	12.3	3.11
	67	26.9	19.6	2.33	25.4	19.1	2.48	23.7	18.5	2.62	22.0	17.9	2.75	20.2	17.2	2.88	18.5	16.5	2.99
	63††	25.1	19.2	2.29	23.4	18.5	2.42	21.8	17.8	2.56	20.2	17.1	2.68	18.6	16.4	2.79	16.9	15.6	2.89
	62	24.7	23.9	2.28	23.2	23.0	2.42	21.9	21.9	2.56	20.6	20.6	2.69	19.2	19.2	2.83	17.9	17.9	2.95
	57	24.4	24.4	2.27	23.1	23.1	2.42	21.9	21.9	2.56	20.6	20.6	2.69	19.2	19.2	2.83	17.8	17.8	2.95

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Cooling		Indoor Section	Unit Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	024	1.00	1.00	CC5A/CD5A/	024	1.00	1.00
	030	1.03	1.00	CD5BA	030	1.01	1.00
FC4BNF	024	1.00	1.00	CC5A/CD5A/	024	1.00	1.00
	030	1.03	1.00	CD5BW	030	1.01	1.00
	033	1.05	1.01	CD3(A,B)A	024	1.00	1.00
FD3ANA	024	0.98	0.98		030	1.01	1.00
	030	1.03	1.00	CE3AA	024	1.01	1.00
FF1BNA	024	1.00	1.00		030	1.02	1.01
	030	1.03	1.01	CF5AA	024	1.00	1.00
FG3AAA	024	0.98	0.99	CJ5A/CK5A/	024	0.99	1.00
FK4BNF	001	1.03	0.96	CK5BA	030	1.02	1.01
	002	1.03	0.96	CJ5A/CK5A/	024	0.99	1.00
FK4CNF	001	1.03	0.92	CK5BW	030	1.02	1.01
	002	1.03	0.92	CK3BA	024	0.99	1.00
	—	—	—		030	1.02	1.01

See notes on page 14.

DETAILED COOLING CAPACITIES* Continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
		Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**
CFM	EWB	Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
693D030-A Outdoor Section With F(A,B)4ANF030 Indoor Section																			
950	72	35.1	17.4	2.80	33.5	16.8	3.01	31.8	16.3	3.22	30.0	15.7	3.42	27.9	15.0	3.61	25.7	14.2	3.79
	67	32.7	22.5	2.75	30.9	21.7	2.93	29.1	21.1	3.13	27.0	20.3	3.30	25.0	19.5	3.47	23.1	18.7	3.63
	63††	30.4	21.9	2.69	28.6	21.1	2.87	26.8	20.3	3.04	24.9	19.5	3.21	23.1	18.7	3.37	21.1	17.9	3.52
	62	29.8	27.1	2.68	28.1	26.2	2.85	26.3	25.3	3.03	24.6	24.4	3.20	23.1	23.1	3.37	21.6	21.6	3.54
	57	28.7	28.7	2.65	27.4	27.4	2.83	26.0	26.0	3.01	24.5	24.5	3.19	23.1	23.1	3.37	21.6	21.6	3.54
1050	72	35.5	17.9	2.85	33.8	17.3	3.06	32.2	16.8	3.27	30.3	16.3	3.48	28.1	15.5	3.67	25.9	14.8	3.84
	67	33.1	23.4	2.79	31.3	22.7	2.99	29.4	22.1	3.18	27.3	21.3	3.36	25.3	20.5	3.53	23.3	19.7	3.69
	63††	30.8	22.8	2.74	28.9	22.0	2.92	27.1	21.2	3.09	25.2	20.4	3.26	23.3	19.6	3.42	21.4	18.8	3.57
	62	30.3	28.4	2.73	28.5	27.5	2.91	26.8	26.5	3.08	25.2	25.2	3.26	23.7	23.7	3.44	22.1	22.1	3.62
	57	29.6	29.6	2.71	28.2	28.2	2.89	26.7	26.7	3.08	25.2	25.2	3.26	23.7	23.7	3.44	22.1	22.1	3.62
1150	72	35.8	18.4	2.90	34.1	17.8	3.11	32.5	17.4	3.32	30.6	16.8	3.53	28.4	16.1	3.72	26.1	15.3	3.89
	67	33.3	24.2	2.84	31.6	23.6	3.03	29.7	23.0	3.23	27.6	22.2	3.41	25.5	21.4	3.58	23.5	20.6	3.74
	63††	31.2	23.7	2.78	29.3	22.9	2.97	27.3	22.1	3.14	25.4	21.3	3.31	23.5	20.5	3.47	21.6	19.6	3.63
	62	30.7	29.6	2.78	29.0	28.6	2.96	27.3	27.3	3.14	25.8	25.8	3.33	24.2	24.2	3.51	22.6	22.6	3.69
	57	30.3	30.3	2.77	28.8	28.8	2.95	27.3	27.3	3.14	25.8	25.8	3.33	24.2	24.2	3.51	22.6	22.6	3.69

