



48/50DJ,DK024-074
 48/50HJ015,024
 48/50TJ016
 50DW,DY024-074

Accessory Motormaster® I Head Pressure Controller



Installation Instructions

Part No. 50DJ902801, 50DJ902811

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INTRODUCTION

The accessory Motormaster I (MMI) head pressure controller is used to control the speed of the outdoor (condenser) fan motor (OFM) (see Fig. 1 and 2 for OFM1 location), permitting the unit to operate in cooling at down to -20 F outdoor ambient. In order to accomplish this, it is also necessary to install the accessory low-ambient kit and/or

winter start kit on some units. Refer to the unit price pages for specific information on which kits to order, and to the literature included with the accessory low-ambient and winter start kits for their installation. Low-ambient and winter start kit wiring details are included in this book as appropriate.

NOTE: In addition, all 575-v units require installation of an accessory transformer (Carrier part no. HT01AH954) not included in this package. Refer to the accessory transformer kit for wiring instructions for that accessory.

Table 1 shows MMI package numbers and usage, and Table 2 shows the contents of each MMI accessory package.

INSTALLATION

48/50DJ,DK and 50DW,DY Units

1. Disconnect power to the unit.
2. Refer to Fig. 1. Disconnect outdoor (condenser) fan motor (OFM1) wiring at the motor junction box.
3. Remove OFM1 fan guard and OFM1 from unit. Save all wires.
4. Remove propeller from OFM1 and keep for reinstallation on the speed control motor.

Table 1 — Motormaster I Package Numbers and Usage

PACKAGE NO.	UNIT MODEL 48/50	UNIT SERIES NO.	UNIT V-Ph-Hz	MOTOR V-Ph-Hz
50DJ902801	DJ,DK,DW,DY024-074 HJ015,024 TJ016	101 501	208/230-3-60 575-3-60	200/230-1-60
50DJ902811	DJ,DK,DW,DY024-074 HJ015,024 TJ016	601	460-3-60	460-1-60

Table 2 — Motormaster I Package Contents

PACKAGE NO.			
50DJ902801*		50DJ902811	
Quantity	Item	Quantity	Item
1	Speed Control Motor with Sensor (8-ft wire)† Motor Mount 50 MFD, 370-V Capacitor† Capacitor Boot Motormaster I Controller Fastener Package	1	Speed Control Motor with Sensor (8-ft wire)** Motor Mount 12.5 MFD, 440-V Capacitor** Capacitor Boot Motormaster I Controller Fastener Package

LEGEND

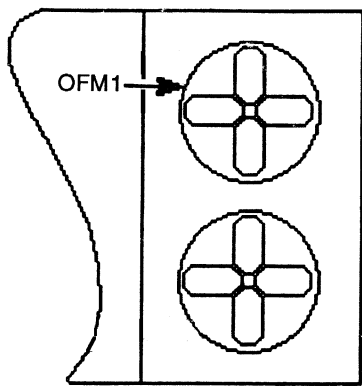
MFD — Micro farad

*For Motormaster I head pressure control device operation, 575-v units require installation of a transformer (Carrier part no. HT01AH954) not included in this accessory package.

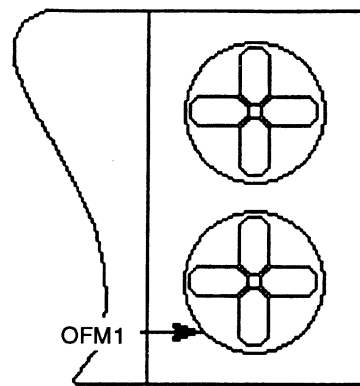
†Kit includes speed control motor part no. HC52AE235 and capacitor no. HC91CA050.

**Kit includes speed control motor part no. HC52AE465 and capacitor no. HC91DA012.

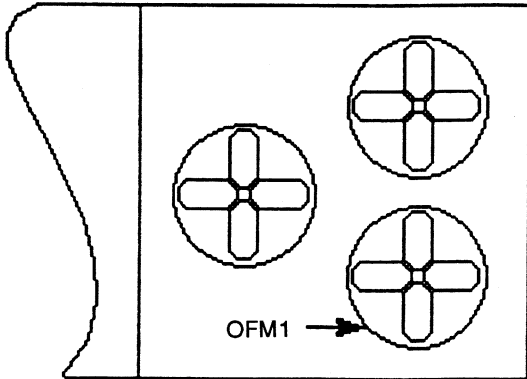
Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.



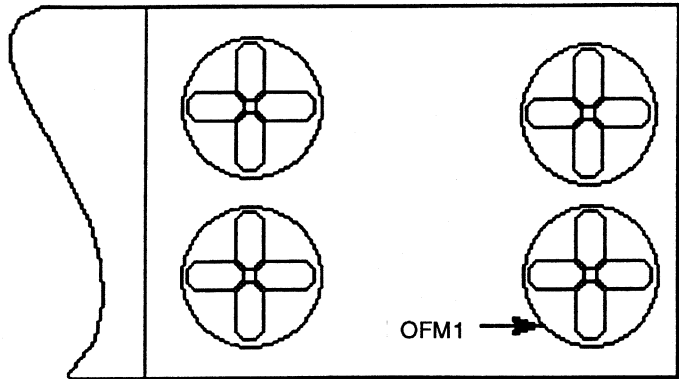
024-030 UNITS



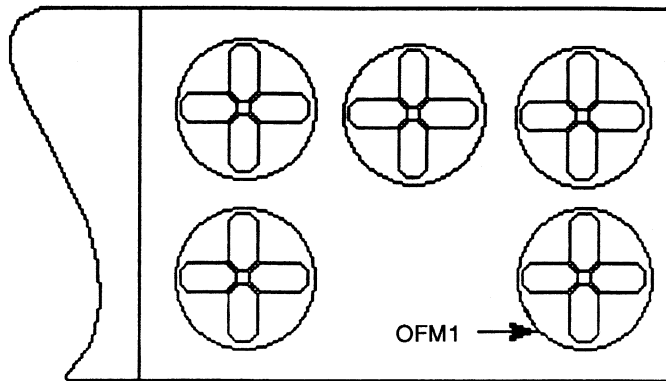
034 UNIT



044 UNIT



054, 064 UNITS



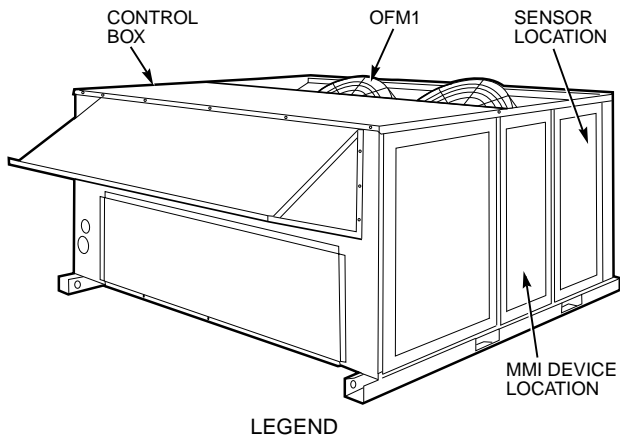
074 UNIT

LEGEND

OFM — Outdoor (Condenser) Fan Motor

NOTE: All views are from the top of the unit.

Fig. 1 — Location of OFM1; 48/50DJ,DK and 50DW,DY Units



LEGEND

- MMI — Motormaster® I Head Pressure Control Device
- OFM — Outdoor (Condenser) Fan Motor

Fig. 2 — Location of OFM1; 48/50HJ,TJ Units

5. Replace the existing motor mount (see Fig. 3) with motor mount provided in the accessory package.
6. Install speed control motor in place of the OFM1 removed in Step 3. This speed control motor becomes the new OFM1.
7. Since the standard OFM1 is a 3-phase motor and the speed control motor is a single-phase motor, a capacitor is required. There is not enough space in the main control box to easily mount a capacitor, so it must be mounted outside the control box. The best location for the capacitor is on the partition between the indoor and outdoor sections of the unit in the compressor section (under the liquid lines) for 024-030 units, or inside the right-hand corner post for 034-074 units.

Drill holes and mount the capacitor with terminals pointing up using field-supplied capacitor strap and screws. See Fig. 4-6.

8. *For counterclockwise OFM rotation* — Connect yellow wire from terminal 22 on OFC1 (outdoor [condenser] fan contactor) to the capacitor (see Fig. 7, 8, or 9, depending on unit voltage). Run a second wire (field supplied) from the same terminal to the yellow (T4) wire in the speed control motor junction box: connect using wire nut (supplied in fastener package). On the 460-v motor, tie the blue (T1) and brown (P2) wires in the motor junction box together using a wire nut (supplied in fastener package). See Fig. 8. On the 208/230-v motor, tie the blue (T1) and black (T5) wires in the motor junction box together (see Fig. 7 or 9).

For clockwise OFM rotation — Connect yellow wire from terminal 22 on OFC1 to the capacitor. Run a second wire (field supplied) from the same terminal to the blue (T1) wire in the speed control motor junction box; connect using wire nut (supplied in fastener package). On the 460-v motor, tie the yellow (T4) and brown (P2) wires in the motor junction box together using a wire nut (supplied in fastener package). On the 208/230-v motor, tie the yellow (T4) and black (T5) wires in the motor junction box together using a wire nut (supplied in fastener package).

9. Run field-supplied wire from the other side of the capacitor or the red (T8) wire in the speed control motor junction box; connect with wire nut (supplied in fastener package).

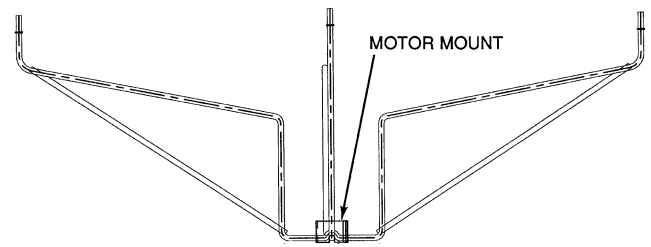


Fig. 3 — Motor Mount Location

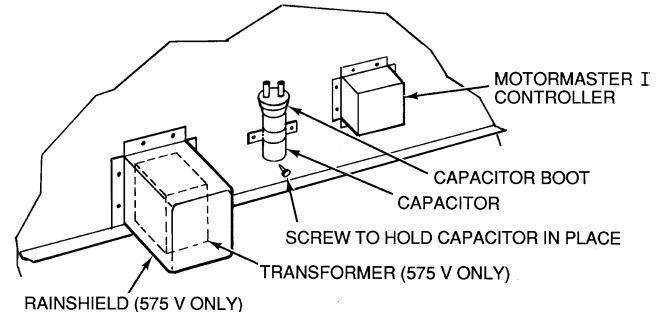


Fig. 4 — Mounting Motormaster I Controller, Capacitor, and 575-V Transformer; 48/50DJ,DK and 50DW,DY024-030 Units

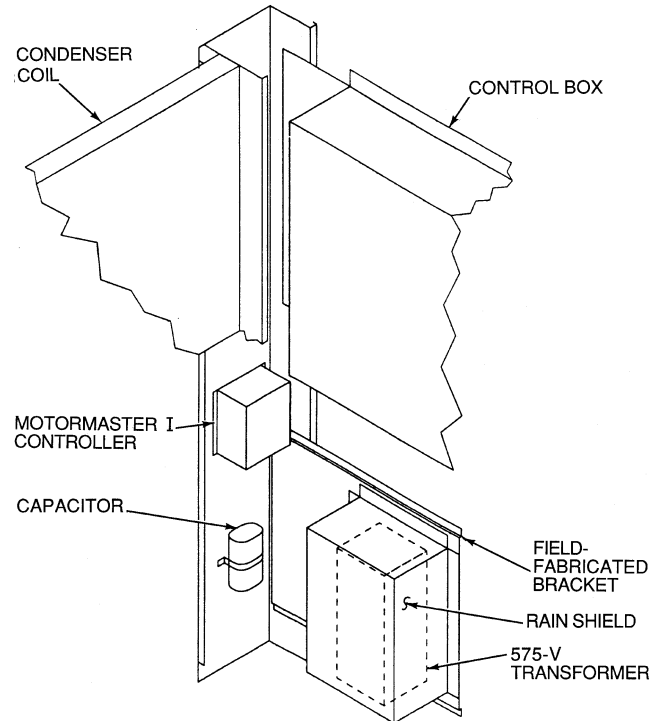


Fig. 5 — Mounting Motormaster I Controller, Capacitor, and 575-V Transformer; 48/50DJ,DK and 50DW,DY034,044 Units

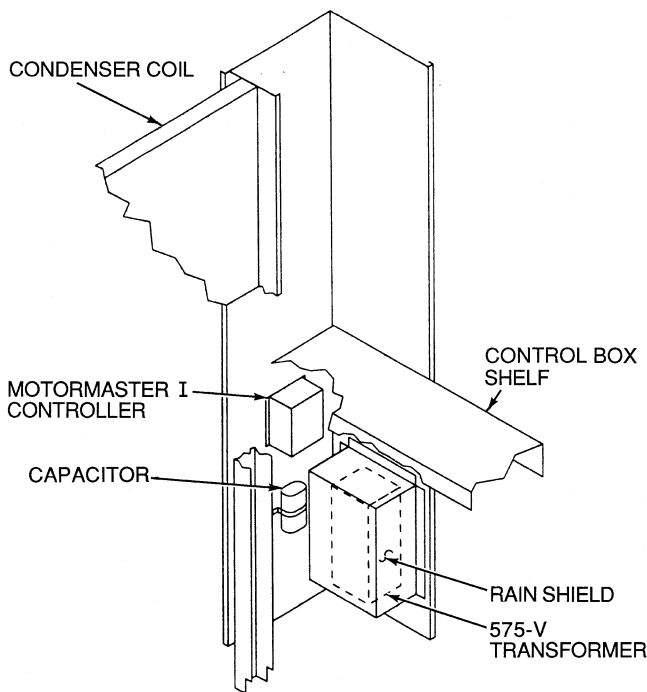
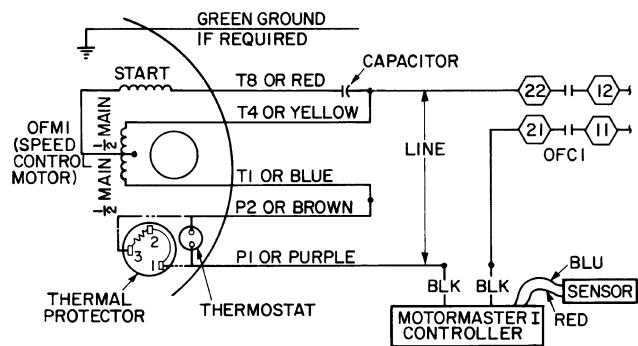


Fig. 6 — Mounting Motormaster® I Controller, Capacitor, and 575-V Transformer; 48/50DJ,DK and 50DW,DY054-074 Units

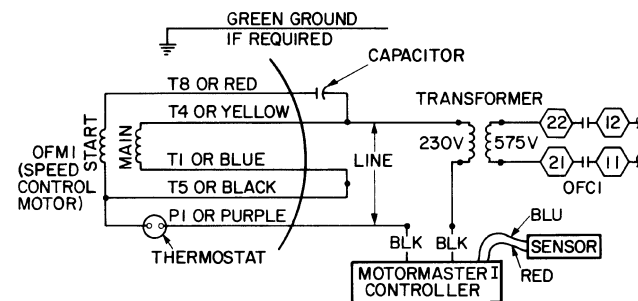


LEGEND

OFC — Outdoor (Condenser) Fan Contactor
OFM — Outdoor (Condenser) Fan Motor

NOTE: Wiring shown is for counterclockwise rotation. To reverse rotation, interchange T1 (blue) and T4 (yellow) leads.

