

# 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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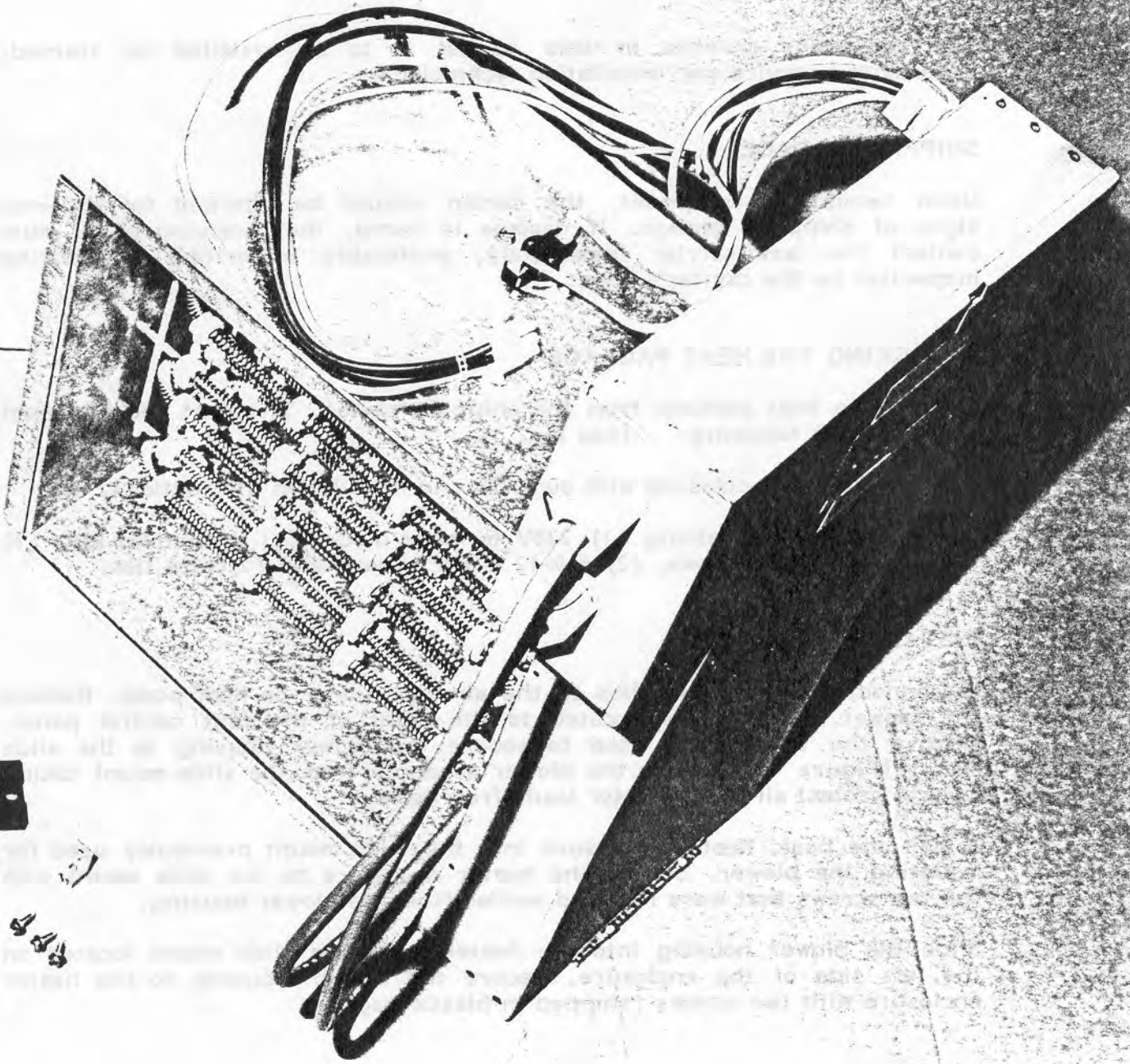


Figure 1

## **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: (See Fig. 1)

1. Basic heater enclosure with controls and installation instructions.
2. Plastic bag containing (1) 230V terminal block, (1) grounding lug, (3) #10-16 x 1/2" screws, (2) #10-12 x 3/4" screws and (2) wire ties.

