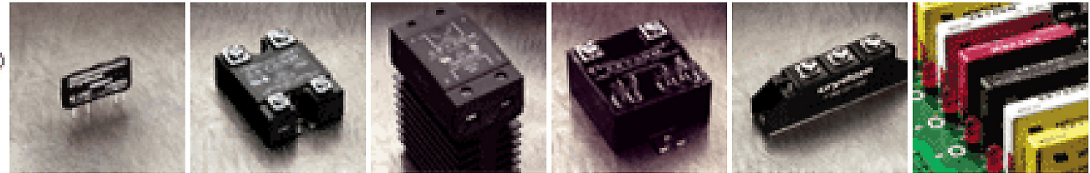




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Solid State Relays - Panel Mount: QUAD



Features

Triac output • 20Amp • 24-280 Vrms • AC Switching • DC control • 1/4" Fast-on terminals • Ideal for applications in which space is a premium.

Product	INPUT SPECIFICATIONS	OUTPUT SPECIFICATIONS			
	Control Voltage Range	Load Current	Switching Voltage Type	Turn On	Load Voltage Range
TD2420Q	4-15 Volts DC	0.15-20 Amps RMS	AC	Zero cross	24-280 Volts RMS
TD2420Q-10	4-15 Volts DC	0.15-20 Amps RMS	AC	Random	24-280 Volts RMS

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

Four 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 NUMBER	TD2420Q	TD2420QE
OUTPUT SPECIFICATIONS ①		
Operating Voltage (47-63 Hz) [Vrms]	24-280	24-280
Load Current Range ③ [Arms]	.15-20	.15-20
Transient Overvoltage [Vpk]	600	600
Max. Surge Current, (16.6ms) [Apk]	250	250
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6
Thermal Resistance Junction to Case ($R_{\theta JC}$) [°C/W]	1.2	1.2
Maximum I^2t for Fusing, (8.3 msec.) [A ² sec]	260	260
Max. Off-State Leakage Current @ Rated Voltage [mArms]	10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②	200	200
Max. Turn-On Time ④	1/2 cycle	1/2 cycle
Max. Turn-Off Time	1/2 cycle	1/2 cycle
Power Factor (Min.) with Max. Load	0.5	0.5

INPUT SPECIFICATIONS ①		
Control Voltage Range	4-15 Vdc	15-28 Vdc
Max. Turn-On Voltage	4.0 Vdc	15 Vdc
Min. Turn-Off Voltage	1.0 Vdc	1.0 Vdc
Nominal Input Impedance	330 Ohms	1500 Ohms
Typical Input Current	12 mA @ 5Vdc	15 mA @ 24Vdc

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, max. 20A per section, max. 60A per package.
- ④ Turn-on time for random turn-on versions is 0.1 msec.

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GENERAL SPECIFICATIONS

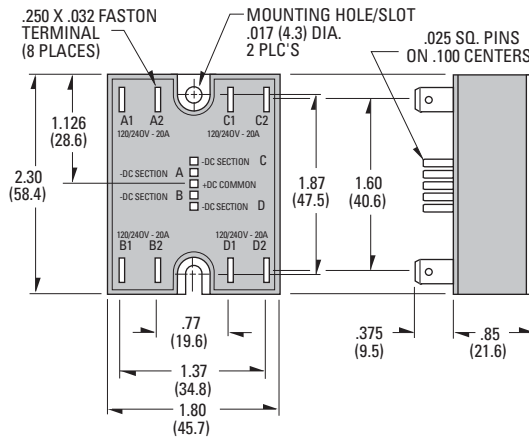
Dielectric Strength 50/60Hz Input/Output/Base	2500 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 ⁹ Ohm
Max. Capacitance Input/Output	10 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

MECHANICAL SPECIFICATIONS

Weight: (typical)	3.5 oz. (109g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	.250 Faston, .025 Square Pins

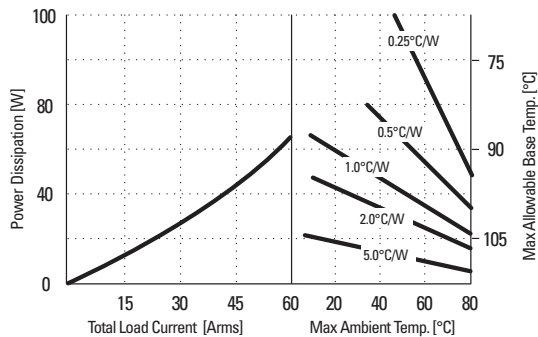
AVAILABLE OPTIONS

- 10** Random Turn-On, Phase Controllable
Example: **TD2420Q-10**
- H** Heat Transfer Pad (Attached)
Example: **TD2420QH**
- E** 15-28Vdc Control
Example: **TD2420QE**

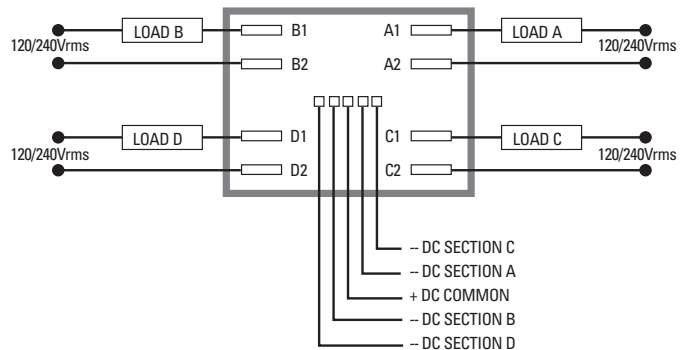


All dimensions are in inches (millimeters)

CURRENT DERATING CURVES



WIRING DIAGRAM



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.

APPROVALS

UL E116949
CSA LR81689

