| EZ SERIES

PANEL MOUNT SOLID STATE RELAYS



Features

- Compact design for low-profile applications
- Ratings from 5 A to 18 A @ 600 VAC
- SCR output for heavy industrial loads
- AC or DC control
- 1/4" fast-on terminals for easy installation
- UL/CSA/TUV Approved, CE Compliant to EN60950-1

PRODUCT SELECTION

Control Voltage	5 A	12 A	18 A
3-15 VDC	EZ240D5	EZ240D12	EZ240D18
15-32 VDC		EZE240D12	EZE240D18
90-140 VAC		EZ240A12	EZ240A18
18-36 VAC		EZE240A12	EZE240A18
4-15 VDC		EZ480D12	EZ480D18
15-32 VDC		EZE480D12	EZE480D18
90-140 VAC		EZ480A12	EZ480A18

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SPECIFICATIONS

Output [1]

Description	5 A	12 A	18 A	12 A	18 A
Operating Voltage (47-63 Hz) [Vrms]	24-280	24-280	24-280	48-660	48-660
Transient Overvoltage [Vpk]	600	600	600	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mArms] [4]	0.1	0.1	0.1	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/µsec] [2]	500	500	500	500	500
Maximum Load Current [Arms] [3]	5	12	18	12	18
Minimum Load Current [Arms]	150	150	150	150	150
Maximum 1 Cycle Surge Current (50/60 Hz) [Apk]	38/40	143/150	191/200	143/150	191/200
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.5	1.5	1.5	1.5	1.5
Thermal Resistance Junction to Case (Rjc) [°C/W]	2	2	1.1	2	1.1
Maximum 1/2 Cycle I^2t for Fusing (50/60 Hz) [A^2 sec]	102/93	102/93	182/166	102/93	182/166
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5	0.5

Input [1]

Description	EZ240Dxx	EZ480Dxx	EZExxxDxx	EZxxxAxx	EZExxxAxx
Control Voltage Range	3-15 VDC	4-15 VDC	15-32 VDC	90-140 Vrms	18-36 Vrms
Minimum Turn-On Voltage	3.0 VDC	4.0 VDC	15.0 VDC	90.0 Vrms	18.0 Vrms
Minimum Turn-Off Voltage	1.0 VDC	1.0 VDC	1.0 VDC	10.0 Vrms	2.0 Vrms
Nominal Voltage	5.0 VDC	5.0 VDC	24 VDC	120 Vrms	24 Vrms
Typical Input Current @ Nominal Voltage	15 mAdc	15 mAdc	15 mAdc	10 mA	10 mA
Nominal Input Impedance	300 Ohms	240 Ohms	1500 Ohms	10.6K Ohms	1800 Ohms
Maximum Turn-On Time [msec] [5]	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle

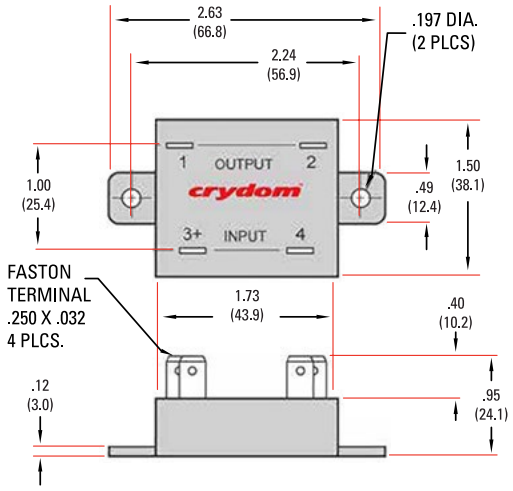
General [1]

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60 Hz)	2500 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10^9 Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	1.5 oz (43 g)
Encapsulation	Thermally Conductive Epoxy
Terminals	.25" Fastons
Mounting Screw Torque Range (8-32 UNC screw) [lb-in/Nm]	8-14/1.1-1.5

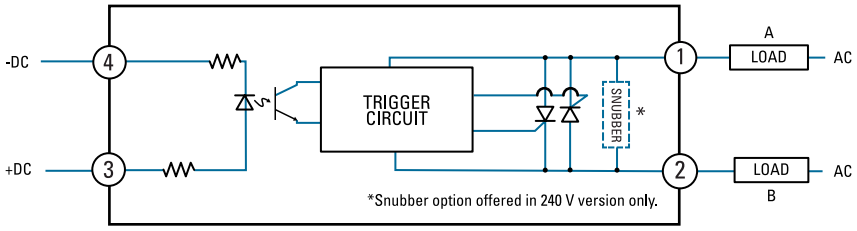
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MECHANICAL SPECIFICATIONS

