

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 3.5, 4 and 5 TON
PACKAGED UNITS

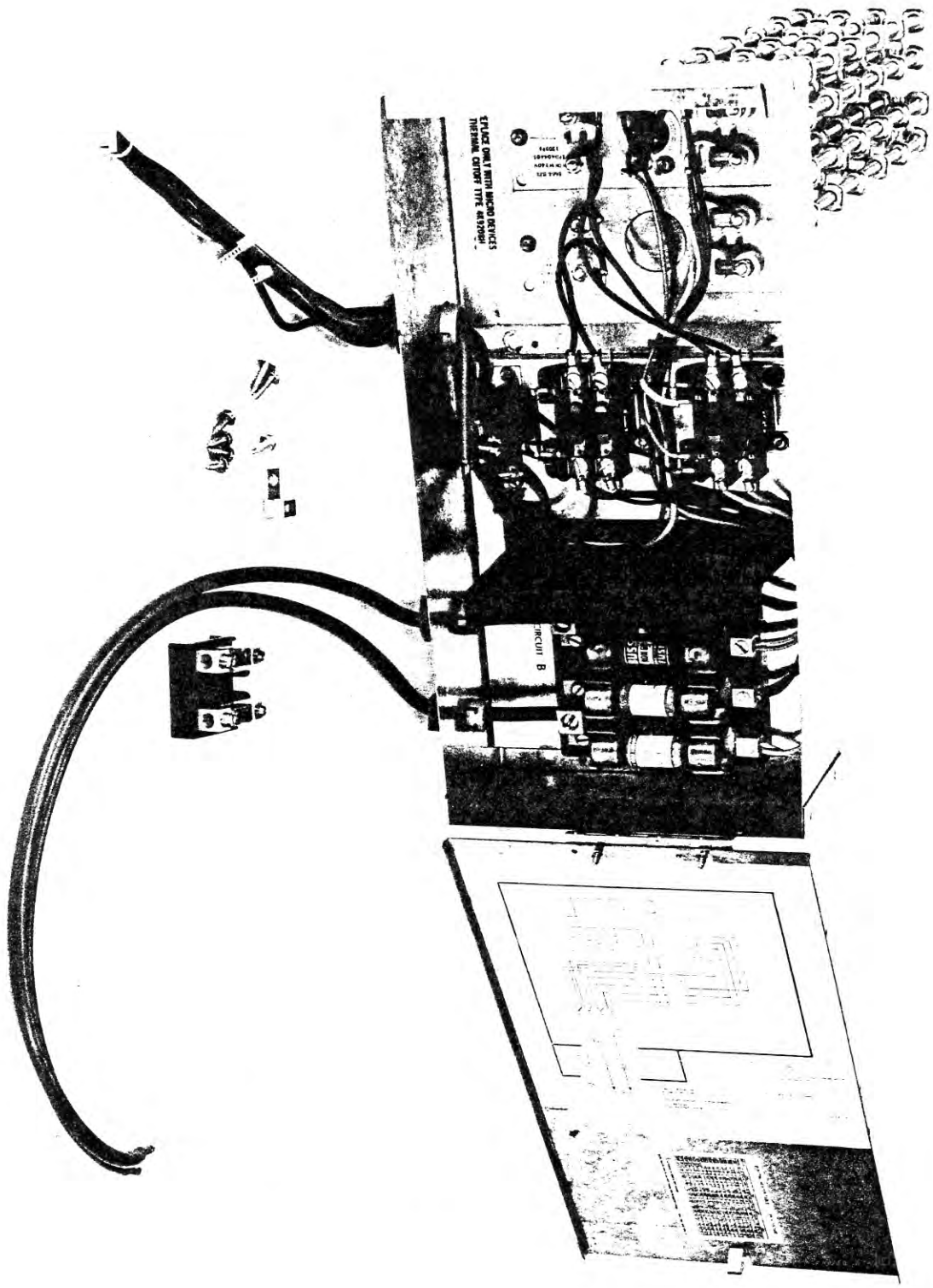


Figure 1

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.

