

# InstallationSheet

# series

## AC/DC Output Single Channel & AC Output Dual Channel

Crydoms SeriesOne DR Solid State Relays were developed to offer the advantages of Crydom's thermal management technology in a compact 11 & 18 mm wide IP20 housing with unique integrated heat sink. The SeriesOne DR provides a quick and easy installation onto any standard 35 mm DIN rail profile paired with high output power ratings.

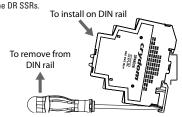
### **FFATURES**

- Single channel 6 & 12 Amps output power rating
- Two independent 6 Amp channels in dual channel versions
- Single channel 60 & 100 VDC, 24 to 600 VAC operating voltage ratings
- Dual channel 24 to 600 VAC operating voltage ratings
- 4-32 VDC, 24, 120 & 230 VAC control input options available for single channel versions
- 4-32 VDC control input for dual channel versions
- AC Output versions with Zero Voltage Turn-On for resistive loads and Random Turn-On for inductive loads

### INSTALLATION INSTRUCTIONS

Please read all installation instructions before using SeriesOne DR SSRs.

- Install the relay on the DIN rail (as shown in drawing)
- Wire the relay to the input side. 22 AWG minimum, 16 AWG maximum
- Wire the relay to the output side. 22 AWG minimum, 14 AWG x 2 or 12 AWG x 1 (standed/solid) maximum
- Maximum recommended terminal screw torque input 4.4 in/lbs (0.5 Nm) & output 7.0 in/lbs (0.8 Nm)
- If multiple units are installed be sure to follow derating curves (reverse side of this sheet)



### PART NUMBER NOMENCLATURE

### Single Channel (A)

Max Output Voltage 06: 1 to 60 VDC 10: 1 to 100 VDC 24: 24 to 280 VAC 48: 48 to 600 VAC

**Output Current 06**: 6 Amps 12: 12 Amps

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Max Output Voltage

AC

Only

**Output Current** 

Option

Control Voltage D: 4 to 32 VDC A: 208 to 265 VAC Output R: 90 to 140 VAC E: 18 to 36 VAC

Blank: Zero Voltage Turn-On R: Random Turn-On

(AC Output Only)

### **Dual Channel**

Series

24: 24 to 280 VAC 48: 48 to 600 VAC

**06**: 6 Amps

Control Voltage D: 4 to 32 VDC

Blank: Zero Voltage Turn-On

R: Random Turn-On

(AC Output Only)

Required for valid part number

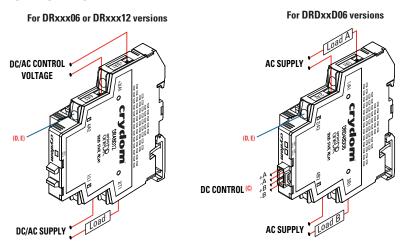
- For options only and not required for valid part number
- (A) Not all combinations of ratings are available.

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### WIRING DIAGRAMS (B)



- (B) No grounding wire required. DC inductive loads must be diode suppressed.
- (C) 4 Pin connector for dual channel output only. Matting connector: MOLEX 050579404 or equivalent.
- (D) 4 Terminal screws Pozidriv #1, 3/16 in [4.8 mm].
- (E) Minimum wire strip lenght 0.20 in [5.1 mm], maximum 0.28 in [7.1 mm].

#### WARNING

### **DANGER**

### 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.

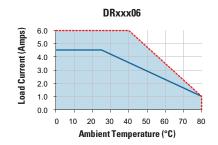
Failure to follow these instructions can result in serious injury, or equipment damage.

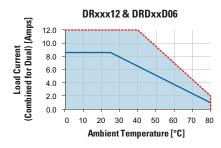
HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

· Turn off power supply before working on this equipment.

Failure to follow these instructions will result in death or serious injury.

### **DERATING CURVES**





- --- Installed single unit, distance to adjacent components ≥ 11 mm for DRxxx06 and ≥ 18 mm for DRxxx12 & DRDxxD06
- Multiple units, no minimum spacing between components

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