

# 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



Control Voltage	3A	3 <b>A</b>	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-MP240D3
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-Sate 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 <sup>2</sup> t for Fusing (50/60 Hz, ½ Cycle) [A <sup>2</sup> Sec]	39 / 36	39 / 36	78 / 72
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6

Page 1



# 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

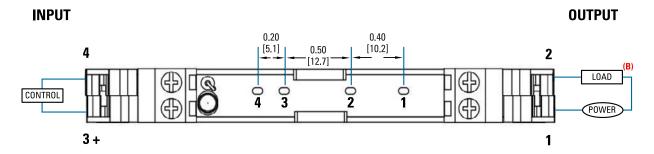
### General (1)

Description	Parameters
Dielectric Strength, Input/Output (50/60 Hz)	4000 Vrms
Maximum Insulation Resistance (@ 500 VDC)	10 <sup>9</sup> 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



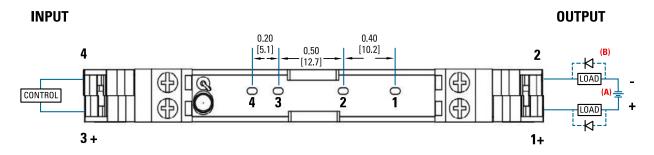
## WIRING DIAGRAMS (A)

# AC Output



Page 2

## 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"

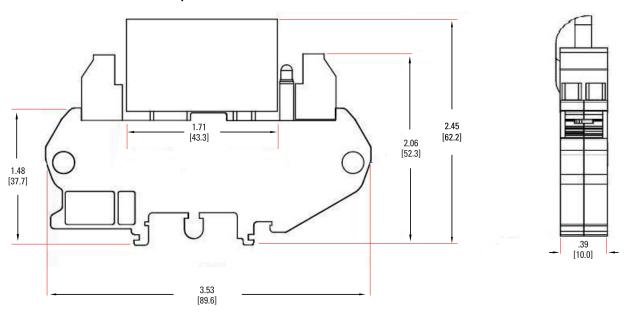
For additional information or specific questions, contact Sensata Technical Support.



#### **MECHANICAL SPECIFICATIONS**

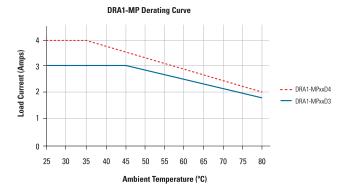
Tolerances: ±0.02 in / 0.5 mm All dimensions are in inches [millimeters]

#### MCX/MP Series SSR



# 9

### THERMAL DERATE INFORMATION



Page 3



- (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)





#### 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

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