

INSTALLATION INSTRUCTIONS

MODELS

EH3MA-1-5A
EH3MA-1-10A
EH3MA-1-15A
EH3MA-1-20A

OPTIONAL ELECTRIC HEAT PACKAGES

FOR USE WITH BARD MODELS

MU30A, MU36C, MU42D
MH30A, MH36A, MH42A

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IMPORTANT

The equipment covered in this manual is to be installed by trained, experienced service and installation technicians.

SHIPPING DAMAGE

- Upon receipt of equipment, the carton should be checked for external signs of shipping damage. If damage is found, the receiving party must contact the last carrier immediately, preferably in writing, requesting inspection by the carrier's agent.

UNPACKING THE HEAT PACKAGE

Remove the heat package from the shipping carton. The heat package must consist of the following:

1. Basic heater enclosure with controls and installation instructions.
2. Plastic bag containing (1) 230V terminal block, (1) grounding lug, (2) strain relief bushings (one for models EH3MA-1-5A and EH3MA-1-10A), (3) #10-16x1/2" screws, (2) #10-12 x 3/4" screws, (2) wire ties and (2) 27" long wires.

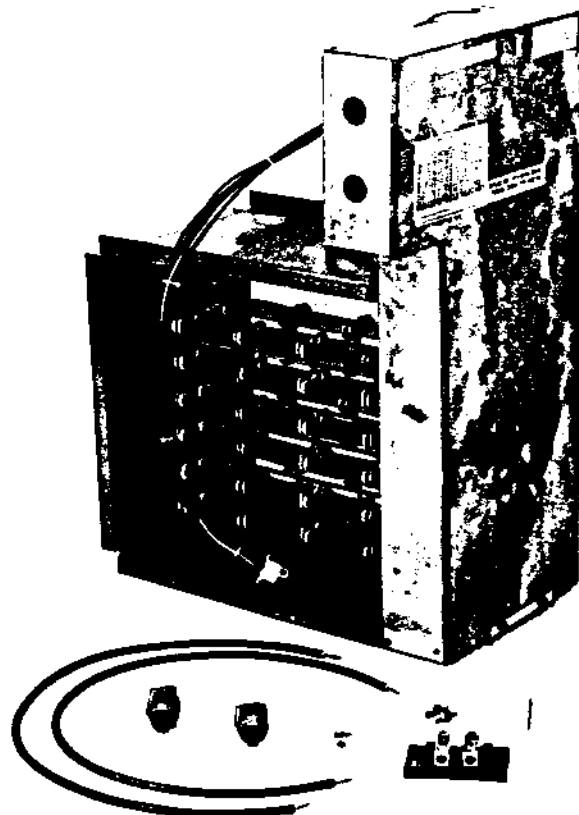


Figure 1

INSTALLATION

Disconnect all power supplies to the air conditioner or heat pump. Remove the blower service door located to the right of the unit control panel. Remove the two screws used to secure the blower housing to the slide mount (figure 2). Remove the blower assembly from the slide mount taking care to protect all blower motor leads from damage.

Install the basic heater enclosure into the slide mount previously used for mounting the blower. Secure the heater enclosure to the slide mount with the two screws that were removed earlier from the blower housing.

Slide the blower housing into the heater enclosure slide mount located on the left side of the enclosure. Secure the blower housing to the heater enclosure with two screws (shipped in the plastic bag).

