SeriesOne DR Series

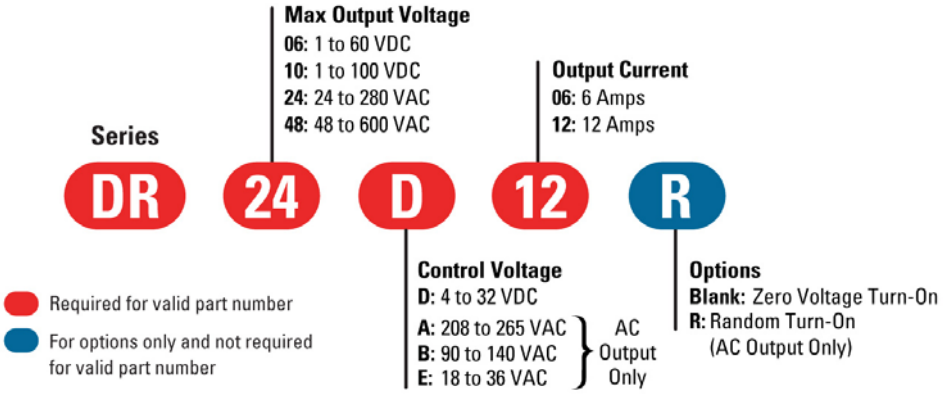


- Ratings of 6 & 12 Amps
- Load voltage ratings of 2-60VDC, 2-100VDC, 24-280VAC and 48-600VAC
- Fits standard 35mm DIN-RAIL
- LED input status indicator
- AC or DC control
- Zero-crossing (resistive loads) or random turn-on (inductive loads) output
- UL and cUL Recognized, CE & RoHS Compliant
- 100K-cycle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

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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	0.1	0.1
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 (5)	9	3	2.5	3.5
Maximum Input Current (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)

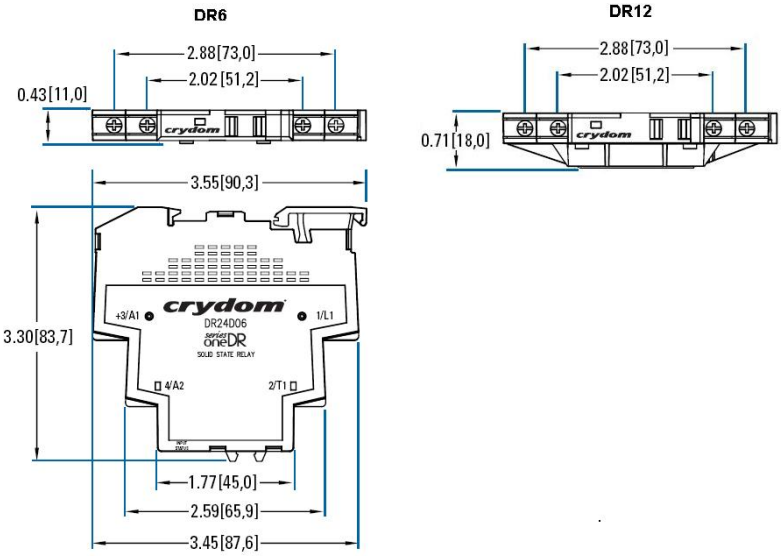
Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000Vrms
Minimum Insulation Resistance (@ 500 V DC)	10^9 Ohms
Maximum Capacitance, Input/Output	10 pF
Ambient Operating Temperature Range	-30ºC to 80ºC
Ambient Storage Temperature Range	-30ºC to 100ºC
Recommended Terminal Screw Torque 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

