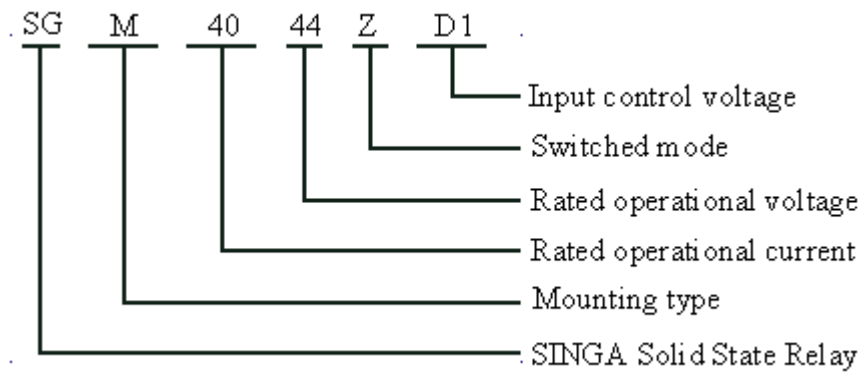


SGM series 10 to 40 Amps Dual SSR

SGM 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.

Ordering Key



Type Selection

Mounting type	M: Dual, Triac Output. MH: Dual, SCR Output.
Rated operational current	10: 10Amp, 15: 15Amp, 25: 25Amp, 40: 40Amp
Rated operational voltage	24: 240V _{AC} , 44: 440V _{AC} .
Switched mode	Z: Zero Voltage, R: Random Switching.
Input Control voltage	D1: DC 4~16V

Selection Guide

voltage	Control voltage	Rated operational current			
		10 Amp	15 Amp	25 Amp	40 Amp
240 V _{AC} “Z”	4~16 Vdc	SGM1024ZD1	SGM1524ZD1	SGM2524ZD1	SGM4024ZD1
240 V _{AC} “R”	4~16 Vdc	SGM1024RD1	SGM1524RD1	SGM2524RD1	SGM4024RD1
440 V _{AC} “Z”	4~16 Vdc	SGM1044ZD1	SGM1544ZD1	SGM2544ZD1	SGM4044ZD1
440 V _{AC} “R”	4~16 Vdc	SGM1044RD1	SGM1544RD1	SGM2544RD1	SGM4044RD1

Specifications

Electrical Specification					
Parameter	Units	Specification Limits			
Model No. SGM		10A	15A	25A	40A
Input Specifications D1					
Control Voltage Range	Vdc	4~16	4~16	4~16	4~16
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
Output Specifications. M: Triac Output.					
Load Current Range	Arms	10+10	15+15	25+25	40+40
Surge Current, 20 mSec (Max.)	Arms	85	115	230	400
Load Voltage Range	Vrms	24~280	24~280	24~280	24~280
TRIAC Over voltage	Vpk	>600	>600	>600	>600
Frequency Range	Hz	47~63	47~63	47~63	47~63
Off State dv/dt (Min)	V μ sec	200	200	200	200
Off State Leakage Current (Max.)	mArms	<8	<8	<8	<8
On State Voltage Drop (Max.)	Vrms	1.6	1.6	1.6	1.6
Thermal Resistance, (Rthjc)	$^{\circ}$ C/W	2.5	2.5	1.3	1.1
Turn On Time (Max.) "Z"	Cycle	1/2	1/2	1/2	1/2
Turn On Time (Max.) "R"	mSec	1	1	1	1
Turn Off Time (Max.)	Cycle	1/2	1/2	1/2	1/2
Output Specifications. MH: SCR Output.					
Load Current Range	Arms	10+10	15+15	25+25	40+40
Surge Current, 20 mSec (Max.)	Arms	200	200	400	500
Load Voltage Range	Vrms	24--280	24--280	24--280	24--280
TRIAC Over voltage	Vpk	>800	>800	>800	>800
Frequency Range	Hz	47--63	47--63	47--63	47--63
Off State dv/dt (Min)	V μ sec	500	500	500	500
Off State Leakage Current Max.	mArms	<8	<8	<8	<8
On State Voltage Drop (Max.)	Vrms	1.6	1.6	1.6	1.6
Thermal Resistance, (Rthjc)	$^{\circ}$ C/W	2.5	2.5	1.3	1.1
Turn On Time (Max.) "Z"	Cycle	1/2	1/2	1/2	1/2
Turn On Time (Max.) "R"	mSec	1	1	1	1
Turn Off Time (Max.)	Cycle	:	:	:	:
Coupling Specifications					
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 °C.
Weight: (max.) Aluminum Base plate: 125g; Copper Base plate: 155g
Base plate: Aluminum or Copper, nickel-plated
Case Color: Black
Mounting Dimensions: L×W×H: 57.2×44.5×22 mm