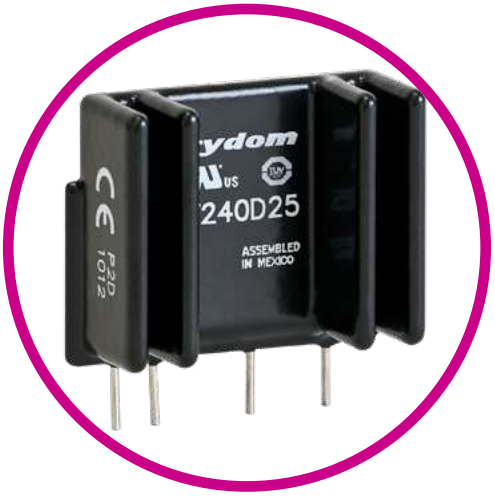
PF SERIES

PCB MOUNT SOLID STATE RELAYS



Features

- SIP style SSR
- Ratings up to 25 A (forced air) @ 660 VAC
- SCR output for heavy industrial loads
- AC or DC control
- Zero voltage (resistive loads) or instantaneous (inductive loads) turn-on output

PRODUCT SELECTION

Control Voltage	25 A	25 A	25 A
3-15 VDC	PF240D25		
4-15 VDC		PF380D25	PF480D25
15-32 VDC	PFE240D25	PFE380D25	PFE480D25
18-36 VAC	PFE240A25		
90-140 VAC	PF240A25		

SPECIFICATIONS

Output[1]

Description	PF240	PF380	PF480
Operating Voltage (47-63 Hz) [Vrms]	12-280	48-530	48-660
Transient Overvoltage [Vpk]	600	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	0.1	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/µsec] [2]	500	500	500
Maximum Load Current (Convection Air) [Arms] [3]	10	10	10
Maximum Load Current (Forced Air) [Arms] [3]	25	25	25
Minimum Load Current [Arms]	0.06	0.06	0.06
Maximum Surge Current (16.6 msec) [Apk]	250	250	250
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6
Maximum I^2t for fusing (8.3 msec) [A^2 sec]	260	260	260
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5

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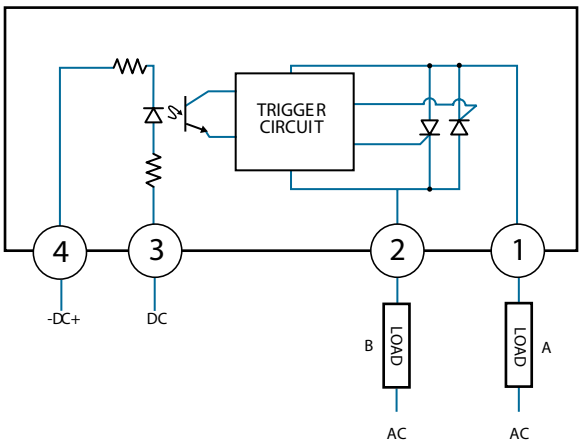
Input[1]

Description	PF240D25	PF380D/480D	PFExxxD25	PF240A25	PFE240A25
Control Voltage Range	3-15 VDC	4-15 VDC	15-32 VDC	90-140 Vrms	18-36 Vrms
Maximum Turn-On Voltage	3.0 VDC	4.0 VDC	15.0 VDC	90.0 Vrms	18.0 Vrms
Minimum Turn-On Voltage	1.0 VDC	1.0 VDC	1.0 VDC	10.0 Vrms	2.0 Vrms
Typical Input Current @ Nominal Voltage [mA]	15	15	15	10	10
Nominal Input Impedance [Ohm]	300	240	1.5K	14.1K	2.1K
Maximum Turn-On Time [msec] [4]	1/2 Cycle	1/2 Cycle	1/2 Cycle	10	10
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle	1/2 Cycle	40	40

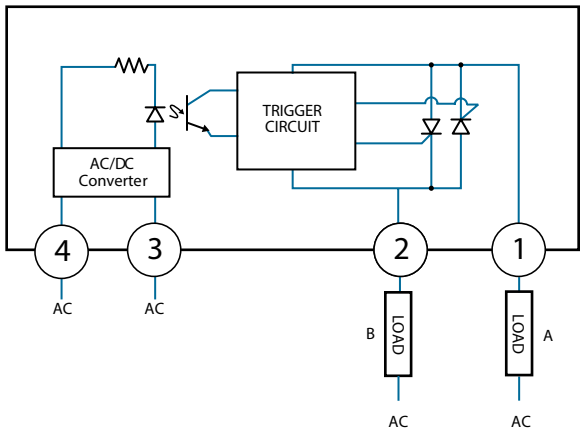
General

Description	Parameters
Dielectric Strength, Input/Output (50/60 Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 V DC)	10^9 Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-30°C to 80°C
Ambient Storage Temperature Range	-30°C to 125°C
Weight (typical)	1.02 oz. (29g)
Encapsulation	Thermally Conductive Epoxy

