

# DRA1 SERIES | CMX DC OUTPUT

DIN RAIL MOUNT



## Features

- 10mm Single Channel DIN Rail Mount SSR Assembly
- AC Ratings up to 380 VAC and 10 Amps
- 3-15 VDC, 15-32VDC, 18-36 VAC and 90-140 VAC Control
- Cage style screw terminals for easy connection
- Fits standard 35mm DIN rail
- Includes LED Status Indicator (DC Control Only)

## PRODUCT SELECTION

| Control Voltage | 3A             | 5A            | 6A             | 10A <sup>(5)</sup> | 10A <sup>(5)</sup> |
|-----------------|----------------|---------------|----------------|--------------------|--------------------|
| 3 - 10 VDC      | DRA1-CMX200D3  | DRA1-CMX60D5  | DRA1-CMX100D6  | DRA1-CMX60D10      | DRA1-CMX100D10     |
| 20 - 28 VDC     | DRA1-CMXE200D3 | DRA1-CMXE60D5 | DRA1-CMXE100D6 | DRA1-CMXE60D10     | DRA1-CMXE100D10    |

## SPECIFICATIONS

### Output <sup>(1)</sup>

| Description  | 3A      | 5A     | 6A      | 10A <sup>(5)</sup> | 10A <sup>(5)</sup> |
|--|---------|--------|---------|--------------------|--------------------|
| Operating Voltage [VDC]  | 1 - 200 | 1 - 60 | 1 - 100 | 1 - 60             | 1 - 100            |
| Maximum Off-State Leakage Current @ Rated Voltage [ $\mu$ Adc] | 100     | 100    | 100     | 100 <sup>(2)</sup> | 100                |
| Maximum Load Current [A] <sup>(3)</sup>                        | 3       | 5      | 6       | 10                 | 10                 |
| Minimum Load Current [A]                                       | 0       | 0      | 0       | 0                  | 0                  |
| Maximum Off-State Resistance [Ohm]                             | 0.2     | 0.1    | 0.04    | 0.018              | 0.01               |
| Maximum Surge Current (10msec) [Apk]                           | 30      | 60     | 100     | 100                | 100                |
| Maximum On-State Voltage Drop @ Rated Current [VDC]            | 0.6     | 0.5    | 0.24    | 0.18               | 0.1                |

## Input <sup>(1)</sup>

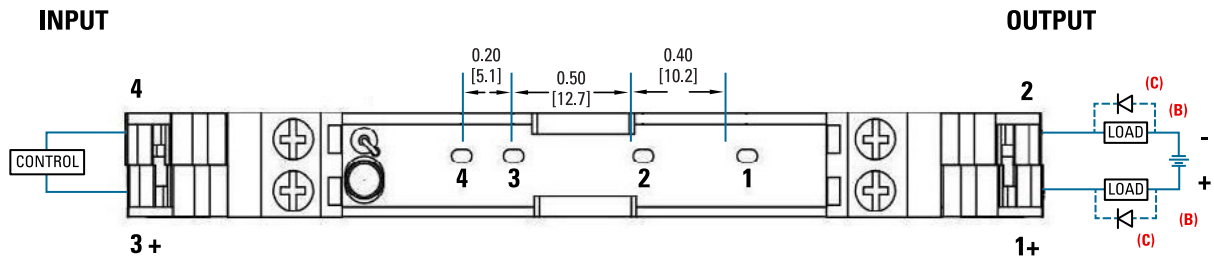
| Description                                | DRA1-CMX        | DRA1-CMXE        |
|--|-----------------|------------------|
| Control Voltage Range                      | 3.0 - 10.0 VDC  | 20.0 - 28.0 VDC  |
| Must Turn-On Voltage                       | 3.0 VDC         | 3.0 VDC          |
| Must Turn-Off Voltage                      | 1.0 VDC         | 1.0 VDC          |
| Typical Input Current                      | 15 mAdc @ 5 Vdc | 12 mAdc @ 20 Vdc |
| Nominal Input Impedance                    | 300 Ohm         | 240 Ohm          |
| Maximum Turn-On Time [msec] <sup>(5)</sup> | 1               | 1                |
| Maximum Turn-Off Time [µsec]               | 300             | 300              |

