

**A42 PHASE REVERSAL  
PROTECTION KIT**

**INSTALLATION INSTRUCTIONS FOR A42 PHASE REVERSAL PROTECTION KIT  
(610758-01; 10C25) USED WITH KG/KC/KH 156-300 UNITS**

**Shipping and Packing List**

**Package 1 of 1 contains:**

- 1- Phase detection monitor A42
- 2- Screws
- 1- A42 low voltage harness, 610749-01
- 1- K1 to A42 high voltage harness, 610748-01
- 4- Insertion wire ties
- 4- Small wire ties

**Application**

This kit is used on KG/KC/KH 156-300 units which are equipped with a standard blower. The kit does not apply to units equipped with supply air variable frequency drives.

The A42 device is a three-phase line monitor that protects against phase loss, phase reversal and phase unbalance. A42 is ideally suited to protect scroll- and screw-style compressors from reverse rotation.

Mode of operation (see figure1):

If all three phases are relatively equal and in proper sequence, the normally open contacts (Y and Y-out) will close when 24 volts is applied between C and Y terminals. If the phases are out of sequence, or if one is missing, the contacts will never close.

If a phase is lost while the A42 is energized, the contacts will open immediately and will remain open until the error is corrected.

An illuminated green LED indicates the output is energized. An illuminated red LED indicates a fault and the output is de-energized.

**⚠ WARNING**

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier

**⚠ CAUTION**

Danger of sharp metallic edges. Can cause injury. Take care when servicing unit to avoid accidental contact with sharp edges.

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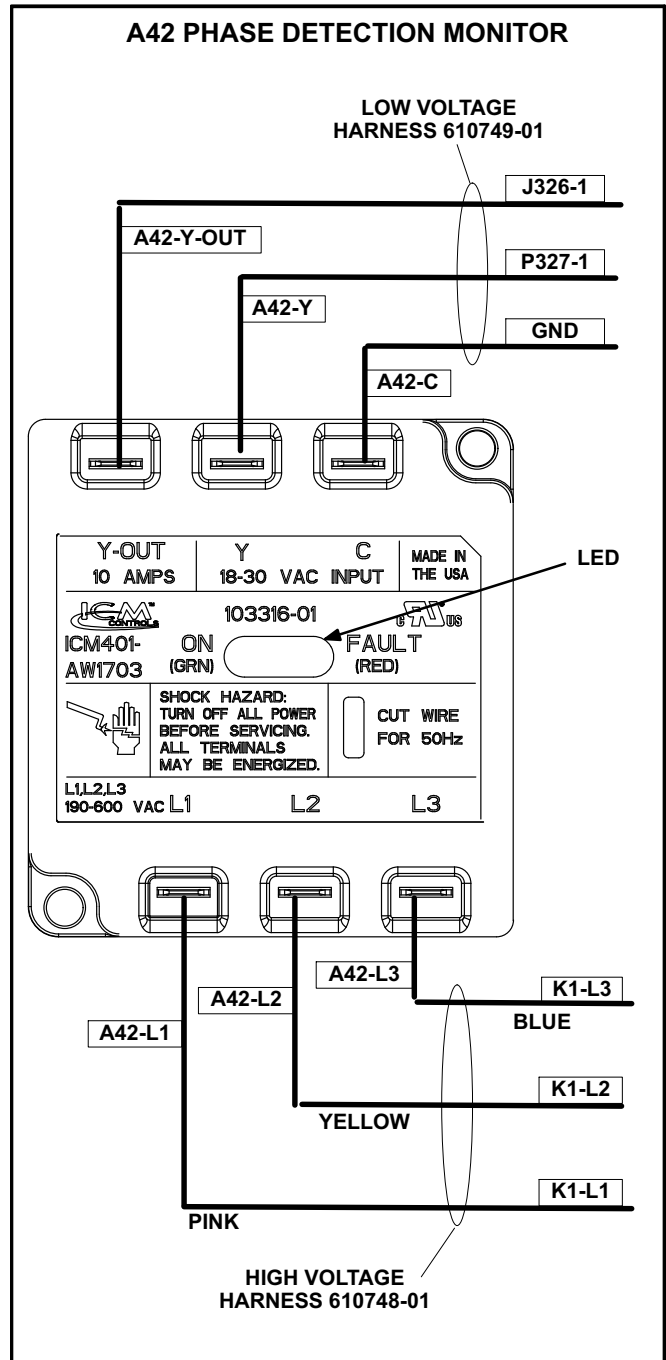


FIGURE 1

**Installation**

- 1- Disconnect all electrical power to unit and open control door/compressor access panel.