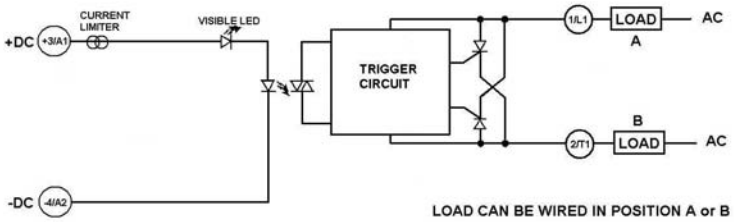
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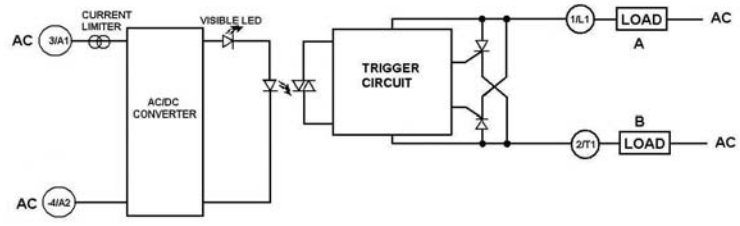
MECHANICAL SPECIFICATIONS

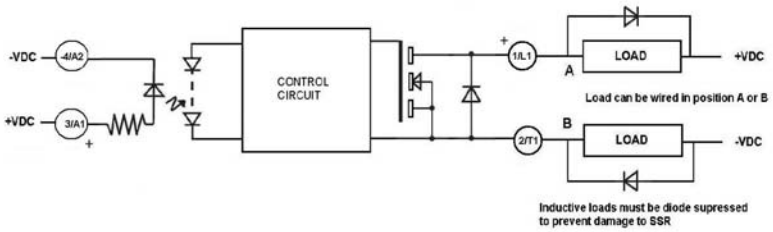


Tolerances: + 0.02in / 0.5mm
Dimensions are in inches [millimeters]

