# Installation Instructions

## 1 & 3 Phase

## EHNA SERIES ELECTRIC HEATERS

### FOR SMALL PACKEAGE PRODUCTS

### PAN3, PAD3, PAN4, PAN5, WPA3 SERIES PACKAGE A/C

### PHN3, PHD3, PHN4, PHN5, WPH3 SERIES PACKAGE HEAT PUMPS

## TABLE OF CONTENTS




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**NOTE:** Read the entire instruction manual before starting the installation.

## SAFETY CONSIDERATIONS

Installation and servicing of this equipment can be hazardous due to mechanical and electrical components. Only trained and qualified personnel should install, repair, or service this equipment.

Untrained personnel can perform basic maintenance functions such as cleaning and replacing air filters. All other operations must be performed by trained service personnel. When working on this equipment, observe precautions in the literature, on tags, and on labels attached to or shipped with the unit and other safety precautions that may apply.

Follow all safety codes. Installation must be in compliance with local and national building codes. Wear safety glasses, protective clothing, and work gloves. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit.

Recognize safety information. This is the safety-alert symbol ⚠. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury. Understand these signal words; DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

Follow all safety codes. Wear safety glasses and work gloves. Have a fire extinguisher available.

Before proceeding with heater installation, inspect thoroughly for shipping damage. Notify shipper immediately if any damage is found. Clean all dirt, dust and moisture from heater package. Check for proper clearances of live parts, between phases and to ground. Make sure that all required barriers are in place. Check conductors run in multiple to insure that they are properly wired. Refer to unit installation instructions for complete unit installation details. The minimum air quantity for safe electric heater operation is automatically set by the unit fan control.

**⚠ WARNING**

**ELECTRICAL SHOCK HAZARD**

Failure to follow this warning could result in personal injury or death.

Before performing installation, service or maintenance operations on this system, turn off all main power to system. There may be more than one disconnect switch. Turn off accessory heater power switch, if applicable. Lock out and tag switch with a suitable warning label.

## DESCRIPTION AND USAGE

This electric heater series is engineered, designed and listed to be installed only in the models shown in Table 3. Before proceeding, verify the heater label for correct voltage and kW requirements.

## INSTALLATION

**NOTE:** Thermostat used must be capable of energizing "G" (indoor fan) on a call for "W" (heating). If "G" is not energized system malfunction will occur.

HEATER INSTALLATION

1. Open all electrical disconnects and install lock-out tag before beginning any installation or service work.
2. Check for proper equipment model number from list in Table 3.
3. Verify that unit ductwork is installed per base unit instructions.
4. Remove unit access panel to heater compartment (See Fig. 1).
5. Locate and remove the heater access cover plate inside unit access panel (See Fig. 2). Save screws.
6. Remove electric heater from packaging.
7. Install heater, sliding assembly carefully through access hole. Ensure that mounting holes of heater align with mounting holes on the unit. Secure heater assembly with screws provided.
8. Dress wires with wire ties provided.

ELECTRICAL CONNECTION

1. Verify all electrical disconnects are open and lockout tag(s) are installed before beginning any installation or service work.
2. All electrical connections, wire sizes and type of conduit shall meet the National Electric Code and state and local codes. Main power supply, minimum wire sizes, circuits, fusing, etc. are shown on schematic wiring diagrams.

**NOTE:** Use minimum 75° C copper wire only.

3. Refer to base unit instructions for recommended wiring procedures.
4. Connect low voltage wires as shown in unit schematic diagrams. These connections must be made in the 24v barrier section inside the unit panel (See Fig. 2).
5. **Connect field power wiring as shown in heater wiring diagram. All connections should be made inside the unit and comply with the NEC and International Electric Code and state and local codes. Heaters with factory installed fuses may be installed on a branch circuit protected by either a fuse or circuit breaker. For all other heaters, the branch circuit must be protected by a fuse or circuit breaker supplied by others.**
6. Make all high voltage wire splice connections inside the unit control box. Use splice connectors provided. Properly insulate connectors. Separate all wires from incoming power leads.
7. For fused heaters, incoming power leads should be strain relieved. After attaching field power wires to the fuse block lugs, use the pre-mounted wire tie on the inside of the control box cover to secure and strain relieve these wires.

**NOTE:** The adjacent heater compressor contactor and low voltage wiring are factory strain relieved in a similar manner.

8. Be sure that all electrical terminal connections, clamps, screws, etc. are tight before proceeding.
9. Check wiring diagram supplied with heater for specific connections and information.
10. Check operation as described in Start-Up section.

## ⚠ WARNING

**ELECTRICAL SHOCK HAZARD**

Failure to follow this warning could result in personal injury or death.

Before performing installation, service or maintenance operations on this system, turn off all main power to system. There may be more than one disconnect switch. Turn off accessory heater power switch if applicable. Lock out and tag switch with a suitable warning label.

### START-UP

## ⚠ WARNING

**ELECTRICAL SHOCK HAZARD**

Failure to follow this warning could result in personal injury or death.

Before proceeding, verify that all wiring is correct per factory approved schematic. Notify factory immediately of any discrepancies.

1. **Refer to base unit installation instructions as required.**
2. Check for loose terminal connections.
3. Check that all fuse and circuit breaker short circuit interrupting ratings are adequate.
4. Turn on unit and heater power.
5. Set thermostat to call for heat.
6. Check operation of heater.
7. Check that airflow across the heater is at or above the minimum recommended CFM requirement (See unit installation instructions). Adjust indoor blower heat speed as required. Check that duct system conforms to static pressure limits in Table 1.
8. Any modifications or repairs to this equipment without written permission from the factory will be done at the installer's own risk and expense.

### TROUBLESHOOTING

1. Fuses-Malfunction will interrupt power to the unit. Check for cause of failure, replace fuses.
2. Limit Switch-Malfunction prevents heating element(s) from being energized. Replace switch if malfunction occurs.
3. Contactor-Malfunction will not allow heater to energize. Replace faulty contactor. Do not attempt to replace coil or dress contacts.

### PACKAGE CONTENTS

| ELECTRIC HEATER PACKAGE CONTENTS | |
|---|---|
| **Contents** | **Qty.** |
| Heater assembly. | 1 |
| UPC heater label. | 1 |
| Installation Instructions. | 1 |
| Identification label. | 1 |
| Schematic on lid door for all fused units. | 1 |
| Schematic on sticker to be placed inside unit panel for non-fused units | 1 |
| Wire connectors | 3 |
| Wire tires-6" | 5 |
| Screws #10A | 5 |

