

Medium Profile, Heavy Duty and Warehouse Unit Coolers

Air, Electric and Hot Gas Defrost Models



Supports are bolted to pallet and unit cooler for product safety and quicker installation



Shown with optional EcoNet® Enabled Controller and Command Center

Installation and Operations Manual

Table of Contents

Inspection	2
General Safety Information	2
Dimensional Drawings	2 - 5
Installation	6-8
Medium Profile Wiring Diagrams	9-13
Heavy Duty & Warehouse Wiring Diagrams	14-21
Start-up Procedures	22
Maintenance	22-23
Troubleshooting Chart	24
Replacement Parts	25-26
Optional Components	27

Medium Profile, Heavy Duty and Warehouse Unit Coolers

Inspection

Equipment listed on the bill of lading but not received, along with any equipment damaged in transit, should be reported immediately to the carrier and a claim filed.

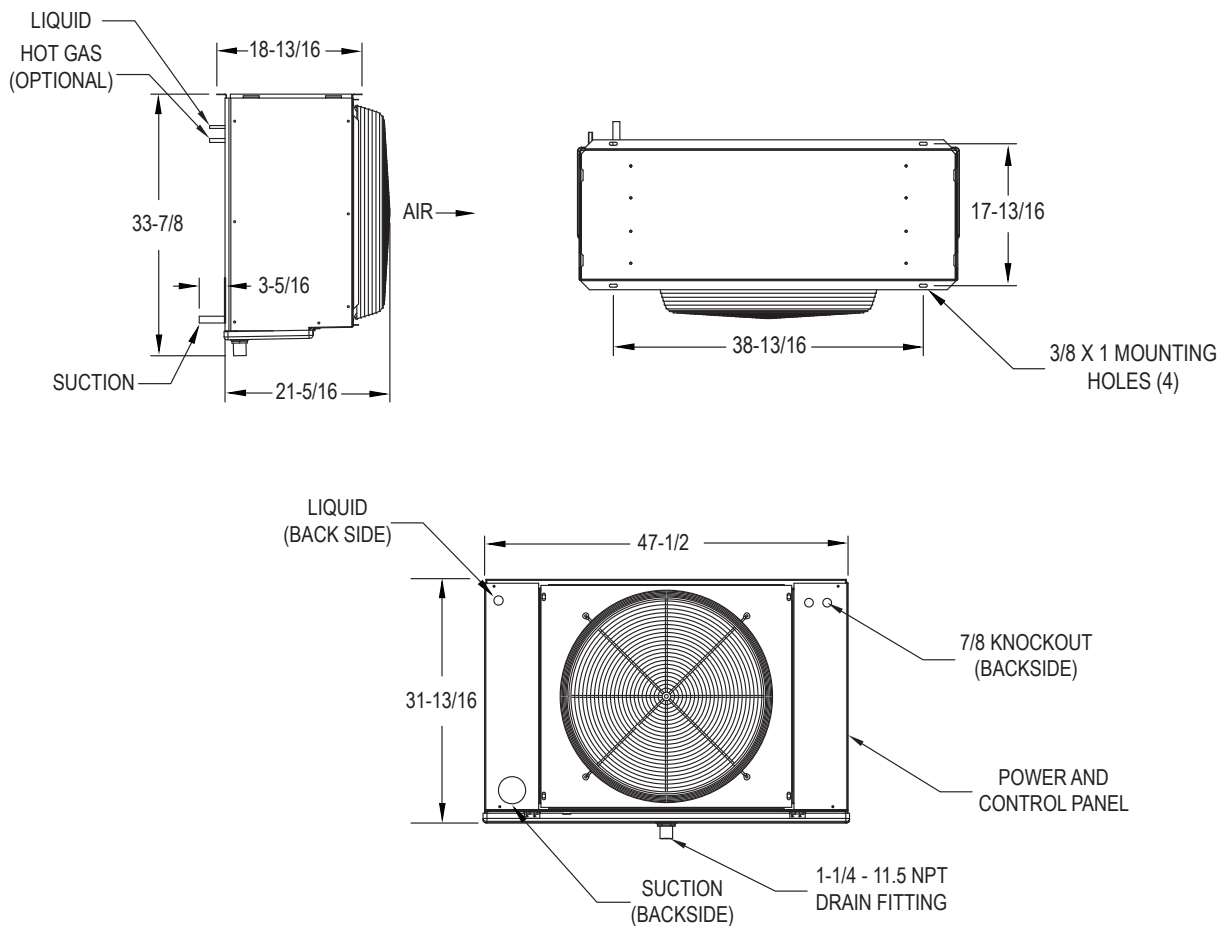
Also, check unit nameplates to make sure the voltage is correct before installing.

General Safety Information

1. Installation and maintenance are to be performed by qualified personnel who are familiar with this type of equipment.
2. Make sure all field wiring conform to the equipment requirements and all applicable national and local codes.
3. Avoid contact with sharp edges and coil surface. They are a potential injury hazard.
4. Disconnect all power sources before performing service or maintenance.

Medium Profile Unit Coolers Dimensional Drawings

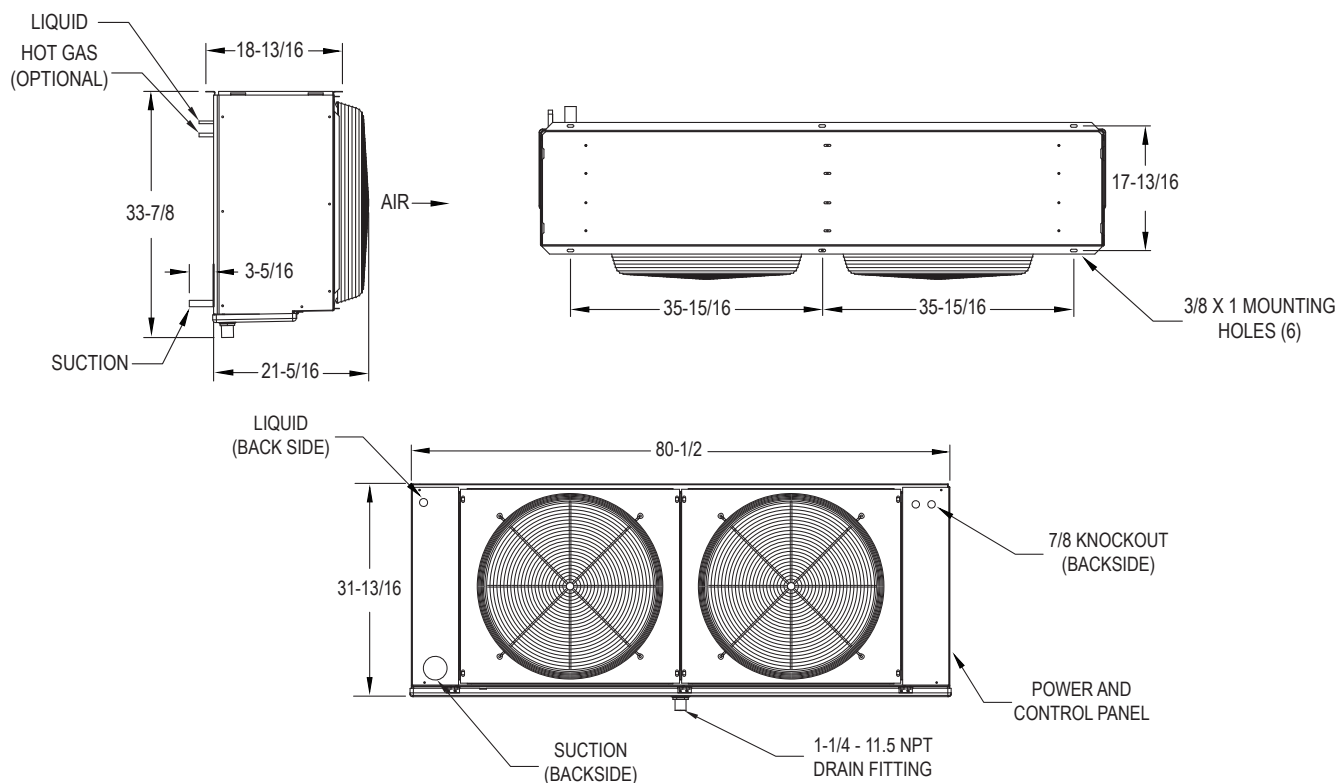
1 Fan Unit Cooler



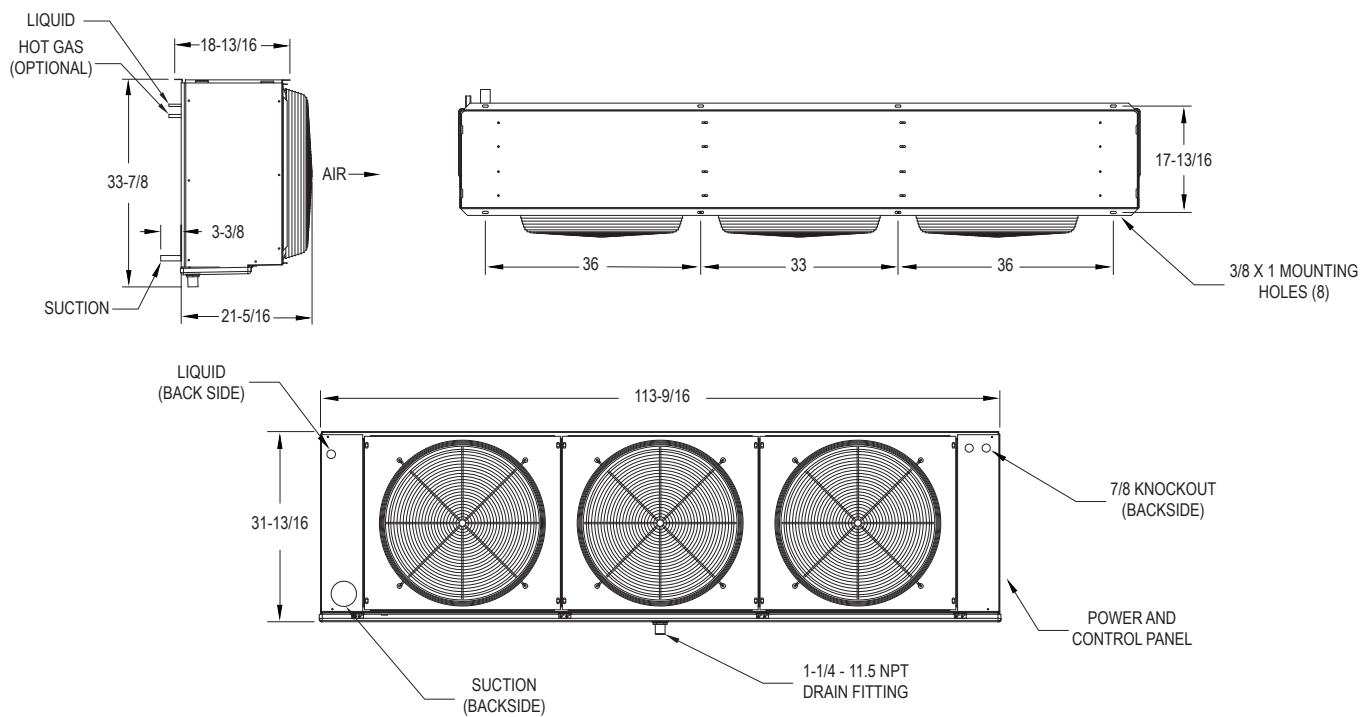
Installation and Operations Manual

Medium Profile Unit Coolers Dimensional Drawings Cont.

2 Fan Unit Cooler

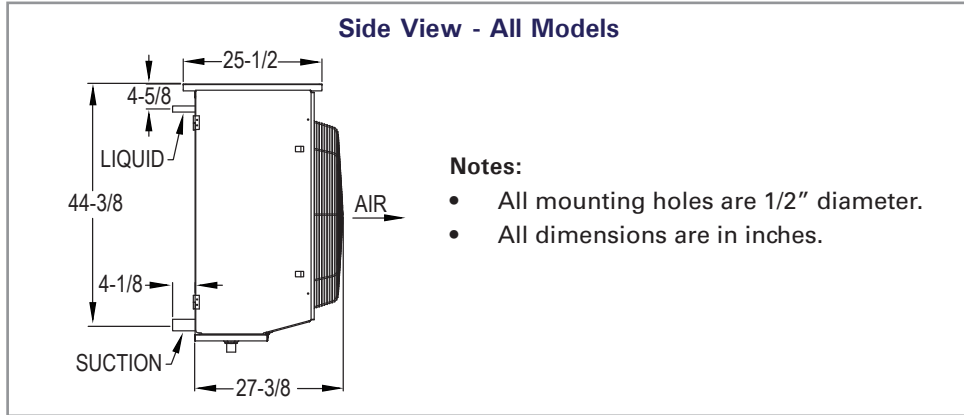


3 Fan Unit Cooler

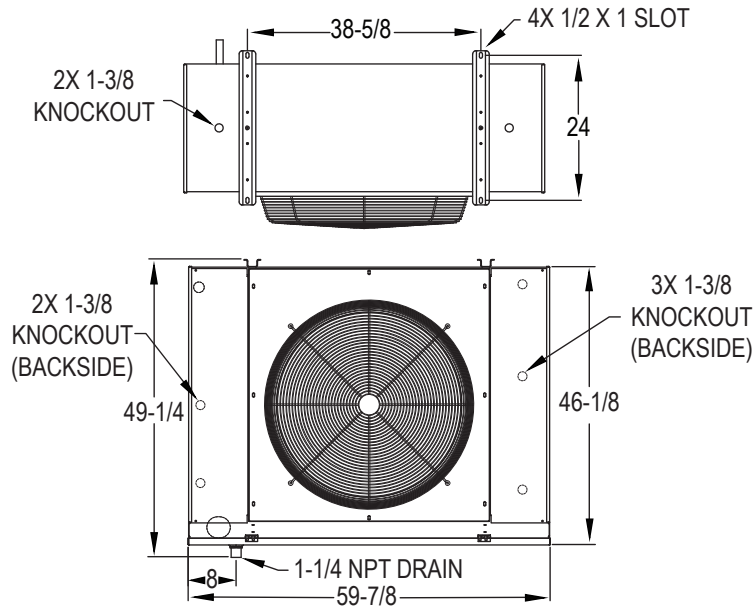


Medium Profile, Heavy Duty and Warehouse Unit Coolers

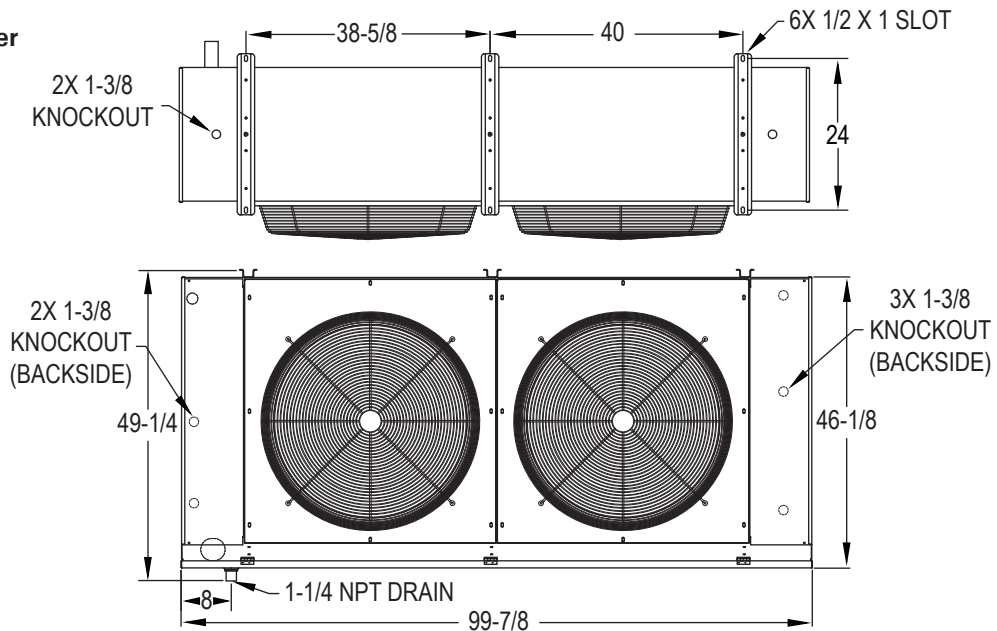
Heavy Duty and Warehouse Unit Coolers Dimensional Drawings



