

DRA1 SERIES | MP AC & DC OUTPUT

DIN RAIL MOUNT



Features

- 10mm Single Channel DIN Rail Mount SSR Assembly
- AC Ratings up to 280 VAC and 4 Amps
- DC Ratings for 60 VDC and 3 Amps
- N.O. AC or DC output, N.C. Output (-B)
- 3-32 VDC Control
- Cage style screw terminals for easy connection
- Fits standard 35mm DIN rail



PRODUCT SELECTION

Control Voltage	3A	3A	4A
3 - 32 VDC Control	DRA1-MP120D3	DRA1-MP240D3	DRA1-MP240D4
3 - 32 VDC Control	DRA1-MPDCD3	DRA1-MPDCD3-B	



SPECIFICATIONS

AC Output ⁽¹⁾

Description	DRA1-MP120D3	DRA1-MP240D3	DRA1-MP240D4
Operating Voltage [VAC]	12 - 140	24 - 280	24 - 280
Transient Overvoltage [Vpk]	400	600	600
Maximum Load Current [Arms] ⁽²⁾	3	3	4
Minimum Load Current [Arms]	0.02	0.02	0.02
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	5	5	5
Maximum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽³⁾	200	200	200
Maximum 1 Cycle Surge Current (50/60 Hz) [Apk]	86 / 90	86 / 90	125 / 130
Maximum I ² t for Fusing (50/60 Hz, ½ Cycle) [A² Sec]	39 / 36	39 / 36	78 / 72
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6

DC Output ⁽¹⁾

Description	DRA1-MCPDCD3	DRA1-MPDCD3-B
Operating Voltage [VDC]	3 - 60	3 - 60
Maximum Load Current [Adc]	3	3
Minimum Load Current [Adc]	0.02	0.02
Maximum Surge Current [Adc]	5	5
Maximum On-State Voltage Drop @ Rated Current [Vdc]	1.5	1.5

Input ⁽¹⁾

Description	DRA1-MPxxxDx	DRA1-MPDCD3	DRA1-MPDCD3-B
Control Voltage Range	3 - 32 VDC	3 - 32 VDC	3 - 32 VDC
Must Turn-On Voltage	3.0 VDC	3.0 VDC	1.0 VDC
Must Turn-Off Voltage	1.0 VDC	1.0 VDC	3.0 VDC
Typical Input Current	2.6 mAdc	2.6 mAdc	2.6 mAdc
Nominal Input Impedance	1500 Ohm	1500 Ohm	1500 Ohm
Maximum Turn-On Time [msec]	8.33	0.10	0.10
Maximum Turn-Off Time [msec]	8.33	0.10	0.10

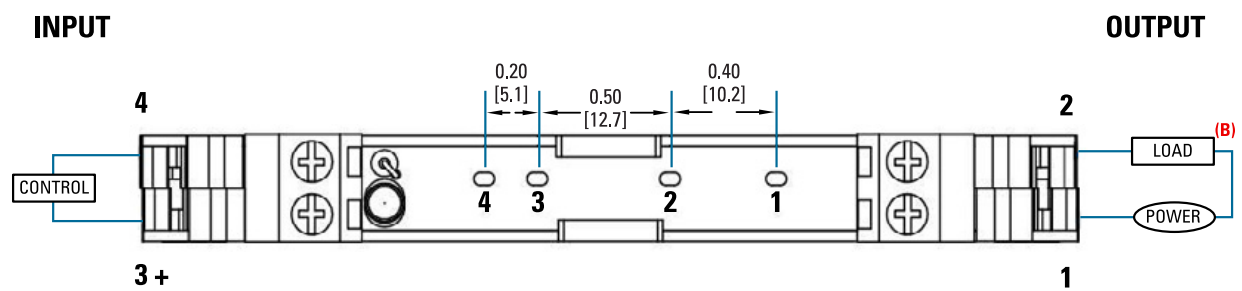
General ⁽¹⁾

Description	Parameters
Dielectric Strength, Input/Output (50/60 Hz)	4000 Vrms
Maximum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohm
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature	-40 to 125°C
Weight (Typical)	0.08 oz (36.4 g)
Encapsulation	Thermally Conductive Epoxy