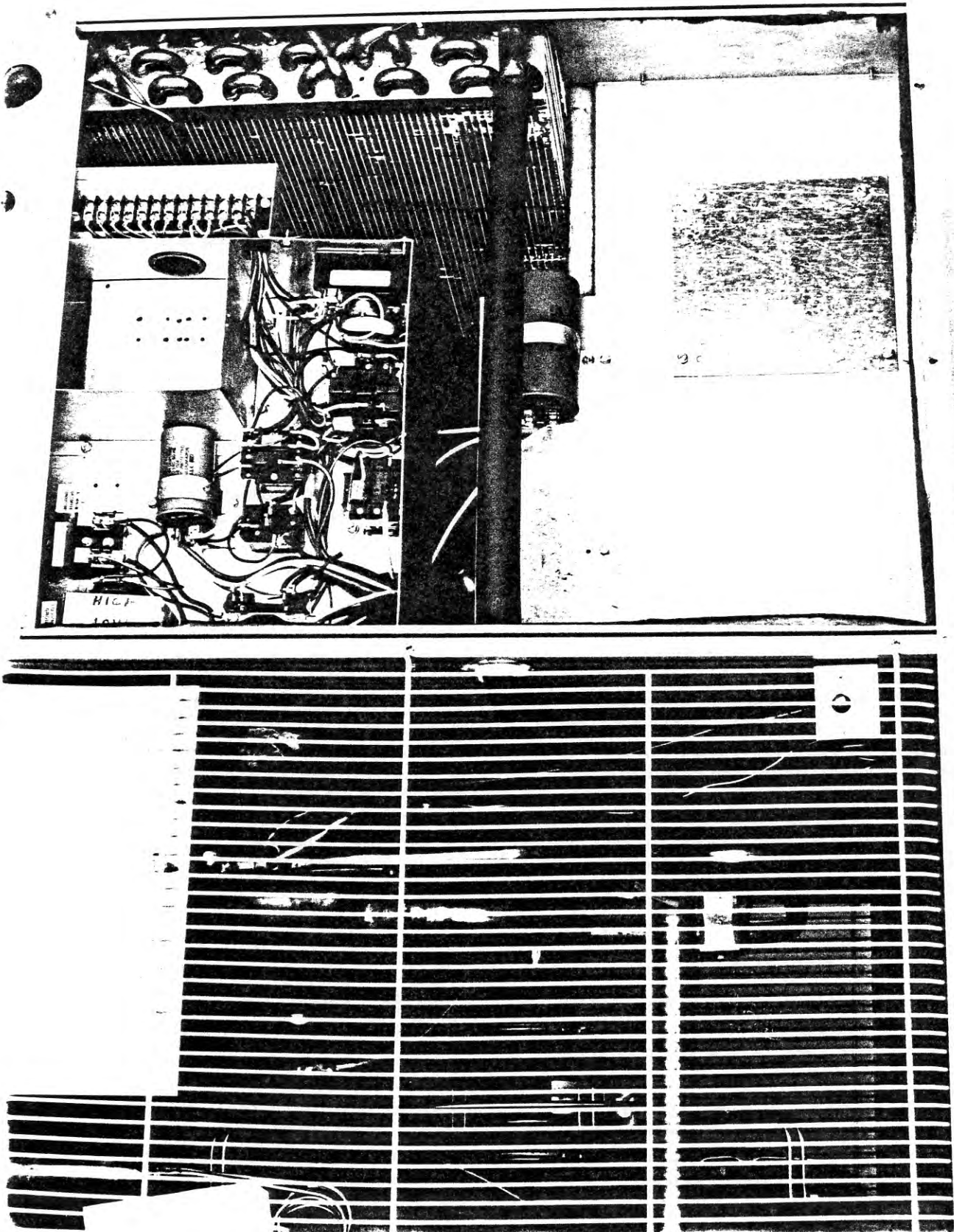


Figure 2

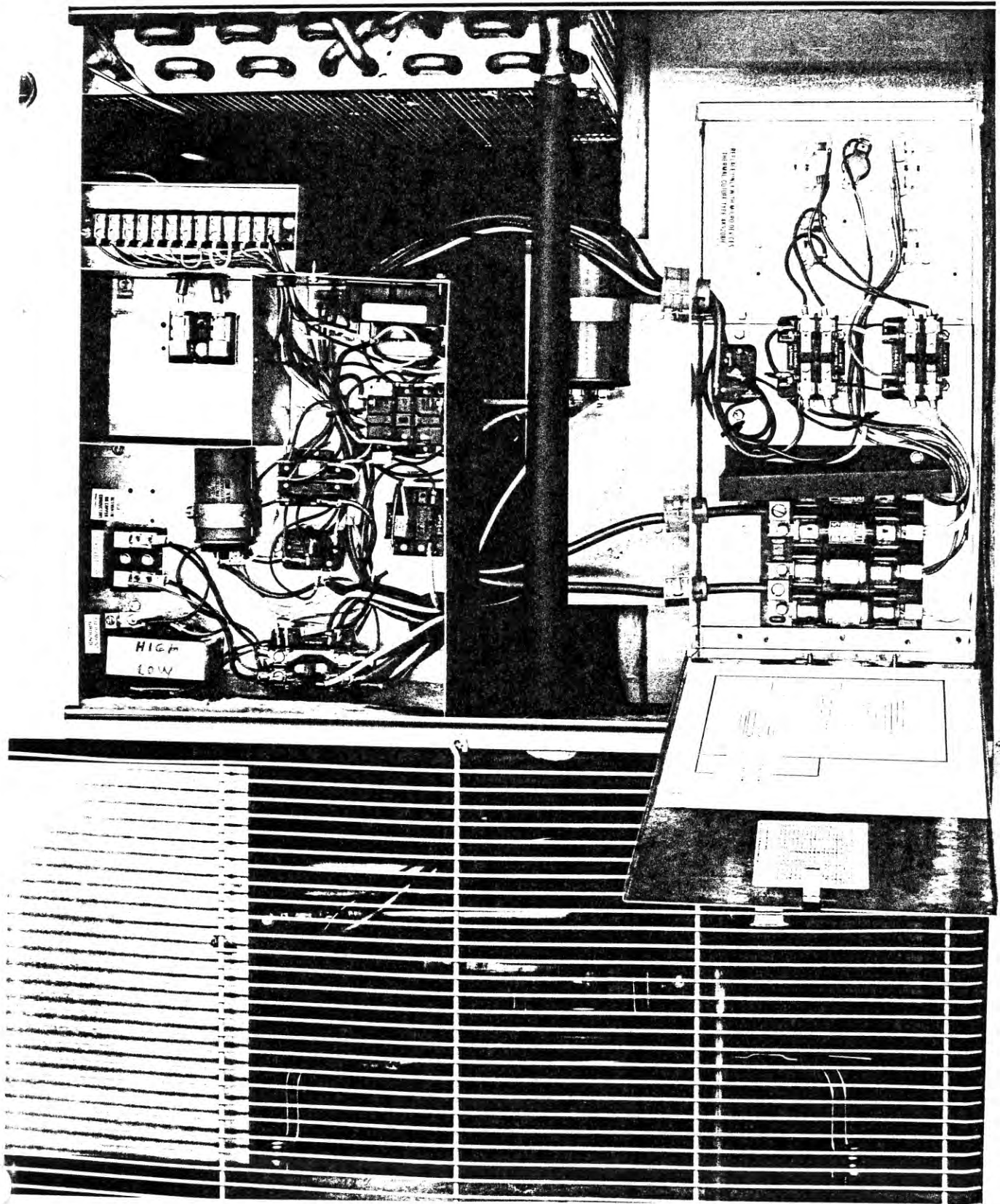


Figure 3

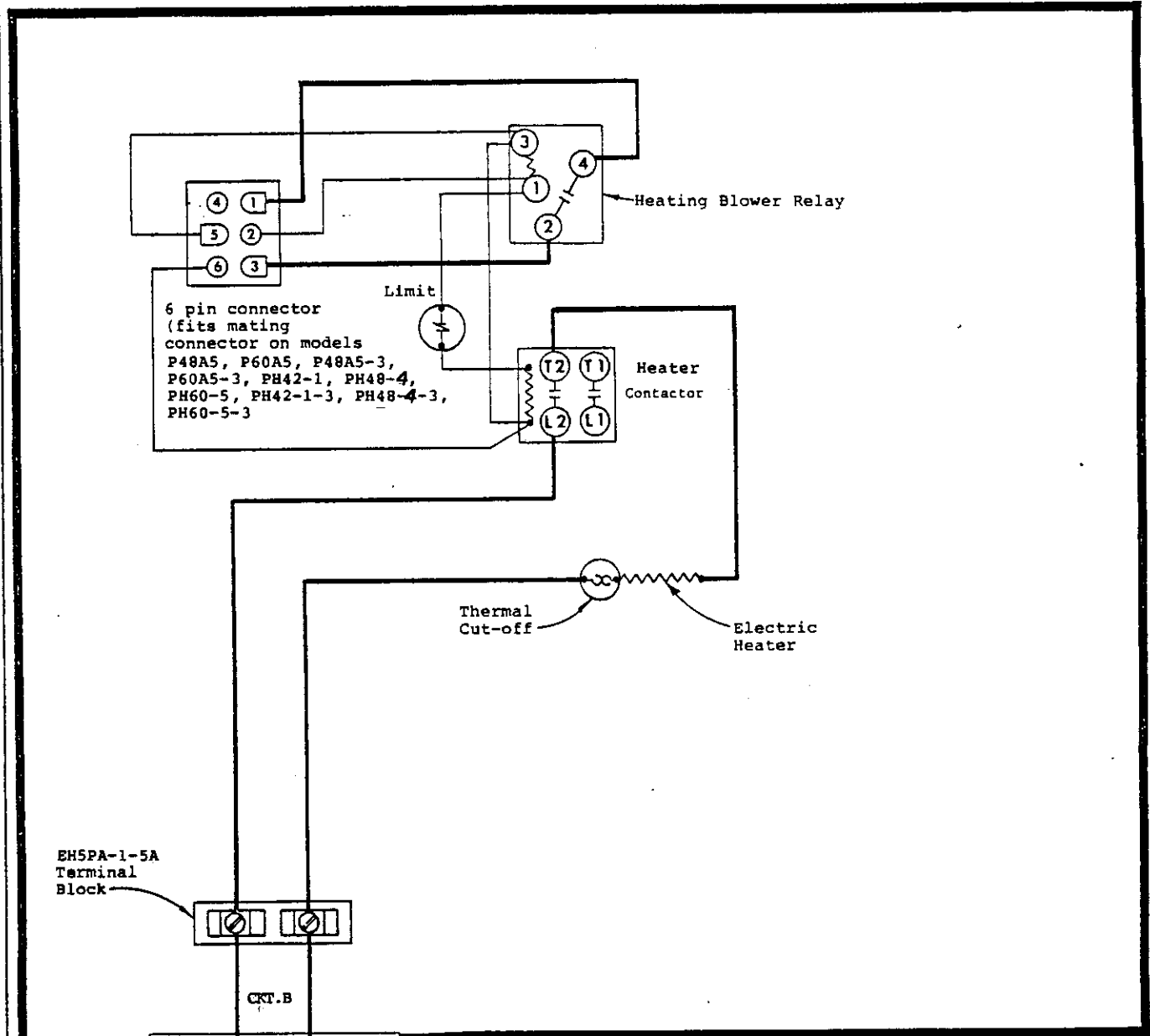
Remove the unit control panel cover and the inner 4-1/4" x 7-3/4" cover. By removing this cover an isolated area is exposed. Install the high voltage terminal block. Use the two (2) #8-16 x 