Fig. 8 — Wiring Details, 460-V Unit (460-V Motor)

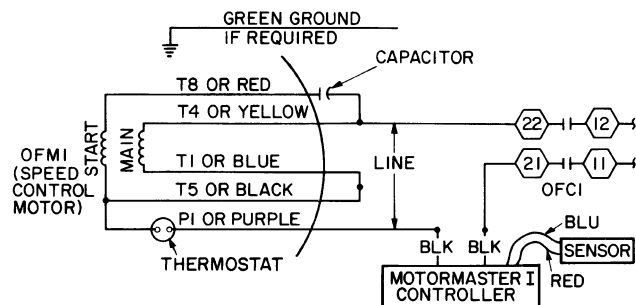


LEGEND

OFC — Outdoor (Condenser) Fan Contactor
OFM — Outdoor (Condenser) Fan Motor

NOTE: Wiring shown is for counterclockwise rotation. To reverse rotation, interchange T1 (blue) and T4 (yellow) leads.

Fig. 9 — Wiring Details, 575-V Unit (208/230-V Motor)



LEGEND

OFC — Outdoor (Condenser) Fan Contactor
OFM — Outdoor (Condenser) Fan Motor

NOTE: Wiring shown is for counterclockwise rotation. To reverse rotation, interchange T1 (blue) and T4 (yellow) leads.

Fig. 7 — Wiring Details, 208/230-V Unit (208/230-V Motor)

- Remove the blue wire that had connected the standard OFM to terminal 23 on OFC1 (not shown in Fig. 7-9). If this wire is not physically removed from the unit, be sure that it is disconnected from terminal 23 of OFC1 and that the end of the wire is placed in a wire nut (field supplied) and secured. The motor end of this wire must be securely wire-tied to the motor mount to prevent it from becoming entangled in the propeller fan when the unit is running.

- Mount the Motormaster I controller on the partition next to the capacitor. The controller must be mounted vertically with the leads coming out the bottom. Four holes must be field drilled using mounting template. (See template located at the back of this literature.) Attach controller using four No. 10 sheet metal screws (supplied in fastener package). To ensure electrical ground, insert star washers (supplied in fastener package) under the heads of the screws.
- Connect the black wire from terminal 21 on OFC1 to one of the black wires in the Motormaster I controller using wire nut (already in unit) for connection (see Fig. 7-9). Run field-supplied wire from the other black wire in the Motormaster I controller (connect using wire nut) to the purple wire (P1) in the speed control motor junction box. Use wire nut (already in unit) to connect black and purple wires. Replace motor junction box cover.

⚠ DANGER

If this wire is not disconnected from terminal 23 of OFC1, it will become energized when OFC1 is energized. This could result in serious injury or death.

⚠ CAUTION

Be sure that the wires running to the speed control motor are wire-tied securely to the motor mount to prevent the wires from becoming entangled in the propeller when the unit is running.

13. Reinstall the propeller fan and fan guard.
14. Route the sensor wire from the controller above the compressor access door to the header end of the condenser coil.

⚠ CAUTION
Sensor assembly is delicate; handle with care.

15. See Fig. 10-13 for sensor location. Secure the sensor to the coil return bend with No. 4-40 screw, 2 plate washers, and nut supplied in fastener package) as shown in the 32LT Installation, Start-Up and Service Instructions (included with MMI controller).
16. Coil up excess wire and secure it next to the MMI controller.
17. Provide sensor wire with protection from physical damage or wind movement by securing wire with wire ties when necessary.

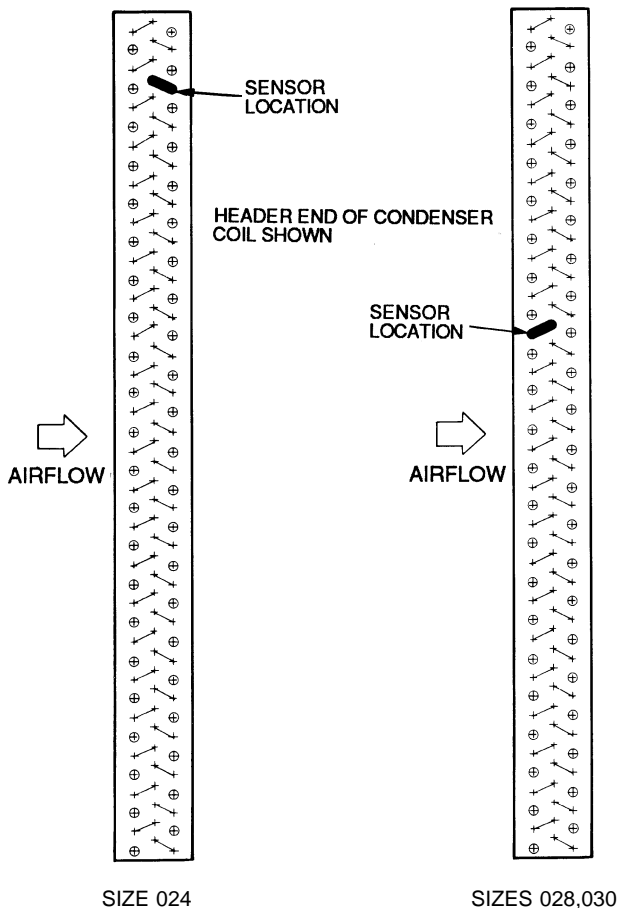


Fig. 10 — Motormaster® I Device Sensor Location, 48/50DJ,DK and 50DW,DY024-030 Units

18. *575-volt units only* — Transformer (Carrier Part No. HT01AH954) must be ordered separately and installed as described below.

⚠ CAUTION
Transformer is heavy. Use care when lifting.

- a. Mount transformer (see Fig. 4-6) using field-drilled holes.
- b. Connect yellow wire from terminal 22 on OFC1 to the primary side of the transformer (see Fig. 9). Connect the black wire from terminal 21 on the OFC1 to the other primary of the transformer.
- c. Run field-supplied wire from the secondary of the transformer to the capacitor. Run second field-supplied wire to one of the black wires on the controller (see Fig. 9).
- d. Install field-supplied rainshield over the transformer. See Fig. 14 for rainshield details.

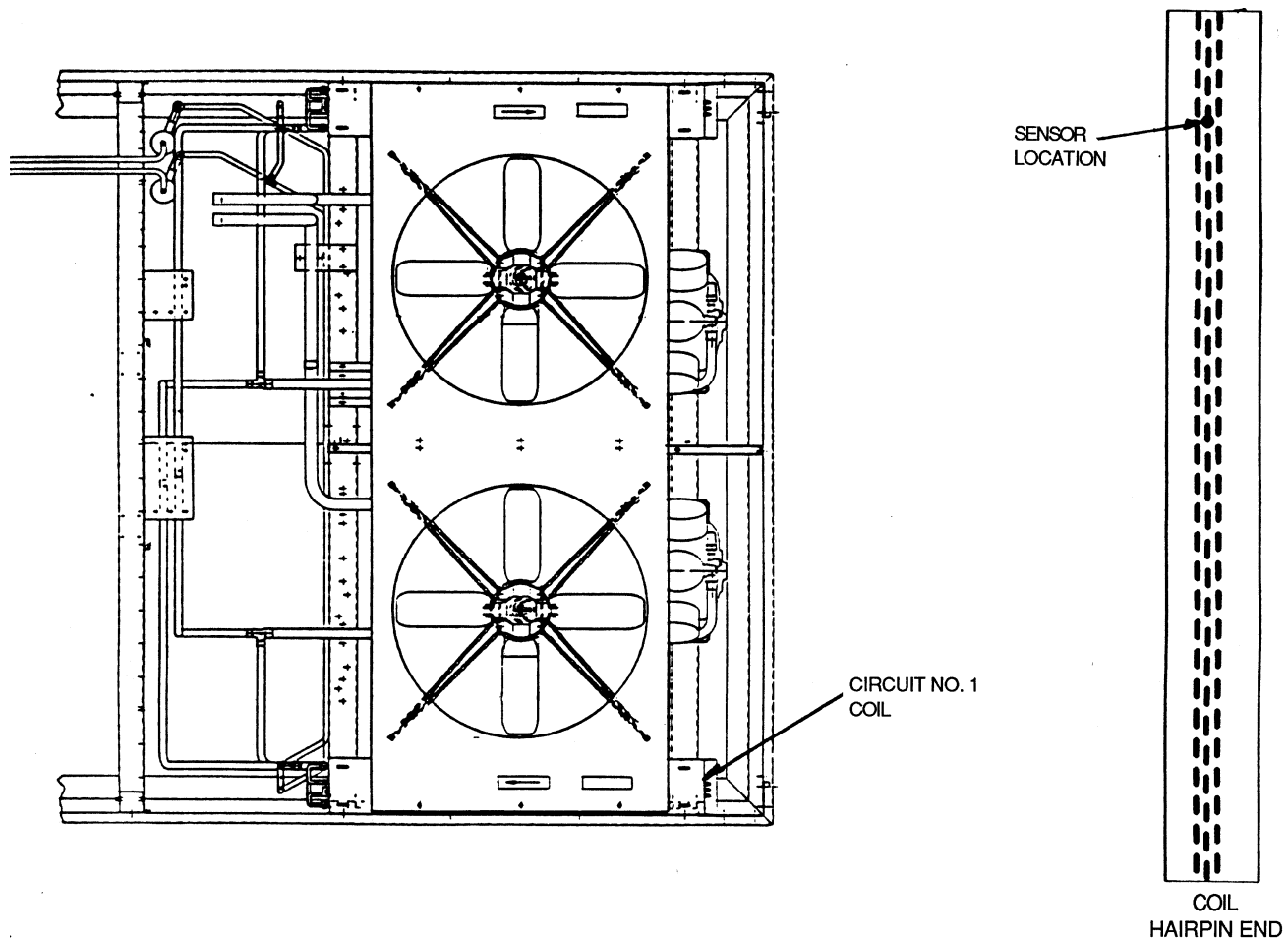
WINTER START RECOMMENDATIONS — For applications requiring winter start capabilities, modify the unit as follows:

1. Shut off all power to the unit. Open and tag all disconnects.
2. Jumper the existing low-pressure switch on circuit one.
3. Install an accessory loss-of-charge switch (LPS) Carrier part no. HK02ZB038 (opens at 5 psig and resets at 25 psig) on the liquid service valve on circuit one.
4. Mount an accessory freeze protection thermostat (FPT) Carrier part no. HH18HC102 (opens at 25 F and resets at 53 F) on any of the ½ in. tubes leaving the evaporator coil and entering the suction header. See Fig. 15-17.
5. Wire the FPT and LPS switches as shown in Fig. 18.

48/50HJ,TJ Units

1. Disconnect power to the unit.
2. Refer to Fig. 2. Disconnect outdoor (condenser) fan motor (OFM1) wiring at the motor junction box.
3. Remove OFM1 fan guard and OFM1 from unit. Save all wires.
4. Remove propeller from OFM1 and keep for reinstallation on the speed control motor.
5. Replace existing motor mount (see Fig. 3) with motor mount provided in the accessory package.
6. Install speed control motor in place of the OFM1 removed in Step 3. This speed control motor becomes the new OFM1.
7. The new speed control motor is single phase and requires the addition of the capacitor in this accessory kit.

NOTE: For 48/50HJ024 and 48/50TJ016 208/230 and 460-v units, this is a new capacitor. For 48/50HJ015 and all 575-v units, the capacitor in the accessory kit will replace the capacitor already in the unit.



**Fig. 11 — Motormaster® I Device Sensor Location,
48/50DJ,DK and 50DW,DY034 Units**

Drill holes and mount the capacitor in the left-hand corner of the control box. Rest the capacitor on the bottom of the control box with terminals facing up, and secure to the 2 control box corner panels using field-supplied capacitor strap and screws.

8. Install outdoor (condenser) fan contactor no. 2 (OFC2) into the control box using the OFC in the field-supplied accessory low-ambient kit. It is recommended that the OFC2 be installed next to the current OFC1 for 208/230-v units or in this same general location for all other units. See Fig. 19.
9. Install Motormaster I (MMI) device (in the accessory kit). See Fig. 20, and use mounting template in the rear of this literature as a guide for drilling screw holes. Mount MMI device directly below the piping from the condenser section to the evaporator section opposite the heat controls (if so equipped). This is the center section of the unit on the opposite side from the control box. See Fig. 2.
10. Mount sensor (attached to the MMI controller) on the condenser coil tube as shown in Fig. 21 or 22.
11. Route the sensor wiring through the holes with the liquid line tubing to the MMI device.