## **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 plastic bag).

## **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.

## 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.

Route the two 29" long wires from the heater package through the provided hole in the insulated partition to the newly installed 230 volt terminal block.

Connect the wires to the fuse or terminal block in the enclosure.

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.

PARTS LIST					
OPTIONAL ELECTRIC HEAT PACKAGES					
PART NO.	DESCRIPTION	EH3MA-1-5A	EH3MA-1-10A	EH3MA-1-15A	EH3MA-1-20A
8401-006	Contactor 2P20	(1)	(1)	(2)	(2)
8614-006	Fuse 0T30			(2)	
8614-007	Fuse 0T60			(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)

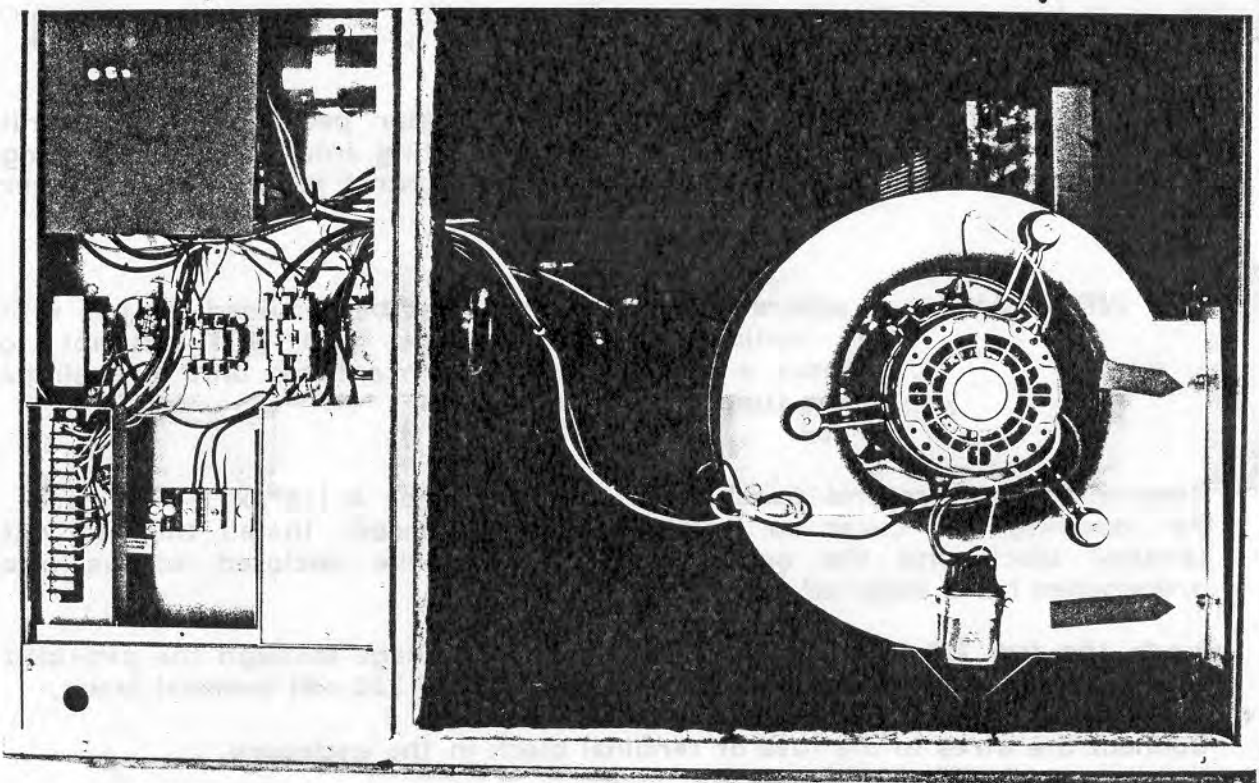


Figure 2

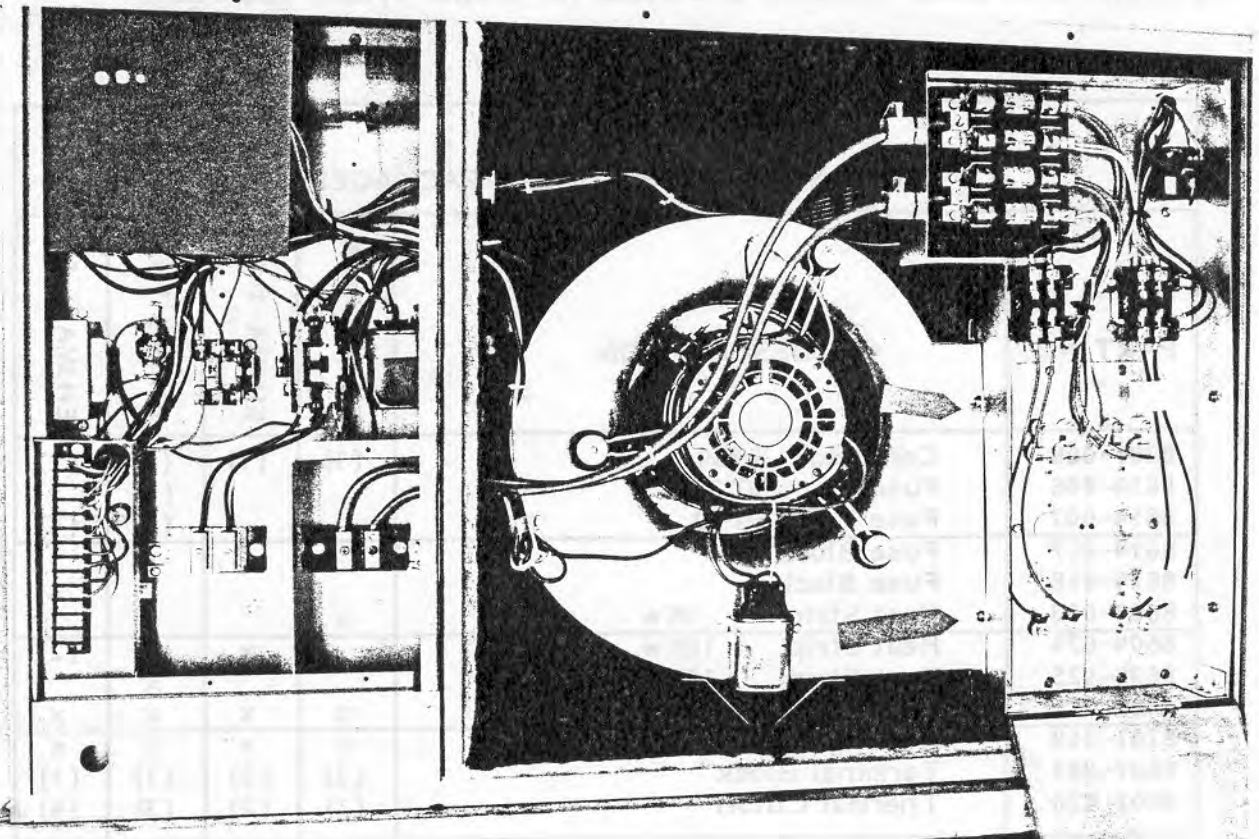
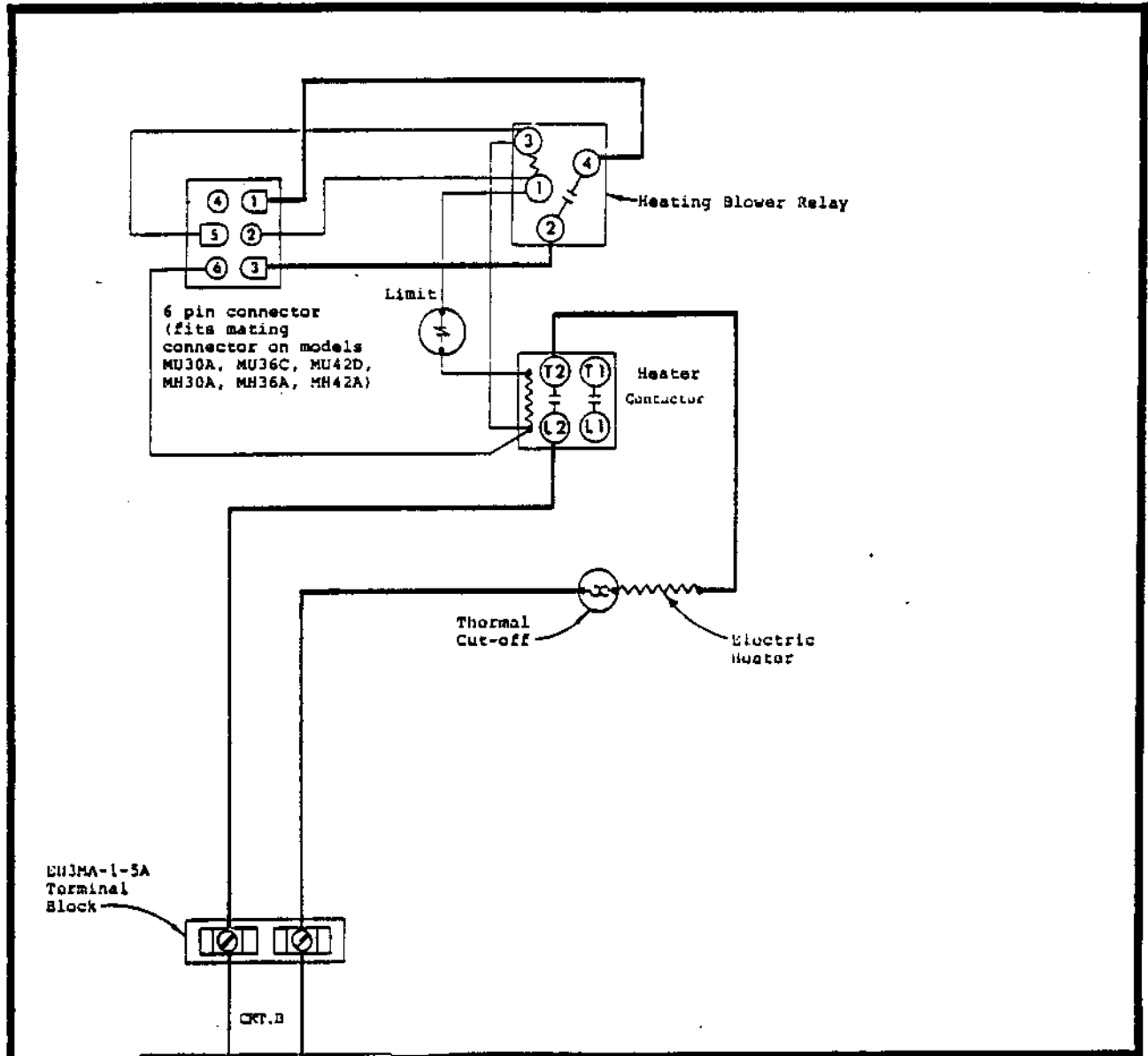


