

INSTALLATION INSTRUCTIONS

MODELS

EH5RA- A05

EH5RA- A10

EH5RA- A15

EH5RA- A20

EH5RA- A25

EH5RA- B06

EH5RA- B09

EH5RA- B12

EH5RA- B15

EH5RA- B18

EH5RA- B21

EH5RA- B24

EH5RA- C06

EH5RA- C09

EH5RA- C12

EH5RA- C15

EH5RA- C18

EH5RA- C21

EH5RA- C24

OPTIONAL ELECTRIC HEAT PACKAGES

FOR USE WITH MODELS

RPMA42, RPMA48, RPMA60

RPMH42, RPMH48, RPMH60



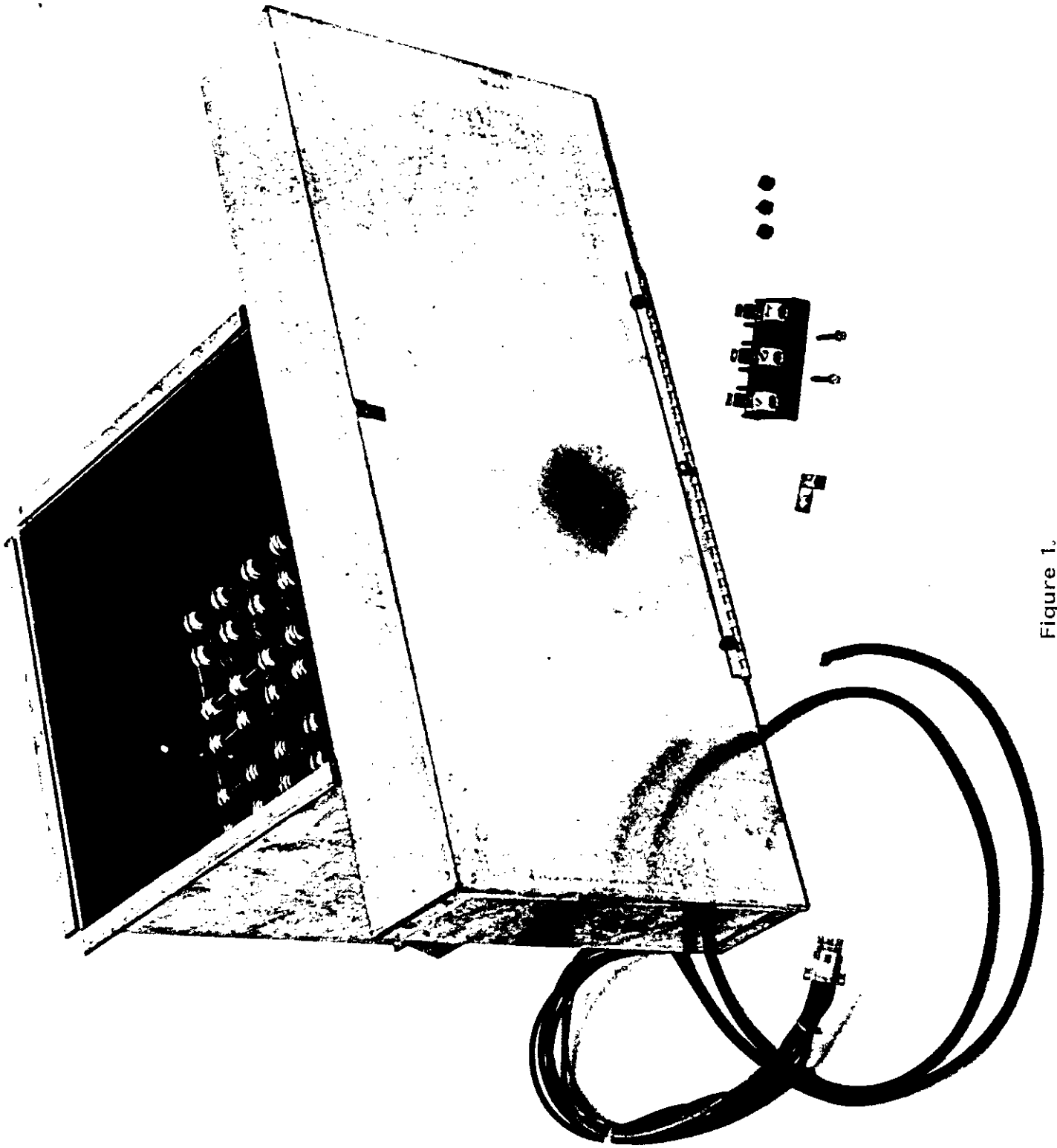


Figure 1.

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 6¼" x 6¼" 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.

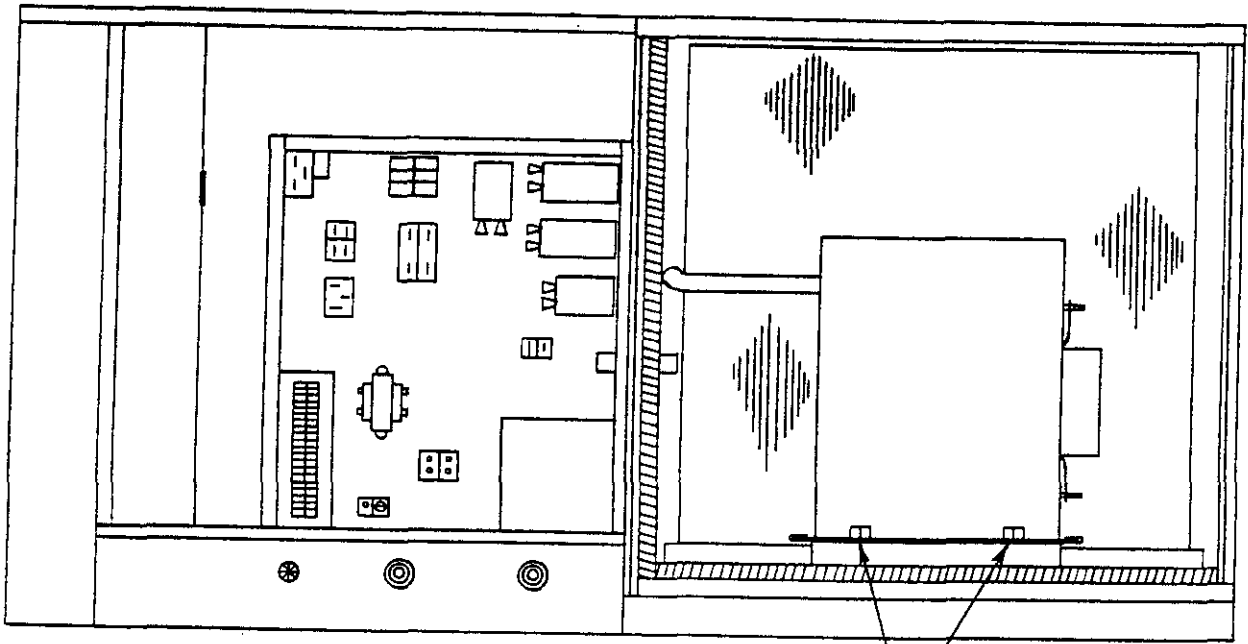


FIGURE 2.

