

INSTALLATION INSTRUCTIONS

MODELS

EH5RA-1-5A	EH5RA-3-6B	EH5RA-3-6C
EH5RA-1-10A	EH5RA-3-9B	EH5RA-3-9C
EH5RA-1-15A	EH5RA-3-12B	EH5RA-3-12C
EH5RA-1-20A	EH5RA-3-15B	EH5RA-3-15C
EH5RA-1-25A	EH5RA-3-18B	EH5RA-3-18C
	EH5RA-3-21B	EH5RA-3-21C
	EH5RA-3-24B	EH5RA-3-24C

OPTIONAL ELECTRIC HEAT PACKAGES

FOR USE WITH MODELS

RPMA42, RPMA48, RPMA60
RPMH42, RPMH48, RPMH60

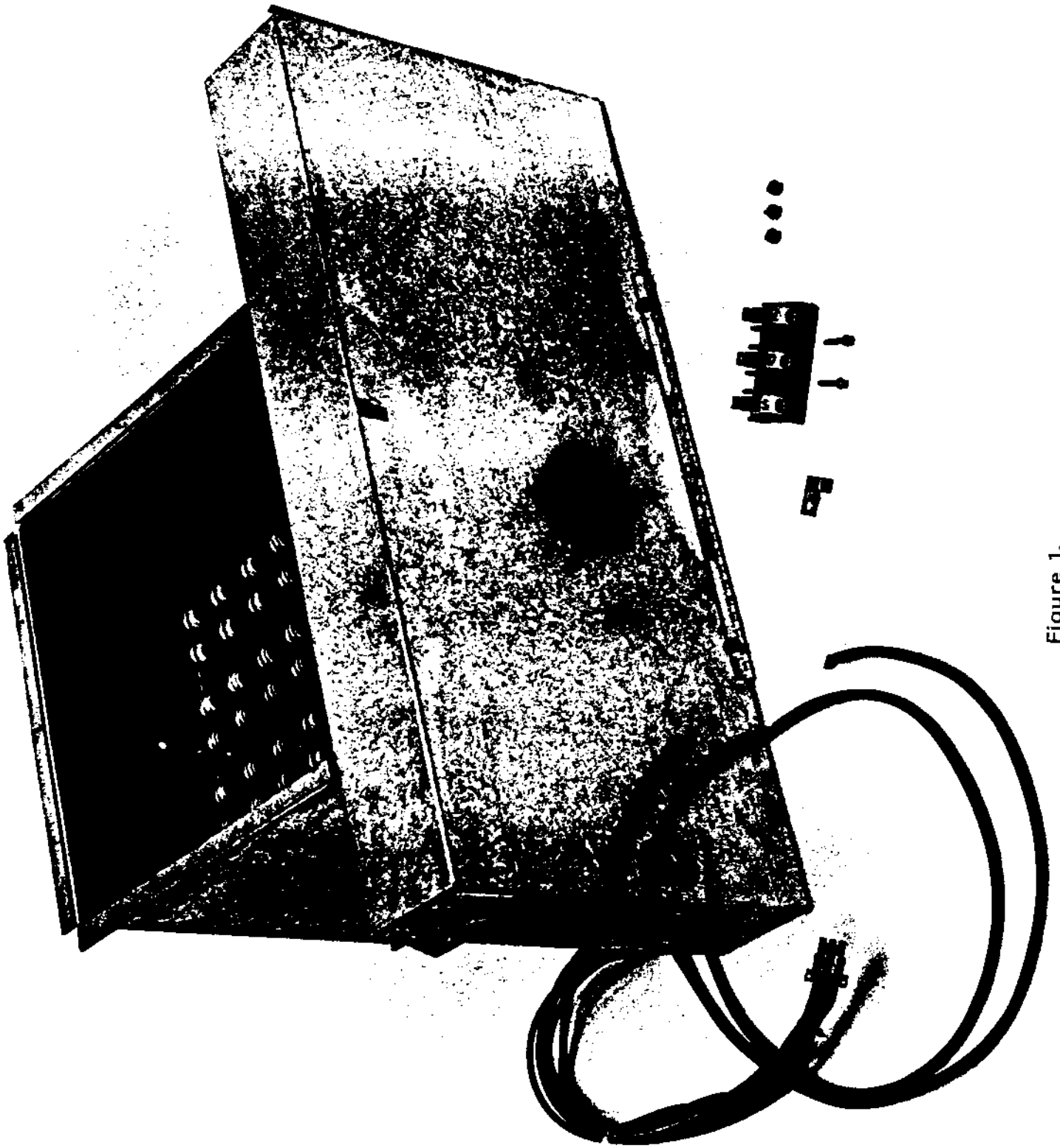


Figure 1.

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, (3) #10-16 x 1/2 screws and (2) #8-18 x 3/4" screws.

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 top 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 models RPMH42 or RPMH48 are internally wired to allow a maximum of 15Kw of electric heat to be energized during heat pump operation. Any additional installed Kw over 15Kw will operate only during the emergency heat mode.

A maximum of 25Kw may operate in conjunction with model RPMH60 during heat pump operation.

A maximum of 25Kw may operate in the heating mode for models RPMA42, RPMA48 and RPMA60.

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 6½" x 6½" 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 44" long wires from the heater package through the provided hole in the insulated partition to the newly installed 230 volt terminal block.

Inspect all wiring for damage and secure any loose wiring. 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.

