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Solid State Relays - Panel Mount: SERIES T



Features

Triac output • 10-25Amp • 120/240
 Vrms - AC Switching • AC/DC control.

Product	INPUT SPECIFICATIONS	OUTPUT SPECIFICATIONS			
	Control Voltage Range	Load Current	Switching Voltage Type	Turn On	Load Voltage Range
TD1210	3-32 Volts DC	0.04-10 Amps RMS	AC	Zero cross	24-140 Volts RMS
TD1225	3-32 Volts DC	0.04-25 Amps RMS	AC	Zero cross	24-140 Volts RMS
TD2410	3-32 Volts DC	0.04-10 Amps RMS	AC	Zero cross	24-280 Volts RMS
TD2425	3-32 Volts DC	0.04-25 Amps RMS	AC	Zero cross	24-280 Volts RMS
TA1210	90-280 Volts RMS	0.04-10 Amps RMS	AC	Zero cross	24-140 Volts RMS
TA1225	90-280 Volts RMS	0.04-25 Amps RMS	AC	Zero cross	24-140 Volts RMS
TA2410	90-280 Volts RMS	0.04-10 Amps RMS	AC	Zero cross	24-280 Volts RMS

TA2425

90-280 Volts RMS

0.04-25
Amps RMS

AC

Zero
cross

24-280
Volts RMS

- Zero Voltage Switching
- Panel Mount
- 600V Transient Capability
- Internal Snubber
- DC or AC Control
- Triac Output

Featuring state-of-the-art Surface Mount Technology, these SPST-NO relays deliver proven reliability in the most demanding applications.

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

MODEL NUMBERS	AC CONTROL	TA1210	TA1225	TA2410	TA2425
	DC CONTROL	TD1210	TD1225	TD2410	TD2425
OUTPUT SPECIFICATIONS ①					
Operating Voltage (47-63 Hz) [Vrms]		24-140	24-140	24-280	24-280
Max. Load Current ③ [Arms]		10	25	10	25
Min. Load Current, [mArms]		40	40	40	40
Transient Overvoltage [Vpk]		400	400	600	600
Max. Surge Current, (16.6ms) [Apk]		120	250	120	250
Max. On-State Voltage Drop @ Rated Current [Vpk]		1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case (R _{θJC}) [°C/W]		1.48	1.02	1.48	1.02
Maximum I ² t for Fusing, (8.3 msec.) [A ² sec]		60	260	60	260
Max. Off-State Leakage Current @ Rated Voltage [mArms]		8	8	10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②		200	200	200	200
Max. Turn-On Time		1/2 Cycle (DC Control), 10.0 msec (AC Control)			
Max. Turn-Off Time		1/2 Cycle (DC Control), 40.0 msec (AC Control)			
Power Factor (Min.) with Max. Load		0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS ①	DC CONTROL	AC CONTROL
Control Voltage Range	3-32 Vdc	90-280 Vrms (60Hz)
Max. Reverse Voltage	-32 Vdc	—
Max. Turn-On Voltage	3.0 Vdc	90 Vrms
Min. Turn-Off Voltage	1.0 Vdc	10 Vrms
Nominal Input Impedance	1500 Ohms	60K Ohms
Typical Input Current	3.4mA @ 5 Vdc, 20mA @ 28Vdc	2mA @ 120 Vrms, 4mA @ 240 Vrms

GENERAL NOTES

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① All parameters at 25° C 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 3.



GENERAL SPECIFICATIONS

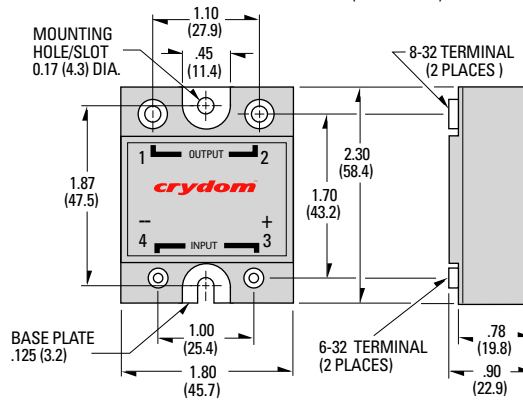
Dielectric Strength 50/60Hz Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 ⁹ Ohm
Max. Capacitance Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

MECHANICAL SPECIFICATIONS

Weight: (typical)	3.0 oz. (86.5g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	Screws and Saddle Clamps Furnished, Unmounted

MECHANICAL DIMENSIONS

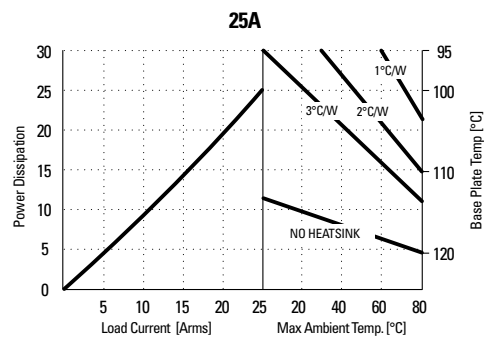
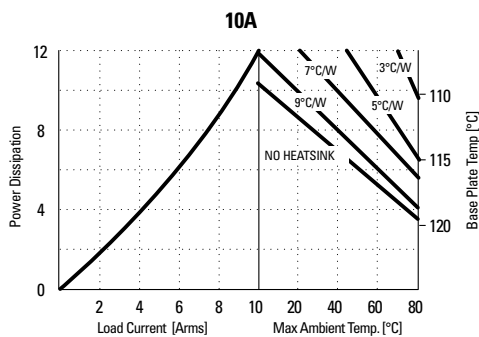
All dimensions are in inches (millimeters)



Screw Torque Requirements:
 6-32 Screws - 10 in. lbs.,
 8-32 Screws - 20 in. lbs.
 (Screws dry without grease.)

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.

CURRENT DERATING CURVES



APPROVALS

UL E116949
 CSA LR81689
 VDE 10143 UG



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