**FIGURE 1** **Unit Access Panel**

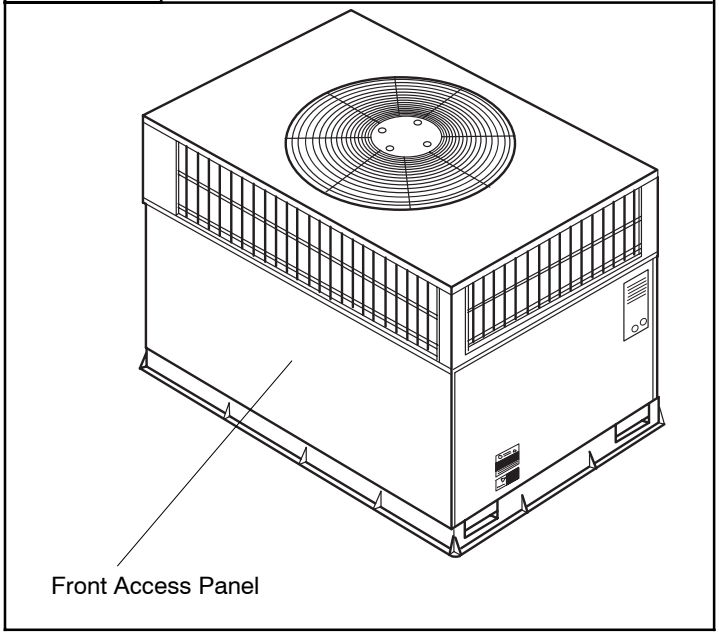


**FIGURE 2** **Heater Blank Plate Location**

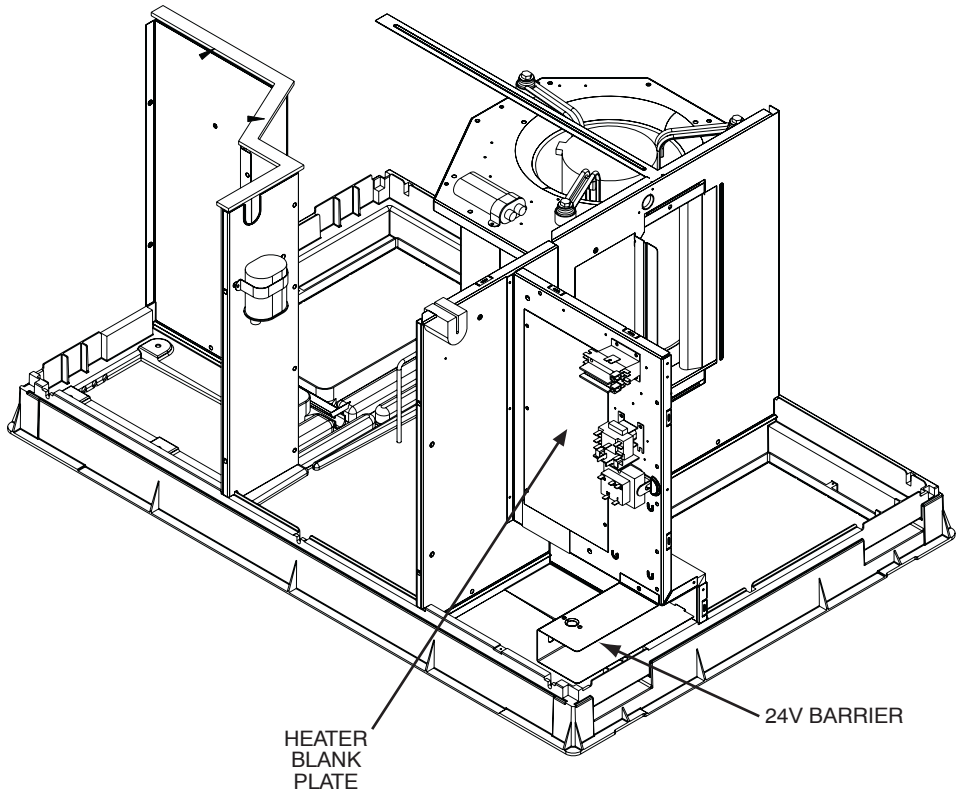



**FIGURE 3** **Heater Control Box**

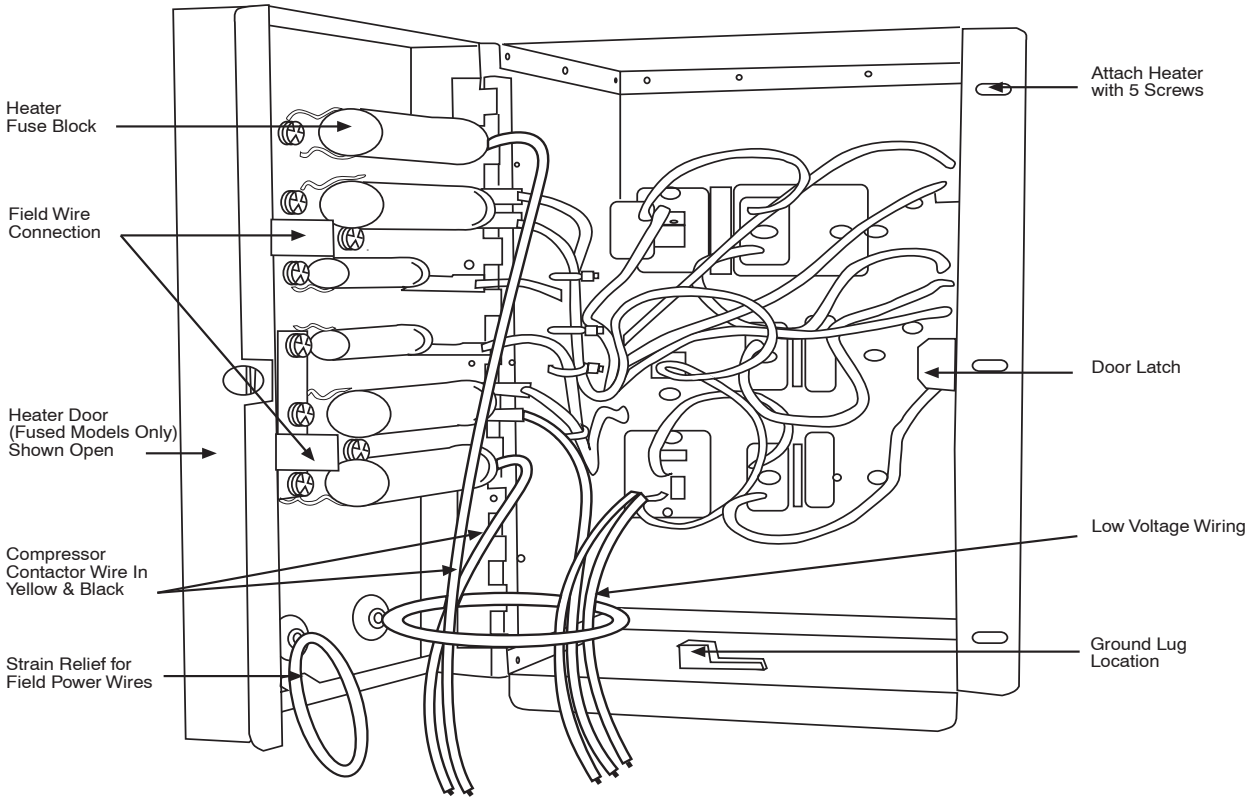


**FIGURE 4** **Schematic Location**

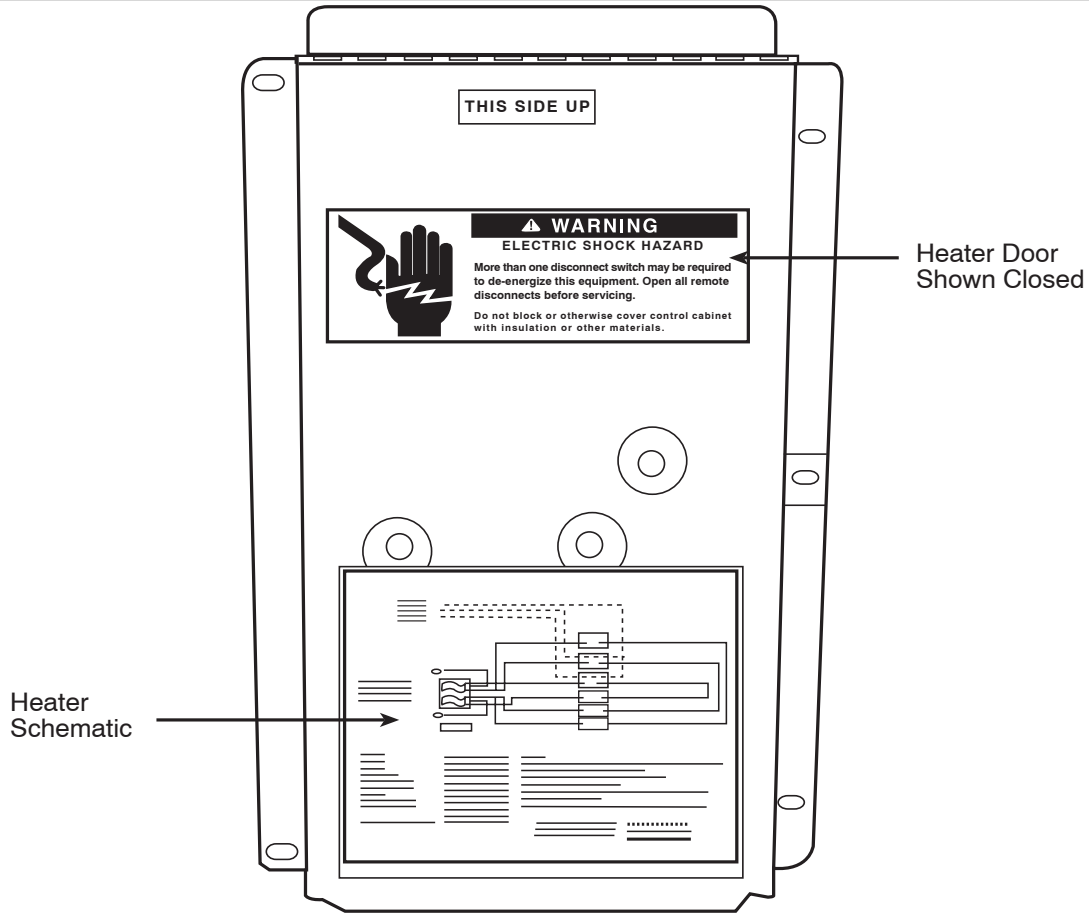



**Table 1—Maximum Duct Static Pressure (in. w.c.)**

| Model Size | MAXIMUM STATIC PRESSURE UNIT SIZE | | | | | |
|---|---|---|---|---|---|---|
| | **24** | **30** | **36** | **42** | **48** | **60** |
| **Heat Pump** | .30 | .30 * | .30 | .50 | .50 | .50 |
| **Electric Cooling** | .30 | .30 | .30 | .50 | .50 | .50 |

*15kW size 30 heat pump must be used with medium speed only. All others can be run at low speed.

# Table 3 — Electric Heater Usage, 208/230V - 1 Ph. - 60 HZ.

**PAN3224-60 & WPA324-60**

| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 24 | 30 | 36 | 42 | 48 | 60 |
| 208/230-1-60 | | | | | | | | |
| EHNA05K0N | 5.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA07K0N | 7.2 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA10K0N | 10.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA15K4F | 15.0 | 4 | | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA20K4F | 20.0 | 4 | | | | ✓ | ✓ | ✓ |

**PAN424-60**

| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 24 | 30 | 36 | 42 | 48 | 60 |
| 208/230-1-60 | | | | | | | | |
| EHNA05K0N | 5.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA07K0N | 7.5 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA10K0N | 10.0 | 0 | ✓ | ✓ | ✓ | ✓ | | |
| EHNA10K4F | 10.0 | 4 | | | | | ✓ | ✓ |
| EHNA15K4F | 15.0 | 4 | | ✓ | ✓ | ✓ | | |
| EHNA15K6F | 15.0 | 6 | | | | | ✓ | ✓ |
| EHNA20K6F | 20.0 | 6 | | | | ✓ | ✓ | ✓ |

**PHN324-60 & WPH324-60**

| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 24 | 30 | 36 | 42 | 48 | 60 |
| 208/230-1-60 | | | | | | | | |
| EHNA05K0N | 5.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | |
| EHNA05K4F | 5.0 | 4 | | | | | | ✓ |
| EHNA07K4F | 7.2 | 4 | | | ✓ | ✓ | ✓ | ✓ |
| EHNA10K4F | 10.0 | 4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA15K6F | 15.0 | 6 | | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA20K6F | 20.0 | 6 | | | | ✓ | ✓ | ✓ |

**PHN424-60**

| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 24 | 30 | 36 | 42 | 48 | 60 |
| 208/230-1-60 | | | | | | | | |
| EHNA05K0N | 5.0 | 0 | ✓ | ✓ | ✓ | | | |
| EHNA05K4F | 5.0 | 4 | | | | ✓ | ✓ | ✓ |
| EHNA07K4F | 7.2 | 4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA10K4F | 10.0 | 4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA15K6F | 15.0 | 6 | | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA20K6F | 20.0 | 6 | | | | ✓ | ✓ | ✓ |

**PHN524-60**

| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | |
|---|---|---|---|---|---|---|
| | | | 24 | 36 | 48 | 60 |
| 208/230-1-60 | | | | | | |
| EHNA05K0N | 5.0 | 0 | ✓ | ✓ | | |
| EHNA05K4F | 5.0 | 4 | | | ✓ | ✓ |
| EHNA07K4F | 7.2 | 4 | ✓ | ✓ | ✓ | ✓ |
| EHNA10K4F | 10.0 | 4 | ✓ | ✓ | ✓ | ✓ |
| EHNA15K6F | 15.0 | 6 | | ✓ | ✓ | ✓ |
| EHNA20K6F | 20.0 | 6 | | | ✓ | ✓ |

# Table 3 (Cont.) — Electric Heater Usage, 3 PHASE

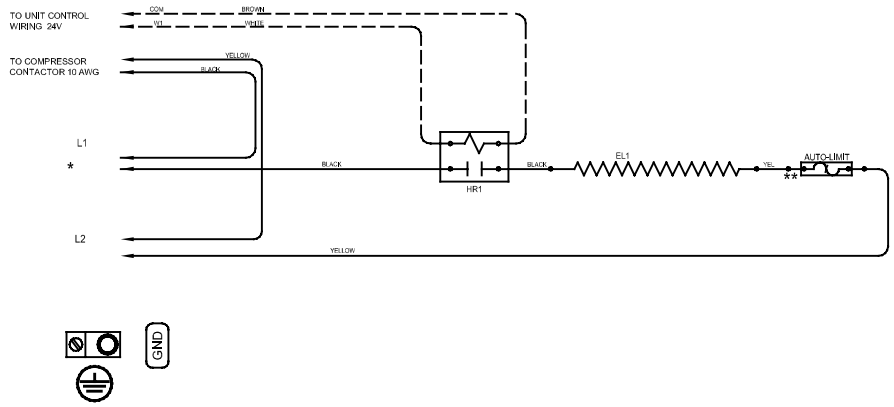
| PAD330-60 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | | |
| | | | 30 | 36 | 42 | 48 | 60 |
| ELECTRIC HEATERS for 208/230—3—60 | | | | | | | |
| EHNA05H0N | 5.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA10H0N | 10.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA15H0N | 15.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA20H6F | 20.0 | 6 | | | ✓ | ✓ | ✓ |
| ELECTRIC HEATERS for 460—3—60 | | | | | | | |
| EHNA05L0N | 5.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA10L0N | 10.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA15L0N | 15.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA20L0N | 20.0 | 0 | | | ✓ | ✓ | ✓ |

