| DUAL SERIES
PANEL MOUNT SOLID STATE RELAYS



Features

- Independently controlled dual output solid-state relay
- Ratings from 25A to 40A @ 24-530 VAC
- Industry standard package
- SCR output for heavy industrial loads
- DC Control
- Zero voltage (resistive loads) or instantaneous turn-on (inductive loads) output

PRODUCT SELECTION

Control Voltage	25 A	40 A
4-15 VDC Control	D2425D	D2440D
15-32 VDC Control	D2425DE	D2440DE
4-15 VDC Control	H12D4825D	H12D4840D
15-32 VDC Control	H12D4825DE	H12D4840D

SPECIFICATIONS

Output [1]

Description	D2425xx	D2440xx	H12D4825xx	H12D4840xx
Operating Voltage (47-63 Hz) [Vrms]	24-280	24-280	48-530	48-530
Transient Overvoltage [Vpk]	600	600	1200 [2]	1200 [2]
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/µsec] [3]	500	500	500	500
Maximum Load Current [Arms] [4]	25	40	25	40
Minimum Load Current [Arms]	0.15	0.15	0.15	0.15
Maximum 1 Cycle Surge Current (50/60 Hz) [Apk]	239/250	597/6250	239/250	597/625
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.02	0.63	1.02	0.63
Maximum 1/2 Cycle I^2t for Fusing (50/60 Hz) [A^2 sec]	285/259	1779/1621	285/259	1779/1621
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5

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Input [(1)]

Description	D24XXD	H12D48XXD	E SUFFIX
Control Voltage Range	4-15 VDC	4-15 VDC	15-32 VDC
Minimum Turn-On Voltage	4.0 VDC	4.0 VDC	15.0 VDC
Minimum Turn-Off Voltage	1.0 VDC	1.0 VDC	1.0 VDC
Typical Input Current @ 5 VDC (@ 24 VDC for E Suffix)	13 mA	13 mA	15 mA
Nominal Input Impedance [Ohm]	300	240	1500
Maximum Turn-On Time [msec] [(5)]	1/2 Cycle	1/2 Cycle	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle	1/2 Cycle

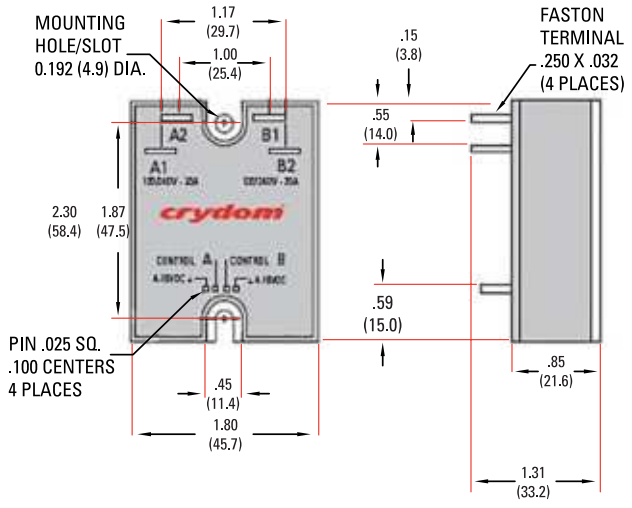
General [(1)]

Description	Parameters
Dielectric Strength, Input/Output (50/60 Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10^9 Ohms
Maximum Capacitance, Input/Output	10 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	3.0 oz (86.5g)
Encapsulation	Thermally Conductive Epoxy
Terminals	.25" Fastons, .025" Square Pins

