

GDH 500 to 1000Amps AC SSR



Single phase Solid State Relay (SCR output)

Series GDH are power line relays allowing 500 to 1000 Amps. switching power, with Voltage ratings from 280 to 480 Volts A.C. GDH series is Dual SCR Power Hybrid technology provides highly efficient thermal management for greatly increased cyclic life.

Features

- High performance/low cost circuit design.
- Logic compatible current regulated input.
- 2500 Vrms optical isolation.
- Both "Zero Voltage" & phase controllable "Random Switching" versions.
- High voltage (1200 Vpk) versions for 480 Vrms service.
- LED-indication for control input.
- Control voltage range: 4~16 Vdc, 4 to 32 Vdc or 90~250Vac.

Symbol

Meaning

G	Greegoo
D	Single phase
H	SCR output
*	500-500A, 600-600A, 800-800A, 1000-1000A
*	28-280V, 48-480V
*	Z-zero control, R-random control
*	D1-4-16Vdc, D3-4-32Vdc, A2-90-250Vac

For example: GDH50048ZD3, single phase, SCR output, 500A, 480Vac, 3-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current	
		500 Amp	600Amp
240 VAC "Z"	4 to 16 Vdc	GDH50024ZD1B	GDH60024ZD1B
240 VAC "R"	4 to 16 Vdc	GDH50024RD1B	GDH60024RD1B
240 VAC "Z"	4 to 32 Vdc	GDH50024ZD3B	GDH60024ZD3B
240 VAC "R"	4 to 32 Vdc	GDH50024RD3B	GDH60024RD3B
440 VAC "Z"	4 to 16 Vdc	GDH50044ZD1B	GDH60044ZD1B
440 VAC "R"	4 to 16 Vdc	GDH50044RD1B	GDH60044RD1B
440 VAC "Z"	4 to 32 Vdc	GDH50044ZD3B	GDH60044ZD3B
440 VAC "R"	4 to 32 Vdc	GDH50044RD3B	GDH60044RD3B
		800Amp	1000Amp
280 VAC "Z"	4 to 16 Vdc	GDH80028ZD1B	GDH100028ZD1B
280 VAC "R"	4 to 16 Vdc	GDH80028RD1B	GDH100028RD1B
280 VAC "Z"	4 to 32 Vdc	GDH80028ZD3B	GDH100028ZD3B
280 VAC "R"	4 to 32 Vdc	GDH80028RD3B	GDH100028RD3B
480 VAC "Z"	4 to 16 Vdc	GDH80048ZD1B	GDH100048ZD1B
480 VAC "R"	4 to 16 Vdc	GDH80048RD1B	GDH100048RD1B
480 VAC "Z"	4 to 32 Vdc	GDH80048ZD3B	GDH100048ZD3B
480 VAC "R"	4 to 32 Vdc	GDH80048RD3B	GDH100048RD3B

Parameter-list	Specification Limits	
Input Parameter	D1	D3
Control Voltage Range	4 to 16Vdc	3 to 32Vdc
Input Current(Max.)	13/42mAdc @=5V/12V	13/16mAdc @=5V/12V
Must Turn On Voltage	4Vdc	3.5Vdc
Must Turn Off Voltage	1Vdc	1Vdc
Reverse Voltage (Max.)	32Vdc	32Vdc

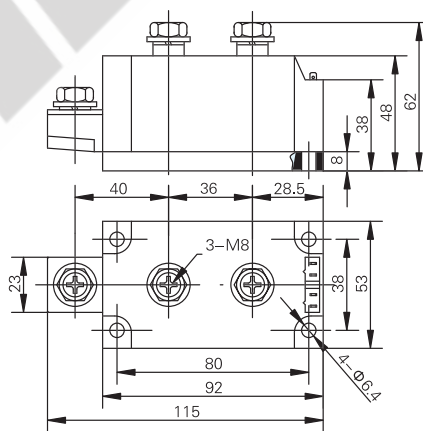
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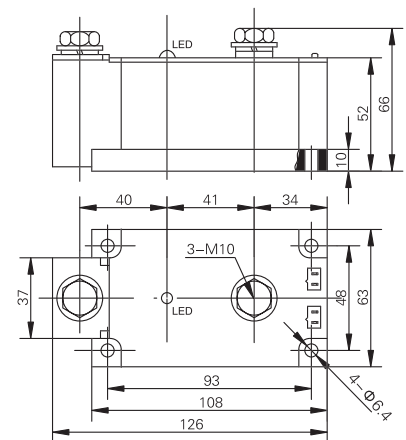
Specifications

Output Parameter	Units	Specification Limits			
		500	600	800	1000
Model No.:GDH	Amp	500	600	800	1000
Load Current Range	Arms	0.05 to 500	0.05 to 600	0.05 to 800	0.05 to 1000
Surge Current 20mSec(Max.)	Arms	7200	8800	11500	12000
Load Voltage Range(240V)	Vrms	24 to 280			
SCR Over voltage(240V)	Vpk	≥1000			
Load Voltage Range(440V)	Vrms	44 to 480			
SCR Over voltage(440V)	Vpk	≥1200			
Thermal Resistance,(Rthjc)	°C/w	0.1	0.1	0.08	0.07
Frequency Range	Hz	47 to 63			
Off State dv/dt (Min.)	V/μsec	500			
Off State Leakage Current(Max.)	mArms	≤10			
On State Voltage Drop(Max.)	Vrms	1.8			
Turn On Time (Max.)"Z"	Cycle	1/2			
Turn On Time (Max.)"R"	mSec	1			
Turn Off Time (Max.)	Cycle	1/2			
Turn Off Time (Max.)"A2"	mSec	40			
Dielectric (Input/Output)	Vrms	2500			
Dielectric (Input-Output/Base)	Vrms	2500			
Capacitance	pf	10			
Ambient Temperature Range	Operating or Storage -30°C to +80°C				
Weight (Typical)	g	880	880	1500	1500
Base Plate	Copper, nikel-plated				
Case Color	Black				
Led Display	Yes				

Dimension



500A~600A



800A~1000A