KeepRite® REFRIGERATION

KLP Low Profile Evaporators

60 Hz

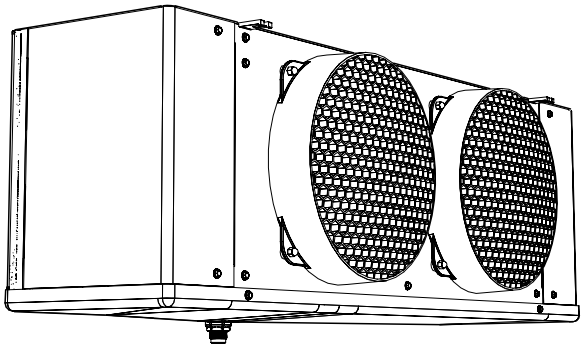
PRODUCT DATA & INSTALLATION

Bulletin K30-KLP-PDI-20
Part # 1087150

PRODUCT SUPPORT
web: **www.k-rp.com/klp**
email: **evaps@k-rp.com**
call: **1-844-893-3222 x520**
scan:

Air, Electric, Hot Gas & Warm Fluid Defrost

Electrical Power:
115/1/60, 208-230/1/60,
208-230/3/60, 460/1/60



LOW GWP REFRIGERANTS

SMARTSPEED™ FAN MOTOR TECHNOLOGY
See Page 22 for details

ESP+
see page 27 for details

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NOMENCLATURE

KLP 3 17 L E - S2 B T

Low Profile Evaporator

Number of Fans

Nominal Capacity:
x 1000 @ 10°F TD, Btu/H, R404A

Application Range:
M = Medium to High Temp 6 FPI (10°F to 45°F (*-12°C to 7°C*) Evap Temp)
L = Low Temp 6 FPI (-40°F to 0°F(*-40°C to -17°C*) Evap Temp)
V = Low Temp 4 FPI (-40°F to 0°F (*-40°C to -17°C*) Evap Temp)
W = Fluid Air Cooler (with water or glycol)

Defrost*:
A = Air E = Electric
T = 3 Pipe Hot Gas w/ Electric Heater Pan
or Warm Fluid w/ Electric Heater Pan for Fluid Air Coolers
H = 3 Pipe Hot Gas w/ Hot Gas Loop Pan (optional)
G = Reverse Cycle w/ Electric Heater Pan
R = Reverse Cycle w/ Hot Gas Loop Pan (optional)
*** T, H, G, R, available on 2 to 6 fan models only**

Voltage:
S1 = 115/1/60 (air defrost & hot gas models only)
S2 = 208-230/1/60
S4 = 460/1/60
T3 = 208-230/3/60

Generation: B = 2nd

Motor:
Blank = PSC
T = SmartSpeed ECM

STANDARD FEATURES

- Compatible with Low GWP Refrigerants
- High efficiency and high strength fan guard
- Front access
- Internally enhanced tubing
- Convenient mounting brackets
- Ample electrical and header compartments
- PSC Motors
- Liquid line solenoid valve wire harness factory installed
- Schrader valve on suction header
- Positive slope, hinged drain pan
- Central drain connections (approximate)
- Universal drain fitting
- Large 3/4” ID (3/4” MPT) drain hole
- Factory installed distributor nozzle

AVAILABLE OPTIONS

- **EC motors with patented SmartSpeed® Technology.** See page 22
- ESP+ Intuitive Evaporator Control Technology. See page 27
- Hot gas loop pan with hot gas defrost models
- Factory installed expansion valve, solenoid valve and room thermostat
- Wire fan guard
- Corrosion protection: alternate fin materials and coatings
- Additional options available, please contact factory

Medium Temperature Models - Capacity @ 6 F.P.I. *

Medium Temp. Model KLP			104M	106M	107M	209M	211M	214M	317M	320M	423M	426M	532M	639M
Number Of Fans			1	1	1	2	2	2	3	3	4	4	5	6
Capacity BTUH (WATTS)	Evap Temp. 25°F (-4°C)	R407A R448A	4090 (1197)	5230 (1530)	6460 (1891)	8170 (2394)	10450 (3059)	13300 (3895)	16200 (4731)	19000 (5567)	21900 (6403)	24700 (7230)	30400 (8902)	37100 (10830)
		R407C	3870 (1134)	4950 (1449)	6120 (1791)	7740 (2268)	9900 (2898)	12600 (3690)	15400 (4482)	18100 (5274)	20800 (6066)	23500 (6849)	28900 (8433)	35200 (10260)
		R404A R507	4300 (1260)	5500 (1610)	6800 (1990)	8600 (2520)	11000 (3220)	14000 (4100)	17000 (4980)	20000 (5860)	23000 (6740)	26000 (7610)	32000 (9370)	39000 (11400)
		R22	4090 (1197)	5230 (1530)	6460 (1891)	8170 (2394)	10500 (3059)	13300 (3895)	16200 (4731)	19000 (5567)	21900 (6403)	24700 (7230)	30400 (8902)	37100 (10830)
Air Flow	CFM (L/S)		1010 (477)	950 (448)	900 (425)	2020 (953)	1910 (901)	1800 (850)	2860 (1350)	2700 (1274)	3810 (1798)	3600 (1699)	4500 (2124)	5400 (2549)
Refrigerant ** Charge R407A	LB. (KG)		0.7 (0.3)	1.1 (0.5)	1.5 (0.7)	1.3 (0.6)	1.4 (0.6)	2.0 (0.9)	3.0 (1.4)	4.0 (1.8)	3.9 (1.8)	3.3 (1.5)	6.5 (2.9)	7.8 (3.5)

Low Temperature Models - Capacity @ 6 F.P.I. *

Low Temp. Model KLP			104L	105L	106L	207L	209L	211L	314L	317L	419L	422L	527L	631L
Number Of Fans			1	1	1	2	2	2	3	3	4	4	5	6
Capacity BTUH (WATTS)	Evap Temp. -20°F (-29°C)	R407A R448A	3610 (1055)	4560 (1340)	5510 (1615)	7030 (2062)	8550 (2508)	10500 (3059)	13300 (3895)	16200 (4731)	18100 (5292)	20900 (6118)	25700 (7515)	29500 (8626)
		R407C	3420 (999)	4320 (1269)	5220 (1530)	6660 (1953)	8100 (2376)	9900 (2898)	12600 (3690)	15400 (4482)	17200 (5013)	19900 (5796)	24400 (7119)	28000 (8172)
		R404A R507	3800 (1110)	4800 (1410)	5800 (1700)	7400 (2170)	9000 (2640)	11000 (3220)	14000 (4100)	17000 (4980)	19000 (5570)	22000 (6440)	27000 (7910)	31000 (9080)
		R22	3610 (1055)	4560 (1340)	5510 (1615)	7030 (2062)	8550 (2508)	10500 (3059)	13300 (3895)	16200 (4731)	18100 (5292)	20900 (6118)	25700 (7515)	29500 (8626)
Air Flow	CFM (L/S)		1010 (477)	950 (448)	900 (425)	2020 (953)	1910 (901)	1800 (850)	2860 (1350)	2700 (1274)	3810 (1798)	3600 (1699)	4500 (2124)	5400 (2549)
Refrigerant ** Charge R407A	LB. (KG)		0.7 (0.3)	1.1 (0.5)	1.5 (0.7)	1.3 (0.6)	1.4 (0.6)	2.0 (0.9)	3.0 (1.4)	4.0 (1.8)	3.9 (1.8)	3.3 (1.5)	6.5 (2.9)	7.8 (3.5)

Low Temperature Models - Capacity @ 4 F.P.I. *

Low Temp. 4 FPI Model KLP			103V	104V	105V	206V	208V	209V	312V	315V	416V	419V	523V	627V
Number Of Fans			1	1	1	2	2	2	3	3	4	4	5	6
Capacity BTUH (WATTS)	Evap Temp. -20°F (-29°C)	R407A R448A	2850 (836)	3900 (1140)	4750 (1397)	6080 (1786)	7410 (2176)	8840 (2584)	11400 (3344)	14300 (4171)	15200 (4456)	18100 (5292)	21900 (6403)	25700 (7515)
		R407C	2700 (792)	3690 (1080)	4500 (1323)	5760 (1692)	7020 (2061)	8370 (2448)	10800 (3168)	13600 (3951)	14400 (4221)	17200 (5013)	20800 (6066)	24400 (7119)
		R404A R507	3000 (880)	4100 (1200)	5000 (1470)	6400 (1880)	7800 (2290)	9300 (2720)	12000 (3520)	15000 (4390)	16000 (4690)	19000 (5570)	23000 (6740)	27000 (7910)
		R22	2850 (836)	3900 (1140)	4750 (1397)	6080 (1786)	7410 (2176)	8840 (2584)	11400 (3344)	14300 (4171)	15200 (4456)	18100 (5292)	21900 (6403)	25700 (7515)
Air Flow	CFM (L/S)		1010 (477)	950 (448)	900 (425)	2020 (953)	1910 (901)	1800 (850)	2860 (1350)	2700 (1274)	3810 (1798)	3600 (1699)	4500 (2124)	5400 (2549)
Refrigerant ** Charge R407A	LB. (KG)		0.7 (0.3)	1.1 (0.5)	1.5 (0.7)	1.3 (0.6)	1.4 (0.6)	2.0 (0.9)	3.0 (1.4)	4.0 (1.8)	3.9 (1.8)	3.3 (1.5)	6.5 (2.9)	7.8 (3.5)

Capacities rated using 10°F *(5.6°C)* TD & 100°F *(38°C)* liquid temperature.
Capacities at other TD within a range of 8 to 15 °F *(4.4 to 8.3°C)* are directly proportional to TD, or use formula: Capacity = Rated capacity ÷ 10 x TD.
For capacities at TD outside of range 8 to 15 °F *(4.4 to 8.3°C)*, or liquid temperature lower than 75°F *(24°)*, consult factory.
Capacities for R448A, R407A and R407C are based on mean temperature. Mean temperature is the average temperature between the saturated suction temperature and the temperature feeding the evaporator. For dew point ratings, consult factory.
For R449A, use R448A data.

*** CAPACITY CORRECTION FACTORS FOR LOW TEMPERATURE UNITS**

SATURATED SUCTION TEMPERATURE °F (°C)	0 (-17.8)	-10 (23.3)	-20 (-28.9)	-30 (-34.4)	-40 (-40)
FACTOR	1.06	1.03	1.0	0.92	0.85

NO CORRECTION FACTOR REQUIRED FOR MEDIUM TEMP. UNITS

**** REFRIGERANT CHARGE CONVERSION FACTORS**

R448A	R407C	R404A	R507	R22
0.96	0.99	0.92	0.93	1.02

ELECTRICAL DATA - 115/1/60

AIR DEFROST &
HOT GAS DEFROST WITH HOT GAS LOOP PAN MODELS

MODEL KLP	FPI	FAN MOTORS										
		QTY.	PSC MOTORS					EC MOTORS				
			HP	FLA TOTAL	WATTS	MIN. CIRC. AMPACITY (A)	MAX. FUSE (AMPS)	HP	FLA TOTAL	WATTS	MIN. CIRC. AMPACITY (A)	MAX. FUSE (AMPS)
104MA-S1 *	6	1	1/15	1.0	100	1.3	15	1/15	1.0	60	1.3	15
106MA-S1 *		1	1/15	1.0	100	1.3	15	1/15	1.0	60	1.3	15
107MA-S1 *		1	1/15	1.0	100	1.3	15	1/15	1.0	60	1.3	15
209M#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
211M#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
214M#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
317M#-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15
320M#-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15
423M#-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15
426M#-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15
532M#-S1		5	1/15	5.0	500	5.3	15	1/15	5.0	300	5.3	15
639M#-S1		6	1/15	6.0	600	6.3	15	1/15	6.0	360	6.3	15
207L†-S1	6	2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
209L†-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
211L†-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
314L†-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15
317L†-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15
419L†-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15
422L†-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15
527L†-S1		5	1/15	5.0	500	5.3	15	1/15	5.0	300	5.3	15
631L†-S1		6	1/15	6.0	500	6.3	15	1/15	6.0	360	6.3	15
206V†-S1	4	2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
208V†-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
209V†-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15
312V†-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15
315V†-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15
416V†-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15
419V†-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15
523V†-S1		5	1/15	5.0	500	5.3	15	1/15	5.0	300	5.3	15
627V†-S1		6	1/15	6.0	600	6.3	15	1/15	6.0	360	6.3	15

 # = A, H or R. Refer to Nomenclature for details

*** = H and R available on 2 to 6 fan models only.**

† = H or R. Refer to Nomenclature for details

ELECTRICAL DATA - 208-230/1/60

AIR DEFROST &
HOT GAS DEFROST WITH HOT GAS LOOP PAN MODELS

MODEL KLP	FPI	FAN MOTORS										
		QTY.	PSC MOTORS					EC MOTORS				
			HP	FLA TOTAL	WATTS	MIN. CIRC. AMPACITY (A)	MAX. FUSE (AMPS)	HP	FLA TOTAL	WATTS	MIN. CIRC. AMPACITY (A)	MAX. FUSE (AMPS)
104MA-S2 *	6	1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.8	15
106MA-S2 *		1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.8	15
107MA-S2 *		1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.8	15
209M#-S2		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15
211M#-S2		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15
214M#-S2		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15
317M#-S2		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15
320M#-S2		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15
423M#-S2		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15
426M#-S2		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15
532M#-S2		5	1/15	2.5	500	5.3	15	1/15	3.0	300	3.2	15
639M#-S2		6	1/15	3.0	600	6.3	15	1/15	3.6	360	3.8	15
207L†-S2	6	2	1/15	1.0	100	2.3	15	1/15	0.6	60	0.75	15
209L†-S2		2	1/15	1.0	100	2.3	15	1/15	0.6	60	0.75	15
211L†-S2		2	1/15	1.0	100	2.3	15	1/15	0.6	60	0.75	15
314L†-S2		3	1/15	1.5	200	3.3	15	1/15	1.2	120	1.4	15
317L†-S2		3	1/15	1.5	200	3.3	15	1/15	1.2	120	1.4	15
419L†-S2		4	1/15	2.0	200	4.3	15	1/15	1.2	120	1.4	15
422L†-S2		4	1/15	2.0	300	4.3	15	1/15	1.8	180	2.0	15
527L†-S2		5	1/15	2.5	300	5.3	15	1/15	1.8	180	2.0	15
631L†-S2		6	1/15	3.0	400	6.3	15	1/15	2.4	240	2.6	15
206V†-S2	4	2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15
208V†-S2		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15
209V†-S2		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15
312V†-S2		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15
315V†-S2		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15
416V†-S2		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15
419V†-S2		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15
523V†-S2		5	1/15	2.5	500	5.3	15	1/15	3.0	300	3.2	15
627V†-S2		6	1/15	3.0	600	6.3	15	1/15	3.6	360	3.8	15

 # = A, H or R. Refer to Nomenclature for details

*** = H and R available on 2 to 6 fan models only.**

† = H or R. Refer to Nomenclature for details

ELECTRICAL DATA - 460/1/60

AIR DEFROST &
HOT GAS DEFROST WITH HOT GAS LOOP PAN MODELS

MODEL KLP	FPI	FAN MOTORS					
		QUANTITY	PSC MOTORS				
			HP	FLA TOTAL	WATTS	MIN. CIRC. AMPACITY (A)	MAX. FUSE (AMPS)
209M#-S4	6	2	1/15	0.8	200	0.9	15
211M#-S4		2	1/15	0.8	200	0.9	15
214M#-S4		2	1/15	0.8	200	0.9	15
317M#-S4		3	1/15	1.2	300	1.3	15
320M#-S4		3	1/15	1.2	300	1.3	15
423M#-S4		4	1/15	1.6	400	1.7	15
426M#-S4		4	1/15	1.6	400	1.7	15
532M#-S4		5	1/15	2.0	500	2.1	15
639M#-S4		6	1/15	2.4	600	2.5	15
207L†-S4	6	2	1/15	0.8	200	0.9	15
209L†-S4		2	1/15	0.8	200	0.9	15
211L†-S4		2	1/15	0.8	200	0.9	15
314L†-S4		3	1/15	1.2	300	1.3	15
317L†-S4		3	1/15	1.2	300	1.3	15
419L†-S4		4	1/15	1.6	400	1.7	15
422L†-S4		4	1/15	1.6	400	1.7	15
527L†-S4		5	1/15	2.0	500	2.1	15
631L†-S4		6	1/15	2.4	600	2.5	15
206V†-S4	4	2	1/15	0.8	200	0.9	15
208V†-S4		2	1/15	0.8	200	0.9	15
209V†-S4		2	1/15	0.8	200	0.9	15
312V†-S4		3	1/15	1.2	300	1.3	15
315V†-S4		3	1/15	1.2	300	1.3	15
416V†-S4		4	1/15	1.6	400	1.7	15
419V†-S4		4	1/15	1.6	400	1.7	15
523V†-S4		5	1/15	2.0	500	2.1	15
627V†-S4		6	1/15	2.4	600	2.5	15

 # = A, H or R. Refer to Nomenclature for details

† = H or R. Refer to Nomenclature for details

ELECTRICAL DATA - 208-230/1/60 & 208-230/3/60

ELECTRIC DEFROST MODELS

MODEL KLP	FPI	FAN MOTORS											DEFROST HEATERS						
		QTY.	PSC MOTORS					EC MOTORS					TOTAL WATTS	208-230/1/60			208-230/3/60		
			HP	FLA TOTAL	WATTS	MCA (A)	MAX. FUSE (AMPS)	HP	FLA TOTAL	WATTS	MCA (A)	MAX. FUSE (AMPS)		TOTAL AMPS	MCA (A)	MAX. FUSE (AMPS)	TOTAL AMPS	MCA (A)	MAX. FUSE (AMPS)
104ME-*	6	1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.8	15	1060	4.6	5.8	15	3.0	3.8	15
106ME-*		1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.8	15	1060	4.6	5.8	15	3.0	3.8	15
107ME-*		1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.8	15	1060	4.6	5.8	15	3.0	3.8	15
209ME-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
211ME-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
214ME-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
317ME-*		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15	2730	11.9	14.8	15	7.7	10	15
320ME-*		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15	2730	11.9	14.8	15	7.7	10	15
423ME-*		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15	3560	15.5	19.3	20	10	12	15
426ME-*		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15	3560	15.5	19.3	20	10	12	15
532ME-*		5	1/15	2.5	500	5.3	15	1/15	3.0	300	3.2	15	4400	19.1	23.9	25	12	15.1	20
639ME-*		6	1/15	3.0	600	6.3	15	1/15	3.6	360	3.8	15	5230	22.7	28.4	30	15	18	20
104LE-*	6	1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.75	15	1060	4.6	5.8	15	3.0	3.8	15
105LE-*		1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.75	15	1060	4.6	5.8	15	3.0	3.8	15
106LE-*		1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.75	15	1060	4.6	5.8	15	3.0	3.8	15
207LE-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
209LE-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
211LE-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
314LE-*		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15	2730	11.9	14.8	15	7.7	10	15
317LE-*		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15	2730	11.9	14.8	15	7.7	10	15
419LE-*		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15	3560	15.5	19.3	20	10	12	15
422LE-*		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15	3560	15.5	19.3	20	10	12	15
527LE-*		5	1/15	2.5	500	5.3	15	1/15	3.0	300	3.2	15	4400	19.1	23.9	25	12	15.1	20
631LE-*		6	1/15	3.0	600	6.3	15	1/15	3.6	360	3.8	15	5230	22.7	28.4	30	15	18	20
103VE-*	4	1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.75	15	1060	4.6	5.8	15	3.0	3.8	15
104VE-*		1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.75	15	1060	4.6	5.8	15	3.0	3.8	15
105VE-*		1	1/15	0.5	100	1.3	15	1/15	0.6	60	0.75	15	1060	4.6	5.8	15	3.0	3.8	15
206VE-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
208VE-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
209VE-*		2	1/15	1.0	200	2.3	15	1/15	1.2	120	1.4	15	1890	8.2	10.3	15	5.3	6.7	15
312VE-*		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15	2730	11.9	14.8	15	7.7	10	15
315VE-*		3	1/15	1.5	300	3.3	15	1/15	1.8	180	2.0	15	2730	11.9	14.8	15	7.7	10	15
416VE-*		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15	3560	15.5	19.3	20	10	12	15
419VE-*		4	1/15	2.0	400	4.3	15	1/15	2.4	240	2.6	15	3560	15.5	19.3	20	10	12	15
523VE-*		5	1/15	2.5	500	5.3	15	1/15	3.0	300	3.2	15	4400	19.1	23.9	25	12	15.1	20
627VE-*		6	1/15	3.0	600	6.3	15	1/15	3.6	360	3.8	15	5230	22.7	28.4	30	15	18	20