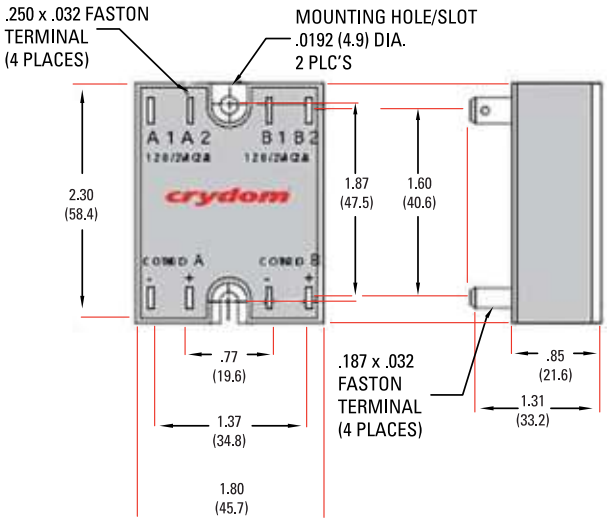
MECHANICAL SPECIFICATIONS

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

120/240V MODEL

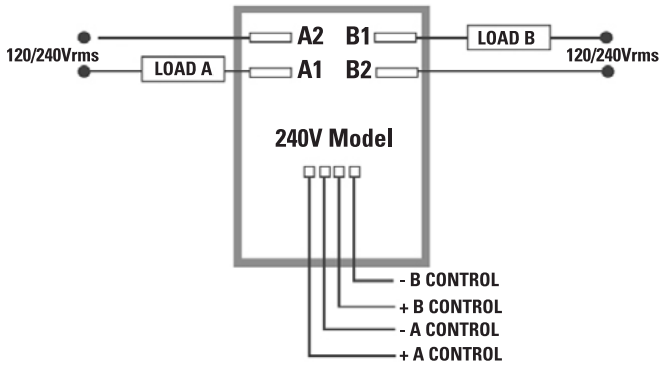


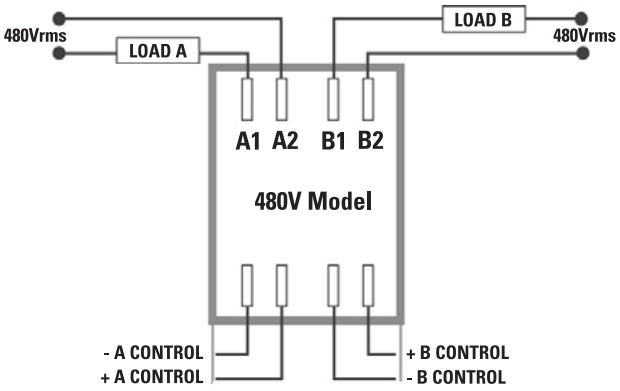
480V MODEL



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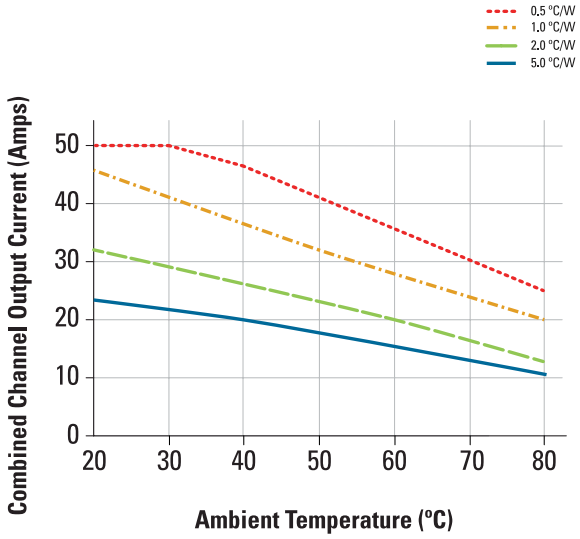
WIRING DIAGRAM



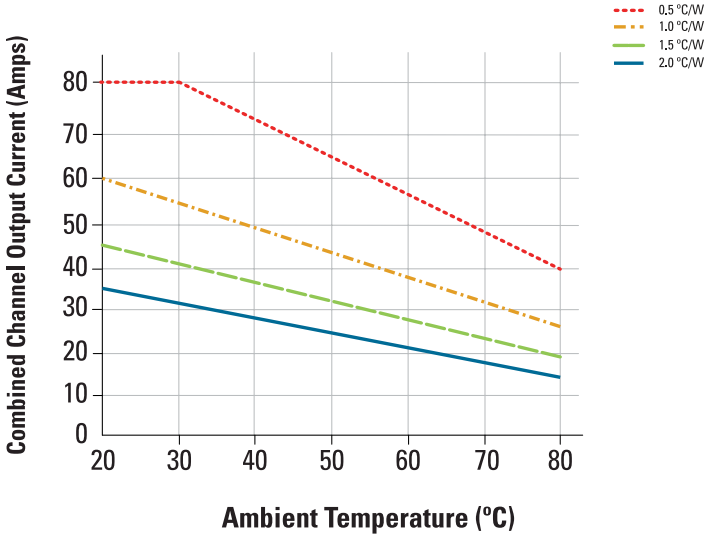


THERMAL DERATE INFORMATION

DERATE CURVE: 25 AMP Dual SSR



DERATING CURVE: 40 A Dual SSR



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ORDERING OPTIONS

Example : H12D4825DH-10

H12D48	25	D	H	-10

Series

Output Voltage
D24 : 24-280 VAC
H12D48 : 48-530 VAC

Rated Load Current

25 : 25 Amps
40 : 40 Amps

Control Voltage

D : 4-15 VDC
DE : 15-32 VDC

Thermal Pad

Blank : Not Included
H : Included

Switching Mode

Blank : Zero Voltage Turn-On
-10 : Instantaneous Turn-On

_ 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) For option (-10) models the Transient overvoltage is 1100Vac.
(3) Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
(4) Heat sinking required, for derating curves see next page.
(5) Turn-on time for Instantaneous turn-on (-10) versions is 0.1 msec

AGENCY APPROVALS & CERTIFICATIONS

c UL us E116949 CSA LR81689 (240 V, 4-15VDC control only) CE RoHS 50

Designed in accordance with the requirements of IEC 62314

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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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