

**INSTALLATION INSTRUCTIONS FOR T3EH SERIES ELECTRIC HEAT SECTIONS USED
WITH TAA072 - 240 SERIES UNITS**

**RETAIN THESE INSTRUCTIONS FOR
FUTURE REFERENCE**

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause personal injury, loss of life, or damage to property.

Installation and service must be performed by a licensed professional installer (or equivalent) or a service agency.

⚠ CAUTION

Physical contact with metal edges and corners while applying excessive force or rapid motion can result in personal injury. Be aware of, and use caution when working near these areas during installation or while servicing this equipment.

Shipping and Packing List

Check parts for shipping damage; if any damage is found, immediately contact the last shipping carrier.

Package 1 of 1 contains the following:

- 1 — Assembled electric heat section
- 1 — Bag assembly containing 16 sheet metal screws
- 1 — Plastic bushing
- 1 — Wiring diagram

Requirements

Installation of electric heat sections must conform with standard in National Fire Protection Association (NFPA) Standard for Installation of Air Conditioning and Ventilation Systems NFPA No. 90A, Standard for the Installation of Residence Type Warm Air Heating and Air Conditioning System NFPA No. 90B, manufacturer's installation instructions and local municipal building codes. Heaters are approved for clearance to combustible materials as listed on heater rating plate. Accessibility and service clearances must take precedence over fire protection clearances. All wiring must conform with local codes and the National Electric Code (NEC). ANSI-C1-1978.

Application

T3EH series heat sections are used as primary heaters for TAA072 - 240 series units. T3EH heat sections may be installed in either upflow or horizontal air discharge applications as illustrated in figures 5 and 4. The T3EH units are designed for indoor use only.

Installation

⚠ WARNING



Electric Shock Hazard. Can cause injury or death.

Line voltage is present at all components on units with single-pole contactors, even when unit is not in operation!

Unit may have multiple power supplies. Disconnect all remote electric power supplies before opening access panel.

Unit must be grounded in accordance with national and local codes.

1. If the air handler unit has been previously installed, remove the duct from the supply air side of the blower coil unit.
2. If the air handler unit has not been installed, attach the supply side duct flanges provided with the air handler.
3. Remove the blower access panel.
4. Remove the blower coil knockout located beside the supply air blower opening as illustrated in figures 1 through 3.
5. Install plastic bushing into knockout.
6. Align the electric heat section unit with the air handler unit. Align the grommet on the T3EH with the TAA knockout as illustrated in figures 5 and 4.
7. Route the electric heat wiring through the grommet and knockout bushing to the coil blower control box as illustrated in figure 6.
8. Insert bottom flange of electric heater inside the supply duct flanges. Use the provided screws to secure the two cabinets together.



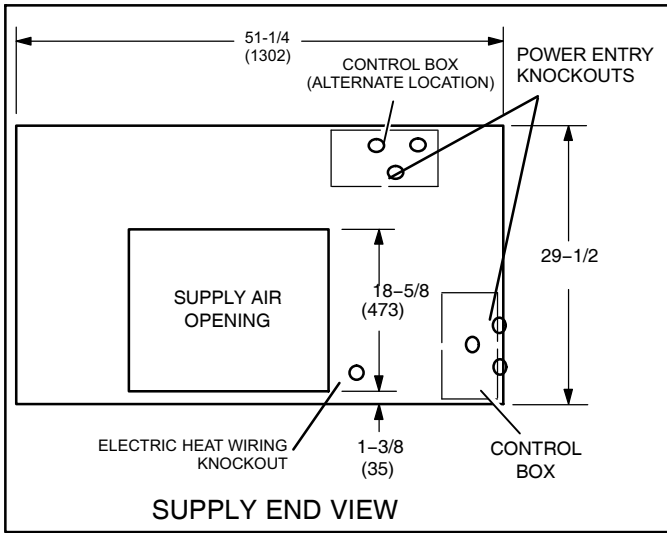


Figure 1. TAA 072 and 090 Knockout Location - Dimensions - inches (mm)

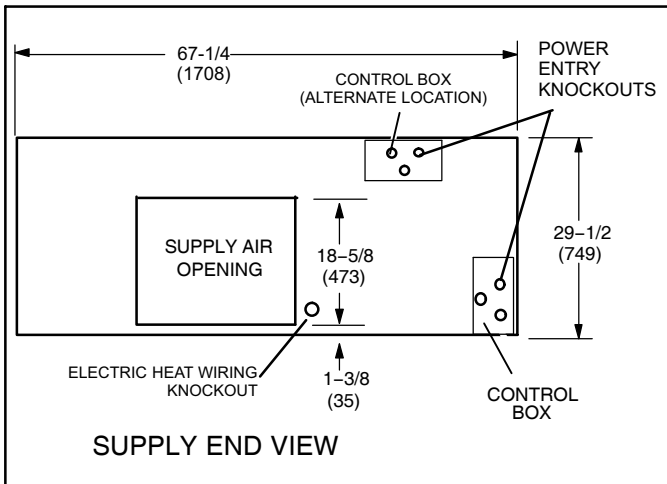


Figure 2. TAA 120 and 150 Knockout Location - Dimensions - inches (mm)

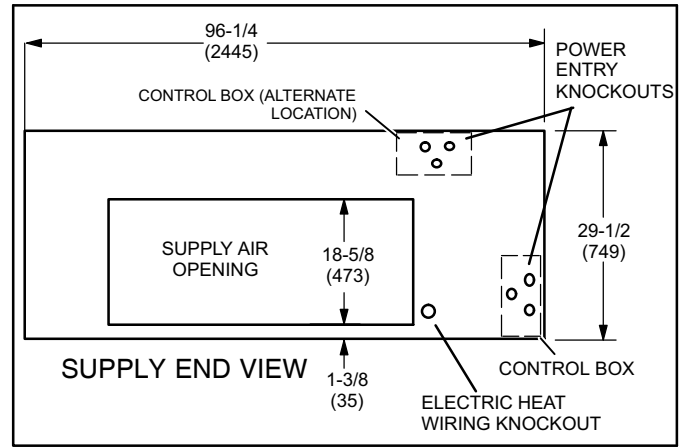


Figure 3. TAA 180 and 240 Knockout Location - Dimensions - inches (mm)

