WIRING DIAGRAMS
Models HER, VE, PTE electric unit heaters
Units built after 12/1/19

Two-In One Diagrams

Two wiring diagrams are furnished for each circuit configuration in this manual. Included are a connection diagram at the left for field installation and a circuit schematic at the right to aid in continuity and trouble shooting.

Solid lines show pre-wiring performed at the factory; dotted lines inform the installer of connections required to put the heater in operation.

NOTE: As indicated in every diagram, all wiring must comply with the National Electrical Code and all local codes. All components must agree with their respective power source.

Wiring Diagram Selection

Diagrams are readily identified in the page location index on the following page. This allows for the correct wiring diagram to be selected using the model, size, and power code of the unit heater.

Select the correct wiring diagrams as follows:

1. Determine unit heater model and size.
2. Select power code number from Table 2.1.
3. Reference unit heater model in the Page Location Index (Table 2.2) with power code number of the corresponding wiring diagram.

⚠ CAUTION

Turn off all power to unit before wiring. Failure to wire this unit according to this wiring diagram may result in injury to the installer or user. For deviations, contact factory.

Abbreviations and Symbols

To facilitate interpretation and enable simplification the abbreviations and symbols have been selected as recommended by ANSI (American National Standards Institute) and NEMA (National Electrical Manufacturers Association) standards.

XFMR or TR	Transformer
V	Volts
Hz	Cycle or Hertz
ϕ	Phase
LC	Limit Control
THERM or TH	Thermostat
G	Ground
HTR	Heater
H	Hot or High
SW	Switch
C	Common
"J" Box	Junction Box
L	Low
H_1, H_2, etc.	Transformer Primary Terminals
O.L.C.	Overload Contact
R	Relay
Rc	Relay Contact
VA	Volt-Ampere
X1,X2, etc.	Transformer Secondary Terminals
L1, L2, etc.	Electric Load Terminals
T1, T2, etc.	Starter or Motor Terminals

Wire Color Coding

BK	Black
BU	Blue
R	Red
W	White
Y	Yellow

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2-424.8 — WIRING DIAGRAMS MODELS HER, VE, PTE

Table 2.1

Power Code Selection

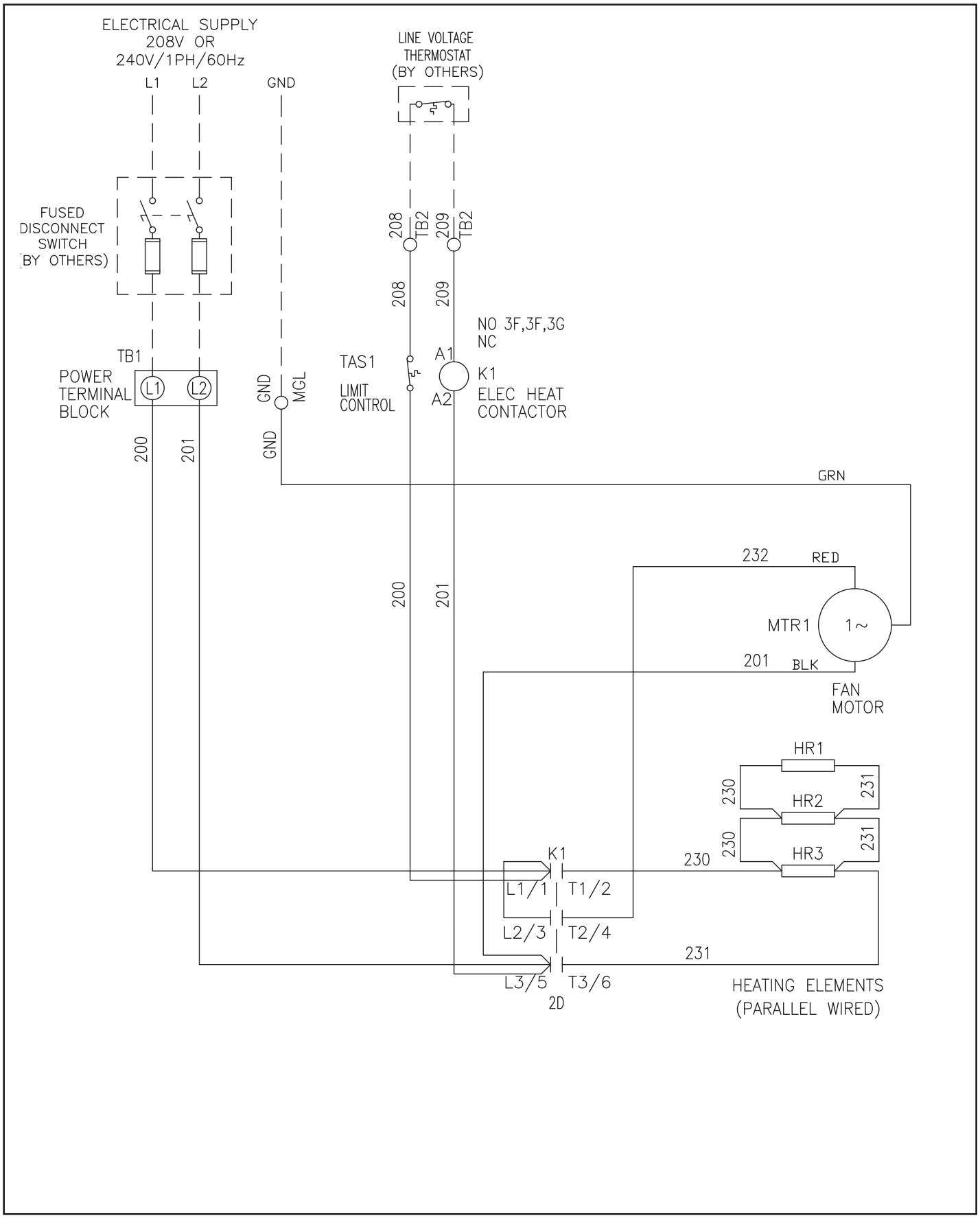
	Power Supply (Volts/Phase)					
	208V/1	**240V/1**	**208V/3**	**240V/3**	**480V/3**	**600v/3**
Power Code	11	12	31	32	33	34