| PAN430-60 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | | |
| | | | 30 | 36 | 42 | 48 | 60 |
| ELECTRIC HEATERS for 208/230—3—60 | | | | | | | |
| EHNA05H0N | 5.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA10H0N | 10.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA15H0N | 15.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA20H6F | 20.0 | 6 | | | ✓ | ✓ | ✓ |

| PHN330-60 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | | |
| | | | 30 | 36 | 42 | 48 | 60 |
| ELECTRIC HEATERS (208/230—3—60) | | | | | | | |
| EHNA05H0N | 5.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA10H0N | 10.0 | 0 | ✓ | ✓ | ✓ | ✓ | |
| EHNA10H6F | 10.0 | 6 | | | | | ✓ |
| EHNA15H6F | 15.0 | 6 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA20H6F | 20.0 | 6 | | | ✓ | ✓ | ✓ |
| ELECTRIC HEATERS (460—3—60) | | | | | | | |
| EHNA05L0N | 5.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA10L0N | 10.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA15L0N | 15.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA20L0N | 20.0 | 0 | | | ✓ | ✓ | ✓ |

| PHD330-60 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Electric Heater Model Number | Nominal Capacity (kW) | Fuses | Used With Model Sizes | | | | |
| | | | 30 | 36 | 42 | 48 | 60 |
| ELECTRIC HEATERS (208/230-3-60) | | | | | | | |
| EHNA05H0N | 5.0 | 0 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA10H0N | 10.0 | 0 | ✓ | ✓ | ✓ | ✓ | |
| EHNA10H6F | 10.0 | 6 | | | | | ✓ |
| EHNA15H6F | 15.0 | 6 | ✓ | ✓ | ✓ | ✓ | ✓ |
| EHNA20H6F | 20.0 | 6 | | | ✓ | ✓ | ✓ |
| ELECTRIC HEATERS (460—3—60) | | | | | | | |
| EHNA05L0N | 5.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA10L0N | 10.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA15L0N | 15.0 | 0 | | ✓ | ✓ | ✓ | ✓ |
| EHNA20L0N | 20.0 | 0 | | | ✓ | ✓ | ✓ |

# 208/230-1-60

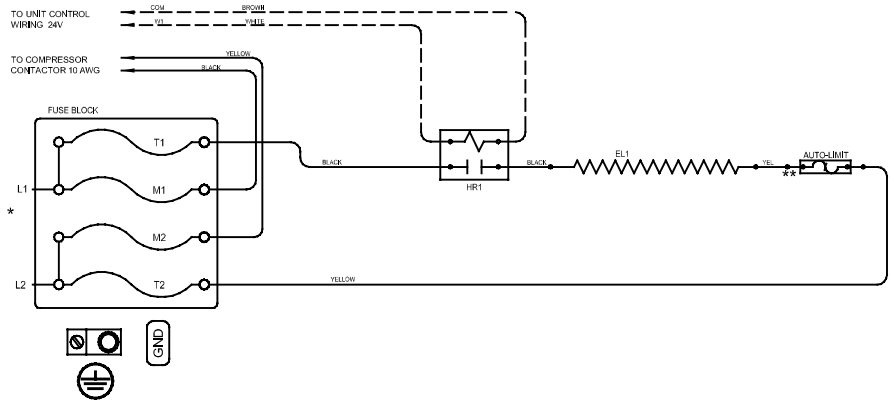



| | |
|---|---|
| KILOWATTS | 3.8/5.0 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 1 |
| HEATER AMPS | 18.1/20.8 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc
type 60TX11-F165
SINGLE POINT CONNECTION

Control Wiring ------
Power Wiring ——————
Field Wiring ——————

| EHNA05K0N | 111002227 |
|---|---|



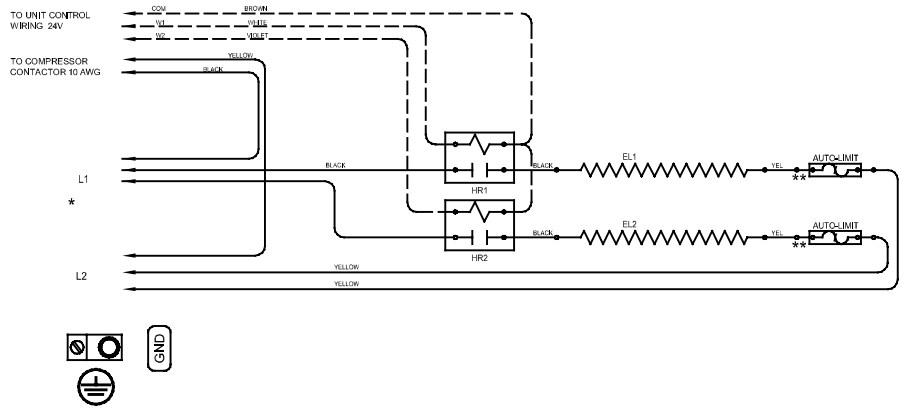

| | |
|---|---|
| KILOWATTS | 3.8/5.0 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 1 |
| HEATER AMPS | 18.1/20.8 |
| HEATER FUSES T1, T2 | 30A |
| M1, M2 | 50A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc
type 60TX11-F165
Replace with 250VAC type Slo-Blow fuses
SINGLE POINT CONNECTION

Control Wiring --------
Power Wiring ——————
Field Wiring ——————

| EHNA05K4F | 111002230 |
|---|---|

# 208/230-1-60

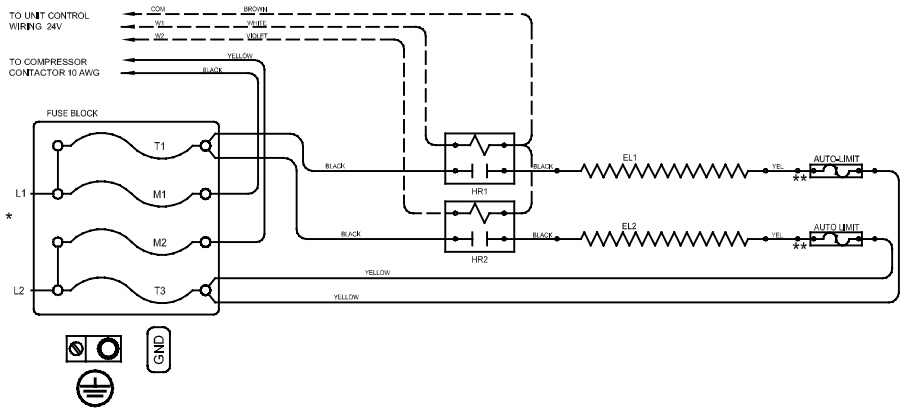



| | |
|---|---|
| KILOWATTS | 5.4/7.2 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 2 |
| HEATER AMPS | 25.9/30.0 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165
SINGLE POINT CONNECTION