*** = S2 or T3. Refer to Nomenclature for details**

ELECTRICAL DATA - 460/1/60

ELECTRIC DEFROST MODELS

MODEL KLP	FPI	FAN MOTORS						DEFROST HEATERS			
		QTY.	PSC MOTORS					TOTAL WATTS	TOTAL AMPS	MCA (A)	MAX. FUSE (AMPS)
			HP	FLA TOTAL	WATTS	MCA (A)	MAX. FUSE (AMPS)				
209ME-S4	6	2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
211ME-S4		2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
214ME-S4		2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
317ME-S4		3	1/15	1.2	300	1.3	15	2730	5.9	7.4	15
320ME-S4		3	1/15	1.2	300	1.3	15	2730	5.9	7.4	15
423ME-S4		4	1/15	1.6	400	1.7	15	3560	7.7	9.7	15
426ME-S4		4	1/15	1.6	400	1.7	15	3560	7.7	9.7	15
532ME-S4		5	1/15	2.0	500	2.1	15	4400	9.6	12.0	15
639ME-S4		6	1/15	2.4	600	2.5	15	5230	11.4	14.2	15
207LE-S4	6	2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
209LE-S4		2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
211LE-S4		2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
314LE-S4		3	1/15	1.2	300	1.3	15	2730	5.9	7.4	15
317LE-S4		3	1/15	1.2	300	1.3	15	2730	5.9	7.4	15
419LE-S4		4	1/15	1.6	400	1.7	15	3560	7.7	9.7	15
422LE-S4		4	1/15	1.6	400	1.7	15	3560	7.7	9.7	15
527LE-S4		5	1/15	2.0	500	2.1	15	4400	9.6	12.0	15
631LE-S4		6	1/15	2.4	600	2.5	15	5230	11.4	14.2	15
206VE-S4	4	2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
208VE-S4		2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
209VE-S4		2	1/15	0.8	200	0.9	15	1890	4.1	5.1	15
312VE-S4		3	1/15	1.2	300	1.3	15	2730	5.9	7.4	15
315VE-S4		3	1/15	1.2	300	1.3	15	2730	5.9	7.4	15
416VE-S4		4	1/15	1.6	400	1.7	15	3560	7.7	9.7	15
419VE-S4		4	1/15	1.6	400	1.7	15	3560	7.7	9.7	15
523VE-S4		5	1/15	2.0	500	2.1	15	4400	9.6	12.0	15
627VE-S4		6	1/15	2.4	600	2.5	15	5230	11.4	14.2	15

ELECTRICAL DATA - 115/1/60

HOT GAS DEFROST
WITH DRAIN PAN HEATER MODELS

MODEL KLP	FPI	FAN MOTORS											DRAIN PAN HEATERS			
		QTY.	PSC MOTORS					EC MOTORS					TOTAL WATTS	TOTAL AMPS	MCA (A)	MAX. FUSE (AMPS)
			HP	FLA TOTAL	WATTS	MCA (A)	MAX. FUSE (AMPS)	HP	FLA TOTAL	WATTS	MCA (A)	MAX. FUSE (AMPS)				
209M#-S1	6	2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
211M#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
214M#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
317M#-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15	560	4.9	6.1	15
320M#-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15	560	4.9	6.1	15
423M#-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15	720	6.3	7.8	15
426M#-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15	720	6.3	7.8	15
532M#-S1		5	1/15	5.0	500	5.3	15	1/15	5.0	300	5.3	15	880	7.7	9.6	15
639M#-S1		6	1/15	6.0	600	6.3	15	1/15	6.0	360	6.3	15	1030	9.0	11.2	15
207L#-S1	6	2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
209L#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
211L#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
314L#-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15	560	4.9	6.1	15
317L#-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15	560	4.9	6.1	15
419L#-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15	720	6.3	7.8	15
422L#-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15	720	6.3	7.8	15
527L#-S1		5	1/15	5.0	500	5.3	15	1/15	5.0	300	5.3	15	880	7.7	9.6	15
631L#-S1		6	1/15	6.0	600	6.3	15	1/15	6.0	360	6.3	15	1030	9.0	11.2	15
206V#-S1	4	2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
208V#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
209V#-S1		2	1/15	2.0	200	2.3	15	1/15	2.0	120	2.3	15	410	3.6	4.5	15
312V#-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15	560	4.9	6.1	15
315V#-S1		3	1/15	3.0	300	3.3	15	1/15	3.0	180	3.3	15	560	4.9	6.1	15
416V#-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15	720	6.3	7.8	15
419V#-S1		4	1/15	4.0	400	4.3	15	1/15	4.0	240	4.3	15	720	6.3	7.8	15
523V#-S1		5	1/15	5.0	500	5.3	15	1/15	5.0	300	5.3	15	880	7.7	9.6	15
627V#-S1		6	1/15	6.0	600	6.3	15	1/15	6.0	360	6.3	15	1030	9.0	11.2	15

 # = T or G. Refer to Nomenclature for details

ELECTRICAL DATA - 208-230/1/60

HOT GAS DEFROST
WITH DRAIN PAN HEATER MODELS

MODEL KLP	FPI	FAN MOTORS											DRAIN PAN HEATERS			
			PSC MOTORS					EC MOTORS								
		QTY.	HP	FLA TOTAL	WATTS	MCA (A)	MAX. FUSE (AMPS)	HP	FLA TOTAL	WATTS	MCA (A)	MAX. FUSE (AMPS)	TOTAL WATTS	TOTAL AMPS	MCA (A)	MAX. FUSE (AMPS)
209M^-S2	6	2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
211M^-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
214M^-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
317M^-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15	560	2.4	3.0	15
320M^-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15	560	2.4	3.0	15
423M^-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15	720	3.1	3.9	15
426M^-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15	720	3.1	3.9	15
532M^-S2		5	1/15	2.5	500	2.6	15	1/15	3.0	300	3.2	15	880	3.8	4.8	15
639M^-S2		6	1/15	3.0	600	3.1	15	1/15	3.6	360	3.8	15	1030	4.0	5.0	15
207L^-S2	6	2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
209L^-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
211L^-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
314L^-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15	560	2.4	3.0	15
317L^-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15	560	2.4	3.0	15
419L^-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15	720	3.1	3.9	15
422L^-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15	720	3.1	3.9	15
527L^-S2		5	1/15	2.5	500	2.6	15	1/15	3.0	300	3.2	15	880	3.8	4.8	15
631L^-S2		6	1/15	3.0	600	3.1	15	1/15	3.6	360	3.8	15	1030	4.0	5.0	15
206V^-S2	4	2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
208V^-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
209V^-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15	410	1.8	2.2	15
312V^-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15	560	2.4	3.0	15
315V^-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15	560	2.4	3.0	15
416V^-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15	720	3.1	3.9	15
419V^-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15	720	3.1	3.9	15
523V^-S2		5	1/15	2.5	500	2.6	15	1/15	3.0	300	3.2	15	880	3.8	4.8	15
627V^-S2		6	1/15	3.0	600	3.1	15	1/15	3.6	360	3.8	15	1030	4.0	5.0	15

^ = T or G. Refer to Nomenclature for details

ELECTRICAL DATA - 460/1/60

HOT GAS DEFROST
WITH DRAIN PAN HEATER MODELS

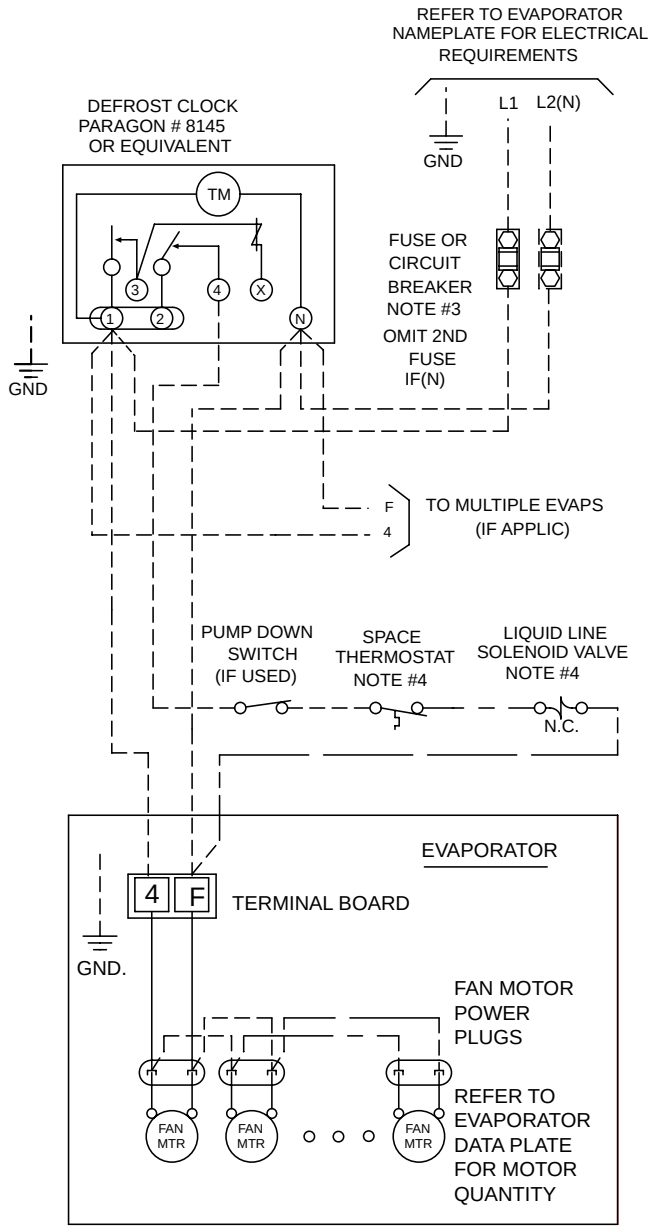
MODEL KLP	FPI	FAN MOTORS						DRAIN PAN HEATERS			
		QTY.	PSC MOTORS					TOTAL WATTS	TOTAL AMPS	MCA (A)	MAX. FUSE (AMPS)
			HP	FLA TOTAL	WATTS	MCA (A)	MAX. FUSE (AMPS)				
209M^-S4	6	2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
211M^-S4		2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
214M^-S4		2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
317M^-S4		3	1/15	1.2	300	1.3	15	560	1.2	1.5	15
320M^-S4		3	1/15	1.2	300	1.3	15	560	1.2	1.5	15
423M^-S4		4	1/15	1.6	400	1.7	15	720	1.6	2.0	15
426M^-S4		4	1/15	1.6	400	1.7	15	720	1.6	2.0	15
532M^-S4		5	1/15	2.0	500	2.1	15	880	1.9	2.4	15
639M^-S4		6	1/15	2.4	600	2.5	15	1030	2.2	2.8	15
207L^-S4	6	2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
209L^-S4		2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
211L^-S4		2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
314L^-S4		3	1/15	1.2	300	1.3	15	560	1.2	1.5	15
317L^-S4		3	1/15	1.2	300	1.3	15	560	1.2	1.5	15
419L^-S4		4	1/15	1.6	400	1.7	15	720	1.6	2.0	15
422L^-S4		4	1/15	1.6	400	1.7	15	720	1.6	2.0	15
527L^-S4		5	1/15	2.0	500	2.1	15	880	1.9	2.4	15
631L^-S4		6	1/15	2.4	600	2.5	15	1030	2.2	2.8	15
206V^-S4	4	2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
208V^-S4		2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
209V^-S4		2	1/15	0.8	200	0.9	15	410	0.9	1.1	15
312V^-S4		3	1/15	1.2	300	1.3	15	560	1.2	1.5	15
315V^-S4		3	1/15	1.2	300	1.3	15	560	1.2	1.5	15
416V^-S4		4	1/15	1.6	400	1.7	15	720	1.6	2.0	15
419V^-S4		4	1/15	1.6	400	1.7	15	720	1.6	2.0	15
523V^-S4		5	1/15	2.0	500	2.1	15	880	1.9	2.4	15
627V^-S4		6	1/15	2.4	600	2.5	15	1030	2.2	2.8	15

^ = T or G. Refer to Nomenclature for details

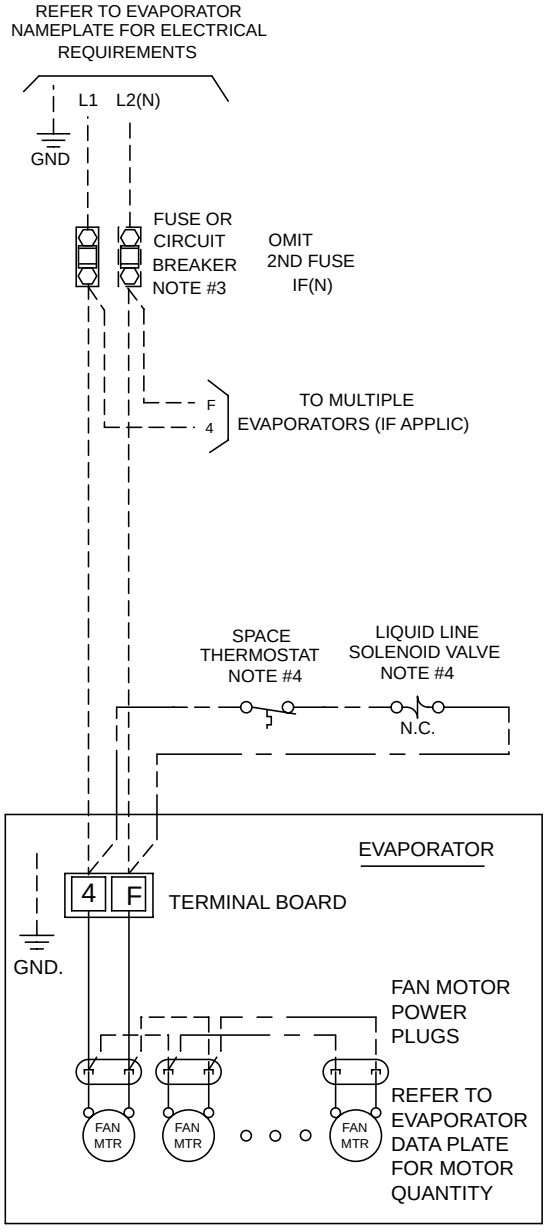
WIRING DIAGRAM - 115/1/60, 208-230/1/60

STANDARD PSC MOTORS
AIR DEFROST MODELS

WITH DEFROST TIME CLOCK



WITHOUT DEFROST TIME CLOCK



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4). MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR .

1-LP AIR 09/06

TERMINALS

O -COMPONENT TERMINAL

☐ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

– – – – – – – – WIRING BY OTHERS

——— – ——— OPTIONAL FACTORY OR BY OTHERS

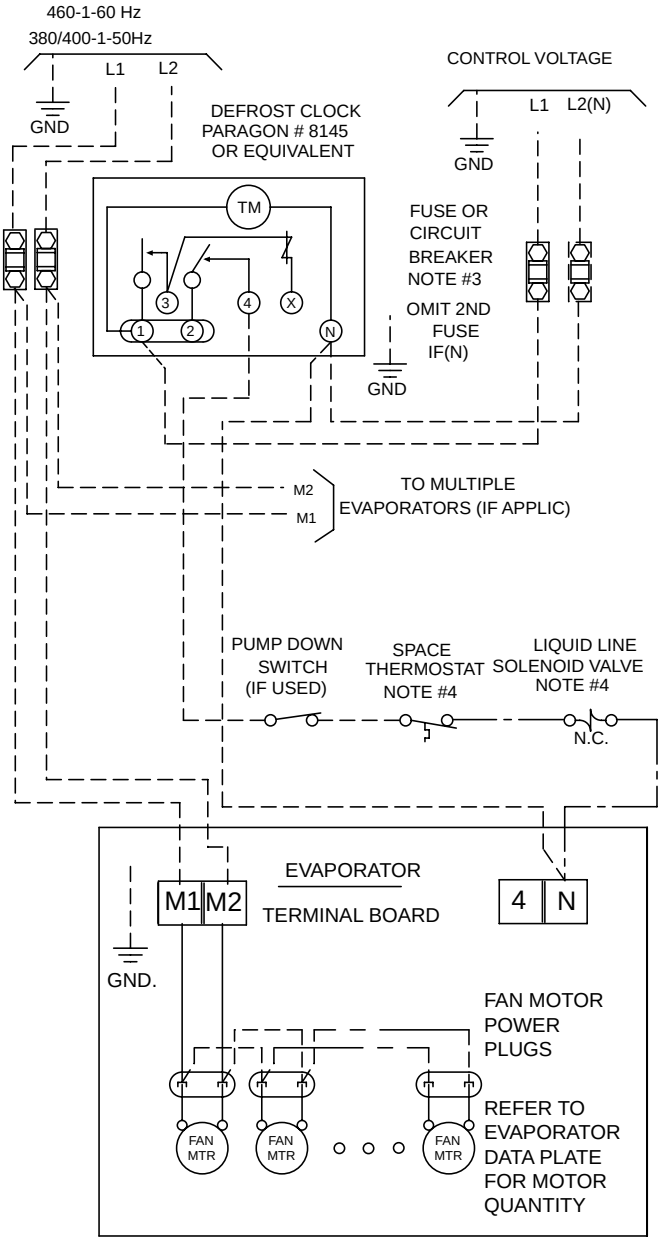
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

WIRING DIAGRAM - 460/1/60

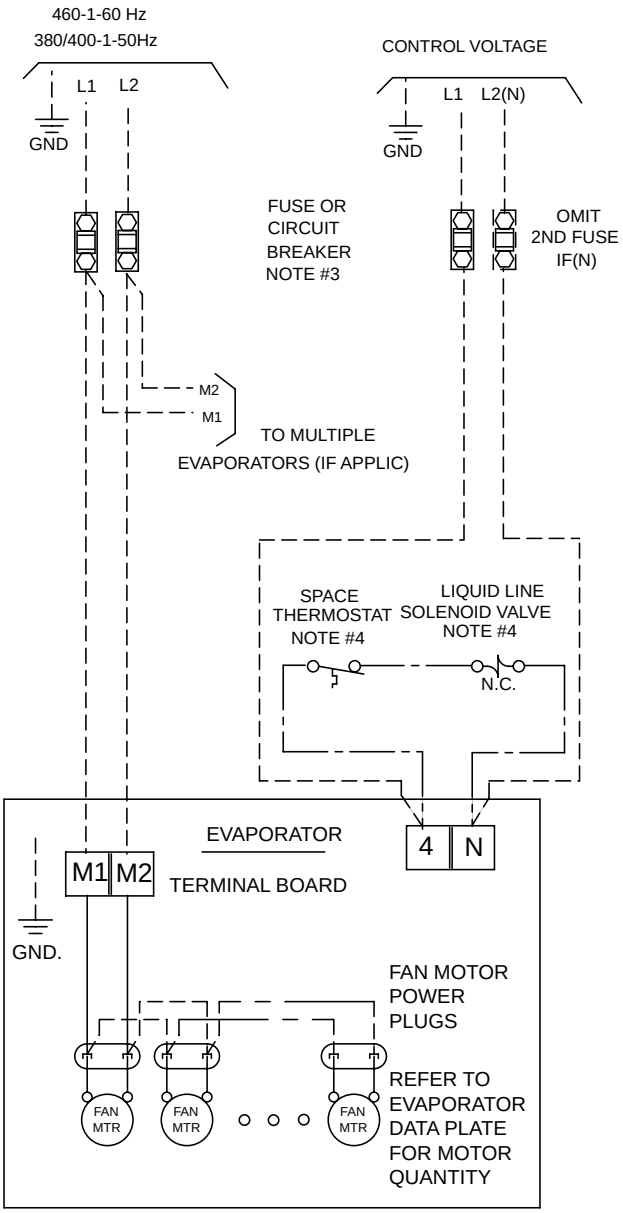
STANDARD PSC MOTORS

AIR DEFROST MODELS

WITH DEFROST TIME CLOCK



WITHOUT DEFROST TIME CLOCK



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4). MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR .

6-LP 460 AIR 09/06

TERMINALS

O -COMPONENT TERMINAL

☐ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

– – – – – – – – – WIRING BY OTHERS

——— – ——— OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

WIRING DIAGRAM - 208-230/1/60

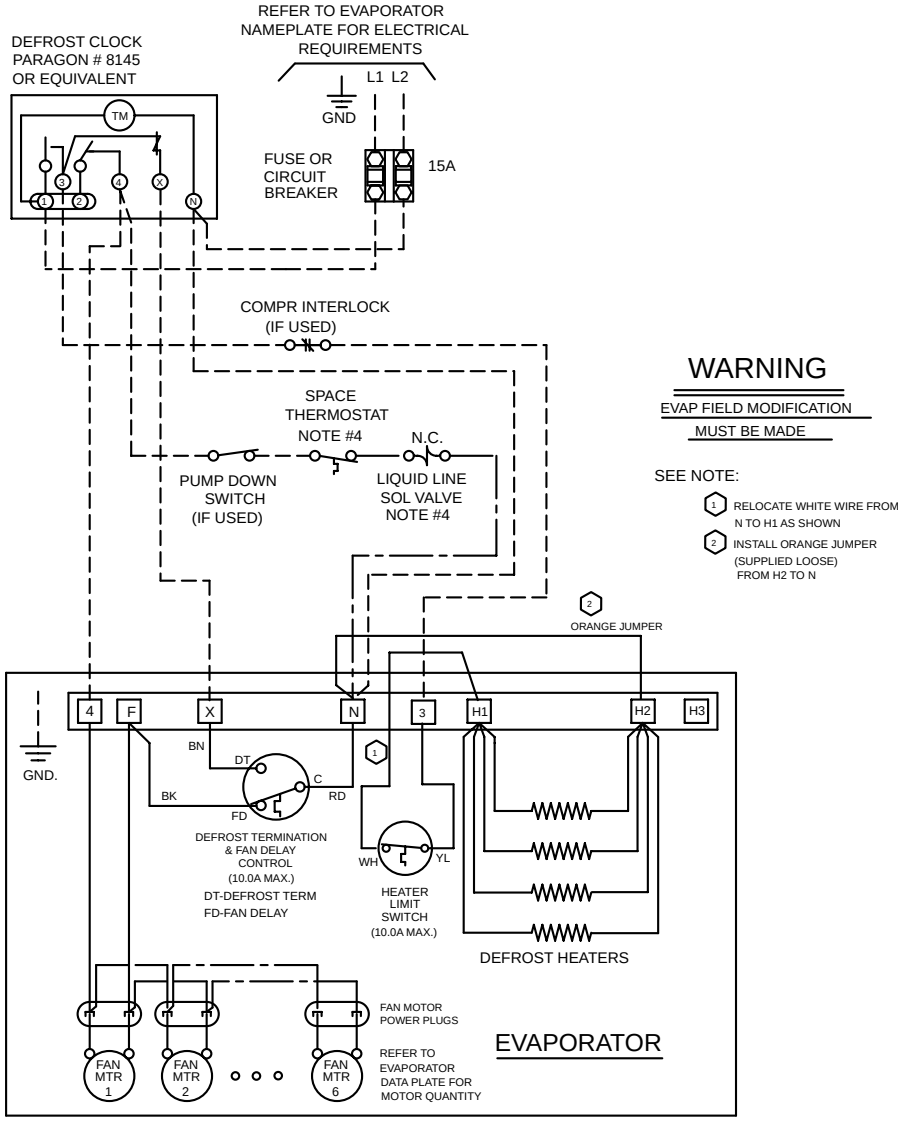
PSC 60Hz

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - SINGLE EVAPORATOR 10A MAX.