EQUIVALENT CIRCUIT BLOCK DIAGRAMS/WIRING DIAGRAMS



Load can be wired in location A or B



Load can be wired in location A or B

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THERMAL DERATE INFORMATION

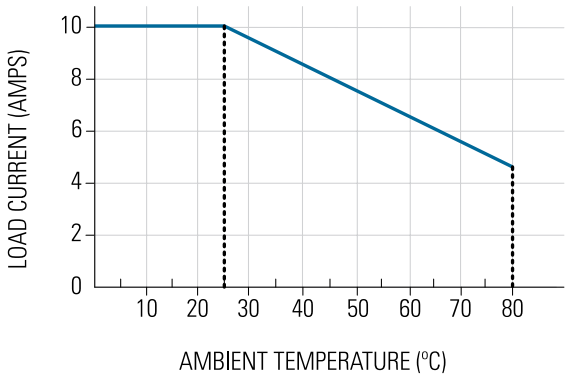


FIG.1 Convection Cooling

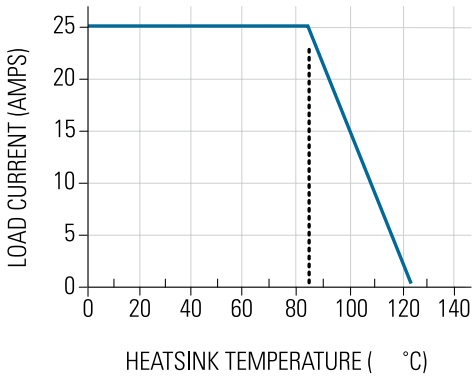
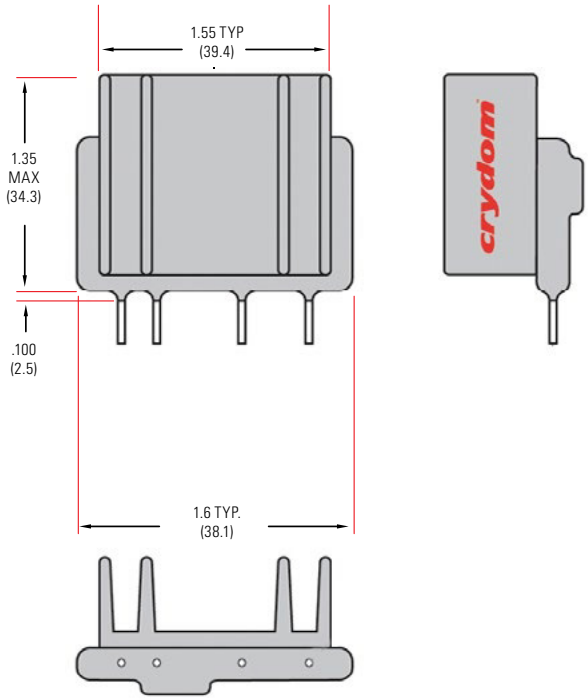


FIG.2 Forced Air Cooling

MECHANICAL SPECIFICATIONS

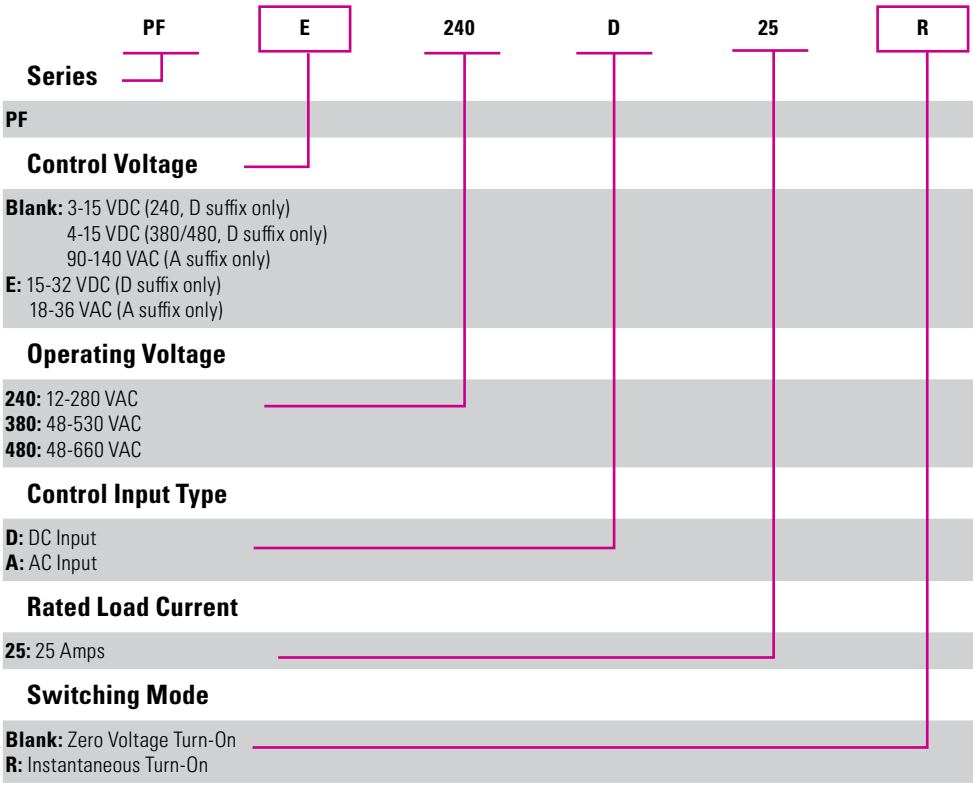
*Tolerances: ±0.02 in / 0.5 mm
All dimensions are in: inches [millimeters]



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AVAILABLE OPTIONS

Example : PFE240D25R



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

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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] Heatsink temperature 85°C Maximum for 25A forced air cooling.
[4] Turn-On Time for Instantaneous Turn-On versions 0.1 msec (DC Control Models)

AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314

c UL us E116950 (Except AC Control and 380V, DC Control, Instantaneous)

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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