

## 7 1/2 & 10 TON 50 HERTZ SPLIT SYSTEM CONDENSING UNITS

### **Description / Application**

- Designed for use with evaporator blowers and coils.
- Outdoor condensing units for ground level or rooftop applications.

### **Cabinet Construction**

- Heavy gauge, G-90 Galvanized, with removable access panels, completely weatherized, properly reinforced and braced. Steel sheet metal is Zinc-coated and galvanized by the hot dip process.
- Weather resistant baked-on powder epoxy paint finish with 500 hr salt spray approval.

### **Third Party Tested**

- Independent Third Party Performance Tested with matching Outdoor Section By ETL Testing Laboratories, Inc., Per ARI Standard 210-240.

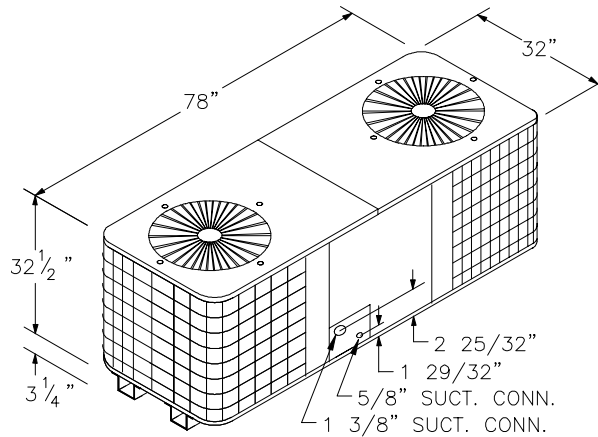
### **Standard Equipment**

- Quiet operating top discharge.
- Copper tube, aluminum fin coil construction.
- Brass suction and liquid line shut off valves.
- Flare connections.
- Totally enclosed permanently lubricated condenser fan motors.
- Isolated compressor compartment.
- High efficiency performance.
- Built-in fan cycle switch.
- Hermetically sealed compressor.
- Liquid line dryer.
- Liquid line sight glass.
- Low pressure automatic reset control.
- High pressure manual reset control.
- Internally protected compressor motor.
- Dual condenser fans with divider to eliminate recirculation when only one fan is operating in mild ambient.

**PHYSICAL DATA**

MODEL	FAN DIA. IN.	FAN RPM	CFM	TUBE DIA IN	FACE AREA FT <sup>2</sup>	ROWS DEEP	FINS /IN.	FIN TYPE	R-22 HOLDING CHARGE	LIQUID CON. IN.	SUCTION CON. IN.	APPROX. SHIPPING WT, LBS(KG)
CE090-5A	22 (2)	1075	5045	3/8	34.75	1	19	RIPPLE	2 LBS.	5/8	1-3/8	403(183.0)
CE120-5A	22 (2)	1075	4900	3/8	34.75	1	19	RIPPLE	2 LBS.	5/8	1-3/8	416(188.9)

**DIMENSIONAL DATA**



**RATINGS**

**ELECTRICAL RATINGS - 50 HZ**

CONDENSER MODEL	VOLTS	PHASE	HZ	MIN. VOLTS	*MIN. WIRE AMPACITY	MAX. FUSE SIZE	COMPRESSOR		CONDENSER FAN	
							FLA	LRA	FLA	HP
CE090-5A	415	3	50	380	20	30	14.4	119	1.2 (2)	1/3(2)
CE120-5A	415	3	50	380	28	50	20.7	135	1.2 (2)	1/3(2)

\*WIRE SIZE SHOULD BE IN ACCORDANCE WITH LOCAL ELECTRICAL CODES. EXTENSIVE WIRE RUNS REQUIRE LARGER WIRE SIZES.

