

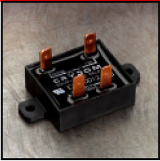


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Solid State Relays - Panel Mount: EZ



Features

SCR output • 5-18 Amps • 240/480 Vrms • AC Switching • DC/AC control with 1/4" Fast-on terminals • Compact design.

Product	INPUT SPECIFICATIONS	OUTPUT SPECIFICATIONS			
	Control Voltage Range	Load Current	Switching Voltage Type	Turn On	Load Voltage Range
EZ240D12	3-15 Volts DC	0.15-12 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ240D12R	3-15 Volts DC	0.15-12 Amps RMS	AC	Random	24-280 Volts RMS
EZ240D12RS	3-15 Volts DC	0.15-12 Amps RMS	AC	Random	24-280 Volts RMS
EZ240D12S	3-15 Volts DC	0.15-12 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ240D18	3-15 Volts DC	0.15-18 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ240D18R	3-15 Volts DC	0.15-18 Amps RMS	AC	Random	24-280 Volts RMS
EZ240D18RS	3-15 Volts DC	0.15-18 Amps RMS	AC	Random	24-280 Volts RMS

EZE480D12S	15-32 Volts DC	0.15-12 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZE480D18	15-32 Volts DC	0.15-18 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZE480D18S	15-32 Volts DC	0.15-18 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZ240A12	90-140 Volts RMS	0.15-12 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ240A12R	90-140 Volts RMS	0.15-12 Amps RMS	AC	Random	24-280 Volts RMS
EZ240A12RS	90-140 Volts RMS	0.15-12 Amps RMS	AC	Random	24-280 Volts RMS
EZ240A12S	90-140 Volts RMS	0.15-12 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ240A18	90-140 Volts RMS	0.15-18 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ240A18R	90-140 Volts RMS	0.15-18 Amps RMS	AC	Random	24-280 Volts RMS
EZ240A18RS	90-140 Volts RMS	0.15-18 Amps RMS	AC	Random	24-280 Volts RMS
EZ240A18S	90-140 Volts RMS	0.15-18 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ480A12	90-140 Volts RMS	0.15-12 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZ480A12S	90-140 Volts RMS	0.15-12 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZ480A18	90-140 Volts RMS	0.15-18 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZ480A18S	90-140 Volts RMS	0.15-18 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZE240A12	18-36 Volts RMS	0.15-12 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZE240A12R	18-36 Volts RMS	0.15-12 Amps RMS	AC	Random	24-280 Volts RMS
EZE240A12RS	18-36 Volts RMS	0.15-12 Amps RMS	AC	Random	24-280 Volts RMS

EZ240D18S	3-15 Volts DC	0.15-18 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ240D5	4-15 Volts DC	0.15-5 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ240D5R	4-15 Volts DC	0.15-5 Amps RMS	AC	Random	24-280 Volts RMS
EZ240D5RS	4-15 Volts DC	0.15-5 Amps RMS	AC	Random	24-280 Volts RMS
EZ240D5S	4-15 Volts DC	0.15-5 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZ480D12	4-15 Volts DC	0.15-12 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZ480D12S	4-15 Volts DC	0.15-12 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZ480D18	4-15 Volts DC	0.15-18 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZ480D18S	4-15 Volts DC	0.15-18 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZE240D12	15-32 Volts DC	0.15-12 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZE240D12R	15-32 Volts DC	0.15-12 Amps RMS	AC	Random	24-280 Volts RMS
EZE240D12RS	15-32 Volts DC	0.15-12 Amps RMS	AC	Random	24-280 Volts RMS
EZE240D12S	15-32 Volts DC	0.15-12 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZE240D18	15-32 Volts DC	0.15-18 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZE240D18R	15-32 Volts DC	0.15-18 Amps RMS	AC	Random	24-280 Volts RMS
EZE240D18RS	15-32 Volts DC	0.15-18 Amps RMS	AC	Random	24-280 Volts RMS
EZE240D18S	15-32 Volts DC	0.15-18 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZE480D12	15-32 Volts DC	0.15-12 Amps RMS	AC	Zero cross	48-660 Volts RMS