1" screws. Install the grounding lug, using the two (2) #10-24 x 1/2" screws into the prepunched holes supplied.

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)

- ⚠ The EH5PA-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.

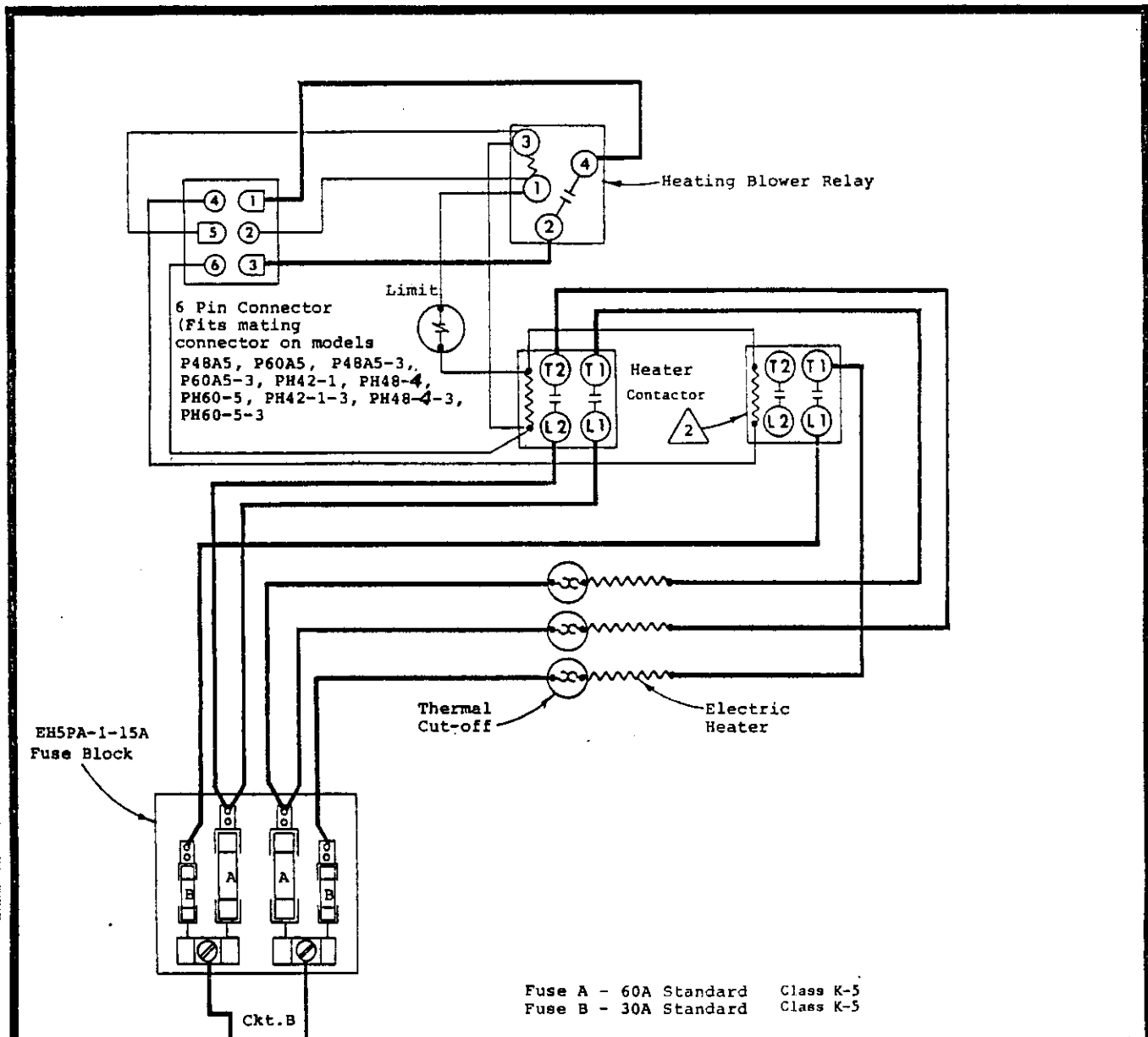
Refer to the heat package instructions for proper installation.