1 Fan Unit Cooler



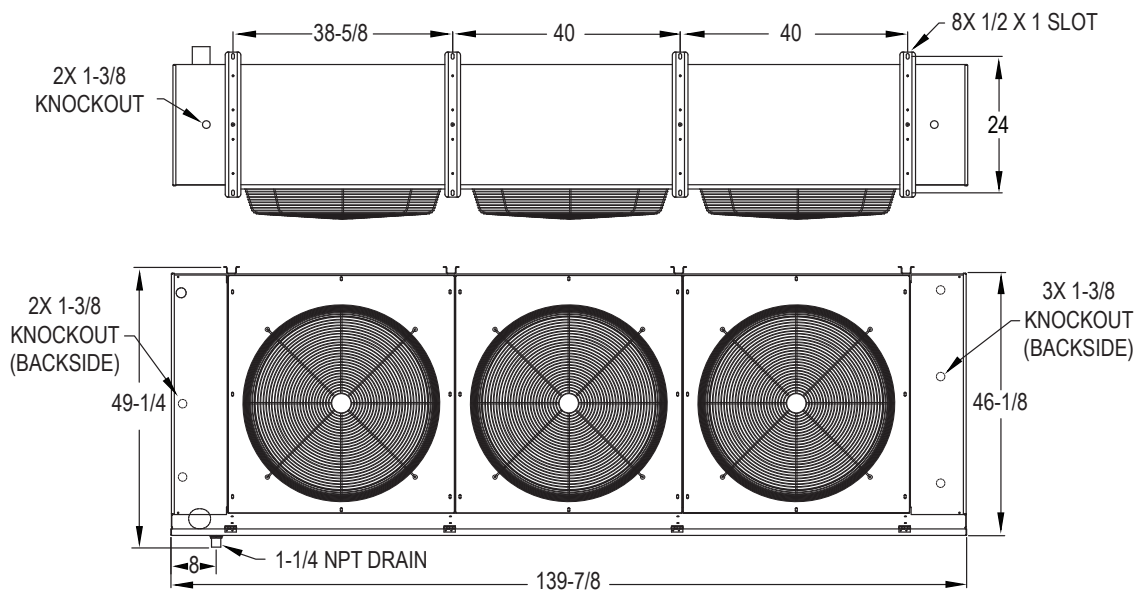
2 Fan Unit Cooler



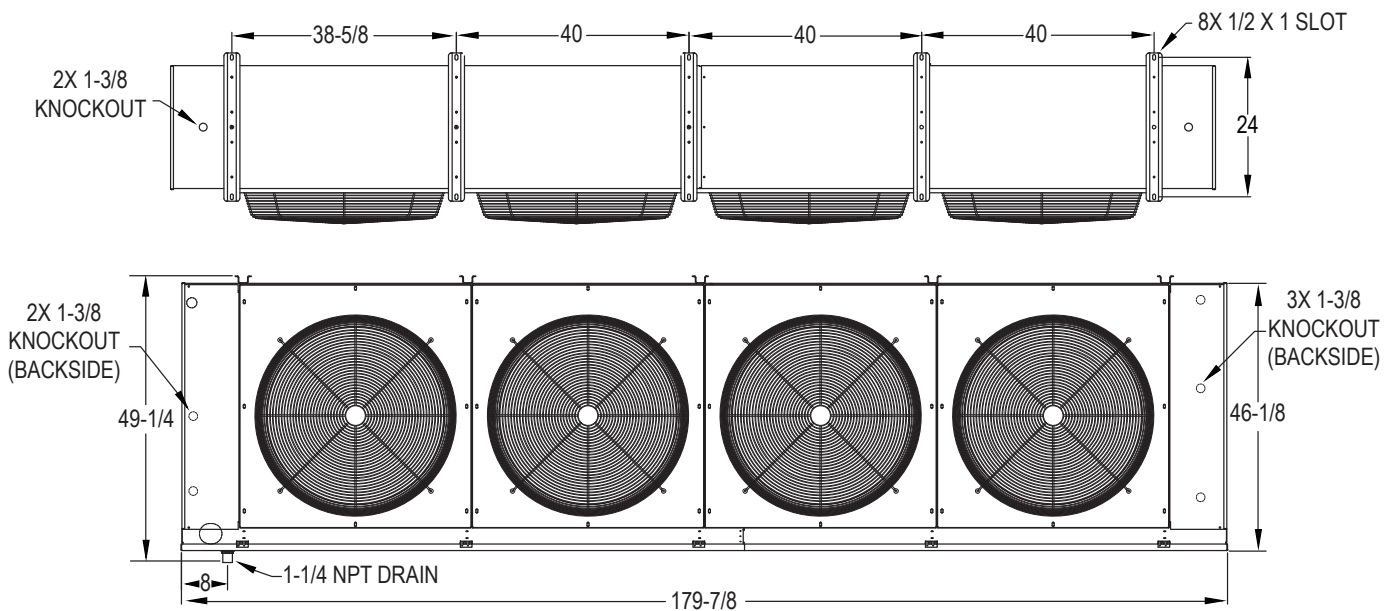
Installation and Operations Manual

Heavy Duty and Warehouse Unit Coolers Dimensional Drawings Cont.

3 Fan Unit Cooler



4 Fan Unit Cooler



Medium Profile, Heavy Duty and Warehouse Unit Coolers

Installation

Our unit coolers are designed to draw air in through the coil and discharge it through the fans. For most efficient operation, units should be located so that air from an open door cannot be drawn directly into the coil.

Figure 1 shows the air flow direction and recommended minimum clearances to walls or other obstructions.

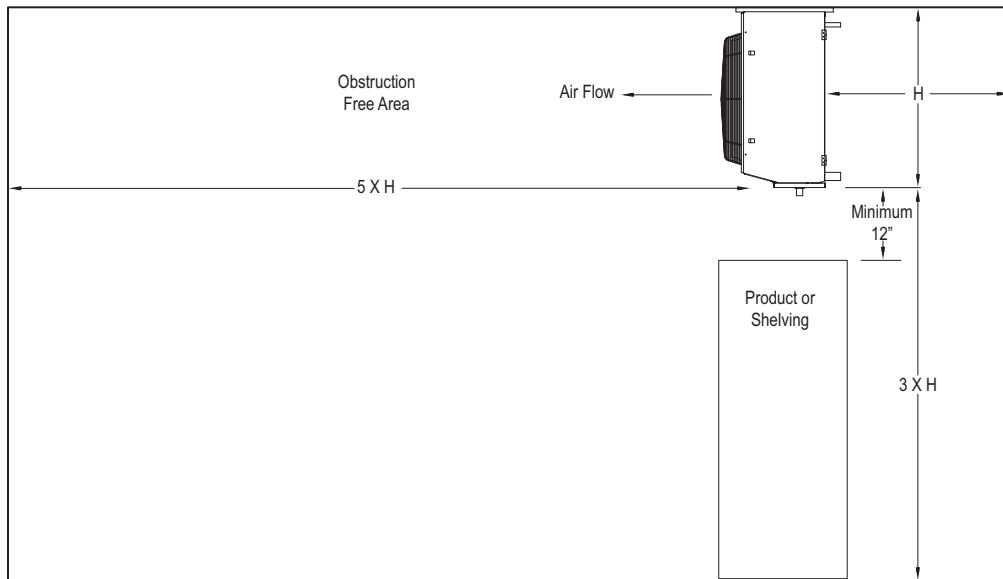
All units are shipped upright as in the mounting position. Remove the top and sides of the crate from the unit leaving the unit sitting on the shipping skid. Using the fastener slot/holes in

the unit mounting hangers as a guide, locate the mounting fasteners in the ceiling of the refrigerated room. Recommended threaded rod size is 5/16" for Medium Profile Units and 3/8" for Heavy Duty and Warehouse Units.

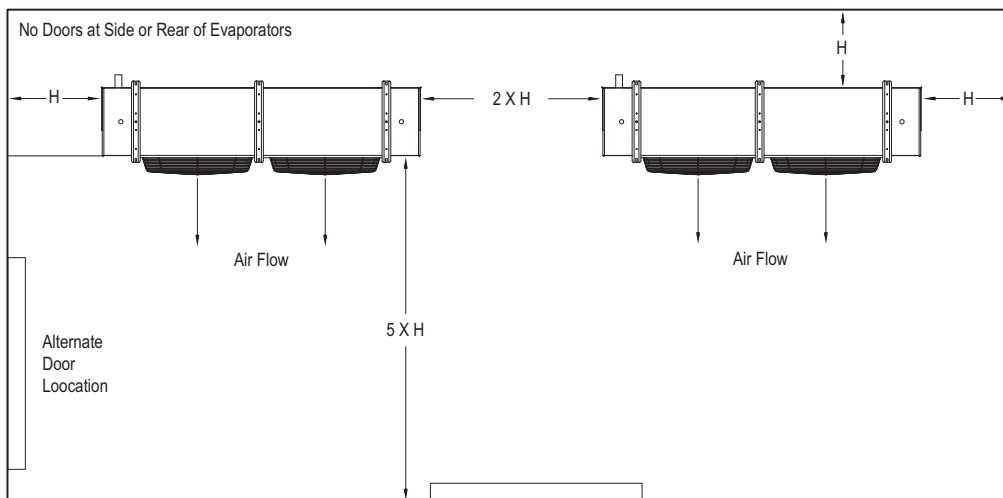
All units can be lifted into place by sliding the forks of a fork lift under the skid to avoid damage to the drain pan.

IMPORTANT: Large evaporators must be mounted with 1/2" per foot slope to the drain fitting side of the unit. Medium evaporators have a die formed pan and must be mounted level for proper drainage.

Figure 1



Clearances Side View



Clearances Top View

Installation and Operations Manual

Drain Line

The condensate drain line should be at least 1-1/4" and should be installed with a minimum of 1/2" of slope per foot of horizontal run. Keep the length of drain line within the refrigerated space as short as possible. Provide a trap in the line outside of the refrigerated space. On freezer units, the drain line within the refrigerated space must be wrapped with heat tape and insulated to prevent water from freezing in the line during the defrost cycle.

Refrigerant Piping

Install refrigeration components in accordance with accepted piping practices. Liquid and suction lines should be sized according to ASHRAE recommendations for the intended conditions of operation and refrigerant.

All horizontal suction lines should be sloped toward the compressor at the rate of 1/8" per foot for good oil return. Vertical suction should be sized for proper oil return. Also, risers of more than five feet should be trapped with a P-Trap at the bottom. Use inverted traps as required when transitioning to horizontal piping

Hot Gas Piping

Hot Gas defrost systems can be described as either three-pipe or Reverse Cycle (two-pipe) types. Figures 2 and 3 represent typical piping arrangements for hot gas defrost units. Kramer also offers a Thermobank hot gas defrost - see Figure 4.

Figure 2

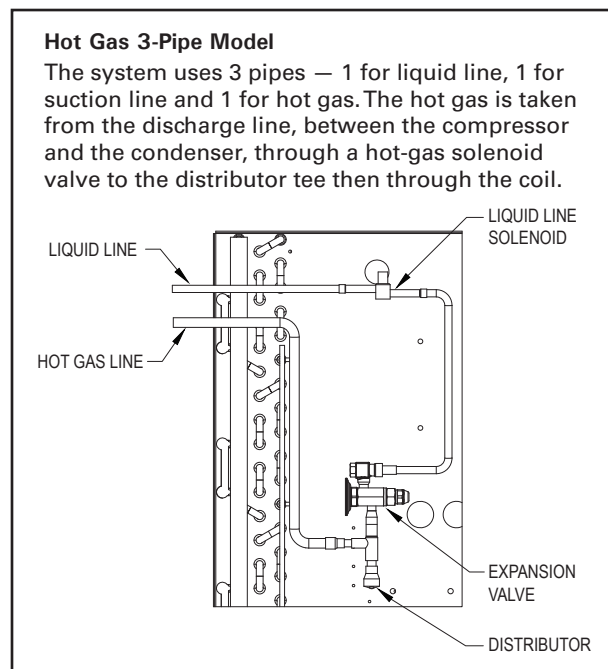


Figure 3

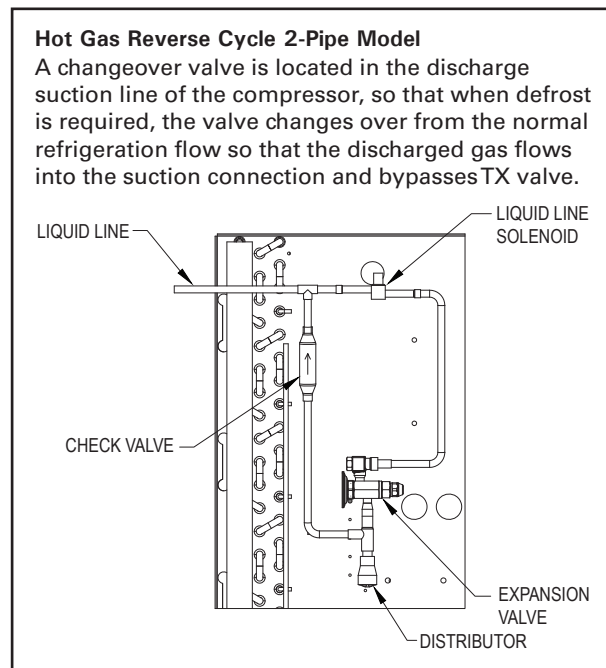
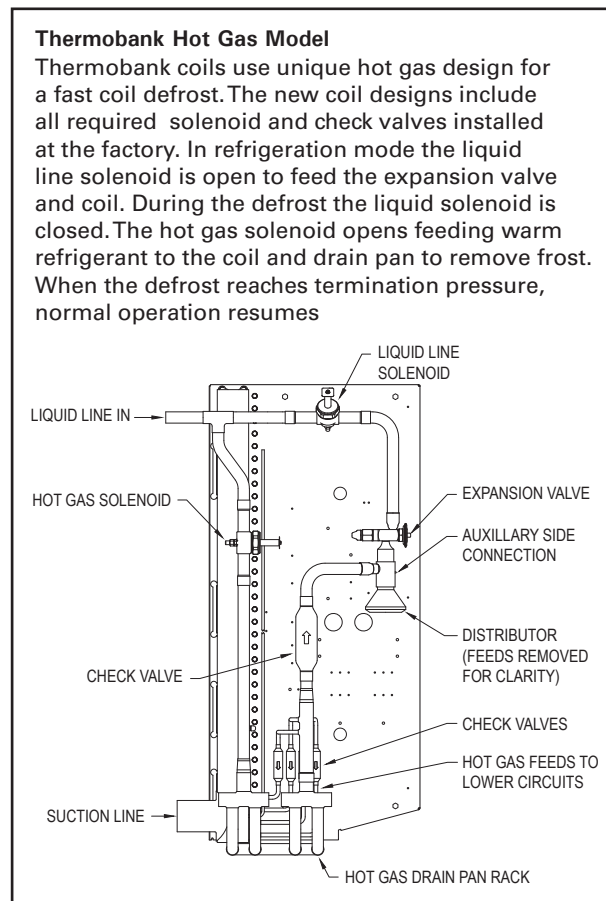


Figure 4



Medium Profile, Heavy Duty and Warehouse Unit Coolers

Hot Gas Defrost units may be ordered so that they are capable of operating on either of the two systems mentioned above.

