TLP
Low Profile Evaporators

60 Hz

Air, Electric, Hot Gas & Warm Fluid Defrost

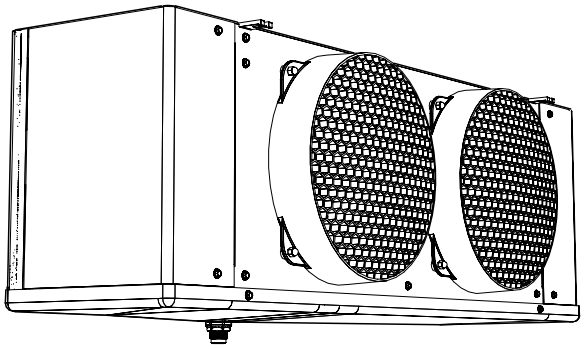
Electrical Power:
115/1/60, 208-230/1/60,
208-230/3/60, 460/1/60

PRODUCT DATA & INSTALLATION

Bulletin T30-TLP-PDI-18

1087151

Questions about this product?
Email: evaps@t-rp.com
Call: 1-844-893-3222 x520



LOW GWP REFRIGERANTS

SMARTSPEED™ FAN MOTOR TECHNOLOGY

See Page 22 for details

CONTENTS

NOMENCLATURE

T LP 3 17 L E - S2 B

T = Trenton

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 (2 to 6 fan models only)
T3 = 208-230/3/60

Generation: B = 2nd

STANDARD FEATURES

- Compatable with Low GWP Refrigerants
- Streamlined cabinet style
- High efficiency and high strength fan guard
- Front access
- Higher capacity
- Compact
- Internally enhanced tubing
- More uniform air flow
- Reverse cycle & 3 pipe hot gas available
- Convenient mounting brackets
- Ample electrical and header compartments
- Lower heater wattage
- PSC Motors
- Proven motor/fan/motor mount design
- 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
- 460/1/60 PSC motor only

OPTIONAL FEATURES

- EC motors with patented SmartSpeed® Technology. See page 22
- Hot gas loop pan with hot gas defrost models
- Factory installed expansion valve, solenoid valve and room thermostat
- Wire fan guard

CAPACITY DATA - ALL MODELS

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

Medium Temp. Models			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	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)
		R134a	3870 (1134)	4950 (1449)	6120 (1791)	7740 (2268)	9900 (2898)	12600 (3690)	15300 (4482)	18000 (5274)	20700 (6066)	23400 (6849)	28800 (8433)	35100 (10260)
Air Flow	CFM (L/S)		1010 (470)	950 (450)	900 (430)	2020 (950)	1910 (900)	1800 (850)	2860 (1350)	2700 (1270)	3810 (1800)	3600 (1700)	4500 (2120)	5400 (2550)
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 (1.2)	3.0 (1.4)	4.0 (1.8)	3.9 (1.8)	3.3 (2.4)	6.5 (3.0)	7.8 (3.5)

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

Low Temp. Models			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	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)
		R134a	3420 (999)	4320 (1269)	5220 (1530)	6660 (1953)	8100 (2376)	9900 (2898)	12600 (3690)	15300 (4482)	17100 (5013)	19800 (5796)	24300 (7119)	27900 (8172)
Air Flow	CFM (L/S)		1010 (470)	950 (450)	900 (430)	2020 (950)	1910 (900)	1800 (850)	2860 (1350)	2700 (1270)	3810 (1800)	3600 (1700)	4500 (2120)	5400 (2550)
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 (1.2)	3.0 (1.4)	4.0 (1.8)	3.9 (1.8)	3.3 (2.4)	6.5 (3.0)	7.8 (3.5)

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

Low Temp. 4 FPI Models			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	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)
		R134a	2700 (792)	3690 (1080)	4500 (1323)	5760 (1692)	7020 (2061)	8370 (2448)	10800 (3168)	13500 (3951)	14400 (4221)	17100 (5013)	20700 (6066)	24300 (7119)
Air Flow	CFM (L/S)		1070 (510)	1010 (480)	950 (450)	2140 (1010)	2020 (950)	1910 (900)	3030 (1430)	2860 (1350)	4040 (1910)	3810 (1800)	4770 (2250)	5720 (2700)
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 (1.2)	3.0 (1.4)	4.0 (1.8)	3.9 (1.8)	3.3 (2.4)	6.5 (3.0)	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 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.

*** 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**

R407C	R404A	R507	R22	R134a
0.99	0.92	0.93	1.02	1.03

TLP

ELECTRICAL DATA - 115/1/60

60Hz

AIR DEFROST &

HOT GAS DEFROST WITH HOT GAS LOOP PAN MODELS

MODEL TLP	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

TLP

ELECTRICAL DATA - 208-230/1/60

60Hz

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

MODEL TLP	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	0.6	15	1/15	0.6	60	0.8	15
106MA-S2 *		1	1/15	0.5	100	0.6	15	1/15	0.6	60	0.8	15
107MA-S2 *		1	1/15	0.5	100	0.6	15	1/15	0.6	60	0.8	15
209M#-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15
211M#-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15
214M#-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15
317M#-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15
320M#-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15
423M#-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15
426M#-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15
532M#-S2		5	1/15	2.5	500	2.6	15	1/15	3.0	300	3.2	15
639M#-S2		6	1/15	3.0	600	3.1	15	1/15	3.6	360	3.8	15
207L†-S2	6	2	1/15	1.0	100	1.1	15	1/15	0.6	60	0.75	15
209L†-S2		2	1/15	1.0	100	1.1	15	1/15	0.6	60	0.75	15
211L†-S2		2	1/15	1.0	100	1.1	15	1/15	0.6	60	0.75	15
314L†-S2		3	1/15	1.5	200	1.6	15	1/15	1.2	120	1.4	15
317L†-S2		3	1/15	1.5	200	1.6	15	1/15	1.2	120	1.4	15
419L†-S2		4	1/15	2.0	200	2.1	15	1/15	1.2	120	1.4	15
422L†-S2		4	1/15	2.0	300	2.1	15	1/15	1.8	180	2.0	15
527L†-S2		5	1/15	2.5	300	2.6	15	1/15	1.8	180	2.0	15
631L†-S2		6	1/15	3.0	400	3.1	15	1/15	2.4	240	2.6	15
206V†-S2	4	2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15
208V†-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15
209V†-S2		2	1/15	1.0	200	1.1	15	1/15	1.2	120	1.4	15
312V†-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15
315V†-S2		3	1/15	1.5	300	1.6	15	1/15	1.8	180	2.0	15
416V†-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15
419V†-S2		4	1/15	2.0	400	2.1	15	1/15	2.4	240	2.6	15
523V†-S2		5	1/15	2.5	500	2.6	15	1/15	3.0	300	3.2	15
627V†-S2		6	1/15	3.0	600	3.1	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

TLP

ELECTRICAL DATA - 460/1/60

60Hz

AIR DEFROST &

HOT GAS DEFROST WITH HOT GAS LOOP PAN MODELS

MODEL TLP	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

TLP

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

ELECTRIC DEFROST MODELS

60Hz

MODEL TLP	FPI	FAN MOTORS											DEFROST HEATERS						
			PSC MOTORS					EC MOTORS						208-230/1/60			208-230/3/60		
		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)	TOTAL AMPS	MCA (A)	MAX. FUSE (AMPS)
104ME-*	6	1	1/15	0.5	100	1.4	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	1.4	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	1.4	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	2.5	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	2.5	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	2.5	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	3.6	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	3.6	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	4.7	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	4.7	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	5.8	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	6.9	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	1.4	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	1.4	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	1.4	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	2.5	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	2.5	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	2.5	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	3.6	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	3.6	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	4.7	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	4.7	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	5.8	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	6.9	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	1.4	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	1.4	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	1.4	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	2.5	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	2.5	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	2.5	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	3.6	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	3.6	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	4.7	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	4.7	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	5.8	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	6.9	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 TLP	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