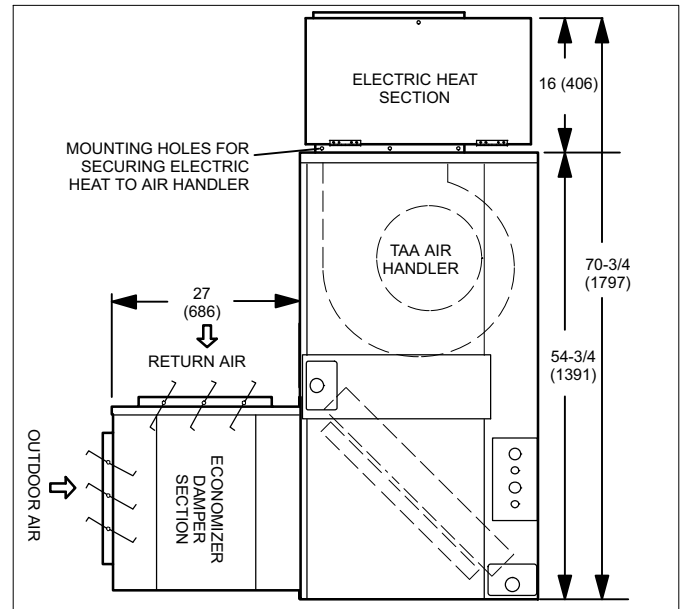


Figure 4. Upflow Application - Dimensions - inches (mm)

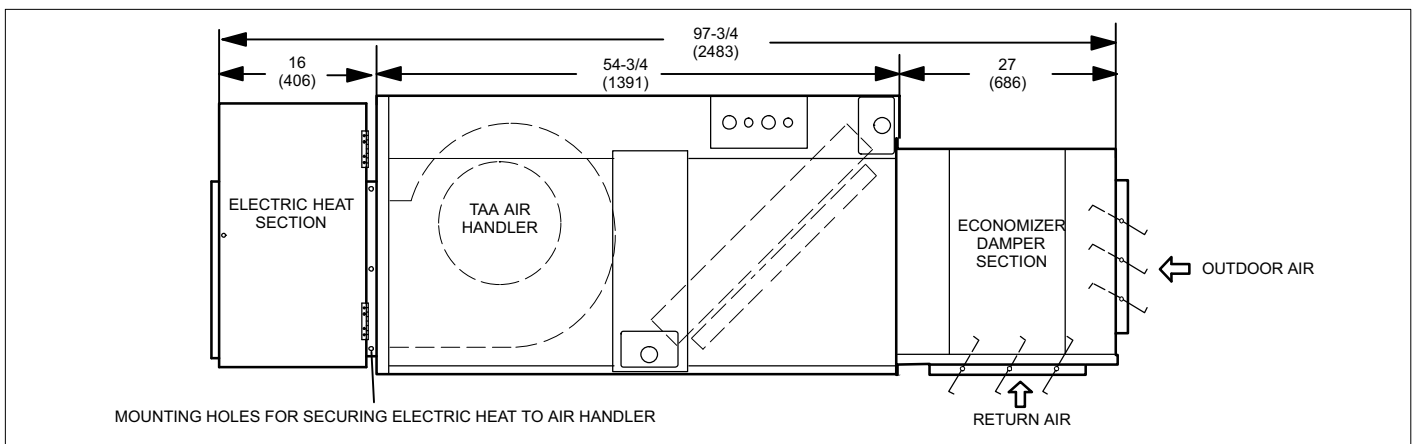


Figure 5. Horizontal Application - Dimensions - inches (mm)

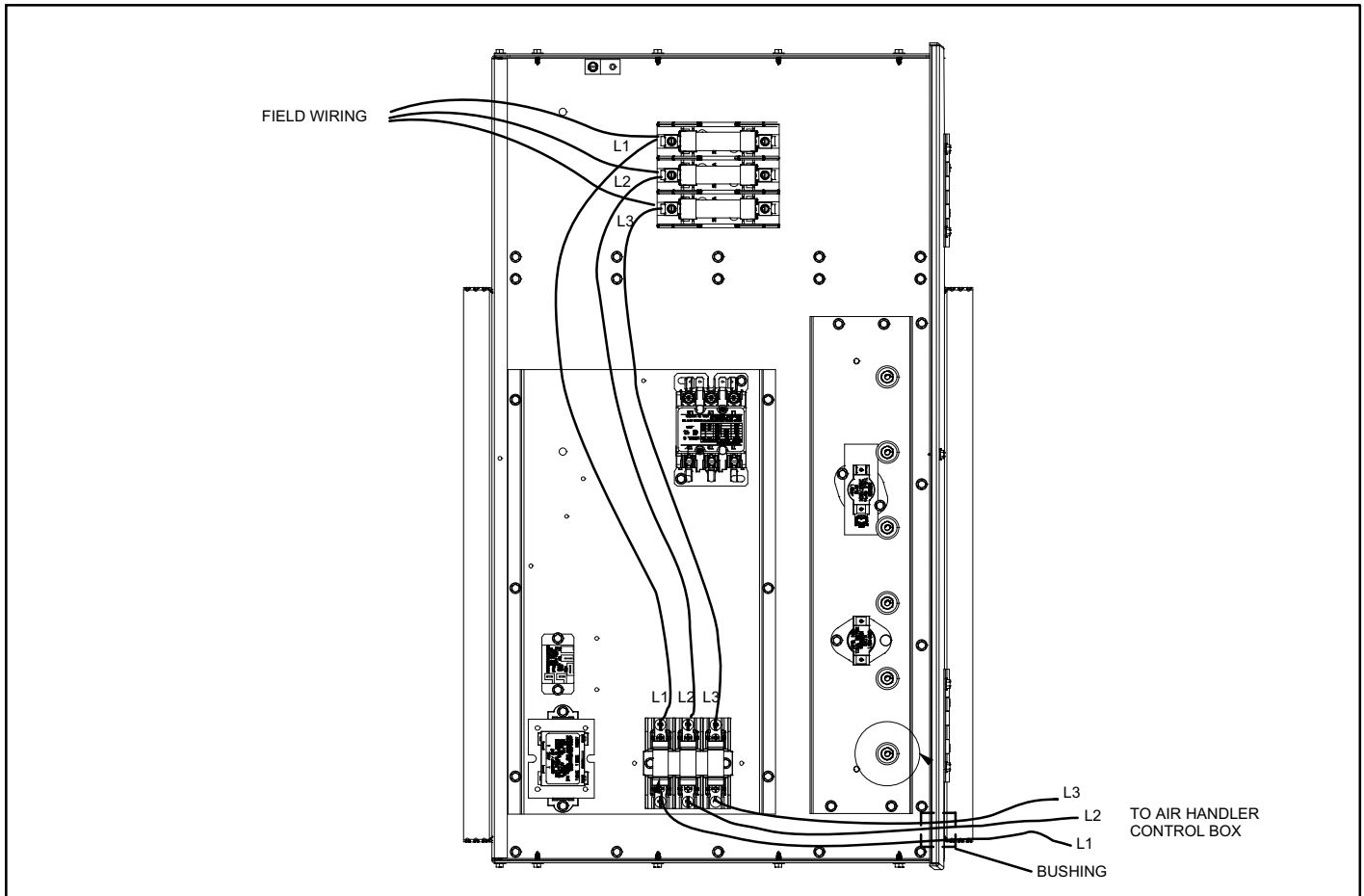


Figure 6. Typical Wire Routing

Electrical Connections

If you install the T3EH with an existing TAA, you must change the power supply wiring if it is not already sized to carry the blower and electric heat load.

