



SHIZUMA



HAO PHUONG
CORPORATION

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CATALOG

PUSH BUTTON & RELAYS



HAO PHUONG CORPORATION

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Characteristics Structure And Performance

Contact and Lamp Element modularization: Both Snap Action contact and Slow Action contact are the same demention, can be any combination and increase, pushbutton increase the illuminated function without increasing the product installation space, un-illuminated push button can control 3 group contacts without increasing the volume of the products simultaneously.

Self-cleaning capacity of the switch contact: adhering to Shuangke advanced design concepts, Snap action contact have self-cleaning ability, with the operation of the push button switch, the contacts can be self-cleaning surface dust and oxidation layer, keep the electricity performance of the products.

The waterproof performance: increase the waterproof design, waterproof grade up to IP65. Small size, simple structure the rear dimensions of the panel only 48mm, operation component: and switch components connection easier, to ensure the connection reliability and service life. It is more convenient to install.

The electricity performance more powerful: 120V voltage can carry 10A current, mechanical life up to 3 million times.

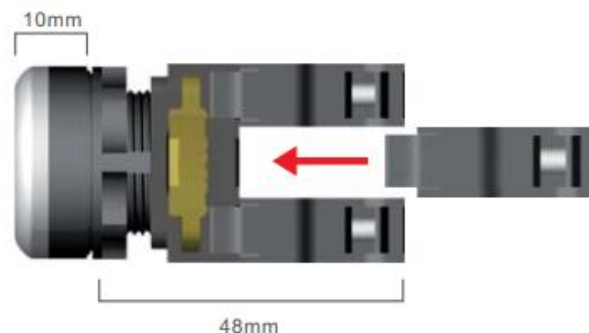
Panel Out High (10 Mm) Thin Design, Reflect Concise, Fashion Image Of Plane Control Panel

Can realize image fashionable device and operation control panel. And the flat surface less concave and convex, in the security level, is to reduce the wrong operation or accident caused by bump was accidentally touch panel, and on the health level, can reduce the accumulation of dust and rubbish

The Rear Dimensions Of The Panel Only 48mm, can Proceed Save Space Design.

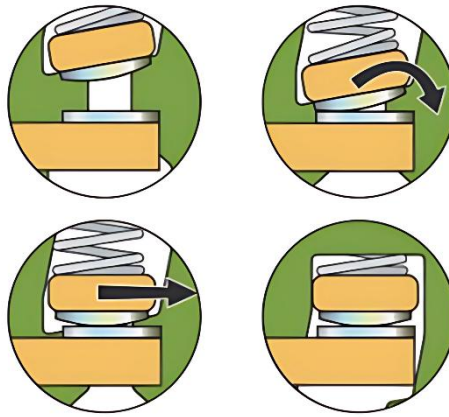
Make contributions to the miniaturization of device and control panel, make save space design to possible. Non-illuminated flat push button on each layer equipped with two contacts, can be installed two layers, total four contacts. Illuminated flat push button on each layer equipped with three contacts, can be installed two layers, total six contacts.

Can also be combined with the push button box and other Ø22 mounting hole in common use control box, It has the ultra short body, but with 120V, AC-10A contact switching capacity. All lighting voltage without transformers, the rear of the panel elongation is consistent.



The contact with self-cleaning function, low-current can also be applied.

Both Snap Action contact and Slow Action contact can realize contact self-cleaning function. During operation, the moving contact rolling, sliding sideways after contact with the static contact, This feature to ensure the contact self-cleaning function even in the low-current applications.



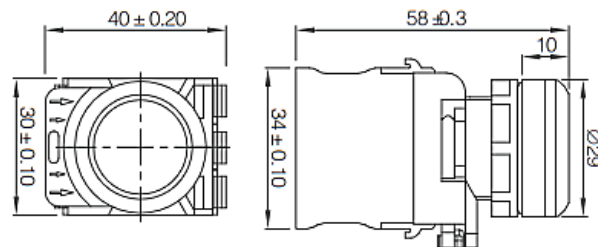
Self-cleaning function

Main Technical Data		
Rated capacity	Snap Action contact	AC-15 220V/2.2A 380V/1.5A 660V/0.8A
		DC-13 24V/3.6A 48V/3A 110V/1A 220V/0.4A 440V/0.25A
	Slow Action contact	AC-15 220V/6A 380V/4A 660V/2A
		DC-13 24V/6A 48V/3A 110V/1A 220V/0.5A 440V/0.25A
Contact resistance		≤ 50mΩ
Maximum insulation voltage		AC 2500V 50Hz. 1min
Mechanical life		Flat push button ≥ 3x10 ⁶ turn button ≥ 3x10 ⁴ Key button ≥ 5x10 ⁴ emergency button ≥ 5x10 ⁴
Electrical life		≥ 60x10 ⁴
Rate thermal current (1th)		10A
Rated insulation voltage (Ui)		AC 660V
Environment temperature		-25℃ ~ +55℃
Front protection degree		Default IP54, if need IP65, please add “IP65” after model while release orther. Key button is IP40, SKBO flat button can mach accessory F1 become IP67

Pushbuttons with plastic

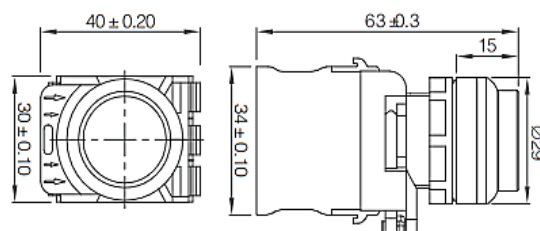
Style	Working status	Contact Classification	Type No	Color code
FLAT 	Momentary	1NO	SZB022-BM10●	R : Red Y : Yellow G : Green S : Blue B : Black
		1NC	SZB022-BM01●	
		1NO-1NC	SZB022-BM11●	
		2NO	SZB022-BM20●	
		2NC	SZB022-BM02●	
	Maintained	1NO	SZB022-BA10●	
		1NC	SZB022-BA01●	
		1NO-1NC	SZB022-BA11●	
		2NO	SZB022-BA20●	
		2NC	SZB022-BA02●	

Overall dimensions



Style	Working status	Contact Classification	Type No	Color code
HIGH CAP 	Momentary	1NO	SZB022-BM210●	R : Red Y : Yellow G : Green S : Blue B : Black
		1NC	SZB022-BM201●	
		1NO-1NC	SZB022-BM211●	
		2NO	SZB022-BM220●	
		2NC	SZB022-BM202●	
	Maintained	1NO	SZB022-BA210●	
		1NC	SZB022-BA201●	
		1NO-1NC	SZB022-BA211●	
		2NO	SZB022-BA220●	
		2NC	SZB022-BA202●	

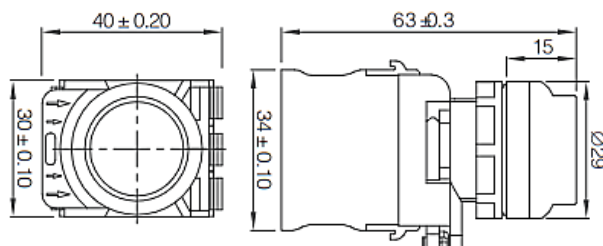
Overall dimensions



Pushbuttons with plastic

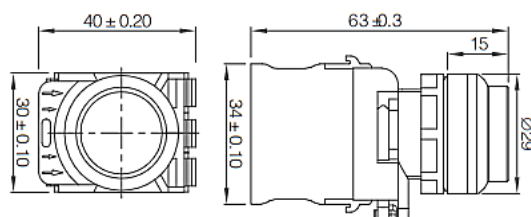
Style	Working status	Contact Classification	Type No	Color code
EXTENDED 	Momentary	1NO	SZB022-BEM10●	R : Red Y : Yellow G : Green S : Blue B : Black
		1NC	SZB022-BEM01●	
		1NO-1NC	SZB022-BEM11●	
		2NO	SZB022-BEM20●	
		2NC	SZB022-BEM02●	
	Maintained	1NO	SZB022-BEA10●	
		1NC	SZB022-BEA01●	
		1NO-1NC	SZB022-BEA11●	
		2NO	SZB022-BEA20●	
		2NC	SZB022-BEA02●	

Overall demensions



Style	Working status	Contact Classification	Type No	Color code
LOW FLAT 	Momentary	1NO	SZB022-BM310●	R : Red Y : Yellow G : Green S : Blue B : Black
		1NC	SZB022-BM301●	
		1NO-1NC	SZB022-BM311●	
		2NO	SZB022-BM320●	
		2NC	SZB022-BM302●	
	Maintained	1NO	SZB022-BA310●	
		1NC	SZB022-BA301●	
		1NO-1NC	SZB022-BA311●	
		2NO	SZB022-BA320●	
		2NC	SZB022-BA302●	

