

# 12 SEER HIGH EFFICIENCY SPLIT SYSTEM HEAT PUMP AIR CONDITIONING 1 1/2 THRU 5 TON

[5.28 to 17.56kw]



## Description / Application

- “CPKJ” outdoor section designed for ground level or rooftop mounting.
- “AR” indoor section versatile up, horizontal or counter flow airflow designed for use with CPKJ outdoor section. The “AR” unit may be located in closet, utility room, attic, or basement.
- “AW” & “AWB” vertical wall mount designed to be installed on top of water heater or recessed in a wall in a vertical upflow position.
- “U”, “UC”, “H” & “HT” fan-less indoor coils for add-on heat pump application.

## Accessories

- Standard room thermostat with 2-stage heat - 1 stage cool & emergency heat, Model HPT18-60.
- Automatic changeover room thermostat with 2-stage heat - 1 stage cool and emergency heat, Model HPT18-60.
- Outdoor thermostats, Model OT18-60.
- Emergency heat relay, Model EH18-60.
- All fuel kit, Model AFE18-60.

## Standard Equipment

- Quiet operation top discharge.
- Copper tube, aluminum fin coil construction.
- Brass suction and liquid shut off valves with sweat connections.
- Totally enclosed permanently lubricated condenser motor.
- Fully charged for 15' [4.57m] of interconnecting tubing.
- Discharge line muffler.
- Low pressure control for loss of charge protection.
- Hermetically sealed compressor.
- Bi-flow liquid line filter drier.
- Suction line accumulator.
- Check-Flowrator expansion device.
- Crankcase heater (where indicated).
- Time initiate, temperature terminate defrost.
- Bottom pan rails elevating unit above slab.
- Compressor internal high pressure control.

## Cabinet Construction

- Beige baked enamel finish with 500 hour salt spray approval.
- Heavy gauge / zinc clad.

Made in the USA by:  
Goodman Manufacturing Company, L.P.  
North Loop West Suite 400  
2550 Houston, Texas 77008  
[www.goodmanmfg.com](http://www.goodmanmfg.com)