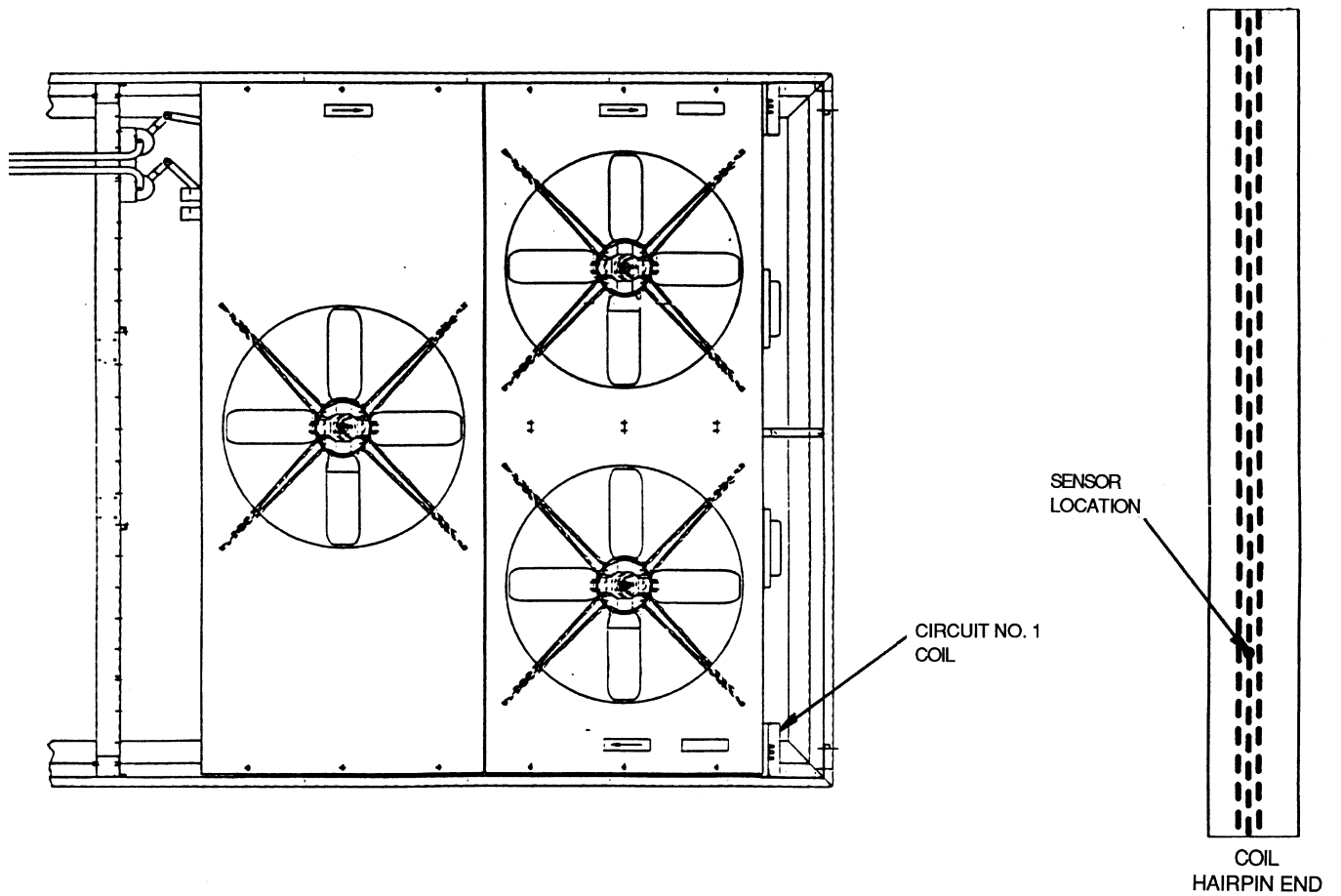


Fig. 12 — Motormaster® I Device Sensor Location, 48/50DJ,DK and 50DW,DY044 Units

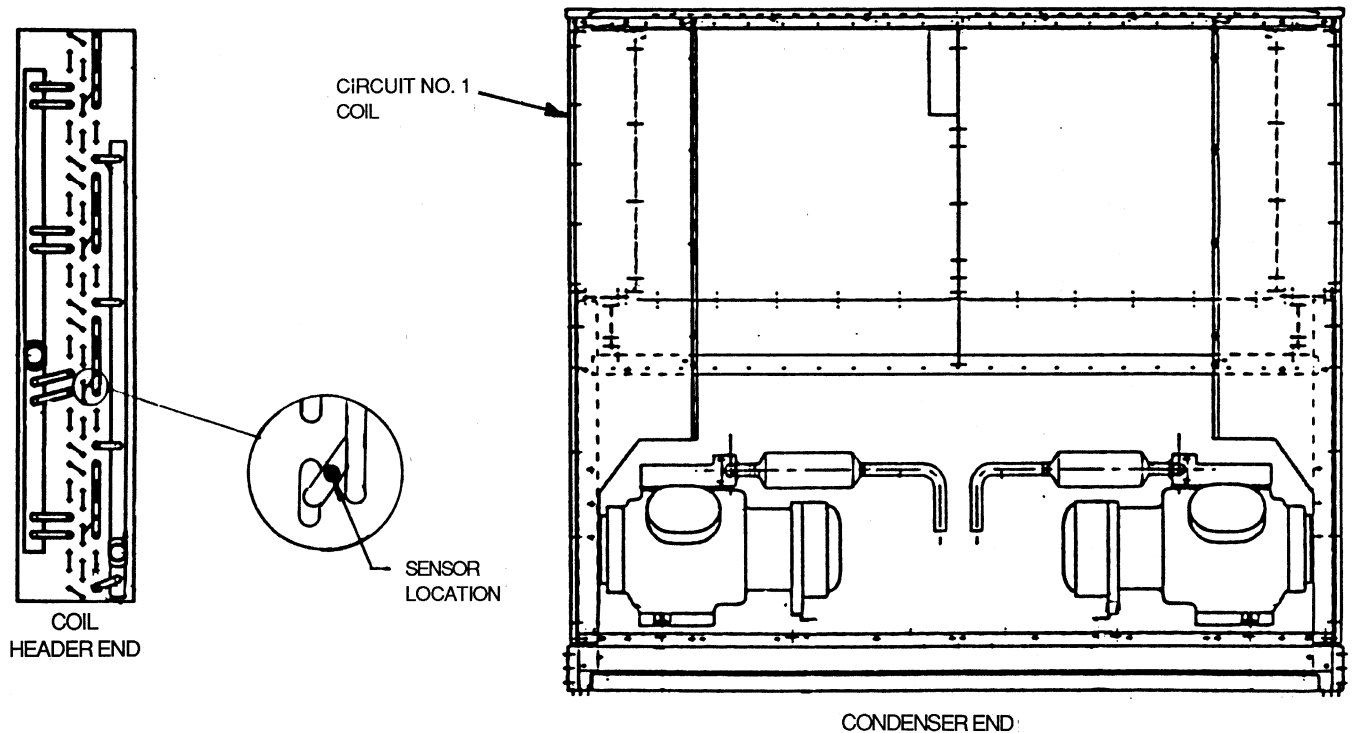
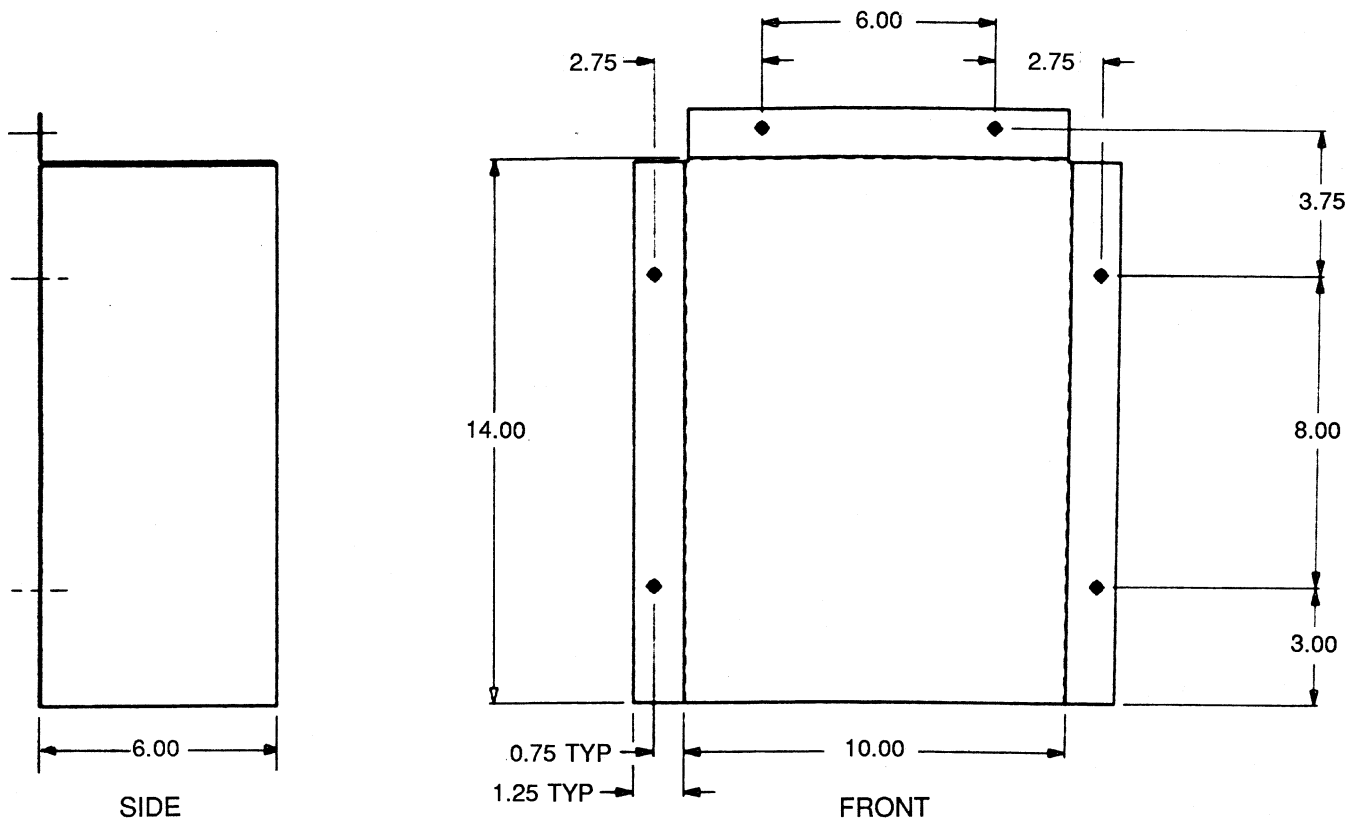
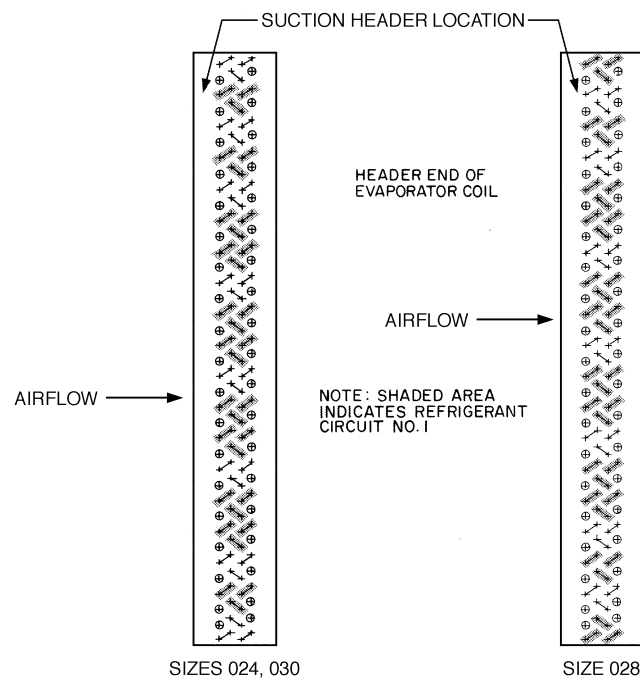


Fig. 13 — Motormaster I Device Sensor Location, 48/50DJ,DK and 50DW,DY054-074 Units



NOTE: Dimensions are in inches.

**Fig. 14 — 575-V Transformer Rain Shield
(For HT01AH954 Transformer)**



**Fig. 15 — Circuit 1 Evaporator Suction Headers for
Freeze Protection Thermostat Location —
48/50DJ,DK and 50DW,DY024-030**

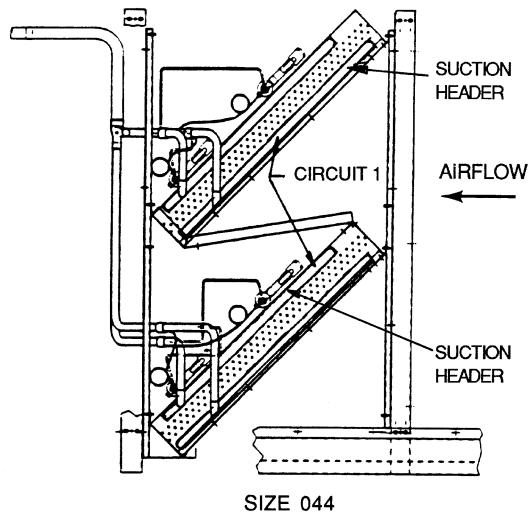
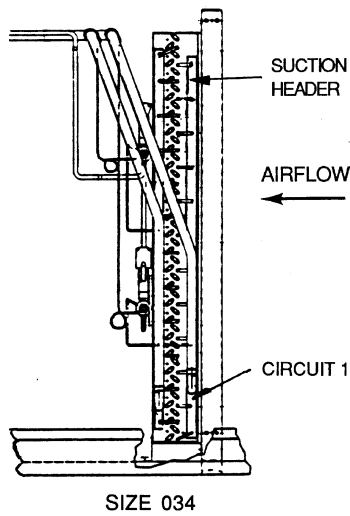


Fig. 16 — Circuit 1 Evaporator Suction Headers for Freeze Protection Thermostat Location, 48/50DJ,DK and 50DW,DY034,044 Units