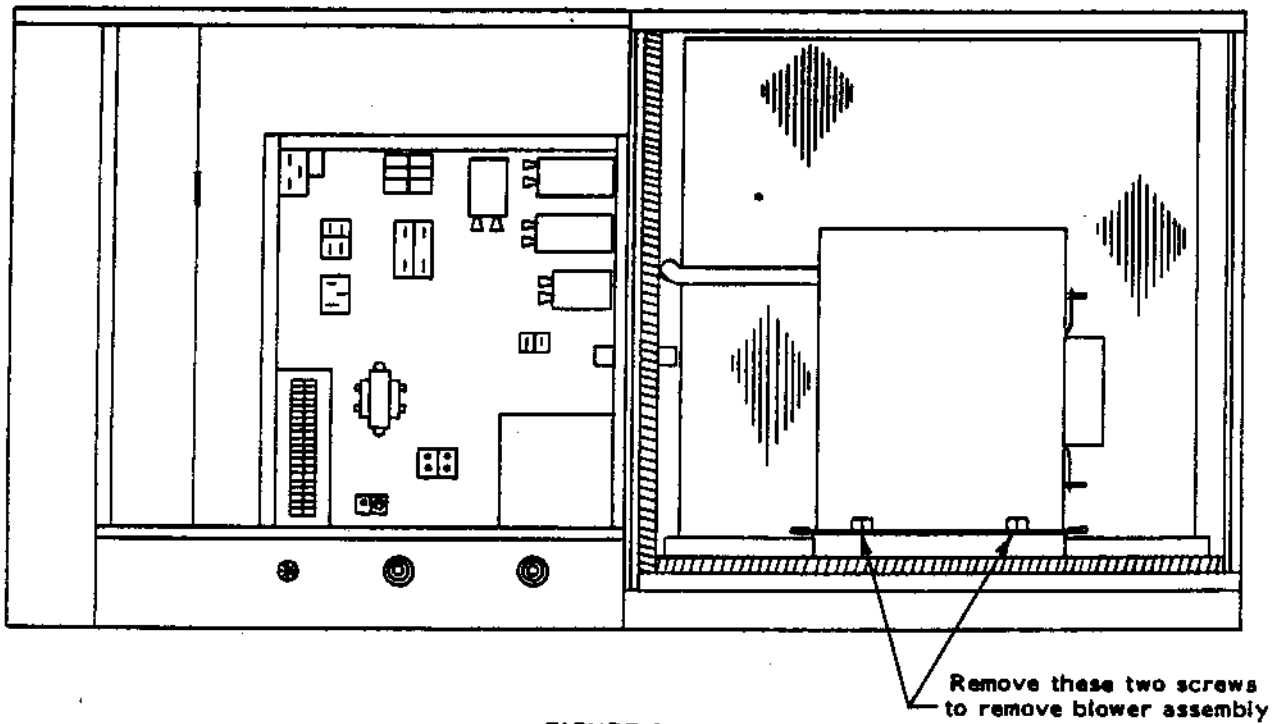
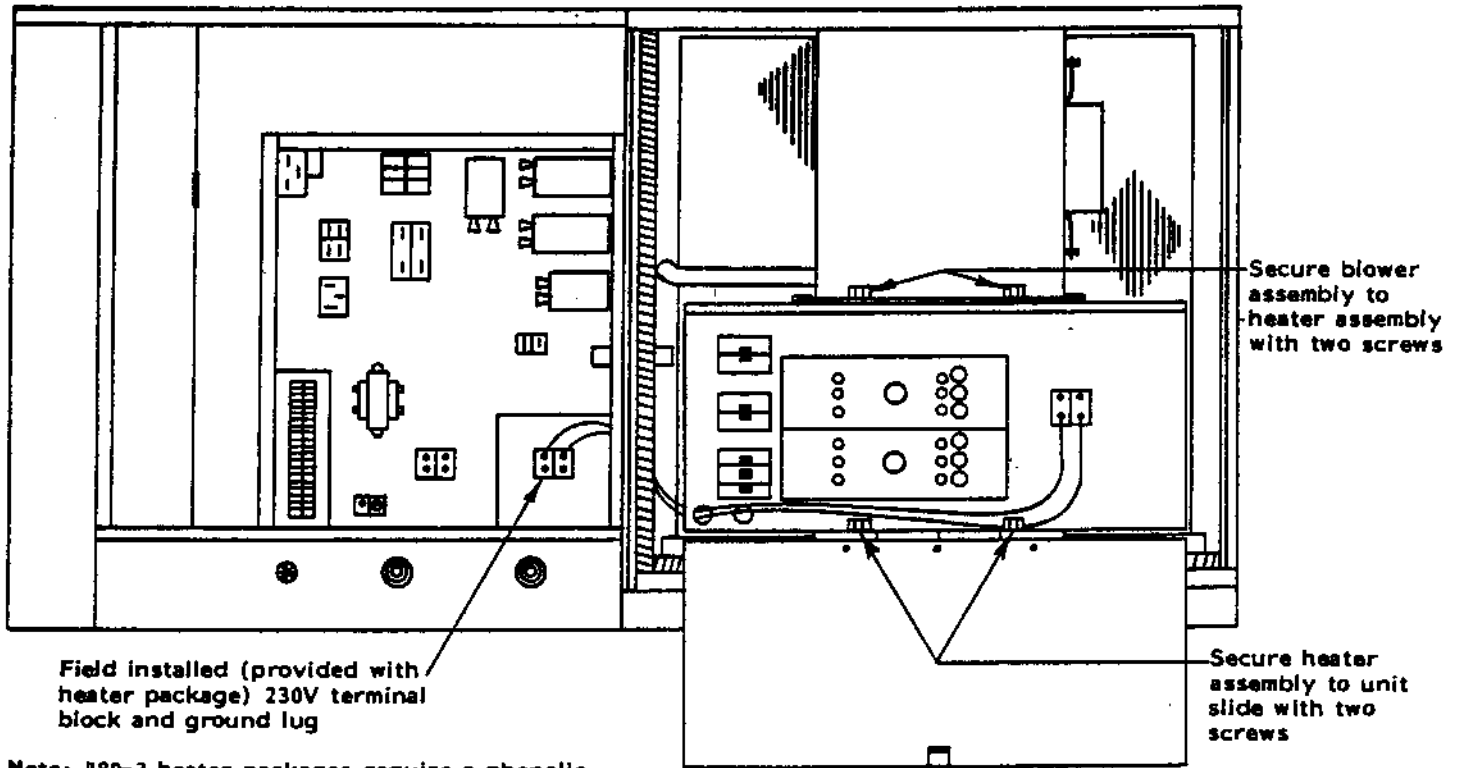
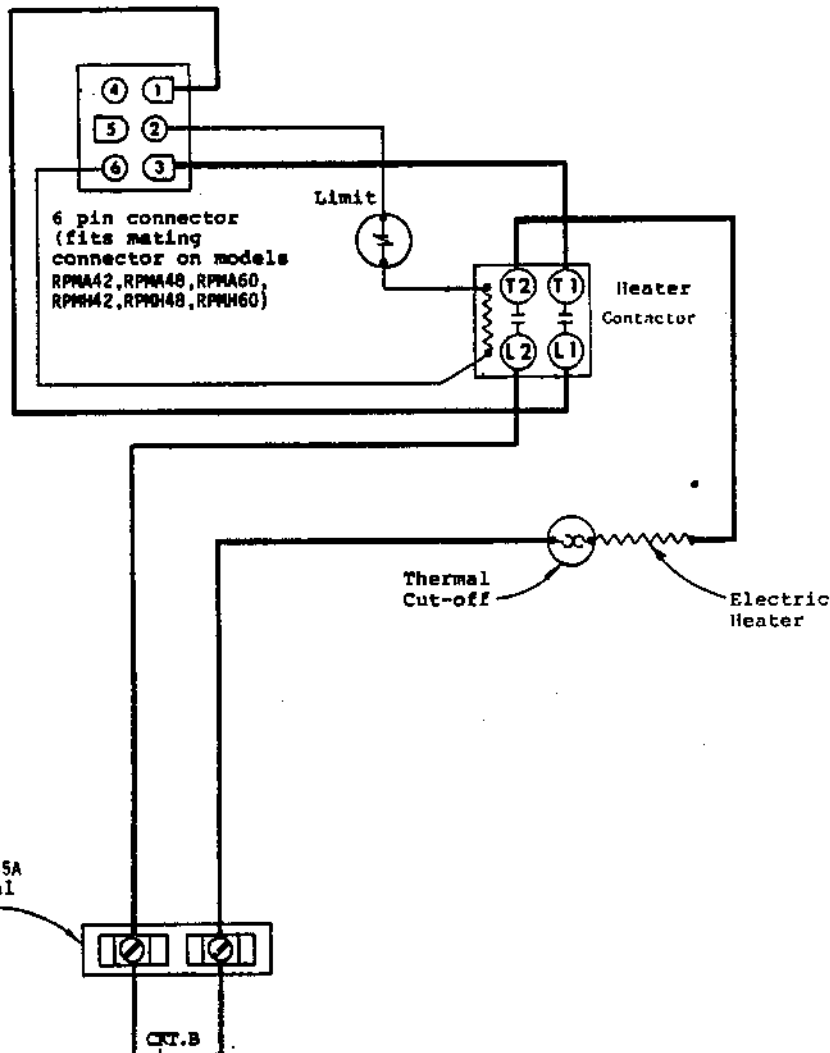


FIGURE 2.



Note: 480-3 heater packages require a phenolic insulator (provided with package) be installed between the terminal block and control panel.

FIGURE 3.



EH5RA-1-5A
Terminal
Block



CRT. B

Equip.
Ground



CRT. B

These components field
mounted in control
Panel of unit.



230V Heater
Terminal Block



240/208-60-1

USE COPPER OR
ALUMINUM WIRE

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

⚠ The EH5RA-1-5A heater package consists of the following:

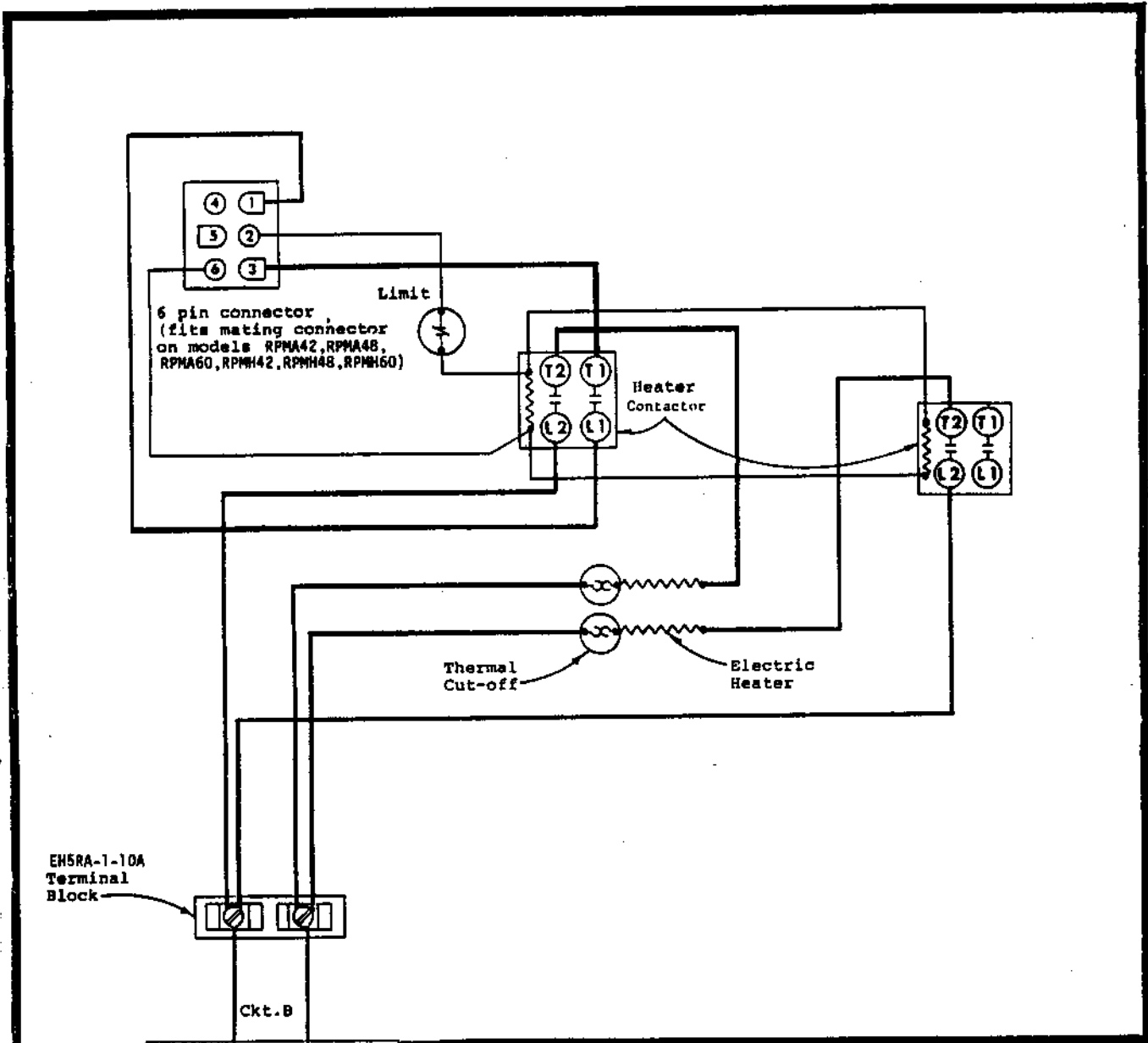
- (1) Basic heater package.
- (1) Terminal Block (Cat. No. EB or 11993).
- (1) Listed Ground Terminal 6-12 AL, 6-14 CU.

