

DR OUTPUT MODULE

I/O MODULE



Features

- DIN Rail Mountable Single Point Output Modules (35mm DIN)
- Plug into mounting boards for 0.6" modules
- Zero Voltage Turn-On for AC Modules
- 4kV Optical isolation with LED Indicator
- UL Recognized, CSA Certified, CE Compliant
- Industry standard Color Coding Black (AC Output) Red (DC Output)
- Barrier Strips Accept 14 to 28 AWG Wire.



SPECIFICATIONS (1)

Input

Part Number	DR-OAC	DR-OAC5	DR-OAC24
Nominal Voltage [VDC]	5-24	5.0	24.0
Minimum Voltage [VDC]	3.7	3.5	18.0
Maximum Voltage [VDC]	32	8.0	32.0
Drop-Out Voltage [VDC]	1.0	1.0	1.0
Maximum Current [mA] (2)	18	18	13
Resistance [Ohms] (3)	NA	250	2000

Output

Part Number	DR-OAC	DR-OAC5	DR-OAC24
Nominal Line Voltage	240 VAC	5-48 VDC	5-48 VDC
Minimum Line Voltage	12 VAC	3 VDC	3 VDC
Maximum Line Voltage	280 VAC	60 VDC	60 VDC
Max Off-State Voltage (4)	600 Vpeak	60 VDC	60 VDC
Max Off-State Leakage (5)	0.1 mArms	10 uA	10 uA
Static Off-State dv/dt (6)	200 V/usec	N/A	N/A
Maximum Rated On-State Current (7)	5.0 Arms	3.0 A	3.0 A
Minimum On-State Current	50 mArms	10 mA	10 mA
Max Surge Current (8)	250 Apeak	5.0 A	5.0 A

Page 1

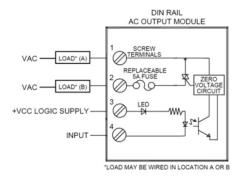


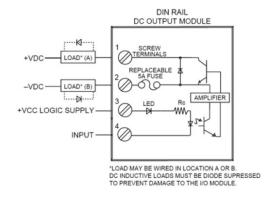
Output (cont.)

Part Number	DR-OAC	DR-OAC5	DR-OAC24
On-State Voltage Drop or Resistance (9)	1.6 V	1.6 V	1.6 V
Horse Power Rating (10)	1/2 H.P.	N/A	N/A
Fuse (11)	5	5	5
Maximum Turn-On Time [msec] (12)	8.33	0.1	0.1
Maximum Turn-Off Time [msec] (12)	8.33	0.75	0.75
Input / Output Isolation Voltage (13)	4000 Vrms	4000 Vrms	4000 Vrms
Input / Output Capacitance	8 pF	8 pF	8 pF
Operating Temperature Range	-30 to 80°C	-30 to 80°C	-30 to 80°C
Storage Temperature Range	-40 to 80°C	-40 to 80°C	-40 to 80°C
Line Frequency Range	47 to 63 Hz	DC	DC
Weight	1.1 oz. (31.2 g)	1.1 oz. (31.2 g)	1.1 oz. (31.2 g)



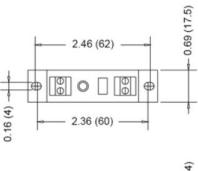
EQUIVALENT CIRCUIT BLOCK DIAGRAMS

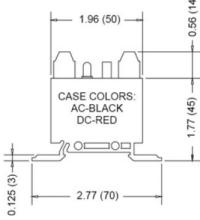






Tolerances: ±0.02 in / 0.5 mm All dimensions are in inches [millimeters]







GENERAL NOTES

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) At nominal input voltage, without external LED status indicator.
- (3) ±10% at 25 °C.
- (4) Maximum 1 minute duration for OAC modules when applied as a DC voltage rather than a peek AC voltage.
- (5) At maximum line voltage, 25 °C for OAC modules, at 80 °C for ODC modules.
- (6) Minimum DV/DT per EIA/NARM RS433, method RS397, DV/DT ratings do not apply to DC output models
- ¹⁷ At 70°C, derate OAC modules 58 mA/°C to 80°C, derate ODC. ODCxMC and ODCxML modules 50 mA/°C to 80°C. CSA rating of OAC modules is 3.0 Arms at 40°C.
- (8) At 25 °C for 1 second maximum duration: 1 AC cycle for AC modules, 1 second for DC modules.
- (9) At maximum rated on-state current and 25 °C.
- (10) 1/3 H.P. at 240 VAC, 1/8 H.P. at 120 VAC.
- (11) Fuse is BUSS # PCE5.
- 12) At maximum line voltage, maximum rated output current, nominal input voltage at 25 °C. Switching speed of OAC modules is based upon 60 Hz line frequency.
- (13) At 25°C for 1 second maximum duration.

For additional information or specific questions, contact Sensata Technical Support.



AGENCY APPROVALS & CERTIFICATIONS











Page 3





RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

Page 4

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

Americas

+1 (877) 502 5500 - Option 2 sales.crydom@sensata.com Europe, Middle East & Africa +44 (1202) 416170 ssr-info.eu@sensata.com Asia Pacific

sales.isasia@list.sensata.com China +86 (21) 2306 1500 Japan +81 (45) 277 7117 Korea +82 (31) 601 2004 India +91 (80) 67920890 Rest of Asia +886 (2) 27602006 ext 2808