TLP

ELECTRICAL DATA - 115/1/60

HOT GAS DEFROST

WITH DRAIN PAN HEATER MODELS

60Hz

MODEL TLP	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

TLP

ELECTRICAL DATA - 208-230/1/60

HOT GAS DEFROST

WITH DRAIN PAN HEATER MODELS

60Hz

MODEL TLP	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

TLP

ELECTRICAL DATA - 460/1/60

HOT GAS DEFROST

WITH DRAIN PAN HEATER MODELS

60Hz

TLP MODEL	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

TLP

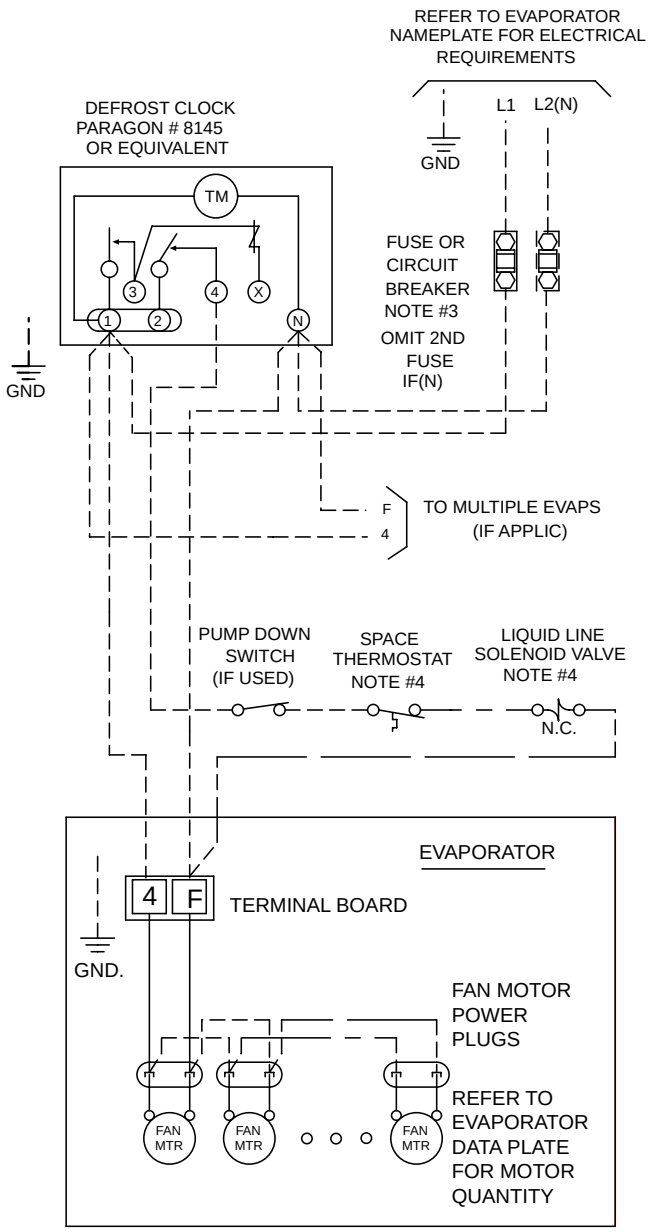
WIRING DIAGRAM - 115/1/60, 208-230/1/60

STANDARD PSC MOTORS

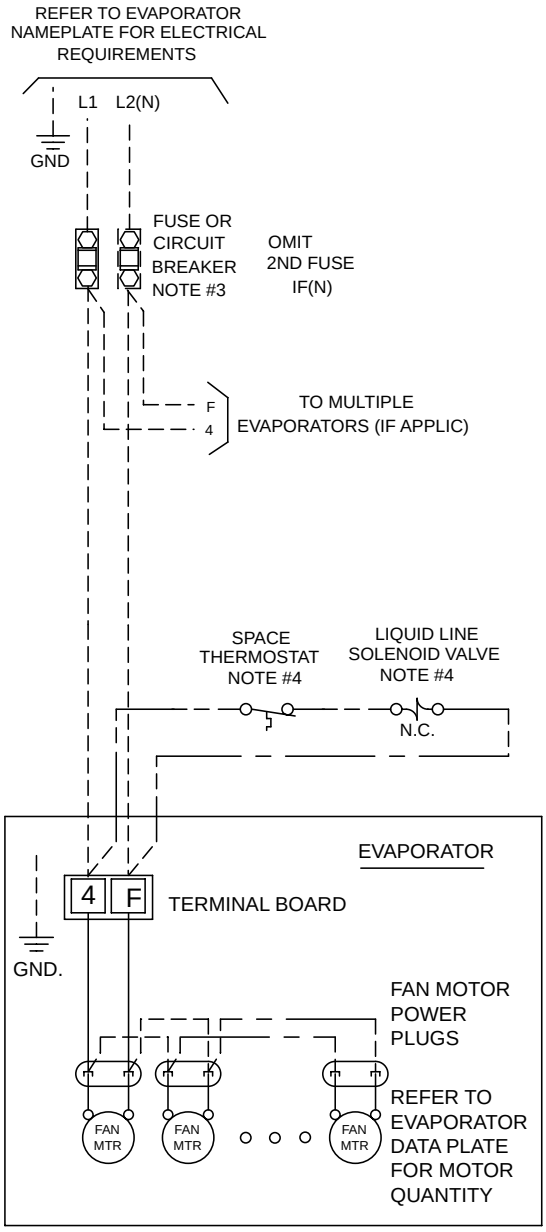
AIR DEFROST MODELS

PSC 60Hz

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

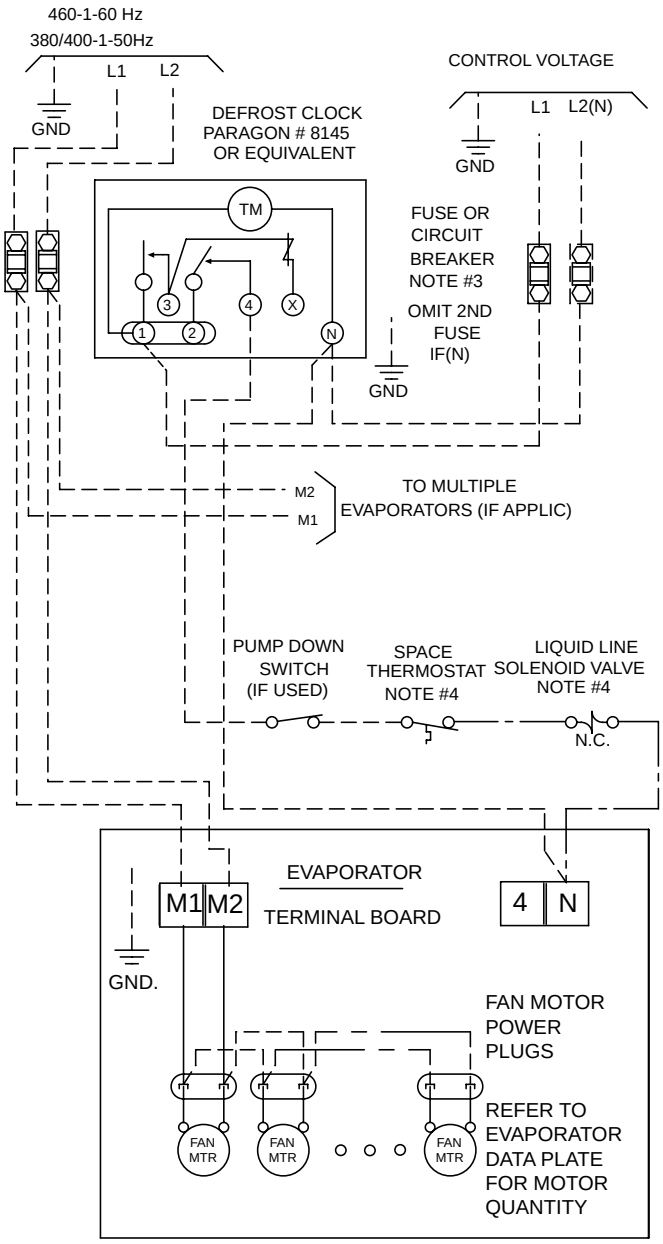
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

TLP

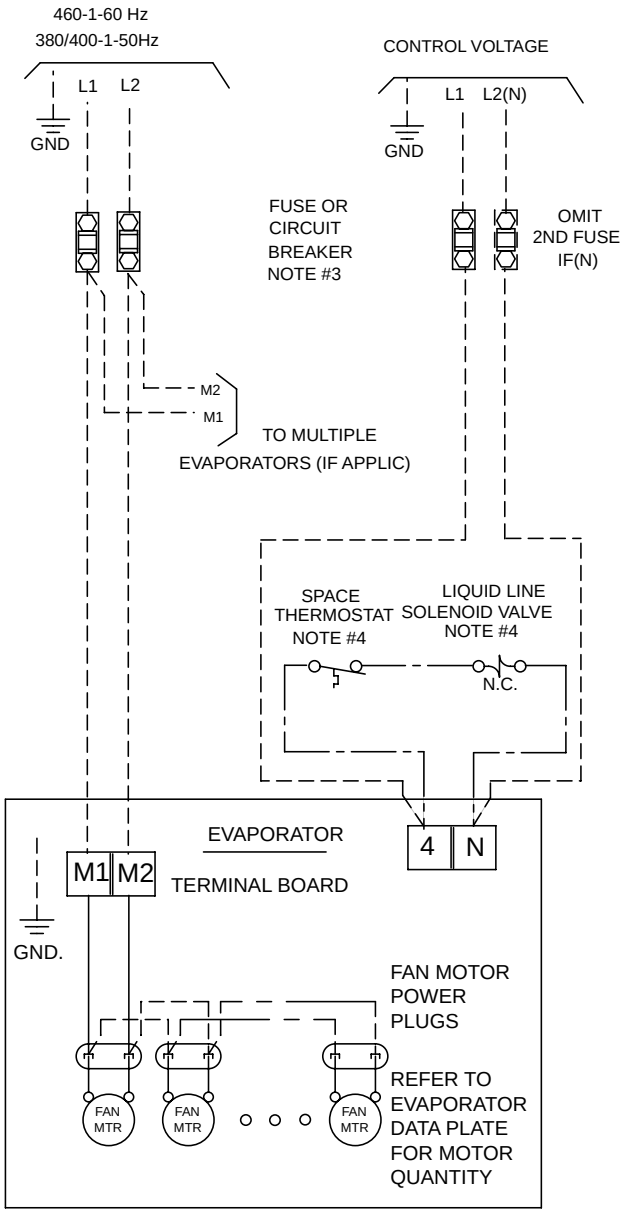
WIRING DIAGRAM - 460/1/60
STANDARD PSC MOTORS
AIR DEFROST MODELS

PSC 60Hz

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.

TLP

WIRING DIAGRAM - 208-230/1/60

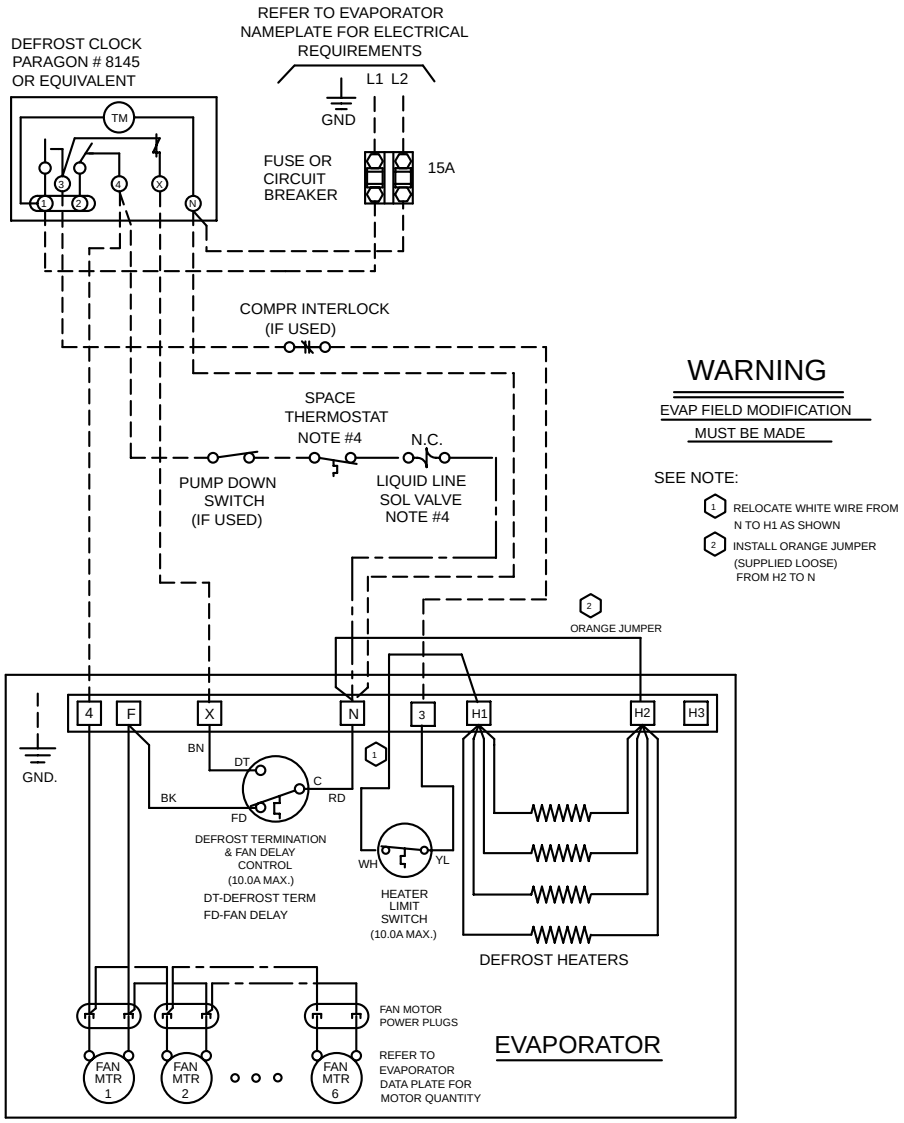
STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - SINGLE EVAPORATOR 10A MAX.

PSC 60Hz

FOR ALL MODELS WITHOUT DEFROST HEATER CONTACTOR

USING MAXIMUM 15A HEATER OVERCURRENT PROTECTION



WARNING

EVAP FIELD MODIFICATION MUST BE MADE

SEE NOTE:

1. RELOCATE WHITE WIRE FROM N TO H1 AS SHOWN
2. INSTALL ORANGE JUMPER (SUPPLIED LOOSE) FROM H2 TO N

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.