Remove these two screws
to remove blower assembly

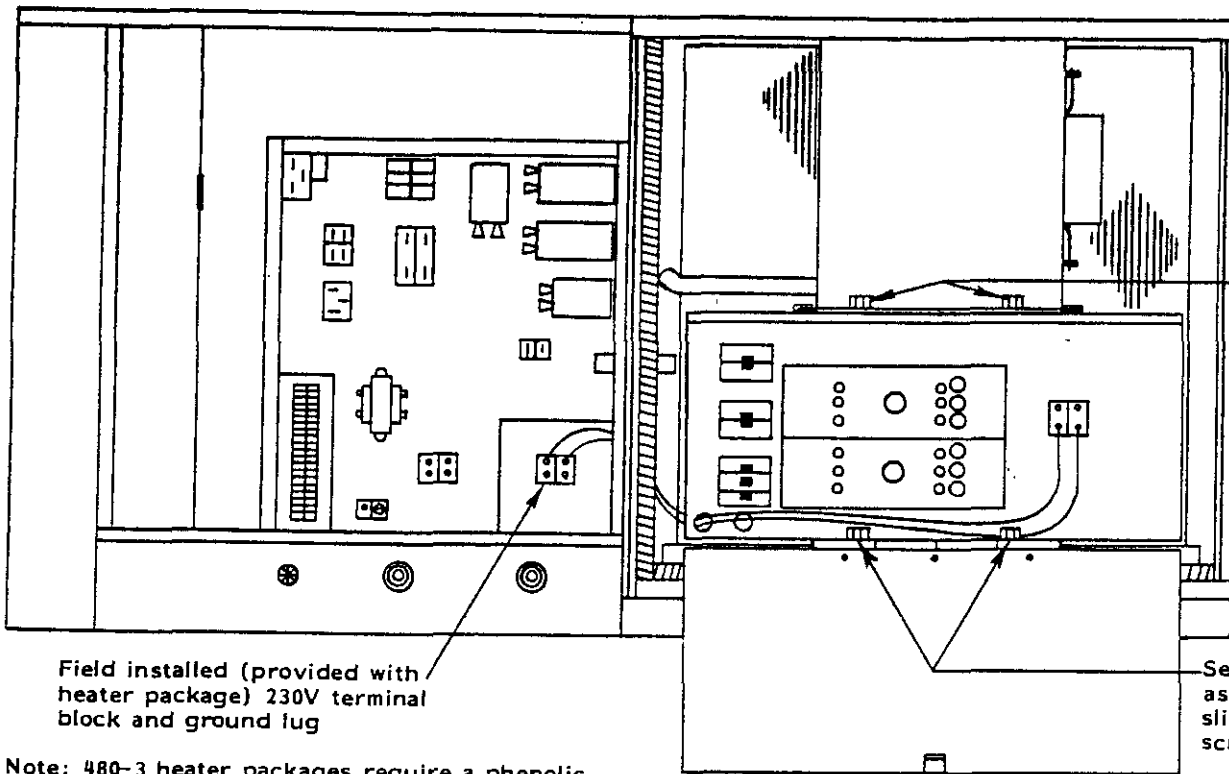


FIGURE 3.

Field installed (provided with
heater package) 230V terminal
block and ground lug

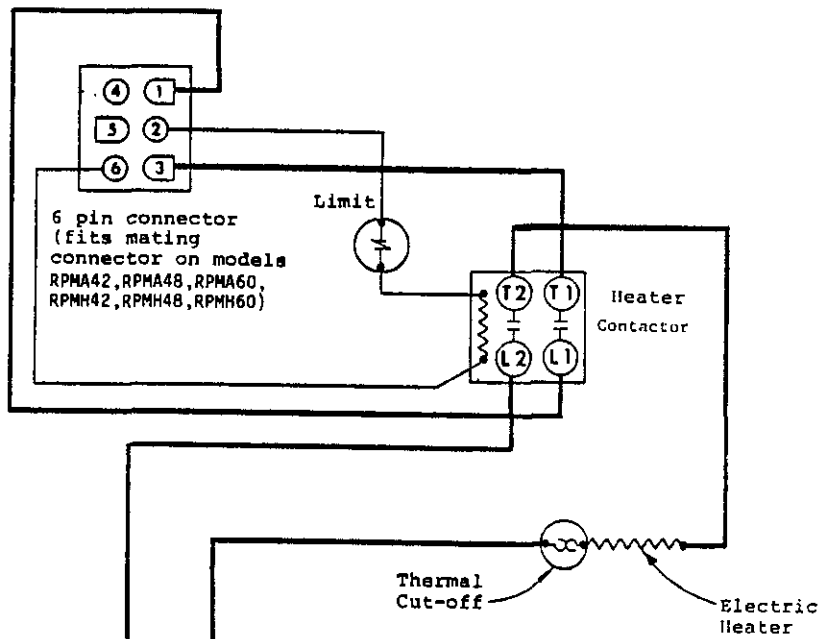
Secure blower
assembly to
heater assembly
with two screws

Secure heater
assembly to unit
slide with two
screws

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

PARTS LIST
OPTIONAL ELECTRIC HEATER PACKAGE

Part No.	Description	EH5RA-A05	EH5RA-A10	EH5RA-A15	EH5RA-A20	EH5RA-A25	EH5RA-B06	EH5RA-B09	EH5RA-B12	EH5RA-B15	EH5RA-B18	EH5RA-B21	EH5RA-B24	EH5RA-C06	EH5RA-C09	EH5RA-C12	EH5RA-C15	EH5RA-C18	EH5RA-C21	EH5RA-C24
8401-006	Contactora 2P20	1	2	2	3	3														
8401-002	Contactora 3P25A						x	x	x		x	x	x	x	x	x	x	x	x	x
8401-011	Contactora 3P30A									x										
8401-006	Contactora 2P20A										x	x	x	x	x	x	x	2	2	2
8614-006	Fuse OT30			2		2														
8614-007	Fuse OT60			2	4	4														
8614-032	Fuse OT40											3	6							
8614-006	Fuse OT30											3								
8614-017	Fuse Block			x																
8614-018	Fuse Block				x															
8614-025	Fuse Block					x														
8614-021	Fuse Block											x								
8614-020	Fuse Block												x							
8604-023	Heat Strip 5Kw 240v	x																		
8604-024	Heat Strip 10Kw 240v		x		2	x														
8604-025	Heat Strip 15Kw 240v			x		x														
8604-064	Heat Strip 6Kw 240v						x				x									
8604-035	Heat Strip 9Kw 240v							x				x								
8604-036	Heat Strip 12Kw 240v								x		x	x	2							
8604-025	Heat Strip 15Kw 240v									x										
8604-065	Heat Strip 6Kw 480v													x				x		
8604-032	Heat Strip 9Kw 480v														x				x	x
8604-033	Heat Strip 12Kw 480v															x		x	x	x
8604-034	Heat Strip 15Kw 480v																x	x	x	x
8402-020	Limit Control	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
8607-015	Phenolic Insulator													2	2	2	2	2	2	2
8607-013	Terminal Block	2	2	1																
8607-014	Terminal Block						2	2	2	2	2	1	1	2	2	2	2	2	2	2
8402-032	Thermal Cutoff	1	2	3	4	5														
8607-016	Terminal Block				1	1														
8607-025	Thermal Cutoff						3	3	3	3	6	6	6	3	3	3	3	6	6	6



EHSRA-1-5A Terminal Block



CRT. B

Equip. Ground



CRT. B



These components field mounted in control Panel of unit.

230V Heater Terminal Block



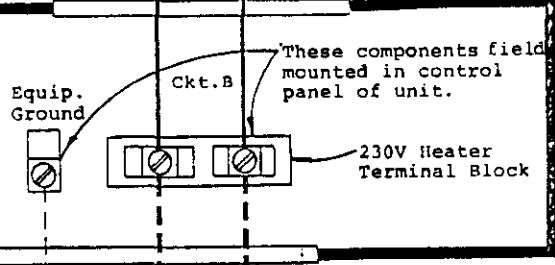
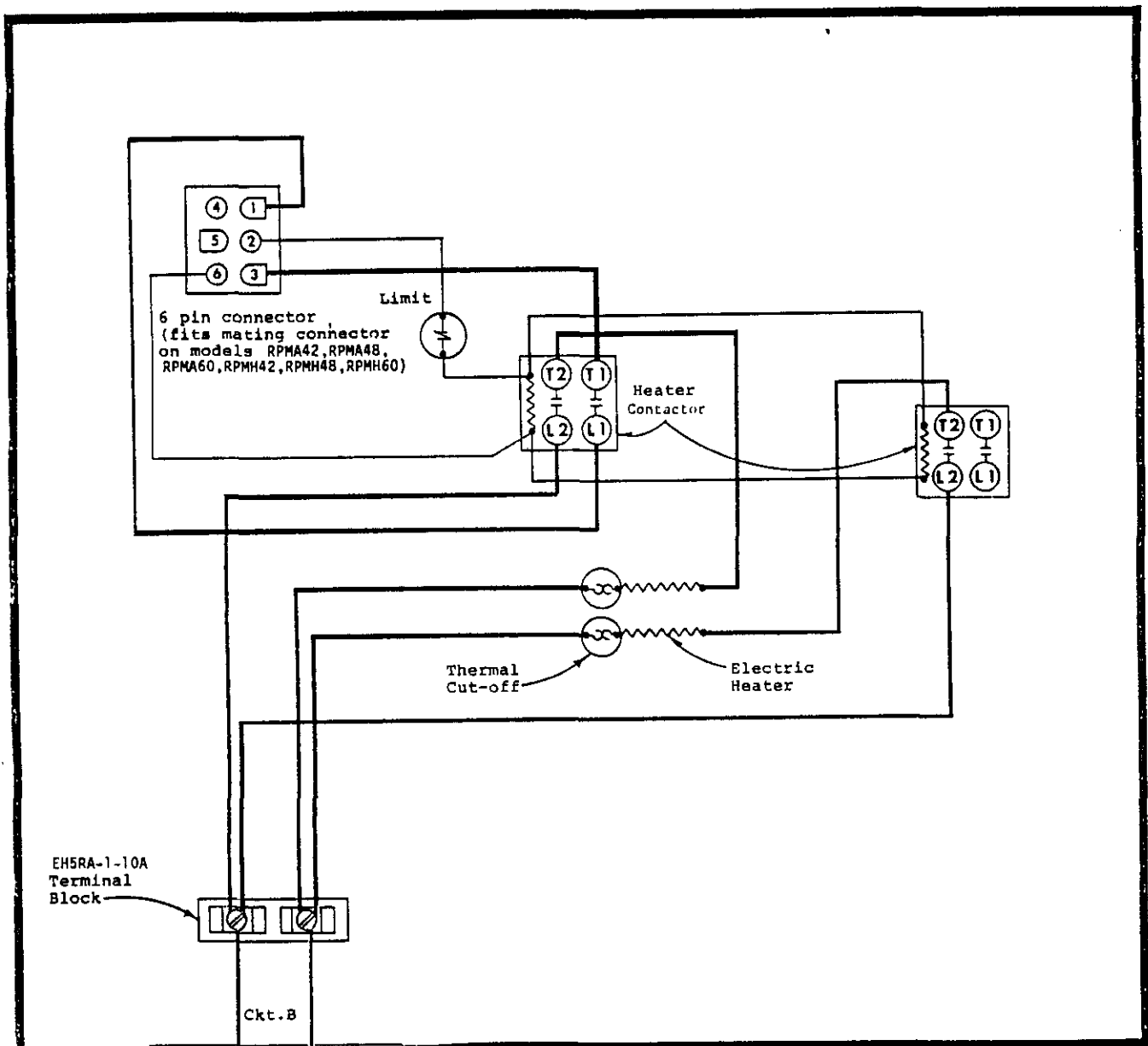
240/208-60-1

