



DRA1 SERIES | MCX AC OUTPUT

DIN RAIL MOUNT



Features

- 10mm Single Channel DIN Rail Mount SSR Assembly
- AC Ratings up to 380 VAC and 5 Amps
- 3-15 and 15-32 VDC Control
- Cage style screw terminals for easy connection
- Fits standard 35mm DIN rail
- Includes LED Status indicator



PRODUCT SELECTION

| Control Voltage | 5A | 5A |
|---------------------|----------------|----------------|
| 3 - 15 VDC Control | DRA1-MCX240D5 | |
| 4 - 15 VDC Control | | DRA1-MCX380D5 |
| 15 - 32 VDC Control | DRA1-MCXE240D5 | DRA1-MCXE380D5 |



SPECIFICATIONS

Output ⁽¹⁾

| Description | MCX(E)240x5 | MCX(E)380x5 |
|--|-------------|-------------|
| Operating Voltage [VAC] | 12 - 280 | 48 - 380** |
| Transient Overvoltage [Vpk] | 600 | 1200 |
| Maximum Load Current [Arms] ⁽²⁾ | 5 | 5 |
| Minimum Load Current [Arms] | 0.06 | 0.06 |
| Maximum Off-State Leakage Current @ Rated Voltage [mArms] | 0.1 | 0.1 |
| Maximum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽³⁾ | 500 | 500 |
| Maximum 1 Cycle Surge Current (50/60 Hz) [Apk] | 239 / 250 | 239 / 500 |
| Maximum I ² t for Fusing (50/60 Hz, ½ Cycle) [A ² Sec] | 285 / 260 | 285 / 260 |
| Maximum On-State Voltage Drop @ Rated Current [Vpk] | 1.4 | 1.4 |

Input ⁽¹⁾

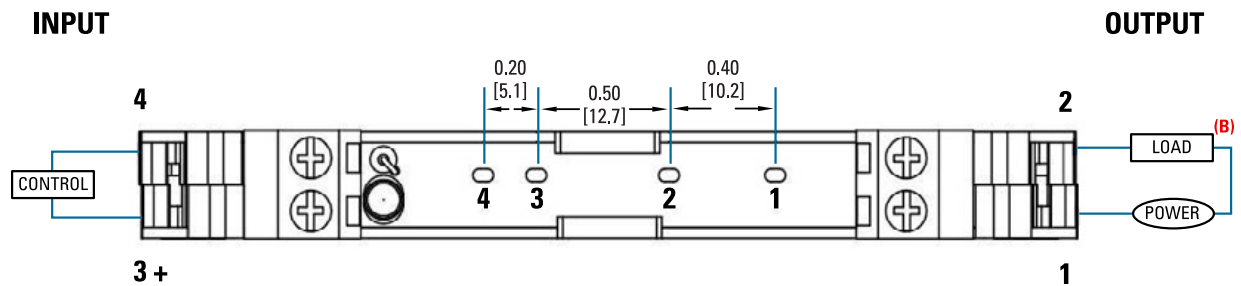
| Description | DRA1-MCX | DRA1-MCX380D5 | DRA1-MCXE |
|------------------------------|------------|---------------|-------------|
| Control Voltage Range | 3 - 15 VDC | 4 - 15 VDC | 15 - 32 VDC |
| Must Turn-On Voltage | 3.0 VDC | 4.0 VDC | 15.0 Vrms |
| Must Turn-Off Voltage | 1.0 VDC | 1.0 VDC | 1.0 VDC |
| Typical Input Current | 15 mAdc | 15 mAdc | 15 mAdc |
| Nominal Input Impedance | 300 Ohms | 240 Ohms | 1500 Ohms |
| Maximum Turn-On Time [msec] | ½ Cycle | ½ Cycle | ½ Cycle |
| Maximum Turn-Off Time [msec] | ½ Cycle | ½ Cycle | ½ Cycle |

General ⁽¹⁾

| Description | Parameters |
|--|----------------------------|
| Dielectric Strength, Input/Output (50/60 Hz) | 4000 Vrms |
| Maximum Insulation Resistance (@ 500 VDC) | 10 ⁹ Ohm |
| Maximum Capacitance, Input/Output | 10 pF |
| Ambient Operating Temperature Range | -30 to 80°C |
| Ambient Storage Temperature | -30 to 125°C |
| Weight (Typical) | 0.08 oz (36.4 g) |
| Encapsulation | Thermally Conductive Epoxy |



WIRING DIAGRAM ^(A)



^(A) Wiring diagram is identical for each individual section whether it is a single or four channel assembly.