**COOLING AND HEATING PERFORMANCE DATA**

MODEL OUTDOOR SECTION	MODEL INDOOR SECTION	TOTAL COOLING BTUH (1)	SENSIBLE COOLING BTUH	(2) BTUH @ 75°F/63°F-95°F		COOLING SEER(4)	COOLING EER (3)	HEATING BTUH 47°F	HEATING COP 47°F	HEATING BTUH 17°F	HEATING COP 17°F	HEATING HSPF	SRN/ BELS
				TOTAL	SENS.								
CPKJ18-1	AC18-XX	16400	12300	15500	11800	11.50	10.50	16000	2.80	9000	2.00	7.00	8.0
	AC24-XX	16800	12600	15800	12000	12.00	11.00	16400	3.00	9400	2.00	7.00	
	AR18-1/AW18-XX	17000	12700	16000	12200	11.00	10.00	17000	3.00	9400	2.00	7.00	
	AWB18-XX	17000	12700	16000	12200	11.00	10.00	17000	3.00	9400	2.00	7.00	
	AWB24/AW24-XX	17400	13100	16400	12600	12.00	11.00	17400	3.00	9600	2.00	7.00	
	U/UC32+EEP	18000	14200	17000	13700	12.00	11.00	18000	3.50	10000	2.20	7.30	
	HT3236/H36F+EEP	18000	14200	17000	13700	12.00	11.00	18000	3.50	10000	2.20	7.30	
	AR32-1	18000	14200	17000	13700	12.00	11.00	18000	3.50	10000	2.20	7.30	
AER24-1	18000	14200	17000	13700	13.00	12.00	18000	3.50	10000	2.20	7.50		
CPKJ24-1A	AC24-XX	21200	15900	20000	15500	11.50	10.50	20200	2.80	11800	2.00	7.00	8.2
	AC30-XX	22000	16500	20700	16000	12.00	11.00	21000	2.80	12000	2.20	7.00	
	AWB24-XX	22400	16800	21100	16400	11.50	10.50	22000	3.00	12100	2.20	7.00	
	AR24-1/AW24-XX	22400	16800	21100	16400	11.50	10.50	22000	3.00	12100	2.20	7.00	
	U/UC32+EEP	23000	18000	21700	17400	12.00	11.00	23000	3.30	13600	2.60	7.50	
	U/UC42+EEP	23000	18000	21700	17400	12.00	11.00	23000	3.30	13600	2.60	7.50	
	HT3236/H36F+EEP	23000	18000	21700	17400	12.00	11.00	23000	3.30	13600	2.60	7.50	
	AWB36-XX	23000	18000	21700	17400	12.00	11.00	23000	3.30	13600	2.60	7.50	
AR32-1/AR42-1	23000	18000	21700	17400	12.00	11.00	23000	3.30	13600	2.60	7.80		
AER24-1	23000	18000	21700	17400	13.00	12.00	23000	3.30	13600	2.60	8.00		
CPKJ30-1A	AC30-XX	27000	20200	24600	18900	11.50	10.50	26000	2.80	14000	2.20	7.00	8.2
	AC36-XX	27400	20500	25000	19100	12.00	11.00	26400	2.80	14600	2.20	7.00	
	AWB30-XX	27200	20400	24800	19100	11.30	10.50	27000	3.00	14800	2.20	7.00	
	AR30-1/AW30-XX	27200	20400	24800	20700	11.30	10.50	27000	3.00	14800	2.20	7.00	
	HT3236/U/UC32+EEP	29000	21600	27400	20700	12.00	11.00	29400	3.30	17000	2.40	7.50	
	U/UC42+EEP	29000	21600	27400	20700	12.00	11.00	29400	3.30	17000	2.40	7.50	
	HT4248/H36F+EEP	29000	21600	27400	20700	12.00	11.00	29400	3.30	17000	2.40	7.50	
	AWB36-XX	29000	21600	27400	20700	12.00	11.00	29400	3.30	17000	2.40	7.50	
	AR32-1/AR42-1	29000	21600	27400	20700	12.00	11.00	29400	3.30	17000	2.40	7.80	
	AER30-1	29000	21600	26800	21200	12.50	11.50	29400	3.30	17000	2.40	7.80	
AER36-1	30000	22300	29300	19000	13.00	12.00	30000	3.50	18000	2.40	7.80		
CPKJ36-1A	AC36-XX	32000	23000	30200	24000	11.00	10.00	31000	2.80	17000	2.00	7.00	8.2
	AWB36-XX/AR36-1	33000	23800	31150	24900	11.30	10.30	33000	3.20	19000	2.10	7.50	
	U/UC42+EEP	34000	24500	32100	23300	12.00	11.00	35000	3.50	20000	2.30	7.80	
	HT4248/H49F+EEP	34000	24500	32100	23300	12.00	11.00	35000	3.50	20000	2.30	7.80	
	AR42-1	34000	24500	32100	23300	12.00	11.00	35000	3.50	20000	2.30	7.80	
	AER36-1	35000	25900	34000	24600	13.00	12.00	35000	3.50	20000	2.30	8.00	
CPKJ42-1	AR42-1	38400	27600	36200	29300	11.30	10.30	38400	3.30	21000	2.10	7.50	8.2
	U/UC60+EEP	40000	30400	37800	29300	12.00	11.00	40000	3.50	22400	2.30	8.00	
	HT61/H61F+EEP	40000	30400	37800	29000	12.00	11.00	40000	3.50	22400	2.30	8.00	
	AR49-1	40000	30400	37800	29300	12.00	11.00	40000	3.50	22400	2.30	8.00	
	AER48-1	41000	31000	37800	29900	13.00	12.00	40000	3.50	23000	2.30	8.30	
CPKJ48-1	AR48-1	44000	32500	41500	31000	11.50	10.50	44000	3.30	24000	2.20	7.50	8.4
	AR49-1	44000	32500	41500	31000	12.00	11.00	45000	3.50	25000	2.30	8.00	
	U/UC60+EEP	44000	32500	41500	31000	12.00	11.00	45000	3.50	25000	2.30	8.00	
	HT61/H61F+EEP	44000	32500	41500	31000	12.00	11.00	45000	3.50	25000	2.30	8.00	
	AER48-1	46000	35000	43400	33600	12.50	11.50	46000	3.60	27000	2.40	8.50	
	AR61-1	46000	35000	43400	33600	12.00	11.00	46000	3.60	27000	2.40	8.00	
CPKJ60-1	AR60-1	51000	39300	48100	38000	11.30	10.30	51000	3.50	30000	2.10	7.30	8.4
	U/UC62+EEP	51000	39300	48100	38000	11.50	10.50	51000	3.30	30000	2.30	7.50	
	AR61-1	52000	40000	49100	38500	12.00	11.00	52000	3.50	31000	2.30	7.50	
	HT61/U/UC61+EEP	52000	40000	49100	38500	12.00	11.00	52000	3.50	31000	2.30	7.50	
	H61F+EEP	52000	40000	49100	38500	12.00	11.00	52000	3.50	31000	2.30	7.50	
	AER60-1	52000	40000	49100	38500	12.00	11.00	52000	3.50	31000	2.30	8.00	