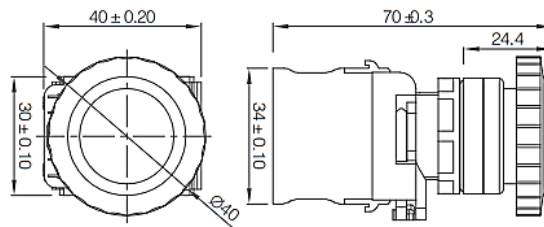
Overall demensions



Pushbuttons with plastic

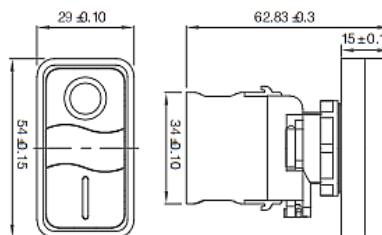
Style	Working status	Contact Classification	Type No	Color code
MUSHROOM 	Momentary	1NO	SZB022-BMM10●	R : Red Y : Yellow G : Green S : Blue B : Black
		1NC	SZB022-BMM01●	
		1NO-1NC	SZB022-BMM11●	
		2NO	SZB022-BMM20●	
		2NC	SZB022-BMM02●	
	Maintained	1NO	SZB022-BMA10●	
		1NC	SZB022-BMA01●	
		1NO-1NC	SZB022-BMA11●	
		2NO	SZB022-BMA20●	
		2NC	SZB022-BMA02●	

Overall demensions



Style	Working status	Contact Classification	Type No	Color code
DOUBLE POSITION 	Momentary	1NO	SZB022-BDM10●●	R : Red Y : Yellow G : Green S : Blue B : Black
		1NC	SZB022-BDM01●●	
		1NO-1NC	SZB022-BDM11●●	
		2NO	SZB022-BDM20●●	
		2NC	SZB022-BDM02●●	

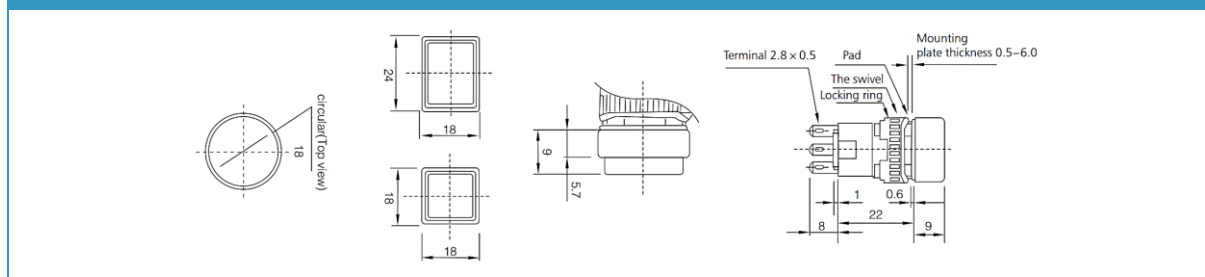
Overall demensions



Pushbuttons with plastic

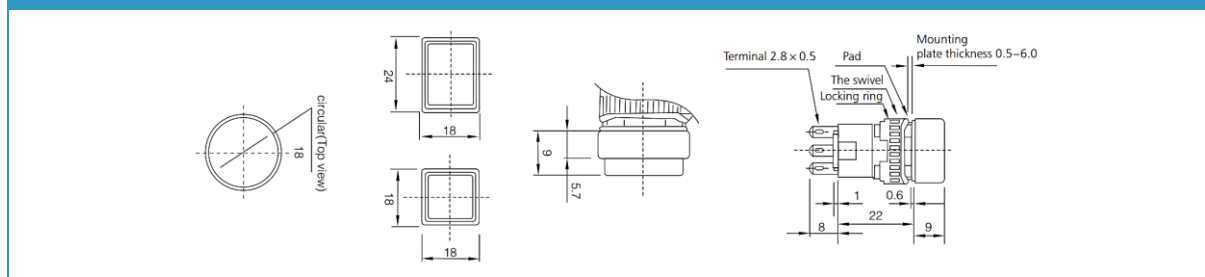
Style	Working status	Contact Classification	Type No	Color code
CIRCULAR 	Momentary	1NO-1NC	SZB016C-M11●	R : Red Y : Yellow G : Green S : Blue B : Black
		2NO-2NC	SZB016C-M22●	
	Maintained	1NO-1NC	SZB016C-A11●	
		2NO-2NC	SZB016C-A22●	

Overall dimensions



Style	Working status	Contact Classification	Type No	Color code
RECTANGULAR 	Momentary	1NO-1NC	SZB016R-M11●	R : Red Y : Yellow G : Green S : Blue B : Black
		2NO-2NC	SZB016R-M22●	
	Maintained	1NO-1NC	SZB016R-A11●	
		2NO-2NC	SZB016R-A22●	

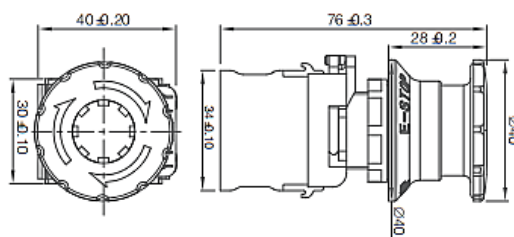
Overall dimensions



Emergency

Style	Working status	Contact Classification	Type No	Color code
Emergency $\Phi 40$ - Without Warning Ring 	Pushlock Pull/Turn Reset	1NO	SZB022-E10●	R : Red
		1NC	SZB022-E01●	
		1NO-1NC	SZB022-E11●	
		2NO	SZB022-E20●	
		2NC	SZB022-E02●	

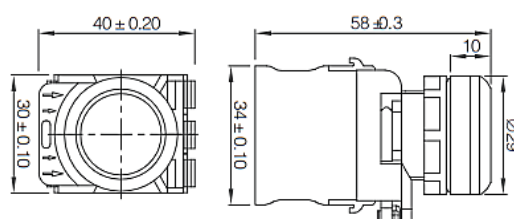
Overall demensions



Pushbuttons with pilot light

Style	Working status	Contact Classification	Type No	Color code	Voltage
FLAT 	Momentary	1NO	SZB022-BPM10●	R : Red Y : Yellow G : Green S : Blue B : Black	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
		1NC	SZB022-BPM01●		
		1NO-1NC	SZB022-BPM11●		
		2NO	SZB022-BPM20●		
		2NC	SZB022-BPM02●		
	Maintained	1NO	SZB022-BPA10●		
		1NC	SZB022-BPA01●		
		1NO-1NC	SZB022-BPA11●		
		2NO	SZB022-BPA20●		
		2NC	SZB022-BPA02●		

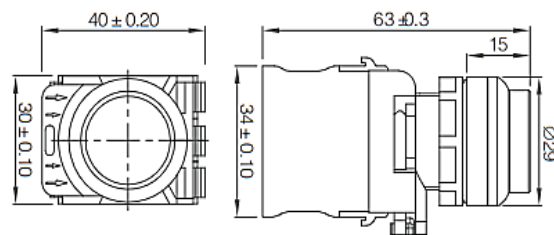
Overall demensions



Pushbuttons with pilot light

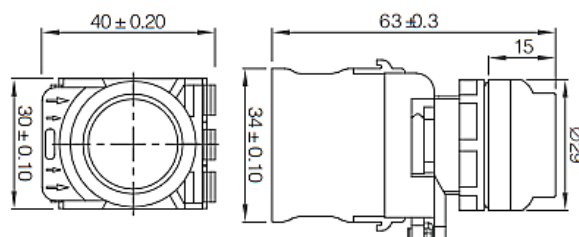
Style	Working status	Contact Classification	Type No	Color code	Voltage
HIGH CAP 	Momentary	1NO	SZB022-BPM210 ●	R : Red Y : Yellow G : Green S : Blue B : Black	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
		1NC	SZB022-BPM201 ●		
		1NO-1NC	SZB022-BPM211 ●		
		2NO	SZB022-BPM220 ●		
		2NC	SZB022-BPM202 ●		
	Maintained	1NO	SZB022-BPA210 ●		
		1NC	SZB022-BPA201 ●		
		1NO-1NC	SZB022-BPA211 ●		
		2NO	SZB022-BPA220 ●		
		2NC	SZB022-BPA202 ●		

Overall demensions



Style	Working status	Contact Classification	Type No	Color code	Voltage
EXTENDED 	Momentary	1NO	SZB022-BEPM10 ●	R : Red Y : Yellow G : Green S : Blue B : Black	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
		1NC	SZB022-BEPM01 ●		
		1NO-1NC	SZB022-BEPM11 ●		
		2NO	SZB022-BEPM20 ●		
		2NC	SZB022-BEPM02 ●		
	Maintained	1NO	SZB022-BEPA10 ●		
		1NC	SZB022-BEPA01 ●		
		1NO-1NC	SZB022-BEPA11 ●		
		2NO	SZB022-BEPA20 ●		
		2NC	SZB022-BEPA02 ●		