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- 2- Install A42 phase detection monitor on compressor panel with screws provided in kit. Use location shown in figure 2.
- 3- Connect low voltage harness, 610749-01, to A42 device using terminals Y-out, Y and C. See figure 1.
- 4- Disconnect P324/J324 in main control harness and connect low voltage harness using J326 and P327 respectively. Route harness as shown in figure 2 and connect ground wire to ground terminal strip.
- 5- Attach low voltage harness to compressor panel using an insertion wire tie and to main control harness using small black wire ties supplied in kit. Locations shown in figure 2.
- 6- Connect high voltage harness, 610748-01, to A42 device using terminals L1, L2, and L3. Connect the pink wire to L1, yellow to L2 and blue to L3. See figure 1.
- 7- Route harness as shown in figure 2. Connect wires to K1 contactor with the pink wire to line 1, yellow wire to line 2 and blue wire line 3.
- 8- Attach high voltage harness to compressor panel using insertion wire ties. Secure high voltage harness to main power harness using a small black wire tie supplied in kit. Locations shown in figure 2.
- 9- DO NOT bundle low voltage and high voltage harnesses together. Make sure wires are routed as shown and are kept separate.
- 10- Reinstall panel and restore power to unit.

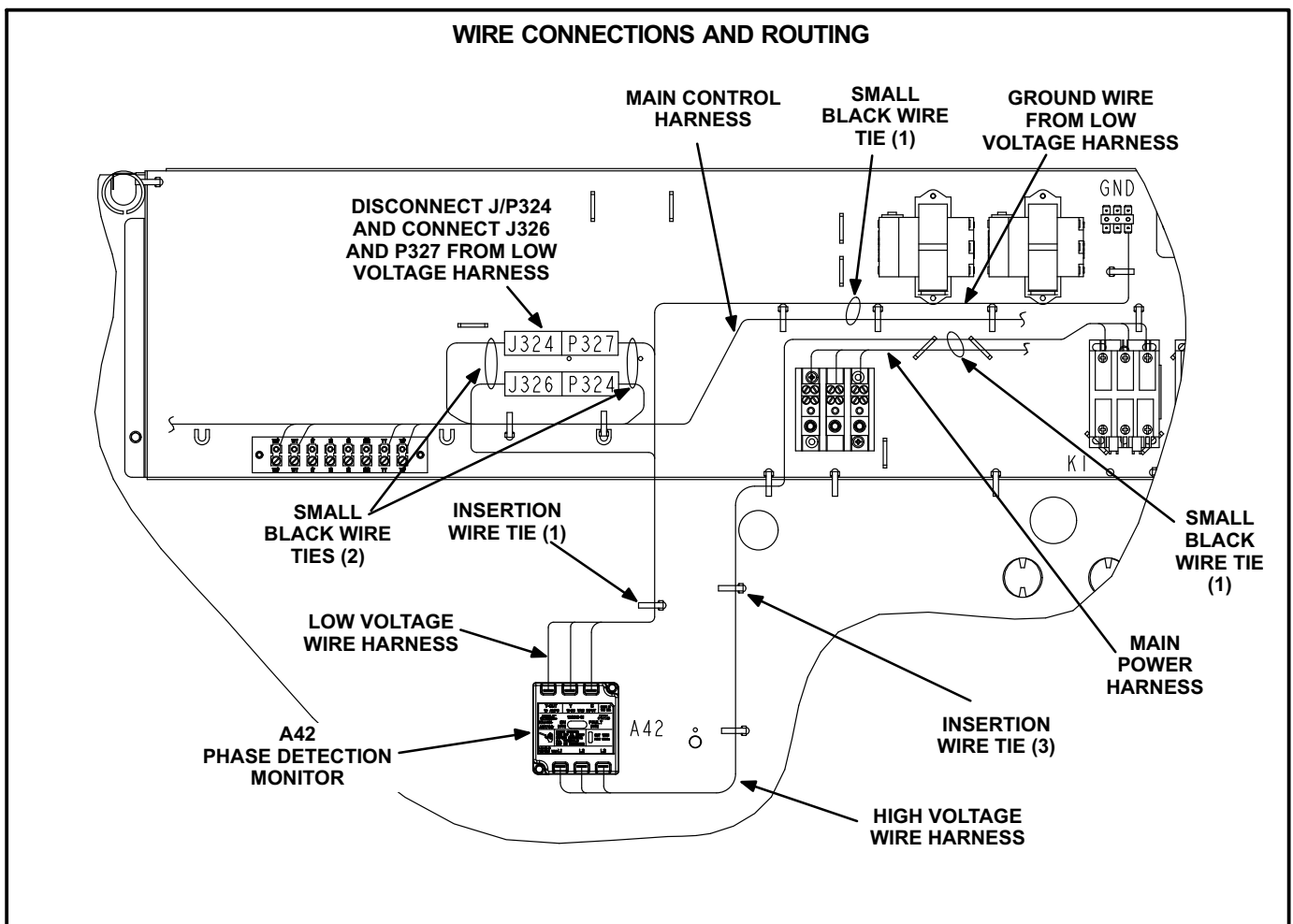


FIGURE 2