

UNITS FACTORY SHIPPED WITH NO REFRIGERANT, DRY NITROGEN CHARGED ONLY

### 50 Hz AIR CONDITIONING CONDENSING UNIT

230 Volt, 1-phase, 50 Hz, 3, and 4 tons

400 Volt, 3-phase, 50 Hz, 3, 4, and 5 tons

#### REFRIGERATION CIRCUIT

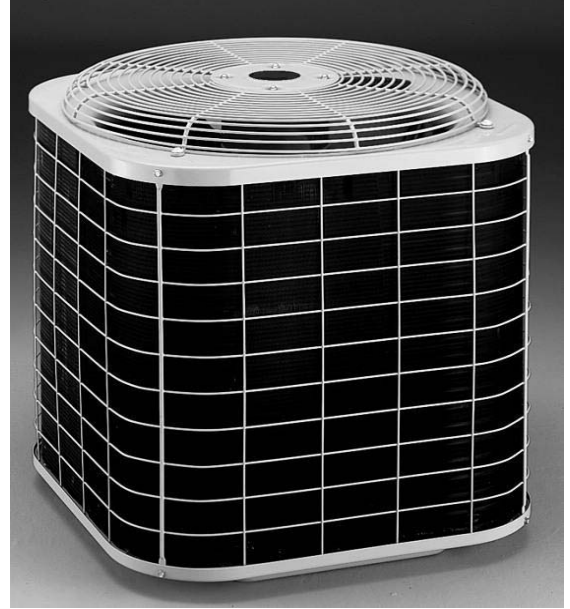
- High efficiency compressors – durable, proven technology
- Copper tube / aluminum fin coil
- Approved for operation to 52° C outdoor ambient

#### BUILT TO LAST

- Triple-step paint process over galvanized steel – one of the toughest finishes in the industry
- Epoxy-Phenolic coated fins for enhanced corrosion protection

#### EASY TO INSTALL AND SERVICE

- External service valves with gauge ports
- Low profile rectangular design for easy site placement
- High and Low pressure switches for enhanced component protection
- Factory charged with R-22 refrigerant




#### OUTDOOR UNIT MODEL NUMBER IDENTIFICATION GUIDE

Digit Position:	1	2	3	4	5, 6	7	8	9	10	11	12
Example Part Number:	<b>N</b>	<b>2</b>	<b>A</b>	<b>E</b>	<b>36</b>	<b>P</b>	<b>W</b>	<b>R</b>	<b>1</b>	<b>0</b>	<b>0</b>
N = Tempstar	<b>BRANDING</b>										
2 = R-22	<b>REFRIGERANT</b>										
A = Air Conditioner H = Heat Pump			<b>TYPE</b>								
E = Export			<b>TYPE</b>								
36 = 36,000 BTUH = 3 tons 48 = 48,000 BTUH = 4 tons 60 = 60,000 BTUH = 5 tons					<b>NOMINAL CAPACITY</b>						
A = Standard P = High and Low Pressure Switches Factory Installed							<b>FEATURES</b>				
K = 208/230-1-60 H = 208/230-3-60 W = 230-1-50 Z = 400-3-50									<b>VOLTAGE</b>		
Dry Charged											
Engineering Revision											
Extra Digit											
Extra Digit											

UNIT SPECIFICATIONS						
Base Model with high and low pressure controls		36-PWR	36-PZR	48-PZR	48-PWR	60-PZR
Electrical Data	Volts-Phase-Hz.	230-1-50	400-3-50	400-3-50	230-1-50	400-3-50
	Voltage Utilization Range	207 - 253	360 - 440	360 - 440	207 - 253	360 - 440
	Minimum Circuit Ampacity	22.6	8.3	10.7	33.6	11.9
Compressor	Quantity - Type	1 - Reciprocating		1 - Scroll		
	Copeland Model Number	CR42K6	CR42K6	ZR61KC	ZR61KC	ZR72KC
	Rated Load Amps	17.7	6.4	7.9	25.6	9.0
	Locked Rotor Amps	94	42	63	150.0	74
Fan	HP	1/10	1/10	1/4	1/4	1/4
	Full Load Amps	0.52	0.3	0.7	1.6	0.7
	Motor Diameter (in / mm)	5.7 / 145				
	RPM	950	900	900	900	900
	Airflow (CFM / l/s)	2000 / 944	2000 / 944	3200 / 1510	3200 / 1510	3200 / 1510
Coil	Face Area (ft <sup>2</sup> / m <sup>2</sup> )	12.4 / 1.15	12.4 / 1.15	14.8 / 1.37	14.8 / 1.37	22.2 / 2.06
	Fins per inch - rows	25 - 1				
	Tube Diameter (in)	3/8				
Refrigerant	Type	R-22				
	Shipping Charge (lb / kg)	4.84 / 2.20	4.84 / 2.20	6.25 / 2.83	6.25 / 2.83	9.10 / 4.13
	Operating Charge line length	15 ft / 4.6 m				
	Connection size, liquid-suction (in)	3/8 - 3/4	3/8 - 3/4	3/8 - 7/8	3/8 - 7/8	3/8 - 7/8
	Piston Identification Number*	73	73	90	90	98
Unit	Sound Level (predicted at 1 m)	78 dBA	78 dBA	78 dBA	78 dBA	78 dBA
	Shipping Weight (lb / kg)	153 / 69.4	153 / 69.4	215 / 97.5	215 / 97.5	220 / 99.8
	Operating Weight (lb / kg)	140 / 63.5	140 / 63.5	200 / 90.7	200 / 90.7	202 / 91.6
	Height (in / mm)	34 / 862	34 / 862	28 / 710	28 / 710	40 / 1014
	Width (in / mm)	22.5 / 572	22.5 / 572	30 / 762	30 / 762	30 / 762
	Depth (in / mm)	22.5 / 572	22.5 / 572	30 / 762	30 / 762	30 / 762

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

AVAILABLE MATCHES		36-PWR	36-PZR	48-PZR	48-PWR	60-PZR
Standard Ducted Fan Coil 	EBW3600A	EBW3600A	EBW4800A	EBW4800A	EBW6000A	
	EBW4200A	EBW4200A	EBW6000A	EBW6000A		

DESIGN CONSIDERATIONS
Minimum outdoor operating temperature without low ambient control accessory = 55 °F / 12.8 °C.
Maximum outdoor ambient operating temperature for continuous operation = 125 °F / 52 °C.
Consult Long Line Application Guideline when vertical separation between indoor and outdoor unit is greater than 20 ft / 6.1 m.
Factory refrigerant connection sizes good for up to 80 ft / 24.4 m line length.
Consult Long Line Application Guideline for line lengths beyond 80 ft / 24.4 m.
Factory installed orifice expansion device in the indoor unit is suitable for matched indoor/outdoor.
If indoor/outdoor units are mix-matched, change indoor unit orifice to the one supplied with the outdoor unit.

# Electrical

MODEL SIZE-SERIES	V-Ph	OPERATING VOLTS*		COMPRESSOR		FAN FLA	MIN WIRE SIZE	MAX LENGTH (Ft)	MAX LENGTH (m)	MCA	MAX FUSE OR CKT BKR AMPS†
		Max	Min	LRA	RLA		60°C/75°C**	60°C / 75°C‡	60°C / 75°C‡		
36-PWR	230-1	253	207	94.0	17.7	0.52	12 / 12	55 / 52	16.8 / 15.8	22.6	35
48-PWR				150	25.6	1.60	8 / 10	91 / 55	27.8 / 17.0	33.6	50
36-PZR	400-3	440	360	42.0	6.4	0.3	14 / 14	202 / 192	61.8 / 58.7	8.3	15
48-PZR				63.0	7.9	0.7	14 / 14	165 / 157	50.3 / 47.9	10.7	15
60-PZR				74.0	9.0	0.7	14 / 14	152 / 144	46.4 / 44	11.9	20

\* Permissible limits of the voltage range at which unit will operate satisfactorily. Operation outside these limits may result in unit 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 336-26. If other than uncoated (non-plated), 60 or 75° C (140 or 167° F) insulation, copper wire (solid wire for 10 AWG and smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the NEC (ANSI/NFPA 70).

