



SeriesOne DR Series

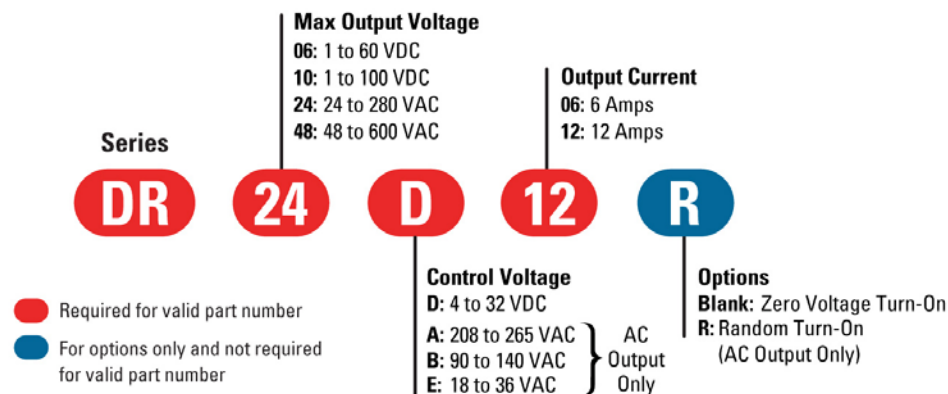


- Ratings of 6 & 12 Amps
- Load voltage ratings of 2-60VDC, 2-100VDC, 24-280VAC and 48-600VAC
- Fits standard 35mm DIN-RAIL
- LED input status indicator
- AC or DC control
- Zero-crossing (resistive loads) or random turn-on (inductive loads) output
- UL and cUL Recognized, CE & RoHS Compliant
- UL 508 Endurance Rating for Enhanced Reliability

PRODUCT SELECTION

Description	280V, 6A	280V, 12A	600V, 6A	600V, 12A	60V, 6A	60V, 12A	100V, 6A	100V, 12A
4-32 VDC Control	DR24D06	DR24D12	DR48D06	DR48D12	DR06D06	DR06D12	DR10D06	DR100D12
90-140 VAC Control	DR24B06	DR24B12		DR48B12				
208-265 VAC Control	DR24A06	DR24A12		DR48A12				
18-36 VAC Control	DR24E06	DR24E12		DR48E12				

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS AC Output (1)

Description	DR24x06	DR24x12	DR48X06	DR48x12
Operating Voltage (47-63Hz) [Vrms]	24-280	24-280	48-600	48-600
Transient Overvoltage [Vpk]	600	600	1200	1200
Maximum Load Current, resistive [Arms] (2)	6	12	6	12
Minimum Load Current [Arms]	0.15	0.15	0.15	0.15
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	0.1	0.1	0.1	0.2
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (3)	500	500	500	500
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.3	1.3	1.3	1.3
Maximum Surge Current (50/60 Hz, 1 cycle) [Apk]	285/300	715/750	285/300	715/750
Maximum I ² t for Fusing (50/60 HZ, 1/2 cycle) [A ² sec]	410/375	2560/2330	410/375	2560/2330
HP Rating @ 240V	1/6	1/3	1/6	1/3
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5
Min/Max stranded wire	22/14 AWG	22/14 AWG	22/14 AWG	22/14 AWG
Min/Max solid wire	22/14 AWG	22/14 AWG	22/14 AWG	22/14 AWG
Weight (typical)	1.76 oz. (50g)	3.17 oz. (90g)	1.76 oz. (50g)	3.17 oz. (90g)



OUTPUT SPECIFICATIONS DC Output (1)