Table 2.2

Electric Unit Heater Page Location Index

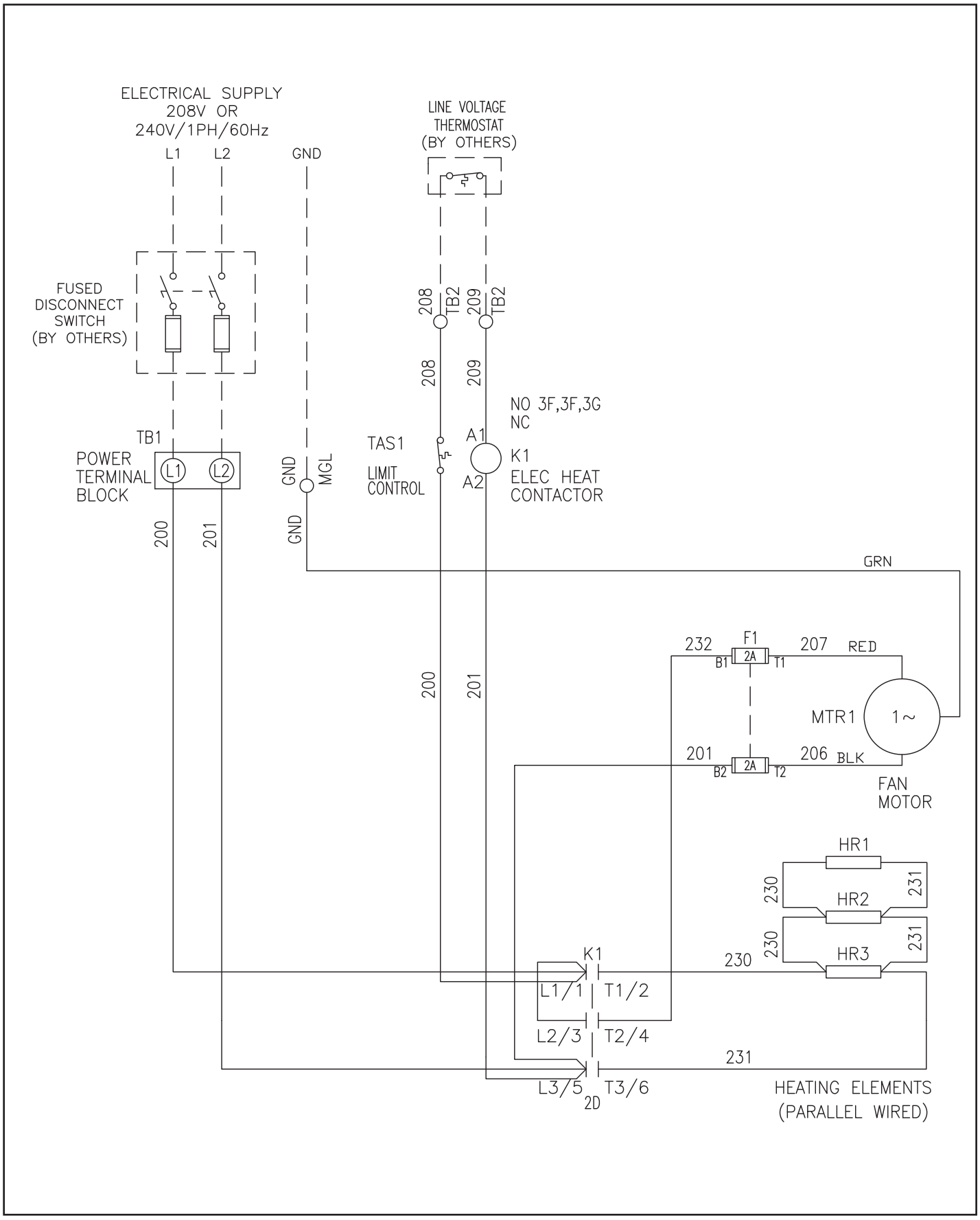
Model No.	**Power Code**					
	11	**12**	**31**	**32**	**33**	**34**
HER 30	3	3	5	5	8	9
HER 50	3	3	5	5	8	9
HER 75	3	3	5	5	8	9
HER100	4	4	5	5	8	9
HER125	-	-	5	5	8	9
HER150	-	-	6	5	8	9
HER200	-	-	7	7	8	9
HER250	-	-	7	7	8	9
VE 50	-	10	11	11	12	-
VE 75	-	10	11	11	12	-
VE100	-	10	11	11	12	-
VE150	-	-	14	14	15	-
VE200	-	-	-	14	15	-
VE250	-	-	-	-	15	-
VE300	-	-	-	-	13	-
VE400	-	-	-	-	13	-
VE500	-	-	-	-	13	-
PTE300	-	-	-	-	13	-
PTE400	-	-	-	-	13	-
PTE500	-	-	-	-	13	-

2-424.8 — WIRING DIAGRAM MODEL HER



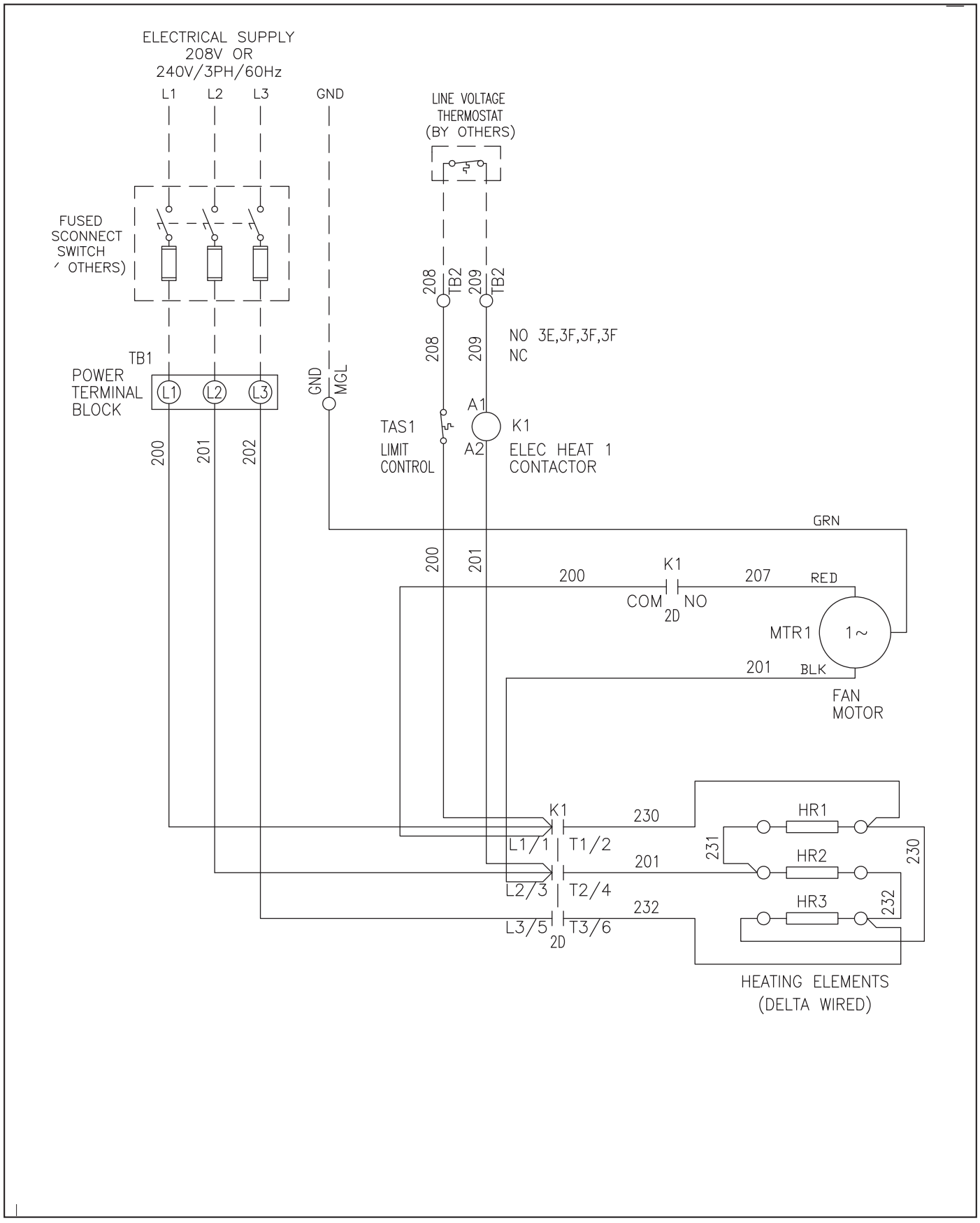
5H1052640001 208V or 240V, single-phase power supply, 3kw, 5kw, 7.5kw, Horizontal Models

