

# **DUAL SERIES**

PANEL MOUNT



## **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-crossing (resistive loads) or random-fire (inductive loads) output



# **SPECIFICATIONS**

## **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

# Output Specifications (1)

Description	D2425xx	D2440xx	H12D4825xx	H12D4840xx
Operating Voltage (47-63Hz) [Vrms]	24-280	24-280	48-530	48-530
Transient Overvoltage [Vpk]	600	600	1200 <sup>(2)</sup>	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 (50/60Hz) [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 <sup>2</sup> t for Fusing (50/60 Hz) [A <sup>2</sup> 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 Specifications (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	300 Ohm	240 Ohm	1500 Ohm
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

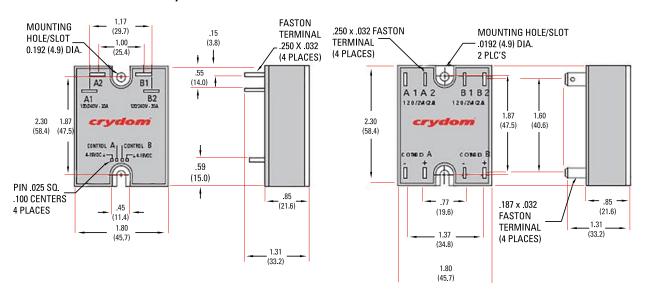
# General Specifications (1)

Description	Parameters
Dielectric Strength, Input/Output (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 <sup>9</sup> Ohm
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

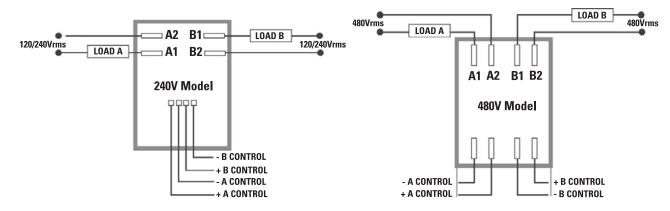


## 120/240V MODEL

## **480V MODEL**





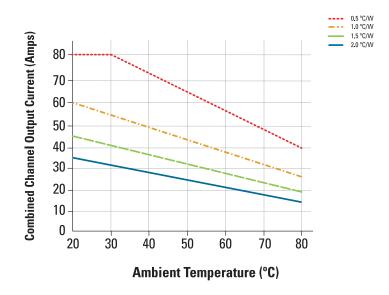


# THERMAL DERATE INFORMATION

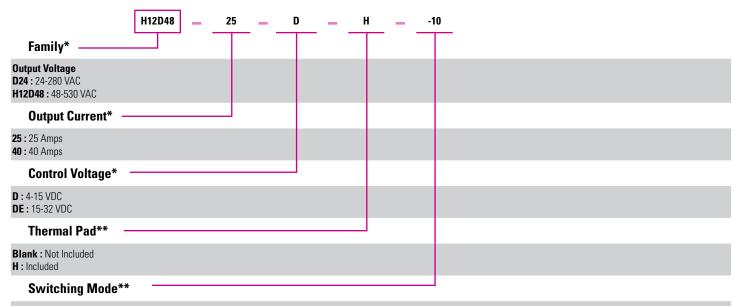
## **DERATE CURVE: 25 AMP Dual SSR**

# So "C/W 10 "C/W 2.0 "C/W 5.0 "

## **DERATING CURVE: 40 A Dual SSR**







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

<sup>\*\*</sup> For options only and not required for valid part number



- (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 random turn-on (-10) versions is 0.1 msec



# **AGENCY APPROVALS & CERTIFICATIONS**











Designed in accordance with the requirements of IEC 62314

<sup>\*</sup> Required for valid part number





#### 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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