



Series PF, PowerFin™

Up to 25Amp • 120/240, 380, 480 Vac • AC Output

- **Ultra High Steady State Current Rating**
- **Low Leakage (Off-State)**
- **SCR Output**
- **AC or DC Control**
- **Crydom's Patented Design**

Crydom's PowerFin™ series delivers the highest ratings of any single in-line package (SIP). The integral heat sink design can operate at 25 amps RMS in forced air at 85°C case temp. With natural convection in free air, it rates 10 amps RMS at 25°C ambient.

Built-in advantages include Surface Mount Technology and SCR output. Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

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MODEL NUMBERS	AC CONTROL (120Vac) (24Vac)	PF240A25 PFE240A25		
	DC CONTROL (5Vdc) (24Vdc)	PF240D25 PFE240D25	PF380D25 PFE380D25	PF480D25 PFE480D25
OUTPUT SPECIFICATIONS ①				
Operating Voltage (47-63 Hz) [Vrms]	12-280		48-530	48-660
Load Current Range [Arms]			Forced Air .06-25 ③ Convection Air .06-10	
Transient Overvoltage [Vpk]	600	1200	1200	1200
Max. Surge Current, (16.6ms) [Apk]	250	250	250	250
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6
Maximum I ² t for Fusing, (8.3 msec.) [A ² sec]	260	260	260	260
Max. Off-State Leakage Current @ Rated Voltage [mArms]	0.1	0.1	0.1	0.1
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②	500	500	500	500
Max. Turn-On Time ④	1/2 Cycle (DC Control), 10.0 msec (AC Control)			
Max. Turn-Off Time	1/2 Cycle (DC Control), 40.0 msec (AC Control)			
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS ①	DC CONTROL			AC CONTROL		
	Nominal Voltage	5Vdc	5Vdc	24Vdc	120Vac	24Vac
MODEL NUMBERS		PF380D25 PF480D25	PFE240D25 PFE380D25 PFE480D25		PF240A25	PFE240A25
Control Voltage Range	3-15 Vdc	4-15 Vdc	15-32 Vdc		90-140 Vrms	18-36 Vrms
Max. Turn-On Voltage	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		10.0 Vrms	2.0 Vrms
Nominal Input Impedance	300 Ohm	240 Ohm	1500 Ohm		14.1k Ohm	4.2k Ohm
Typical Input Current @ Nominal Voltage	15 mAdc	15 mAdc	15 mAdc		10 mArms	5 mArms

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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.
- ④ Turn-On Time for Random Turn-On versions 0.1msec (DC Control Models).





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GENERAL SPECIFICATIONS

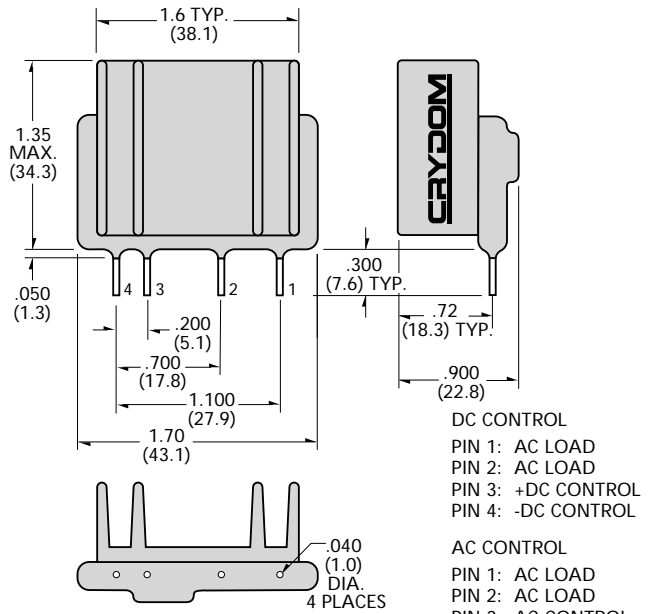
Dielectric Strength 50/60Hz Input/Output	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 ⁹ Ohm
Max. Capacitance Input/Output	8 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-30 to 125°C

MECHANICAL SPECIFICATIONS

Weight: (typical)	.85 oz. (25g)
Encapsulation:	Thermally Conductive Epoxy

AVAILABLE OPTIONS

- R Random Turn-On (AC & DC Control, 240V Only)
- Phase Controllable (DC Control, 240V Only)
- Example: **PF240A25 R, PFE240D25 R**



All dimensions are in inches (millimeters)

CURRENT DERATING CURVES

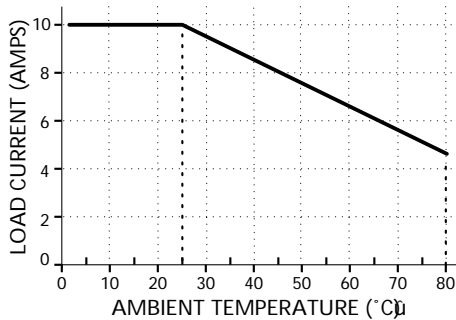


Fig.1 Convection Cooling

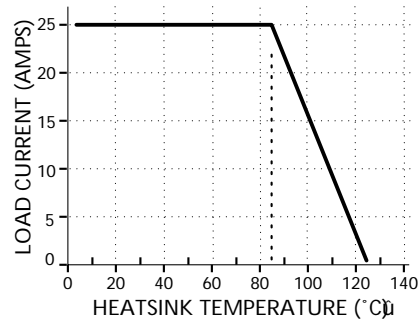



Fig.2 Forced Air Cooling

APPROVALS

UL E116950 
 VDE 70938 (DC Control Only)

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