USE COPPER OR ALUMINUM WIRE

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

- ⚠ The EHSRA-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.



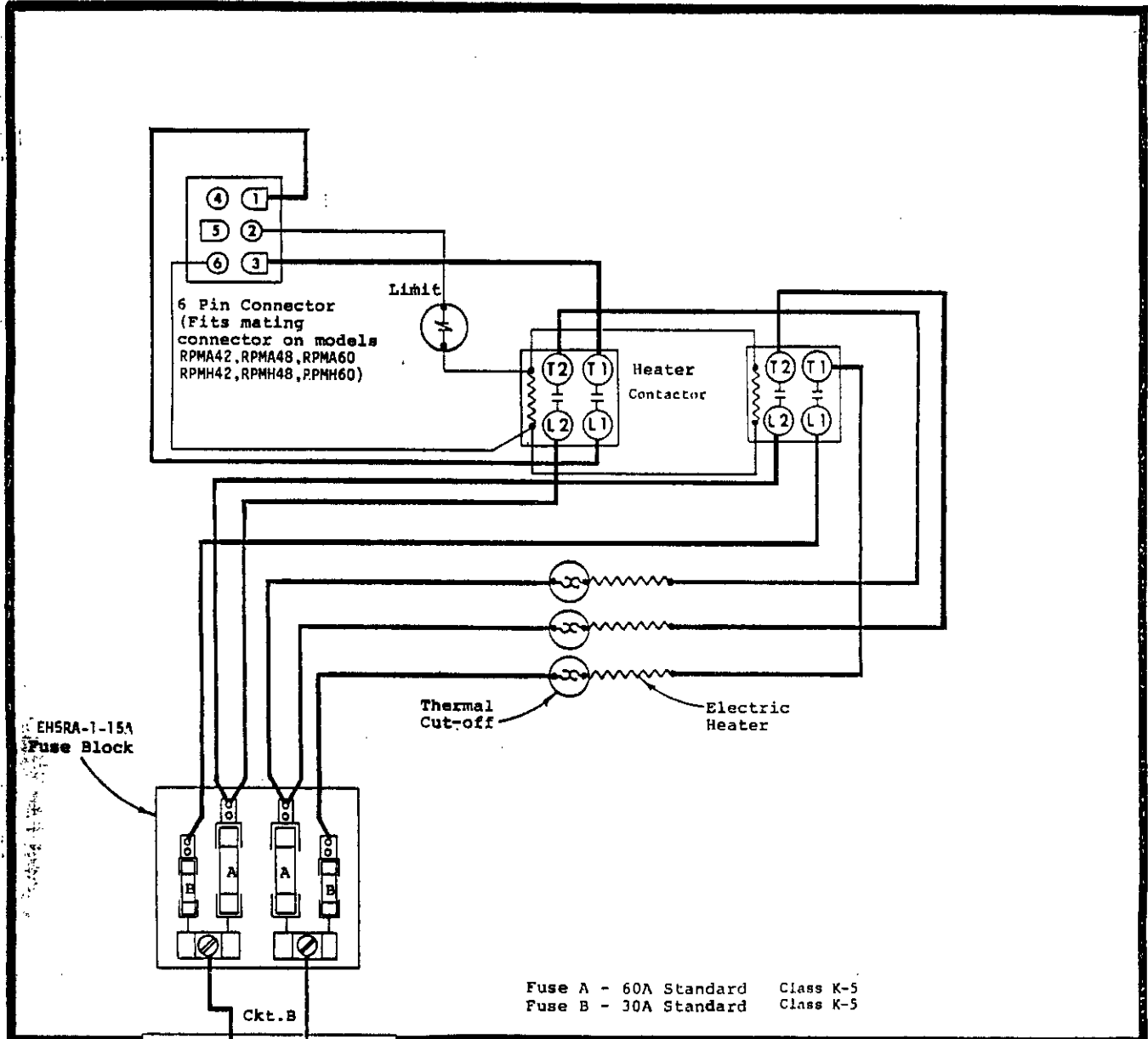
- ⚠ The EHSRA-1-10A heater package consists of the following:
- (1) Basic heater package.
 - (1) Terminal Block (Cat.No. EB or 11993).
 - (1) Listed Ground Terminal 6-12AL, 6-14 CU.

Refer to the heat package instructions for proper installation.

USE COPPER OR ALUMINUM WIRE

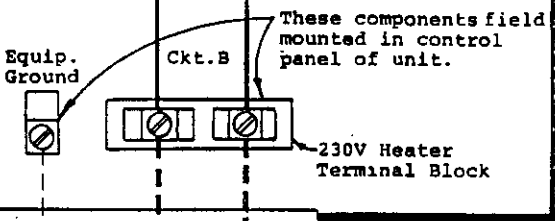
	FACTORY WIRING	FIELD WIRING
Low Voltage	—————	- - - - -
High Voltage	—————	- - - - -