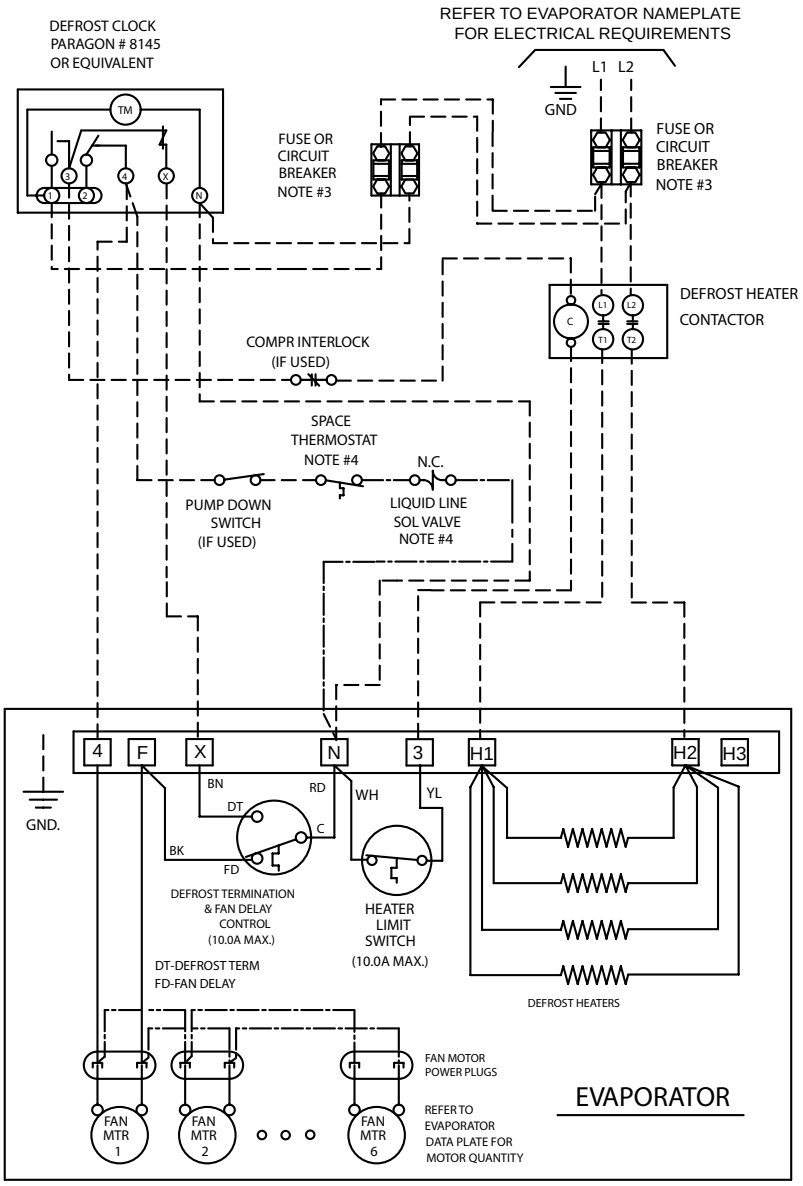
2-LP ED 12/07

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

○ -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

TLP

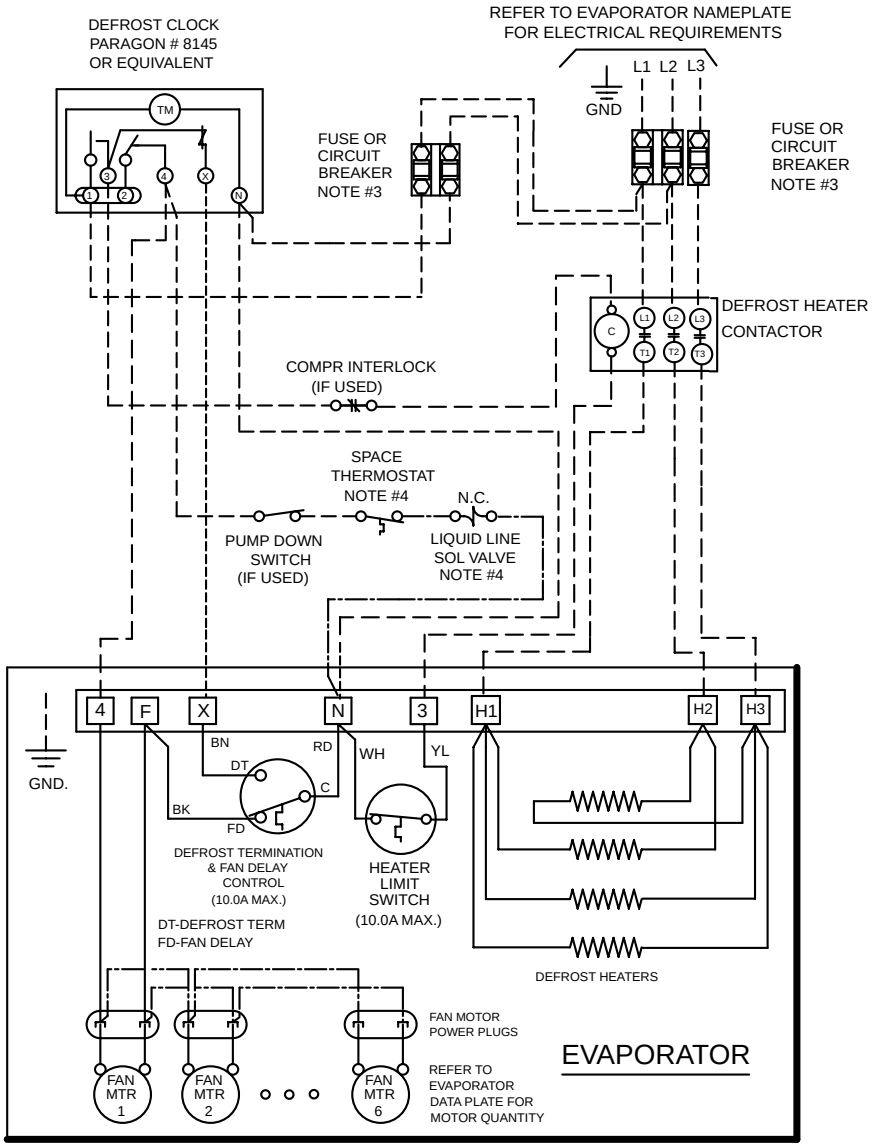
WIRING DIAGRAM - 208-230/3/60

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - SINGLE EVAPORATOR

PSC 60Hz

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

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.

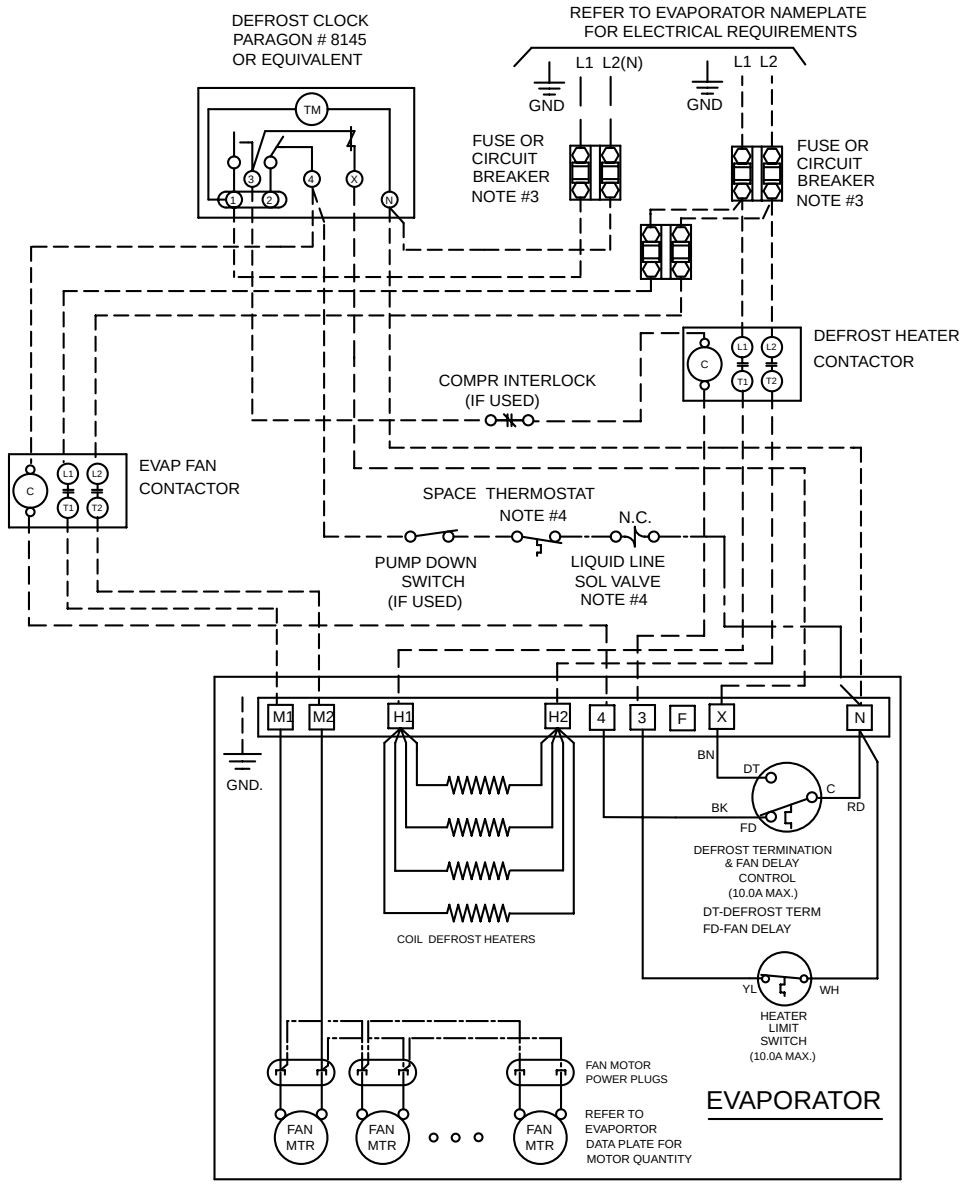
3A-LP ED 3ph.CONTACTOR SINGLE 12/07

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.

TLP

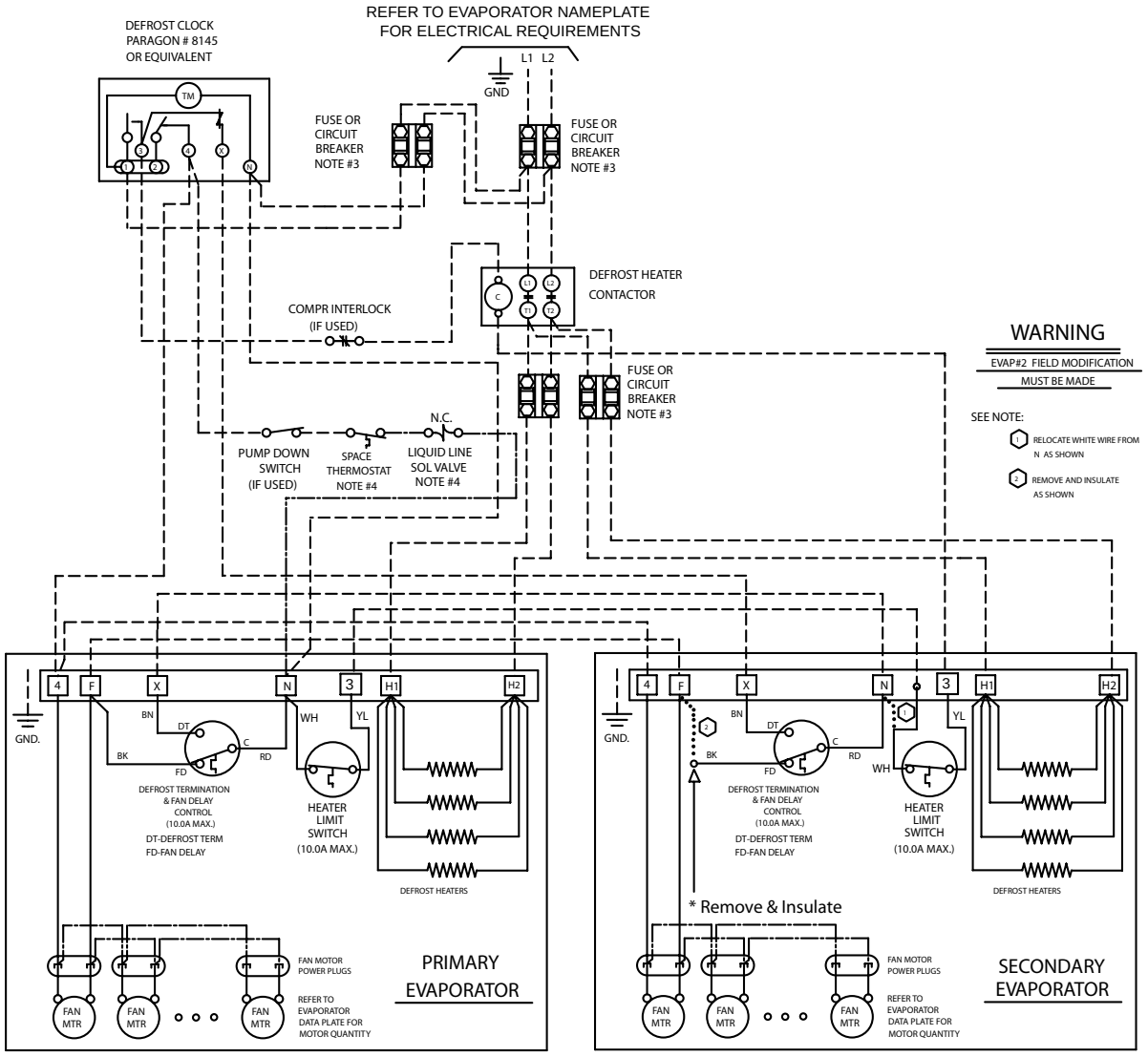
WIRING DIAGRAM - 208-230/1/60

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - MULTIPLE EVAPORATORS

PSC 60Hz

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

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.