*50HZ application not U.L. Listed

USE COPPER OR ALUMINUM WIRE

⚠ EH5PA-1-5A 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

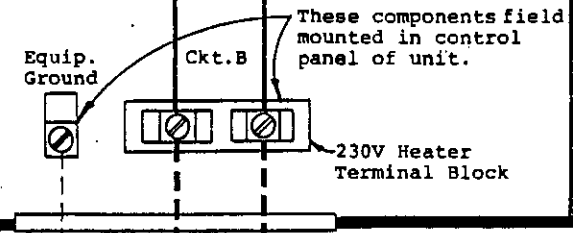
Limit

Heater Contactor

Thermal Cut-off Electric Heater

EH5PA-1-15A Fuse Block

Fuse A - 60A Standard Class K-5
Fuse B - 30A Standard Class K-5



These components field mounted in control panel of unit.

⚠ 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.

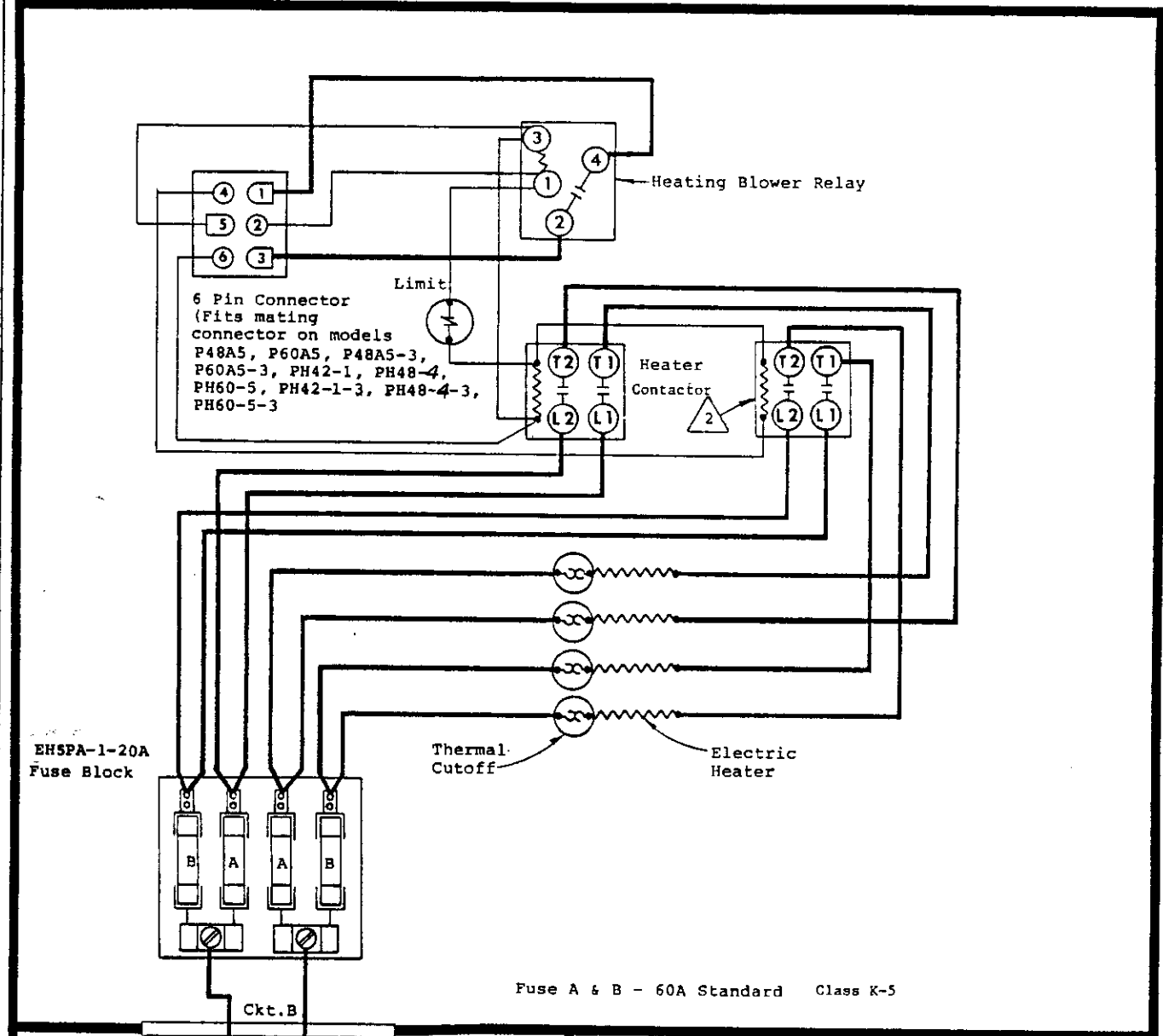
*50HZ application not U.L. Listed

USE COPPER OR ALUMINUM WIRE

⚠ EH5PA-1-15A HEATER PACKAGE

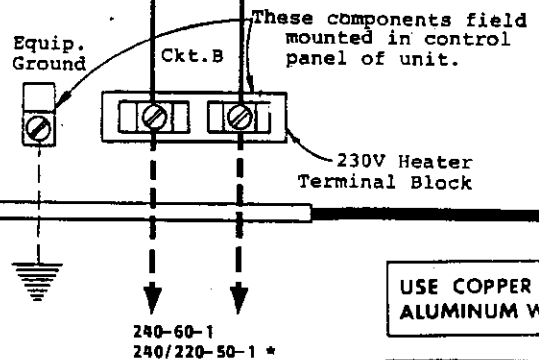
| FACTORY WIRING | FIELD WIRING |
|------------------|--------------|
| Low Voltage ——— | ----- |
| High Voltage ——— | ----- |

4068-130B



EHSPA-1-20A
Fuse Block

Fuse A & B - 60A Standard Class K-5



- ⚠ 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.