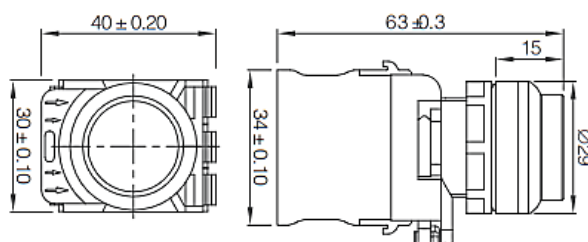
Overall demensions



Pushbuttons with pilot light

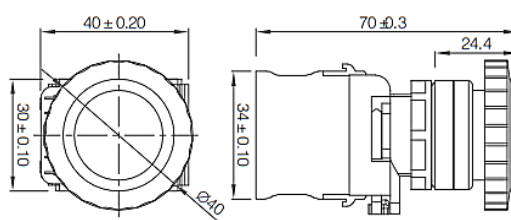
Style	Working status	Contact Classification	Type No	Color code	Voltage
LOW FLAT 	Momentary	1NO	SZB022-BPM310●	R : Red Y : Yellow G : Green S : Blue B : Black	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
		1NC	SZB022-BPM301●		
		1NO-1NC	SZB022-BPM311●		
		2NO	SZB022-BPM320●		
		2NC	SZB022-BPM302●		
	Maintained	1NO	SZB022-BPA310●		
		1NC	SZB022-BPA301●		
		1NO-1NC	SZB022-BPA311●		
		2NO	SZB022-BPA320●		
		2NC	SZB022-BPA302●		

Overall demensions

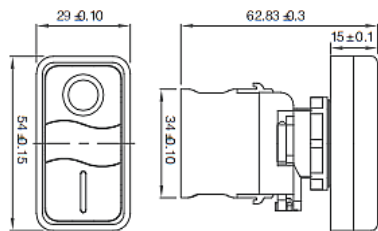


Style	Working status	Contact Classification	Type No	Color code	Voltage
MUSHROOM 	Momentary	1NO	SZB022-BPMM10●	R : Red Y : Yellow G : Green S : Blue B : Black	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
		1NC	SZB022-BPMM01●		
		1NO-1NC	SZB022-BPMM11●		
		2NO	SZB022-BPMM20●		
		2NC	SZB022-BPMM02●		
	Maintained	1NO	SZB022-BPMA10●		
		1NC	SZB022-BPMA01●		
		1NO-1NC	SZB022-BPMA11●		
		2NO	SZB022-BPMA20●		
		2NC	SZB022-BPMA02●		

Overall demensions



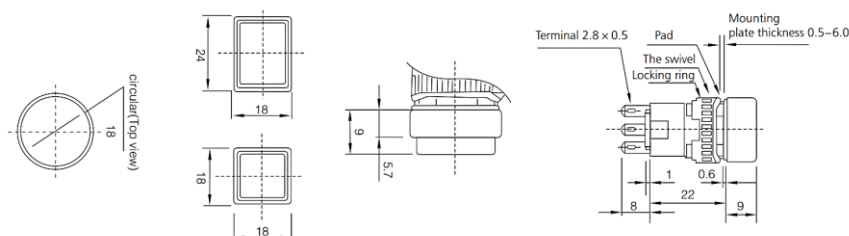
Pushbuttons with pilot light

Style	Working status	Contact Classification	Type No	Color code	Voltage
DOUBLE POSITION 	Momentary	1NO	SZB022-BDPM10●●	R : Red Y : Yellow G : Green S : Blue B : Black	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
		1NC	SZB022-BDPM01●●		
		1NO-1NC	SZB022-BDPM11●●		
		2NO	SZB022-BDPM20●●		
		2NC	SZB022-BDPM02●●		
Overall demensions					
					

Pushbuttons with pilot light

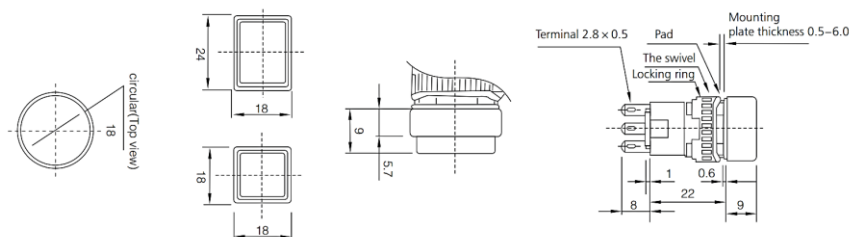
Style	Working status	Contact Classification	Type No	Color code	Voltage
CIRCULAR 	Momentary	1NO-1NC	SZB016C-BM11●●	R : Red Y : Yellow G : Green S : Blue B : Black	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
		2NO-2NC	SZB016C-BM22●●		
	Maintained	1NO-1NC	SZB016C-BA11●●		
		2NO-2NC	SZB016C-BA22●●		

Overall demensions



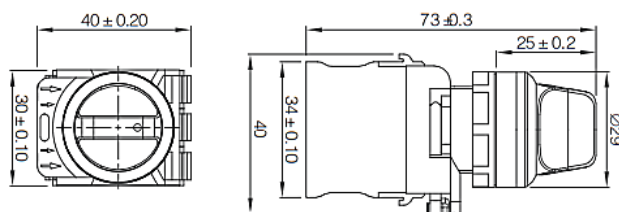
Style	Working status	Contact Classification	Type No	Color code	Voltage
RECTANGULAR 	Momentary	1NO-1NC	SZB016R-PM11●●	R : Red Y : Yellow G : Green S : Blue B : Black	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
		2NO-2NC	SZB016R-PM22●●		
	Maintained	1NO-1NC	SZB016R-PA11●●		
		2NO-2NC	SZB016R-PA22●●		

Overall demensions



Selector Switches

Overall demensions



Selector Switches with Plastic

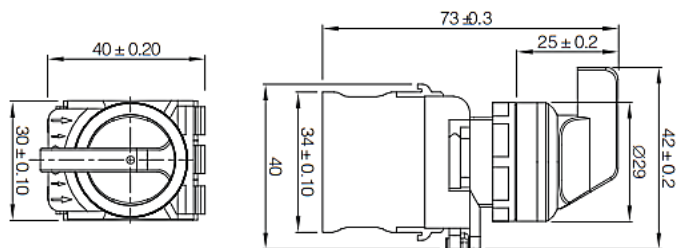
Style	Positions		Model	Action function	Contact
	Two-positions BLACK		SZB022-S2●●	- : Maintained 1 : Return form right 2 : Return form left	10 : 1NO 01 : NC 11 : 1NO-1NC 20 : NO 02 : NC
			SZB022-S2●●		
			SZB022-S2●●		
			SZB022-S2●●		
			SZB022-S2●●		
	Three-positions BLACK		SZB022-S3●●	- : Maintained 1 : Return form right 2 : Return form left 3 : Return of both	
			SZB022-S3●●		
			SZB022-S3●●		
			SZB022-S3●●		
			SZB022-S3●●		

Selector Switches with Light

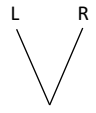
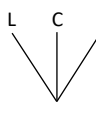
Style	Positions		Model	Action function	Contact	Color code	Voltage
	Two-positions		SZB022-SP2●●●●	- : Maintained 1 : Return form right 2 : Return form left	10 : 1NO 01 : NC 11 : 1NO-1NC 20 : NO 02 : NC	R : Red Y : Yellow G : Green S : Blue W : White	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
			SZB022-SP2●●●●				
			SZB022-SP2●●●●				
			SZB022-SP2●●●●				
			SZB022-SP2●●●●				
	Three-positions		SZB022-SP3●●●●●	- : Maintained 1 : Return form right 2 : Return form left 3 : Return of both			
			SZB022-SP3●●●●●				
			SZB022-SP3●●●●●				
			SZB022-SP3●●●●●				
			SZB022-SP3●●●●●				

Key Selector Switches

Overall demensions



Key Selector Switches with Plastic

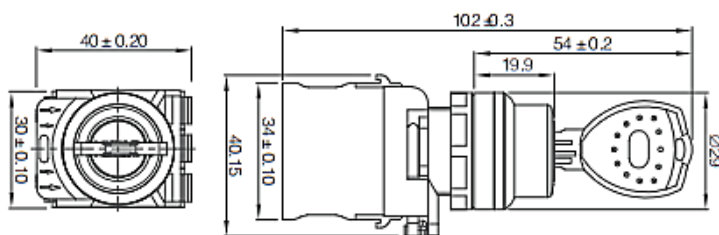
Style	Positions		Model	Action function	Contact
	Two-positions BLACK		SZB022-SLK2●●	- : Maintained 1 : Return form right 2 : Return form left	10 : 1NO
			SZB022-SLK2●●		01 : NC
			SZB022-SLK2●●		11 : 1NO-1NC
			SZB022-SLK2●●		20 : NO
			SZB022-SLK2●●		02 : NC
	Three-positions BLACK		SZB022-SLK3●●	- : Maintained 1 : Return form right 2 : Return form left 3 : Return of both	10 : 1NO
			SZB022-SLK3●●		01 : NC
			SZB022-SLK3●●		11 : 1NO-1NC
			SZB022-SLK3●●		20 : NO
			SZB022-SLK3●●		02 : NC