XX designates electric heat quantity.

HSPF = heating seasonal performance factor.

When mix matching outdoor and indoor units, the indoor unit check-flowrator must match the outdoor unit size.

See "AR" unit for coil instructions.

EEP - Order from service dept. part No. B13707-38. Unless used with a 1992 Goodman Gas Furnace which contains the EEP cooling time delay.

(1) Certified per ARI 210/240 @ 80°F/67°F -95°F

(2) TVA Rating

(3) Energy Efficiency Ratio @ 80°F/67°F -95°F

(4) Seasonal Energy Efficiency Ratio

**COOLING AND HEATING PERFORMANCE DATA [METRIC]**

MODEL OUTDOOR SECTION	MODEL INDOOR SECTION	TOTAL COOLING KW (1)	SENSIBLE COOLING KW	(2) KW @ 24°C/17°C-35°C		COOLING SEER(4)	COOLING EER (3)	HEATING KW 8.3°C	HEATING COP 8.3°C	HEATING KW -8.3°C	HEATING COP -8.3°C	HEATING HSPF	SRN/ BELS
				TOTAL	SENS.								
CPKJ18-1	AC18-XX	4.8	3.6	4.5	3.4	11.50	10.50	4.7	2.80	2.6	2.00	7.00	8.0
	AC24-XX	4.9	3.7	4.6	3.5	12.00	11.00	4.8	3.00	2.7	2.00	7.00	
	AR18-1/AW18-XX	5.0	3.7	4.7	3.6	11.00	10.00	4.9	3.00	2.7	2.00	7.00	
	AWB18-XX	5.0	3.7	4.7	3.6	11.00	10.00	4.9	3.00	2.7	2.00	7.00	
	AWB24/AW24-XX	5.0	3.8	4.8	3.7	12.00	11.00	5.1	3.00	2.8	2.00	7.00	
	U/UC32+EEP	5.3	5.2	4.9	4.0	12.00	11.00	5.3	3.50	2.9	2.20	7.30	
	HT3236/H36F+EEP	5.3	5.2	4.9	4.0	12.00	11.00	5.3	3.50	2.9	2.20	7.30	
	AR32-1	5.3	5.2	4.9	4.0	12.00	11.00	5.3	3.50	2.9	2.20	7.30	
	AER24-1	5.3	5.2	4.9	4.0	13.00	12.00	5.3	3.50	2.9	2.20	7.50	
CPKJ24-1A	AC24-XX	6.2	4.6	5.8	4.5	11.50	10.50	5.9	2.80	3.4	2.00	7.00	8.2
	AC30-XX	6.4	4.8	6.0	4.6	12.00	11.00	6.1	2.80	3.5	2.20	7.00	
	AWB24-XX	6.6	4.9	6.1	4.8	11.50	10.50	6.4	3.00	3.6	2.20	7.00	
	AR24-1/AW24-XX	6.6	4.9	6.1	4.8	11.50	10.50	6.4	3.00	3.6	2.20	7.00	
	U/UC32+EEP	6.7	5.3	6.3	5.1	12.00	11.00	6.7	3.30	3.9	2.60	7.50	
	U/UC42+EEP	6.7	5.3	6.3	5.1	12.00	11.00	6.7	3.30	3.9	2.60	7.50	
	HT3236/H36F+EEP	6.7	5.3	6.3	5.1	12.00	11.00	6.7	3.30	3.9	2.60	7.50	
	AWB36-XX	6.7	5.3	6.3	5.1	12.00	11.00	6.7	3.30	3.9	2.60	7.50	
	AR32-1/AR42-1	6.7	5.3	6.3	5.1	12.00	11.00	6.7	3.30	3.9	2.60	7.80	
AER24-1	6.7	5.3	6.3	5.1	13.00	12.00	6.7	3.30	3.9	2.60	8.00		
CPKJ30-1A	AC30-XX	7.9	5.9	7.2	5.5	11.50	10.50	7.6	2.80	4.1	2.20	7.00	8.2
	AC36-XX	8.0	6.0	7.3	5.6	12.00	11.00	7.7	2.80	4.2	2.20	7.00	
