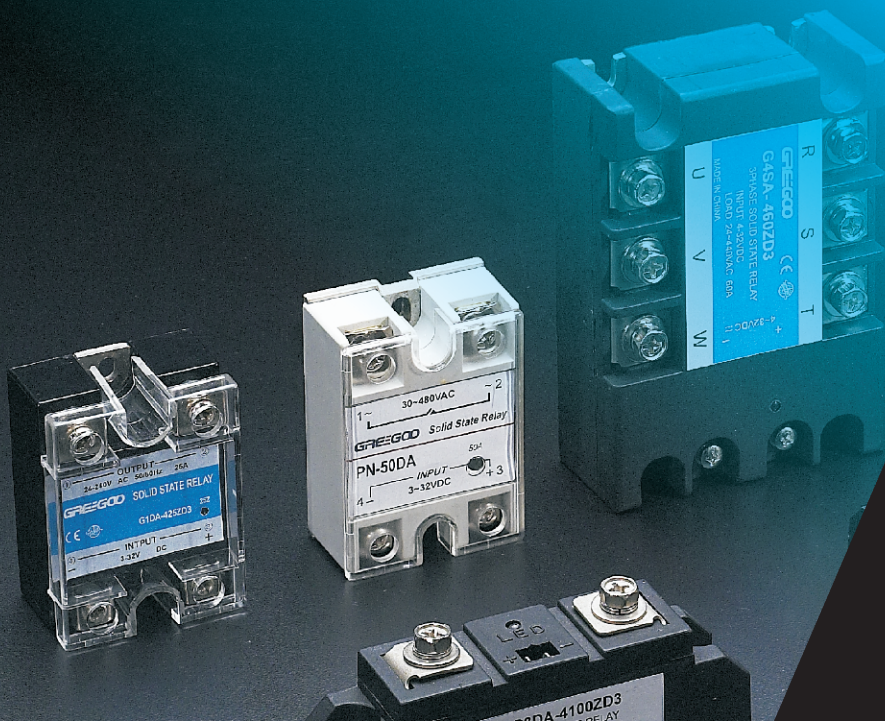
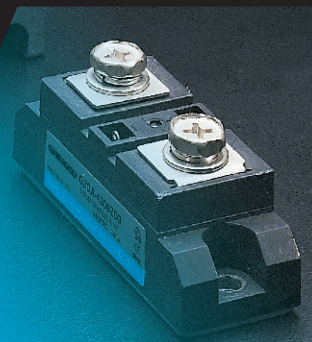


GREEGOO ELECTRIC

The Power Management Leader

Solid State Relays
Introduction





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) (24:240V,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.

GT 10 to 40 Amps AC SSR

The series GT three phase Solid State Relays is used three phase loads. 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.

- Three phase Solid State Relays
- Rated operational current 3x10, 3x15, 3x25 and 3x40 Amps.
- Rated operational voltage 440 V.
- Zero switching for resistive loads.
- Input Voltage Range 4 to 16 Vdc, 3 to 32 Vdc.
- 2500 Vrms Optical Isolation.(input/output)
- LED-indication for control input.

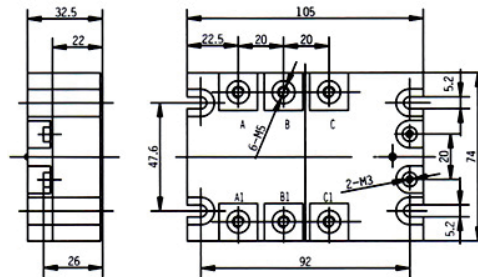
Type Selection

- Mounting type T: AC Three phase Solid State Relay
- Operational current 10: 3 10Amp, 15: 3 15Amp, 25: 3 25Amp, 40: 3 40Amp
- Operational voltage 44: 440VAC.
- Switched mode Z: Zero Voltage
- Input Control voltage D1: DC 4~16V, D3: DC 3~32V

Selection guide

Voltage	Control voltage	Rated operational current			
		10 Amp	15 Amp	25 Amp	40 Amp
440 V _{AC}	4~16 Vdc	GT1044ZD1	GT1544ZD1	GT2544ZD1	GT4044ZD1
440 V _{AC}	3~32 Vdc	GT1044ZD3	GT1544ZD3	GT2544ZD3	GT4044ZD3
440 V _{AC}	4~16 Vdc	GT1044RD1	GT1544RD1	GT2544RD1	GT4044RD1
440 V _{AC}	3~32 Vdc	GT1044RD3	GT1544RD3	GT2544RD3	GT4044RD3

Dimension



1

Specifications

INPUT PARAMETER ①	D1	D3
Control Voltage Range	4 to 16Vdc	3 to 32Vdc
Input Current (Max.)	26/86 mAdc @=5V/12V	25/28 mAdc @=5V/12V
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. GTH		10A	15A	25A	40A
Load Current Range	Arms	3X10	3X15	3X25	3X40
Surge Current, 20 mSec (Max.)	Arms	85	115	230	400
Load Voltage Range	Vrms	44 to 440			
TRIAC Over voltage	Vpk	≥1000			
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	1.3
Turn On Time (Max.) "Z"	Cycle	1/2			
Turn On Time (Max.) "R"	mSec	1			
Turn Off Time (Max.)	Cycle	1/2			

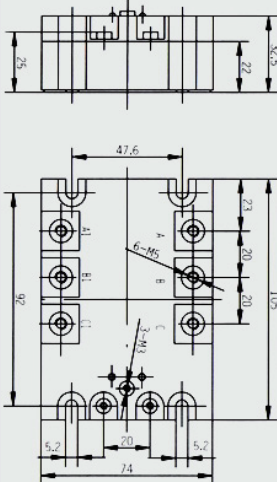
GENERAL SPECIFICATIONS ③					
Dielectric (Input/Output)	Vrms	2500	2500	2500	2500
Dielectric (Input-Output/Base)	Vrms	2500	2500	2500	2500
Capacitance(Max.)	pf	10	10	10	10
Ambient Operating Temperature Range	-30 to +80°C				
Ambient Storage Temperature Range	-30 to +80°C				
Weight: (max.) Aluminum Base plate 310g, Copper Base plate 430g.					
Case Color: Black					
Mounting Dimensions:	LXWXH	105X74X32.5mm			



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.



GTH 10 to 120 Amps AC SSR

GTH series three phase Solid State Relays is used three phase loads. SCR Output. GTH series is Dual SCR Power Hybrid technology provides highly efficient thermal management for greatly increased cyclic life.

- Three phase Solid State Relays
- Rated operational current 3X10, 3X15, 3X25, 3X40, 3X60, 3X80, 3X100 and 3X120 Amps.
- High voltage (1400 Vpk) versions for 530 Vrms service.
- Both "Zero Voltage" & phase controllable "Random Switching" versions.
- Input Voltage Range 4 to 16 Vdc, 3 to 32 Vdc, 90 to 250VAc.
- 2500 Vrms Optical Isolation.(input/output)
- LED-indication for control input.