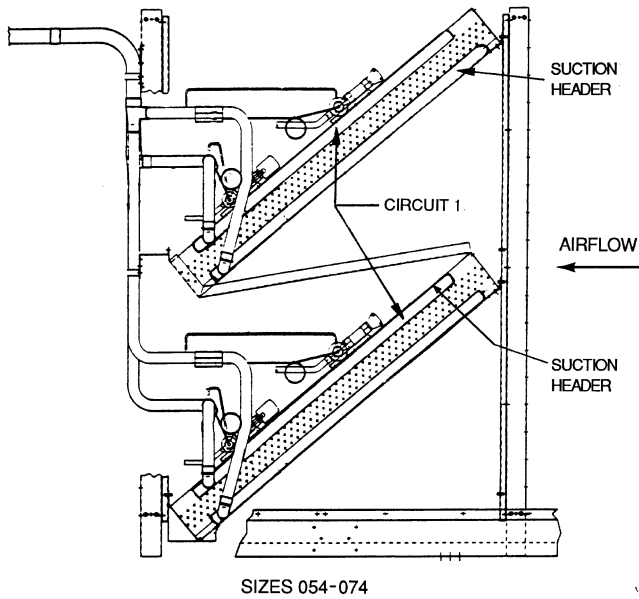
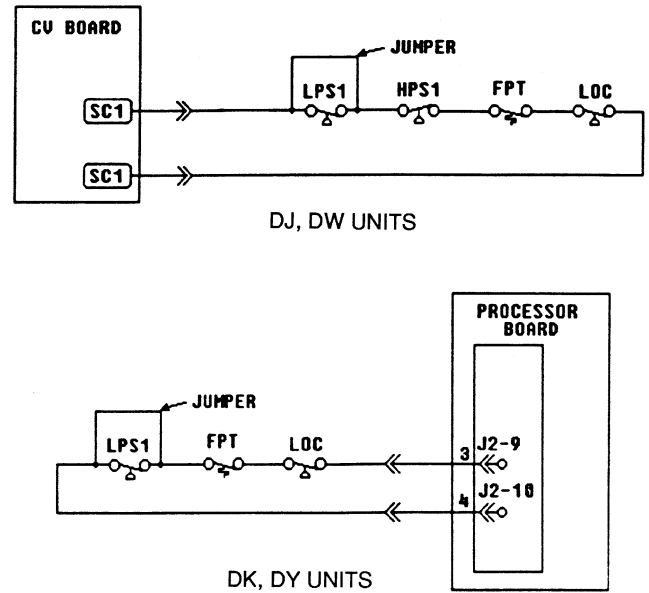


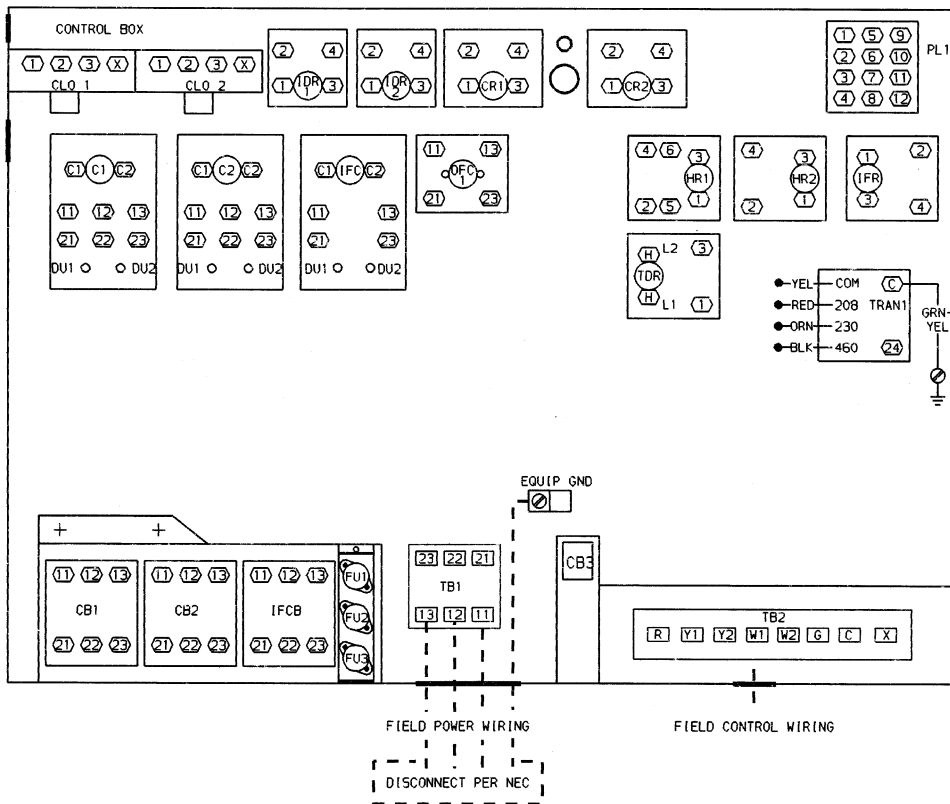
Fig. 17 — Circuit 1 Evaporator Suction Headers for Freeze Protection Thermostat Location, 48/50DJ,DK and 50DW,DY054-074 Units



LEGEND

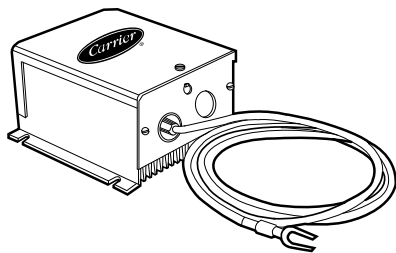
- CV — Constant Volume
- FPT — Freeze Protection Thermostat
- HPS — High-Pressure Switch
- LOC — Loss-of-Charge Switch
- LPS — Low-Pressure Switch
- SC — Safety Circuit

Fig. 18 — Freeze Protection Thermostat and Loss-of-Charge Switch Wiring Details, 48/50DJ,DK and 50DW,DY Units

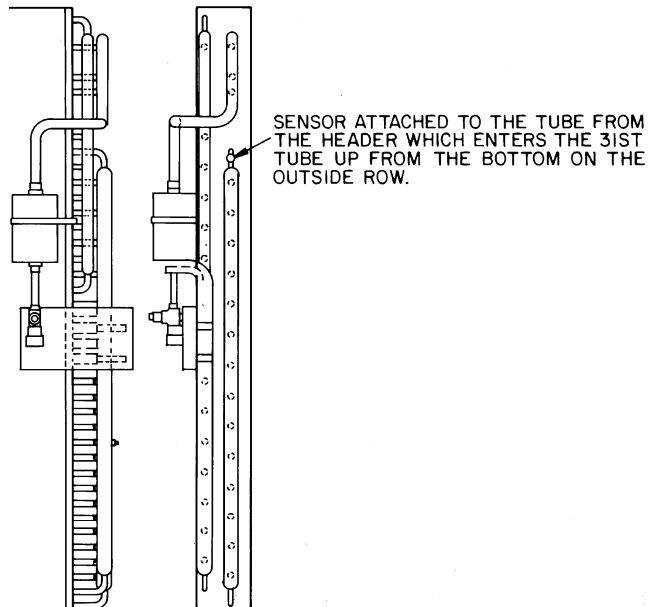


See Legend on page 11.

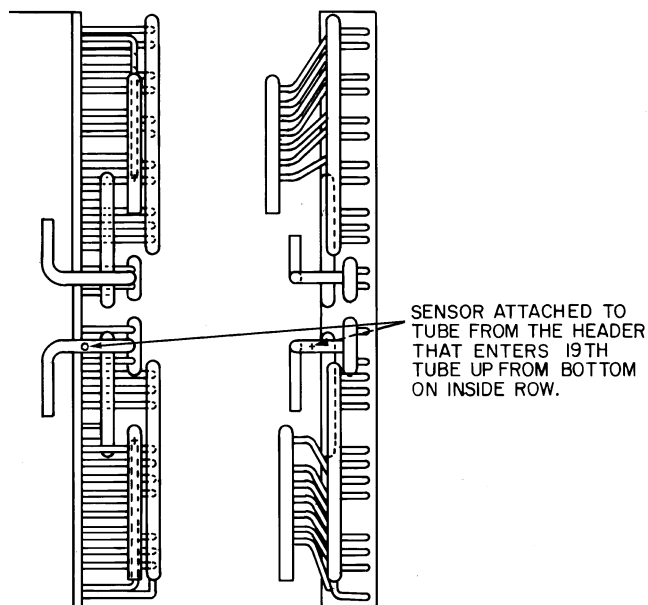
**Fig. 19 — Typical Component Arrangement
(48HJ024 Shown)**



**Fig. 20 — Motormaster® I Head Pressure
Controller**



**Fig. 21 — Sensor Location; 48/50HJ015,
48/50TJ016**



**Fig. 22 — Sensor Location,
48/50HJ024**

LEGEND FOR FIGURES 19, 23-34

C	— Contactor
CAP	— Capacitor
CB	— Circuit Breaker
CH	— Crankcase Heater
CLO	— Cooling Lockout
COMP	— Compressor
CR	— Control Relay
DU	— Dummy
EQUIP	— Equipment
FPT	— Freeze Protection Thermostat
FU	— Fuse
GND	— Ground
HPCT	— Head Pressure Control Thermostat
HPS	— High-Pressure Switch
IDM	— Induced Draft Motor
IDR	— Induced Draft Relay
IFC	— Indoor (Evaporator) Fan Contactor
IFM	— Indoor (Evaporator) Fan Motor
IP	— Internal Protector
LPS	— Low-Pressure Switch
MMI	— Motormaster® I Head Pressure Control Device
OFC	— Outdoor (Condenser) Fan Contactor
OFM	— Outdoor (Condenser) Fan Motor
QT	— Quadruple Terminal
TB	— Terminal Block
TDR	— Time-Delay Relay
TRAN	— Transformer

48/50HJ015, 208/230-V UNITS (See Fig. 23 and 24)

1. Remove the yellow wire from outdoor (condenser) fan motor (OFM1) to outdoor (condenser) fan contactor (OFC1).
2. Attach the yellow wire removed in Step 1 from MMI to OFM1 violet wire.
3. Reattach white and brown wires removed from old OFM1 to blue and red leads of new OFM1, respectively.
4. Remove the black wire from OFM2 to OFC1.
5. Attach the black wire removed in Step 4 between OFM2 and OFC2.
6. Add a field-supplied wire (shown as black in Fig. 24) from fuse no. 3 (FU3) to OFC2.
7. Attach a field-supplied wire (shown as black in Fig. 24) from OFC1 to MMI.
8. Remove the yellow wire between CAP1 and CAP2 and discard.
9. Attach a new field-supplied wire (shown as yellow in Fig. 24) from CAP1 to FU2.

48/50HJ024, 48/50TJ016, 208/230-V UNITS (See Fig. 25-27)

1. Remove the black wire from OFC terminal 11 (HJ024) or OFC1 terminal 13 (TJ016) and the yellow wire from OFC terminal 13 (HJ024) or OFC1 terminal 11 (TJ016) that connect to OFM2.
2. Attach the black wire removed in Step 1 to OFC2 terminal 11 (HJ024) or to terminal 13 (TJ016) leaving the other end attached to OFM2 black lead.
3. Attach the yellow wire removed in Step 1 to OFC2 terminal 13 (HJ024) or to terminal 11 (TJ016) leaving the other end attached to OFM2 yellow lead.
4. Install a field-supplied wire (shown as a yellow wire in Fig. 27) from OFC1 terminal 23 (HJ024) or terminal 21 (TJ016) to OFC2 terminal 23 (HJ024) or terminal 21 (TJ016).
5. Install a field-supplied wire (shown as a black wire in Fig. 27) from OFC1 terminal 21 (HJ024) or terminal 23 (TJ016) to OFC2 terminal 21 (HJ024) or terminal 23 (TJ016).
6. Add a field-supplied wire (shown as a yellow wire in Fig. 27) from OFC1 terminal 13 (HJ024) or terminal 11 (TJ016) to CAP1 quadruple terminal (QT).
7. Add a field-supplied wire (shown as a black wire in Fig. 27) from OFC1 terminal 11 (HJ024) or terminal 13 (TJ016) to MMI black lead.
8. Use the original black wire which was between the old OFM1 and OFC terminal 11 (HJ024) or OFC1 terminal 13 (TJ016) to connect between MMI other black lead and new OFM1 violet lead.
9. Use the original yellow wire which was between the old OFM1 and OFC terminal 13 (HJ024) or OFC1 terminal 11 (TJ016) to connect between CAP1 QT and the new OFM1 blue lead.
10. Add a field-supplied wire (shown as a brown wire in Fig. 27) from CAP1 to OFM1 red lead.

