INSTALLING AN OUTPUT BOARD

Caution: The bezel assembly contains electronic circuits that can be damaged by static electricity. Before removing the assembly, discharge static charge on your body by touching an earth ground point. It is also important that the bezel assembly be handled only by the bezel itself. When handling a circuit board, be certain that hands are free from dirt, oil, etc., to avoid circuit contamination that may lead to a malfunction.

1. Remove the controller from the case.
2. Lift up on the top bezel board latch while gently pulling out on the bezel/display board assembly. Do NOT remove the display board from the bezel.
3. Remove the output board by pulling it away from the other boards. Replace the output board by aligning the board to board connector. Be certain the connector is fully mated.
4. Connect the bezel/display board assembly by guiding the board ends into the bezel latches. Slide the assembly on evenly until the display board connector is completely engaged and bezel latches are fully seated onto the boards.

Note: When replacing the output board, be certain to install a new output board of the same type. Appropriate rewiring considerations must be given if the output board type is changed.
SPECIFICATIONS & TYPICAL CONNECTIONS

Relay Connections
CN6-481xx Relay Outputs:
Type: Form-A (Shared common for the Alarms)
Contact Rating: 3 A @ 250 VAC or 30 VDC (resistive load), 1/10 HP @ 120 VAC (inductive load)
CN6-RBDLA210 Relay Outputs:
Limit Relay Type: Form-C
Alarm 1 Relay Type: Form-A
Contact Rating: 5 A @ 250 VAC or 30 VDC (resistive load), 1/10 HP @ 120 VAC (inductive load)
Life Expectancy: 100,000 cycles at max. load rating. (Decreasing load and/or increasing cycle time, increases life expectancy.)

Main Control Output

To prolong contact life and suppress electrical noise interference due to the switching of inductive loads, it is good installation practice to install a snubber across the contactor. Follow the manufacturer’s instructions for installation.

Note: Snubber leakage current can cause some electromechanical devices to be held ON.

Logic/SSR Connections (CN6-482xx Only)
Logic/SSR Drive Output (01 only):
Rating: 45 mA @ 4 V min., 7 V nominal (current limited)

PART NUMBERS

<table>
<thead>
<tr>
<th>MAIN CONTROL OUTPUT</th>
<th>AL1</th>
<th>AL2 (COOL)</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLY-A</td>
<td>NONE</td>
<td>NONE</td>
<td>CN6-48100</td>
</tr>
<tr>
<td>RLY-A</td>
<td>RLY-A</td>
<td>RLY-A</td>
<td>CN6-48111</td>
</tr>
<tr>
<td>LGC</td>
<td>NONE</td>
<td>NONE</td>
<td>CN6-48200</td>
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<tr>
<td>LGC</td>
<td>RLY-A</td>
<td>RLY-A</td>
<td>CN6-48211</td>
</tr>
<tr>
<td>RLY-C</td>
<td>RLY-A</td>
<td>NONE</td>
<td>CN6-RBDLA210</td>
</tr>
</tbody>
</table>

Note: For units equipped with a single alarm, order a dual alarm replacement board.
Note: RLY-A = Form-A Relay Output
RLY-C = Form-C Relay Output
LGC = Logic/SSR Drive Output
It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. WARNING: These products are not designed for use in, and should not be used for, human applications.

**WARRANTY/DISCLAIMER**

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of 25 months from date of purchase. OMEGA’s WARRANTY adds an additional one (1) month grace period to the normal two (2) year product warranty to cover handling and shipping time. This ensures that OMEGA’s customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA’s Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA’s WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA’s control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a “Basic Component” under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications, used on humans, or misused in any way. OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

**RETURN REQUESTS/INQUIRIES**

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA’S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

For **WARRANTY** returns, please have the following information available BEFORE contacting OMEGA:
1. Purchase Order number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

For **NON-WARRANTY** repairs, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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