2-424.8 — WIRING DIAGRAM MODEL HER



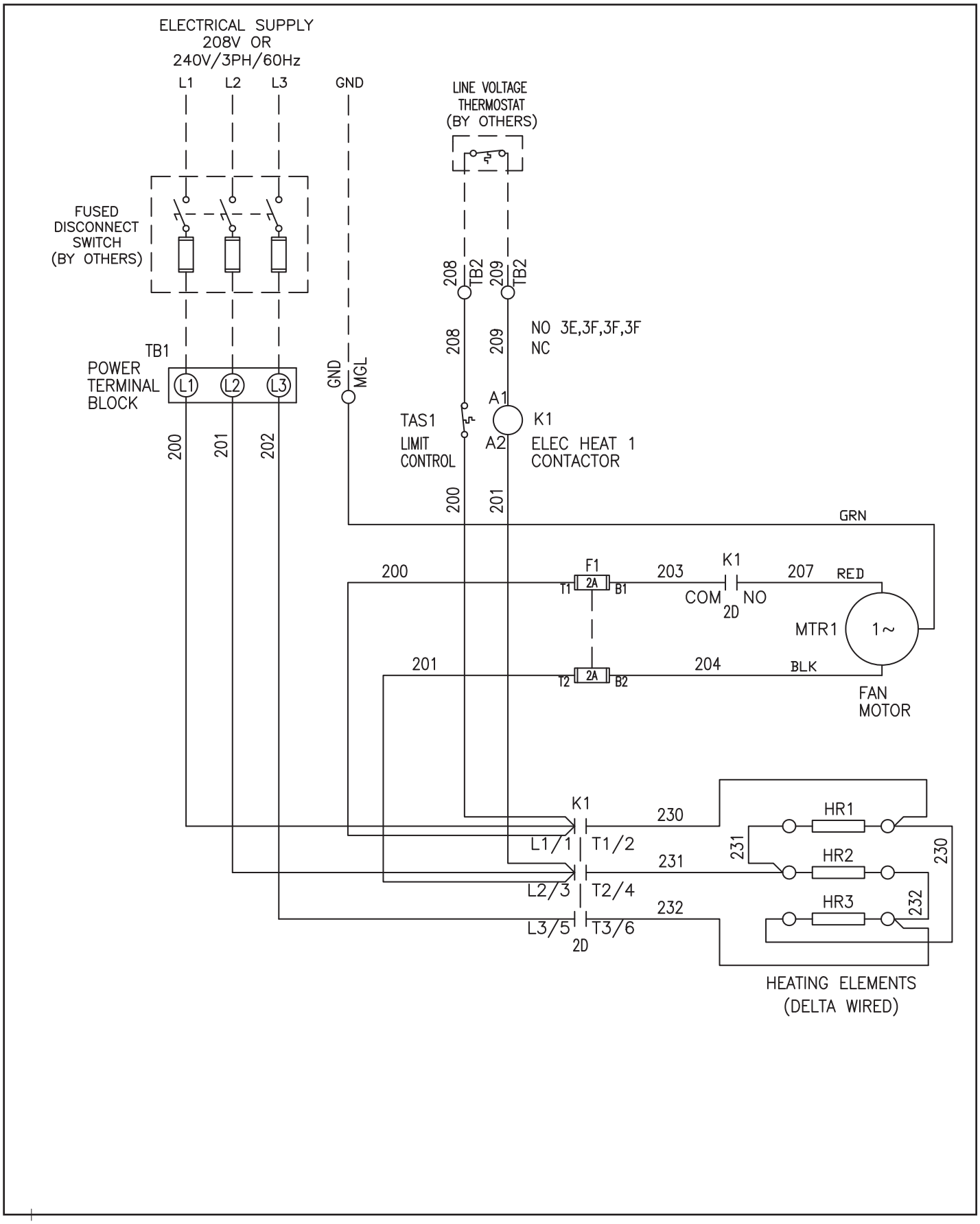
5H1052640002 208V or 240V, single-phase power supply, 10kw Horizontal Model