Description	DR06D06	DR10D06	DR06D12	DR10D12
Operating Voltage [VDC]	1-60	1-100	1-60	1-100
Maximum Load Current [Adc] (2)	6	6	12	12
Minimum Load Current [mAdc]	2.5	2.5	2.5	2.5
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.1	0.1	0.1
Maximum On-State Voltage Drop @ Rated Current [Vpk]	0.6	0.6	0.5	0.5
Maximum Surge Current (10ms) [Apk]	60	60	100	100
On-State resistance at rated current [Ohms]	0.1	0.1	0.045	0.045
Min/Max stranded wire	22/14 AWG	22/14 AWG	22/14 AWG	22/14 AWG
Min/Max solid wire	22/14 AWG	22/14 AWG	22/14 AWG	22/14 AWG
Weight (typical)	1.76 oz. (50g)	1.76 oz. (50g)	3.17 oz. (90g)	3.17 oz. (90g)

INPUT SPECIFICATIONS (1)

Description	DRxxDxx	DRxxBxx	DRxxAxx	DRxxExx
Control Voltage Range (4)	4.0-32 VDC	90-140 Vrms	200-265 Vrms	18-36 Vrms
Minimum Turn-On Voltage	4.0 VDC	90 Vrms	200 Vrms	18 Vrms
Minimum Turn-Off Voltage	1.0 VDC	10 Vrms	90 Vrms	4 Vrms
Minimum Input Current [mA] (5)	9	3	2.5	3.5
Maximum Input Current [mA] (5)	11	5	3.3	8
Maximum Turn-On Time (6) (7)	1/2 Cycle	20 msec	20 msec	20 msec
Maximum Turn-Off Time (8)	1/2 Cycle	30 msec	30 msec	30 msec
Min/Max stranded/solid wire	22/16 AWG	22/16 AWG	22/16 AWG	22/16 AWG

GENERAL SPECIFICATIONS (1)

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000Vrms
Minimum Insulation Resistance (@ 500 V DC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	10 pF
Ambient Operating Temperature Range	-30°C to 80°C
Ambient Storage Temperature Range	-30°C to 100°C
Recommended Terminal Screw Torque Range:	4.4-7.0 in lb (0.5-0.8 Nm)

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
- 7) Turn-on time for DC output 600µsec
- 8) Turn-off time for DC output 300µsec

Standards of Compliance

IEC 62314

LC A, Resistive or Slightly Inductive Load Ratings: 12A @ 40C ambient for DR24x12, 12A @ 40C ambient for DR48x12

LC A, Resistive or Slightly Inductive Load Ratings: 6A @ 40C ambient for DR24x06, 6A @ 40C ambient for DR48x06

LC A, Resistive or Slightly Inductive Load Ratings: 6A per channel @ 40C ambient for DRD24D06, 6A per channel @ 40C ambient for DRD48D06

LC B, Motor Loads Ratings: 2.88KW @ 240VAC for DR24x12 and 5.76KW @ 480VAC DR48x12

LC B, Motor Loads Ratings: 1.44KW @ 240VAC for DR24x06 and 2.88KW @ 480VAC DR48x06

LC B, Motor Loads Ratings: 1.44KW @ 240VAC for DRD24x06 and 2.88KW @ 480VAC DRD48x06

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

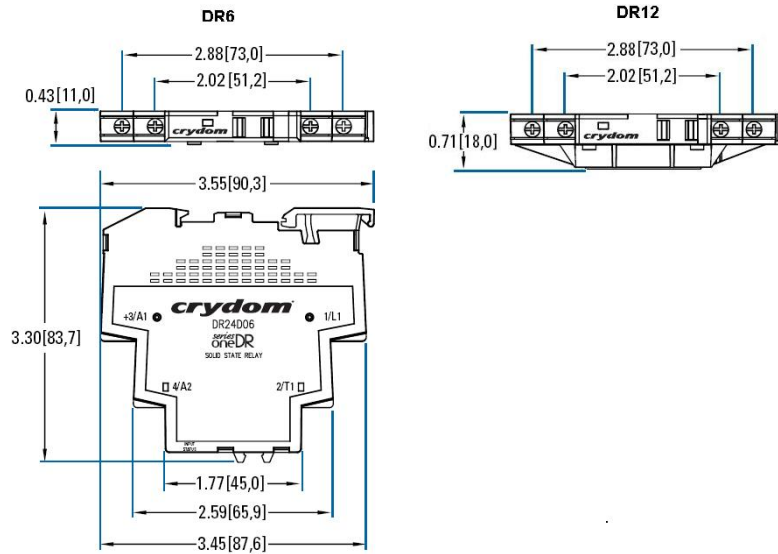
IEC 61000-4-4 : Electrically Fast Transients – Level 3

