

GD 10 to 40 Amps AC SSR



Solid state relays (triacs output)

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.

Features

- Rated operational current 10 to 40 Amps.
- Rated operational voltage 240V or 440 V.
- Input Voltage Range 4 to 16 Vdc, 4 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.

Symbol	Meaning
G	Greegoo
D	Single phase
*	10-10A, 25-25A, 40-40A
*	24-240V, 48-480V
*	Z-zero control, R-random control
*	D1-4-16Vdc, D3-4-32Vdc, A2-90-250Vac

For example:GD4048ZD3, single phase, 40A, 480Vac, 4-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		10 Amp	25Amp	40Amp
240 VAC “Z”	4 to 16 Vdc	GD1024ZD1	GD2524ZD1	GD4024ZD1
240 VAC “R”	4 to 16 Vdc	GD1024RD1	GD2524RD1	GD4024RD1
240 VAC “Z”	4 to 32 Vdc	GD1024ZD3	GD2524ZD3	GD4024ZD3
240 VAC “R”	4 to 32 Vdc	GD1024RD3	GD2524RD3	GD4024RD3
240 VAC “Z”	90 to 250Vac	GD1024ZA2	GD2524ZA2	GD4024ZA2
240 VAC “R”	90 to 250Vac	GD1024RA2	GD2524RA2	GD4024RA2
440 VAC “Z”	4 to 16 Vdc	GD1044ZD1	GD2544ZD1	GD4044ZD1
440 VAC “R”	4 to 16 Vdc	GD1044RD1	GD2544RD1	GD4044RD1
440 VAC “Z”	4 to 32 Vdc	GD1044ZD3	GD2544ZD3	GD4044ZD3
440 VAC “R”	4 to 32 Vdc	GD1044RD3	GD2544RD3	GD4044RD3
440 VAC “Z”	90 to 250Vac	GD1044ZA2	GD2544ZA2	GD4044ZA2
440 VAC “R”	90 to 250Vac	GD1044RA2	GD2544RA2	GD4044RA2
Rated Voltage	Control voltage	Rated operational current		
		10 Amp	25Amp	40Amp
280 VAC “Z”	4 to 16 Vdc	GD1028ZD1	GD2528ZD1	GD4028ZD1
280 VAC “R”	4 to 16 Vdc	GD1028RD1	GD2528RD1	GD4028RD1
280 VAC “Z”	4 to 32 Vdc	GD1028ZD3	GD2528ZD3	GD4028ZD3
280 VAC “R”	4 to 32 Vdc	GD1028RD3	GD2528RD3	GD4028RD3
280 VAC “Z”	90 to 250Vac	GD1028ZA2	GD2528ZA2	GD4028ZA2
280 VAC “R”	90 to 250Vac	GD1028RA2	GD2528RA2	GD4028RA2
480 VAC “Z”	4 to 16 Vdc	GD1048ZD1	GD2548ZD1	GD4048ZD1
480 VAC “R”	4 to 16 Vdc	GD1048RD1	GD2548RD1	GD4048RD1
480 VAC “Z”	4 to 32 Vdc	GD1048ZD3	GD2548ZD3	GD4048ZD3
480 VAC “R”	4 to 32 Vdc	GD1048RD3	GD2548RD3	GD4048RD3
480 VAC “Z”	90 to 250Vac	GD1048ZA2	GD2548ZA2	GD4048ZA2
480 VAC “R”	90 to 250Vac	GD1048RA2	GD2548RA2	GD4048RA2

GD 10 to 40 Amps AC SSR

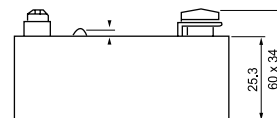
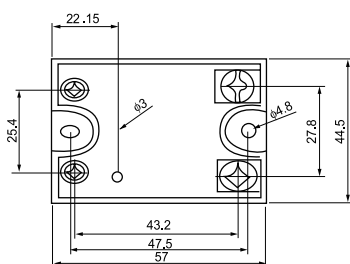


Specifications

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

Output Parameter	Units	Specification Limits		
Model No.:GD	Amp	10	25	40
Load Current Range	Arms	0.05 to 10	0.05 to 25	0.05 to 40
Surge Current 20mSec(Max.)	Arms	85	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	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		
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)	145g			
Base Plate	Copper, nikel-plated			
Case Color	Black			
Led Display	Yes			

Dimension



GDH 40 to 120Amps AC SSR



Single phase Solid State Relay (SCR output)

Series GDH are power line relays allowing 40 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.

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
- * 40-40A, 60-60A, 80-80A, 100-100A, 120-120A
- * 28-280V,48-480V
- * Z-zero control, R-random control
- * D1-4-16Vdc, D3-4-32Vdc, A2-90-250Vac

For example:GDH4048ZD3, single phase, SCR output, 40A, 480Vac, 4-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		40 Amp	60Amp	80Amp
280 VAC “Z”	4 to 16 Vdc	GDH4028ZD1	GDH6028ZD1	GDH8028ZD1
280 VAC “R”	4 to 16 Vdc	GDH4028RD1	GDH6028RD1	GDH8028RD1
280 VAC “Z”	4 to 32 Vdc	GDH4028ZD3	GDH6028ZD3	GDH8028ZD3
280 VAC “R”	4 to 32 Vdc	GDH4028RD3	GDH6028RD3	GDH8028RD3
280 VAC “Z”	90 to 250Vac	GDH4028ZA2	GDH6028ZA2	GDH8028ZA2
280 VAC “R”	90 to 250Vac	GDH4028RA2	GDH6028RA2	GDH8028RA2
480 VAC “Z”	4 to 16 Vdc	GDH4048ZD1	GDH6048ZD1	GDH8048ZD1
480 VAC “R”	4 to 16 Vdc	GDH4048RD1	GDH6048RD1	GDH8048RD1
480 VAC “Z”	4 to 32 Vdc	GDH4048ZD3	GDH6048ZD3	GDH8048ZD3
480 VAC “R”	4 to 32 Vdc	GDH4048RD3	GDH6048RD3	GDH8048RD3
480 VAC “Z”	90 to 250Vac	GDH4048ZA2	GDH6048ZA2	GDH8048ZA2
480 VAC “R”	90 to 250Vac	GDH4048RA2	GDH6048RA2	GDH8048RA2
		100 Amp	120Amp	
280 VAC “Z”	4 to 16 Vdc	GDH10028ZD1	GDH12028ZD1	
280 VAC “R”	4 to 16 Vdc	GDH10028RD1	GDH12028RD1	
280 VAC “Z”	4 to 32 Vdc	GDH10028ZD3	GDH12028ZD3	
280 VAC “R”	4 to 32 Vdc	GDH10028RD3	GDH12028RD3	
280 VAC “Z”	90 to 250Vac	GDH10028ZA2	GDH12028ZA2	
280 VAC “R”	90 to 250Vac	GDH10028RA2	GDH12028RA2	
480 VAC “Z”	4 to 16 Vdc	GDH10048ZD1	GDH12048ZD1	
480 VAC “R”	4 to 16 Vdc	GDH10048RD1	GDH12048RD1	
480 VAC “Z”	4 to 32 Vdc	GDH10048ZD3	GDH12048ZD3	
480 VAC “R”	4 to 32 Vdc	GDH10048RD3	GDH12048RD3	
480 VAC “Z”	90 to 250Vac	GDH10048ZA2	GDH12048ZA2	
480 VAC “R”	90 to 250Vac	GDH10048RA2	GDH12048RA2	

GDH 40 to 120Amps AC SSR

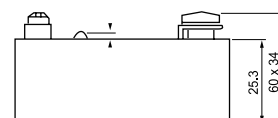
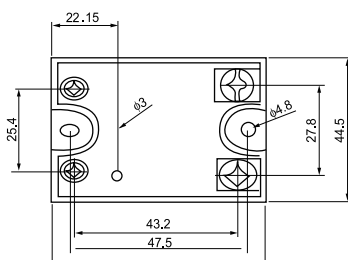


Specifications

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

Output Parameter	Units	Specification Limits				
Model No.:GDH	Amp	40	60	80	100	120
Load Current Range	Arms	0.05 to 40	0.05 to 60	0.05 to 80	0.05 to 100	0.05 to 120
Surge Current 20mSec(Max.)	Arms	400	600	1000	1200	1500
Load Voltage Range(280V)	Vrms	24 to 280				
SCR Over voltage(280V)	Vpk	≥800				
Load Voltage Range(480V)	Vrms	44 to 480				
SCR Over voltage(480V)	Vpk	≥1200				
Thermal Resistance,(Rthjc)	°C/w	1.3	0.65	0.5	0.3	0.3
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				
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)	145g					
Base Plate	Copper, nikel-plated					
Case Color	Black					
Led Display	Yes					

Dimension



GDH 60 to 150Amps AC SSR



Single phase Solid State Relay (SCR output)

Series GDH are power line relays allowing 60 to 150 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

