

DRA4D Series

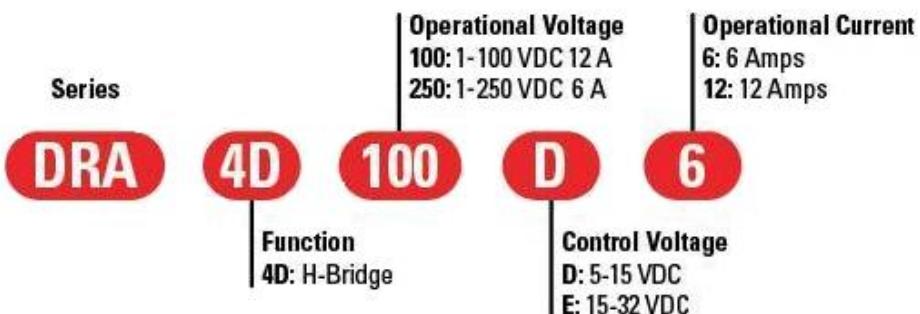


- DC Motor Reversing Contactor
- Ratings of 6 & 12 Amps
- Load voltage ratings of 1-100VDC and 1-250VDC
- Fits standard 35mm DIN-RAIL
- LED input status indicator. Green (Forward), Yellow (Reverse)
- DC control
- cUL Recognized, IEC Rated, CE & RoHS Compliant
- Horsepower Rated

PRODUCT SELECTION

Description	12A	6A
5-15 VDC Control	DRA4D100D12	DRA4D250D6
15-32 VDC Control	DRA4D100E12	DRA4D250E6

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS (1)

Description	DRA4D100x12	DRA4D250x6
Operating Voltage [VDC]	1-100 (3)	1-250 (2)
Maximum Load Current [Adc] (4)	12	6 (5)
Minimum Load Current [mAdc]	1.0	1.0
Maximum Off-State Leakage Current @ Rated Voltage [uA]	1.0	20
Maximum On-State Voltage Drop @ Rated Current [Vpk]	0.1	0.1
Maximum Surge Current (10ms) [Apk]	110	91
On-State resistance at rated current (R_{DSOn}) [Ohms]	0.011	0.45
Thermal Resistance Junction to Case (R_{jc}) [$^{\circ}\text{C}/\text{W}$]	0.48	0.45
Min/Max stranded/solid wire [AWG]	24/10	24/10
Min/Max stranded/solid wire [IEC mm ²]	0.5-4.0	0.5-4.0
HP Rating per UL508 @ 40°C	1/4, 4 FLA @ 90 VDC	1/4, 2 FLA @ 180 VDC
IEC 60947-4-1 Ratings DC-1	12 FLA @ 90 VDC, 1KW	6.0 FLA @ 180 VDC, 1KW
IEC 60947-4-1 Ratings DC-3	4.0 FLA @ 90 VDC, 360W	2.0 FLA @ 180 VDC, 360W

INPUT SPECIFICATIONS (1)