2-424.8 — WIRING DIAGRAM MODEL HER



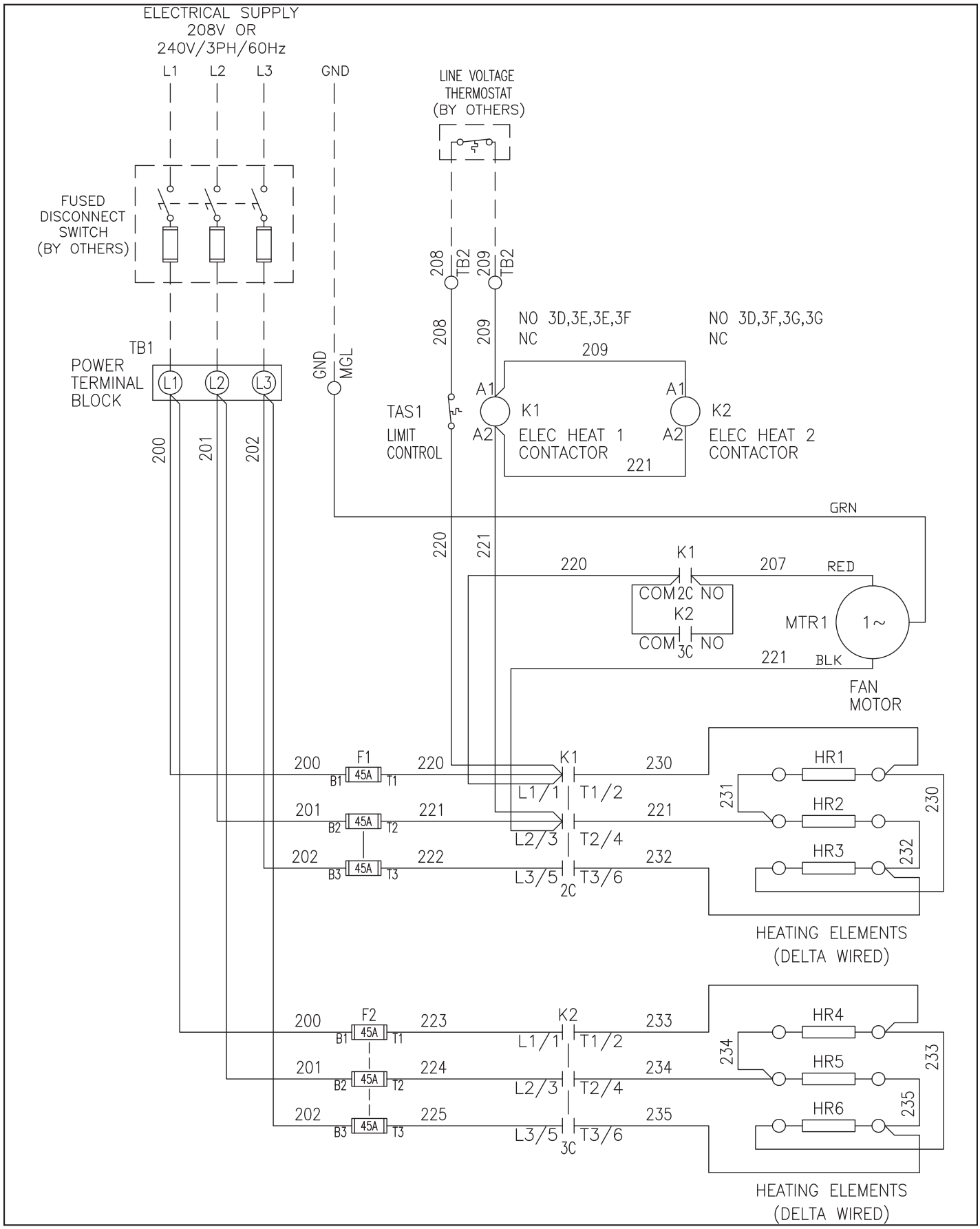
5H1052640003 208V or 240V, three-phase power supply, 3kw, 5kw, 7.5kw, 10kw, 12.5kw, 15kw (240 only) Horizontal Models

2-424.8 — WIRING DIAGRAM MODEL HER



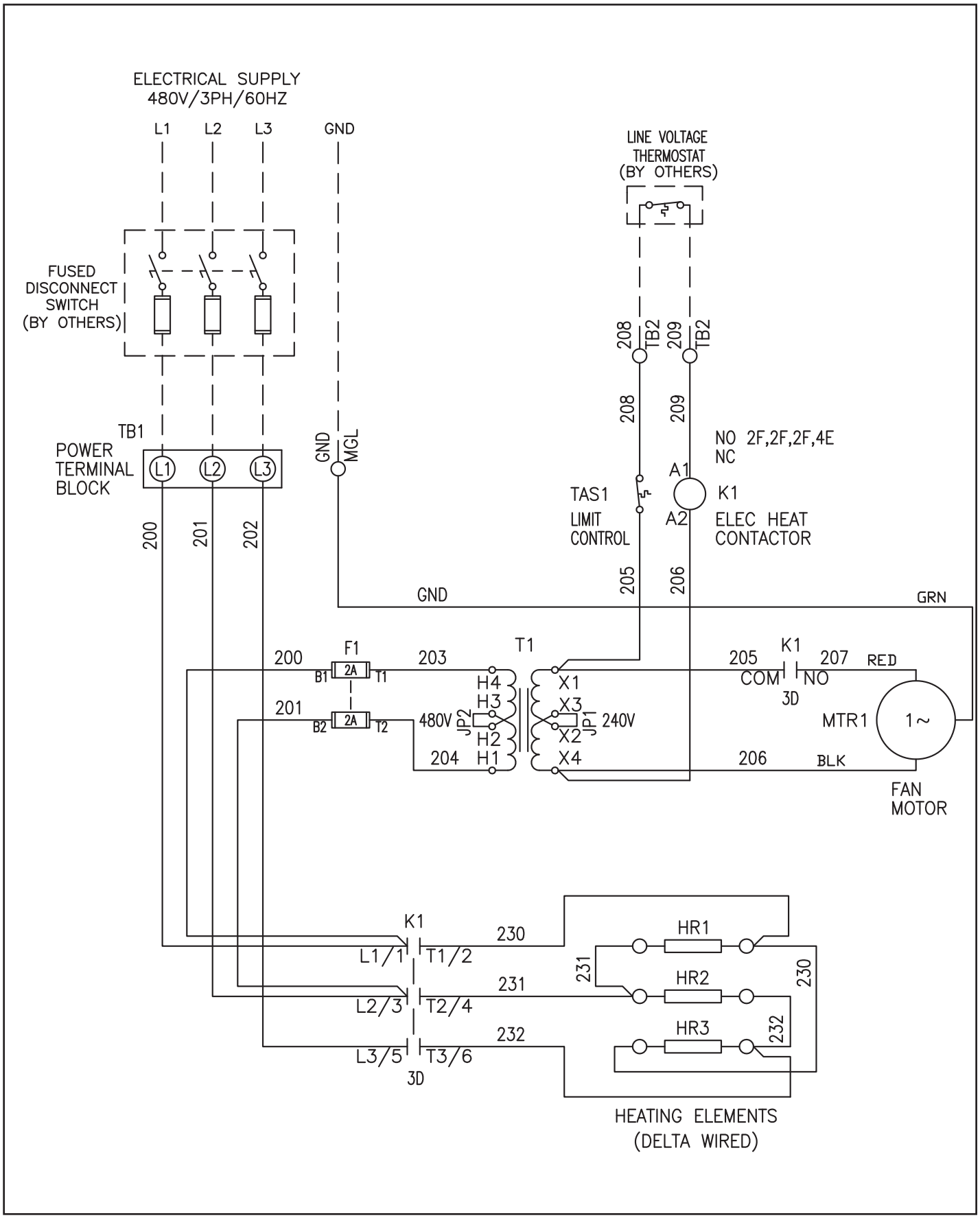
5H1052640004 208V, three-phase power supply, 15kw Horizontal Model