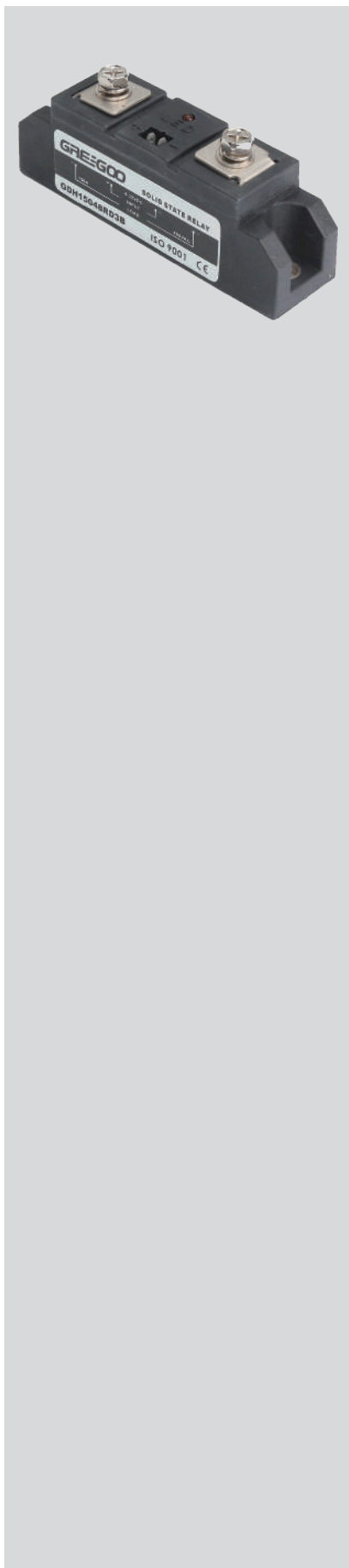
- G Greegoo
- D Single phase
- H SCR output
- * 60-60A, 80-80A, 100-100A, 120-120A, 150-150A
- * 28-280V, 48-480V
- * Z-zero control, R-random control
- * D1-4-16Vdc, D3-4-32Vdc, A2-90-250Vac

For example:GDH8048ZD3, single phase, SCR output, 80A, 480Vac, 4-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		60 Amp	80Amp	100Amp
280 VAC “Z”	4 to 16 Vdc	GDH6028ZD1B	GDH8028ZD1B	GDH10028ZD1B
280 VAC “R”	4 to 16 Vdc	GDH6028RD1B	GDH8028RD1B	GDH10028RD1B
280 VAC “Z”	4 to 32 Vdc	GDH6028ZD3B	GDH8028ZD3B	GDH10028ZD3B
280 VAC “R”	4 to 32 Vdc	GDH6028RD3B	GDH8028RD3B	GDH10028RD3B
280 VAC “Z”	90 to 250Vac	GDH6028ZA2B	GDH8028ZA2B	GDH10028ZA2B
280 VAC “R”	90 to 250Vac	GDH6028RA2B	GDH8028RA2B	GDH10028RA2B
480 VAC “Z”	4 to 16 Vdc	GDH6048ZD1B	GDH8048ZD1B	GDH10048ZD1B
480 VAC “R”	4 to 16 Vdc	GDH6048RD1B	GDH8048RD1B	GDH10048RD1B
480 VAC “Z”	4 to 32 Vdc	GDH6048ZD3B	GDH8048ZD3B	GDH10048ZD3B
480 VAC “R”	4 to 32 Vdc	GDH6048RD3B	GDH8048RD3B	GDH10048RD3B
480 VAC “Z”	90 to 250Vac	GDH6048ZA2B	GDH8048ZA2B	GDH10048ZA2B
480 VAC “R”	90 to 250Vac	GDH6048RA2B	GDH8048RA2B	GDH10048RA2B
		120 Amp		150Amp
280 VAC “Z”	4 to 16 Vdc	GDH12028ZD1B		GDH15028ZD1B
280 VAC “R”	4 to 16 Vdc	GDH12028RD1B		GDH15028RD1B
280 VAC “Z”	4 to 32 Vdc	GDH12028ZD3B		GDH15028ZD3B
280 VAC “R”	4 to 32 Vdc	GDH12028RD3B		GDH15028RD3B
280 VAC “Z”	90 to 250Vac	GDH12028ZA2B		GDH15028ZA2B
280 VAC “R”	90 to 250Vac	GDH12028RA2B		GDH15028RA2B
480 VAC “Z”	4 to 16 Vdc	GDH12048ZD1B		GDH15048ZD1B
480 VAC “R”	4 to 16 Vdc	GDH12048RD1B		GDH15048RD1B
480 VAC “Z”	4 to 32 Vdc	GDH12048ZD3B		GDH15048ZD3B
480 VAC “R”	4 to 32 Vdc	GDH12048RD3B		GDH15048RD3B
480 VAC “Z”	90 to 250Vac	GDH12048ZA2B		GDH15048ZA2B
480 VAC “R”	90 to 250Vac	GDH12048RA2B		GDH15048RA2B

GDH 60 to 150 Amps AC SSR

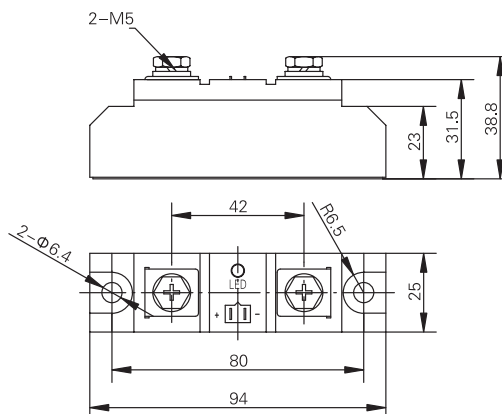


Specifications

Parameter-list	Specification Limits		
Input Parameter	D1	D3	A2
Control Voltage Range	4 to 16Vdc	4 to 32Vdc	90 to 250Vac
Input Current(Max.)	13/42mAdc @=5V/12V	13/16mAdc @=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	60	80	100	120	150
Load Current Range	Arms	0.05 to 60	0.05 to 80	0.05 to 100	0.05 to 120	0.05 to 150
Surge Current 20mSec(Max.)	Arms	600	1000	1200	1500	2000
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	0.65	0.5	0.3	0.3	0.3
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				
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)	150g					
Base Plate	Copper, nikel-plated					
Case Color	Black					
Led Display	Yes					

Dimension



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, 4-32Vdc 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		

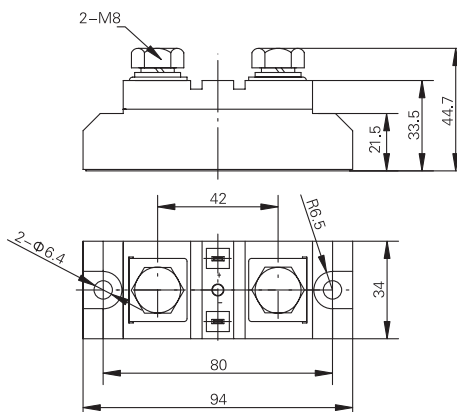
GDH 200 to 400Amps AC SSR



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.)	13/42mAdc @=5V/12V	13/16mAdc @=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



GDH 500 to 1000Amps AC SSR



Single phase Solid State Relay (SCR output)

Series GDH are power line relays allowing 500 to 1000 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
- * 500-500A, 600-600A, 800-800A, 1000-1000A
- * 28-280V,48-480V
- * Z-zero control, R-random control
- * D1-4-16Vdc, D3-4-32Vdc, A2-90-250Vac

For example:GDH50048ZD3, single phase, SCR output, 500A, 480Vac, 3-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current	
		500 Amp	600Amp
240 VAC “Z”	4 to 16 Vdc	GDH50024ZD1B	GDH60024ZD1B
240 VAC “R”	4 to 16 Vdc	GDH50024RD1B	GDH60024RD1B
240 VAC “Z”	4 to 32 Vdc	GDH50024ZD3B	GDH60024ZD3B
240 VAC “R”	4 to 32 Vdc	GDH50024RD3B	GDH60024RD3B
440 VAC “Z”	4 to 16 Vdc	GDH50044ZD1B	GDH60044ZD1B
440 VAC “R”	4 to 16 Vdc	GDH50044RD1B	GDH60044RD1B
440 VAC “Z”	4 to 32 Vdc	GDH50044ZD3B	GDH60044ZD3B
440 VAC “R”	4 to 32 Vdc	GDH50044RD3B	GDH60044RD3B
		800Amp	1000Amp
280 VAC “Z”	4 to 16 Vdc	GDH80028ZD1B	GDH100028ZD1B
280 VAC “R”	4 to 16 Vdc	GDH80028RD1B	GDH100028RD1B
280 VAC “Z”	4 to 32 Vdc	GDH80028ZD3B	GDH100028ZD3B
280 VAC “R”	4 to 32 Vdc	GDH80028RD3B	GDH100028RD3B
480 VAC “Z”	4 to 16 Vdc	GDH80048ZD1B	GDH100048ZD1B
480 VAC “R”	4 to 16 Vdc	GDH80048RD1B	GDH100048RD1B
480 VAC “Z”	4 to 32 Vdc	GDH80048ZD3B	GDH100048ZD3B
480 VAC “R”	4 to 32 Vdc	GDH80048RD3B	GDH100048RD3B

Parameter-list	Specification Limits	
Input Parameter	D1	D3
Control Voltage Range	4 to 16Vdc	4 to 32Vdc
Input Current(Max.)	13/42mAdc @=5V/12V	13/16mAdc @=5V/12V
Must Turn On Voltage	4Vdc	3.5Vdc
Must Turn Off Voltage	1Vdc	1Vdc
Reverse Voltage (Max.)	32Vdc	32Vdc