Hot Gas 3-Pipe shown in Figure 2.

One for the liquid, one for the suction and one for the hot gas. The hot gas is taken from the discharge line between the compressor and the condenser, through a hot gas solenoid valve then to the evaporator drain pan loop. From there enters the distributor at the side inlet then goes through the coil in the same direction as the normal refrigeration flow.

Reverse Cycle shown in Figure 3.

Reverse Cycle is a technique in which the hot gas flows backwards (i.e. opposite to the normal refrigerating flow) through the evaporator. Systems employing the reverse cycle principle are divided into two types:

Alternating Evaporator System

This is the system commonly referred to as "Reverse Cycle Defrost." It must have multiple evaporator coils on the same system to operate. Evaporator coils are defrosted in groups of one or more coils per group. 65% to 75% of the coils will continue to refrigerate while 25% to 35% are on defrost. The defrosting coils produce liquid refrigerant which is used to operate the coils which are still refrigerating. The simplest design is a system with one condensing unit and three evaporator coils. One coil will defrost at a time, while the other two continue to refrigerate.

A hot gas line is run from the discharge line of the compressor close to the junction of the main suction line with the three individual suction lines. There the hot gas line branches into three hot gas lines. Each of these three lines has a hot gas solenoid valve; the leaving side of each solenoid valve is teed into one of the three branch suction lines. Each suction line has a suction stop valve installed between the main suction line and the hot gas tee-in to keep hot gas from entering the main suction line to the compressor. In this way, each evaporator coil has a source for hot gas, controlled by its own defrost solenoid valve. A modular multi-circuit defrost timer is normally employed to synchronize defrosts.

Expansion Valve Installation

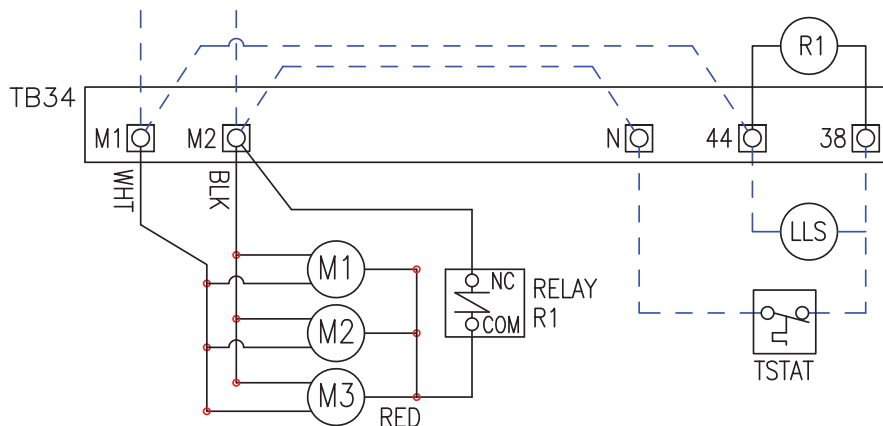
All units use an externally equalized type mechanical or electronic valve. It may be desirable to use a pressure-limiting type expansion valve on low temperature systems to prevent possible overloading of the compressor on initial start-up or after defrost. Mount the valve directly on the distributor of the unit when possible. Minimize the use of reducing fitting for expansion valve mounting. Locate the expansion valve bulb on a horizontal section of the suction line as close to the suction header as possible. If a P-Trap is installed, locate the expansion valve bulb between the trap and the unit. Make sure the surfaces of the suction line and bulb are clean and make good contact for the full length of the bulb when the bulb is mounted. Insulate the bulb to insure accurate superheat control. Follow all expansion valve manufacturer installation guidelines for proper operation.

FACTORY STANDARD WIRING DIAGRAMS - MEDIUM EVAPORATORS

Wiring Diagrams - Air Defrost

SEE UNIT COOLER RATING STICKER FOR CORRECT VOLTAGE.

208-230/50-60/1



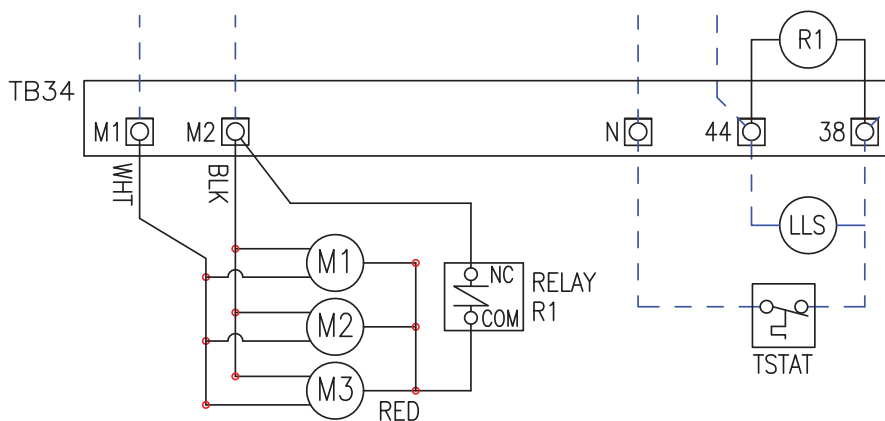
NOTE - IF THE EVAPORATOR IS PAIRED WITH A CONDENSING UNIT REFER TO THE NEXT DIAGRAM.
WIRING WITHOUT TIMER

SEE UNIT COOLER RATING STICKER FOR CORRECT VOLTAGE.

115/208-230/50-60/1
 FAN MOTOR CIRCUIT

208-230
 CONTROL CIRCUIT

THIS WIRE IS NEEDED
 WHEN LLS IS MOUNTED
 IN CONDENSING UNIT.



NOTE - USE THIS DIAGRAM IF THE EVAPORATOR IS PAIRED WITH A CONDENSING UNIT.
WIRING WITH OR WITHOUT A 208-230V TIMER

NOTES:

1. USE COPPER CONDUCTORS ONLY.
2. UNIT MUST BE GROUNDED.
3. FOR MOTOR AMPS SEE RATING STICKER ON OUTSIDE OF UNIT.

FACTORY WIRING ———
 FIELD WIRING - - - -

LEGEND:
 TB - TERMINAL BOARD
 M1 - MOTOR #1, ETC.
 TSTAT - THERMOSTAT
 LLS - LIQUID LINE SOLENOID
 R1 - RELAY

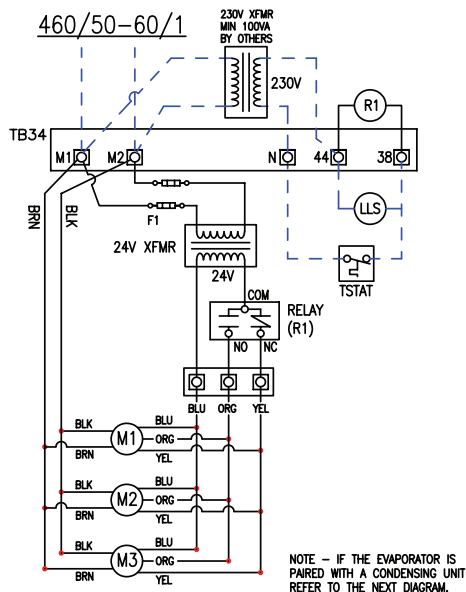
08532005A

Medium Profile, Heavy Duty and Warehouse Unit Coolers

FACTORY STANDARD WIRING DIAGRAMS - MEDIUM EVAPORATORS Wiring Diagrams - Air Defrost

SEE UNIT COOLER RATING STICKER FOR CORRECT VOLTAGE.

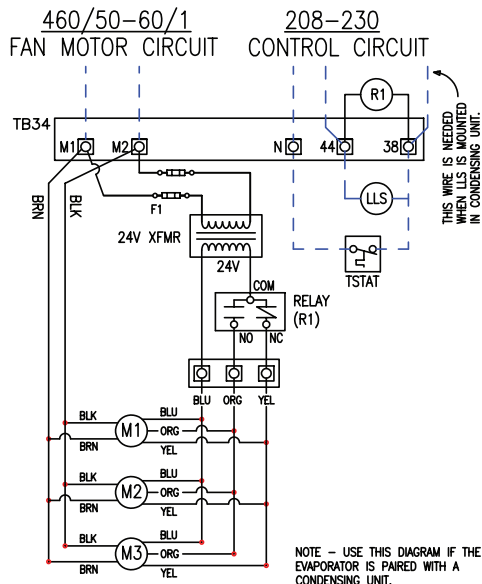
WIRING WITHOUT TIMER



NOTE - IF THE EVAPORATOR IS PAIRED WITH A CONDENSING UNIT REFER TO THE NEXT DIAGRAM.

SEE UNIT COOLER RATING STICKER FOR CORRECT VOLTAGE.

WIRING WITH OR WITHOUT A 208-230V TIMER



NOTE - USE THIS DIAGRAM IF THE EVAPORATOR IS PAIRED WITH A CONDENSING UNIT.

NOTES:

1. USE COPPER CONDUCTORS ONLY
2. UNIT MUST BE GROUNDED
3. FOR MOTOR AMPS SEE RATING STICKER ON OUTSIDE OF UNIT.

LEGEND:

- TB - TERMINAL BOARD
- M1 - MOTOR #1, ETC.
- TSTAT - THERMOSTAT
- LLS - LIQUID LINE SOLENOID
- R1 - RELAY
- XFMR - TRANSFORMER
- F1 - TRANSFORMER FUSES

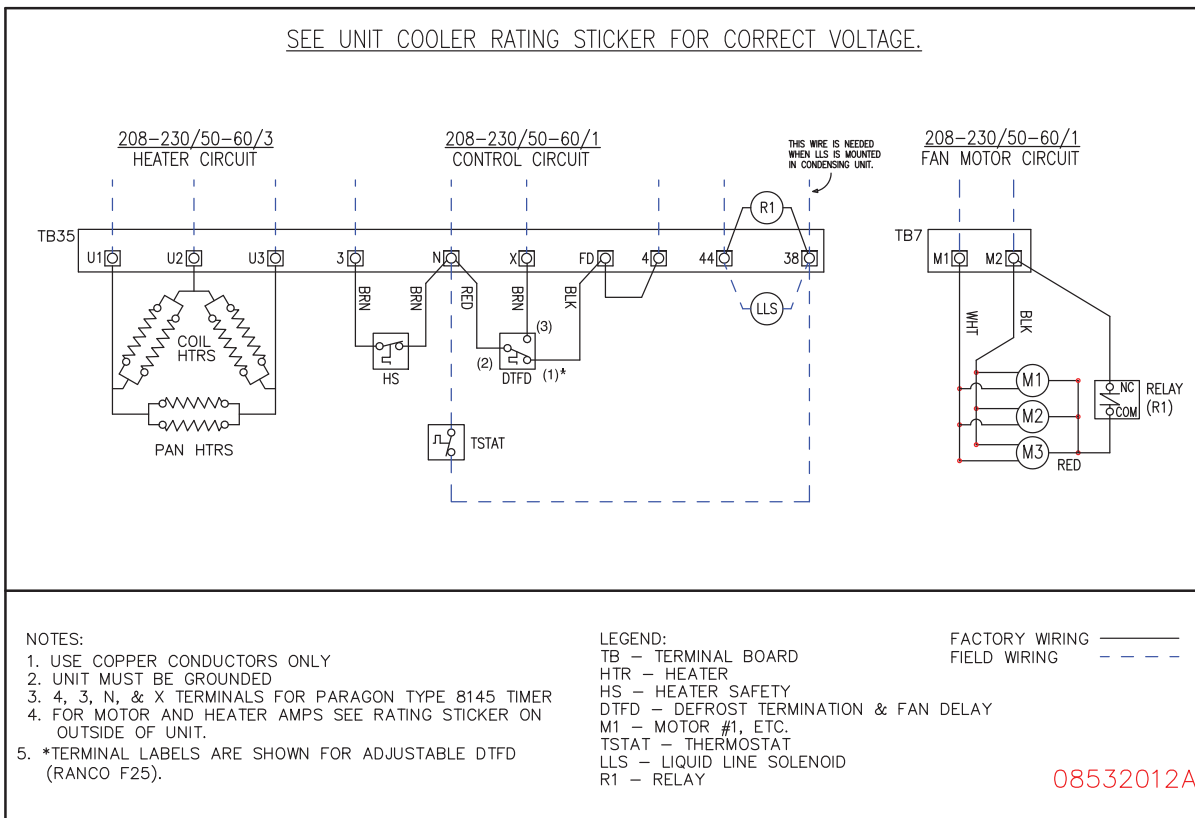
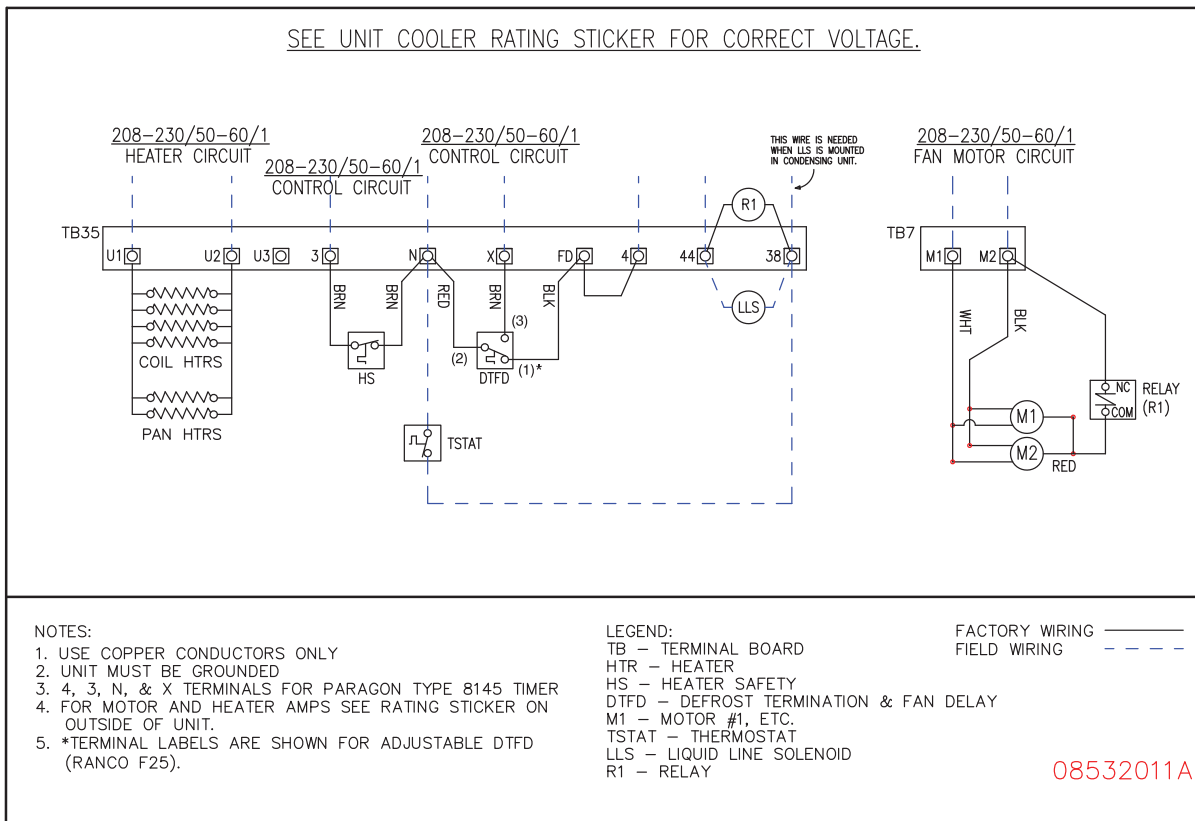
FACTORY WIRING ———
FIELD WIRING - - - -

