

**ARI MEMBER
COMPANY**

2 THRU 5 TONS 50 HERTZ SPLIT SYSTEM HEAT PUMPS

DESCRIPTION / APPLICATION

- Outdoor section designed for ground level or rooftop mounting.
- Designed for use with "A" series air handlers. The "A" series air handler may be located in a closet, utility room, attic, or basement.

CABINET CONSTRUCTION

- Heavy gauge, G-90 galvanized, with removable access panels, completely weatherized, properly reinforced and braced. Steel sheet metal shall be zinc-coated and galvanized using the hot dip process.

ACCESSORIES

- Room thermostat w/2 stage heat - 1 stage cool and emergency heat, capability, Model HPT18-60.
- Automatic changeover room thermostat with 2 stage heat - 1 stage cool and emergency heat capability, Model HPTA18-60.

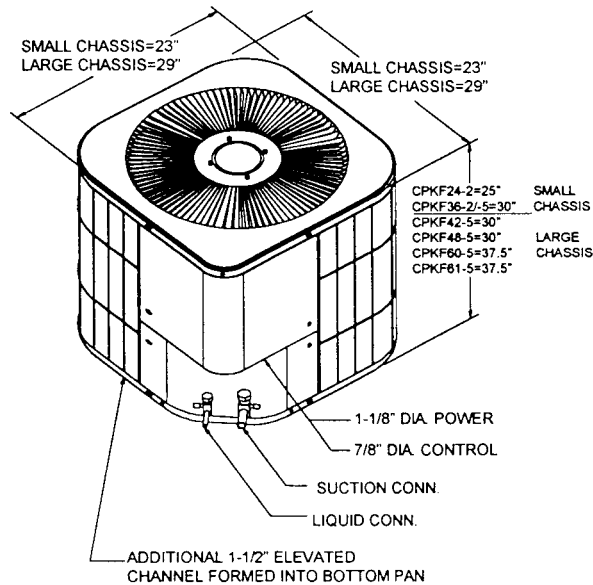
STANDARD EQUIPMENT

- Quiet operating top discharge.
- High efficiency performance.
- Copper tube, aluminum fin coil construction.
- Brass suction and liquid line shut off valves with sweat connection.
- Fully charged for 25 feet of interconnecting tubing.
- Manual reset high pressure control.
- Automatic reset low pressure control for loss of charge protection.
- Totally enclosed permanently lubricated condenser motor.
- Ultra quiet hermetically sealed compressor with internal high pressure control.
- Bi-flow liquid line drier.
- Suction line accumulator.
- Check-flowrator expansion device.
- Anti-cycling reversing valve circuit.
- Crankcase heater (where indicated).
- Time initiated, temperature terminated defrost control.
- Bottom pan rails elevating unit above slab.

PHYSICAL DATA

MODEL	CPKF24-2	CPKF36-2/-5	CPKF42-5	CPKF48-5	CPKF60-5	CPKF61-5
FAN						
DIA.	18	18	22	22	22	22
RPM	950	950	950	950	950	950
COIL DESCRIPTION						
FACE AREA - sq. ft.	10.4	12.5	17.5	17.5	21.9	21.9
TUBE DIA. INCHES	3/8	3/8	3/8	3/8	3/8	3/8
NO. ROWS / FINS/INCH	1/ 19	1/ 19	1/ 19	1/ 19	1/ 19	1/ 19
NO. TUBES	20	24	24	24	30	30
FIN TYPES	RIPPLE	RIPPLE	RIPPLE	RIPPLE	RIPPLE	RIPPLE
REFRIGERANT CONNECTIONS						
LIQUID	3/8	3/8	3/8	3/8	3/8	3/8
SUCTION	3/4	3/4	7/8	7/8	7/8	7/8
TYPE	SWEAT	SWEAT	SWEAT	SWEAT	SWEAT	SWEAT
SHIPPING WEIGHT - LBS	150	165	310	330	335	350

