

| 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 (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 I²t for Fusing (50/60 Hz) [A² 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)

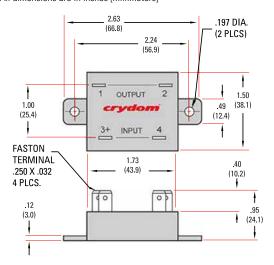
| Description | EZ240Dxx | EZ480Dxx | EZExxxDxx | EZxxxAxx | EZExxxAxx |
|---|-----------|-----------|-----------|-------------|------------|
| Control Voltage Range | 3-15 VDC | 4-15 VDC | 15-32 VDC | 90-140 Vrms | 18-36 Vrms |
| Minimum Turn-On Voltage | 3.0 VDC | 4.0 VDC | 15.0 VDC | 90.0 Vrms | 18.0 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)

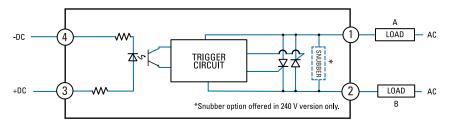
| Description | Parameters | |
|---|----------------------------|--|
| Dielectric Strength, Input/Output/Base (50/60 Hz) | 2500 Vrms | |
| Minimum Insulation Resistance (@ 500 VDC) | 10 ⁹ Ohms | |
| Maximum Capacitance, Input/Output | 8 pF | |
| Ambient Operating Temperature Range | -40 to 80°C | |
|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

MECHANICAL SPECIFICATIONS

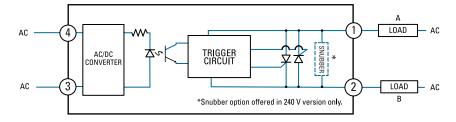
Tolerance: ± 0.02 in / 0.5 mm All dimensions are in inches [millimeters]



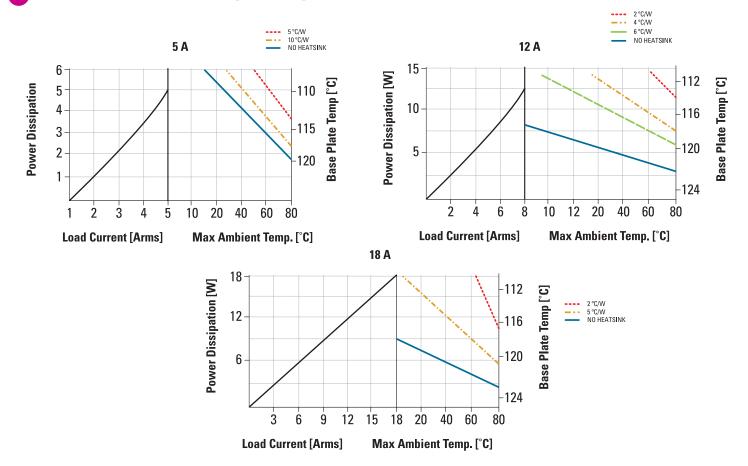
WIRING DIAGRAM

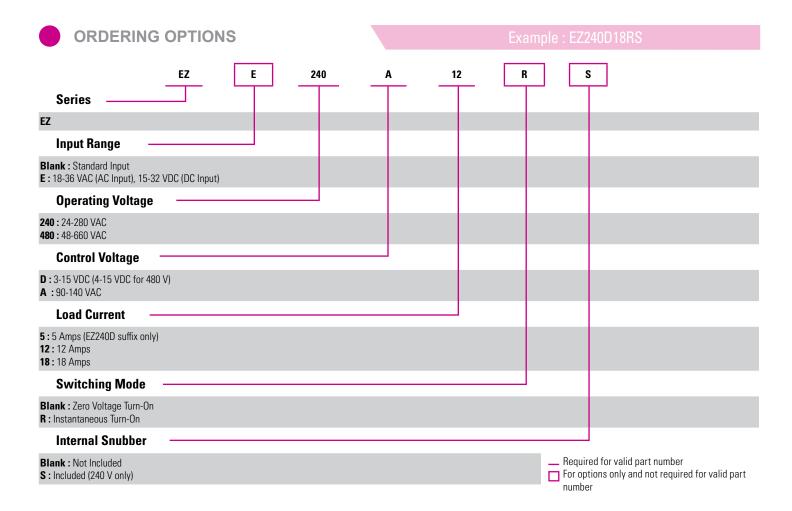


Load can be wired in location A or B



THERMAL DERATE INFORMATION



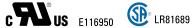




GENERAL NOTES

- (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















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:





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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