08532006B

Installation and Operations Manual

FACTORY STANDARD WIRING DIAGRAMS - MEDIUM EVAPORATORS

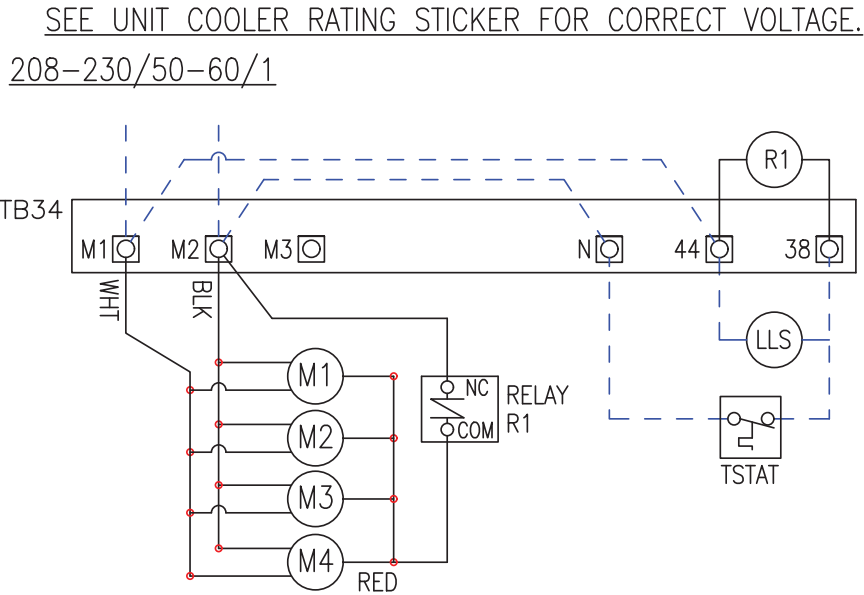
Wiring Diagrams - Electric Defrost



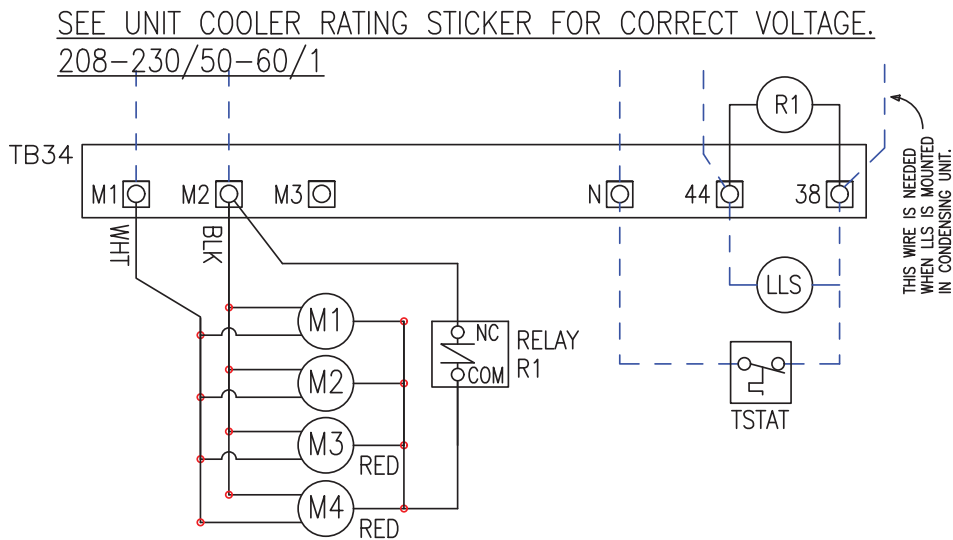
Medium Profile, Heavy Duty and Warehouse Unit Coolers

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS

Wiring Diagrams - Air Defrost



NOTE - IF THE EVAPORATOR IS PAIRED WITH A CONDENSING UNIT REFER TO THE NEXT DIAGRAM.
WIRING WITHOUT TIMER



NOTE - USE THIS DIAGRAM IF THE EVAPORATOR IS PAIRED WITH A CONDENSING UNIT.
WIRING WITH A 208-230V TIMER

- NOTES:
1. USE COPPER CONDUCTORS ONLY.
 2. UNIT MUST BE GROUNDED.
 3. FOR MOTOR AMPS SEE RATING STICKER ON OUTSIDE OF UNIT.

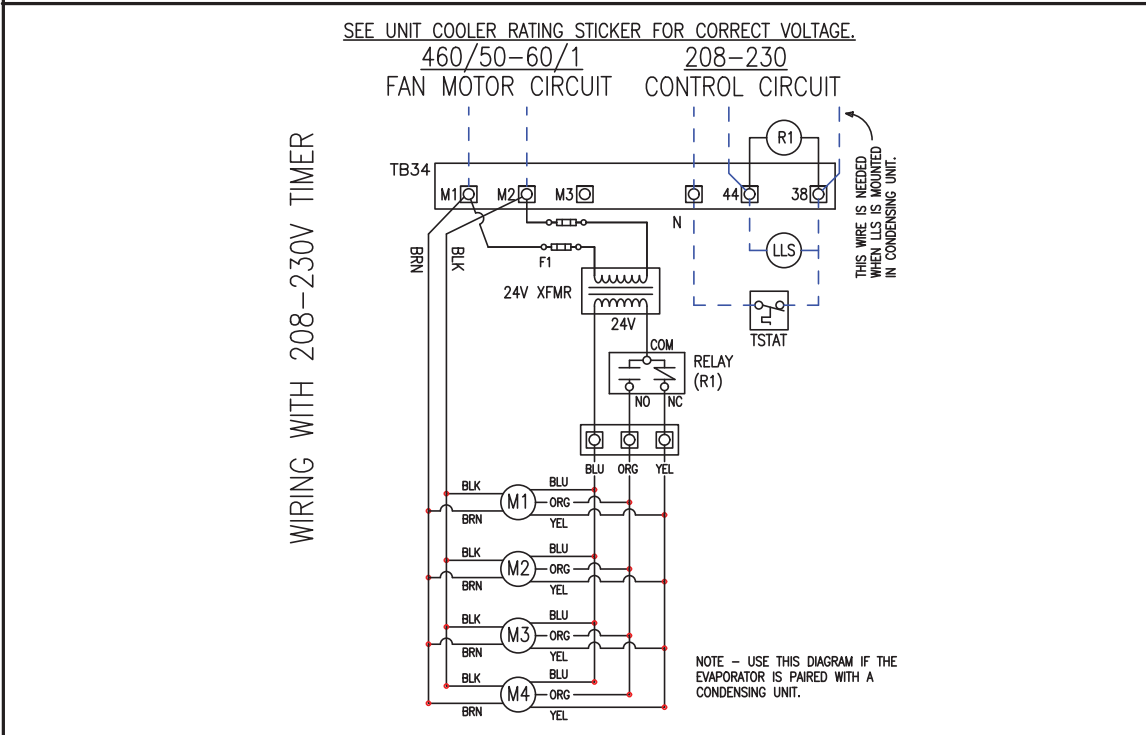
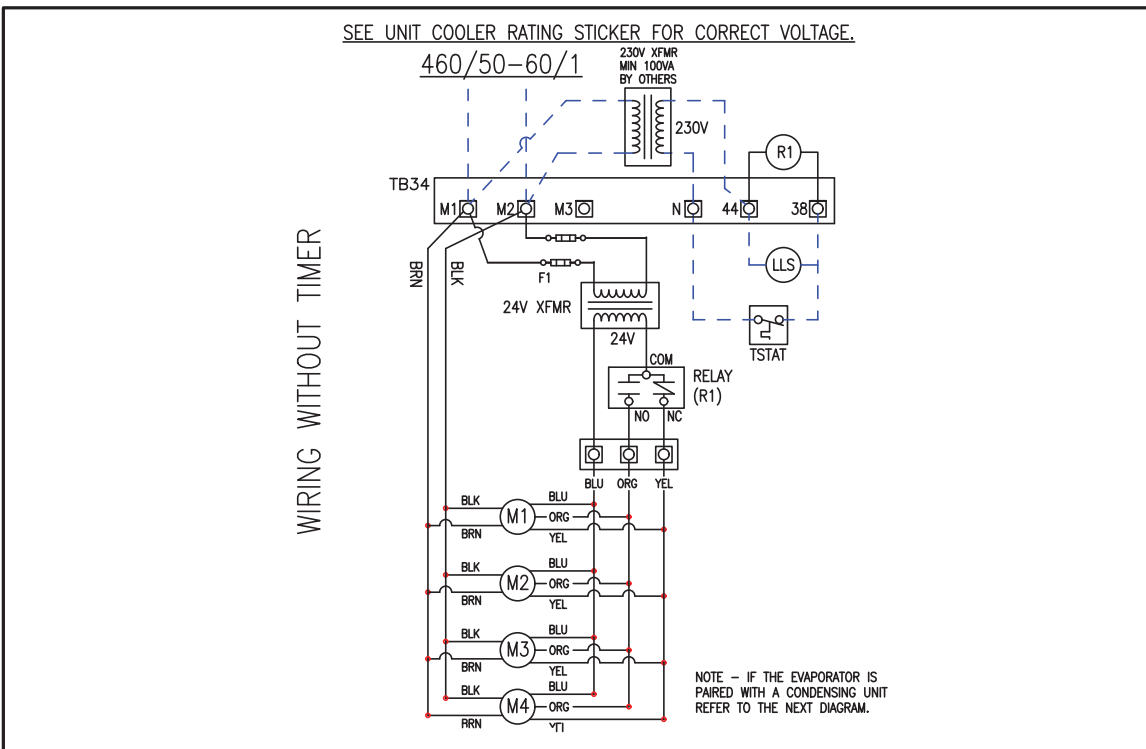
FACTORY WIRING ———
FIELD WIRING - - - - -
LEGEND:
TB - TERMINAL BOARD
M1 - MOTOR #1, ETC.
TSTAT - THERMOSTAT
LLS - LIQUID LINE SOLENOID
R1 - RELAY
PDB - POWER DISTRIBUTION BLOCK

08533576B

Installation and Operations Manual

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS

Wiring Diagrams - Air Defrost Continued



NOTES:

1. USE COPPER CONDUCTORS ONLY
2. UNIT MUST BE GROUNDED
3. FOR MOTOR AMPS SEE RATING STICKER ON OUTSIDE OF UNIT.

08533577D

LEGEND:

- TB - TERMINAL BOARD
- M1 - MOTOR #1, ETC.
- TSTAT - THERMOSTAT
- LLS - LIQUID LINE SOLENOID
- R1 - RELAY
- XFMR - TRANSFORMER
- F1 - TRANSFORMER FUSES

FACTORY WIRING ———
FIELD WIRING - - - - -

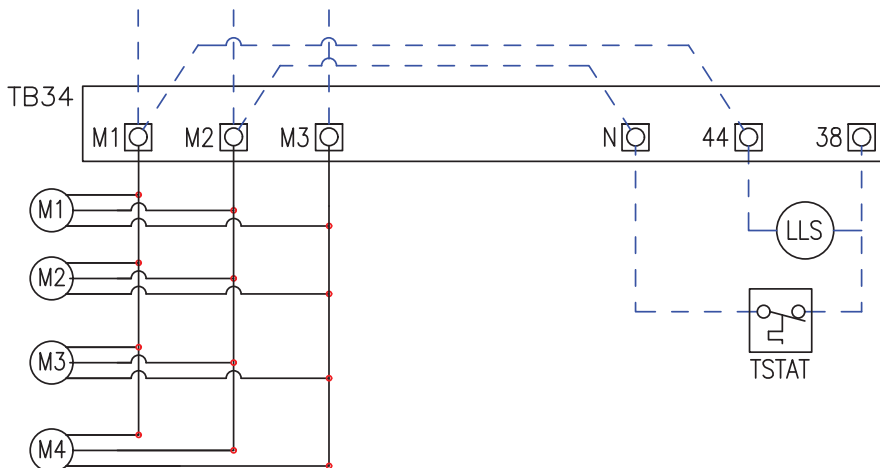
Medium Profile, Heavy Duty and Warehouse Unit Coolers

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS

Wiring Diagrams - Air Defrost Continued

SEE UNIT COOLER RATING STICKER FOR CORRECT VOLTAGE.

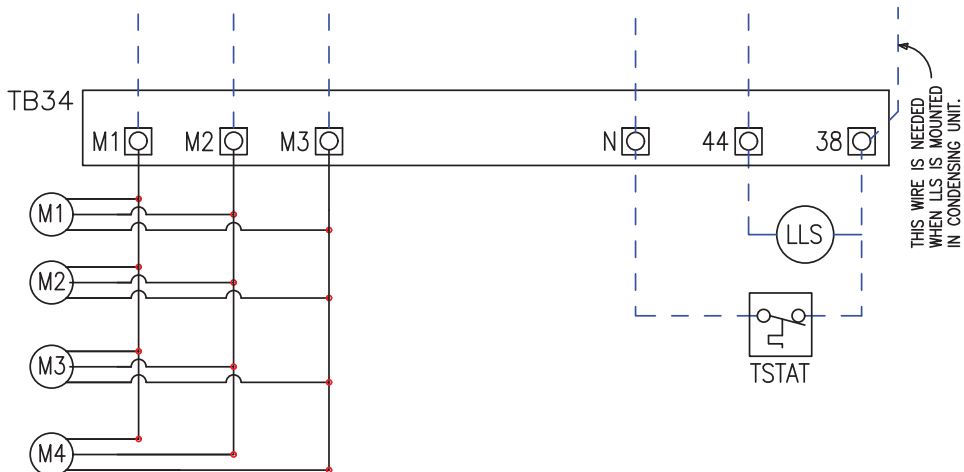
208-230/50-60/3



NOTE - IF THE EVAPORATOR IS PAIRED WITH A CONDENSING UNIT REFER TO THE NEXT DIAGRAM.
WIRING WITHOUT TIMER

SEE UNIT COOLER RATING STICKER FOR CORRECT VOLTAGE.