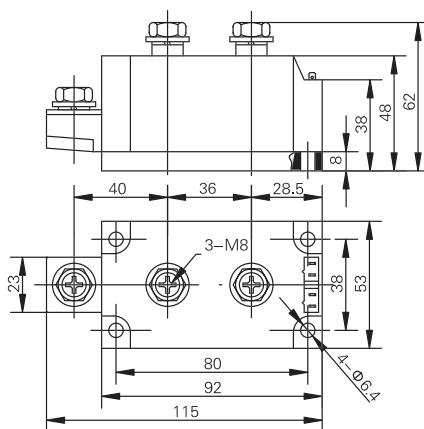
GDH 500 to 1000Amps AC SSR



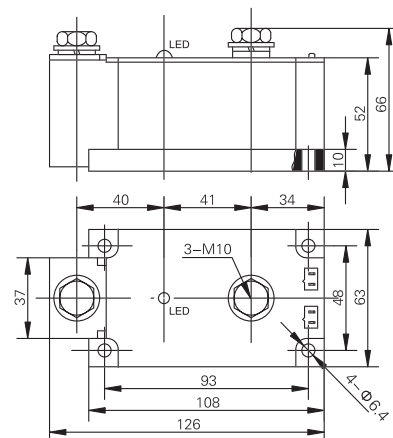
Specifications

Output Parameter	Units	Specification Limits			
		500	600	800	1000
Model No.:GDH	Amp	500	600	800	1000
Load Current Range	Arms	0.05 to 500	0.05 to 600	0.05 to 800	0.05 to 1000
Surge Current 20mSec(Max.)	Arms	7200	8800	11500	12000
Load Voltage Range(240V)	Vrms	24 to 280			
SCR Over voltage(240V)	Vpk	≥1000			
Load Voltage Range(440V)	Vrms	44 to 480			
SCR Over voltage(440V)	Vpk	≥1200			
Thermal Resistance,(Rthjc)	°C/w	0.1	0.1	0.08	0.07
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)	g	880	880	1500	1500
Base Plate	Copper, nikel-plated				
Case Color	Black				
Led Display	Yes				

Dimension



500A~600A



800A~1000A

GD 10 to 40 Amps AC SSR



Solid state relays (triacs output)

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.

Features

- 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.

Symbol	Meaning
G	Greegoo
D	Single phase
*	10-10A, 25-25A, 40-40A
*	24-240V, 48-480V
*	Z-zero control, R-random control
*	D1-4-16Vdc, D3-3-32Vdc, A2-90-250Vac

For example:GD4048ZD3, single phase, 40A, 480Vac, 3-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		10 Amp	25Amp	40Amp
240 VAC “Z”	4 to 16 Vdc	GD1024ZD1	GD2524ZD1	GD4024ZD1
240 VAC “R”	4 to 16 Vdc	GD1024RD1	GD2524RD1	GD4024RD1
240 VAC “Z”	3 to 32 Vdc	GD1024ZD3	GD2524ZD3	GD4024ZD3
240 VAC “R”	3 to 32 Vdc	GD1024RD3	GD2524RD3	GD4024RD3
240 VAC “Z”	90 to 250Vac	GD1024ZA2	GD2524ZA2	GD4024ZA2
240 VAC “R”	90 to 250Vac	GD1024RA2	GD2524RA2	GD4024RA2
440 VAC “Z”	4 to 16 Vdc	GD1044ZD1	GD2544ZD1	GD4044ZD1
440 VAC “R”	4 to 16 Vdc	GD1044RD1	GD2544RD1	GD4044RD1
440 VAC “Z”	3 to 32 Vdc	GD1044ZD3	GD2544ZD3	GD4044ZD3
440 VAC “R”	3 to 32 Vdc	GD1044RD3	GD2544RD3	GD4044RD3
440 VAC “Z”	90 to 250Vac	GD1044ZA2	GD2544ZA2	GD4044ZA2
440 VAC “R”	90 to 250Vac	GD1044RA2	GD2544RA2	GD4044RA2
Rated Voltage	Control voltage	Rated operational current		
		10 Amp	25Amp	40Amp
280 VAC “Z”	4 to 16 Vdc	GD1028ZD1	GD2528ZD1	GD4028ZD1
280 VAC “R”	4 to 16 Vdc	GD1028RD1	GD2528RD1	GD4028RD1
280 VAC “Z”	3 to 32 Vdc	GD1028ZD3	GD2528ZD3	GD4028ZD3
280 VAC “R”	3 to 32 Vdc	GD1028RD3	GD2528RD3	GD4028RD3
280 VAC “Z”	90 to 250Vac	GD1028ZA2	GD2528ZA2	GD4028ZA2
280 VAC “R”	90 to 250Vac	GD1028RA2	GD2528RA2	GD4028RA2
480 VAC “Z”	4 to 16 Vdc	GD1048ZD1	GD2548ZD1	GD4048ZD1
480 VAC “R”	4 to 16 Vdc	GD1048RD1	GD2548RD1	GD4048RD1
480 VAC “Z”	3 to 32 Vdc	GD1048ZD3	GD2548ZD3	GD4048ZD3
480 VAC “R”	3 to 32 Vdc	GD1048RD3	GD2548RD3	GD4048RD3
480 VAC “Z”	90 to 250Vac	GD1048ZA2	GD2548ZA2	GD4048ZA2
480 VAC “R”	90 to 250Vac	GD1048RA2	GD2548RA2	GD4048RA2

GD 10 to 40 Amps AC SSR

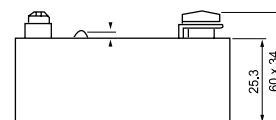
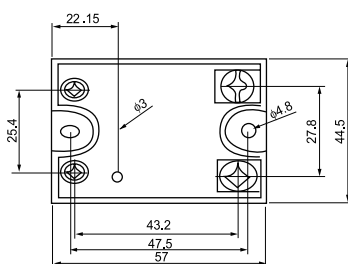


Specifications

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

Output Parameter	Units	Specification Limits		
Model No.:GD	Amp	10	25	40
Load Current Range	Arms	0.05 to 10	0.05 to 25	0.05 to 40
Surge Current 20mSec(Max.)	Arms	85	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	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		
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)	145g			
Base Plate	Copper, nikel-plated			
Case Color	Black			
Led Display	Yes			

Dimension



GDH 40 to 120Amps AC SSR



Single phase Solid State Relay (SCR output)

Series GDH are power line relays allowing 40 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.

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 ,3 to 32 Vdc or 90~250Vac

Symbol Meaning

- G Greegoo
- D Single phase
- H SCR output
- * 40-40A, 60-60A, 80-80A, 100-100A, 120-120A
- * 28-280V,48-480V
- * Z-zero control, R-random control
- * D1-4-16Vdc, D3-3-32Vdc, A2-90-250Vac

For example:GDH4048ZD3, single phase, SCR output, 40A, 480Vac, 3-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		40 Amp	60Amp	80Amp
280 VAC “Z”	4 to 16 Vdc	GDH4028ZD1	GDH6028ZD1	GDH8028ZD1
280 VAC “R”	4 to 16 Vdc	GDH4028RD1	GDH6028RD1	GDH8028RD1
280 VAC “Z”	3 to 32 Vdc	GDH4028ZD3	GDH6028ZD3	GDH8028ZD3
280 VAC “R”	3 to 32 Vdc	GDH4028RD3	GDH6028RD3	GDH8028RD3
280 VAC “Z”	90 to 250Vac	GDH4028ZA2	GDH6028ZA2	GDH8028ZA2
280 VAC “R”	90 to 250Vac	GDH4028RA2	GDH6028RA2	GDH8028RA2
480 VAC “Z”	4 to 16 Vdc	GDH4048ZD1	GDH6048ZD1	GDH8048ZD1
480 VAC “R”	4 to 16 Vdc	GDH4048RD1	GDH6048RD1	GDH8048RD1
480 VAC “Z”	3 to 32 Vdc	GDH4048ZD3	GDH6048ZD3	GDH8048ZD3
480 VAC “R”	3 to 32 Vdc	GDH4048RD3	GDH6048RD3	GDH8048RD3
480 VAC “Z”	90 to 250Vac	GDH4048ZA2	GDH6048ZA2	GDH8048ZA2
480 VAC “R”	90 to 250Vac	GDH4048RA2	GDH6048RA2	GDH8048RA2
		100 Amp	120Amp	
280 VAC “Z”	4 to 16 Vdc	GDH10028ZD1	GDH12028ZD1	
280 VAC “R”	4 to 16 Vdc	GDH10028RD1	GDH12028RD1	
280 VAC “Z”	3 to 32 Vdc	GDH10028ZD3	GDH12028ZD3	
280 VAC “R”	3 to 32 Vdc	GDH10028RD3	GDH12028RD3	
280 VAC “Z”	90 to 250Vac	GDH10028ZA2	GDH12028ZA2	
280 VAC “R”	90 to 250Vac	GDH10028RA2	GDH12028RA2	
480 VAC “Z”	4 to 16 Vdc	GDH10048ZD1	GDH12048ZD1	
480 VAC “R”	4 to 16 Vdc	GDH10048RD1	GDH12048RD1	
480 VAC “Z”	3 to 32 Vdc	GDH10048ZD3	GDH12048ZD3	
480 VAC “R”	3 to 32 Vdc	GDH10048RD3	GDH12048RD3	
480 VAC “Z”	90 to 250Vac	GDH10048ZA2	GDH12048ZA2	
480 VAC “R”	90 to 250Vac	GDH10048RA2	GDH12048RA2	

GDH 40 to 120Amps AC SSR

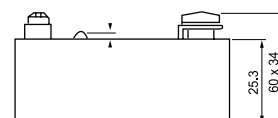
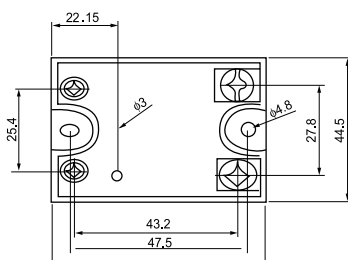