FOR ALL MODELS WITHOUT DEFROST HEATER CONTACTOR

USING MAXIMUM 15A HEATER OVERCURRENT PROTECTION



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4.) MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR

TERMINALS

O -COMPONENT TERMINAL

☐ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

– – – – – – – – WIRING BY OTHERS

– — – — – — OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

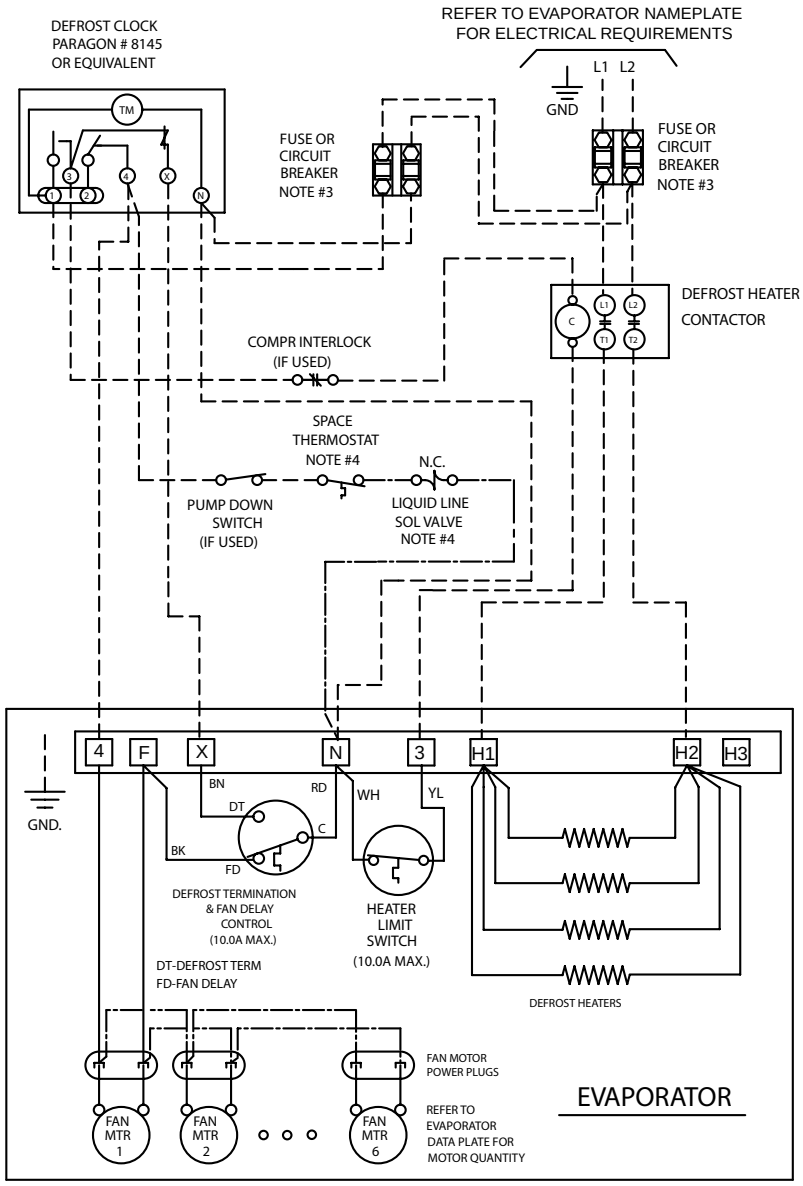
2-LP ED 12/07

WIRING DIAGRAM - 208-230/1/60

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - SINGLE EVAPORATOR

FOR ALL MODELS USING DEFROST HEATER CONTACTOR



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4.) MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR

TERMINALS

O -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

– – – – – – – – – WIRING BY OTHERS

– – —— · —— – – OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

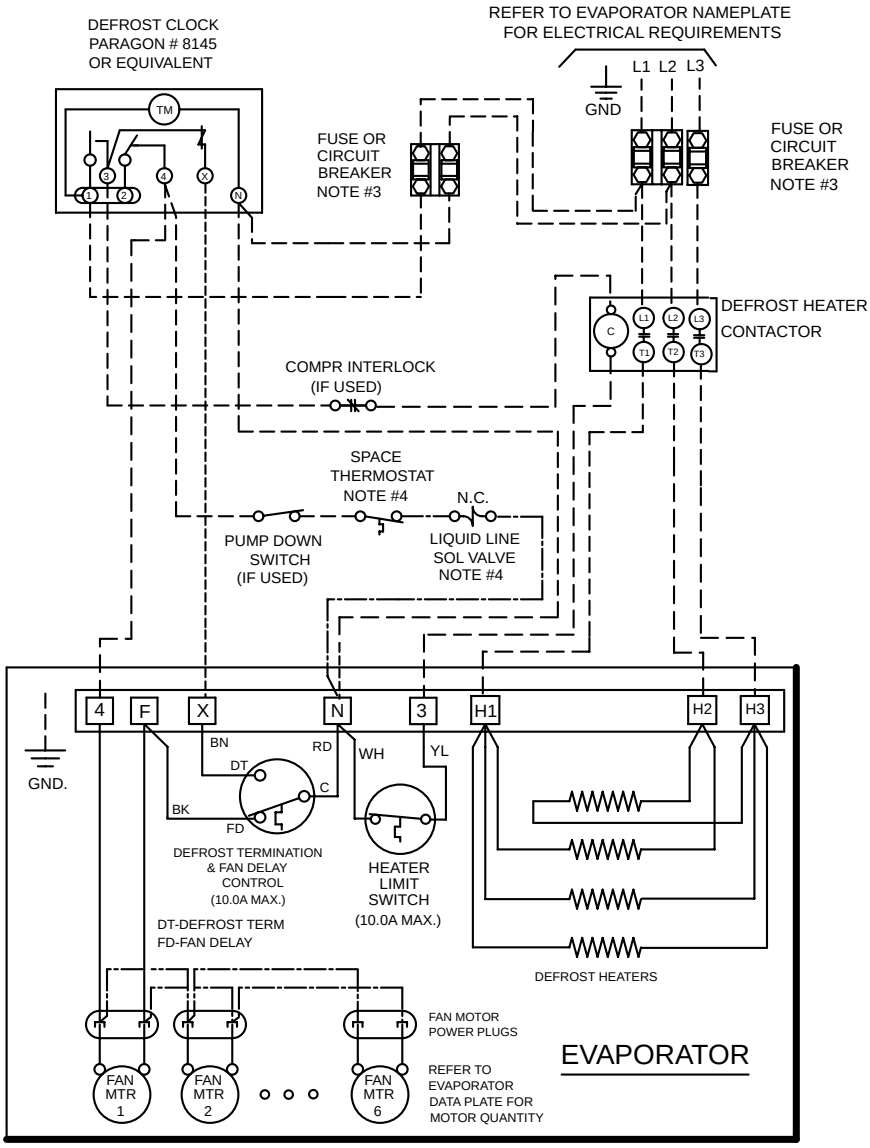
3-LP ED CONTACTOR SINGLE 12/07

WIRING DIAGRAM - 208-230/3/60

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - SINGLE EVAPORATOR

FOR ALL MODELS USING 3 PHASE DEFROST HEATER CONTACTOR



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4.) MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR

TERMINALS

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

– – – – – – – – – WIRING BY OTHERS

——————— OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

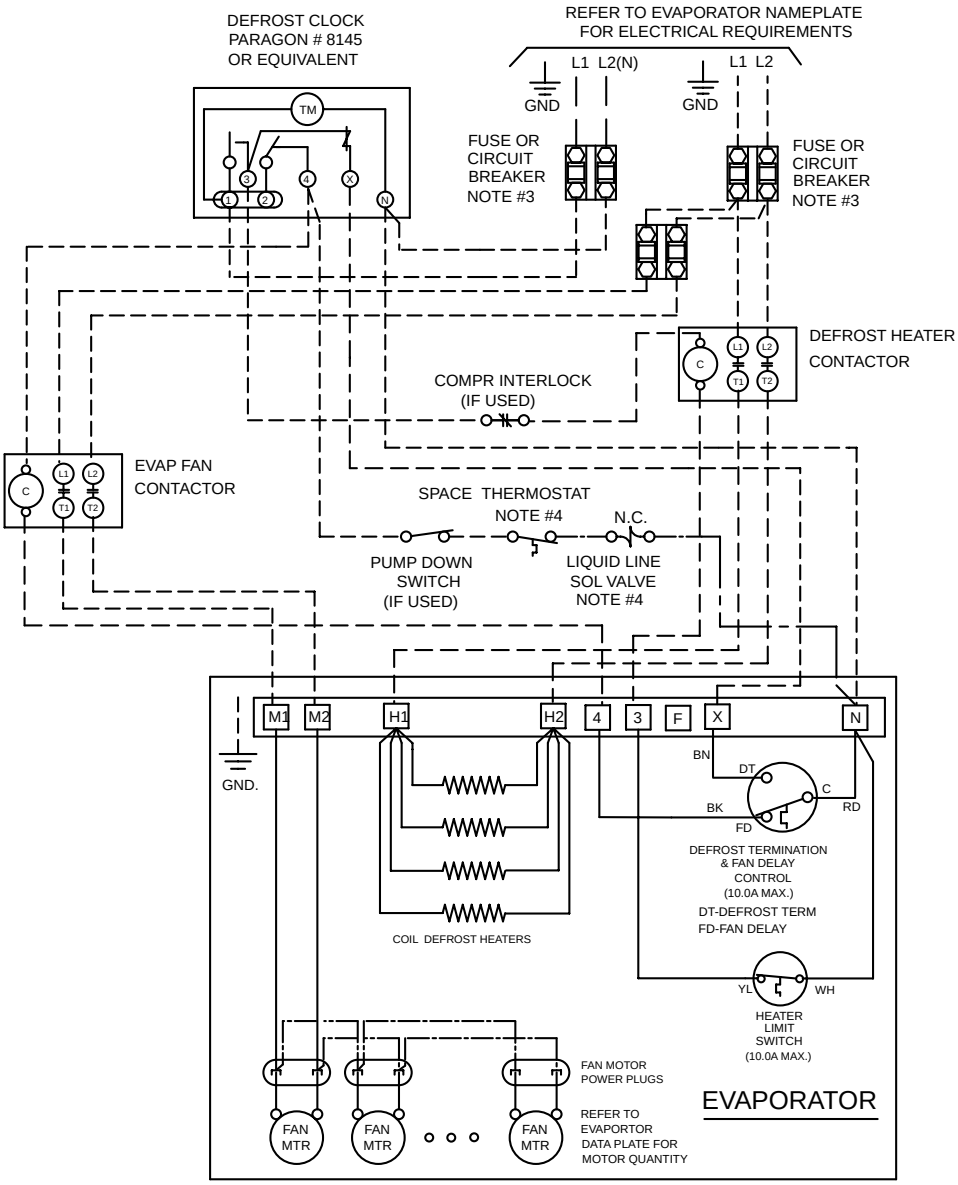
3A-LP ED 3ph.CONTACTOR SINGLE 12/07

WIRING DIAGRAM - 460/1/60

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - SINGLE EVAPORATOR

FOR ALL 460V MODELS USING DEFROST HEATER AND FAN CONTACTORS



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4.) MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR

7-LP ED CONTACTOR SINGLE 12/07

TERMINALS

O -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

– – – – – – – – – WIRING BY OTHERS

-·—·—·—·—·— OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

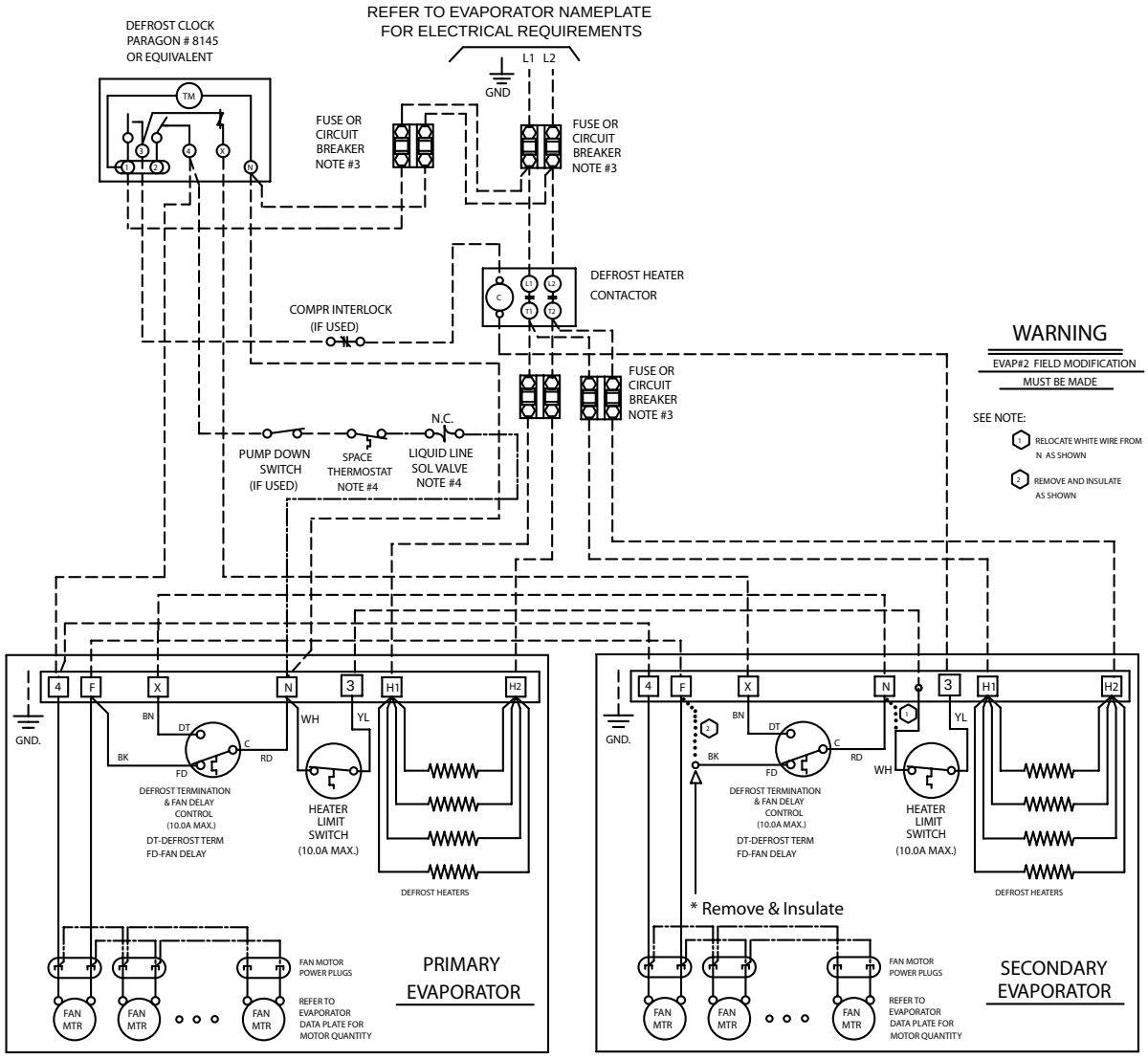
WIRING DIAGRAM - 208-230/1/60

PSC 60Hz

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - MULTIPLE EVAPORATORS

FOR ALL MODELS USING DEFROST HEATER CONTACTOR



* Fan delay not used on second evap / use fan contactor if total fan amps exceeds 10A

NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4.) MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR

4-LP ED CONTACTOR MULTI 12/07

TERMINALS

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——— FACTORY WIRING

- - - - - - - - - - WIRING BY OTHERS

— ——— OPTIONAL FACTORY OR BY OTHERS

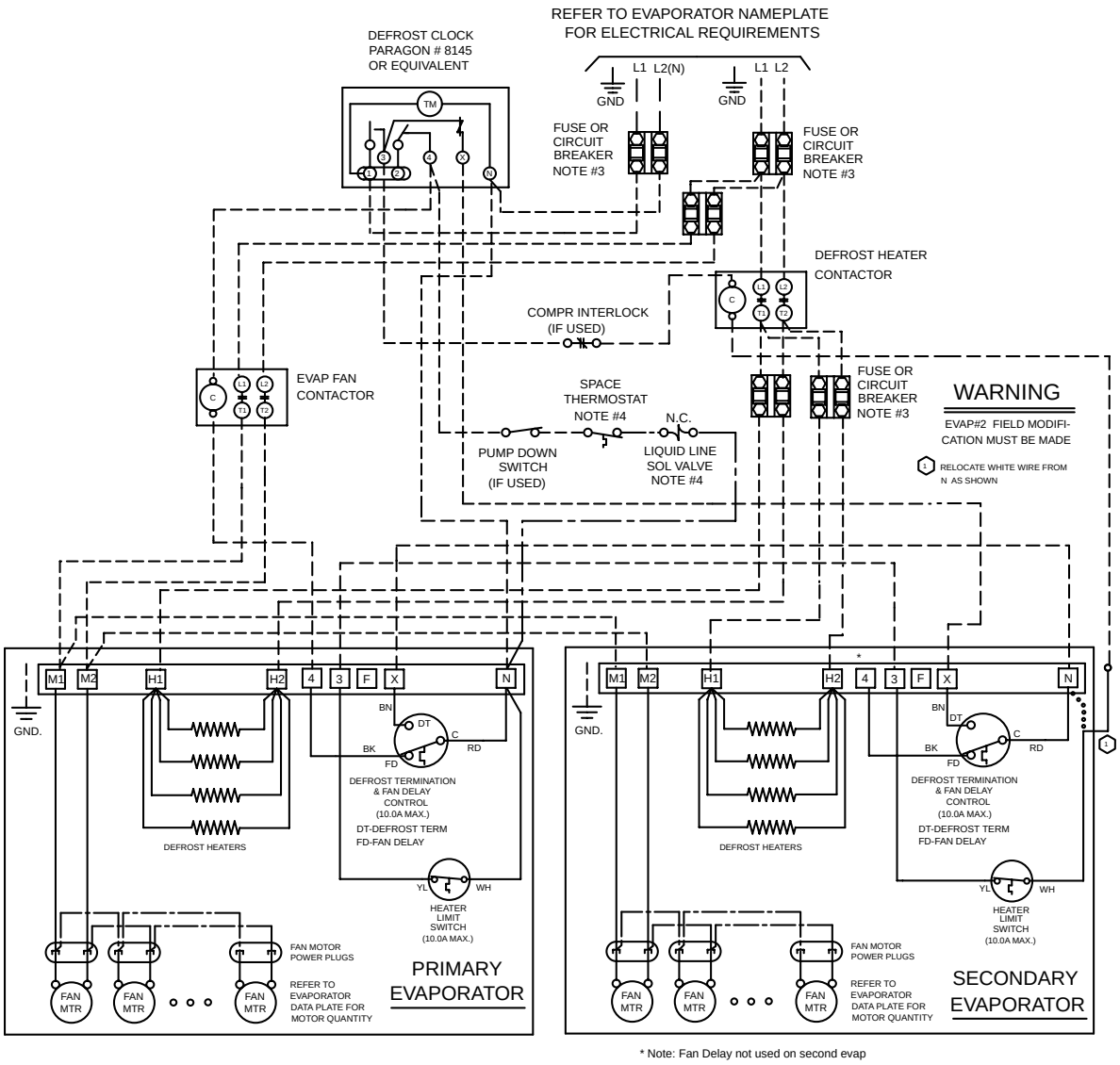
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

WIRING DIAGRAM - 460/1/60

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - MULTIPLE EVAPORATORS

FOR ALL 460V MODELS USING DEFROST HEATER AND FAN CONTACTORS



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4.) MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR

8-LP 460v ED CONTACTOR MULTI 09/06

TERMINALS

O -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

———— FACTORY WIRING

- - - - - - - - - - WIRING BY OTHERS

— ———— OPTIONAL FACTORY OR BY OTHERS

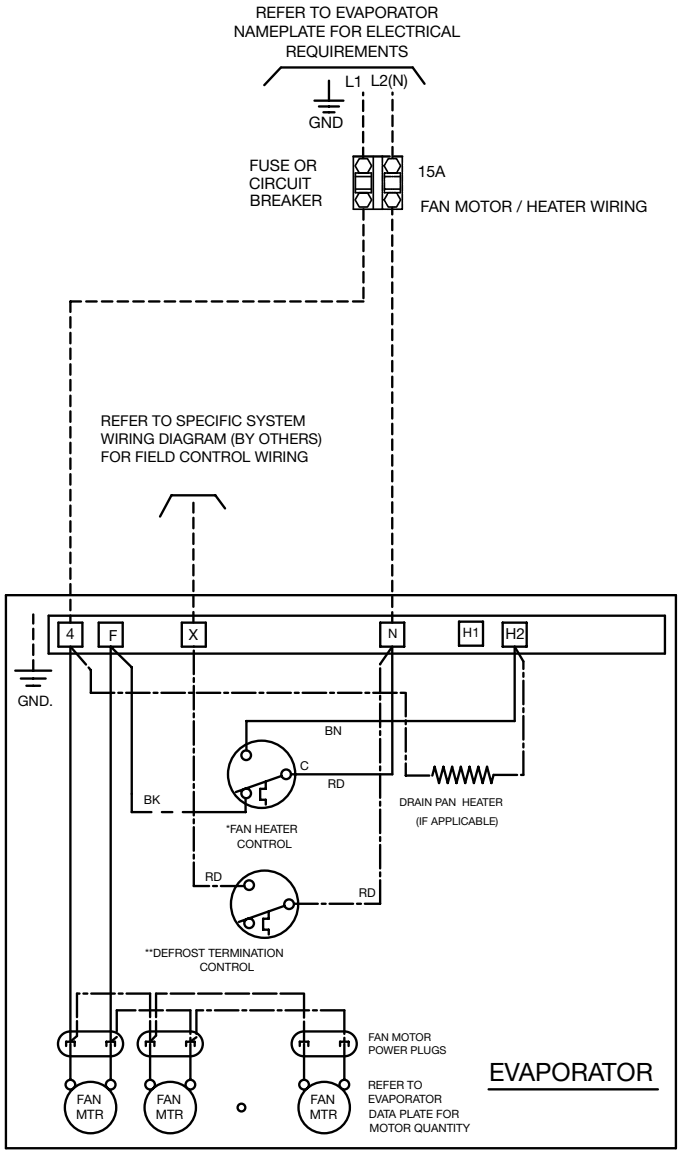
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

WIRING DIAGRAM - 115/1/60, 208-230/1/60

STANDARD PSC MOTORS

HOT GAS DEFROST MODELS

USING MAXIMUM 15A HEATER OVERCURRENT PROTECTION



*FAN HEATER
CONTROL
ON REVERSE CYCLE LOCATED AT SUCTION LINE.
ON THREE-PIPE LOCATED AT DISTRIBUTOR SIDE PORT.
NOTE: DURING THE HOT GAS DEFROST CYCLE
THE FAN/HEATER CONTROL DE-ENERGIZES THE
EVAPORATOR FANS AND ENERGIZES THE
DRAIN PAN HEATER.
(ANYTIME THE TEMPERATURE OF THE INCOMING
REFRIGERANT GAS IS ABOVE 50° F).