240/208-60-1



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

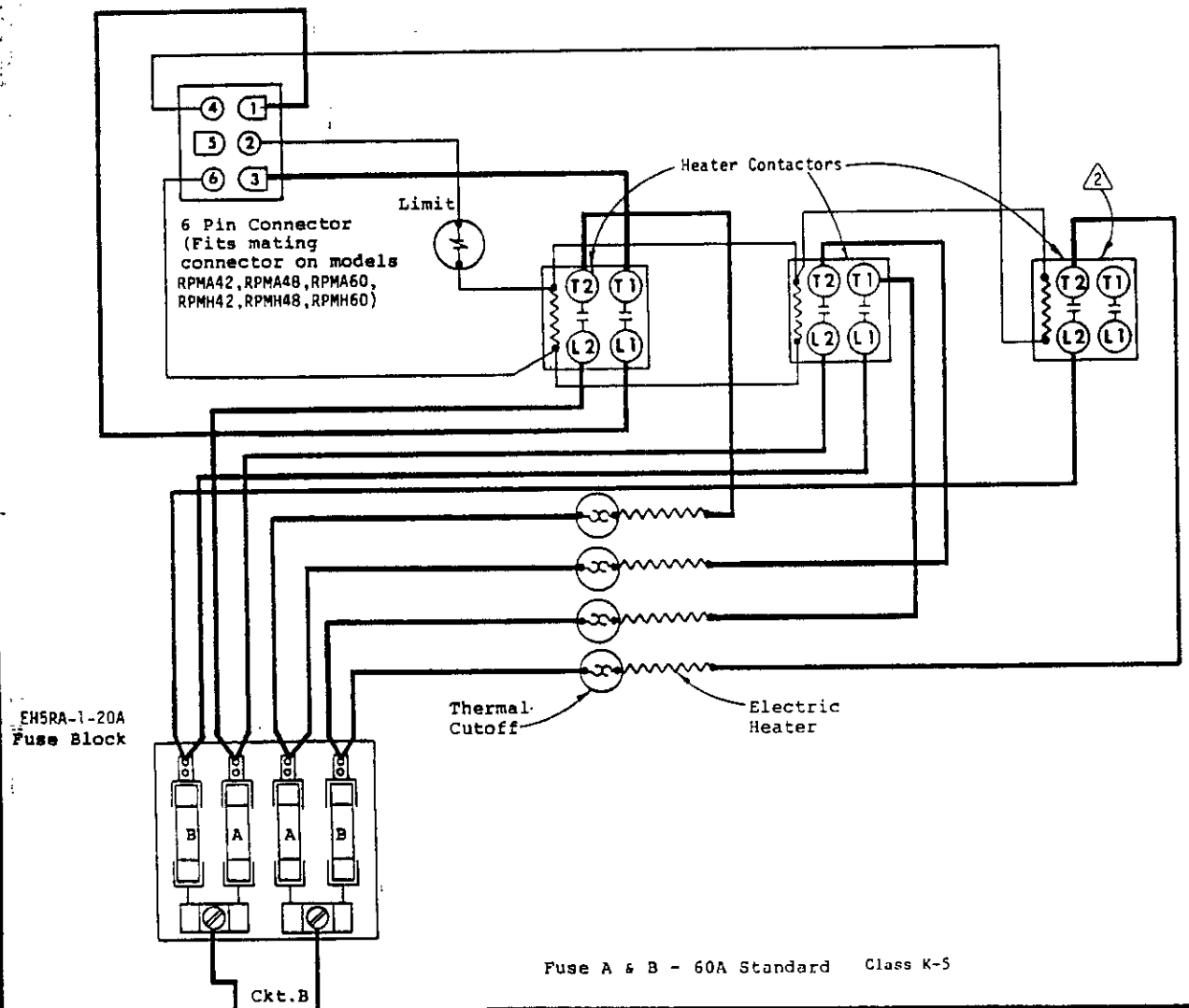
⚠ The EHSRA-1-15A heater package consists of the following:
 (1) Basic heater package.
 (1) Terminal Block (Cat.No. EB or 11993).
 (1) Listed Ground Terminal 6-12 AL, 6-14 CU.
 Refer to the heat package instructions for proper installation.



USE COPPER OR ALUMINUM WIRE

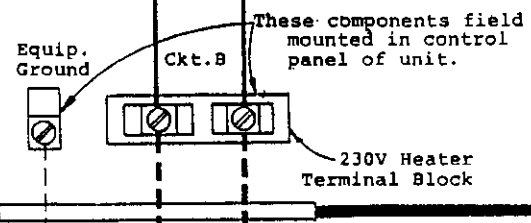
240/208-60-1

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



EH5RA-1-20A
Fuse Block

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

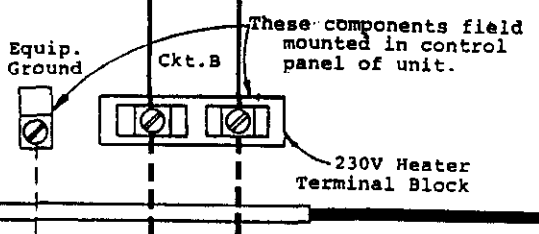
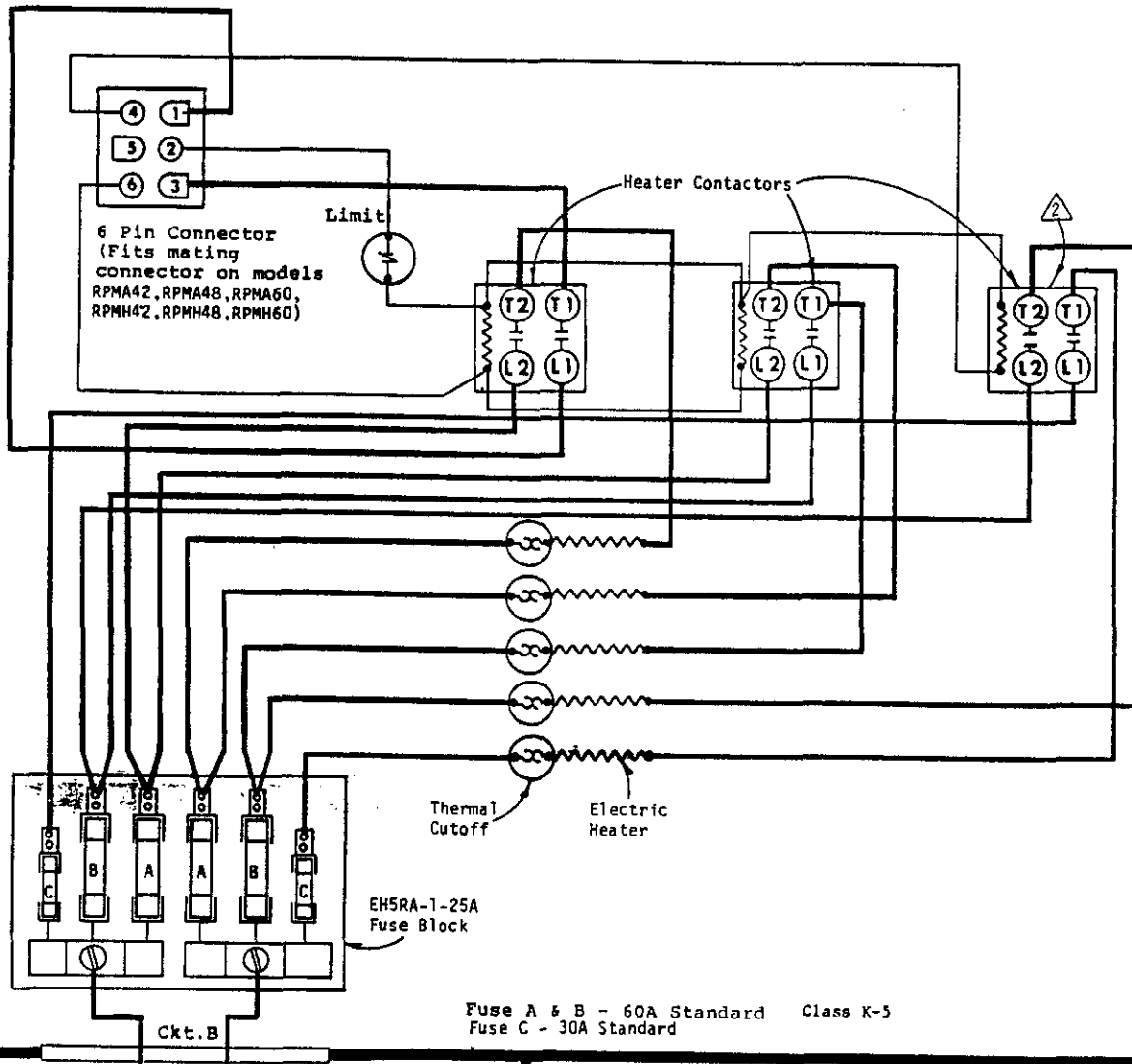


- ⚠ The EH5RA-1-20A heater package consists of the following:
 - (1) Basic heater package.
 - (1) Terminal Block (Cat. No. EB or 11993).
 - (1) Listed Ground Terminal 6-12 AL, 6-14 CU.
 Refer to the heat package instructions for proper installation.
- ⚠ 3rd heat contactor operates only during emergency heat or compressor cut-off.