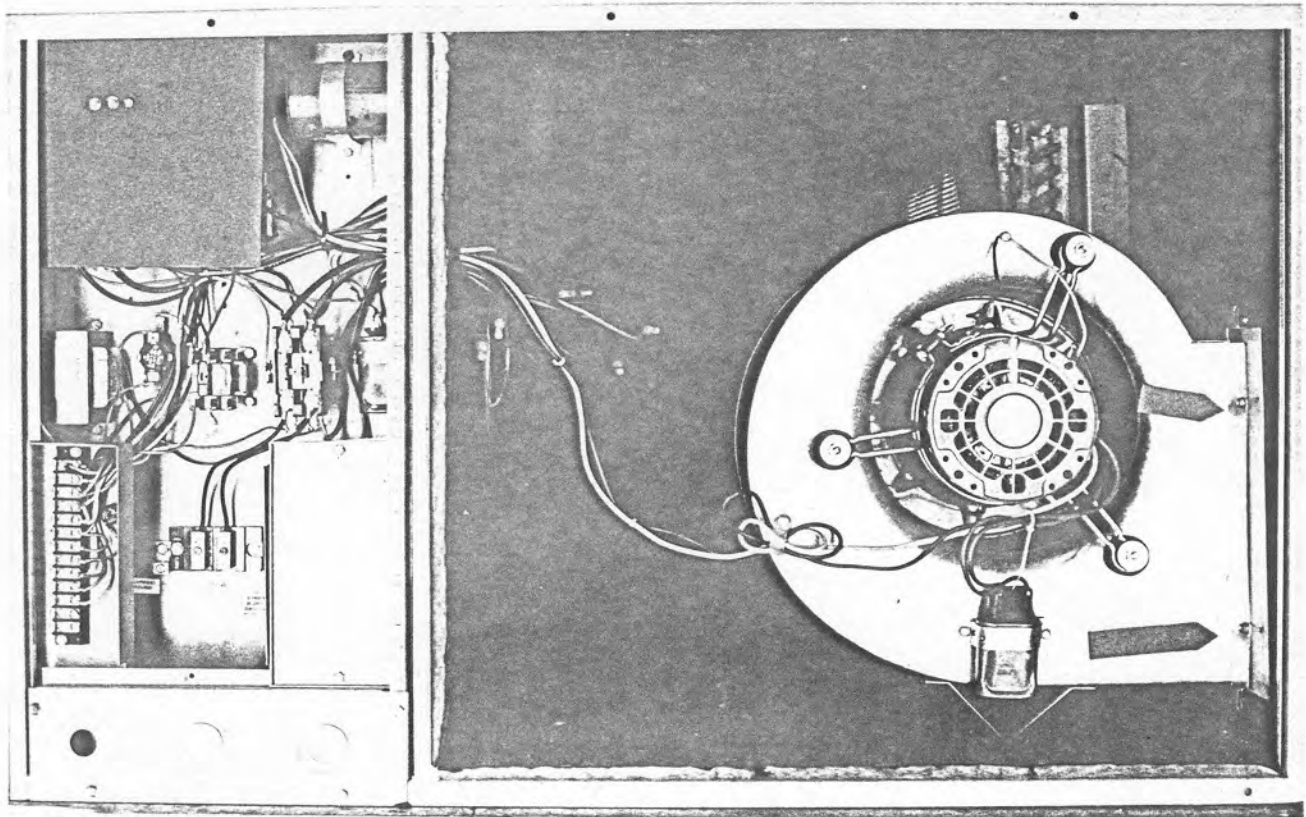


Figure 2

WIRING CONNECTIONS

Connect the wires exiting the rear of the heater package into the unit circuit by plugging in the plastic snap lock fitting into the mating fitting located on the insulated partition between the control panel and the blower area.

IMPORTANT: A separate power supply must be provided for use with any optional heater package. DO NOT attempt to connect a heater package with a basic unit to a single power supply.

Remove the unit control panel cover and the inner 4-1/4" x 7-3/4" cover. By removing this cover an isolated area is exposed. Install the 230 volt terminal block and the grounding lug using the enclosed screws into prepunched holes supplied.

Insert the strain reliefs (only one required for models EH3MA-1-5A and EH3MA-1-10A) into the 7/8" diameter holes in the heater enclosure. Route the two 27" long wires from the newly installed 230 volt terminal block through the provided hole in the insulated partition and through the strain relief bushings in the heater enclosure.

Connect the wires to the fuse or terminal block in the enclosure. Insert the button (attached to the strain reliefs) into the cavities of the strain relief and push down, locking the wires in place.

Inspect all wiring for damage and secure any loose wiring with the enclosed wire ties. See Figure 3 for completed assembly. Replace the terminal block cover, control box cover and blower service door.

Energize both power supplies and check for proper system operation.

IMPORTANT

The optional heat packages in conjunction with Bard models MH30A, MH36A or MH42A are internally wired to allow a maximum of 10Kw of electric heat to be energized during heat pump operation. Any installed Kw over 10Kw will operate only during the emergency heat mode.