Type Selection

- Output device H: SCR
- Operational current 10: 3x10A, 15: 3x15A, 25: 3x25A, 40: 3x40A, 60: 3x60A, 80: 3x80A, 100: 3x100A, 120: 3x120 Amps
- Operational voltage 48: 480/53 V_{AC} 53: 530V_{AC}.
- Control mode Z: Zero Voltage. R: Random Switching.
- Input Control voltage D1: DC 4~16V, D3: DC 3~32V, A2: 90~250V.

Selection guide

Voltage	Control voltage	Rated operational current			
		10 Amp	15 Amp	25 Amp	40 Amp
480 V _{AC} "Zero Voltage"	4~16 Vdc	GTH1048ZD1	GTH1548ZD1	GTH2548ZD1	GTH4048ZD1
	3~32 Vdc	GTH1048ZD3	GTH1548ZD3	GTH2548ZD3	GTH4048ZD3
	90~250VAc	GTH1048ZA2	GTH1548ZA2	GTH2548ZA2	GTH4048ZA2
530 V _{AC} "Zero Voltage"	4~16 Vdc	GTH1053ZD1	GTH1553ZD1	GTH2553ZD1	GTH4053ZD1
	3~32 Vdc	GTH1053ZD3	GTH1553ZD3	GTH2553ZD3	GTH4053ZD3
	90~250VAc	GTH1053ZA2	GTH1553ZA2	GTH2553ZA2	GTH4053ZA2
480 VAC Random	4~16 Vdc	GTH1048RD1	GTH1548RD1	GTH2548RD1	GTH4048RD1
	3~32 Vdc	GTH1048RD3	GTH1548RD3	GTH2548RD3	GTH4048RD3
	90~250VAc	GTH1048RA2	GTH1548RA2	GTH2548RA2	GTH4048RA2
530 VAC Random	4~16 Vdc	GTH1053RD1	GTH1553RD1	GTH2553RD1	GTH4053RD1
	3~32 Vdc	GTH1053RD3	GTH1553RD3	GTH2553RD3	GTH4053RD3
	90~250VAc	GTH1053RA2	GTH1553RA2	GTH2553RA2	GTH4053RA2

Voltage	Control voltage	Operational current			
		60 Amp	80 Amp	100 Amp	120 Amp
480 V _{AC} "Zero Voltage"	4~16 Vdc	GTH6048ZD1	GTH8048ZD1	GTH10048ZD1	GTH12048ZD1
	3~32 Vdc	GTH6048ZD3	GTH8048ZD3	GTH10048ZD3	GTH12048ZD3
	90~250VAc	GTH6048ZA2	GTH8048ZA2	GTH10048ZA2	GTH12048ZA2
530 V _{AC} "Zero Voltage"	4~16 Vdc	GTH6053ZD1	GTH8053ZD1	GTH10053ZD1	GTH12053ZD1
	3~32 Vdc	GTH6053ZD3	GTH8053ZD3	GTH10053ZD3	GTH12053ZD3
	90~250VAc	GTH6053ZA2	GTH8053ZA2	GTH10053ZA2	GTH12053ZA2
480 VAC Random	4~16 Vdc	GTH6048RD1	GTH8048RD1	GTH10048RD1	GTH12048RD1
	3~32 Vdc	GTH6048RD3	GTH8048RD3	GTH10048RD3	GTH12048RD3
	90~250VAc	GTH6048RA2	GTH8048RA2	GTH10048RA2	GTH12048RA2
530 VAC Random	4~16 Vdc	GTH6053RD1	GTH8053RD1	GTH10053RD1	GTH12053RD1
	3~32 Vdc	GTH6053RD3	GTH8053RD3	GTH10053RD3	GTH12053RD3
	90~250VAc	GTH6053RA2	GTH8053RA2	GTH10053RA2	GTH12053RA2

Specifications

PARAMETER	Units	Specification Limits			
Model No. GTH		10A	15A	25A	40A
INPUT PARAMETER ①	D1				
Control Voltage Range	Vdc	4 to 16	4 to 16	4 to 16	4 to 16
Input Current(Max.) @=5V/12V	mAdc	26/86	26/86	26/86	26/86
Must Turn On Voltage	Vdc	4	4	4	4
Must Turn Off Voltage	Vdc	1	1	1	1
Reverse Voltage (Max.)	Vdc	32	32	32	32
Display LED		yes	yes	yes	yes

INPUT PARAMETER ②	D3				
Control Voltage Range	Vdc	3 to 32	3 to 32	3 to 32	3 to 32
Input Current (Max.) @=5V/12V	mAdc	33/56	26/56	33/56	33/56
Must Turn On Voltage	Vdc	3	3	3	3
Must Turn Off Voltage	Vdc	1	1	1	1
Reverse Voltage (Max.)	Vdc	32	32	32	32
Display LED		yes	yes	yes	yes

INPUT PARAMETER ③	A2				
Control Voltage Range	Vdc	90 to 250	90 to 250	90 to 250	90 to 250
Input Current (Max.) @=220r	mAdc	13	13	13	13
Must Turn On Voltage	Vdc	90	90	90	90
Must Turn Off Voltage	Vdc	10	10	10	10
Display LED		yes	yes	yes	yes

OUTPUT SPECIFICATIONS ④					
Load Current Range	Arms	3x10	3x15	3x25	3x40
Surge Current, 20 mSec (Max.)	Arms	200	250	300	400
Load Voltage Range (480V)	Vrms	44 to 480	44 to 480	44 to 480	44 to 480
SCR Over voltage (480V)	Vpk	≥1200	≥1200	≥1200	≥1200
Load Voltage Range (530V)	Vrms	53 to 530	53 to 530	53 to 530	53 to 530
SCR Over voltage (530V)	Vpk	≥1400	≥1400	≥1400	≥1400
Frequency Range	Hz	47 to 63	47 to 63	47 to 63	47 to 63
Off-State dv/dt (Min)	V/μsec	500	500	500	500
Max.Off-State Leakage Current	mArms	≤8	≤8	≤8	≤8
On State Voltage Drop (Max.)	Vrms	1.6	1.6	1.6	1.6
Thermal Resistance, (Rthjc)	°C/W	0.75	0.65	0.55	0.46
Turn On Time (Max.) "Z"	Cycle	1/2	1/2	1/2	1/2
Turn Off Time (Max.)	Cycle	1/2	1/2	1/2	1/2
Turn On Time (Max.) "R"	mSec	1	1	1	1
Turn Off Time (Max.) "A2"	mSec	40	40	40	40

Model No. GTH		60A	80A	100A	120A
INPUT SPECIFICATIONS ①	D1				
Control Voltage Range	Vdc	4 to 16	4 to 16	4 to 16	4 to 16
Input Current(Max.) @=5V/12V	mAdc	26/86	26/86	26/86	26/86
Must Turn On Voltage	Vdc	4	4	4	4
Must Turn Off Voltage	Vdc	1	1	1	1
Reverse Voltage (Max.)	Vdc	32	32	32	32
Display LED		yes	yes	yes	yes