IEC 61000-4-5 : Electrical Surges – Level 3

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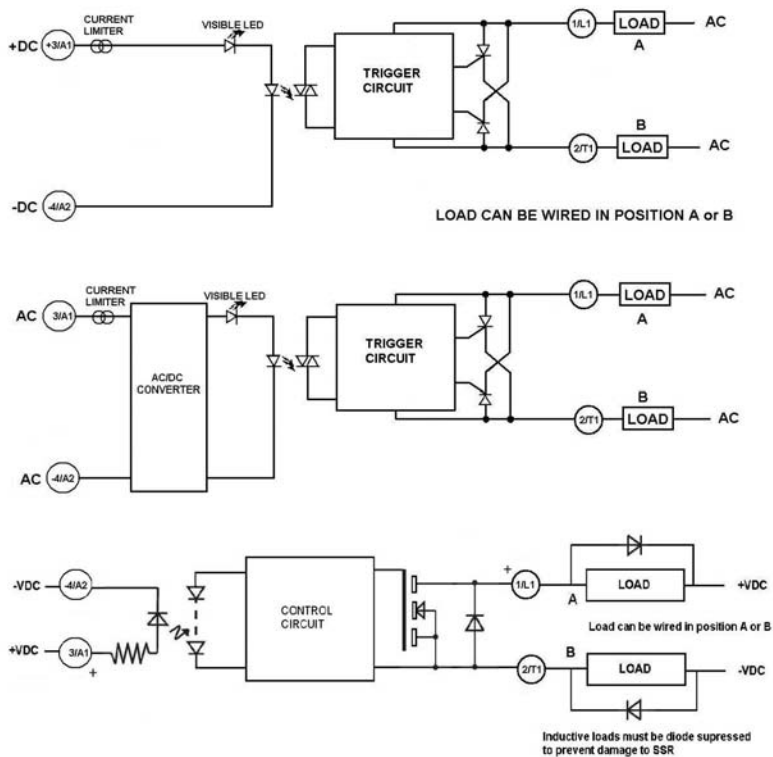
DIN Rail Mount
Datasheet

MECHANICAL SPECIFICATIONS



Tolerances: + 0.02in / 0.5mm
Dimensions are in inches [millimeters]