Remove the original power supply wires or disconnect the power source.

1. The T3EH heat section contains the blower motor wiring harness and sub-fusing. Route the blower motor harness from the electric heat section through the knockout into the blower unit, and into the wiring makeup box.
2. See figures 7 through 14 for proper wiring. The T3EH electric heat section includes provisions for high and low voltage field wiring.
3. Route the low voltage wiring from the electric heater to the low voltage terminal strip in the TAA unit. Refer

to wiring diagrams provided with the T3EH unit for details on wiring with a heat pump or AC.

Blower Speed Requirements

T3EH electric heat applications require specific blower air volumes. To determine unit CFM, refer to the TAA series installation instruction.

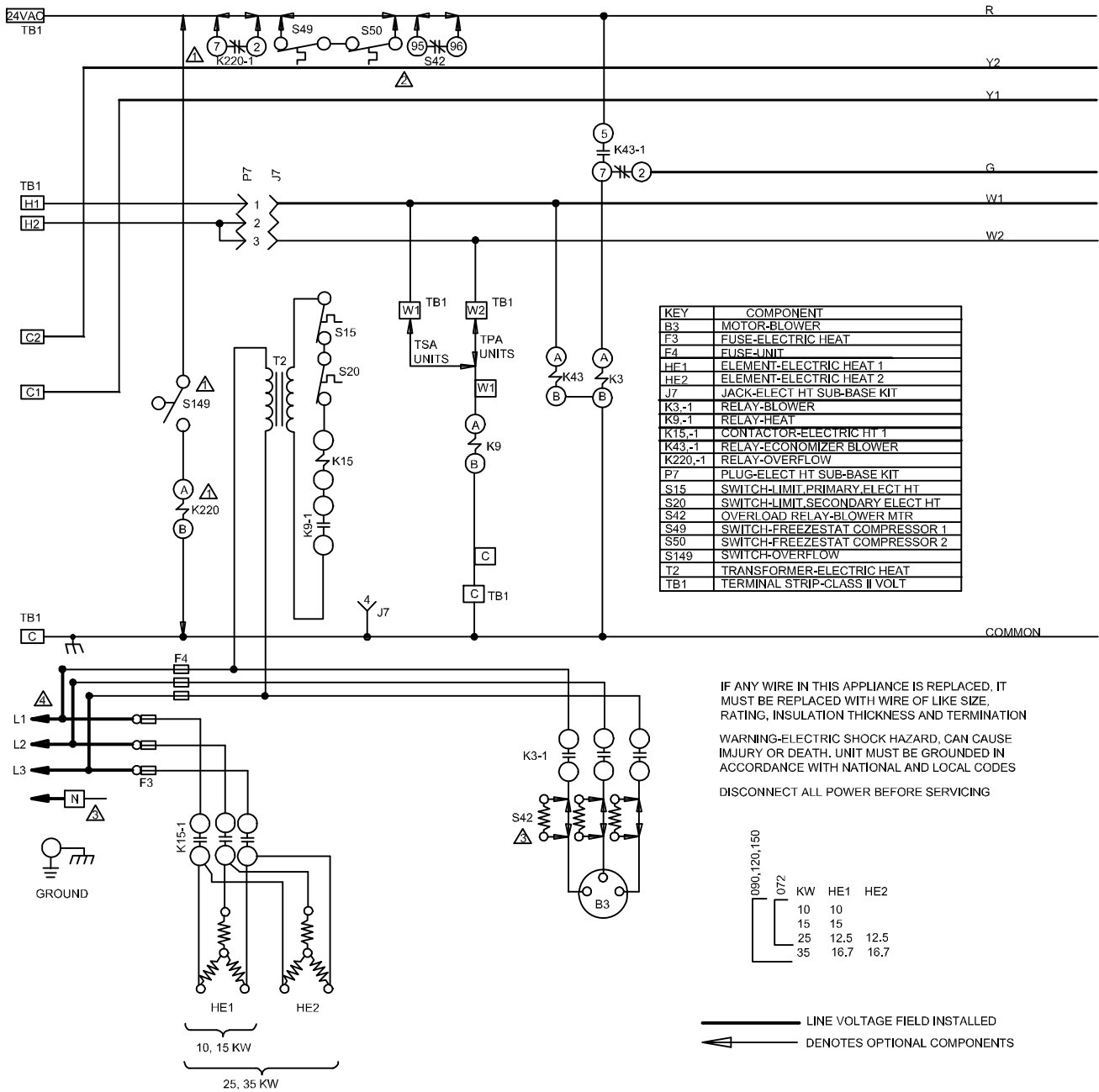
Duct Connections

Refer to the TAA series installation instruction and the TAA heater installed nameplate for the proper duct connections and clearances.

Unit Start-Up (Heating Cycle)

Set the room sensor for the proper HEAT or AUTO operation, if you use a switching subbase. Close the disconnect switch and position the heat setpoint above room temperature.