TLP

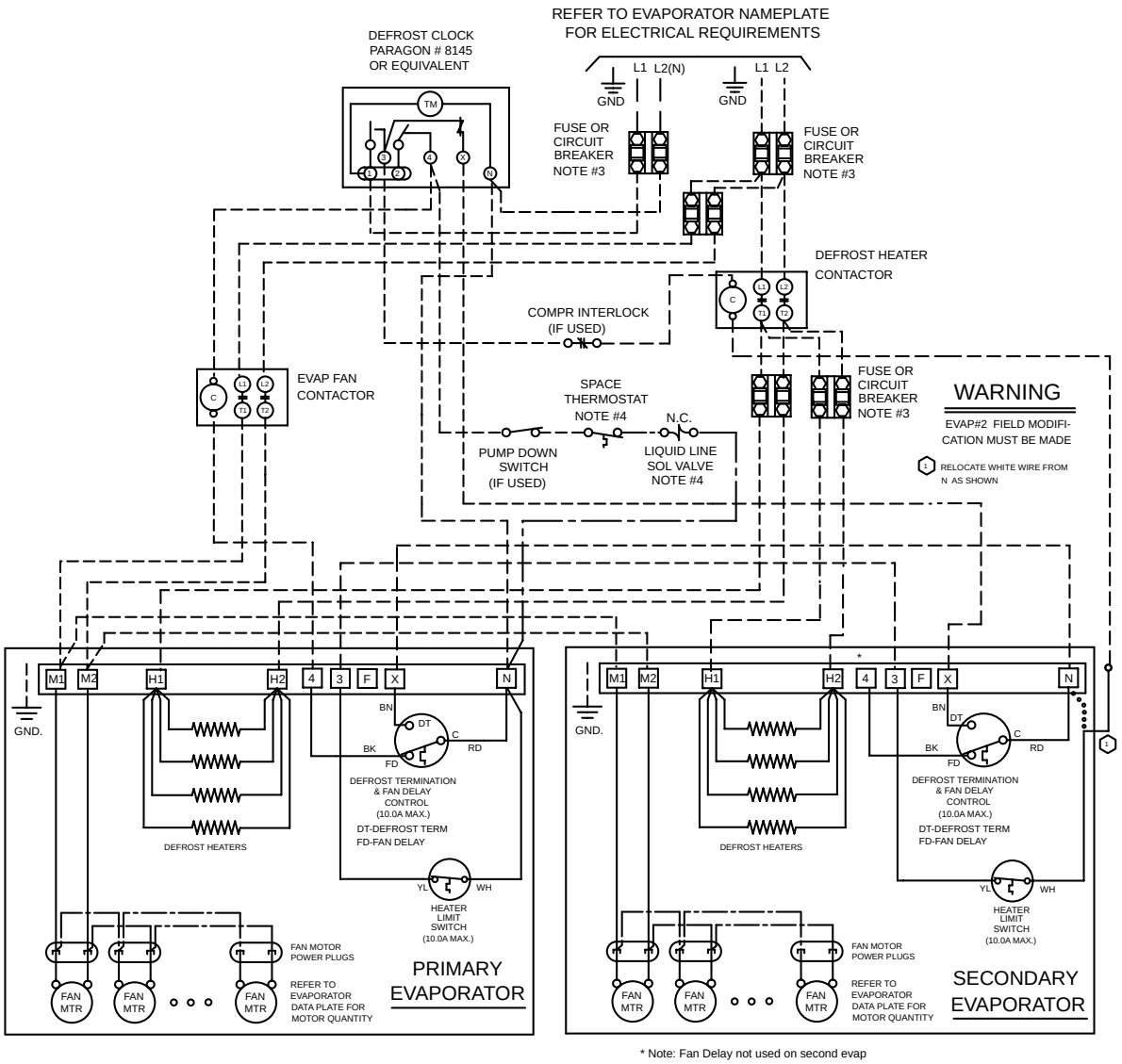
WIRING DIAGRAM - 460/1/60

STANDARD PSC MOTORS

ELECTRIC DEFROST MODELS - MULTIPLE EVAPORATORS

PSC 60Hz

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

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

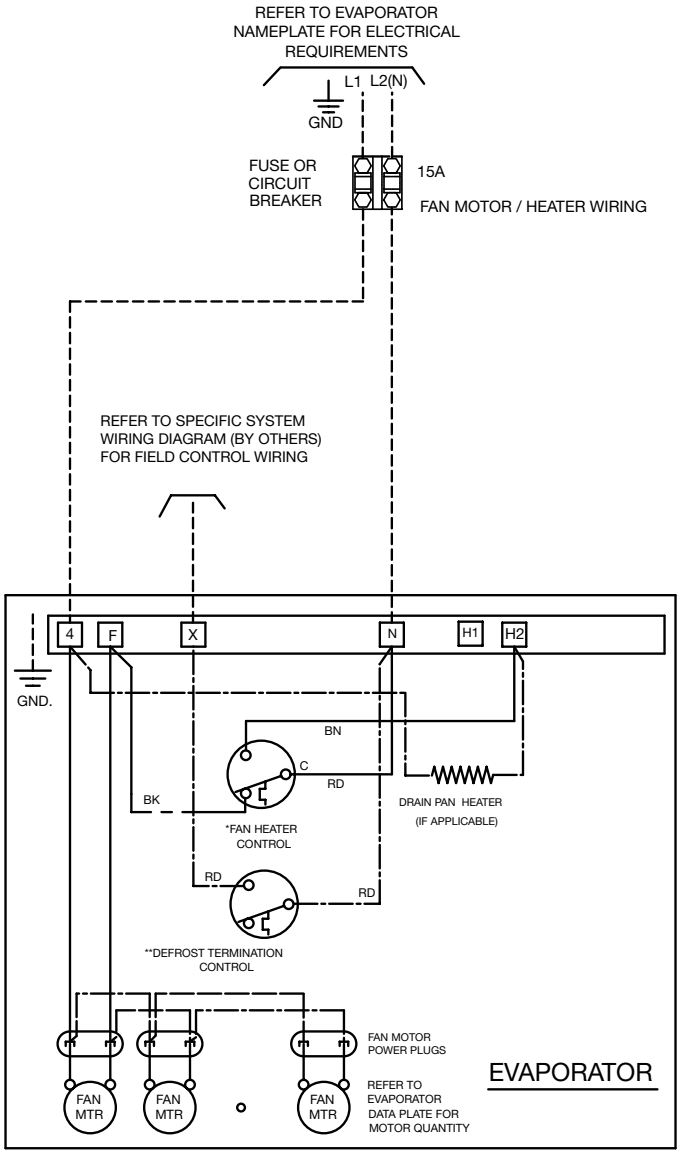
- - - - - - - - - - - WIRING BY OTHERS

— ——————— 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

O -COMPONENT TERMINAL

☐ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

——————— FACTORY WIRING

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

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

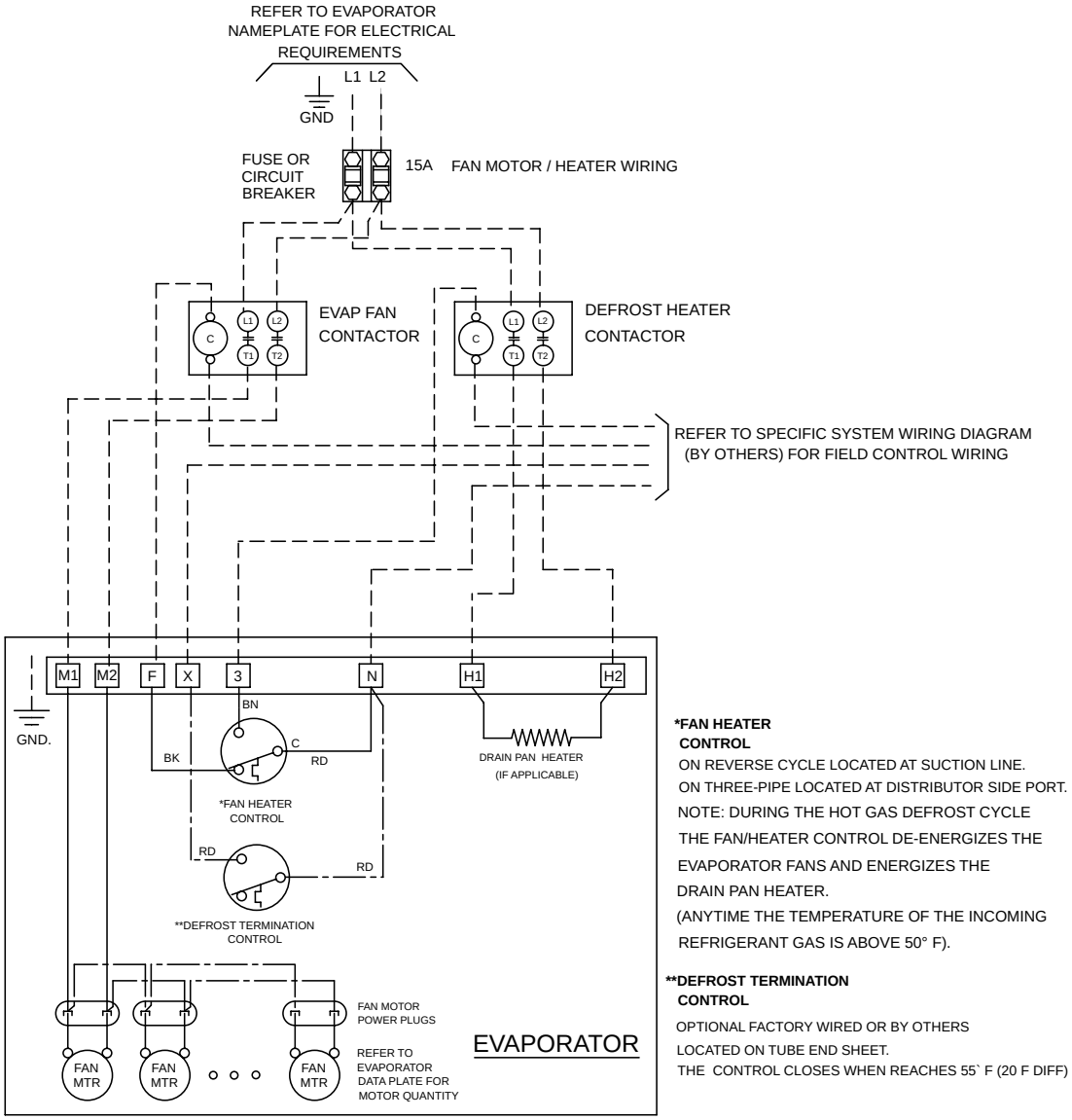
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