† Time-delay fuse.

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

FLA = Full Load Amps

LRA = Locked Rotor Amps

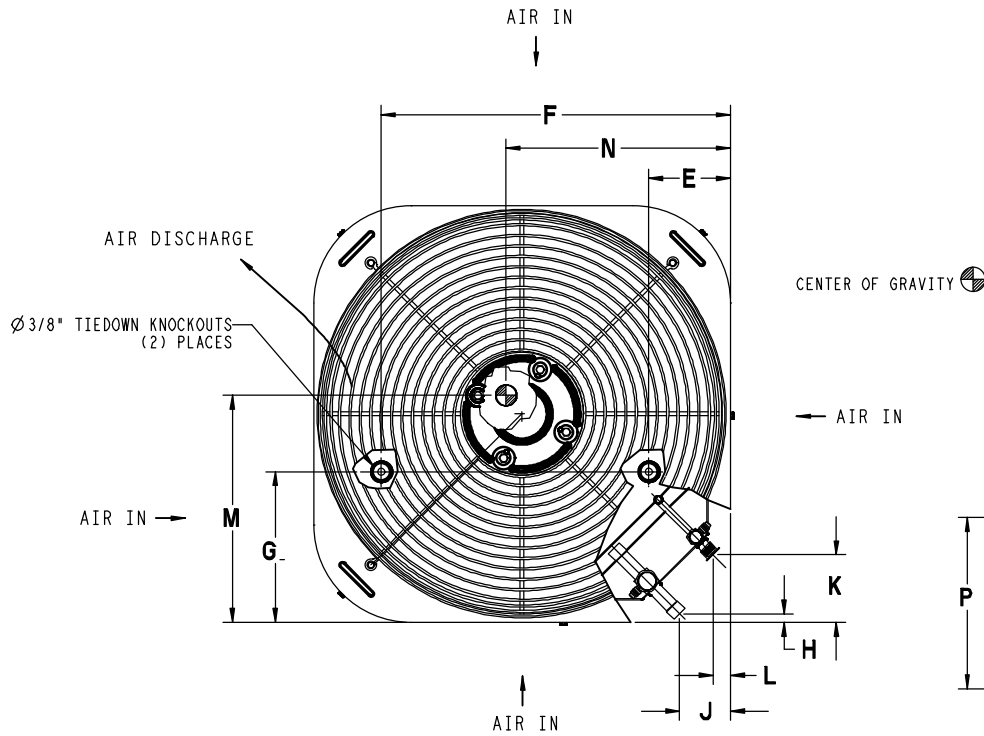
MCA = Minimum Circuit Amps

RLA = Rated Load Amps

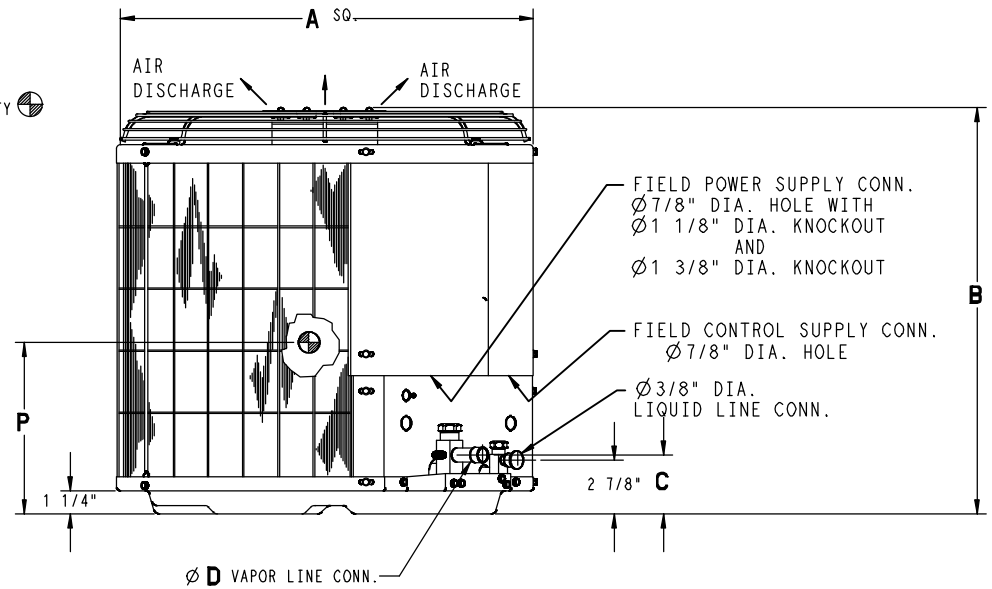
NOTES:

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

# 4 Dimensions



MODEL SIZE	MINIMUM MOUNTING PAD DIMENSIONS (mm)	MINIMUM MOUNTING PAD DIMENSIONS (In.)
36, 48	572 x 572	22-1/2 x 22-1/2
60	762 x 762	30 x 30



## NOTES:

1. Allow 30 In. (762 mm) clearance to service side of unit, 48 In. (1219 mm) above unit, 6 In. (152 mm) on one side, 12 In. (309mm) on remaining side, and 24 In. (610 mm) between units for proper airflow.
2. Minimum outdoor operating ambient in cooling mode is 55 °F(13 °C), max 125 °F(52 °C).
3. Center of gravity dimensions M, N, P.

## Dimensions – continued

MODEL SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P
	MM (SI Metric)													
36	572	862	81	19	94	460	206	11	70	75	6	294	308	381
48	762	710	83	22	165	597	254	11	70	75	6	406	368	356
60	762	1014	83	22	165	597	254	11	70	75	6	406	368	406
MODEL SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P
	Inches (English)													
36	22-1/2	34	3-3/16	3/4	3-11/16	18-1/8	8-1/8	7/16	2-3/4	2-15/16	1/4	11-3/4	12-1/8	15
48	30	28	3-1/4	7/8	6-1/2	23-1/2	10	7/16	2-3/4	2-15/16	1/4	16	14-1/2	14
60	30	40	3-1/4	7/8	6-1/2	23-1/2	10	7/16	2-3/4	2-15/16	1/4	16	14-1/2	16

# Combination Ratings‡

OUTDOOR UNIT SIZE-SERIES	INDOOR UNIT	NOMINAL AIRFLOW		COOLING CAPACITY @ 95 °F (35 °C)				COOLING CAPACITY @ 115 °F (46 °C)		
		CFM	L/S	RATED CAPACITY		POWER	RATED EER	RATED CAPACITY		POWER
				BTUH	kW	kW		BTUH	kW	kW
36-PWR 36-PZR	EBW3600A	1200	550	35000	10.25	3.89	9.00	29100	8.53	4.28
	EBW4200A	1200	550	35500	10.40	3.94	9.00	29800	8.73	4.26
	ED*2X36B**	1200	550	35000	10.25	3.89	9.00	29800	8.73	4.26
	ED*2X36F**	1200	550	35000	10.25	3.89	9.00	29800	8.73	4.26
	ED*2X36J**	1200	550	35000	10.25	3.89	9.00	29800	8.73	4.26
	ED*2X42J**	1200	550	35500	10.40	3.94	9.00	30000	8.79	4.29
	ED*2X42L**	1200	550	35500	10.40	3.94	9.00	30000	8.79	4.29
48-PWR 48-PZR	EBW4800A	1600	750	47000	13.77	5.22	9.00	44700	13.10	6.39
	EBW6000A	1600	750	48500	14.21	5.11	9.50	45500	13.33	6.50
	ED*2X48F**	1600	750	47000	13.77	4.95	9.50	44700	13.10	6.39
	ED*2X48J**	1600	750	47000	13.77	4.95	9.50	44700	13.10	6.39
	ED*2X48L**	1600	750	47000	13.77	4.95	9.50	44700	13.10	6.39
	ED*2X60J**	1600	750	48000	14.06	5.05	9.50	45500	13.33	6.50
	ED*2X60L**	1600	750	48000	14.06	5.05	9.50	45500	13.33	6.50
60-PZR	EBW6000A	1850	850	60000	17.58	6.67	9.00	54300	15.91	7.76
	ED*2X60J**	1850	850	60000	17.58	6.32	9.50	54500	15.97	7.27
	ED*2X60L**	1850	850	60000	17.58	6.32	9.50	54500	15.97	7.27