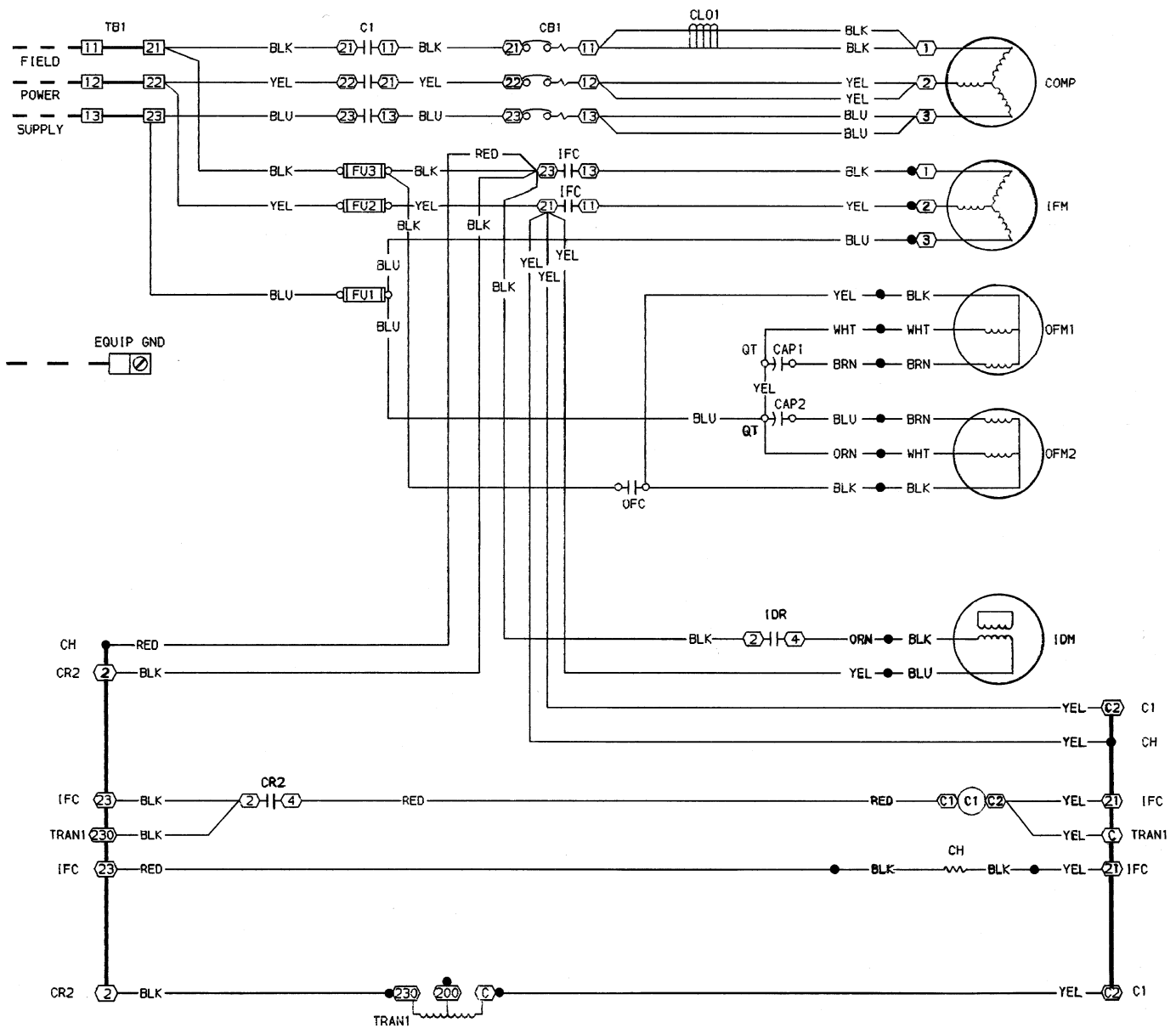
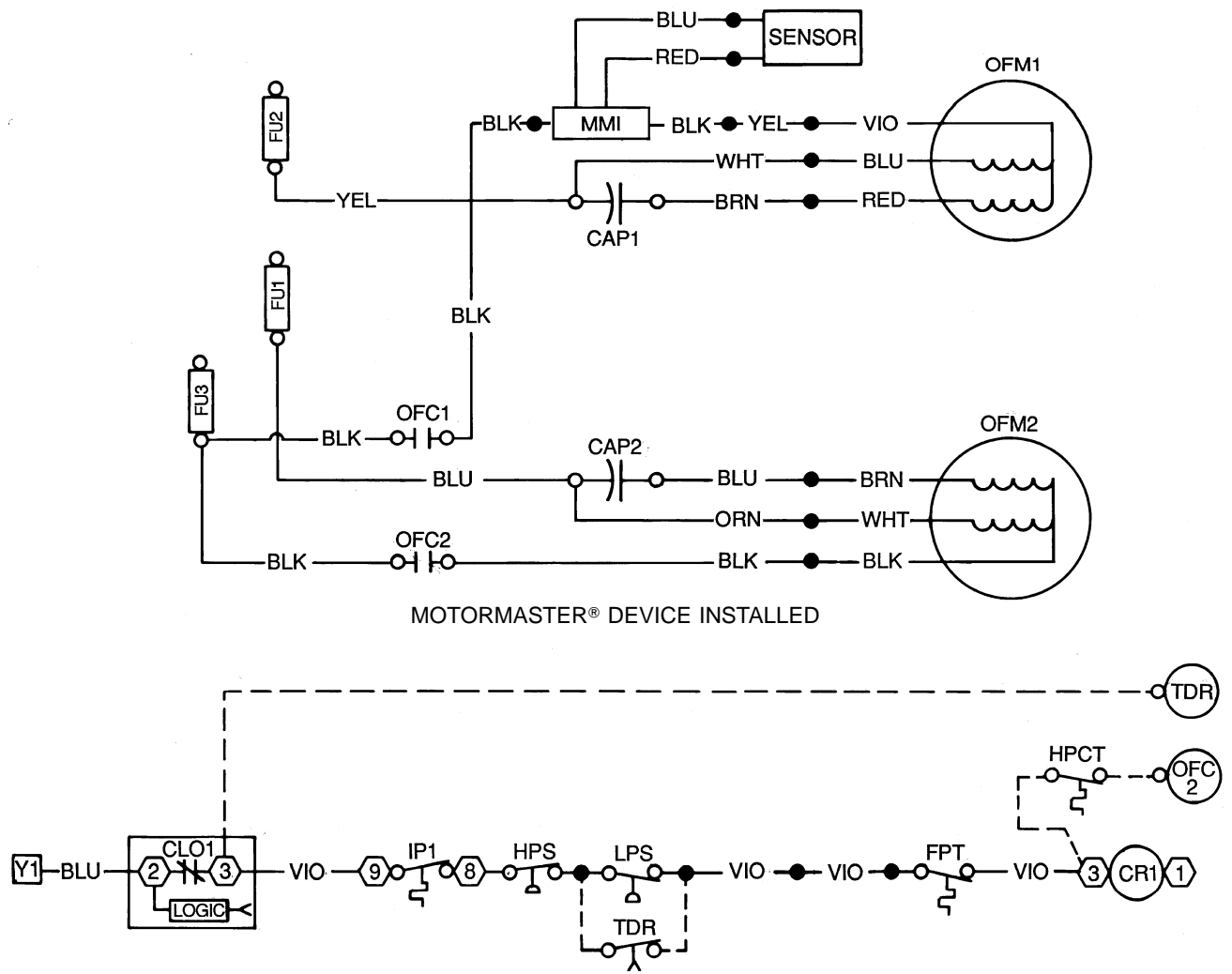


Fig. 23 — Wiring Details, Standard 48/50HJ015, 208/230 V Units



MOTORMASTER® DEVICE INSTALLED

WINTER START KIT WIRING

**Fig. 24 — Wiring Details, Motormaster I Controller Installed;
48/50HJ015, 208/230-V Units**

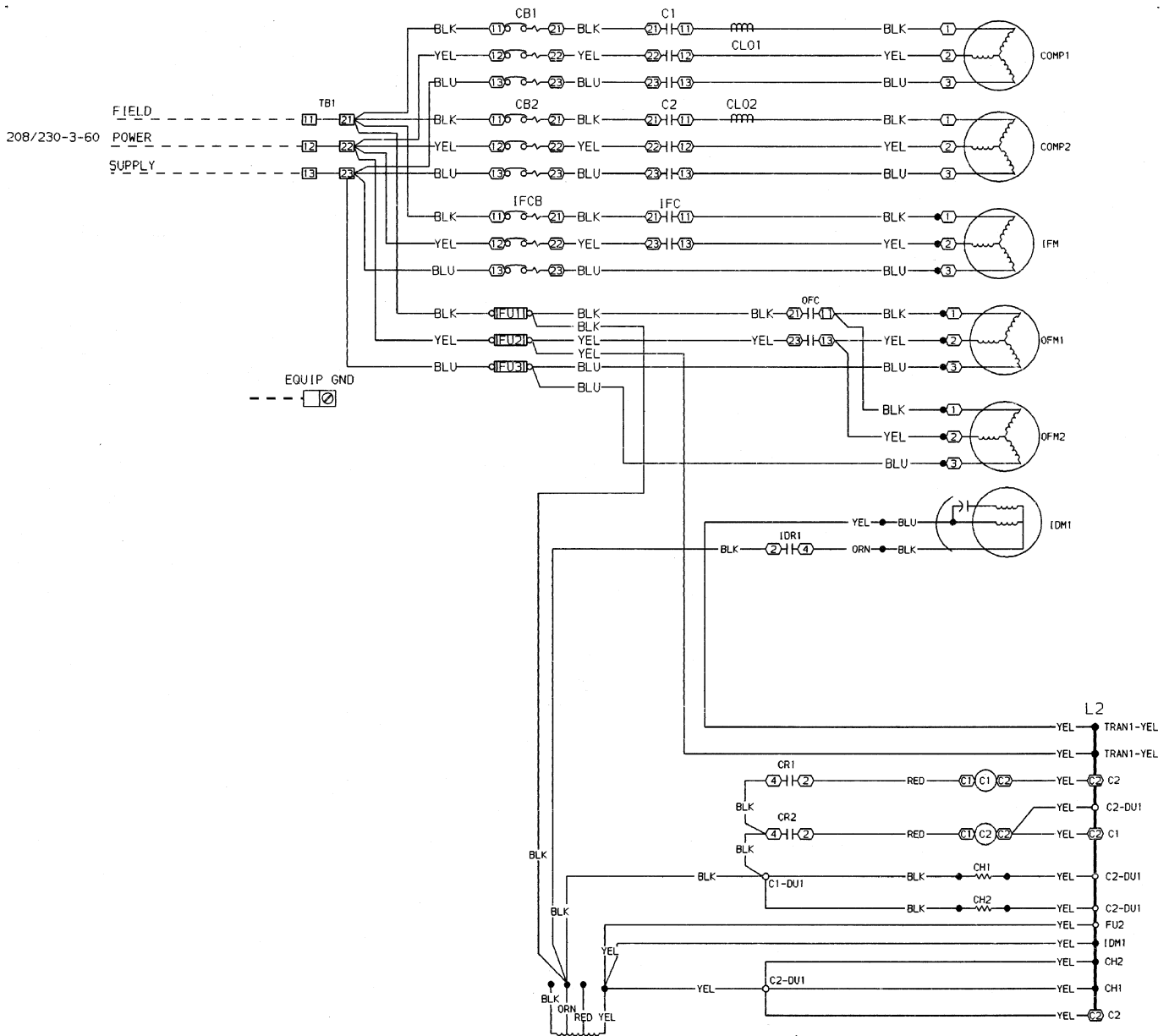


Fig. 25 — Wiring Details, Standard 48/50HJ024, 208/230-V Units

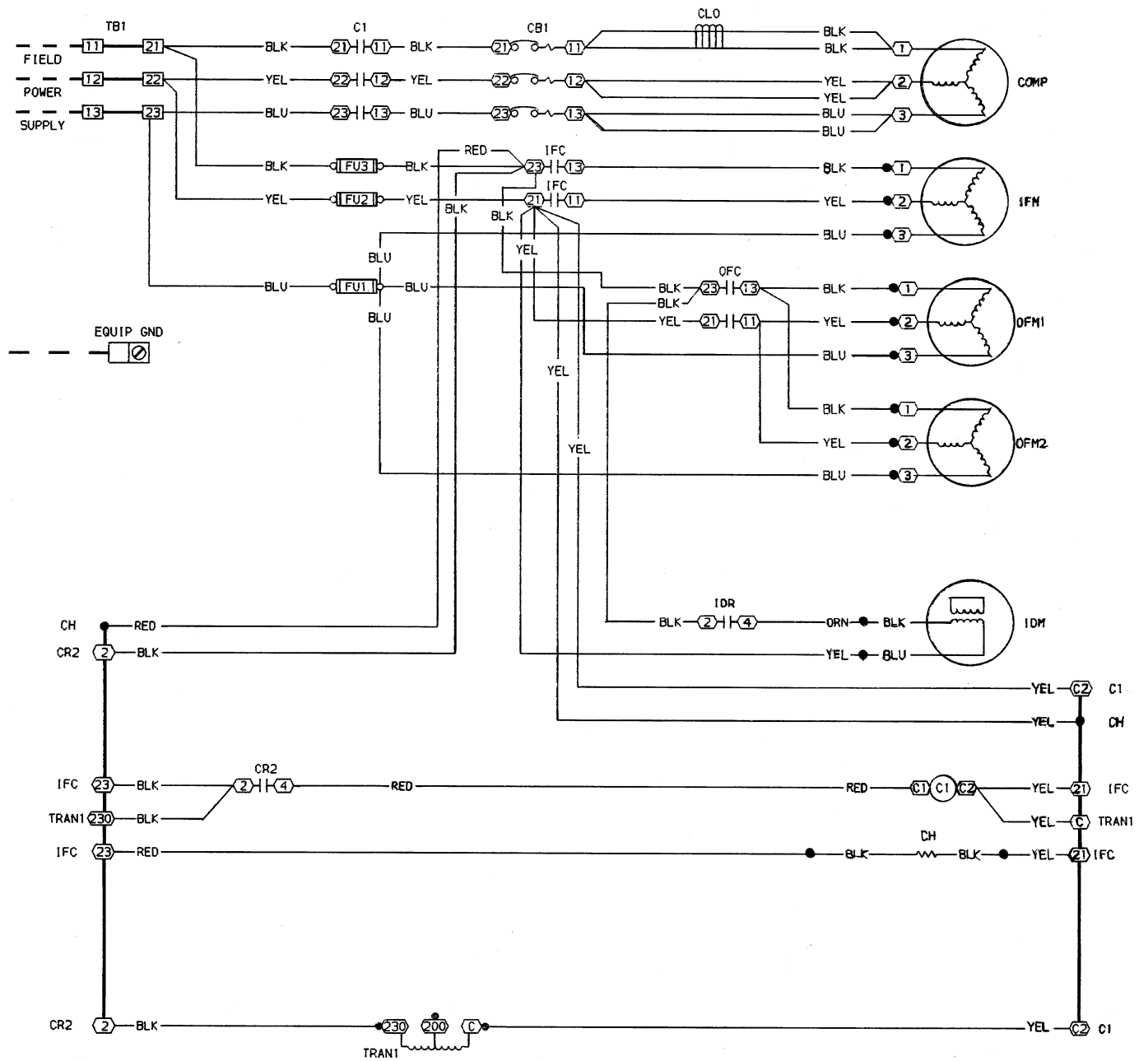


Fig. 26 — Wiring Details, Standard 48/50TJ016, 208/230-V Units

48/50HJ015, 460- AND 575-V UNITS, AND 48/50TJ016, 575-V UNITS (See Fig. 28 and 29)

1. 575-V units only: Install new accessory TRAN3 (field-supplied part no. HT01AH954) on unit basepan in the area beneath the control box according to installation instructions shipped with the accessory.
2. Remove blue wire connecting C1 terminal 13 and CAP2 quadruple terminal (QT) at the C1 terminal 13 end, and attach it to OFC2 terminal 11.
3. Remove the black wire connecting C1 terminal 11 and OFM2 at the C1 terminal 11 end, and attach it to OFC2 terminal 13.
4. Add a field-supplied wire (shown as a black wire in Fig. 29) from OFC2 terminal 23 to C1 terminal 11 black lead.
5. Add a field-supplied wire (shown as a blue wire in Fig. 29) from OFC2 terminal 11 to CAP2 QT.
6. Using a field-supplied wire (shown as a yellow wire in Fig. 29) attach it from C1 terminal 12 to CAP1 QT (460-v units) or to TRAN3 terminal H2.
7. Remove the yellow wire from CAP2 QT to CAP1 QT and discard.

