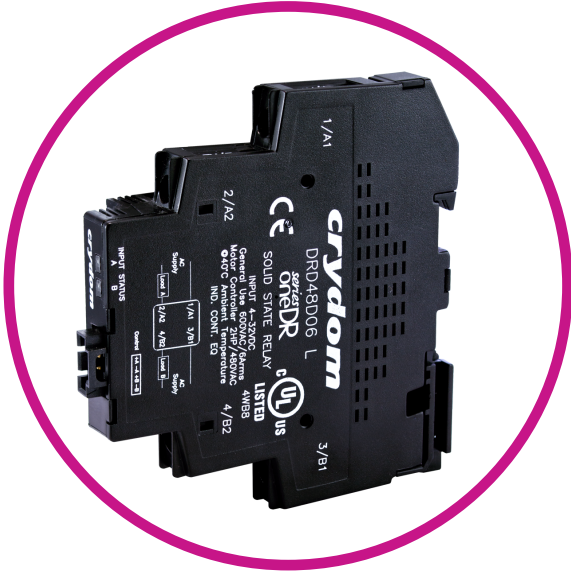


# | SERIES ONE DR DUAL SERIES

## DIN RAIL MOUNT SOLID STATE RELAYS



### Features

- Dual Output with Ratings of 6 Amps each channel
- Load voltage ratings of 24-280 VAC and 48-600 VAC
- Fits standard 35mm DIN Rail
- LED input status indicator
- DC control (4-32V)
- Zero Voltage (resistive loads) or Instantaneous (inductive loads) turn-on output
- UL and cUL Listed, HP Rated (General Purpose and Motor Control)
- CE & RoHs Compliant
- UL 508 Endurance Rating for Enhanced Reliability
- UL Class I and II, Division 2, for Hazardous Locations

### PRODUCT SELECTION

Control Voltage	280V, 6 A	600V, 6A
4-32 VDC	DRD24D06	DRD48D06

### SPECIFICATIONS

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

Description	DRD24D06	DRD48D06
Operating Voltage Range (47-63Hz) [Vrms]	24-280	48-600
Transient Overvoltage [Vpk]	600	1200
Maximum Load Current, resistive [Arms] <sup>(2)</sup>	6	6
Minimum Load Current [mArms]	150	150
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	0.1	0.25
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] <sup>(3)</sup>	500	500
Maximum On-State Voltage Drop @ Rated Current [Vrms]	1.3	1.3
Maximum Surge Current (50/60Hz, 1 cycle) [Apk]	715/750	715/750
Maximum I <sup>2</sup> t for Fusing (50/60 Hz, 1/2 cycle) [A <sup>2</sup> sec]	2560/2330	2560/2330

<b>HP Rating UL 508/IEC60947 [HP (KW)] @ 240V</b>	1/2 (.37)	1/2 (.37)
<b>HP Rating UL 508/IEC60947 [HP (KW)] @ 380V</b>	N/A	1 (.75)
<b>HP Rating UL 508/IEC60947 [HP (KW)] @ 480V</b>	N/A	2 (1.5)
<b>Minimum Power Factor (at Maximum Load)</b>	0.5	0.5
<b>Min/Max stranded wire</b>	22/14 AWG	22/14 AWG
<b>Min/Max solid wire</b>	22/14 AWG	22/14 AWG

