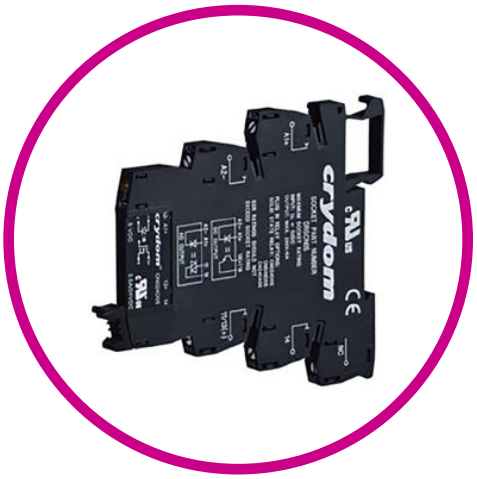
| DRACN SERIES

DIN RAIL MOUNT SOLID STATE RELAYS



Features

- 6.2mm Din-Rail Mount (35 mm) SSR Assembly
- Ratings 24VDC @ 3.5A, 48VDC @ 100mA and 240VAC @ 2A
- UL & cUL recognized @ 40°C, 100K-Cycle Endurance Test (SSR Only)
- AC output SSR is UL rated for Pilot Duty @ 240VAC
- CE & RoHS Compliant
- Yellow LED input status indicator
- 5 & 24 VDC Control

SPECIFICATIONS

Product Selection

Control Voltage	3.5 A	100 mA	2 A
3-12 VDC	DRA-CN024D05	DRA-CN048D05	DRA-CN240A05
15-30 VDC	DRA-CN024D24	DRA-CN048D24	DRA-CN240A24

Output Specifications (1)

Description	DRA-CN024DXX	DRA-CN048DXX	DRA-CN240AXX
Operating Voltage	0-24 VDC	0-48 VDC	24-250 VAC
Maximum Load Current @ 40°C (2)	3.5 A	100 mA	2 A
Minimum Load Current [mA]	1	1	70
Maximum Blocking Voltage	30 VDC	60 VDC	600 VAC
Maximum Surge Current [Apk]	9 A (10 ms)	300 mA (10 ms)	120/115 A (16.6/20 ms)
Maximum I^2t for fusing 50/60 Hz (1/2 cycle) [A^2 sec]	N.A.	N.A.	285/260
Typical On-State Voltage Drop @ Rated Current (V)	0.4	1.0	1.1
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.001	0.001	4.0
Maximum PWM (Hz) (3)	500	500	N.A.
Switch Configuration	N.O.	N.O.	N.O.

Input Specifications for CN024 [1]

Description	DRA-CN024D05	DRA-CN024D24
Control Voltage Range	3-12 VDC	15-30 VDC
Minimum Turn-On Voltage	3.0 VDC	15 VDC
Must Turn-Off Voltage	1.0 VDC	15 VDC
Nominal Input Impedance	450 Ohms	2.4K Ohms
Typical Input Current	11 mA @ 5.0 VDC	10 mA @ 24 VDC
Typical Turn-On Time	300 µs	350 µs
Typical Turn-Off Time	50 µs	50 µs

Input Specifications for CN048 [1]

Description	DRA-CN048D05	DRA-CN048D24
Control Voltage Range	3-12 VDC	15-30 VDC
Minimum Turn-On Voltage	3.0 VDC	15 VDC
Must Turn-Off Voltage	1.0 VDC	5 VDC
Nominal Input Impedance	833 Ohms	3.43K Ohms
Typical Input Current	6 mA @ 5.0 VDC	7 mA @ 24 VDC
Typical Turn-On Time	20 µs	20 µs
Typical Turn-Off Time	130 µs	130 µs

Input Specifications for CN240 [1]

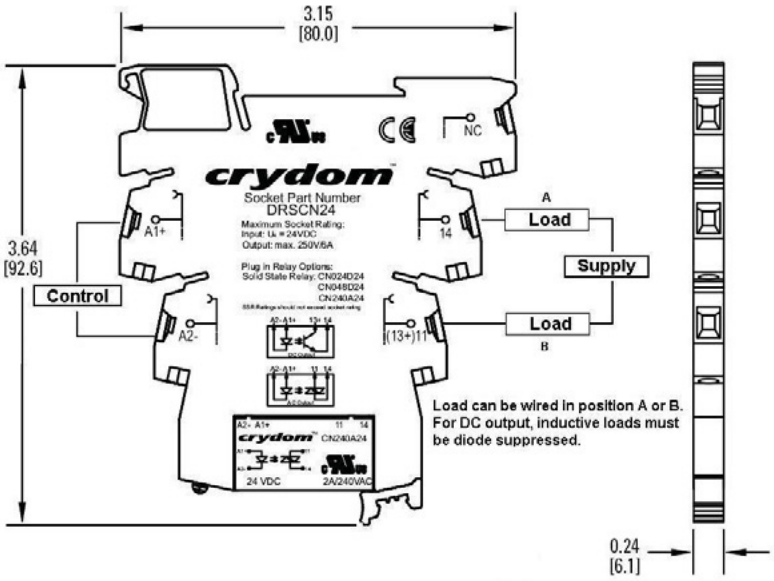
Description	DRA-CN240A05	DRA-CN240A24
Control Voltage Range	3-12 VDC	15-30 VDC
Minimum Turn-On Voltage	3.0 VDC	15 VDC
Must Turn-Off Voltage	1.0 VDC	5 VDC
Nominal Input Impedance	333 Ohms	3.43K Ohms
Typical Input Current	15 mA @ 5.0 VDC	7 mA @ 24 VDC
Typical Turn-On Time	1/2 Cycle	1/2 Cycle
Typical Turn-Off Time	1/2 Cycle	1/2 Cycle