Wiring Diagrams



IF ANY WIRE IN THIS APPLIANCE IS REPLACED, IT MUST BE REPLACED WITH WIRE OF LIKE SIZE, RATING, INSULATION THICKNESS AND TERMINATION

WARNING-ELECTRIC SHOCK HAZARD, CAN CAUSE INJURY OR DEATH. UNIT MUST BE GROUNDED IN ACCORDANCE WITH NATIONAL AND LOCAL CODES

DISCONNECT ALL POWER BEFORE SERVICING

- ⚠ S149 SWITCH AND K220 RELAY MAY BE FIELD SUPPLIED OR USE AVAILABLE KIT
- ⚠ S50 USED ON TWO STAGE UNITS
- ⚠ "M" VOLTAGE UNITS ONLY
- ⚠ USE COPPER CONDUCTORS ONLY


01/12	 537521-01	WIRING DIAGRAM	01/12
		HEATING - ELECTRIC	
T3EH - TAA 072 - 150 UNITS - G,J,M			
SECTION B3		REV 0	
Supersedes	New Form No.		
537173-01	537521-01		

Figure 7. T3EH-10, 15, 25, and 35 (G, J and M Voltages) for use with TAA 072 through 150

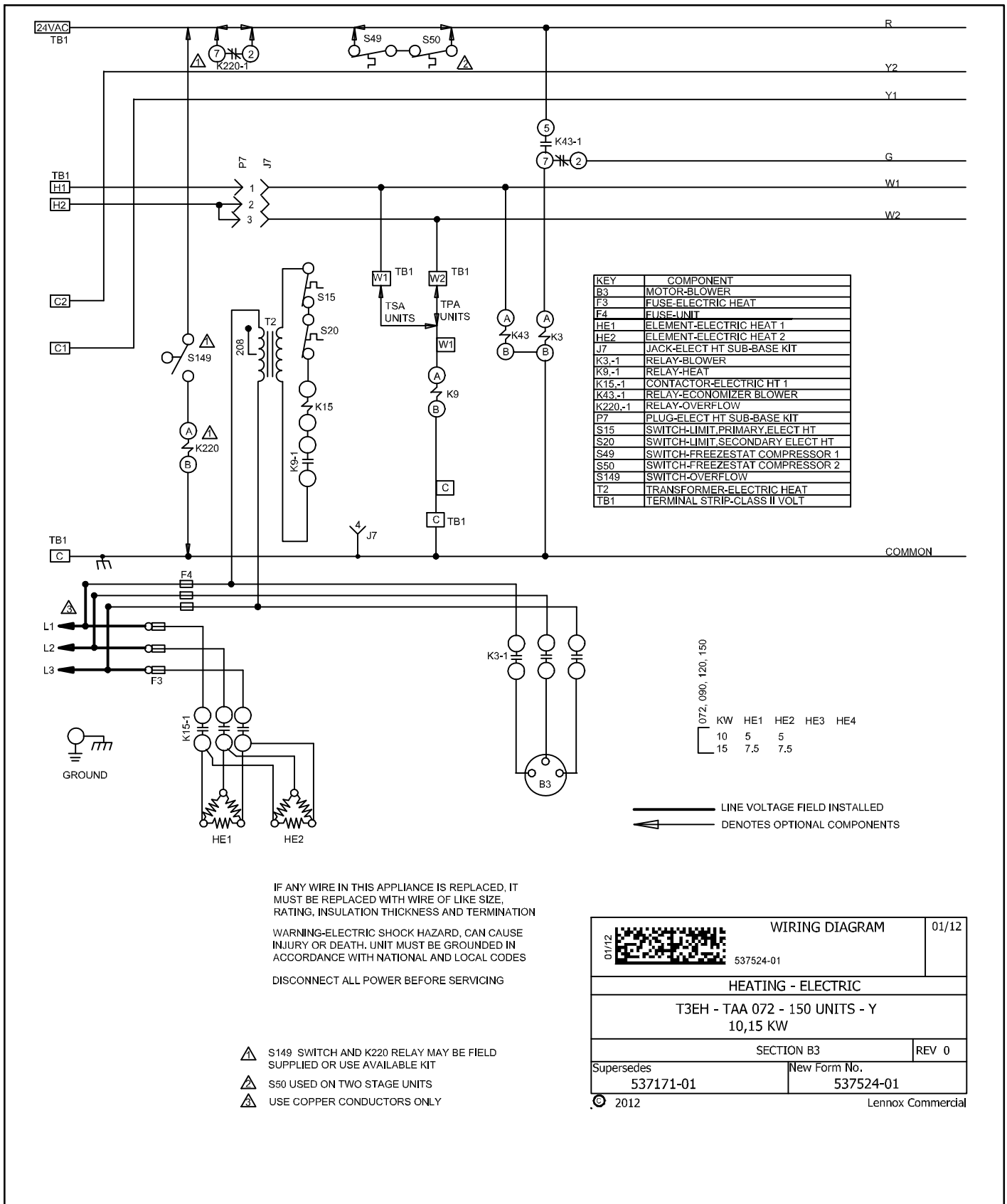


Figure 8. T3EH-10 and 15 (Y Voltage) for use with TAA 072 through 150

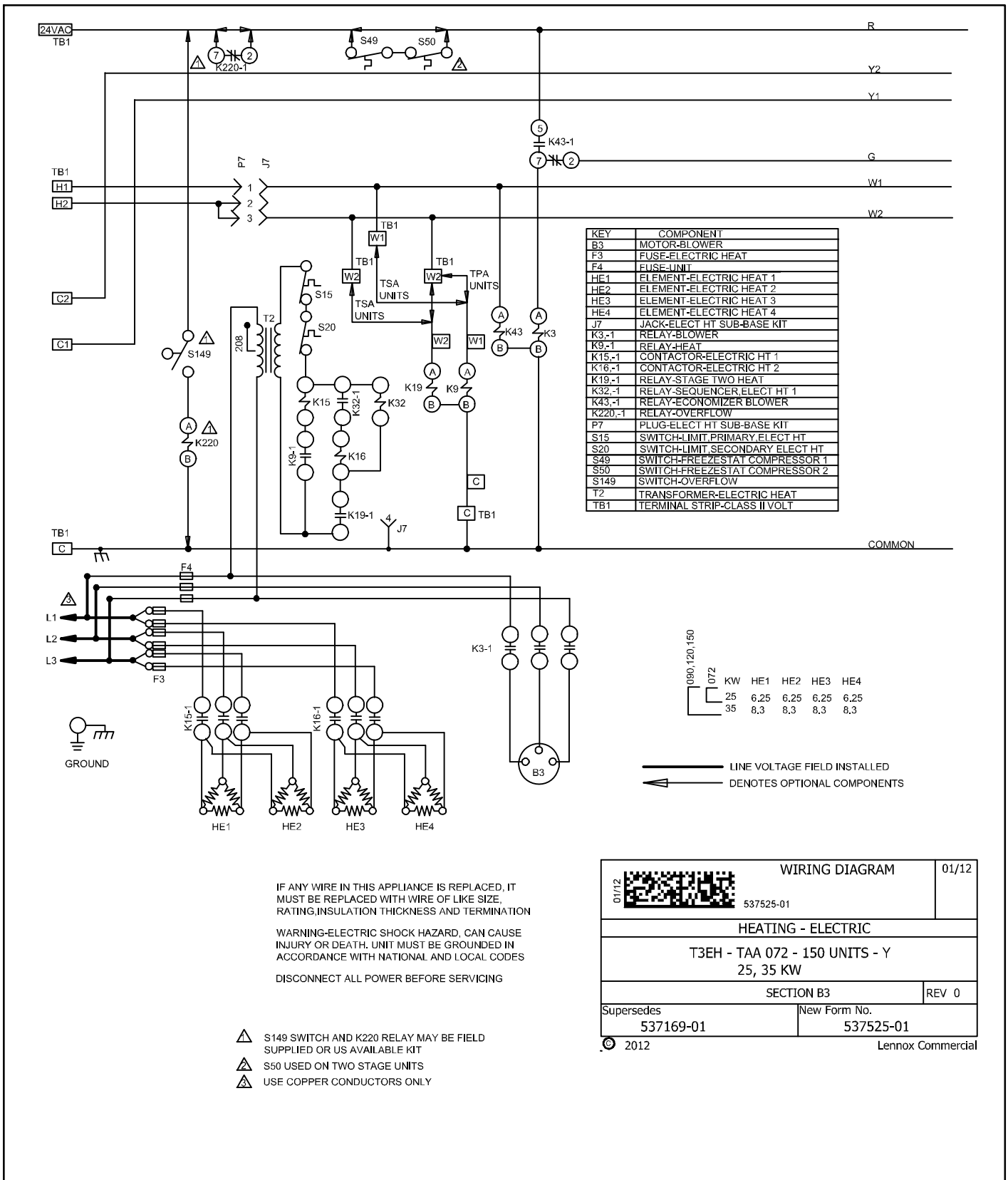


Figure 9. T3EH-25 and 35 (Y Voltage) for use with TAA 072 through 150

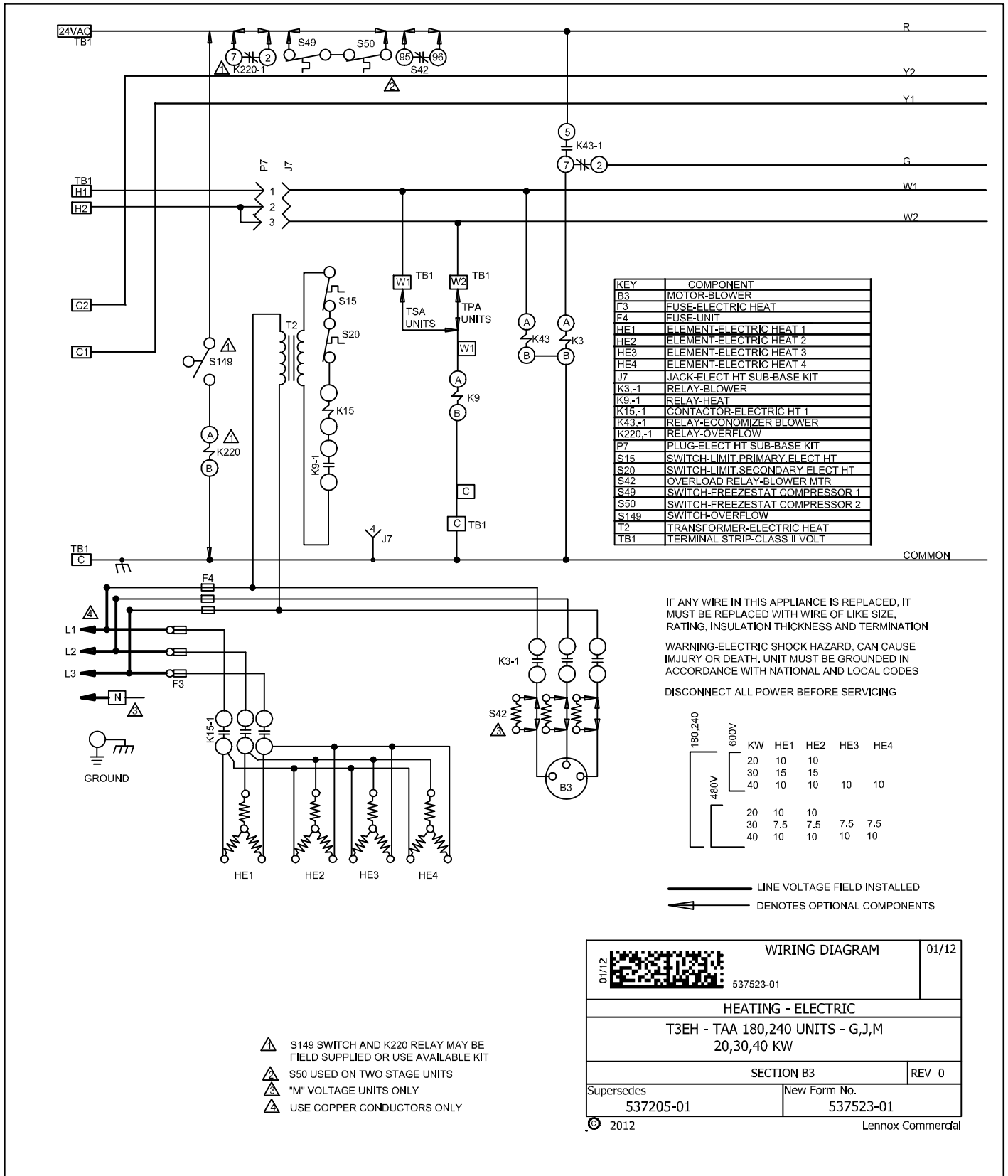


Figure 10. T3EH-20, 30, and 50 (G, J and M Voltages) for use with TAA 180 and 240