INPUT SPECIFICATIONS ②		D3			
Control Voltage Range	Vdc	3 to 32	3 to 32	3 to 32	3 to 32
Input Current (Max.) @=5V/12V	mAdc	33/56	33/56	33/56	33/56
Must Turn On Voltage	Vdc	3	3	3	3
Must Turn Off Voltage	Vdc	1	1	1	1
Reverse Voltage (Max.)	Vdc	32	32	32	32
Display LED		yes	yes	yes	yes

INPUT SPECIFICATIONS ③		A2			
Control Voltage Range	Vac	90 to 250	90 to 250	90 to 250	90 to 250
Input Current (Max.) @=220V	mAdc	13	13	13	13
Must Turn On Voltage	Vdc	90	90	90	90
Must Turn Off Voltage	Vdc	10	10	10	10
Display LED		yes	yes	yes	yes

OUTPUT SPECIFICATIONS ④					
Load Current Range	Vrms	3x60	3x80	3x100	3x120
Surge Current, 20 mSec (Max.)	Vrms	600	1000	1200	1500
Load Voltage Range (480V)	Vrms	44 to 480	44 to 480	44 to 480	44 to 480
SCR Over voltage (480V)	Vpk	≥1200	≥1200	≥1200	≥1200
Load Voltage Range (530V)	Vrms	53 to 530	53 to 530	53 to 530	53 to 530
SCR Over voltage (530V)	Vpk	≥1400	≥1400	≥1400	≥1400
Frequency Range	Hz	47 to 63	47 to 63	47 to 63	47 to 63
Off State dv/dt (Min)	V/μsec	500	500	500	500
Max.Off-StateLeakage Current	mArms	≤8	≤8	≤8	≤8
On State Voltage Drop (Max.)	Vrms	1.8	1.8	1.8	1.8
Thermal Resistance, (Rthjc)	°C/W	0.38	0.34	0.23	0.23
Turn On Time (Max.) "Z"	Cycle	1/2	1/2	1/2	1/2
Turn Off Time (Max.)	Cycle	1/2	1/2	1/2	1/2
Turn On Time (Max.) "R"	mSec	1	1	1	1
Turn Off Time (Max.) "A2"	mSec	40	40	40	40

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

GENERAL SPECIFICATIONS					
Ambient temperature range: operating or Storage -30°C to +80°C					
Weight: (typical) 430g					
Base plate: Copper, nickel-plated					
Case Color: Black					
Mounting Dimensions: LxWxH 105x74x32.5 mm					

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) (24:240V,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.

GTH 200 to 500 Amps AC SSR

The GTH series three phase Solid State Relays is used three phase loads. SCR Output. GTH series is Dual SCR Power Hybrid technology provides highly efficient thermal management for greatly increased cyclic life.

- Three phase Solid State Relays
- Rated operational current 3x200, 3x300, 3x400 and 3x500Amps.
- High voltage (1400 Vpk) versions for 530 Vrms service.
- Both "Zero Voltage" & phase controllable "Random Switching" versions.
- Input Voltage Range 4 to 32 Vdc, 90 to 250vVac.
- 2500 Vrms Optical Isolation.(input/output)
- LED-indication for control input.

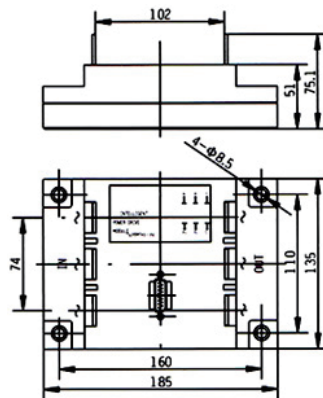
Type Selection

- Mounting type TH: AC Three phase SSR, SCR Output.
- Operational current 200: 3 200A, 300: 3 300A,400: 3 400A, 500: 3 500Amps
- Operational voltage Voltage :480V 530V.
- Control mode Z: Zero Voltage R: Random Switching.
- Input Control voltage D3: DC 4~32V A2: 90~250V.

Selection guide

Voltage	Control voltage	Rated operational current			
		200Amp	300Amp	400Amp	500Amp
480 V _{AC} "Zero Voltage"	3~32 Vdc	GTH20048ZD3	GTH30048ZD3	GTH40048ZD3	GTH50048ZD3
	90~250 Vac	GTH20048ZA2	GTH20048ZA2	GTH40048ZA2	GTH50048ZA2
530 V _{AC} "Zero Voltage"	3~32 Vdc	GTH20053ZD3	GTH30053ZD3	GTH40053ZD3	GTH50053ZD3
	90~250 Vac	GTH20053ZA2	GTH30053ZA2	GTH40053ZA2	GTH50053ZA2
480 V _{AC} "Random"	3~32 Vdc	GTH20048RD3	GTH30048RD3	GTH40048RD3	GTH50048RD3
	90~250 Vac	GTH20048RA2	GTH30048RA2	GTH40048RA2	GTH50048RA2
480 V _{AC} "Random"	3~32 Vdc	GTH20053RD3	GTH30053RD3	GTH40053RD3	GTH50053RD3
	90~250 Vac	GTH20053RA2	GTH30053RA2	GTH40053RA2	GTH50053RA2

Dimension



Specifications

INPUT PARAMETER ①	D3	A2
Control Voltage Range	3 to 32Vdc	90 to 250Vac
Input Current (Max.)	33/56 mAac @ =5V/24V	13 mAac @ =220V
Must Turn On Voltage	3Vdc	90Vac
Must Turn Off Voltage	1.5Vdc	10Vdc
Reverse Voltage (Max.)	32Vdc	/
Display LED	yes	yes

OUTPUT PARAMETER ②	Units	Specification Limits			
Model No. GTH		200A	300A	400A	500A
Load Current Range	Arms	3X200	3X300	3X400	3X500
Surge Current, 20 mSec (Max.)	Arms	2100	5000	7000	8000
Load Voltage Range (480V)	Vrms	44 to 480			
TRIAC Over voltage (480V)	Vpk	≥1200			
Load Voltage Range (530V)	Vrms	53 to 530			
TRIAC Over voltage (530V)	Vpk	≥1400			
Frequency Range	Hz	47 to 63			
Min. Off-state dv/dt	V/μsec	500			
Off State Leakage Current (Max.)	mArms	<10	<10	<15	<20
On-State Voltage Drop (Max.)	Vrms	1.8			
Thermal Resistance, (Rthjc)	°C/W	0.14	0.09	0.072	0.065
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(Max.)	pf	10	10	10	10
Ambient Operating Temperature Range		-30°C to +80°C			
Ambient Storage Temperature Range		-30°C to +80°C			
Weight: (typical)	g	2200			
Base plate: Copper, nickel-plated					
Mounting Dimensions:	LxWxH	Case A: 185x135x76 mm			

1



GR 1 to 7 KW Motor Reversing SSR

Motor reversing Solid State Relays for 3-phase industrial motors up to 7 KW.

- Operational voltage: Up to 530VAC rms
- High performance /low cost circuit design.
- Built-in interlock function
- AC or DC control voltage
- LED indication for direction
- Insulation: Reed relay or opt coupler (input-output)2500VAC rms
- Control voltage range:10~30 Vdc or 115 Vac
- This series with Dual SCR Power Hybrid technology provide highly efficient thermal management for greatly increased cyclic life.