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Cooling		Indoor Section	Unit Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	030	1.00	1.00	CC5A/CD5A/			
	036	1.01	1.03	CD5BW	030	0.99	1.00
FC4BNF	030	1.00	1.00	CD3(A,B)A	030	0.99	1.00
	033	1.02	1.02	CE3AA	030	1.00	1.01
	036	1.01	1.03		036	1.02	1.01
FD3ANA	030	1.00	1.02	CF5AA	036	1.02	1.01
FF1BNA	030	1.01	1.02	CJ5A/CK5A/	030	1.00	1.01
FK4BNF	001	1.02	0.99	CK5BA	036	1.02	1.02
	002	1.02	0.99	CJ5A/CK5A/			
	003	1.02	0.95	CK5BN	036	1.02	1.02
FK4CNF	001	1.00	0.94	CJ5A/CK5A/	030	1.00	1.01
	002	1.01	0.94	CK5BW	036	1.02	1.02
	003	1.02	0.92	CK3BA	030	1.00	1.01
CC5A/CD5A/					036	1.02	1.02
CD5BA	030	0.99	1.00		—	—	—

693D036-A Outdoor Section With F(A,B)4ANF036 Indoor Section																			
1150	72	42.0	20.7	3.40	40.6	20.3	3.65	38.5	19.6	3.88	36.3	18.8	4.11	33.8	18.0	4.32	31.2	17.1	4.51
	67	39.1	26.8	3.33	37.2	26.1	3.56	35.0	25.3	3.77	32.6	24.4	3.97	30.2	23.4	4.16	27.9	22.5	4.33
	63††	36.5	26.3	3.29	34.3	25.3	3.48	32.2	24.4	3.67	30.0	23.4	3.86	27.7	22.5	4.03	25.4	21.5	4.19
	62	35.8	32.5	3.27	33.7	31.5	3.47	31.7	30.5	3.66	29.7	29.3	3.85	27.8	27.8	4.04	26.0	26.0	4.22
	57	34.5	34.5	3.24	32.9	32.9	3.44	31.2	31.2	3.64	29.5	29.5	3.84	27.8	27.8	4.04	26.0	26.0	4.22
1250	72	42.4	21.2	3.45	40.7	20.7	3.70	38.7	20.1	3.93	36.5	19.4	4.16	34.1	18.6	4.38	31.5	17.7	4.57
	67	39.3	27.6	3.38	37.5	27.1	3.61	35.4	26.3	3.83	33.0	25.4	4.03	30.5	24.5	4.22	28.1	23.5	4.40
	63††	36.9	27.3	3.34	34.7	26.3	3.54	32.5	25.3	3.73	30.3	24.4	3.92	28.0	23.4	4.09	25.7	22.4	4.26
	62	36.3	33.9	3.33	34.2	32.8	3.52	32.2	31.7	3.72	30.2	30.2	3.91	28.4	28.4	4.11	26.5	26.5	4.30
	57	35.4	35.4	3.30	33.7	33.7	3.51	31.9	31.9	3.71	30.2	30.2	3.91	28.4	28.4	4.11	26.5	26.5	4.30
1350	72	42.7	21.7	3.51	40.6	20.9	3.74	38.7	20.4	3.98	36.6	19.8	4.21	34.3	19.1	4.43	31.7	18.3	4.63
	67	39.7	28.5	3.44	37.7	27.9	3.66	35.7	27.3	3.88	33.2	26.4	4.09	30.8	25.4	4.28	28.3	24.4	4.46
	63††	37.4	28.2	3.39	35.1	27.2	3.59	32.8	26.3	3.79	30.5	25.3	3.98	28.2	24.3	4.15	25.9	23.3	4.32
	62	36.8	35.2	3.38	34.7	34.0	3.58	32.7	32.6	3.78	30.8	30.8	3.99	28.9	28.9	4.19	27.0	27.0	4.38
	57	36.2	36.2	3.37	34.4	34.4	3.58	32.6	32.6	3.78	30.8	30.8	3.99	28.9	28.9	4.19	27.0	27.0	4.38

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Cooling		Indoor Section	Unit Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	036	1.00	1.00	CC5A/CD5A/	042	1.01	0.98
F(A,B)4AN(F,B)	042	1.02	1.00	CD5BW	043	1.02	0.98
FC4BNF	033	1.02	0.99	CD5A/CD5BW	036	1.02	0.98
	036	1.00	0.99	CD3(A,B)A	036	1.02	0.98
FC4BN(F,B)	042	1.02	0.99		042	1.02	0.99
FG3AAA	036	1.00	0.98	CE3AA	036	1.01	0.98
FK4BNF	001	1.01	0.96		042	1.02	0.99
	002	1.01	0.96	CF5AA	036	1.02	0.99
	003	1.02	0.93	CJ5A/CK5A/	036	1.02	0.98
	004	1.02	0.94	CK5BA	042	1.02	0.99
FK4CNF	001	0.99	0.92	CJ5A/CK5A/	036	0.99	0.95
	002	1.00	0.92	CK5BN	042	1.02	0.99
	003	1.02	0.90	CJ5A/CK5A/			
CC5A/CD5A/	036	1.02	0.98	CK5BW	036	1.02	0.98
CD5BA	042	1.02	0.99	CK3BA	036	1.02	0.98
	043	1.02	0.98		042	1.02	0.99

See notes on page 14.

