

**PURPOSE**

The purpose of this EDOC is to instruct in the installation of Harrington supplied heavy duty contactors in the ER1 hoist.

**SCOPE**

This EDOC encompasses all capacities in the ER1 product line.

**DETERMINING ER BODY SIZE**

The heavy duty contactors are sized according to hoist body size. Documentation, wiring diagrams and drawings are all grouped according to hoist body size. The following chart can be used to determine the body size:

<b><u>CAPACITY (Tons)</u></b>	<b><u>PRODUCT CODE</u></b>	<b><u>HOIST BODY SIZE</u></b>
1/8	(N)ER001H(D)	ER-B
1/4	(N)ER003S(D)	
1/4	(N)ER003H(D)	ER-C
1/2	(N)ER005L(D)	ER-B
1/2	(N)ER005S(D)	ER-C
1	(N)ER010L(D)	
1	(N)ER010M	
1	(N)ER010S(D)	ER-D
1½	(N)ER015S(D)	
2	(N)ER020L(D)	
2	(N)ER020M	
2	(N)ER020S(D)	ER-E
2½	(N)ER025S(D)	
3	(N)ER030C	ER-D
3	(N)ER030L(D)	ER-E
3	(N)ER030S(D)	
5	(N)ER050L(D)	
8	(N)ER080S(D)	
10	(N)ER100L(D)	
10	(N)ER100S(D)	
15	(N)ER150S(D)	
20	(N)ER200S(D)	

### BODY SIZE ER-B MATERIALS

1. (QTY:1) **90069-21** Harrington B-Body Heavy-Duty "Reversing Contactor"
2. (QTY:1) **90069-22** Harrington B-Body Heavy-Duty "Speed Contactor" (For dual speed units only.)
3. (QTY:3) **90135-01** 8-32 x ½" Self-Tapping Screws
4. (QTY:1) **60941** DIN Rail cut down to 5½"

### BODY SIZE ER-B INSTRUCTIONS

1. Remove both KITO "Reversing" and "Dual Speed" contactors, referencing Figure 1.
2. Using the template on drawing number 633, mark and drill three (3), holes for 8-32 self-tapping screws in the space vacated by the removed contactors.
3. Using the provided 8-32 self-tapping screws, attach the 5½" piece of "DIN" rail to the control panel.
4. Snap the new heavy duty contactors on to the installed "DIN" rail with the Dual Speed to the right.
5. Connect the wires onto the new heavy duty contactors, referencing the wiring diagram included in the packet. Be sure to include all jumpers shown in the wiring diagram. Reference Figure 2.

### BODY SIZE ER-C MATERIALS

1. (QTY:1) **90069-23** Harrington C-Body Heavy-Duty "Reversing Contactor"
2. (QTY:1) **90069-24** Harrington C&D-Body Heavy-Duty "Speed Contactor" (For dual speed units only.)

### BODY SIZE ER-D MATERIALS

1. (QTY:1) **90069-25** Harrington D-Body Heavy-Duty "Reversing Contactor"
2. (QTY:1) **90069-24** Harrington C&D-Body Heavy-Duty "Speed Contactor" (For dual speed units only.)

### BODY SIZE ER-C & D INSTRUCTIONS

1. Remove both KITO "Reversing" and "Dual Speed" contactors, referencing Figure 1. Also remove the Transformer.
2. Using the template on drawing number 634, mark, drill, and tap four (4), M4 holes in the space vacated by the removed contactors.
3. Using the existing M4x16mm machine screws, attach the new heavy duty contactors to the control panel.
4. After the contactors are attached to the panel, use the transformer to mark, drill, and tap three (3), M4 holes, referencing Figure 3 (you will be able to reuse 1 existing M4 hole). Reattach the transformer.
5. Connect the wires onto the new heavy duty contactors, referencing the included wiring diagram. Be sure to include all jumpers shown in the wiring diagram. Reference Figure 3.

**BODY SIZE ER-E MATERIALS (EXCEPT 3 TON S)**

1. (QTY:1) **90069-26** Harrington E-Body Heavy-Duty "Reversing Contactor"
2. (QTY:1) **90069-26** Harrington E-Body Heavy-Duty "Speed Contactor" (For dual speed units only.)