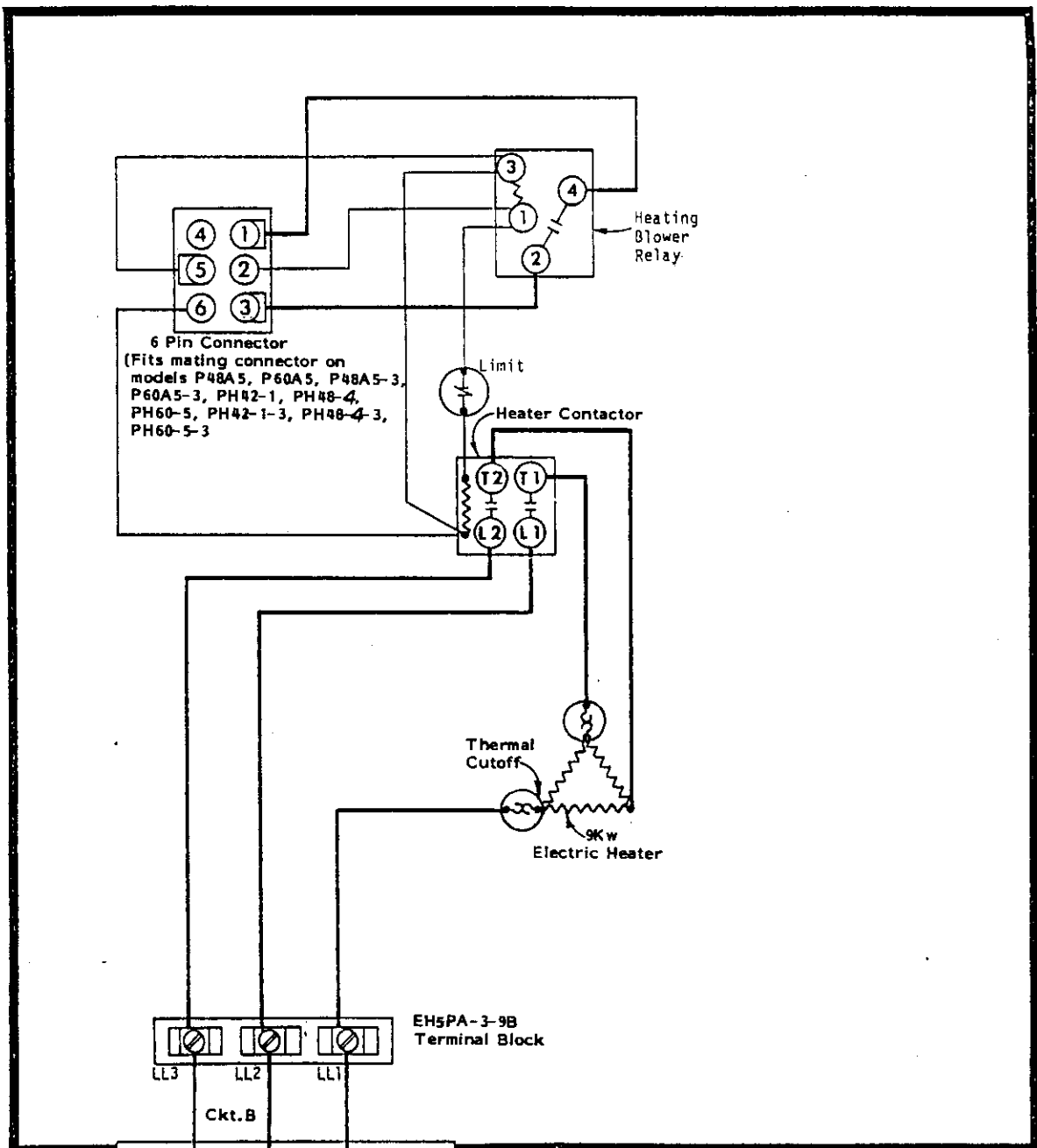
*50HZ application not U.L. Listed

USE COPPER OR ALUMINUM WIRE

⚠ **EH5PA-1-20A HEATER PACKAGE**

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

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



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

Ckt. B

Equip.
Ground

⚠ The EH5PA-3-9B 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

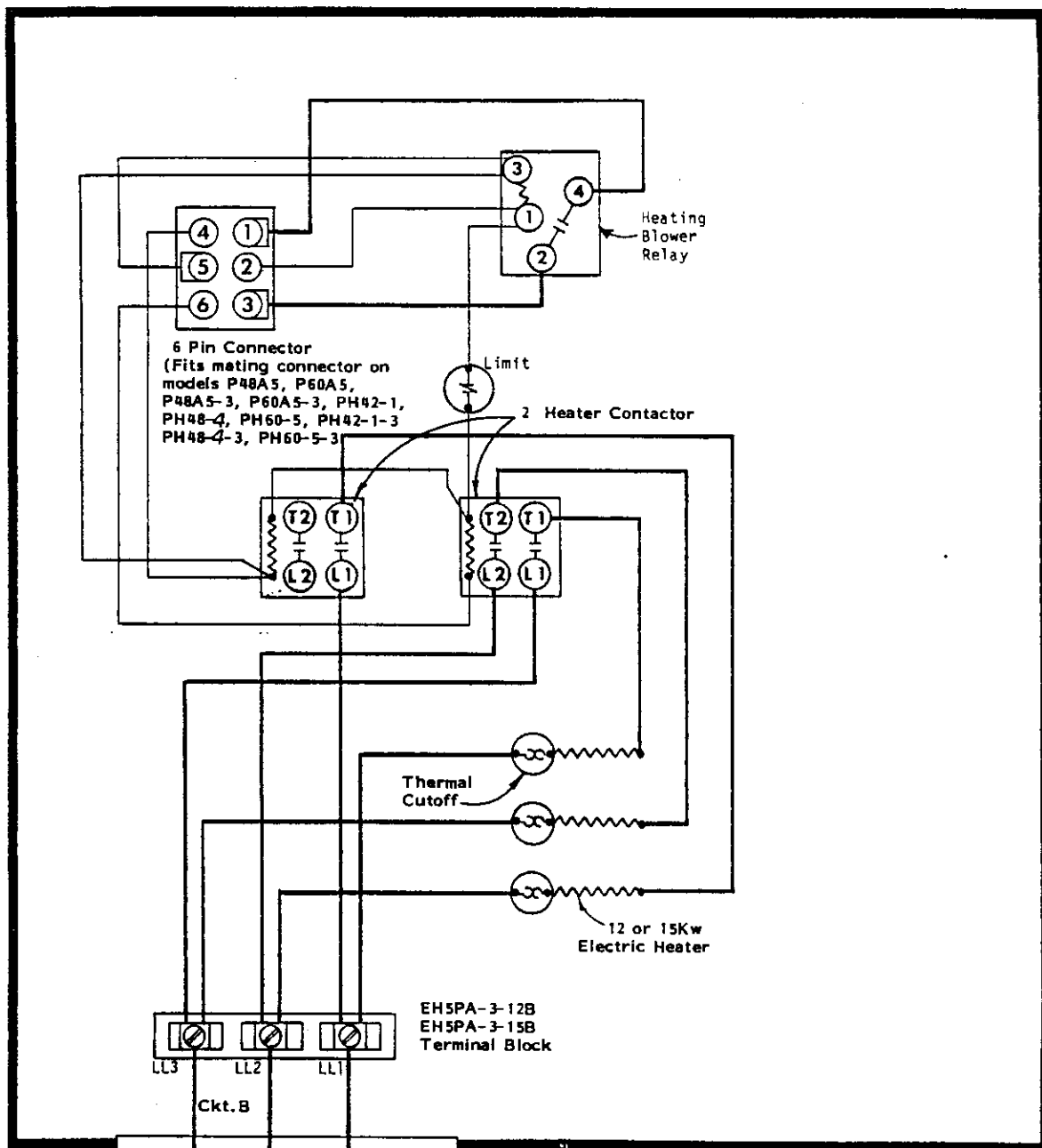
*50HZ application not U.L. Listed

⚠ EH5PA-3-9B
HEATER PACKAGE

USE COPPER OR
ALUMINUM WIRE

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