**DEFROST TERMINATION
CONTROL
OPTIONAL FACTORY WIRED OR BY OTHERS
LOCATED ON TUBE END SHEET
THE CONTROL CLOSES WHEN REACHES 55` F (20 F DIFF)

NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4.) MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR

5-LP HG 08/06

TERMINALS

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

- - - - - - - - - - - - WIRING BY OTHERS

- — ——————— OPTIONAL FACTORY OR BY OTHERS

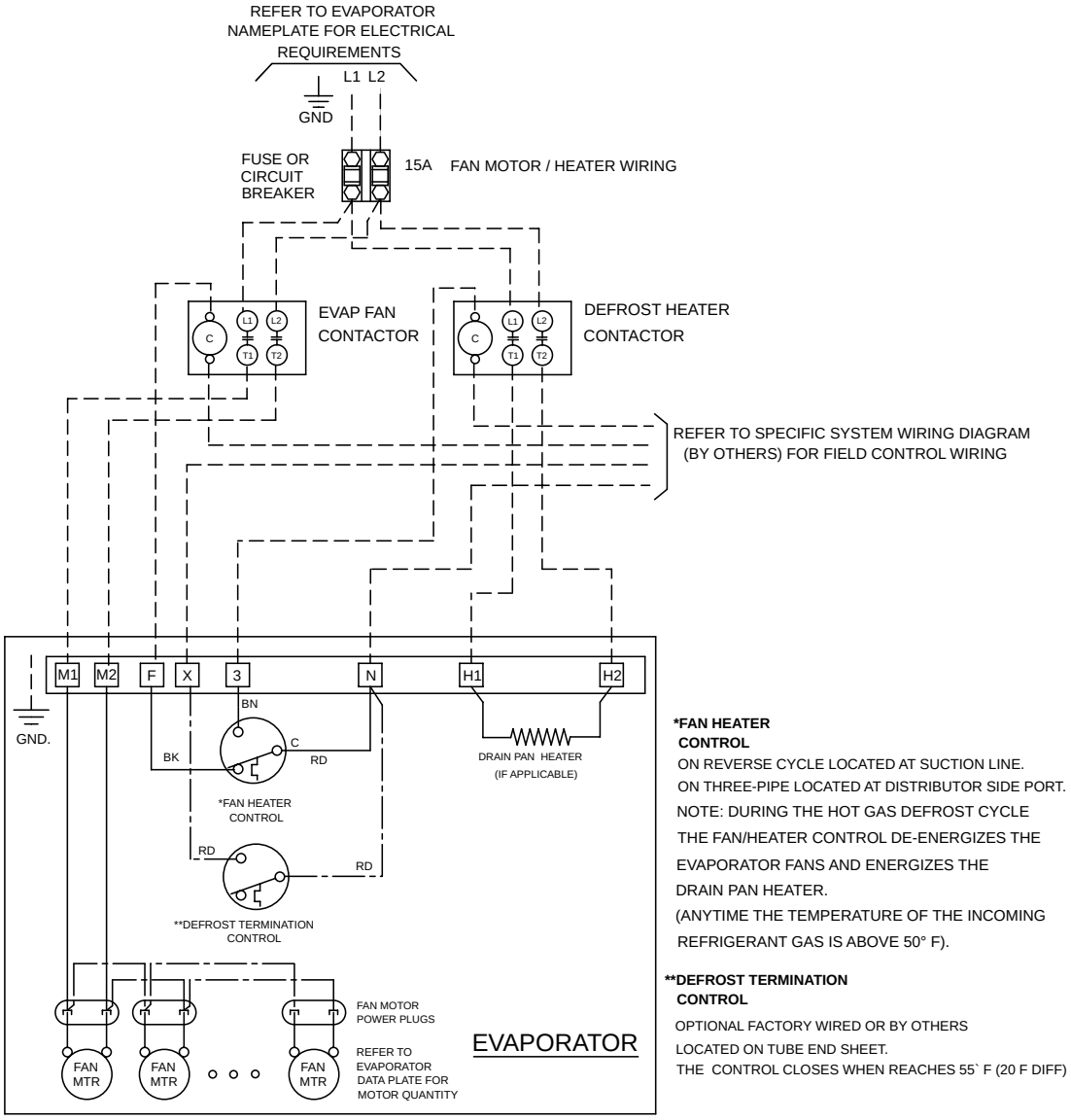
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

WIRING DIAGRAM - 460/1/60

STANDARD PSC MOTORS

HOT GAS DEFROST MODELS

USING MAXIMUM 15A HEATER OVERCURRENT PROTECTION



***FAN HEATER CONTROL**

ON REVERSE CYCLE LOCATED AT SUCTION LINE.
ON THREE-PIPE LOCATED AT DISTRIBUTOR SIDE PORT.
NOTE: DURING THE HOT GAS DEFROST CYCLE THE FAN/HEATER CONTROL DE-ENERGIZES THE EVAPORATOR FANS AND ENERGIZES THE DRAIN PAN HEATER.
(ANYTIME THE TEMPERATURE OF THE INCOMING REFRIGERANT GAS IS ABOVE 50° F).

****DEFROST TERMINATION CONTROL**

OPTIONAL FACTORY WIRED OR BY OTHERS
LOCATED ON TUBE END SHEET.
THE CONTROL CLOSES WHEN REACHES 55` F (20 F DIFF)

NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 90°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4.) MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR

TERMINALS

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

– – – – – – – – – WIRING BY OTHERS

·——·——·——· OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

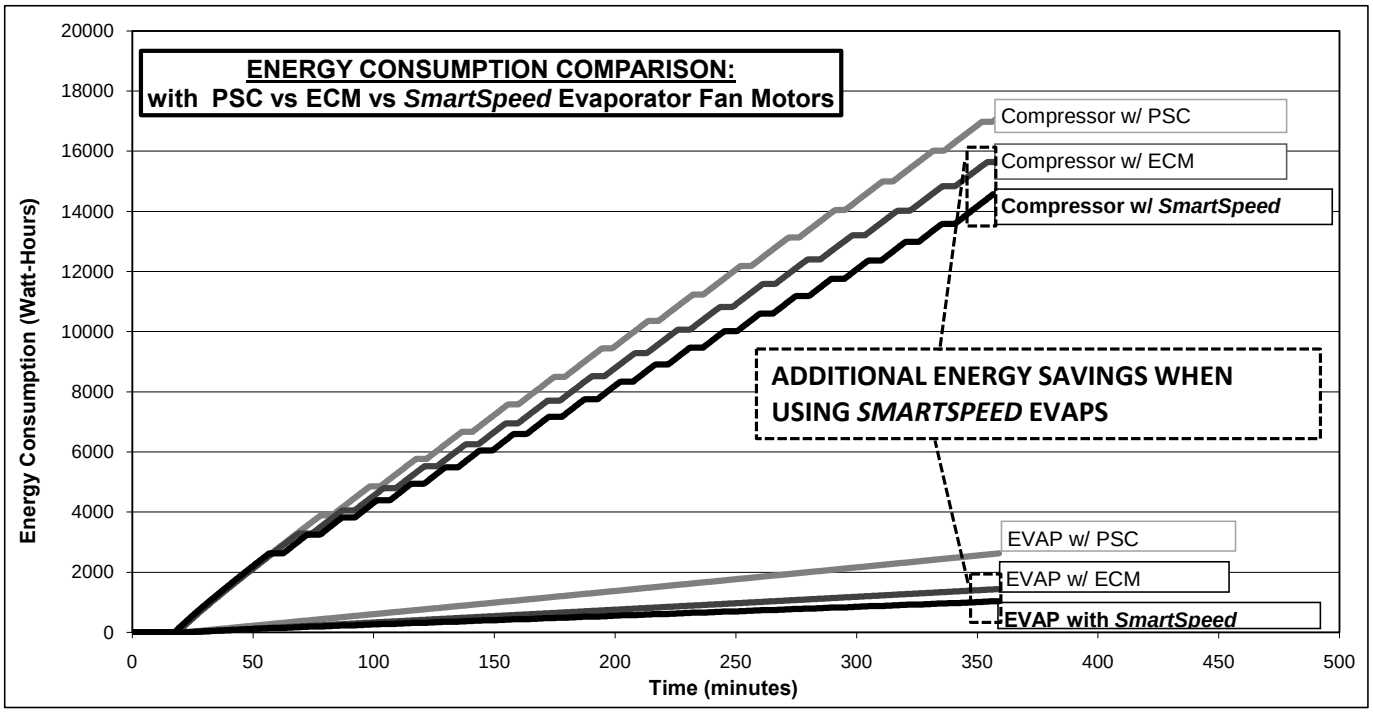
9-LP 460 HG 05/06

US Patents Nos.
8,635,883
& 9,151,525

2010 AHR Expo® INNOVATION AWARDS Value Impact Application Honorable Mention

DESIGN FEATURES

- Standard on all EC Motors
- NO special controls required.
- Refrigeration mode – EC motor operates at full speed. Consumption 60 W per motor
- Off Cycle mode – EC motor operates at reduced speed. Consumption 13 W per motor.
- Energy saving benefit on motor and compressor wattage consumption:



Note: Data collected on a typical freezer application with a 3HP low temp condensing unit and a 4 fan KLP evaporator

INSTALLATION NOTES

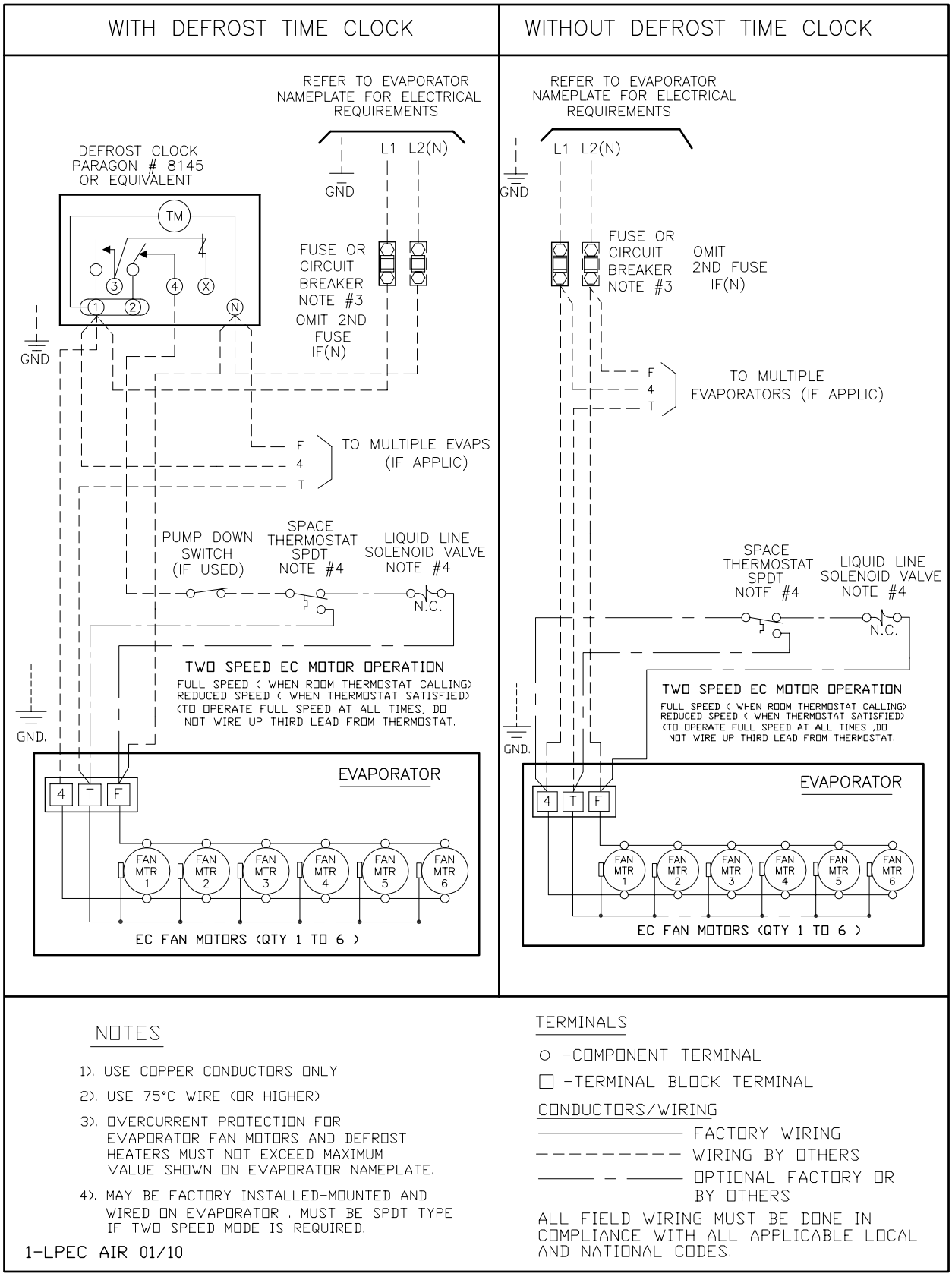
EC motors are factory wired for SmartSpeed operation on evaporators equipped **with** a factory installed thermostat.

For SmartSpeed operation on Evaporators **without** a factory installed thermostat, a field wired SPDT type thermostat is required.

WIRING DIAGRAM - 115/1/60, 208-230/1/60

OPTIONAL EC MOTORS with SMARTSPEED™

AIR DEFROST MODELS



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4). MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR . MUST BE SPDT TYPE IF TWO SPEED MODE IS REQUIRED.

1-LPEC AIR 01/10

TERMINALS

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

———————— FACTORY WIRING

– – – – – – – – – WIRING BY OTHERS

——— – ——— OPTIONAL FACTORY OR BY OTHERS

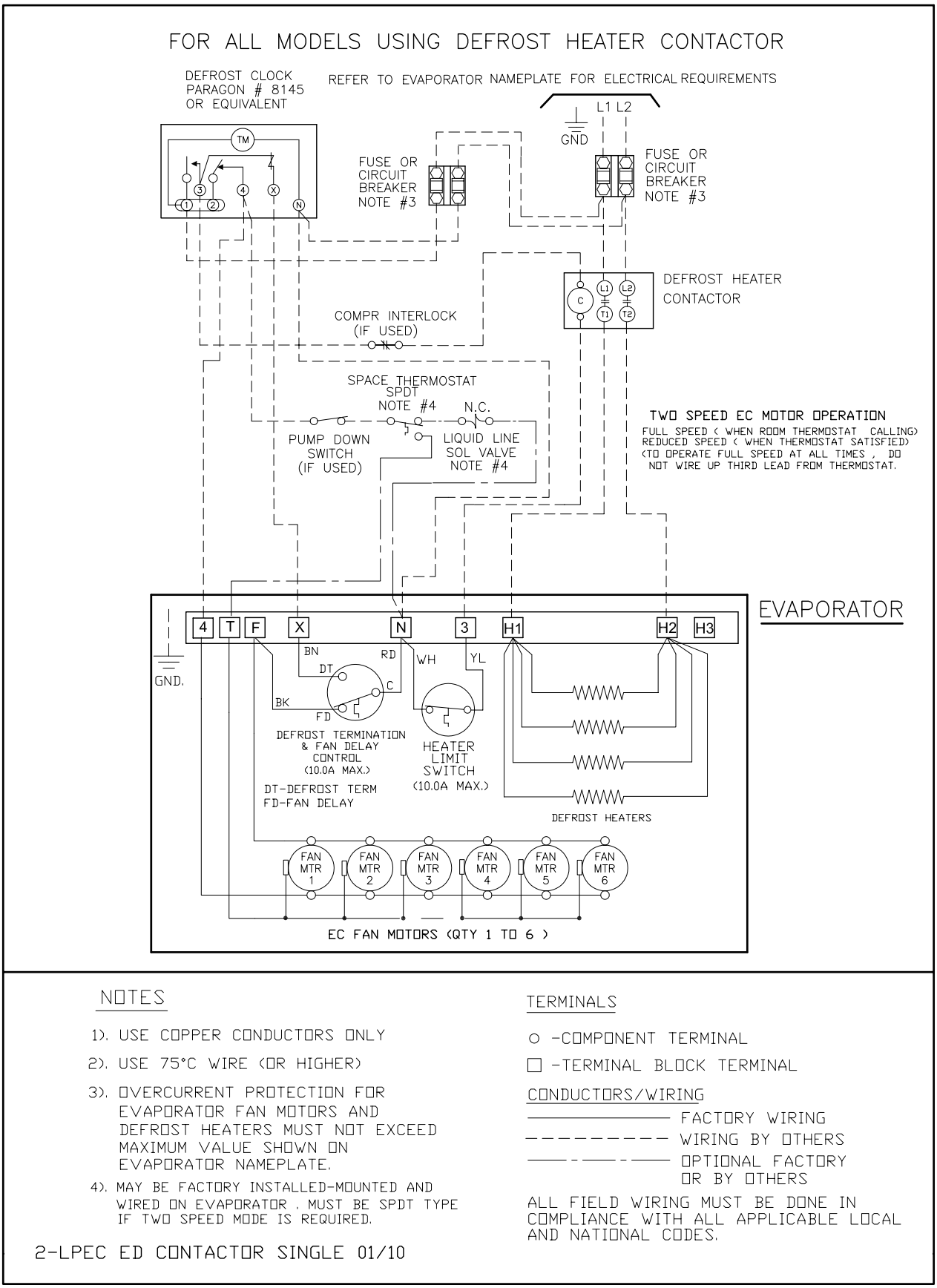
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

WIRING DIAGRAM - 208-230/1/60

OPTIONAL EC MOTORS with SMARTSPEED™

ELECTRIC DEFROST MODELS

ECM 60Hz



NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4). MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR . MUST BE SPDT TYPE IF TWO SPEED MODE IS REQUIRED.