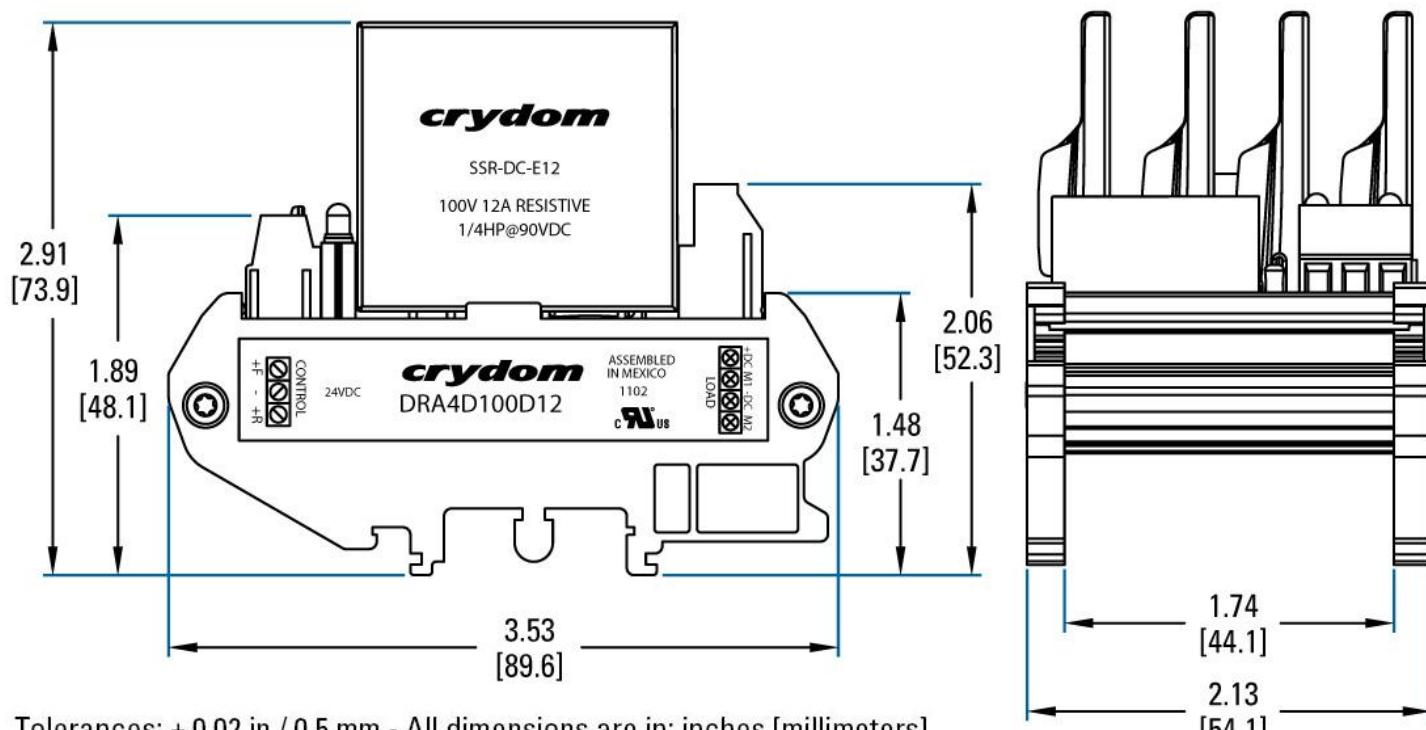
Description	DRA4DxxxD	DRA4DxxxE
Control Voltage Range	5.0-15 VDC	15-32 VDC
Minimum Turn-On Voltage	5.0 VDC	15 VDC
Minimum Turn-Off Voltage	2.5 VDC	2.9 VDC
Minimum Input Current [mA]	16	20.5
Maximum Input Current [mA]	24.5	22
Nominal Input Impedance	See Note 6	See Note 6
Maximum Turn-On Time [msec]	22	22
Maximum Turn-Off Time [msec]	0.264	0.33
Min/Max stranded/solid wire	24/12	24/12
Min/Max stranded/solid wire [IEC mm ²]	0.5-2.5	0.5-2.5

GENERAL SPECIFICATIONS

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	2500Vrms
Minimum Insulation Resistance (@ 500 V DC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	35 pF @ 1KHz
Ambient Operating Temperature Range	-30°C to 60°C
Ambient Storage Temperature Range	-30°C to 85°C
Recommended Terminal Screw Torque:	4.0 in lb (0.45 Nm)