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	————	-----

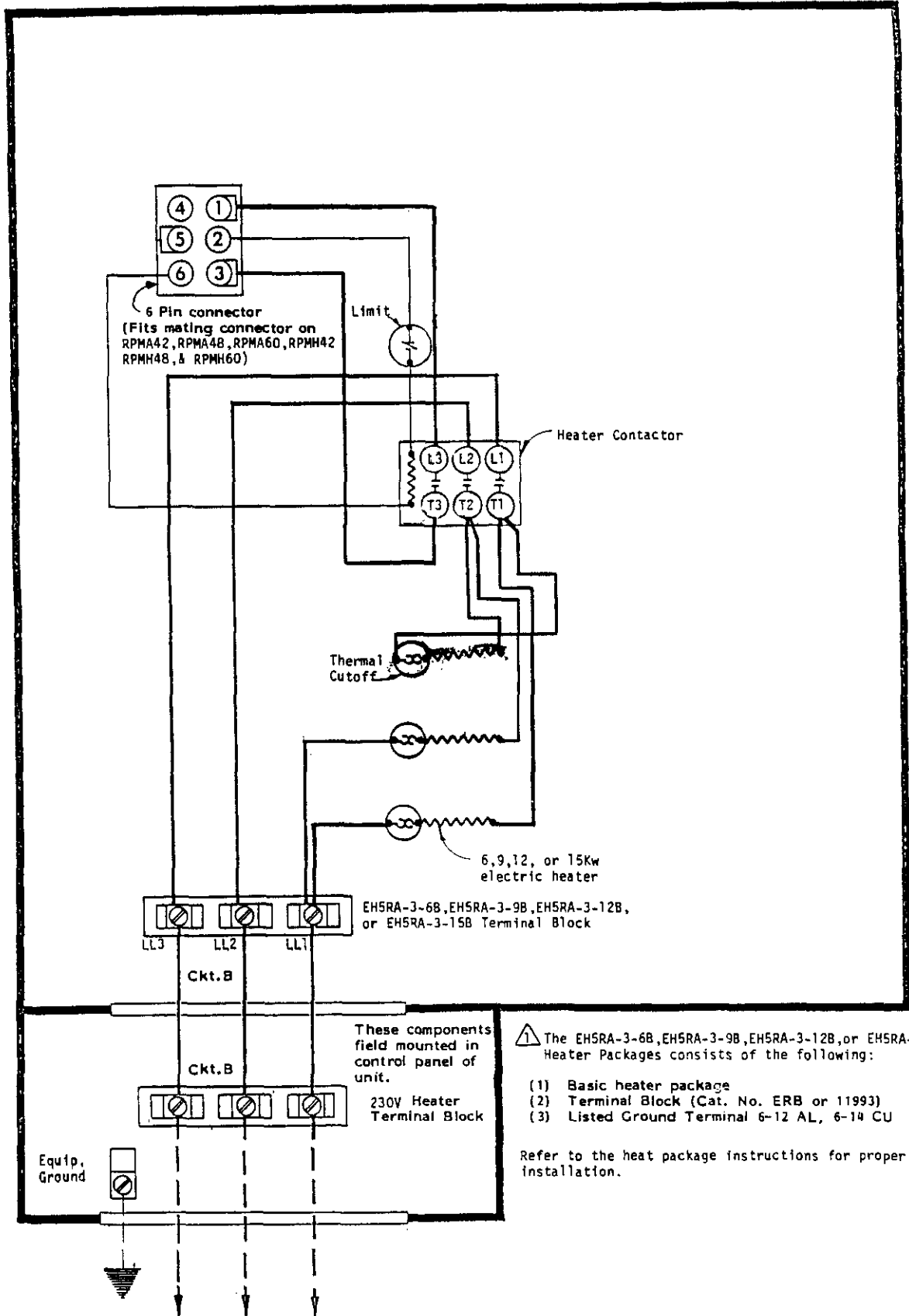


- ⚠ The EH5RA-1-25A heater package consists of the following:
 - (1) Basic heater package.
 - (1) Terminal Block (Cat. No. EB or 11993).
 - (1) Listed Ground Terminal 6-12 AL, 6-14 CU.
 Refer to the heat package instructions for proper installation.
- ⚠ 3rd heat contactor operates only during emergency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

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	————	-----



6 Pin connector
(Fits mating connector on
RPMA42, RPMA48, RPMA60, RPMH42
RPMH48, & RPMH60)

Limit

Heater Contactor

Thermal
Cutoff

6, 9, 12, or 15Kw
electric heater

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

LL3 LL2 LL1

Ckt. B

Ckt. B

These components
field mounted in
control panel of
unit.

230V Heater
Terminal Block

Equip.
Ground

⚠ The EHSRA-3-6B, EHSRA-3-9B, EHSRA-3-12B, or EHSRA-3-15B
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

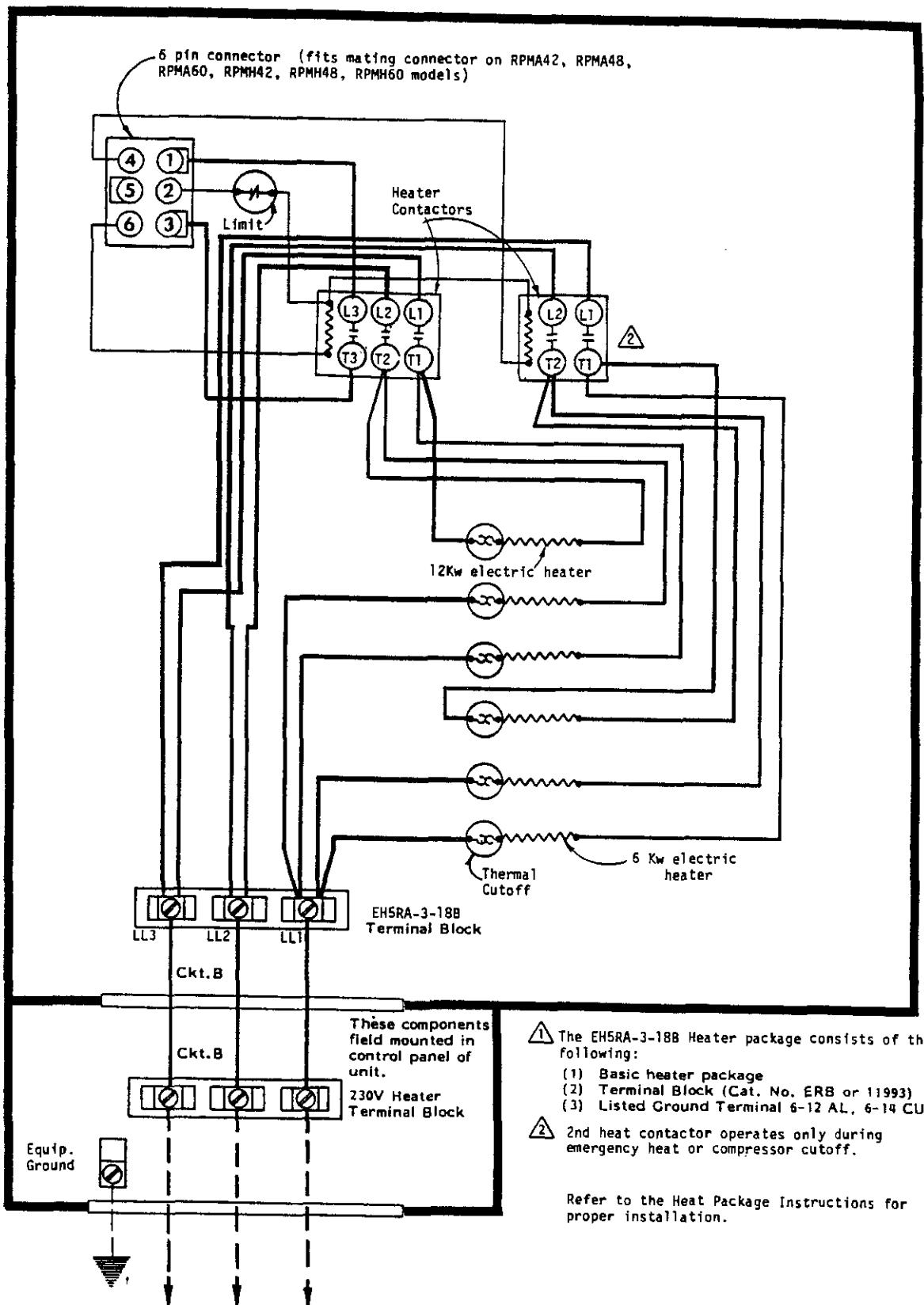
Refer to the heat package instructions for proper
installation.

USE COPPER OR
ALUMINUM WIRE

240/208-60-3

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

4077 210 B



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

Limit

Heater Contactors

12Kw electric heater

6 Kw electric heater

Thermal Cutoff

EHSRA-3-188 Terminal Block

Ckt. B

Ckt. B

These components field mounted in control panel of unit.

230V Heater Terminal Block

Equip. Ground

⚠ The EHSRA-3-188 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.