General Specifications

Description	Parameters
Dielectric Strength, Input/Output (50/60 Hz) [5]	2.5 kV
Maximum Capacitance, Input/Output	1.5 pF
Ambient Operating Temperature Range	-25 to 60°C
Ambient Storage Temperature Range	-40 to 80°C
Weight (typical)	0.067 lb (31g)
Housing Material	UL 94 V0
Overvoltage Category	III
Pollution Degree	2
Degree of protection (SSR Encapsulation)	IP67
Max. Torque (output screws)	5-7 lb-in (0.56-0.8 Nm)
Max. Wire Size (load side)	24-14 AWG Solid or Stranded

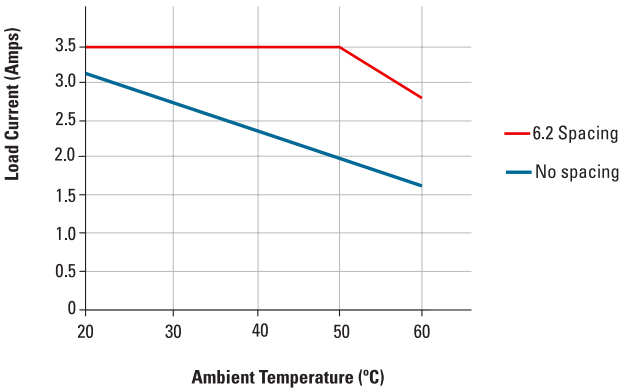
MECHANICAL SPECIFICATIONS

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

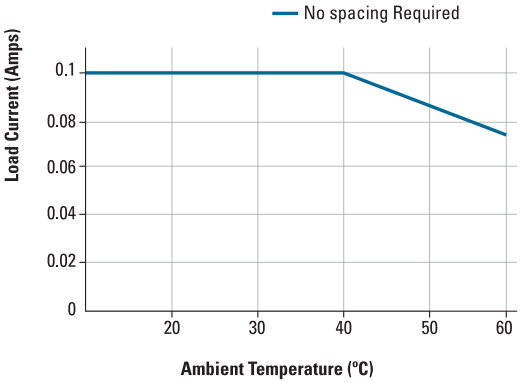


THERMAL DERATE INFORMATION

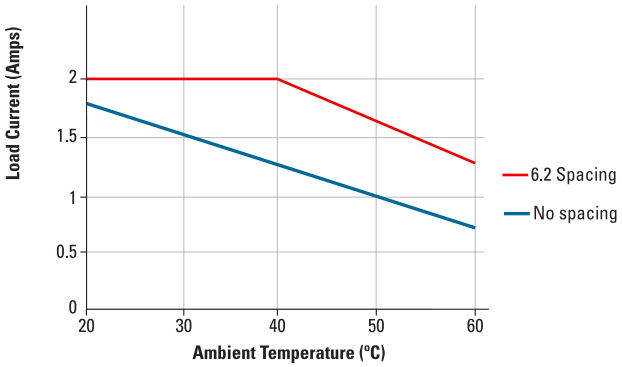
DERATING CURVE: DRA-CN024DXX



DERATING CURVE: DRA-CN048DXX

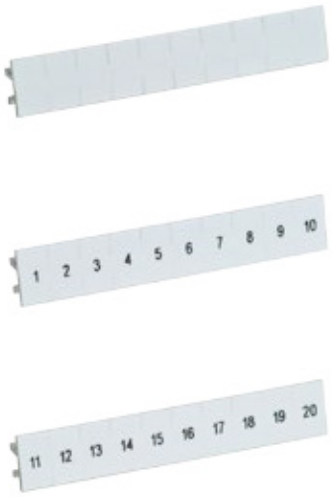


DERATING CURVE: DRA-CN240AXX



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.

ORDERING OPTIONS

Example : DRA-CN240A05R

DRA-CN	240A	05	R

Series

DRA-CN

Load Voltage

024D : 24 VDC, 3.5 A
048D : 48 VDC, 0.1 A
240A : 240 VAC, 2 A

Assembly Input Voltage

05 : 05 VDC
24 : 24 VDC

Switching Mode

Blank: Zero Cross Turn-On (AC Output Only)
R: Random Turn On (AC Output Only)

— Required for valid part number
☐ For options only and not required for valid part number

GENERAL NOTES

[1] All parameters at 25°C unless otherwise specified.
[2] See derate curves for more information
[3] Operating frequency above 500 Hz will damage the SSR (DC output only).
[4] Turn-on time for random turn-on version is 0.1 msec
[5] 3.75 kV for CN048Dxx

AGENCY APPROVALS & CERTIFICATIONS

E334072. AC output relay is UL rated for Pilot Duty @ 240VAC

Designed in accordance with the requirements of IEC 62314

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.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

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CONTACT US

Americas
+1 (800) 350 2727
sales.crydom@sensata.com
Europe, Middle East & Africa
+44 (1202) 416170
ssr-info.eu@sensata.com
Asia Pacific
sales.isasia@list.sensata.com
China +86 (21) 2306 1500
Japan +81 (45) 277 7117
Korea +82 (31) 601 2004
India +91 (80) 67920890
Rest of Asia +886 (2) 27602006 ext 2808