



**GDH 60 to 150 Amps AC SSR**

SOLID STATE RELAYS is series GDH are power line relays allowing 10 to 150 Amps. switching power, with Voltage ratings from 28 to 480 Volts A.C.  
SGDH series 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: 4~16 Vdc or 3 to 32 Vdc
- Industry standard "SCR Modules" package.

**Ordering Key**

G D H 150 48 Z D1  
1 2 3 4 5 6 7

- 1: Greego 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.

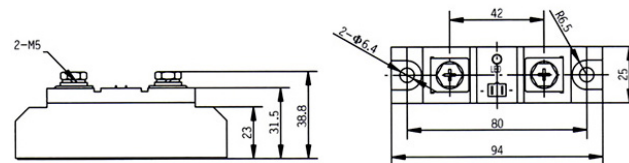
**Type Selection**

- Mounting type
  - Rated operational current
  - Rated operational voltage
  - Switched mode
  - Input Control voltage
  - Case type
- DH: AC Single phase, SCR Output.  
60: 60Amp, 80: 80Amp, 100:100Amp, 120: 120Amp, 150: 150Amp.  
28: 280VAC, 48: 480VAC.  
Z: Zero Voltage, R: Random Switching.  
D1: DC 4~16V, D3: DC 3~32V.  
B: bar, Industry standard "SCles" package.

**Selection guide**

Voltage	Control voltage	Rated operational current				
		60 Amp	80 Amp	100 Amp	120 Amp	150 Amp
280 V <sub>AC</sub> "Zero Voltage"	4to16 Vdc	GDH6028ZD1B	GDH8028ZD1B	GDH10028ZD1B	GDH12028ZD1B	GDH15028ZD1B
	3to32 Vdc	GDH6028ZD3B	GDH8028ZD3B	GDH10028ZD3B	GDH12028ZD3B	GDH15028ZD3B
280 V <sub>AC</sub> "Random Switching"	4to16 Vdc	GDH6028RD1B	GDH8028RD1B	GDH10028RD1B	GDH12028RD1B	GDH15028RD1B
	3to32 Vdc	GDH6028RD3B	GDH8028RD3B	GDH10028RD3B	GDH12028RD3B	GDH15028RD3B
480 V <sub>AC</sub> "Zero Voltage"	4to16 Vdc	GDH6048ZD1B	GDH8048ZD1B	GDH10048ZD1B	GDH12048ZD1B	GDH15048ZD1B
	3to32 Vdc	GDH6048ZD3B	GDH8048ZD3B	GDH10048ZD3B	GDH12048ZD3B	GDH15048ZD3B
480 V <sub>AC</sub> "Random Switching"	4to16 Vdc	GDH6048RD1B	GDH8048RD1B	GDH10048RD1B	GDH12048RD1B	GDH15048RD1B
	3to32 Vdc	GDH6048RD3B	GDH8048RD3B	GDH10048RD3B	GDH12048RD3B	GDH15048RD3B

**Dimension**



**1**

**Specifications**

Input Parameter ①	D1	D3
Control Voltage Range	4 to 16Vdc	3 to 32Vdc
Input Current (Max.)	13/42 mAdc @ =5V/12V	13/16 mAdc @ =5V/24V
Must Turn On Voltage	4Vdc	3Vdc
Must Turn Off Voltage	1Vdc	1Vdc
Reverse Voltage (Max.)	32Vdc	32Vdc
Display LED	Yes	Yes

Output Parameter ②	Units	Specification Limits	
Model No. GDH		60A	80A
Load Current Range	Arms	0.05 to 60	0.05 to 80
Surge Current, 20 mSec (Max.)	Arms	600	1000
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	≤8	
On-State Voltage Drop (Max.)	Vrms	1.6	
Thermal Resistance, (Rthjc)	°C/w	0.65	0.5
Turn On Time (Max.) "Z"	Cycle	1/2	
Turn On Time (Max.) "R"	mSec	1	
Turn Off Time (Max.)	Cycle	1/2	

Model No. GDH		100A	120A	150A
Load Current Range	Arms	0.05 to 100	0.05 to 120	0.05 to 150
Surge Current, 20 mSec (Max.)	Arms	1200	1500	2000
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	≤8		
On-State Voltage Drop (Max.)	Vrms	1.6		
Thermal Resistance, (Rthjc)	°C/w	0.3	0.3	0.3
Turn On Time (Max.) "Z"	Cycle	1/2		
Turn On Time (Max.) "R"	mSec	1		
Turn Off Time (Max.)	Cycle	1/2		

**General Specifications**

Dielectric (Input/Output)	Arms	2500
Dielectric (Input-Output/Base)	Arms	2500
Capacitance(Max.)	pf	10
Ambient Operating Temperature Range		-30 °C to +80 °C
Ambient Storage Temperature Range		-30 °C to +80 °C
Weight: ( typical)		125 g.
Base plate: Aluminum or Copper, nickel-plated		
Case Color: Black		
Mounting Dimensions:	LxWxH	94x25x38mm, with LED