



H12 Series

- Ratings from 25A to 125A @ 48-530 VAC
- Snubber Included
- SCR output for heavy industrial loads
- Zero Voltage or instantaneous turn-on outputs
- UL/CSA/VDE Approved, CE Compliant to EN60950-1
- Improved SEMS screw and washer
- Redesigned housing with anti-rotation barriers
- DC control
- Direct Bond Copper substrate
- EMC Compliant to Level 3
- Direct Power Lead Frame
- Epoxy Free Design

For **Generation 3** datasheet [click here](#)

PRODUCT SELECTION

Control Voltage	25A	50A	75A	90A	125A
4-32 VDC	H12D4825	H12D4850	H12D4875	H12D4890	H12D48125

AVAILABLE OPTIONS

Series

Transient Overvoltage
2D: 1200 Vpk

Rated Load Current
25: 25 Amps
50: 50 Amps
75: 75 Amps
90: 90 Amps
125: 125 Amps

Overvoltage Protection
Blank: Not Included
P: Included (1)

Thermal Pad
Blank: Not Included
H: Included

Operating Voltage
48: 48-530 VAC

Termination
Blank: Screw
F: Quick Connect (2)
(Up to 50 Amps models)
K: Hex standoffs (3)

Input Status LED
Blank: Not Included
G: Included

Switching Type
Blank: Zero Voltage Turn-On
-10: Instantaneous Turn-On (4)

● Required for valid part number
● For options only and not required for valid part number
* Not all part number combinations are available. Contact Crydom Technical Support for information on the availability of a specific part number.

OUTPUT SPECIFICATIONS (5)

Description	25A	50A	75A	90A	125A
Operating Voltage (47-63Hz) [Vrms]	48-530	48-530	48-530	48-530	48-530
Transient Overvoltage [Vpk]	1200	1200	1200	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA rms]	10	10	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec]	500	500	500	500	500
Maximum Load Current [Arms] (6)(3)	25	50	75	90	125
Minimum Load Current [mA rms]	150	150	150	150	150
Maximum 1 Cycle Surge Current (50/60Hz) [A pk]	239/250	597/625	954/1000	1145/1200	1670/1750
Maximum On-State Voltage Drop @ Rated Current [Vrms]	1.15	1.15	1.15	1.15	1.15
Thermal Resistance Junction to Case [Rjc] [°C/W]	0.8	0.45	0.3	0.27	0.22
Maximum 1/2 Cycle I ² t for Fusing (50/60Hz) [A ² sec]	285/259	1770/1629	4555/4150	6560/5976	13950/12709
Minimum Power Factor (at Maximum Load) (1)	0.5	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS (5)

Description	DC Control
Control Voltage Range	4-32 VDC
Minimum Turn-On Voltage (7)	4.0 VDC
Must Turn-Off Voltage	1.0 VDC
Maximum Reverse Voltage	-32 VDC
Minimum Input Current	7 mA DC
Maximum Input Current	12 mA DC
Nominal Input Impedance	Current Regulated
Maximum Turn-On Time [msec] (8)	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle