

PRODUCT SPECIFICATIONS

CPLE COMMERCIAL SERIES

10.1 EER/3.2 C.O.P.

Split System Heat Pump

7½ to 10 Ton



Air Conditioning & Heating



The CPLE commercial heat pump is designed for ground-level or rooftop mount applications.

Standard Features

- Energy-efficient scroll compressor
- Louvered guard protects the coil from damage and adds strength to the unit
- Bottom pan rails elevate the unit above the slab
- Quiet operating top discharge
- Permanently lubricated condenser motor
- Copper tube, aluminum fin coil
- Brass suction ball valve and liquid front-seating shut-off valve for sweat connections
- Large capacity bi-flow liquid line filter drier
- Suction line accumulator
- Time Temperature Defrost Control
- High-pressure switch and loss of charge protection
- Crankcase heater

Cabinet Construction

- Polyester powder paint provides premium durability and improved UV protection
- Heavy-gauge, zinc-clad, G90 galvanized steel
- When properly anchored, meets the 2001 Florida Building Code unit integrity requirements for hurricane-type winds

Air Handler Compatibilities

- AR indoor section is an upflow and horizontal left air handler

Accessories

- Standard room thermostat with 1-stage cool/1-stage heat (HPT18-60)
- Digital room thermostat with 1-stage cool/1-stage heat (HPTD18-60)
- Outdoor Lockout Thermostat/Emergency Heat Relay Kit for staging electric heat (OT/EHR18-60)
- Outdoor Thermostat (OT18-60); required for all heat pumps if outdoor ambient temperature is 0°F with 50% or higher relative humidity



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Specifications

Model	Service Valve		Type	Approximate Shipping Weight (pounds)
	Liquid	Suction		
CPLE090-3/-3C	5/8"	1-3/8"	Sweat	390
CPLE090-4/-4C	5/8"	1-3/8"	Sweat	390
CPLE120-3/-3C	5/8"	1-3/8"	Sweat	440
CPLE120-4/-4C	5/8"	1-3/8"	Sweat	440

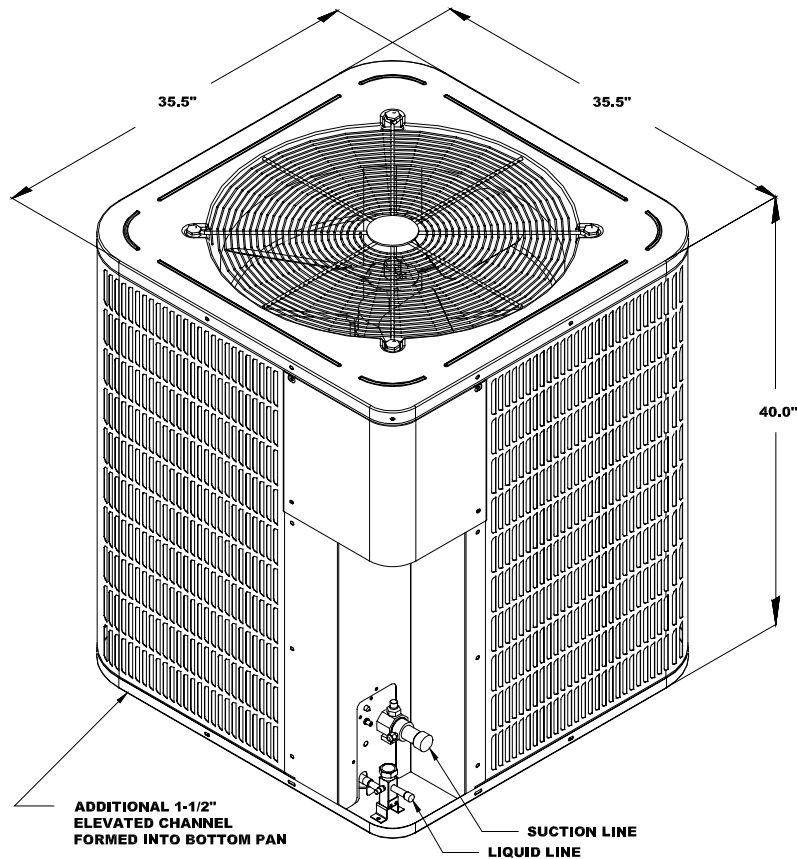
Model	Fan Diameter	Fan RPM	CFM	Tube Diameter	Face Area (Ft ²)	Rows Deep	Fins Per Inch	Fin Type	R-22 Holding Charge (pounds)
CPLE090-3/-4/-3C/-4C	26"	1,100	6,600	3/8"	30	1	19	Ripple	2
CPLE120-3/-4/-3C/-4C	26"	1,100	6,600	3/8"	30	2	16	Ripple	2

Electrical Data

Model	Volts	Ph	Hz	Minimum Circuit Amps ¹	Maximum Overcurrent Protection ²	Minimum Volts	Maximum Volts	Compressor		Condenser Fan	
								RLA	LRA	FLA	HP
CPLE090-3/-3C	208/230	3	60	37.8	60	197	253	25.7	196	5.6	1
CPLE090-4/-4C	460	3	60	18.8	30	414	506	12.8	100	2.8	1
CPLE120-3/-3C	208/230	3	60	43.3	60	197	253	30.1	225	5.6	1
CPLE120-4/-4C	460	3	60	22.2	35	414	506	15.5	114	2.8	1

- 1) Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes.
- 2) May use fuses or HACR type Circuit Breakers of the same size as noted.
- 3) The -3C and -4C models are painted Architectural Gray. All other models are painted Bahama Beige.

Dimensions



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Performance Ratings at ARI Conditions

Model	Evaporator Model	Total Cooling BTUH @ 95 °F	Sensible Cooling BTUH @ 95 °F	EER ¹	Heating BTUH @ 47 °F	COP @ 47 °F	Heating BTUH @ 17 °F	COP @ 17 °F	SRN/ BELS
CPLE090-3/-4/-3C/-4C	AR090	87,000	63,500	10.1	82,000	3.2	53,000	2.2	8.4
CPLE120-3/-4/-3C/-4C	AR120	109,000	78,000	10.1	105,500	3.2	68,500	2.2	8.4

1) Energy Efficiency Ratio @ 80 °F/67 °F/95 °F = Capacity BTUH @95 F / kW_i

(kW_i = Compressor + Indoor Blower Motor + Outdoor Fan Motor)

Note: For 3-models, reduce BTUH by 2,000 @ 208V

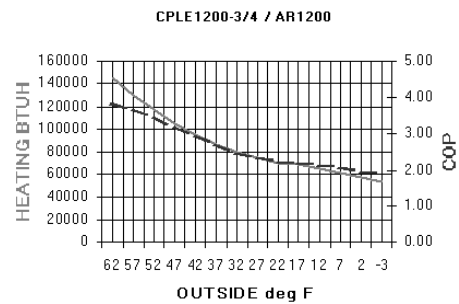
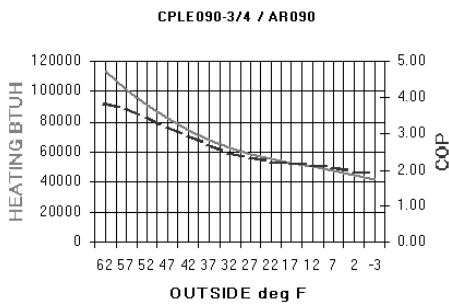
Expanded Ratings (Heating)

COP Plot CPLE090-3/-4/-3C/-4C

OD Temp	BTUH	COP	Watts
62	113,300	3.85	8.64
57	101,500	3.68	8.08
52	91,000	3.46	7.72
47	82,000	3.20	7.51
42	74,300	2.94	7.41
37	67,800	2.69	7.39
32	62,500	2.48	7.38
27	58,300	2.32	7.35
22	55,100	2.22	7.26
17	53,000	2.20	7.06
12	49,900	2.11	6.92
7	47,300	2.05	6.78
2	44,000	1.96	6.57
-3	41,900	1.91	6.43

COP Plot CPLE120-3/-4/-3C/-4C

OD Temp	BTUH	COP	Watts
62	145,800	3.85	11.0
57	130,800	3.68	10.4
52	117,400	3.46	9.96
47	105,500	3.20	9.66
42	95,200	2.94	9.50
37	86,500	2.69	9.43
32	79,500	2.48	9.40
27	74,100	2.32	9.37
22	70,400	2.22	9.29
17	68,500	2.20	9.13
12	64,500	2.11	8.94
7	61,200	2.05	8.76
2	56,900	1.97	8.49
-3	54,100	1.91	8.30



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OUTDOOR UNIT CPLE090-3/-4/-3C/-4C