DIMENSIONAL DATA



COOLING AND HEATING PERFORMANCE DATA

MODEL OUTDOOR SECTION	MODEL INDOOR SECTION	COOLING @ 95 DEG F OUTDOOR 80 / 67 DEG INDOOR			COOLING @ 115 DEG F OUTDOOR 80 / 67 DEG INDOOR			HEATING @ 47 / 43 DEG F OUTDOOR 70 DEG F INDOOR		HEATING @ 17 / 13 DEG F OUTDOOR 70 DEG F INDOOR	
		TOTAL BTUH	SENS. BTUH	WATTS	TOTAL BTUH	SENS. BTUH	WATTS	TOTAL BTUH	WATTS	TOTAL BTUH	WATTS
CPKF24-2	A24-00-2	22000	16500	2750	19300	15500	3000	23000	2320	13000	2110
CPKF36-2/-5	A36-00-2	32000	25000	3760	28200	23400	4125	32000	3230	20800	3380
CPKF36-2/-5	A48-00-2	36000	28000	4240	31600	26200	4510	35000	3530	22800	3710
CPKF42-5	A48-00-2	40000	31200	5000	35000	29300	5480	39000	3940	24200	3940
CPKF48-5	A48-00-2	47000	37400	5220	41400	34300	5720	48000	4850	31400	5110
CPKF60-5	A60-00-2	52000	41200	5780	46000	37000	6700	53000	5350	34000	5530
CPKF61-5	A60-00-2	58000	45200	6440	51000	42300	7100	58000	5860	37800	6150

When mix matching outdoor and indoor units, the indoor unit check-flowrator must match the outdoor unit size.
See "A" unit or coil instructions.

ELECTRICAL DATA

MODEL	POWER SUPPLY			MINIMUM CIRCUIT	*MAXIMUM OVERCURRENT	MINIMUM	MAXIMUM	COMPRESSOR		COND. FAN MOTOR	
	VOLTS	PH	HZ	AMPACITY	PROTECTION			VOLTS	VOLTS	RLA	LRA
†CPKF24-2	220/240	1	50	17.8	30	198	264	12.8	75	0.9	1/4
†CPKF36-2	220/240	1	50	26.8	45	198	264	19.9	110	0.9	1/4
†CPKF36-5	380/415	3	50	9.4	15	342	456	6.0	39	0.5	1/4
†CPKF42-5	380/415	3	50	12.2	20	342	456	8.3	45	0.5	1/4
CPKF48-5	380/415	3	50	11.8	15	342	456	8.0	67	0.5	1/4
†CPKF60-5	380/415	3	50	14.6	20	342	456	10.3	65	0.5	1/4
CPKF61-5	380/415	3	50	13.6	20	342	456	9.5	73	0.5	1/4

* MAY USE FUSES OR HACR TYPE CIRCUIT BREAKERS OF THE SAME SIZE AS NOTED.

† INCLUDES CRANKCASE HEATER

OUTDOOR UNIT

CPKF48-5

INDOOR UNIT A48-00-2

INDOOR AIR		CONDENSER AIR TEMPERATURE														
SCFM	WB	75F			85F			95F			105F			115F		
		TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH
1332	72	54.5	28.1	4.91	52.2	26.9	5.17	49.4	25.8	5.38	46.5	24.7	5.64	43.7	23.6	5.90
	67	49.8	34.8	4.60	47.5	33.7	4.80	45.1	32.5	5.07	42.3	31.4	5.33	39.5	31.4	5.59
	62	46.1	41.1	4.28	43.7	40.0	4.54	42.5	38.9	4.80	41.4	37.8	5.07	39.0	36.3	5.27
	57	44.2	44.5	4.18	42.3	42.6	4.44	40.4	40.8	4.70	38.1	38.5	5.01	36.2	36.3	5.22
1567	72	56.9	31.0	5.07	54.1	29.9	5.27	51.2	28.8	5.54	48.4	28.1	5.80	45.1	26.6	6.06
	67	52.2	39.6	4.75	49.8	38.5	4.96	47.0	37.4	5.22	44.2	36.3	5.48	41.4	35.2	5.74
	62	48.4	47.5	4.49	46.1	46.0	4.70	43.7	44.1	4.96	41.8	41.9	5.22	39.5	39.6	5.54
	57	47.9	48.2	4.44	45.6	46.4	4.70	43.7	44.1	4.96	41.8	41.9	5.22	39.5	39.6	5.54
1802	72	58.3	33.7	5.17	55.5	32.5	5.38	52.6	31.4	5.64	49.4	30.3	5.90	46.5	29.5	6.16
	67	54.1	43.8	4.86	51.2	43.0	5.07	48.4	41.9	5.33	45.6	40.4	5.59	42.8	39.3	5.85
	62	50.8	51.2	4.65	48.9	49.0	4.91	46.1	46.8	5.17	44.2	44.5	5.43	41.4	41.9	5.74
	57	50.8	51.2	4.65	48.9	49.0	4.91	46.1	46.8	5.17	44.2	44.5	5.43	41.4	41.9	5.74

