

GTH 40 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 250vVac.
- 2500 Vrms Optical Isolation.(input/output)
- LED-indication for control input.

Type Selection

■ Output device	H: SCR
■ Operational current	60: 3x60A, 80: 3x80A, 100: 3x100A, 120: 3x120 Amps
■ Operational voltage	48: 48053 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.

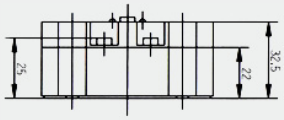
Ordering Key

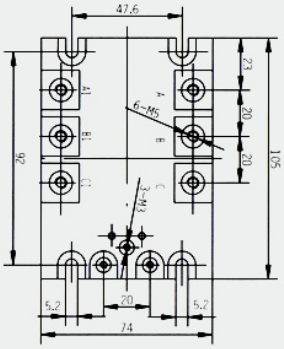
G	D	H	200	48	Z	D1
1	2	3	4	5	6	7

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.

Selection guide

Voltage	Control voltage	Operational current				
		40 Amp	60 Amp	80 Amp	100 Amp	120 Amp
480 V_{AC} "Zero Voltage"	4~16 Vdc	GTH4048ZD1	GTH6048ZD1	GTH8048ZD1	GTH10048ZD1	GTH12048ZD1
	3~32 Vdc	GTH4048ZD3	GTH6048ZD3	GTH8048ZD3	GTH10048ZD3	GTH12048ZD3
	90~250Vac	GTH4048ZA2	GTH6048ZA2	GTH8048ZA2	GTH10048ZA2	GTH12048ZA2
530 V_{AC} "Zero Voltage"	4~16 Vdc	GTH4053ZD1	GTH6053ZD1	GTH8053ZD1	GTH10053ZD1	GTH12053ZD1
	3~32 Vdc	GTH4053ZD3	GTH6053ZD3	GTH8053ZD3	GTH10053ZD3	GTH12053ZD3
	90~250Vac	GTH4053ZA2	GTH6053ZA2	GTH8053ZA2	GTH10053ZA2	GTH12053ZA2
480 VAC Random	4~16 Vdc	GTH4048RD1	GTH6048RD1	GTH8048RD1	GTH10048RD1	GTH12048RD1
	3~32 Vdc	GTH4048RD3	GTH6048RD3	GTH8048RD3	GTH10048RD3	GTH12048RD3
	90~250Vac	GTH4048RA2	GTH6048RA2	GTH8048RA2	GTH10048RA2	GTH12048RA2
530 VAC Random	4~16 Vdc	GTH4053RD1	GTH6053RD1	GTH8053RD1	GTH10053RD1	GTH12053RD1
	3~32 Vdc	GTH4053RD3	GTH6053RD3	GTH8053RD3	GTH10053RD3	GTH12053RD3
	90~250Vac	GTH4053RA2	GTH6053RA2	GTH8053RA2	GTH10053RA2	GTH12053RA2





Specifications

PARAMETER	Units	Specification Limits				
Model No. GTH		**40A**	**60A**	**80A**	**100A**	**120A**
INPUT SPECIFICATIONS ①	D1					
Control Voltage Range	Vdc	4 to 16	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	26/86
Must Turn On Voltage	Vdc	4	4	4	4	4
Must Turn Off Voltage	Vdc	1	1	1	1	1
Reverse Voltage (Max.)	Vdc	32	32	32	32	32
Display LED		yes	yes	yes	yes	yes
INPUT SPECIFICATIONS ②	**D3**					
Control Voltage Range	Vdc	3 to 32	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	33/56
Must Turn On Voltage	Vdc	3	3	3	3	3
Must Turn Off Voltage	Vdc	1	1	1	1	1
Reverse Voltage (Max.)	Vdc	32	32	32	32	32
Display LED		yes	yes	yes	yes	yes

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PARAMETER	Units	Specification Limits				
Model No. GTH		40A	60A	80A	100A	120A
INPUT SPECIFICATIONS ③	A2					
Control Voltage Range	Vac	90 to 250	90 to 250	90 to 250	90 to 250	90 to 250
Input Current (Max.) @=220V	mAdc	13	13	13	13	13
Must Turn On Voltage	Vdc	90	90	90	90	90
Must Turn Off Voltage	Vdc	10	10	10	10	10
Display LED		yes	yes	yes	yes	yes
OUTPUT SPECIFICATIONS ④						
Load Current Range	Vrms	3x40	3x60	3x80	3x100	3x120
Surge Current, 20 mSec (Max.)	Vrms	400	600	1000	1200	1500
Load Voltage Range (480V)	Vrms	44 to 480	44 to 480	44 to 480	44 to 480	44 to 480
SCR Over voltage (480V)	Vpk	≥1200	≥1200	≥1200	≥1200	≥1200
Load Voltage Range (530V)	Vrms	53 to 530	53 to 530	53 to 530	53 to 530	53 to 530
SCR Over voltage (530V)	Vpk	≥1400	≥1400	≥1400	≥1400	≥1400
Frequency Range	Hz	47 to 63	47 to 63	47 to 63	47 to 63	47 to 63
Off State dv/dt (Min)	V/μsec	500	500	500	500	500
Max.Off-StateLeakage Current	mArms	≤8	≤8	≤8	≤8	≤8
On State Voltage Drop (Max.)	Vrms	1.6	1.8	1.8	1.8	1.8
Thermal Resistance, (Rthjc)	℃/W	0.46	0.38	0.34	0.23	0.23
Turn On Time (Max.) "Z"	Cycle	1/2	1/2	1/2	1/2	1/2
Turn Off Time (Max.)	Cycle	1/2	1/2	1/2	1/2	1/2
Turn On Time (Max.) "R"	mSec	1	1	1	1	1
Turn Off Time (Max.) "A2"	mSec	40	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℃to +80℃

Weight: (typical) 430g

Base plate: Copper, nickel-plated

Case Color: Black

Mounting Dimensions: LxWxH 105x74x32.5 mm