2-424.7 — WIRING DIAGRAM MODEL HER



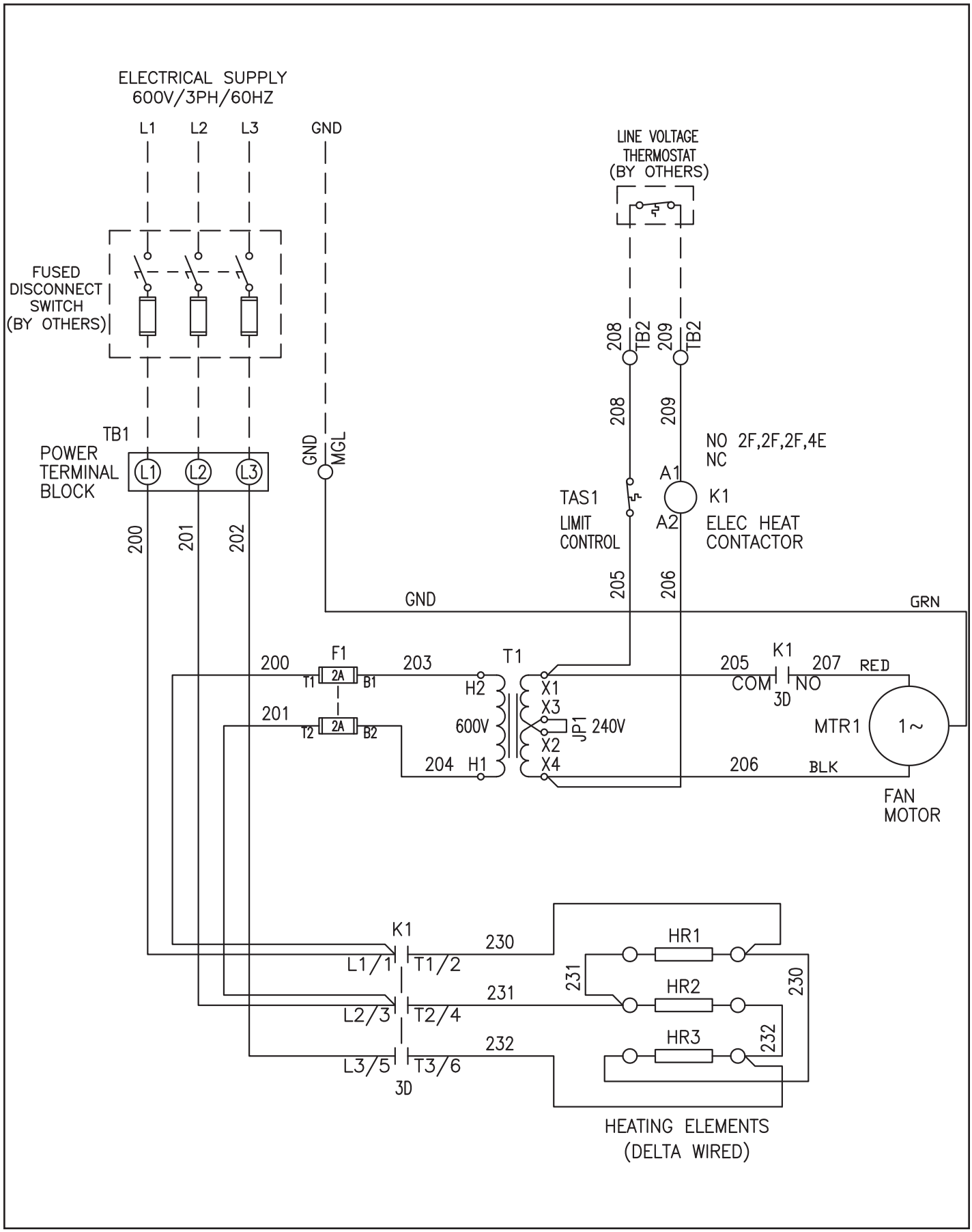
5H1052640005 208V or 240V, three-phase power supply, 20kw, 25kw Horizontal Models

2-424.8 — WIRING DIAGRAM MODEL HER



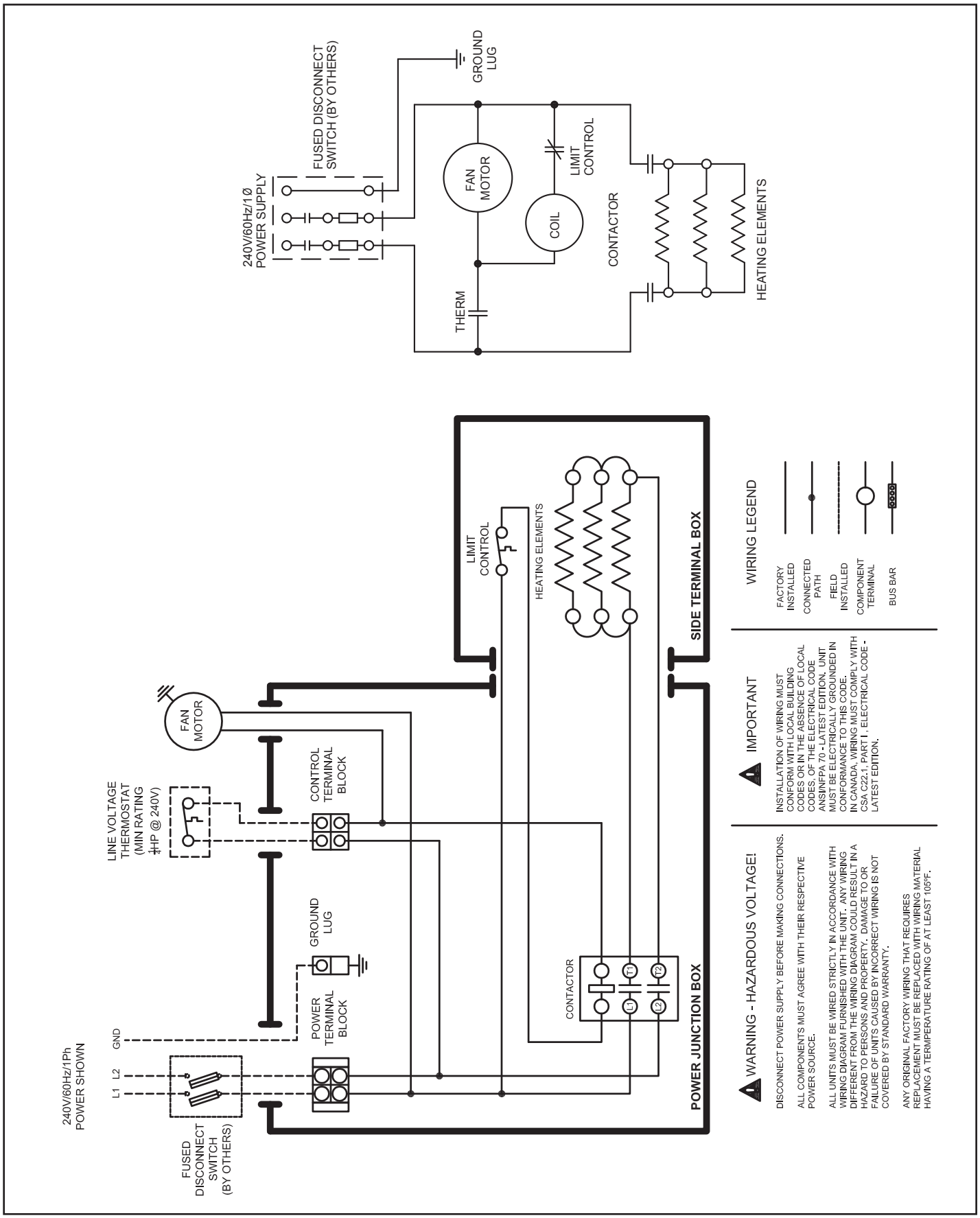
5H1052640006 480V three-phase power supply, 3kw, 5kw, 7.5kw, 10kw, 12.5kw, 15kw, 20kw, 25kw Horizontal Models