Key Selector Switches with Light

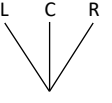
Style	Positions		Model	Action function	Contact	Color code	Voltage
	Two-positions		SZB022-SLPK2●●●●	- : Maintained 1 : Return form right 2 : Return form left	10 : 1NO 01 : NC 11 : 1NO-1NC 20 : NO 02 : NC	R : Red Y : Yellow G : Green S : Blue W : White	6 : AC/DC6V 12 : AC/DC12V 24 : AC/DC24V 36 : AC/DC36V 48 : AC/DC48V 110 : AC/DC110V 220 : AC/DC220V
			SZB022-SLPK2●●●●				
			SZB022-SLPK2●●●●				
			SZB022-SLPK2●●●●				
			SZB022-SLPK2●●●●				
	Three-positions		SZB022-SLPK3●●●●	- : Maintained 1 : Return form right 2 : Return form left 3 : Return of both			
			SZB022-SLPK3●●●●				
			SZB022-SLPK3●●●●				
			SZB022-SLPK3●●●●				
			SZB022-SLPK3●●●●				

Key Selector Switches

Overall demensions



Key Selector Switches with Plastic

Style	Positions		Model	Contact
	Two-positions BLACK		SZB022-SK2●	10 : 1NO 01 : NC 11 : 1NO-1NC 20 : NO 02 : NC
			SZB022-SK2●	
			SZB022-SK2●	
			SZB022-SK2●	
			SZB022-SK2●	
	Three-positions BLACK		SZB022-SK3●	
			SZB022-SK3●	
			SZB022-SK3●	
			SZB022-SK3●	
			SZB022-SK3●	

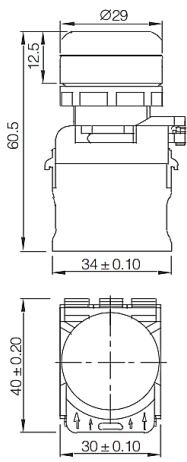


Indicator Light

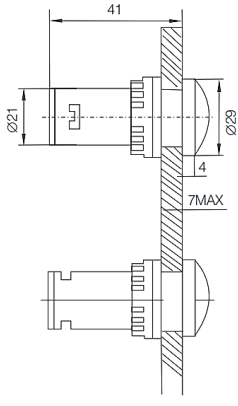
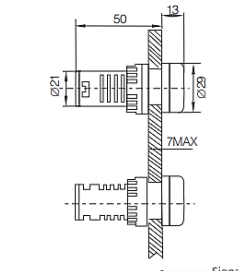
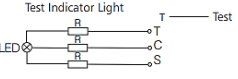
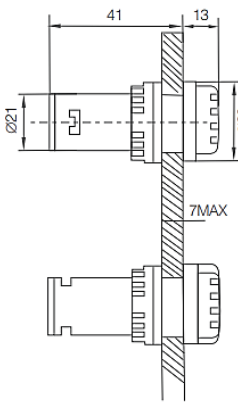
Main Technical Parameters

Industrial Frequency Withstand Voltage	2.5kV (AC RMS), 1min
Insulation Resistance	$\geq 2M\Omega$
Allowable Voltage Fluctuation	$\pm 10\%$
Continuous Operating Life	$\geq 30000h$
Brightness	$\geq 100cd/m^2$
Cti	CTI $\geq 600V$
Degree Of Protection	IP40, 65, IP67 (customize)
Applying Frequency	AC50 ~ 60Hz
Ambient Temperature	-25°C ~ +55°C
Relative Humidity	$\leq 98\%$

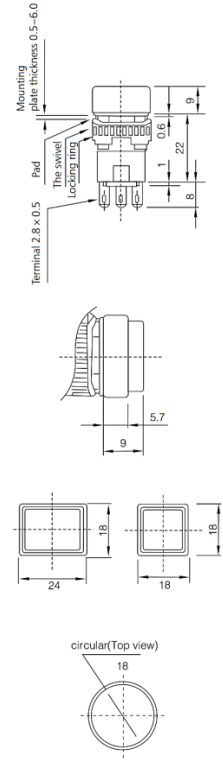
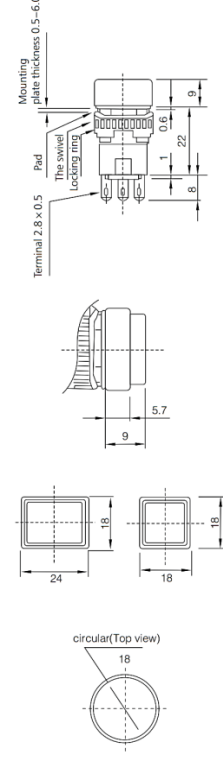
Pilot Lights

Style	Type No	Color code	Voltage	Picture	Overall dimensions
Flush Full Voltage	SZB022-P●●	R : Red Y : Yellow G : Green S : Blue W : White	6 : AC/DC6V		
	SZB022-P●●		12 : AC/DC12V		
	SZB022-P●●		24 : AC/DC24V		
	SZB022-P●●		36 : AC/DC36V		
	SZB022-P●●		48 : AC/DC48V		
	SZB022-P●●		110 : AC/DC110V		
	SZB022-P●●		220 : AC/DC220V		

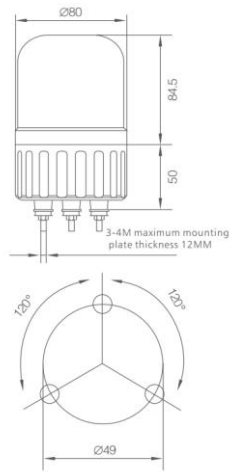
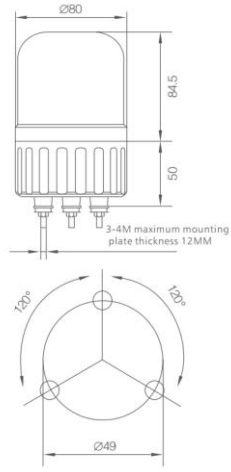
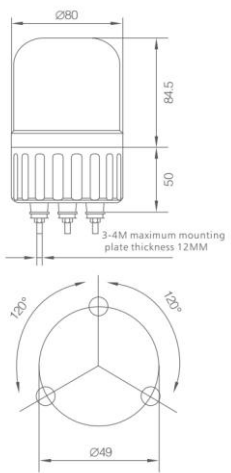
Indicator Light

Style	Type No	Color code	Voltage	Picture	Overall dimensions
Combined Indicator Light	SZB022-UP1●●	R : Red Y : Yellow G : Green S : Blue W : White	6 : AC/DC6V		
	SZB022-UP1●●		12 : AC/DC12V		
	SZB022-UP1●●		24 : AC/DC24V		
	SZB022-UP1●●		36 : AC/DC36V		
	SZB022-UP1●●		48 : AC/DC48V		
	SZB022-UP1●●		110 : AC/DC110V		
	SZB022-UP1●●		220 : AC/DC220V		
Test Indicator Light	SZB022-UP2●●	R : Red Y : Yellow G : Green S : Blue W : White	6 : AC/DC6V		 
	SZB022-UP2●●		12 : AC/DC12V		
	SZB022-UP2●●		24 : AC/DC24V		
	SZB022-UP2●●		36 : AC/DC36V		
	SZB022-UP2●●		48 : AC/DC48V		
	SZB022-UP2●●		110 : AC/DC110V		
	SZB022-UP2●●		220 : AC/DC220V		
Extended Indicator Light	SZB022-UP3●●	R : Red Y : Yellow G : Green S : Blue W : White	6 : AC/DC6V		
	SZB022-UP3●●		12 : AC/DC12V		
	SZB022-UP3●●		24 : AC/DC24V		
	SZB022-UP3●●		36 : AC/DC36V		
	SZB022-UP3●●		48 : AC/DC48V		
	SZB022-UP3●●		110 : AC/DC110V		
	SZB022-UP3●●		220 : AC/DC220V		

Indicator Light

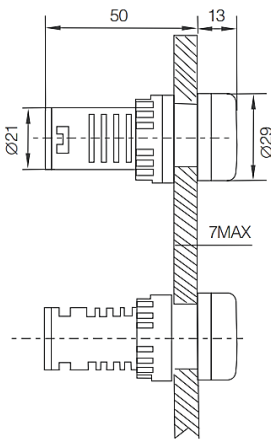
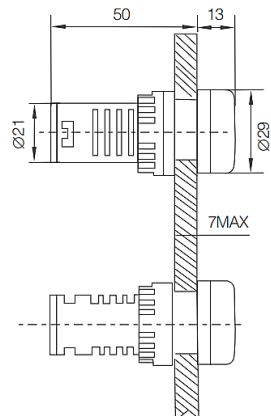
Style	Type No	Color code	Voltage	Picture	Overall demensions
Circular Indicator Light	SZB016C-P●●●	R : Red Y : Yellow G : Green S : Blue W : White	6 : AC/DC6V		
	SZB016C-P●●●		12 : AC/DC12V		
	SZB016C-P●●●		24 : AC/DC24V		
	SZB016C-P●●●		36 : AC/DC36V		
	SZB016C-P●●●		48 : AC/DC48V		
	SZB016C-P●●●		110 : AC/DC110V		
	SZB016C-P●●●		220 : AC/DC220V		
Rectangular Indicator Light	SZB016R-P●●●	R : Red Y : Yellow G : Green S : Blue W : White	6 : AC/DC6V		
	SZB016R-P●●●		12 : AC/DC12V		
	SZB016R-P●●●		24 : AC/DC24V		
	SZB016R-P●●●		36 : AC/DC36V		
	SZB016R-P●●●		48 : AC/DC48V		
	SZB016R-P●●●		110 : AC/DC110V		
	SZB016R-P●●●		220 : AC/DC220V		