8. Add a field-supplied wire (shown as a black wire in Fig. 29) from C1 terminal 11 to MMI black lead (460-v units) or to TRAN3 terminal H1 (575-v units).
 9. 575-v units only: Add a field-supplied wire (shown as a yellow wire in Fig. 29) from TRAN3 terminal X1 to CAP1 QT.
- NOTE: This was done in Step 6 for 460-v units.
10. 575-v units only: Add a field-supplied wire (shown as a black wire in Fig. 29) from TRAN3 terminal X4 to MMI black lead.
- NOTE: This was done in Step 8 for 460-v units.
11. Use the original yellow wire which was connected between the old OFM1 and C1 terminal 12 to connect between the other MMI black lead and the new OFM1 violet lead.
 12. Use the original white wire which was connected between the old OFM1 and CAP1 QT to connect between CAP1 QT and the new OFM1 blue lead.
 13. Use the original brown wire which was connected between the old OFM1 brown lead and CAP1 to connect between CAP1 and the new OFM1 red lead.

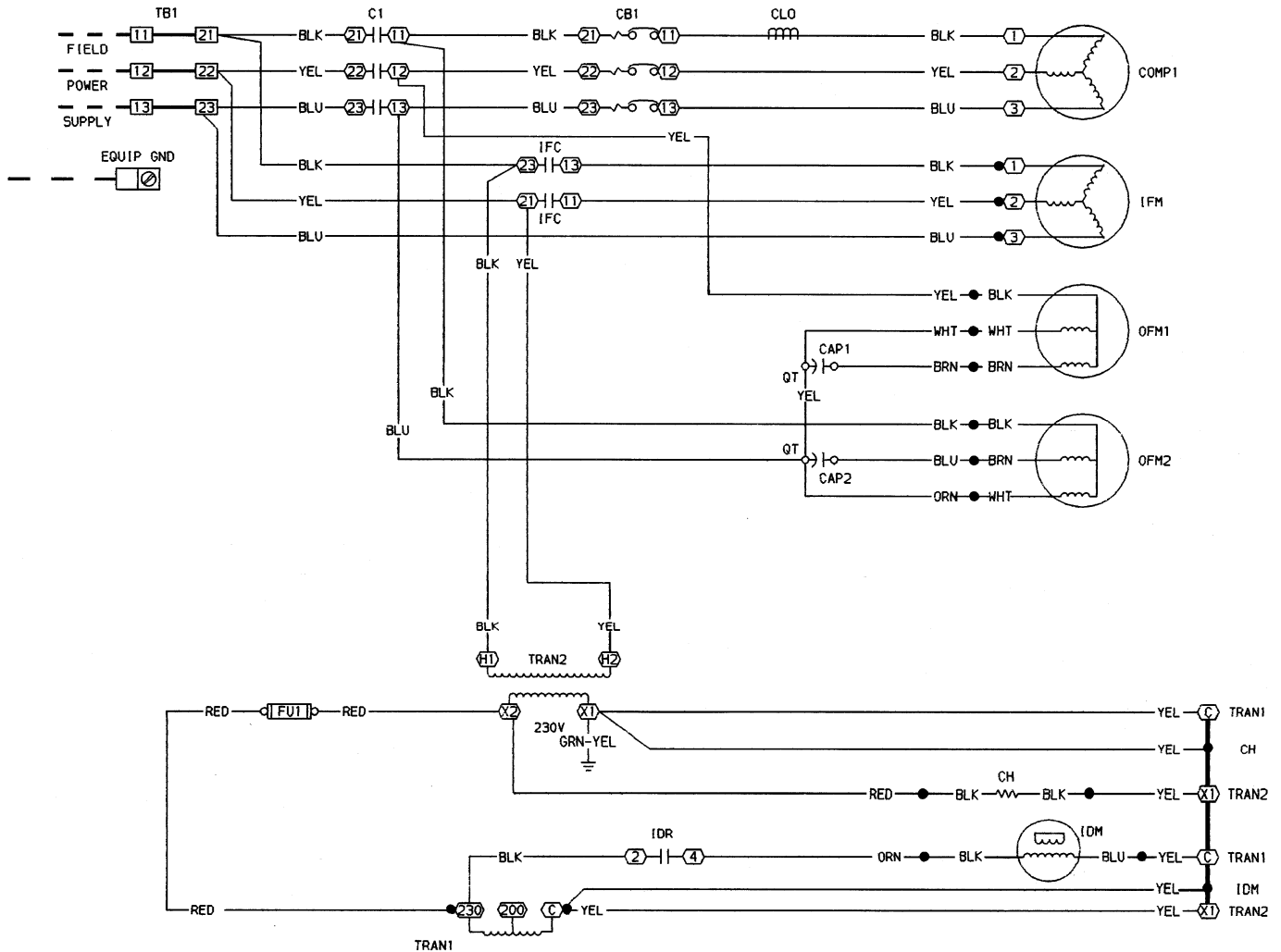
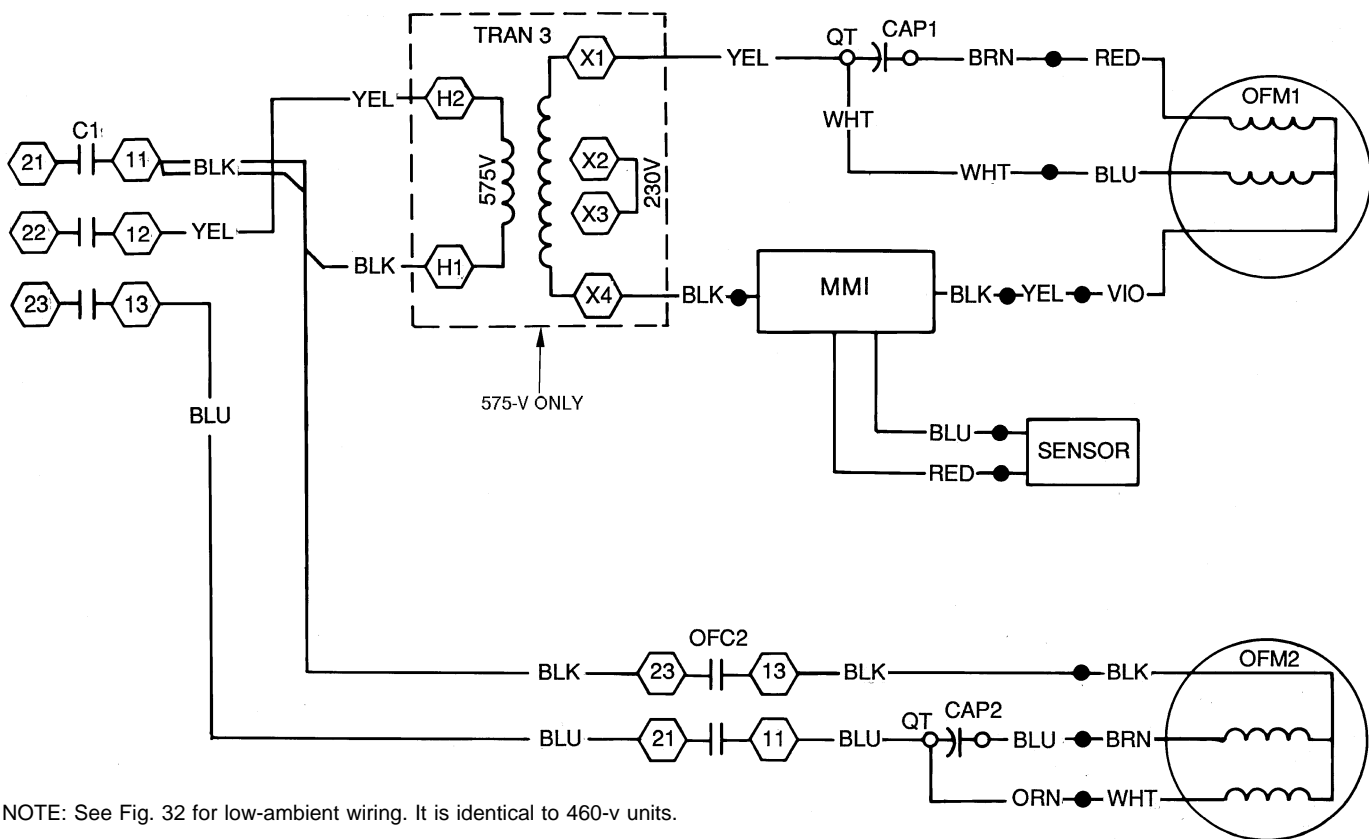


Fig. 28 — Wiring Details, Standard 48/50HJ015, 460- and 575-V Units, and 48/50TJ016, 575-V Units



NOTE: See Fig. 32 for low-ambient wiring. It is identical to 460-v units.

Fig. 29 — Wiring Details, Motormaster® I Controller Installed; 48/50HJ015, 460- and 575-V Units and 48/50TJ016, 575-V Units

48/50HJ024 AND 48/50TJ016, 460-V UNITS (See Fig. 30-32)

1. Remove the black wire connecting C1 terminal 21 (HJ024) or terminal 11 (TJ016) and OFM2 at the C1 end, and attach it to OFC2 terminal 13.
2. Remove the yellow wire connecting C1 terminal 23 (HJ024) or terminal 12 (TJ016) to OFM2 at the C1 end, and attach it to OFC2 terminal 11.
3. Add a field-supplied wire (shown as a black wire in Fig. 32) from OFC2 terminal 23 to C1 terminal 21 (HJ024) or terminal 11 (TJ016).
4. Add a field-supplied wire (shown as a yellow wire in Fig. 32) from OFC2 terminal 21 to C1 terminal 23 (HJ024) or terminal 12 (TJ016).
5. Add a field-supplied wire (shown as a yellow wire in Fig. 32) from C1 terminal 23 (HJ024) or terminal 12 (TJ016) to CAP1 quadruple terminal (QT).
6. Add a field-supplied wire (shown as a black wire in Fig. 32) from C1 terminal 21 (HJ024) or terminal 11 (TJ016) to MMI black lead.
7. Use the original black wire which was connected between the old OFM1 black lead and C1 to connect between the other MMI black lead and the new OFM1 violet lead.
8. Use the original yellow wire which was connected between the old OFM1 yellow lead and C1 to connect between CAP1 QT and the new OFM1 blue lead.
9. Add a field-supplied wire (shown as a brown wire in Fig. 32) from CAP1 to OFM1 red lead.

48/50HJ024, 575-V UNITS (See Fig. 33 and 34)

1. Install new accessory TRAN3 (field-supplied part no. HT01AH954) on unit basepan in the area beneath the control box according to installation instructions shipped with the accessory.
2. Remove the black wire connecting C1 terminal 21 and OFM2 black wire on the C1 end, and attach it to OFC2 terminal 13.
3. Remove the black wire connecting C1 terminal 21 and old OFM1 black wire. Connect it between MMI and new OFM1 violet lead.
4. Attach 2 new, field-supplied wires (shown as black in Fig. 34). Attach one between C1 terminal 21 and OFC2 terminal 23, and the other between C1 terminal 21 and TRAN3 terminal H1.
5. Remove the yellow wire connecting C1 terminal 23 and OFM2 yellow wire on the C1 end, and attach it to OFC2 terminal 11.
6. Remove the yellow wire connecting C1 terminal 23 and old OFM1 yellow lead. Connect it between CAP1 QT and new OFM1 blue lead.
7. Attach 2 new, field-supplied wires (shown as yellow in Fig. 34). Attach one between C1 terminal 23 and OFC2 terminal 21 and the other between C1 terminal 23 and TRAN3 terminal H2.
8. Use the original blue wire which was connected between the old OFM1 blue lead and TB1 terminal 23 to connect between CAP1 and the new OFM1 red lead.
9. Attach new field-supplied wire (shown as black in Fig. 34) between TRAN3 terminal X4 and MMI.
10. Attach new field-supplied wire (shown as yellow in Fig. 34) between TRAN3 terminal 1 and CAP1 QT.