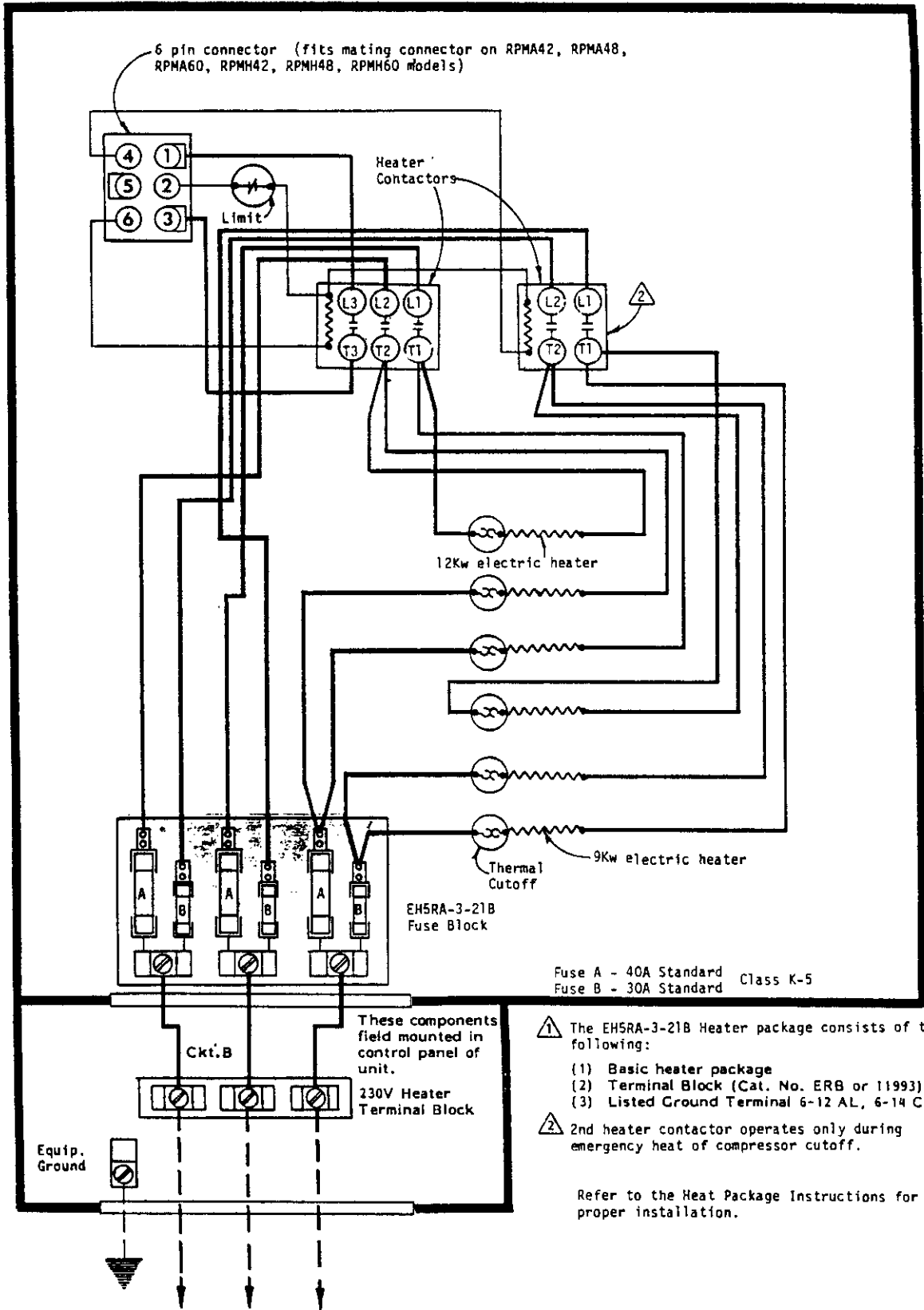
Refer to the Heat Package Instructions for proper installation.

USE COPPER OR ALUMINUM WIRE

240/208-60-3

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

4077220B



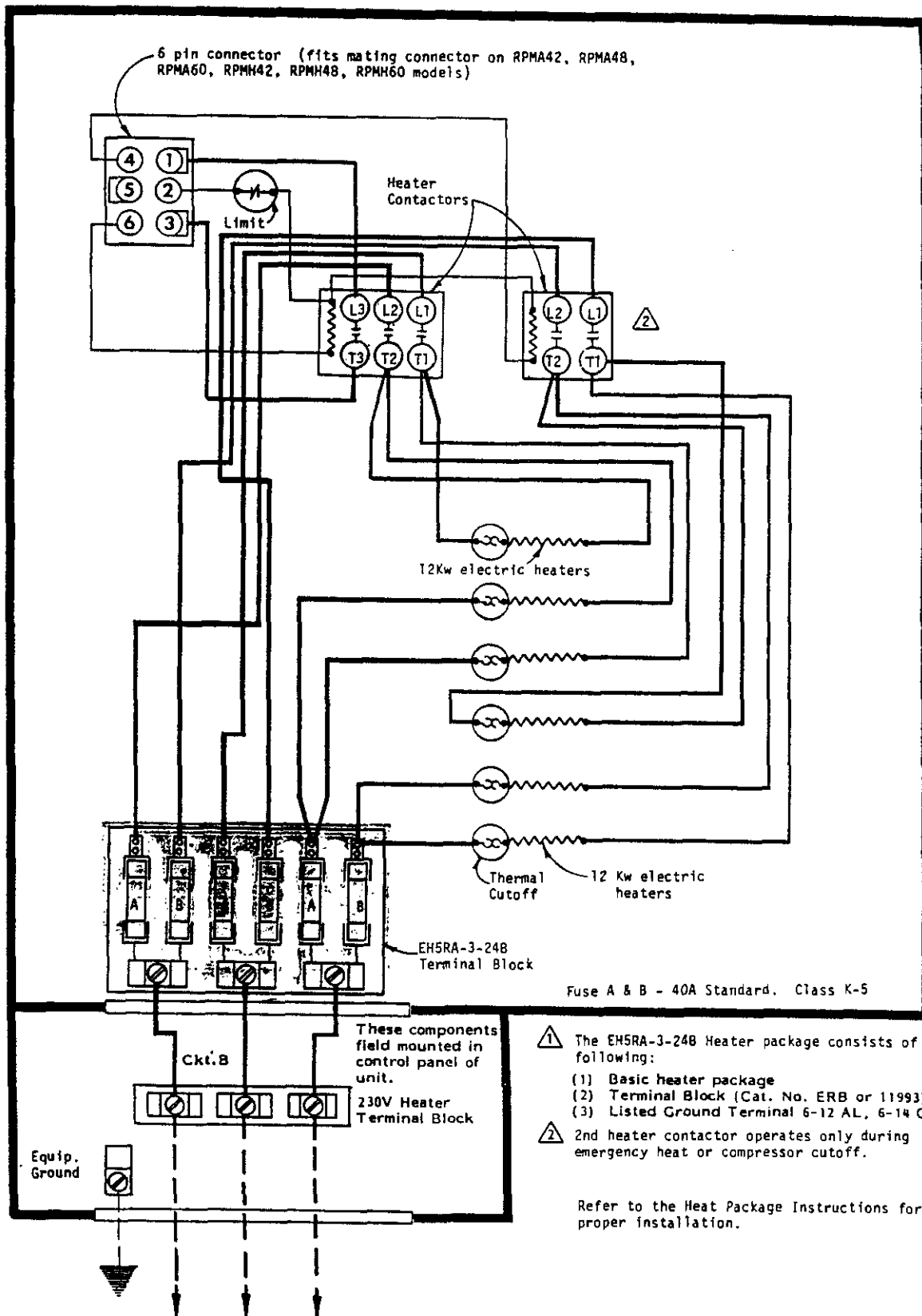
- ⚠ The EH5RA-3-21B Heater package consists of the following:
 - (1) Basic heater package
 - (2) Terminal Block (Cat. No. ERB or 11993)
 - (3) Listed Ground Terminal 6-12 AL, 6-14 CU
- ⚠ 2nd heater contactor operates only during emergency heat of compressor cutoff.