Indicator Light

Style	Type No	Color code	Voltage	Picture	Overall demensions
Constant Warning Light	SZB082-LS●●	R : Red Y : Yellow G : Green S : Blue	24 : AC/DC24V		
			220 : AC/DC220V		
Flashing Warning Light	SZB082-FS●●	R : Red Y : Yellow G : Green S : Blue	24 : AC/DC24V		
			220 : AC/DC220V		
Revolving Warning Light	SZB082-ZS●●	R : Red Y : Yellow G : Green S : Blue	24 : AC/DC24V		
			220 : AC/DC220V		



Buzzer – Unibody

Style	Type No	Color code	Voltage	Picture	Overall demensions
Non-Pilot	SZB022-BZ	R : Red K : Black	6 : AC/DC6V		
			12 : AC/DC12V		
			24 : AC/DC24V		
			36 : AC/DC36V		
			48 : AC/DC48V		
			110 : AC/DC110V		
			220 : AC/DC220V		
Flash Buzzer	SZB022-BZF	R : Red Y: Yellow S: Blue	6 : AC/DC6V		
			12 : AC/DC12V		
			24 : AC/DC24V		
			36 : AC/DC36V		
			48 : AC/DC48V		
			110 : AC/DC110V		
			220 : AC/DC220V		

LED Series Indicator Bulb

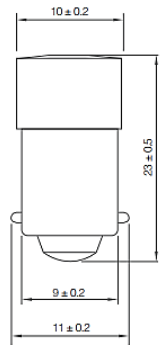
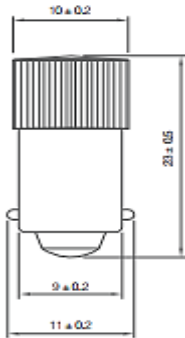
Introduction

Suitable for AC 220V, frequency 50-60Hz, 220V and below 220V DC voltage specifications of telecommunications electrical equipment for a variety of electrical circuit indicator signal, warning signal, accident signal and other instructions signal; in line with GB14048.5-2003 standard. Advantages: light bright color, high reliability and appearance have multiple style, light form of LED light-emitting diode having a long life and other characteristics.

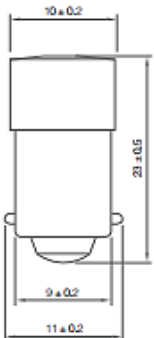
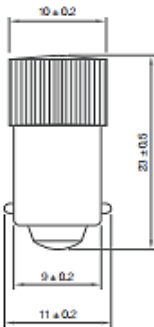
Main technical parameters and operating environment	
Performance Index	Operating frequency 2000V/min, allowable voltage $\pm 10\%$
Continuous Operating Life	30000h
Ambient Temperature	$-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$
Altitude	$\leq 2000\text{m}$
Relative Humidity	$\leq 85\%$
Degree Of Protection	IP55
Insulation Class: III	III Class
Pollution Class	3 Class



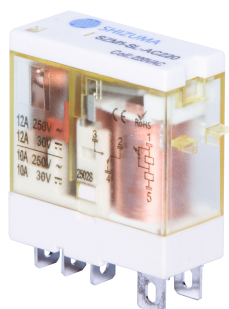
Common

Picture	Name	Electric light source	Color	Overall dimensions
	BA9S-X1●●	6 : AC/DC6V	R : Red Y : Yellow G : Green S : Blue W : White	
		12 : AC/DC12V		
		24 : AC/DC24V		
		36 : AC/DC36V		
		48 : AC/DC48V		
		110 : AC/DC110V		
		220 : AC/DC220V		
	BA9S-X2●●●	6 : AC/DC6V	R : Red Y : Yellow G : Green S : Blue W : White	
		12 : AC/DC12V		
		24 : AC/DC24V		
		36 : AC/DC36V		
		48 : AC/DC48V		
		110 : AC/DC110V		
		220 : AC/DC220V		

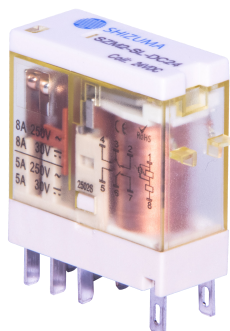
Flash

Picture	Name	Electric light source	Color	Overall dimensions
	BA9S-XF1●●	6 : AC/DC6V	R : Red Y : Yellow G : Green S : Blue W : White	
		12 : AC/DC12V		
		24 : AC/DC24V		
		36 : AC/DC36V		
		48 : AC/DC48V		
		110 : AC/DC110V		
		220 : AC/DC220V		
	BA9S-XF2●●●	6 : AC/DC6V	R : Red Y : Yellow G : Green S : Blue W : White	
		12 : AC/DC12V		
		24 : AC/DC24V		
		36 : AC/DC36V		
		48 : AC/DC48V		
		110 : AC/DC110V		
		220 : AC/DC220V		

SZM INTERFACE RELAY



SZM1



SZM2

Product features

- > Small size, easy to assemble
- > High contact load, 1-S 12A; 2-S 8A
- > High sensitivity
- > Plug-in installation

Model Number Structure

SZM□-□□-□□
 Contact form(Riveted contact) _____
 1: 1PDT
 2 :2PDT
 S: Product type _____
 Type _____
 L: LED _____
 Coll voltage _____
 DC 3~110V
 AC 6~240V

Specifications

Contact Ratings	Contact form	1PDT	2PDT
	Rated load(Resistive load)	12A/250VAC, 30VDC	8A/250VAC, 30VDC
	Switching power(Resistive load)	3000VA, 360W	2000VA, 240W
	Contact resistance(initial)	≤50mΩ	
	Contact materials	Ag alloy	
	Electrical life	1×10 ⁵ times	
	Mechanical life	AC:3×10 ⁷ times DC:5×10 ⁷ times	
Must-iperate voltage (23°C)		DC:≤75% (rated voltage), AC:≤80% (rated voltage) 50/60Hz(rated voltage)	
Must-release voltage (23°C)		DC:≥10% (rated voltage), AC:≥30% (rated voltage) 50/60Hz(rated voltage)	
Maximum voltage (23°C)		110% (rated voltage)	
Coil power consumption	DC (W)	Approx. 0.53	
	AC (VA)	Approx. 0.9	
Operate time (rated voltage)		≤20ms	
Release time (rated voltage)	AC	≤25ms	
	DC	≤10ms, Built in freewheeling diode type: ≤20ms	
Insulation resistance		1000MΩ (500VDC)	
Dielectric Strength	Between contacts of same polarity	1000VAC/1min	
	Between contacts of different polarity	3000VAC/1min (Leakage current 1mA)	
	Between contact and coil	5000VAC/1min (Leakage current 1mA)	
Ambient temperature		-40~70°C	
Ambient humidity		5%~85%RH	
Atmospheric pressure		86~106KPa	
Shock resistance	stability	98m/S ²	
	strength	980m/S ²	
Vibration resistance		10~55Hz double amplitude:	
Installation mode		Plug-In type	
Packaging form		Dust cover type	
Weight		Approx. 20g	

SZM INTERFACE RELAY



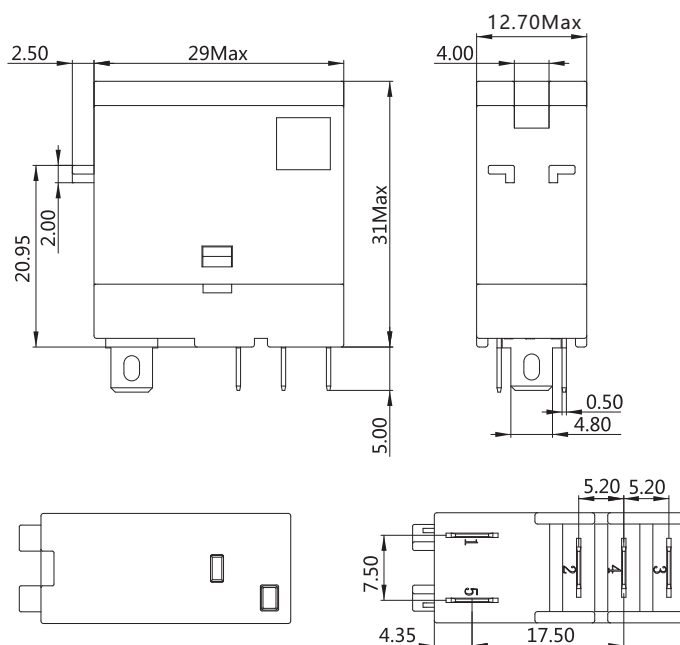
Coil Ratings (23°C)

Rated Voltage V.DC	6	12	24	36	48	100~110	
Coil resistance Ω	68	270	1080	2440	4300	18800	
Rated Voltage V.AC	6	12	24	48	115	230	240
Coil resistance Ω	16	62	240	1080	6000	23000	25000

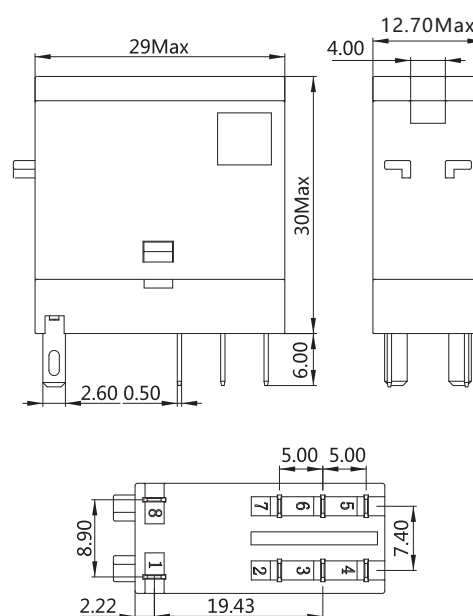
Note: Coil resistance tolerance: Nominal value of coil rated voltage < 110V $\pm$ 10% Ω , $\geq$ 110V 1 $\pm$ 15% Ω .

