

SLIM Type

Single phase S.S.R **HSR-SLD series**

Single phase thyristor power regulator **TPR-2SL series**



MAIN PRODUCTS

Temperature Controller / Recorder / Digital Counter / Timer / Analog Timer / Panelmeter / Multi Pulse Meter
Sensor / Rotary Encoder / Thyristor Power Regulator / Solid State Relay / Power Supply / Hoist switch / Foot switch
Mono lever switch / Micro switch / Power switch / Limit switch / Cam switch / Mono lever switch / Hoist / Foot
Main switch / Sign tower / Signal light / Buzzer / Terminal block / Fuse holder / Control box / Cable connector

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Single phase solid state relay

HSR-SLD series



- ▶ 22.4mm Ultra slim size
- ▶ Wide range of rated load voltage
90~264 V a.c / 90 - 480 V a.c
- ▶ High insulation for input and output
- ▶ C-R Snubber, Zero Cross function
- ▶ Improved safety and operability by Heat sink one body type

>> Suffix code

Model	Code						Information
HSR	-SL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Slim type Single phase solid state relay
Input control voltage	D						4 - 32 V d.c
Contact	-						1 contact
	2C						2 contact
Rated load current			15				15 A
			25				25 A
			40				40 A
Rated load voltage					2		90 - 264 V a.c (Low voltage)
					4		90 - 480 V a.c (High voltage)
Operation method (Switching Mode)					Z		Zero Cross Switching
					R		Random Switching

※ 2 contact : Only available 15 A items (HSR-SLD2C152Z, HSR-SLD2C154Z)

>> Specification

Model	Low	HSR-SLD152Z	HSR-SLD252Z	HSR-SLD402Z	
	High	HSR-SLD154Z	HSR-SLD254Z	HSR-SLD404Z	
O U T P U T	Rated load voltage	Low	90 - 264 V a.c		
		High	90 - 480 V a.c		
	Peak voltage (Non-repetition)	Low	600 V		
		High	800 V	1200 V	
	Rated load current	15 A	25 A	40 A	
	Frequency	50/60 Hz (Dual usage)			
	Surge current (8.3 ms No repetition)	Low	170 A	260 A	420 A
		High	170 A	250 A	370 A
	Leakage current	20 mA max.			
	Output ON voltage dropping	1.6 V (R.M.S) max.			
Zero cross function	Available (R type is not available)				
I N P U T	Rated voltage	5 - 24 V d.c			
	voltage ous range	4 - 32 V d.c			
	Impedance	Less than 4 kΩ			
	Operation voltage	More than 3 V d.c			
	Release voltage	Less than 1.5 V d.c			
Response time	1/2 Cycle + 1 ms max. (R type below 1 ms)				
Insulating resistance	500 V d.c, 100 MΩ (Between the input / output and case)				
Dielectric strength	3000 V a.c (For 1 min at 60 Hz)				
Vibration resistance	10 - 55 Hz, Double amplitude : 1.5 mm each X,Y and Z direction for 2 hours				
Shock resistance	1000 ٪, X, Y, Z each axis 3 times				
Storage temperature	-30 ~ 90 °C				
Ambient temperature	-20 ~ 80 °C				
Ambient humidity	45 ~ 85 % R.H.				
Weight	Approx 230g (Including packing box)		Approx 372g (Including packing box)		

Single phase thyristor power regulator

TPR-2SL series



- ▶ 60mm Ultra slim size
- ▶ Improve reliability by separating a controller power and a load power (apply a wide range of power supply circuit)
- ▶ Various control methods available depending on a variety of loads
- ▶ Alarm output is divided into caution and warning
- ▶ Various protection functions (partial heater break, Over-current, Heat sink overheat, SCR short circuit)

>> Suffix code

Model	Code	Information
TPR - 2SL	<input type="checkbox"/> <input type="checkbox"/>	Slim type Single phase thyristor power regulator
Input Control Voltage Contact	040	40 A
	055	55 A
	070	70 A
Rated load current	L	100 - 240 V a.c (Low voltage)
	H	380 - 440 V a.c (High voltage)

※ For Circuit input power, please connect 100~240Vac separately.

>> Specification

Model	Low	TPR-2SL040L	TPR-2SL055L	TPR-2SL070L
	High	TPR-2SL040H	TPR-2SL055H	TPR-2SL070H
Power supply voltage	100 - 240V a.c (Low) 380 - 440V a.c (High)			
Circuit input power	100 - 240V a.c			
Power frequency	50 Hz/60 Hz (Dual usage)			
Rated current	40 A	55 A	70 A	
Applying load	Load resistance			
Control input	Current input	4 - 20 mA d.c (Impedance : 100 Ω)		
	Voltage input	1 - 5V d.c		
	Contact input	ON / OFF		
	External V.R	External volume (10 kΩ)		
Control method	Phase control, Fixed cycle control, Variable cycle control, ON/OFF control			
Movement type	SOFT START, SOFT UP/DOWN			
Output voltage	More than 98 % of the power supply voltage (In case of maximum current input)			
Cooling method	Natural cooling (40A , 55 A), Forced cooling (70 A)			
Display method	Display by LED			
Insulating resistance	Min 100 MΩ (Base on 500 V d.c mega)			
Output control range	0 ~ 100 %			
Dielectric strength	3,000 V a.c 50/60 Hz for 1 min			
Line noise	Noise by noise simulator (3,000 V)			
Storage temperature	-25 ~ 70 °C			
Ambient temperature	0 ~ 40 °C (But without frostiness)			
Ambient humidity	30 ~ 85 % R.H.			
Weight		1388 g		1478 g

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Control Switch

Control Instrument

Photo Sensor / Proximity Sensor

Thyristor Power Regulator

Sign tower / Signal light