INDOOR UNIT AR090

INDOOR		CONDENSER AIR TEMPERATURE														
AIR SCFM	WB	75 °F			85 °F			95 °F			105 °F			115 °F		
		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
2465	72	100.9	47.6	8.10	96.6	45.7	8.53	91.4	43.8	8.87	86.1	41.9	9.30	80.9	40.0	9.73
	67	92.2	59.1	7.58	87.9	57.2	7.92	83.5	55.2	8.36	78.3	53.3	8.79	73.1	53.3	9.22
	62	85.3	69.9	7.06	80.9	67.9	7.49	78.7	66.0	7.92	76.6	64.1	8.36	72.2	61.6	8.70
	57	81.8	75.6	6.89	78.3	72.4	7.32	74.8	69.2	7.75	70.5	65.4	8.27	67.0	61.6	8.61
2900	72	105.3	52.7	8.36	100.1	50.8	8.70	94.8	48.9	9.13	89.6	47.6	9.56	83.5	45.1	9.99
	67	96.6	67.3	7.84	92.2	65.4	8.18	87.0	63.5	8.61	81.8	61.6	9.04	76.6	59.7	9.48
	62	89.6	80.6	7.41	85.3	78.1	7.75	80.9	74.9	8.18	77.4	71.1	8.61	73.1	67.3	9.13
	57	88.7	81.9	7.32	84.4	78.7	7.75	80.9	74.9	8.18	77.4	71.1	8.61	73.1	67.3	9.13
3335	72	107.9	57.2	8.53	102.7	55.2	8.87	97.4	53.3	9.30	91.4	51.4	9.73	86.1	50.2	10.16
	67	100.1	74.3	8.01	94.8	73.0	8.36	89.6	71.1	8.79	84.4	68.6	9.22	79.2	66.7	9.65
	62	94.0	87.0	7.67	90.5	83.2	8.10	85.3	79.4	8.53	81.8	75.6	8.96	76.6	71.1	9.48
	57	94.0	87.0	7.67	90.5	83.2	8.10	85.3	79.4	8.53	81.8	75.6	8.96	76.6	71.1	9.48

Sensible heat capacities shown are based on 80 °F DB entering air at the evaporator coil.

For sensible heat capacities at other than 80 °F DB, deduct 84 BTUH per 100 CFM of evaporator coil air for each degree below 80 °F, or add 84 BTUH per 100 CFM of evaporator coil air per degree above 80 °F.

Capacities at 95 °F OUTDOOR, 75 °F DB and 63 °F WB INDOOR

TOTAL MBTUH 82.1 SENSIBLE MBTUH 60.5 LATENT MBTUH 21.7

INDOOR UNIT CPLE120-3/-4/-3C/-4C

INDOOR UNIT AR120

INDOOR		CONDENSER AIR TEMPERATURE														
AIR SCFM	WB	75 °F			85 °F			95 °F			105 °F			115 °F		
		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
3230	72	126.4	58.9	10.14	121.0	56.5	10.68	114.5	54.2	11.12	107.9	51.8	11.66	101.4	49.5	12.20
	67	115.5	73.0	9.50	110.1	70.7	9.93	104.6	68.3	10.47	98.1	65.9	11.01	91.6	65.9	11.55
	62	106.8	86.4	8.85	101.4	84.0	9.39	98.6	81.6	9.93	95.9	79.3	10.47	90.5	76.1	10.90
	57	102.5	93.4	8.63	98.1	89.5	9.17	93.7	85.6	9.71	88.3	80.9	10.36	83.9	76.1	10.79
3800	72	131.9	65.2	10.47	125.4	62.8	10.90	118.8	60.4	11.44	112.3	58.9	11.98	104.6	55.7	12.52
	67	121.0	83.2	9.82	115.5	80.9	10.25	109.0	78.5	10.79	102.5	76.1	11.33	95.9	73.8	11.87
	62	112.3	99.7	9.28	106.8	96.6	9.71	101.4	92.6	10.25	97.0	87.9	10.79	91.6	83.2	11.44
	57	111.2	101.3	9.17	105.7	97.3	9.71	101.4	92.6	10.25	97.0	87.9	10.79	91.6	83.2	11.44
4370	72	135.2	70.7	10.68	128.6	68.3	11.12	122.1	65.9	11.66	114.5	63.6	12.20	107.9	62.0	12.73
	67	125.4	91.8	10.04	118.8	90.3	10.47	112.3	87.9	11.01	105.7	84.8	11.55	99.2	82.4	12.09
	62	117.7	107.5	9.60	113.4	102.8	10.14	106.8	98.1	10.68	102.5	93.4	11.22	95.9	87.9	11.87
	57	117.7	107.5	9.60	113.4	102.8	10.14	106.8	98.1	10.68	102.5	93.4	11.22	95.9	87.9	11.87

Sensible heat capacities shown are based on 80 °F DB entering air at the evaporator coil.

For sensible heat capacities at other than 80 °F DB, deduct 84 BTUH per 100 CFM of evaporator coil air for each degree below 80 °F, or add 84 BTUH PER 100 CFM of evaporator coil air per degree above 80 °F.

CAPACITIES AT 95 °F OUTDOOR, 75 °F DB AND 63 °F WB INDOOR

TOTAL MBTUH 102.9 SENSIBLE MBTUH 74.5 LATENT MBTUH 28.4



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