Dimensions (mm)

SZM1-SL

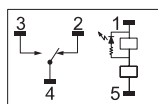


SZM2-SL

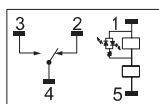


Connecting diagram

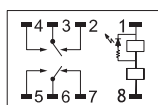
SZM1-SL AC



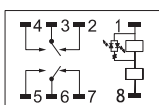
SZM1-SL DC



SZM2-SL AC



SZM2-SL DC



SZU SMALL HIGH POWER RELAY



Product features

- > Load 2-Z 8A;4-Z 5A
- > Various specifications, equipped with LED indicator device
- > With mechanical indicator window
- > Plug-in installation

Model Number Structure

SZU□-□□-□□
 Contact form(Riveted contact) ————
 2 : 2PDT
 4 : 4PDT
 2T : 2PDT with test trigger
 4T : 4PDT with test trigger
 Z : Product type ————
 Type ————
 L: LED
 Coll voltage ————
 DC 6~220V
 AC 6~380V

Specifications

Contact Ratings	Contact form	2PDT	4PDT
	Rated load(Resistive load)	8A/250V AC, 30VDC	5A/250VAC, 30VDC
	Switching power(Resistive load))	2000VA, 240W	1250VA, 150W
	Contact resistance(initial)	≤50mΩ	
	Contact materials	Ag alloy	
	Electrical life	1×10 ⁵ times	
	Mechanical life	AC:2×10 ⁷ times DC:5×10 ⁷ times	
Must-iperate voltage (23℃)		DC:≤75% (rated voltage), AC:≤80% (rated voltage) 50/60Hz(rated voltage)	
Must-release voltage (23)		DC:≥10% (rated voltage),AC:≥30% (rated voltage) 50/60Hz(rated voltage)	
Maximum voltage (23)		110% (rated voltage)	
Coil power consumption	DC (W)	Approx. 0.9	
	AC (VA)	Approx. 1.2	
Operate time (rated voltage)		≤20ms	
Release time (rated voltage)	AC	≤25ms	
	DC	≤15ms: Built in freewheeling diode type: ≤25ms	
nsulation resistance		1000MΩ (500VDC)	
Dielectric Strength	Between contacts of same polarity	1000VAC/1min	
	Between contacts of different polarity	2Z: 2000VAC/1min (Leakage current 1mA)	
		4Z: 1500VAC/1min (Leakage current 1mA)	
Between contact and coil		2000VAC/1min (Leakage current 1mA)	
Ambient temperature		-40~70℃	
Ambient humidity		5%~85%RH	
Atmospheric pressure		86~106KPa	
Shock resistance	stability	98m/S²	
	strength	980m/S²	
Vibration resistance		10~55Hz double amplitude: 1mm	
Installation mode		Plug-In type	
Packaging form		Dust cover type	
Weight		Approx. 32g	

SZU SMALL HIGH POWER RELAY

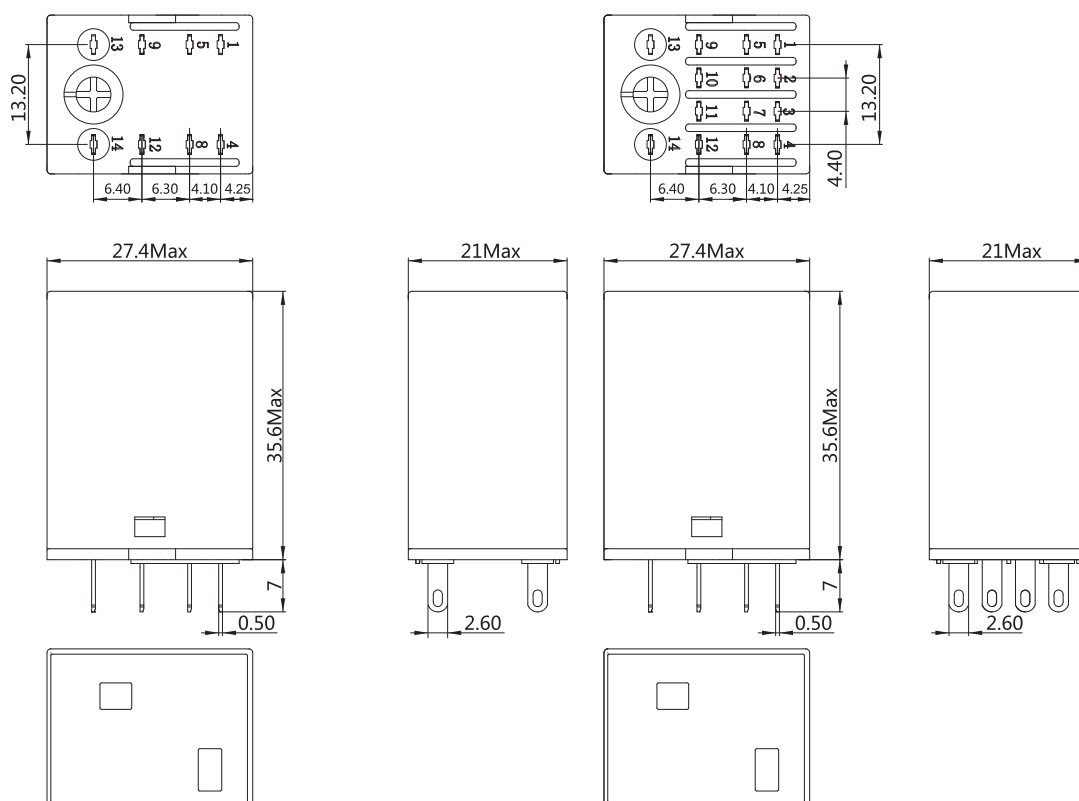


Coil Ratings (23°C)

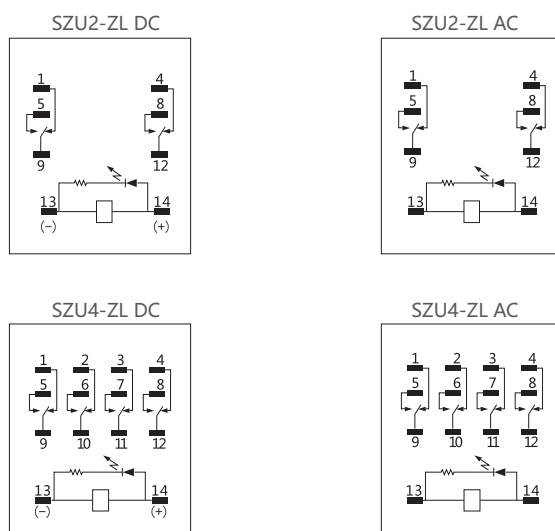
Rated Voltage V.DC	6	12	24	48	100~110	220
Coil resistance Ω	41	165	662	2725	11440	53780
Rated Voltage V.AC	12	24	48	110~120	220~240	
Coil resistance Ω	45	180	785	4430	15900	

Note: Coil resistance tolerance: Nominal value of coil rated voltage < 110V $\pm 10\%$, ≥ 110 V $1 \pm 15\%$.

Dimensions (mm)



Connecting diagram



SZUP SMALL HIGH POWER RELAY



SZUP2-CL



SZUP2T-CL

Product features

- > Load 2-C 10A
- > Various specifications, equipped with LED indicator device
- > With mechanical indicator window
- > Plug-in installation

Model Number Structure

Contact form(Riveted contact)

2 : 2PDT

2T: 2PDT with test trigger

C : Product type

Type

L: LED

Coll voltage

DC 6~220V

AC 6~380V

SZUP□-□-□-□

Specifications

Contact Ratings	Contact form	2PDT
	Rated load(Resistive load)	10A/250VAC, 30VDC
	Switching power(Resistive load)	2500VA, 300W
	Contact resistance(initial)	≤50mΩ
	Contact materials	Ag alloy
	Electrical life	1×10 ⁵ times
	Mechanical life	AC: 1×10 ⁷ times
Must-operate voltage(23°C)		DC: ≤75% (rated voltage), AC: ≤80% (rated voltage) 50/60Hz(rated voltage)
Must-release voltage (23 °)		DC: ≥10% (rated voltage), AC: ≥30% (rated voltage) 50/60Hz(rated voltage)
Maximum voltage(23 °)		110% (rated voltage)
Coil power consumption	DC (W)	Approx. 0.9
	AC (VA)	Approx. 1.2
Operate time (rated voltage)		≤20ms
Release time (rated voltage)	AC	≤25ms
	DC	≤15ms, Built in freewheeling diode type: ≤25ms
Insulation resistance		1000MΩ (500VDC)
Dielectric Strength	Between contacts of same polarity	1000VAC/1min
	Between contacts of different polarity	2000VAC/1min (Leakage current 1mA)
	Between contact and coil	2000VAC/1min (Leakage current 1mA)
Ambient temperature		-40~70°C
Ambient humidity		5%~85%RH
Atmospheric pressure		86~106KPa
Shock resistance	stability	98m/S ²
	strength	980m/S ²
Vibration resistance		10~55Hz double amplitude: 1mm
Installation mode		Plug-In type
Packaging form		Dust cover type
Weight		Approx. 32g

SZUP SMALL HIGH POWER RELAY

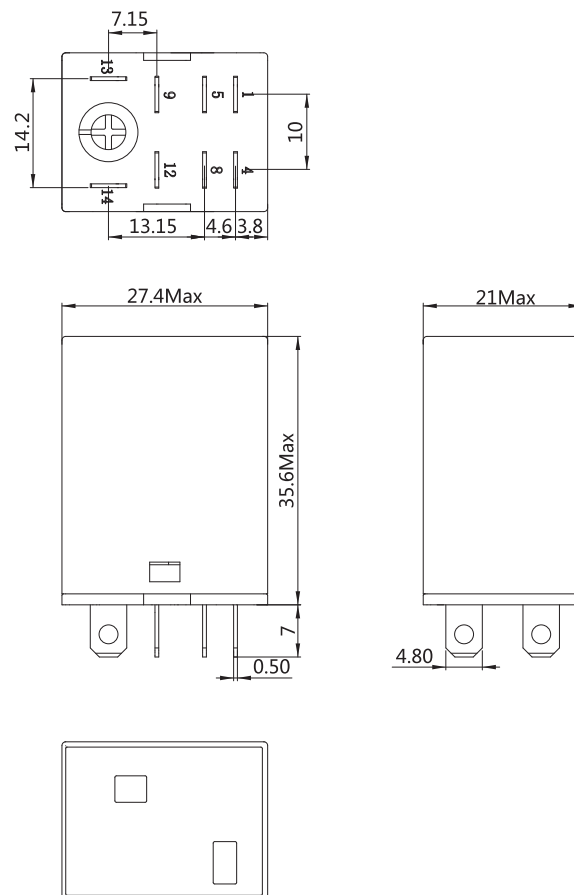


Coil Ratings (23°C)

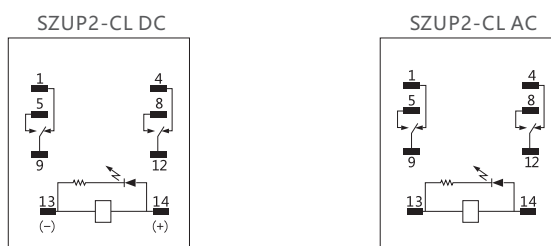
Rated Voltage V.DC	6	12	24	48	100~110	220
Coil resistance Ω	41	165	662	2725	11440	53780
Rated Voltage V.AC	12	24	48	110~120	220~240	
Coil resistance Ω	45	180	785	4430	15900	

Note: Coil resistance tolerance: Nominal value of coil rated voltage < 110V $\pm 10\% \Omega$, $\geq 110V$ $1 \pm 15\% \Omega$.

Dimensions (mm)



Connecting diagram



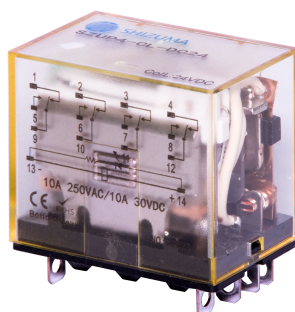
SZUP SMALL HIGH POWER RELAY



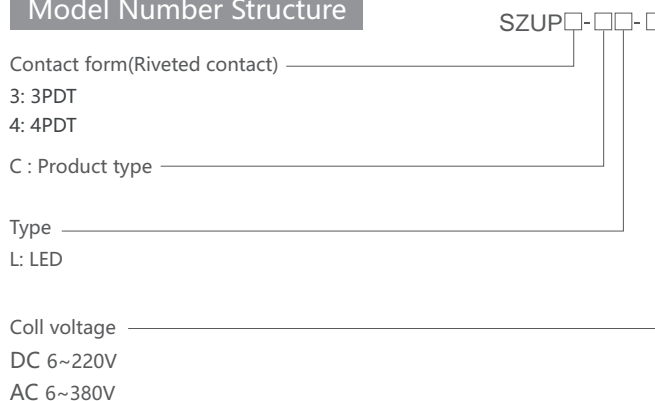
Product features

- > Load 3-C 10A;4-C 10A
- > Various specifications, equipped with LED indicator device
- > Plug-in installation

Model Number Structure



SZUP4-CL



Specifications

Contact Ratings	Contact form	3PDT	4PDT
	Rated load(Resistive load)	10A/250VAC ,30VDC	10A/250VAC ,30VDC
	Load motor	1/6HP 240VAC	1/6HP 240VAC
	Switching power(Resistive load)	2500VA 300W	2500VA 300W
	Contact resistance(initial)	≤50mΩ	
	Contact materials	Ag alloy	
	Electrical life(Frequency 1s on, 1s off)	1×10 ⁵ times	
	Mechanical life	AC: 2×10 ⁷ times DC: 5×10 ⁷ times	
Must-iperate voltage(23°C)		DC: ≤75% (rated voltage), AC: ≤80% (rated voltage) 50/60Hz(rated voltage)	
Must-release voltage (23 °)		DC: ≥10% (rated voltage), AC: ≥30% (rated voltage) 50/60Hz(rated voltage)	
Maximum voltage(23 °)		110% (rated voltage)	
Coil power consumption	DC (W)	3C-Approx. 1.4	4C-Approx. 1.5
	AC (VA)	3C-Approx. 2	4C-Approx. 2.5
Operate time (rated voltage)		≤20ms	
Release time (rated voltage)	AC	≤25ms	
	DC	≤15ms, Built in freewheeling diode type: ≤25ms	
Insulation resistance		1000MΩ (500VDC)	
Dielectric Strength	Between contacts of same polarity	1000VAC/1min (Leakage current 1mA)	
	Between contacts of different polarity	2000VAC/1min (Leakage current 1mA)	
	Between contact and coil	2000VAC/1min (Leakage current 1mA)	
Ambient temperature		-25 ~ + 55°C	
Ambient humidity		35%~85%RH	
Atmospheric pressure		86 ~ 106KPa	
Shock resistance		10G (Sine half wave pulse: 11ms)	
Vibration resistance		10~55Hz double amplitude: 1mm	
Installation mode		Plug-In type	
Packaging form		Dust cover type	
Weight		3C-Approx. 50g	4C-Approx. 65g

SZUP SMALL HIGH POWER RELAY



Coil Ratings (23°C)

SZUP3-C

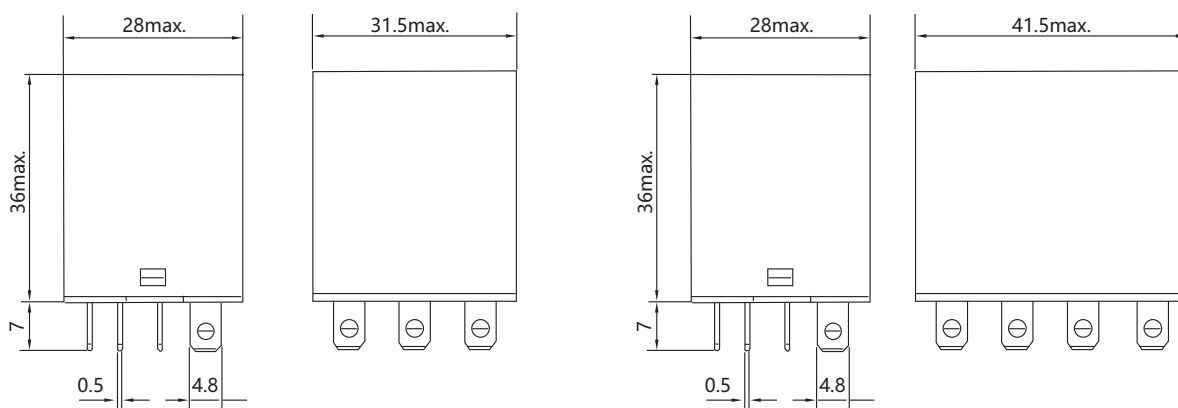
Rated Voltage V.DC	6	12	24	48	100~110	220
Coil resistance Ω	25	100	400	1600	8400	33000
Rated Voltage V.AC	6	24	48	110~120	220~240	380
Coil resistance Ω	6.5	102	410	2500	10000	26000

SZUP4-C

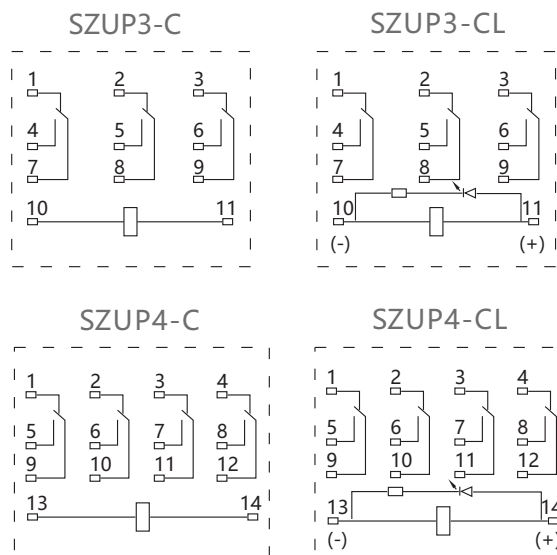
Rated Voltage V.DC	6	12	24	48	100~110	220
Coil resistance Ω	24	96	360	1500	6800	29000
Rated Voltage V.AC	6	24	48	110~120	220~240	380
Coil resistance Ω	5	80	320	1680	8000	20000

Note: Coil resistance tolerance: Nominal value of coil rated voltage < 110V±10%Ω, ≥110V 1±15%Ω.