	AWB30-XX	7.9	6.0	7.3	5.6	11.30	10.50	7.9	3.00	4.3	2.20	7.00	
	AR30-1/AW30-XX	7.9	6.0	7.3	6.0	11.30	10.50	7.9	3.00	4.3	2.20	7.00	
	HT3236/U/UC32+EEP	8.5	6.3	8.0	6.0	12.00	11.00	8.6	3.30	5.0	2.40	7.50	
	U/UC42+EEP	8.5	6.3	8.0	6.0	12.00	11.00	8.6	3.30	5.0	2.40	7.50	
	HT4248/H36F+EEP	8.5	6.3	8.0	6.0	12.00	11.00	8.6	3.30	5.0	2.40	7.50	
	AWB36-XX	8.5	6.3	8.0	6.0	12.00	11.00	8.6	3.30	5.0	2.40	7.50	
	AR32-1/AR42-1	8.5	6.3	8.0	6.0	12.00	11.00	8.6	3.30	5.0	2.40	7.80	
AER30-1	8.5	6.3	7.8	6.2	12.50	11.50	8.6	3.30	5.0	2.40	7.80		
AER36-1	8.8	6.5	8.6	5.6	13.00	12.00	8.8	3.50	5.3	2.40	7.80		
CPKJ36-1A	AC36-XX	9.4	6.7	8.8	7.0	11.00	10.00	9.1	2.80	5.0	2.00	7.00	8.2
	AWB36-XX/AR36-1	9.7	7.0	9.1	7.3	11.30	10.30	9.7	3.20	5.6	2.10	7.50	
	U/UC42+EEP	10.0	7.2	9.4	6.8	12.00	11.00	10.3	3.50	5.9	2.30	7.80	
	HT4248/H49F+EEP	10.0	7.2	9.4	6.8	12.00	11.00	10.3	3.50	5.9	2.30	7.80	
	AR42-1	10.0	7.2	9.4	6.8	12.00	11.00	10.3	3.50	5.9	2.30	7.80	
	AER36-1	10.3	7.6	10.0	7.2	13.00	12.00	10.3	3.50	5.9	2.30	8.00	
CPKJ42-1	AR42-1	11.3	8.1	10.6	8.6	11.30	10.30	11.3	3.30	6.1	2.10	7.50	8.2
	U/UC60+EEP	11.7	8.9	11.0	8.6	12.00	11.00	11.7	3.50	6.6	2.30	8.00	
	HT61/H61F+EEP	11.7	8.9	11.0	8.5	12.00	11.00	11.7	3.50	6.6	2.30	8.00	
	AR49-1	11.7	8.9	11.0	8.6	12.00	11.00	11.7	3.50	6.6	2.30	8.00	
	AER48-1	12.0	9.0	11.0	8.7	13.00	12.00	11.7	3.50	6.7	2.30	8.30	
CPKJ48-1	AR48-1	12.9	9.5	12.2	9.1	11.50	10.50	12.9	3.30	7.0	2.20	7.50	8.4
	AR49-1	12.9	9.5	12.2	9.1	12.00	11.00	13.2	3.50	7.3	2.30	8.00	
	U/UC60+EEP	12.9	9.5	12.2	9.1	12.00	11.00	13.2	3.50	7.3	2.30	8.00	
	HT61/H61F+EEP	12.9	9.5	12.2	9.1	12.00	11.00	13.2	3.50	7.3	2.30	8.00	
	AER48-1	13.5	10.3	12.7	9.8	12.50	11.50	13.5	3.60	7.9	2.40	8.50	
	AR61-1	13.5	10.3	12.7	9.8	12.00	11.00	13.5	3.60	7.9	2.40	8.00	
CPKJ60-1	AR60-1	14.9	11.5	14.1	11.1	11.30	10.30	14.9	3.50	8.8	2.10	7.30	8.4
	U/UC62+EEP	14.9	11.5	14.1	11.1	11.50	10.50	14.9	3.30	8.8	2.30	7.50	
	AR61-1	15.2	11.7	14.4	11.3	12.00	11.00	15.2	3.50	9.1	2.30	7.50	
	HT61/U/UC61+EEP	15.2	11.7	14.4	11.3	12.00	11.00	15.2	3.50	9.1	2.30	7.50	
	H61F+EEP	15.2	11.7	14.4	11.3	12.00	11.00	15.2	3.50	9.1	2.30	7.50	
	AER60-1	15.2	11.7	14.4	11.3	12.00	11.00	15.2	3.50	9.1	2.30	8.00	