Specifications

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

Output Parameter	Units	Specification Limits				
Model No.:GDH	Amp	40	60	80	100	120
Load Current Range	Arms	0.05 to 40	0.05 to 60	0.05 to 80	0.05 to 100	0.05 to 120
Surge Current 20mSec(Max.)	Arms	400	600	1000	1200	1500
Load Voltage Range(280V)	Vrms	24 to 280				
SCR Over voltage(280V)	Vpk	≥800				
Load Voltage Range(480V)	Vrms	44 to 480				
SCR Over voltage(480V)	Vpk	≥1200				
Thermal Resistance,(Rthjc)	°C/w	1.3	0.65	0.5	0.3	0.3
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				
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)	145g					
Base Plate	Copper, nikel-plated					
Case Color	Black					
Led Display	Yes					

Dimension



GDH 60 to 150Amps AC SSR



Single phase Solid State Relay (SCR output)

Series GDH are power line relays allowing 60 to 150 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
*	60-60A, 80-80A, 100-100A, 120-120A, 150-150A
*	28-280V, 48-480V
*	Z-zero control, R-random control
*	D1-4-16Vdc, D3-4-32Vdc, A2-90-250Vac

For example:GDH8048ZD3, single phase, SCR output, 80A, 480Vac, 4-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		60 Amp	80Amp	100Amp
280 VAC “Z”	4 to 16 Vdc	GDH6028ZD1B	GDH8028ZD1B	GDH10028ZD1B
280 VAC “R”	4 to 16 Vdc	GDH6028RD1B	GDH8028RD1B	GDH10028RD1B
280 VAC “Z”	4 to 32 Vdc	GDH6028ZD3B	GDH8028ZD3B	GDH10028ZD3B
280 VAC “R”	4 to 32 Vdc	GDH6028RD3B	GDH8028RD3B	GDH10028RD3B
280 VAC “Z”	90 to 250Vac	GDH6028ZA2B	GDH8028ZA2B	GDH10028ZA2B
280 VAC “R”	90 to 250Vac	GDH6028RA2B	GDH8028RA2B	GDH10028RA2B
480 VAC “Z”	4 to 16 Vdc	GDH6048ZD1B	GDH8048ZD1B	GDH10048ZD1B
480 VAC “R”	4 to 16 Vdc	GDH6048RD1B	GDH8048RD1B	GDH10048RD1B
480 VAC “Z”	4 to 32 Vdc	GDH6048ZD3B	GDH8048ZD3B	GDH10048ZD3B
480 VAC “R”	4 to 32 Vdc	GDH6048RD3B	GDH8048RD3B	GDH10048RD3B
480 VAC “Z”	90 to 250Vac	GDH6048ZA2B	GDH8048ZA2B	GDH10048ZA2B
480 VAC “R”	90 to 250Vac	GDH6048RA2B	GDH8048RA2B	GDH10048RA2B
		120 Amp		150Amp
280 VAC “Z”	4 to 16 Vdc	GDH12028ZD1B		GDH15028ZD1B
280 VAC “R”	4 to 16 Vdc	GDH12028RD1B		GDH15028RD1B
280 VAC “Z”	4 to 32 Vdc	GDH12028ZD3B		GDH15028ZD3B
280 VAC “R”	4 to 32 Vdc	GDH12028RD3B		GDH15028RD3B
280 VAC “Z”	90 to 250Vac	GDH12028ZA2B		GDH15028ZA2B
280 VAC “R”	90 to 250Vac	GDH12028RA2B		GDH15028RA2B
480 VAC “Z”	4 to 16 Vdc	GDH12048ZD1B		GDH15048ZD1B
480 VAC “R”	4 to 16 Vdc	GDH12048RD1B		GDH15048RD1B
480 VAC “Z”	4 to 32 Vdc	GDH12048ZD3B		GDH15048ZD3B
480 VAC “R”	4 to 32 Vdc	GDH12048RD3B		GDH15048RD3B
480 VAC “Z”	90 to 250Vac	GDH12048ZA2B		GDH15048ZA2B
480 VAC “R”	90 to 250Vac	GDH12048RA2B		GDH15048RA2B

GDH 60 to 150 Amps AC SSR

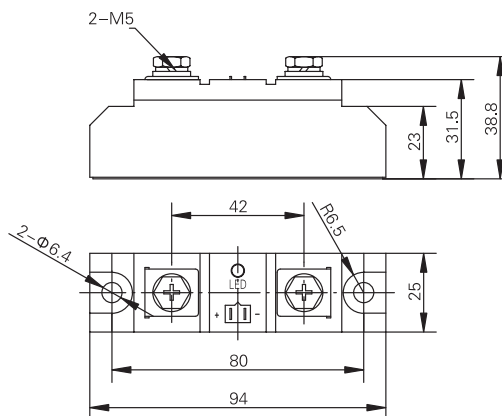


Specifications

Parameter-list	Specification Limits		
Input Parameter	D1	D3	A2
Control Voltage Range	4 to 16Vdc	4 to 32Vdc	90 to 250Vac
Input Current(Max.)	13/42mAdc @=5V/12V	13/16mAdc @=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	60	80	100	120	150
Load Current Range	Arms	0.05 to 60	0.05 to 80	0.05 to 100	0.05 to 120	0.05 to 150
Surge Current 20mSec(Max.)	Arms	600	1000	1200	1500	2000
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	0.65	0.5	0.3	0.3	0.3
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				
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)	150g					
Base Plate	Copper, nikel-plated					
Case Color	Black					
Led Display	Yes					

Dimension



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, 4-32Vdc 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		

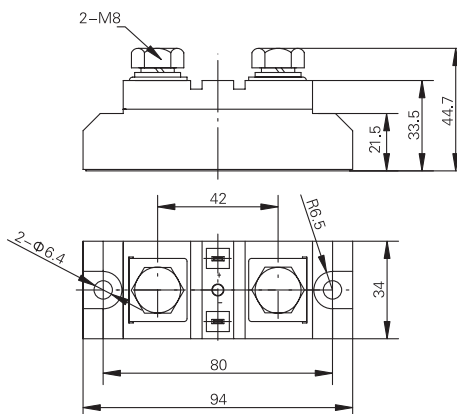
GDH 200 to 400Amps AC SSR



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



GDH 500 to 1000Amps AC SSR



Single phase Solid State Relay (SCR output)

Series GDH are power line relays allowing 500 to 1000 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
- * 500-500A, 600-600A, 800-800A, 1000-1000A
- * 28-280V,48-480V
- * Z-zero control, R-random control
- * D1-4-16Vdc, D3-4-32Vdc, A2-90-250Vac

For example:GDH50048ZD3, single phase, SCR output, 500A, 480Vac, 4-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current	
		500 Amp	600Amp
240 VAC “Z”	4 to 16 Vdc	GDH50024ZD1B	GDH60024ZD1B
240 VAC “R”	4 to 16 Vdc	GDH50024RD1B	GDH60024RD1B
240 VAC “Z”	4 to 32 Vdc	GDH50024ZD3B	GDH60024ZD3B
240 VAC “R”	4 to 32 Vdc	GDH50024RD3B	GDH60024RD3B
440 VAC “Z”	4 to 16 Vdc	GDH50044ZD1B	GDH60044ZD1B
440 VAC “R”	4 to 16 Vdc	GDH50044RD1B	GDH60044RD1B
440 VAC “Z”	4 to 32 Vdc	GDH50044ZD3B	GDH60044ZD3B
440 VAC “R”	4 to 32 Vdc	GDH50044RD3B	GDH60044RD3B
		800Amp	1000Amp
280 VAC “Z”	4 to 16 Vdc	GDH80028ZD1B	GDH100028ZD1B
280 VAC “R”	4 to 16 Vdc	GDH80028RD1B	GDH100028RD1B
280 VAC “Z”	4 to 32 Vdc	GDH80028ZD3B	GDH100028ZD3B
280 VAC “R”	4 to 32 Vdc	GDH80028RD3B	GDH100028RD3B
480 VAC “Z”	4 to 16 Vdc	GDH80048ZD1B	GDH100048ZD1B
480 VAC “R”	4 to 16 Vdc	GDH80048RD1B	GDH100048RD1B
480 VAC “Z”	4 to 32 Vdc	GDH80048ZD3B	GDH100048ZD3B
480 VAC “R”	4 to 32 Vdc	GDH80048RD3B	GDH100048RD3B

Parameter-list	Specification Limits	
Input Parameter	D1	D3
Control Voltage Range	4 to 16Vdc	3 to 32Vdc
Input Current(Max.)	13/42mAdc @=5V/12V	13/16mAdc @=5V/12V
Must Turn On Voltage	4Vdc	3.5Vdc
Must Turn Off Voltage	1Vdc	1Vdc
Reverse Voltage (Max.)	32Vdc	32Vdc

