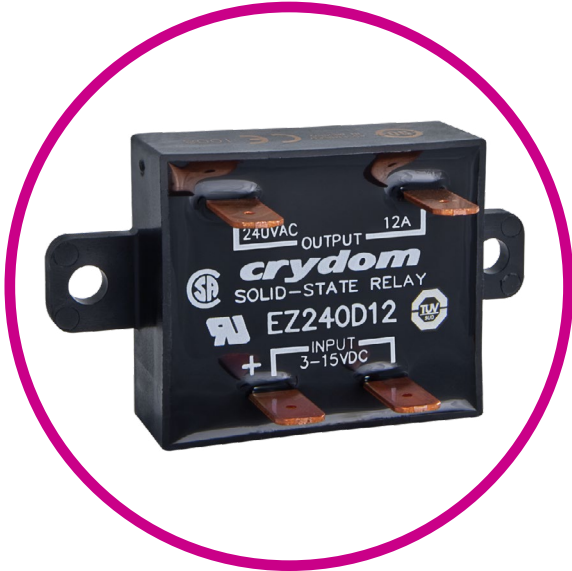




## EZ SERIES

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

## SPECIFICATIONS

### Output <sup>(1)</sup>

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] <sup>(4)</sup>	0.1	0.1	0.1	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] <sup>(2)</sup>	500	500	500	500	500
Maximum Load Current [Arms] <sup>(3)</sup>	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 <sup>2</sup> t for Fusing (50/60 Hz) [A <sup>2</sup> 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 <sup>(1)</sup>

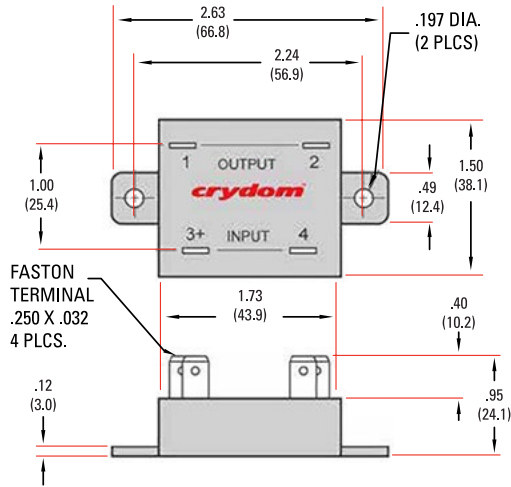
Description	EZ240Dxx	EZ480Dxx	EZExxxDxx	EZxxxAxx	EZExxxAxx
Control Voltage Range	3-15 VDC	4-15 VDC	15-32 VDC	90-140 Vrms	18-36 Vrms
Minimum Turn-On Voltage	3.0 VDC	4.0 VDC	15.0 VDC	90.0 Vrms	18.0 Vrms
Minimum Turn-Off Voltage	1.0 VDC	1.0 VDC	1.0 VDC	10.0 Vrms	2.0 Vrms
Nominal Voltage	5.0 VDC	5.0 VDC	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] <sup>(5)</sup>	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 <sup>(1)</sup>

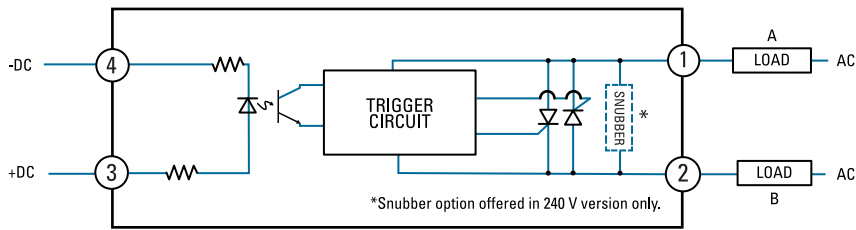
Description	Parameters
Dielectric Strength, Input/Output/Base (50/60 Hz)	2500 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 <sup>9</sup> Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	1.5 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