DETAILED COOLING CAPACITIES* Continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
		Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**
CFM	EWB	Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
693D042-A Outdoor Section With F(A,B)4AN(F,B)042 Indoor Section																			
1300	72	48.8	23.8	3.93	47.7	23.6	4.27	45.7	23.0	4.59	43.2	22.1	4.89	40.3	21.1	5.16	37.3	20.1	5.41
	67	46.0	31.0	3.88	44.1	30.4	4.18	41.5	29.5	4.46	38.9	28.4	4.71	36.2	27.3	4.96	33.5	26.3	5.19
	63††	43.1	30.6	3.82	40.7	29.5	4.09	38.3	28.4	4.34	35.8	27.4	4.58	33.2	26.3	4.81	30.7	25.2	5.02
	62	42.3	37.8	3.81	40.0	36.6	4.06	37.6	35.5	4.31	35.3	34.2	4.56	33.0	32.8	4.80	30.9	30.9	5.04
	57	40.5	40.5	3.76	38.7	38.7	4.02	36.8	36.8	4.28	34.9	34.9	4.54	32.9	32.9	4.79	30.9	30.9	5.04
1400	72	49.2	24.3	3.99	48.1	24.1	4.33	46.1	23.6	4.65	43.6	22.8	4.95	40.6	21.7	5.22	37.6	20.7	5.47
	67	46.2	31.8	3.92	44.5	31.4	4.23	42.0	30.5	4.52	39.2	29.4	4.78	36.5	28.4	5.02	33.7	27.3	5.25
	63††	43.6	31.5	3.87	41.2	30.5	4.14	38.6	29.4	4.40	36.1	28.3	4.64	33.5	27.2	4.87	30.9	26.1	5.09
	62	42.9	39.2	3.87	40.5	38.0	4.13	38.1	36.8	4.38	35.8	35.4	4.63	33.6	33.6	4.87	31.5	31.5	5.12
	57	41.4	41.4	3.83	39.6	39.6	4.09	37.6	37.6	4.36	35.6	35.6	4.62	33.6	33.6	4.88	31.5	31.5	5.12
1500	72	49.6	24.7	4.05	48.5	24.7	4.38	46.5	24.1	4.71	44.0	23.4	5.01	40.9	22.3	5.28	37.9	21.3	5.54
	67	46.7	32.7	3.98	44.7	32.2	4.28	42.4	31.6	4.57	39.6	30.5	4.84	36.7	29.4	5.08	34.0	28.3	5.32
	63††	43.9	32.3	3.92	41.7	31.5	4.20	39.0	30.4	4.46	36.4	29.3	4.70	33.8	28.1	4.93	31.1	27.0	5.15
	62	43.4	40.6	3.92	41.0	39.3	4.19	38.6	38.0	4.44	36.3	36.3	4.70	34.2	34.2	4.95	32.0	32.0	5.20
	57	42.3	42.3	3.90	40.3	40.3	4.17	38.3	38.3	4.43	36.3	36.3	4.70	34.2	34.2	4.95	32.0	32.0	5.20

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Cooling		Indoor Section	Unit Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4AN(F,B)	042	1.00	1.00	CC5A/CD5A/			
	048	1.00	1.01	CD5BC	048	0.98	0.98
FC4BNF	038	1.02	1.01	CD5A/CD5BA	048	0.99	0.99
FC4BN(F,B)	042	1.00	0.99	CD3(A,B)A	042	0.99	0.99
	048	1.00	1.00		048	0.99	0.99
FG3AAA	048	1.00	0.99	CE3AA	042	1.00	0.99
FK4BNB	005	1.02	0.97		048	1.00	0.99
FK4BNF	003	1.00	0.95	CF5AA	048	1.00	0.99
FK4CNF	003	0.99	0.92	CJ5A/CK5A/	042	0.99	0.99
	005	1.02	0.93	CK5BA	048	1.00	0.99
CC5A/CD5A/	042	0.99	0.99	CJ5A/CK5A/	042	0.99	0.99
CD5BA	043	0.99	0.98	CK5BN	048	1.00	0.99
CC5A/CD5A/	042	0.98	0.98	CJ5A/CK5A/			
CD5BW	043	0.99	0.98	CK5BW	048	1.00	0.99
	048	0.99	0.99	CK3BA	042	0.99	0.99
	—	—	—		048	1.00	0.99

693D048-A Outdoor Section With F(A,B)4AN(F,B)048 Indoor Section																			
1500	72	53.1	26.5	4.05	51.7	26.1	4.45	49.8	25.6	4.89	47.6	24.8	5.36	45.1	23.9	5.87	42.4	23.0	6.41
	67	49.7	34.8	4.01	47.7	34.0	4.39	45.6	33.2	4.82	43.2	32.2	5.28	40.9	31.3	5.77	38.5	30.4	6.29
	63††	46.2	33.8	3.97	44.3	33.0	4.35	42.2	32.1	4.76	40.1	31.2	5.20	37.9	30.3	5.69	35.5	29.2	6.20
	62	45.5	42.2	3.96	43.6	41.2	4.33	41.7	40.2	4.75	39.7	39.1	5.20	37.8	37.7	5.68	35.8	35.8	6.21
	57	44.4	44.4	3.94	42.8	42.8	4.32	41.2	41.2	4.74	39.5	39.5	5.19	37.8	37.8	5.68	35.8	35.8	6.21
1650	72	53.5	27.2	4.12	52.2	26.9	4.53	50.3	26.4	4.96	48.1	25.7	5.44	45.4	24.8	5.95	42.7	23.9	6.49
	67	50.3	36.3	4.09	48.2	35.5	4.47	46.0	34.7	4.89	43.6	33.8	5.35	41.2	32.8	5.84	38.8	31.9	6.37
	63††	46.8	35.3	4.05	44.7	34.4	4.42	42.6	33.5	4.83	40.5	32.6	5.28	38.3	31.7	5.76	35.8	30.6	6.28
	62	46.2	44.2	4.04	44.3	43.1	4.41	42.3	41.9	4.83	40.5	40.5	5.28	38.6	38.6	5.77	36.7	36.7	6.30
	57	45.5	45.5	4.03	43.9	43.9	4.41	42.2	42.2	4.82	40.4	40.4	5.28	38.6	38.6	5.77	36.6	36.6	6.30
1800	72	53.8	27.9	4.19	52.6	27.8	4.60	50.7	27.2	5.04	48.4	26.6	5.52	45.7	25.7	6.03	42.9	24.7	6.57
	67	50.8	37.8	4.16	48.7	37.0	4.54	46.4	36.2	4.97	43.9	35.3	5.43	41.5	34.3	5.92	39.1	33.3	6.45
	63††	47.2	36.7	4.12	45.2	35.8	4.49	43.0	34.9	4.91	40.8	34.0	5.36	38.5	33.0	5.84	36.1	32.0	6.35
	62	46.8	46.0	4.11	44.9	44.7	4.49	43.0	43.0	4.91	41.3	41.3	5.37	39.4	39.4	5.86	37.3	37.3	6.39
	57	46.5	46.5	4.11	44.8	44.8	4.49	43.1	43.1	4.91	41.3	41.3	5.37	39.3	39.3	5.86	37.4	37.4	6.39

