

# INSTALLATION INSTRUCTIONS

## MODELS

EH5PA-1-5A  
EH5PA-1-10A  
EH5PA-1-15A  
EH5PA-1-20A  
EH5PA-3-9B  
EH5PA-3-12B  
EH5PA-3-15B  
EH5PA-3-18B  
EH5PA-3-9C  
EH5PA-3-12C  
EH5PA-3-15C  
EH5PA-3-18C

OPTIONAL ELECTRIC HEAT PACKAGES

FOR USE WITH MODELS

P48A5, P60A5  
PH42-1, PH48-4, PH60-5

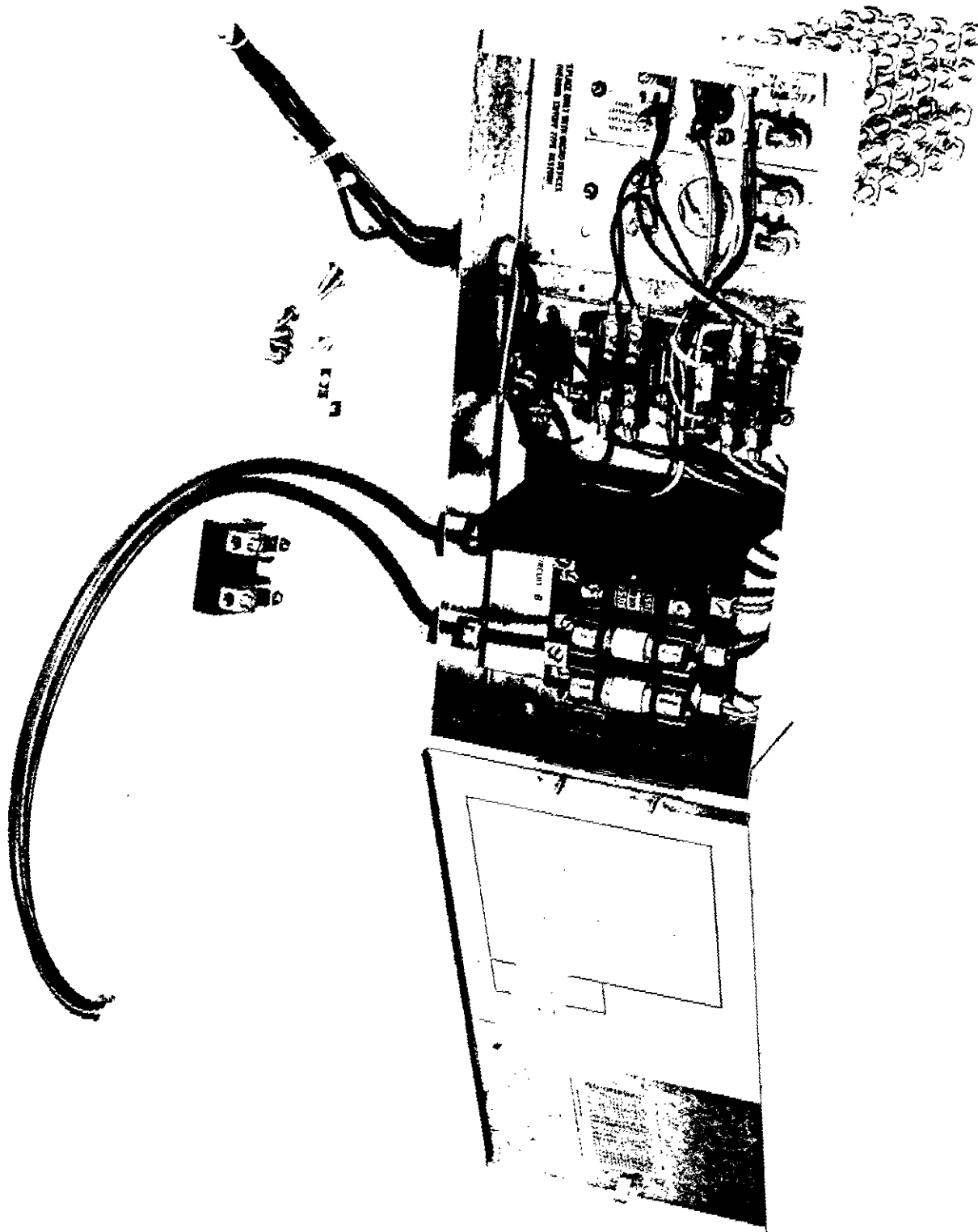


Figure 1

## 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 Figure 1)

1. Basic heater enclosure with controls and installation instructions.
2. Plastic bag containing (1) 230V terminal block; (1) grounding lug; (4) #10-16 x 1/2" screws; (2) #8-16 x 1" screws; (1) #10-24 x 1/2" screw; and (1) wire tie.

## INSTALLATION

Disconnect all power supplies to the air conditioner or heat pump. Remove the control panel service door. Remove the four (4) #10-16 x 1/2" screws which secure the electric heat cover plate. Remove the electric heat cover plate from the blower partition and discard. Carefully insert heater package through the opening, provided in the blower partition. Guide the heater package into the opening being careful to align the locating pin(s) of the heater(s) in the dimpled holes provided in the rear of the blower partition. Line up the four (4) holes in the heater control panel with the four (4) prepunched holes in the blower partition and secure the heater package to the blower partition with the four (4) #10-16x1/2" screws provided.

## WIRING CONNECTIONS

Connect the wires exiting the bottom of the heater package into the unit circuit by plugging in the plastic snap lock fitting into the mating fitting located on the rear of the control panel.