TLP

WIRING DIAGRAM - 460/1/60
STANDARD PSC MOTORS
HOT GAS DEFROST MODELS

PSC 60Hz

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

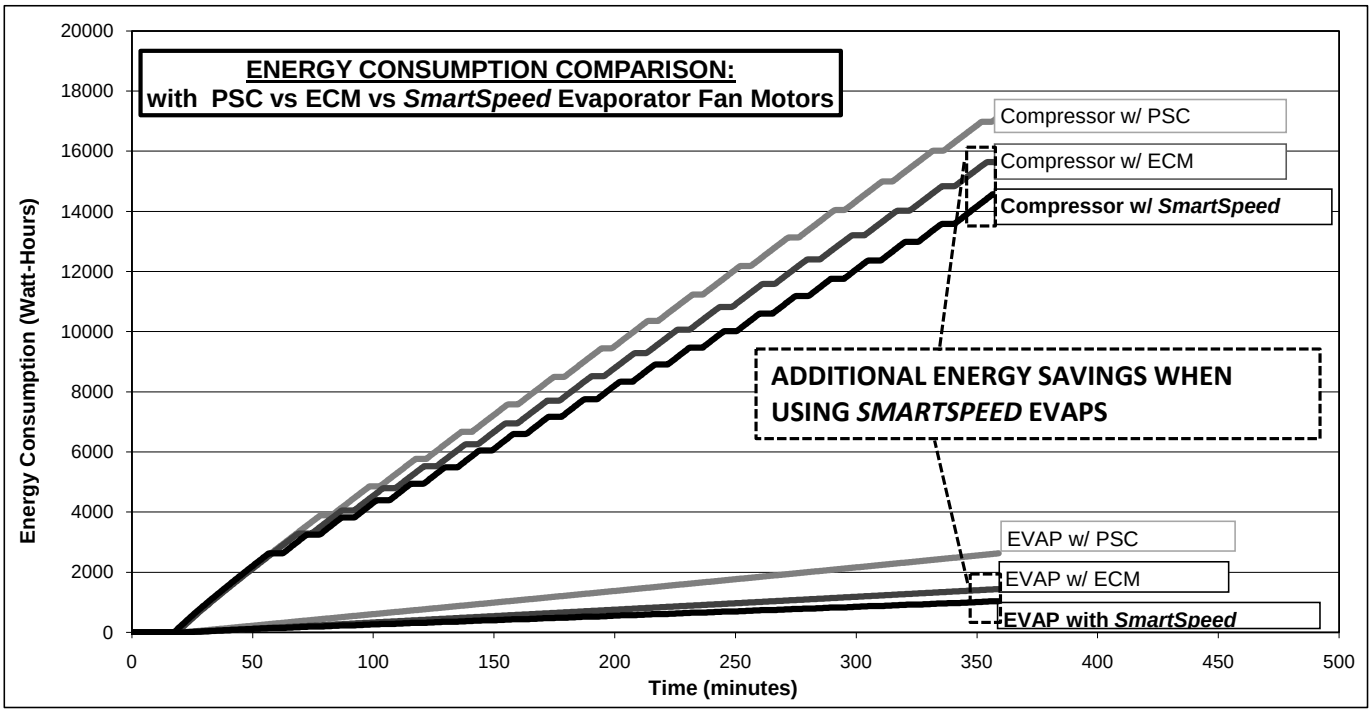
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

9-LP 460 HG 05/06

US Patent No. 8,635,883

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 TLP 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.

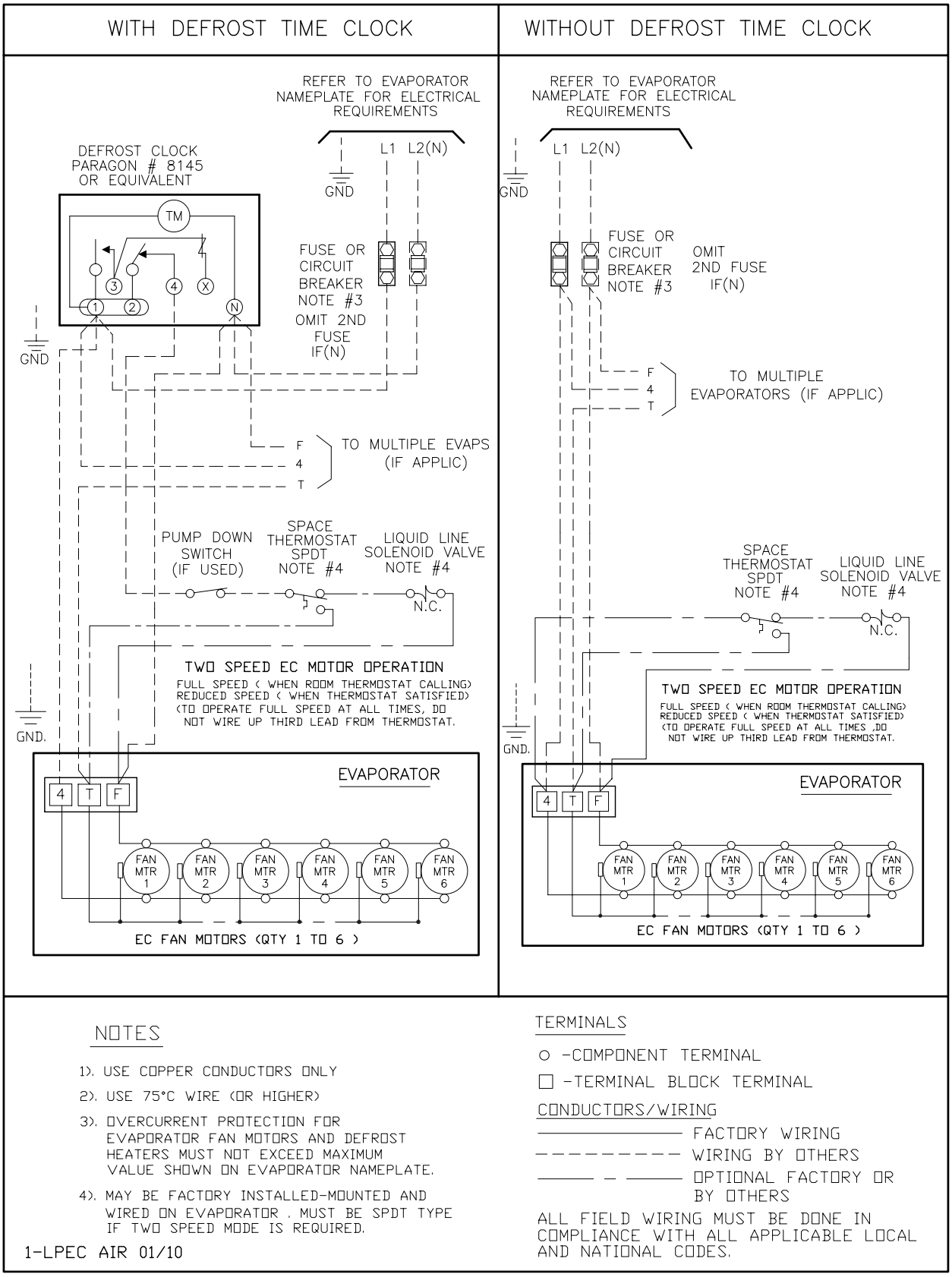
TLP

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

OPTIONAL EC MOTORS with SMARTSPEED™

AIR 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.

1-LPEC AIR 01/10

TERMINALS

○ -COMPONENT TERMINAL

□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

———————— FACTORY WIRING

– – – – – – – – – WIRING BY OTHERS

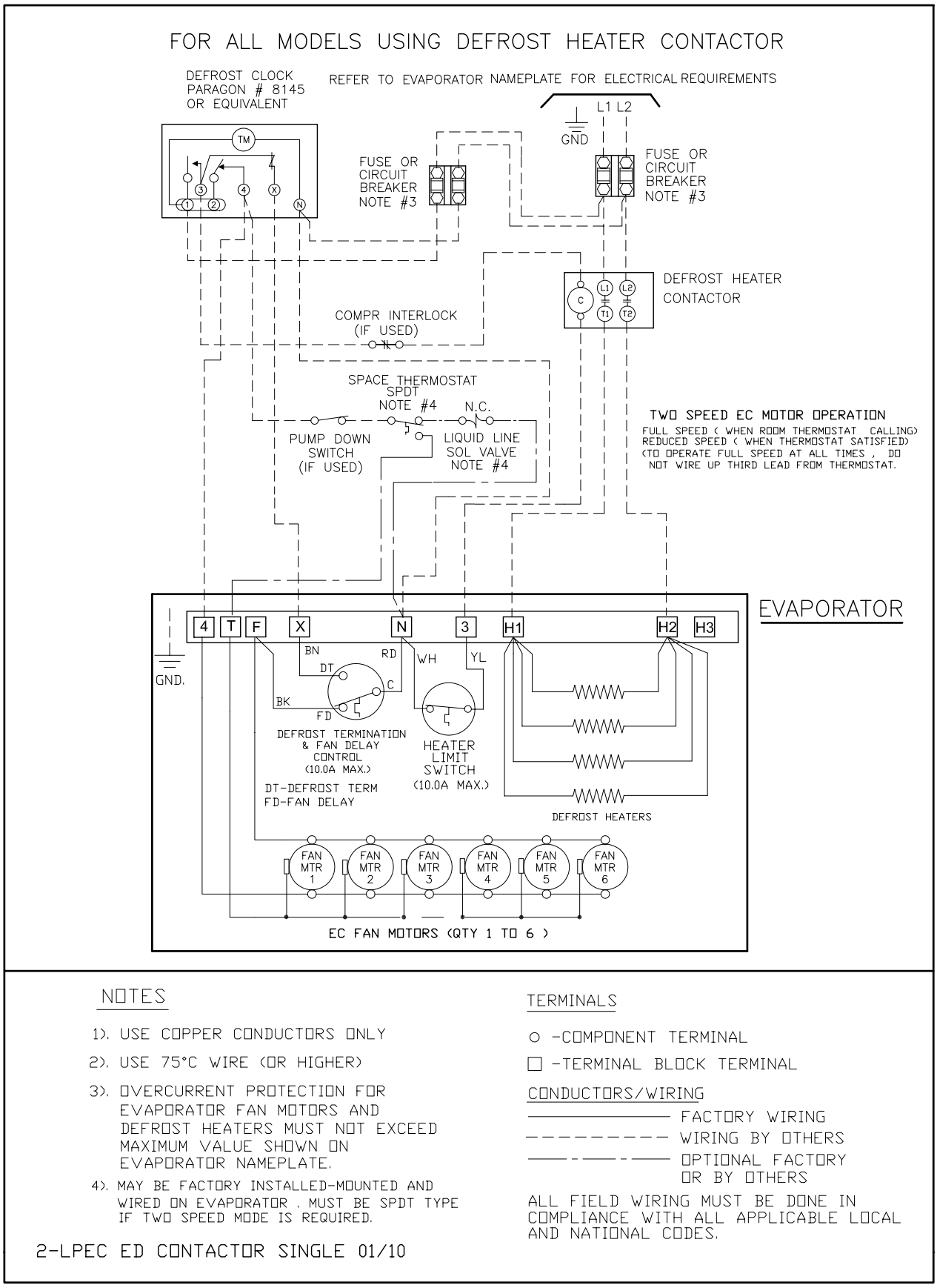
——— – ——— OPTIONAL FACTORY OR BY OTHERS

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

TLP

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.