2-424.8 — WIRING DIAGRAM MODEL HER



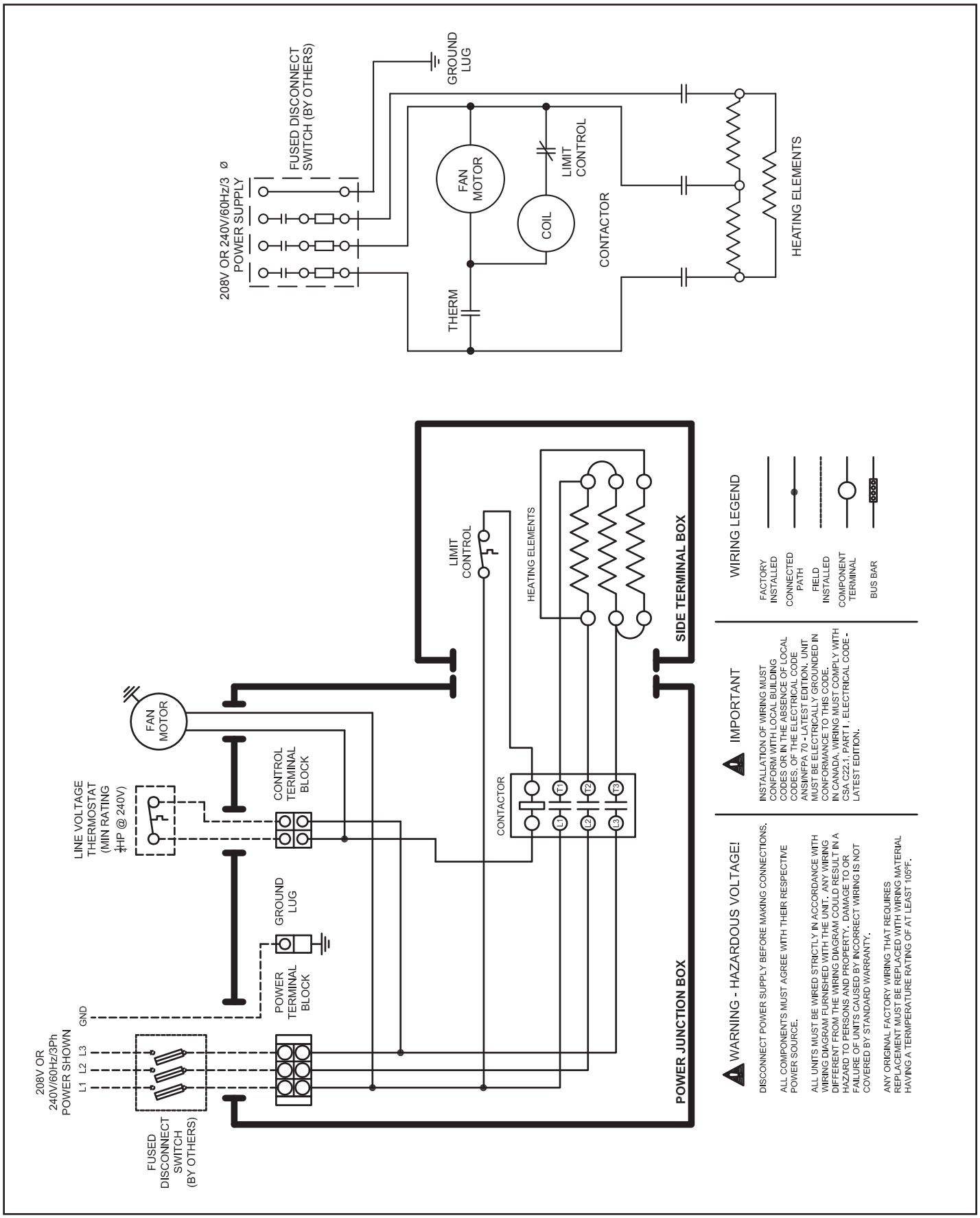
5H1052640007 600V, three-phase power supply, 3kw, 5kw, 7.5kw, 10kw, 12.5kw, 15kw, 20kw, 25kw Horizontal Models

2-424.7 — WIRING DIAGRAM MODEL VE



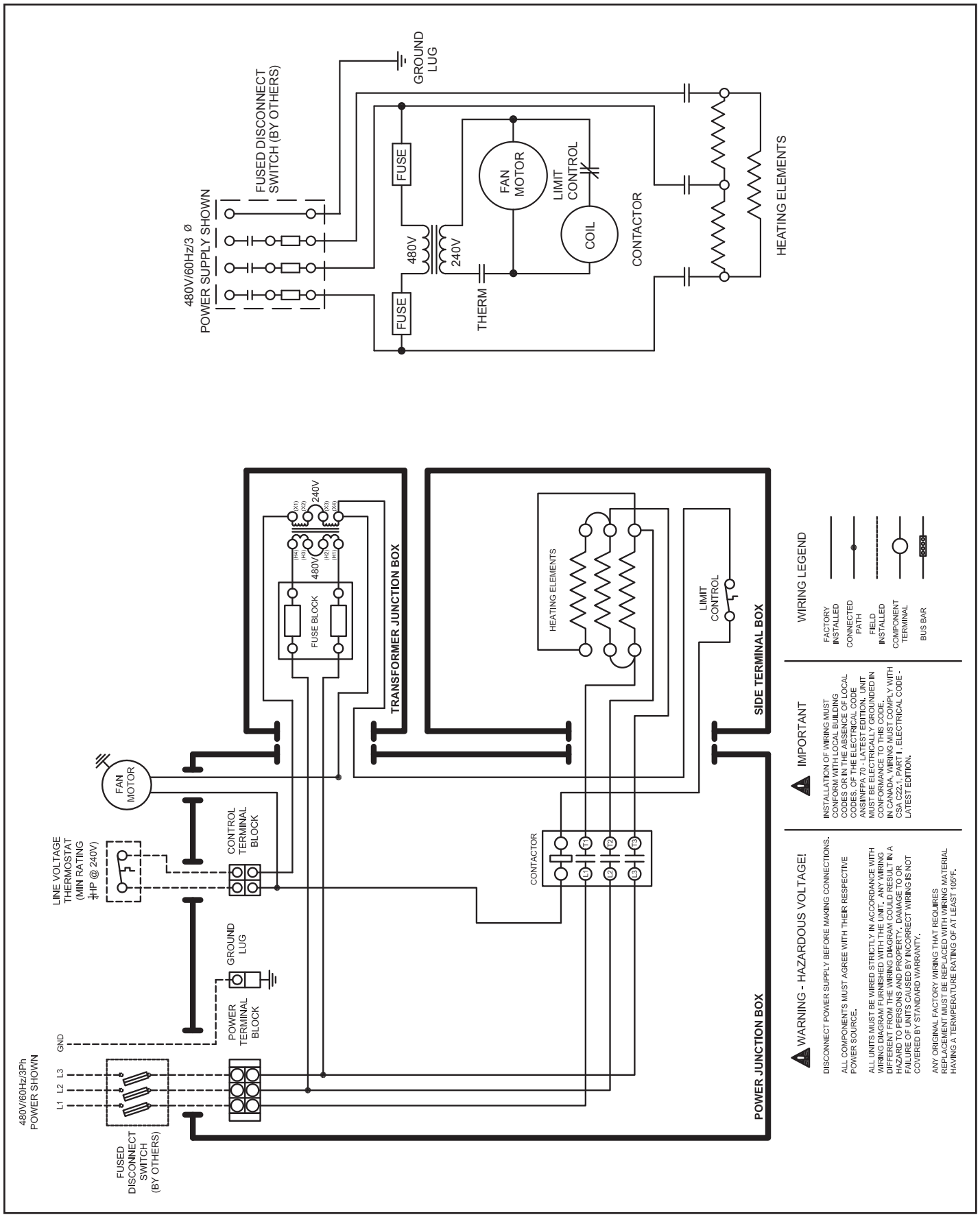
5H0702530008 240V, single-phase power supply, 5kw, 7.5kw, 10kw Vertical Models