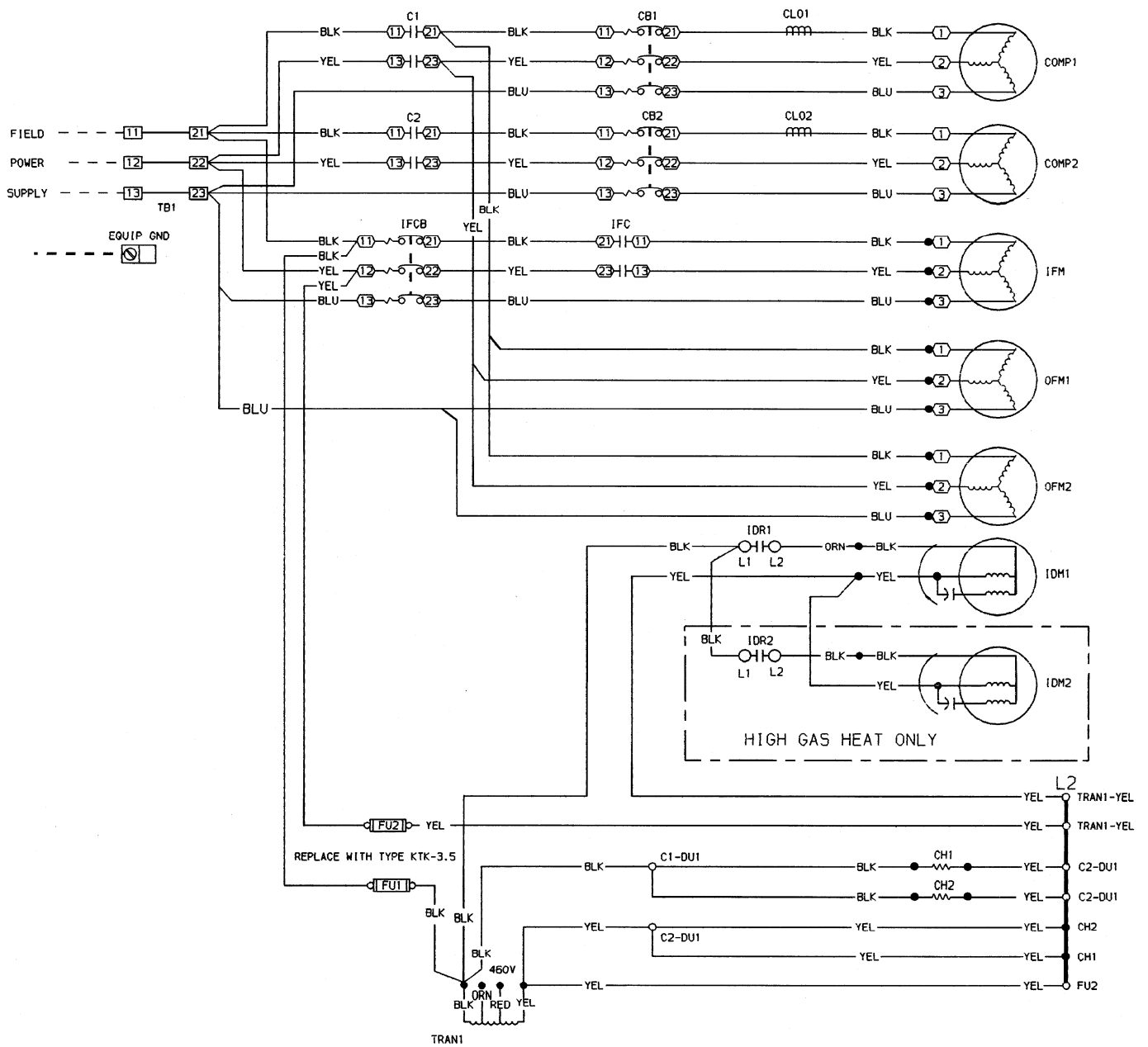


Fig. 30 — Wiring Details, Standard 48/50HJ024, 460-V Units

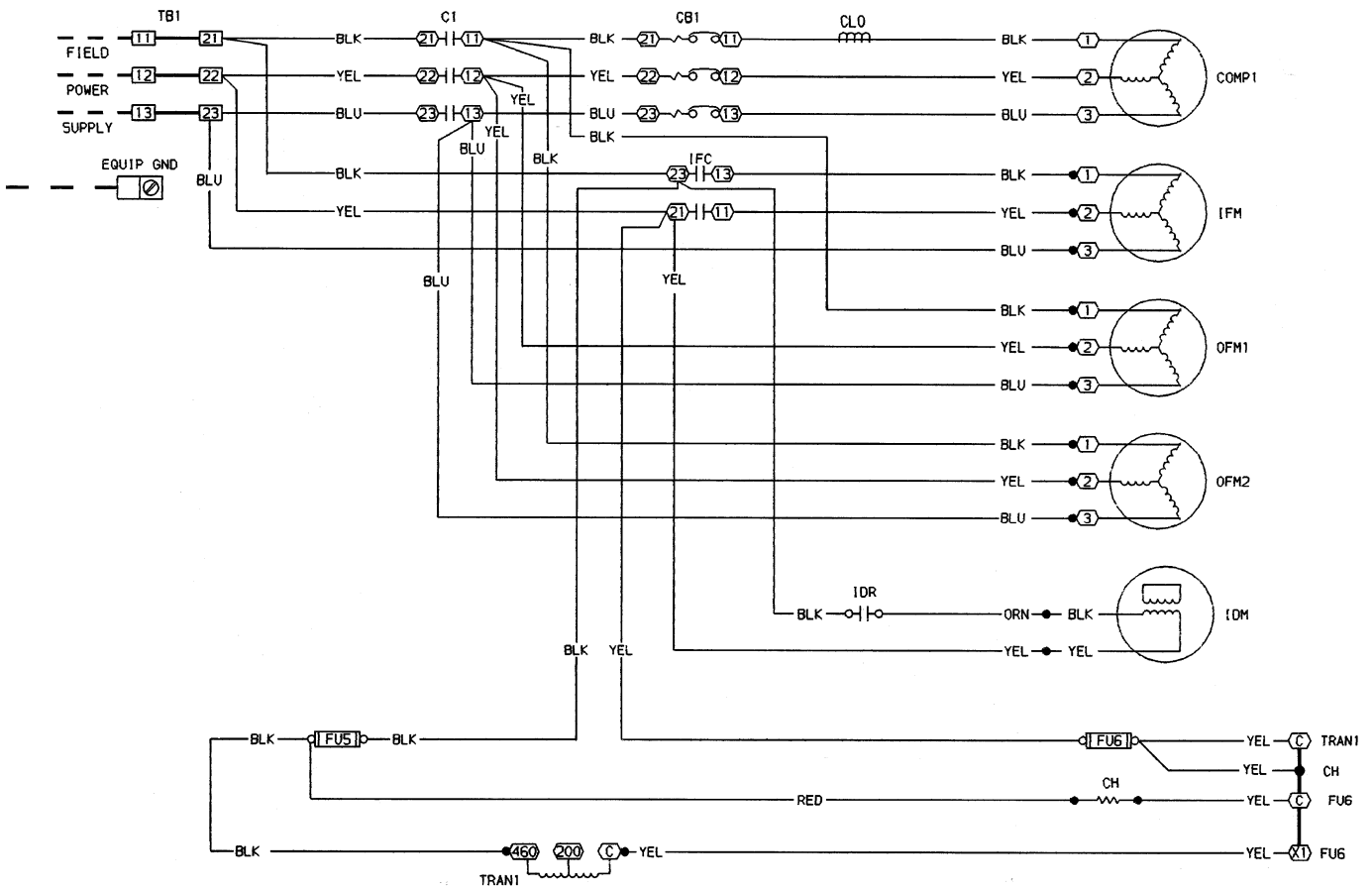
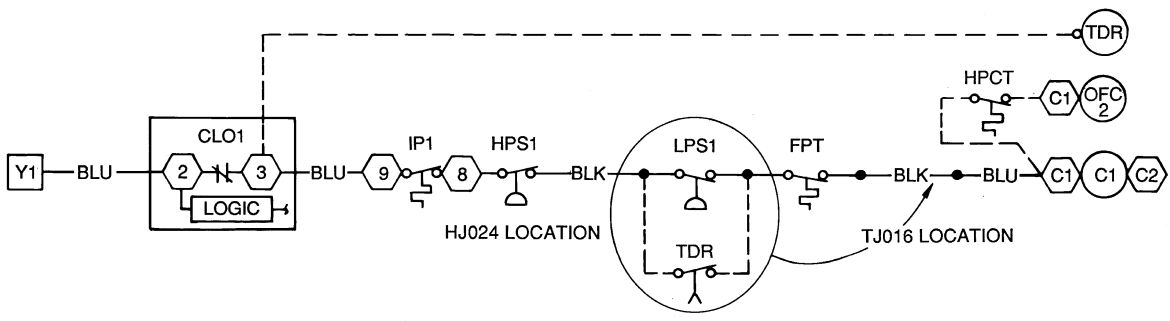
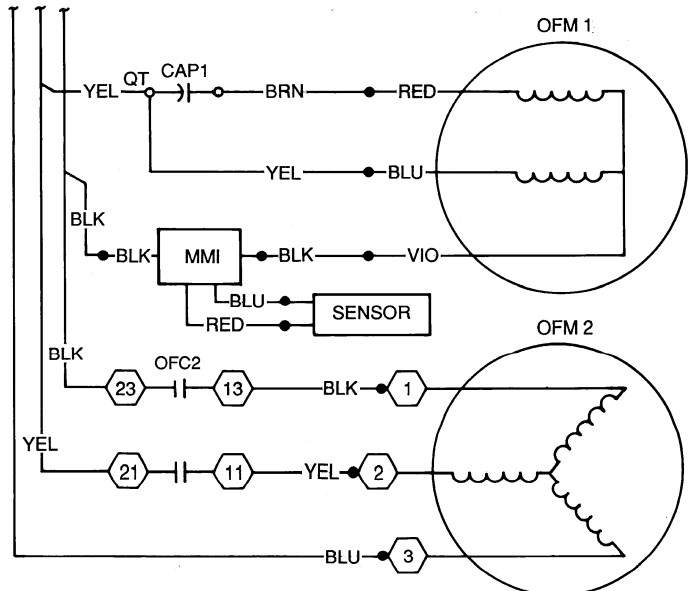
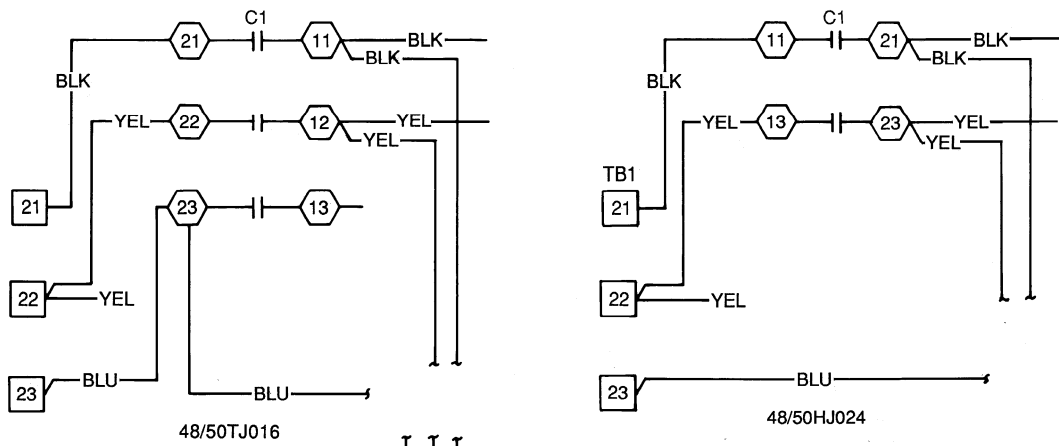
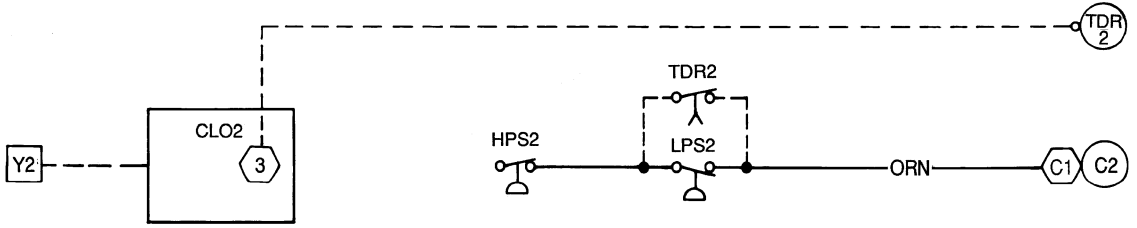


Fig. 31 — Wiring Details, Standard 48/50TJ016, 460-V Units



48/50TJ016 AND 48/50HJ024 (COMPRESSOR NO. 1)
LOW-AMBIENT KIT WIRING



48/50HJ024 (COMPRESSOR NO. 2)
WINTER START KIT WIRING

**Fig. 32 — Wiring Details, Motormaster® I Controller Installed;
48/50HJ024 and 48/50TJ016, 460-V Units**

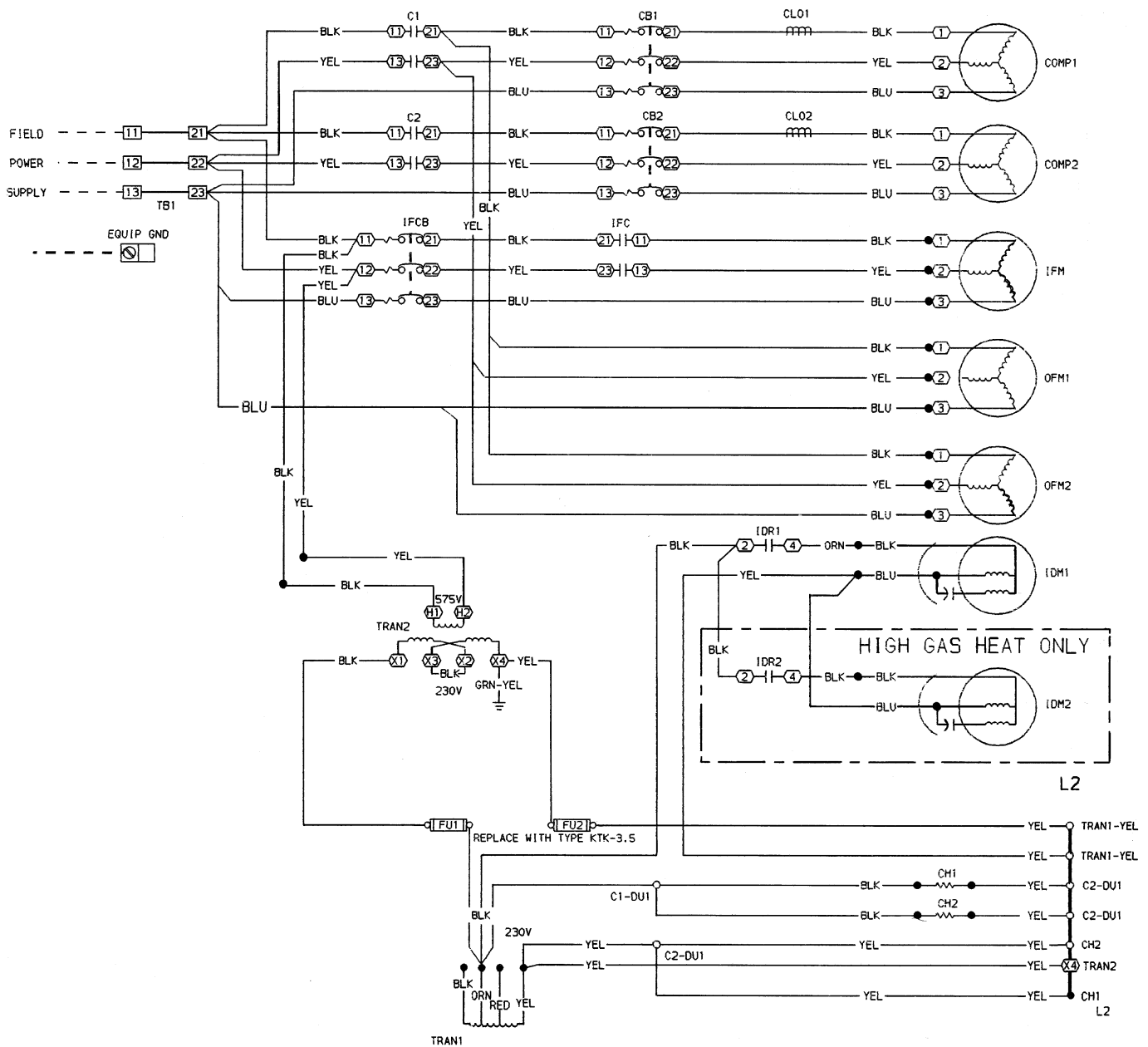


Fig. 33 — Wiring Details, Standard 48/50HJ024, 575-V Units

NOTE: See Fig. 32 for low-ambient and winter start kit wiring. It is identical to 460-v units.