Refer to the heat package instructions for proper installation.



EH5RA-1-5A
HEATER PACKAGE

4077-110



EHSRA-1-10A
Terminal
Block

Ckt. B

Equip.
Ground

Ckt. B

These components field
mounted in control
panel of unit.

230V Heater
Terminal Block

240/208-60-1

⚠ The EHSRA-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.

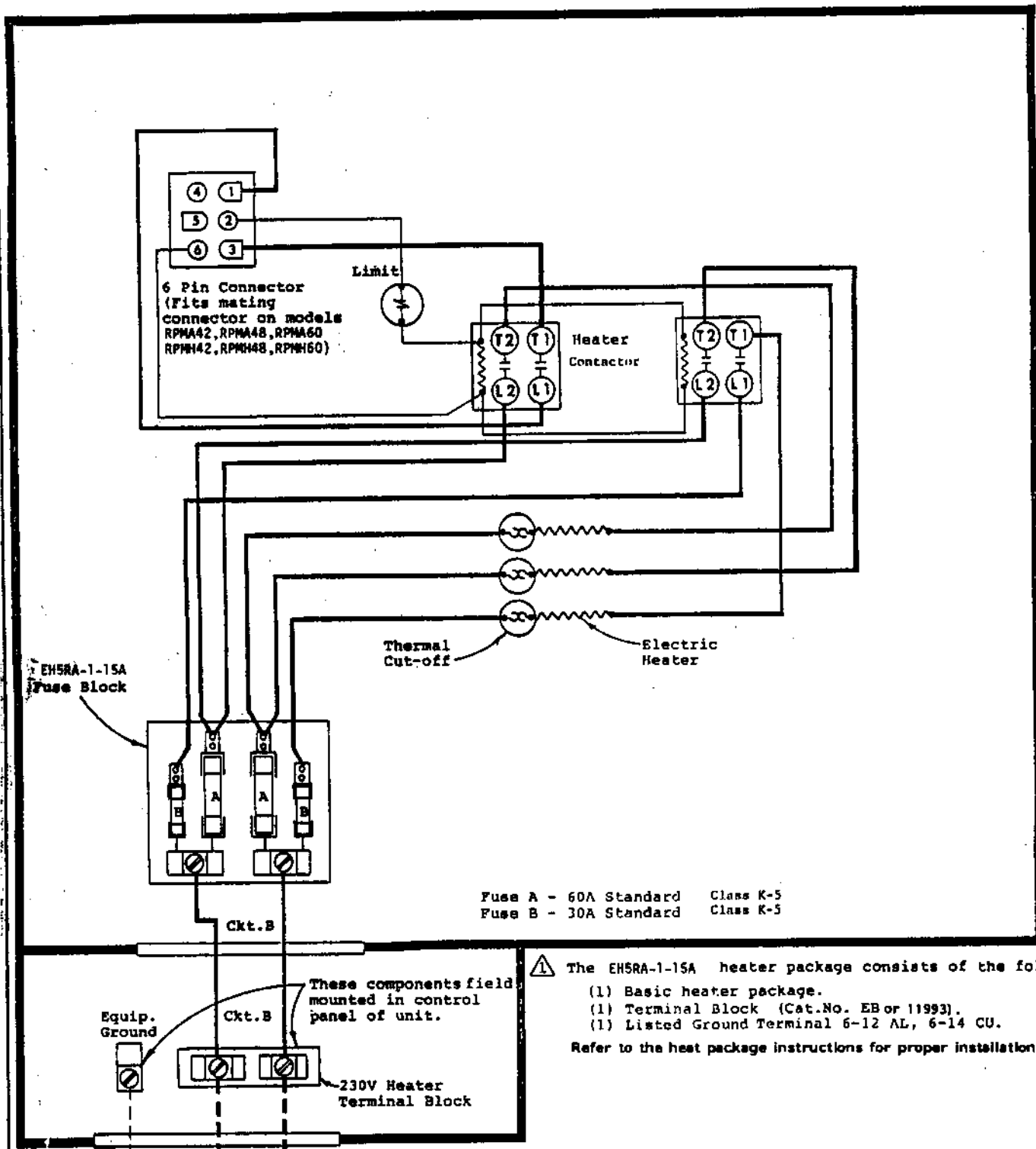
Refer to the heat package instructions for proper
installation.