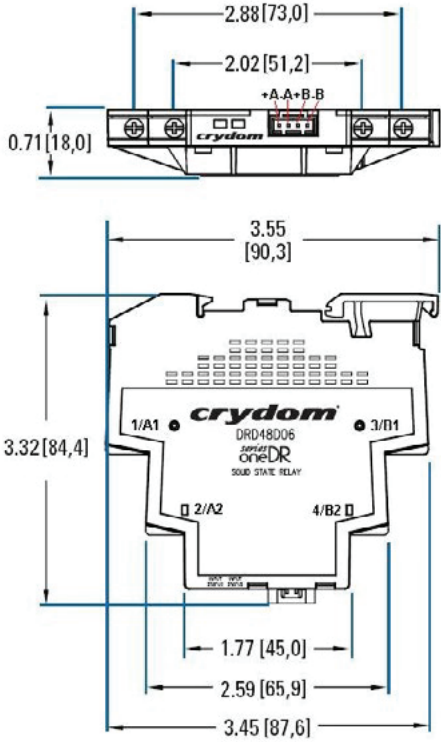
## Input <sup>(1)</sup>

Description	DRDxxD06
<b>Control Voltage [Vdc] <sup>(4)</sup></b>	4.0-32
<b>Minimum Turn-On Voltage [Vdc]</b>	1.0
<b>Must Turn-Off Voltage [Vdc]</b>	4.0
<b>Minimum Input Current for [mA] <sup>(5)</sup></b>	9
<b>Maximum Input Current for [mA] <sup>(5)</sup></b>	11
<b>Maximum Turn-on Time [msec] <sup>(6)</sup></b>	1/2 Cycle
<b>Maximum Turn-off Time [msec]</b>	1/2 Cycle
<b>Min/Max stranded/solid wire</b>	22/16 AWG

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

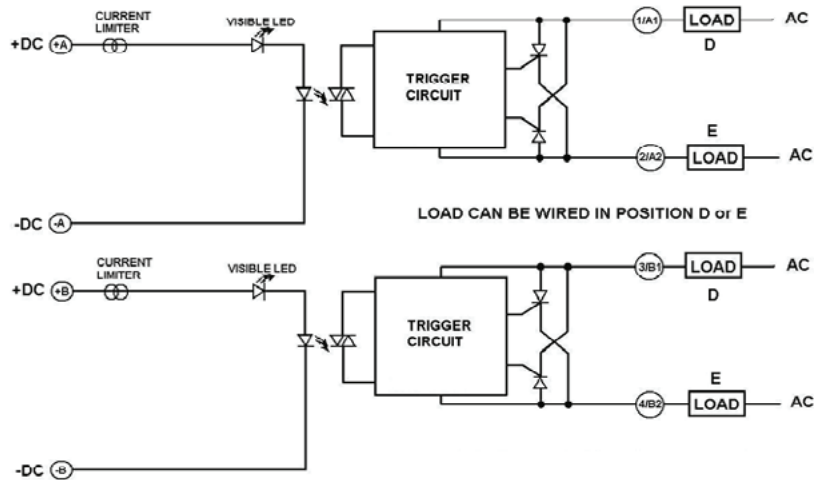
<b>Dielectric Strength, Input/Output/Base (50/60Hz)</b>	2500 Vrms
<b>Minimum Insulation Resistance (@ 500 V DC)</b>	10 <sup>9</sup> Ohms
<b>Maximum Capacitance, Input/Output</b>	10 pF
<b>Ambient Operating Temperature Range</b>	-30 to 80 °C
<b>Ambient Storage Temperature Range</b>	-30 to 100 °C
<b>Recommended Terminal Screw Torque Range</b>	4.4-7.0 lb-in (0.5-0.8Nm)
<b>Weight (Typical)</b>	3.17 oz (90g)

# MECHANICAL SPECIFICATIONS (1)

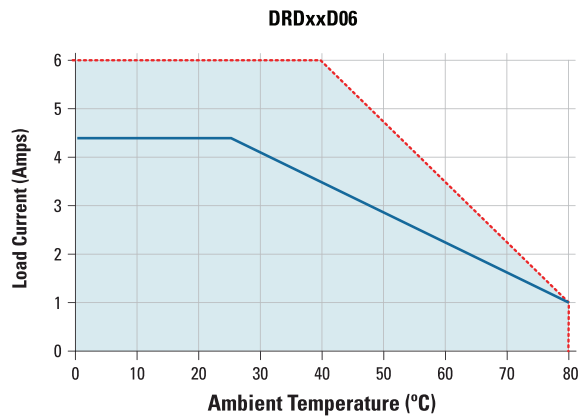


Tolerances: + 0.02in / 0.5mm  
 Dimensions are in inches [millimeters]  
 Mating connector is Molex 050579404 or equivalent

# EQUIVALENT CIRCUIT BLOCK DIAGRAMS/WIRING DIAGRAMS



## THERMAL DERATE INFORMATION



- Single or Multi unit \*\*\*
- Multi Units No Spacing
- \*\*\* Minimum Spacing between Units is 18mm