XX designates electric heat quantity.

HSPF = heating seasonal performance factor.

When mix matching outdoor and indoor units, the indoor unit check-flowrator must match the outdoor unit size.

See "A" unit for coil instructions.

EEP - Order from service dept. part No. B13707-38. Unless used with a 1992 Goodman Gas Furnace which contains the EEP cooling time delay.

- (5) Certified per ARI 210/240 @ 80°F/67°F -95°F
- (6) TVA Rating
- (7) Energy Efficiency Ratio @ 80°F/67°F -95°F
- (8) Seasonal Energy Efficiency Ratio

**PHYSICAL DATA**

MODEL	LIQUID CONNECTION	SUCTION CONNECTION	TYPE	APPROX. SHIPPING WT.
CPKJ18-1	3/8" [9.5mm]	3/4" [19mm]	Sweat	127 [57.6kg]
CPKJ24-1	3/8" [9.5mm]	3/4" [19mm]	Sweat	137 [62.1kg]
CPKJ30-1A	3/8" [9.5mm]	3/4" [19mm]	Sweat	142 [64.4kg]
CPKJ36-1A	3/8" [9.5mm]	7/8" [22.2mm]	Sweat	152 [68.9kg]
CPKJ42-1	3/8" [9.5mm]	7/8" [22.2mm]	Sweat	162 [73.5kg]
CPKJ48-1	3/8" [9.5mm]	7/8" [22.2mm]	Sweat	178 [80.7kg]
CPKJ60-1	3/8" [9.5mm]	7/8" [22.2mm]	Sweat	182 [82.6kg]