EZE240A12S	18-36 Volts RMS	0.15-12 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZE240A18	18-36 Volts RMS	0.15-18 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZE240A18R	18-36 Volts RMS	0.15-18 Amps RMS	AC	Random	24-280 Volts RMS
EZE240A18RS	18-36 Volts RMS	0.15-18 Amps RMS	AC	Random	24-280 Volts RMS
EZE240A18S	18-36 Volts RMS	0.15-18 Amps RMS	AC	Zero cross	24-280 Volts RMS
EZE480A12	18-36 Volts RMS	0.15-12 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZE480A12S	18-36 Volts RMS	0.15-12 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZE480A18	18-36 Volts RMS	0.15-18 Amps RMS	AC	Zero cross	48-660 Volts RMS
EZE480A18S	18-36 Volts RMS	0.15-18 Amps RMS	AC	Zero cross	48-660 Volts RMS

- Low Leakage
- Quick Connect Terminals
- SCR Output
- 24V Control Available (EZE Models)

The Series EZ SPST-NO AC output relays offer a low profile package with the convenience of quick con-

nect terminals. The Series EZ is the preferred choice for replacement of 120V and 240V Electro-mechanical relays. Output consists of an SCR switch and is available in Zero-Cross and Random Turn-On (Phase Controllable) versions.

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

MODEL NUMBERS	AC CONTROL	(120Vac)	E2240D5	EZ240A12	EZ240A18	EZ480A12	EZ480A18
	DC CONTROL	(24Vac)		EZE240A12	EZE240A18	EZE480A12	EZE480A18
OUTPUT SPECIFICATIONS ①							
Operating Voltage (47-63 Hz) [Vrms]		(5Vdc)		EZ240D12	EZ240D18	EZ480D12	EZ480D18
		(24Vdc)		EZE240D12	EZE240D18	EZE480D12	EZE480D18
Operating Voltage (47-63 Hz) [Vrms]			24-280	24-280	24-280	48-660	48-660
Max. Load Current ④ [Arms]			5	12	18	12	18
Min. Load Current, [mArms]			150	150	150	150	150
Transient Overvoltage [Vpk]			600	600	600	1200	1200
Max. Surge Current, (16.6ms) [Apk]			40	150	200	150	200
Max. On-State Voltage Drop @ Rated Current [Vpk]			1.5	1.5	1.5	1.5	1.5
Thermal Resistance Junction to Case (R _{qJC}) [°C/W]			2.0	2.0	1.1	2.0	1.1
Maximum I ² t for Fusing, (8.3 msec.) [A ² sec]			95	95	170	95	170
Max. Off-State Leakage Current @ Rated Voltage [mArms] ⑤			0.1	0.1	0.1	0.1	0.1
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②			500	500	500	500	500
Max. Turn-On Time ⑥			1/2 Cycle (DC Input), 10.0 msec (AC Input)				
Max. Turn-Off Time			1/2 Cycle (DC Input), 40.0 msec (AC Input)				
Power Factor (Min.) with Max. Load			0.5	0.5	0.5	0.5	0.5

MODEL NUMBERS	DC CONTROL				AC CONTROL		
	Nominal Voltage	5Vdc	5Vdc	5Vdc	24Vdc	120Vac	24Vac
					EZE240D12	EZ240A12	EZE240A12
					EZE240D18	EZ240A18	EZE240A18
		E2240D5	EZ240D12	EZ480D12	EZE480D12	EZ480A12	EZE480A12
			EZ240D18	EZ480D18	EZE480D18	EZ480A18	EZE480A18
Control Voltage Range		4-15 Vdc	3-15 Vdc	4-15 Vdc	15-32 Vdc	90-140 Vrms	18-36 Vrms
Max. Turn-On Voltage		4.0 Vdc	3.0 Vdc	4.0 Vdc	15.0 Vdc	90.0 Vrms	18.0 Vrms
Min. Turn-Off Voltage		1.0 Vdc	1.0 Vdc	1.0 Vdc	1.0 Vdc	10.0 Vrms	2.0 Vrms
Nominal Input Impedance		300 Ohms	300 Ohms	240 Ohms	1500 Ohms	10.6k Ohms	1.8k Ohms
Typical Input Current @ Nominal Voltage		13 mAdc	15 mAdc	15 mAdc	15 mAdc	10 mArms	10 mArms

