

- Zero Voltage and Random Turn-On Switching
- SCR Output
- Industry Standard Package
- Panel Mount

Two totally independent AC output relays come in a single standard panel-mount package. Utilizing an AC switch output with internal snubber, relays provide greater protection against false triggering. Model choices include zero-voltage or random turn-on (phase controllable) switching.

Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

MODEL NUMBERS	D2425D D2425DE	D2440D D2440DE	H12D4825D H12D4825DE	H12D4840D H12D4840DE
<b>OUTPUT SPECIFICATIONS</b> ①				
Operating Voltage (47-63 Hz) [Vrms]	24-280	24-280	48-530	48-530
Load Current Range ③ [Arms]	.15-25	.15-40	.15-25	.15-40
Transient Overvoltage [Vpk]	600	600	1200	1200
Max. Surge Current, (16.6ms) [Apk]	250	625	250	625
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case (R <sub>qJC</sub> ) [°C/W] ①	1.02	.63	1.02	.63
Maximum I <sup>2</sup> t for Fusing, (8.3 msec.) [A <sup>2</sup> sec]	260	1620	260	1620
Max. Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②	500	500	500	500
Max. Turn-On Time ④	1/2 cycle	1/2 cycle	1/2 cycle	1/2 cycle
Max. Turn-Off Time	1/2 cycle	1/2 cycle	1/2 cycle	1/2 cycle
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5
<b>INPUT SPECIFICATIONS</b> ①	<b>D24XXD</b>		<b>H12D48XXD</b>	<b>E-SUFFIX</b>
Control Voltage Range	4-15Vdc		4-15Vdc	15-32Vdc
Max. Turn-On Voltage	4.0 Vdc		4.0 Vdc	15 Vdc
Min. Turn-Off Voltage	1.0 Vdc		1.0 Vdc	1.0 Vdc
Nominal Input Impedance	300 Ohms		240 Ohms	1500 Ohms
Typical Input Current @ 5Vdc (@ 24Vdc for E-Suffix)	13mA		13mA	15mA

### GENERAL NOTES

- ① All parameters at 25°C and per section unless otherwise specified.
- ② Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
- ③ Heat sinking required, for derating curves see page 2.
- ④ Turn-on time for random turn-on (-10) versions is 0.1 msec.

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**Crydom Heat Sinks** offer excellent thermal management and are perfectly matched to the load current ratings of Crydom panel mount relays. Request Crydom's Heat Sink specification sheet for all the details.



### GENERAL SPECIFICATIONS

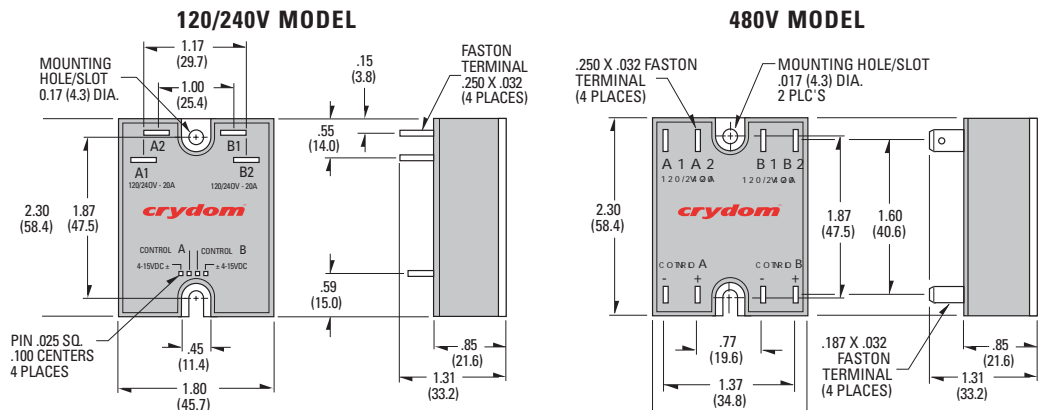
Dielectric Strength 50/60Hz Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 <sup>9</sup> Ohm
Max. Capacitance Input/Output	10 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

### MECHANICAL SPECIFICATIONS

Weight: (typical)	3.0 oz. (86.5g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	.25" Fastons, .025" Square Pins

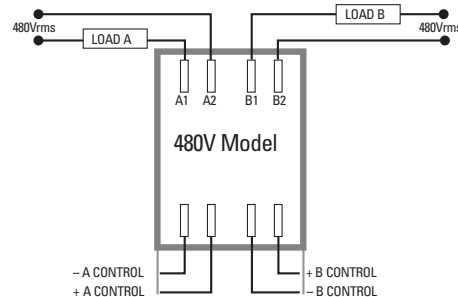
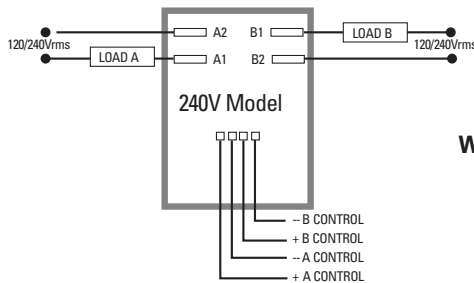
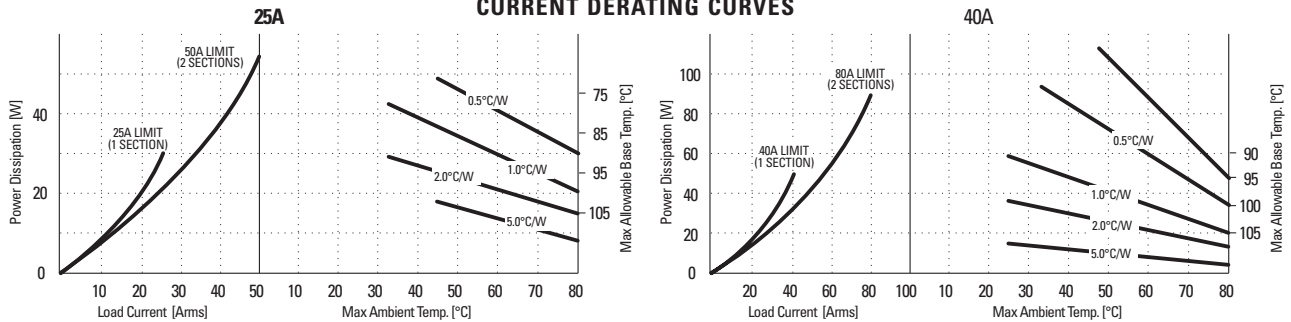
### AVAILABLE OPTIONS

- 10** Random Turn-On, Phase Controllable  
Example: **D2440D-10**
- E** 15-32Vdc Control  
Example: **H12D4840DE**
- H** Heat Transfer Pad (Attached)  
Example: **D2440DH**



All dimensions are in inches (millimeters)

### CURRENT DERATING CURVES



### WIRING DIAGRAMS

### APPROVALS

UL E116949  
CSA LR81689 (240V only)  
VDE 5902 UG



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