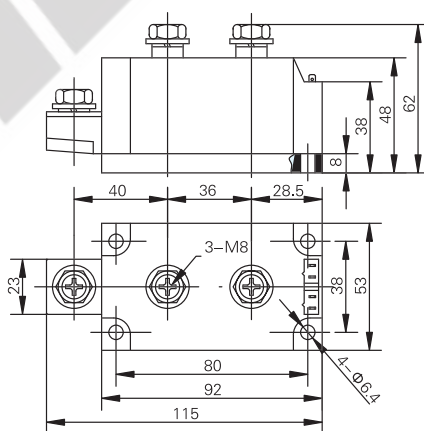
GDH 500 to 1000Amps AC SSR



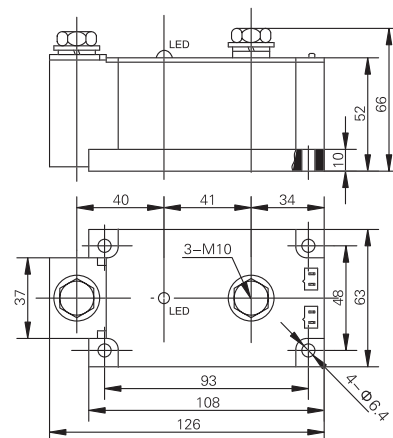
Specifications

Output Parameter	Units	Specification Limits			
		500	600	800	1000
Model No.:GDH	Amp	500	600	800	1000
Load Current Range	Arms	0.05 to 500	0.05 to 600	0.05 to 800	0.05 to 1000
Surge Current 20mSec(Max.)	Arms	7200	8800	11500	12000
Load Voltage Range(240V)	Vrms	24 to 280			
SCR Over voltage(240V)	Vpk	≥1000			
Load Voltage Range(440V)	Vrms	44 to 480			
SCR Over voltage(440V)	Vpk	≥1200			
Thermal Resistance,(Rthjc)	°C/w	0.1	0.1	0.08	0.07
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)	g	880	880	1500	1500
Base Plate	Copper, nikel-plated				
Case Color	Black				
Led Display	Yes				

Dimension



500A~600A



800A~1000A

GT 10 to 40 Amps AC SSR



3 phase solid state relays (SCR output 10A to 40A)

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

Feature:

- Rated operational current 3X10, 3X15, 3X25, 3X40A.
- Both “Zero Voltage” & phase controllable “Random Switching” versions.
- Input Voltage Range 4 to 16 Vdc, 3 to 32 Vdc.
- 2500 Vrms Optical Isolation.(input/output)
- LED-indication for control input.

Symbol Meaning

- G Greegoo
- T Three phase
- * 10-10A, 15-15A, 25-25A, 40-40A
- * 44-440V
- * Z-zero control, R-random control
- * D1-4-16Vdc, D3-3-32Vdc

For example:GT4048ZD3, 3 phase, 40A, 480Vac, 3-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		10 Amp	25Amp	40Amp
440 VAC “Z”	4 to 16 Vdc	GT1044ZD1	GT2544ZD1	GT4044ZD1
440 VAC “R”	4 to 16 Vdc	GT1044RD1	GT2544RD1	GT4044RD1
440 VAC “Z”	3 to 32 Vdc	GT1044ZD3	GT2544ZD3	GT4044ZD3
440 VAC “R”	3 to 32 Vdc	GT1044RD3	GT2544RD3	GT4044RD3
440 VAC “Z”	90 to 250Vac	GT1044ZA2	GT2544ZA2	GT4044ZA2
440 VAC “R”	90 to 250Vac	GT1044RA2	GT2544RA2	GT4044RA2
480 VAC “Z”	4 to 16 Vdc	GT1048ZD1	GT2548ZD1	GT4048ZD1
480 VAC “R”	4 to 16 Vdc	GT1048RD1	GT2548RD1	GT4048RD1
480 VAC “Z”	3 to 32 Vdc	GT1048ZD3	GT2548ZD3	GT4048ZD3
480 VAC “R”	3 to 32 Vdc	GT1048RD3	GT2548RD3	GT4048RD3
480 VAC “Z”	90 to 250Vac	GT1048ZA2	GT2548ZA2	GT4048ZA2
480 VAC “R”	90 to 250Vac	GT1048RA2	GT2548RA2	GT4048RA2

Specifications

Parameter-list	Specification Limits		
	D1	D3	A2
Input Parameter			
Control Voltage Range	4 to 16Vdc	3 to 32Vdc	90 to 250Vac
Input Current(Max.)	26/86mAdc @=5V/12V	33/56mAdc @=5V/12V	13mAac @=220V
Must Turn On Voltage	4Vdc	3Vdc	90Vac
Must Turn Off Voltage	1Vdc	1Vdc	10Vac
Reverse Voltage (Max.)	32Vdc	32Vdc	/

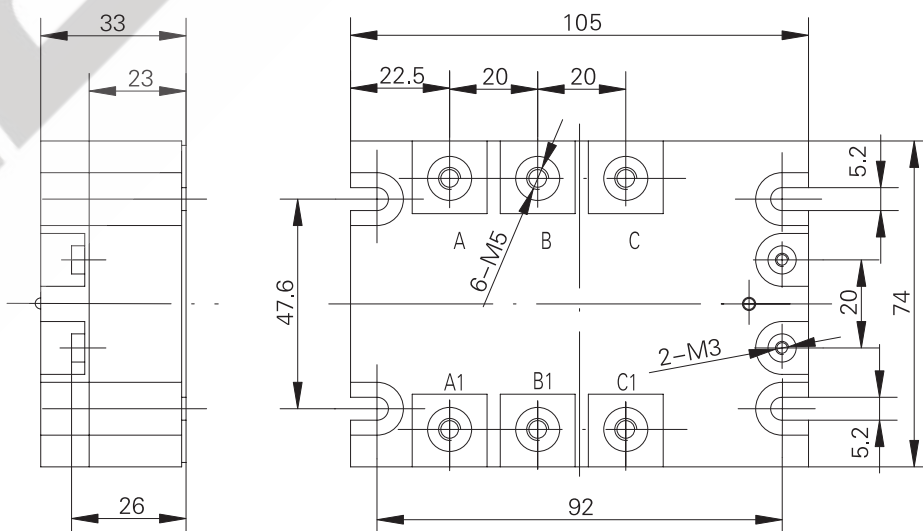
GT 10 to 40 Amps AC SSR



Specifications

Output Parameter	Units	Specification Limits		
Model No.:GT	Amp	10	25	40
Load Current Range	Arms	3X10	3X25	3X40
Surge Current 20mSec(Max.)	Arms	85	230	400
Load Voltage Range(440V)	Vrms	44 to 480		
TRIAC Over voltage(440V)	Vpk	≥1000		
Load Voltage Range(480V)	Vrms	44 to 480		
TRIAC Over voltage(480V)	Vpk	≥1000		
Thermal Resistance,(Rthjc)	°C/w	2.5	1.3	1.3
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		
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)	430g			
Base Plate	Copper, nikel-plated			
Case Color	Black			
Led Display	Yes			

Dimension



GTH 40 to 120Amps AC SSR



3 phase solid state relays (SCR output 40A to 120A)

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.

Feature:

- Three phase Solid State Relays
- Rated operational current 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.

Symbol

Meaning

- G Greego
- T Three phase
- H SCR output
- * 40-40A, 60-60A, 80-80A, 100-100A, 120-120A
- * 48-480V, 53-530V, 66-660V
- * Z-zero control, R-random control
- * D1-4-16Vdc, D3-3-32Vdc, A2-90-250Vac

For example: GTH4048ZD3, 3 phase, 40A, 480Vac, 3-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current		
		40 Amp	60Amp	80Amp
480 VAC “Z”	4 to 16 Vdc	GTH4048ZD1	GTH6048ZD1	GTH8048ZD1
480 VAC “R”	4 to 16 Vdc	GTH4048RD1	GTH6048RD1	GTH8048RD1
480 VAC “Z”	3 to 32 Vdc	GTH4048ZD3	GTH6048ZD3	GTH8048ZD3
480 VAC “R”	3 to 32 Vdc	GTH4048RD3	GTH6048RD3	GTH8048RD3
480 VAC “Z”	90 to 250Vac	GTH4048ZA2	GTH6048ZA2	GTH8048ZA2
480 VAC “R”	90 to 250Vac	GTH4048RA2	GTH6048RA2	GTH8048RA2
530 VAC “Z”	4 to 16 Vdc	GTH4053ZD1	GTH6053ZD1	GTH8053ZD1
530 VAC “R”	4 to 16 Vdc	GTH4053RD1	GTH6053RD1	GTH8053RD1
530 VAC “Z”	3 to 32 Vdc	GTH4053ZD3	GTH6053ZD3	GTH8053ZD3
530 VAC “R”	3 to 32 Vdc	GTH4053RD3	GTH6053RD3	GTH8053RD3
530 VAC “Z”	90 to 250Vac	GTH4053ZA2	GTH6053ZA2	GTH8053ZA2
530 VAC “R”	90 to 250Vac	GTH4053RA2	GTH6053RA2	GTH8053RA2

Rated Voltage	Control voltage	Rated operational current	
		100 Amp	120Amp
480 VAC “Z”	4 to 16 Vdc	GTH10048ZD1	GTH12048ZD1
480 VAC “R”	4 to 16 Vdc	GTH10048RD1	GTH12048RD1
480 VAC “Z”	3 to 32 Vdc	GTH10048ZD3	GTH12048ZD3
480 VAC “R”	3 to 32 Vdc	GTH10048RD3	GTH12048RD3
480 VAC “Z”	90 to 250Vac	GTH10048ZA2	GTH12048ZA2
480 VAC “R”	90 to 250Vac	GTH10048RA2	GTH12048RA2
530 VAC “Z”	4 to 16 Vdc	GTH10053ZD1	GTH12053ZD1
530 VAC “R”	4 to 16 Vdc	GTH10053RD1	GTH12053RD1
530 VAC “Z”	3 to 32 Vdc	GTH10053ZD3	GTH12053ZD3
530 VAC “R”	3 to 32 Vdc	GTH10053RD3	GTH12053RD3
530 VAC “Z”	90 to 250Vac	GTH10053ZA2	GTH12053ZA2
530 VAC “R”	90 to 250Vac	GTH10053RA2	GTH12053RA2