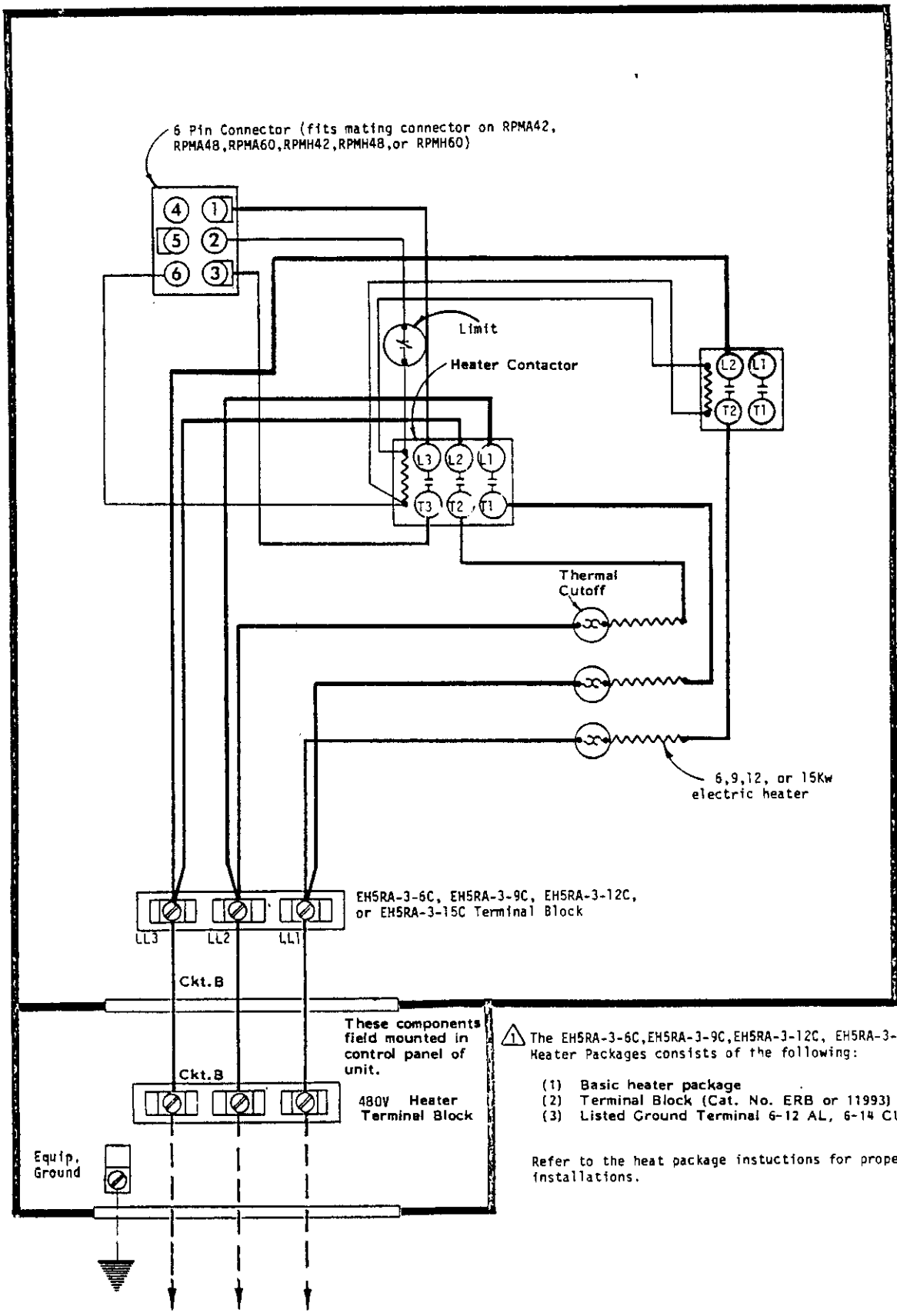
Refer to the Heat Package Instructions for proper installation.

USE COPPER OR ALUMINUM WIRE

240/208-60-3

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





6 Pin Connector (fits mating connector on RPMA42, RPMA48, RPMA60, RPMH42, RPMH48, or RPMH60)

EH5RA-3-6C, EH5RA-3-9C, EH5RA-3-12C, or EH5RA-3-15C Terminal Block

LL3 LL2 LL1

Ckt. B

These components field mounted in control panel of unit.

Ckt. B

480V Heater Terminal Block

Equip. Ground

⚠ The EH5RA-3-6C, EH5RA-3-9C, EH5RA-3-12C, EH5RA-3-15C Heater Packages consists of the following:

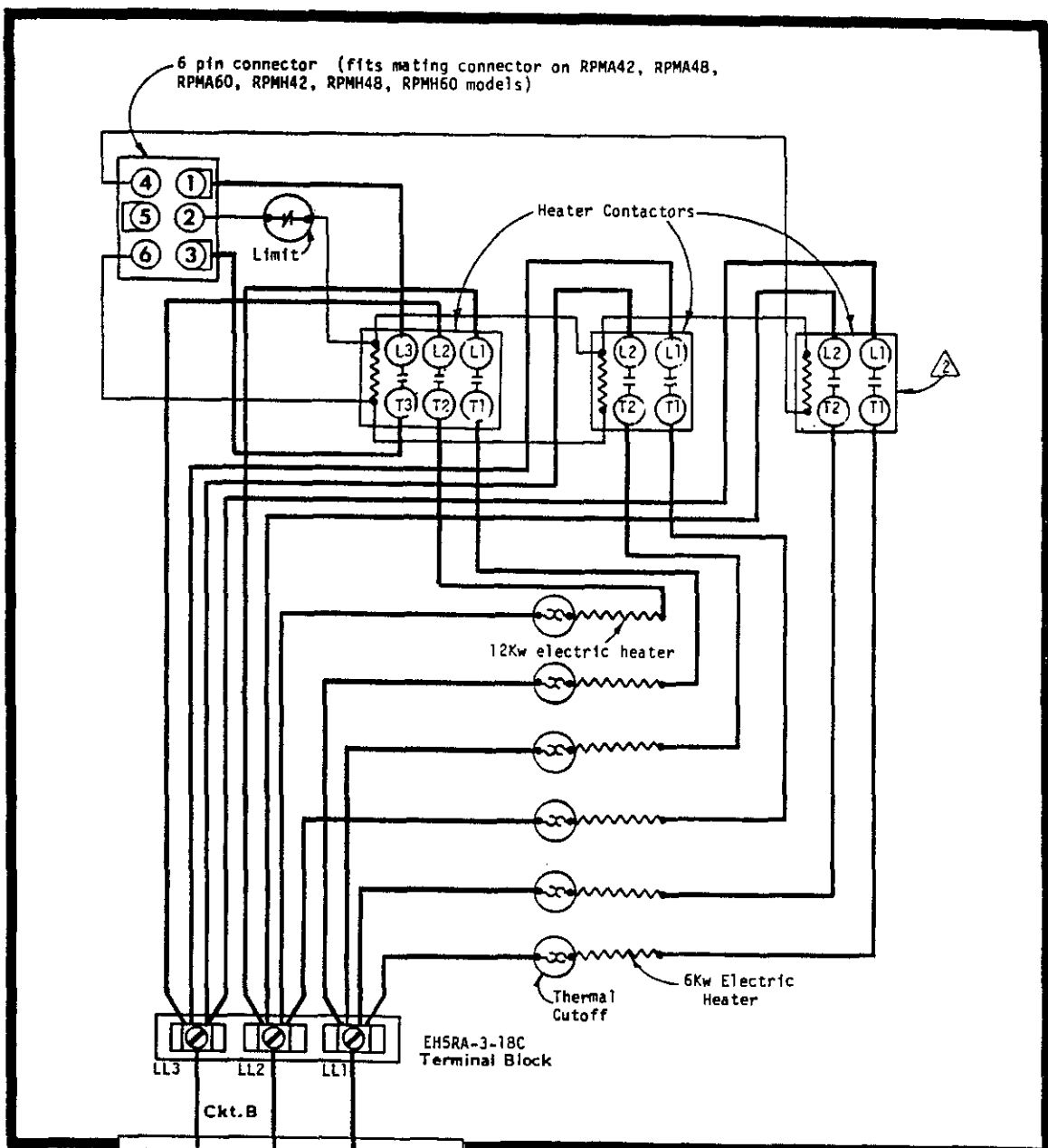
- (1) Basic heater package
- (2) Terminal Block (Cat. No. ERB or 11993)
- (3) Listed Ground Terminal 6-12 AL, 6-14 CU

Refer to the heat package instructions for proper installations.

480-60-3

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)

Limit

Heater Contactors

12Kw electric heater

6Kw Electric Heater

Thermal Cutoff

EH5RA-3-18C Terminal Block

LL3

Ckt. B

Ckt. B

These components field mounted in control panel of unit.