TLP

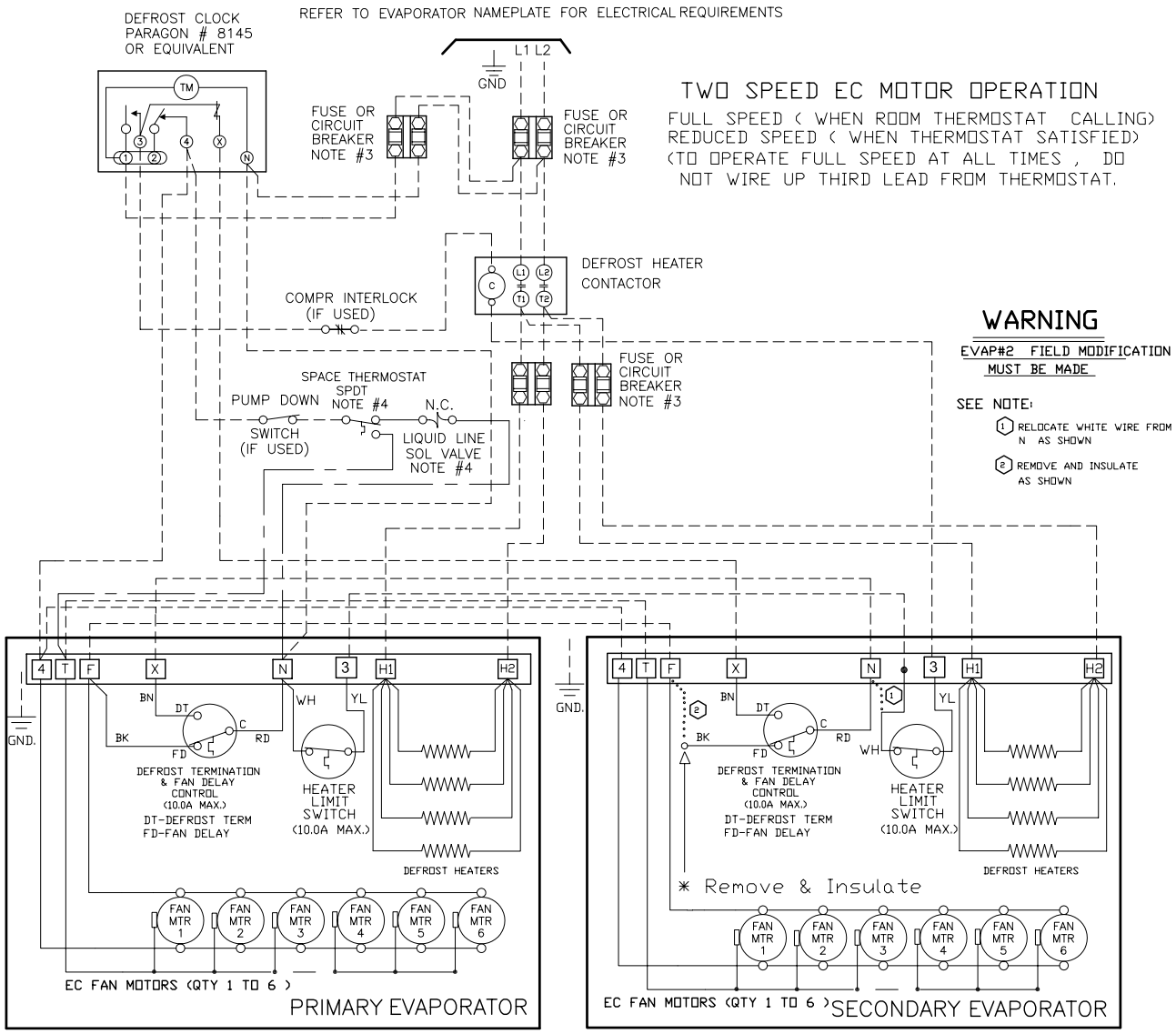
WIRING DIAGRAM - 208-230/1/60

OPTIONAL EC MOTORS with SMARTSPEED™

ELECTRIC DEFROST MODELS - MULTIPLE EVAPORATORS

ECM 60Hz

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.

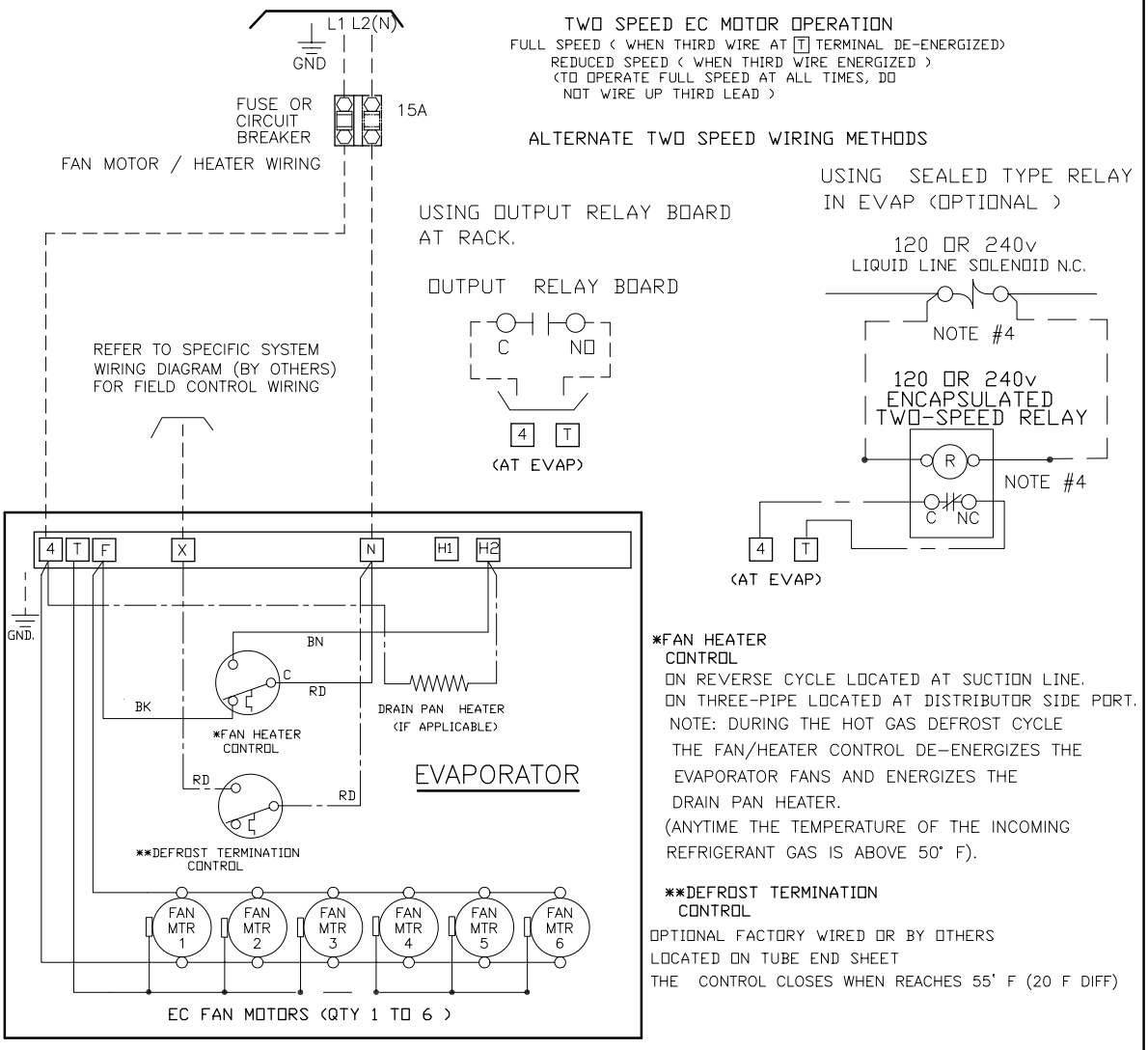
TLP

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

ECM 60Hz

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 .

TERMINALS

O -COMPONENT TERMINAL
□ -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

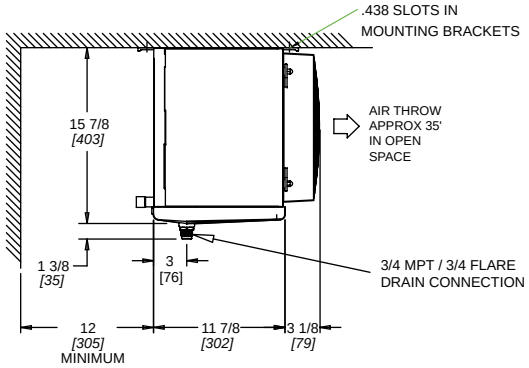
——————— FACTORY WIRING
– – – – – – – – – WIRING BY OTHERS
——————— OPTIONAL FACTORY OR BY OTHERS

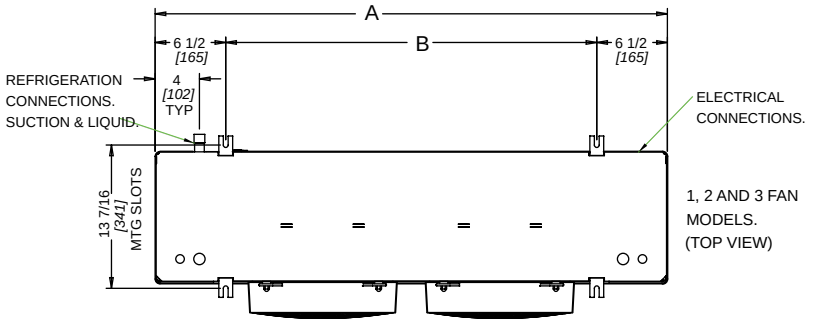
ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

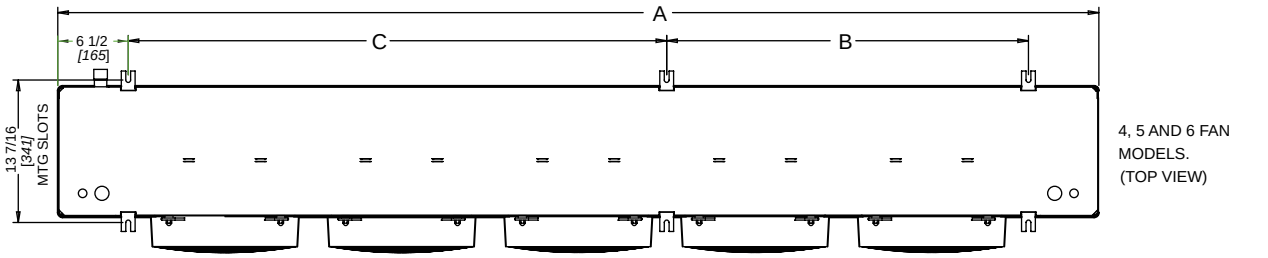
4-LPEC HG 01/10

TLP

DIMENSIONAL DATA







MODEL	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

TLP

SHIPPING WEIGHTS

Air Defrost and Hot Gas Defrost with Drain Pan Heater Models

MODEL NUMBER								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				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						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)*