**NOTE: SPECIFICATIONS AND PERFORMANCE DATA LISTED HEREIN ARE SUBJECT TO CHANGE WITHOUT NOTICE.**

**ELECTRICAL DATA**

	+MINIMUM	*MAXIMUM

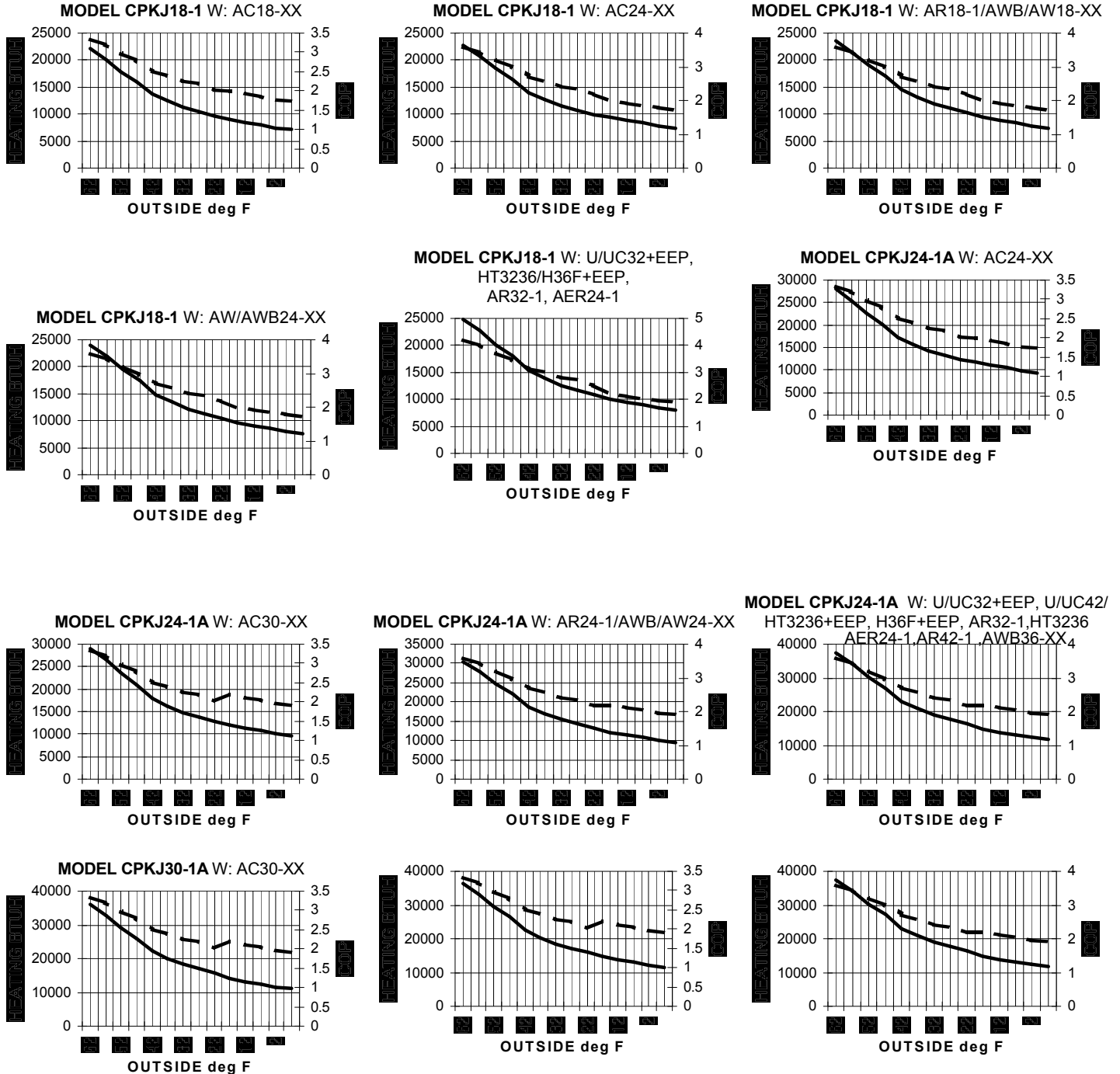
MODEL	VOLTS	PH	HZ	CIRCUIT AMPS	OVERCURRENT PROTECTION	MINIMUM VOLTS	MAXIMUM VOLTS	COMPRESSOR		COND. FAN	
								RLA	LRA	FLA	HP
CPKJ18-1	208/230	1	60	10.8	15	197	253	7.9	48.0	0.9	1/6
†CPKJ24-1A	208/230	1	60	15.3	20	197	253	11.5	60.0	0.9	1/6
CPKJ30-1A	208/230	1	60	19.3	30	197	253	14.7	74.0	0.9	1/6
CPKJ36-1A	208/230	1	60	18.5	30	197	253	14.1	79.0	0.9	1/6
†CPKJ42-1	208/230	1	60	25.8	40	197	253	19.2	87.0	1.8	1/4
†CPKJ48-1	208/230	1	60	29.0	50	197	253	21.8	105.0	1.8	1/4
†CPKJ60-1	208/230	1	60	31.5	50	197	253	23.7	129.0	1.8	1/4

† With Crankcase Heat.