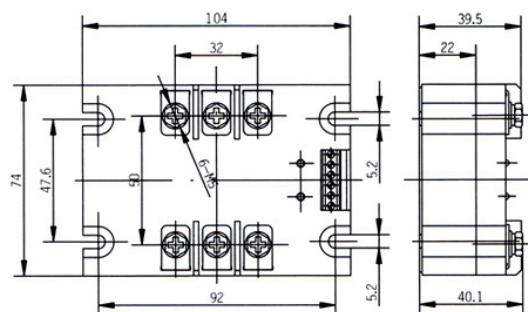
Type Selection

- Switching mode R: reversing relay
- Motor load power 10:1KW;30:3KW;50:5KW
- Rated operational voltage 48:480V; 53:530 V
- Switched phases D: Two leg models. T: Three leg models
- Control voltage D:10—30Vdc; A:115Vac

Selection guide

Voltage	Control voltage	Load power			
		1kW	3kW	5kW	7kW
480 VACrms	10 to 30Vdc	GR1048DD	GR3048DD	GR5048DD	GR7048DD
		GR1048TD	GR3048TD	GR5048TD	GR7048TD
	115Vac	GR1048DA	GR3048DA	GR5048DA	GR7048DA
		GR1048TA	GR3048TA	GR5048TA	GR7048TA
530 VACrms	10 to 30Vdc	GR1053DD	GR3053DD	GR5053DD	GR7053DD
		GR1053TD	GR3053TD	GR5053TD	GR7053TD
	115Vac	GR1053DA	GR3053DA	GR5053DA	GR7053DA
		GR1053TA	GR3053TA	GR5053TA	GR7053TA

Dimension



Specifications

PARAMETER	Units	Specification Limits			
		1KW	3KW	5KW	7KW
Model No. GR					

INPUT SPECIFICATIONS ①	DC				
Control Voltage Range	Vdc	10 to 30	10 to 30	10 to 30	10 to 30
Input Current(Max.) @=12V	mAdc	30	30	30	30
Must Turn On Voltage	Vdc	8	8	8	8
Must Turn Off Voltage	Vdc	4	4	4	4
Display LED		yes	yes	yes	yes

INPUT SPECIFICATIONS ②	AC				
Control Voltage Range	Vdc	115	115	115	115
Input Current(Max.)	mAdc	35	35	35	35
Must Turn On Voltage	Vdc	85	85	85	85
Must Turn Off Voltage	Vdc	30	30	30	30
Display LED		yes	yes	yes	yes

OUTPUT SPECIFICATIONS ③					
Load Current Range(Max.)	Arms	3x25	3x40	3x60	3x80
Surge Current,20 mSec (Max.)	Arms	250	500	600	1000
Load voltage Range	Vrms	24 to 530			
Transient Over voltage(Max.)	Vpk	≥1200			
Frequency Range	Hz	47 to 63			
Off State dv/dt(Min.)	V/μSec	500			
Off-State Leakage Current(Max.)	mArms	≤8			
On State Voltage Drop(Max.)	Vrms	1.6	1.6	1.8	1.8
Thermal Resistance (Rthjc)	°C/W	0.25	0.22	0.22	0.17
Turn On Time(Max.)	Cycle	1/2			
Turn Off Time(Max.)	Cycle				
Turn On Time(Max.)"A"	mSec	40			

COUPLING PARAMETER		
Dielectric strength(Input/Output)	Vrms	2500
Surge Current,20 mSec (Max.)	Vrms	
Load voltage Range	pf	10

GENERAL SPECIFICATIONS	
Ambient temperature range: Operating or Storage -30 to +80°C	
Weight (typical) 430g	
Base plate: Copper, nickel-plated	
Mounting Dimension: LxWxH 104x74x39.5mm	



GDF Compound SSR

Series GDF Compound Solid State Relay is a new type relay product developed independently according to demand of the user. It is a singular module that is comprised by a SSR that has zero turn on-off function connects the load at first and disconnects loads at last and a mechanical relay that has low power waste keeps connection of load at other working time.

GDF avoids the disadvantages that mechanical relay make the surge current when it turns on and make arc when it turns off with SSR or thyristor switch will make power waste heat from the voltage drop of silicon during it is on work.

GDF can be widely used in the power capacitor turning on and off, motor switching on off and temperature controlling of industry furnace etc.

Feature

- Bar structure, convenient for mounting and using.
- High performance/low cost circuit design.
- Dual SCR Power Hybrid technology provides highly efficient thermal management for greatly increased cyclic life.
- High voltage (1400 Vpk) versions for 530 V service.
- Control voltage range: 12 Vdc.
- Switch type: Zero voltage turns on, Zero current turn off, and keep low power waste. Especially apply in power capacitor turning on and off.
- LED-indication for control input.

Type Selection

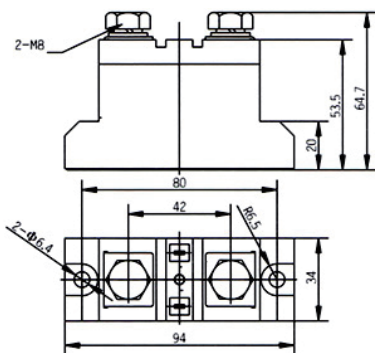
- Mounting type DF: AC Single phase, SCR Output.
- Operational current 60: 60Amp, 80: 80Amp, 120: 120Amp, 250: 250Amp,
- Operational voltage 48: 480V_{AC}, 53: 530V_{AC}.
- Input Control voltage D: DC12V

Selection guide

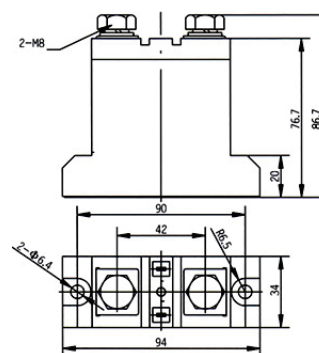
Voltage	Control voltage	Operational current			
		60 Amp	80 Amp	120 Amp	250 Amp
480 VAC	12Vdc	GDF6048D	GDF8048D	GDF12048D	GDF25048Z1
530 VAC	12Vdc	GDF6053D	GDF8053D	GDF12053D	GDF25053D
Case type		Case A	Case A	Case B	Case B

Dimension

GDF Compound Case A



GDF Compound Case B



Specifications

PARAMETER	Units	Specification Limits			
Model No. GDF		60A	80A	120A	250A
Input Parameter					
Control Voltage	Vdc	12			
Input Current (Max.)	mAdc	95	95	180	180
Display LED		yes			

Output Parameter

Current Range Max	Arms	0.05 to 60	0.05 to 80	0.05 to 120	0.05 to 250
Surge Current, 20 mSec (Max.)	Arms	600	1000	1500	2800
Working current of capacitor	Arms	<16	<21	<31	<63
Load Voltage Range (480V)	Vrms	48 to 480			
SCR Over voltage (480V)	Vpk	1200			
Load Voltage Range (530V)	Vrms	53 to 530			
SCR Over voltage (530V)	Vpk	>1400			
Frequency Range	Hz	47 to 63			
Off State dv/dt (Min)	V/μsec	500			
Off State Leakage Current (Max.)	mArms	<8		<10	
On State Voltage Drop (Max.)	Vrms	1.8		1.6	
Thermal Resistance, (Rthjc)	°C/W	0.65	0.5	0.3	0.2
Turn On Time (Max.)	Cycle	1/2			
Turn off delay-time (Max.)	mSec	40 to 100			
Holding contact connect delay-time	mSec	40 to 100			
Holding contact resistance (Max.)	mΩ	50	50	30	30