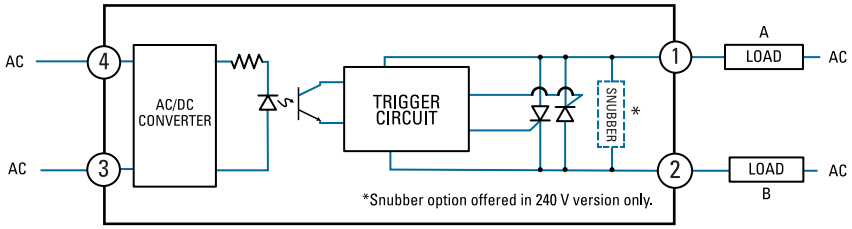
Tolerance: ±0.02 in / 0.5 mm
All dimensions are in inches [millimeters]



WIRING DIAGRAM

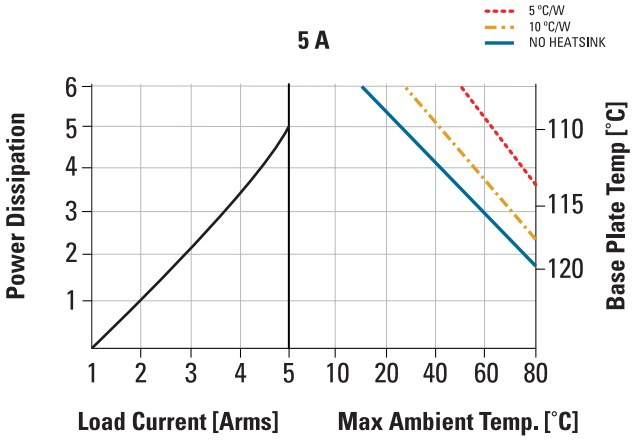


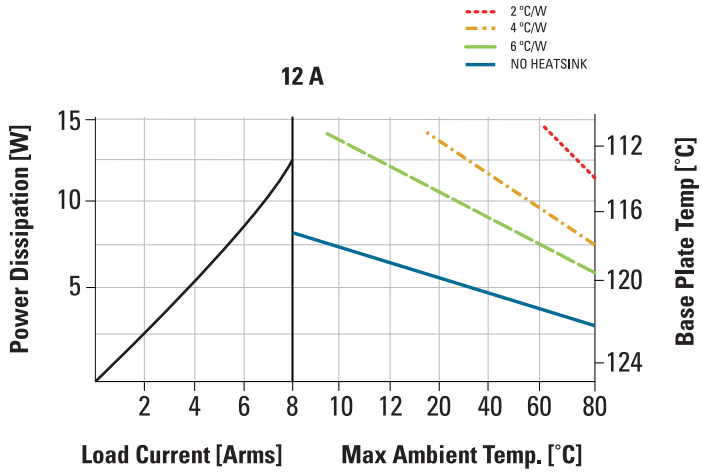
Load can be wired in location A or B

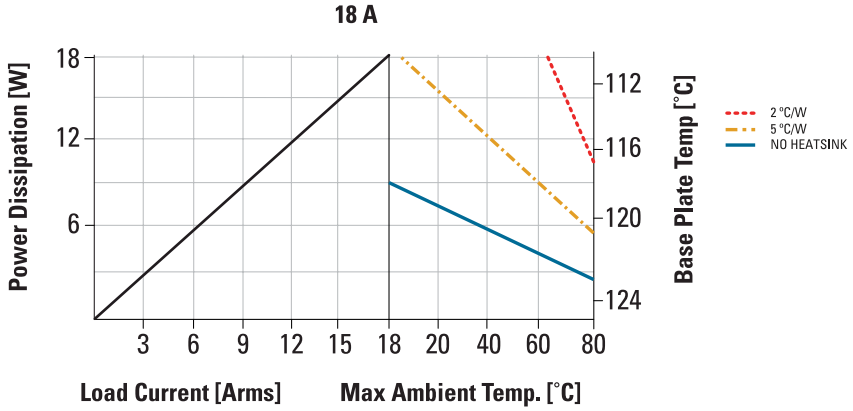


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THERMAL DERATE INFORMATION







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ORDERING OPTIONS

Example : EZ240D18RS

EZ	E	240	A	12	R	S

Series

EZ

Input Range

Blank : Standard Input
E : 18-36 VAC (AC Input), 15-32 VDC (DC Input)

Operating Voltage

240 : 24-280 VAC
480 : 48-660 VAC

Control Voltage

D : 3-15 VDC (4-15 VDC for 480 V)
A : 90-140 VAC

Load Current

5 : 5 Amps (EZ240D suffix only)
12 : 12 Amps
18 : 18 Amps

Switching Mode

Blank : Zero Voltage Turn-On
R : Instantaneous Turn-On

Internal Snubber

Blank : Not Included
S : Included (240 V only)

— Required for valid part number
☐ For options only and not required for valid part number

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) Heat sinking required, see derating curves.
(4) Off- state leakage for snubbered version (suffix S, 240V version only) is 10.0mArms
(5) Turn-on time for Instantaneous turn-on versions is 0.1 msec (DC Control Models).

AGENCY APPROVALS & CERTIFICATIONS

c UL us E116950 LR81689

Designed in accordance with the requirements of IEC 62314
EN60950 : Meets the requirements of sections1.5: 1,7: 2.9: 2.10.5.3: 4.2: 4.5: 4.7:

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WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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