Control Wiring ---------
Power Wiring _____
Field Wiring _____

| EHNA07K0N | 111002228 |
|---|---|



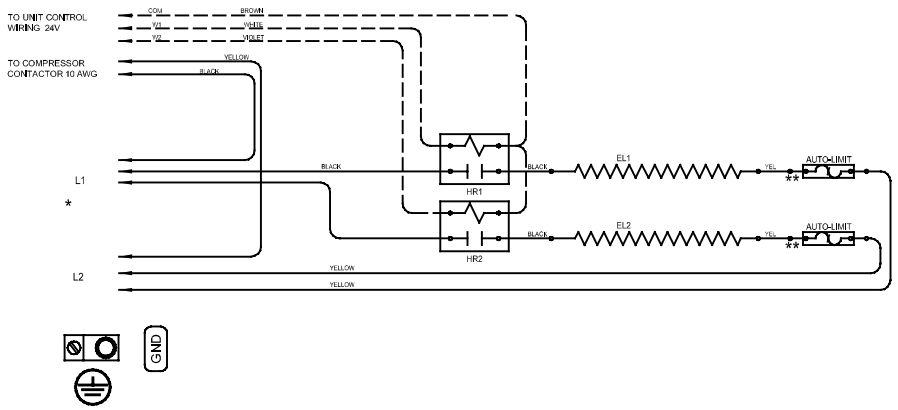

| | |
|---|---|
| KILOWATTS | 5.4/7.2 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 2 |
| HEATER AMPS | 25.9/30.0 |
| HEATER FUSES T1, T3 | 60A |
| M1, M2 | 50A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165
Replace with 250VAC type Slow-Blow fuses
SINGLE POINT CONNECTION

Control Wiring ---------
Power Wiring _____
Field Wiring _____

| EHNA07K4F | 111002231 |
|---|---|

# 208/230-1-60

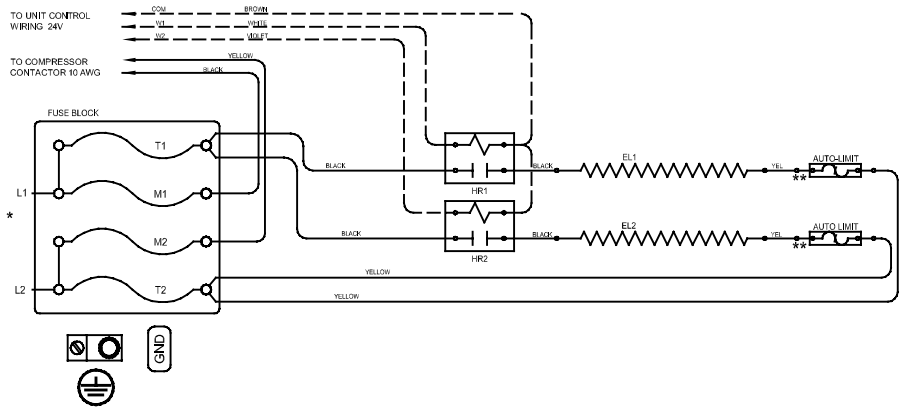



| | |
|---|---|
| KILOWATTS | 7.5/10.0 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 2 |
| HEATER AMPS | 36.1/41.7 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165
SINGLE POINT CONNECTION

Control Wiring --------
Power Wiring ————
Field Wiring ————

| EHNA10K0N | 111002229 |
|---|---|



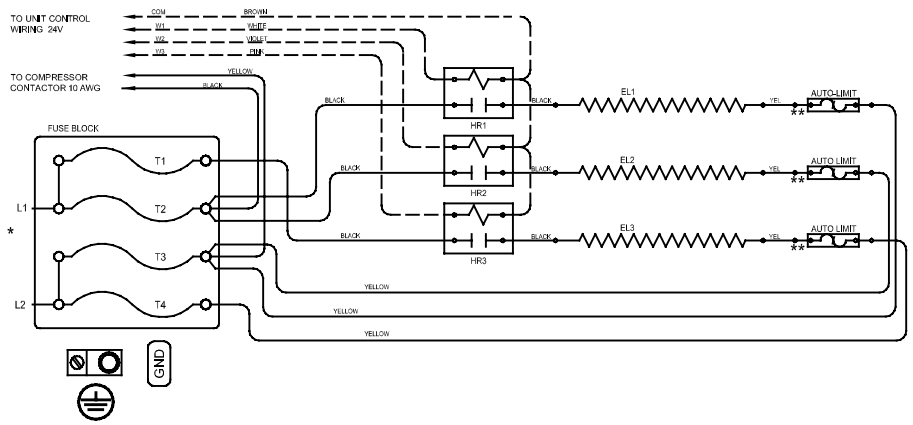

| | |
|---|---|
| KILOWATTS | 7.5/10.0 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 2 |
| HEATER AMPS | 36.1/41.7 |
| HEATER FUSES T1, T2 | 60A |
| M1, M2 | 50A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165
Replace with 250VAC type Slo-Blow fuses
SINGLE POINT CONNECTION

Control Wiring --------
Power Wiring ————
Field Wiring ————

| EHNA10K4F | 111002232 |
|---|---|

# 208/230-1-60



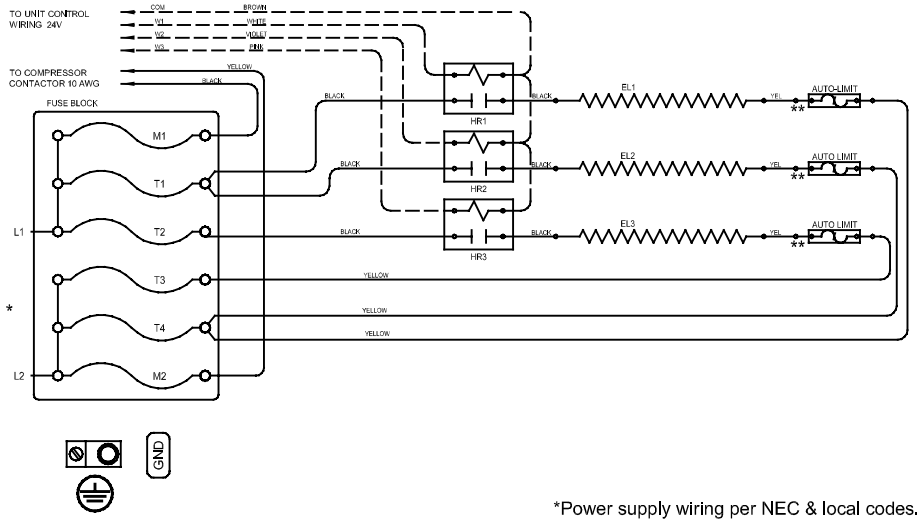

| | |
|---|---|
| KILOWATTS | 11.3/15.0 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 3 |
| HEATER AMPS | 54.2/62.5 |
| HEATER FUSES T1, T4 | 30A |
| T2, T3 | 60A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165 & 64TX11-F165