2-LPEC ED CONTACTOR SINGLE 01/10

TERMINALS

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

———————— FACTORY WIRING

– – – – – – – – – WIRING BY OTHERS

——-——-—— OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

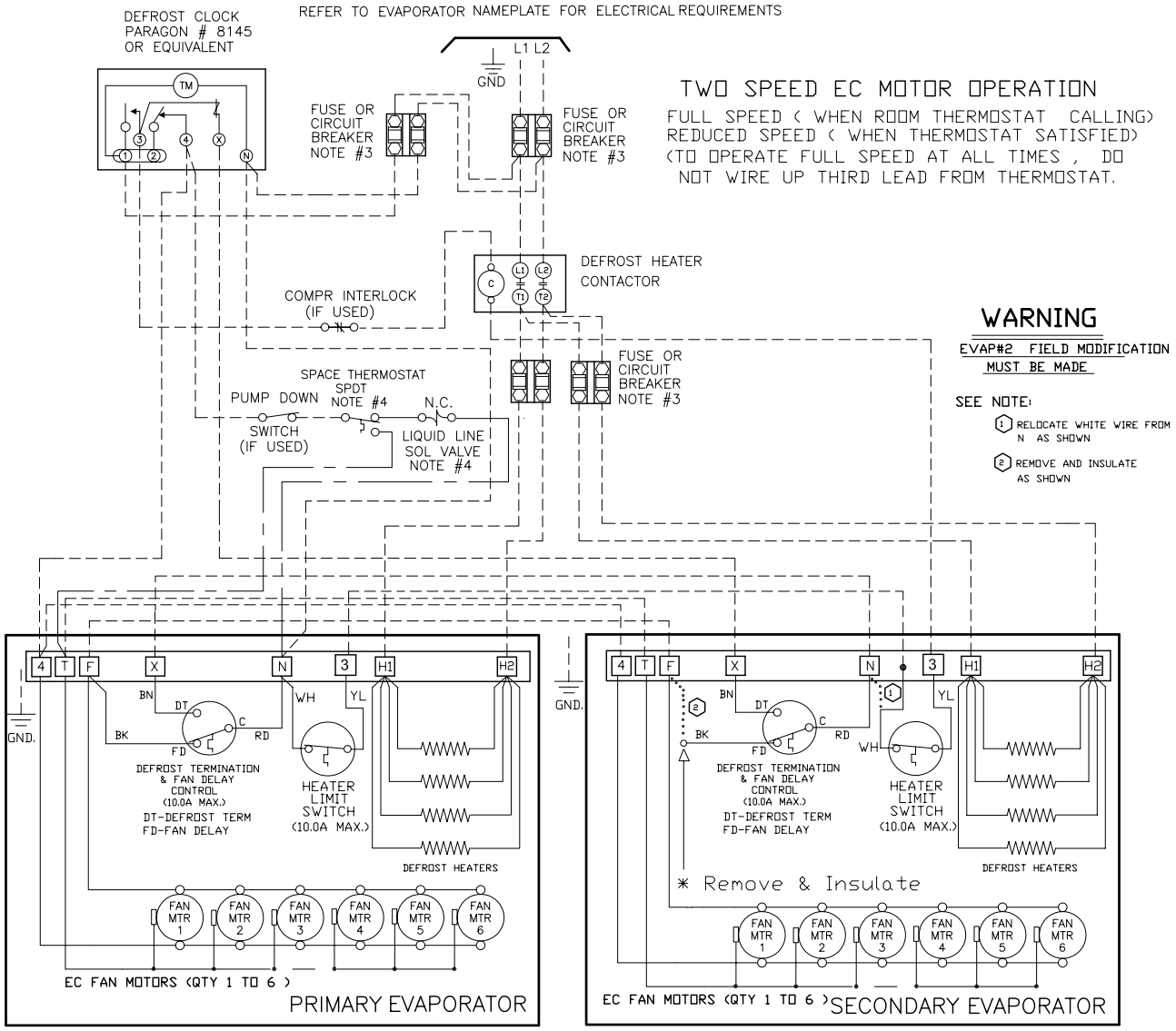
WIRING DIAGRAM - 208-230/1/60

ECM 60Hz

OPTIONAL EC MOTORS with SMARTSPEED™

ELECTRIC DEFROST MODELS - MULTIPLE EVAPORATORS

FOR ALL MODELS USING DEFROST HEATER CONTACTOR



* Fan delay not used on second evap / use fan contactor if total fan amps exceeds 10A

NOTES

1). USE COPPER CONDUCTORS ONLY

2). USE 75°C WIRE (OR HIGHER)

3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.

4). MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR . MUST BE SPDT TYPE IF TWO SPEED MODE IS REQUIRED.

3-LPEC ED CONTACTOR MULTI 01/10

TERMINALS

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

———————— FACTORY WIRING

- - - - - - - - - - - - WIRING BY OTHERS

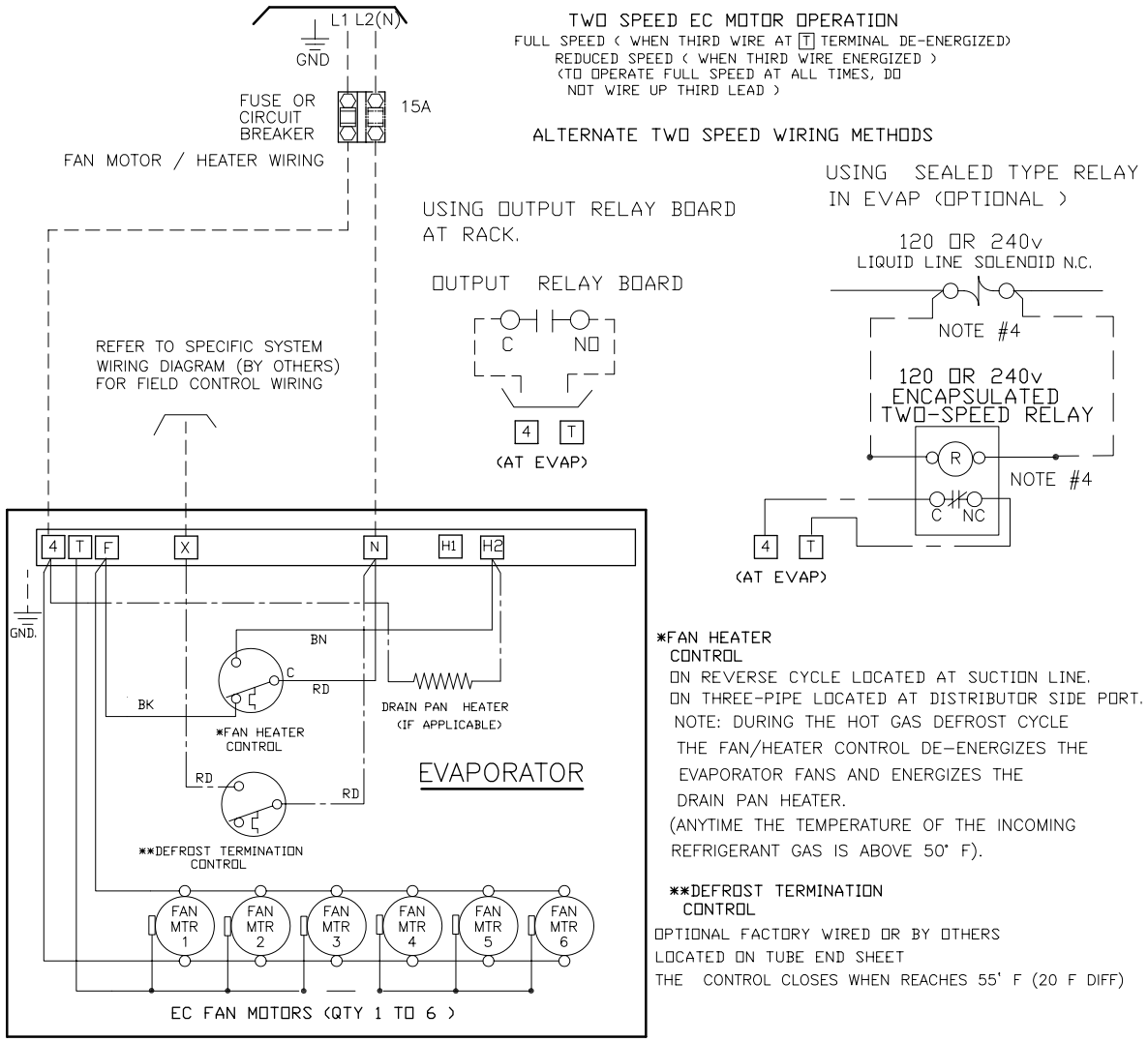
——— – ——— OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

WIRING DIAGRAM - 115/1/60, 208-230/1/60
OPTIONAL EC MOTORS with SMARTSPEED™
HOT GAS DEFROST MODELS

USING MAXIMUM 15A HEATER OVERCURRENT PROTECTION

REFER TO EVAPORATOR NAMEPLATE FOR ELECTRICAL REQUIREMENTS



TWO SPEED EC MOTOR OPERATION

FULL SPEED (WHEN THIRD WIRE AT T TERMINAL DE-ENERGIZED)
REDUCED SPEED (WHEN THIRD WIRE ENERGIZED)
(TO OPERATE FULL SPEED AT ALL TIMES, DO NOT WIRE UP THIRD LEAD)

ALTERNATE TWO SPEED WIRING METHODS

USING OUTPUT RELAY BOARD AT RACK.

USING SEALED TYPE RELAY IN EVAP (OPTIONAL)

*FAN HEATER CONTROL
ON REVERSE CYCLE LOCATED AT SUCTION LINE.
ON THREE-PIPE LOCATED AT DISTRIBUTOR SIDE PORT.
NOTE: DURING THE HOT GAS DEFROST CYCLE THE FAN/HEATER CONTROL DE-ENERGIZES THE EVAPORATOR FANS AND ENERGIZES THE DRAIN PAN HEATER.
(ANYTIME THE TEMPERATURE OF THE INCOMING REFRIGERANT GAS IS ABOVE 50° F).

**DEFROST TERMINATION CONTROL
OPTIONAL FACTORY WIRED OR BY OTHERS
LOCATED ON TUBE END SHEET
THE CONTROL CLOSES WHEN REACHES 55° F (20 F DIFF)

NOTES

1). USE COPPER CONDUCTORS ONLY
2). USE 75°C WIRE (OR HIGHER)
3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.
4). MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR .

4-LPEC HG 01/10

TERMINALS

○ -COMPONENT TERMINAL
□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING
– – – – – – – – – WIRING BY OTHERS
——————— OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

INTUITIVE EVAPORATOR CONTROL TECHNOLOGY

What is ESP+?
KeepRite Refrigeration's ESP+ intuitive evaporator control technology is designed to replace traditional electro-mechanical refrigeration controls typically used on medium and low temperature applications. By combining award winning adaptive technology along with an electronic expansion valve, KeepRite Refrigeration continues to be The Right Choice For The Refrigeration Professional.

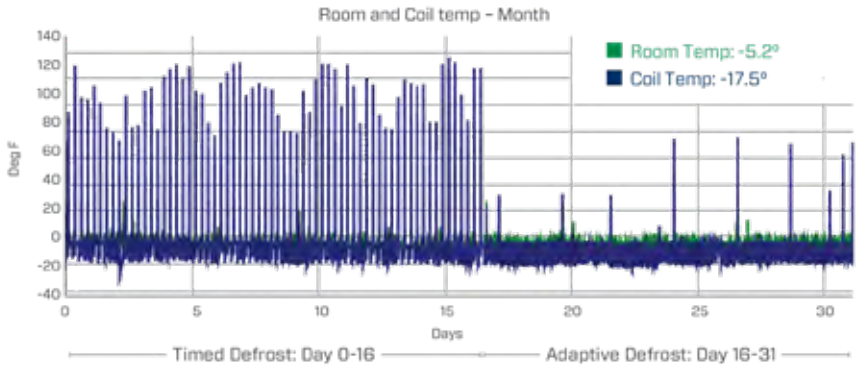
Installing an evaporator utilizing the ESP+ intuitive evaporator control technology is simple. Two pipes, two wires and you're done. No interconnecting control wiring between the evaporator and the condensing unit is required.

- Quick simple installation
- Improved evaporator performance by minimizing excessive frost on the evaporator
- Eliminates ice build up on surfaces and product
- Energy savings through evaporator fan management
- Energy savings with reduction in the number of defrost cycles
- Defrost heater management
- Improved system diagnostics and service through advanced alarm notification text/email
- Remote monitoring & system control
- User friendly interface
- Precise temperature control for prolonged product shelf life
- Improved product integrity with less potential for spoilage
- Downloadable data provides system history for prior 30 days
- Remotely view and change system parameters and alarm settings
- Manually control system
- Easily troubleshoot issues

ESP+ controls:
- Box Temperature - Superheat
- Defrost Initiation - Defrost Termination - Fan Motors
- Defrost Heater (Electric Defrost Models)

Plus - User can access operating data directly from the system interface

15-20% System Energy Savings over a Properly Commissioned System!



86% Fewer Defrost Cycles*

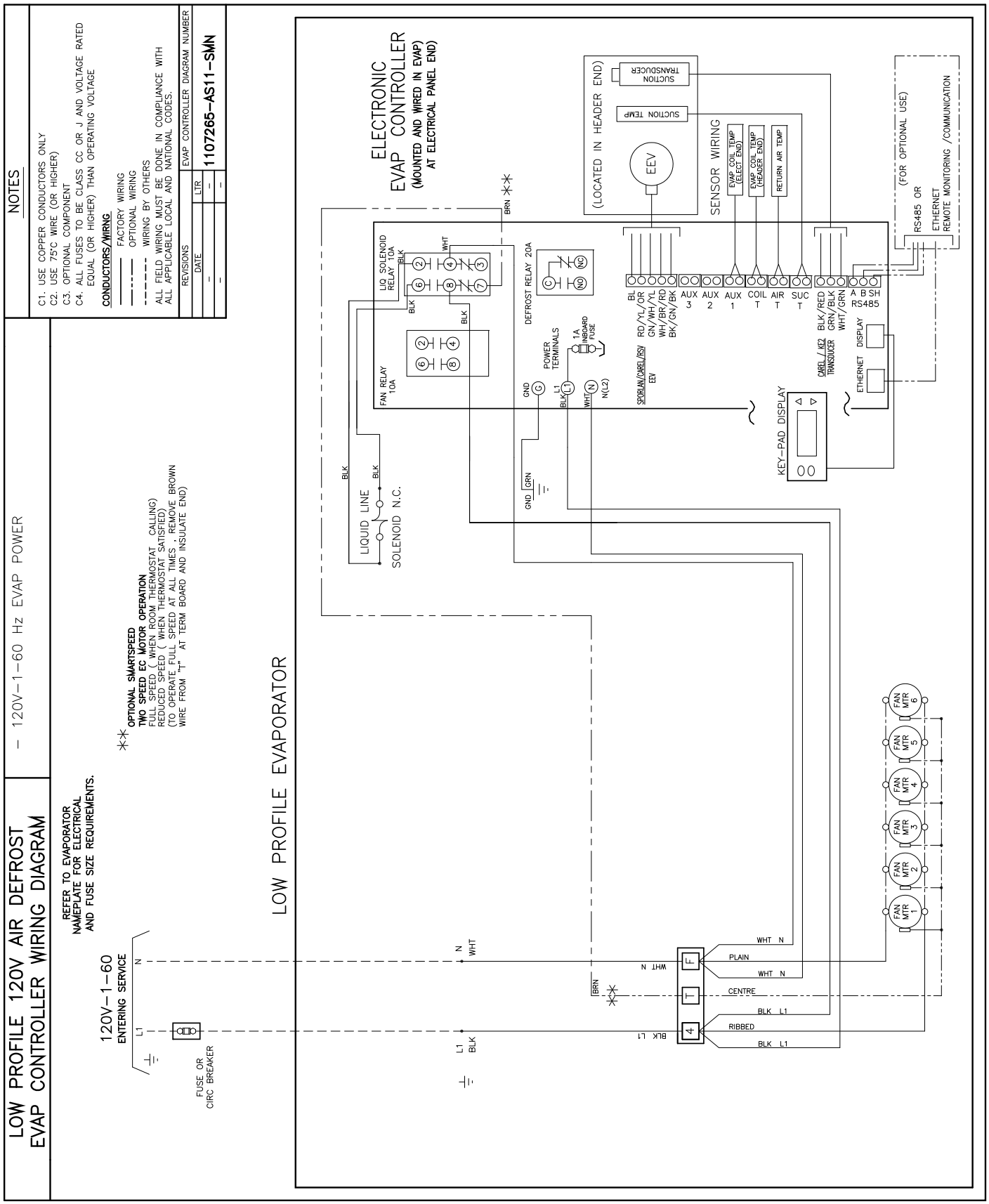
- Enhanced system performance
- Energy Savings
- Improved product integrity