GENERAL NOTES

- 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 240V, DC control models only, all others 2500Vrms.
- ④ Heat sinking required, for derating curves see page 2.
- ⑤ Off-State leakage for snubbered version (suffix S) is 10.0 mArms.
- ⑥ Turn-on time for random turn-on versions is 0.1 msec (DC Control Models).

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GENERAL SPECIFICATIONS

Dielectric Strength ③ 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

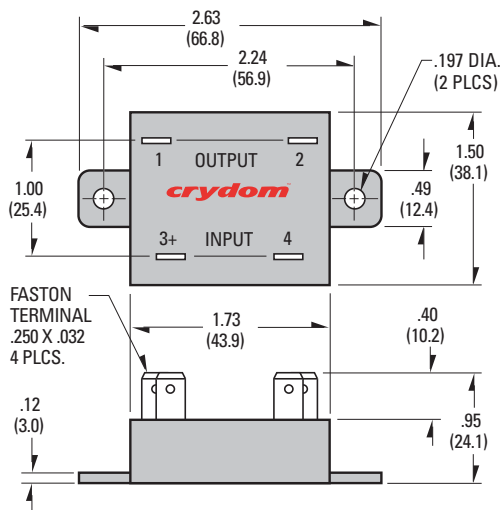
MECHANICAL SPECIFICATIONS

Weight: (typical)	1.5 oz. (43g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	.25 Inch Faston

AVAILABLE OPTIONS

- S** Internal Snubber (Operating Voltage 530 Vrms max.)
Example: **EZ240D12S**
- R** Random Turn-On Switching
Example: **EZ240D12R, EZ240D12RS**
EZ240D5R

*240V, DC Control Models Only.



- PIN 1: AC LOAD
- PIN 2: AC LOAD
- PIN 3: +DC CONTROL
- PIN 4: -DC CONTROL

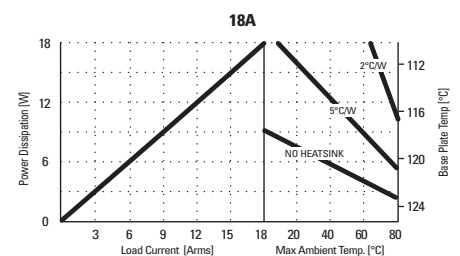
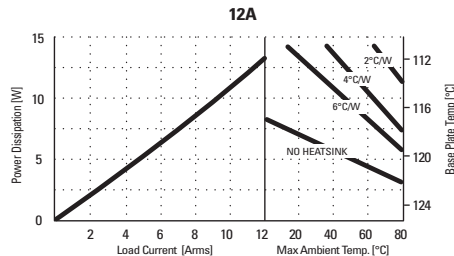
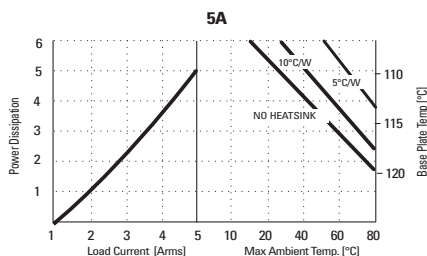
Crydom Heat Sinks offer excellent thermal management and are perfectly matched to the load current ratings of Crydom panel mount relays. Request Crydom's Heat Sink specification sheet for all the details.

All dimensions are in inches (millimeters)

Note:

Recommended torque for mounting screw is 8 - 14 in lb (1.1 - 1.6 Nm). This assumes a standard #8-32 UNC screw

CURRENT DERATING CURVES



APPROVALS

UL E116950
 CSA LR81689
 VDE 10139 UG (240V DC Control Only)



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