208-230/50-60/3



NOTE - USE THIS DIAGRAM IF THE EVAPORATOR IS PAIRED WITH A CONDENSING UNIT.
WIRING WITH A 208-230V TIMER

NOTES:

1. USE COPPER CONDUCTORS ONLY.
2. UNIT MUST BE GROUNDED.
3. FOR MOTOR AMPS SEE RATING STICKER ON OUTSIDE OF UNIT.

FACTORY WIRING ———

FIELD WIRING - - -

LEGEND:

TB - TERMINAL BOARD

M1 - MOTOR #1, ETC.

TSTAT - THERMOSTAT

LLS - LIQUID LINE SOLENOID

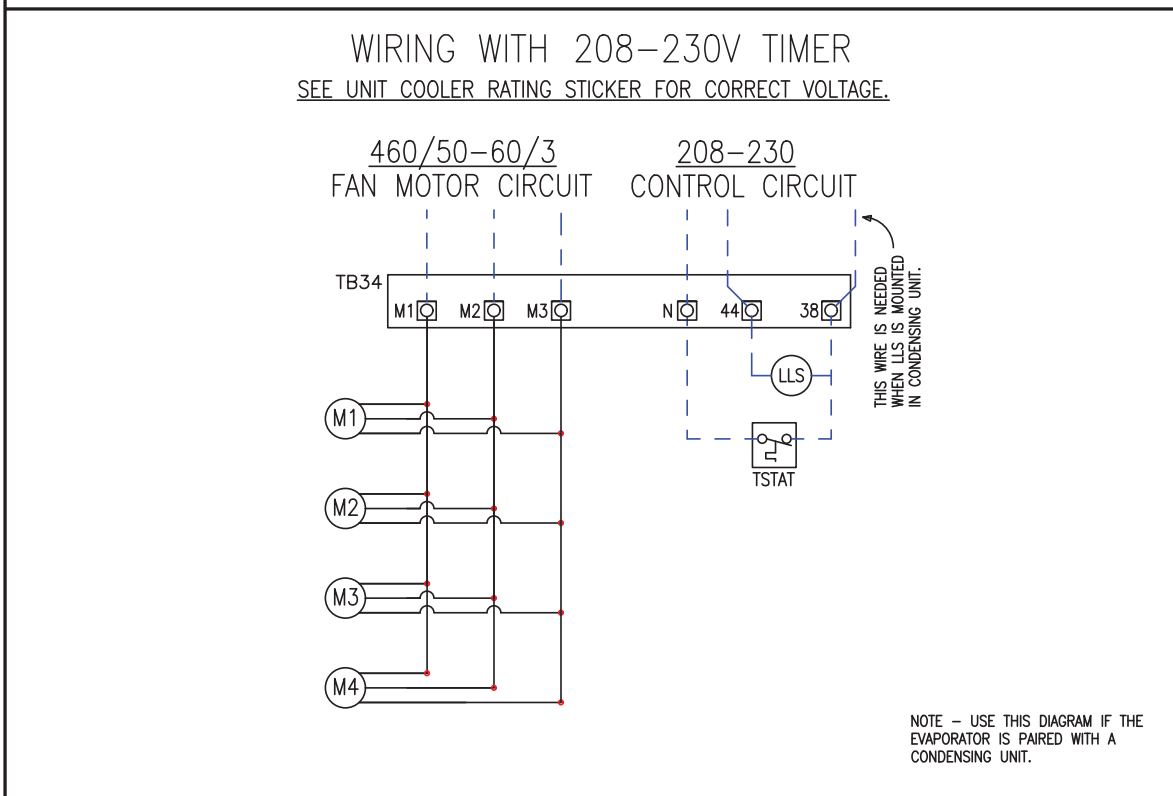
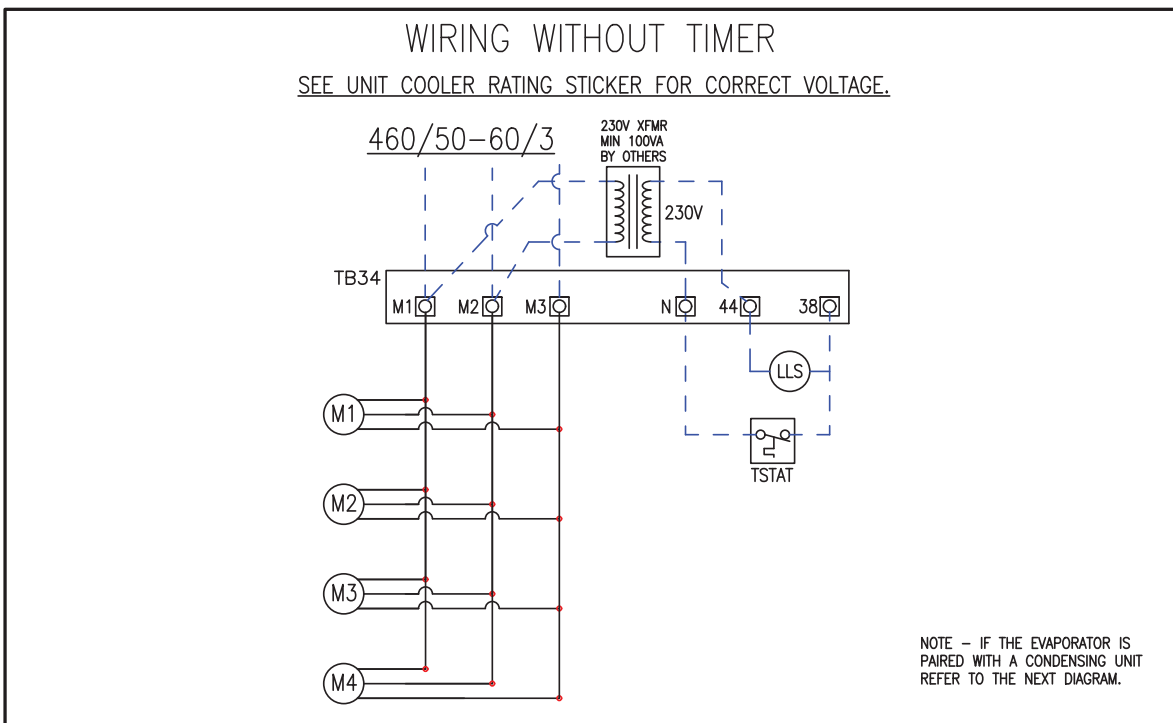
R1 - RELAY

PDB - POWER DISTRIBUTION BLOCK

08533586B

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS

Wiring Diagrams - Air Defrost Continued



- NOTES:
1. USE COPPER CONDUCTORS ONLY
 2. UNIT MUST BE GROUNDED
 3. FOR MOTOR AMPS SEE RATING STICKER ON OUTSIDE OF UNIT.

- LEGEND:
- TB - TERMINAL BOARD
 - M1 - MOTOR #1, ETC.
 - TSTAT - THERMOSTAT
 - LLS - LIQUID LINE SOLENOID
 - R1 - RELAY
 - XFMR - TRANSFORMER

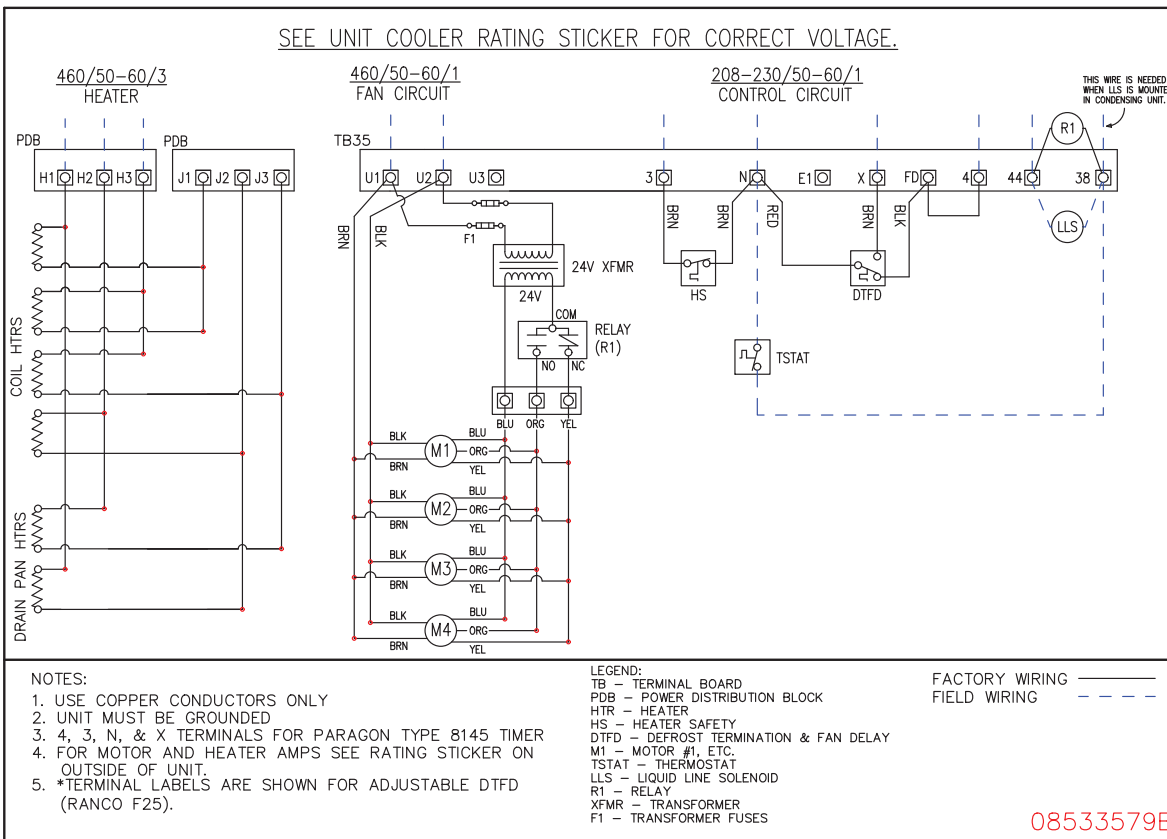
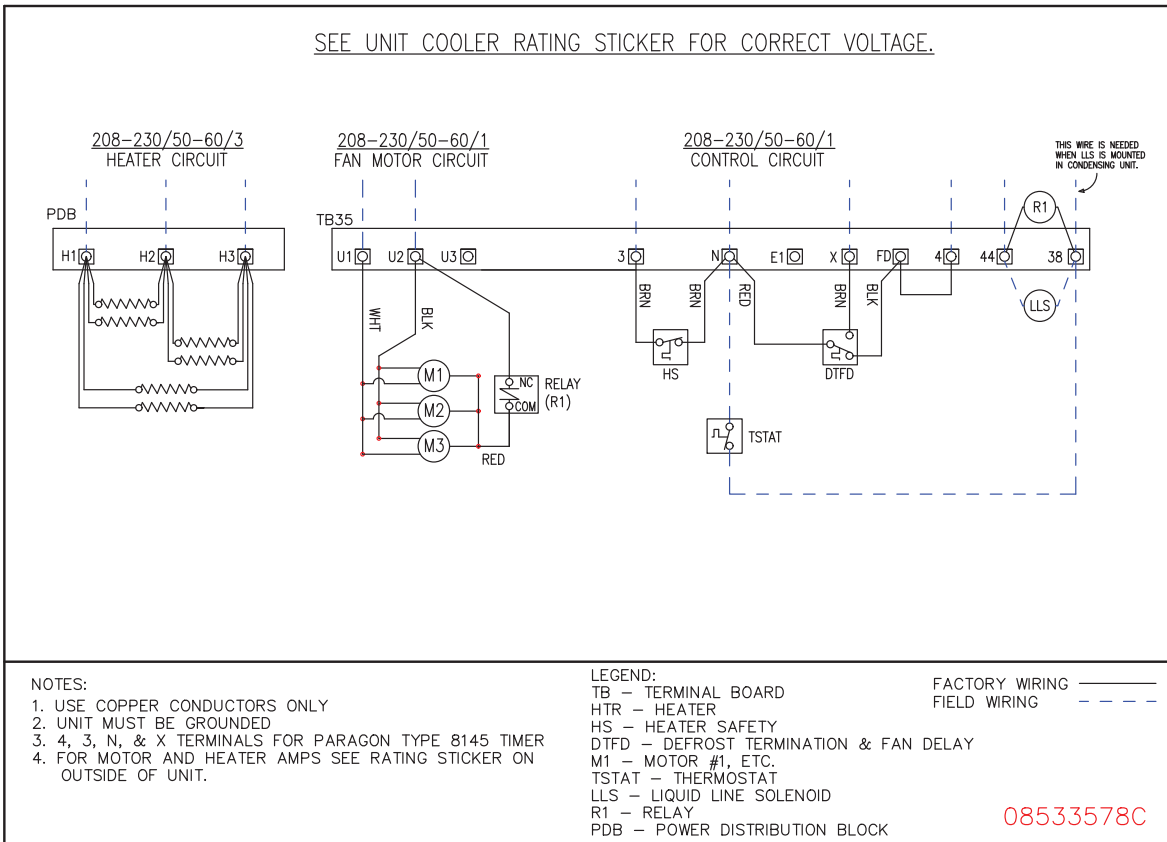
FACTORY WIRING ———

