



# Singa

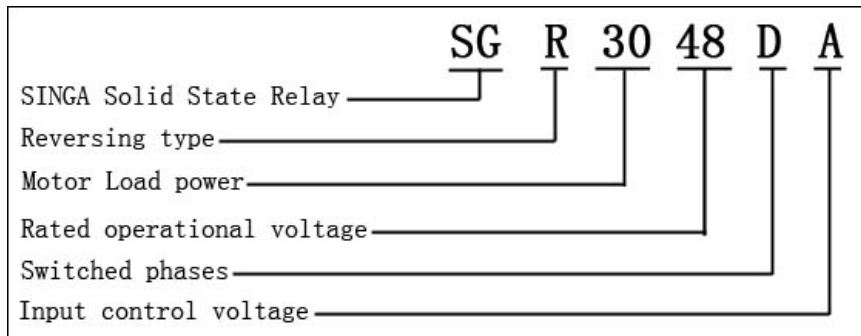
## Series SGR

### 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.

#### ORDERING KEY



#### TYPE SELECTION

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

© 2006 SINGA CORP, Specifications subject to change without notice.



**WEIHAI SINGA ELECTRONICS CO.,LTD.**

**ADD :No.173,Torch Road,Hi-Tech Developing Zone,Weihai,China**

**SALES SUPPORT(+86)631-5680009 FAX(+86)631-5680010**

**E-mail:singa@singa.cn**

**WEB SITE: <http://www.singa.cn>      <http://www.whsinga.com.cn>**



# Singa

## Series SGR

### 1 to 7 KW Motor Reversing SSR

#### SELECTION GUIDE

Rated operational voltage	Control voltage	Load power 1kW	Load power 3kW	Load power 5kW	Load power 7kW
480 VACrms	10 to 30Vdc	SGR1048DD	SGR3048DD	SGR5048DD	SGR7048DD
		SGR1048TD	SGR3048TD	SGR5048TD	SGR7048TD
	115Vac	SGR1048DA	SGR3048DA	SGR5048DA	SGR7048DA
		SGR1048TA	SGR3048TA	SGR5048TA	SGR7048TA
530 VACrms	10 to 30Vdc	SGR1053DD	SGR3053DD	SGR5053DD	SGR7053DD
		SGR1053TD	SGR3053TD	SGR5053TD	SGR7053TD
	115Vac	SGR1053DA	SGR3053DA	SGR5053DA	SGR7053DA
		SGR1053TA	SGR3053TA	SGR5053TA	SGR7053TA

#### SPECIFICATION

PARAMETER	Units	Specification Limits			
		1KW	3KW	5KW	7KW
Model No. SGR					
<b>INPUT SPECIFICATIONS ① DC</b>					
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
<b>INPUT SPECIFICATIONS ② AC</b>					
Control Voltage Range	Vac	115	115	115	115
Input Current (Max.)	mAac	35	35	35	35
Must Turn On Voltage	Vac	85	85	85	85
Must Turn Off Voltage	Vac	30	30	30	30
Display LED		yes	yes	yes	yes
<b>OUTPUT SPECIFICATIONS ③</b>					
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			

© 2006 SINGA CORP, Specifications subject to change without notice.



**WEIHAI SINGA ELECTRONICS CO.,LTD.**

**ADD :No.173,Torch Road,Hi-Tech Developing Zone,Weihai,China**

**SALES SUPPORT(+86)631-5680009 FAX(+86)631-5680010**

**E-mail:singa@singa.cn**

**WEB SITE: <http://www.singa.cn> <http://www.whsinga.com.cn>**



# Singa

## Series SGR 1 to 7 KW Motor Reversing SSR

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

### GENERAL SPECIFICATIONS

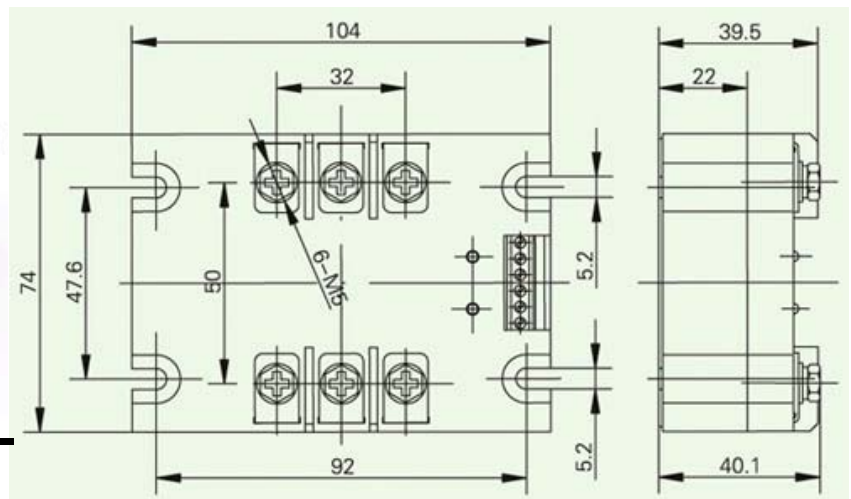
Ambient temperature range: Operating or Storage -30 to +80 °C

Weight: (typical) 430g

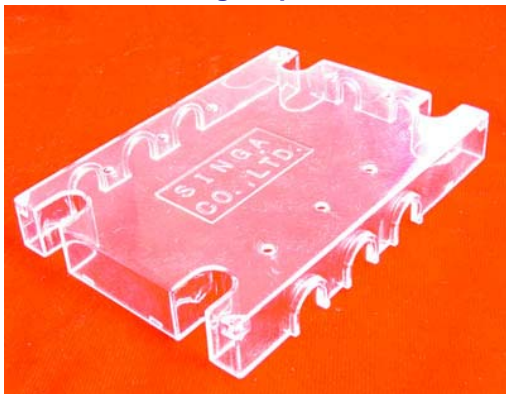
Base plate: Copper, nickel-plated

Case Color: Black

Mounting Dimension: LxWxH 104x74x39.5mm



### Defense Covering (Optional)



© 2006 SINGA CORP, Specifications subject to change without notice.



WEIHAI SINGA ELECTRONICS CO.,LTD.

ADD :No.173,Torch Road,Hi-Tech Developing Zone,Weihai,China

SALES SUPPORT(+86)631-5680009 FAX(+86)631-5680010

E-mail:singa@singa.cn

WEB SITE: <http://www.singa.cn> <http://www.whsinga.com.cn>