Replace with 250VAC type Slow-Blow fuses
SINGLE POINT CONNECTION

Control Wiring --------
Power Wiring ————
Field Wiring ————

| EHNA15K4F | 111002233 |
|---|---|



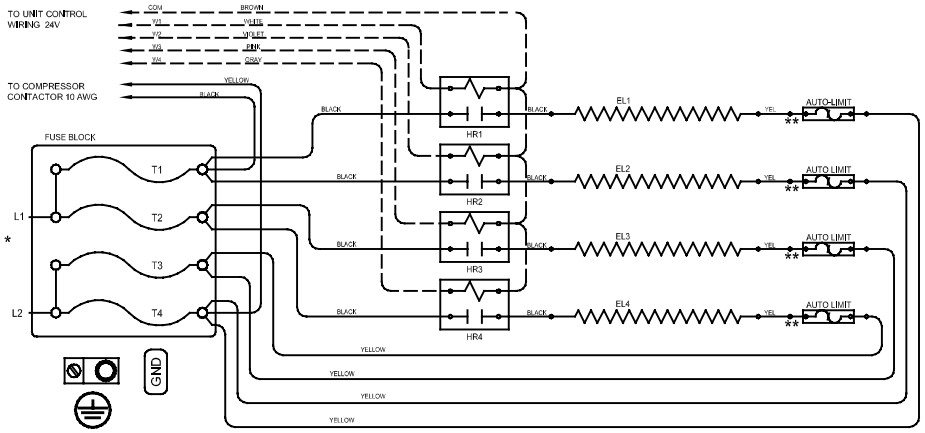

| | |
|---|---|
| KILOWATTS | 11.3/15.0 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 3 |
| HEATER AMPS | 54.2/62.5 |
| HEATER FUSES T1, T4 | 60A |
| T2, T3 | 30A |
| M1, M2 | 50A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165 & 64TX11-F165
Replace with 250VAC type Slo-Blow fuses
SINGLE POINT CONNECTION

Control Wiring --------
Power Wiring ————
Field Wiring ————

| EHNA15K6F | 111002235 |
|---|---|

## 208/230-1-60

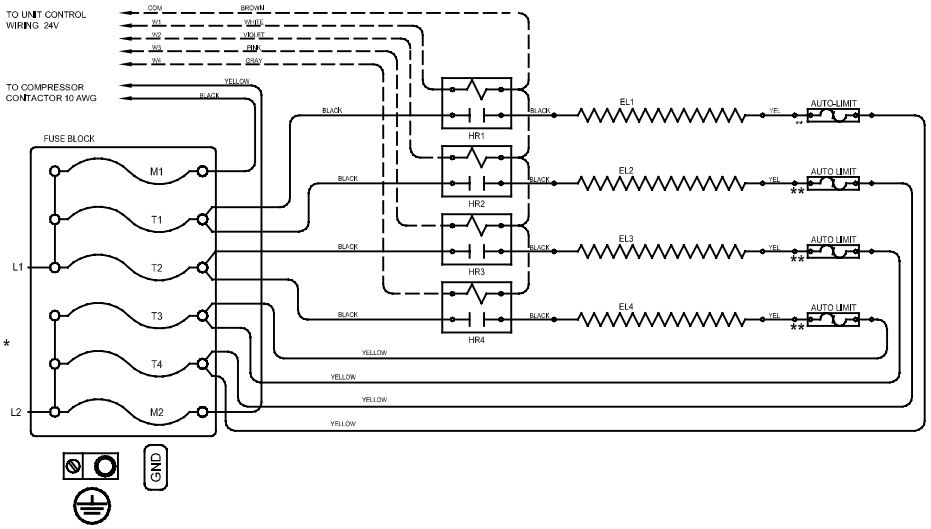



| | |
|---|---|
| KILOWATTS | 15.0/20.0 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 4 |
| HEATER AMPS | 72.2/83.3 |
| HEATER FUSES T1, T4 | 60A |
| T2, T3 | 60A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 64TX11-F165
Replace with 250VAC type Slo-Blow fuses
SINGLE POINT CONNECTION

Control Wiring ---------
Power Wiring ————
Field Wiring ————

| | |
|---|---|
| EHNA20K4F | 111002234 |



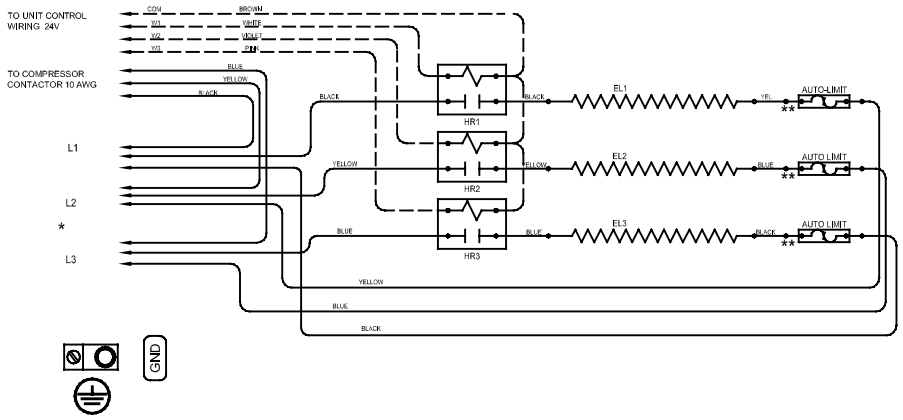

| | |
|---|---|
| KILOWATTS | 15.0/20.0 |
| VOLTS-PH-HZ | 208/240-1-60 |
| CONTROL VOLTS | 24 |
| STEPS | 4 |
| HEATER AMPS | 72.2/83.3 |
| HEATER FUSES M1, M2 | 50A |
| T1, T4 | 60A |
| T2, T3 | 60A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 64TX11-F165
Replace with 250VAC type Slo-Blow fuses
SINGLE POINT CONNECTION

Control Wiring -------
Power Wiring ————
Field Wiring ————

| | |
|---|---|
| EHNA20K6F | 111002236 |

# 208/230-3-60

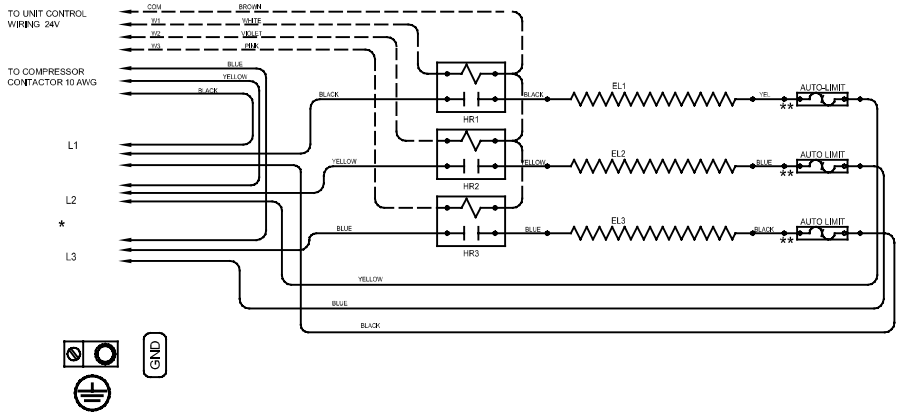



| | |
|---|---|
| KILOWATTS | 3.8/5.0 |
| VOLTS-PH-HZ | 208/240-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 3 |
| HEATER AMPS | 10.4/12.0 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165 & 64TX11-F165
SINGLE POINT CONNECTION