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

# A-Weighted Sound Power (dBA)

MODEL SIZE - SERIES	SOUND RATING (dBA)	TYPICAL OCTAVE BAND SPECTRUM, WITHOUT TONE ADJUSTMENT (Hz)						
		125	250	500	1000	2000	4000	8000
36-PWR	78	59.0	68.0	68.0	72.5	73.0	71.0	67.0
48-PWR	78	62.5	64.0	70.5	73.5	72.5	70.5	66.5
36-PZR	78	59.0	68.0	68.0	72.5	73.0	71.0	67.0
48-PZR	78	62.5	64.0	70.5	73.5	72.5	70.5	66.5
60-PZR	78	58.5	66.0	69.0	73.0	70.0	70.5	66.5

# Detailed Cooling Capacities (S.I.)

36-PWR/PZR Outdoor Section With EBW3600A Indoor Section @ 0.2 In. WC External Static Pressure

EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °C																	
			24						29						35					
435	27	16	9.92	0.94	9.37	3.10	2.81	0.29	9.20	0.97	8.90	3.27	2.98	0.29	8.45	1.00	8.43	3.42	3.13	0.29
	24	17	10.55	0.70	7.41	3.19	2.90	0.29	9.78	0.72	7.01	3.37	3.08	0.29	9.00	0.73	6.60	3.54	3.25	0.29
	27	19	11.43	0.67	7.68	3.28	2.99	0.29	10.64	0.69	7.29	3.50	3.21	0.29	9.83	0.70	6.88	3.71	3.42	0.29
	27	22	12.48	0.51	6.34	3.40	3.11	0.29	11.73	0.51	6.03	3.64	3.35	0.29	10.93	0.52	5.69	3.87	3.58	0.29
500	27	16	10.24	0.98	10.03	3.21	2.88	0.33	9.51	1.00	9.51	3.39	3.06	0.33	8.86	1.00	8.86	3.57	3.24	0.33
	24	17	10.83	0.73	7.87	3.27	2.94	0.33	10.04	0.74	7.45	3.48	3.15	0.33	9.22	0.76	7.03	3.64	3.31	0.33
	27	19	11.70	0.69	8.13	3.37	3.04	0.33	10.90	0.71	7.74	3.59	3.26	0.33	10.07	0.73	7.34	3.80	3.47	0.33
	27	22	12.69	0.52	6.58	3.47	3.14	0.33	11.96	0.53	6.28	3.72	3.39	0.33	11.14	0.53	5.95	3.96	3.63	0.33
570	27	16	10.60	1.00	10.60	3.31	2.88	0.43	9.93	1.00	9.93	3.53	3.10	0.43	9.25	1.00	9.25	3.72	3.29	0.43
	24	17	11.08	0.75	8.35	3.36	2.93	0.43	10.26	0.77	7.93	3.57	3.14	0.43	9.42	0.80	7.49	3.75	3.32	0.43
	27	19	11.93	0.72	8.60	3.45	3.02	0.43	11.12	0.74	8.22	3.68	3.25	0.43	10.27	0.76	7.82	3.90	3.47	0.43
	27	22	12.85	0.53	6.82	3.55	3.12	0.43	12.13	0.54	6.54	3.80	3.37	0.43	11.32	0.55	6.23	4.05	3.62	0.43

EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °C																	
			41						46						52					
435	27	16	7.84	1.00	7.84	3.62	3.33	0.29	7.25	1.00	7.25	3.82	3.53	0.29	6.66	1.00	6.66	4.02	3.73	0.29
	24	17	8.23	0.75	6.20	3.70	3.41	0.29	7.48	0.78	5.82	3.87	3.58	0.29	6.73	0.81	5.44	4.03	3.74	0.29
	27	19	9.00	0.72	6.48	3.88	3.59	0.29	8.21	0.74	6.09	4.06	3.77	0.29	7.43	0.77	5.72	4.24	3.95	0.29
	27	22	10.09	0.53	5.33	4.10	3.81	0.29	9.24	0.54	4.98	4.32	4.03	0.29	8.40	0.55	4.63	4.54	4.25	0.29
500	27	16	8.21	1.00	8.21	3.76	3.43	0.33	7.59	1.00	7.59	3.97	3.64	0.33	6.97	1.00	6.97	4.17	3.84	0.33
	24	17	8.42	0.79	6.61	3.80	3.47	0.33	7.65	0.81	6.21	3.97	3.64	0.33	6.87	0.85	5.82	4.14	3.81	0.33
	27	19	9.20	0.75	6.91	3.99	3.66	0.33	8.38	0.78	6.52	4.17	3.84	0.33	7.58	0.81	6.12	4.35	4.02	0.33
	27	22	10.30	0.54	5.61	4.19	3.86	0.33	9.42	0.56	5.25	4.41	4.08	0.33	8.57	0.57	4.90	4.63	4.30	0.33
570	27	16	8.57	1.00	8.57	3.91	3.48	0.43	7.91	1.00	7.91	4.12	3.69	0.43	7.25	1.00	7.25	4.33	3.90	0.43
	24	17	8.59	0.82	7.06	3.91	3.48	0.43	7.79	0.85	6.64	4.08	3.65	0.43	7.00	0.89	6.23	4.24	3.81	0.43
	27	19	9.38	0.79	7.39	4.11	3.68	0.43	8.53	0.82	6.98	4.29	3.86	0.43	7.71	0.85	6.57	4.46	4.03	0.43
	27	22	10.47	0.56	5.89	4.28	3.85	0.43	9.58	0.58	5.54	4.51	4.08	0.43	8.70	0.60	5.18	4.73	4.30	0.43

Multipliers for determining performance when this outdoor section is used with different indoor sections:		Indoor Section	Capacity kW	Total System kW
		EBW4200A	1.01	1.01
ED*2X36B	1.00	1.00		
ED*2X36F	1.00	1.00		
ED*2X36J	1.00	1.00		
ED*2X42J	1.01	1.01		
ED*2X42L	1.01	1.01		

# Detailed Cooling Capacities (S.I.) – continued

48-PWR/PZR Outdoor Section With EBW4800A Indoor Section @ 0.2 in. WC External Static Pressure

EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °C																	
			24						29						35					
670	27	16	12.18	0.98	11.89	4.00	3.60	0.40	12.04	1.00	12.04	4.41	4.01	0.40	11.96	1.00	11.96	4.90	4.50	0.40
	24	17	12.85	0.72	9.30	4.06	3.66	0.40	12.72	0.74	9.37	4.52	4.12	0.40	12.52	0.75	9.40	4.99	4.59	0.40
	27	19	13.81	0.69	9.58	4.16	3.76	0.40	13.73	0.71	9.70	4.62	4.22	0.40	13.54	0.72	9.76	5.13	4.73	0.40
	27	22	14.94	0.52	7.76	4.29	3.89	0.40	15.00	0.52	7.87	4.77	4.37	0.40	14.91	0.53	7.92	5.29	4.89	0.40
725	27	16	12.37	1.00	12.37	4.05	3.60	0.45	12.34	1.00	12.34	4.50	4.05	0.45	12.26	1.00	12.26	4.99	4.54	0.45
	24	17	13.01	0.74	9.61	4.12	3.67	0.45	12.88	0.75	9.70	4.57	4.12	0.45	12.67	0.77	9.74	5.06	4.61	0.45
	27	19	13.96	0.71	9.90	4.22	3.77	0.45	13.89	0.72	10.04	4.68	4.23	0.45	13.69	0.74	10.12	5.19	4.74	0.45
	27	22	15.06	0.53	7.92	4.34	3.89	0.45	15.13	0.53	8.06	4.82	4.37	0.45	15.05	0.54	8.13	5.35	4.90	0.45
765	27	16	12.57	1.00	12.57	4.10	3.54	0.56	12.55	1.00	12.55	4.57	4.01	0.56	12.46	1.00	12.46	5.06	4.50	0.56
	24	17	13.12	0.75	9.85	4.15	3.59	0.56	12.99	0.77	9.95	4.61	4.05	0.56	12.76	0.78	9.99	5.11	4.55	0.56
	27	19	14.06	0.72	10.13	4.26	3.70	0.56	13.99	0.74	10.29	4.72	4.16	0.56	13.80	0.75	10.38	5.23	4.67	0.56
	27	22	15.13	0.53	8.04	4.37	3.81	0.56	15.21	0.54	8.19	4.86	4.30	0.56	15.14	0.55	8.29	5.39	4.83	0.56

EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °C																	
			41						46						52					
670	27	16	11.82	1.00	11.82	5.43	5.03	0.40	11.60	1.00	11.60	6.01	5.61	0.40	11.28	1.00	11.28	6.63	6.23	0.40
	24	17	12.23	0.77	9.40	5.50	5.10	0.40	11.84	0.79	9.36	6.05	5.65	0.40	11.32	0.82	9.26	6.63	6.23	0.40
	27	19	13.28	0.74	9.79	5.70	5.30	0.40	12.89	0.76	9.76	6.28	5.88	0.40	12.38	0.78	9.70	6.87	6.47	0.40
	27	22	14.69	0.54	7.92	5.87	5.47	0.40	14.35	0.55	7.88	6.50	6.10	0.40	13.88	0.56	7.79	7.18	6.78	0.40
725	27	16	12.11	1.00	12.11	5.53	5.08	0.45	11.88	1.00	11.88	6.11	5.66	0.45	11.55	1.00	11.55	6.73	6.28	0.45
	24	17	12.37	0.79	9.75	5.57	5.12	0.45	11.97	0.81	9.71	6.12	5.67	0.45	11.44	0.84	9.63	6.70	6.25	0.45
	27	19	13.42	0.76	10.16	5.76	5.31	0.45	13.03	0.78	10.14	6.35	5.90	0.45	12.51	0.81	10.09	6.95	6.50	0.45
	27	22	14.83	0.55	8.15	5.93	5.48	0.45	14.49	0.56	8.11	6.56	6.11	0.45	14.01	0.57	8.03	7.24	6.79	0.45
765	27	16	12.31	1.00	12.31	5.60	5.04	0.56	12.08	1.00	12.08	6.18	5.62	0.56	11.74	1.00	11.74	6.81	6.25	0.56
	24	17	12.47	0.80	10.01	5.62	5.06	0.56	12.06	0.83	9.98	6.17	5.61	0.56	11.53	0.86	9.89	6.75	6.19	0.56
	27	19	13.52	0.77	10.43	5.80	5.24	0.56	13.12	0.79	10.43	6.40	5.84	0.56	12.60	0.82	10.38	7.00	6.44	0.56
	27	22	14.92	0.56	8.31	5.97	5.41	0.56	14.58	0.57	8.29	6.60	6.04	0.56	14.10	0.58	8.21	7.28	6.72	0.56

Multipliers for determining performance when this outdoor section is used with different indoor sections:	Indoor Section	Capacity kW	Total System kW
	EBW6000A	1.03	0.98
	ED*2X48F	1.00	0.95
	ED*2X48J	1.00	0.95
	ED*2X48L	1.00	0.95
	ED*2X60J	1.02	0.97
ED*2X60L	1.02	0.97	



## Detailed Cooling Capacities (S.I.) – continued

60-PZR Outdoor Section With EBW6000A Indoor Section @ 0.2 in. WC External Static Pressure

EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °C																	
			24						29						35					
650	27	16	15.55	0.92	14.26	5.15	4.67	0.48	14.98	0.94	14.01	5.59	5.11	0.48	14.34	0.96	13.71	6.07	5.59	0.48
	24	17	16.58	0.69	11.39	5.23	4.75	0.48	15.96	0.70	11.11	5.72	5.24	0.48	15.28	0.71	10.81	6.19	5.71	0.48
	27	19	17.88	0.66	11.77	5.31	4.83	0.48	17.33	0.66	11.52	5.84	5.36	0.48	16.63	0.68	11.23	6.37	5.89	0.48
	27	22	19.32	0.50	9.70	5.43	4.95	0.48	19.07	0.50	9.62	5.96	5.48	0.48	18.51	0.51	9.42	6.51	6.03	0.48
765	27	16	16.20	0.96	15.61	5.33	4.77	0.56	15.60	0.98	15.32	5.80	5.24	0.56	14.96	1.00	14.96	6.27	5.71	0.56
	24	17	17.16	0.71	12.25	5.38	4.82	0.56	16.53	0.73	12.00	5.91	5.35	0.56	15.79	0.74	11.69	6.39	5.83	0.56
	27	19	18.41	0.68	12.59	5.47	4.91	0.56	17.94	0.69	12.44	5.99	5.43	0.56	17.21	0.71	12.18	6.55	5.99	0.56
	27	22	19.64	0.51	10.09	5.60	5.04	0.56	19.51	0.52	10.11	6.12	5.56	0.56	19.04	0.52	9.98	6.67	6.11	0.56
845	27	16	16.57	0.99	16.37	5.43	4.73	0.70	15.99	1.00	15.99	5.93	5.23	0.70	15.43	1.00	15.43	6.42	5.72	0.70
	24	17	17.44	0.73	12.76	5.47	4.77	0.70	16.82	0.75	12.54	6.00	5.30	0.70	16.06	0.76	12.23	6.50	5.80	0.70
	27	19	18.63	0.70	13.04	5.57	4.87	0.70	18.21	0.71	12.98	6.08	5.38	0.70	17.49	0.73	12.75	6.64	5.94	0.70
	27	22	19.77	0.52	10.30	5.70	5.00	0.70	19.69	0.53	10.38	6.22	5.52	0.70	19.26	0.53	10.29	6.77	6.07	0.70
EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °C																	
			41						46						52					
650	27	16	13.65	0.98	13.39	6.57	6.09	0.48	12.94	1.00	12.94	7.09	6.61	0.48	12.27	1.00	12.27	7.63	7.15	0.48
	24	17	14.55	0.72	10.50	6.70	6.22	0.48	13.73	0.74	10.16	7.22	6.74	0.48	12.83	0.76	9.78	7.71	7.23	0.48
	27	19	15.89	0.69	10.94	6.88	6.40	0.48	15.09	0.70	10.63	7.40	6.92	0.48	14.20	0.72	10.28	7.92	7.44	0.48
	27	22	17.79	0.51	9.15	7.09	6.61	0.48	17.00	0.52	8.86	7.67	7.19	0.48	16.10	0.53	8.51	8.23	7.75	0.48
765	27	16	14.39	1.00	14.39	6.81	6.25	0.56	13.76	1.00	13.76	7.35	6.79	0.56	13.08	1.00	13.08	7.88	7.32	0.56
	24	17	15.04	0.76	11.39	6.89	6.33	0.56	14.19	0.78	11.05	7.40	6.84	0.56	13.25	0.81	10.67	7.89	7.33	0.56
	27	19	16.43	0.72	11.88	7.08	6.52	0.56	15.59	0.74	11.58	7.60	7.04	0.56	14.65	0.77	11.23	8.11	7.55	0.56
	27	22	18.33	0.53	9.74	7.24	6.68	0.56	17.53	0.54	9.46	7.82	7.26	0.56	16.62	0.55	9.14	8.42	7.86	0.56
845	27	16	14.86	1.00	14.86	6.95	6.25	0.70	14.23	1.00	14.23	7.49	6.79	0.70	13.54	1.00	13.54	8.02	7.32	0.70
	24	17	15.28	0.78	11.93	7.00	6.30	0.70	14.42	0.80	11.59	7.51	6.81	0.70	13.46	0.83	11.21	8.00	7.30	0.70
	27	19	16.68	0.75	12.46	7.20	6.50	0.70	15.83	0.77	12.15	7.72	7.02	0.70	14.88	0.79	11.81	8.23	7.53	0.70
	27	22	18.58	0.54	10.09	7.34	6.64	0.70	17.77	0.55	9.82	7.92	7.22	0.70	16.85	0.56	9.51	8.51	7.81	0.70
Multipliers for determining performance when this outdoor section is used with different indoor sections:									Indoor Section			Capacity kW			Total System kW					
									ED*2X60J			1.00			0.95					
									ED*2X60L			1.00			0.95					