* Data may vary depending on application

Visit www.k-rp.com/esp for details

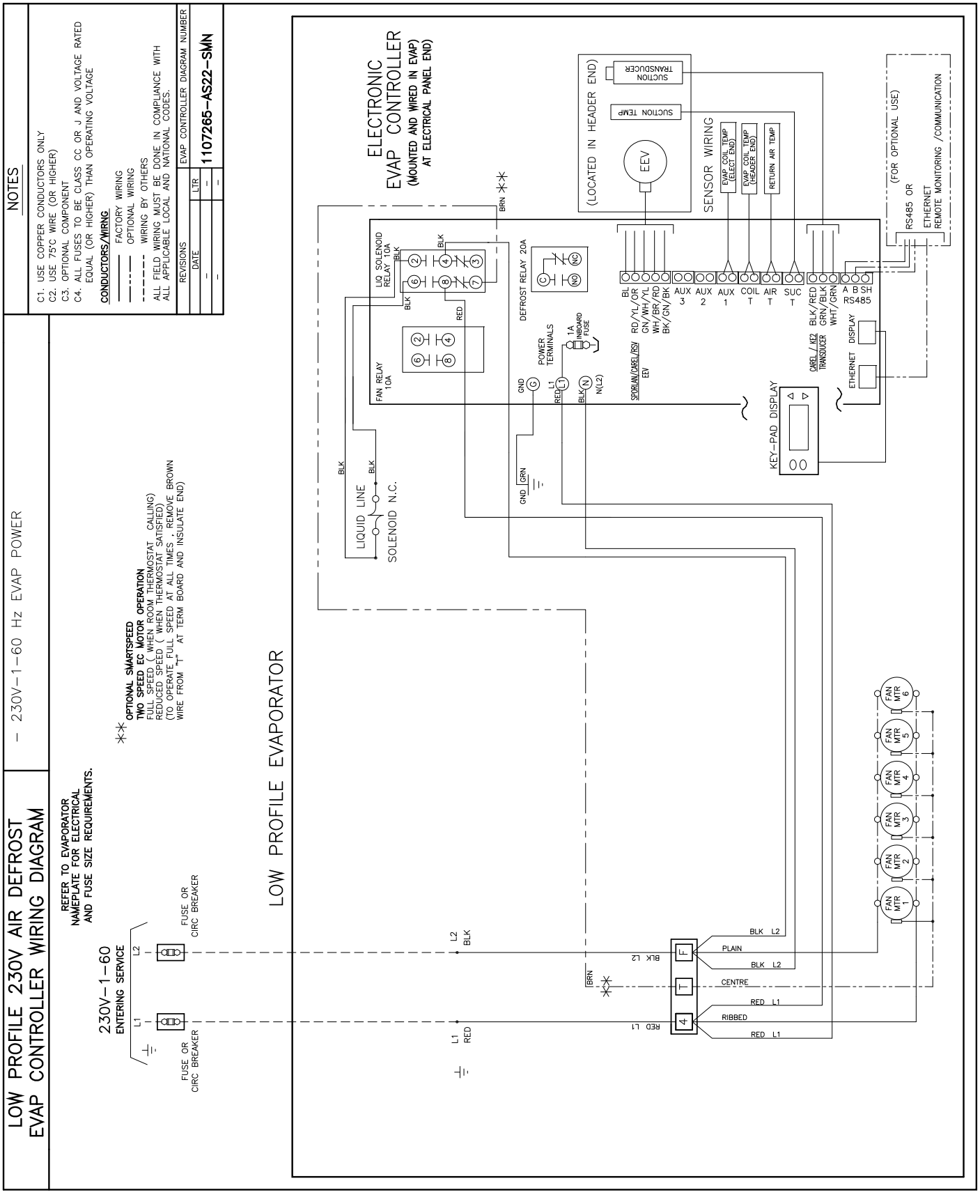
WIRING DIAGRAM - 115/1/60

AIR DEFROST MODELS w/ ESP



WIRING DIAGRAM - 208-230/1/60
AIR DEFROST MODELS w/ ESP+

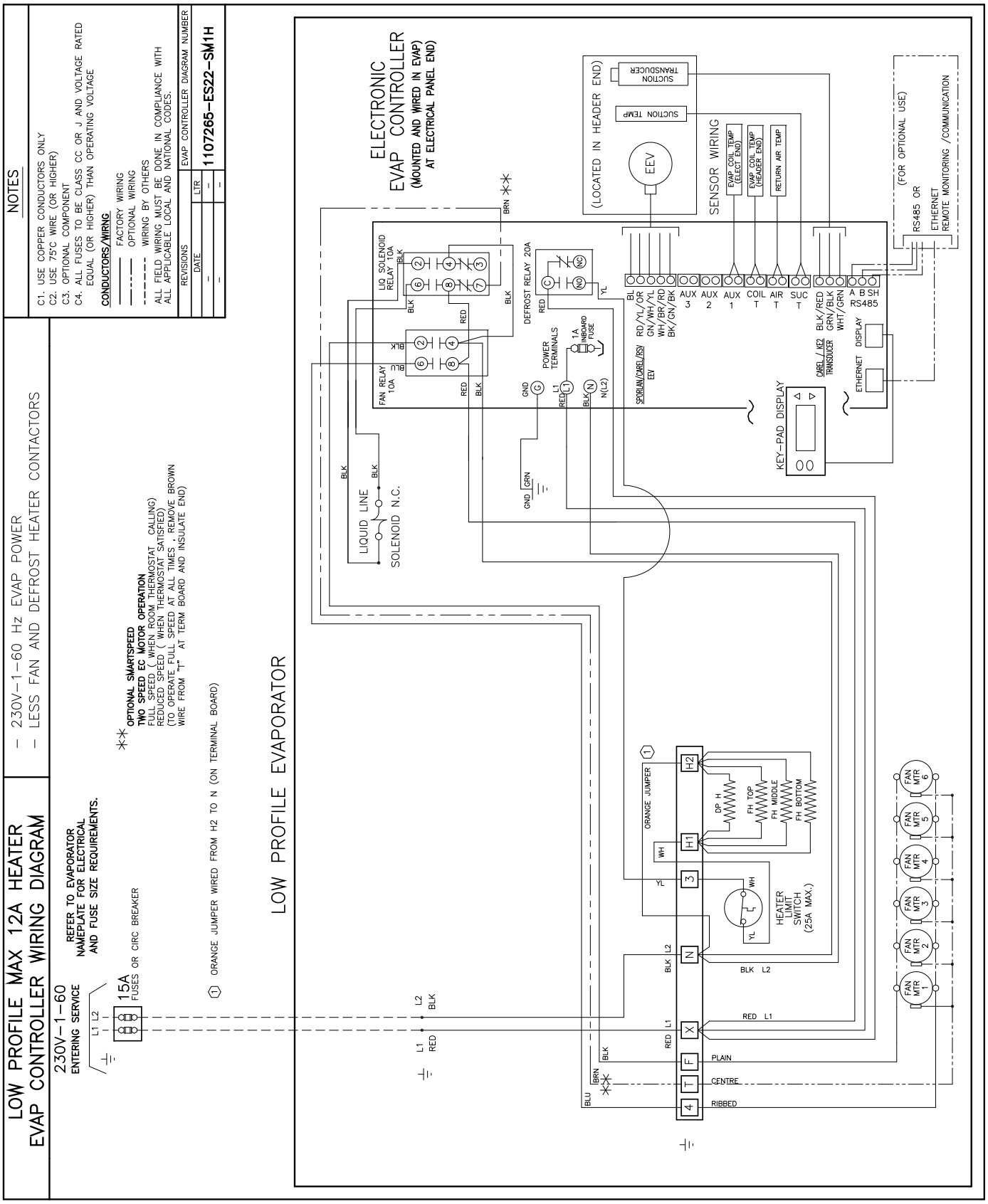
60Hz



WIRING DIAGRAM - 208-230/1/60

1-3 FAN ELECTRIC DEFROST MODELS

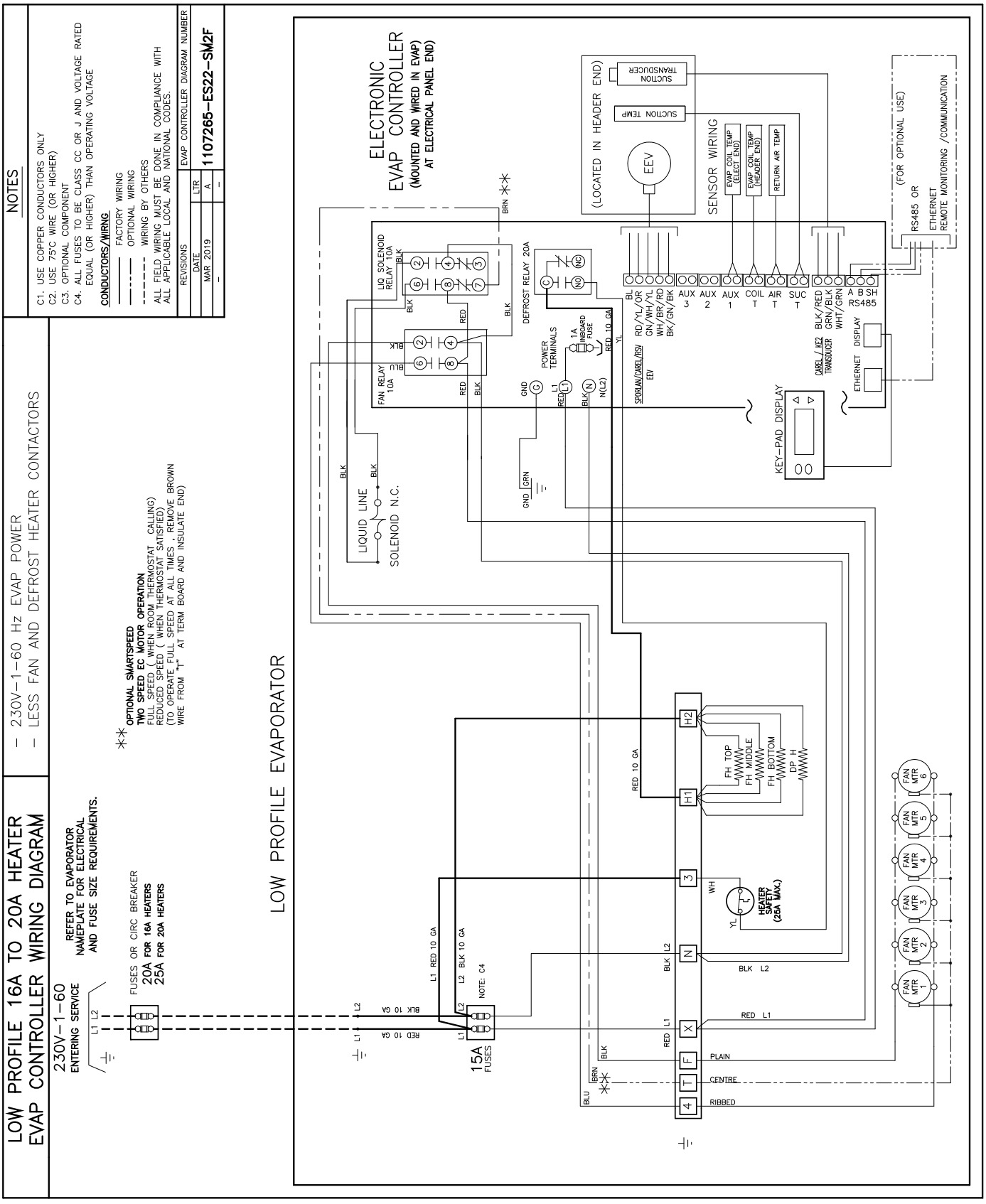
w/ ESP+ MAX. 12A



WIRING DIAGRAM - 208-230/1/60

4-5 FAN ELECTRIC DEFROST MODELS

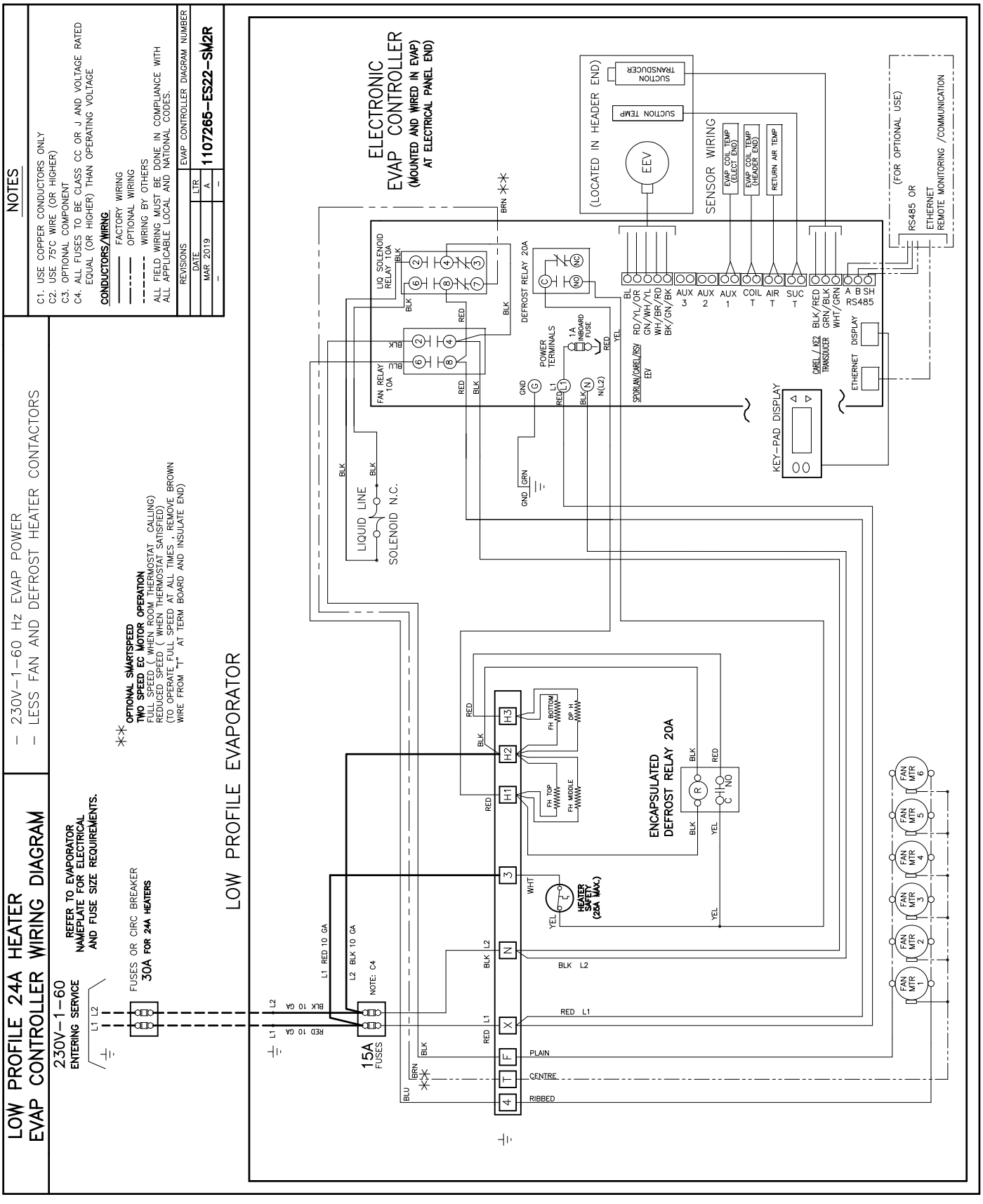
w/ ESP+ 16A TO 20A



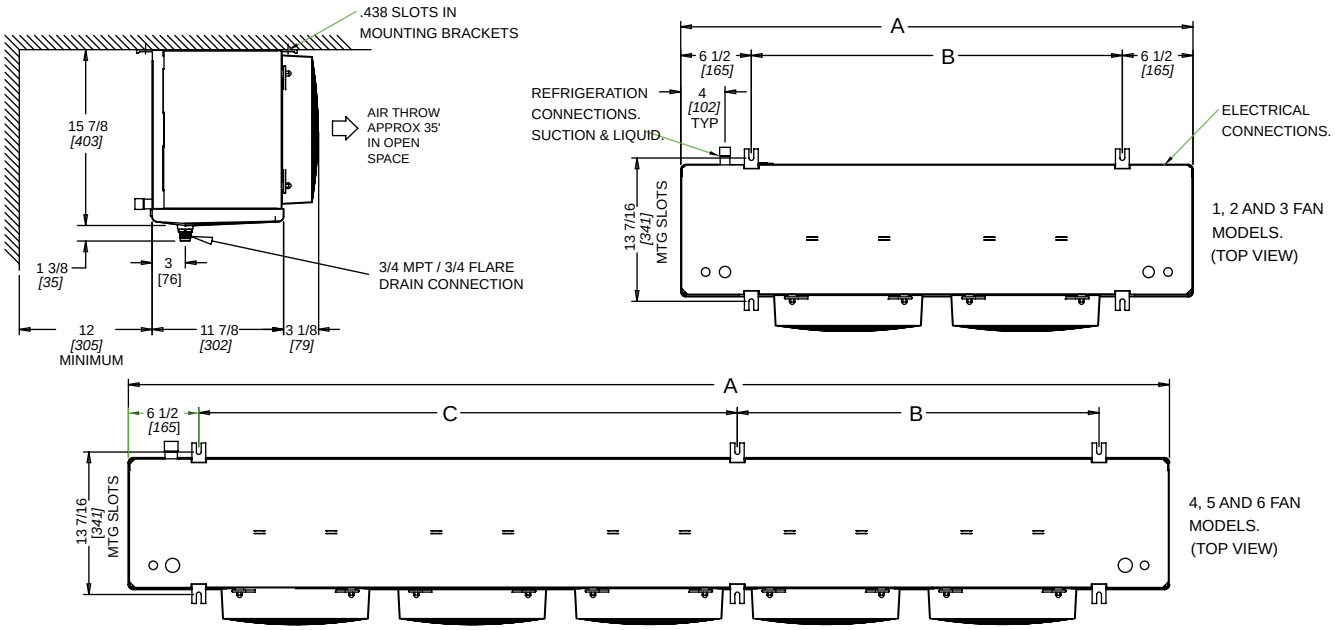
WIRING DIAGRAM - 208-230/1/60

6 FAN ELECTRIC DEFROST MODELS

w/ ESP+ 24A



DIMENSIONAL DATA



MODEL KLP	NO. OF FANS	A		B		C		SUCTION CONNECTION (ID) SWEAT	DISTRIBUTOR INLET SIZE	HOT GAS DISTRIBUTOR SIDE PORT	DRAIN PAN LOOP
		IN	*(mm)*	IN	*(mm)*	IN	*(mm)*				
104M^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
106M^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
107M^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
209M#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
211M#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
214M#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
317M#	3	62 1/4	*(1581)*	49 1/4	*(1251)*	N/A	*N/A*	7/8	1/2	1/2	7/8
320M#	3	62 1/4	*(1581)*	49 1/4	*(1251)*	N/A	*N/A*	7/8	1/2	1/2	7/8
423M#	4	78 1/4	*(1988)*	32 5/8	*(829)*	32 5/8	*(829)*	1 1/8	1/2	1/2	7/8
426M#	4	78 1/4	*(1988)*	32 5/8	*(829)*	32 5/8	*(829)*	1 1/8	1/2	1/2	7/8
532M#	5	94 1/4	*(2394)*	32 5/8	*(829)*	48 5/8	*(1235)*	1 3/8	1/2	1/2	1 1/8
639M#	6	110 1/4	*(2800)*	48 5/8	*(1235)*	48 5/8	*(1235)*	1 3/8	7/8	5/8	1 1/8
104L^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
105L^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
106L^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
207L#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
209L#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
211L#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
314L#	3	62 1/4	*(1581)*	49 1/4	*(1251)*	N/A	*N/A*	7/8	1/2	1/2	7/8
317L#	3	62 1/4	*(1581)*	49 1/4	*(1251)*	N/A	*N/A*	1 1/8	1/2	1/2	7/8
419L#	4	78 1/4	*(1988)*	32 5/8	*(829)*	32 5/8	*(829)*	1 1/8	1/2	1/2	7/8
422L#	4	78 1/4	*(1988)*	32 5/8	*(829)*	32 5/8	*(829)*	1 1/8	7/8	5/8	7/8
527L#	5	94 1/4	*(2394)*	32 5/8	*(829)*	48 5/8	*(1235)*	1 3/8	7/8	5/8	1 1/8
631L#	6	110 1/4	*(2800)*	48 5/8	*(1235)*	48 5/8	*(1235)*	1 3/8	7/8	5/8	1 1/8
103V^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
104V^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
105V^	1	30 1/4	*(768)*	17 1/4	*(438)*	N/A	*N/A*	5/8	1/2	1/2	N/A
206V#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
208V#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
209V#	2	46 1/4	*(1175)*	33 1/4	*(845)*	N/A	*N/A*	7/8	1/2	1/2	5/8
312V#	3	62 1/4	*(1581)*	49 1/4	*(1251)*	N/A	*N/A*	7/8	1/2	1/2	7/8
315V#	3	62 1/4	*(1581)*	49 1/4	*(1251)*	N/A	*N/A*	1 1/8	1/2	1/2	7/8
416V#	4	78 1/4	*(1988)*	32 5/8	*(829)*	32 5/8	*(829)*	1 1/8	1/2	1/2	7/8
419V#	4	78 1/4	*(1988)*	32 5/8	*(829)*	32 5/8	*(829)*	1 1/8	7/8	5/8	7/8
523V#	5	94 1/4	*(2394)*	32 5/8	*(829)*	48 5/8	*(1235)*	1 3/8	7/8	5/8	1 1/8
627V#	6	110 1/4	*(2800)*	48 5/8	*(1235)*	48 5/8	*(1235)*	1 3/8	7/8	5/8	1 1/8

 # = A, E, T, H, G, or R. ^ = A or E. T, H, G or R available in 2 to 6 fan models only Refer to Nomenclature for details

SHIPPING WEIGHTS

Air Defrost and Hot Gas Defrost with Drain Pan Heater Models

MODEL NUMBER KLP								SHIPPING WEIGHT	
								LB.	*(kg)*
104MA	N/A	N/A	N/A	N/A	N/A	N/A	104WA	45	*(20)*
106MA	N/A	N/A	N/A	N/A	N/A	N/A	106WA	47	*(21)*
107MA	N/A	N/A	N/A	N/A	N/A	N/A	107WA	49	*(22)*
209MA	209MT	209MG	207LG	207LT	206VG	206VT	209WA	70	*(32)*
211MA	211MT	211MG	209LG	209LT	208VG	208VT	211WA	74	*(33)*
214MA	214MT	214MG	211LG	211LT	209VG	209VT	214WA	78	*(35)*
317MA	317MT	317MG	314LG	314LT	312VG	312VT	317WA	101	*(46)*
320MA	320MT	320MG	317LG	317LT	315VG	315VT	320WA	107	(48)
423MA	423MT	423MG	419LG	419LT	416VG	416VT	423WA	117	*(53)*
426MA	426MT	426MG	422LG	422LT	419VG	419VT	426WA	135	*(61)*
532MA	532MT	532MG	527LG	527LT	523VG	523VT	532WA	163	*(74)*
639MA	639MT	639MG	631LG	631LT	627VG	627VT	639WA	192	*(87)*

Electric Defrost Models

MODEL NUMBER KLP				SHIPPING WEIGHT	
				LB.	*(kg)*
104ME	104LE	103VE	104WE	49	*(22)*
106ME	105LE	104VE	106WE	51	*(23)*
107ME	106LE	105VE	107WE	53	*(24)*
209ME	207LE	206VE	209WE	76	*(34)*
211ME	209LE	208VE	211WE	80	*(36)*
214ME	211LE	209VE	214WE	84	*(38)*
317ME	314LE	312VE	317WE	109	*(49)*
320ME	317LE	315VE	320WE	115	(52)
423ME	419LE	416VE	423WE	127	*(58)*
426ME	422LE	419VE	426WE	145	*(66)*
532ME	527LE	523VE	532WE	176	*(80)*
639ME	631LE	627VE	639WE	207	*(94)*

Hot Gas Defrost with Drain Pan Loop Models

MODEL NUMBER KLP						SHIPPING WEIGHT	
						LB.	*(kg)*
209MH	209MR	207LH	207LR	206VH	206VR	87	*(39)*
211MH	211MR	209LH	209LR	208VH	208VR	91	*(41)*
214MH	214MR	211LH	211LR	209VH	209VR	95	*(43)*
317MH	317MR	314LH	314LR	312VH	312VR	124	*(56)*
320MH	320MR	317LH	317LR	315VH	315VR	130	(59)
423MH	423MR	419LH	419LR	416VH	416VR	145	*(66)*
426MH	426MR	422LH	422LR	419VH	419VR	163	*(74)*
532MH	532MR	527LH	527LR	523VH	523VR	198	*(90)*
639MH	639MR	631LH	631LR	627VH	627VR	233	*(106)*

KLP RECOMMENDED EXPANSION VALVE SELECTIONS 60Hz

MEDIUM TEMPERATURE MODELS

MEDIUM TEMPERATURE
R404A R507
AIR or ELECTRIC DEFROST

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE	FACTORY INSTALLED SOLENOID COIL
104M****	N/A	EBQE-AA-SC	E3	MKC-1
106M****	L-1/2	EBQE-A-SC	E3	MKC-1
107M****	L-1/2	EBQE-A-SC	E3	MKC-1
209M****	L-3/4	EBQE-A-C	E3	MKC-1
211M****	L-1	EBQE-A-SC	E3	MKC-1
214M****	L-1	EBQE-B-SC	E5	MKC-1
317M****	L-1 1/2	EBQE-B-SC	E5	MKC-1
320M****	L-1 1/2	EBQE-B-SC	E5	MKC-1
423M****	L-2	EBQE-C-C	E6	MKC-1
426M****	L-2	EBQE-C-C	E6	MKC-1
532M****	L-2 1/2	EBSSE-6-SC	E6	MKC-1
639M****	G-3	EBSSE-6-SC	E6	MKC-1

**** Insert voltage type. See nomenclature for details

MEDIUM TEMPERATURE
R448A R407A R407C R22
AIR or ELECTRIC DEFROST

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE	FACTORY INSTALLED SOLENOID COIL
104M****	N/A	EBQE-AA-VC	E3	MKC-1
106M****	L-1/2	EBQE-AA-VC	E3	MKC-1
107M****	L-1/2	EBQE-AA-VC	E3	MKC-1
209M****	L-3/4	EBQE-A-VC	E3	MKC-1
211M****	L-1	EBQE-A-VC	E3	MKC-1
214M****	L-1	EBQE-A-VC	E3	MKC-1
317M****	L-1 1/2	EBQE-A-VC	E3	MKC-1
320M****	L-1 1/2	EBQE-B-VC	E3	MKC-1
423M****	L-2	EBQE-B-VC	E5	MKC-1
426M****	L-2	EBQE-B-VC	E5	MKC-1
532M****	L-2 1/2	EBQE-C-VC	E6	MKC-1
639M****	G-3	EBQE-C-VC	E6	MKC-1

**** Insert voltage type. See nomenclature for details

Medium Temperature Expansion valve selection are selected based on a 10°TD.
Example: 25°F evaporator temperature and 35°F interior cooler temperature.