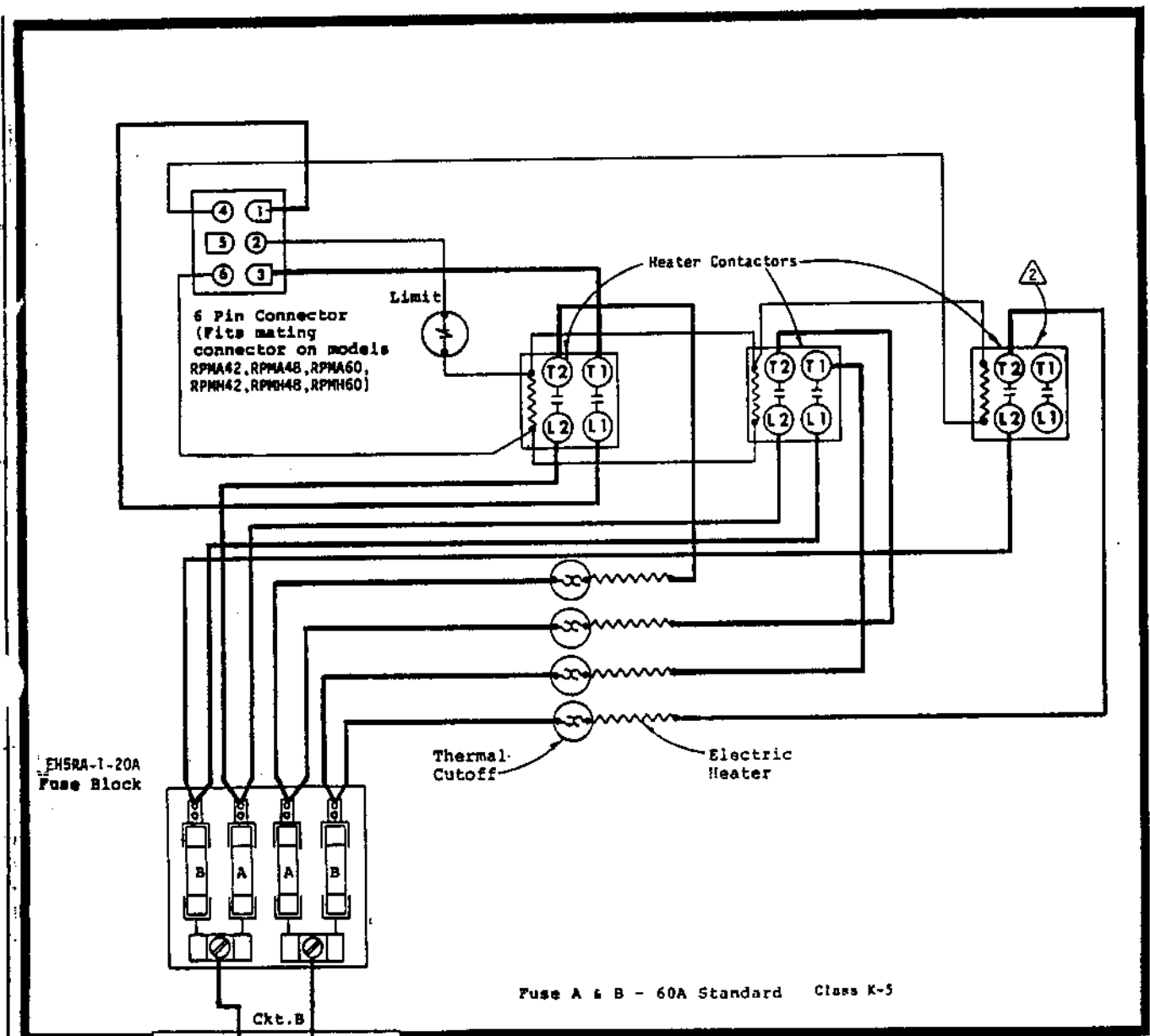
⚠ EHSRA-1-10A
HEATER PACKAGE

USE COPPER OR
ALUMINUM WIRE

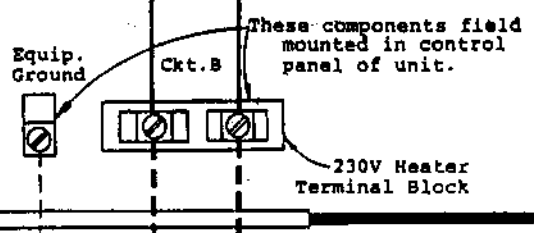
	FACTORY WIRING	FIELD WIRING
Low Voltage	————	-----
High Voltage	————	-----

4077-120





- ⚠ The EHSRA-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.
- ⚠ 3rd heat contactor operates only during emergency heat or compressor cut-off.

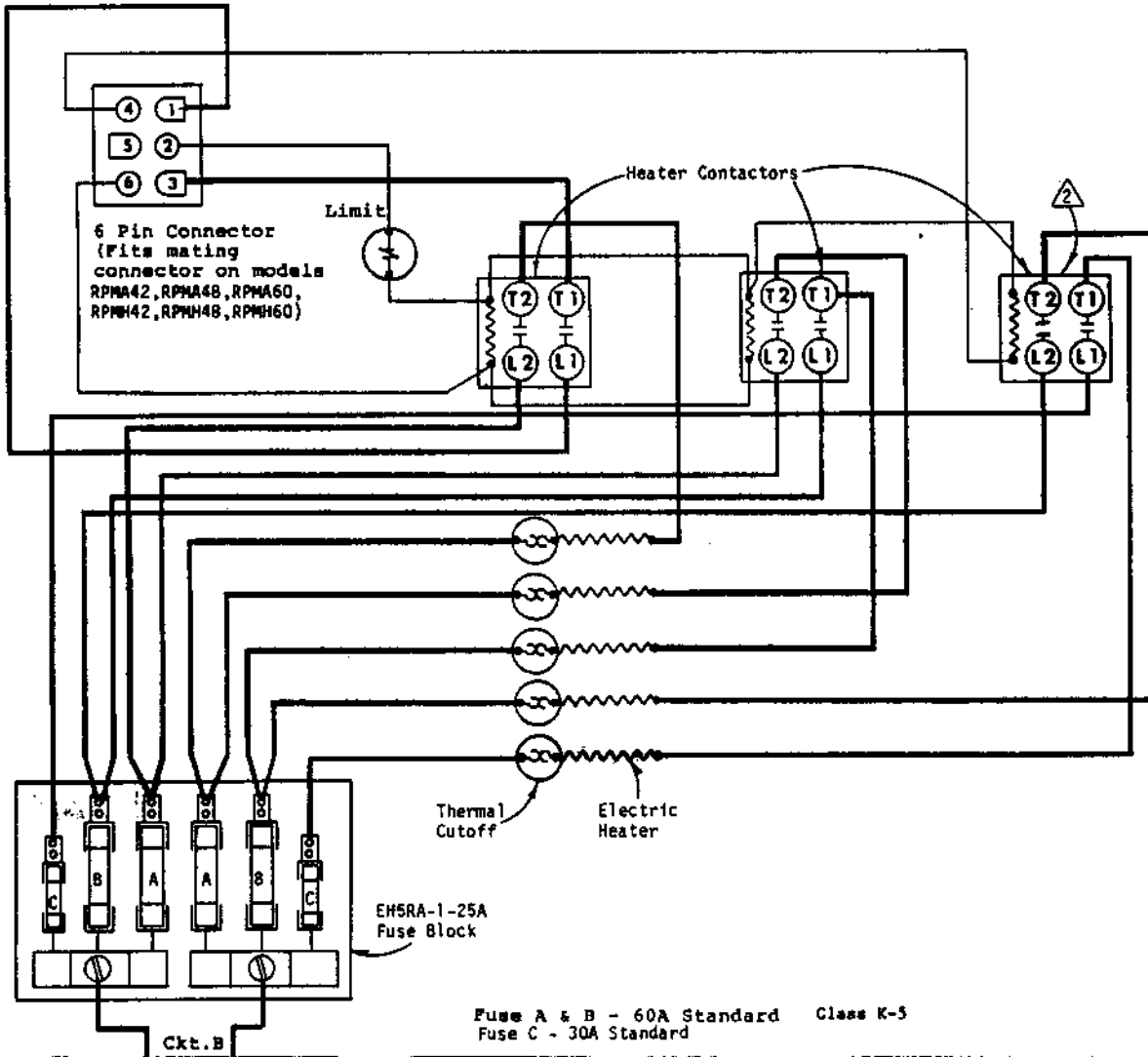


⚠ EHSRA-1-20A HEATER PACKAGE

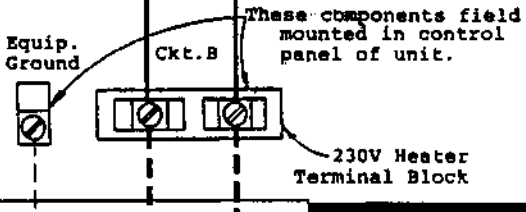
USE COPPER OR ALUMINUM WIRE

For supply connections use No. 2 AWG (240V) or No. 3 AWG (208V) or larger wires suitable for at least 75°C (167°F).