# Detailed Cooling Capacities (English)

36-PWR/PZR Outdoor Section With EBW3600A Indoor Section @ 0.2 in. WC External Static Pressure

EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °F																	
			75						85						95					
CFM	DB °F	WB °F	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW
			Total	S/T	Sens				Total	S/T	Sens				Total	S/T	Sens			
925	80	60	33.84	0.95	31.99	3.10	2.81	0.29	31.39	0.97	30.39	3.27	2.98	0.29	28.83	1.00	28.77	3.42	3.13	0.29
	75	63	36.01	0.70	25.31	3.19	2.90	0.29	33.39	0.72	23.92	3.37	3.08	0.29	30.73	0.73	22.53	3.54	3.25	0.29
	80	67	39.03	0.67	26.21	3.28	2.99	0.29	36.33	0.68	24.87	3.50	3.21	0.29	33.55	0.70	23.48	3.71	3.42	0.29
	80	72	42.60	0.51	21.65	3.40	3.11	0.29	40.05	0.51	20.57	3.64	3.35	0.29	37.29	0.52	19.40	3.87	3.58	0.29
1058	80	60	34.95	0.98	34.24	3.21	2.88	0.33	32.47	1.00	32.47	3.39	3.06	0.33	30.23	1.00	30.23	3.57	3.24	0.33
	75	63	36.97	0.73	26.85	3.27	2.94	0.33	34.25	0.74	25.42	3.48	3.15	0.33	31.48	0.76	23.98	3.64	3.31	0.33
	80	67	39.95	0.69	27.73	3.37	3.04	0.33	37.19	0.71	26.42	3.59	3.26	0.33	34.36	0.73	25.04	3.80	3.47	0.33
	80	72	43.31	0.52	22.46	3.47	3.14	0.33	40.80	0.53	21.45	3.72	3.39	0.33	38.03	0.53	20.31	3.96	3.63	0.33
1210	80	60	36.18	1.00	36.18	3.31	2.88	0.43	33.89	1.00	33.89	3.53	3.10	0.43	31.55	1.00	31.55	3.72	3.29	0.43
	75	63	37.81	0.75	28.49	3.36	2.93	0.43	35.03	0.77	27.08	3.57	3.14	0.43	32.14	0.80	25.57	3.75	3.32	0.43
	80	67	40.71	0.72	29.35	3.45	3.02	0.43	37.94	0.74	28.07	3.68	3.25	0.43	35.04	0.76	26.70	3.90	3.47	0.43
	80	72	43.84	0.53	23.27	3.55	3.12	0.43	41.40	0.54	22.34	3.80	3.37	0.43	38.63	0.55	21.25	4.05	3.62	0.43
EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °F																	
			105						115						125					
CFM	DB °F	WB °F	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW
			Total	S/T	Sens				Total	S/T	Sens				Total	S/T	Sens			
925	80	60	26.75	1.00	26.75	3.62	3.33	0.29	24.74	1.00	24.74	3.82	3.53	0.29	22.72	1.00	22.72	4.02	3.73	0.29
	75	63	28.09	0.75	21.17	3.70	3.41	0.29	25.54	0.78	19.86	3.87	3.58	0.29	22.98	0.81	18.55	4.03	3.74	0.29
	80	67	30.73	0.72	22.11	3.88	3.59	0.29	28.03	0.74	20.80	4.06	3.77	0.29	25.35	0.77	19.51	4.24	3.95	0.29
	80	72	34.42	0.53	18.21	4.10	3.81	0.29	31.53	0.54	17.01	4.32	4.03	0.29	28.67	0.55	15.81	4.54	4.25	0.29
1058	80	60	28.04	1.00	28.04	3.76	3.43	0.33	25.91	1.00	25.91	3.97	3.64	0.33	23.78	1.00	23.78	4.17	3.84	0.33
	75	63	28.73	0.79	22.57	3.80	3.47	0.33	26.09	0.81	21.21	3.97	3.64	0.33	23.46	0.85	19.86	4.14	3.81	0.33
	80	67	31.42	0.75	23.60	3.99	3.66	0.33	28.61	0.78	22.24	4.17	3.84	0.33	25.86	0.81	20.90	4.35	4.02	0.33
	80	72	35.15	0.54	19.13	4.19	3.86	0.33	32.16	0.56	17.92	4.41	4.08	0.33	29.24	0.57	16.73	4.63	4.30	0.33
1210	80	60	29.24	1.00	29.24	3.91	3.48	0.43	26.99	1.00	26.99	4.12	3.69	0.43	24.75	1.00	24.75	4.33	3.90	0.43
	75	63	29.31	0.82	24.10	3.91	3.48	0.43	26.58	0.85	22.68	4.08	3.65	0.43	23.89	0.89	21.26	4.24	3.81	0.43
	80	67	32.03	0.79	25.23	4.11	3.68	0.43	29.13	0.82	23.81	4.29	3.86	0.43	26.31	0.85	22.41	4.46	4.03	0.43
	80	72	35.72	0.56	20.09	4.28	3.85	0.43	32.68	0.58	18.89	4.51	4.08	0.43	29.70	0.60	17.69	4.73	4.30	0.43
Multipliers for determining performance when this outdoor section is used with different indoor sections:									Indoor Section			Capacity kW				Total System kW				
									EBW4200A			1.01				1.01				
									ED*2X36B			1.00				1.00				
									ED*2X36F			1.00				1.00				
									ED*2X36J			1.00				1.00				
									ED*2X42J			1.01				1.01				
ED*2X42L			1.01				1.01													

## Detailed Cooling Capacities (English) – continued

48-PWR/PZR Outdoor Section With EBW4800A Indoor Section @ 0.2 in. WC External Static Pressure																				
EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °F																	
			75						85						95					
CFM	DB °F	WB °F	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW
			Total	S/T	Sens				Total	S/T	Sens				Total	S/T	Sens			
1422	80	60	41.56	0.98	40.59	4.00	3.60	0.40	41.11	1.00	41.11	4.41	4.01	0.40	40.83	1.00	40.83	4.90	4.50	0.40
	75	63	43.86	0.72	31.76	4.06	3.66	0.40	43.43	0.74	31.99	4.52	4.12	0.40	42.73	0.75	32.08	4.99	4.59	0.40
	80	67	47.13	0.69	32.70	4.16	3.76	0.40	46.86	0.71	33.10	4.62	4.22	0.40	46.22	0.72	33.31	5.13	4.73	0.40
	80	72	51.00	0.52	26.48	4.29	3.89	0.40	51.18	0.52	26.86	4.77	4.37	0.40	50.88	0.53	27.04	5.29	4.89	0.40
1535	80	60	42.23	1.00	42.23	4.05	3.60	0.45	42.10	1.00	42.10	4.50	4.05	0.45	41.83	1.00	41.83	4.99	4.54	0.45
	75	63	44.41	0.74	32.81	4.12	3.67	0.45	43.96	0.75	33.11	4.57	4.12	0.45	43.23	0.77	33.24	5.06	4.61	0.45
	80	67	47.65	0.71	33.78	4.22	3.77	0.45	47.40	0.72	34.26	4.68	4.23	0.45	46.74	0.74	34.53	5.19	4.74	0.45
	80	72	51.40	0.53	27.05	4.34	3.89	0.45	51.63	0.53	27.50	4.82	4.37	0.45	51.37	0.54	27.76	5.35	4.90	0.45
1622	80	60	42.91	1.00	42.91	4.10	3.54	0.56	42.82	1.00	42.82	4.57	4.01	0.56	42.53	1.00	42.53	5.06	4.50	0.56
	75	63	44.77	0.75	33.60	4.15	3.59	0.56	44.32	0.77	33.95	4.61	4.05	0.56	43.56	0.78	34.10	5.11	4.55	0.56
	80	67	47.98	0.72	34.57	4.26	3.70	0.56	47.75	0.74	35.12	4.72	4.16	0.56	47.08	0.75	35.43	5.23	4.67	0.56
	80	72	51.65	0.53	27.46	4.37	3.81	0.56	51.92	0.54	27.96	4.86	4.30	0.56	51.69	0.55	28.28	5.39	4.83	0.56