If correct nozzle is not available, the proper orifice size can be drilled in the field using the following chart	
NOZZLE ORIFICE No.	DRILL SIZE IN.
1/2	.070
3/4	.086
1	.0995
1-1/2	.120
2	.1406
2-1/2	.157
3	.172
4	.199
5	.211
6	.242
8	.266
10	.281

KLP RECOMMENDED EXPANSION VALVE SELECTIONS 60Hz
LOW TEMPERATURE MODELS

LOW TEMPERATURE
R404A R507
ELECTRIC DEFROST

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE	FACTORY INSTALLED SOLENOID COIL
104LE* **	L-1/2	EBQE-AA-ZP	E3	MKC-1
105LE* **	L-3/4	EBQE-AA-ZP	E3	MKC-1
106LE* **	L-1	EBQE-A-ZP	E3	MKC-1
207LE* **	L-1	EBQE-A-ZP	E3	MKC-1
209LE* **	L-1 1/2	EBQE-A-ZP	E3	MKC-1
211LE* **	L-2	EBQE-B-ZP	E3	MKC-1
314LE* **	L-2	EBQE-B-ZP	E5	MKC-1
317LE* **	L-3	EBQE-C-ZP	E5	MKC-1
419LE* **	L-3	EBQE-C-ZP	E5	MKC-1
422LE* **	G-4	EBQE-C-ZP	E6	MKC-1
527LE* **	G-4	EBSSE-6-ZP	E6	MKC-1
631LE* **	G-5	EBSSE-6-ZP	E6	MKC-1

*** Insert voltage type. See nomenclature for details

LOW TEMPERATURE
R448A R407A
ELECTRIC DEFROST

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE	FACTORY INSTALLED SOLENOID COIL
104LE* **	L-1/2	EBQE-AA-VZ	E3	MKC-1
105LE* **	L-3/4	EBQE-AA-VZ	E3	MKC-1
106LE* **	L-1	EBQE-AA-VZ	E3	MKC-1
207LE* **	L-1	EBQE-A-VZ	E3	MKC-1
209LE* **	L-1 1/2	EBQE-A-VZ	E3	MKC-1
211LE* **	L-2	EBQE-A-VZ	E3	MKC-1
314LE* **	L-2	EBQE-B-VZ	E3	MKC-1
317LE* **	L-3	EBQE-B-VZ	E5	MKC-1
419LE* **	L-3	EBQE-B-VZ	E5	MKC-1
422LE* **	G-4	EBQE-C-VZ	E5	MKC-1
527LE* **	G-4	EBQE-C-VZ	E5	MKC-1
631LE* **	G-5	EBQE-C-VZ	E6	MKC-1

*** Insert voltage type. See nomenclature for details

LOW TEMPERATURE
R404A R507
ELECTRIC DEFROST 4 FPI

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE	FACTORY INSTALLED SOLENOID COIL
104VE* **	L-1/2	EBQE-AA-ZP	E3	MKC-1
105VE* **	L-3/4	EBQE-AA-ZP	E3	MKC-1
106VE* **	L-1	EBQE-A-ZP	E3	MKC-1
207VE* **	L-1	EBQE-A-ZP	E3	MKC-1
209VE* **	L-1 1/2	EBQE-A-ZP	E3	MKC-1
211VE* **	L-2	EBQE-B-ZP	E3	MKC-1
314VE* **	L-2	EBQE-B-ZP	E5	MKC-1
317VE* **	L-3	EBQE-C-ZP	E5	MKC-1
419VE* **	L-3	EBQE-C-ZP	E5	MKC-1
422VE* **	G-4	EBQE-C-ZP	E6	MKC-1
527VE* **	G-4	EBSSE-6-ZP	E6	MKC-1
631VE* **	G-5	EBSSE-6-ZP	E6	MKC-1

*** Insert voltage type. See nomenclature for details

LOW TEMPERATURE
R448A R407A
ELECTRIC DEFROST 4 FPI

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE	FACTORY INSTALLED SOLENOID COIL
104VE* **	L-1/2	EBQE-AA-VZ	E3	MKC-1
105VE* **	L-3/4	EBQE-AA-VZ	E3	MKC-1
106VE* **	L-1	EBQE-AA-VZ	E3	MKC-1
207VE* **	L-1	EBQE-A-VZ	E3	MKC-1
209VE* **	L-1 1/2	EBQE-A-VZ	E3	MKC-1
211VE* **	L-2	EBQE-A-VZ	E3	MKC-1
314VE* **	L-2	EBQE-B-VZ	E3	MKC-1
317VE* **	L-3	EBQE-B-VZ	E5	MKC-1
419VE* **	L-3	EBQE-B-VZ	E5	MKC-1
422VE* **	G-4	EBQE-C-VZ	E5	MKC-1
527VE* **	G-4	EBQE-C-VZ	E5	MKC-1
631VE* **	G-5	EBQE-C-VZ	E6	MKC-1

*** Insert voltage type. See nomenclature for details

Low Temperature Expansion Valve Selection are selected based on a 10°TD.
Example: -20°F evaporator temperature and -10°F interior freezer temperature.

FACTORY INSTALLED EXPANSION VALVE SELECTIONS - MODELS w/ ESP+

MEDIUM TEMPERATURE ALL REFRIGERANTS AIR OR ELECTRIC DEFROST

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE
104M* **	N/A	E2V9	E3
106M* **	L1/2	E2V11	E3
107M* **	L1/2	E2V14	E3
209M* **	L3/4	E2V14	E3
211M* **	L1	E2V14	E3
214M* **	L1	E2V18	E3
317M* **	L1-1/2	E2V18	E5
320M* **	L1-1/2	E2V24	E5
423M* **	L2	E2V24	E5
426M* **	L2	E2V24	E5
532M* **	L2-1/2	E2V35	E6
639M* **	G3	E2V35	E6

*** Insert defrost type. See nomenclature for details

LOW TEMPERATURE ALL REFRIGERANTS ELECTRIC DEFROST

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE
104LE	L1/2	E2V9	E3
105LE	L3/4	E2V9	E3
106LE	L1	E2V11	E3
207LE	L1	E2V11	E3
209LE	L1-1/2	E2V11	E3
211LE	L2	E2V14	E3
314LE	L2	E2V14	E5
317LE	L3	E2V18	E5
419LE	L3	E2V18	E5
422LE	G4	E2V24	E5
527LE	G4	E2V24	E6
631LE	G5	E2V24	E6

LOW TEMPERATURE ALL REFRIGERANTS ELECTRIC DEFROST 4 FPI

MODEL KLP	FACTORY INSTALLED NOZZLE	FACTORY INSTALLED E2V EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE
103VE	L1/2	E2V9	E3
104VE	L3/4	E2V9	E3
105VE	L1	E2V9	E3
206VE	L1	E2V11	E3
208VE	L1-1/2	E2V11	E3
209VE	L2	E2V11	E3
312VE	L2	E2V14	E3
315VE	L2-1/2	E2V14	E5
416VE	J2-1/2	E2V18	E5
419VE	G3	E2V18	E5
523VE	G4	E2V24	E5
627VE	G5	E2V24	E6

Models with Standard PSC Motors

Medium Temperature, 6 FPI, with standard PSC Motors

TEMP	FPI	# of Fans	Model KLP	Voltage	1 X EVAPORATOR		2 X EVAPORATOR	
					Defrost Kit	Fuse Package	Defrost Kit	Fuse Package
ME - MEDIUM TEMPERATURE	6	1	**104ME-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			104ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			106ME-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			106ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			107ME-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			107ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		2	**209ME-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			209ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			209ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			211ME-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			211ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			211ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			214ME-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			214ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			214ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		3	**317ME-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			317ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			317ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			320ME-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			320ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			320ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		4	**423ME-S2B**	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			423ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			423ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			426ME-S2B	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			426ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			426ME-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		5	**532ME-S2B**	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010
			532ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			532ME-T3B	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019
		6	**639ME-S2B**	208-230/1/60	DFK-02	FP-020	DFK-09	FP-021
			639ME-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			639ME-T3B	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019

Low Temperature, 6 FPI, with standard PSC Motors

TEMP	FPI	# of Fans	Model KLP	Voltage	1 X EVAPORATOR		2 X EVAPORATOR	
					Defrost Kit	Fuse Package	Defrost Kit	Fuse Package
LE - LOW TEMPERATURE	6	1	**104LE-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			104LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			105LE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			105LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			106LE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			106LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		2	**207LE-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			207LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			207LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			209LE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			209LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			209LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			211LE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			211LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			211LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		3	**314LE-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			314LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			314LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			317LE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			317LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			317LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		4	**419LE-S2B**	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			419LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			419LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			422LE-S2B	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			422LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			422LE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		5	**527LE-S2B**	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010
			527LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			527LE-T3B	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019
		6	**631LE-S2B**	208-230/1/60	DFK-02	FP-020	DFK-09	FP-021
			631LE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			631LE-T3B	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019

Models with Standard PSC Motors (cont'd)

Very Low Temperature, 4 FPI, with standard PSC Motors

TEMP	FPI	# of Fans	MModel KLP	Voltage	1 X EVAPORATOR		2 X EVAPORATOR	
					Defrost Kit	Fuse Package	Defrost Kit	Fuse Package
VE - VERY LOW TEMPERATURE	4	1	**103VE-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			103VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			104VE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			104VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			105VE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			105VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		2	**206VE-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			206VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			206VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			208VE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			208VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			208VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			209VE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			209VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			209VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		3	**312VE-S2B**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			312VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			312VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			315VE-S2B	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			315VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			315VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		4	**416VE-S2B**	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			416VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			416VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			419VE-S2B	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			419VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			419VE-T3B	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		5	**523VE-S2B**	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010
			523VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			523VE-T3B	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019
		6	**627VE-S2B**	208-230/1/60	DFK-02	FP-020	DFK-09	FP-021
			627VE-S4B	460/1/60	DFK-10	FP-008	DFK-12	FP-022
			627VE-T3B	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019

Models with optional SMARTSPEED™ EC Motors

Medium Temperature, 6 FPI, with optional SMARTSPEED™ EC Motors

TEMP	FPI	# of Fans	Model KLP	Voltage	1 X EVAPORATOR		2 X EVAPORATOR	
					Defrost Kit	Fuse Package	Defrost Kit	Fuse Package
ME - MEDIUM TEMPERATURE	6	1	**104ME-S2B-T**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			104ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			106ME-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			106ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			107ME-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			107ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		2	**209ME-S2B-T**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			209ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			211ME-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			211ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			214ME-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			214ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		3	**317ME-S2B-T**	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			317ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			320ME-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			320ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		4	**423ME-S2B-T**	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			423ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			426ME-S2B-T	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			426ME-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		5	**532ME-S2B-T**	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010
			532ME-T3B-T	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019
		6	**639ME-S2B-T**	208-230/1/60	DFK-02	FP-020	DFK-09	FP-021
			639ME-T3B-T	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019

Models with optional SMARTSPEED™ EC Motors (cont'd)

Low Temperature, 6 FPI, with optional SMARTSPEED™ EC Motors

TEMP	FPI	# of Fans	Model KLP	Voltage	1 X EVAPORATOR		2 X EVAPORATOR	
					Defrost Kit	Fuse Package	Defrost Kit	Fuse Package
LE - LOW TEMPERATURE	6	1	104LE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			104LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			105LE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			105LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			106LE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			106LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		2	207LE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			207LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			209LE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			209LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			211LE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			211LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		3	314LE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			314LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			317LE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			317LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		4	419LE-S2B-T	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			419LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			422LE-S2B-T	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			422LE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		5	527LE-S2B-T	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010
			527LE-T3B-T	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019
		6	631LE-S2B-T	208-230/1/60	DFK-02	FP-020	DFK-09	FP-021
			631LE-T3B-T	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019

Very Low Temperature, 4 FPI, with optional SMARTSPEED™ EC Motors

TEMP	FPI	# of Fans	Model KLP	Voltage	1 X EVAPORATOR		2 X EVAPORATOR	
					Defrost Kit	Fuse Package	Defrost Kit	Fuse Package
VE - VERY LOW TEMPERATURE	4	1	103VE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			103VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			104VE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			104VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			105VE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			105VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		2	206VE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			206VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			208VE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			208VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			209VE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			209VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		3	312VE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			312VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			315VE-S2B-T	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			315VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		4	416VE-S2B-T	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			416VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
			419VE-S2B-T	208-230/1/60	DFK-02	FP-006	DFK-06	FP-015
			419VE-T3B-T	208-230/3/60	DFK-03	FP-013	DFK-07	FP-018
		5	523VE-S2B-T	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010
			523VE-T3B-T	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019
		6	627VE-S2B-T	208-230/1/60	DFK-02	FP-020	DFK-09	FP-021
			627VE-T3B-T	208-230/3/60	DFK-03	FP-014	DFK-07	FP-019

Defrost Kits

Kit Part Number	Description
DFK-01	Time Clock, HtrCont - 1x 40A (3P), FB 1x 30A (1P)
DFK-02	Time Clock, HtrCont - 1x 40A (3P), FB 1x 30A (2P)
DFK-03	Time Clock, HtrCont - 1x 40A (3P), FB 1x 30A (3P)
DFK-04	Time Clock, HtrCont - 1x 40A (3P), FB 1x 60A (2P)
DFK-05	Time Clock, HtrCont - 1x 40A (3P), FB 2x 30A (1P)
DFK-06	Time Clock, HtrCont - 1x 40A (3P), FB 2x 30A (2P)
DFK-07	Time Clock, HtrCont - 1x 40A (3P), FB 2x 30A (3P)
DFK-08	Time Clock, HtrCont - 1x 50A (3P), FB 2x 60A (2P)
DFK-09	Time Clock, HtrCont - 1x 50A (3P), FB 2x 30A (2P)
DFK-10	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P)
DFK-11	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P)
DFK-12	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 4x 30A (2P)
DFK-13	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 4x 30A (3P)
DFK-14	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 1x 30A (3P)
DFK-15	Time Clock, HtrCont - 1x40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 1x 60A (2P)
DFK-16	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 1x 60A (3P)
DFK-17	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (3P), FB 1x 60A (3P)
DFK-18	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 30A (3P)
DFK-19	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 4x 30A (2P)
DFK-20	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 4x 30A (3P)
DFK-21	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 1x 60A (2P)
DFK-22	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 1x 30A (3P), FB 1x 60A (3P)
DFK-23	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 30A (3P)
DFK-24	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P), FB 2x 60A (3P)
DFK-25	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 2x 60A (2P)
DFK-26	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (3P), FB 2x 60A (3P)
DFK-27	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 60A (2P)
DFK-28	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 60A (3P)
DFK-29	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P), FB 2x 60A (3P)
DFK-30	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 50A (3P), FB 2x 30A (2P), FB 2x 60A (3P)
DFK-31	Time Clock, HtrCont - 2x 50A (3P), FanCont - 1x 40A (3P), FB 1x 30A (3P), FB 2x 60A (3P)
DFK-32	Time Clock, HtrCont - 2x 50A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 60A (2P)
DFK-33	Time Clock, HtrCont - 2x 50A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P), FB 2x 60A (3P)
DFK-34	Time Clock, HtrCont - 4x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 4x 60A (2P)
DFK-35	Time Clock, HtrCont - 4x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P), FB 4x 60A (3P)
DFK-36	Time Clock, HtrCont - 4x 40A (3P), FanCont - 1x 50A (3P), FB 2x 30A (2P), FB 4x 60A (2P)
DFK-37	Time Clock, HtrCont - 4x 40A (3P), FanCont - 1x 50A (3P), FB 2x 30A (3P), FB 4x 60A (3P)
DFK-38	Time Clock, HtrCont - 4x 50A (3P), FanCont - 1x 50A (3P), FB 2x 30A (3P), FB 4x 60A (3P)
DFK-39	Time Clock, HtrCont1 - 1x 40A (3P), HtrCont2 - 2x 50A (3P), FanCont - 1x 40A (3P), FB 4x 60A (3P)

NOTE: HtrCont = Heater Contactor, FanCont = Fan Contactor, FB = Fuse Block, (1P), (2P), (3P) = Number of Poles

DEFROST KIT AND FUSE PACKAGE DETAILS (cont'd)

Fuse Packages

Package Part Number	Quantity and Amp Rating		
FP-001	1 x 15A		
FP-002	1 x 20A		
FP-003	1 x 25A		
FP-004	2 x 15A		
FP-006	2 x 20A		
FP-007	2 x 25A		
FP-008	4 x 15A		
FP-010	4 x 25A		
FP-012	2 x 35A		
FP-013	3 x 15A		
FP-014	3 x 20A		
FP-015	4 x 20A		
FP-016	4 x 20A	6 x 45A	
FP-017	4 x 35A		
FP-018	6 x 15A		
FP-019	6 x 20A		
FP-020	2 x 30A		
FP-021	4 x 30A		
FP-022	8 x 15A		
FP-023	2 x 25A	3 x 50A	
FP-024	2 x 20A	3 x 45A	
FP-025	6 x 20A	6 x 60A	
FP-026	6 x 15A	12 x 40A	
FP-027	6 x 15A	6 x 40A	
FP-028	6 x 20A	12 x 40A	
FP-029	6 x 15A	6 x 50A	
FP-030	6 x 15A	6 x 45A	
FP-031	6 x 15A	6 x 35A	
FP-032	6 x 15A	6 x 30A	
FP-033	6 x 25A	12 x 50A	
FP-034	6 x 20A	12 x 35A	
FP-035	4 x 25A	6 x 50A	
FP-036	6 x 25A	12 x 60A	
FP-037	6 x 20A	12 x 60A	
FP-038	6 x 20A	12 x 50A	
FP-039	6 x 20A	12 x 45A	
FP-040	6 x 15A	12 x 45A	
FP-041	5 x 15A		
FP-042	10 x 15A		
FP-043	3 x 25A	6 x 60A	
FP-044	3 x 20A	6 x 60A	
FP-045	3 x 20A	6 x 50A	
FP-046	3 x 20A	6 x 45A	
FP-047	3 x 15A	6 x 45A	
FP-048	4 x 15A	4 x 45A	
FP-049	4 x 15A	4 x 40A	
FP-050	3 x 15A	3 x 60A	
FP-051	4 x 20A	6 x 50A	
FP-052	4 x 15A	6 x 45A	
FP-053	4 x 15A	6 x 30A	

Package Part Number	Quantity and Amp Rating		
FP-054	3 x 15A	6 x 35A	
FP-055	2 x 15A	2 x 45A	
FP-056	2 x 15A	2 x 40A	
FP-057	2 x 20A	3 x 50A	
FP-058	2 x 15A	3 x 45A	
FP-059	2 x 15A	3 x 30A	
FP-060	2 x 15A	2 x 35A	
FP-061	2 x 15A	2 x 50A	
FP-062	2 x 15A	2 x 60A	
FP-063	2 x 15A	3 x 25A	
FP-064	2 x 15A	3 x 35A	
FP-065	2 x 15A	3 x 40A	
FP-066	2 x 15A	3 x 20A	
FP-067	4 x 15A	4 x 35A	
FP-068	4 x 15A	4 x 50A	
FP-069	4 x 15A	4 x 60A	
FP-070	4 x 15A	6 x 25A	
FP-071	4 x 15A	6 x 35A	
FP-072	4 x 15A	6 x 40A	
FP-073	4 x 15A	6 x 20A	
FP-074	3 x 20A	3 x 60A	
FP-075	3 x 20A	6 x 35A	
FP-076	3 x 25A	6 x 50A	
FP-077	3 x 35A	9 x 45A	
FP-078	3 x 15A	3 x 35A	
FP-079	3 x 15A	3 x 45A	
FP-080	3 x 15A	3 x 50A	
FP-081	3 x 20A	6 x 40A	
FP-082	3 x 15A	3 x 40A	
FP-083	3 x 15A	6 x 40A	
FP-084	6 x 15A	6 x 60A	
FP-085	6 x 15A	12 x 35A	
FP-086	3 x 35A	3 x 45A	6 x 60A
FP-087	4 x 20A	4 x 40A	4 x 50A
FP-088	4 x 15A	4 x 35A	4 x 40A
FP-089	2 x 20A	2 x 40A	2 x 50A
FP-090	2 x 15A	2 x 35A	2 x 40A
FP-091	2 x 20A	2 x 35A	2 x 40A
FP-092	2 x 25A	2 x 40A	2 x 50A
FP-093	4 x 20A	4 x 35A	4 x 40A
FP-094	6 x 15A	6 x 25A	
FP-095	3 x 15A	3 x 25A	
FP-096	3 x 15A	3 x 30A	
FP-097	4 x 15A	4 x 30A	
FP-098	4 x 15A	4 x 25A	
FP-099	4 x 15A	4 x 20A	
FP-100	2 x 15A	2 x 20A	
FP-101	2 x 15A	2 x 25A	
FP-102	2 x 15A	2 x 30A	
FP-103	4 x 25A	4 x 40A	4 x 50A

NOTE: FUSES 30AMP and Below - Class CC Type, FUSES 35AMP and Above - Class J Type

INSTALLATION
The installation and start-up of evaporators should only be performed by qualified refrigeration mechanics. This equipment should be installed in accordance with all applicable codes, ordinances and local by-laws.

INSPECTION
Inspect all equipment before unpacking for visible signs of damage or loss. Check shipping list against material received to ensure shipment is complete.

IMPORTANT: Remember, you, the consignee, must make any claim necessary against the transportation company. Shipping damage or missing parts, when discovered at the outset, will prevent later unnecessary and costly delays.
If damage or loss during transport is evident, make claim to carrier, as this will be their responsibility, not the manufacturer's.
Should carton be damaged, but damage to equipment is not obvious, a claim should be filed for "concealed damage" with the carrier.