A maximum of 20Kw may operate in the heating mode for models MU30A, MU36C and MU42D.

PARTS LIST
OPTIONAL ELECTRIC HEAT PACKAGES

PART NO.	DESCRIPTION	EH3MA-1-5A	EH3MA-1-10A	EH3MA-1-15A	EH3MA-1-20A
8401-006	Contactator 2P20	(1)	(1)	(2)	(2)
8614-006	Fuse OT30			(2)	
8614-007	Fuse OT60			(2)	(4)
8614-017	Fuse Block			x	
8614-018	Fuse Block				x
8604-023	Heat Strip 5Kw	x			
8604-024	Heat Strip 10Kw		x		(2)
8604-025	Heat Strip 15Kw			x	
8402-011	Limit Switch	x	x	x	x
8201-008	Heating Blower Relay	x	x	x	x
8607-001	Terminal Block	(2)	(2)	(1)	(1)
8402-030	Thermal Cutoff	(1)	(2)	(3)	(4)

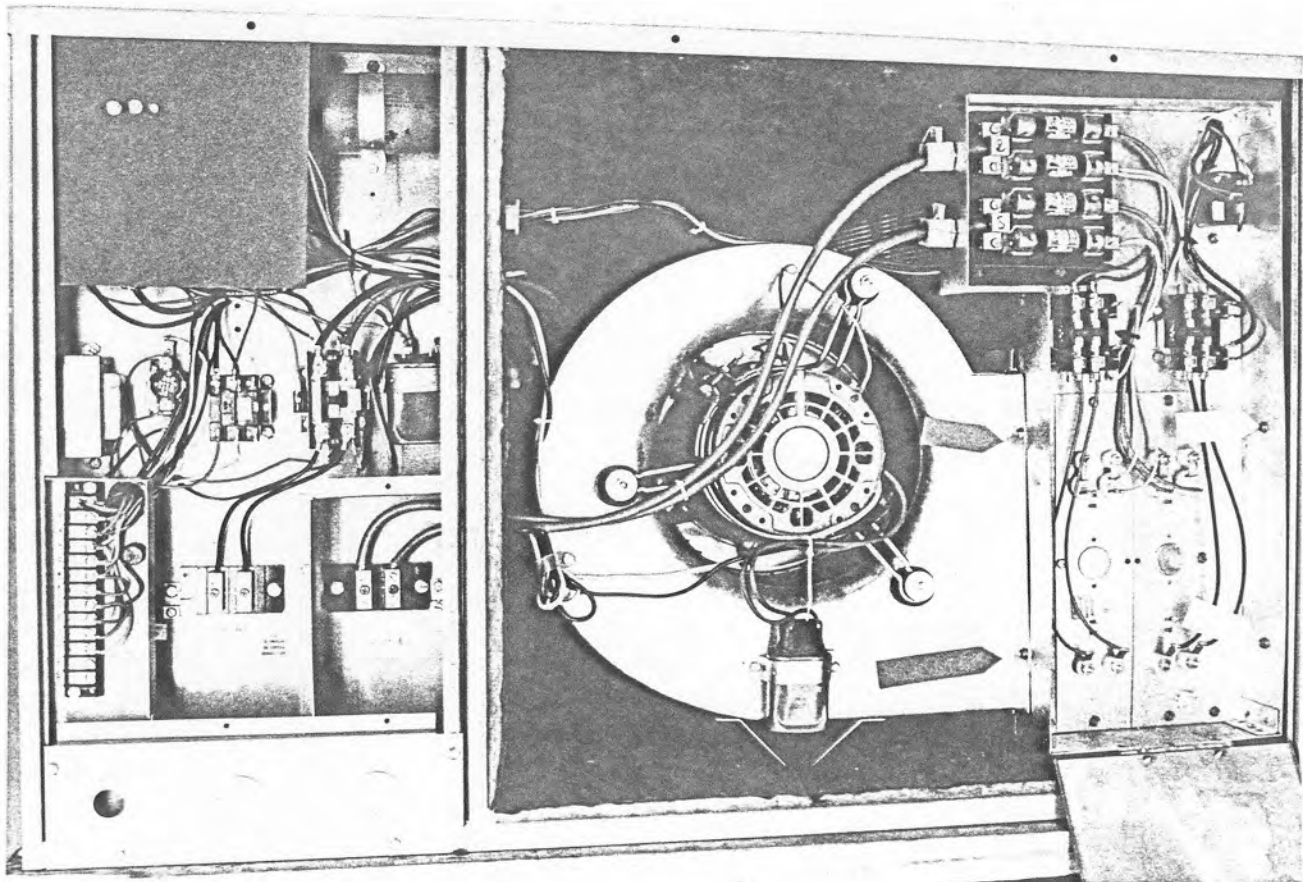
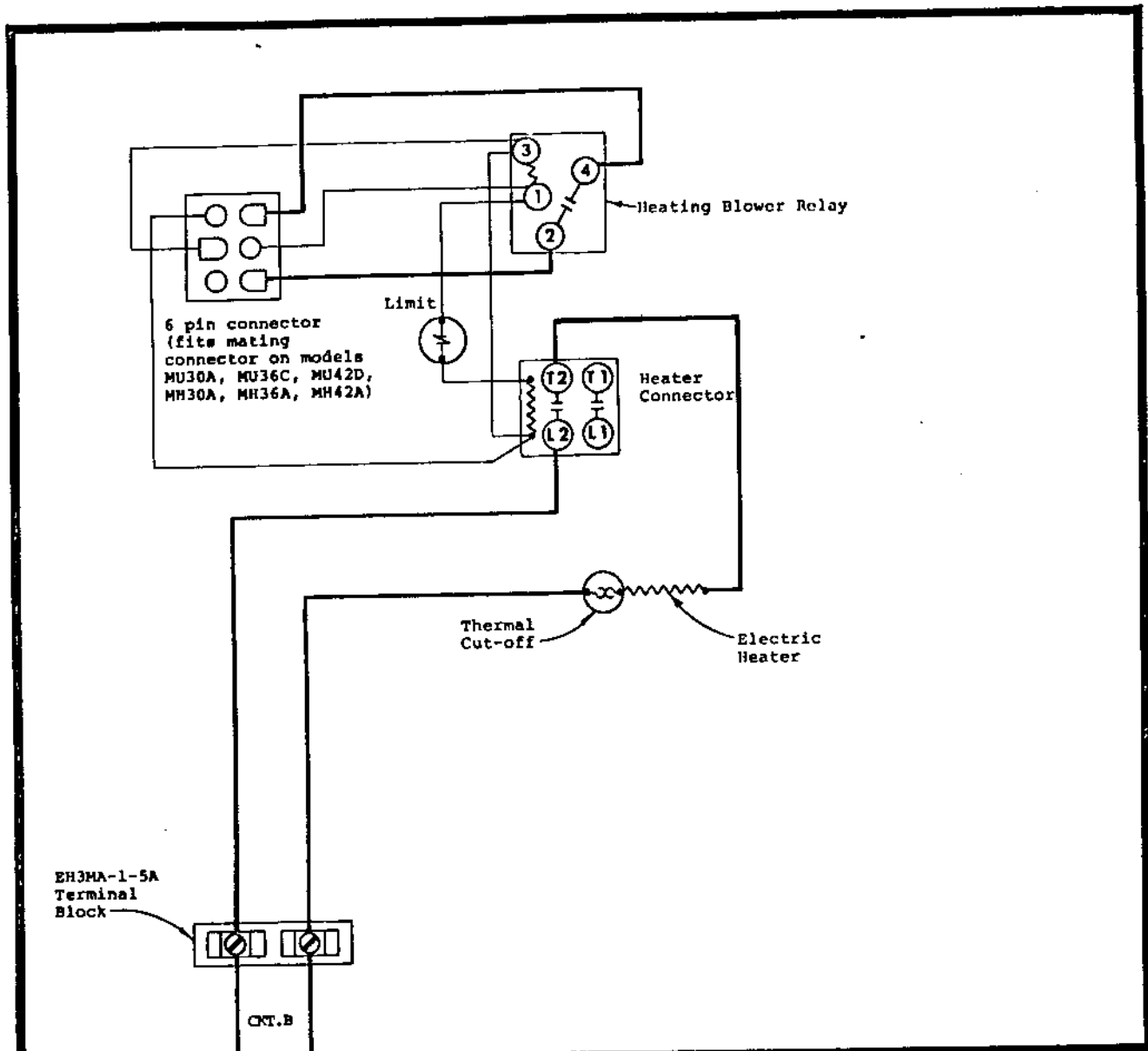
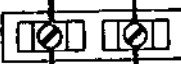