WIRING DIAGRAM

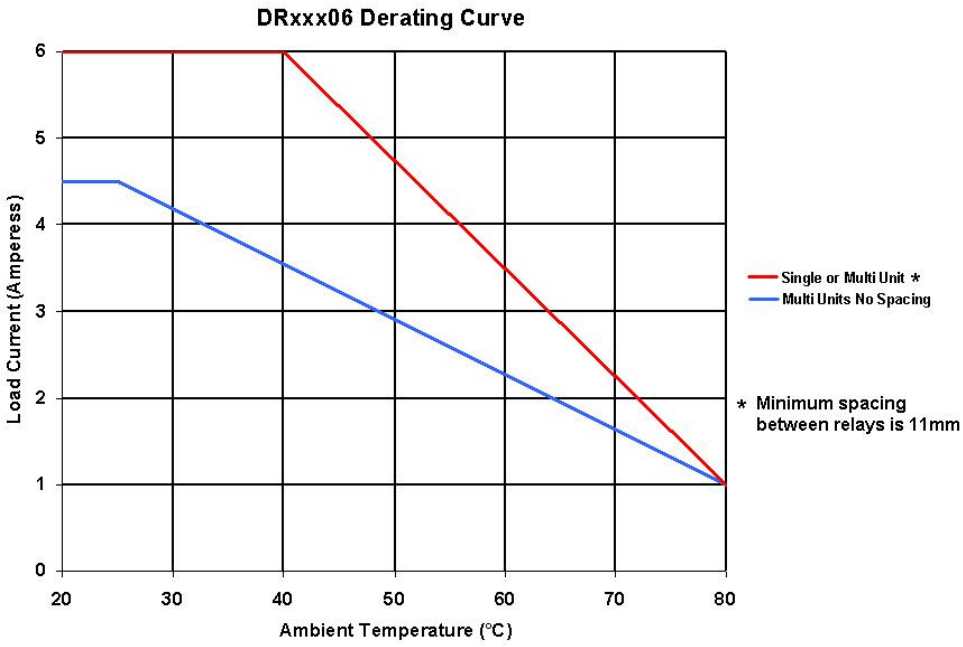


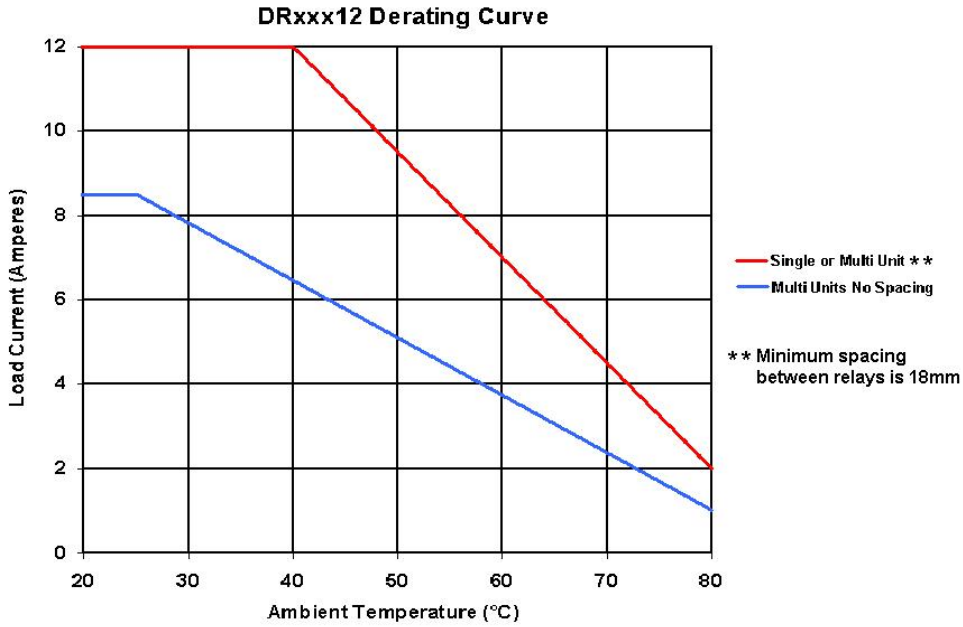




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THERMAL DERATE INFORMATION





AGENCY APPROVALS

E116949

RoHS Compliant

Rev 080910

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ACCESSORIES

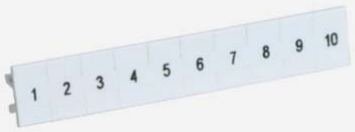
ID Marker Strips
CNLB, CNLN, CNL2



Blank Strips

Part no.: CNLB

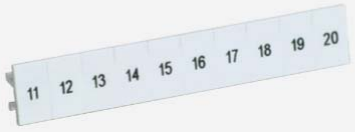
A package of 10 plastic strips comprising 10 individual unprinted markers which can be placed on sockets' terminal block for easy identification during the use of multiple units.



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.

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⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH.	RIESGO DE DESCARGA ELECTRICA O EXPLOSION.	RISQUE DE DESCHARGE ELECTRIQUE OU EXPLOSION	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION.	RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSI ONE.	RISCO DE DESCARGA ELÉTTRICA OU EXPLOSÃO
• 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.**	• Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizer el equipo. **El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.**	• Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en olace avant de mettre sous **De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.**	• Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor der Inbetriebnahme alle Anschlüsse überprüfen und alle Gehäuseteile montieren. **Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.**	• Spenga tutta l'alimentazion e che fornisce questa apparecchiatu ra prima del lavorare a questa apparecchiatu ra • Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazi one **L'omissione di seguire queste istruz ioni provocherà la morte o di lesioni serie**	• Desconectar o equipamento de toda á energia antes de instalar ou trabalhar com este equipamen to • Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento **O não cumprimento destas instruções pode levar á morte ou lesões sérias.**

⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO

RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG
• 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.**	• Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. • Respecter les consignes de montage, et notamment les couples de serrage. • Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. **Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.**	• Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. • Beachten Sie die Montageanweisungen, • Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. **Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.**
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD	**RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO**	**RISCO DE DANO MATERIAL E DE AQUECIMENTO**
• Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. • Respetar las instrucciones de montaje, y en particular los pares de apretado. • No dejar que penetren líquidos o cuerpos extraños en el producto. **Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.**	• I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. • Seguire le istruzioni di montaggio corrette. • Non far entrare liquidi o oggetti estranei in questo apparecchio. **La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.**	• Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. • Siga devidamente as instruções de montagem. • Não permita a entrada de líquidos e de objectos estranhos no produto. **A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.**

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The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O



此附件所标示的包括电子信息产品污染图标的环保信息符合中华人民共和国电子行业标准 SJ/T11364 - 2006, 电子信息产品污染控制标识要求

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

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