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



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



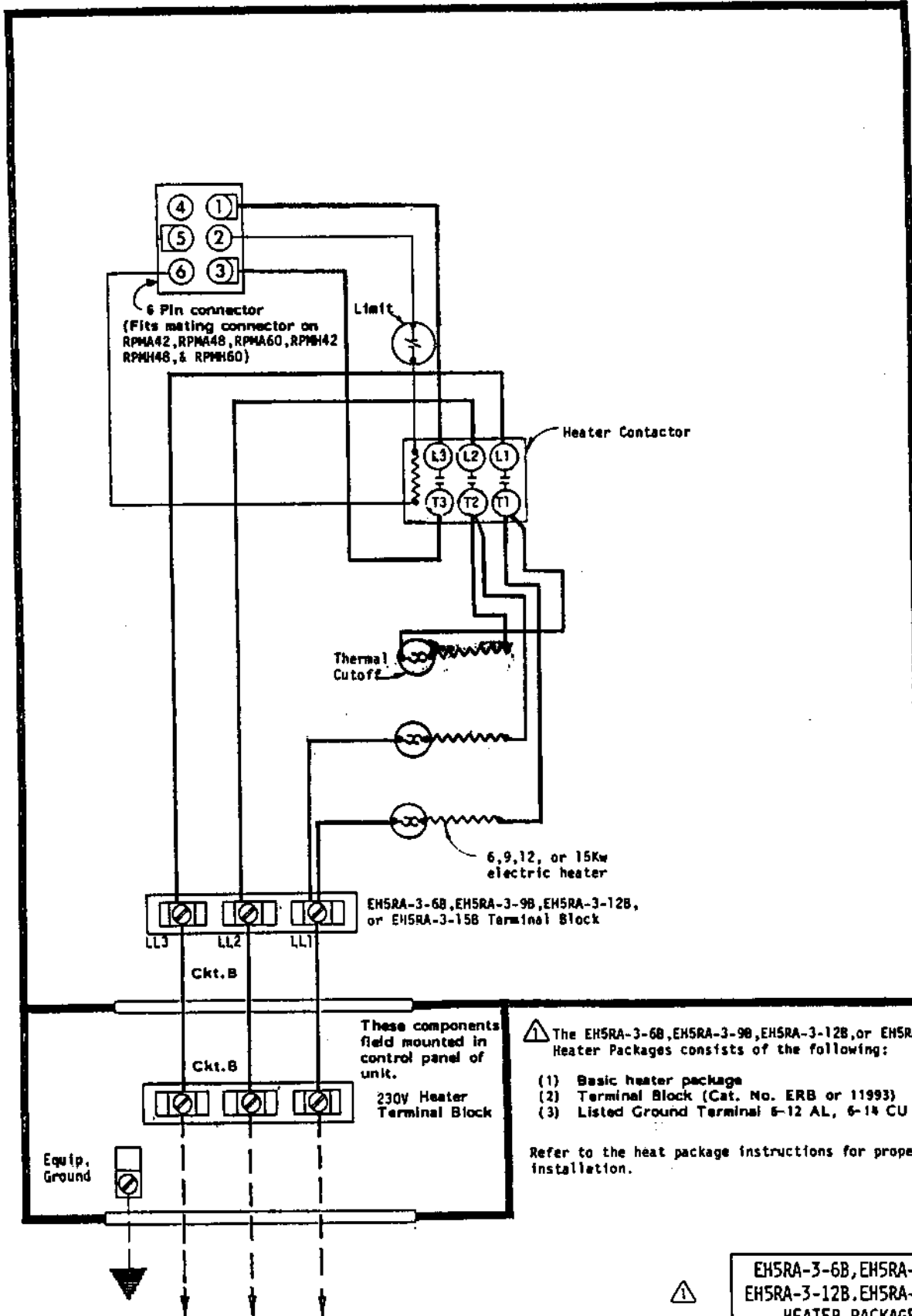
- ⚠ The EH5RA-1-25A heater package consists of the following:
 - (1) Basic heater package.
 - (1) Terminal Block (Cat. No. EB or 11993).
 - (1) Listed Ground Terminal 6-12 AL, 6-14 CU.
 Refer to the heat package instructions for proper installation.
- ⚠ 3rd heat contactor operates only during emergency heat or compressor cut-off.

⚠ EH5RA-1-25A HEATER PACKAGE

USE COPPER OR ALUMINUM WIRE

For supply connections use No. 1 AWG (240V) or No. 2 AWG (208V) or larger wires suitable for at least 75°C (167°F).

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

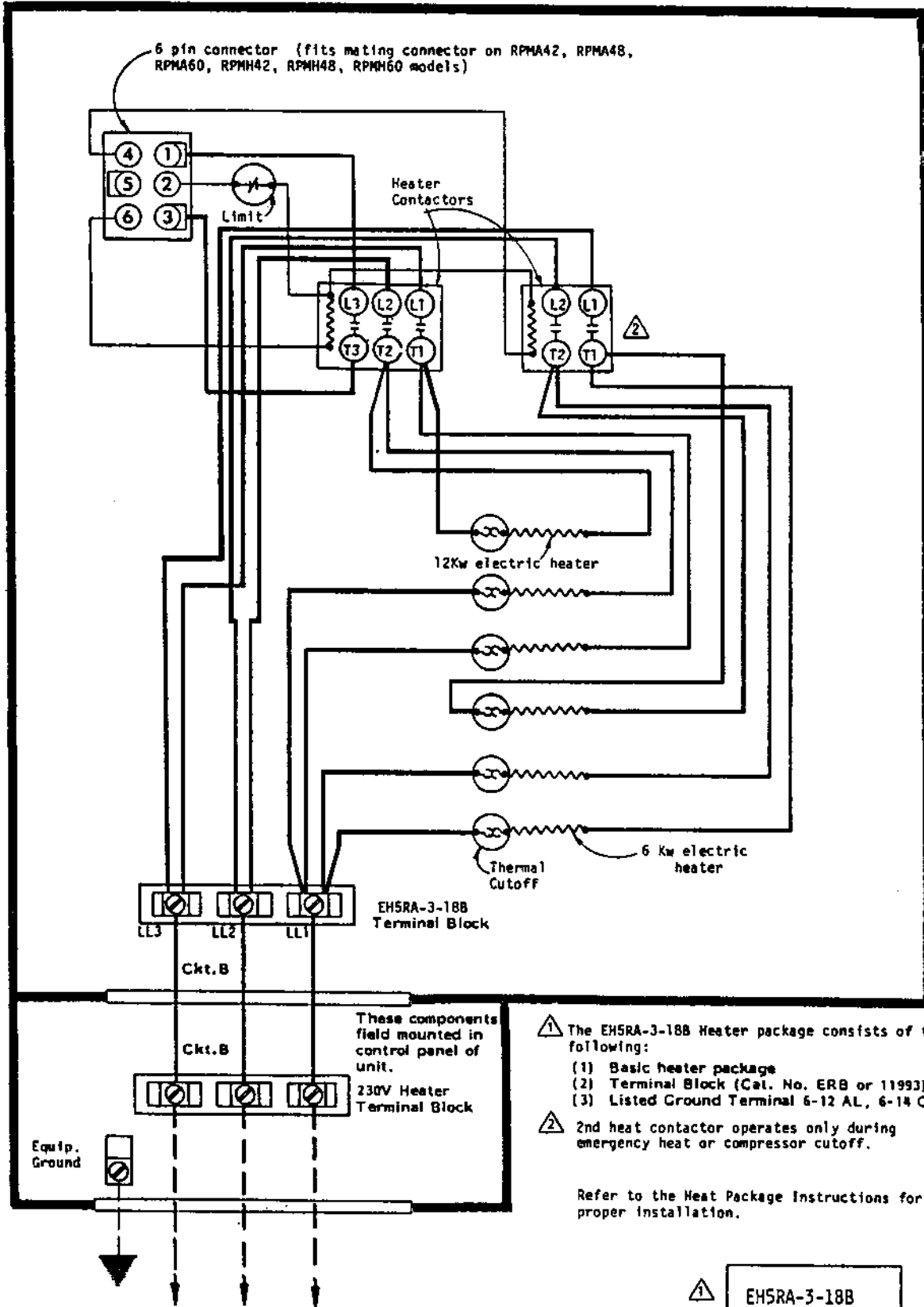


USE COPPER OR
ALUMINUM WIRE

240/208-60-3

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

4077 210A



6 pin connector (fits mating connector on RPHA42, RPHA48, RPHA60, RPMH42, RPMH48, RPMH60 models)

Heater Contactors

Limit

12Kw electric heater



6 Kw electric heater

Thermal Cutoff

EHSRA-3-18B Terminal Block

LL3

LL2

LL1

Ckt. B

These components field mounted in control panel of unit.

230V Heater Terminal Block

Equip. Ground

Ckt. B

⚠ The EHSRA-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

⚠ 2nd heat contactor operates only during emergency heat or compressor cutoff.

Refer to the Heat Package Instructions for proper installation.