**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.

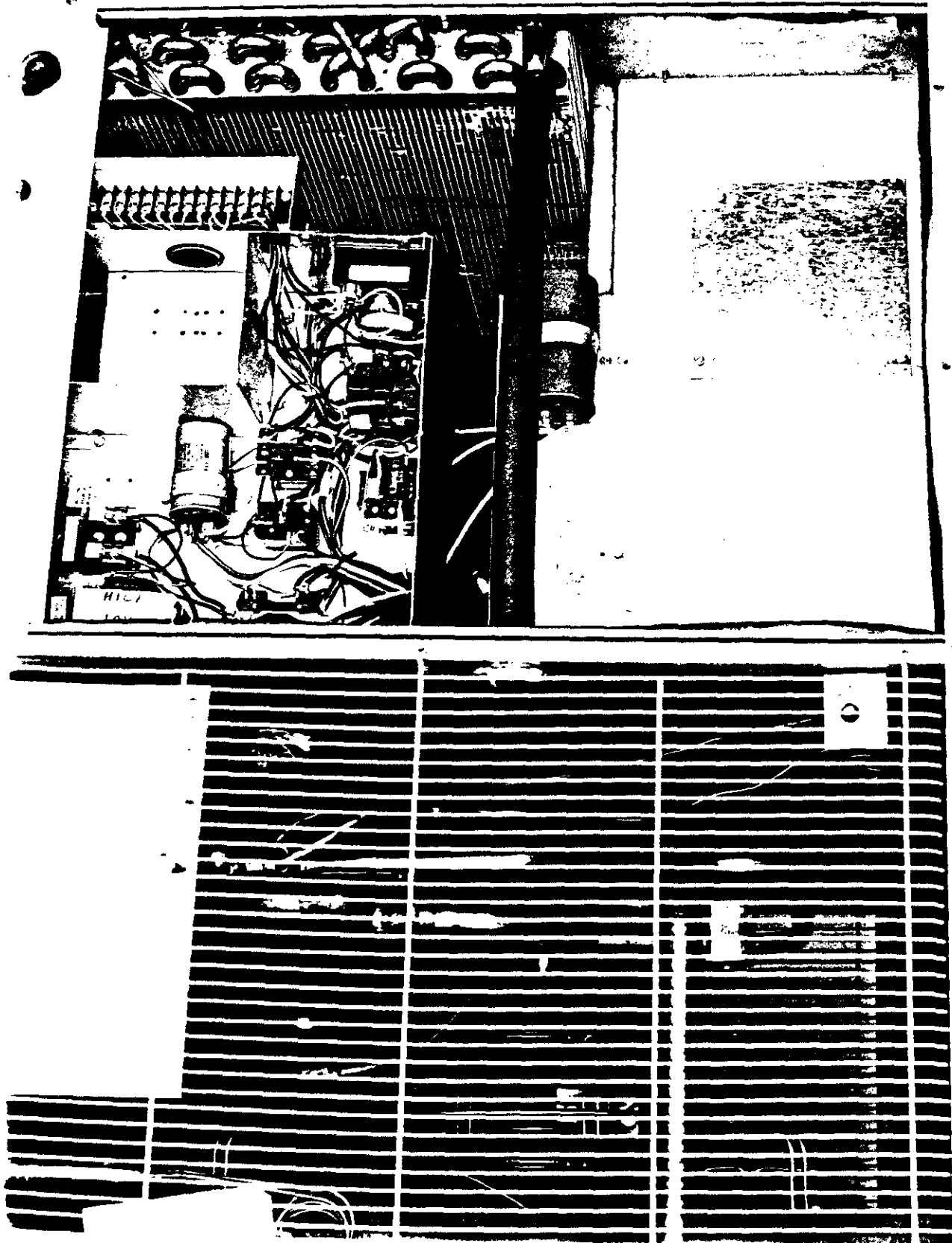


Figure 2

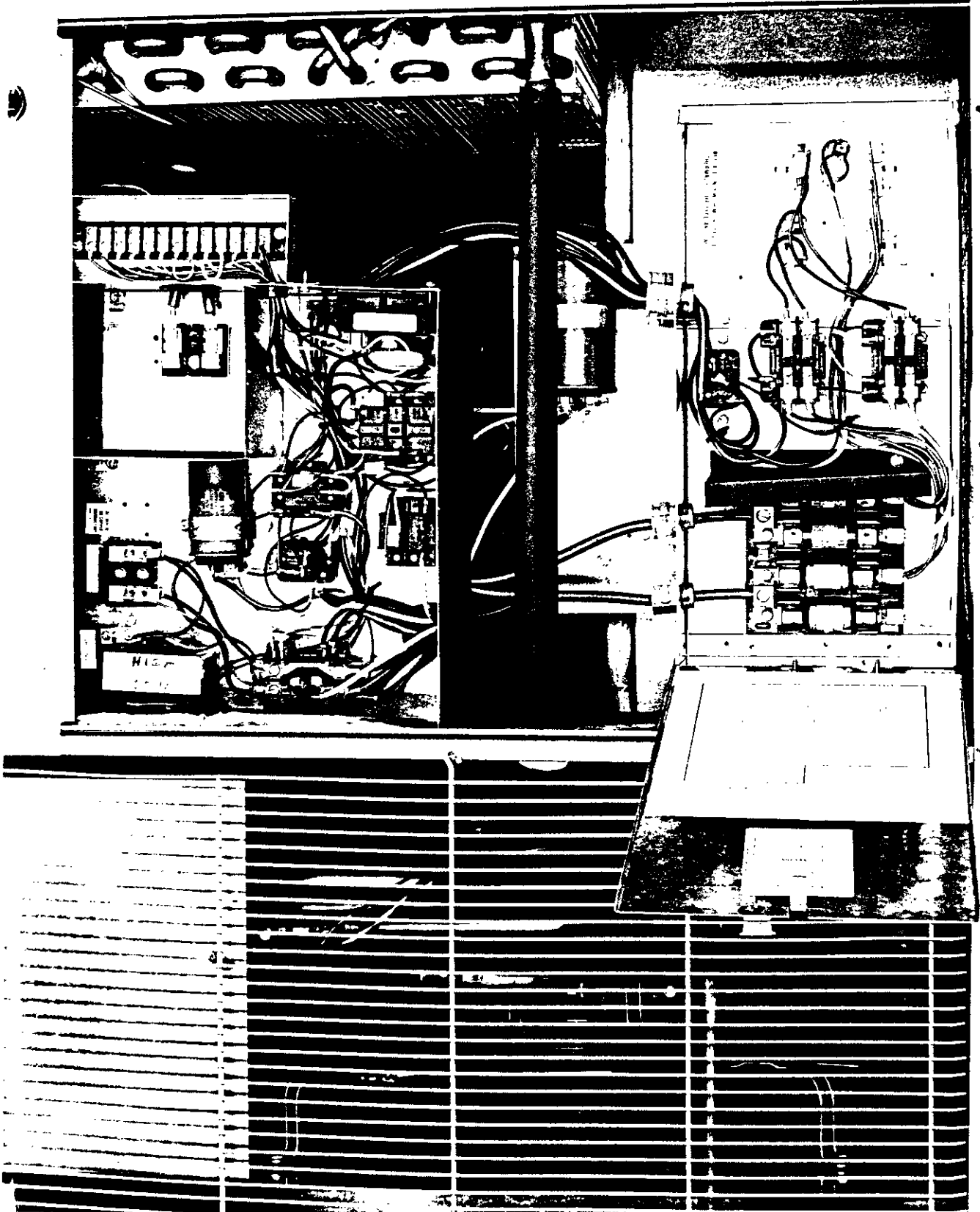


Figure 3

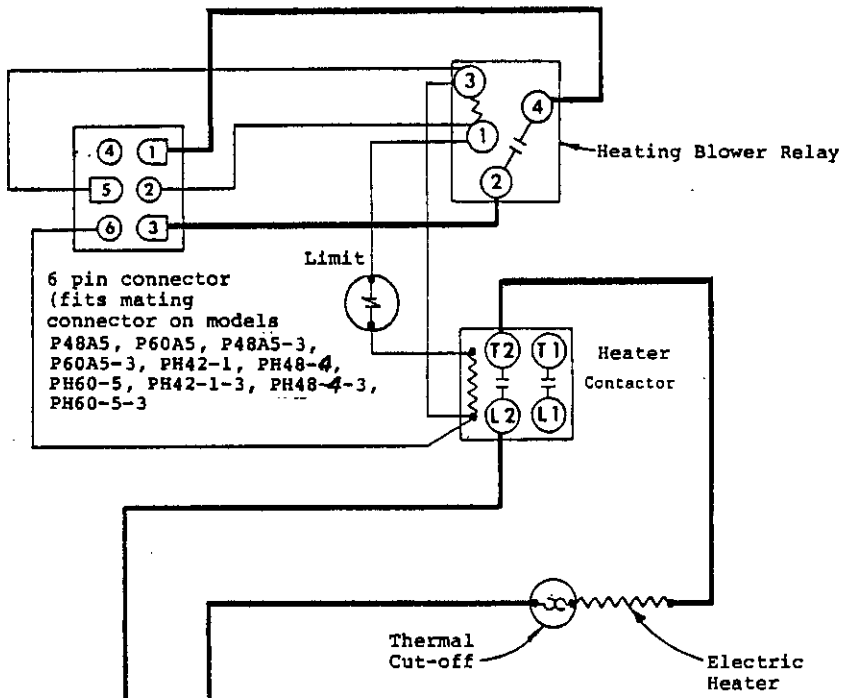
Remove the unit control panel cover and the inner 4-1/4" x 7-3/4" cover. By removing this cover an isolated area is exposed. Install the high voltage terminal block. Use the two (2) #8-16 x 1" screws. Install the grounding lug, using the two (2) #10-24 x 1/2" screws into the prepunched holes supplied.