CONDENSER ENTERING AIR TEMPERATURES °F																				
EVAPORATOR AIR			105						115						125					
			Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW
CFM	DB °F	WB °F	Total	S/T	Sens				Total	S/T	Sens				Total	S/T	Sens			
1422	80	60	40.34	1.00	40.34	5.43	5.03	0.40	39.58	1.00	39.58	6.01	5.61	0.40	38.48	1.00	38.48	6.63	6.23	0.40
	75	63	41.75	0.77	32.09	5.50	5.10	0.40	40.40	0.79	31.94	6.05	5.65	0.40	38.64	0.82	31.61	6.63	6.23	0.40
	80	67	45.31	0.74	33.40	5.70	5.30	0.40	43.99	0.76	33.32	6.28	5.88	0.40	42.27	0.78	33.11	6.87	6.47	0.40
	80	72	50.13	0.54	27.04	5.87	5.47	0.40	48.99	0.55	26.90	6.50	6.10	0.40	47.36	0.56	26.57	7.18	6.78	0.40
1535	80	60	41.33	1.00	41.33	5.53	5.08	0.45	40.54	1.00	40.54	6.11	5.66	0.45	39.42	1.00	39.42	6.73	6.28	0.45
	75	63	42.23	0.79	33.27	5.57	5.12	0.45	40.85	0.81	33.15	6.12	5.67	0.45	39.06	0.84	32.85	6.70	6.25	0.45
	80	67	45.81	0.76	34.67	5.76	5.31	0.45	44.46	0.78	34.62	6.35	5.90	0.45	42.71	0.81	34.43	6.95	6.50	0.45
	80	72	50.62	0.55	27.80	5.93	5.48	0.45	49.47	0.56	27.69	6.56	6.11	0.45	47.81	0.57	27.41	7.24	6.79	0.45
1622	80	60	42.02	1.00	42.02	5.60	5.04	0.56	41.21	1.00	41.21	6.18	5.62	0.56	40.07	1.00	40.07	6.81	6.25	0.56
	75	63	42.55	0.80	34.16	5.62	5.06	0.56	41.15	0.83	34.05	6.17	5.61	0.56	39.34	0.86	33.77	6.75	6.19	0.56
	80	67	46.14	0.77	35.61	5.80	5.24	0.56	44.78	0.79	35.58	6.40	5.84	0.56	43.00	0.82	35.41	7.00	6.44	0.56
	80	72	50.94	0.56	28.36	5.97	5.41	0.56	49.78	0.57	28.29	6.60	6.04	0.56	48.11	0.58	28.03	7.28	6.72	0.56

Multipliers for determining performance when this outdoor section is used with different indoor sections:	Indoor Section	Capacity kW	Total System kW
	EBW6000A	1.03	0.98
	ED*2X48F	1.00	0.95
	ED*2X48J	1.00	0.95
	ED*2X48L	1.00	0.95
	ED*2X60J	1.02	0.97
ED*2X60L	1.02	0.97	

# Detailed Cooling Capacities (English) – continued

60-PZR Outdoor Section With EBW6000A Indoor Section @ 0.2 IN. wc External Static Pressure

EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °F																	
			75						85					95						
			CFM	DB °F	WB °F	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh		
Total	S/T	Sens				Total	S/T	Sens				Total	S/T	Sens						
1372	80	60	53.07	0.92	48.66	5.15	4.67	0.48	51.12	0.94	47.80	5.59	5.11	0.48	48.93	0.96	46.81	6.07	5.59	0.48
	75	63	56.58	0.69	38.87	5.23	4.75	0.48	54.47	0.70	37.91	5.72	5.24	0.48	52.15	0.71	36.91	6.19	5.71	0.48
	80	67	61.03	0.66	40.17	5.31	4.83	0.48	59.16	0.66	39.32	5.84	5.36	0.48	56.74	0.68	38.33	6.37	5.89	0.48
	80	72	65.94	0.50	33.10	5.43	4.95	0.48	65.07	0.50	32.85	5.96	5.48	0.48	63.18	0.51	32.16	6.51	6.03	0.48
1625	80	60	55.30	0.96	53.28	5.33	4.77	0.56	53.23	0.98	52.30	5.80	5.24	0.56	51.05	1.00	51.05	6.27	5.71	0.56
	75	63	58.58	0.71	41.82	5.38	4.82	0.56	56.42	0.73	40.94	5.91	5.35	0.56	53.91	0.74	39.91	6.39	5.83	0.56
	80	67	62.85	0.68	42.97	5.47	4.91	0.56	61.22	0.69	42.47	5.99	5.43	0.56	58.73	0.71	41.58	6.55	5.99	0.56
	80	72	67.05	0.51	34.43	5.60	5.04	0.56	66.58	0.52	34.51	6.12	5.56	0.56	64.98	0.52	34.05	6.67	6.11	0.56
1788	80	60	56.55	0.99	55.88	5.43	4.73	0.70	54.57	1.00	54.57	5.93	5.23	0.70	52.68	1.00	52.68	6.42	5.72	0.70
	75	63	59.51	0.73	43.54	5.47	4.77	0.70	57.40	0.75	42.80	6.00	5.30	0.70	54.81	0.76	41.75	6.50	5.80	0.70
	80	67	63.59	0.70	44.51	5.57	4.87	0.70	62.14	0.71	44.31	6.08	5.38	0.70	59.69	0.73	43.53	6.64	5.94	0.70
	80	72	67.47	0.52	35.15	5.70	5.00	0.70	67.19	0.53	35.42	6.22	5.52	0.70	65.72	0.53	35.11	6.77	6.07	0.70
EVAPORATOR AIR			CONDENSER ENTERING AIR TEMPERATURES °F																	
			105						115					125						
			CFM	DB °F	WB °F	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh			Total System kW	Cond Only kW	Fan Only kW	Capacity MBtuh		
Total	S/T	Sens				Total	S/T	Sens				Total	S/T	Sens						
1372	80	60	46.59	0.98	45.68	6.57	6.09	0.48	44.15	1.00	44.15	7.09	6.61	0.48	41.88	1.00	41.88	7.63	7.15	0.48
	75	63	49.66	0.72	35.84	6.70	6.22	0.48	46.86	0.74	34.66	7.22	6.74	0.48	43.78	0.76	33.38	7.71	7.23	0.48
	80	67	54.25	0.69	37.34	6.88	6.40	0.48	51.51	0.70	36.28	7.40	6.92	0.48	48.45	0.72	35.10	7.92	7.44	0.48
	80	72	60.71	0.51	31.23	7.09	6.61	0.48	58.04	0.52	30.22	7.67	7.19	0.48	54.94	0.53	29.05	8.23	7.75	0.48
1625	80	60	49.10	1.00	49.10	6.81	6.25	0.56	46.98	1.00	46.98	7.35	6.79	0.56	44.66	1.00	44.66	7.88	7.32	0.56
	75	63	51.32	0.76	38.86	6.89	6.33	0.56	48.44	0.78	37.71	7.40	6.84	0.56	45.23	0.81	36.42	7.89	7.33	0.56
	80	67	56.06	0.72	40.56	7.08	6.52	0.56	53.20	0.74	39.51	7.60	7.04	0.56	50.01	0.77	38.33	8.11	7.55	0.56
	80	72	62.57	0.53	33.25	7.24	6.68	0.56	59.83	0.54	32.29	7.82	7.26	0.56	56.71	0.55	31.20	8.42	7.86	0.56
1788	80	60	50.73	1.00	50.73	6.95	6.25	0.70	48.57	1.00	48.57	7.49	6.79	0.70	46.20	1.00	46.20	8.02	7.32	0.70
	75	63	52.15	0.78	40.71	7.00	6.30	0.70	49.22	0.80	39.55	7.51	6.81	0.70	45.95	0.83	38.26	8.00	7.30	0.70
	80	67	56.94	0.75	42.52	7.20	6.50	0.70	54.03	0.77	41.47	7.72	7.02	0.70	50.77	0.79	40.30	8.23	7.53	0.70
	80	72	63.43	0.54	34.43	7.34	6.64	0.70	60.66	0.55	33.50	7.92	7.22	0.70	57.51	0.56	32.45	8.51	7.81	0.70
Multipliers for determining performance when this outdoor section is used with different indoor sections:									Indoor Section			Capacity kW				Total System kW				
									ED*2X60J			1.00				0.95				
									ED*2X60L			1.00				0.95				