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

EHSPA-3-12B
 EHSPA-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 EHSPA-3-12B or EHSPA-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.

*50HZ application not U.L. Listed

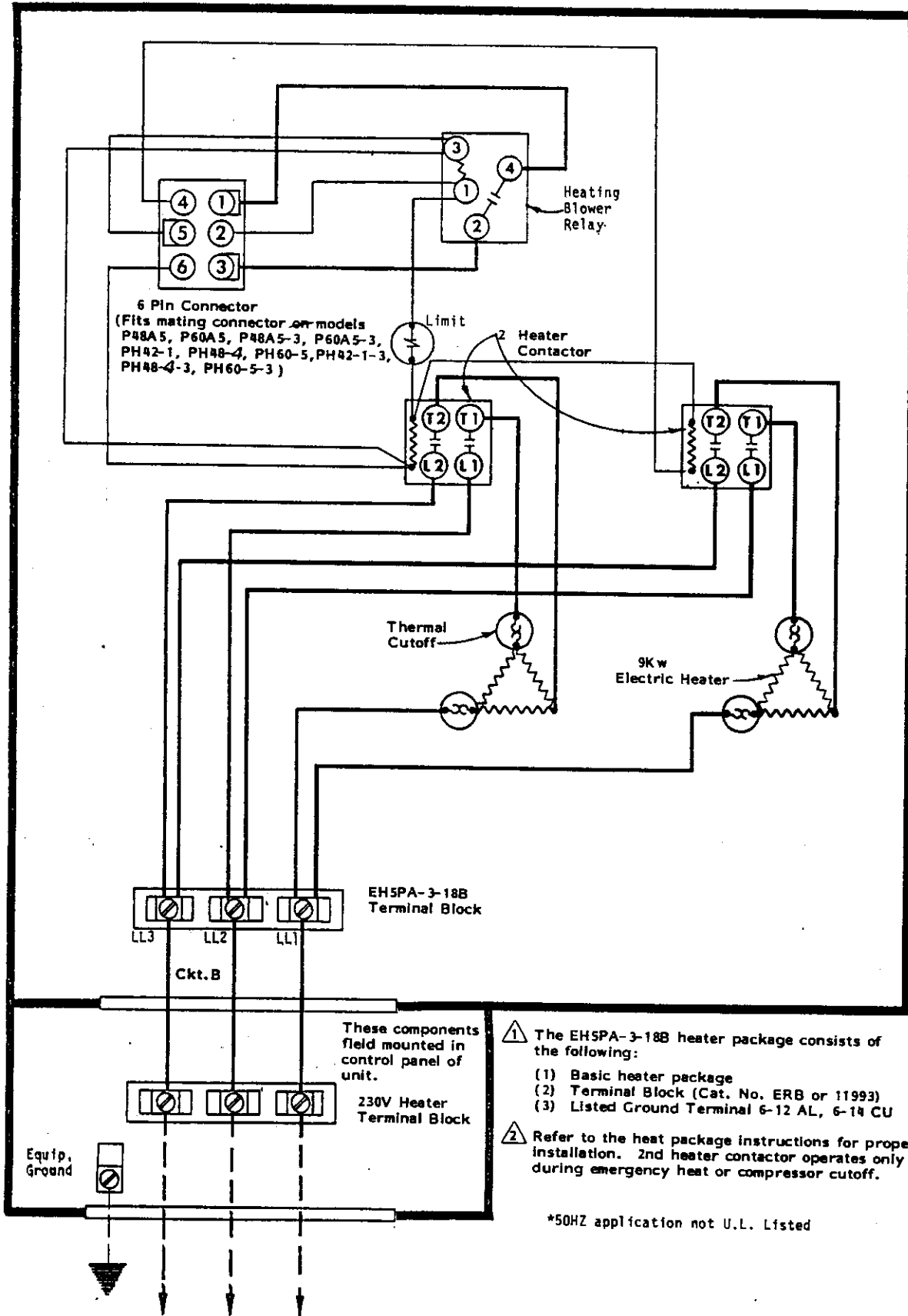
USE COPPER OR
 ALUMINUM WIRE

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



EHSPA-3-12B
 EHSPA-3-15B
 HEATER PACKAGES

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



⚠ The EHSPA-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.