Route the line voltage power circuit wires from the heater package through the bushed hole in the control panel to the newly installed high voltage terminal block.

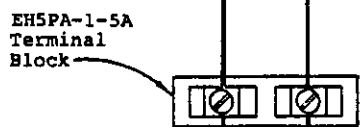
Inspect all wiring for damage and secure any loose wiring with the enclosed wire ties. See Figure 3 for completed assembly. Replace the terminal block cover, control box cover and blower service door.

Energize both power supplies and check for proper system operation.

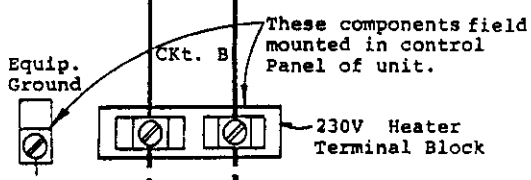
PARTS LIST													
OPTIONAL ELECTRIC HEAT PACKAGES													
Part No.	Description	EH5PA-1-5A	EH5PA-1-10A	EH5PA-1-15A	EH5PA-1-20A	EH5PA-3-9B	EH5PA-3-12B	EH5PA-3-15B	EH5PA-3-18B	EH5PA-3-9C 460V	EH5PA-3-12C 460V	EH5PA-3-15C 460V	EH5PA-3-18C 460V
8401-006	Contactor 2P20A	(1)	(1)	(2)	(2)	(1)	(2)	(2)	(2)				
8401-002	Contactor 3P25A									(1)	(1)	(1)	(2)
8614-017	Fuse Block			(1)									
8614-018	Fuse Block				(1)								
8402-025	Thermal Cutoff	(1)	(2)	(3)	(4)	(2)	(3)	(3)	(4)	(2)	(3)	(3)	(4)
8201-008	Blower Relay	x	x	x	x	x	x	x	x	x	x	x	x
8607-013	Terminal Block	x	x										
8607-014	Terminal Block					x	x	x	x	x	x	x	x
8614-006	Fuse 30A			(2)									
8614-007	Fuse 60A			(2)	(4)								
8402-012	Limit Switch	x	x	x	x	x	x	x	x	x	x	x	x
8604-042	Heat Strip 5kw	x											
8604-044	Heat Strip 10kw		x		(2)								
8604-047	Heat Strip 15kw			x				x					
8604-046	Heat Strip 12kw						x						
8604-048	Heat Strip 9kw					x			(2)				
8604-072	Heat Strip 9kw									x			(2)
8604-051	Heat Strip 12kw										x		
8604-052	Heat Strip 15kw											x	



6 pin connector  
 (fits mating  
 connector on models  
 P48A5, P60A5, P48A5-3,  
 P60A5-3, PH42-1, PH48-4,  
 PH60-5, PH42-1-3, PH48-4-3,  
 PH60-5-3



EHSPA-1-5A  
 Terminal  
 Block



These components field  
 mounted in control  
 Panel of unit.

230V Heater  
 Terminal Block

- ⚠ The EHSPA-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.

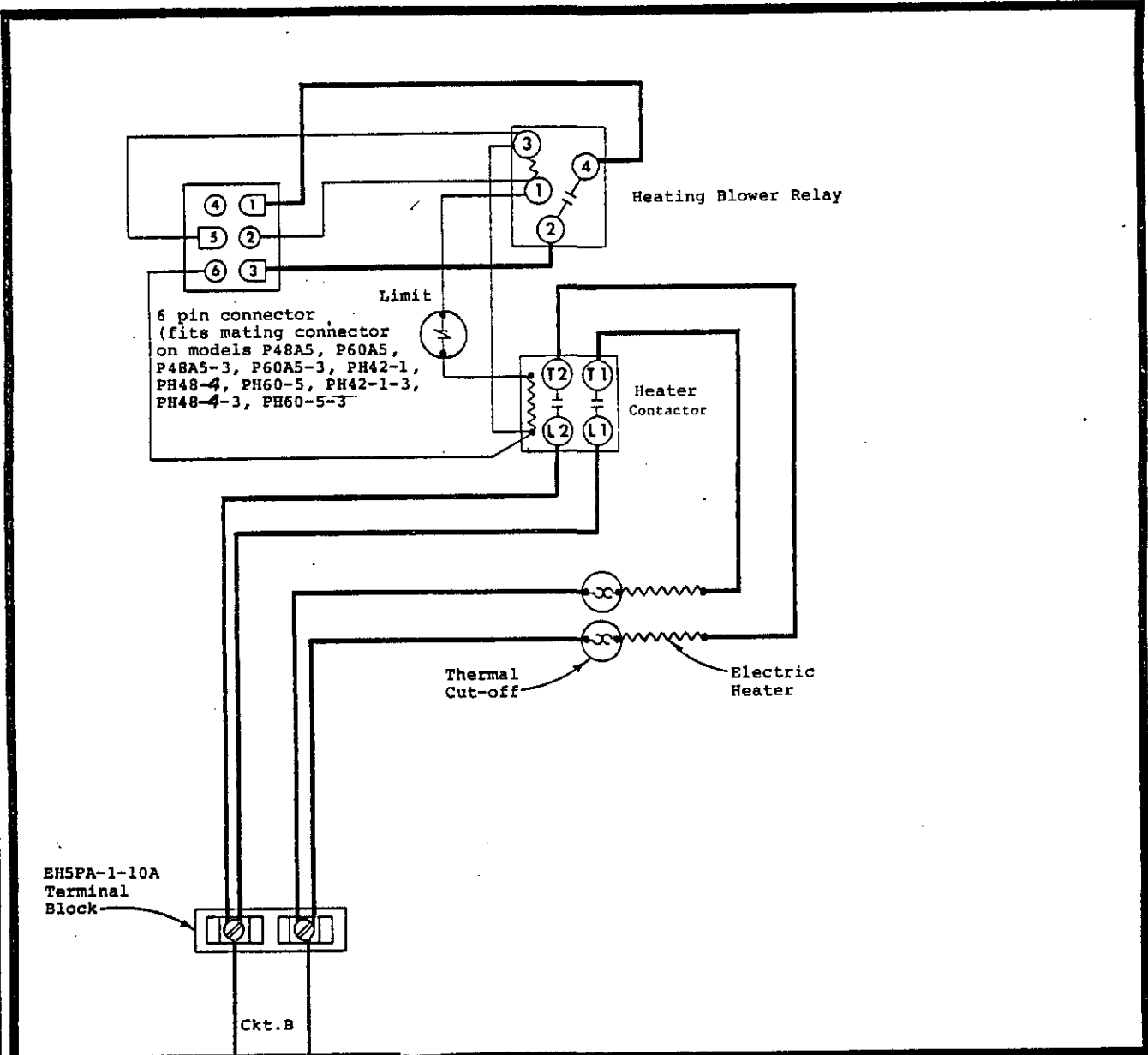
Refer to the heat package instructions for proper installation.

