



**Ordering Key**

G	D	H	200	48	Z	D1
1	2	3	4	5	6	7

- 1: Greegoo brand;
- 2: Switch type: S - small size (1-5A), D - single phase, T - three phase;
- 3: Output method, blank - triac output, H - SCR output;
- 4: Rated working current (A);
- 5: Rated working voltage (V) (24:240 V,44:440V,48:480V);
- 6: Control method Z - Zero, R - Random;
- 7: Control voltage D: 3-8V, D1 - 4-16VDC, D3 - 3-32VDC, A2 - 90-250VAC.

**GDH 400 to 550 Amps AC SSR**

Series GDH are power line relays allowing 400 to 550 Amps. switching power, with Voltage ratings from 28 to 480 Volts A.C.

Series GDH is Dual SCR Power Hybrid technology provides highly efficient thermal management for greatly increased cyclic life.

- High power and high current.
- High performance/low cost circuit design.
- Logic compatible current regulated input.
- 4000 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 to 16 Vdc, 3 to 32 Vdc or 90 to 250Vac.
- Industry standard "SCR Modules" package.

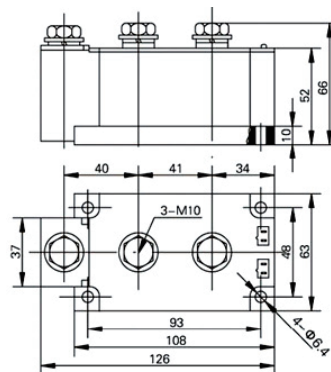
**Type Selection**

- Mounting type
  - Rated operational current
  - Rated operational voltage
  - Switched mode
  - Input Control voltage
- DH: AC Single phase, SCR Output.  
 400: 400Amp, 450: 450Amp, 500: 500Amp, 550: 550Amp.  
 28: 280VAC, 48: 480VAC.  
 Z: Zero Voltage, R: Random Switching.  
 D1: DC 4 to 16V, D3: DC 3 to 32V, A2: AC 90 to 250V.

**Selection guide**

Voltage	Control voltage	Rated operational current			
		400 Amp	450 Amp	500 Amp	550 Amp
280 V <sub>AC</sub> "Zero Voltage"	4to16 Vdc	GDH40028ZD1	GDH45028ZD1	GDH50028ZD1	GDH55028ZD1
	3to32 Vdc	GDH40028ZD3	GDH45028ZD3	GDH50028ZD3	GDH55028ZD3
	90to250Vac	GDH40028ZA2	GDH45028ZA2	GDH50028ZA2	GDH55028ZA2
280 V <sub>AC</sub> "Random Switching"	4to16 Vdc	GDH40028RD1	GDH45028RD1	GDH50028RD1	GDH55028RD1
	3to32 Vdc	GDH40028RD3	GDH45028RD3	GDH50028RD3	GDH55028RD3
	90to250Vac	GDH40028RA2	GDH45028RA2	GDH50028RA2	GDH55028RA2
480 V <sub>AC</sub> "Zero Voltage"	4to16 Vdc	GDH40048ZD1	GDH45048ZD1	GDH50048ZD1	GDH55048ZD1
	3to32 Vdc	GDH40048ZD3	GDH45048ZD3	GDH50048ZD3	GDH55048ZD3
	90to250Vac	GDH40048ZA2	GDH45048ZA2	GDH50048ZA2	GDH55048ZA2
480 V <sub>AC</sub> "Random Switching"	4to16 Vdc	GDH40048RD1	GDH45048RD1	GDH50048RD1	GDH55048RD1
	3to32 Vdc	GDH40048RD3	GDH45048RD3	GDH50048RD3	GDH55048RD3
	90to250Vac	GDH40048RA2	GDH45048RA2	GDH50048RA2	GDH55048RA2

**Dimension**



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**Specifications**

Input Parameter ①	D3	A2
Control Voltage Range	3 to 32Vdc	90 to 250Vac
Input Current (Max.)	13/16 mA <sub>dc</sub> @ =5V/24V	29 mA <sub>ac</sub> @ =220V
Must Turn On Voltage	3Vdc	90Vac
Must Turn Off Voltage	1 Vdc	10Vdc
Reverse Voltage (Max.)	32Vdc	/
Display LED	yes	yes

Output Parameter ②	Units	Specification Limits			
Model No. GDH		400A	450A	500A	550A
Load Current Range	Arms	00.05 to 400	0.05 to 450	0.05 to 500	0.05 to 550
Surge Current, 20 mSec (Max.)	Arms	6000	6800	7200	8000
Load Voltage Range (280V)	Vrms	24 to 280			
SCR interdiction voltage (280V)	Vpk	≥800			
Load Voltage Range (480V)	Vrms	44 to 480			
SCR interdiction voltage (480V)	Vpk	≥1200			
Frequency Range	Hz	47 to 63			
Min. Off-state dv/dt	V/μsec	500			
Off State Leakage Current (Max.)	mArms	≤10			
On-State Voltage Drop (Max.)	Vrms	1/2			
Thermal Resistance, (Rthjc)	°C/w	0.12	0.12	0.1	0.1
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			

**General Specifications**

Dielectric (Input/Output)	Vrms	2500	2500	2500	2500
Dielectric (Input-Output/Base)	Vrms	2500	2500	2500	2500
Capacitance	pf	10	10	10	10
Ambient Operating Temperature Range		-30°C to +80°C			
Ambient Storage Temperature Range	g	-30°C to +80°C			
Weight: ( typical)		2200g			
Base plate: Copper, nickel-plated					
Case Color: Black					
Mounting Dimensions:	LxWxH	126x63x66 mm			