

2 YEAR
WARRANTY

MADE IN
USA



Ω OMEGA[®] **User's Guide**

Shop online at
omega.com[®]

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



DR-IO Series **Solid State Input** **and Output Modules**

AC & DC Output

Model Number	Logic (Input) Voltage Range Vdc (Vac)	Logic (Input) Impedance Rc Ohm	Field (Output) Voltage Range Vac (Vdc)	Field (Output) Current Range Arms @ 45°C	Schematic	Mechanical
Case Color: Black						
DR-IO-OAC-R0-280	4-28	1,500	12-280	.05-3	1	A
DR-IO-OAC-RA-280	(90-280)	40,000	12-280	.05-3	2	A
Case Color: Red						
DR-IO-ODC-R0-060	4-28	1,500	(5-60)	0-3	3	A
DR-IO-ODC-RL-060*	4-28	1,500	(5-60)	0-3	3	A
DR-IO-ODC-R0-200	4-28	1,500	(5-200)	0-1	3	A

*Low off-state leakage model (100 µA @ max field voltage)(micro Amps)

AC & DC Input

Model Number	Logic (Output) Voltage Range Vdc	Max Load Current mA	Turn On Time Max ms (µs)	Turn Off Time Max ms (µs)	Field (Input) Voltage Vac (Vdc)	Logic	Logic (Output) Voltage Drop @ 100mA Load Vdc
Case Color: Yellow							
DR-I.O.-IAC-R0-280	4-28	100	20	20	90-280	Neg	0.5
DR-I.O.-IAC+R0-280	4-28	100	20	20	90-280	Pos	0.5
Case Color: White							
DR-I.O.-IDC-R0-028	4-28	100	(30)	(60)	(4-28)	Neg	0.5
DR-I.O.-IDC+R0-028	4-28	100	(30)	(60)	(4-28)	Pos	0.5

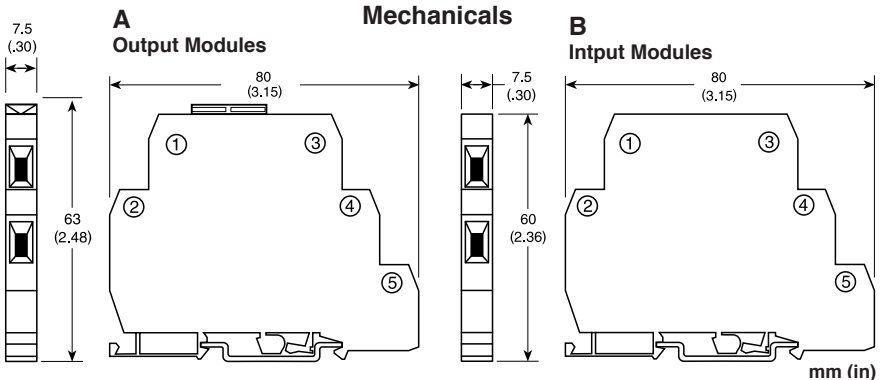
Specifications

Operating Ambient: -30 to 70°C (-22 to 158°F)

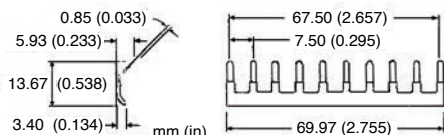
Isolation: 4000 Vrms

Storage Temperature: -40 to 100°C (-40 to 212°F)

Mounting: standard "C" or as Top Hat 35 mm DIN rails

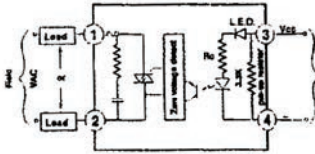


Jumper Strip: DR-IO-JUMPER
 10 position jumper strip accessory interconnects positive and/or negative terminals for easy, quick connection



Schematics

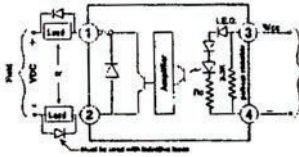
1
OAC-R0



2
OAC-RA

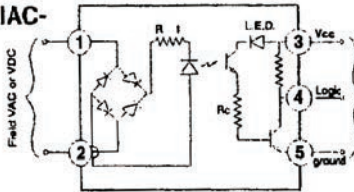


3
ODC



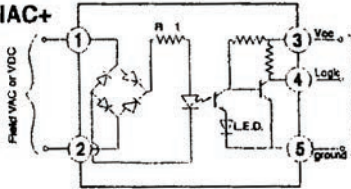
(Application of a voltage here will cause the load to turn on).

4 IAC-



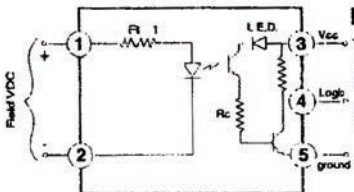
(A voltage on the field side will cause the voltage on terminal "4" to drop from Vdc to ground)

5 IAC+



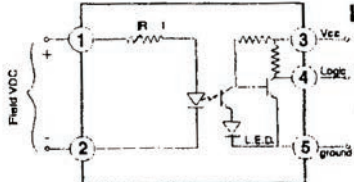
(A voltage on the field side will cause the voltage on terminal "4" to drop from ground to Vdc)

6 IDC-



(A voltage on the field side will cause the voltage on terminal "4" to drop from Vdc to ground)

7 IDC+



(A voltage on the field side will cause the voltage on terminal "4" to drop from ground to Vdc)



OMEGAnet® Online Service omega.com	Internet e-mail info@omega.com
---------------------------------------	-----------------------------------

Servicing North America:

U.S.A.: Omega Engineering, Inc., One Omega Drive,
ISO 9001 Certified P.O. Box 4047, Stamford, CT 06907-0047 USA
 Toll-Free: 1-800-826-6342 Tel: (203) 359-1660
 FAX: (203) 359-7700 e-mail: info@omega.com

Canada: 976 Bergar, Laval (Quebec), H7L 5A1, Canada
 Toll-Free: 1-800-826-6342 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/ Latin America: TEL: 001 (203) 359-1660 FAX: 001 (203) 359-7700
 e-mail: espano@omega.com

Serving Asia:

China: 1698 Yi Shan Road, Unit 102, Min Hang District
 Shanghai, China 201103 P.R.C.
 Hotline: 800 819 0559/400 619 0559
 e-mail: info@cn.omega.com

Servicing Europe:

Benelux: Toll-Free: 0800 099 3344 TEL: +31 20 347 21 21
 FAX: +31 20 643 46 43 e-mail: sales@omegaeng.nl

Czech Republic: Frystatska 184
 733 01 Karviná, Czech Republic
 TEL: +420-59-6311899 FAX: +420-59-6311114
 e-mail: info@omegashop.cz

France: Toll-Free: 0850 541 038 TEL: 01 57 32 48 17
 FAX: 01 57 32 48 17 e-mail: info@omega.fr

Germany/Austria: Daimlerstrasse 26
 D-75392 Deckenpfronn, Germany
 Toll-Free: 0800 8266342 TEL: +49 (0) 7056 9398-0
 FAX: +49 (0) 7056 9398-29 e-mail: info@omega.de

United Kingdom: OMEGA Engineering Ltd.
ISO 9001 Certified One Omega Drive, River Bend Technology Centre,
 Northbank, Irlam, Manchester M44 5BD, United Kingdom
 Toll-Free: 0800-488-488 TEL: +44 (0) 161 777-6611
 FAX: +44 (0) 161 777-6622 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.

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 **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) 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 2012 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.