**PERFORMANCE RATINGS @ ARI CONDITIONS**

CONDENSER MODEL	EVAPORATOR MODEL	TOTAL BTUH @95F	SENSIBLE BTUH @95F	KW	SRN BELS
CE090-5A	A90-00-2	85690	63100	9.56	8.8
CE120-5A	A120-00-2	108780	81200	13.38	8.8

**EXPANDED PERFORMANCE RATINGS**

**OUTDOOR UNIT CE090-5A (50HZ)**

**INDOOR UNIT**

**A90-00-2**

INDOOR AIR		CONDENSER AIR TEMPERATURE														
SCFM	WB	85			95			105			115			120		
		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
2369	72	92.8	45.4	9.03	87.8	43.5	9.39	82.8	41.6	9.85	77.7	39.8	10.30	74.7	38.2	10.50
	67	84.4	56.8	8.39	80.3	54.9	8.84	75.2	53.0	9.30	70.2	53.0	9.75	67.5	50.8	9.77
	62	77.7	67.5	7.93	75.7	65.6	8.39	73.6	63.7	8.84	69.4	61.2	9.21	66.9	58.7	9.21
2990	72	96.1	50.5	9.21	91.1	48.6	9.66	86.1	47.3	10.12	80.3	44.8	10.58	77.3	42.9	10.58
	67	88.6	65.0	8.66	83.6	63.1	9.12	78.6	61.2	9.57	73.6	59.3	10.03	67.7	56.8	10.23
	62	81.9	77.6	8.21	77.7	74.5	8.66	74.4	70.7	9.12	70.2	66.9	9.66	67.5	64.2	9.67
3205	72	98.6	54.9	9.39	93.6	53.0	9.85	87.8	51.1	10.30	82.8	49.8	10.76	79.9	48.8	10.75
	67	91.1	72.6	8.84	86.1	70.7	9.30	81.1	68.1	9.75	76.1	66.3	10.21	73.4	63.6	10.22
	62	86.9	82.7	8.57	81.9	78.9	9.03	78.6	75.1	9.48	73.6	70.7	10.03	70.8	68.0	10.03
57	86.9	82.7	8.57	81.9	78.9	9.03	78.6	75.1	9.48	73.6	70.7	10.03	70.8	68.0	10.03	