Figure 3



6 pin connector  
(fits mating  
connector on models  
MU30A, MU36C, MU42D,  
MH30A, MH36A, MH42A)

Heating Blower Relay

Heater  
Contactor

Thermal  
Cut-off

Electric  
Heater

EH3MA-1-5A  
Terminal  
Block

CKT. B

Equip.  
Ground

These components field  
mounted in control  
Panel of unit.

230V Heater  
Terminal Block

- ⚠ The EH3MA-1-5A heater package consists of the following:
- (1) Basic heater package.
  - (1) Terminal Block (Cat. No. EB or 11993).
  - (1) Listed Ground Terminal 6-12 AL, 6-14 CU.

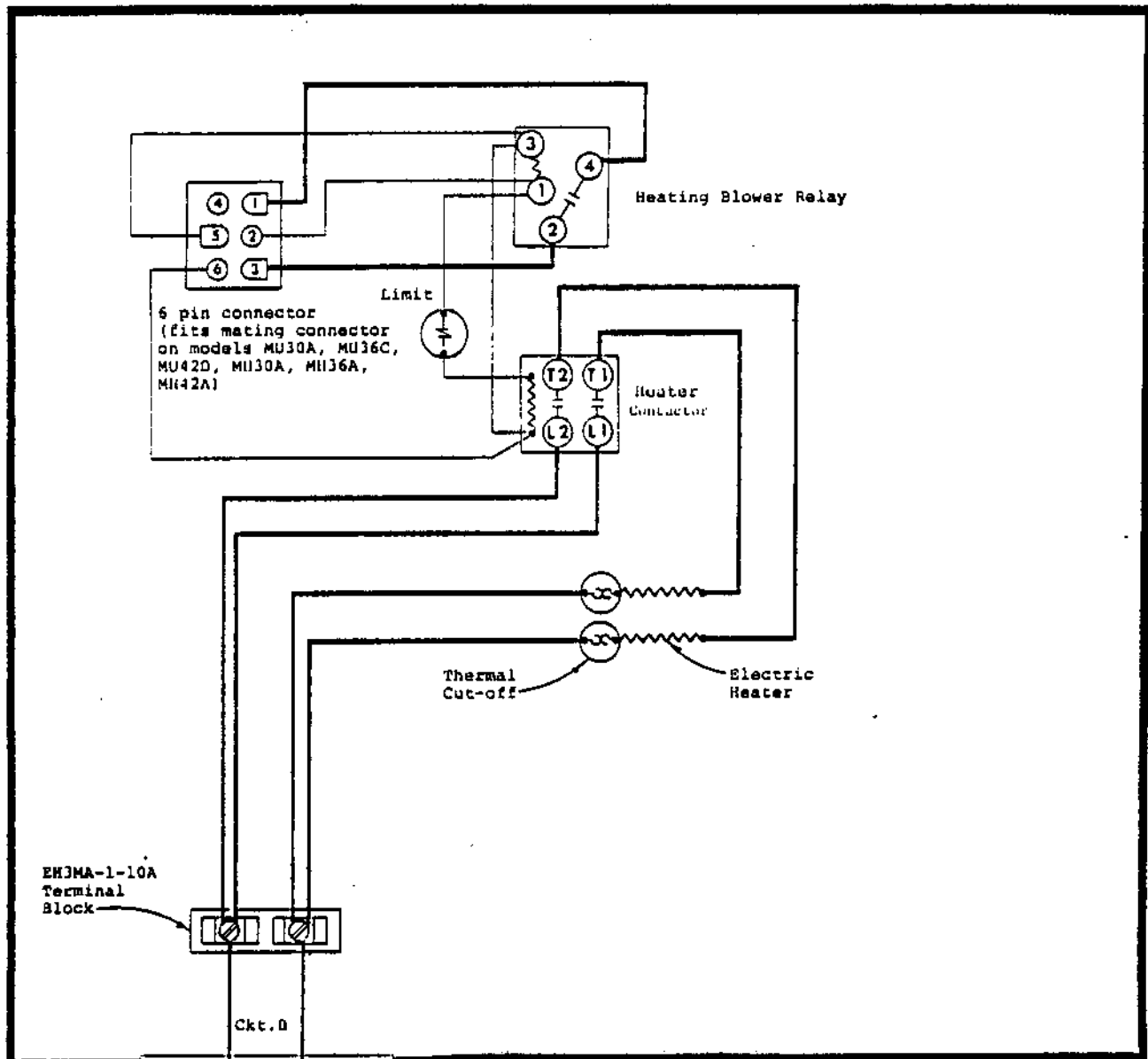
Refer to the heat package instructions for proper installation.

USE COPPER OR  
ALUMINUM WIRE

⚠ EH3MA-1-5A  
HEATER PACKAGE

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

230/208-60-1



6 pin connector  
(fits mating connector  
on models MU30A, MU36C,  
MU42D, MU30A, MU36A,  
MU42A)

Heating Blower Relay

Heater  
Contactor

Thermal  
Cut-off

Electric  
Heater

EH3MA-1-10A  
Terminal  
Block

Ckt. D

Equip.  
Ground

Ckt. U

These components field  
mounted in control  
panel of unit.

230V Heater  
Terminal Block

- ⚠ The EH3MA-1-10A heater package consists of the following:
- (1) Base heater package.
  - (1) Terminal Block (Cat.No. EB or 11993).
  - (1) Listed Ground Terminal 6-12AL, 6-14 CU.