# MECHANICAL SPECIFICATIONS

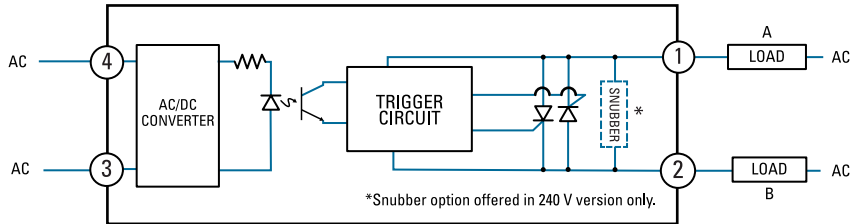
Tolerance:  $\pm 0.02$  in / 0.5 mm  
 All dimensions are in inches [millimeters]



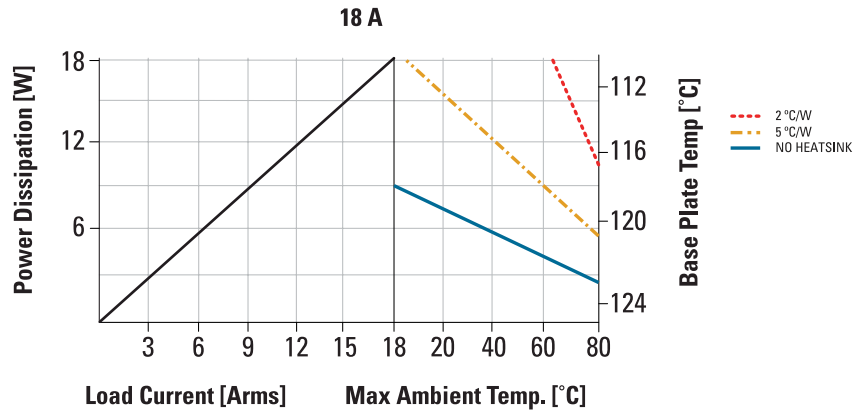
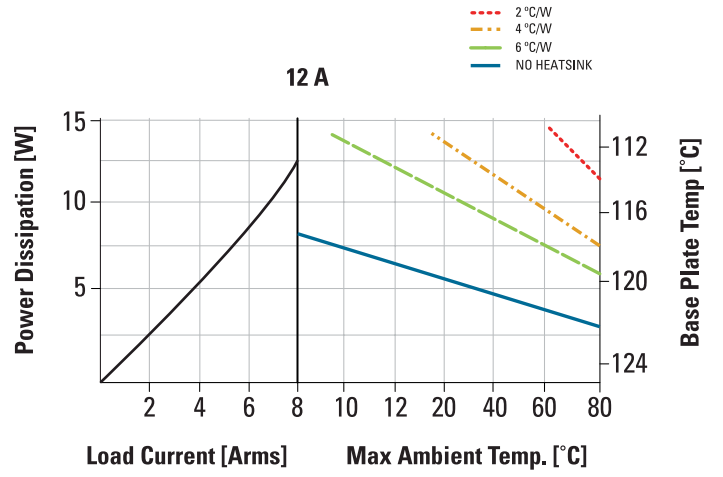
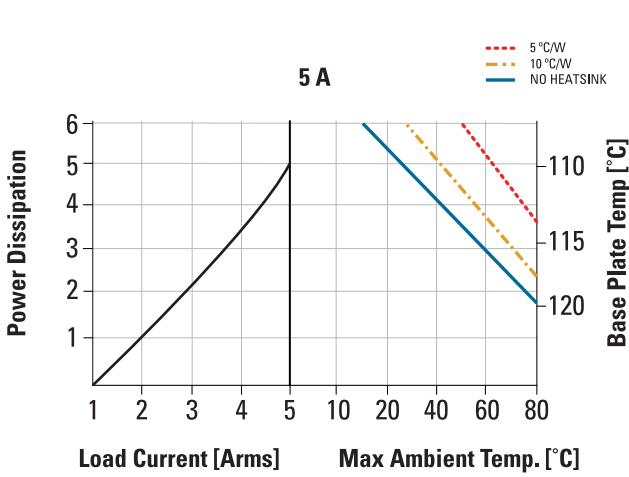
# WIRING DIAGRAM