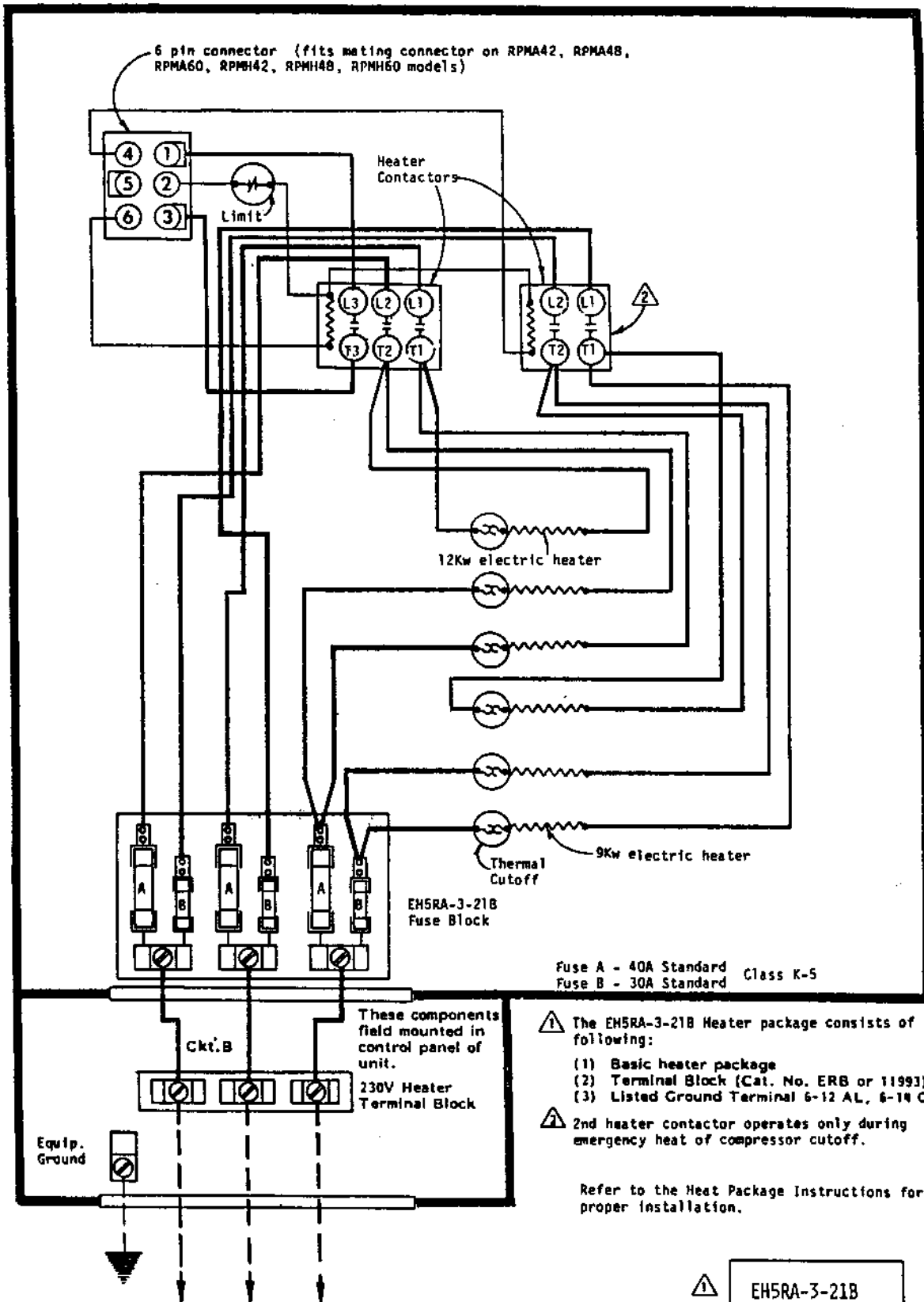
⚠ EHSRA-3-18B HEATER PACKAGES

USE COPPER OR ALUMINUM WIRE

280/208-60-3

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

4077-220A



6 pin connector (fits mating connector on RPMA42, RPMA48, RPMA60, RPMH42, RPMH48, RPMH60 models)

Heater Contactors

Limit

L3

L2

L1

T3

T2

T1

L2

L1

T2

T1

12Kw electric heater

Thermal Cutoff 9Kw electric heater

EH5RA-3-21B Fuse Block

Fuse A - 40A Standard Class K-5
 Fuse B - 30A Standard

These components field mounted in control panel of unit.

230V Heater Terminal Block

Ckt. B

Equip. Ground

⚠ The EH5RA-3-21B 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

⚠ 2nd heater contactor operates only during emergency heat of compressor cutoff.

Refer to the Heat Package Instructions for proper installation.

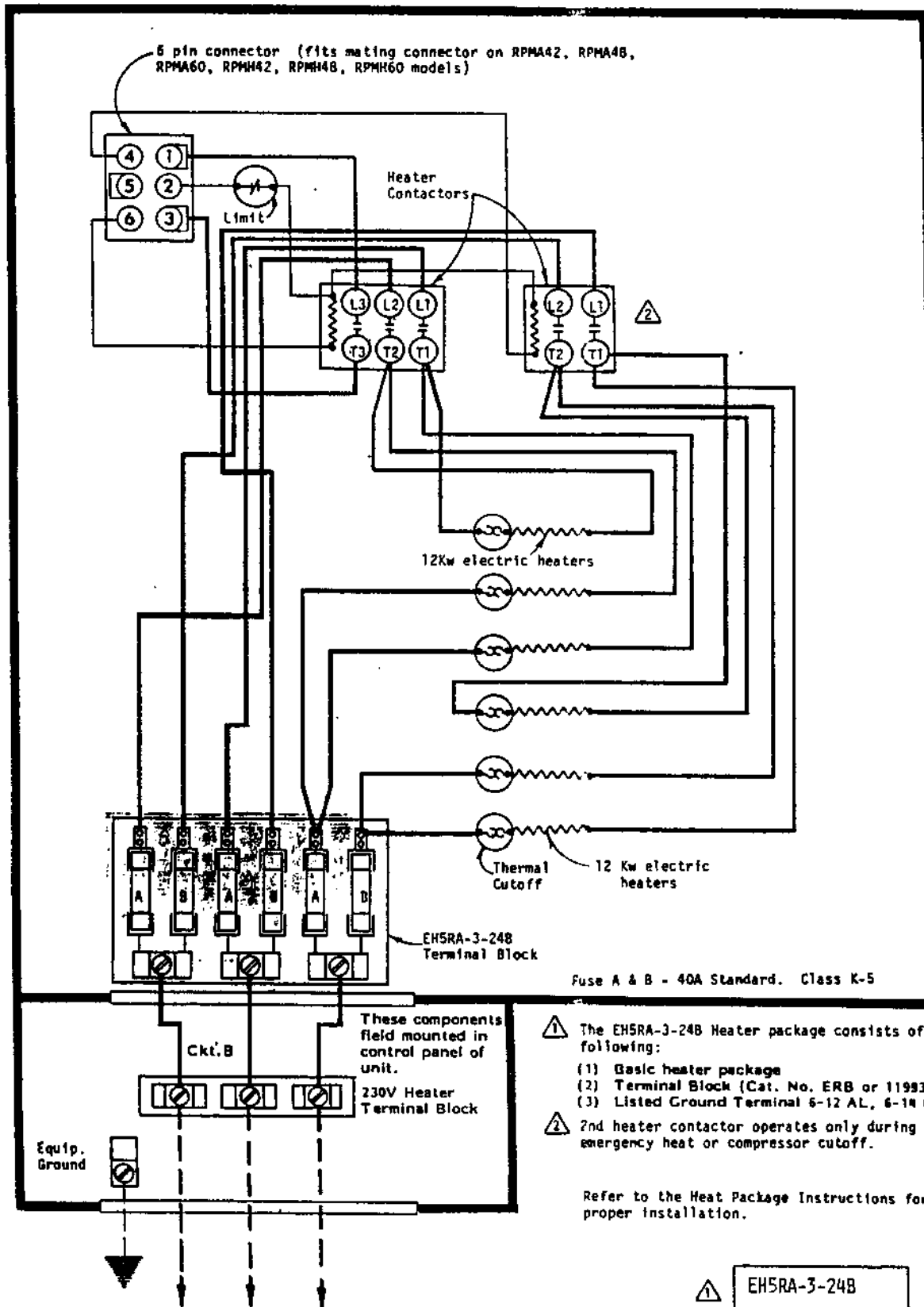
⚠ EH5RA-3-21B HEATER PACKAGES

USE COPPER OR ALUMINUM WIRE

240/208-60-3

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

4077-230A



6 pin connector (fits mating connector on RPA42, RPA48, RPA60, RPM42, RPM48, RPM60 models)

Heater Contactors

Limit

12kw electric heaters

⚠

Thermal Cutoff 12 Kw electric heaters

EHSRA-3-248 Terminal Block

Fuse A & B - 40A Standard. Class K-5

These components field mounted in control panel of unit.

230V Heater Terminal Block

Equip. Ground

Ckt. B

⚠ The EHSRA-3-248 Heater package consists of the following:

- (1) Basic heater package
- (2) Terminal Block (Cat. No. ERB or 11983)
- (3) Listed Ground Terminal 6-12 AL, 6-14 CU

⚠ 2nd heater contactor operates only during emergency heat or compressor cutoff.

Refer to the Heat Package Instructions for proper installation.