FIELD WIRING - - - - -

08533587B

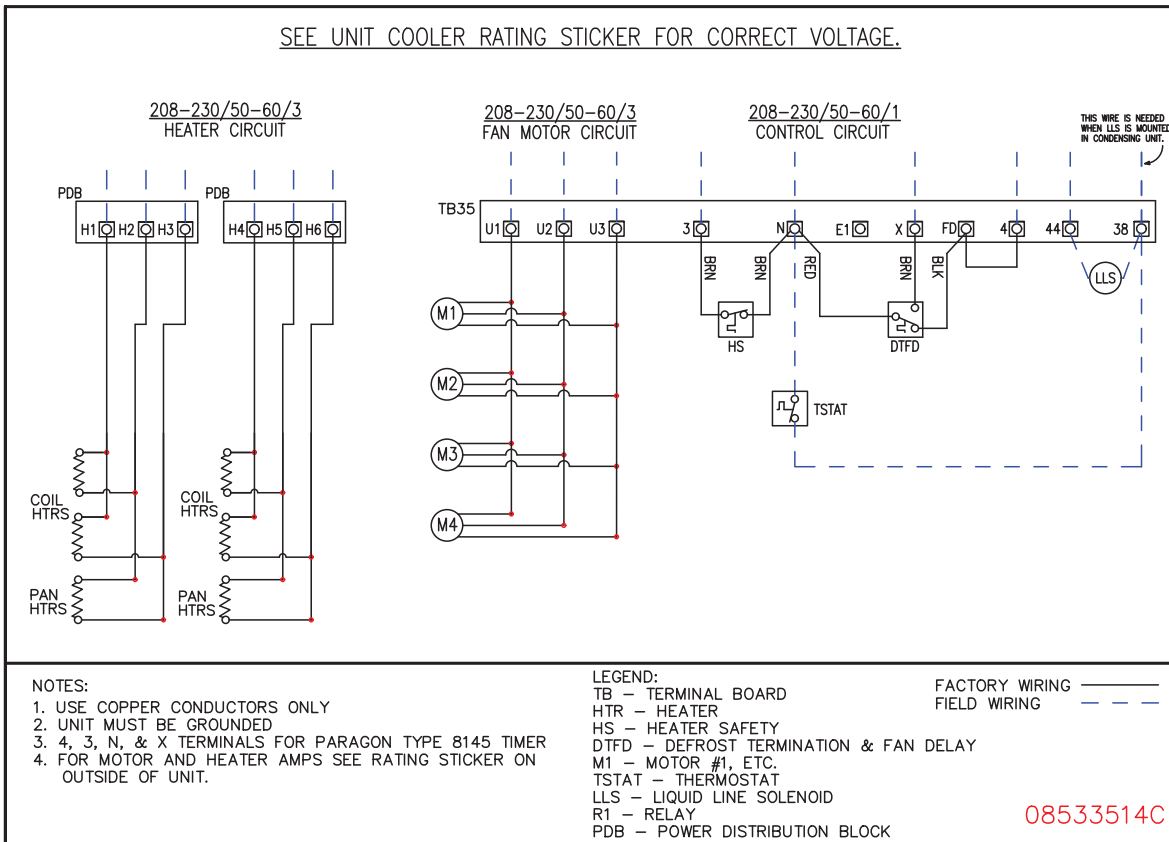
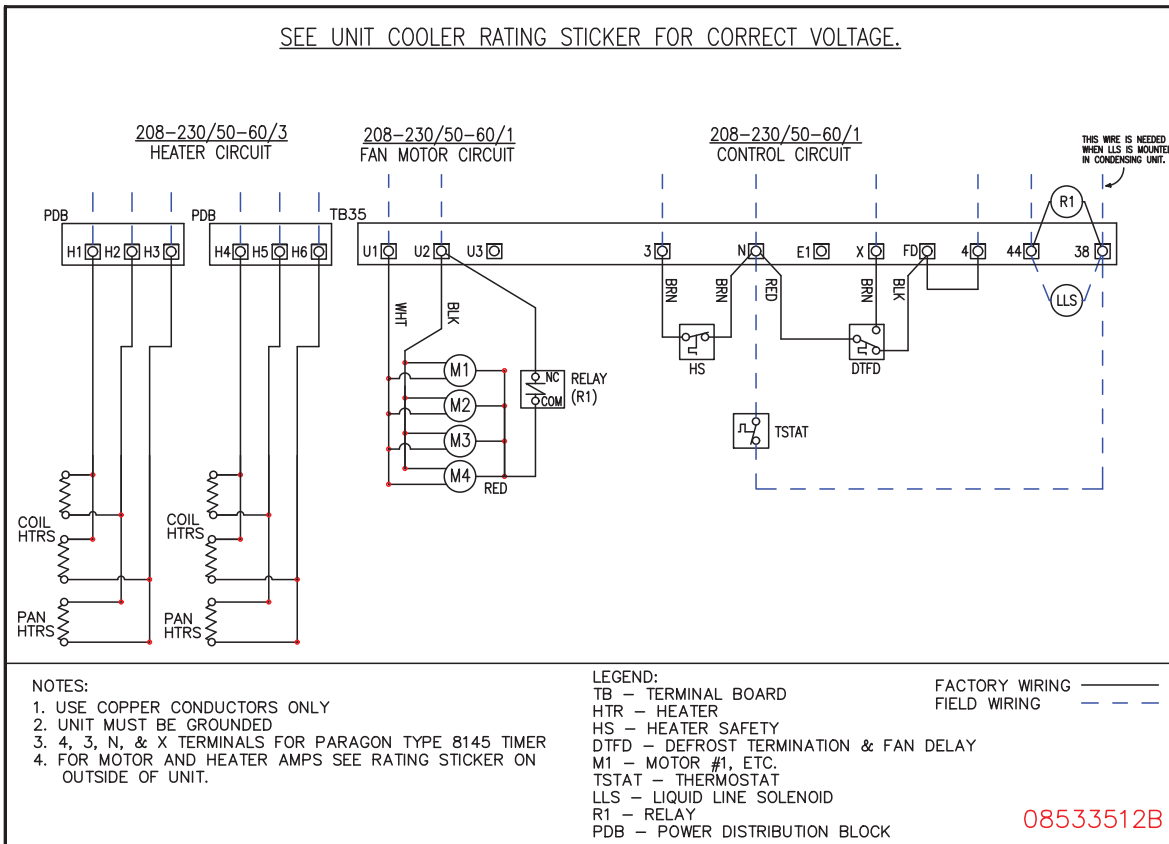
Medium Profile, Heavy Duty and Warehouse Unit Coolers

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS Wiring Diagrams - Electric Defrost



Installation and Operations Manual

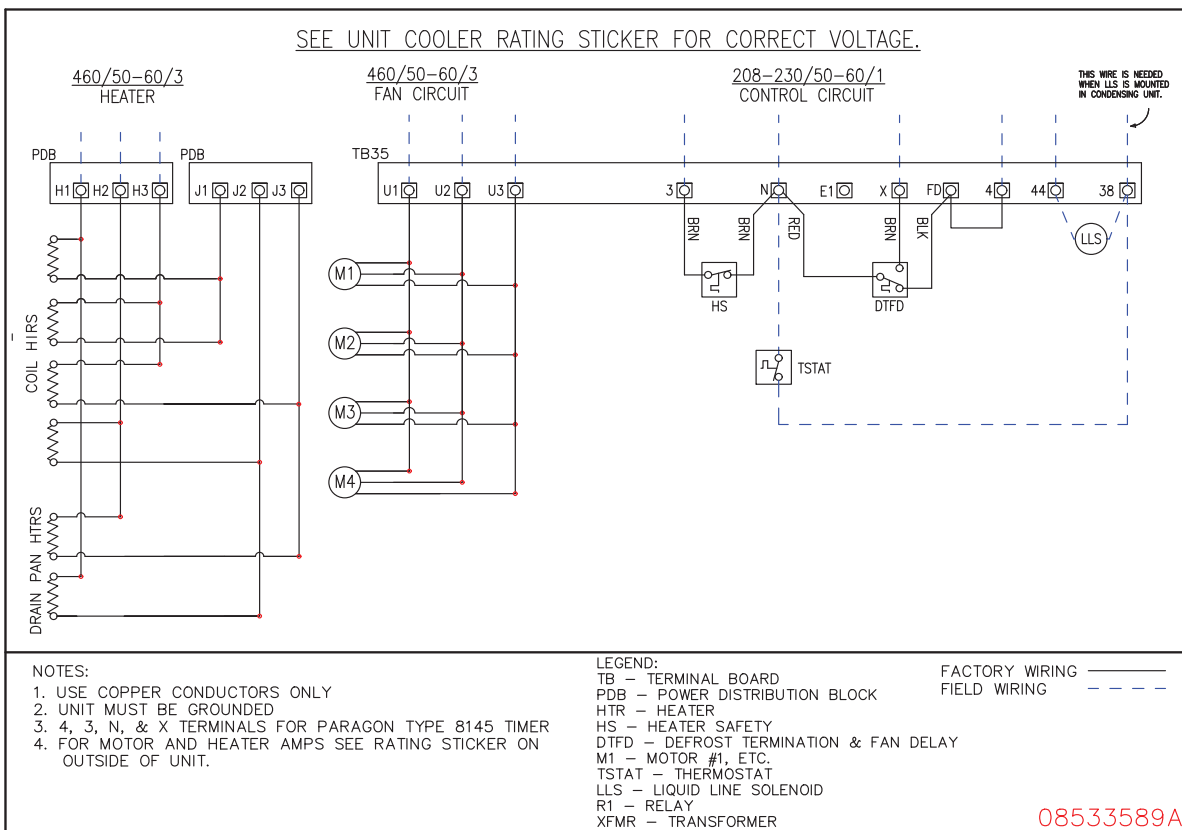
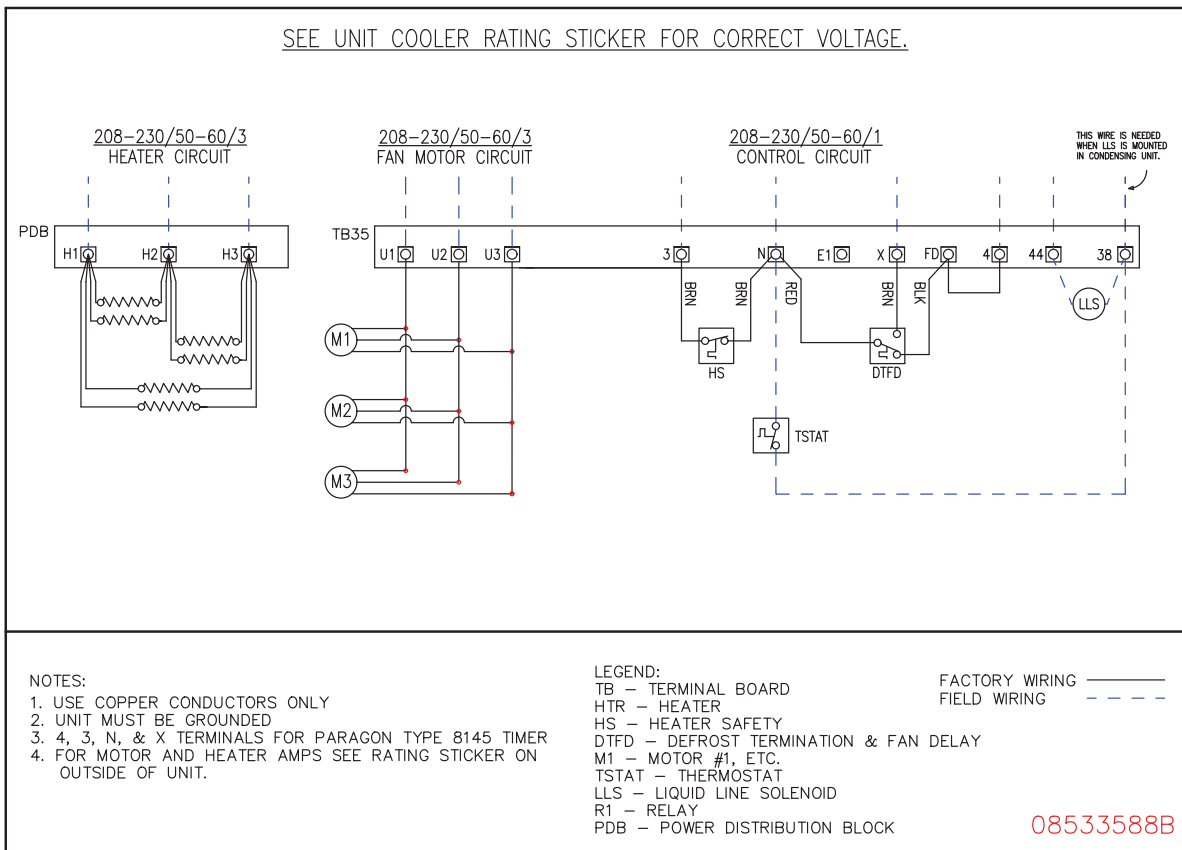
FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS Wiring Diagrams - Electric Defrost Continued



Medium Profile, Heavy Duty and Warehouse Unit Coolers

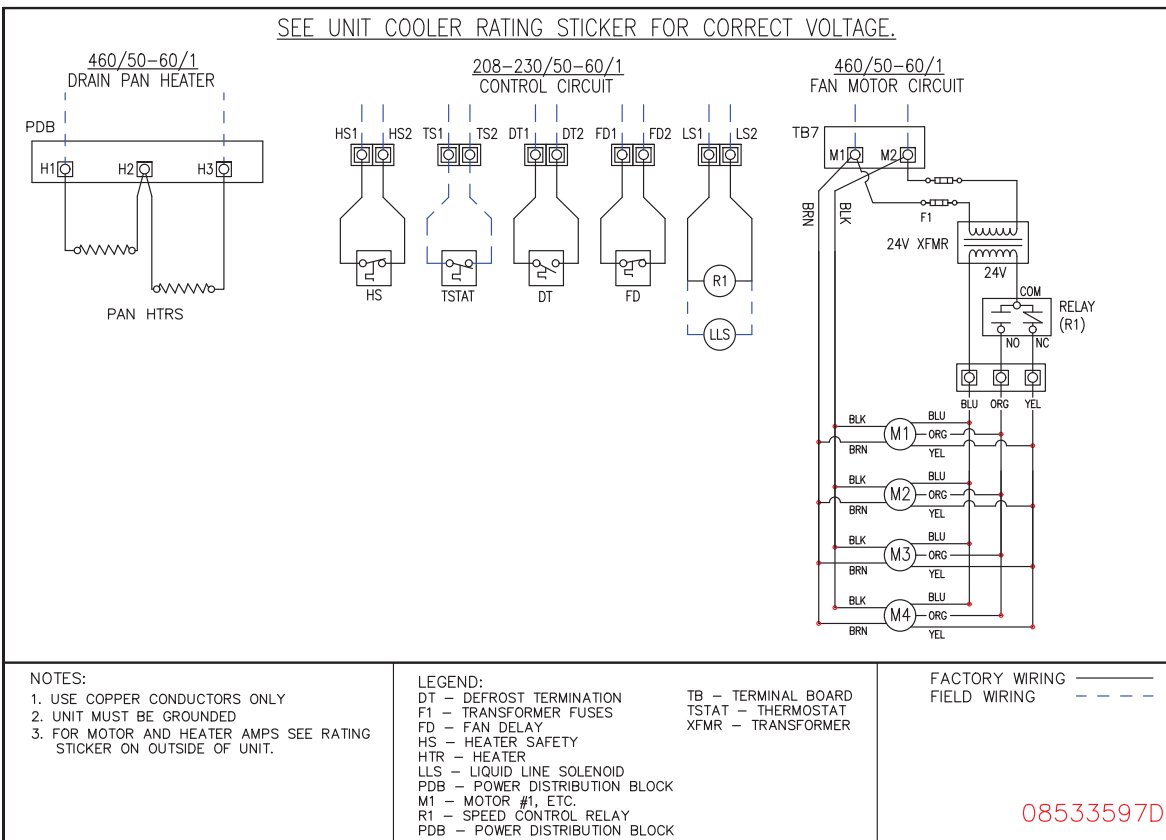
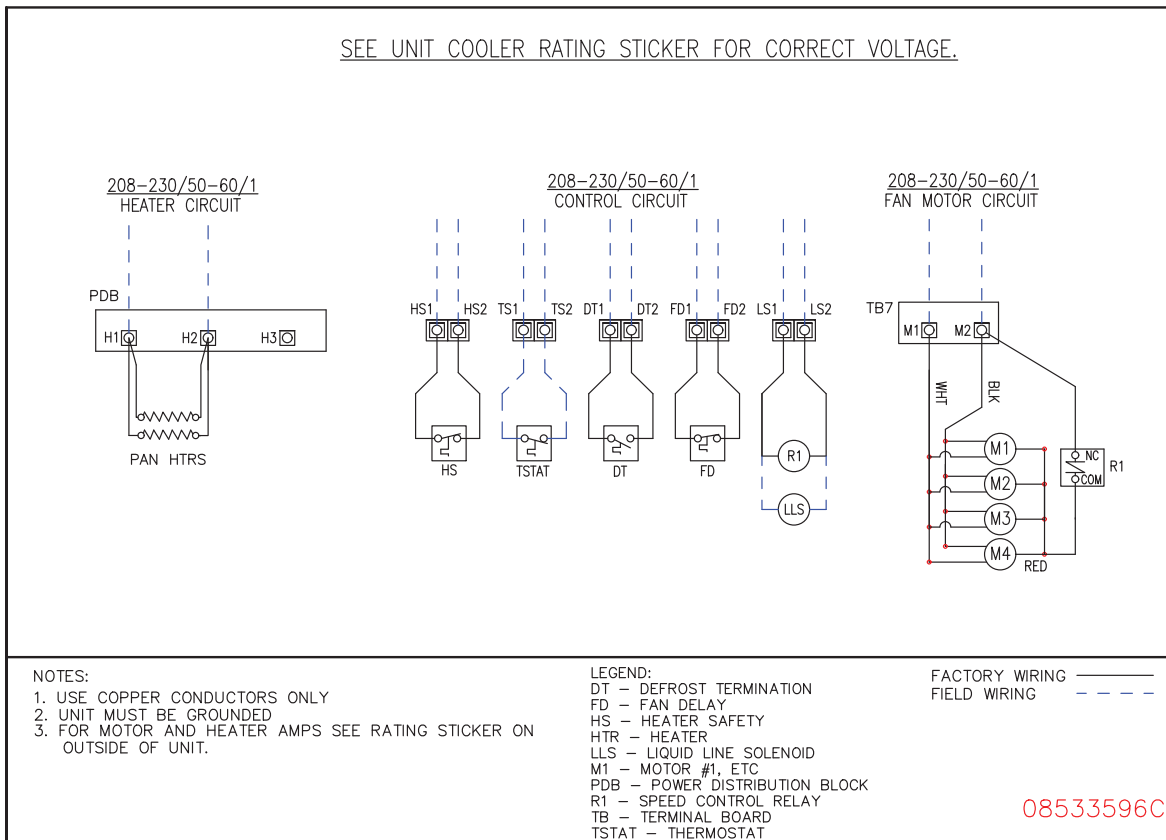
FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS