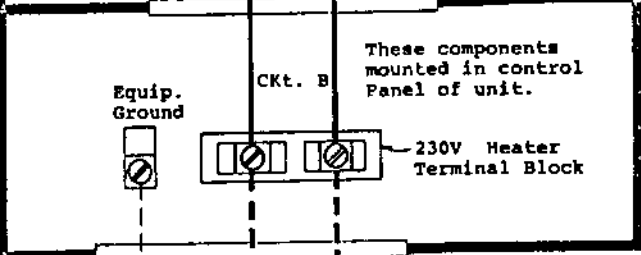
Figure 3



EH3MA-1-5A Terminal Block



CKT. B



Equip. Ground



These components mounted in control Panel of unit.

230V Heater Terminal Block

230/208-60-1

⚠ The EH3MA-1-5A heater package consists of the following:

- (1) Basic heater package.
- (2) 27" long wires.
- (1) Terminal Block
- (1) Equipment Ground Label
- (1) Strain Relief Bushing

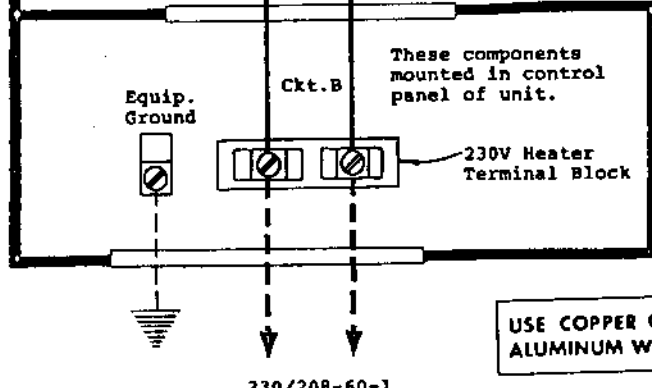
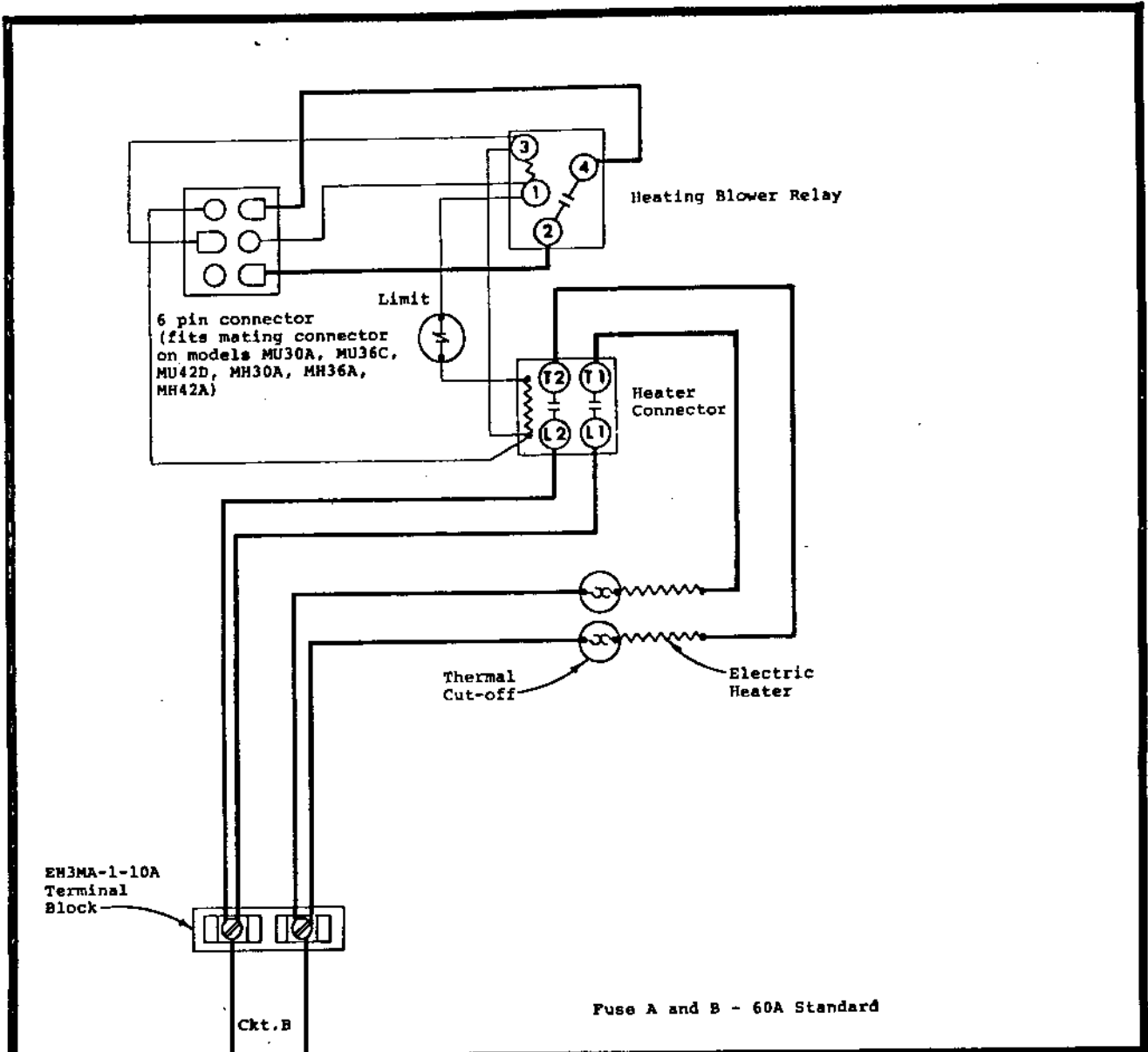
Refer to the heat package instructions for proper installation.