## Condenser Only Ratings (S.I.)

36-PWR/PZR									
-1	TCG	10.4	9.6	8.7	7.9	7	6.2	5.3	4.5
	SDT	30	34	39	43	48	52	57	61
	KW	2.34	2.46	2.58	2.68	2.77	2.84	2.89	2.92
2	TCG	11.7	10.8	9.9	9	8.1	7.2	6.3	5.4
	SDT	32	36	40	45	49	54	58	63
	KW	2.45	2.62	2.74	2.85	2.96	3.05	3.12	3.17
4	TCG	13	12.1	11.1	10.2	9.2	8.3	7.4	6.4
	SDT	33	38	42	46	51	55	60	64
	KW	2.56	2.75	2.93	3.06	3.16	3.27	3.36	3.43
7	TCG	14.6	13.5	12.5	11.4	10.4	9.4	8.5	7.5
	SDT	35	40	44	48	53	57	62	66
	KW	2.66	2.88	3.07	3.25	3.41	3.51	3.62	3.71
10	TCG	16.5	15.1	13.9	12.8	11.7	10.7	9.6	8.6
	SDT	37	41	46	50	55	59	63	68
	KW	2.75	3	3.23	3.43	3.61	3.78	3.92	4.03
13	TCG	18.6	17.1	15.7	14.4	13.2	12.1	10.9	9.8
	SDT	38	43	47	52	56	61	65	70
	KW	2.83	3.11	3.36	3.59	3.8	3.99	4.17	4.33
48-PWR/PZR									
-1	TCG	13.5	12.7	11.9	11.1	10.2	9.3	8.2	7.1
	SDT	28	33	38	43	48	53	58	63
	KW	2.66	2.95	3.28	3.64	4.04	4.46	4.89	5.32
2	TCG	14.9	14.1	13.3	12.4	11.5	10.5	9.5	8.4
	SDT	29	34	39	44	49	54	59	64
	KW	2.79	3.1	3.42	3.79	4.2	4.64	5.09	5.55
4	TCG	16.5	15.6	14.7	13.8	12.8	11.9	10.8	9.7
	SDT	30	35	40	45	50	55	60	65
	KW	2.9	3.23	3.61	3.98	4.4	4.85	5.31	5.79
7	TCG	18.2	17.2	16.3	15.3	14.3	13.3	12.2	11
	SDT	32	37	42	47	52	57	62	67
	KW	3.04	3.38	3.75	4.16	4.63	5.11	5.59	6.08
10	TCG	20	19	18	16.9	15.8	14.7	13.6	12.4
	SDT	34	38	43	48	53	58	63	68
	KW	3.19	3.53	3.91	4.34	4.8	5.32	5.88	6.44
13	TCG	22.2	21	19.8	18.7	17.5	16.3	15.2	14
	SDT	35	40	45	50	55	60	65	70
	KW	3.32	3.69	4.09	4.52	4.99	5.52	6.08	6.67

SST = Saturated Temperature Entering Compressor (°C)

TCG = Gross Cooling Capacity (kW)

kW = Total Power (kW)

SDT = Saturated Temperature Leaving Compressor (°C)

# Condenser Only Ratings (S.I.)

60-PZR									
-1	TCG	17.2	16.3	15.2	14.1	13	11.8	10.5	9
	SDT	28	33	38	43	48	53	58	63
	KW	3.29	3.79	4.25	4.77	5.34	5.93	6.51	7.07
2	TCG	19.3	18.1	17	15.8	14.7	13.4	12.1	10.6
	SDT	29	35	40	45	49	54	59	64
	KW	3.34	3.9	4.44	4.95	5.54	6.16	6.78	7.4
4	TCG	21.7	20.2	18.9	17.7	16.4	15.1	13.8	12.3
	SDT	30	36	41	46	51	56	61	66
	KW	3.39	3.97	4.57	5.19	5.76	6.41	7.07	7.74
7	TCG	24.5	24	21.1	19.8	18.4	17.1	15.7	14.2
	SDT	31	35	42	47	52	57	62	67
	KW	3.43	3.91	4.66	5.31	6.01	6.68	7.37	8.06
10	TCG	28.1	25.5	23.7	22.1	20.6	19.2	17.8	16.2
	SDT	31	37	43	48	53	58	63	68
	KW	3.46	4.1	4.74	5.41	6.12	6.87	7.65	8.46
13	TCG	34.9	28.9	26.7	24.9	23.3	21.5	20.1	18.5
	SDT	31	38	44	49	54	59	64	69
	KW	3.37	4.15	4.82	5.51	6.23	7	7.8	8.64

SST = Saturated Temperature Entering Compressor (°C)

TCG = Gross Cooling Capacity (kW)

kW = Total Power (kW)

SDT = Saturated Temperature Leaving Compressor (°C)

# Condenser Only Ratings (English)

36-PWR/PZR									
30	TCG	35.6	32.7	29.8	26.9	24	21.1	18.2	15.2
	SDT	85.7	93.6	101.6	109.6	117.7	125.9	133.9	141.9
	KW	2.34	2.46	2.58	2.68	2.77	2.84	2.89	2.92
35	TCG	39.9	36.8	33.8	30.7	27.6	24.6	21.6	18.5
	SDT	88.7	96.6	104.6	112.5	120.5	128.6	136.7	144.7
	KW	2.45	2.62	2.74	2.85	2.96	3.05	3.12	3.17
40	TCG	44.5	41.2	38	34.8	31.5	28.3	25.2	22
	SDT	92.1	99.9	107.7	115.7	123.5	131.6	139.6	147.6
	KW	2.56	2.75	2.93	3.06	3.16	3.27	3.36	3.43
45	TCG	49.8	46	42.5	39.1	35.6	32.2	28.9	25.6
	SDT	95.2	103.3	111.1	119	126.9	134.7	142.8	150.7
	KW	2.66	2.88	3.07	3.25	3.41	3.51	3.62	3.71
50	TCG	56.2	51.6	47.4	43.7	40.1	36.4	32.9	29.4
	SDT	97.7	106.3	114.6	122.5	130.4	138.1	146.1	154
	KW	2.75	3	3.23	3.43	3.61	3.78	3.92	4.03
55	TCG	63.6	58.3	53.6	49.3	45.2	41.3	37.2	33.6
	SDT	100.3	109	117.3	125.5	133.5	141.5	149.4	157.3
	KW	2.83	3.11	3.36	3.59	3.8	3.99	4.17	4.33
48-PWR/PZR									
30	TCG	46	43.4	40.6	37.7	34.8	31.6	28.1	24.3
	SDT	81.7	90.6	99.6	108.6	117.7	126.8	135.8	144.6
	KW	2.66	2.95	3.28	3.64	4.04	4.46	4.89	5.32
35	TCG	50.9	48.1	45.2	42.2	39.2	35.9	32.4	28.5
	SDT	84.1	93	101.9	110.8	120	129.1	138.1	146.9
	KW	2.79	3.1	3.42	3.79	4.2	4.64	5.09	5.55
40	TCG	56.2	53.3	50.2	47	43.8	40.5	36.9	32.9
	SDT	86.6	95.4	104.4	113.3	122.4	131.5	140.5	149.3
	KW	2.9	3.23	3.61	3.98	4.4	4.85	5.31	5.79
45	TCG	62.1	58.8	55.6	52.1	48.7	45.2	41.5	37.5
	SDT	89.5	98.2	107	115.8	124.9	134.1	143.1	152
	KW	3.04	3.38	3.75	4.16	4.63	5.11	5.59	6.08
50	TCG	68.4	64.9	61.4	57.8	53.9	50.3	46.5	42.4
	SDT	92.6	101.2	109.9	118.8	127.6	136.7	145.8	154.7
	KW	3.19	3.53	3.91	4.34	4.8	5.32	5.88	6.44
55	TCG	75.8	71.6	67.7	63.8	59.8	55.8	51.9	47.8
	SDT	95.2	104.2	113.1	121.8	130.6	139.6	148.5	157.2
	KW	3.32	3.69	4.09	4.52	4.99	5.52	6.08	6.67