Wiring Diagrams - Electric Defrost Continued



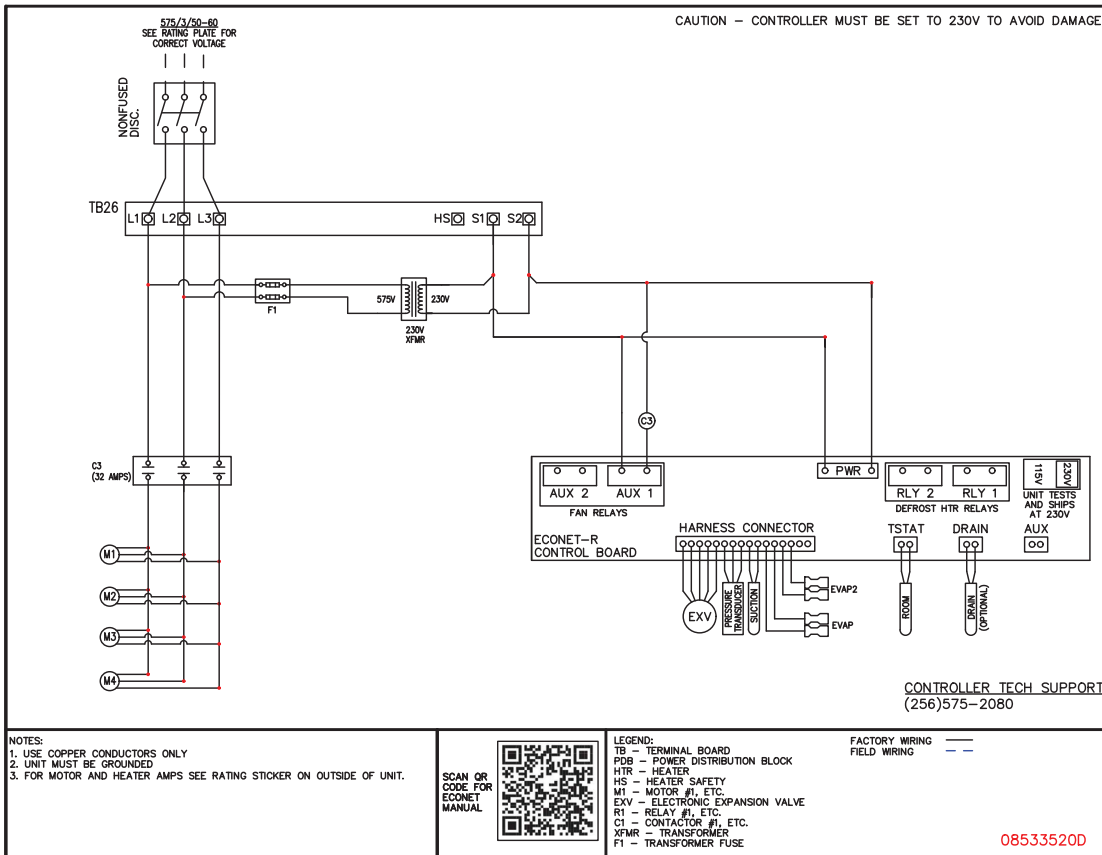
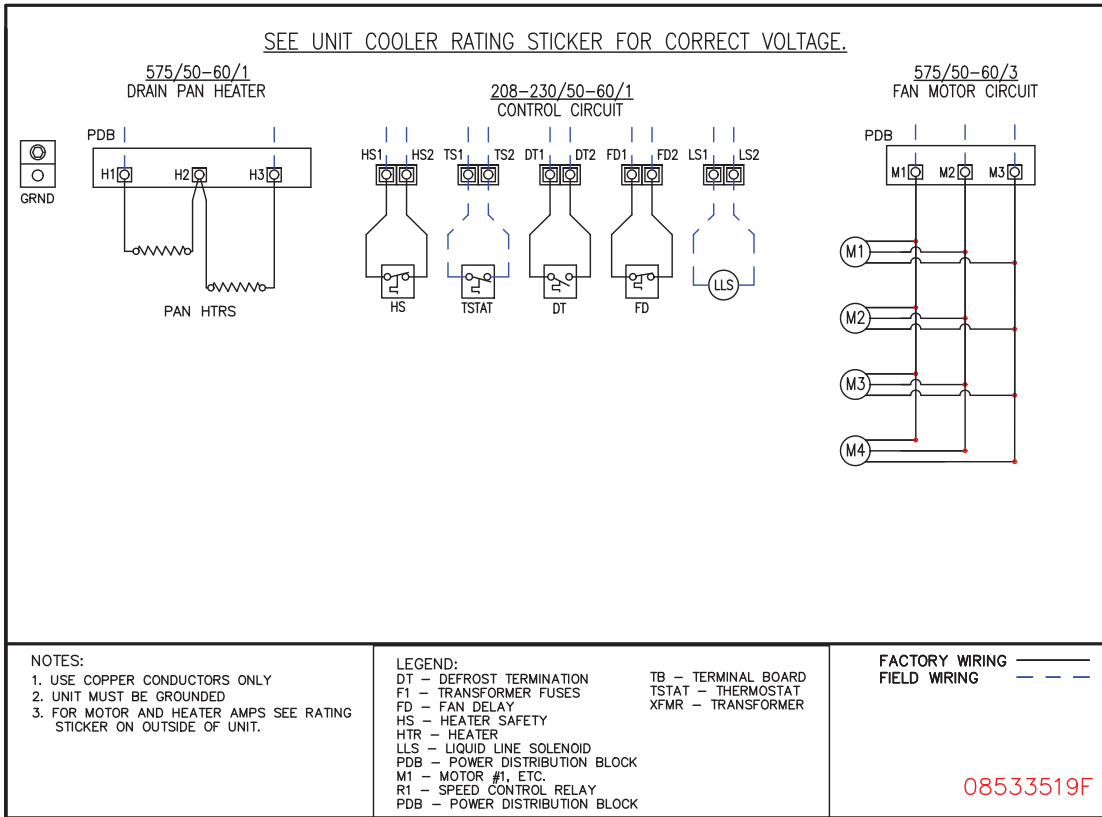
Installation and Operations Manual

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS Wiring Diagrams - Hot Gas Defrost with Electric Drain Pan



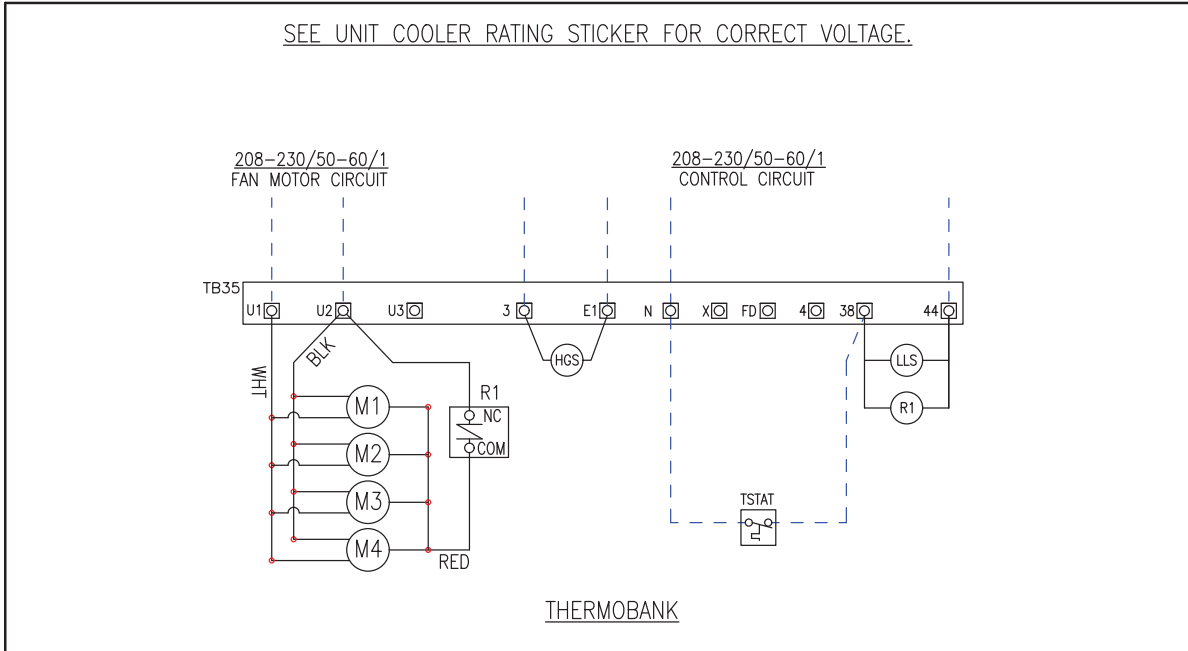
Medium Profile, Heavy Duty and Warehouse Unit Coolers

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS Wiring Diagrams - Hot Gas with Electric Defrost



Installation and Operations Manual

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS Wiring Diagrams - Thermobank Hot Gas Defrost



NOTES:

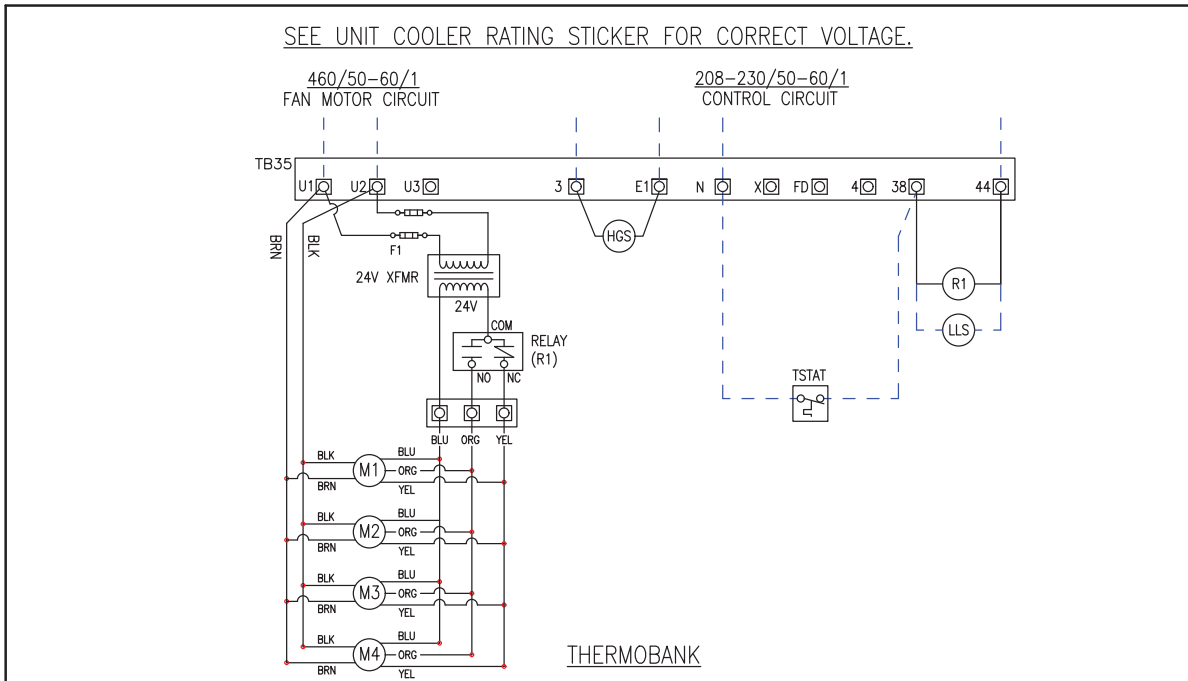
1. USE COPPER CONDUCTORS ONLY
2. UNIT MUST BE GROUNDED

LEGEND:

- HGS - HOT GAS SOLENOID
- LLS - LIQUID LINE SOLENOID
- M1 - MOTOR #1, ETC
- R1 - SPEED CONTROL RELAY
- TB - TERMINAL BOARD
- TSTAT - THERMOSTAT

FACTORY WIRING ———
FIELD WIRING - - - - -

08533621



NOTES:

1. USE COPPER CONDUCTORS ONLY
2. UNIT MUST BE GROUNDED

LEGEND:

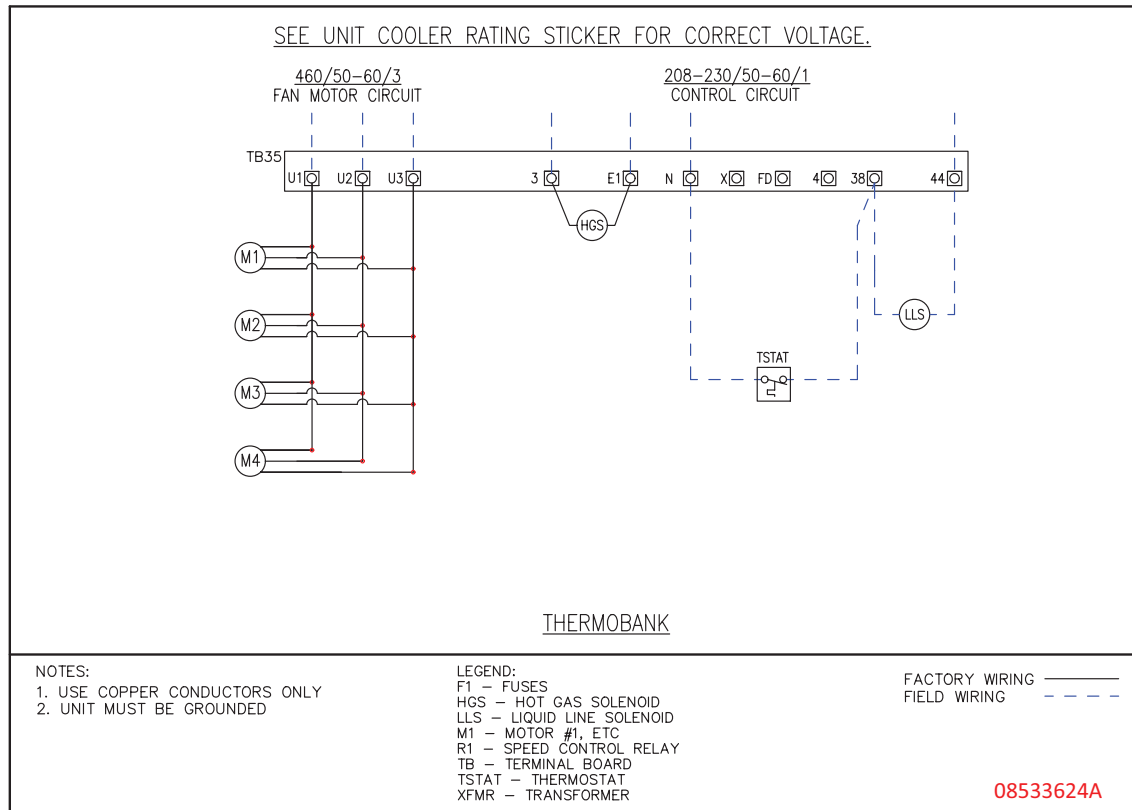
- F1 - FUSES
- HGS - HOT GAS SOLENOID
- LLS - LIQUID LINE SOLENOID
- M1 - MOTOR #1, ETC
- R1 - SPEED CONTROL RELAY
- TB - TERMINAL BOARD
- TSTAT - THERMOSTAT
- XFMR - TRANSFORMER

FACTORY WIRING ———
FIELD WIRING - - - - -

08533622

Medium Profile, Heavy Duty and Warehouse Unit Coolers

FACTORY STANDARD WIRING DIAGRAMS HEAVY DUTY & WAREHOUSE EVAPORATORS Wiring Diagrams - Thermobank Hot Gas Defrost Cont.