USE COPPER OR ALUMINUM WIRE



EH3MA-1-5A HEATER PACKAGE

FACTORY WIRING	FIELD WIRING
Low Voltage _____	-----
High Voltage _____	-----



⚠ The EH3MA-1-10A heater package consists of the following:

- (1) Basic heater package.
- (2) 27" long wires.
- (1) Terminal Block
- (1) Equipment Ground Label
- (1) Strain Relief Bushing

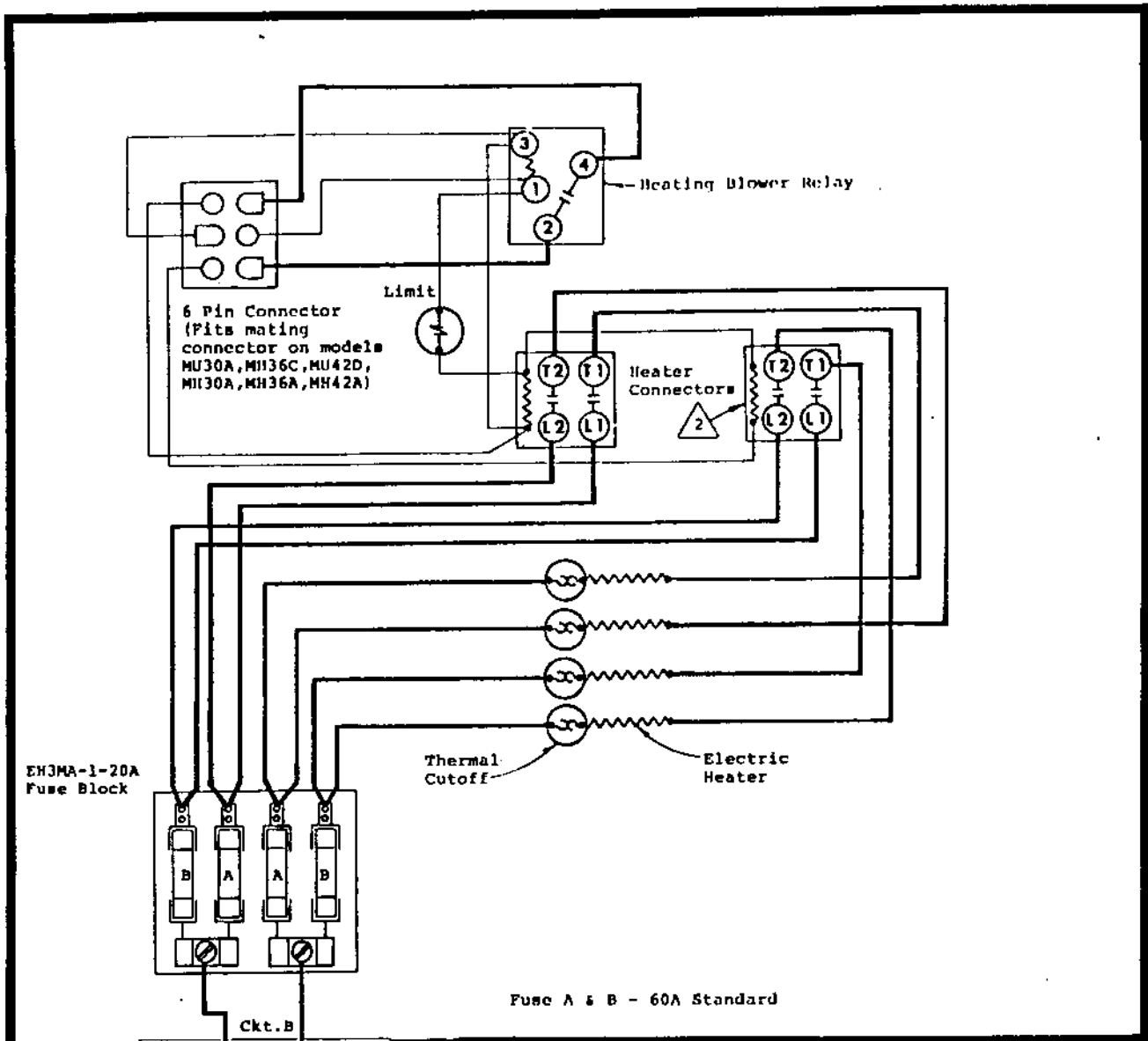
Refer to the heat package instructions for proper installation.

⚠ EH3MA-1-10A HEATER PACKAGE

USE COPPER OR ALUMINUM WIRE

FACTORY WIRING	FIELD WIRING
Low Voltage ———	-----
High Voltage ———	-----

230/208-60-1



**EH3MA-1-20A
Fuse Block**

Limit

Heating Blower Relay

6 Pin Connector
(Fits mating
connector on models
MU30A, MH36C, MU42D,
MI30A, MH36A, MH42A)

Heater
Connectors

Thermal
Cutoff

Electric
Heater

Fuse A & B - 60A Standard

Equip.
Ground

These components
mounted in control
panel of unit.

