

GDH 200 to 400Amps AC SSR



Single phase Solid State Relay (SCR output)

Series GDH are power line relays allowing 200 to 400 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
*	200-200A, 250-250A, 300-300A, 350-350A, 400-400A
*	28-280V, 48-480V
*	Z-zero control, R-random control
*	D1-4-16Vdc, D3-4-32Vdc, A2-90-250Vac

For example: GDH25048ZD3, single phase, SCR output, 250A, 480Vac, 3-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		200 Amp	250Amp	300Amp
280 VAC "Z"	4 to 16 Vdc	GDH20028ZD1B	GDH25028ZD1B	GDH30028ZD1B
280 VAC "R"	4 to 16 Vdc	GDH20028RD1B	GDH25028RD1B	GDH30028RD1B
280 VAC "Z"	4 to 32 Vdc	GDH20028ZD3B	GDH25028ZD3B	GDH30028ZD3B
280 VAC "R"	4 to 32 Vdc	GDH20028RD3B	GDH25028RD3B	GDH30028RD3B
280 VAC "Z"	90 to 250Vac	GDH20028ZA2B	GDH25028ZA2B	GDH30028ZA2B
280 VAC "R"	90 to 250Vac	GDH20028RA2B	GDH25028RA2B	GDH30028RA2B
480 VAC "Z"	4 to 16 Vdc	GDH20048ZD1B	GDH25048ZD1B	GDH30048ZD1B
480 VAC "R"	4 to 16 Vdc	GDH20048RD1B	GDH25048RD1B	GDH30048RD1B
480 VAC "Z"	4 to 32 Vdc	GDH20048ZD3B	GDH25048ZD3B	GDH30048ZD3B
480 VAC "R"	4 to 32 Vdc	GDH20048RD3B	GDH25048RD3B	GDH30048RD3B
480 VAC "Z"	90 to 250Vac	GDH20048ZA2B	GDH25048ZA2B	GDH30048ZA2B
480 VAC "R"	90 to 250Vac	GDH20048RA2B	GDH25048RA2B	GDH30048RA2B
		350 Amp		400Amp
280 VAC "Z"	4 to 16 Vdc	GDH35028ZD1B		GDH40028ZD1B
280 VAC "R"	4 to 16 Vdc	GDH35028RD1B		GDH40028RD1B
280 VAC "Z"	4 to 32 Vdc	GDH35028ZD3B		GDH40028ZD3B
280 VAC "R"	4 to 32 Vdc	GDH35028RD3B		GDH40028RD3B
280 VAC "Z"	90 to 250Vac	GDH35028ZA2B		
280 VAC "R"	90 to 250Vac	GDH35028RA2B		
480 VAC "Z"	4 to 16 Vdc	GDH35048ZD1B		GDH40048ZD1B
480 VAC "R"	4 to 16 Vdc	GDH35048RD1B		GDH40048RD1B
480 VAC "Z"	4 to 32 Vdc	GDH35048ZD3B		GDH40048ZD3B
480 VAC "R"	4 to 32 Vdc	GDH35048RD3B		GDH40048RD3B
480 VAC "Z"	90 to 250Vac	GDH35048ZA2B		
480 VAC "R"	90 to 250Vac	GDH35048RA2B		

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Specifications

Parameter-list	Specification Limits					
Input Parameter	D1	D3	A2			
Control Voltage Range	4 to 16Vdc	4 to 32Vdc	90 to 250Vac			
Input Current(Max.)	13/42mAadc @=5V/12V	13/16mAadc @=5V/12V	30mAac @=220V			
Must Turn On Voltage	4Vdc	3.5Vdc	90Vac			
Must Turn Off Voltage	1Vdc	1Vdc	10Vac			
Reverse Voltage (Max.)	32Vdc	32Vdc	/			
Output Parameter	Units	Specification Limits				
Model No.:GDH	Amp	200	250	300	350	400
Load Current Range	Arms	0.05 to 200	0.05 to 250	0.05 to 300	0.05 to 350	0.05 to 400
Surge Current 20mSec(Max.)	Arms	2500	3400	4500	5000	6000
Load Voltage Range(240V)	Vrms	24 to 280				
SCR Over voltage(240V)	Vpk	≥800				
Load Voltage Range(440V)	Vrms	44 to 480				
SCR Over voltage(440V)	Vpk	≥1200				
Thermal Resistance,(Rthjc)	°C/w	0.22	0.15	0.14	0.13	0.12
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)	280g					
Base Plate	Copper, nikel-plated					
Case Color	Black					
Led Display	Yes					

Dimension