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Cooling		Indoor Section	Unit Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4AN(F,B)	048	1.00	1.00	CD5A/CD5BA	048	0.99	0.98
	060	1.03	1.02	CD3(A,B)A	048	0.99	0.98
FB4ANB	070	1.05	1.01		060	1.00	0.98
FC4BN(F,B)	048	1.00	0.99	CE3AA	048	1.00	0.98
	060	1.03	1.01		060	1.02	0.99
FC4BNB	054	1.04	0.99	CF5AA	048	1.00	0.97
	070	1.05	1.00	CJ5A/CK5A/	048	1.00	0.98
FG3AAA	048	0.99	0.98	CK5BA	060	1.02	0.98
	060	1.02	0.98	CJ5A/CK5A/	048	1.00	0.98
FK4BNB	006	1.07	0.95	CK5BN	060	1.02	0.98
FK4CNB	006	1.05	0.91	CJ5A/CK5A/			
FK4CNF	005	1.03	0.93	CK5BW	048	1.00	0.98
CC5A/CD5A/				CJ5A/CK5A/			
CD5BC	048	0.98	0.97	CK5BX	060	1.03	0.99
CC5A/CD5A/	048	0.99	0.98	CK3BA	048	1.00	0.98
CD5BW	060	1.02	0.99		060	1.02	0.98
CC5A/CD5A/					—	—	—
CD5BA	060	1.00	0.98				

See notes on page 14.

DETAILED COOLING CAPACITIES* Continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F																	
		75			85			95			105			115			125		
		Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**	Capacity MBtuh†		Total Sys Kw**
CFM	EWB	Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
693D060-A Outdoor Section With F(A,B)4AN(F,B)O060 Indoor Section																			
1800	72	65.8	32.5	4.95	63.8	31.9	5.44	61.2	31.1	5.97	58.4	30.1	6.54	55.1	28.9	7.16	51.8	27.8	7.79
	67	61.2	42.3	4.89	58.7	41.4	5.35	56.0	40.3	5.87	53.0	39.1	6.42	50.1	38.0	7.00	47.0	36.8	7.63
	63††	56.8	41.2	4.84	54.4	40.1	5.29	51.8	39.0	5.78	49.2	37.9	6.32	46.5	36.7	6.89	43.4	35.4	7.50
	62	56.0	51.4	4.82	53.5	50.2	5.27	51.1	49.0	5.77	48.6	47.6	6.30	46.1	46.0	6.89	43.6	43.6	7.51
	57	54.4	54.4	4.79	52.4	52.4	5.25	50.4	50.4	5.75	48.3	48.3	6.30	46.1	46.1	6.88	43.7	43.7	7.51
2000	72	66.4	33.5	5.06	64.4	33.0	5.55	61.9	32.2	6.08	59.0	31.3	6.66	55.6	30.1	7.27	52.2	28.9	7.91
	67	61.9	44.4	5.00	59.3	43.4	5.47	56.5	42.3	5.98	53.5	41.2	6.53	50.5	40.0	7.12	47.4	38.8	7.75
	63††	57.6	43.1	4.95	55.0	42.0	5.40	52.4	40.9	5.89	49.6	39.7	6.43	46.8	38.5	7.01	43.8	37.2	7.62
	62	56.8	54.0	4.93	54.4	52.8	5.39	51.9	51.4	5.88	49.6	49.6	6.43	47.2	47.2	7.02	44.8	44.8	7.65
	57	55.9	55.9	4.92	53.9	53.9	5.38	51.7	51.7	5.88	49.5	49.5	6.43	47.2	47.2	7.02	44.8	44.8	7.66
2200	72	66.9	34.4	5.17	64.9	34.0	5.66	62.4	33.3	6.19	59.4	32.4	6.77	56.0	31.2	7.38	52.5	30.1	8.03
	67	62.5	46.3	5.11	59.9	45.3	5.58	57.0	44.3	6.09	53.9	43.1	6.65	50.9	41.9	7.23	47.7	40.7	7.86
	63††	58.1	45.0	5.06	55.5	43.9	5.51	52.8	42.7	6.00	50.0	41.5	6.54	47.2	40.3	7.12	44.1	39.0	7.74
	62	57.6	56.5	5.05	55.2	55.0	5.50	52.9	52.9	6.01	50.6	50.6	6.56	48.2	48.2	7.16	45.7	45.7	7.79
	57	57.2	57.2	5.04	55.1	55.1	5.50	52.9	52.9	6.01	50.6	50.6	6.56	48.2	48.2	7.16	45.7	45.7	7.79

