

Overview

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

Specifications

Parameter-list	Specification Limits		
Input Parameter	D1	D3	A2
Control Voltage Range	4 to 16Vdc	4 to 32Vdc	90 to 250 Vac
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