2-424.7 — WIRING DIAGRAM MODEL



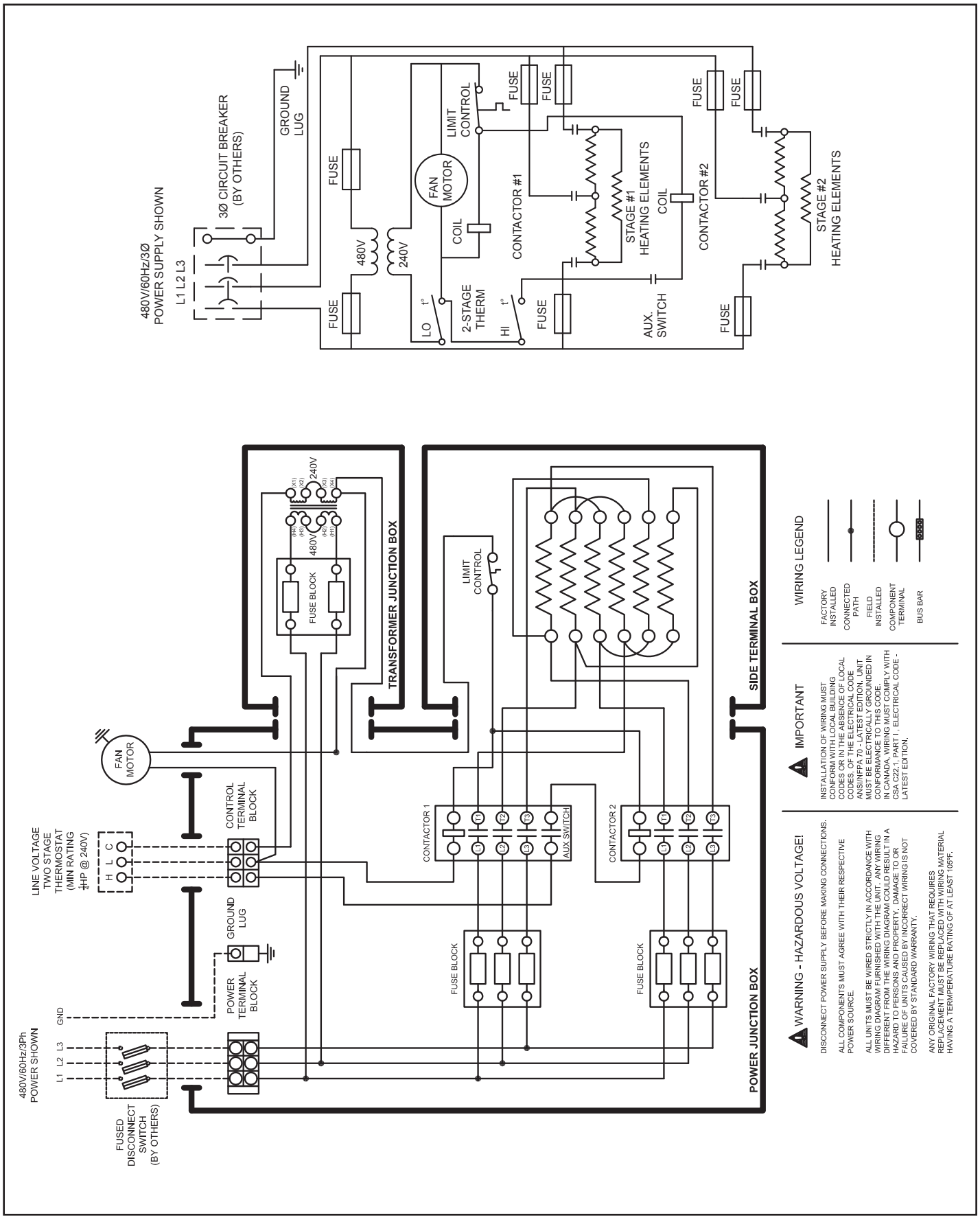
5H0702530009 208V or 240V, three-phase power supply, 5kw, 7.5kw, 10kw Vertical Models