\* May use fuses or HACR type Circuit Breakers of the same size as noted.

+ Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

### HEATING PERFORMANCE EXPANDED RATINGS @70°F INDOOR AMBIENT

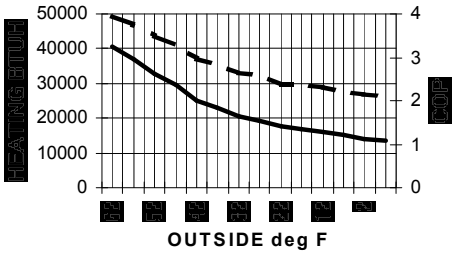


MODEL CPKJ30-1A W: AC36-XX

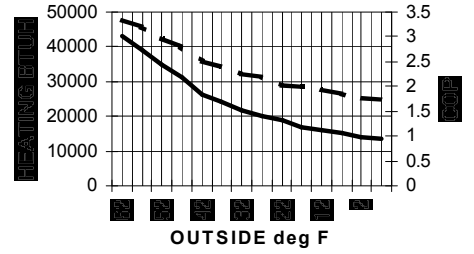
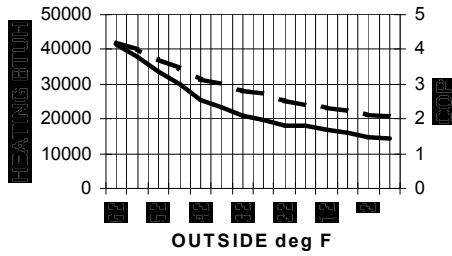
MODEL CPKJ30-1A W: AR30-1/AWB/AW30-XX