Control Wiring -------
Power Wiring _____
Field Wiring _____

| | |
|---|---|
| EHNA05H0N | 111002237 |



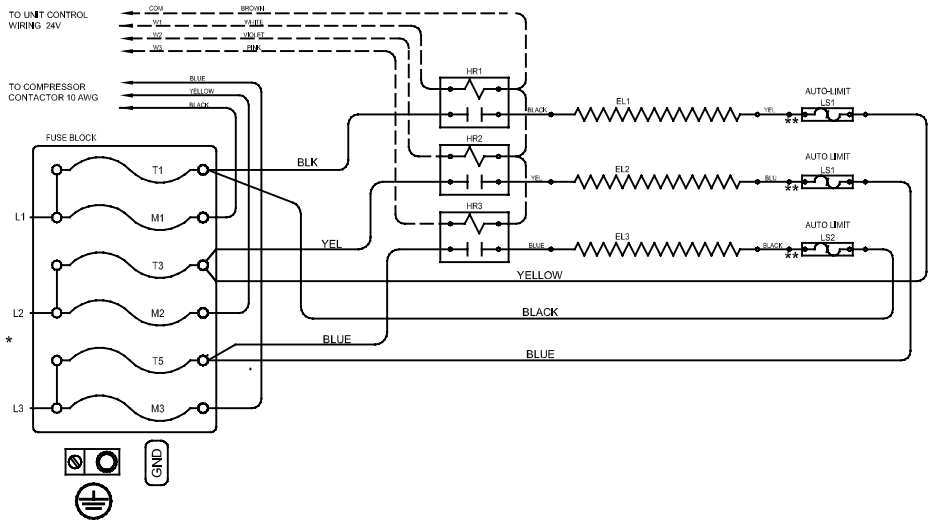

| | |
|---|---|
| KILOWATTS | 7.5/10.0 |
| VOLTS-PH-HZ | 208/240-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 3 |
| HEATER AMPS | 20.8/24.1 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165 & 64TX11-F165
SINGLE POINT CONNECTION

Control Wiring -------
Power Wiring _____
Field Wiring _____

| | |
|---|---|
| EHNA10H0N | 111002238 |

# 208/230-3-60

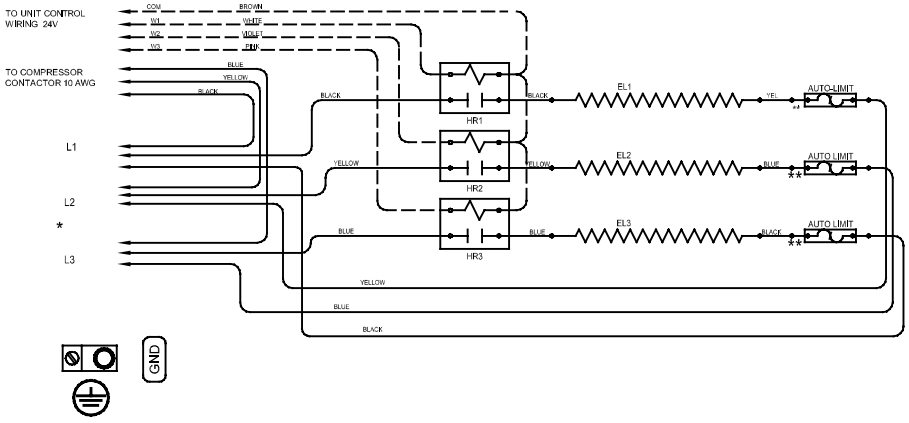



| | |
|---|---|
| KILOWATTS | 7.5/10.0 |
| VOLTS-PH-HZ | 208/240-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 3 |
| HEATER AMPS | 20.8/24.1 |
| HTR FUSES T1, T3, T5 | 35A |
| M1, M2, M3 | 40A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc
type 60TX11-F165 & 64TX11-F165
Replace with 250VAC type Slo-Blow fuses
SINGLE POINT CONNECTION

Control Wiring --------
Power Wiring ————
Field Wiring ————

| | |
|---|---|
| EHNA10H6F | 111002240 |



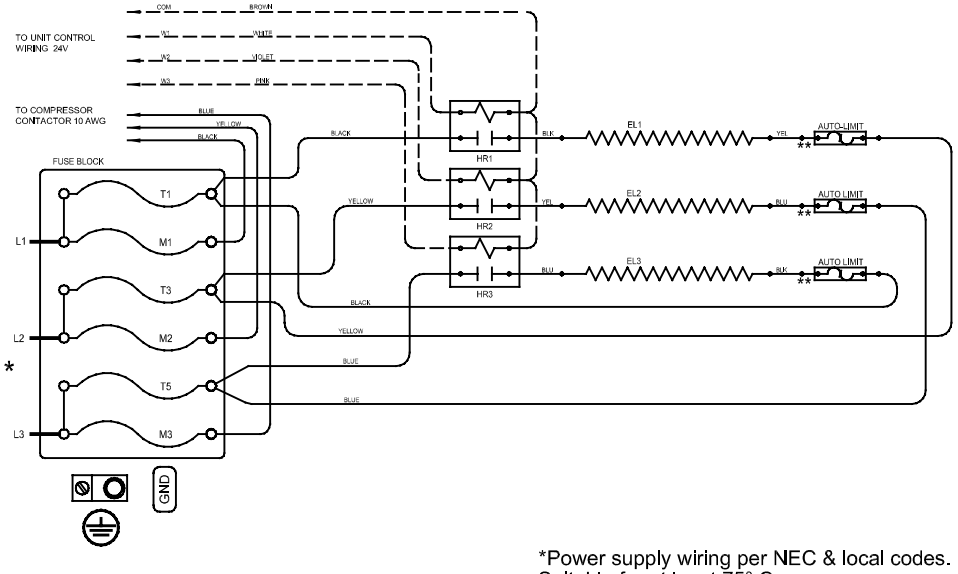

| | |
|---|---|
| KILOWATTS | 11.3/15.0 |
| VOLTS-PH-HZ | 208/240-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 3 |
| HEATER AMPS | 31.3/36.1 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc
type 60TX11-F165 & 64TX11-F165
SINGLE POINT CONNECTION

Control Wiring --------
Power Wiring ————
Field Wiring ————

| | |
|---|---|
| EHNA15H0N | 111002239 |

## 208/230-3-60

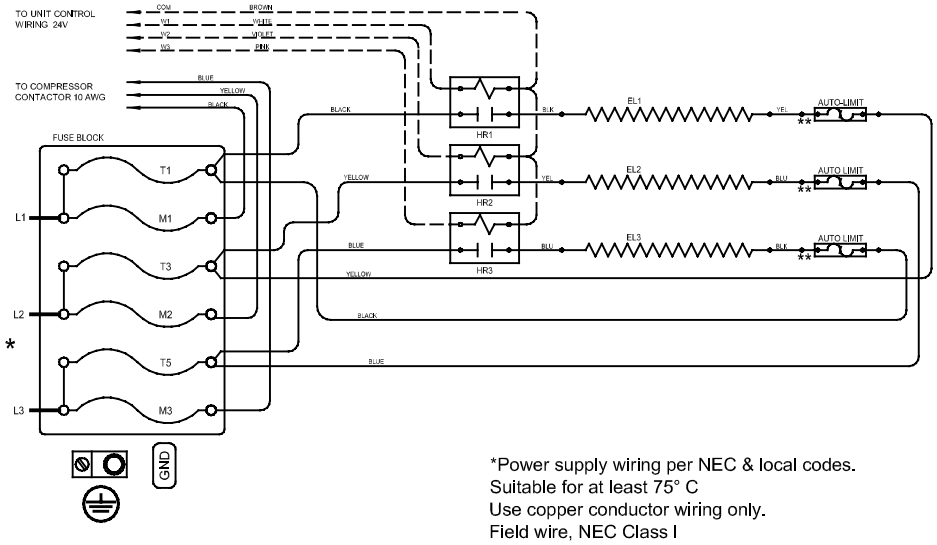



| | |
|---|---|
| KILOWATTS | 11.3/15.0 |
| VOLTS-PH-HZ | 208/240-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 3 |
| HEATER AMPS | 31.3/36.1 |
| HTR FUSES T1, T3, T5 | 50A |
| M1, M2, M3 | 40A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 60TX11-F165 & 64TX11-F165
Replace with 250VAC type Slow-Blow fuses
SINGLE POINT CONNECTION