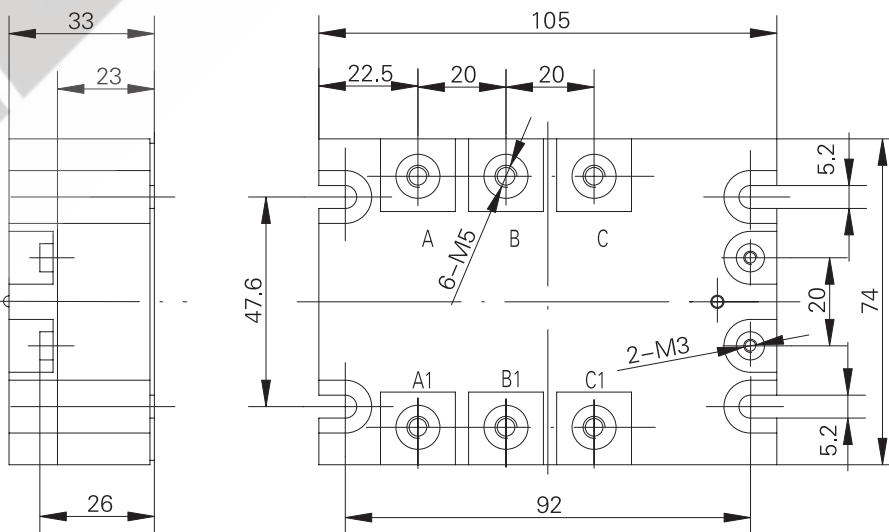
GTH 40 to 120Amps AC SSR



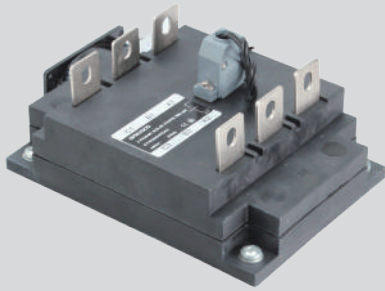
Specifications

Output Parameter	Units	Specification Limits				
Model No.:GTH	Amp	40	60	80	100	120
Load Current Range	Arms	3x40	3x60	3x80	3x100	3x120
Surge Current 20mSec(Max.)	Arms	400	600	1000	1200	1500
Load Voltage Range(480V)	Vrms	44 to 480				
SCR Over voltage(480V)	Vpk	≥1200				
Load Voltage Range(530V)	Vrms	53 to 530				
SCR Over voltage(530V)	Vpk	≥1400				
Thermal Resistance,(Rthjc)	°C/w	0.46	0.38	0.34	0.23	0.23
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	1.8				
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)	490g					
Base Plate	Copper, nikel-plated					
Case Color	Black					
Led Display	Yes					

Dimension



GTH 200 to500Amps AC SSR



3 phase solid state relays (SCR output 200A to 500A)

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.

Feature:

- 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 16 Vdc, 3 to 32 Vdc, 90 to 250Vac.
- 2500 Vrms Optical Isolation.(input/output)
- LED-indication for control input.

Symbol

Meaning

- G Greegoo
- T Three phase
- H SCR output
- * 200-200A, 300-300A, 400-400A, 500-500A
- * 48-480V, 53-530V
- * Z-zero control, R-random control
- * D3-3-32Vdc, A2-90-250Vac

For example: GTH40048ZD3, 3 phase, 400A,480Vac,3-32Vdc control

Selection Guide

Rated Voltage	Control voltage	Rated operational current	
		200 Amp	300Amp
480 VAC “Z”	3 to 32 Vdc	GTH20048ZD3	GTH30048ZD3
480 VAC “R”	3 to 32 Vdc	GTH20048RD3	GTH30048RD3
530 VAC “Z”	3 to 32 Vdc	GTH20053ZD3	GTH30053ZD3
530 VAC “R”	3 to 32 Vdc	GTH20053RD3	GTH30053RD3
480 VAC “Z”	90 to 250Vac	GTH20048ZA2	GTH30048ZA2
480 VAC “R”	90 to 250Vac	GTH20048RA2	GTH30048RA2
530 VAC “Z”	90 to 250Vac	GTH20053ZA2	GTH30053ZA2
530 VAC “R”	90 to 250Vac	GTH20053RA2	GTH30053RA2
		400 Amp	500Amp
480 VAC “Z”	3 to 32 Vdc	GTH40048ZD3	GTH50048ZD3
480 VAC “R”	3 to 32 Vdc	GTH40048RD3	GTH50048RD3
530 VAC “Z”	3 to 32 Vdc	GTH40053ZD3	GTH50053ZD3
530 VAC “R”	3 to 32 Vdc	GTH40053RD3	GTH50053RD3
480 VAC “Z”	90 to 250Vac	GTH40048ZA2	GTH50048ZA2
480 VAC “R”	90 to 250Vac	GTH40048RA2	GTH50048RA2
530 VAC “Z”	90 to 250Vac	GTH40053ZA2	GTH50053ZA2
530 VAC “R”	90 to 250Vac	GTH40053RA2	GTH50053RA2

Parameter-list	Specification Limits	
Input Parameter	D3	A2
Control Voltage Range	3 to 32Vdc	90 to 250Vac
Input Current(Max.)	33/56mAdc @=5V/24V	13mAac @=220V
Must Turn On Voltage	3Vdc	90Vac
Must Turn Off Voltage	1.5Vdc	10Vac
Reverse Voltage (Max.)	32Vdc	/

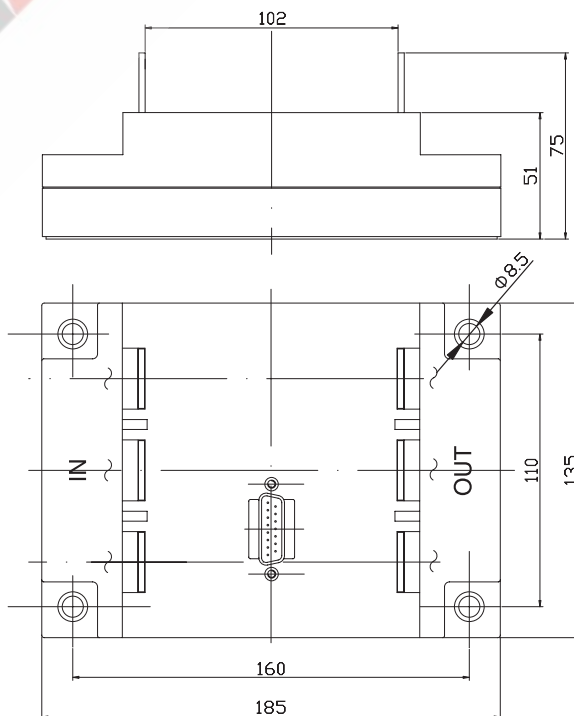
GTH 200 to500Amps AC SSR



Specifications

Output Parameter	Units	Specification Limits			
Model No.:GTH	Amp	200	300	400	500
Load Current Range	Arms	3x200	3x300	3x400	3x500
Surge Current 20mSec(Max.)	Arms	2100	5000	7000	8000
Load Voltage Range(480V)	Vrms	44 to 480			
SCR Over voltage(480V)	Vpk	≥1200			
Load Voltage Range(530V)	Vrms	53 to 530			
SCR Over voltage(530V)	Vpk	≥1400			
Thermal Resistance,(Rthjc)	°C/w	0.14	0.09	0.072	0.065
Frequency Range	Hz	47 to 63			
Off State dv/dt (Min.)	V/μsec	500			
Off State Leakage Current(Max.)	mArms	<10	<10	<15	<20
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)	2200g				
Base Plate	Copper, nikel-plated				
Case Color	Black				
Led Display	Yes				

Dimension



GR 1 to 7 KW Motor Reversing SSR



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.

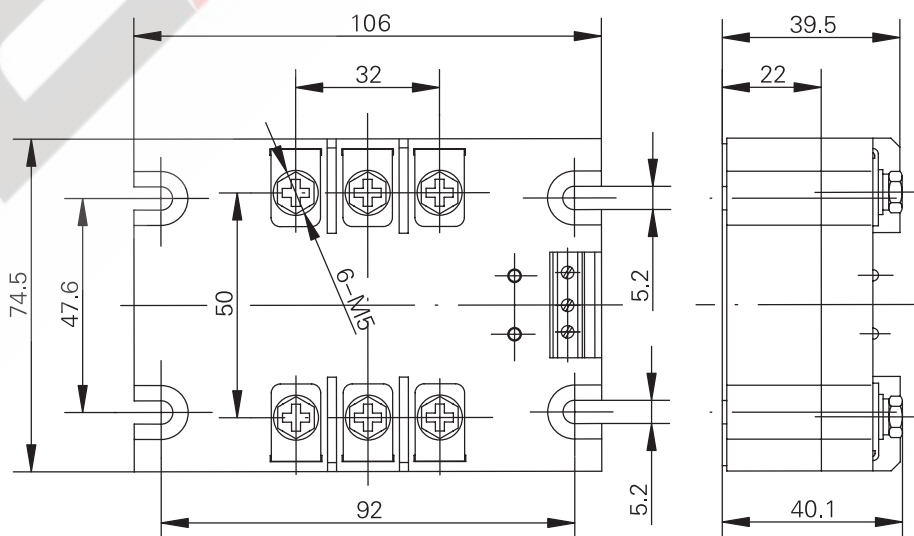
Type Selection

- 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



GR 1 to 7 KW Motor Reversing SSR



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



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 tune on-off function connects the load at first an 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 west. Especially apply in power capacitor turning on and off.
- LED-indication for control input.

