



DRA1 SERIES | CX DC INPUT

DIN RAIL MOUNT SOLID STATE RELAYS



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	5 A	5 A	5 A	5 A	5 A
3 - 15 VDC Control	DRA1-CX240D5	DRA1-CX240D5-B ⁽²⁾	DRA1-CX240D5R		
4 - 15 VDC Control				DRA1-CXE240D5R	DRA1-CX380D5R
15 - 32 VDC Control	DRA1-CXE240D5		DRA1-CXE240D5R	DRA1-CXE380D5	

SPECIFICATIONS

Output ⁽¹⁾

Description	CX(E)240x5	CX(E)380x5
Operating Voltage [VAC]	12 - 280	48 - 380**
Transient Overvoltage [Vpk]	600	1200
Maximum Load Current [Arms] ⁽³⁾	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] ⁽⁴⁾	500	500
Maximum 1 Cycle Surge Current (50/60 Hz) [Apk]	239 / 250	239 / 500
Maximum I ² t for Fusing (50/60 Hz, 1/2 Cycle) [A ² Sec]	285 / 260	285 / 260
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.4	1.4

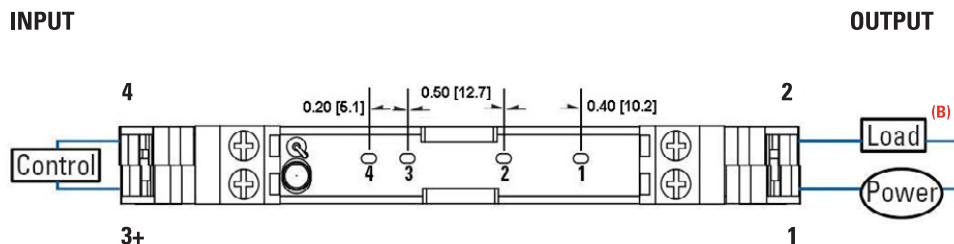
Input ⁽¹⁾

Description	DRA1-CX	DRA1-CX240D5-B	DRA1-CX380D5	DRA1-CXE
Control Voltage Range	3 - 15 VDC	4 - 28 VDC	4 - 15 VDC	15 - 32 VDC
Must Turn-On Voltage	3.0 VDC	1.0 VDC	4.0 VDC	15.0 VDC
Must Turn-Off Voltage	1.0 VDC	4.0 VDC	1.0 VDC	1.0 VDC
Typical Input Current	15 mA _{dc}	10 mA _{dc}	15 mA _{dc}	15 mA _{dc}
Nominal Input Impedance	300 Ohms	1360 Ohms	240 Ohms	1500 Ohms
Maximum Turn-On Time [msec] ⁽⁵⁾	½ Cycle	½ Cycle	½ Cycle	½ Cycle
Maximum Turn-Off Time [msec]	½ Cycle	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 Ohms
Maximum Capacitance, Input/Output	10 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature	-30 to 125°C
Weight (Typical)	0.063 lb (28.6 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.

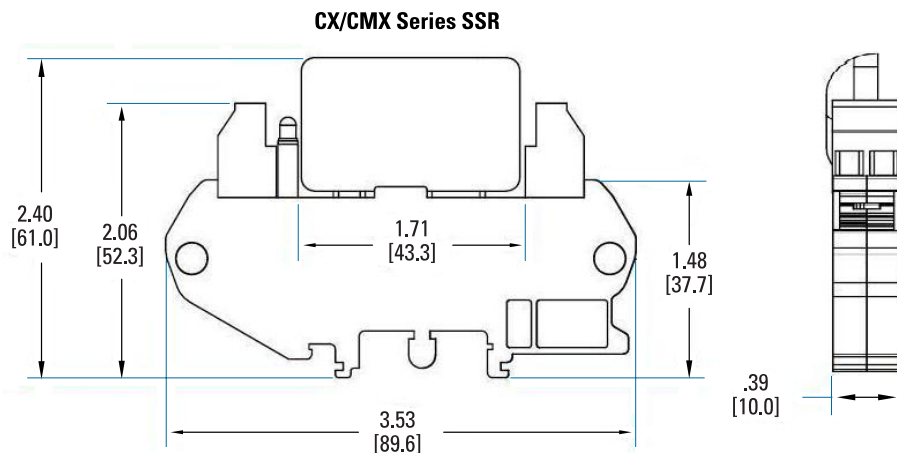
^(B) Load can be placed on either side of "Power"

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

MECHANICAL SPECIFICATIONS

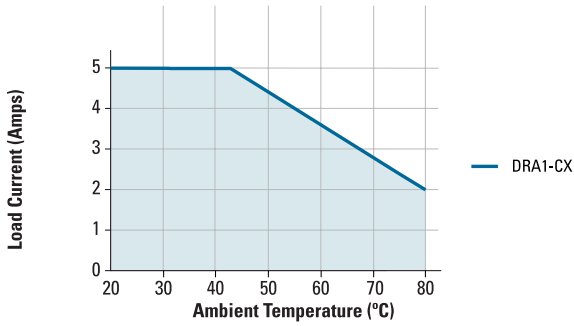
Tolerances: ±0.02 in / 0.5 mm

All dimensions are in inches [millimeters]



THERMAL DERATE INFORMATION

DRA1-CX Derating Curve



GENERAL NOTES

- (1) All parameters at 25 °C unless otherwise specified.
 - (2) The output is normally closed and does not have an LED status indicator.
 - (3) See Derating Chart on page 4.
 - (4) Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
 - (5) Turn-on time for DC control random turn-on versions is 0.1 msec
- For additional information or specific questions, contact Sensata Technical Support.

AGENCY APPROVALS & CERTIFICATIONS

Agency certifications are for relay only (not for complete assembly).
Normally closed version (-B suffix) doesn't have UL, CSA or VDE certifications.



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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