USE COPPER OR  
 ALUMINUM WIRE

⚠ EHSPA-1-5A  
 HEATER PACKAGE

240-60-1  
 240/220-50-1

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



6 pin connector  
 (fits mating connector  
 on models P48A5, P60A5,  
 P48A5-3, P60A5-3, PH42-1,  
 PH48-4, PH60-5, PH42-1-3,  
 PH48-4-3, PH60-5-3)

Heating Blower Relay

Limit

Heater  
 Contactor

Thermal  
 Cut-off

Electric  
 Heater

EH5PA-1-10A  
 Terminal  
 Block

Ckt. B

Equip.  
 Ground

Ckt. B

These components field  
 mounted in control  
 panel of unit.

230V Heater  
 Terminal Block

- ⚠ The EH5PA-1-10A heater package consists of the following:
- (1) Basic 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.



EH5PA-1-10A  
 HEATER PACKAGE

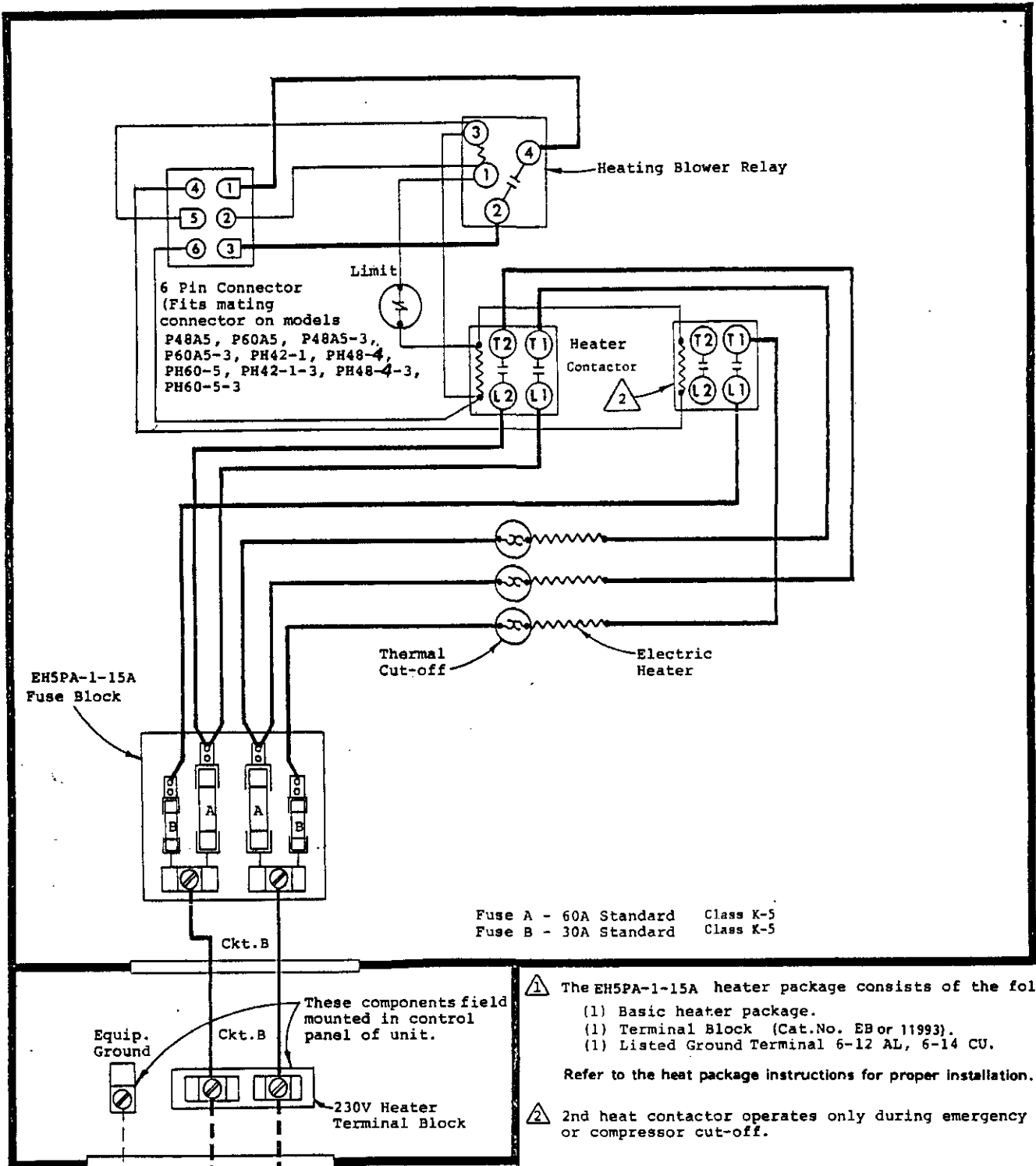
USE COPPER OR  
 ALUMINUM WIRE

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

240-60-1  
 240/220-50-1

4068-120A



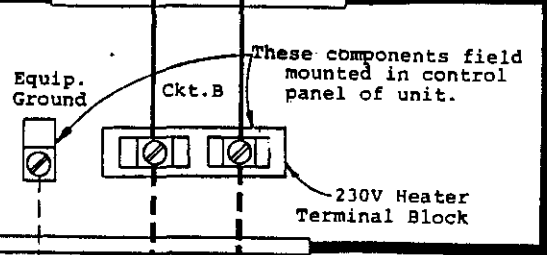
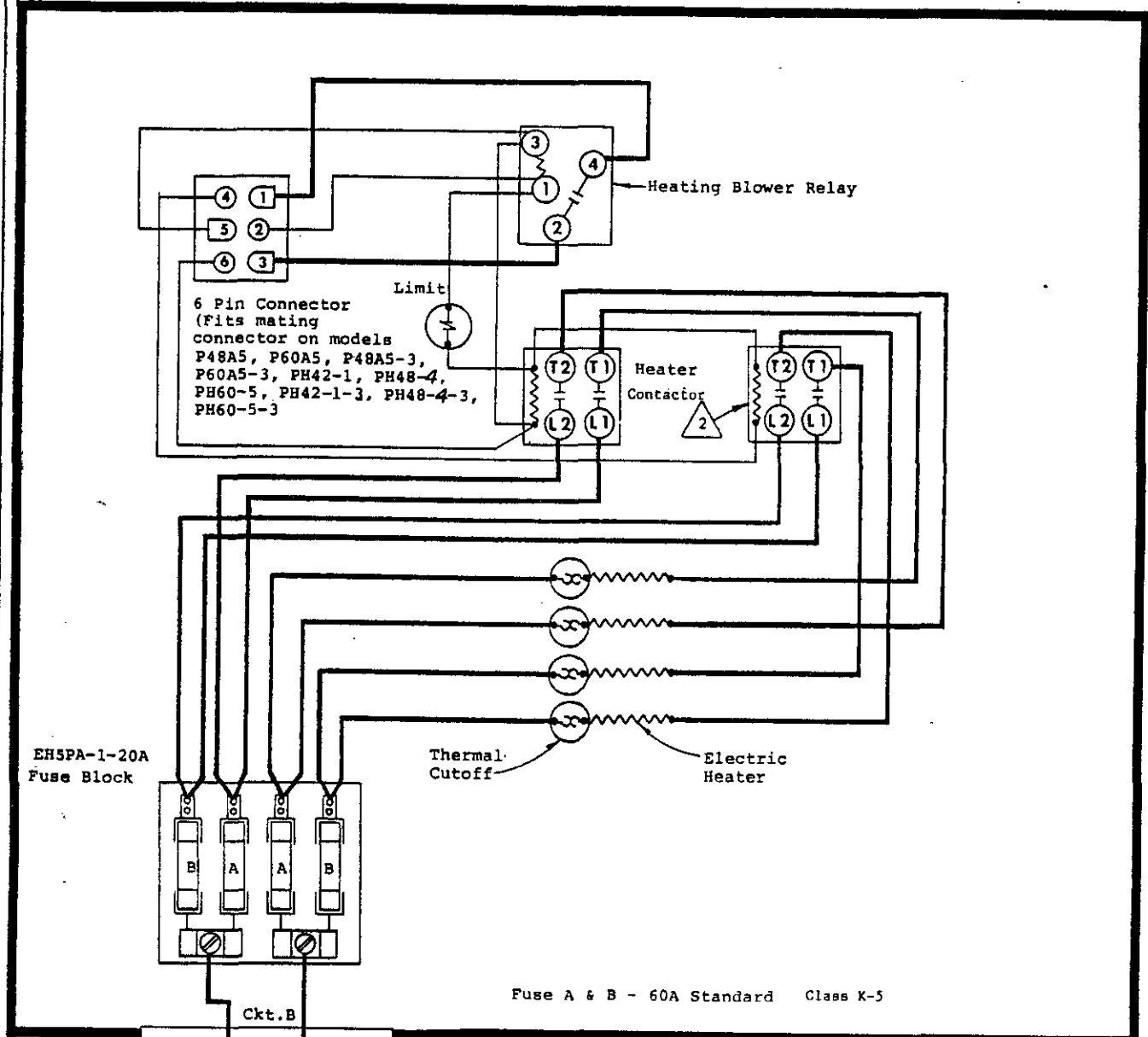