230V Heater
Terminal Block

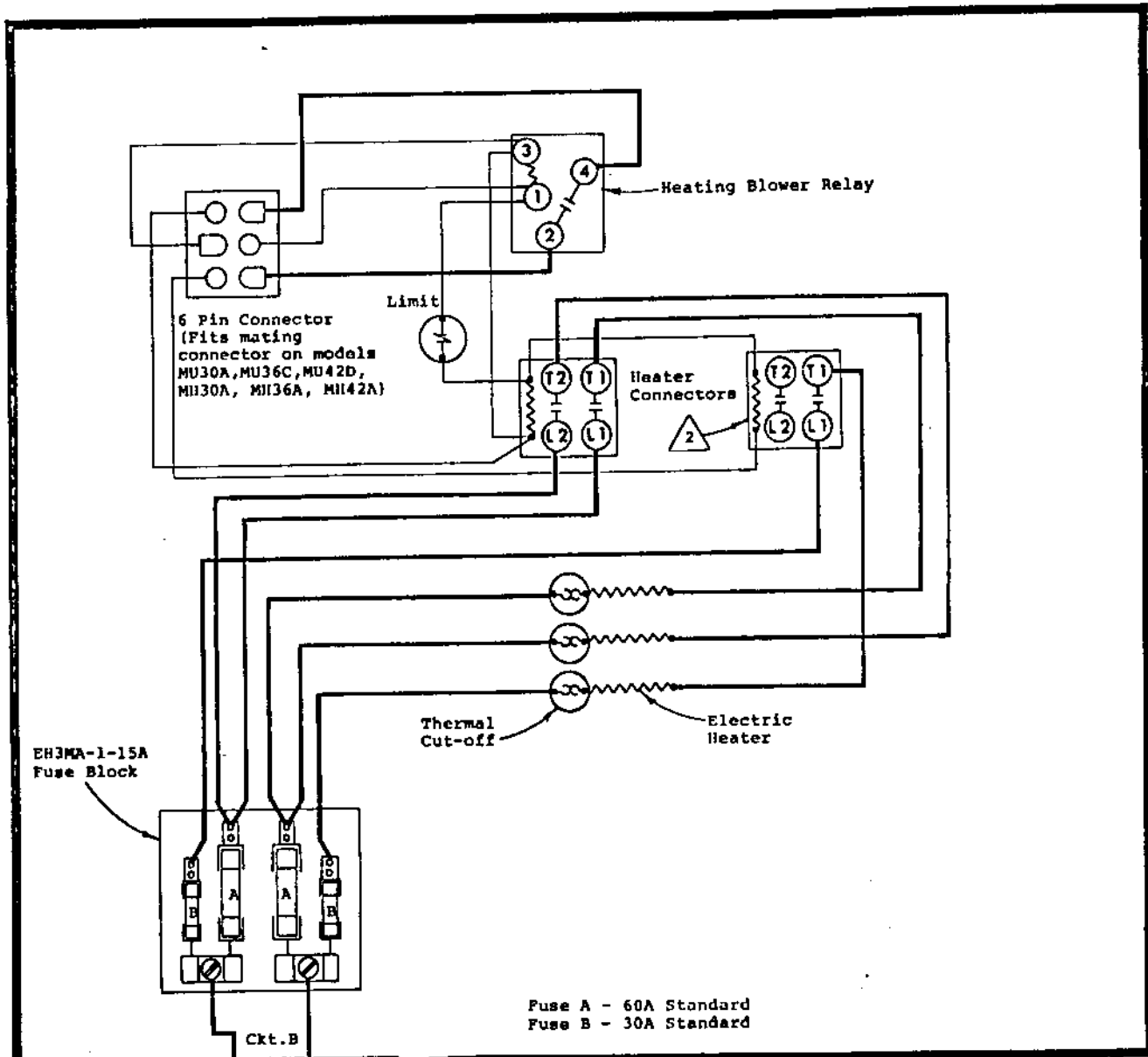
- ⚠ The EH3MA-1-20A heater package consists of the following:
- (1) Basic heater package.
 - (2) 27" long wires.
 - (1) Terminal Block
 - (1) Equipment Ground Label
 - (2) Strain Relief Bushing
- Refer to the heat package instructions for proper installation.
- ⚠ 2nd heat contactor operates only during emergency heat or compressor cut-off.

**USE COPPER OR
ALUMINUM WIRE**

⚠ **EH3MA-1-20A
HEATER PACKAGE**

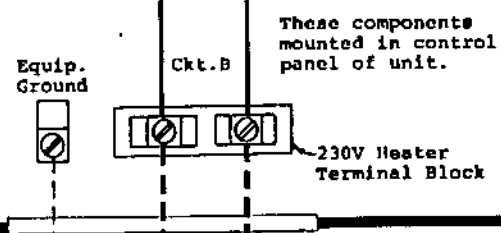
FACTORY WIRING	FIELD WIRING
Low Voltage ———	-----
High Voltage ———	-----

230/208-60-1



**EH3MA-1-15A
Fuse Block**

Fuse A - 60A Standard
Fuse B - 30A Standard



These components
mounted in control
panel of unit.

**USE COPPER OR
ALUMINUM WIRE**

FACTORY WIRING	FIELD WIRING
Low Voltage ———	-----
High Voltage ———	-----

- ⚠ The EH3MA-1-15A heater package consists of the following:
 - (1) Basic heater package.
 - (2) 27" long wires.
 - (1) Terminal Block
 - (1) Equipment Ground Label
 - (2) Strain Relief Bushing
 Refer to the heat package instructions for proper installation.
- ⚠ 2nd heat contactor operates only during emergency heat or compressor cut-off.

⚠ **EH3MA-1-15A
HEATER PACKAGE**

230/208-60-1