## HEATING PERFORMANCE EXPANDED RATINGS @70°F INDOOR AMBIENT

**MODEL CPKJ30-1A W: U/UC32+EEP, U/UC42/HT3236+EEP, H36F+EEP, AR32-1, AR42-1, AER30-1,AWB36-XX**

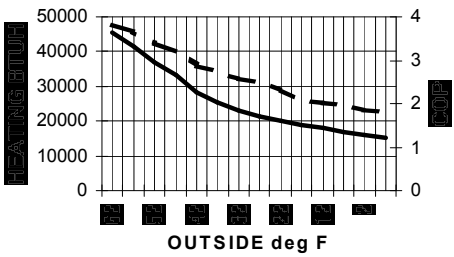


**MODEL CPKJ30-1/1A W: AER36-1**

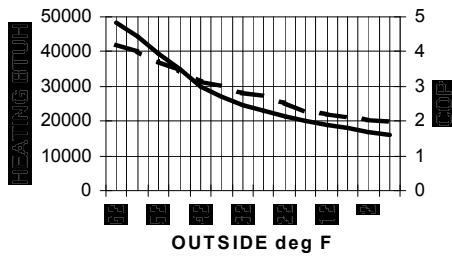


**MODEL CPKJ36-1A W: AC36-XX**

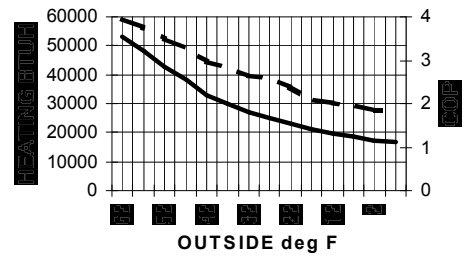
**MODEL CPKJ36-1A W: AR36-1/AWB36-XX**



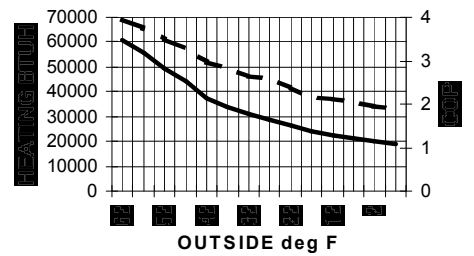
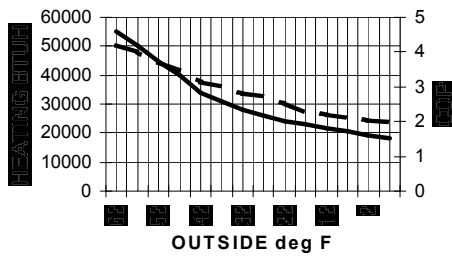
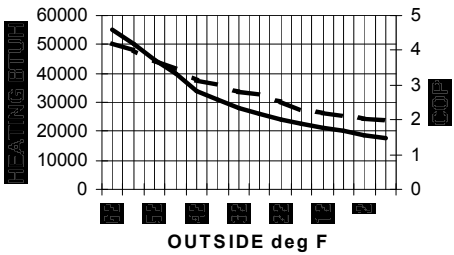
**MODEL CPKJ36-1A W: U/UC42+EEP, H49F+EEP, AR42-1, AER36-1**



**MODEL CPKJ42-1 W: AR42-1**



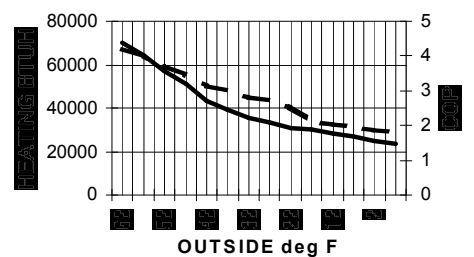
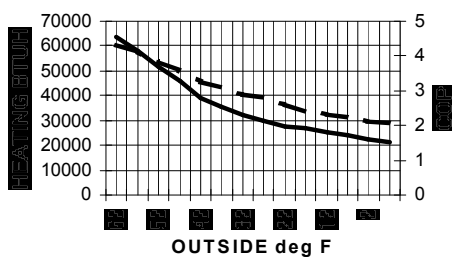
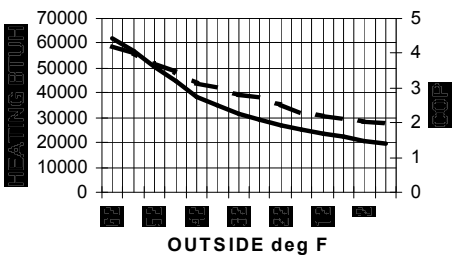
**MODEL CPKJ42-1 W: U/UC60+EEP, HT61/H61F+EEP, AR49-1**



**MODEL CPKJ48-1 W: AR48-1**

**MODEL CPKJ42-1 W: AER48-1**

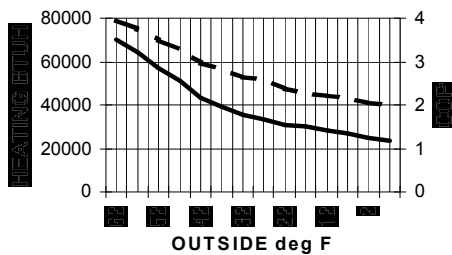
**MODEL CPKJ48-1 W: AR49-1, U/UC60+EEP, H61F+EEP**



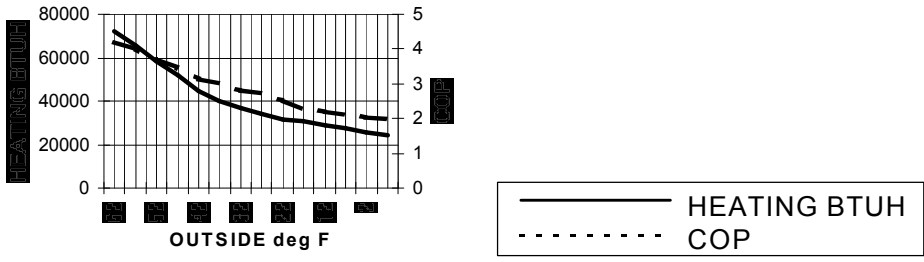
**MODEL CPKJ60-1 W: AR60-1**

**MODEL CPKJ48-1 W: AER48-1, AR61-1**

**MODEL CPKJ60-1 W: U/UC62+EEP**



**MODEL CPKJ60-1 W: AR61-1, U/UC61+EEP, HT61/H61F+EEP, AER60-1**



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# DIMENSIONAL DATA CPKJ18-60 MODELS