WIRING DIAGRAM

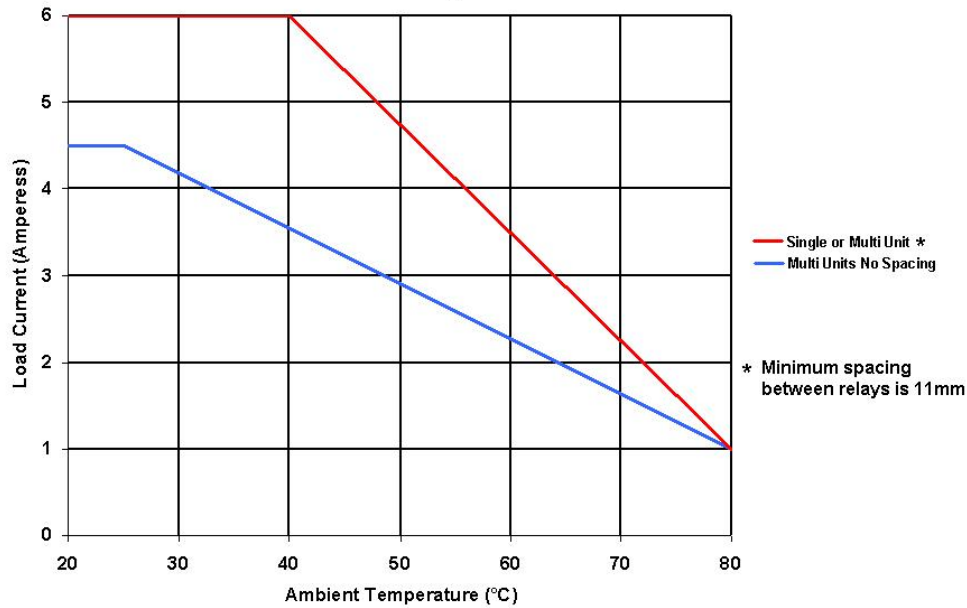


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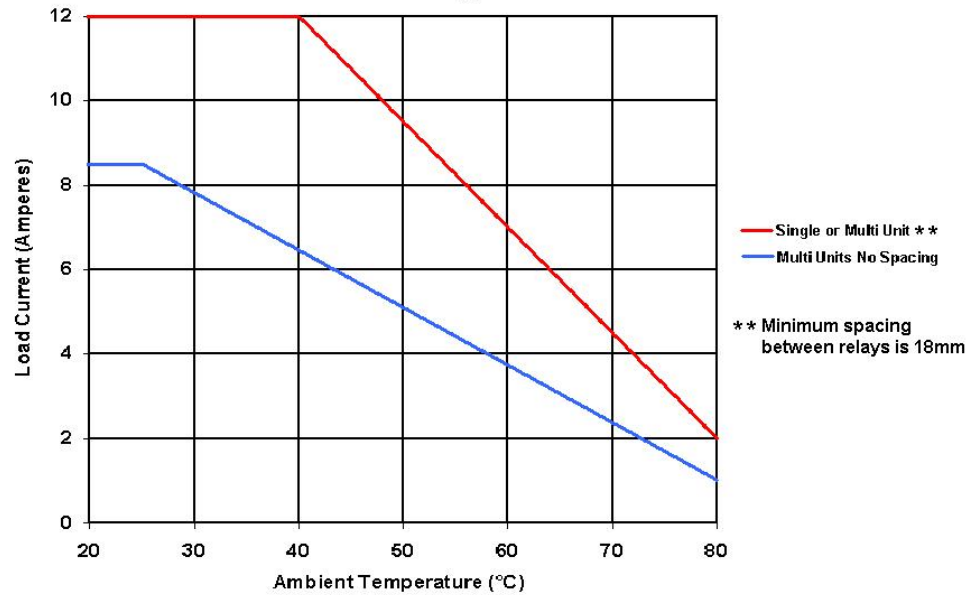
DIN Rail Mount
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THERMAL DERATE INFORMATION

DRxxx06 Derating Curve



DRxxx12 Derating Curve



AGENCY APPROVALS



E116949



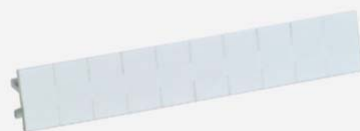
Rev 110911

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DIN Rail Mount
Datasheet

ACCESSORIES

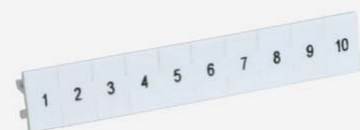
ID Marker Strips **CNLB, CNLN, CNL2**



Blank Strips

Part no.: CNLB

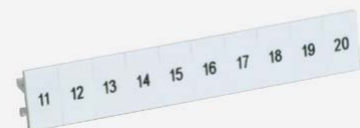
A package of 10 plastic strips comprising 10 individual unprinted markers which can be placed on sockets' terminal block for easy identification during the use of multiple units.



Numbered 1 to 10 Strips

Part no.: CNLN

A package of 10 plastic strips comprising 10 markers printed individually from 1 to 10 which can be placed on sockets' terminal block for easy identification during the use of multiple units.



Numbered 11 to 20 Strips

Part no.: CNL2

A package of 10 plastic strips comprising 10 markers printed individually from 11 to 20 which can be placed on sockets' terminal block for easy identification during the use of multiple units.