480V Heater Terminal Block

Equip. Ground

480-60-3

⚠ The EH5RA-3-18C Heater Package consists of the following:

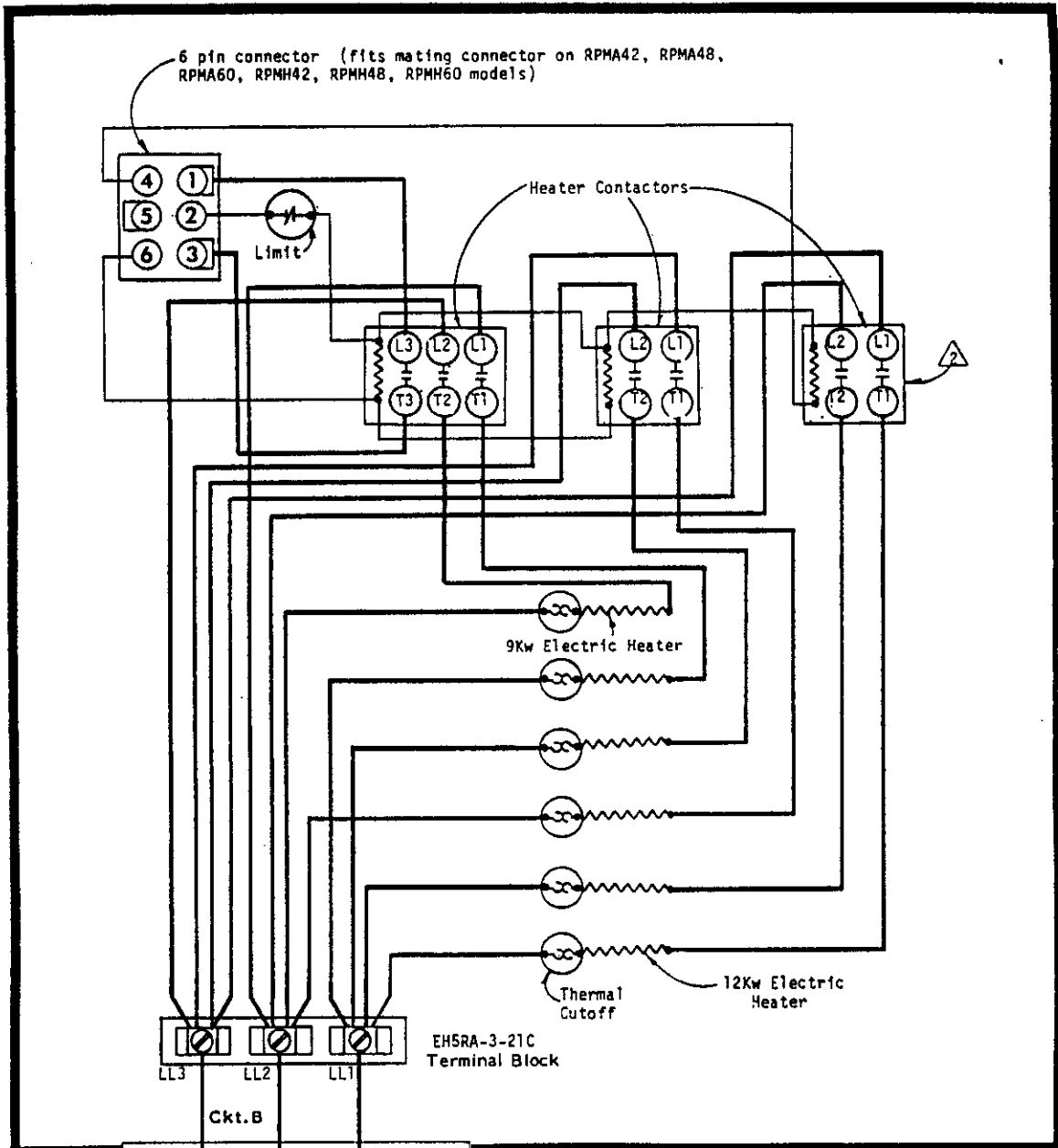
- (1) Basic heater package
- (2) Terminal Block (Cat. No. ERB or 11993)
- (3) Listed Ground Terminal 6-12 AL, 6-14 CU

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

Refer to the Heat Package Instructions for proper installation.

USE COPPER OR ALUMINUM WIRE

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



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

Heater Contactors

Limit

9Kw Electric Heater

12Kw Electric Heater

Thermal Cutoff

EHSRA-3-21C Terminal Block

LL3

Ckt. B

Ckt. B

These components field mounted in control panel of unit.

480y 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.

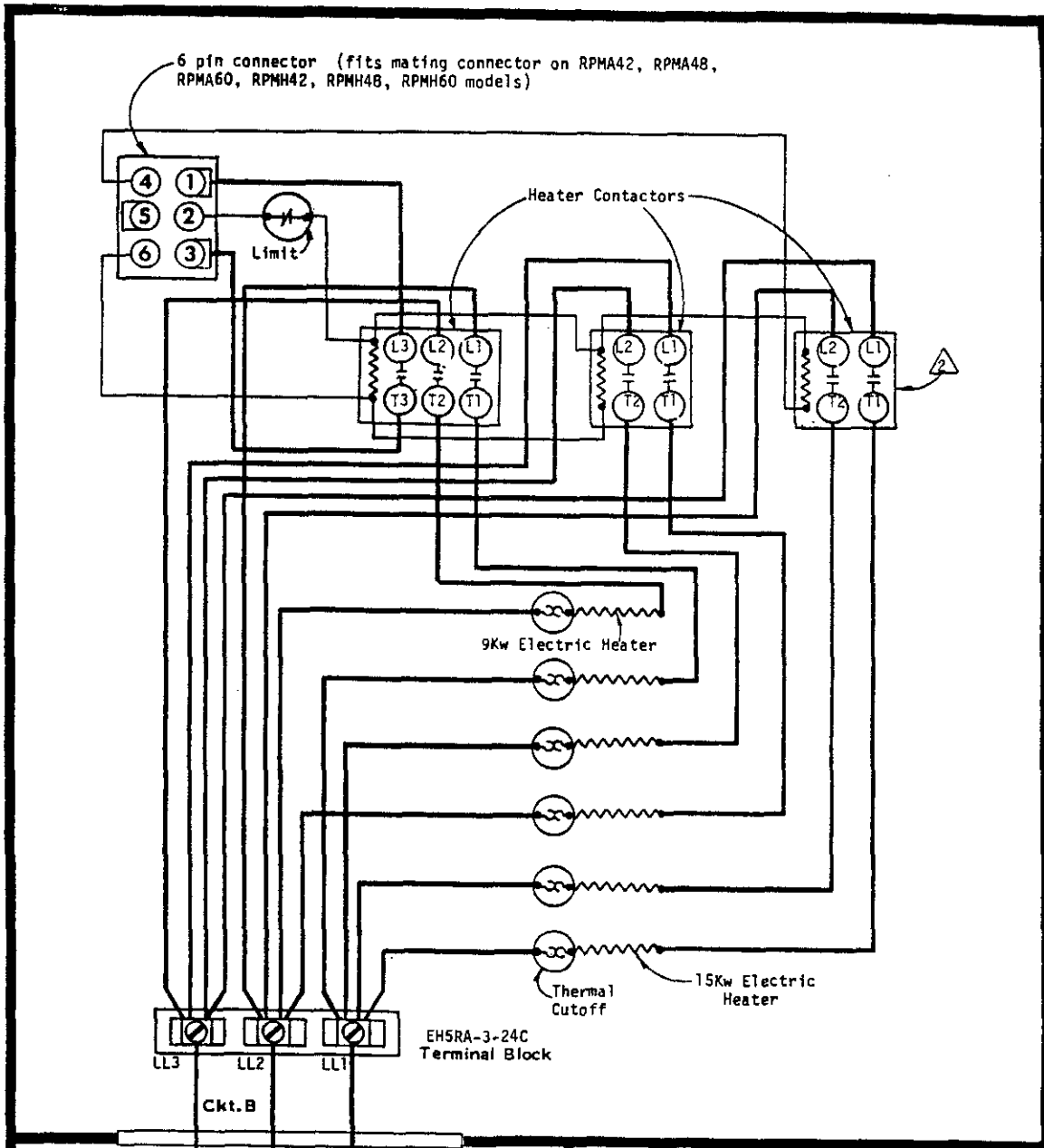
Refer to the Heat Package Instructions for proper installation.

USE COPPER OR ALUMINUM WIRE

480-60-3

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

4077-330B



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

Heater Contactors

Limit

9Kw Electric Heater

15Kw Electric Heater

EHSRA-3-24C Terminal Block

These components field mounted in control panel of unit.

480V Heater Terminal Block

⚠ 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.

Equip. Ground

480-60-3

USE COPPER OR ALUMINUM WIRE

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