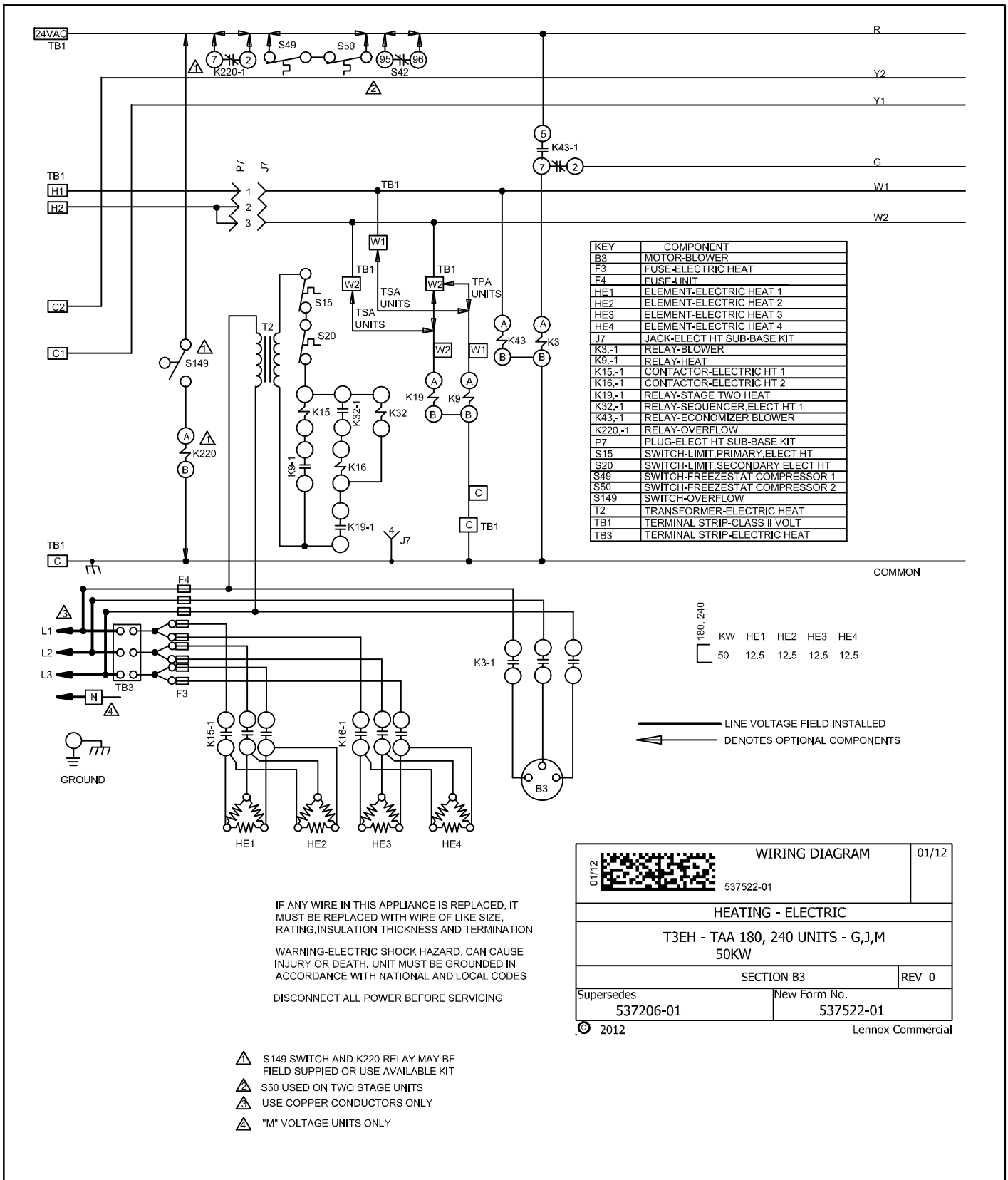


Figure 11. T3EH- 50 (G, J and M Voltages) for use with TAA 180 and 240

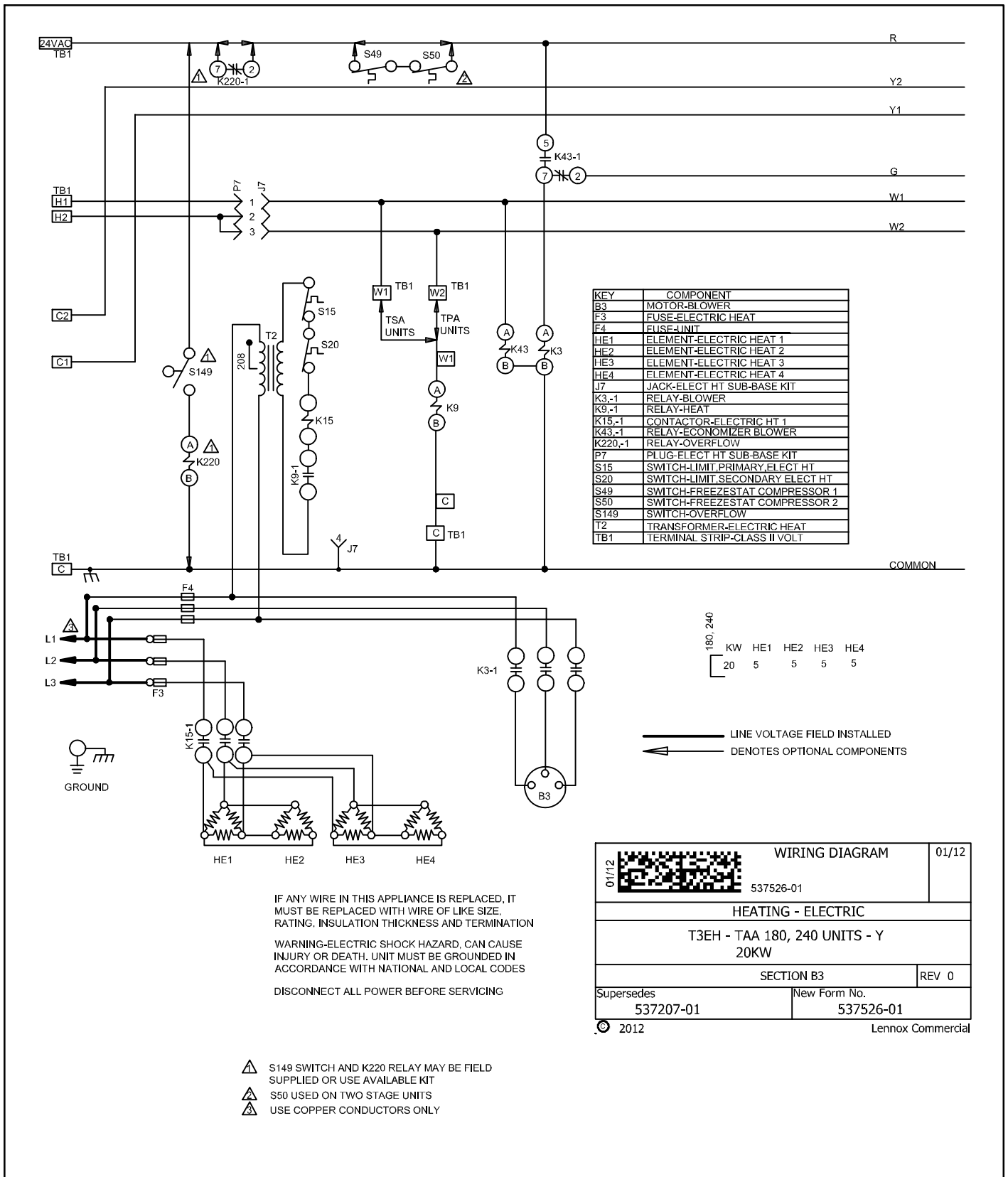


Figure 12. T3EH- 20 (Y Voltage) for use with TAA 180 and 240