Start Up Procedure System Check

Before starting the system, check the following items:

1. The system is properly wired as shown in the diagrams.
2. Make sure all electrical connections are tight.
3. Check all piping is completed as described in the installation section.
4. All fan set screws and motor mounting bolts are tight.
5. Make sure the service valves are open.
6. The unit is mounted securely and pitched properly. Pour water into drain pan to verify the drain pan and line empty completely.
7. Make sure the drain line is trapped and heated and insulated as required.
8. Properly evacuate the system.
9. Check compressor oil level. Follow proper procedures for handling startup of systems using POE oils.
3. Verify the expansion valve is receiving a full column of liquid. Set the expansion valve superheat to the correct value. Factory recommendation is 6°F for standard applications.
4. Check the drain line heater operation for freezer applications.
5. During startup it is not unusual to have very heavy frost load. Manual defrost cycles may be required until the moisture level has dropped.
6. Observe the first defrost cycle to ensure all system components are functioning properly. Check the amp draw of the defrost heaters and verify it does not exceed the heater MCA.

Maintenance

General

Check at least once a month for proper defrosting. The amount and pattern of frosting can vary greatly. It is dependent on room temperature, product type, turnover rate, door usage, and surrounding temperature and humidity. It may be necessary to change the defrost schedule to meet individual cooler/freezer requirements.

At least every six months check the following items.

Initial Startup

Check the following items after initial startup:

1. After the initial startup, the fans will not start until the coil temperature pulls down to about 25°F. The fans may cycle several times until the room temperature pulls down.
2. Check the system for charge and oil level.
1. Tighten all electrical connections.
2. Tighten fan set screws and mounting bolts.
3. Clean the coil.

General Cont.

4. Check the refrigerant system charge and oil levels.
5. Verify defrost controls are operating properly.
6. Clean the drain pan and check the drain line for proper operation.
7. Check the drain line heaters for proper operation.

Fan and Motor Replacement

Fan Removal

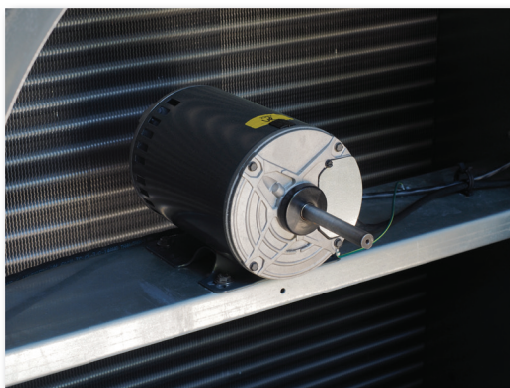
1. Disconnect all power to unit before service.
2. Remove the fan guard or venturi panel from the unit.
3. Loosen the fan set screws in the fan blade
4. Remove the fan.
5. Reverse procedure for installation. Apply adequate torque to fan hub set screws.
6. Check blade proper alignment and free rotation. The motor base allows adjustment in the horizontal axis. Vertical adjustment is done with the venturi panel.



Motor Replacement

The motor may be replaced per the procedure below.

1. Disconnect all power to unit before service.
2. Remove fan blade per instructions above.
3. Disconnect motor electrical connections from the wire harness.
4. Remove mounting bolts or nuts from the motor mounting rail and base.
5. Remove motor.
6. Replace using reverse procedure. Use adequate torque on all fasteners.
7. Install fan blade using fan blade procedure.



Defrost Heater Replacement

1. Disconnect all power to unit before servicing.
2. Disconnect electrical leads to the heater to be replaced.
3. The coil face heaters are held in place with several spring clips. Carefully remove each clip and save for installing the new heater.
4. Slide the heater out of the electrical control panel. The coil tube sheets holes allow the heater to be removed without damaging the coil.
5. Slide the new heater into the tube sheet heater holes.
6. Press the heater into the fin notches making firm contact the entire coil finned length.
7. Install the coil spring clips to firmly hold the heater in place.
8. Route heater wires to the required terminals. Secure wires from hot surfaces with wire ties.
9. Drain pan heaters are held in place with brackets. Remove the brass nut from the drain pan stud.
10. Replace drain heater with the brackets and nuts. Verify condensate line is connected properly.



Medium Profile, Heavy Duty and Warehouse Unit Coolers

Troubleshooting Chart

Symptoms	Possible Causes	Corrective Action
Fans not operating	Main switch open	Close switch
	Blown Fuses	Check for cause. Replace fuses
	Defective Motors	Replace motors as required
	Defective defrost thermostat	Replace defective component
	Unit in defrost cycle	Allow defrost to terminate
	Defrost thermostat not sensing coil temperature	Verify bulb or sensor is properly located.
Room temperature too high	Check thermostat setting	Adjust thermostat
	Superheat too high	Adjust expansion valve
	System low on charge	Add refrigerant
	Coil iced up	Manually defrost coil. Check components
Defrost heaters not operating	Main switch open	Close switch
	Blown Fuses	Check for cause. Replace fuses
	Defective heater(s)	Replace heaters
	Defective timer	Replace timer
	Defective heater safety	Replace heater safety
Coil not clearing during defrost cycle	Defective heaters	Replace heaters
	Not enough defrost cycles per day	Adjust number of defrost cycles
	Defrost cycle too short	Adjust defrost termination temperature
	Defective defrost thermostat	Replace thermostat
	Failsafe on timer too short	Increase failsafe termination time
	Defrost sensor not detecting coil iced area	Relocate sensor
Ice accumulating in drain pan	Defective heater	Replace heater
	Unit not pitched properly	Close switch
	Drain plugged	Clear drain
	Defective drain line heater	Replace heater
Unit stays in prolonged defrost cycle	Defective time or thermostat	Replace defective component
	Defrost thermostat sensor termination temperature set too high	Adjust thermostat setting
	Failsafe timer setting too long	Decrease failsafe time

Medium Evaporator Replacement Parts

Part Number	Description
08216214	MOTOR,1/3HP,120,825/425,EC RBS
08216212	MOTOR,1/3HP,230,825/425,EC RBS
08216213	MOTOR,1/3HP,460,825/425,EC RBS
08215201	HEATER 2F,230,750W
08215203	HTR,4F,230,1475W
08215205	HTR,6F,230,2225W
08248176	FITG,DRAIN,1-1/4-11.5,1.5" AL
08248176	FITG,DRAIN,1-1/4-11.5,1.5" AL
08321625	HTR CLIP,COIL,NEXGEN-LP,080SS
08248178	DRN,1.75 HX MTE,1-1/4-11.5,AL
08248180	DRN GSKT,1.86 OD X 1.66 ID AL
08532761	MOTOR HARNESS,EVMD3,1F,230V
08532762	MOTOR HARNESS,EVMD3,2F,230V
08532763	MOTOR HARNESS,EVMD3,3F,230V
08532764	MOTOR HARNESS,EVMD3,1F,460V
08532765	MOTOR HARNESS,EVMD3,2F,460V
08532766	MOTOR HARNESS,EVMD3,3F,460V
207757007	TERMINAL BOARD,TB7
207757034	TERMINAL BOARD,TB34,AIR DEF
207757035	TERMINAL BOARD,TB35,EL&HG DEF
207757026	TERMINAL BOARD,TB26,ECONET
08218563	3 POLE TERMINAL BLK,EVMD3 2SPD
08218564	3 POLE TERMINAL BLK,EVMD3 HTRS
08221244	FAN,PROP,24-25 X 1/2,CW
08221245	FAN,PROP,24-18 X 1/2,CW
202136005	GUARD,FAN,WIRE,BLACK,24"BLADE
103079003	CONTROL, HTR SAFETY
08219328	CNTL,DTFD,SPDT,O35/C55+O55/C35
08219273	CONTROL,DEFTERM,SPST,O30/C60
103079009	CONTROL, FAN DELAY O45/C35
109282001	STUB,SADDLE,1/2X.035,WHT-375
204464037	CONTROL, DEFR, ADJUSTABLE

Medium Profile, Heavy Duty and Warehouse Unit Coolers

Heavy Duty and Warehouse Evaporator Replacement Parts

Part Number	Description
08532682	MOTOR,3/4HP,230/1,ECM,60/50HZ
08532683	MOTOR,3/4HP,460/1,ECM,60/50HZ
08533523	MOTOR,1 HP,230/460/3,850,INVBAS
08216190	MOTOR,1.5HP,230/460/3,1150,INVBAS
08216217	MOTOR,2HP,575/3,1140BASE
08216198	MOTOR,1HP,575/3,850,INVBAS
08533522	FAN,PROP,30",28DEG,3-BLADE
08221238	FAN,PROP,30",25DEG,3-BLADE
08533511	FAN,PROP, 30", 23DEG, 3-BLADE
08528201	GUARD,FAN,WIRE,BLK,30"BLADE
08532696	ELG HTR,1F,240,1000W
08532697	ELG HTR,2F,240,2000W
08532698	ELG HTR,3F,240,3000W
08532699	ELG HTR,4F,240,4000W
08533687	ELG HTR,1F,287,1000W
08533688	ELG HTR,2F,287,2000W
08533689	ELG HTR,3F,287,3000W
08533690	ELG HTR,4F,287,4000W
08533495	MOTOR HARNESS,ELG, ECM,1 FAN,230, 3WIRE
08533496	MOTOR HARNESS,ELG, ECM,2 FAN,230, 3WIRE
08533497	MOTOR HARNESS,ELG, ECM,3 FAN,230, 3WIRE
08533498	MOTOR HARNESS,ELG, ECM,4 FAN,230, 3WIRE
08533499	MOTOR HARNESS,ELG, ECM,1 FAN,460, 5 WIRE
08533500	MOTOR HARNESS,ELG, ECM,2 FAN,460, 5WIRE
08533501	MOTOR HARNESS,ELG, ECM,3 FAN,460, 5WIRE
08533502	MOTOR HARNESS,ELG, ECM,4 FAN,460, 5WIRE
08533507	MOTOR HARNESS,ELG, 3PH,1 FAN, DAISY CHAIN, 230/460, 3WIRE
08533508	MOTOR HARNESS,ELG, 3PH,2 FAN, DAISY CHAIN, 230/460, 3WIRE
08533509	MOTOR HARNESS,ELG, 3PH,3 FAN, DAISY CHAIN,230/460, 3WIRE
08533510	MOTOR HARNESS,ELG, 3PH,4 FAN, DAISY CHAIN, 230/460, 3WIRE
207757029	TERMINAL BOARD,TB29, ELG ECONET
207757034	TERMINAL BOARD,TB34,AIR DEF
207757035	TERMINAL BOARD,TB35,EL&HG DEF
207757026	TERMINAL BOARD,TB26
08219008	JOHNSON CONTROL MECHANICAL A19,TSTAT
08219588	ELECTRIC THERMOSTAT
08219608	ELECTRIC THERMOSTAT WITH TIMER
204464037	DTFD (ADJUSTABLE)
08219273	CONTROL,DEFTERM,SPST,O30/C60
103079009	CONTROL, FAN DELAY O45/C35
103079003	CONTROL, HTR SAFETY

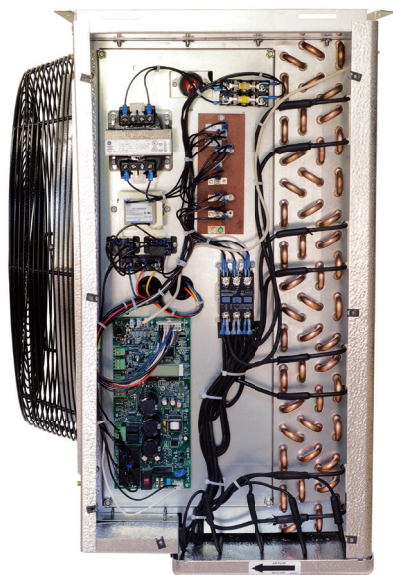
Optional Components - EcoNet[®] Enabled Unit Coolers

The award-winning EcoNet Enabled Controller and EcoNet Command Center bring easy-to-use smart technology to commercial refrigeration applications.

The optional EcoNet Controller gives customers a higher level of efficiency and more control of their walk-in units for greater energy savings. The EcoNet Controller is shipped from the factory with the controller board already installed and all sensors and relays wired. The controller replaces the TXV, liquid line solenoid valve, room thermostat, time clock, and defrost termination and fan delay. Parameters are pre-selected to match equipment.

The optional EcoNet Command Center allows for EcoNet Enabled Unit Coolers to be programmed, monitored, and troubleshot outside of the space being cooled. The EcoNet Command Center is shipped loose and includes everything in the box to quickly install the device on a wall outside of the walk-in. System set up is easy with the intuitive touchscreen installer settings.

If the Medium Profile, Heavy Duty or Warehouse Unit Cooler has the factory-installed EcoNet Enabled Controller (see photo below), you will need to reference the EcoNet Enabled Unit Coolers Installation and Operations Manual for further assistance.



EcoNet Enabled Controller
(factory-installed)



EcoNet Command Center
(shipped loose)

TO INQUIRE OR ORDER REPLACEMENT PARTS

Email: parts@htpg.com
 Telephone: 1-855-HTPARTS
 (1-855-487-2787)
 Fax: (256) 259-7478

1. Provide the complete Model Number and Serial Number of the unit.
2. Provide a detailed description of the part with any model, diameter, HP, or other markings.
3. State the quantity you are ordering.
4. Advise special shipping methods, routes, procedures, or instructions with ship to address.
5. Provide complete and accurate data to insure prompt and accurate delivery.

Medium Profile, Heavy Duty and Warehouse Unit Coolers

Due to continuing product development, specifications are subject to change without notice.



A member of the Rheem family of brands

3885 Crestwood Pkwy., Ste. 500 • Duluth, Georgia 30096 • www.htpg.com
E-mail or call us for help: parts@htpg.com or 1-855-HTPARTS (1-855-487-2787)