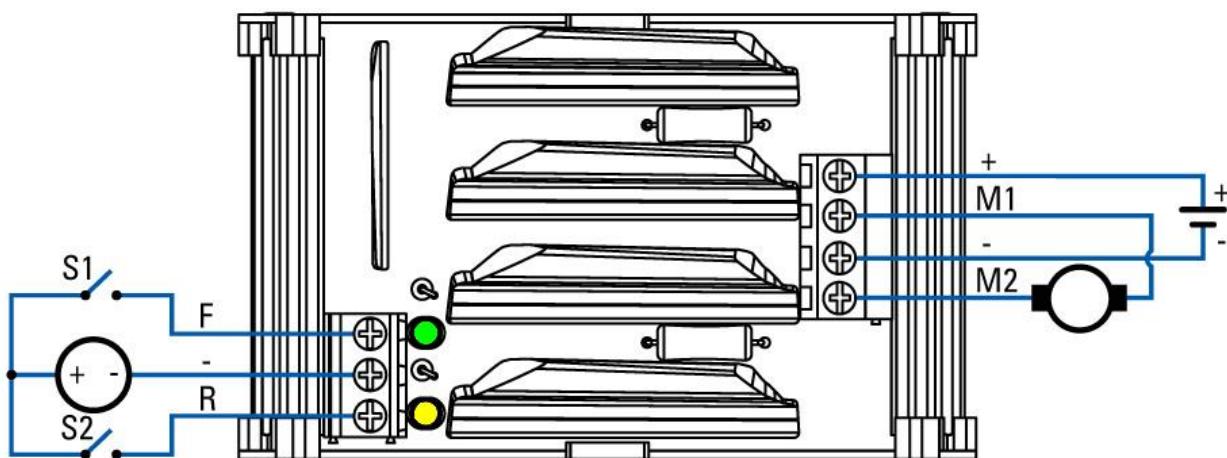
GENERAL NOTES

- 1) All parameters at 25°C unless otherwise specified.
- 2) UL maximum rated voltage is 180VDC
- 3) UL maximum rated voltage is 90VDC.
- 4) At 40°C and mounted in vertical position
- 5) At 40°C single unit, multiple units need spacing of 45mm.
No spacing maximum current is 5.5A
- 6) Input circuitry incorporates active current limiter.

MECHANICAL SPECIFICATIONS

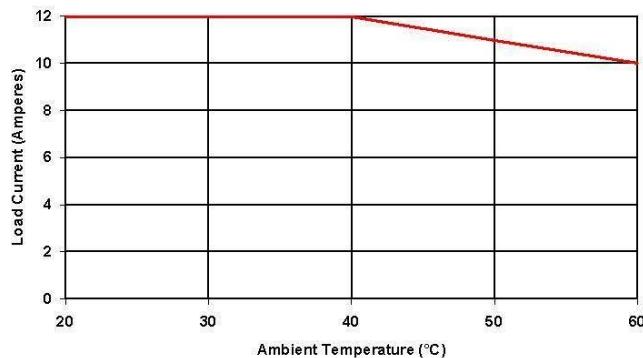
Tolerances: ± 0.02 in / 0.5 mm - All dimensions are in: inches [millimeters]

WIRING DIAGRAM



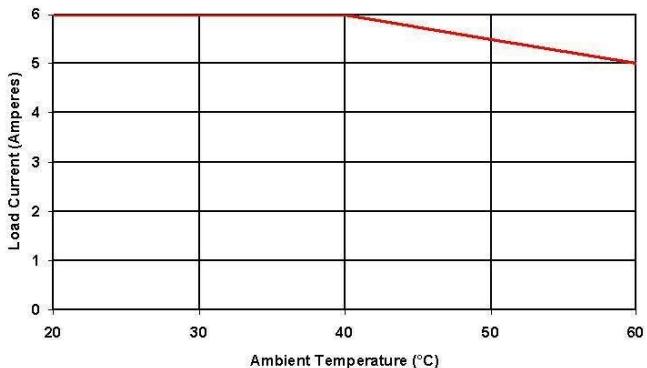
THERMAL DERATE INFORMATION

DRA4D100x12



Rating based on single or multiple relays and no space between units.

DRA4D250D6



Rating based on single relay or multiple relays with 45mm gap between units. For no spacing between relays, maximum current @ 40°C is 5.5A

AGENCY APPROVALS

Designed in accordance with the requirements of IEC 62314

IEC 61000-4-2 : Electrostatic Discharge – Level 3

IEC 61000-4-4 : Electrically Fast Transients – Level 2 (Criteria A)

IEC 61000-4-5 : Electrical Surges - Level 2 (Criteria A)



Rev 111011