IMPORTANT: The electrical characteristics of the unit should be checked at this time to make sure they correspond to those ordered and to electrical power available at the job site.

Save all shipping papers, tags and instruction sheets for reference by installer and owner.

APPLICATION
LP evaporators are designed for walker-in cooler and freezer applications used with wide range of refrigerants. For room temperatures above 35°F *(2 °C)* AND evaporating temperatures above 26°F *(-3 °C)*, positive defrosting means (with electric or hot gas) may not be required, otherwise, electric defrost or hot gas defrost models should be used. Electric defrost models come with defrost termination and fan delay as standard to control the defrost cycle termination and fan delay, while defrost initiation means (e.g. defrost timer) is not included.

The coil must not be exposed to any abnormal atmospheric or acidic environments. This may result in corrosion to the cabinet and possible coil failure (leaks). (Consult manufacturer for optional baked on phenolic protective coatings).

LOCATION
The unit location in the room should be selected to ensure uniform air distribution throughout the entire space to be refrigerated. Be sure that the product does not obstruct the free circulation of air. Allow a minimum of 24" clearance at each end. Do not locate evaporators over doors. Consideration should be given to the coil location in order to minimize the piping run length to the condensing unit and floor drain.

EXPANSION VALVE (TXV) SELECTION
All units require the use of an **externally equalized** expansion valve. (A 1/4" *(6 mm)* O.D. equalizer line has been provided on the coil) TX valves should **not** be selected strictly by their nominal ton rating. (This rating is based at a specific pressure differential and entering liquid temperature). Since applications will differ it is suggested the following selection procedure be followed.

1. Determine actual evaporator capacity.
   The nominal rating is based at 10°F T.D. *(5 .6°C)* (Entering Air Temp. minus Evap. Temp.) Note that a higher / lower operating T.D.will increase / decrease this capacity rating by their direct ratio within a range of 8 to 12°F *(4 .4 to 8.3°C)* T.D.

2. Determine the pressure drop across the valve by subtracting the evaporating pressure and distributor pressure drop from the high side liquid pressure. The distributor pressure drop is typically in the range of 20 to 35 psig (1.4 to 2.4 bar) depending on the type of refrigerant and operating conditions.

3. Estimate entering liquid temperature. Temperatures lower than 100°F *(38 °C)* increase valve capacity ratings. Refer to valve manufacturer's specs for details.

4. Select valve from the valve manufacturer selection charts for the appropriate refrigerant, evaporating temp and pressure drop.

For best performance, the outlet of the expansion valve should be installed directly to the distributor body. If this is not possible, a straight tube up to 12 inches may be used for the connection.

Locate the expansion valve bulb on a horizontal length of suction line preferably 3 to 6 inches from the suction header. Locate the bulb at 4 or 8 clock position and insulate with a waterproof type of insulation. Clamp the bulb to ensure 100% contact of the bulb with the suction line.

Ensure appropriate nozzle has been installed in the distributor before installing valve. After following the manufacturer's installation instructions and after the room has reached the desired temperature the valve superheat should be checked. This will confirm that the evaporator is operating properly and performing to maximum efficiency. The superheat should be around 6 *(3.3 °C)* to 8°F *(4.4 °C)* for a 10 to 12°F T.D *(5.6 to 6.7 °C)*. Too high or low a super heat will result in unsatisfactory system performance and possible compressor problems.

NOZZLE INSTALLATION

For common applications (Medium temp. R404A/R22/ R407A/R448A, 8 to 12°F *(4 .4 to 6.7°C)* T.D.; low temp. R404A/R407A/R448A, 8 to 12°F *(4 .4 to 6.7°C)* T.D.) the nozzle for all models has been factory installed. For other applications, refer to nozzle manufacturer's selection guide. To replace a nozzle, the nozzle retainer clip (in distributor) must be removed before inserting nozzle. Re-install clip ensuring nozzle is properly in place. A small nozzle can be drilled larger using the drill size listed in table on page 35**.** Ensure the hole must be accurately centered and smooth. A lathe is preferred for the drilling.

MOUNTING

Refer to dimensional drawing for recommended mounting arrangements. Ensure adequate clearance is provided behind the coil as well as each end. The evaporators may be mounted flush with ceiling with bolts, or hanging down with rod hangers. When using rod hangers, allow adequate space between the top of the unit and the ceiling for cleaning to comply with NSF Standard 7.

Ensure that the ceiling is level since the drain pan has been sloped for drainage during the defrost cycle.

DRAIN LINE

The drain line should be run from the drain connection, sloping at least 1" *(25 mm)* per foot and should have the size at least as large as the drain connection. A trap in a warm area outside the room must be provided to allow proper draining through the tubing. Connection should be made to proper drainage facilities that comply with local regulations.

To prevent freeze-up when the temperature of the refrigerated space is 35°F *(2 °C)* or lower, the drain line should be heated along its run inside the cold room. The heated drain line should be insulated. It is recommended that the heater be energized at all times. A heat input of 20 watts per foot in a 28°F *(-2°C)* room and 30 watts per foot for -20°F *(-29°C)* rooms, is satisfactory. Drain line heaters are not required for constant room temperature above 35°F *(2°C)*.

Always trap evaporator drain line individually to prevent vapor migration.

Ensure that the drain line has sufficient slope for proper drainage (prevention of ice build up/blockage in pan).

PIPING

Refrigeration grade piping must be used for all field refrigeration piping. Refrigerant line sizes are important and **may not** be the same size as the coil connections. Consult ASHRAE handbook or other similar reference book for proper line sizing.

Refrigerant piping and control system should be designed to prevent possible liquid slugging (from oil or refrigerant) of the compressors on start-up after the defrost cycle. Also, it should prevent oil logging and minimize refrigerant pressure drop.

For hot gas models, refer to pages 45 - 46 for recommended piping.

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for Quick Start Guide, Operation Manual, etc

WIRING

Wire system in accordance with governing standards and local codes. Refer to data and wiring diagrams on throughout this publication for typical wiring arrangement. Electrical wiring is to be sized in accordance with minimum circuit ampacity rating (MCA). Size fuses used must not exceed the Maximum Fuse Size ratings.

For ease of identifying the proper wiring terminal, unit wiring is color coded and terminal block connections are identified.

When **fan delay thermostats** (combination fan delay and defrost termination) are installed, on start-up, the fans do not operate until the coil temperature is reduced to approximately 25°F *(-4°C)*. It is normal for the fans to cycle a few times until the room temperature is brought down. At higher evaporating temperatures this control may not close and therefore should either be by-passed temporarily or replaced with an adjustable type. (set for a higher temperature cut-in point).

MAINTENANCE

The unit should be periodically inspected for any dirt or ice build-up on the fin surface and cleaned if necessary with a soft whisk or brush. Also ensure coils inner (and outer) drain pans do not have any ice build-up from improper defrost operation. When replacing heater elements first remove heater retainer brackets and heater clips.

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SYSTEM CHECK

Before Start-Up:

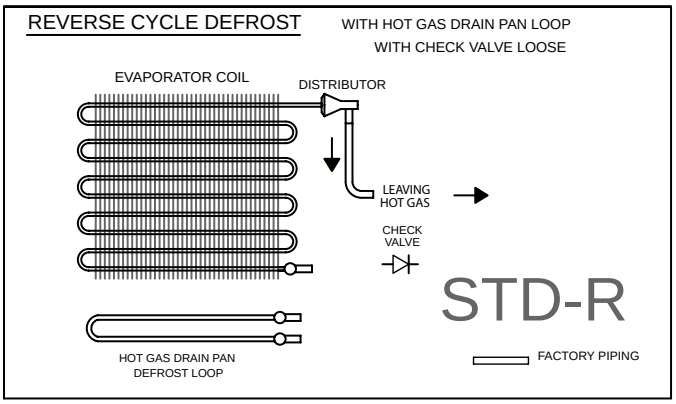
1. All wiring should be in accordance with local codes.
2. Refrigerant lines should be properly sized.
3. All systems preferably include a liqud line solenoid valve at immediately up stream of the expansion valve.
4. Thorough evacuation and dehydration has been performed.
5. The suction, discharge, and receiver service valves must be open.
6. The system preferably include a liquid line filter drier moisture indicator and suction filter.
7. Pour enough water into the drain pan to allow a good check on drainage and seal the trap.

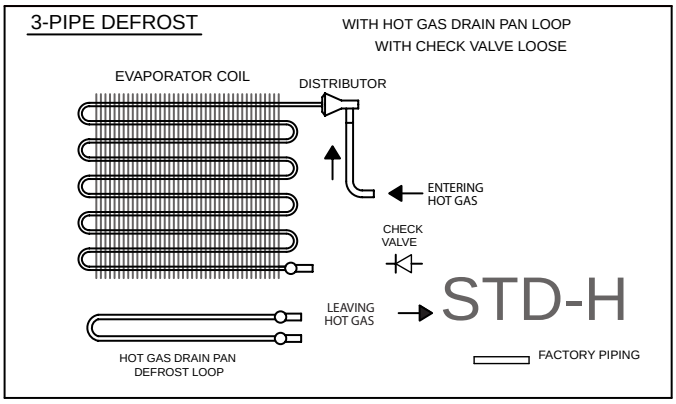
After Start-Up:

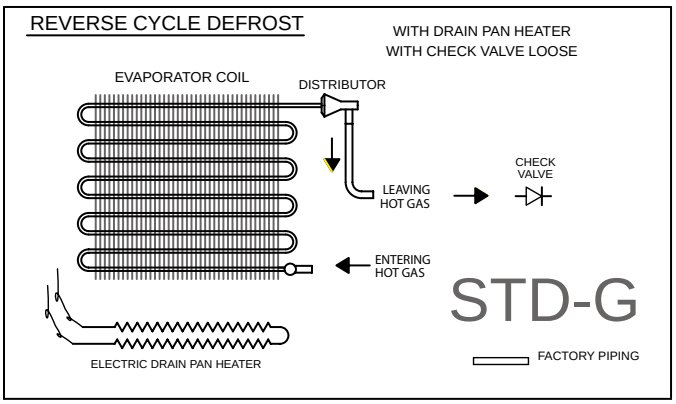
1. Check the oil level to be sure the oil charge is correct.
2. On initial start up the fans do not start until coil temperature is pulled down to approximately 25°F *(-4 °C)* on the coil. Also, it is normal for the fan to cycle a few times until the room temperature is pulled down.
3. If necessary, temporarily by-pass fan delay control (to run fans until room temp is lowered).
4. Be sure that the expansion valve is properly set to provide the correct amount of superheat.
5. After the box temperature is close to reaching the desired temperature, the evaporator superheat must be checked and adjustment made if necessary.
   In general, evaporators running with a TD of 10°F *(5.6 °C*) should have a superheat reading of 6° to 8°F *(3.3 °C to 4.4 °C)*. For evaporators with another T.D., the general rule is that the superheat should be around 60 to 80% of T.D.
6. Heavy moisture loads are usually encountered when starting the system for the first time. This may cause a rapid build-up of frost on the evaporator. During the initial pull down, we suggest that the frost build-up be watched and defrosted manually as required.
7. Observe that the system goes through at least one complete DEFROST CYCLE.

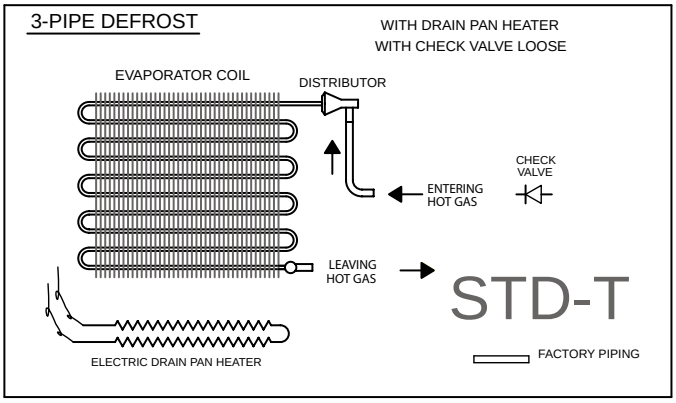
HOT GAS PIPING SCHEMATICS
STANDARD CONFIGURATIONS

Refer to Nomenclature for details









Standard Offering: *All Models*

Check Valve is included with the coil shipped loose as it is a must have component for system operation.

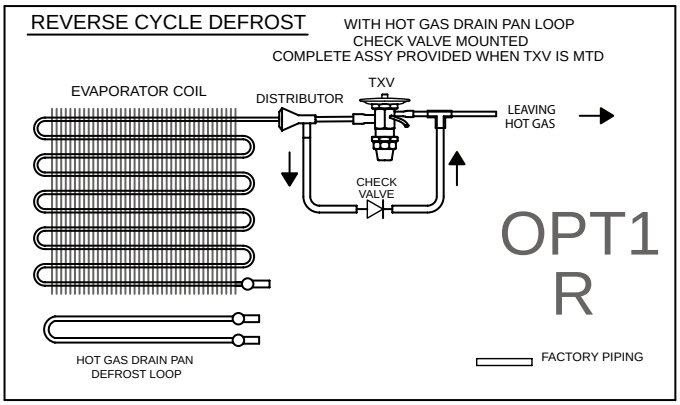
Check Valve & TXV - See next page (OPT 1)

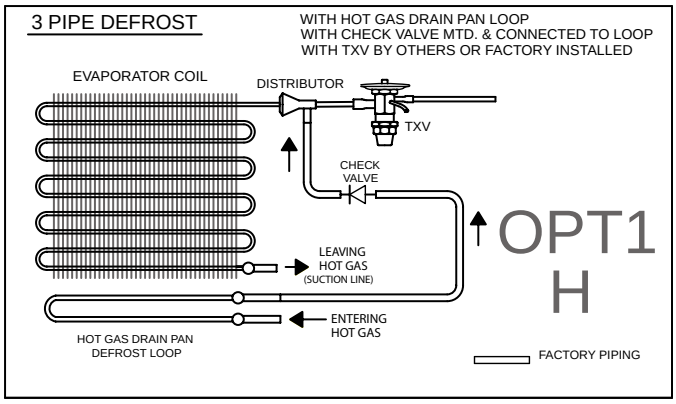
When a TXV is ordered with a HG defrost coil: Its *only* option will be **Factory Installed**. The bypass check valve will be **factory installed** as well as part of the same option.

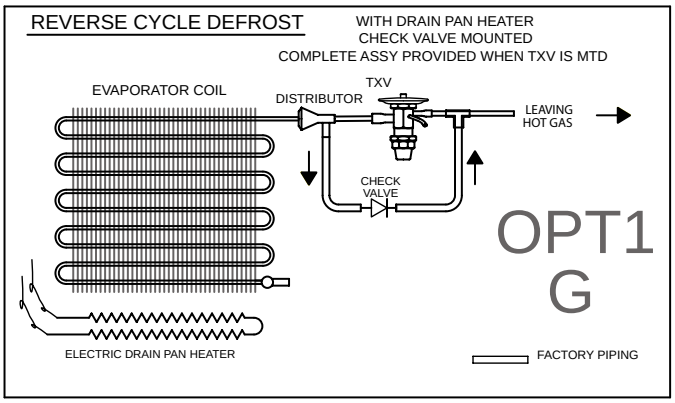
- **Reverse Cycle PanHeater *(G Models)*** when ordered with TXV & Check Valve:
  - TXV, Check Valve and bypass Tee are factory installed
- **Reverse Cycle PanLoop *(R Models)*** when ordered with TXV & Check Valve:
  - TXV, Check Valve and bypass Tee are factory installed
- **3-Pipe PanHeater *(T Models)*** when ordered with TXV & Check Valve:
  - TXV and Check Valve are factory installed
- **3-Pipe PanLoop *(H Models)*** when ordered with TXV & Check Valve:
  - TXV and Check Valve are factory installed

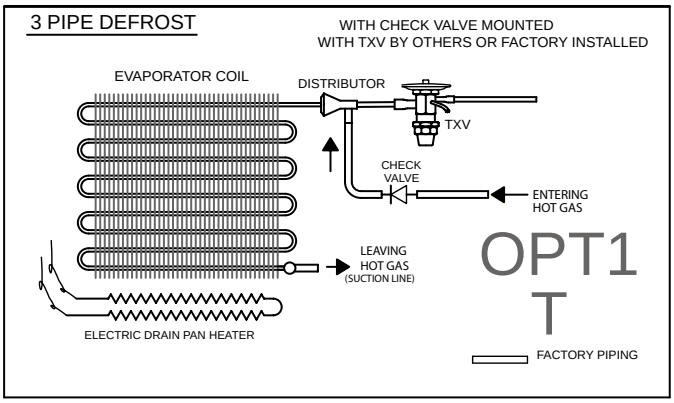
HOT GAS PIPING SCHEMATICS
OPTIONAL CONFIGURATIONS

Refer to Nomenclature for details





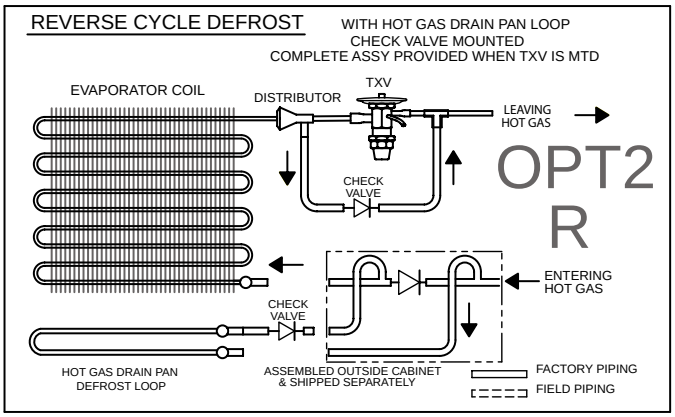




Drain pan Loop Kit - See below (OPT 2)

Drain pan loop kit is an assembly that is fully assembled and shipped loose for field installation outside the cabinet. Two check valves are included, depending on the model size, one or both are factory installed.

- **Reverse Cycle PanLoop *(R Models)*** when ordered with TXV & Check Valve:
  - Suction line piping shipped as a pre-piped assembly for field installation



Solenoid Valve

Solenoid valves are available as a shipped loose item due to limited space inside the cabinet

GLYCOL FLUID AIR COOLER DATA
(Contact Factory for Complete Details)

MODEL KLP	NO. OF FANS	AIRFLOW		CAPACITY * - 5 USGPM *(.032 L/S)*				CAPACITY * - 15 USGPM *(.095 L/S)*				CONN. SIZE (IN/ OUT)
		CFM	*(L/S)*	BTU/H	*(WATTS)*	P.D. (FT. H_20)	*P.D. (kPa)*	BTU/H	*(WATTS)*	P.D. (FT. H_20)	*P.D. (kPa)*	
104W	1	1010	*(480)*	2100	*(620)*	6.9	*(20.7)*	2500	*(730)*	17	*(51.7)*	7/8
106W	1	950	*(450)*	2800	*(820)*	3.2	*(9.7)*	3100	*(910)*	8.1	*(24.1)*	7/8
107W	1	900	*(430)*	3400	*(1000)*	4.4	*(13.1)*	3700	*(1080)*	4.6	*(13.8)*	7/8
209W	2	2020	*(950)*	3800	*(1110)*	10	*(31.0)*	5000	*(1470)*	25	*(73.8)*	7/8
211W	2	1910	*(900)*	4900	*(1440)*	4.8	*(14.5)*	5700	*(1670)*	12	*(35.2)*	7/8
214W	2	1800	*(850)*	5900	*(1730)*	6.5	*(19.3)*	6700	*(1960)*	6.9	*(20.7)*	7/8
317W	3	2860	*(1350)*	6600	*(1930)*	6.5	*(19.3)*	8000	*(2340)*	15	*(46.2)*	7/8
320W	3	2700	*(1270)*	8000	*(2340)*	8.8	*(26.2)*	9400	*(2750)*	9.2	*(27.6)*	7/8
423W	4	3810	*(1800)*	8100	*(2370)*	8.1	*(24.1)*	10000	*(2930)*	19	*(57.2)*	7/8
426W	4	3600	*(1700)*	9800	*(2870)*	11	*(32.4)*	12000	*(3520)*	11	*(33.8)*	7/8
532W	5	4500	*(2120)*	11000	*(3220)*	13	*(38.6)*	14000	*(4100)*	14	*(40.7)*	7/8
639W	6	5400	*(2550)*	13000	*(3810)*	15	*(45.5)*	16000	*(4690)*	16	*(46.9)*	7/8

The above capacities were rated based on 30% Propylene Glycol, 25°F *(-4°C)* glycol entering temperature and 35°F *(-2°C)* air entering temperature with glycol flow rate listed. For all other conditions, please use “Pi-Coil” software (contact factory).

PROJECT INFORMATION

System	
Model Number	Date of Start-Up
Serial Number	Service Contractor
Refrigerant	Phone
Electrical Supply	E-mail

PRODUCT SUPPORT RESOURCES



web: **www.k-rp.com/klp**
email: **evaps@k-rp.com**
call: **1-844-893-3222 x520**



email: **troubleshooting@k-rp.com**
call: **1-844-893-3222 x529**



web: **www.k-rp.com/parts**
email: **parts@k-rp.com**
call: **1-844-893-3222 x520**



web: **www.k-rp.com/warranty**
email: **warranty@k-rp.com**
call: **1-844-893-3222 x501**



email: **orders@k-rp.com**
call: **1-844-893-3222 x501**



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Due to the manufacturer’s policy of continuous product improvement, we reserve the right to make changes without notice.

27/08/19