



Series HPF

20, 30Amp • 120/240/480 Vac • AC Output

- DIN Rail Mount
- Integral Heat sink
- LED Status Indicator
- SCR Output
- Zero Voltage and Random Turn-On Switching
- Low Leakage

The Series HPF Solid State Relays utilize Crydom's proprietary thermal management technology providing a compact and efficient design. Built-in DIN Rail attachment, easy-to-use cage type terminals and integral heat sinking complete the package. This compact new design offers up to 30Arms in ambient temperatures of 25°C.

Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

MODEL NUMBERS	HPF240D20	HPF240D30	HPF480D20	HPF480D30
OUTPUT SPECIFICATIONS^①				
Operating Voltage (47-63 Hz) [Vrms]	12-280	12-280	48-660	48-660
Max. Load Current [Arms]	20	30	20	30
Min. Load Current, [mArms]	150	150	150	150
Transient Overvoltage [Vpk]	600	600	1200	1200
Max. Surge Current, (16.6ms) [Apk]	250	625	250	625
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.4	1.6	1.4
Maximum I^2t for Fusing, (8.3 msec.) [$I^2\text{sec}$]	260	1620	260	1620
Max. Off-State Leakage Current @ Rated Voltage [mArms] ^②	0.1	0.1	0.1	0.1
Min. Off-State dv/dt @ Max. Rated Voltage [V/ μsec] ^③	500	500	500	500
Max. Turn-On Time ^④	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle
Max. Turn-Off Time	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS^①

	(HPF240Dxx)	DC CONTROL	(HPF480Dxx)
Control Voltage Range	4-32 Vdc		4.5-32 Vdc
Max. Turn-On Voltage	5.0 Vdc		5.0 Vdc
Min. Turn-Off Voltage	1.0 Vdc		1.0 Vdc
Nominal Input Impedance	See Note ^⑤		See Note ^⑤
Typical Input Current @ 5Vdc	5 mAdc		5 mAdc
Typical Input Current @ 20Vdc	20 mAdc		20 mAdc

GENERAL NOTES

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① All parameters at 25°C unless otherwise specified.

② Off-State leakage for snubbed version (S suffix) is 10 mArms

③ Off-State dv/dt test method per **EIA/NARM** standard RS-443, paragraph 13.11.1

④ Turn-on time for random turn-on version is 0.02 msec.

⑤ Input circuitry incorporates active current limiter.

Operating voltage range for snubbed version (S-suffix) is 48-530 Vrms.

For recommended applications and more information contact:

USA: Sales Support (877) 502-5500 **Tech Support** (877) 702-7700 **FAX** (619) 710-8540
Crydom Corp, 2320 Paseo de las Americas, Ste. 201, San Diego, CA 92154

Email: sales@crydom.com **WEB SITE:** <http://www.crydom.com>

UK: +44 (0)1202 365070 • **FAX** +44 (0)1202 365090 Crydom International Ltd., 7 Cobham Road, Ferndown Industrial Estate, Ferndown, Dorset BH21 7PE, **Email:** intsales@crydom.com.

GERMANY: +49 (0)180 3000 506



CRYDOM

Control over power

Series HPF

20, 30Amp • 120/240/480 Vac • AC Output

GENERAL SPECIFICATIONS

Dielectric Strength 50/60Hz Input/Output/Base 4000 Vrms

Insulation Resistance (Min.) @ 500 Vdc 10^9 Ohm

Max. Capacitance Input/Output 8 pF

Ambient Operating Temperature Range -40 to 80°C

Ambient Storage Temperature Range -40 to 125°C

MECHANICAL SPECIFICATIONS

Weight: (typical) 9.2 oz. (260g)

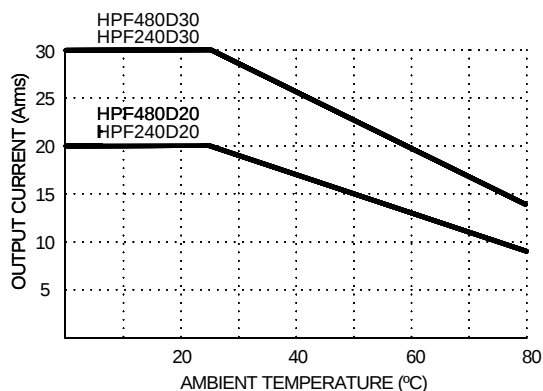
Encapsulation: Thermally Conductive Epoxy

Terminals: Cage Type,

Maximum Wire Size: AWG 8 (3.3mm)

Max. Terminal Screw Torque 5.3 in lb (0.6 Nm)

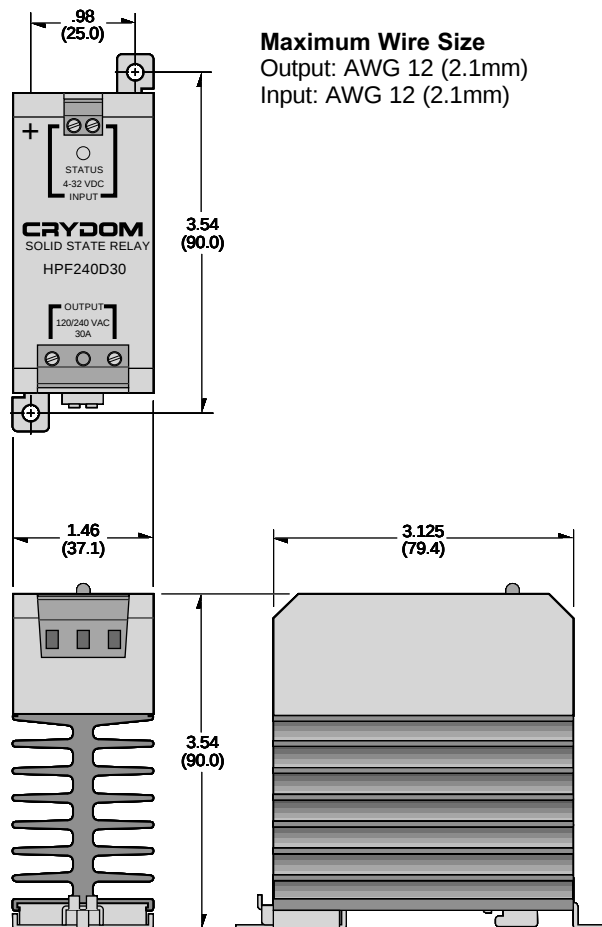
CURRENT DERATING CURVES



HPF Max. Output Current vs. Temp.

AVAILABLE OPTIONS

- R** Random Turn-On
Example: **HPF480D30R**
- S** Internal Snubber
Example: **HPF240D20RS**



Maximum Wire Size
Output: AWG 12 (2.1mm)
Input: AWG 12 (2.1mm)

All dimensions are in inches (millimeters)

APPROVALS

PENDING

FastFax Document No.155
SERIES HPF.
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