



**Ordering Key**

$\frac{G}{1} \frac{D}{2} \frac{H}{3} \frac{200}{4} \frac{48}{5} \frac{Z}{6} \frac{D1}{7}$

- 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.

**GD 10 to 40 Amps AC SSR**

Series GD Solid State Relays are AC relays, Triac Output. The triac version of the zero switching relay is an inexpensive solution for resistive loads. The zero switching relay switches on when the AC sine voltage just crosses zero, and switches off when the current crosses zero.

- Rated operational current 10 to 40 Amps.
- Rated operational voltage 240V or 440 V
- Input Voltage Range 4 to 16 Vdc, 3 to 32 Vdc or 90 to 250 Vac.
- 4000 Vrms Optical Isolation.(input/output)
- Both "Zero Voltage" & phase controllable "Random Switching" versions.
- LED-indication for control input.

**Type Selection**

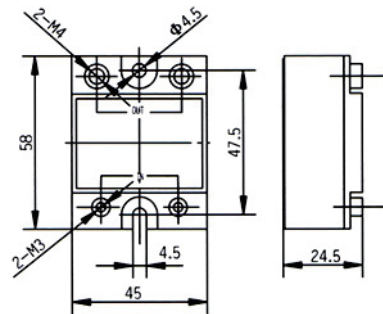
- Mounting type
  - Rated operational current
  - Rated operational voltage
  - Switched mode
  - Input Control voltage
- D: AC Single phase Solid State Relay  
 10: 10Amp, 15: 15Amp, 25: 25Amp, 40: 40Amp  
 24: 240VAC, 44: 440VAC.  
 Z: Zero Voltage,R: Random Switching.  
 D1: DC 4to16V, D3: DC 3to32V, A2: 90to250V.

**Selection guide**

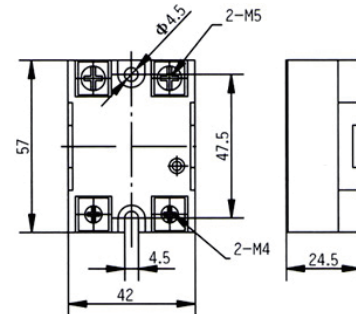
Voltage	Control voltage	Rated operational current			
		10 Amp	15 Amp	25 Amp	40 Amp
240 VAC "Z"	4 to 16 Vdc	GD1024ZD1	GD1524ZD1	GD2524ZD1	GD4024ZD1
240 VAC "R"	4 to 16 Vdc	GD1024RD1	GD1524RD1	GD2524RD1	GD4024RD1
240 VAC "Z"	3 to 32 Vdc	GD1024ZD3	GD1524ZD3	GD2524ZD3	GD4024ZD3
240 VAC "R"	3 to 32 Vdc	GD1024RD3	GD1524RD3	GD2524RD3	GD4024RD3
240 VAC "Z"	90 to 250Vac	GD1024ZA2	GD4024ZA2	GD4024ZA2	GD4024ZA2
240 VAC "R"	90 to 250Vac	GD1024RA2	GD4024RA2	GD4024RA2	GD4024RA2
440 VAC "Z"	4 to 16 Vdc	GD1044ZD1	GD1544ZD1	GD2544ZD1	GD4044ZD1
440 VAC "R"	4 to 16 Vdc	GD1044RD1	GD1544RD1	GD2544RD1	GD4044RD1
440 VAC "Z"	3 to 32 Vdc	GD1044ZD3	GD1544ZD3	GD2544ZD3	GD4044ZD3
440 VAC "R"	3 to 32 Vdc	GD1044RD3	GD1544RD3	GD2544RD3	GD4044RD3
440 VAC "Z"	90 to 250Vac	GD1044ZA2	GD1044ZA2	GD2544ZA2	GD4044ZA2
440 VAC "R"	90 to 250Vac	GD1044RA2	GD1044RA2	GD2544RA2	GD1044RA2

**Dimension**

GD 10 to 40 Case A



GD 10 to 40 Case B



**Specifications**

PARAMETER-LIST	Units		Specification Limits	
Input Parameter ①	D1	D3	A2	
Control Voltage Range	4 to 16Vdc	3 to 32Vdc	90 to 250Vac	
Input Current (Max.)	7/20 mAdc @=5V/12V	13/16 mAdc @=5V/12	30 MAac @=220V	
Must Turn On Voltage	4Vdc	3 Vdc	90Vac	
Must Turn Off Voltage	1Vdc	1 Vdc	10Vac	

Output Parameter ②	Units	Specification Limits			
Model No. <b>GD</b>		10	15	25	40
Load Current Range	Arms	0.05 to 10	0.05 to 15	0.05 to 25	0.05 to 40
Surge Current, 20 mSec (Max.)	Arms	85	115	230	400
Load Voltage Range (240V)	Vrms	24 to 280			
TRIAC Over voltage(240V)	Vpk	≥600			
Load Voltage Range (440V)	Vrms	44 to 440			
TRIAC Over voltage(440V)	Vpk	≥800			
Thermal Resistance, (Rthjc)	°C/w	2.5	2.5	1.3	1.1
Frequency Range	Hz	47 to 63			
Off State dv/dt (Min)	V/μsec	200			
Off State Leakage Current (Max.)	mArms	≤8			
On State Voltage Drop (Max.)	Vrms	1.6			
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			

**Coupling Specifications**

Dielectric (Input/Output)	Vrms	2500
Dielectric (Input-Output/Base)	Vrms	2500
Capacitance	pf	10

**General Specifications**

Ambient temperature range: operating or Storage -30°C to +80°C

Weight( typical.): **Case A** Aluminum Base plate: 99g; Copper Base plate: 145g

**Case B** Aluminum Base plate: 81g; Copper Base plate: 120g

Base plate: Aluminum or Copper, nickel-plated

Case Color: Black

Reverse Voltage (Max.)	32 Vdc	32 Vdc	/
LED Display	Optional	Optional	Optional



**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 10 to 120 Amps AC SSR**

Series GDH are power line relays allowing 10 to 120 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.

- 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 ,3 to 32 Vdc or 90~280Vac.
- Control voltage range: 4~16 Vdc ,3 to 32 Vdc or 90~280Vac.trol input.

**Type Selection**

- Mounting type
  - Rated operational current
  - Rated operational voltage
  - Switched mode
  - Input Control voltage
  - Case typ
- D: AC Single phase Solid State Relay  
 10: 10Amp, 15: 15Amp, 25: 25Amp, 40: 40Amp, 60: 60Amp, 80: 80Amp, 100: 100Amp, 120: 120Amp  
 28: 280VAC, 48: 480VAC.  
 Z: Zero Voltage,R: Random Switching.  
 D1: DC 4to16V, D3: DC 3to32V, A2: 90to250V.  
 Blank: Case A, 1: Case B, with LED.

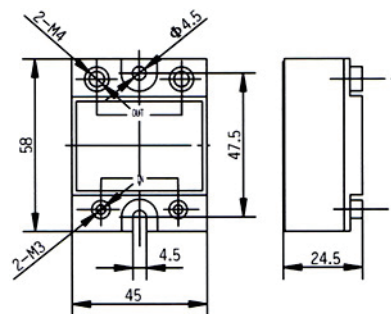
**Selection guide**

Voltage	Control voltage	Rated operational current			
		10 Amp	15 Amp	25 Amp	10 Amp
280 V <sub>AC</sub> “Zero Voltage”	4 to16 Vdc	GDH1028ZD1	GDH1528ZD1	GDH2528ZD1	GDH4028ZD1
	3 to32 Vdc	GDH1028ZD3	GDH1528ZD3	GDH2528ZD3	GDH4028ZD3
	90 to250Vac	GDH1028ZA2	GDH1528ZA2	GDH2528ZA2	GDH4028ZA2
480 V <sub>AC</sub> “Zero Voltage”	4 to16 Vdc	GDH1048ZD1	GDH1548ZD1	GDH2548ZD1	GDH4048ZD1
	3 to32 Vdc	GDH1048ZD3	GDH1548ZD3	GDH2548ZD3	GDH4048ZD3
	90 to250Vac	GDH1048ZA2	GDH1548ZA2	GDH2548ZA2	GDH4048ZA2

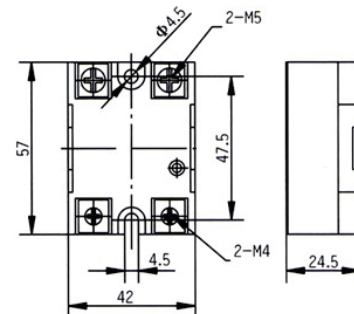
Voltage	Control voltage	Rated operational current			
		60 Amp	80 Amp	100 Amp	120 Amp
280 V <sub>AC</sub> “Random Switching”	4 to 16 Vdc	GDH6028RD1	GDH8028RD1	GDH10028RD1	GDH12028RD1
	3 to 32 Vdc	GDH6028RD3	GDH8028RD3	GDH10028RD3	GDH12028RD3
	90 to 250Vac	GDH6028RA2	GDH8028RA2	GDH10028RA2	GDH12028RA2
480 V <sub>AC</sub> “Random Switching”	4 to 16 Vdc	GDH6048RD1	GDH8048RD1	GDH10048RD1	GDH12048RD1
	3 to 32 Vdc	GDH6048RD3	GDH8048RD3	GDH10048RD3	GDH12048RD3
	90 to 250Vac	GDH6048RA2	GDH8048RA2	GDH10048RA2	GDH12048RA2

**Dimension**

GDH 10 to 120 Case A



GDH 10 to 120 Case B



**Specifications**

**Electrical Specification**

Input Parameter ①	D1	D3	A2
Control Voltage Range	4 to 16Vdc	3 to 32Vdc	90 to 250Vac
Input Current (Max.)	7/20 mAdc @ =5V/12V	13/16 mAdc @ =5V/24V	29 mAac @ =220V
Must Turn On Voltage	4Vdc	3Vdc	90Vac
Must Turn Off Voltage	1Vdc	1Vdc	10Vdc
Reverse Voltage (Max.)	32Vdc	32Vdc	/
Display LED	Yes	Yes	Yes

Output Parameter	Units	Specification Limits			
Model No. <b>GDH</b>		10A	25A	40A	60A
Load Current Range	Arms	0.05 to 10	0.05 to 25	0.05 to 40	0.05 to 60
Surge Current, 20 mSec (Max.)	Arms	200	300	400	600
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	200			
Off State Leakage Current (Max.)	mArms	≤8			
On-State Voltage Drop (Max.)	Vrms	1.6			
Thermal Resistance, (Rthjc)	°C/W	2.5	2.5	1.3	0.65
Turn On Time (Max.) "Z"	Cycle	1/2			
Turn On Time (Max.) "R"	mSec	1			
Turn Off Time (Max.)	Cycle	1/2			

Model No. <b>GDH</b>		80A	100A	120A
Load Current Range	Arms	0.05 to 80	0.05 to 100	0.05 to 120
Surge Current, 20 mSec (Max.)	Arms	1000	1200	1500
Thermal Resistance (Rthjc)	°C/W	0.5	0.3	0.3
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	200		
Off State Leakage Current (Max.)	mArms	≤8		
On-State Voltage Drop (Max.)	Vrms	1.6		
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)	Vrms	2500
Dielectric (Input-Output/Base)	Vrms	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)	Case A: Aluminum Base plate 99g, Copper Base plate 145g. Case B: Aluminum Base plate 81g, Copper Base plate 120g.	
Base plate:	Aluminum or Copper, nickel-plated	
Case Color:	Black	

1



**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 10 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 to480 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.

**Type Selection**

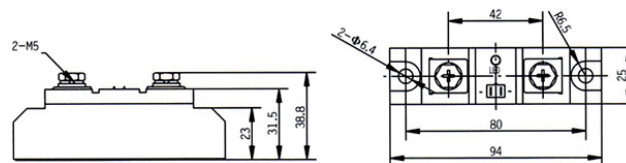
- Mounting type
  - Rated operational current
  - Rated operational voltage
  - Switched mode
  - Input Control voltage
  - Case type
- DH: AC Single phase, SCR Output.  
10: 10Amp, 25: 25Amp, 40: 40Amp, 60: 60Amp, 80: 80Amp, 100:100Amp, 120: 120Amp, 150: 150Amp.  
28: 280VAC, 48: 480VAC.  
Z: Zero Voltage, 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			
		10 Amp	25 Amp	40 Amp	60 Amp
280 V <sub>AC</sub> “Zero Voltage”	4to16 Vdc	GDH1028ZD1B	GDH2528ZD1B	GDH4028ZD1B	GDH6028ZD1B
	3to32 Vdc	GDH1028ZD3B	GDH2528ZD3B	GDH4028ZD3B	GDH6028ZD3B
280 V <sub>AC</sub> “Random Switching”	4to16 Vdc	GDH1028RD1B	GDH2528RD1B	GDH4028RD1B	GDH6028RD1B
	3to32 Vdc	GDH1028RD3B	GDH2528RD3B	GDH4028RD3B	GDH6028RD3B
480 V <sub>AC</sub> “Zero Voltage”	4to16 Vdc	GDH1048ZD1B	GDH2548ZD1B	GDH4048ZD1B	GDH6048ZD1B
	3to32 Vdc	GDH1048ZD3B	GDH2548ZD3B	GDH4048ZD3B	GDH6048ZD3B
480 V <sub>AC</sub> “Random Switching”	4to16 Vdc	GDH1048RD1B	GDH2548RD1B	GDH4048RD1B	GDH6048RD1B
	3to32 Vdc	GDH1048RD3B	GDH2548RD3B	GDH4048RD3B	GDH6048RD3B

Voltage	Control voltage	Rated operational current			
		80 Amp	100 Amp	120 Amp	150 Amp
280 V <sub>AC</sub> “Zero Voltage”	4to16 Vdc	GDH8028ZD1B	GDH10028ZD1B	GDH12028ZD1B	GDH15028ZD1
	3to32 Vdc	GDH8028ZD3B	GDH10028ZD3B	GDH12028ZD3B	GDH15028ZD3
280 V <sub>AC</sub> “Random Switching”	4to16 Vdc	GDH8028RD1B	GDH10028RD1B	GDH12028RD1B	GDH15028RD1
	3to32 Vdc	GDH8028RD3B	GDH10028RD3B	GDH12028RD3B	GDH15028RD3
480 V <sub>AC</sub> “Zero Voltage”	4to16 Vdc	GDH8048ZD1B	GDH10048ZD1B	GDH12048ZD1B	GDH15048ZD1
	3to32 Vdc	GDH8048ZD3B	GDH10048ZD3B	GDH12048ZD3B	GDH15048ZD3
480 V <sub>AC</sub> “Random Switching”	4to16 Vdc	GDH8048RD1B	GDH10048RD1B	GDH12048RD1B	GDH15048RD1
	3to32 Vdc	GDH8048RD3B	GDH10048RD3B	GDH12048RD3B	GDH15048RD3

**Dimension**



**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. <b>GDH</b>		40A	60A	80A
Load Current Range	Arms	0.05 to 40	0.05 to 60	0.05 to 80
Surge Current, 20 mSec (Max.)	Arms	400	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	1.3	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. <b>GDH</b>		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

1



**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 200 to 350 Amps AC SSR**

Series GD Solid State Relays are AC relays, Triac Output. The triac version of the zero switching relay is an inexpensive solution for resistive loads. The zero switching relay switches on when the AC sine voltage just crosses zero, and switches off when the current crosses zero.

- Rated operational current 200A to 350Amps.
- Rated operational voltage 280V or 480 V
- Input Voltage Range 4 to 16 Vdc, 3 to 32 Vdc or 90 to 250 Vac.
- 4000 Vrms Optical Isolation.(input/output)
- Both "Zero Voltage" & phase controllable "Random Switching" versions.
- LED-indication for control input.

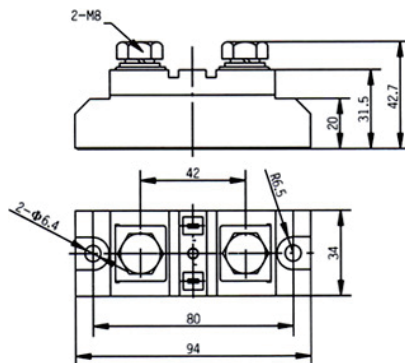
**Type Selection**

- Mounting type D: AC Single phase Solid State Relay
- Rated operational current 200: 200Amp, 250: 250Amp, 300: 300Amp, 350:350Amp
- Rated operational voltage 28: 280VAC, 48: 480VAC.
- Switched mode Z: Zero Voltage,R: Random Switching.
- Input Control voltage D1: DC 4to16V, D3: DC 3to32V, A2:AC 90to250V.
- Case type Blank: Case A, 1: Case B, with LED.

**Selection guide**

Voltage	Control voltage	Rated operational current			
		200 Amp	250 Amp	300 Amp	350 Amp
280 V <sub>AC</sub> "Zero Voltage"	4to16 Vdc	GDH20028ZD1	GDH25028ZD1	GDH30028ZD1	GDH35028ZD1
	3to32 Vdc	GDH20028ZD3	GDH25028ZD3	GDH30028ZD3	GDH35028ZD3
	90to250Vac	GDH20028ZA2	GDH25028ZA2	GDH30028ZA2	GDH35028ZA2
280 V <sub>AC</sub> "Random Switching"	4to16 Vdc	GDH20028ZD1	GDH25028ZD1	GDH30028ZD1	GDH35028ZD1
	3to32 Vdc	GDH20028ZD3	GDH25028ZD3	GDH30028ZD3	GDH35028ZD3
	90to250Vac	GDH20028ZA2	GDH25028ZA2	GDH30028ZA2	GDH35028ZA2
480 V <sub>AC</sub> "Zero Voltage"	4to16 Vdc	GDH20048ZD1	GDH25048ZD1	GDH30048ZD1	GDH35048ZD1
	3to32 Vdc	GDH20048ZD3	GDH25048ZD3	GDH30048ZD3	GDH35048ZD3
	90to250Vac	GDH20048ZA2	GDH25048ZA2	GDH30048ZA2	GDH35048ZA2
480 V <sub>AC</sub> "Random Switching"	4to16 Vdc	GDH20048RD1	GDH25048RD1	GDH30048RD1	GDH35048RD1
	3to32 Vdc	GDH20048RD3	GDH25048RD3	GDH30048RD3	GDH35048RD3
	90to250Vac	GDH20048RA2	GDH25048RA2	GDH30048RA2	GDH35048RA2

**Dimension**





**Specifications**

Parameter-list	Units	Specification Limits	
Input Parameter ① D1	D1	D3	A2
Control Voltage Range	4 to 16Vdc	3 to 32 Vdc	90 to250Vac
Input Current (Max.) @=5V/12V	13/42 @=5x/12v	13/16 @=5V/24V	
Must Turn On Voltage	4 Vdc	3 Vdc	90Vac
Must Turn Off Voltage	1 Vdc	1 Vdc	1Vav
Reverse Voltage (Max.)	32 Vdc	32 Vdc	
Display LED	yes	yes	yes

Output Parameter ②	Units	Specification Limits			
Model No. <b>GDH</b>		200	250	300	350
Load Current Range	Arms	0.05 to 200	0.05 to 250	0.05 to 300	0.05 to 350
Surge Current, 20 mSec (Max.)	Arms	2500	3400	4500	5000
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			
Off State dv/dt (Min)	V/μsec	500			
Off State Leakage Current (Max.)	mArms	≤10			
On State Voltage Drop (Max.)	Vrms	1.8			
Thermal Resistance, (Rthjc)	°C/w	0.22	0.15	0.14	0.13
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			

**Coupling Specifications**

Dielectric (Input/Output)	Arms	2500
Dielectric (Input-Output/Base)	Arms	2500
Capacitance	pf	10

**General Specifications**

Ambient temperature range:	operating or Storage	-30°C to +80°C
Weight: ( typicro)	g	280
Base plate: Aluminum or Copper, nickel-plated		
Case Color: Black		
Mounting Dimensions	LxWxH	Case: 94x34x42.7mm



1



**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.

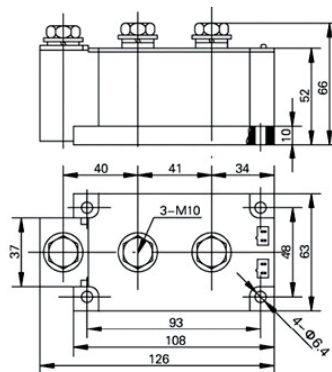
**Type Selection**

- 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**



**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			



**GDH 600 to1000 Amps AC SSR**

Series GDH are power line relays allowing 600 to 1000 Amps. switching power, with Voltage ratings 440 Volts A.C.

GDH 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 440 Vrms service.
- LED-indication for control input.
- Control voltage range: 4~16 Vdc, 3~32 Vdc.
- Industry standard “SCR Modules” package.

**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.

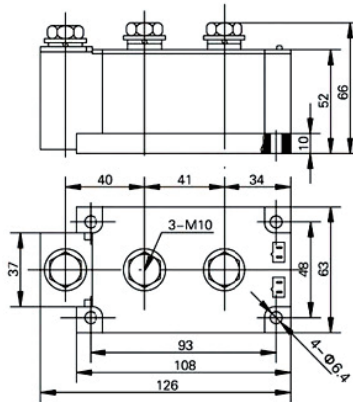
**Type Selection**

- Mounting type
  - Rated operational current
  - Rated operational voltage
  - Switched mode
  - Input Control voltage
- DH: AC Single phase, SCR Output.  
600: 600Amp, 800: 800Amp, 1000: 1000Amp.  
44: 440V  
Z: Zero Voltage, R: Random Switching.  
D3: DC 4~32V

**Selection guide**

Voltage	Control voltage	Rated operational current		
		600 Amp	800 Amp	1000 Amp
440 V <sub>AC</sub> “Zero Voltage”	4~32 Vdc	GDH60044ZD3	GDH80044ZD3	GDH100044ZD3
440 V <sub>AC</sub> “Random Switching”	4~32 Vdc	GDH60044ZD3	GDH80044ZD3	GDH100044ZD3

**Dimension**



**Specifications**

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

Output Parameter ②	Units	Specification Limits		
Model No. <b>GDH</b>		600A	800A	1000A
Load Current Range	Arms	0.05 to 600	0.05 to 800	0.05 to 1000
Surge Current, 20 mSec (Max.)	Arms			
Load Voltage Range	Vrms	44 to 440		
SCR Over Voltage	Vpk	≥1000		
Frequency Range	Hz	47 to 63		
Min. Off-state dv/dt	V/μsec	500		
Off State Leakage Current (Max.)	mArms	20	30	35
On-State Voltage Drop (Max.)	Vrms	1.8		
Thermal Resistance, (Rthjc)	°C/w	0.1	0.08	0.07
Turn On Time (Max.)	Cycle	1/2		
Turn Off Time (Max.)	Cycle	1/2		

General Specifications					
Dielectric (Input/Output)	Vrms	2500	2500	2500	2500
Dielectric (Input-Output/Base)	Vrms	2500	2500	2500	2500
Capacitance	pf	Exterior link			
Ambient Operating Temperature Range		-30°C to +80°C			
Ambient Storage Temperature Range	g	-30°C to +80°C			
Weight: ( typical)		1600g			
Base plate: Copper, nickel-plated					
Case Color: Black					
Mounting Dimensions:	LxWxH	126x63x66 mm			