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Cooling		Indoor Section	Unit Size	Cooling	
		Capacity	Power			Capacity	Power
F(A,B)4AN(F,B)	060	1.00	1.00	CD3(A,B)A	060	0.96	0.94
FB4ANB	070	1.03	0.98	CE3AA	060	1.01	0.96
FC4BN(F,B)	060	1.00	0.99	CJ5A/CK5A/			
FC4BNB	070	1.03	0.98	CK5BA	060	0.98	0.96
FG3AAA	060	0.99	0.96	CJ5A/CK5A/			
FK4BNB	006	1.02	0.96	CK5BN	060	0.98	0.96
FK4CNB	006	1.01	0.92	CJ5A/CK5A/			
CC5A/CD5A/				CK5BX	060	1.01	0.96
CD5BA	060	0.96	0.94	CK3BA	060	0.98	0.96
CC5A/CD5A/					—	—	—
CD5BW	060	0.99	0.96				

* Detailed cooling capacities are based on indoor and outdoor unit at the same elevation and connected by 25 ft (9.14m) of tubing. If other than 25 ft (9.14m) of tubing is used and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

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

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

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

†† At TVA rating indoor condition (75°edb/63°ewb). All other indoor air temperatures are at 80°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	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‡
693D018-A 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	24.4	24.4	2.01
	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	24.6	24.6	2.01
	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	24.8	24.8	2.02
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	23.8	23.8	2.04
	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	24.1	24.1	2.05
	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	24.3	24.3	2.05
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	23.3	23.3	2.07
	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	23.5	23.5	2.08
	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	23.7	23.7	2.08

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Heating		Indoor Section	Unit Size	Heating	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	018	1.00	1.00	CC5A/CD5A/CD5BW	024	1.00	0.98
	024	1.01	0.97	CD3(A,B)A	018	0.99	1.02
FC4BNF	024	1.01	0.96		024	1.00	0.98
FD3ANA	018	1.00	1.02	CE3AA	024	1.00	0.97
	024	1.00	0.97	CF5AA	024	1.00	0.96
FF1BNA	018	0.99	0.96	CJ5A/CK5A/CK5BA	018	1.00	0.97
	024	1.02	0.97		024	1.01	0.96
FG3AAA	024	1.00	0.98	CJ5A/CK5A/CK5BW	024	1.01	0.96
CC5A/CD5A/CD5BA	018	0.99	1.02	CK3BA	024	1.01	0.96
	024	1.00	0.98		—	—	—

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‡
693D024-A Outdoor Section With F(A,B)4ANF024 Indoor Section																									
65	750	8.83	8.12	1.63	11.2	10.3	1.73	13.9	12.7	1.84	16.7	14.8	1.94	19.9	18.2	2.05	23.6	23.6	2.17	27.7	27.7	2.32	32.0	32.0	2.45
	850	9.02	8.30	1.67	11.4	10.5	1.77	14.1	12.9	1.87	17.0	15.1	1.96	20.3	18.5	2.07	24.0	24.0	2.19	28.1	28.1	2.33	32.3	32.3	2.45
	950	9.18	8.45	1.70	11.6	10.7	1.80	14.3	13.1	1.90	17.2	15.3	1.99	20.5	18.7	2.09	24.2	24.2	2.21	28.4	28.4	2.34	32.0	32.0	2.43
70	750	8.42	7.75	1.63	10.8	9.94	1.75	13.4	12.3	1.86	16.2	14.4	1.97	19.5	17.7	2.08	23.0	23.0	2.21	27.1	27.1	2.35	31.5	31.5	2.51
	850	8.62	7.93	1.67	11.0	10.1	1.78	13.7	12.5	1.89	16.5	14.7	1.99	19.8	18.0	2.10	23.4	23.4	2.23	27.5	27.5	2.37	31.8	31.8	2.50
	950	8.80	8.09	1.71	11.2	10.3	1.82	13.9	12.7	1.93	16.8	14.9	2.02	20.0	18.2	2.13	23.7	23.7	2.25	27.8	27.8	2.39	31.7	31.7	2.49
75	750	7.97	7.34	1.64	10.4	9.57	1.76	13.0	11.9	1.88	15.8	14.0	1.99	19.0	17.3	2.12	22.5	22.5	2.24	26.4	26.4	2.39	30.9	30.9	2.56
	850	8.18	7.53	1.68	10.6	9.76	1.80	13.3	12.1	1.91	16.1	14.3	2.02	19.3	17.6	2.14	22.8	22.8	2.26	26.8	26.8	2.41	31.3	31.3	2.56
	950	8.35	7.69	1.72	10.8	9.93	1.83	13.5	12.3	1.95	16.3	14.5	2.05	19.6	17.8	2.16	23.1	23.1	2.28	27.2	27.2	2.43	31.4	31.4	2.56