OUTDOOR UNIT

CPKF60-5

INDOOR UNIT A60-00-2

INDOOR AIR		CONDENSER AIR TEMPERATURE														
SCFM	WB	75F			85F			95F			105F			115F		
		TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH
1473	72	60.3	30.9	5.43	57.7	29.6	5.72	54.6	28.4	5.95	51.5	27.2	6.24	48.4	25.9	6.53
	67	55.1	38.3	5.08	52.5	37.1	5.32	49.9	35.8	5.60	46.8	34.6	5.89	43.7	34.6	6.18
	62	51.0	45.3	4.74	48.4	44.1	5.03	47.1	42.8	5.32	45.8	41.6	5.60	43.2	39.9	5.84
	57	48.9	49.0	4.62	46.8	46.9	4.91	44.7	44.9	5.20	42.1	42.4	5.55	40.0	39.9	5.78
1733	72	62.9	34.2	5.60	59.8	32.9	5.84	56.7	31.7	6.12	53.6	30.9	6.41	49.9	29.2	6.70
	67	57.7	43.7	5.26	55.1	42.4	5.49	52.0	41.2	5.78	48.9	39.9	6.07	45.8	38.7	6.36
	62	53.6	52.3	4.97	51.0	50.7	5.20	48.4	48.6	5.49	46.3	46.1	5.78	43.7	43.7	6.12
	57	53.0	53.1	4.91	50.4	51.1	5.20	48.4	48.6	5.49	46.3	46.1	5.78	43.7	43.7	6.12
1993	72	64.5	37.1	5.72	61.4	35.8	5.95	58.2	34.6	6.24	54.6	33.4	6.53	51.5	32.5	6.82
	67	59.8	48.2	5.37	56.7	47.4	5.60	53.6	46.1	5.89	50.4	44.5	6.18	47.3	43.2	6.47
	62	56.2	56.4	5.14	54.1	53.9	5.43	51.0	51.5	5.72	48.9	49.0	6.01	45.8	46.1	6.36

OUTDOOR UNIT

CPKF61-5

INDOOR UNIT A60-00-2

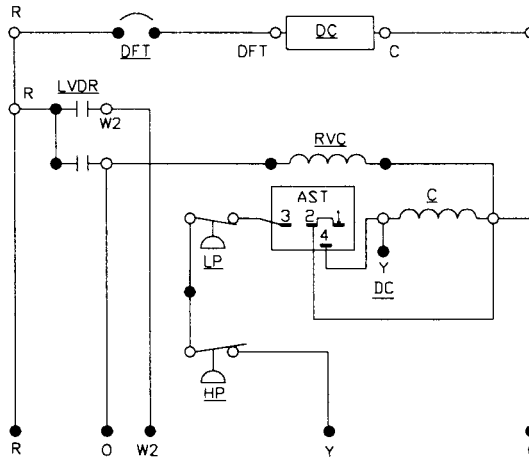
INDOOR AIR		CONDENSER AIR TEMPERATURE														
SCFM	WB	75F			85F			95F			105F			115F		
		TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH
1643	72	67.3	33.9	6.06	64.4	32.6	6.38	60.9	31.2	6.64	57.4	29.9	6.96	53.9	28.5	7.28
	67	61.5	42.1	5.67	58.6	40.7	5.93	55.7	39.4	6.25	52.2	38.0	6.57	48.7	38.0	6.90
	62	56.8	49.8	5.28	53.9	48.4	5.61	52.5	47.0	5.93	51.0	45.7	6.25	48.1	43.9	6.51
	57	54.5	53.8	5.16	52.2	51.6	5.48	49.9	49.3	5.80	47.0	46.6	6.19	44.7	43.9	6.44
1933	72	70.2	37.5	6.25	66.7	36.2	6.51	63.2	34.8	6.83	59.7	33.9	7.15	55.7	32.1	7.48
	67	64.4	48.0	5.86	61.5	46.6	6.12	58.0	45.2	6.44	54.5	43.9	6.77	51.0	42.5	7.09
	62	59.7	57.5	5.54	56.8	55.6	5.80	53.9	53.4	6.12	51.6	50.7	6.44	48.7	48.0	6.83
	57	59.2	58.4	5.48	56.3	56.1	5.80	53.9	53.4	6.12	51.6	50.7	6.44	48.7	48.0	6.83
2223	72	71.9	40.7	6.38	68.4	39.4	6.64	65.0	38.0	6.96	60.9	36.6	7.28	57.4	35.7	7.60
	67	66.7	52.9	5.99	63.2	52.0	6.25	59.7	50.7	6.57	56.3	48.9	6.90	52.8	47.5	7.22
	62	62.6	62.0	5.74	60.3	59.3	6.06	56.8	56.6	6.38	54.5	53.8	6.70	51.0	50.7	7.09
	57	62.6	62.0	5.74	60.3	59.3	6.06	56.8	56.6	6.38	54.5	53.8	6.70	51.0	50.7	7.09