^(B) Load can be placed on either side of "Power"

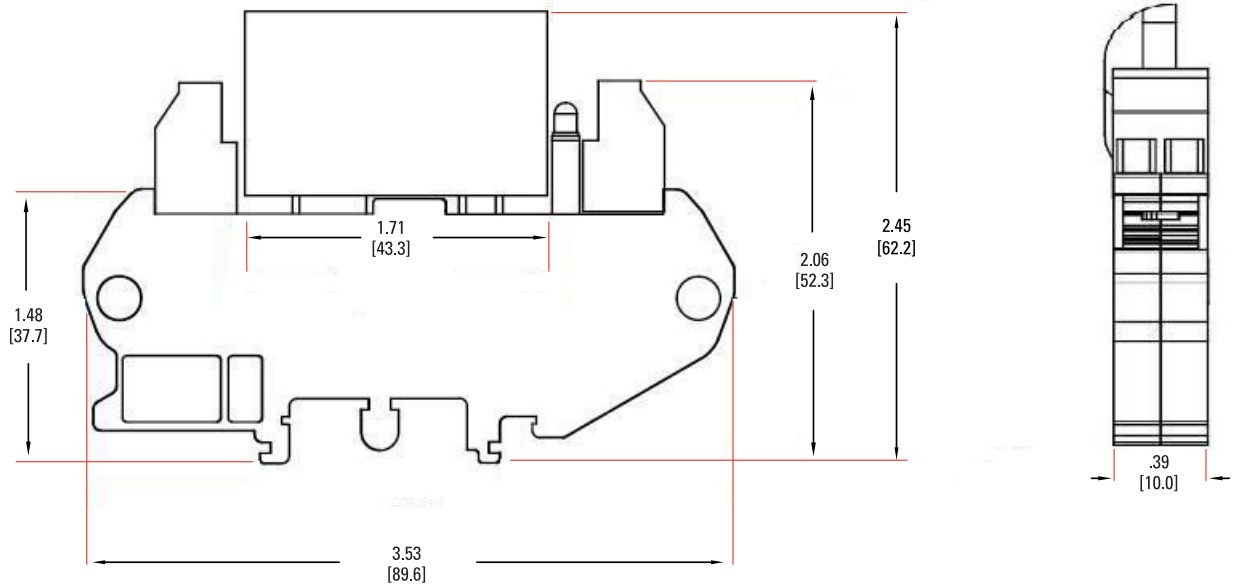
For additional information or specific questions, contact Sensata Technical Support.



MECHANICAL SPECIFICATIONS

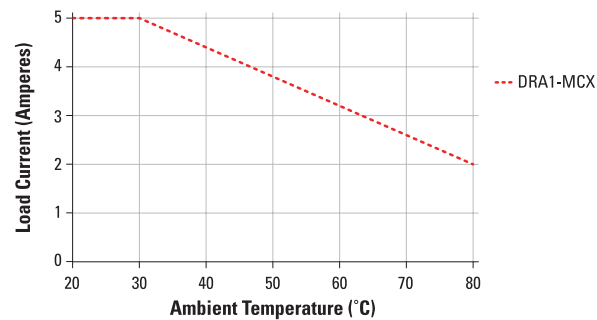
Tolerances: ± 0.02 in / 0.5 mm
All dimensions are in inches [millimeters]

MCX/MP Series SSR



THERMAL DERATE INFORMATION

DRA1-MCX Derating Curve



GENERAL NOTES

- ⁽¹⁾ All parameters at 25 °C unless otherwise specified.
- ⁽²⁾ See Derating Chart on page 4.
- ⁽³⁾ Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1

** NOTE: Voltages in excess of 380V will damage output terminals.

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



AGENCY APPROVALS & CERTIFICATIONS



- UL: E116949 (Relay Only)



WARNINGS



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.

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Sensata:](#)

[DRA1-MCX240D5](#) [DRA1-MCX380D5](#) [DRA1-MCXE240D5](#) [DRA1-MCXE380D5](#)