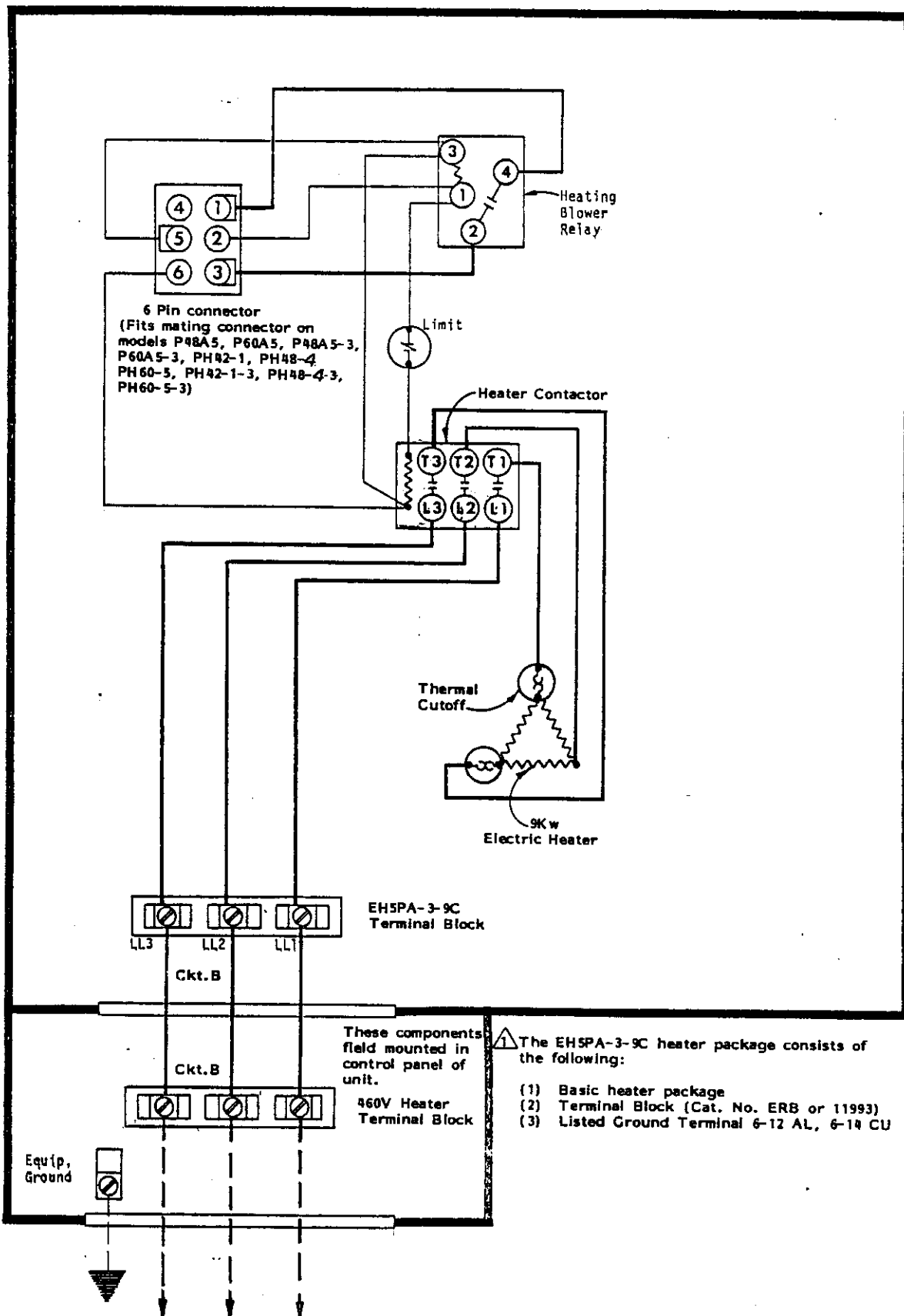
*50HZ application not U.L. Listed

USE COPPER OR ALUMINUM WIRE

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

EHSPA-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

EHSPA-3-9C
 Terminal Block

LL3 LL2 LL1

Ckt. B

These components
 field mounted in
 control panel of
 unit.

460V Heater
 Terminal Block

Equip.
 Ground

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

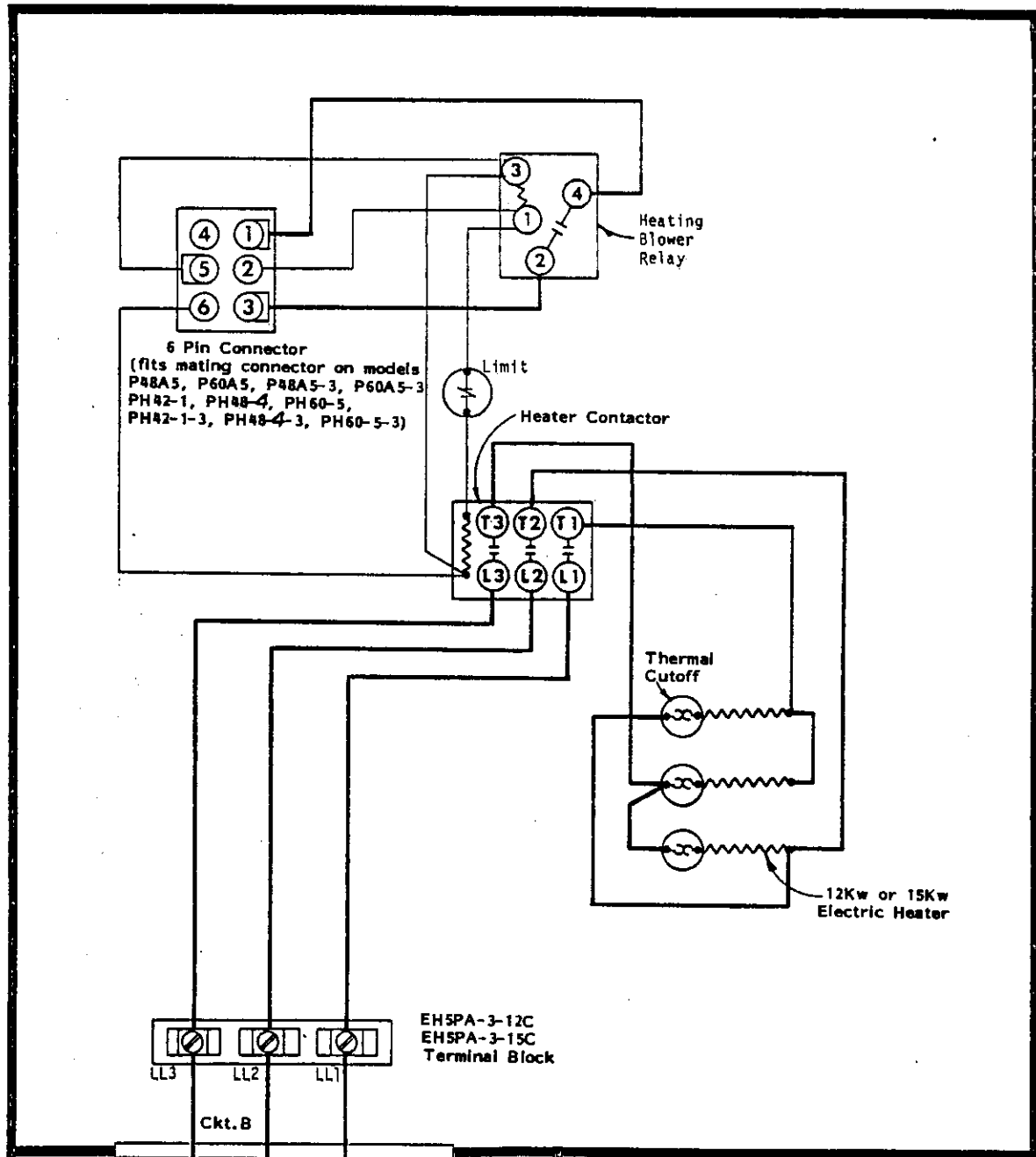
- (1) Basic heater package
- (2) Terminal Block (Cat. No. ERB or 11993)
- (3) Listed Ground Terminal 6-12 AL, 6-14 CU