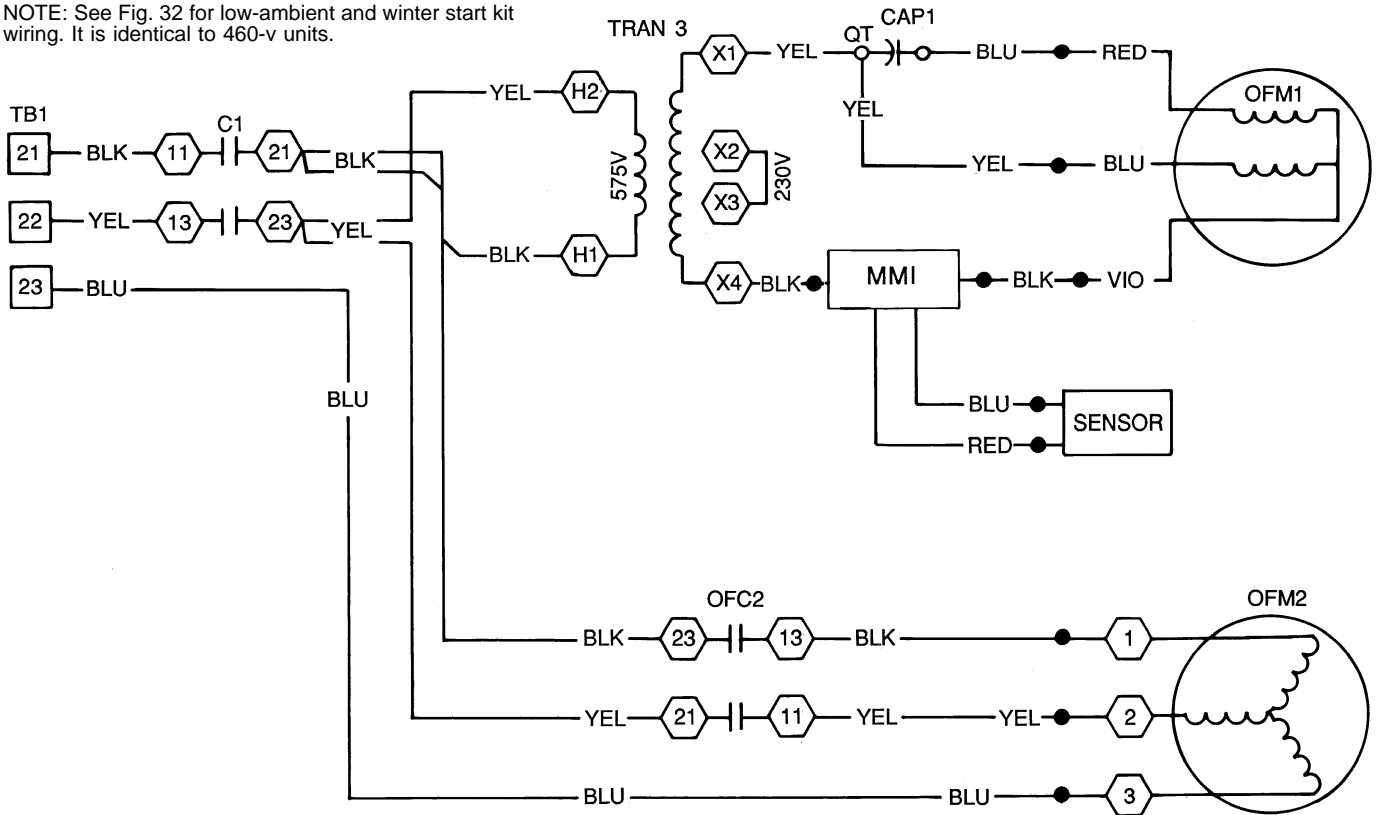


Fig. 34 — Wiring Details, Motormaster® I Controller Installed; 48/50HJ024, 575-V Units

WIND BAFFLE

For low-ambient duty, a baffle should be installed in front of the condenser coil to prevent cross currents from causing abnormal operation. See Fig. 35 and 36 for baffle details.

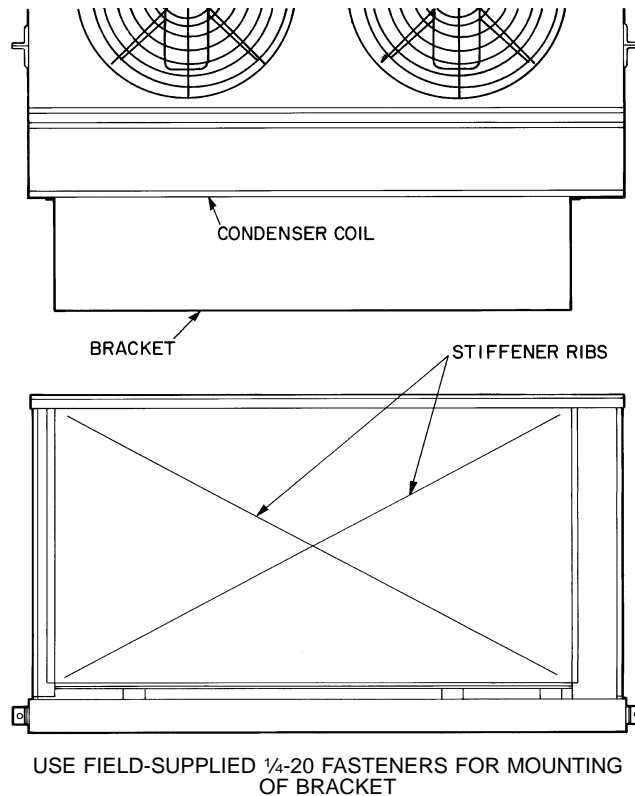
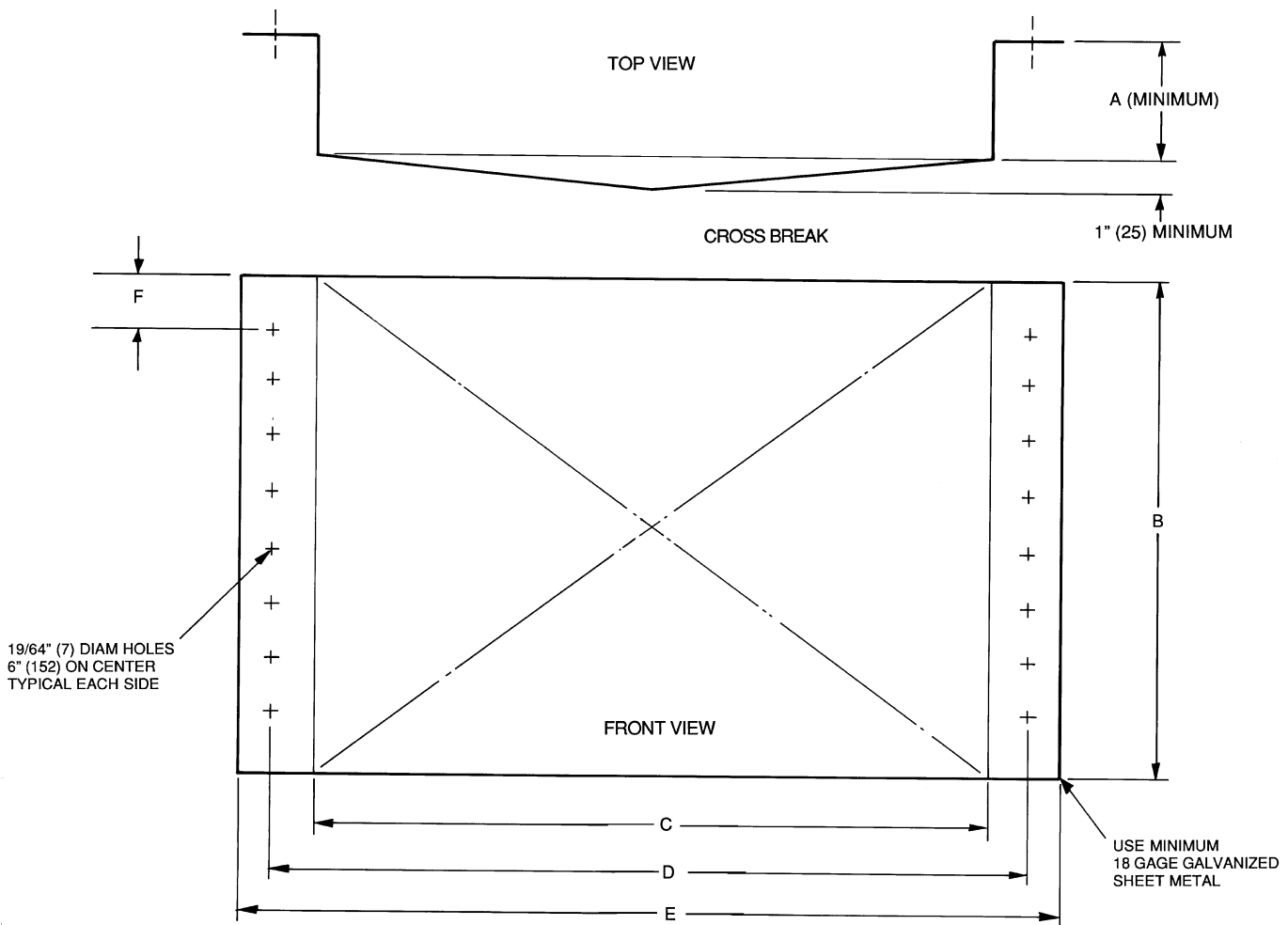


Fig. 35 — Suggested Wind Baffle Design



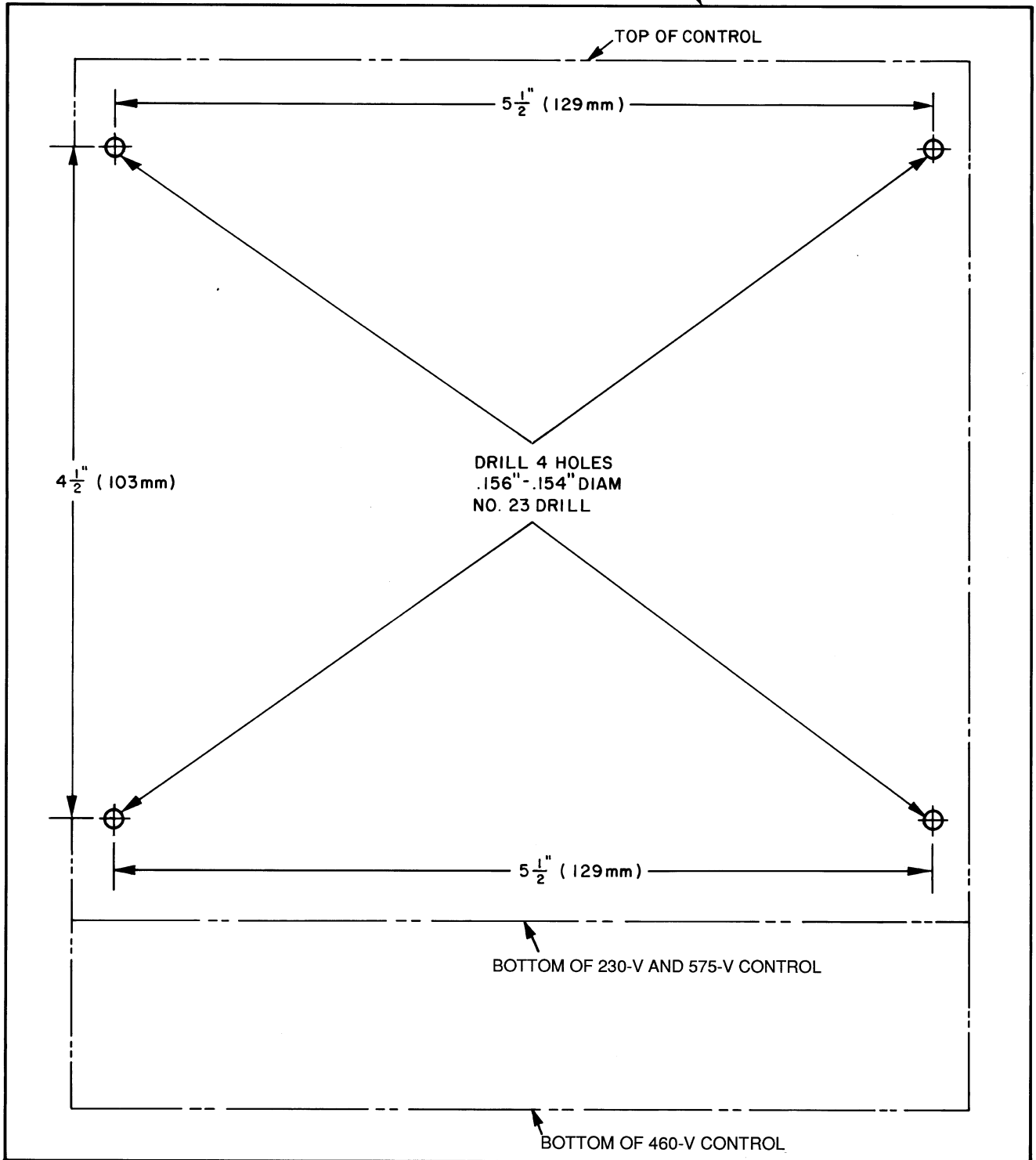
NOTE: Dimensions shown in () are in millimeters.

UNIT	DIMENSIONS											
	A		B		C		D		E		F	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
48/50DJ,DK and 50DW,DY024-030	10	254	43	1092	76	1930	81	2057	83	2108	1/2	13
48/50DJ,DK and 50DW,DY034	10	254	59	1500	44	1118	45 1/2	1156	47 1/2	1207	2	51
48/50DJ,DK and 50DW,DY044	10	254	59	1500	59	1500	60 1/2	1537	62 1/2	1588	2	51
48/50DJ,DK and 50DW,DY054,064	10	254	31	787	72	1829	73 3/4	1873	75 3/4	1924	1	25
48/50DJ,DK and 50DW,DY074	10	254	31	787	108	2743	109 1/2	2781	111 1/2	2832	1	25
48/50HJ015,024 and 48/50TJ016	14	356	40	1016	80	2032	80 3/4	2051	81 1/2	2070	1	25

Fig. 36 — Wind Baffle Mounting Details

MOTORMASTER® I CONTROLLER MOUNTING TEMPLATE

CUT ALONG SOLID BORDER LINES TO REMOVE TEMPLATE



CUT ALONG DOTTED LINE

NOTE: Dimensions in () are in millimeters.

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.