

CN6-48100 & CN6-RBDLA210 Replacement Output Boards

INSTRUCTION SHEET M4536-0607

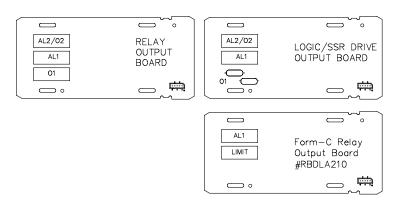
Shop online at: omega.com e-mail: info@omega.com For latest product manuals: omegamanual.info

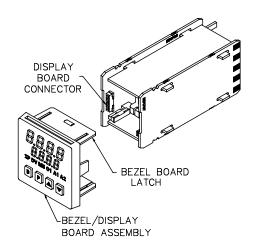
INSTALLING AN OUTPUT BOARD

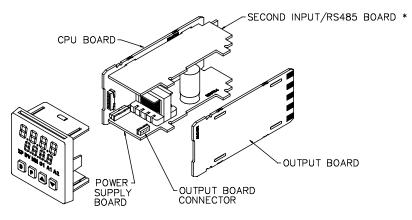
Caution: The bezel assembly contains electronic circuits that can be damaged by static electricity. Before removing the assembly, discharge static charge on your body by touching an earth ground point. It is also important that the bezel assembly be handled only by the bezel itself. When handling a circuit 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.
- 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.
- 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)

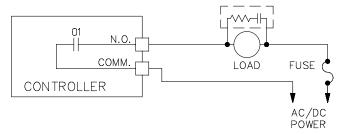
Life Expectancy: 100,000 cycles at max. load rating. (Decreasing load

and/or increasing cycle time, increases life expectancy.)

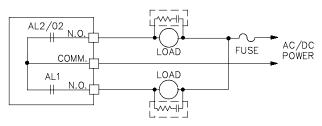
To prolong contact life and suppress electrical noise interference due to the switching of inductive loads, it is good installation practice to install a snubber across the contactor. Follow the manufacturer's instructions for installation.

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

Main Control Output



Alarm Outputs/Cooling

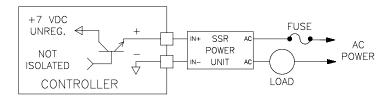


Logic/SSR Connections (CN6-482xx Only)

Logic/SSR Drive Output (O1 only):

Rating: 45 mA @ 4 V min., 7 V nominal (current limited)

Main Control Output



PART NUMBERS

MAIN CONTROL OUTPUT	AL1	AL2 02 (COOL)	PART NUMBER
RLY-A	NONE	NONE	CN6-48100
RLY-A	RLY-A	RLY-A	CN6-48111
LGC	NONE	NONE	CN6-48200
LGC	RLY-A	RLY-A	CN6-48211
RLY-C	RLY-A	NONE	CN6-RBDLA210

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



OMEGAnet® Online Service omega.com

Internet e-mail info@omega.com

Servicing North America:

One Omega Drive, P.O. Box 4047

ISO 9001 Certified Stamford, CT 06907-0047

TEL: (203) 359-1660 FAX: (203) 359-7700 e-mail: info@omega.com

Canada: 976 Bergar

U.S.A.:

Laval (Quebec) H7L 5A1, Canada

TEL: (514) 856-6928 FAX: (514) 856-6886 e-mail: info@omega.ca

For immediate technical or application assistance:

U.S.A. and Canada: Sales Service: 1-800-826-6342/1-800-TC-OMEGA®

Customer Service: 1-800-622-2378/1-800-622-BEST[®] Engineering Service: 1-800-872-9436/1-800-USA-WHEN[®]

Mexico: En Español: (001) 203-359-7803

e-mail: espanol@omega.com FAX: (001) 203-359-7807 info@omega.com.mx **Servicing Europe:**

Czech Republic: Frystatska 184, 733 01 Karviná, Czech Republic

TÉL: +420 (0)59 6311899 FAX: +420 (0)59 6311114 Toll Free: 0800-1-66342 e-mail: info@omegashop.cz

Germany/Austria: Daimlerstrasse 26, D-75392 Deckenpfronn, Germany

TEL: +49 (0)7056 9398-0 FAX: +49 (0)7056 9398-29

Toll Free in Germany: 0800 639 7678

e-mail: info@omega.de

One Omega Drive, River Bend Technology Centre

Northbank, Irlam, Manchester M44 5BD United Kingdom TEL: +44 (0)161 777 6611 FAX: +44 (0)161 777 6622

Toll Free in United Kingdom: 0800-488-488

e-mail: sales@omega.co.uk

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.

United Kingdom:

ISO 9002 Certified

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.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

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 or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, 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.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering. OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2006 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.

Where Do I Find Everything I Need for Process Measurement and Control? OMEGA...Of Course! Shop online at omega.com

TEMPERATURE

- ☑ Thermocouple, RTD & Thermistor Probes, Connectors, Panels & Assemblies
- ✓ Wire: Thermocouple, RTD & Thermistor
- ☑ Calibrators & Ice Point References
- ☑ Recorders, Controllers & Process Monitors
- ☑ Infrared Pyrometers

PRESSURE, STRAIN AND FORCE

- ☑ Transducers & Strain Gages
- Displacement Transducers
- ✓ Instrumentation & Accessories

FLOW/LEVEL

- ☑ Rotameters, Gas Mass Flowmeters & Flow Computers
- ☑ Air Velocity Indicators
- ☑ Turbine/Paddlewheel Systems
- ☑ Totalizers & Batch Controllers

pH/CONDUCTIVITY

- Benchtop/Laboratory Meters
- ☑ Controllers, Calibrators, Simulators & Pumps
- ☑ Industrial pH & Conductivity Equipment

DATA ACQUISITION

- ☑ Data Acquisition & Engineering Software
- ☑ Communications-Based Acquisition Systems
- ☑ Plug-in Cards for Apple, IBM & Compatibles
- Datalogging Systems
- Recorders, Printers & Plotters

HEATERS

- Heating Cable
- ☑ Cartridge & Strip Heaters
- ☑ Immersion & Band Heaters
- Flexible Heaters

ENVIRONMENTAL MONITORING AND CONTROL

- ✓ Metering & Control Instrumentation
- Refractometers
- Pumps & Tubing
- Air, Soil & Water Monitors
- ☑ Industrial Water & Wastewater Treatment