Coupling Specifications

Dielectric (Input/Output)	Vrms	1500			
Dielectric (Input-Output/Base)	Vrms	2500			
Capacitance	pf	10			

General Specifications

Weight: (typical)	g	300	390		
Mounting Dimensions: LxWxH	mm	94x34x64.7	94x34x87		
Ambient temperature range: operating or Storage		-30°C to +80°C			
Case Color: Black					



Ordering Key

G R 30 48 D A
1 2 3 4 5 6

- 1: Greegoo brand;
- 2: Switch type: S - small size (1-5A),
D - single phase, T - three phase
M: dual output;
- 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.

GM 10 to 40 Amps Dual SSR

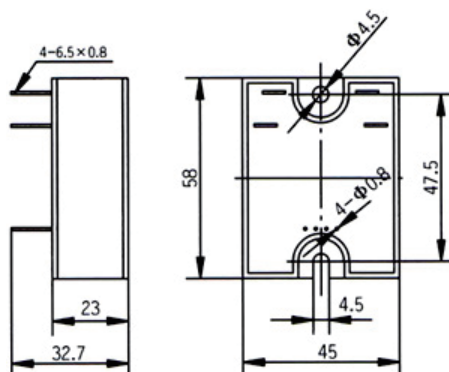
GM series Solid State Relays are Dual AC relays, Triac or SCR Output. The Triac version of the zero switching relay is an inexpensive solution for resistive loads. The zero switching relay switches on when the AC sine voltage just crosses zero, and switches off when the current crosses zero. The SCR Output is Dual SCR Power Hybrid technology provides highly efficient thermal management for greatly increased cyclic life.

- Rated operational current 10+10 to 40+40 Amps.
- Rated operational voltage 240V
- Input Voltage Range 4 to 16 Vdc.
- 2500 Vrms Optical Isolation.(input/output)
- Both "Zero Voltage" & phase controllable "Random Switching" versions.

Selection guide

Voltage	Controlvoltage	Rated operational current			
		10Amp	15Amp	25Amp	40Amp
240 VAC "Z"	4~16 Vdc	GM1024ZD1	GM1524ZD1	GM2524ZD1	GM4024ZD1
240 VAC "R"	4~16 Vdc	GM1024RD1	GM1524RD1	GM2524RD1	GM4024RD1
440 VAC "Z"	4~16 Vdc	GM1044ZD1	GM1544ZD1	GM2544ZD1	GM4044ZD1
440 VAC "R"	4~16 Vdc	GM1044RD1	GM1544RD1	GM2544RD1	GM4044RD1

Dimension





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.

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

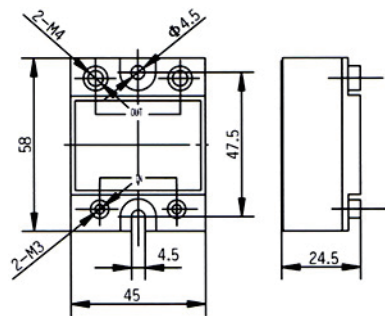
- Mounting type
D: AC Single phase Solid State Relay
- Rated operational current
10: 10Amp, 15: 15Amp, 25: 25Amp, 40: 40Amp
- Rated operational voltage
24: 240VAC, 44: 440VAC.
- Switched mode
Z: Zero Voltage,R: Random Switching.
- Input Control voltage
D1: DC 4to16V, D3: DC 3to32V, A2: 90to250V.

Selection guide

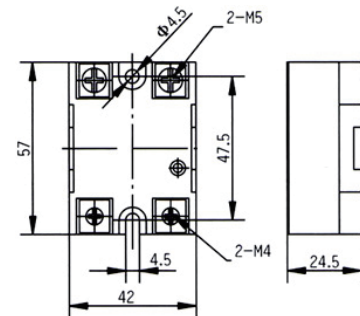
Voltage	Control voltage	Rated operational current			
		10 Amp	15 Amp	25 Amp	40 Amp
240 VAC "Z"	4 to 16 Vdc	GD1024ZD1	GD1524ZD1	GD2524ZD1	GD4024ZD1
240 VAC "R"	4 to 16 Vdc	GD1024RD1	GD1524RD1	GD2524RD1	GD4024RD1
240 VAC "Z"	3 to 32 Vdc	GD1024ZD3	GD1524ZD3	GD2524ZD3	GD4024ZD3
240 VAC "R"	3 to 32 Vdc	GD1024RD3	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. GD		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: 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.

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
D: AC Single phase Solid State Relay
- Rated operational current
10: 10Amp, 15: 15Amp, 25: 25Amp, 40: 40Amp, 60: 60Amp,
80: 80Amp, 100: 100Amp, 120: 120Amp
- 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: 90to250V.
- Case type
Blank: Case A, 1: Case B, with LED.

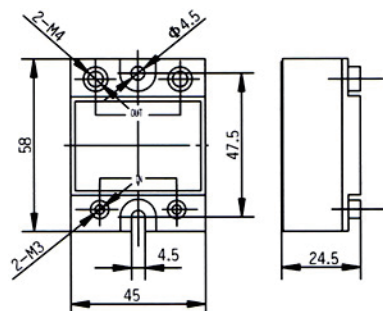
Selection guide

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

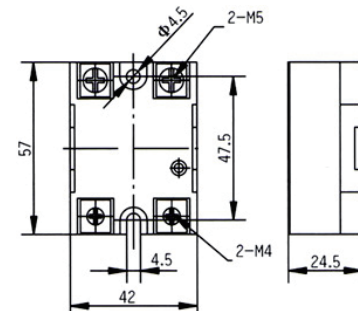
Voltage	Control voltage	Rated operational current			
		60 Amp	80 Amp	100 Amp	120 Amp
280 V _{AC} "Random Switching"	4 to 16 Vdc	GDH6028RD1	GDH8028RD1	GDH10028RD1	GDH12028RD1
	3 to 32 Vdc	GDH6028RD3	GDH8028RD3	GDH10028RD3	GDH12028RD3
	90 to 250Vac	GDH6028RA2	GDH8028RA2	GDH10028RA2	GDH12028RA2
480 V _{AC} "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 mA _{dc} @ =5V/12V	13/16 mA _{dc} @ =5V/24V	29 mA _{ac} @ =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. GDH		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)	V _{rms}	24 to 280			
SCR interdiction voltage (280V)	V _{pk}	≥800			
Load Voltage Range (480V)	V _{rms}	44 to 480			
SCR interdiction voltage (480V)	V _{pk}	≥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.)	V _{rms}	1.6			
Thermal Resistance, (R _{thjc})	°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. GDH		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 (R _{thjc})	°C/W	0.5	0.3	0.3
Load Voltage Range (280V)	V _{rms}	24 to 280		
SCR interdiction voltage (280V)	V _{pk}	≥800		
Load Voltage Range (480V)	V _{rms}	44 to 480		
SCR interdiction voltage (480V)	V _{pk}	≥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.)	V _{rms}	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)	V _{rms}	2500
Dielectric (Input-Output/Base)	V _{rms}	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	



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 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 200 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

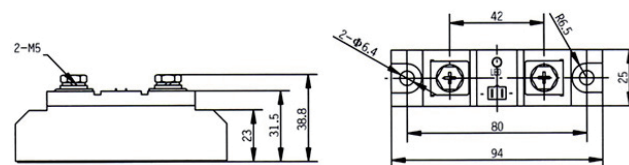
- Mounting type
 - Rated operational current
 - Rated operational voltage
 - Switched mode
 - Input Control voltage
 - Case type
- DH: AC Single phase, SCR Output.
10: 10Amp, 25: 25Amp, 40: 40Amp, 60: 60Amp, 80: 80Amp, 100:100Amp, 120: 120Amp, 150: 150Amp.
28: 280VAC, 48: 480VAC.
Z: Zero Voltage, R: 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 _{AC} "Zero Voltage"	4to16 Vdc	GDH1028ZD1B	GDH2528ZD1B	GDH4028ZD1B	GDH6028ZD1B
	3to32 Vdc	GDH1028ZD3B	GDH2528ZD3B	GDH4028ZD3B	GDH6028ZD3B
280 V _{AC} "Random Switching"	4to16 Vdc	GDH1028RD1B	GDH2528RD1B	GDH4028RD1B	GDH6028RD1B
	3to32 Vdc	GDH1028RD3B	GDH2528RD3B	GDH4028RD3B	GDH6028RD3B
480 V _{AC} "Zero Voltage"	4to16 Vdc	GDH1048ZD1B	GDH2548ZD1B	GDH4048ZD1B	GDH6048ZD1B
	3to32 Vdc	GDH1048ZD3B	GDH2548ZD3B	GDH4048ZD3B	GDH6048ZD3B
480 V _{AC} "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 _{AC} "Zero Voltage"	4to16 Vdc	GDH8028ZD1B	GDH10028ZD1B	GDH12028ZD1B	GDH15028ZD1
	3to32 Vdc	GDH8028ZD3B	GDH10028ZD3B	GDH12028ZD3B	GDH15028ZD3
280 V _{AC} "Random Switching"	4to16 Vdc	GDH8028RD1B	GDH10028RD1B	GDH12028RD1B	GDH15028RD1
	3to32 Vdc	GDH8028RD3B	GDH10028RD3B	GDH12028RD3B	GDH15028RD3
480 V _{AC} "Zero Voltage"	4to16 Vdc	GDH8048ZD1B	GDH10048ZD1B	GDH12048ZD1B	GDH15048ZD1
	3to32 Vdc	GDH8048ZD3B	GDH10048ZD3B	GDH12048ZD3B	GDH15048ZD3
480 V _{AC} "Random Switching"	4to16 Vdc	GDH8048RD1B	GDH10048RD1B	GDH12048RD1B	GDH15048RD1
	3to32 Vdc	GDH8048RD3B	GDH10048RD3B	GDH12048RD3B	GDH15048RD3

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		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. 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



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.

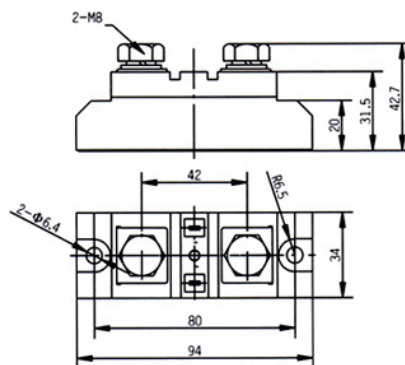
Type Selection

- 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 _{AC} "Zero Voltage"	4to16 Vdc	GDH20028ZD1	GDH25028ZD1	GDH30028ZD1	GDH35028ZD1
	3to32 Vdc	GDH20028ZD3	GDH25028ZD3	GDH30028ZD3	GDH35028ZD3
	90to250Vac	GDH20028ZA2	GDH25028ZA2	GDH30028ZA2	GDH35028ZA2
280 V _{AC} "Random Switching"	4to16 Vdc	GDH20028ZD1	GDH25028ZD1	GDH30028ZD1	GDH35028ZD1
	3to32 Vdc	GDH20028ZD3	GDH25028ZD3	GDH30028ZD3	GDH35028ZD3
	90to250Vac	GDH20028ZA2	GDH25028ZA2	GDH30028ZA2	GDH35028ZA2
480 V _{AC} "Zero Voltage"	4to16 Vdc	GDH20048ZD1	GDH25048ZD1	GDH30048ZD1	GDH35048ZD1
	3to32 Vdc	GDH20048ZD3	GDH25048ZD3	GDH30048ZD3	GDH35048ZD3
	90to250Vac	GDH20048ZA2	GDH25048ZA2	GDH30048ZA2	GDH35048ZA2
480 V _{AC} "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. GDH		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



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.

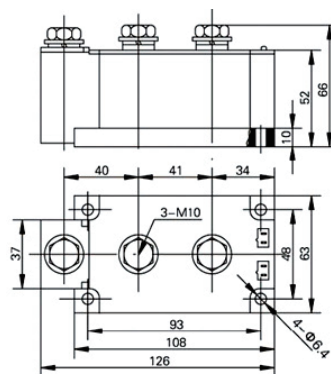
Type Selection

- 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 _{AC} "Zero Voltage"	4to16 Vdc	GDH40028ZD1	GDH45028ZD1	GDH50028ZD1	GDH55028ZD1
	3to32 Vdc	GDH40028ZD3	GDH45028ZD3	GDH50028ZD3	GDH55028ZD3
	90to250Vac	GDH40028ZA2	GDH45028ZA2	GDH50028ZA2	GDH55028ZA2
280 V _{AC} "Random Switching"	4to16 Vdc	GDH40028RD1	GDH45028RD1	GDH50028RD1	GDH55028RD1
	3to32 Vdc	GDH40028RD3	GDH45028RD3	GDH50028RD3	GDH55028RD3
	90to250Vac	GDH40028RA2	GDH45028RA2	GDH50028RA2	GDH55028RA2
480 V _{AC} "Zero Voltage"	4to16 Vdc	GDH40048ZD1	GDH45048ZD1	GDH50048ZD1	GDH55048ZD1
	3to32 Vdc	GDH40048ZD3	GDH45048ZD3	GDH50048ZD3	GDH55048ZD3
	90to250Vac	GDH40048ZA2	GDH45048ZA2	GDH50048ZA2	GDH55048ZA2
480 V _{AC} "Random Switching"	4to16 Vdc	GDH40048RD1	GDH45048RD1	GDH50048RD1	GDH55048RD1
	3to32 Vdc	GDH40048RD3	GDH45048RD3	GDH50048RD3	GDH55048RD3
	90to250Vac	GDH40048RA2	GDH45048RA2	GDH50048RA2	GDH55048RA2

Dimension



1

Specifications

Input Parameter ①	D3	A2
Control Voltage Range	3 to 32Vdc	90 to 250Vac
Input Current (Max.)	13/16 mA _{dc} @ =5V/24V	29 mA _{ac} @ =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			



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 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.