480-60-3

USE COPPER OR
 ALUMINUM WIRE

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

⚠ EHSPA-3-9C
 HEATER PACKAGE



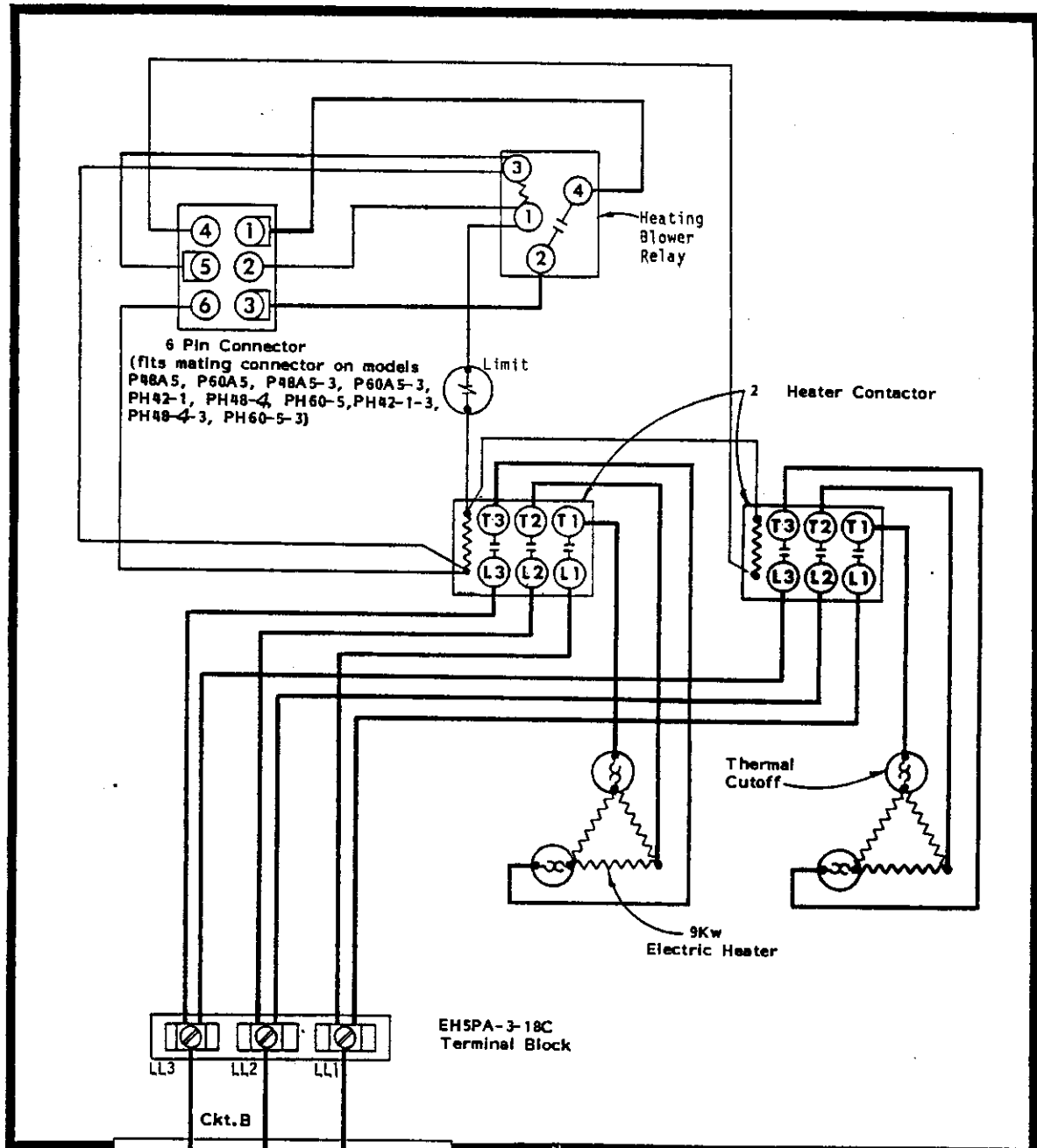
⚠ The EH5PA-3-12C, EH5PA-3-25C heater package consists of the following:

- (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 ———— | ----- |



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)

Limit

Heater Contactor

Thermal Cutoff

9Kw Electric Heater

EH5PA-3-18C Terminal Block

These components field mounted in control panel of unit.

460V Heater Terminal Block

Equip. Ground

⚠ 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

⚠ EH5PA-3-18C HEATER PACKAGE

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

480-60-3