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Heating		Indoor Section	Unit Size	Heating	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	024	1.00	1.00	CC5A/CD5A/CD5BA	024	0.98	1.01
	030	1.00	0.99		030	0.98	1.01
FC4BNF	024	1.00	1.00	CC5A/CD5A/CD5BW	024	0.98	1.01
	030	1.00	0.99		030	0.98	1.01
	033	0.93	0.94	CD3(A,B)A	024	0.98	1.01
FD3ANA	024	0.98	1.00		030	0.98	1.01
	030	1.01	1.00	CE3AA	024	0.99	1.00
FF1BNA	024	1.01	1.01		030	1.01	1.00
	030	1.01	1.00	CF5AA	024	0.99	1.00
FG3AAA	024	0.98	1.02	CJ5A/CK5A/CK5BA	024	1.01	1.00
FK4BNF	001	0.98	0.92		030	1.00	1.01
	002	0.95	0.89	CJ5A/CK5A/CK5BW	024	1.01	1.00
FK4CNF	001	0.97	0.91		030	1.00	1.01
	002	0.97	0.90	CK3BA	024	1.01	1.00
	—	—	—		030	1.00	1.01

See notes on page 18.

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‡
693D030-A Outdoor Section With F(A,B)4ANF030 Indoor Section																									
65	950	11.5	10.6	1.94	14.4	13.3	2.07	17.7	16.2	2.20	21.2	18.8	2.33	25.3	23.0	2.48	29.9	29.9	2.64	35.1	35.1	2.84	40.8	40.8	3.05
	1050	11.7	10.8	1.98	14.6	13.4	2.10	18.0	16.4	2.23	21.4	19.0	2.35	25.6	23.3	2.49	30.2	30.2	2.65	35.5	35.5	2.85	40.7	40.7	3.02
	1150	11.9	10.9	2.01	14.8	13.6	2.13	18.2	16.6	2.26	21.7	19.2	2.37	25.8	23.5	2.51	30.5	30.5	2.67	35.8	35.8	2.87	40.6	40.6	3.00
70	950	11.1	10.2	1.96	14.0	12.9	2.10	17.3	15.7	2.24	20.7	18.4	2.38	24.7	22.5	2.53	29.3	29.3	2.70	34.4	34.4	2.90	40.0	40.0	3.12
	1050	11.3	10.4	2.00	14.2	13.1	2.13	17.5	16.0	2.27	21.0	18.6	2.40	25.0	22.8	2.54	29.6	29.6	2.71	34.8	34.8	2.91	40.4	40.4	3.11
	1150	11.5	10.5	2.03	14.4	13.2	2.16	17.7	16.1	2.30	21.2	18.8	2.42	25.3	23.0	2.56	29.9	29.9	2.73	35.1	35.1	2.92	40.6	40.6	3.11
75	950	10.7	9.80	1.98	13.6	12.5	2.13	16.8	15.3	2.28	20.3	18.0	2.42	24.2	22.0	2.58	28.6	28.6	2.75	33.7	33.7	2.96	39.3	39.3	3.20
	1050	10.8	9.98	2.02	14.2	13.0	2.16	17.0	15.5	2.30	20.5	18.2	2.44	24.5	22.3	2.60	29.0	29.0	2.77	34.1	34.1	2.97	39.8	39.8	3.19
	1150	11.0	10.1	2.05	14.0	12.8	2.19	17.2	15.7	2.33	20.7	18.4	2.47	24.8	22.5	2.62	29.3	29.3	2.78	34.4	34.4	2.98	39.9	39.9	3.18

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Heating		Indoor Section	Unit Size	Heating	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	030	1.00	1.00	CC5A/CD5A/CD5BA	030	0.99	1.02
	036	1.01	1.01	CC5A/CD5A/CD5BW	030	0.99	1.02
FC4BNF	030	1.00	1.00	CD3(A,B)A	030	0.99	1.02
	033	1.00	0.98	CE3AA	030	1.01	1.01
	036	1.01	1.01		036	1.01	1.01
FD3ANA	030	1.01	1.01	CF5AA	036	1.01	1.00
FF1BNA	030	1.01	1.01	CJ5A/CK5A/CK5BA	030	1.00	1.01
FK4BNF	001	1.01	0.97		036	1.01	0.99
	002	1.02	0.95	CJ5A/CK5A/CK5BN	036	1.01	0.99
	003	0.98	0.91	CJ5A/CK5A/CK5BW	030	1.00	1.01
FK4CNF	001	0.97	0.94		036	1.01	0.99
	002	0.99	0.92	CK3BA	030	1.00	1.01
	003	0.97	0.91		036	1.01	0.99