Load can be wired in location A or B

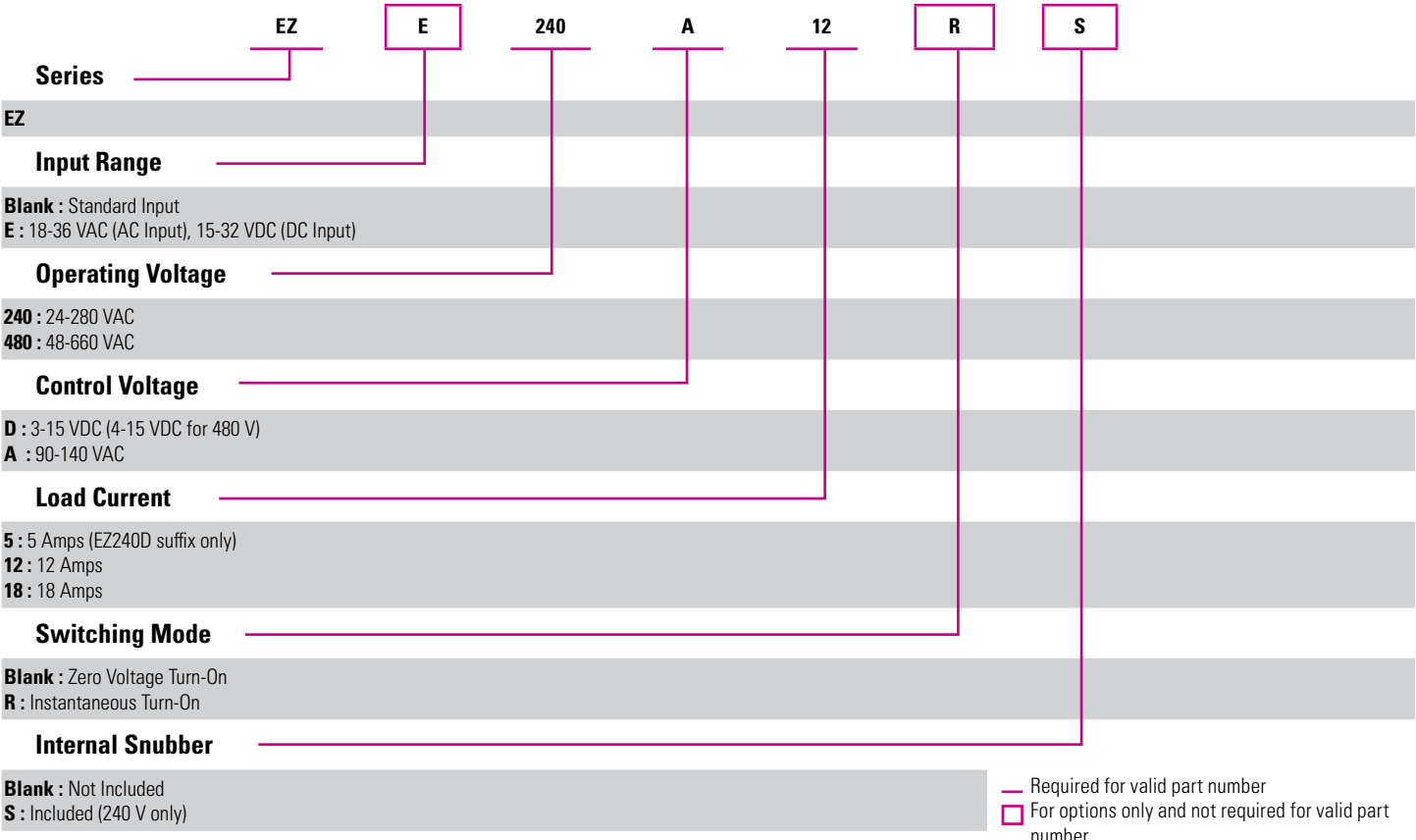


**THERMAL DERATE INFORMATION**



# ORDERING OPTIONS

Example : EZ240D12RS



# 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 snubbed 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



Designed in accordance with the requirements of IEC 62314  
 EN60950 : Meets the requirements of sections 1.5: 1.7: 2.9: 2.10.5.3: 4.2: 4.5: 4.7:

## 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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