## General <sup>(1)</sup>

| Description  | Parameters                 |
|--|----------------------------|
| Dielectric Strength <sup>(4)</sup>                       | 2500 Vrms                  |
| Maximum Insulation Resistance (@ 500 VDC) <sup>(4)</sup> | 10 <sup>9</sup> Ohm        |
| Maximum Capacitance, Input/Output                        | 15 pF                      |
| Ambient Operating Temperature Range                      | -20 to 80°C                |
| Ambient Storage Temperature Range                        | -20 to 125°C               |
| Weight (Typical)   | 0.063 oz (28.6 g)          |
| Encapsulation  | Thermally Conductive Epoxy |



## WIRING DIAGRAMS <sup>(A)</sup>



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

<sup>(B)</sup> Load can be placed on either side of "Power"

<sup>(C)</sup> DC inductive loads must be diode suppressed to prevent damage to SSR.

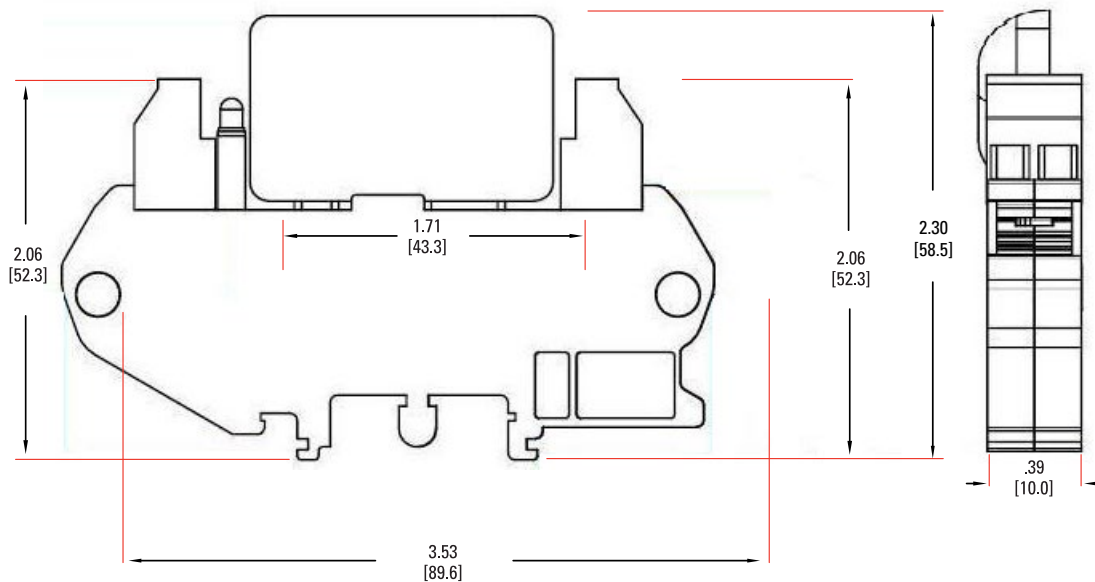
For additional information or specific questions, contact Sensata Technical Support.



## MECHANICAL SPECIFICATIONS

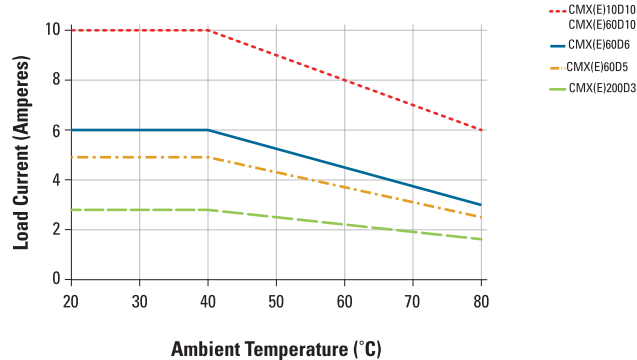
Tolerances:  $\pm 0.02$  in / 0.5 mm  
All dimensions are in inches [millimeters]

### CX/CMX Series SSR



## THERMAL DERATE INFORMATION

DRA1-CMX Derating Curve



## GENERAL NOTES

- (1) All parameters at 25 °C unless otherwise specified.
- (2) At 55 Vdc.
- (3) See Derating Chart on page 4.
- (4) Dielectric and insulation resistance is measured between input and output
- (5) Steady state load Current exceeding 10 amps will damage socket.

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



## AGENCY APPROVALS & CERTIFICATIONS



- Designed in accordance with the requirements of IEC 62314
- UL: E116950 (3, 6, and 10 CMX Relays 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.**

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