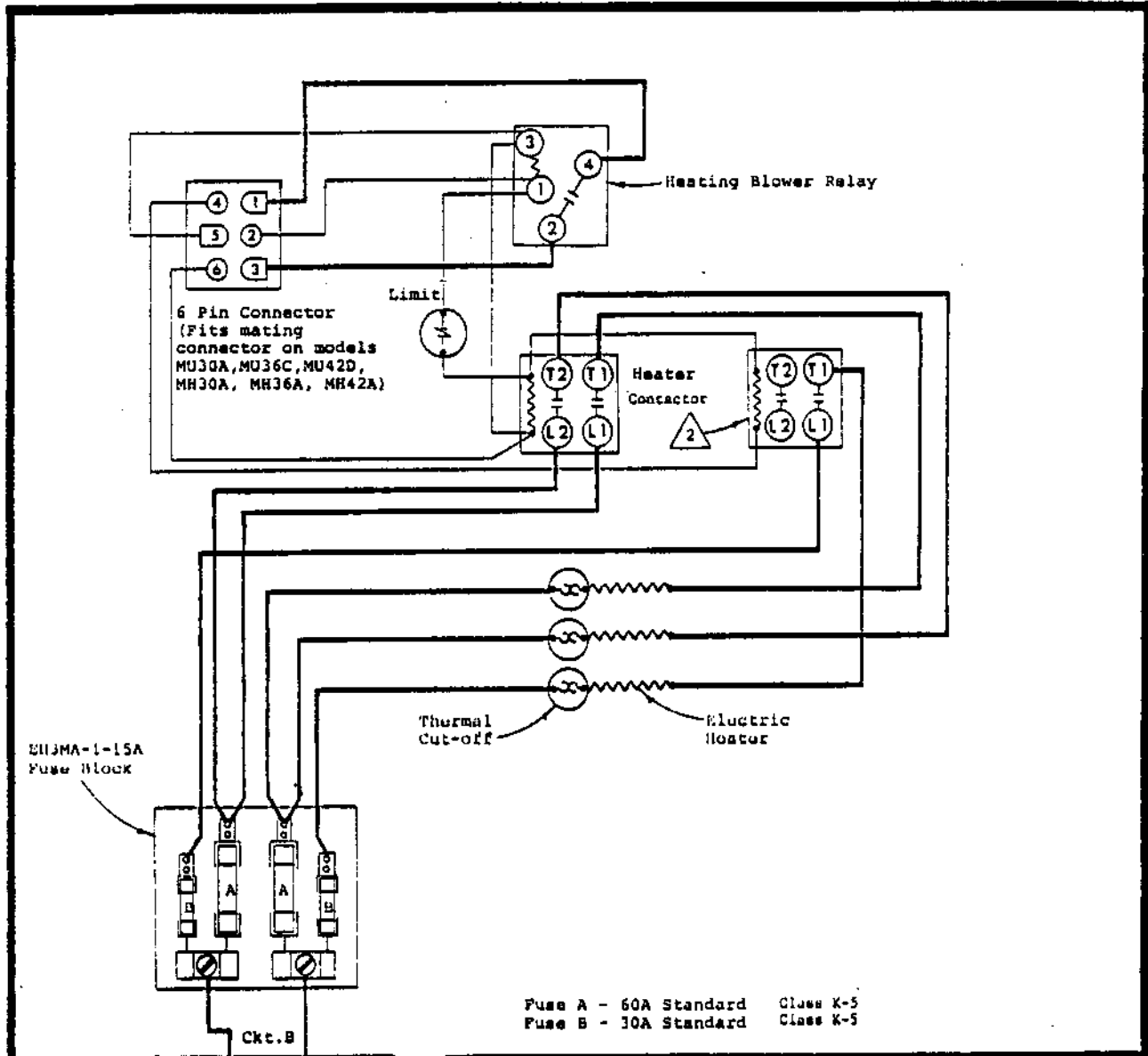
Refer to the heat package instructions for proper installation.

⚠ EH3MA-1-10A  
HEATER PACKAGE

USE COPPER OR  
ALUMINUM WIRE

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

230/208-60-1



- ⚠ The EN3MA-1-15A heater package consists of the following:
- (1) Basic heater package.
  - (1) Terminal Block (Cat.No. EB or 11993).
  - (1) Listed Ground Terminal 6-12 AL, 6-14 CU.

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

⚠ EN3MA-1-15A HEATER PACKAGE

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