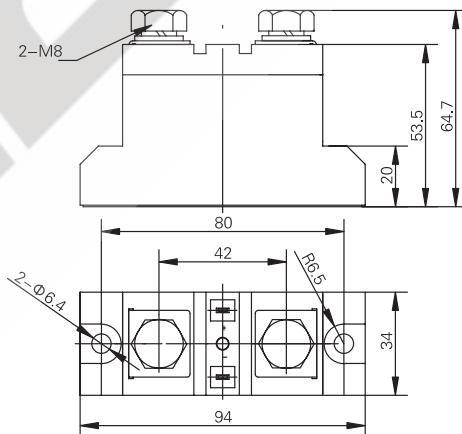
Type Selection

- | | |
|--|---|
| <ul style="list-style-type: none"> ■ Mounting type ■ Operational current ■ Operational voltage ■ Input Control voltage | <p>DF: AC Single phase, SCR Output.</p> <p>60: 60Amp, 80: 80Amp, 120: 120Amp, 250: 250Amp,</p> <p>48: 480V_{AC}, 53: 530V_{AC}.</p> <p>D: DC12V</p> |
|--|---|

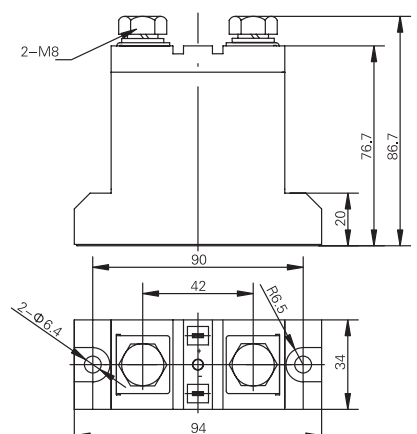
Selection guide

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



Case A



Case B

GDF Compound SSR



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					

GM 10 to 40 Amps Dual SSR



GM 10 to 40 Amps Dual SSR

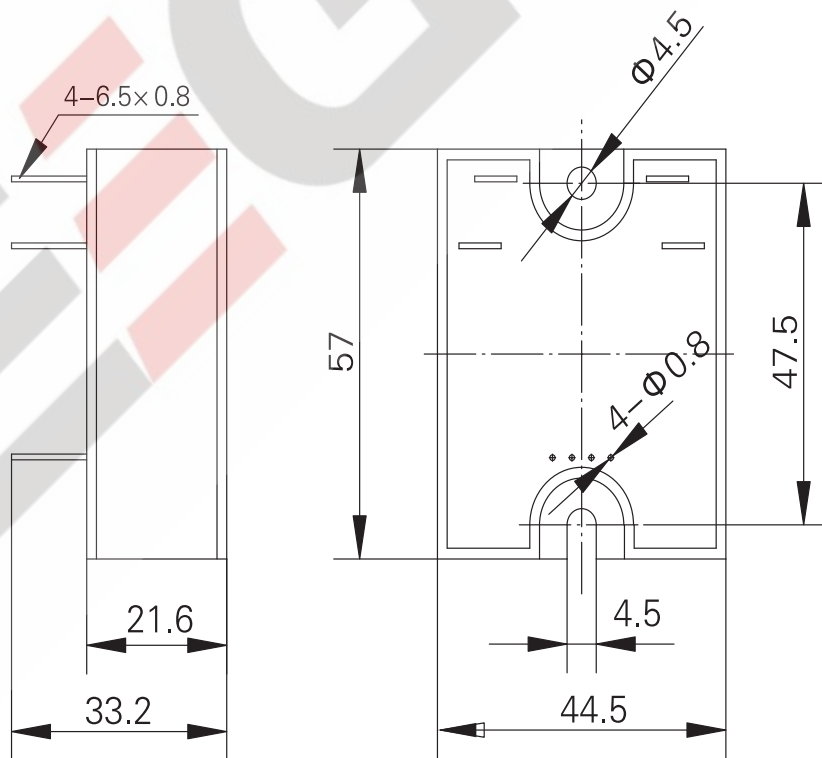
GM series Solid State Relays are Dual AC relays, Triac or SCR Output. The Triac version of the zero switching relay is an inexpensive solution for resistive loads. The zero switching relay switches on when the AC sine voltage just crosses zero, and switches off when the current crosses zero. The SCR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



GM 10 to 40 Amps Dual SSR



Specifications

PARAMETER	Units	Specification Limits			
Input Parameter D1①		10A	15A	25A	40A
Control Voltage Range	Vdc	4 to16	4 to16	4 to16	4 to16
Input Current (Max.) @=5V/12V	mAdc	10/20	10/20	10/20	10/20
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

OUTPUT PARAMETER ②	Units	Specification Limits			
Load Current Range	Arms	10+10	15+15	25+25	40+10
Surge Current, 20 mSec (Max.)	Arms	85	115	230	400
Load Voltage Range	Vrms	24 to 280			
Load Voltage Range	Vrms	28 to 280			
TRIAC Over voltage	Vpk	>600			
Frequency Range	Hz	47 to 63			
Off State dv/dt (Min)	V/μsec	200			
Off State dv/dt (Min)	V/μsec	500			
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.)	Cycle	1/2			
Turn Off Time (Max.)	mSec				

COUPLING PARAMETER

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

GENERAL SPECIFICATIONS

Ambient temperature range: operating or Storage °C 30 to +80
 Weight: (max.): Aluminum Base plate: 130g; Copper Base plate: 99g
 Base plate: Aluminum or Copper, nickel-plated
 Case Color: Black

AC SSR (10A and 60A) of all-in-one radiator



AC SSR (10A and 60A) of all-in-one radiator

- Zero-cross type.
- Guide rail installing.
- Rated current 10A, 25A
- Enhanced type.
- RC absorption protection.
- Double LED indicate input & output condition.
- Authentication symbol.

Specification

Model	G3DA4810	G3DA4825
Output	SCR	SCR
Operating Voltage Range (Max. Vrms)	48-600Vac	48-600Vac
Peak voltage(V peak)	1000Vac	1000Vac
Rated operating current (A)	10	25
Off state maximum leakage (mA) (T=25°C Vmax)	3	3
Turn-on voltage (V) max, T=25°C	≤1.2	≤1.2
Static state (off-state) dv/dt(V/us)	500	500
Frequency range (Hz)	47/63	47/63
Input voltage(V)	3.5-24VDC	3.5-24VDC
Input parameter	14-18 (automatic limit current)	14-18 (automatic limit current)
Operate time	≤10ms (0.5cycle) Max	≤10ms (0.5cycle) Max
Response time (opened)	≤10ms (0.5cycle) Max	≤10ms (0.5cycle) Max
Operating temperature(°C)	-40°C -80°C	-40°C -80°C
Isolation bet in & out(Vrms)	≥2000V	≥2000V
Isolation to case(Viso)(Vrms)	≥2000V	≥2000V

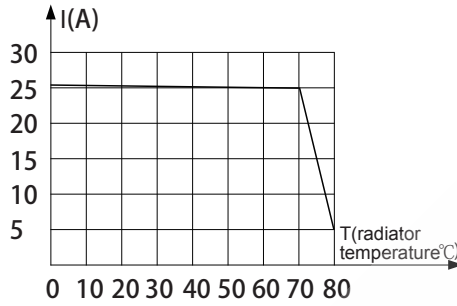
Model	G3DA4840	G3DA4860
Output	SCR	SCR
Operating Voltage Range (Max. Vrms)	48-600Vac	48-600Vac
Peak voltage(V peak)	1000Vac	1000Vac
Rated operating current (A)	40	60
Off state maximum leakage (mA) (T=25°C Vmax)	3	3
Turn-on voltage (V) max, T=25°C	≤1.2	≤1.2
Static state (off-state) dv/dt(V/us)	500	500
Frequency range (Hz)	47/63	47/63
Input voltage(V)	3.5-24VDC	3.5-24VDC
Input parameter	14-18 (automatic limit current)	14-18 (automatic limit current)
Operate time	≤10ms (0.5cycle) Max	≤10ms (0.5cycle) Max
Response time (opened)	≤10ms (0.5cycle) Max	≤10ms (0.5cycle) Max
Operating temperature(°C)	-40°C -80°C	-40°C -80°C
Isolation bet in & out(Vrms)	≥2000V	≥2000V
Isolation to case(Viso)(Vrms)	≥2000V	≥2000V