## STANDARDS OF COMPLIANCE

### IEC 62314

LC A, Resistive or Slightly Inductive Load Ratings: 6A per channel @ 40°C ambient for DRD24D06X, 6A per channel @ 40°C ambient for DRD48D06X  
 LC B, Motor Loads Ratings: 0.375KW @ 240VAC for DRD24x06X and 1.5KW @ 480VAC DRD48x06X

### Shock and Vibration (Applies to all part numbers)

Vibration Resistance according to IEC 60068-2-6: **0.35mm and 0.75mm Amplitude over 10-55 Hz**  
 Shock Resistance according to IEC 60068-2-27: **15g/11ms**

### EMC (Applies to all part numbers)

IEC 61000-4-2: Electrostatic Discharge- Level 3  
 IEC 61000-4-4: Electrically Fast Transients- Level 3  
 IEC 61000-4-5: Electrical Surges- Level 3

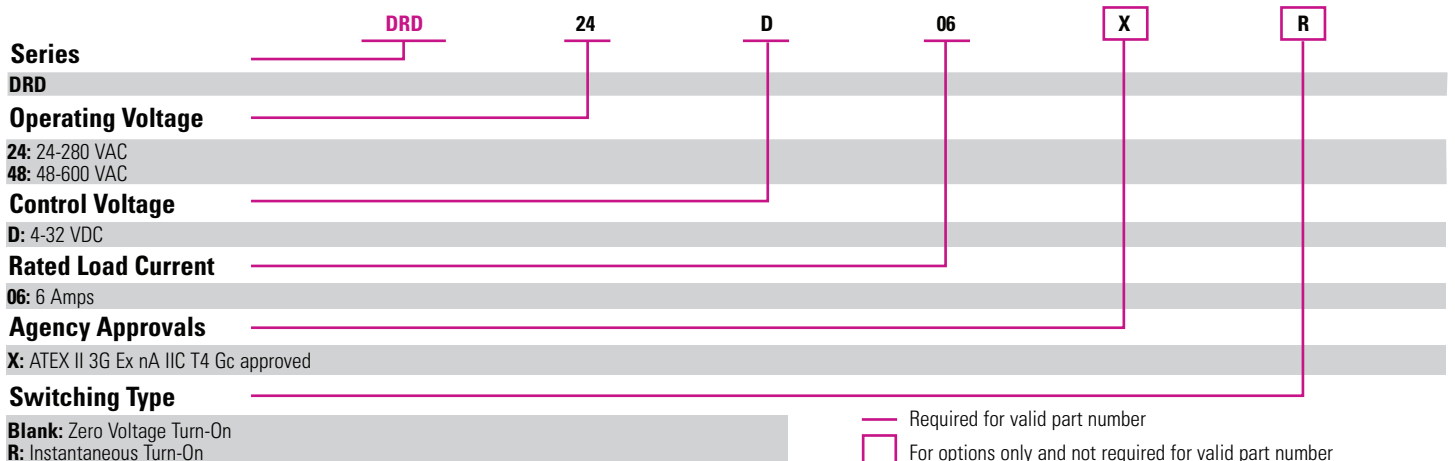
### ANSI / ISA 12.12.01-2013

Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Division 1 and 2 Hazardous (classified) locations  
 This equipment is open-type device and is meant to be installed in an enclosure suitable for the environment such that the equipment is only accessible with the use of a tool suitable for use in Class 1, Division 2, Group A,B,C and Hazardous locations, or Nonhazardous locations only

WARNING-Explosion Hazard- Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable concentrations  
 WARNING-Explosion Hazard- Substitution of any component may impair suitability for Class I, Division 2

## ORDERING OPTIONS

Example : DRD24D06XR



## GENERAL NOTES

- (1) All parameters at 25°C unless otherwise specified.
- (2) See Derating curves
- (3) Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
- (4) DC control includes reverse polarity protection.
- (5) Input circuitry incorporates active current limiter.
- (6) Turn-on time for DC control random turn-on versions is 0.1 msec.

## AGENCY APPROVALS & CERTIFICATIONS



E116949



## 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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