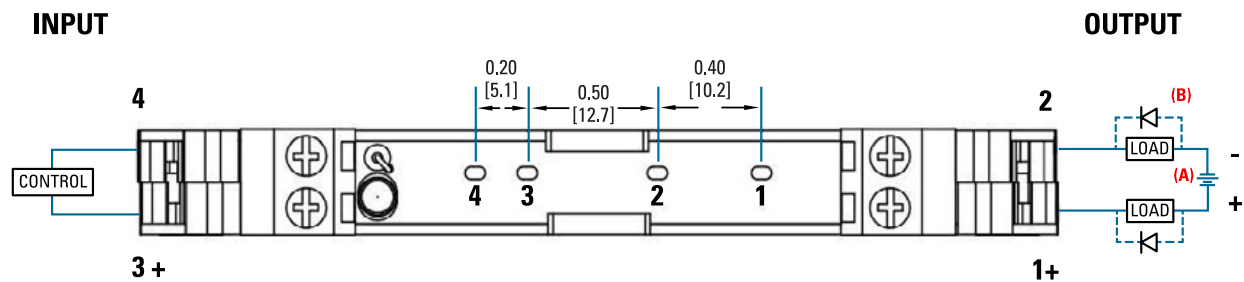


WIRING DIAGRAMS ^(A)

AC Output



DC Output



(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.

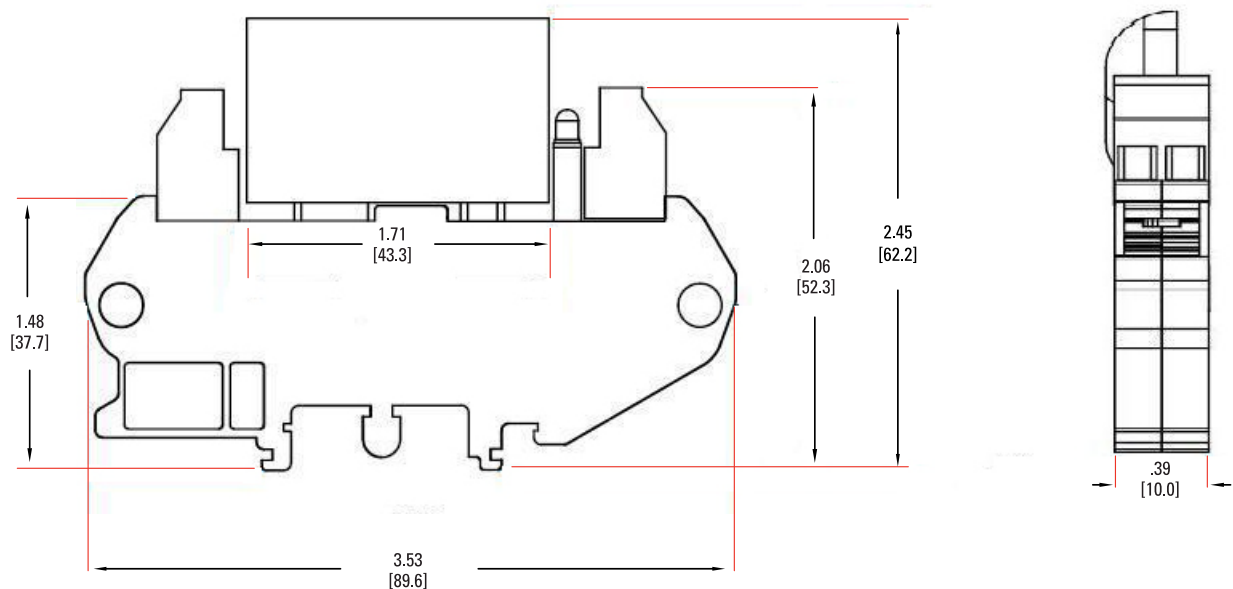


MECHANICAL SPECIFICATIONS

Tolerances: ± 0.02 in / 0.5 mm

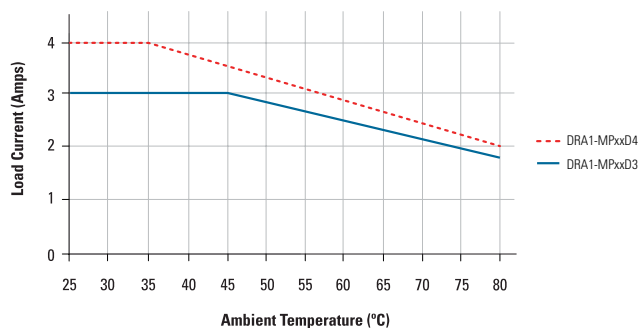
All dimensions are in inches [millimeters]

MCX/MP Series SSR



THERMAL DERATE INFORMATION

DRA1-MP 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

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



AGENCY APPROVALS & CERTIFICATIONS



- Designed in accordance with the requirements of IEC 62314
- UL: E116950 (Relay Only)
- CSA: LR 81689 (AC Output Relay Only)
- VDE: 5900 UG (AC Output 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.

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