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‡
693D036-A Outdoor Section With F(A,B)4ANF036 Indoor Section																									
65	1150	13.8	12.7	2.39	17.7	16.3	2.57	21.8	19.9	2.75	26.0	23.1	2.93	31.0	28.2	3.13	36.4	36.4	3.34	42.5	42.5	3.59	49.4	49.4	3.89
	1250	14.0	12.9	2.43	17.9	16.5	2.61	22.0	20.1	2.79	26.3	23.4	2.96	31.4	28.6	3.15	36.8	36.8	3.36	43.0	43.0	3.60	50.0	50.0	3.90
	1350	14.2	13.1	2.47	18.1	16.7	2.65	22.3	20.3	2.83	26.6	23.7	2.99	31.7	28.8	3.18	37.2	37.2	3.38	43.5	43.5	3.62	50.5	50.5	3.91
70	1150	13.0	12.0	2.40	17.1	15.7	2.59	21.1	19.3	2.79	25.3	22.5	2.97	30.3	27.5	3.18	35.6	35.6	3.40	41.6	41.6	3.66	48.3	48.3	3.96
	1250	13.2	12.2	2.44	17.8	16.3	2.63	21.4	19.5	2.82	25.7	22.8	3.01	30.6	27.9	3.21	36.0	36.0	3.42	42.1	42.1	3.67	48.9	48.9	3.97
	1350	13.5	12.4	2.48	17.5	16.1	2.67	21.7	19.7	2.86	26.0	23.1	3.04	30.9	28.2	3.24	36.4	36.4	3.45	42.5	42.5	3.69	49.4	49.4	3.99
75	1150	12.2	11.2	2.41	16.3	15.0	2.61	20.5	18.7	2.82	24.7	21.9	3.02	29.5	26.8	3.24	34.8	34.8	3.47	40.6	40.6	3.73	47.2	47.2	4.03
	1250	12.4	11.4	2.45	17.2	15.8	2.65	20.8	18.9	2.86	25.0	22.2	3.05	29.9	27.2	3.26	35.2	35.2	3.49	41.1	41.1	3.74	47.8	47.8	4.05
	1350	12.6	11.6	2.49	16.8	15.5	2.69	21.0	19.2	2.89	25.2	22.4	3.08	30.2	27.5	3.29	35.6	35.6	3.51	41.5	41.5	3.76	48.3	48.3	4.06

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Heating		Indoor Section	Unit Size	Heating	
		Capacity	Power			Capacity	Power
F(A,B)4ANF	036	1.00	1.00	CC5A/CD5A/CD5BW	042	0.99	0.99
F(A,B)4AN(F,B)	042	1.01	0.99		043	0.99	0.98
FC4BNF	033	1.01	0.99	CD5A/CD5BW	036	0.99	0.98
	036	1.00	1.00	CD3(A,B)A	036	0.99	0.98
FC4BN(F,B)	042	1.01	0.99		042	1.00	0.98
FG3AAA	036	0.99	0.99	CE3AA	036	0.98	0.98
FK4BNF	001	0.98	0.96		042	1.01	0.97
	002	1.00	0.96	CF5AA	036	0.99	0.98
	003	0.98	0.92	CJ5A/CK5A/CK5BA	036	1.00	0.97
	004	1.01	0.92		042	1.00	0.97
FK4CNF	001	0.96	0.94	CJ5A/CK5A/CK5BN	036	0.97	0.97
	002	0.98	0.93		042	1.00	0.97
	003	0.96	0.91	CJ5A/CK5A/CK5BW	036	1.00	0.97
CC5A/CD5A/CD5BA	036	0.99	0.98	CK3BA	036	1.00	0.97
	042	1.00	0.98		042	1.00	0.97
	043	0.99	0.98		—	—	—

See notes on page 18.

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‡
693D042-A Outdoor Section With F(A,B)4AN(F,B)042 Indoor Section																									
65	1300	17.2	15.9	2.80	21.5	19.8	3.00	26.2	23.9	3.20	31.2	27.7	3.40	37.0	33.7	3.62	43.6	43.6	3.87	51.0	51.0	4.16	59.2	59.2	4.52
	1400	17.5	16.1	2.84	21.7	20.0	3.04	26.5	24.1	3.23	31.5	28.0	3.42	37.4	34.0	3.64	44.0	44.0	3.88	51.5	51.5	4.18	59.8	59.8	4.53
	1500	17.7	16.2	2.88	21.9	20.2	3.07	26.7	24.4	3.27	31.8	28.2	3.45	37.7	34.3	3.66	44.4	44.4	3.90	51.9	51.9	4.19	60.2	60.2	4.54
70	1300	16.5	15.2	2.82	20.9	19.2	3.04	25.5	23.3	3.25	30.4	27.0	3.46	36.2	32.9	3.69	42.6	42.6	3.94	49.9	49.9	4.25	58.0	58.0	4.61
	1400	16.7	15.4	2.86	21.1	19.4	3.08	25.8	23.5	3.29	30.7	27.3	3.49	36.5	33.2	3.71	43.0	43.0	3.96	50.4	50.4	4.26	58.5	58.5	4.62
	1500	17.0	15.6	2.91	21.3	19.6	3.11	26.0	23.7	3.32	31.0	27.6	3.52	36.9	33.5	3.74	43.4	43.4	3.98	50.8	50.8	4.28	59.0	59.0	4.63
75	1300	15.7	14.5	2.84	20.2	18.6	3.07	24.8	22.6	3.30	29.7	26.4	3.52	35.3	32.1	3.76	41.6	41.6	4.02	48.8	48.8	4.33	56.7	56.7	4.69
	1400	16.0	14.7	2.89	21.0	19.3	3.11	25.1	22.9	3.33	30.0	26.7	3.55	35.7	32.5	3.78	42.0	42.0	4.04	49.3	49.3	4.34	57.3	57.3	4.70
	1500	16.2	14.9	2.93	20.7	19.0	3.15	25.3	23.1	3.37	30.3	26.9	3.58	36.0	32.8	3.81	42.4	42.4	4.06	49.7	49.7	4.36	57.8	57.8	4.72

