crydom™

Series EZ

5-18Amp • 120/240, 480 Vac • AC OUTPUT

- 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 connect 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 Controlable) versions.

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

MODEL NUMBERS						
AC CONTROL	(120Vac) (24Vac)		**EZ240A12 EZE240A12**	**EZ240A18 EZE240A18**	**EZ480A12 EZE480A12**	**EZ480A18 EZE480A18**
DC CONTROL	(5Vdc) (24Vdc)	**EZ240D5**	**EZ240D12 EZE240D12**	**EZ240D18 EZE240D18**	**EZ480D12 EZE480D12**	**EZ480D18 EZE480D18**
OUTPUT SPECIFICATIONS ①						
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 ($R_{\theta JC}$) [°C/W]		2.0	2.0	1.1	2.0	1.1
Maximum I^2t for Fusing, (8.3 msec.) [A^2sec]		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

INPUT SPECIFICATIONS ①	**DC CONTROL**				**AC CONTROL**	
Nominal Voltage	5Vdc	5Vdc	5Vdc	24Vdc	120Vac	24Vac
MODEL NUMBERS	**EZ240D5**	**EZ240D12 EZ240D18**	**EZ480D12 EZ480D18**	**EZE240D12 EZE240D18 EZE480D12 EZE480D18**	**EZ240A12 EZ240A18 EZ480A12 EZ480A18**	**EZE240A12 EZE240A18 EZE480A12 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).

For recommended applications and more information contact:
USA: Sales Support (877) 502-5500 **Tech Support** (877) 702-7700 **FAX** (619) 710-8540
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Email: sales@crydom.com **WEB SITE:** http://www.crydom.com
UK: +44 (0)1202 365070 • **FAX** +44 (0)1202 365090 Crydom International Ltd., 7 Cobham Road, Ferndown Industrial Estate, Ferndown, Dorset BH21 7PE, **Email**: intsales@crydom.com.
GERMANY: +49 (0)180 3000 506

ISO 9001 CERTIFIED

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Series EZ

5-18Amp • 120/240, 480 Vac • AC OUTPUT

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

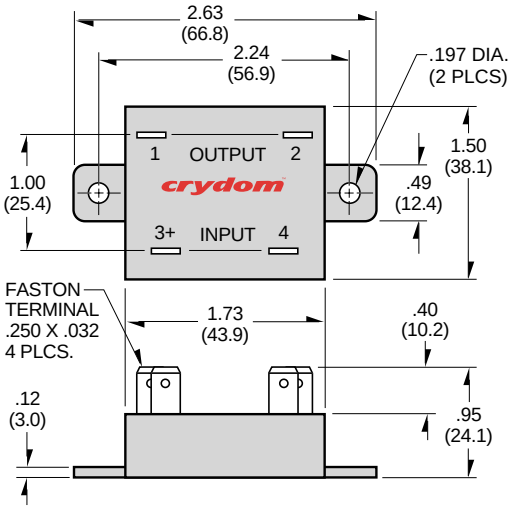
Weight: (typical)	1.5 oz. (43g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	.25 Inch Faston

*240V, DC Control Models Only.

AVAILABLE OPTIONS

S Internal Snubber
Example: **EZ240D12S**

R Random Turn-On Switching
Example: **EZ240D12R, EZ240D12RS**
EZ240D5R

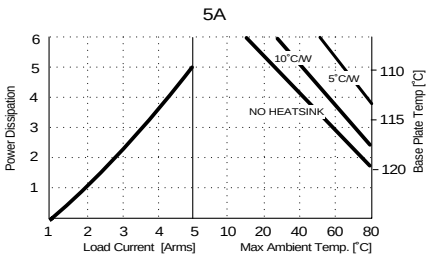


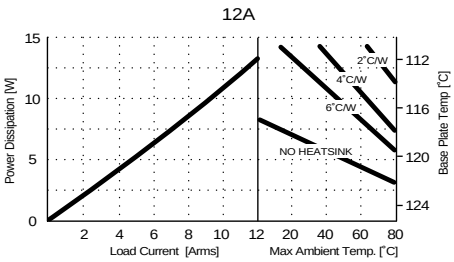
PIN 1: AC LOAD
PIN 2: AC LOAD
PIN 3: +DC CONTROL
PIN 4: −DC CONTROL

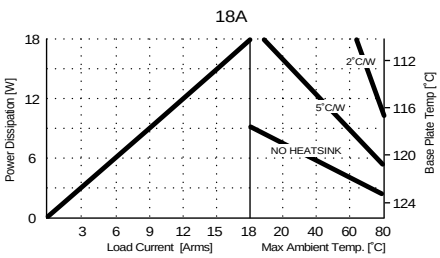
All dimensions are in inches (millimeters)

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

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