KHAEM0101EMI EMI Filter Kit

Installation Instructions

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

SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause death, personal injury, or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Use quenching cloth for brazing operations. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit.. Consult local building codes and current editions of the National Electrical Code (NEC) NFPA 70. In Canada, refer to current editions of the Canadian electrical code CSA 22.1.

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 the 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.

Use only the kit components described in this installation procedure.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

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

Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.

⚠ CAUTION

ELECTRICAL OPERATION HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

INTRODUCTION



Kit contents:

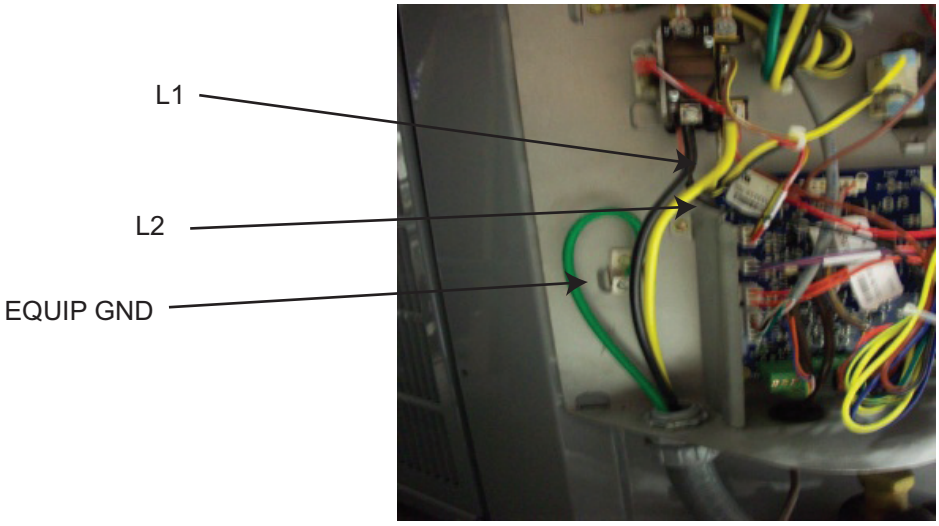
EMI Filter Box - 1
Self-drilling screws - 2
Conduit connectors - 2
Ring terminals - 6
Power conduit harness - 1
Installation Instructions - 1

INSTALLATION

1. Remove power to the unit. Wait a minimum of two minutes before servicing the unit to allow inverter capacitors to discharge.

NOTE: Precautions must be taken when servicing components within the control box of this unit. The technician performing the service must determine that it is safe to work on or near the inverter. The electrical disconnect that provides power to the unit must be turned off, locked and tagged out. This will insure that no damage will occur to the inverter, controls or other equipment and will prevent injury if contact is made with the electrical equipment.

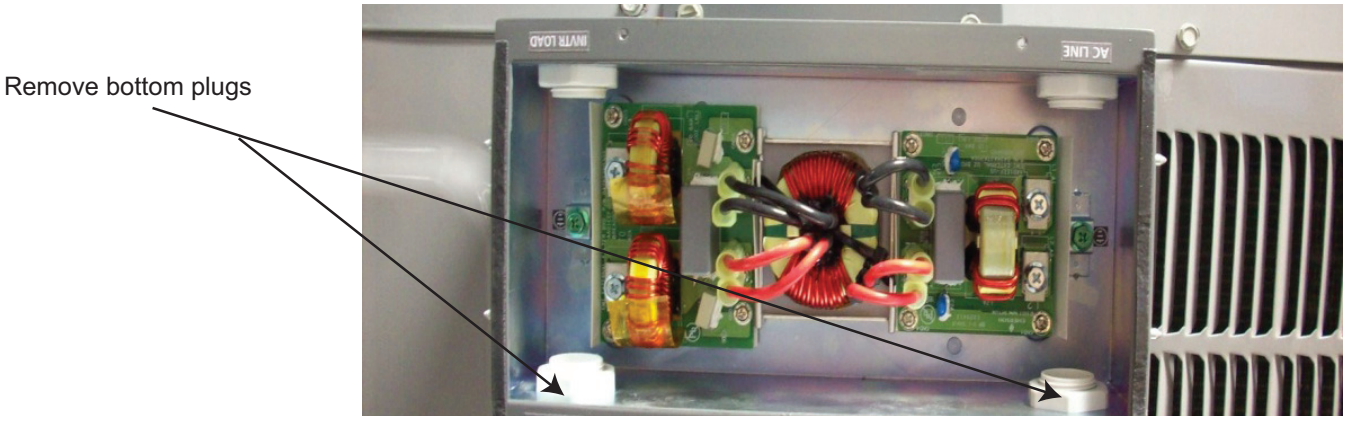
2. Remove EMI kit components from box and verify all components listed above.
3. Remove the control box cover.
4. Disconnect line power supply wiring (L1, L2 and EQUIP GND) from unit contactor terminals 11, 23 and ground lug, as shown in Fig. 1.