TLP RECOMMENDED EXPANSION VALVE SELECTIONS
MEDIUM TEMPERATURE MODELS

SPORLAN

MODEL	FACTORY INSTALLED NOZZLE	R404A R507	R407A R407C R22	R134a
104M	N/A	EBQE-AA-*C	EBQE-AAA-VC	EBQE-AAA-JC
106M	L-1/2	EBQE-AA-*C	EBQE-AA-VC	EBQE-AA-JC
107M	L-1/2	EBQE-A-*C	EBQE-AA-VC	EBQE-AA-JC
209M	L-3/4	EBQE-A-*C	EBQE-AA-VC	EBQE-AA-JC
211M	L-1	EBQE-A-*C	EBQE-A-VC	EBQE-A-JC
214M	L-1	EBQE-B-*C	EBQE-A-VC	EBQE-A-JC
317M	L-1 1/2	EBQE-B-*C	EBQE-A-VC	EBQE-A-JC
320M	L-1 1/2	EBQE-B-*C	EBQE-B-VC	EBQE-A-JC
423M	L-2	EBQE-B-*C	EBQE-B-VC	EBQE-A-JC
426M	L-2	EBQE-C-*C	EBQE-B-VC	EBQE-B-JC
532M	L-2 1/2	EBQE-C-*C	EBQE-B-VC	EBQE-B-JC
639M	G-3	EBQE-C-*C	EBQE-C-VC	EBQE-C-JC

*** Varies with refrigerant: S = R404A, P = R507**

ALCO

MODEL	FACTORY INSTALLED NOZZLE	R404A R507	R407A R407C R22	R134a
104M	N/A	HFESC 1/4 SC	HFESC 1/2 HC	HFESC 1/2 MC
106M	L-1/2	HFESC 1/2 SC	HFESC 1/2 HC	HFESC 3/4 MC
107M	L-1/2	HFESC 1/2 SC	HFESC 1/2 HC	HFESC 3/4 MC
209M	L-3/4	HFESC 1 SC	HFESC 1 HC	HFESC 3/4 MC
211M	L-1	HFESC 1 SC	HFESC 1 HC	HFESC 1 MC
214M	L-1	HFESC 1-1/4 SC	HFESC 1-1/2 HC	HFESC 1 MC
317M	L-1 1/2	HFESC 1-1/2 SC	HFESC 1-1/2 HC	HFESC 1-1/2 MC
320M	L-1 1/2	HFESC 1-1/2 SC	HFESC 2 HC	HFESC 1-3/4 MC
423M	L-2	HFESC 2 SC	HFESC 2 HC	HFESC 1-3/4 MC
426M	L-2	HFESC 2 SC	HFESC 2-1/2 HC	HFESC 2-1/2 MC
532M	L-2 1/2	HFESC 3-1/2 SC	HFESC 2-1/2 HC	HFESC 2-1/2 MC
639M	G-3	HFESC 3-1/2 SC	HFESC 3 HC	HFESC 4 MC

DANFOSS

MODEL	FACTORY INSTALLED NOZZLE	R404A R507	R407A R407C † R22	R134a
104M	N/A	TUAE-R404A-4-N	TUAE-R22-4-N	TUAE-R134a-4-N
106M	L-1/2	TUAE-R404A-5-N	TUAE-R22-5-N	TUAE-R134a-5-N
107M	L-1/2	TUAE-R404A-6-N	TUAE-R22-5-N	TUAE-R134a-5-N
209M	L-3/4	TUAE-R404A-7-N	TUAE-R22-6-N	TUAE-R134a-6-N
211M	L-1	TUAE-R404A-7-N	TUAE-R22-6-N	TUAE-R134a-6-N
214M	L-1	TUAE-R404A-8-N	TUAE-R22-7-N	TUAE-R134a-7-N
317M	L-1 1/2	TUAE-R404A-8-N	TUAE-R22-8-N	TUAE-R134a-8-N
320M	L-1 1/2	TUAE-R404A-9-N	TUAE-R22-8-N	TUAE-R134a-8-N
423M	L-2	TUAE-R404A-9-N	TUAE-R22-8-N	TUAE-R134a-9-N
426M	L-2	TCAE-R404A-TC1-N	TUAE-R22-9-N	TUAE-R134a-9-N
532M	L-2 1/2	TCAE-R404A-TC2-N	TUAE-R22-9-N	TCAE-R134a-TC1-N
639M	G-3	TCAE-R404A-TC3-N	TCAE-R22-TC1-N	TCAE-R134a-TC2-N

† If using 407C, superheat setting must be adjusted by turning 1 - 1.5 turns clockwise.

Above selections based on:

1) 100°F *(38°C)* **vapor free liquid entering expansion valve**
2) 110°F *(43°C)* **Condensing temperature**
3) 8 -12°F *(4.4 -6.7°C)* **evaporator TD**

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

TLP RECOMMENDED EXPANSION VALVE SELECTIONS
LOW TEMPERATURE MODELS

SPORLAN - R407A

MODEL	FACTORY INSTALLED NOZZLE	0° F *(-18° C)* EVAP.	-10° F *(-23° C)* EVAP.	-20° F *(-29° C)* EVAP.	-30° F *(-34° C)* EVAP.	-40° F *(-40° C)* EVAP.
104L	L-1/2	EBQE-AAA-VC	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40
105L	L-3/4	EBQE-AA-VC	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40
106L	L-1	EBQE-AA-VC	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40
207L	L-1	EBQE-AA-VC	EBQE-AA-VZP40	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-A-VZP40
209L	L-1-1/2	EBQE-AA-VC	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-A-VZP40
211L	L-2	EBQE-A-VC	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-B-VZP40
314L	L-2	EBQE-A-VC	EBQE-A-VZP40	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40
317L	L-3	EBQE-A-VC	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40
419L	L-3	EBQE-A-VC	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40
422L	G-4	EBQE-B-VC	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-C-VZP40	EBQE-C-VZP40
527L	G-4	EBQE-B-VC	EBQE-C-VZP40	EBQE-C-VZP40	EBQE-C-VZP40	EBQE-C-VZP40
631L	G-5	EBQE-C-VC	EBQE-C-VZP40	EBQE-C-VZP40	EBQE-C-VZP40	EBQE-C-VZP40
103V	L-1/2	EBQE-AAA-VC	EBQE-AAA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40
104V	L-3/4	EBQE-AAA-VC	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40
105V	L-1	EBQE-AA-VC	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40
206V	L-1	EBQE-AA-VC	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-AA-VZP40	EBQE-A-VZP40
208V	L-1 1/2	EBQE-AA-VC	EBQE-AA-VZP40	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-A-VZP40
209V	L-2	EBQE-A-VC	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-A-VZP40
312V	L-2	EBQE-A-VC	EBQE-A-VZP40	EBQE-A-VZP40	EBQE-B-VZP40	EBQE-B-VZP40
315V	L-2 1/2	EBQE-A-VC	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40
416V	L-2 1/2	EBQE-A-VC	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40
419V	G-3	EBQE-A-VC	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40	EBQE-B-VZP40
523V	G-4	EBQE-B-VC	EBQE-B-VZP40	EBQE-C-VZP40	EBQE-C-VZP40	EBQE-C-VZP40
627V	G-5	EBQE-B-VC	EBQE-C-VZP40	EBQE-C-VZP40	EBQE-C-VZP40	EBQE-C-VZP40

SPORLAN - R404A

MODEL	FACTORY INSTALLED NOZZLE	0° F *(-18° C)* EVAP.	-10° F *(-23° C)* EVAP.	-20° F *(-29° C)* EVAP.	-30° F *(-34° C)* EVAP.	-40° F *(-40° C)* EVAP.
104L	L-1/2	EBQE-AA-SC	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP
105L	L-3/4	EBQE-AA-SC	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP
106L	L-1	EBQE-AA-SC	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP
207L	L-1	EBQE-A-SC	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP
209L	1-1/2	EBQE-A-SC	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP
211L	L-2	EBQE-A-SC	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP
314L	L-2	EBQE-B-SC	EBQE-B-SZP	EBQE-B-SZP	EBQE-B-SZP	EBQE-B-SZP
317L	L-3	EBQE-B-SC	EBQE-B-SZP	EBQE-B-SZP	EBQE-B-SZP	EBQE-B-SZP
419L	L-3	EBQE-B-SC	EBQE-B-SZP	EBQE-C-SZP	EBQE-C-SZP	EBQE-C-SZP
422L	G-4	EBQE-C-SC	EBQE-C-SZP	EBQE-C-SZP	EBQE-C-SZP	EBQE-C-SZP
527L	G-4	EBQE-C-SC	EBQE-C-SZP	EBQE-C-SZP	EBSE-6-SZP	EBSE-6-SZP
631L	G-5	EBSE-6-SC	EBSE-6-SZP	EBSE-6-SZP	EBSE-6-SZP	EBSE-6-SZP
103V	L-1/2	EBQE-AA-SC	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP
104V	L-3/4	EBQE-AA-SC	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP
105V	L-1	EBQE-AA-SC	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP	EBQE-AA-SZP
206V	L-1	EBQE-A-SC	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP
208V	L-1 1/2	EBQE-A-SC	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP
209V	L-2	EBQE-A-SC	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP	EBQE-A-SZP
312V	L-2	EBQE-A-SC	EBQE-A-SZP	EBQE-A-SZP	EBQE-B-SZP	EBQE-B-SZP
315V	L-2 1/2	EBQE-B-SC	EBQE-B-SZP	EBQE-B-SZP	EBQE-B-SZP	EBQE-B-SZP
416V	L-2 1/2	EBQE-B-SC	EBQE-B-SZP	EBQE-B-SZP	EBQE-B-SZP	EBQE-B-SZP
419V	G-3	EBQE-B-SC	EBQE-B-SZP	EBQE-C-SZP	EBQE-C-SZP	EBQE-C-SZP
523V	G-4	EBQE-C-SC	EBQE-C-SZP	EBQE-C-SZP	EBQE-C-SZP	EBQE-C-SZP
627V	G-5	EBQE-C-SC	EBQE-C-SZP	EBQE-C-SZP	EBSE-6-SZP	EBSE-6-SZP

Above selections based on:

1) 100°F *(38°C)* **vapor free liquid entering expansion valve**
2) 110°F *(43°C)* **Condensing temperature**
3) 8 -12°F *(4.4 -6.7°C)* **evaporator TD**

TLP INSTALLATION INSTRUCTIONS

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.

INSTALLATION INSTRUCTIONS

NOZZLE INSTALLATION

For common applications (Medium temp. R404A, R22, R407A, 8 to 12°F *(4 .4 to 6.7°C)* T.D.; low temp. R404A/ R407A, 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 23**.** 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 33 - 34 for recommended piping.

INSTALLATION INSTRUCTIONS

WIRING

Wire system in accordance with governing standards and local codes. See data and wiring diagrams on pages 4 to 20 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 25ºF *(-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.

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:

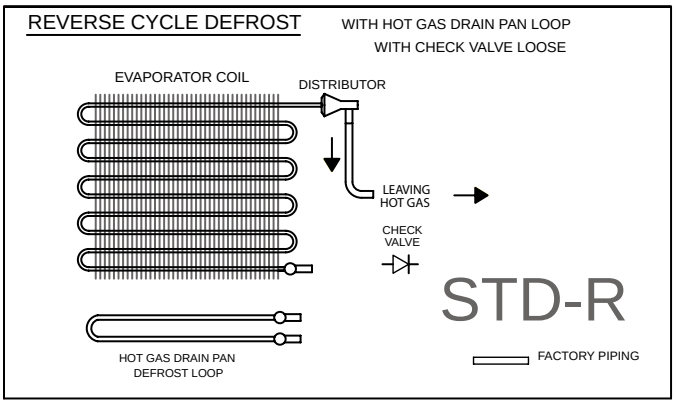
1. Check the oil level to be sure the oil charge is correct.
2. On initial start up the fans do not start until coil temperature is pulled down to approximately 25°F *(-4 °C)* on the coil. Also, it is normal for the fan to cycle a few times until the room temperature is pulled down.
3. If necessary, 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.