- ⚠ The EH5PA-1-15A heater package consists of the following:
  - (1) Basic heater package.
  - (1) Terminal Block (Cat.No. EB or 11993).
  - (1) Listed Ground Terminal 6-12 AL, 6-14 CU.
- Refer to the heat package instructions for proper installation.
- ⚠ 2nd heat contactor operates only during emergency heat or compressor cut-off.

USE COPPER OR ALUMINUM WIRE

⚠ EH5PA-1-15A HEATER PACKAGE

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

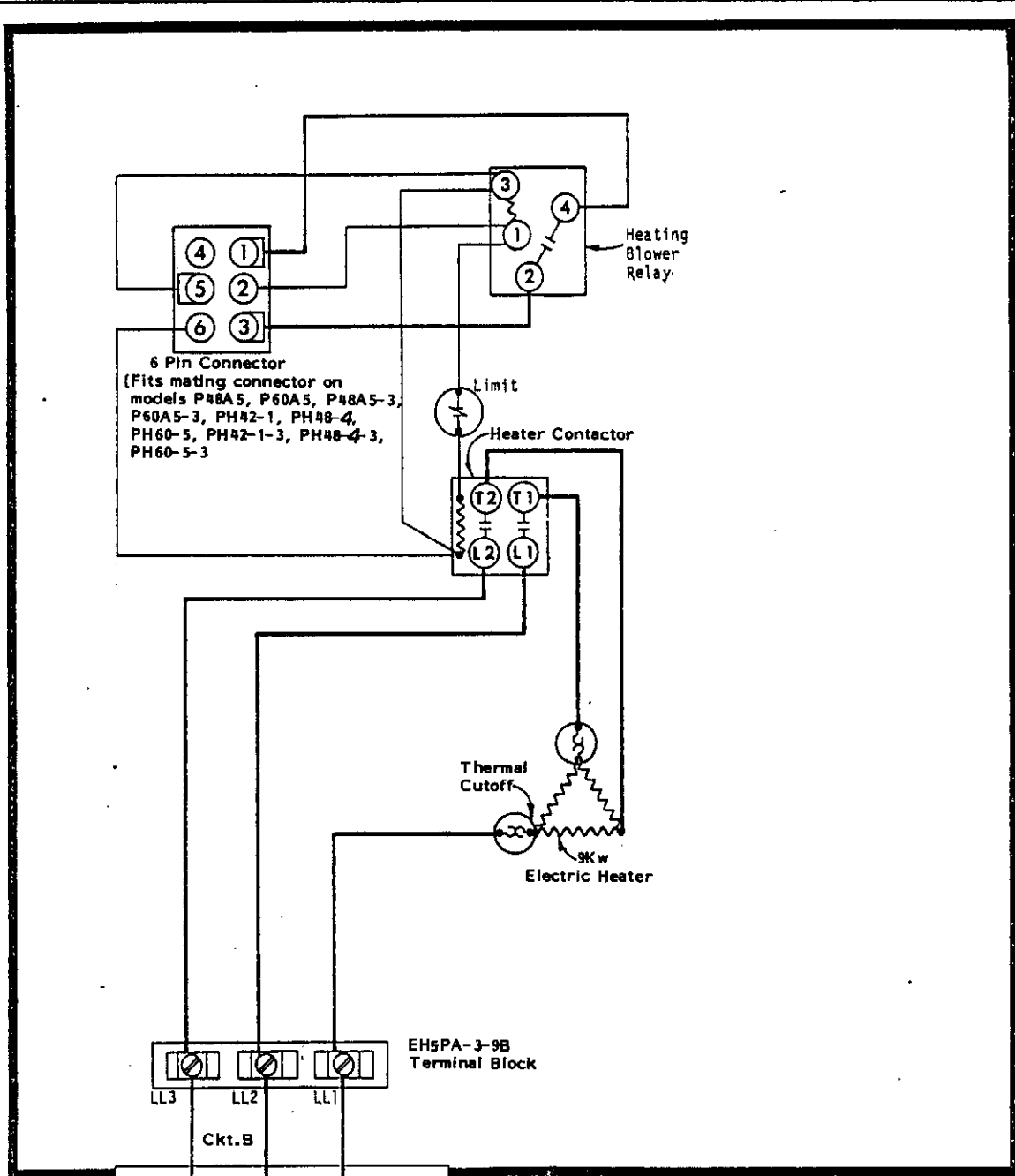


- ⚠ The EH5PA-1-20A heater package consists of the following:
- (1) Basic heater package.
  - (1) Terminal Block (Cat. No. EB or 11993).
  - (1) Listed Ground Terminal 6-12 AL, 6-14 CU.
- Refer to the heat package instructions for proper installation.
- ⚠ 2nd heat contactor operates only during emergency heat or compressor cut-off.

USE COPPER OR ALUMINUM WIRE

⚠ EH5PA-1-20A HEATER PACKAGE

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



6 Pin Connector  
 (Fits mating connector on models P48A5, P60A5, P48A5-3, P60A5-3, PH42-1, PH48-4, PH60-5, PH42-1-3, PH48-4-3, PH60-5-3)

Heating Blower Relay

Limit

Heater Contactor

Thermal Cutoff

9Kw Electric Heater

EH5PA-3-9B Terminal Block

LL3 LL2 LL1

Ckt. B

These components field mounted in control panel of unit.