SST = Saturated Temperature Entering Compressor (°F)

TCG = Gross Cooling Capacity (x1000 BTU/hr)

kW = Total Power (kW)

SDT = Saturated Temperature Leaving Compressor (°F)

## Condenser Only Ratings (English)

60-PZR									
30	TCG	58.8	55.5	52	48.3	44.4	40.3	35.8	30.8
	SDT	82.9	92.2	101	109.8	118.7	127.5	136.2	144.7
	KW	3.29	3.79	4.25	4.77	5.34	5.93	6.51	7.07
35	TCG	65.8	61.7	58	54.1	50.1	45.9	41.3	36.3
	SDT	84.4	94.4	103.6	112.3	121.1	129.9	138.7	147.3
	KW	3.34	3.9	4.44	4.95	5.54	6.16	6.78	7.4
40	TCG	73.9	68.9	64.6	60.2	56	51.7	47	42
	SDT	85.9	96	105.6	114.9	123.6	132.5	141.3	149.9
	KW	3.39	3.97	4.57	5.19	5.76	6.41	7.07	7.74
45	TCG	83.7	81.9	72.1	67.5	62.7	58.2	53.5	48.4
	SDT	87.2	95.7	107.3	116.6	125.7	134.5	143.3	151.9
	KW	3.43	3.91	4.66	5.31	6.01	6.68	7.37	8.06
50	TCG	95.9	87	80.9	75.6	70.4	65.4	60.6	55.4
	SDT	88.3	99.3	109.1	118.4	127.5	136.4	145.1	153.7
	KW	3.46	4.1	4.74	5.41	6.12	6.87	7.65	8.46
55	TCG	119.2	98.6	91	84.9	79.4	73.5	68.4	63.1
	SDT	87.3	100.7	110.8	120.2	129.3	138.2	146.9	155.5
	KW	3.37	4.15	4.82	5.51	6.23	7	7.8	8.64

SST = Saturated Temperature Entering Compressor (°F)

TCG = Gross Cooling Capacity (x1000 BTU/hr)

kW = Total Power (kW)

SDT = Saturated Temperature Leaving Compressor (°F)



## Accessories

PART NO.	DESCRIPTION
NASA002SC	Start Assist – PTC – Sizes 36 (PWR)
NASA201LS*	Liquid Solenoid Valve – All Sizes
NASA001AC	Cycle Protector – All Sizes
NASA001WS	Winter Start Control – All Sizes
NASA001FS	Evaporator Freeze Thermostat – All Sizes
NASA001TD	Time-Delay Relay – All Sizes
NASA001SF	Support Feet – All Sizes
NASA002CH	Crankcase Heater – Sizes 48, 60 (PZR)
NASA201LA	Low-Ambient Pressure Switch (R22) – All Sizes

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

## Accessory Usage Guideline

ACCESSORY	REQUIRED FOR LOW-AMBIENT APPLICATION* (Below 55 ° F / 12.8 ° C)	REQUIRED FOR LONG-LINE APPLICATIONS* (Over 80 Ft / 24.4 m)	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 Mi / 3.2 km)
Crankcase Heater	Yes	Yes	No
Evaporator Freeze Thermostat	Yes	No	No
Winter Start Control	Yes†	No	No
Accumulator	No	No	No
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Low Ambient Controller or MotorMaster□ Control	Yes	No	No
Wind Baffle	See low-ambient Instructions	No	No
Coastal Filter	No	No	Yes
Support Feet	Recommended	No	Recommended
Liquid-Line Solenoid Valve or Hard Shutoff TXV	No	See Long Line Application Guideline	No

\* For tubing line sets longer than 80 ft (24.4 m), refer to Long Line Application Guideline.

† Only when low-pressure switch is used.

## Accessory Description and Usage (listed alphabetically)

### 1. Coastal Filter

A mesh screen inserted under the top cover and inside the base pan to protect the condenser coil from salt damage without restricting airflow.

SUGGESTED USE: In geographic areas where salt damage could occur.

### 2. Compressor Start Assist – Capacitor/Relay Type

Start capacitor and start relay gives “hard” boost to compressor motor at each start-up.

SUGGESTED USE: Installations where interconnecting tube length exceeds 50 ft (15.24 m).  
Installations where outdoor design temperature exceeds 105 ° F (40.6 ° C).  
Replacement installations with hard shutoff expansion valve on indoor coil.

### 3. Compressor Start Assist – PTC Type

Solid-state electrical device which gives a “soft” boost to the compressor at each start-up.

SUGGESTED USE: Installations with marginal power supply.  
Replacement installations with rapid pressure balance (RPB) expansion valve on indoor coil.

(continued)

## Accessory Description and Usage (continued)

### 4. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes chance of refrigerant slugging. May or may not include a thermostat control.

**SUGGESTED USE:** When interconnecting tube length exceeds 50 ft (15.24 m).  
When unit will be operated below 55 °F (12.8 °C) outdoor air temperature. (Use with low-ambient controller.)  
All commercial installations.

### 5. Cycle Protector

Solid-state timing device which prevents compressor rapid recycling. Control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including normal room thermostat cycling.

**SUGGESTED USE:** Installations in areas where power interruptions are frequent.  
Where user is likely to “play” with the room thermostat.  
All commercial installations.  
Installations where interconnecting tube length exceeds 50 ft (15.24 m).  
High-rise applications.

### 6. Evaporator Freeze Thermostat

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

**SUGGESTED USE:** All units where winter start control has been added.

### 7. Liquid Solenoid Valve (LSV)

An electrically operated shutoff valve to be installed at the outdoor or indoor unit (depending on tubing configuration) which stops and starts refrigerant liquid flow in response to compressor operation. Maintains a column of refrigerant liquid ready for action at next compressor operation cycle.

**NOTE:** Compressor start assist – capacitor/relay type must also be used.

**SUGGESTED USE:** For improved system performance in air conditioners for certain combinations of indoor and outdoor units. (Refer to ARI Unitary Directory.)  
In certain long-line applications. Refer to Residential Split System Long-Line Application Guideline.

### 8. Low-Ambient Pressure Switch

A long-life pressure switch that maintains head pressure by turning the fan OFF and ON.

**SUGGESTED USE:** Cooling operation at outdoor temperatures below 55° F.  
All commercial applications.

### 9. MotorMaster<sup>®</sup> 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 (-28.9 °C), it maintains condensing temperature at 100 °F ± 10 °F (37.8 °C ± 12.2 °C).

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

### 10. Support Feet

Four stick-on plastic feet which raise the unit 4 in. (10.16 cm) 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.

### 11. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator. Kit includes valve, adapter tubes, and external equalizer tube. Both hard shutoff and RPB valves are available.

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

### 12. Time-Delay Relay

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

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

### 13. Winter Start Control

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

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