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Fig. 1 – Power Supply Wiring

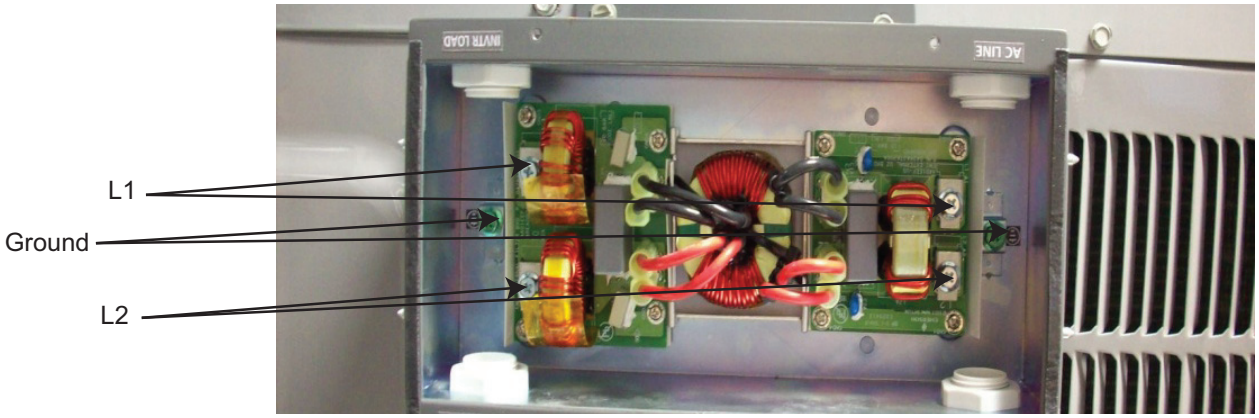
5. If mounting filter box on the right side of control box (see Fig. 2):
   a. Mount filter box so INVTR LOAD is on the left and AC LINE is on the right. INVTR side of filter box should be closest to the control box.
   b. Remove top cover/louver screw located 19” from control box corner of unit. Insert screw through top right filter box hole, top cover & louver.
6. If mounting filter box on the left side of control box (see Fig. 2):
   a. Mount filter box so AC LINE is on the left and INVTR LOAD is on the right. INVTR side of filter box should be closest to the control box.
   b. Remove top cover/louver screw located 20” from control box corner of unit. Insert screw through top left filter box hole, top cover & louver.



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Fig. 2 – Right Side Mounting (filter box mounted on right side of control box)

7. Use supplied self-driller screw, insert through open hole in filter box and drive screw with power driver to attach to top cover/louver.
8. Remove filter box cover and filter box bottom plugs.
9. Install supplied conduit connectors onto both ends of power harness conduit.
10. Add supplied ring terminals to one end of black, yellow and green wires in power harness.
11. Add supplied ring terminals to line power wires (L1, L2 and EQUIP GND) routed from disconnect (previously disconnected from unit control box in step 4).



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Fig. 3 - Line Power Wire Locations

12. Route disconnect wire harness through bottom of filter box AC LINE side. Connect L1, L2 and EQUIP GND wiring routed from disconnect to AC LINE side of filter. Attach the wire closest to the bottom of the filter box first, the upper wire next, and the ground wire last.
13. Tighten conduit connector to bottom of filter box.
14. Route supplied power harness through bottom of filter box INVTR LOAD side. The ring terminal end of the wires should connect inside the filter box. The black wire should connect to L1, the yellow wire to L2 and the green wire to the green ground screw terminal. Attach the wire closest to the bottom of the filter box first, the upper wire next, and the ground wire last.
15. Tighten conduit connector to bottom of filter box.
16. Snugly tighten the filter box top plugs.
17. Replace filter box cover.
18. Insert conduit into control box and tighten conduit connector.
19. Cut excess wire length (about 4") from yellow, black and green wires in supplied power harness.
20. Attach supplied power harness black wire to terminal 11 on bottom of contactor, yellow wire to terminal 23 on bottom of contactor and the green wire to unit ground lug.
21. Replace control box cover.
22. Apply power to the unit.

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