Control Wiring ------
Power Wiring ——————
Field Wiring ——————

| | |
|---|---|
| EHNA15H6F | 111002241 |



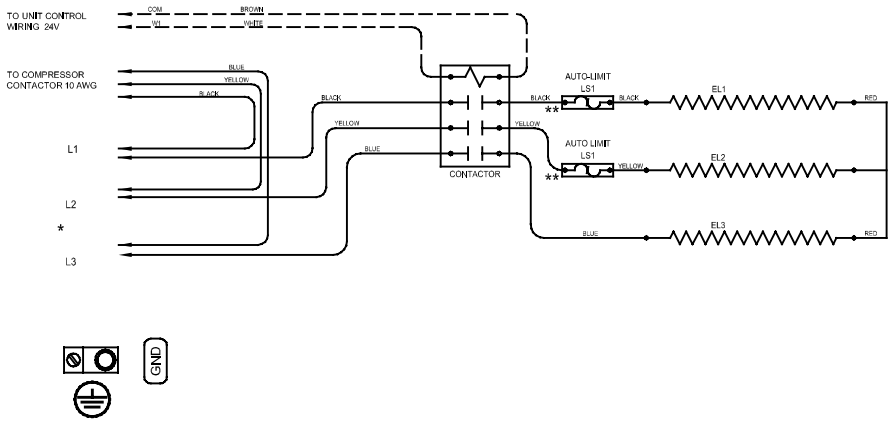

| | |
|---|---|
| KILOWATTS | 14.9/19.9 |
| VOLTS-PH-HZ | 208/240-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 3 |
| HEATER AMPS | 41.4/47.9 |
| HTR FUSES T1, T3, T5 | 60A |
| M1, M2, M3 | 40A |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 64TX11-F165 & 60TX11-F165
Replace with 250VAC type Slow-Blow fuses
SINGLE POINT CONNECTION

Control Wiring ------
Power Wiring ——————
Field Wiring ——————

| | |
|---|---|
| EHNA20H6F | 111002242 |

# 460-3-60





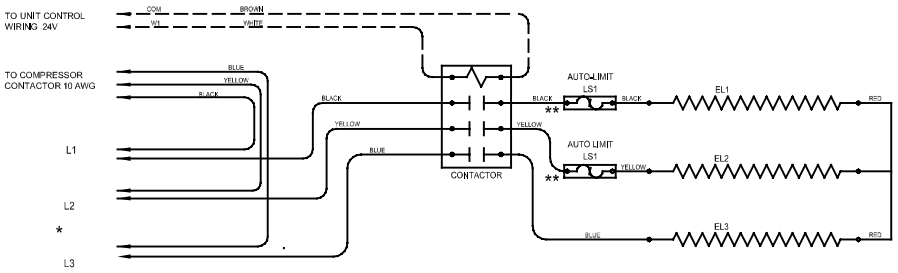


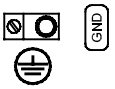
| | |
|---|---|
| KILOWATTS | 5.0 |
| VOLTS-PH-HZ | 480-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 1 |
| HEATER AMPS | 6.0 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 64TXX11-F165
SINGLE POINT CONNECTION

Control Wiring ---------
Power Wiring _____
Field Wiring _____

| EHNA05L0N | 111002243 |
|---|---|



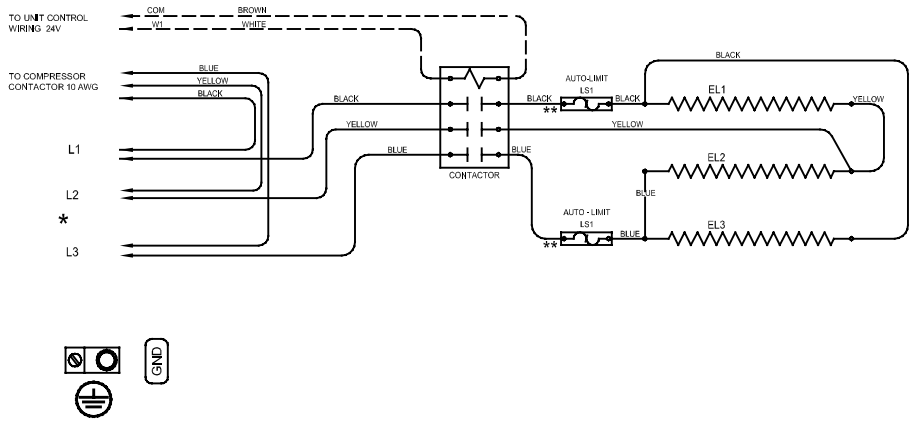

| | |
|---|---|
| KILOWATTS | 10.0 |
| VOLTS-PH-HZ | 480-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 1 |
| HEATER AMPS | 12.0 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 64TXX11-F165
SINGLE POINT CONNECTION

Control Wiring - - - - -
Power Wiring _____
Field Wiring _____

| EHNA10L0N | 111002244 |
|---|---|

# 460-3-60

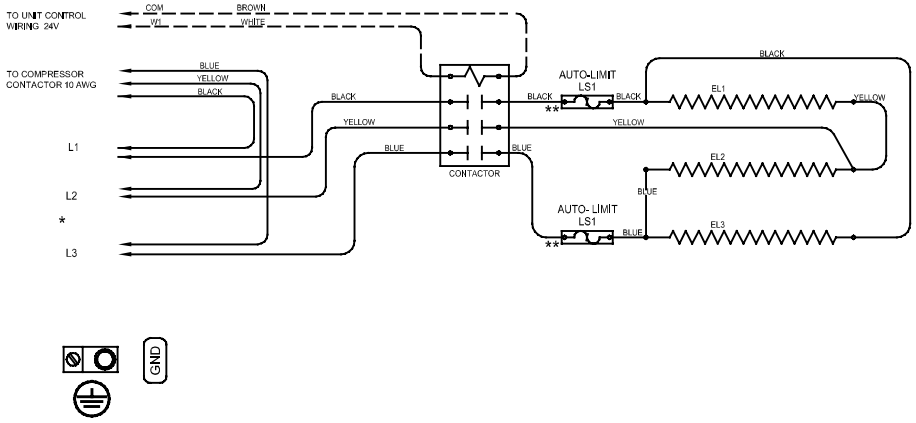



| | |
|---|---|
| KILOWATTS | 15.0 |
| VOLTS-PH-HZ | 480-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 1 |
| HEATER AMPS | 18.0 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 64TXX11-F165
SINGLE POINT CONNECTION

Control Wiring ------
Power Wiring ——————
Field Wiring ——————

| | |
|---|---|
| EHNA15L0N | 111002245 |




| | |
|---|---|
| KILOWATTS | 20.0 |
| VOLTS-PH-HZ | 480-3-60 |
| CONTROL VOLTS | 24 |
| STEPS | 1 |
| HEATER AMPS | 24.1 |

*Power supply wiring per NEC & local codes.
Suitable for at least 75° C
Use copper conductor wiring only.
Field wire, NEC Class I
**Replace Auto Reset with Therm-O-Disc type 64TXX11-F165
SINGLE POINT CONNECTION

Control Wiring ------
Power Wiring ——————
Field Wiring ——————

| | |
|---|---|
| EHNA20L0N | 111002246 |