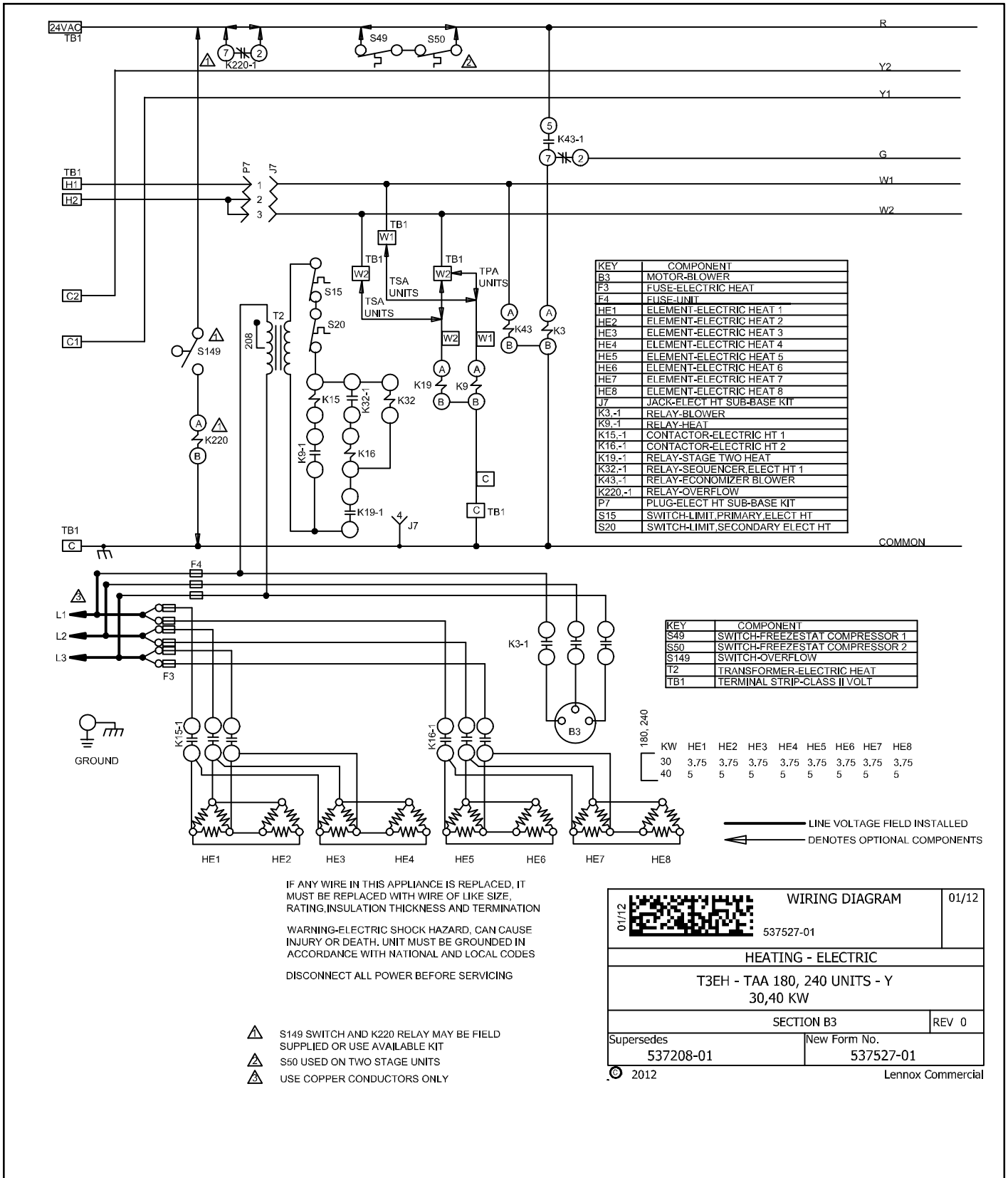


Figure 13. T3EH- 30 and 40 (Y Voltage) for use with TAA 180 and 240

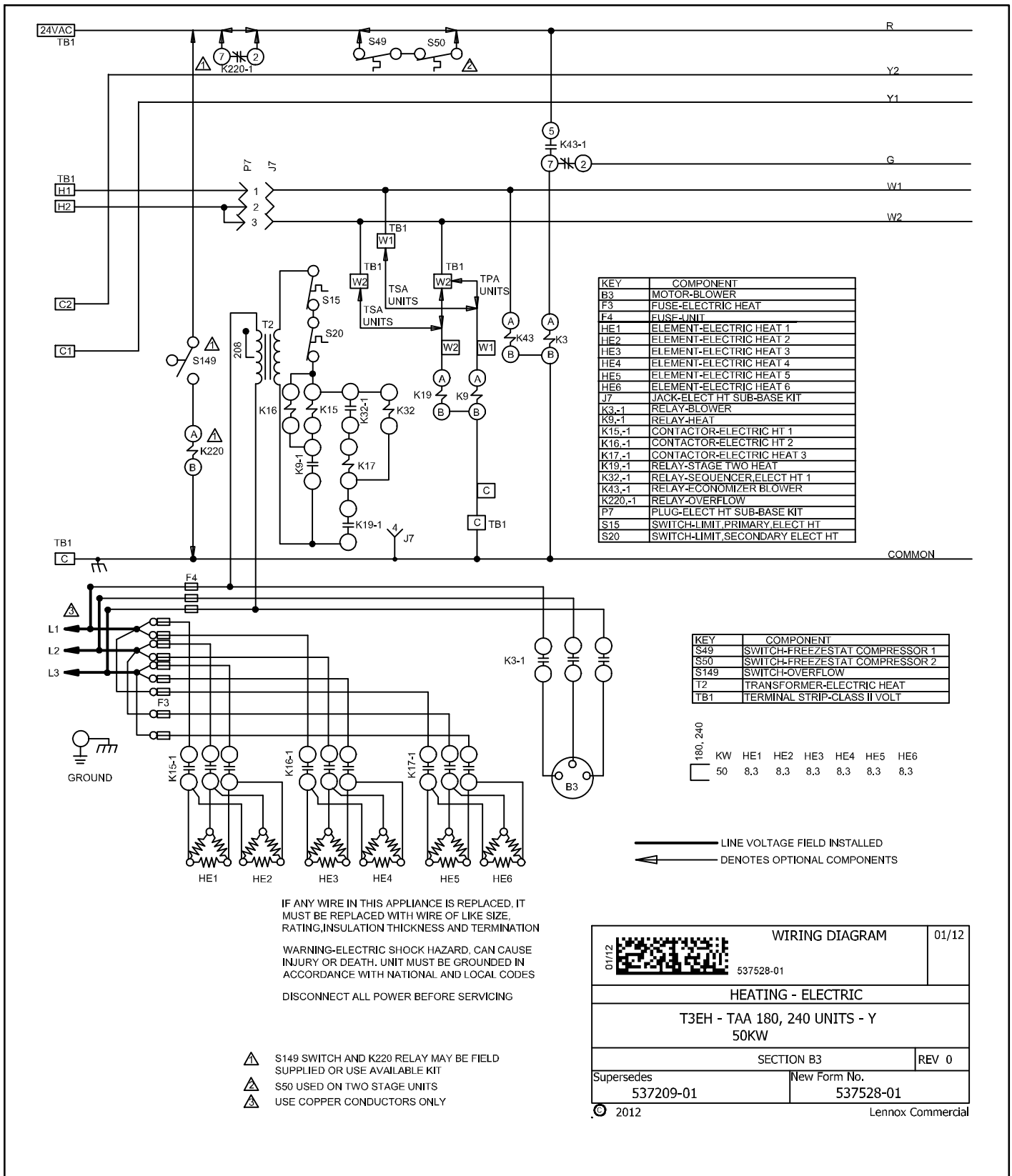
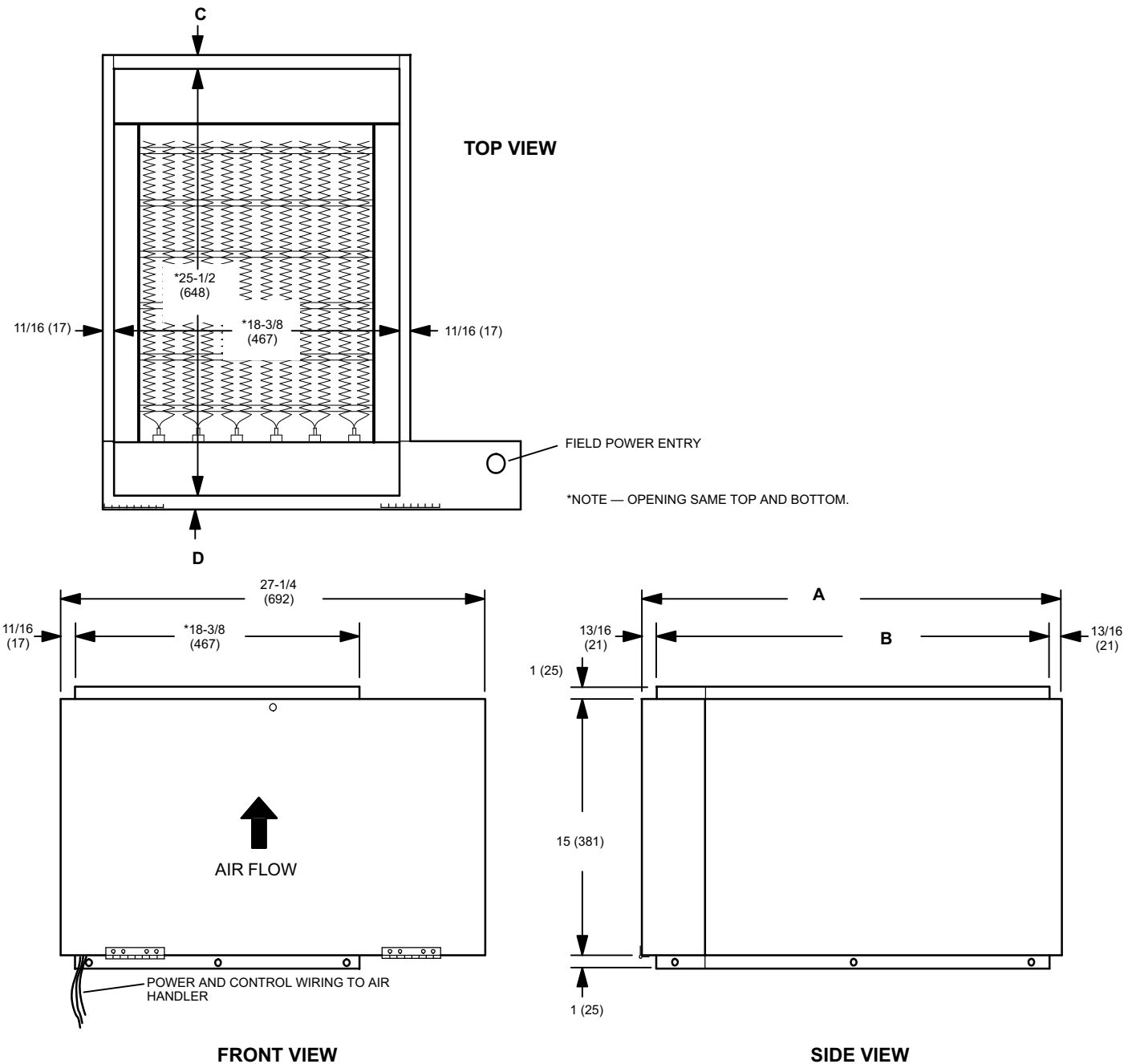


Figure 14. T3EH- 50 (Y Voltage) for use with TAA 180 and 240

Electric Heat Section Dimensions - inches (mm)



Air Handler Usage	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
TAA072 through TAA150	27-1/8	689	25-1/2	648	13/16	21	13/16	21
TA180 through TAA240	56-3/4	1441	51-1/4	1302	1-1/2	38	4	102