230V Heater Terminal Block

Equip. Ground

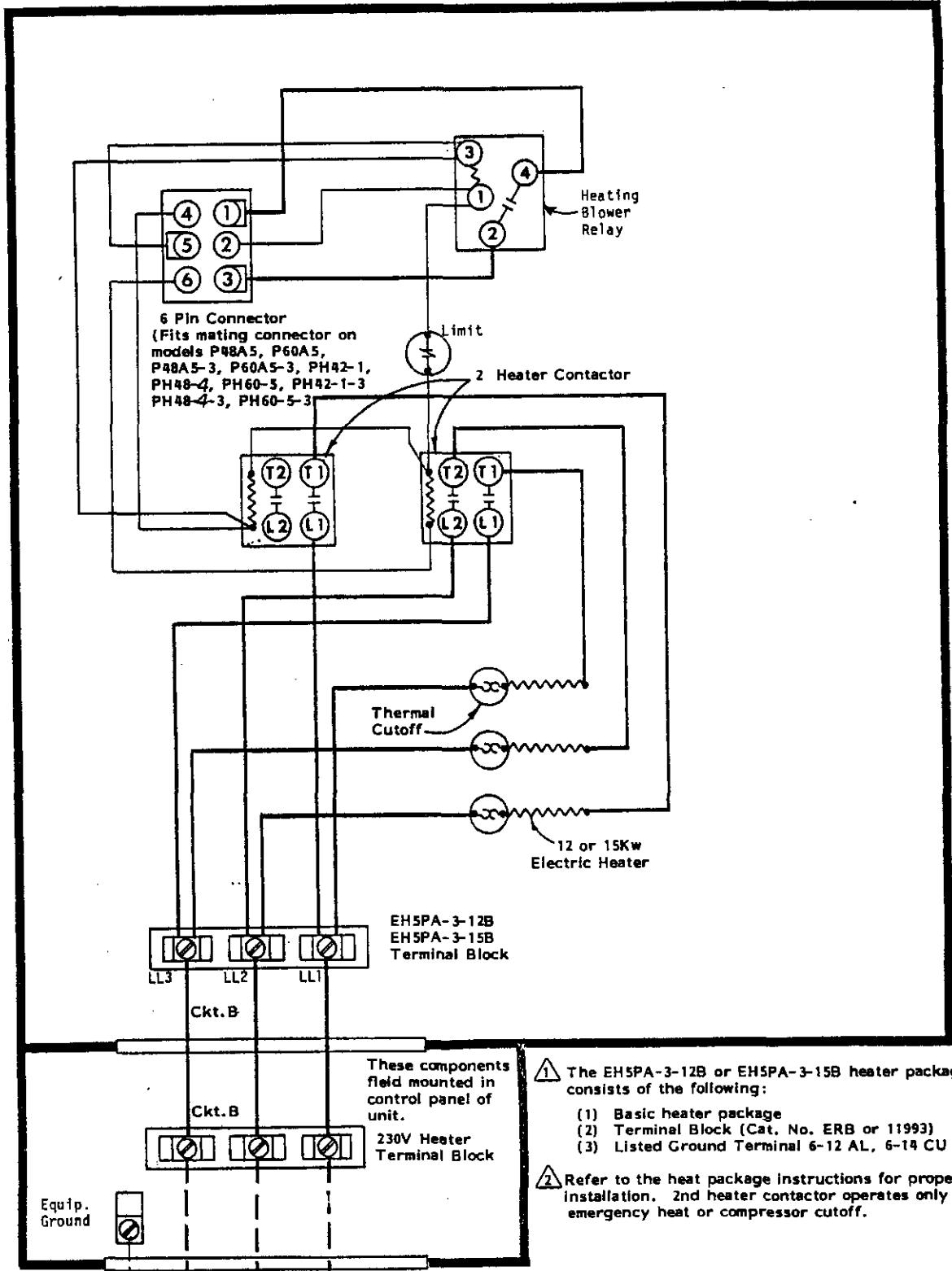
- ⚠ The EH5PA-3-9B Heater Package consists of the following:
- (1) Basic heater package
  - (2) Terminal Block (Cat. No. ER8 or 11993)
  - (3) Listed Ground Terminal 6-12 AL, 6-14 CU

⚠ EH5PA-3-9B HEATER PACKAGE

USE COPPER OR ALUMINUM WIRE

240-60-3  
 240/220-50-3

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



6 Pin Connector  
 (Fits mating connector on  
 models P48A5, P60A5,  
 P48A5-3, P60A5-3, PH42-1,  
 PH48-4, PH60-5, PH42-1-3,  
 PH48-4-3, PH60-5-3)

Heating  
Blower  
Relay

Limit

2 Heater Contactor

Thermal  
Cutoff

12 or 15Kw  
Electric Heater

EH5PA-3-12B  
 EH5PA-3-15B  
 Terminal Block

LL3 LL2 LL1

Ckt. B

These components  
 field mounted in  
 control panel of  
 unit.

Ckt. B  
 230V Heater  
 Terminal Block

Equip.  
Ground

⚠ The EH5PA-3-12B or EH5PA-3-15B heater package consists of the following:

- (1) Basic heater package
- (2) Terminal Block (Cat. No. ERB or 11993)
- (3) Listed Ground Terminal 6-12 AL, 6-14 CU

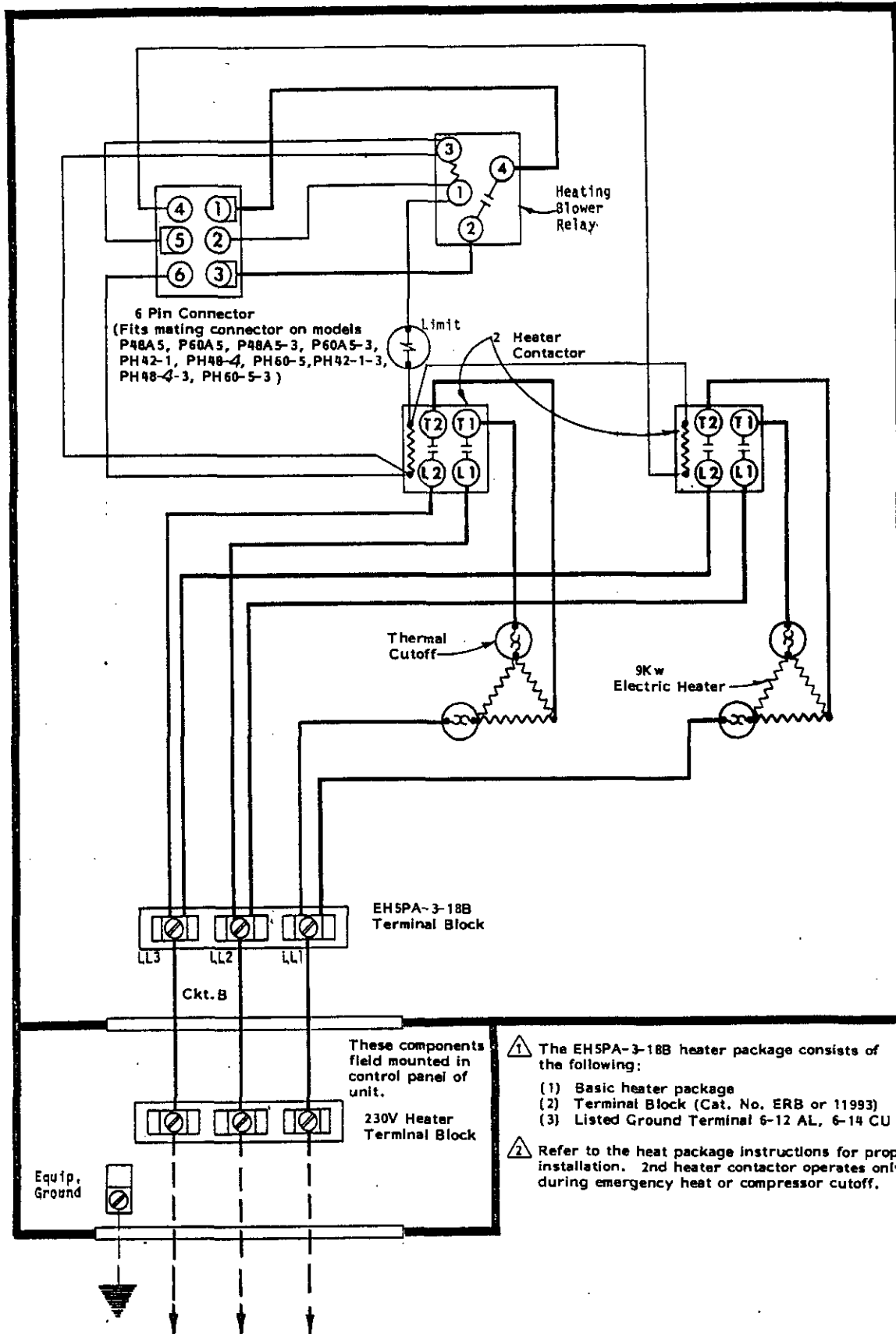
⚠ Refer to the heat package instructions for proper installation. 2nd heater contactor operates only during emergency heat or compressor cutoff.