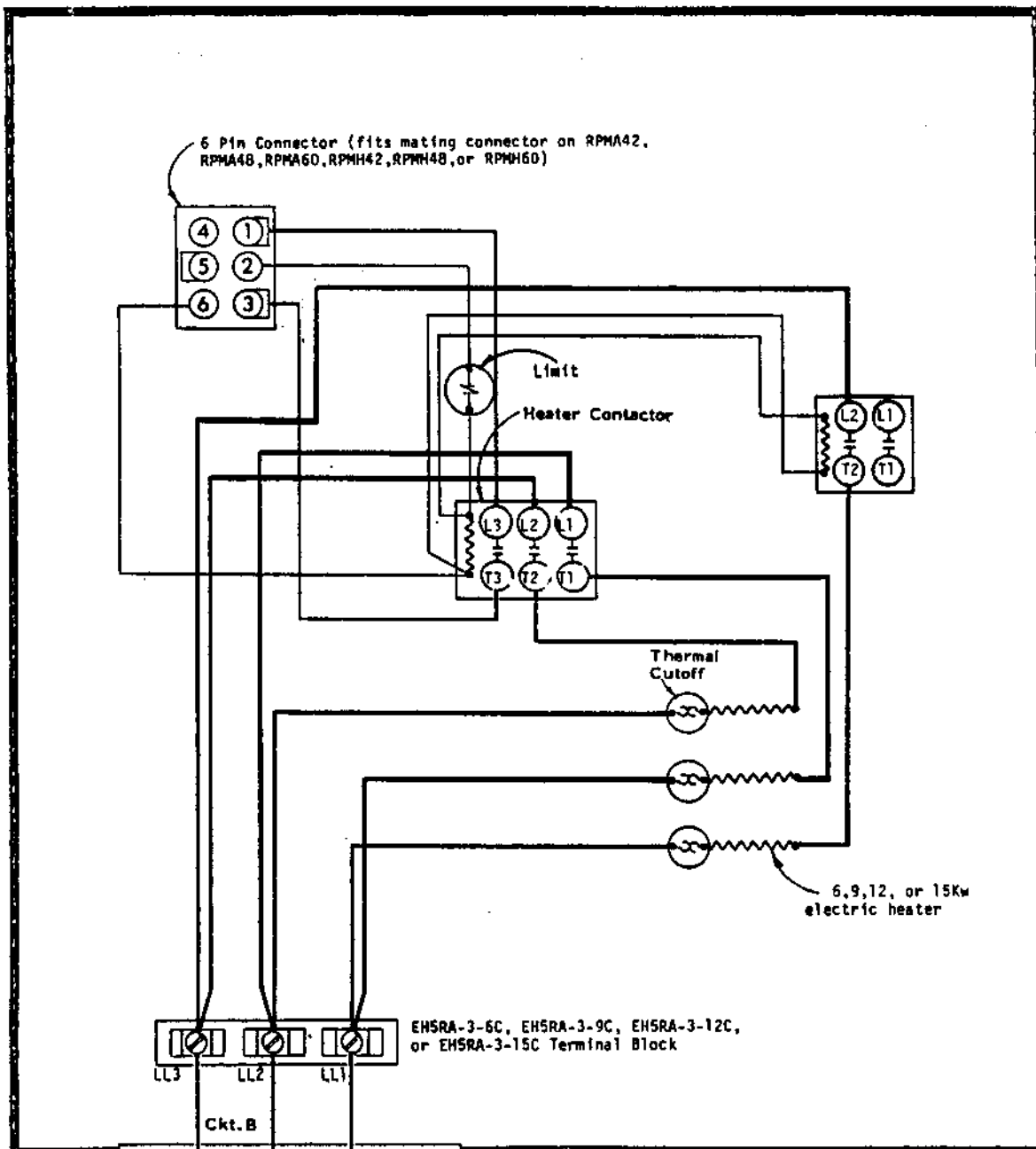
⚠ EHSRA-3-248 HEATER PACKAGES

USE COPPER OR ALUMINUM WIRE

240/208-60-3

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

4077240A



5 Pin Connector (fits mating connector on RPA42, RPA48, RPA60, RPM42, RPM48, or RPM60)

EHSRA-3-6C, EHSRA-3-9C, EHSRA-3-12C, or EHSRA-3-15C Terminal Block

These components field mounted in control panel of unit.

480V Heater Terminal Block

⚠ The EHSRA-3-6C, EHSRA-3-9C, EHSRA-3-12C, EHSRA-3-15C Heater Packages 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

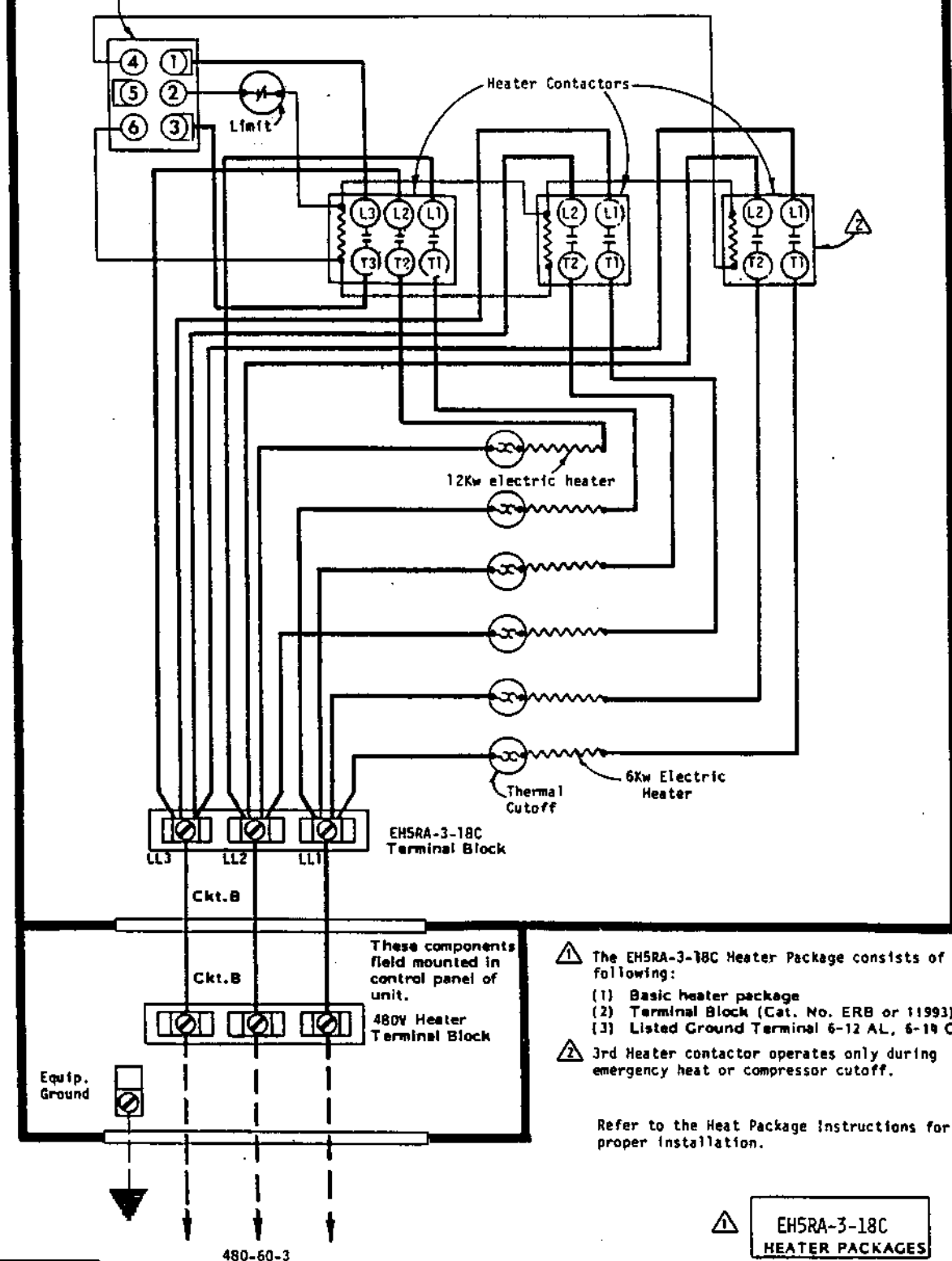
Refer to the heat package instructions for proper installations.

⚠
EHSRA-3-6C
EHSRA-3-9C
EHSRA-3-12C
EHSRA-3-15C
HEATER PACKAGES

USE COPPER OR ALUMINUM WIRE

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

6 pin connector (fits mating connector on RPMA42, RPMA48, RPM460, RPM442, RPM448, RPM460 models)



These components field mounted in control panel of unit.