**OUTDOOR UNIT CE120-5A (50HZ)**

**INDOOR UNIT**

**A120-00-2**

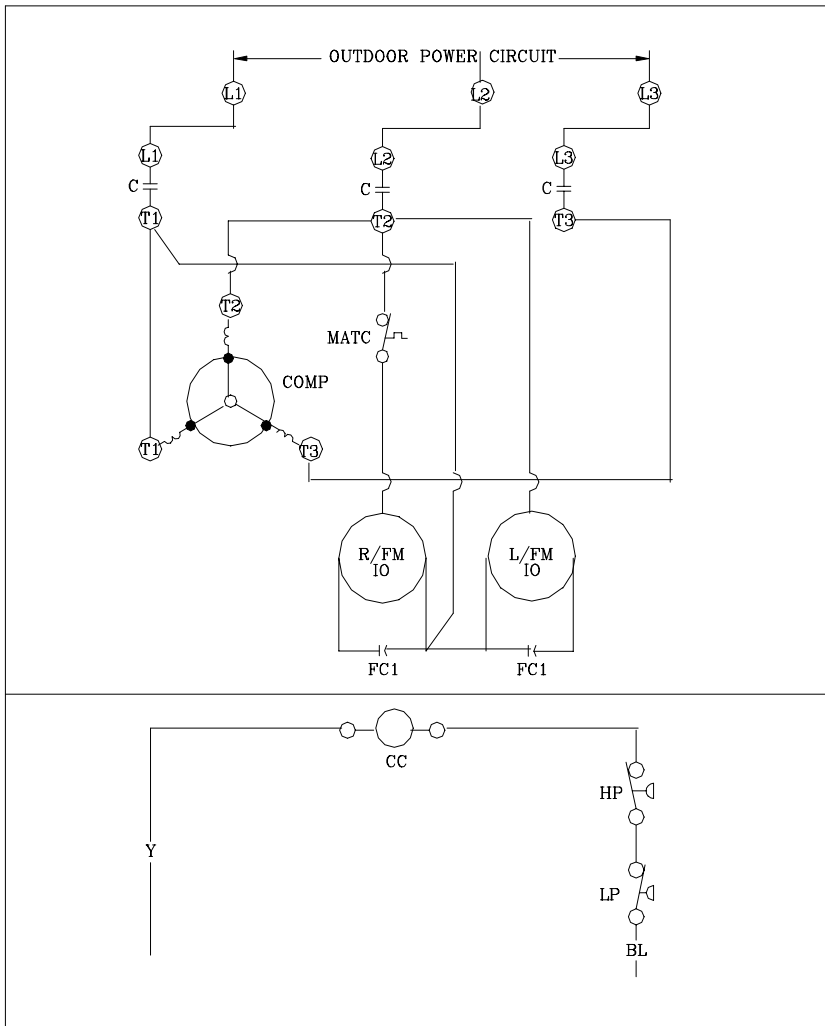
INDOOR AIR		CONDENSER AIR TEMPERATURE														
SCFM	WB	85			95			105			115			120		
		TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH	TOTAL MBTUH	SENS MBTUH	WATTS KWH
2838	72	117.2	51.3	12.86	110.9	49.1	13.38	104.5	47.0	14.03	98.2	44.9	14.68	95.0	43.8	15.00
	67	106.7	64.1	11.95	101.4	61.9	12.60	95.0	59.8	13.25	88.7	59.8	13.90	85.5	59.8	14.22
	62	98.2	76.2	11.30	95.6	74.0	11.95	92.9	71.9	12.60	87.6	69.1	13.12	85.0	67.6	13.38
	57	95.0	81.2	11.04	90.8	77.6	11.69	85.5	73.3	12.47	81.3	69.1	12.99	79.2	66.9	13.25
3153	72	121.4	57.0	13.12	115.1	54.8	13.77	108.8	53.4	14.42	101.4	50.6	15.07	97.7	49.1	15.39
	67	111.9	73.3	12.34	105.6	71.2	12.99	99.3	69.1	13.64	92.9	66.9	14.29	89.8	65.9	14.61
	62	103.5	87.6	11.69	98.2	84.0	12.34	94.0	79.7	12.99	88.7	75.5	13.77	86.1	73.3	14.16
	57	102.4	88.3	11.69	98.2	84.0	12.34	94.0	79.7	12.99	88.7	75.5	13.77	86.1	73.3	14.16
3784	72	124.6	61.9	13.38	118.3	59.8	14.03	110.9	57.7	14.68	104.5	56.2	15.33	101.4	55.5	15.65
	67	115.1	81.9	12.60	108.8	79.7	13.25	102.4	76.9	13.90	96.1	74.8	14.55	92.9	73.7	14.87
	62	109.8	93.3	12.21	103.5	89.0	12.86	99.3	84.7	13.51	92.9	79.7	14.29	89.8	77.3	14.68
57	109.8	93.3	12.21	103.5	89.0	12.86	99.3	84.7	13.51	92.9	79.7	14.29	89.8	77.3	14.68	

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

**LEGEND AND NOTES**

1. KWI are net and includes compressor, condenser fan, and evaporator fan consumption.
2. Sensible heat capacities shown are based on 80F DB (Dry Bulb) entering air at the evaporator coil.
3. 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 per degree above 80F.
4. All capacities are gross and include indoor motor heat. (at outdoor 95F, indoor 75F DB and 63F WB)  
Indoor motor heat, for CE090-5A is 4700 BTU/HR; for CE120-5A is 9000 BTU/HR.
5. SCFM= SUPPLY AIR FLOW (CFM);WB= ENTERING WET BULB TEMPERATURE; MBTUH= 1000 BTU/HR

**SCHEMATIC WIRING DIAGRAM  
"CE" SERIES, CE090-5A & CE120-5A  
CONDENSING UNITS**



**WIRE CODE**

BL - BLACK  
Y - YELLOW

**COMPONENT LEGEND**

C	CONTACTOR
CC	CONTACTOR COIL
COMP	COMPRESSOR
FC	FAN MOTOR CAPACITOR
HP	HIGH PRESSURE CONTROL
LP	LOW PRESSURE CONTROL
MATC	MILD AMBIENT TEMPERATURE
TB	TERMINAL BLOCK
L/FM	LEFT FAN MOTOR
R/FM	RIGHT FAN MOTOR
IO	INTERNAL OVERLOAD