Dimensions (mm)



Connecting diagram

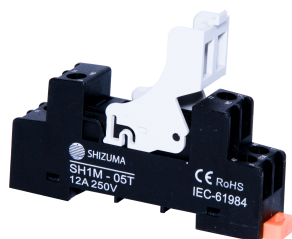


RELAY SOCKET



SH1M-05T (Guide rail installation)

Applicable relay
SZM1-SL



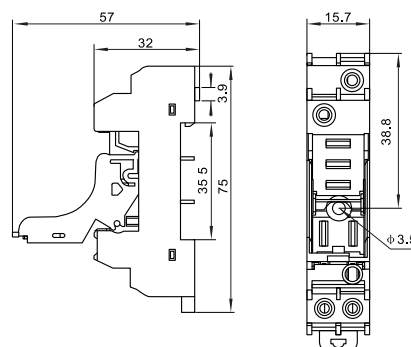
Specifications

Model			
Nominal Load	Current	A	12
	Voltage	V	250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S	4000
	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque	N.m		1.0
Wire Size	AWG/mm ²		20-14/0.5-2.5
Ambient temperature	°C		-40-70
Unit Weight	g		24

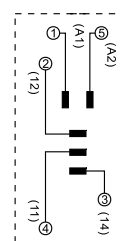
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH1M-05T	Assembled	-

Dimensions (mm)

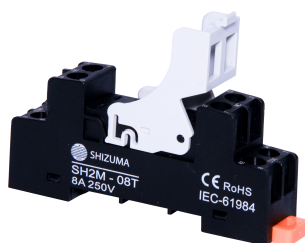


Internal connections



SH2M--08T (Guide rail installation)

Applicable relay
SZM2-SL



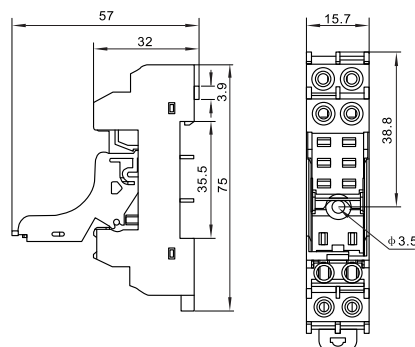
Specifications

Model			
Nominal Load	Current	A	8/10
	Voltage	V	250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S	4000
	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque	N.m		1.0
Wire Size	AWG/mm ²		20-14/0.5-2.5
Ambient temperature	°C		-40-70
Unit Weight	g		29

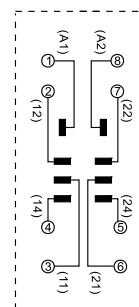
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH2M-08T	Assembled	-

Dimensions (mm)



Internal connections



RELAY SOCKET



SH2U-08T (Guide rail installation)

Applicable relay
SZU2-ZL



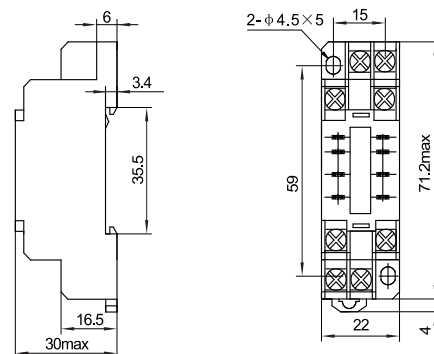
Specifications

Model			
Nominal Load	Current	A	8
	Voltage	V	250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S	4000
	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque	N.m		1.0
Wire Size	AWG/mm ²		20-14/0.5-2.5
Ambient temperature	°C		-40-70
Unit Weight	g		30

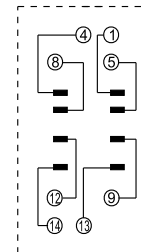
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH2U-08T	Assembled	-

Dimensions (mm)



Internal connections



/page

SH4U-14T (Guide rail installation)

Applicable relay
SZU4-ZL



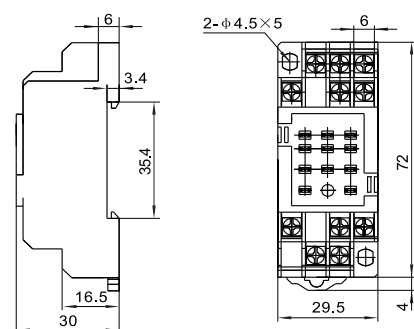
Specifications

Model			
Nominal Load	Current	A	5
	Voltage	V	250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S	4000
	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque	N.m		1.0
Wire Size	AWG/mm ²		20-14/0.5-2.5
Ambient temperature	°C		-40-70
Unit Weight	g		44

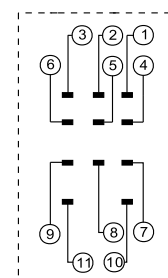
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH4U-14T	Assembled	-

Dimensions (mm)



Internal connections

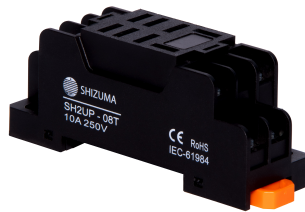


RELAY SOCKET



SH2UP-08T(Guide rail installation)

Applicable relay
SZUP2-CL



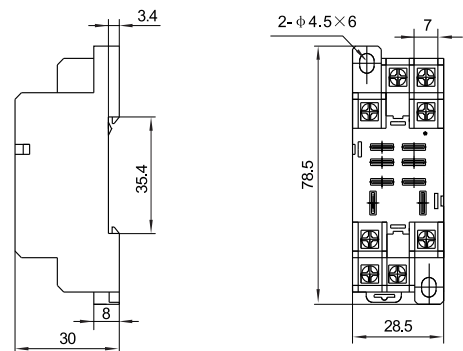
Specifications

Model			
Nominal Load	Current	A	10
	Voltage	V	250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S	4000
	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque		N.m	1.0
Wire Size		AWG/mm ²	20-14/0.5-2.5
Ambient temperature		°C	-40-70
Unit Weight		g	31

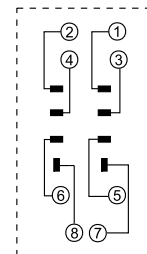
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH2UP-08T	Assembled	-

Dimensions (mm)



Internal connections



SH4UP-14T(Guide rail installation)

Applicable relay
SZUP4-CL



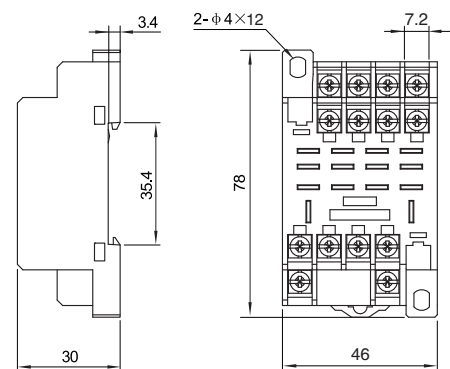
Specifications

Model			
Nominal Load	Current	A	10
	Voltage	V	250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S	4000
	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque		N.m	1.0
Wire Size		AWG/mm ²	20-14/0.5-2.5
Ambient temperature		°C	-40-70
Unit Weight		g	67.3

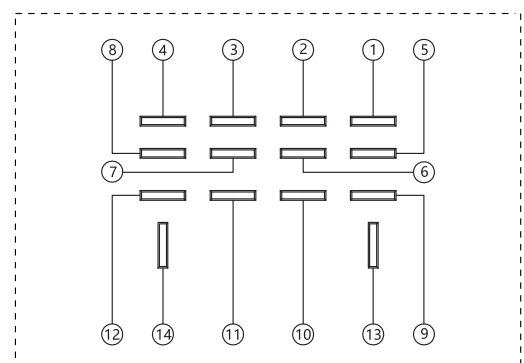
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH4UP-14T	Assembled	-

Dimensions (mm)



Internal connections





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