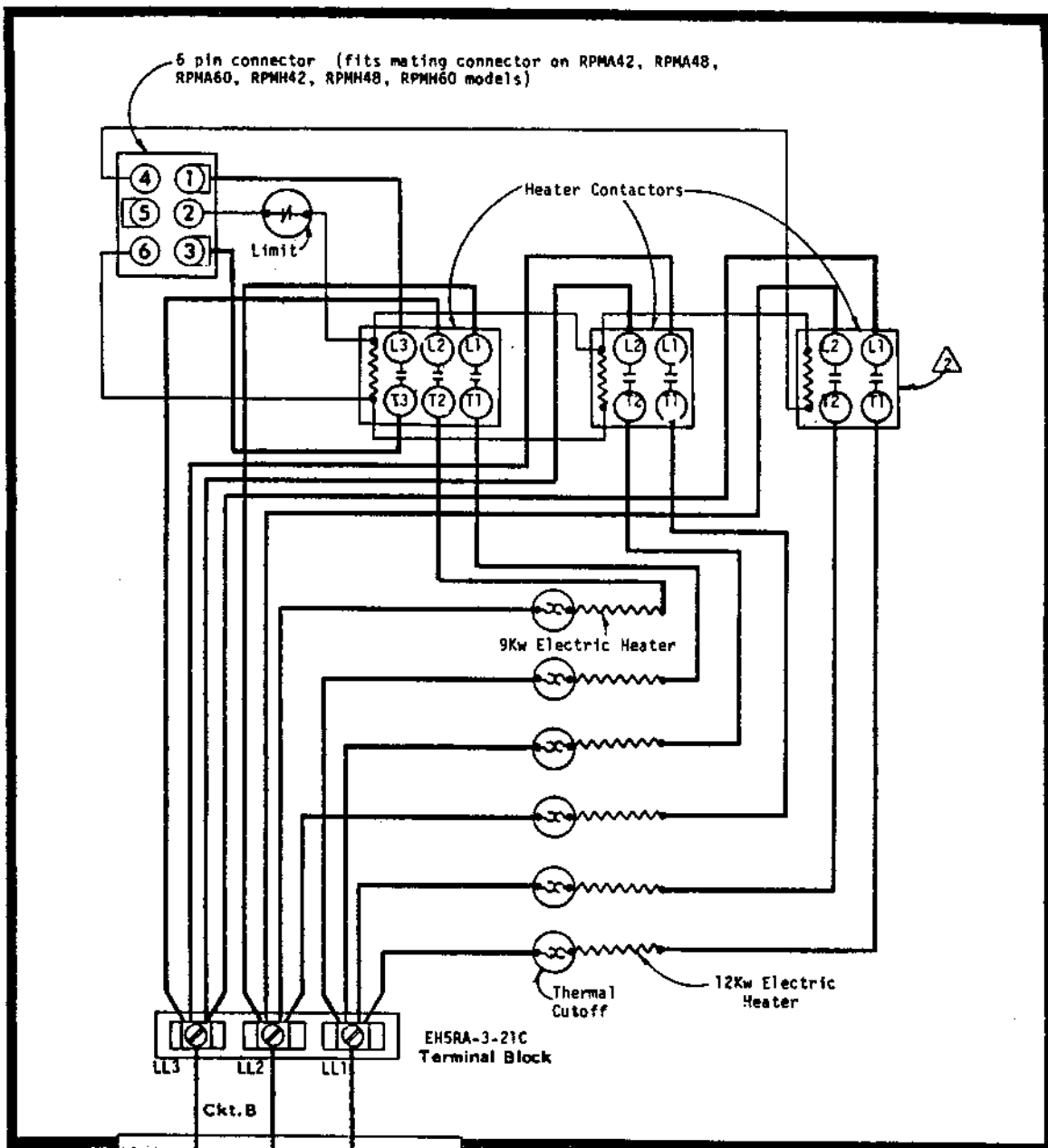
- ⚠ The EH5RA-3-18C Heater Package consists of the following:
 - (1) Basic heater package
 - (2) Terminal Block (Cat. No. ERB or 11993)
 - (3) Listed Ground Terminal 6-12 AL, 6-18 CU
- ⚠ 3rd Heater contactor operates only during emergency heat or compressor cutoff.

Refer to the Heat Package Instructions for proper installation.

⚠ EH5RA-3-18C HEATER PACKAGES

USE COPPER OR ALUMINUM WIRE

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



6 pin connector (fits mating connector on RPMA42, RPMA48, RPMA60, RPMH42, RPMH48, RPMH60 models)

Heater Contactors

Limit

9Kw Electric Heater

12Kw Electric Heater

Thermal Cutoff

EHSRA-3-21C Terminal Block

LL3 LL2 LL1

Ckt. B

These components field mounted in control panel of unit.

Ckt. B

400v Heater Terminal Block

Equip. Ground

- ⚠ The EHSRA-3-21C 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
- ⚠ 3rd heater contactor operates only during emergency heat or compressor cutoff.

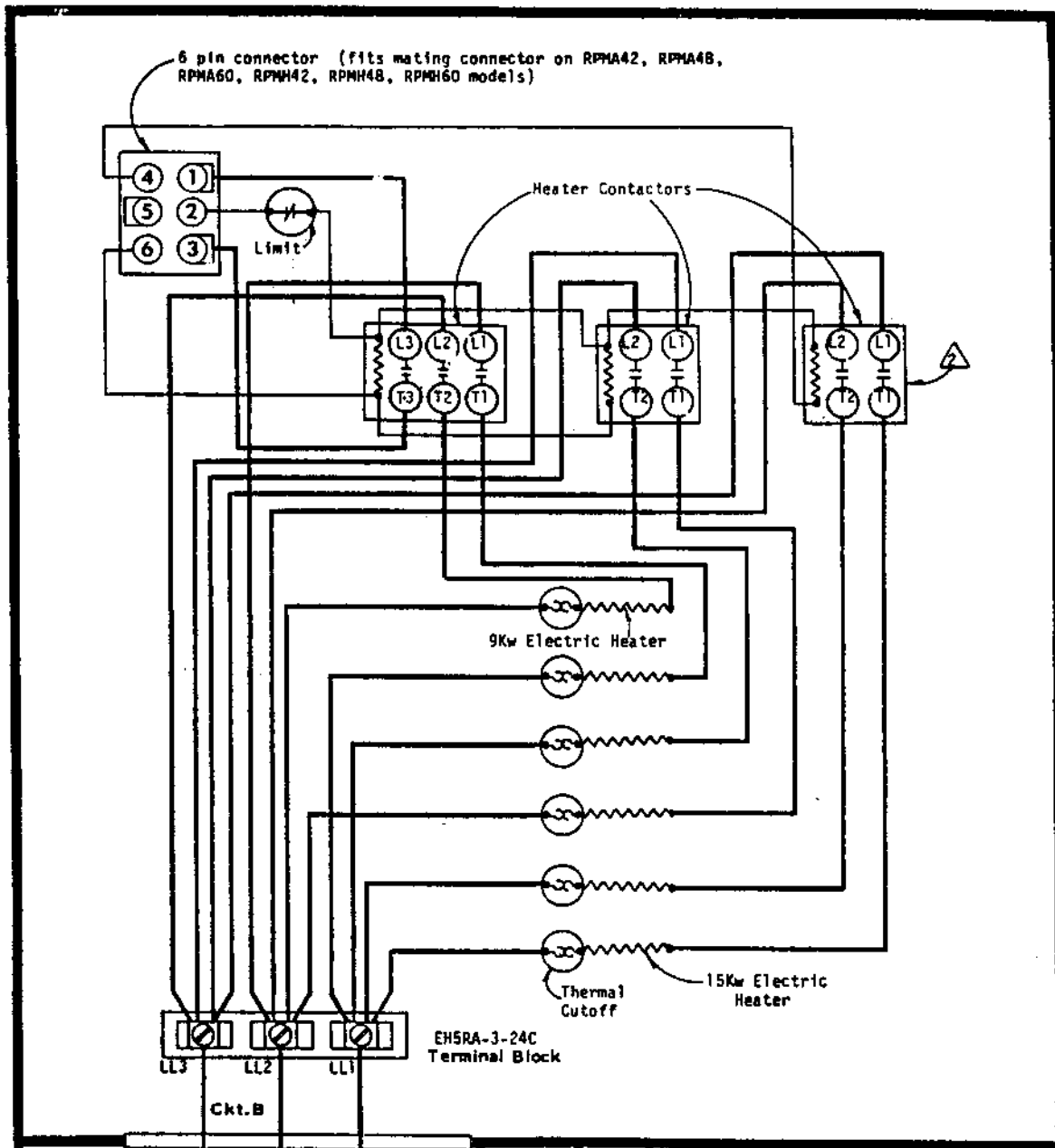
Refer to the Heat Package Instructions for proper installation.

⚠ EHSRA-3-21C HEATER PACKAGES

USE COPPER OR ALUMINUM WIRE

480-60-3

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



6 pin connector (fits mating connector on RPMA42, RPMA48, RPMA60, RPMH42, RPMH48, RPMH60 models)

Heater Contactors

Limit

9Kw Electric Heater

15Kw Electric Heater

Thermal Cutoff

EHSRA-3-24C Terminal Block

LL3

LL2

LL1

Ckt. B

These components field mounted in control panel of unit.

480V Heater Terminal Block

Equip. Ground

480-60-3

⚠ The EHSRA-3-24C 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

⚠ 3rd heater contactor operates only during emergency heat or compressor cutoff.

Refer to the Heat Package Instructions for proper installation.

⚠ EHSRA-3-24C HEATER PACKAGES

USE COPPER OR ALUMINUM WIRE

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