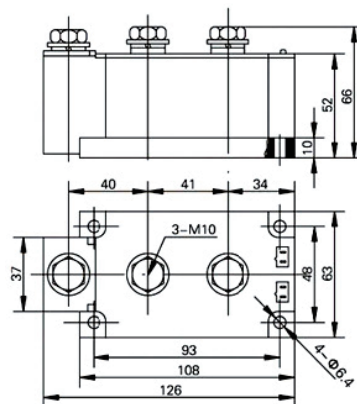
Type Selection

- 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 _{AC} "Zero Voltage"	4~32 Vdc	GDH60044ZD3	GDH80044ZD3	GDH100044ZD3
440 V _{AC} "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. GDH		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			



Case A:
LxWxH: 31x16x15mm
Operational current: 1-2A



Case B:
LxWxH: 43x15x30 mm
Operational current: 3A



Case C:
LxWxH: 43x12x35 mm
Operational current: 5A

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.

GS 1 to 5A Small Size Solid State Relay

Series GS Solid State Relays are small size AC relays. Compact package for high density PC board mounting.

- Operational current 1 to 5 Amps.
- Operational voltage 240V or 440V
- Input Control voltage 4 to 16Vdc or 3 to 32Vdc
- Dielectric strength (Input/Output) 2500Vrms

Type Selection

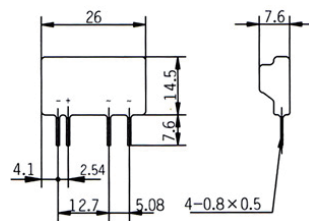
- Mounting type S: AC PCB mounting
- Operational current 01: 1Amp, 02: 2Amp, 03: 3Amp,05: 5Amp
- Operational voltage 24: 240VAC, 44: 440VAC.
- Switched mode Z: Zero Voltage, R: Random Switching.
- Input Control voltage D1: DC 4 to 16V, D3: DC 3 to 32V.
- Case type Blank: Case A, -1 Case B, -2 Case C, -3

Selection guide

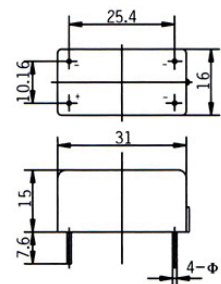
Voltage	Control voltage	Rated operational current			
		1 Amp	2 Amp	3 Amp	5 Amp
240 Vac	4 to 16 Vdc	GS0124ZD1	GS0224ZD1	GS0324ZD1	GS0524ZD1
	3 to 32 Vdc	GS0124ZD3	GS0224ZD3	GS0324ZD3	GS0524ZD3
440 Vac	4 to 16 Vdc	GS0144ZD1	GS0244ZD1	GS0344ZD1	GS0544ZD1
	3 to 32 Vdc	GS0144ZD3	GS0244ZD3	GS0344ZD3	GS0544ZD3

Dimension

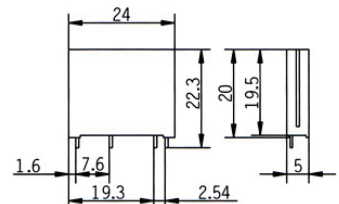
GS 1 to 5A Case A



GS 1 to 5A Case B

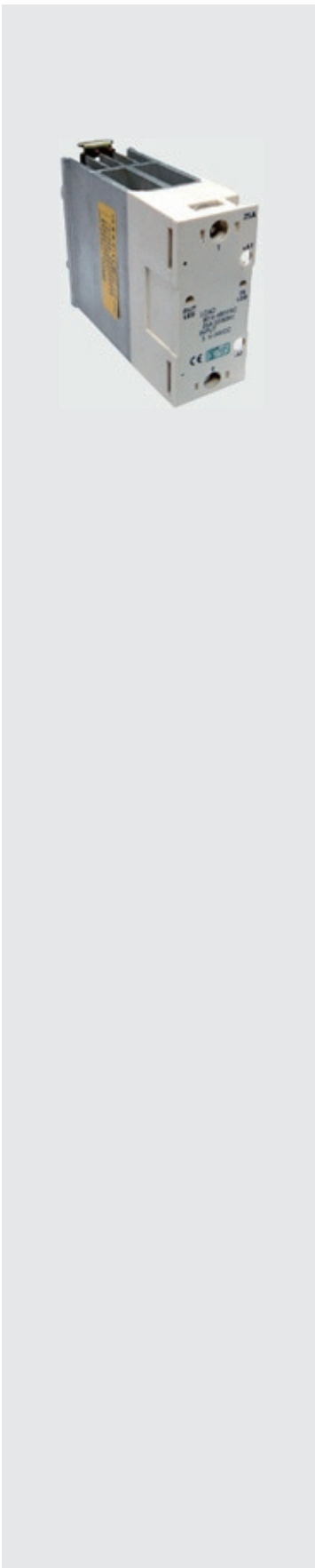


GS 1 to 5A Case C



Specifications

PARAMETER-LIST	Units	Specification Limits			
Model No. GS		1A	2A	3A	5A
INPUT PARAMETER ①		D1			
Control Voltage Range	Vdc	4 to 16			
Input Current (Max.) @=5V/12V	mAdc	10/20			
Must Turn On Voltage	Vdc	4			
Must Turn Off Voltage	Vdc	1			
Reverse Voltage (Max.)	Vdc	32			
INPUT PARAMETER ②		D3			
Control Voltage Range	Vdc	3 to 32			
Input Current (Max.) @=5V/12V	mAdc	13/16			
Must Turn On Voltage	Vdc	3			
Must Turn Off Voltage	Vdc	1			
Reverse Voltage (Max.)	Vdc	32			
OUTPUT PARAMETER ③					
Max. Load Current	Arms	1A	2A	3A	5A
Surge Current, 20 mSec(Max.)	Arms	30	46	60	80
Load Voltage Range (240V)	Vrms	24 to 280			
VDRM/VRRM(240V)	Vpk	≥600			
Load Voltage Range (440V)	Vrms	44 to 440			
VDRM/VRRM(440V)	Vpk	≥800			
Frequency Range	Hz	47 to 63			
Min. Off-state dv/dt	V/μsec	50	50	75	75
Max. Off-State Leakage Current	mArms	≤5			
On-State Voltage Drop (Max.)	Vrms	1.2			
Turn On Time (Max.)	Cycle	1/2			
Turn Off Time (Max.)	Cycle	1/2			
COUPLING PARAMETER ④					
Dielectric strength (Input/Output)	Vrms	2500			
Capacitance	pf	8			
GENERAL SPECIFICATIONS ⑤					
Ambient Operating Temperature Range		-30°C to +80°C			
Ambient Storage Temperature Range		-30°C to +80°C			
Weight: (typical) Case A: 15g, Case B: 29g, Case C: 37g					



AC SSR (25A-60A) of all-in-one radiator

- Zero-cross type.
- Guide rail installing.
- Rated current 25A, 40A, 50A, 60A.
- Enhanced type.
- RC absorption protection.
- Double LED indicate input & output condition.
- Authentication symbol.