2-424.7 — WIRING DIAGRAM MODEL VE



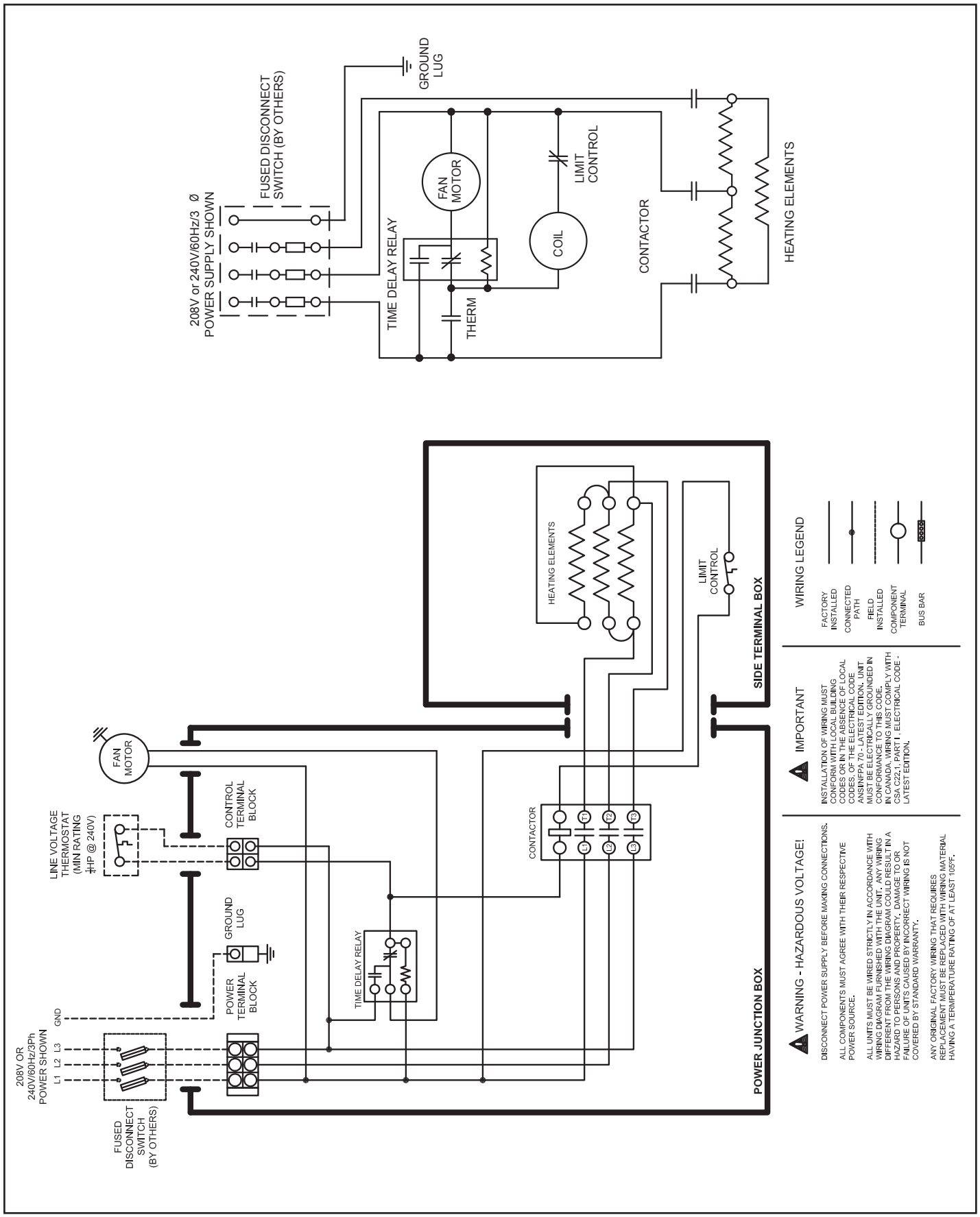
5H0702530010 480V or 600V, three-phase power supply, 5kw, 7.5kw, 10kw Vertical Models

2-424.7 — WIRING DIAGRAMS MODELS VE, PTE



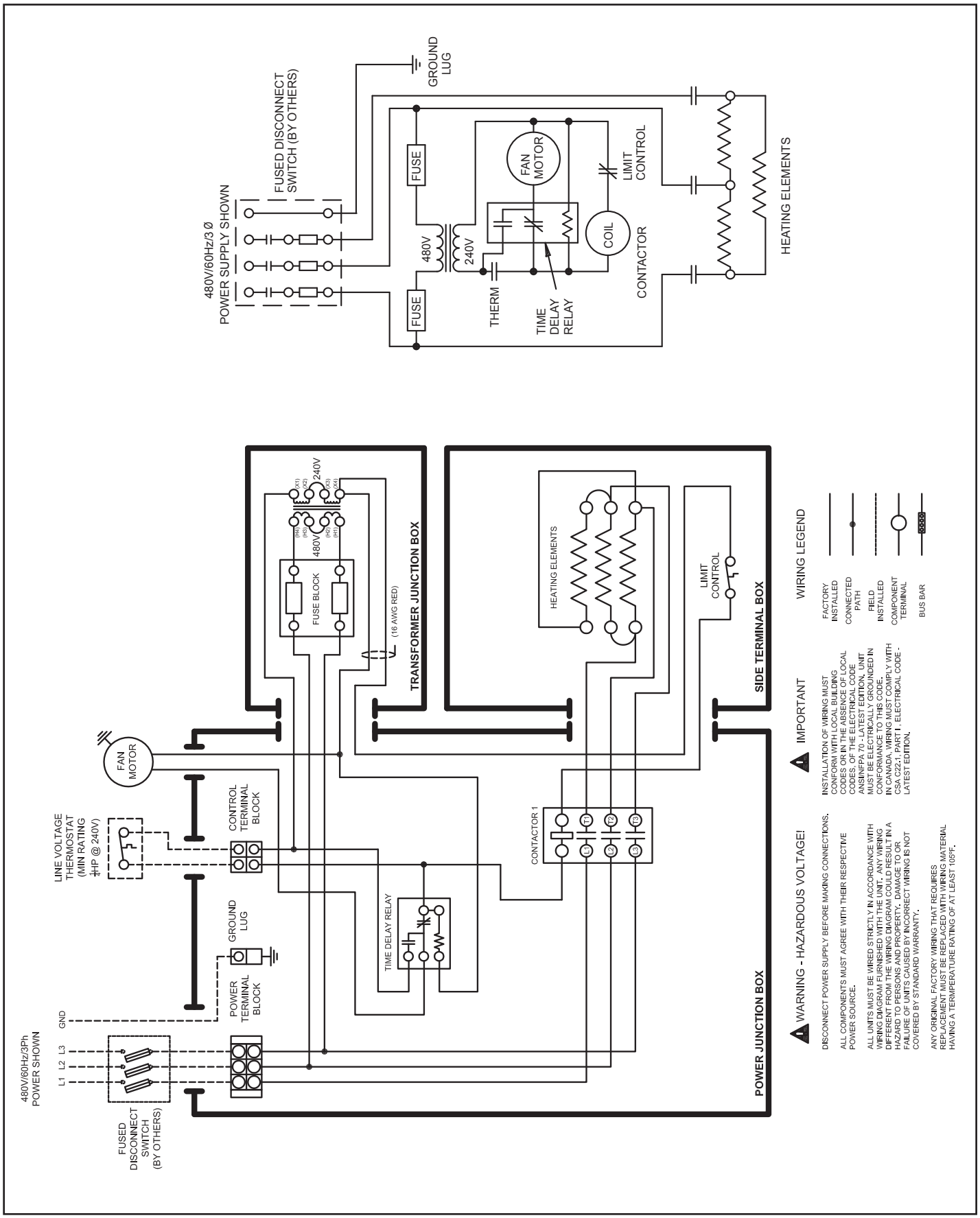
5H0702530011 REV H 480V or 600V, three-phase power supply, 30kw, 40kw, and 50kw Vertical and Power Throw Models

2-424.7 — WIRING DIAGRAM MODEL VE



5H0702530012 208V or 240-volt, three-phase power supply, 15kw, 20kw Vertical Models

2-424.7 — WIRING DIAGRAM MODEL VE



5H0702530013 480V or 600-volt, three-phase power supply, 15kw, 20kw, 25kw Vertical Models

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For SERVICE contact your local qualified installation and service contractor or appropriate utility company.

As Modine Manufacturing Company has a continuous product improvement program, it reserves the right to change design and specifications without notice.

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