USE COPPER OR ALUMINUM WIRE

240-60-3  
 240/220-50-3

⚠ EH5PA-3-12B  
 EH5PA-3-15B  
 HEATER PACKAGES

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



- ⚠ The EH5PA-3-18B heater package consists of the following:
- (1) Basic heater package
  - (2) Terminal Block (Cat. No. ERB or 11993)
  - (3) Listed Ground Terminal 6-12 AL, 6-14 CU

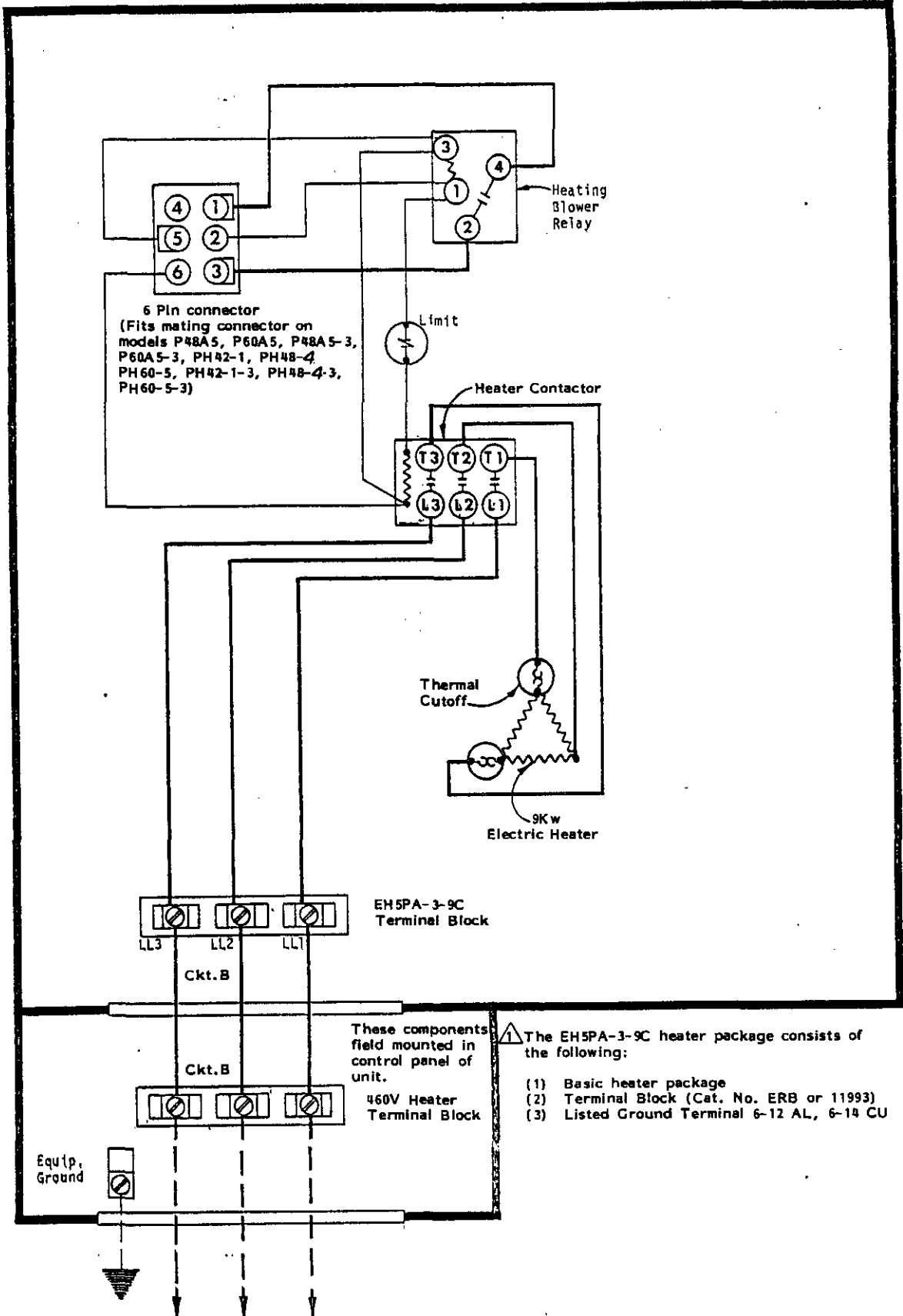
⚠ Refer to the heat package instructions for proper installation. 2nd heater contactor operates only during emergency heat or compressor cutoff.

**USE COPPER OR ALUMINUM WIRE**

240-60-3  
240/220-50-3

⚠ EH5PA-3-18B HEATER PACKAGE

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



6 Pin connector  
 (Fits mating connector on  
 models P48A5, P60A5, P48A5-3,  
 P60A5-3, PH42-1, PH48-4,  
 PH60-5, PH42-1-3, PH48-4-3,  
 PH60-5-3)

Heating  
Blower  
Relay

Limit

Heater Contactor

Thermal  
Cutoff

9Kw  
Electric Heater

EH5PA-3-9C  
Terminal Block

LL3 LL2 LL1

Ckt. B

These components  
field mounted in  
control panel of  
unit.

460V Heater  
Terminal Block

Ckt. B

Equip.  
Ground

⚠ The EH5PA-3-9C heater package consists of the following:

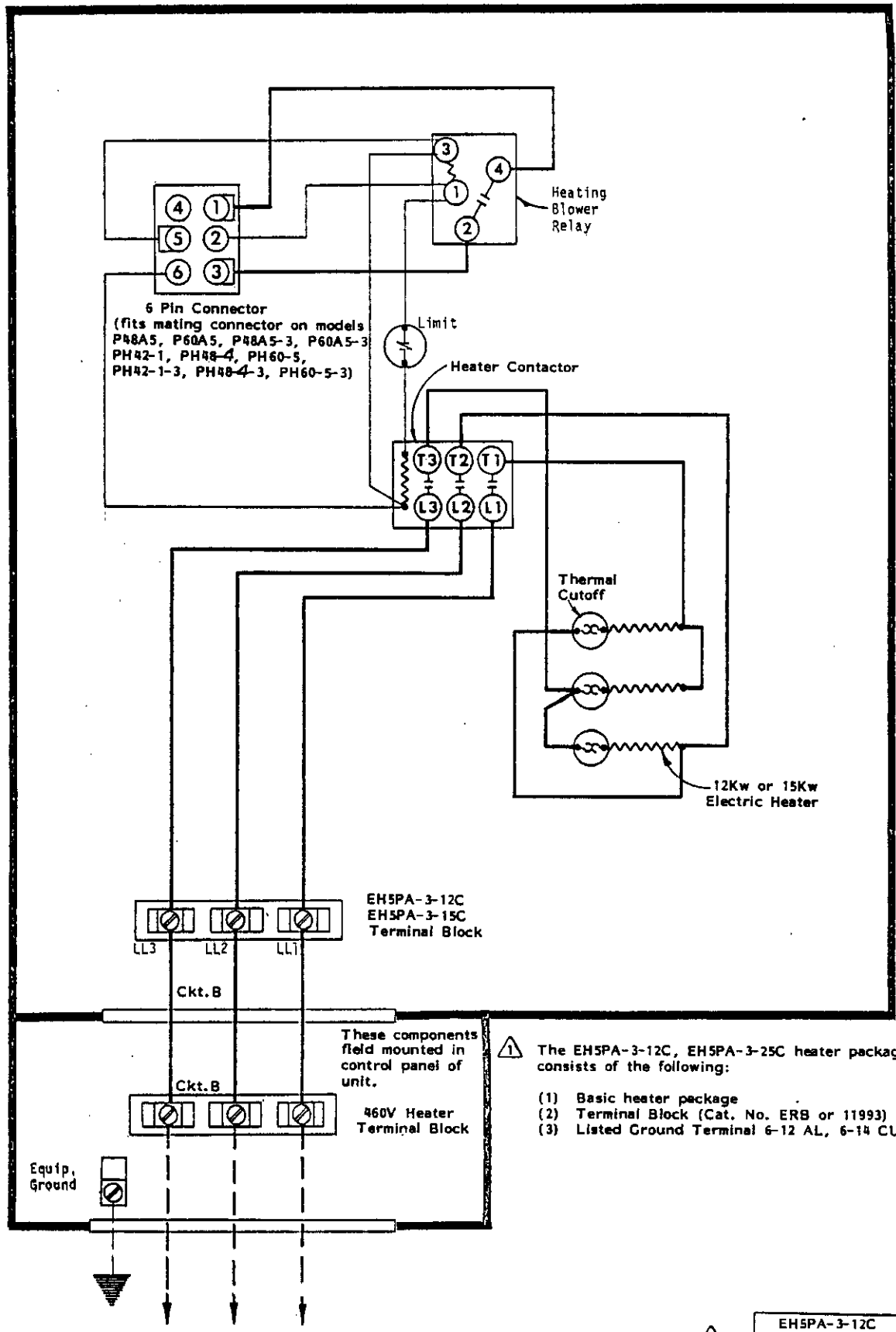
- (1) Basic heater package
- (2) Terminal Block (Cat. No. ERB or 11993)
- (3) Listed Ground Terminal 6-12 AL, 6-14 CU

USE COPPER OR  
ALUMINUM WIRE

480-60-3

⚠ EH5PA-3-9C  
HEATER PACKAGE

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



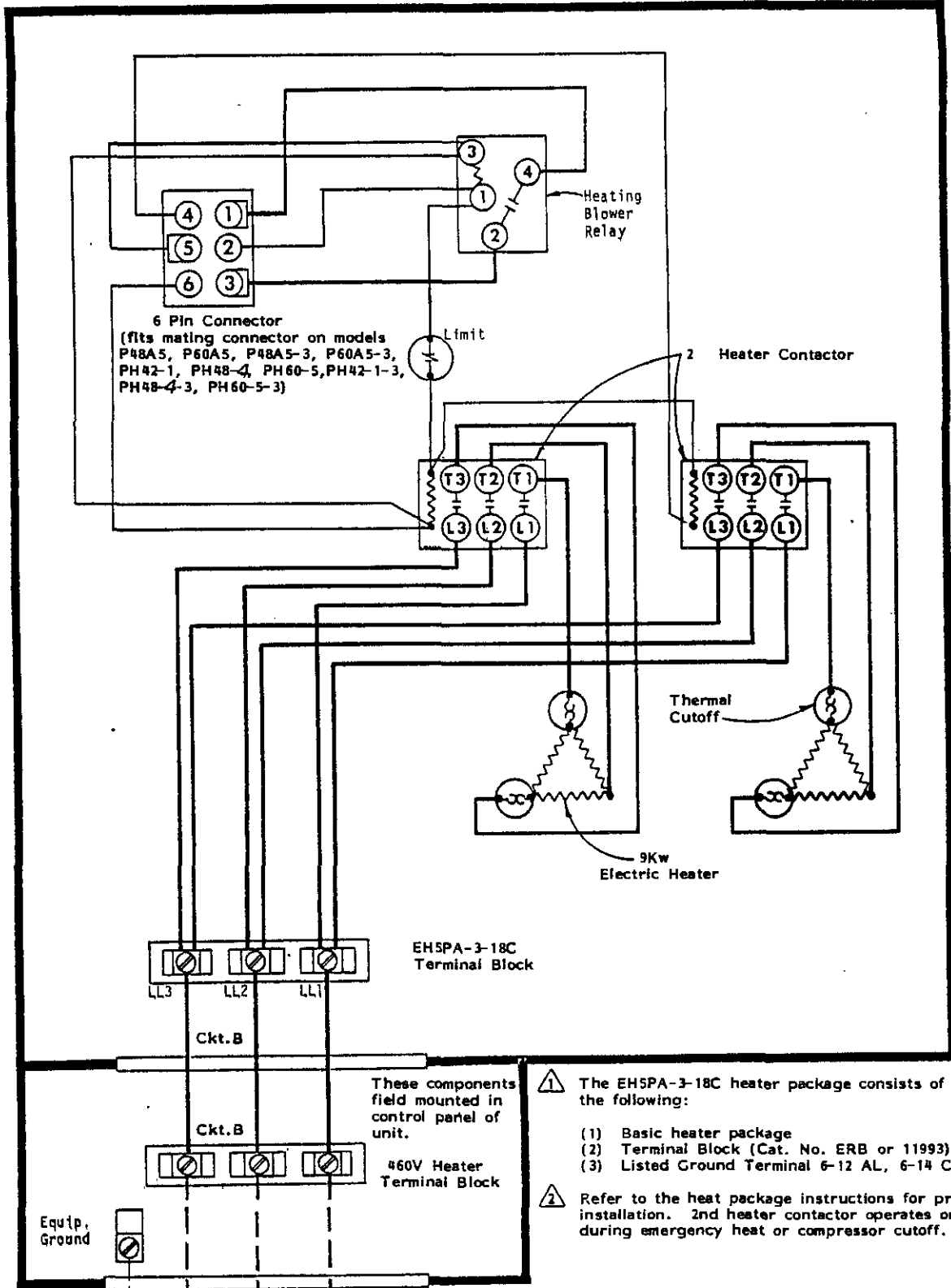
⚠ The EH5PA-3-12C, EH5PA-3-25C heater package consists of the following:

- (1) Basic heater package
- (2) Terminal Block (Cat. No. ERB or 11993)
- (3) Listed Ground Terminal 6-12 AL, 6-14 CU

⚠ EH5PA-3-12C  
EH5PA-3-15C  
HEATER PACKAGE

USE COPPER OR ALUMINUM WIRE

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



- ⚠ The EH5PA-3-18C heater package consists of the following:
- (1) Basic heater package
  - (2) Terminal Block (Cat. No. ERB or 11993)
  - (3) Listed Ground Terminal 6-12 AL, 6-14 CU
- ⚠ Refer to the heat package instructions for proper installation. 2nd heater contactor operates only during emergency heat or compressor cutoff.

USE COPPER OR ALUMINUM WIRE

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

⚠ EH5PA-3-18C HEATER PACKAGE