**BODY SIZE ER-E INSTRUCTIONS (EXCEPT 3 TON S)**

1. Remove both KITO "Reversing" and "Dual Speed" contactors, referencing Figure 1.
2. Using the template on drawing number 635, mark, drill, and tap four (4), M4 holes in the space vacated by the removed contactors.
3. Using the existing M4x16mm machine screws, attach the new heavy duty contactors to the control panel.
4. Connect the wires onto the new heavy duty contactors, referencing the included wiring diagram. Be sure to include all jumpers shown in the wiring diagram.

**3 TON S DUAL SPEED MATERIALS**

**Heavy-Duty Contactors Not Available**

**3 TON S DUAL SPEED MATERIALS**

**Heavy-Duty Contactors Not Available**

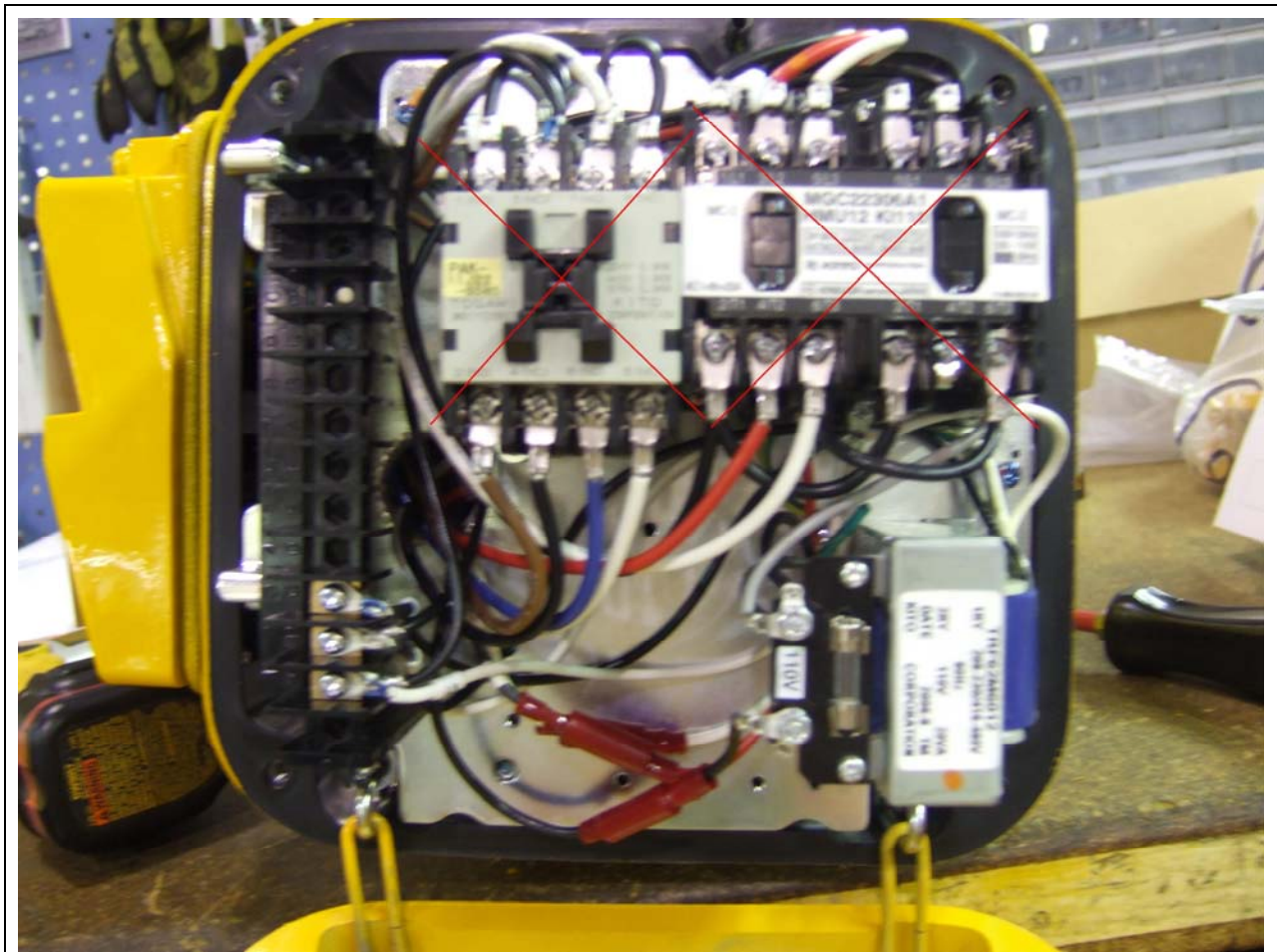


Figure 1

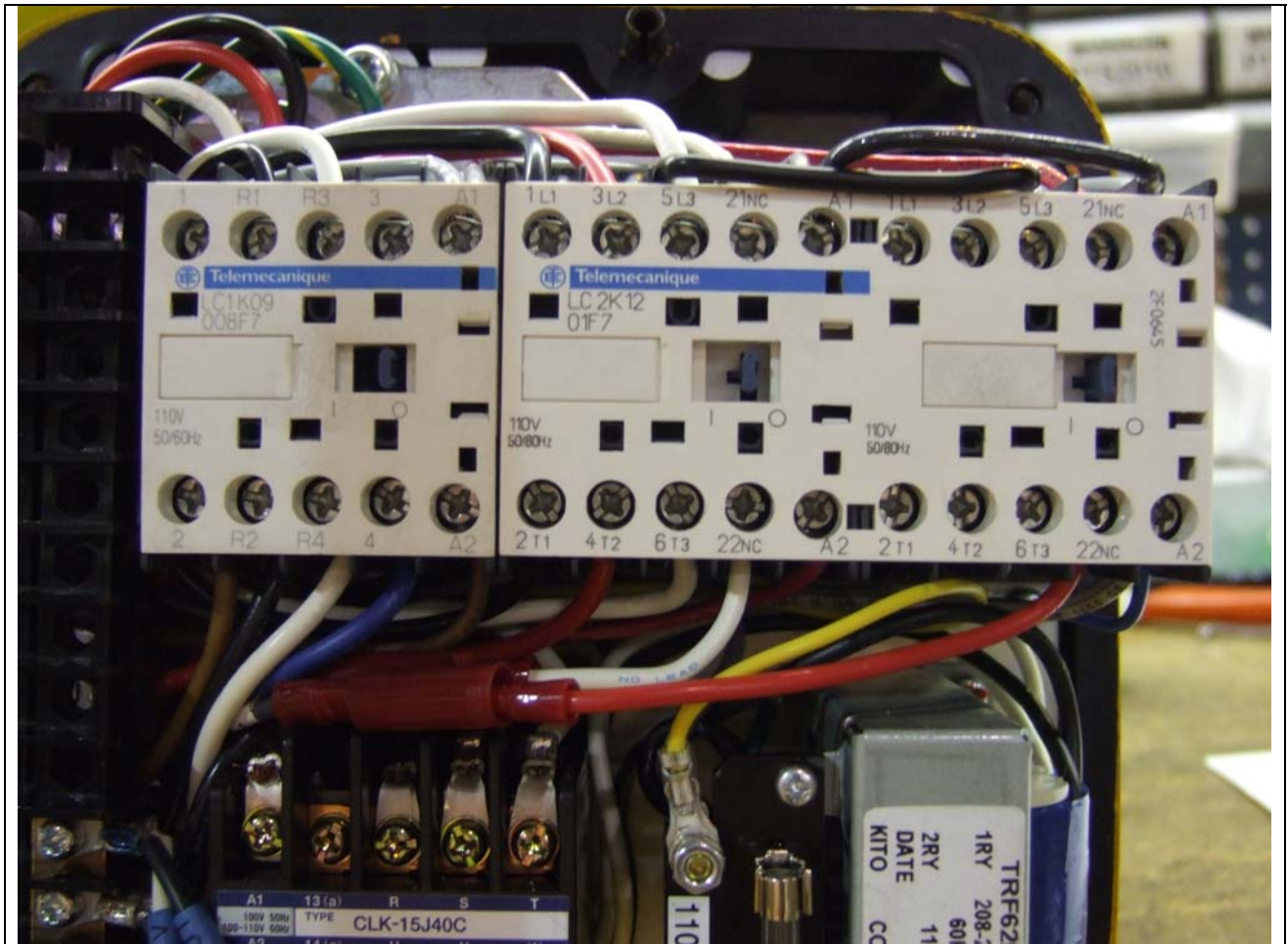


Figure 2

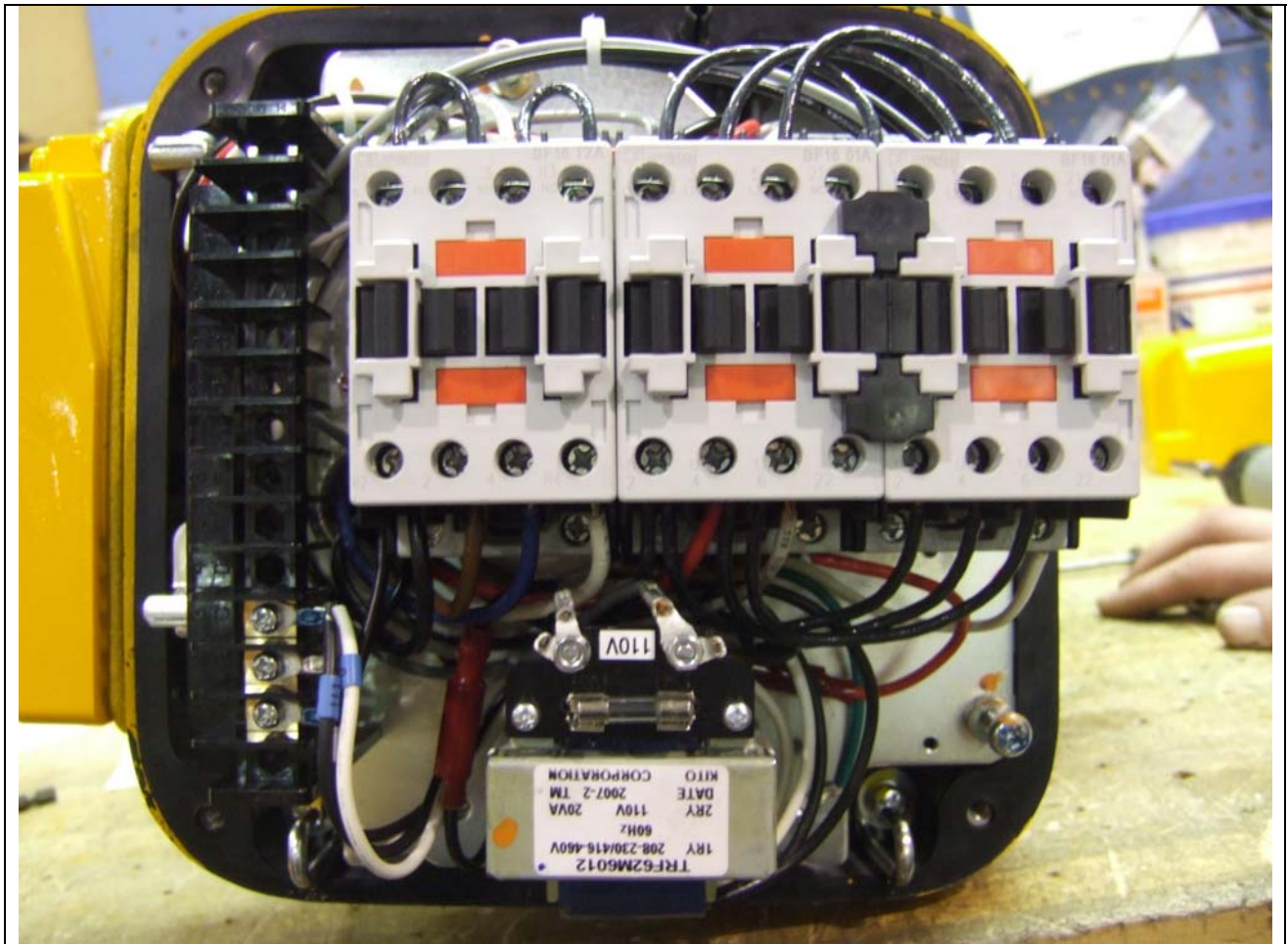


Figure 3

END