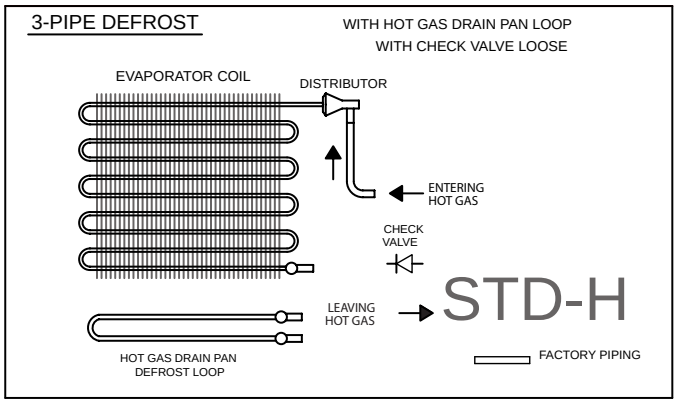
   In general, evaporators running with a TD of 10°F *(5.6 °C*) should have a superheat reading of 6° to 8°F *(3.3 °C to 4.4 °C)*. For evaporators with another T.D., the general rule is that the superheat should be around 60 to 80% of T.D.
6. Heavy moisture loads are usually encountered when starting the 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.

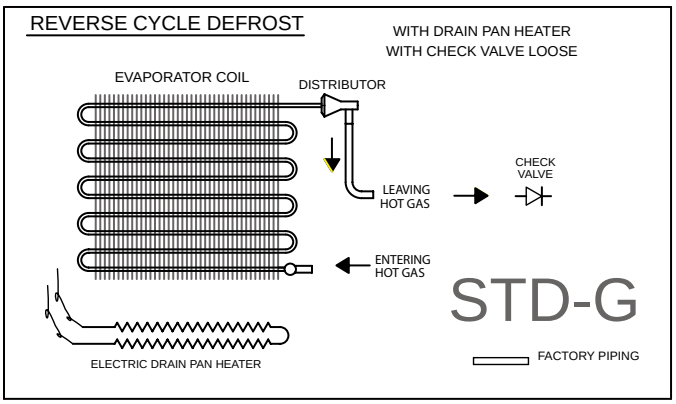
TLP

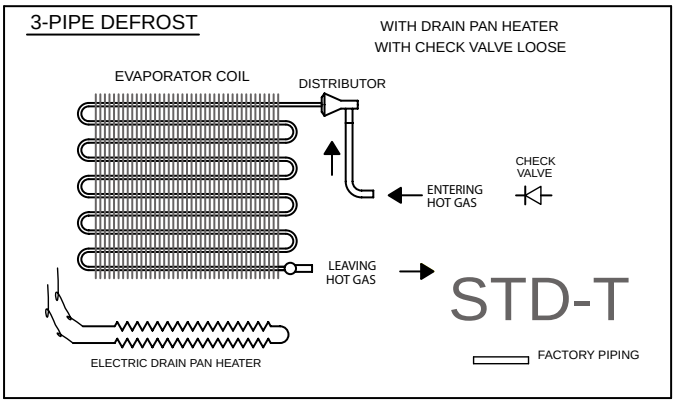
HOT GAS PIPING SCHEMATICS
STANDARD CONFIGURATIONS

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)

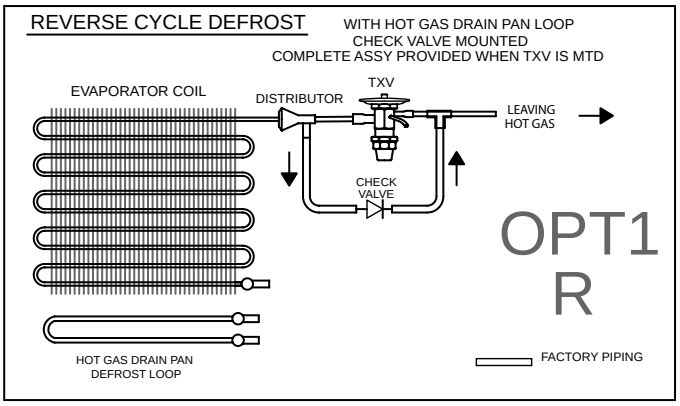
When a TXV is ordered with a HG defrost coil: Its *only* option will be **Factory Installed**. The bypass check valve will be **factory installed** as well as part of the same option.

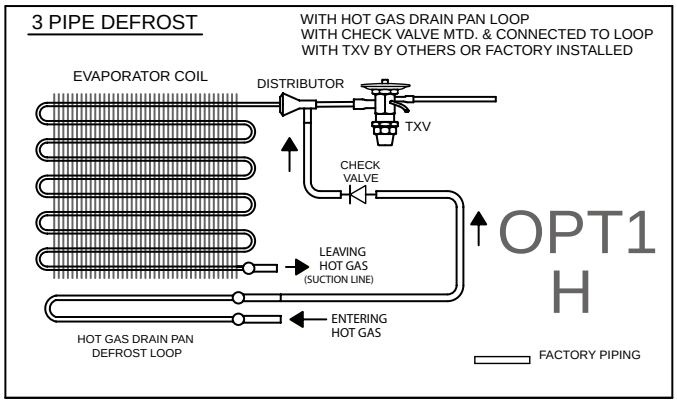
- **Reverse Cycle PanHeater *(G Models)*** when ordered with TXV & Check Valve:
  - TXV, Check Valve and bypass Tee are factory installed
- **Reverse Cycle PanLoop *(R Models)*** when ordered with TXV & Check Valve:
  - TXV, Check Valve and bypass Tee are factory installed
- **3-Pipe PanHeater *(T Models)***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

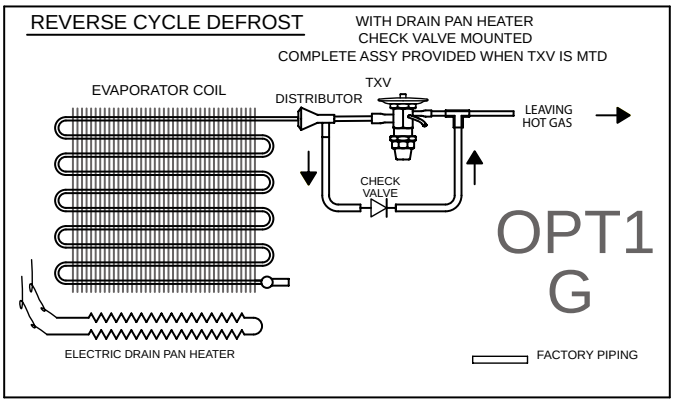
TLP

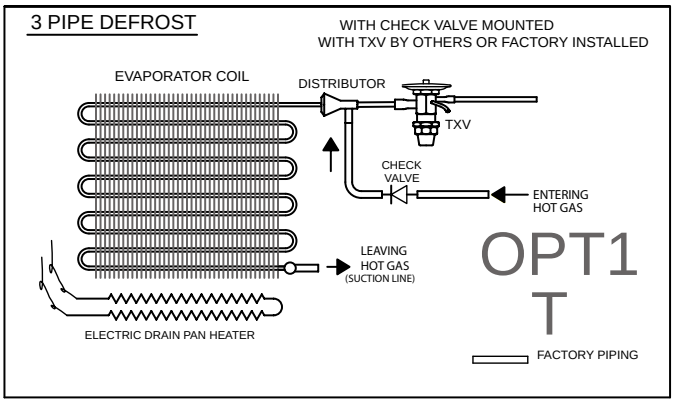
HOT GAS PIPING SCHEMATICS
OPTIONAL CONFIGURATIONS

Refer to Nomenclature for details





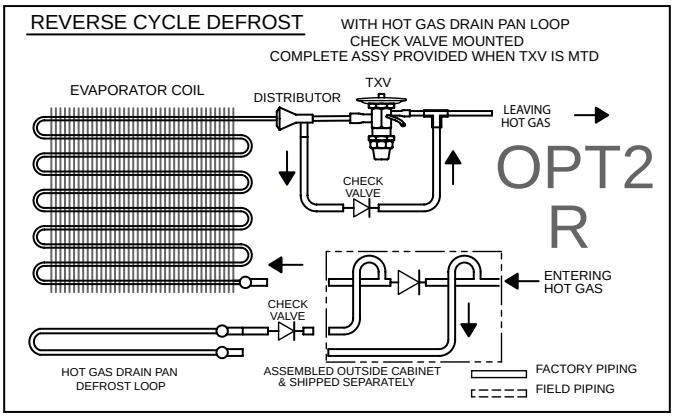




Drain pan Loop Kit - See below (OPT 2)

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

TLP GLYCOL FLUID AIR COOLER DATA (Contact Factory for Complete Details) 60Hz

MODEL	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).

FOR SERVICE PARTS LOOK-UP:
visit: http://www.t-rp.com/serv_parts.htm
email: parts@t-rp.com
call: 1-844-893-3222 x501

NOTES

FINISHED GOODS WARRANTY

The terms and conditions as described below in the General Warranty Policy cover all products manufactured by National Refrigeration.

GENERAL WARRANTY POLICY

Subject to the terms and conditions hereof, the Company warrants all Products, including Service Parts, manufactured by the Company to be free of defects in material or workmanship, under normal use and application for a period of one (1) year from the original date of installation, or eighteen (18) months from the date of shipment from the Company, whichever occurs first. Any replacement part(s) so supplied will be warranted for the balance of the product's original warranty. The part(s) to be replaced must be made available in exchange for the replacement part(s) and reasonable proof of the original installation date of the product must be presented in order to establish the effective date of the warranty, failing which, the effective date will be based upon the date of manufacture plus thirty (30) days. Any labour, material, refrigerant, transportation, freight or other charges incurred in connection with the performance of this warranty will be the responsibility of the owner at the current rates and prices then in effect. This warranty may be transferred to a subsequent owner of the product.

THIS WARRANTY DOES NOT COVER

(a) Damages caused by accident, abuse, negligence, misuse, riot, fire, flood, or Acts of God (b) damages caused by operating the product in a corrosive atmosphere (c) damages caused by any unauthorized alteration or repair of the system affecting the product's reliability or performance (d) damages caused by improper matching or application of the product or the product's components (e) damages caused by failing to provide routine and proper maintenance or service to the product (f) expenses incurred for the erecting, disconnecting, or dismantling the product (g) parts used in connection with normal maintenance, such as filters or belts (h) products no longer at the site of the original installation (i) products installed or operated other than in accordance with the printed instructions, with the local installation or building codes and with good trade practices (j) products lost or stolen.

No one is authorized to change this WARRANTY or to create for or on behalf of the Company any other obligation or liability in connection with the Product(s). There is no other representation, warranty or condition in any respect, expressed or implied, made by or binding upon the Company other than the above or as provided by provincial or state law and which cannot be limited or excluded by such law, nor will we be liable in any way for incidental, consequential, or special damages however caused.

The provisions of this additional written warranty are in addition to and not a modification of or subtraction from the statutory warranties and other rights and remedies provided by Federal, Provincial or State laws.

PROJECT INFORMATION

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

“AS BUILT” SERVICE PARTS LIST

Service Parts List
Label
To Be Attached
HERE

NATIONAL REFRIGERATION &
AIR CONDITIONING CANADA CORP.
159 Roy Blvd.
Brantford Ontario Canada N3R 7K1
PHONE: (519) 751-0444 800-463-9517
FAX (519) 753-1140 www.t-rp.com

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