LEGEND AND NOTES

1. All capacities are net and include the effect of the outdoor fan and indoor motors.
2. SCFM - Supply air flow (CFM)
3. WB - Entering wet bulb temperature
4. MBTUH - 1000 BTU / Hr.
5. KWH - Total KW input including compressor, outdoor and indoor motors
6. Sensible heat capacities shown are based on 80F DB entering air at the evaporator coil.
For sensible heat capacities at other than 80F DB, deduct 84 BTUH per 100 CFM of evaporator coil air for each degree below 80F, or add 84 BTUH per 100 CFM of evaporator coil air per degree above 80F.

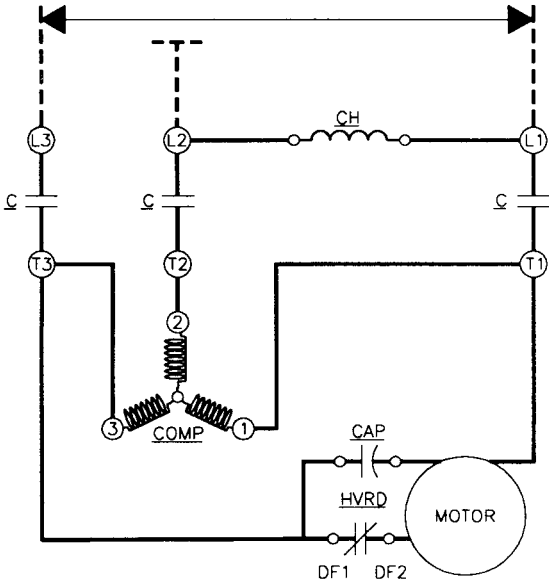
SCHEMATIC WIRING DIAGRAMS

LOW VOLTAGE CONTROL WIRING DIAGRAM



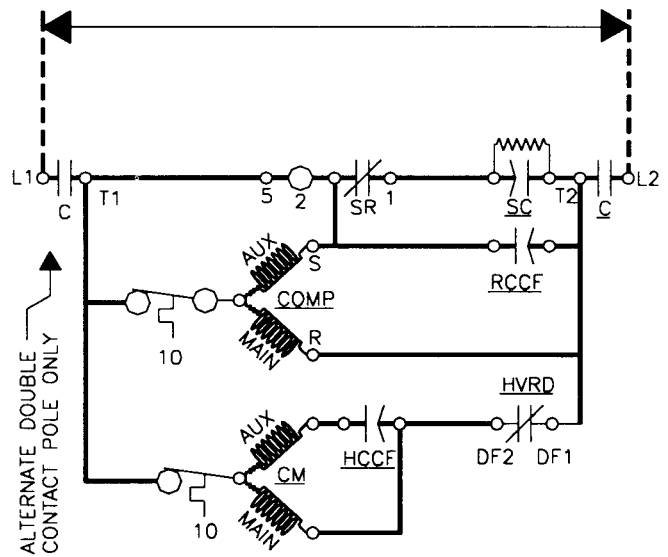
LINE VOLTAGE POWER WIRING DIAGRAMS

380/415, 50 HZ, 3 PH



CPKF36-5, CPKF48-5, CPKF60-5 & CPKF61-5

220-240, 50HZ, 1 PH



CPKF24-2 & CPKF36-2

COMPONENT CODE

CM - OUTDOOR FAN MOTOR
 COMP - COMPRESSOR
 C - CONTACTOR
 DC - DEFROST CONTROL
 LDVR - LOW VOLTAGE DEFROST RELAY
 CH - CRANKCASE HEATER
 IO - INTERNAL OVERLOAD
 LP - LOW PRESSURE CONTROL

HP - HIGH PRESSURE CONTROL
 OT - OUTDOOR THERMOSTAT (OPTIONAL)
 FC - FAN CAPACITOR
 DFT - DEFROST THERMOSTAT
 RVC - REVERSING VALVE COIL
 HVDR - HIGH VOLTAGE DEFROST RELAY
 AST - ANTI SHORT CYCLE TIMER

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