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Heating Capacity	Heating Power	Indoor Section	Unit Size	Heating Capacity	Heating Power
F(A,B)4AN(F,B)	042	1.00	1.00	CC5A/CD5A/CD5BC	048	0.98	1.00
	048	1.01	0.98	CD5A/CD5BA	048	0.99	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	0.99	0.98
	048	1.01	0.98	CE3AA	042	1.00	0.99
FG3AAA	048	1.00	0.98		048	1.00	0.98
FK4BNB	005	1.01	0.91	CF5AA	048	0.99	0.98
FK4BNF	003	0.98	0.94	CJ5A/CK5A/CK5BA	042	0.99	0.98
FK4CNF	003	0.97	0.94		048	1.00	0.98
	005	0.99	0.90	CJ5A/CK5A/CK5BN	042	0.99	0.98
CC5A/CD5A/CD5BA	042	0.99	0.99		048	1.00	0.98
	043	0.99	0.99	CJ5A/CK5A/CK5BW	048	1.00	0.98
CC5A/CD5A/CD5BW	042	0.98	0.98	CK3BA	042	0.99	0.98
	043	0.99	0.99		048	1.00	0.98
	048	0.99	0.98		—	—	—

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‡
693D048-A Outdoor Section With F(A,B)4AN(F,B)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	67.5	67.5	4.96
	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	68.1	68.1	4.95
	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	68.5	68.5	4.96
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	66.7	66.7	5.15
	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	67.3	67.3	5.14
	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	67.8	67.8	5.14
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	65.8	65.8	5.35
	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	66.4	66.4	5.33
	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	66.9	66.9	5.32

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Heating Capacity	Heating Power	Indoor Section	Unit Size	Heating Capacity	Heating Power
F(A,B)4AN(F,B)	048	1.00	1.00	CC5A/CD5A/CD5BA	060	0.99	1.04
	060	1.01	0.99	CD5A/CD5BA	048	0.99	1.02
FB4ANB	070	1.01	0.95	CD3(A,B)A	048	0.99	1.02
FC4BN(F,B)	048	1.00	1.00		060	0.98	1.03
	060	1.01	0.99	CE3AA	048	0.99	1.01
FC4BNB	054	1.00	0.94		060	0.99	0.98
	070	1.01	0.95	CF5AA	048	0.98	1.04
FG3AAA	048	0.99	1.01	CJ5A/CK5A/CK5BA	048	0.99	1.01
	060	0.99	1.00		060	0.99	1.01
FK4BNB	006	0.99	0.89	CJ5A/CK5A/CK5BN	048	0.99	1.01
FK4CNB	006	1.00	0.91		060	0.99	1.01
FK4CNF	005	1.00	0.96	CJ5A/CK5A/CK5BW	048	0.99	1.01
CC5A/CD5A/CD5BC	048	0.98	1.09	CJ5A/CK5A/CK5BX	060	1.00	0.98
CC5A/CD5A/CD5BW	048	0.98	1.02	CK3BA	048	0.99	1.01
	060	0.99	0.98		060	0.99	1.01

See notes on page 18.

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‡
693D060-A Outdoor Section With F(A,B)4AN(F,B)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	81.1	81.1	6.07
	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	82.0	82.0	6.04
	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	82.7	82.7	6.05
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	80.1	80.1	6.31
	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	81.0	81.0	6.28
	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	81.7	81.7	6.28
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	79.1	79.1	6.57
	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	80.0	80.0	6.53
	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	80.7	80.7	6.52

Multipliers for Determining the Performance With Other Indoor Sections

Indoor Section	Unit Size	Heating		Indoor Section	Unit Size	Heating	
		Capacity	Power			Capacity	Power
F(A,B)4AN(F,B)	060	1.00	1.00	CC5A/CD5A/CD5BW	060	0.98	0.99
FB4ANB	070	1.00	0.95	CD3(A,B)A	060	0.97	1.06
FC4BN(F,B)	060	1.00	1.00	CE3AA	060	0.98	0.99
FC4BNB	070	1.00	0.95	CJ5A/CK5A/CK5BA	060	0.98	1.01
FG3AAA	060	0.98	1.00	CJ5A/CK5A/CK5BN	060	0.98	1.01
FK4BNB	006	0.99	0.93	CJ5A/CK5A/CK5BX	060	0.98	0.98
FK4CNB	006	1.01	0.92	CK3BA	060	0.98	1.01
CC5A/CD5A/CD5BA	060	0.97	1.06		—	—	—

† 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

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature for cooling mode without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature for cooling mode is 125°F (51.7°C).
4. Minimum outdoor operating air temperature for heating mode is –30°F (–34.4°C).
5. Maximum outdoor operating air temperature for heating mode is 66°F (18.9°C).
6. For reliable operation, unit should be level in all horizontal planes.
7. 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.)
8. For interconnecting refrigerant tube lengths greater than 50 ft, consult Long-Line Application Guideline available from equipment distributor.
9. 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.
10. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
11. Mixmatches of indoor coil capacity more than 1 size larger than outdoor unit capacity may result in inadequate indoor comfort.

SERVICE TRAINING

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

- Unit Familiarization
- Maintenance
- Installation Overview
- Operating Sequence

A large selection of product, theory, and skills programs is available, using popular video-based formats and materials. All include video and/or slides, plus companion book.

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE WITH INSTALLATION INSTRUCTIONS

Cancels: PDS 693D.18.1D

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