AC SSR (10A and 60A) of all-in-one radiator

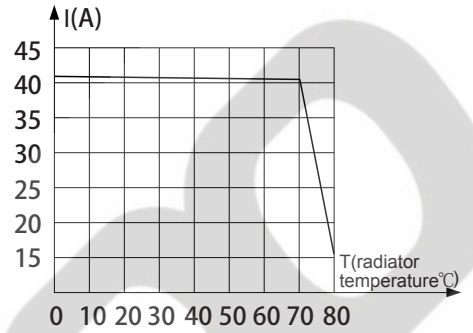


Rated value temperature curre

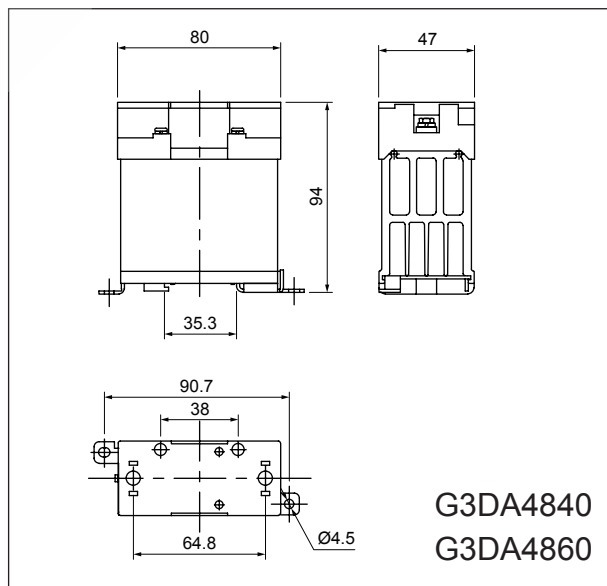
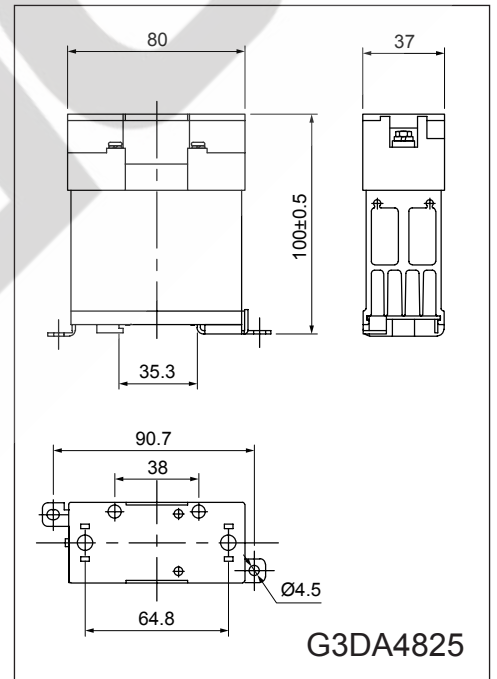
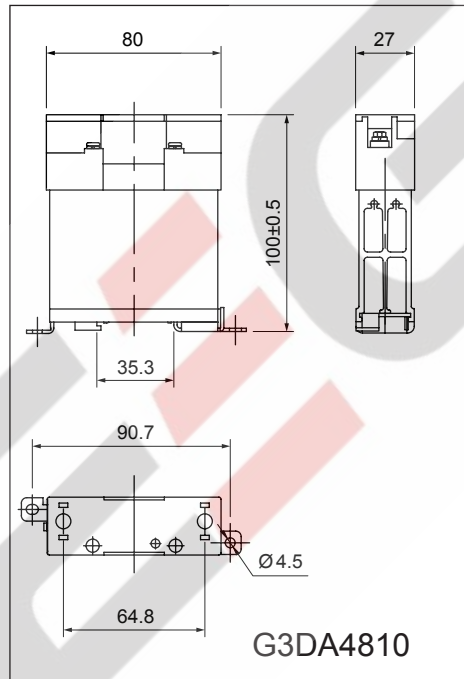
■ G3DA4825



■ G3DA type 40A



Dimension



GRV Regulating Solid State Module

GRV Regulating Solid Module

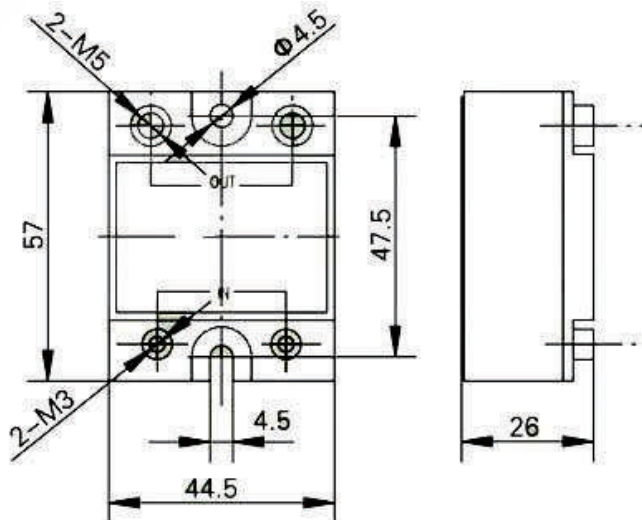


GRV series products are economical voltage modulation elements which are designed for single-phase AC resistive loads. They are mainly used in the temperature control and lamp adjustment of electronic products. They feature the characteristics as compact dimension, light weight, big controlled power, infinitely variable control and high insulating voltage, etc. They are ideal substitutes for traditional cumbersome voltage regulating transformers.

Specification

Model		GRV1024 PW	GRV1524 PW	GRV2524 PW	GRV4024 PW
Load Current Range	Arms	10	15	25	40
Surge Current, 20 mSec (Max.)	Arms	85	115	230	400
Load Voltage Range	Vrms	0-240 17-239			
On-state angle range		0-170°			
TRIAC Over voltage	Vpk	>800			
Potentiometer	kΩ	330-510			
Frequency Range	Hz	47-63			
Off State dv/dt (Min)	V/μsec	100			
Off State Leakage Current (Max.)	mArms	<5			
On State Voltage Drop (Max.)	Vrms	1.6			
Thermal Resistance, (Rthjc)	°C/W	2.5	2.5	1.3	1.1
Dielectric (Input- Output/Base)	Vrms	2500			
Ambient temperature range		operating or Storage -30 °C to +80 °C			
Weight: (max.)		Aluminum Base plate: 130g; Copper Base plate: 99g			
Base plate		Aluminum or Copper, nickel-plated			
Case Color		Black			
Dimensions		L*W*H:57.2*44.5*22mm			

Dimension



GV series voltage adjustable integrated solid state module



4-20mA or 0-5V or 10K potentiometer input SSR, Control SSR

The GV series voltage adjustable integrated solid state module is newly developed according to customers' requests. It is characterized by input-output photoelectric isolation, integrated phase shift voltage adjustable circuit with main circuit, smart size, light weight, long service lifetime, big control power, stepless adjustment and high insulation voltage etc. It can control power of loads on output side automatically by changing the input voltage or by potentiometer manually. Meanwhile, due to its high input resistance and internal synchronization, through digital analogue converter, it can connect to computer, digital remote control, 0 5V or 4 20mA meters directly and make stepless adjustment for voltage, power of loads on output side conveniently. The TRIAC output are mainly applicable for resistive loads; The SCR output are mainly applicable for inductive loads. This product is widely used for lighting adjustment in illumination devices, temperature control in civil and industrial heating and soft start control etc

Features

- Standard structure and convenient mounting
- Photoelectric isolation between input and output; the isolation voltage up to 2500V
- Insulation voltage: 2500V
- Adopting "vacuum + hydric protection" soldering SCR wafer technology for copper bottom plate
- the anti-parallel SCR for those models with suffix "H", good heat performance and long service lifetime
- Input control voltage: DC5V
- Control signal: automatic: 0~5Vdc or 4~20mA, manual: 10K potentiometer
- Rated working voltage: 240V-440V
- Max output current: 10~120A

Selection Guide

Voltage	Output Mode	10A	15A	25A	40A
240Vac	TRIAC	GV1024D	GV1524D	GV2524D	GV4024DH
440Vac		GV1044D	GV1544D	GV2544D	GV4044DH
280Vac	SCR	GV1028DH	GV1528DH	GV2528DH	GV4028DH
480Vac		GV1048DH	GV1548DH	GV2548DH	GV4048DH
Voltage	Output Mode	60A	80A	100A	120A
280Vac	SCR	GV6028DH	GV8028DH	GV10028DH	GV12028DH
480Vac		GV6048DH	GV8048DH	GV10048DH	GV12048DH

Specification

Input parameter	Units	Value
Control Voltage	Vdc	5
Signal Voltage range	Vdc	0-5
Input Current(Max.)	mAdc	<2
Pontesiometer	KΩ	10

GV series voltage adjustable integrated solid state module



Specification

Output Parameter	Units	Specification Limits			
Model No.:GV	Amp	10	15	25	40
Load Current Range	Arms	0.05-10	0.05-15	0.05-25	0.05-40
Surge Current 20mSec(Max.)	Arms	80	115	230	400
SCR Over voltage(240V)	Vpk	≥600	≥600	≥600	≥800
SCR Over voltage(440V)	Vpk	≥1000	≥1000	≥1000	≥1200
Thermal Resistance,(Rthjc)	°C/w	2.5	2.5	1.3	1.3
Frequency Range	Hz	47 to 63			
Off State dv/dt (Min.)	V/μsec	500			
Off State Leakage Current(Max.)	mArms	≤8			
On-state angle range		0-170°			
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)		144g			
Base Plate		Copper, nikel-plated			
Case Color		Black			
Led Display		Yes			

Output Parameter	Units	Specification Limits			
Model No.:GV	Amp	60	80	100	120
Load Current Range	Arms	0.05-60	0.05-80	0.05-100	0.05-120
Surge Current 20mSec(Max.)	Arms	600	1000	1200	1500
SCR Over voltage(240V)	Vpk	≥800	≥800	≥800	≥800
SCR Over voltage(440V)	Vpk	≥1200	≥1200	≥1200	≥1200
Thermal Resistance,(Rthjc)	°C/w	0.65	0.5	0.3	0.3
Frequency Range	Hz	47 to 63			
Off State dv/dt (Min.)	V/μsec	500			
Off State Leakage Current(Max.)	mArms	≤10			
On-state angle range		0-170°			
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)		144g			
Base Plate		Copper, nikel-plated			
Case Color		Black			
Led Display		Yes			

GV series voltage adjustable integrated solid state module



Dimension