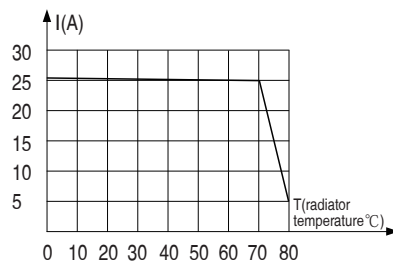
Specification

Output parameter	BCR or SCR anti-parallel connection
Voltage scope(Max Vrms)	48-600
Peak voltage(V peak)	1000
Maximum current(A)	25, 40, 50, 60
Off state maximum leakage(mA)(T=25°C Vmax)	3
Turn-on voltage(V) max, T=25°C	≤1.2
Static state(off-state) dv/dt(V/us)	500
Frequency range(Hz)	47/63
Input parameter	
Input voltage(V)	5-24VDC
Input parameter	14-18(automatic limit current)
Operate time	≤10ms(0.5cycle)Max
Response time(opened)	≤10ms(0.5cycle)Max
General parameter	
Operating temperature(°C)	-40°C-80°C
Isolation bet in & out(Vrms)	≥2000V
Isolation to case(Viso)(Vrms)	≥2000V
Material	Outer coverint anti-burns
Radiator	Foundation plate pigment aluminum molding
Weight	340g
Input terminal	M3
Output terminal	M4, M5

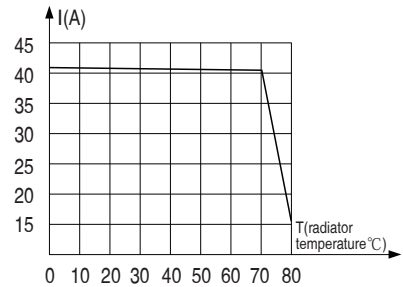
*Fit the special installment guide rail

Rated value temperature curree

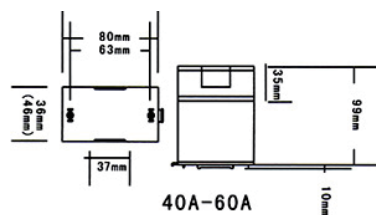
■ G3DA4825



■ G3DA type 40A



Dimension



1



AC SSR (100A-130A) of all-in-one radiator

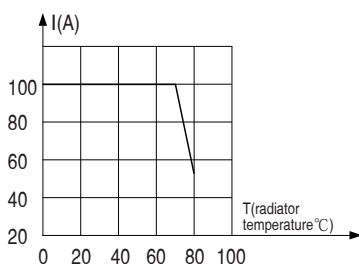
- Single-phase, current rating 80A, 100A, 130A;
- SCR anti-parallel combination enhanced type;
- The out-port is load with the fast fuse protection;
- RC absorption protection
- Double LED indicate input & output condition;
- The CT inductance feed out voltage signal.

Specification

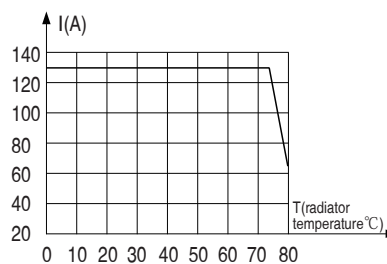
Output parameter	SCR anti-parallel connection
Voltage scope(Max Vrms)	48-660
Peak voltage(V peak)	1200
Maximum current(A)	100, 130
Off state maximum leakage(mA)(T=25°C Vmax)	3mA
Turn-on voltage(V) max, T=25°C	1.2
Static state(off-state) dv/dt(V/us)	500
Frequency range(Hz)	47/63
Input parameter	
Input voltage(V)	4-32VDC or 220VAC±15VAC
Input control current(mA)	8-30
Operate time(Cclosed)	10ms(0.5cycle)Max
Response time(opened)	10ms(0.5cycle)Max
General parameter	
Operating temperature(°C)	-40°C-80°C
Isolation bet in & out(Vrms)	≥2000V
Isolation to case(Viso)(Vrms)	≥2000V
Material	Outer coverint anti-burns
Radiator	Foundation plate pigment aluminum molding
Weight	3kg
Input terminal	Screw Fatens
Output terminal	M8

Rated value temperature curre

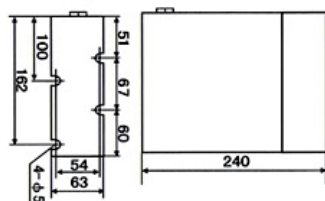
■ 100A



■ 130A



Dimension



Solid state contactor

Solid state contactor is an integrated switch which with the solid state relay, installing connector, temperature protecting switch assembled to the heat-sink designed by calorifics calculation. Current: 30A-500A voltage: 280-530V.

Specification

Order No.	Max load current Per phase	Product size(mm)	Mounfing size(mm)	Heat sink length(mm)	Control voltage
SAM4060D 3	30A	170x125x175	173x106	100	12/24VDC
SAM4080D 3	40A	170x125x175	173x106	100	12/24VDC
SAM40120DX3	50A	190x125x175	173x106	100	12/24VDC
SAM40120DX3	60A	215x125x175	198x106	125	12/24VDC
SAM40150DX3	75A	245x125x180	228x106	155	12/24VDC
SAM40200DX3	100A	260x125x180	243x106	210	12/24VDC
SAM40200DX3	100A	300x125x180	283x106	210	12/24VDC
SAM40250DX3	125A	300x125x180	283x106	210	12/24VDC
SAM40250DX3	125A	340x125x180	323x106	250	12/24VDC
SAM40300DX3	150A	390x125x180	373x106	300	12/24VDC
SAM40400DX3	200A	390x125x180	373x106	300	12/24VDC
SAM80500DX3	250A	(260x125x191)x3	(243x106)x3	170x3	12/24VDC
SAM80600DX3	300A	(300x125x191)x3	(283x106)x3	210x3	12/24VDC
SAM80800DX3	400A	(340x125x215)x3	(323x106)x3	250x3	12/24VDC
SAM801000DX3	500A	(390x125x215)x3	(373x106)x3	300x3	12/24VDC

Order No.	Specification	Max load current Per phase	Product size(mm)	Mounfing size(mm)	Control voltage
SKT33KW	3x380VAC	50A	280x330x174	250x270	12/24VDC
SKT50KW	3x380VAC	75A	280x330x174	250x270	12/24VDC
SKT66KW	3x380VAC	100A	280x330x174	250x270	12/24VDC
SKT99KW	3x380VAC	150A	340x330x174	310x270	12/24VDC
SKT132KW	3x380VAC	200A	340x330x174	310x270	12/24VDC
SKT165KW	3x380VAC	250A	420x330x185	390x270	12/24VDC
SKT198KW	3x380VAC	300A	420x330x185	390x270	12/24VDC



GREEGOO™

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www.greegoo.com



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