

»» Features

- ☐ 15A general purpose Power Relays.
- ☐ UL/CUL,CSA,TUV approved.
- ☐ Optional for AC & DC coil.
- ☐ Optional with and or w/out lamp, push-to-test button, stud, etc.
- ☐ Sealed and washable type w/ knock-off nib vent.
- ☐ Plain or top flange cover, PCB and or solder lug / quick terminals.
- ☐ Contact rating up to 15A 250VAC (SPNO).
- ☐ RoHS Compliant.



»» Type List

Terminal style	Contact form	Designation (provided with)	Enclosure style	
			Dust cover	Flanged cover
S (Quick terminal)	1C (SPDT)	-----	SCLA-S-SPDT-C	SCLA-S-SPDT-C1
	1A (SPNO)		SCLA-S-SPNO-C	SCLA-S-SPNO-C1
	1B (SPNC)		SCLA-S-SPNC-C	SCLA-S-SPNC-C1
	1C (SPDT)	Lamp	SCLA-S-L-SPDT-C	SCLA-S-L-SPDT-C1
	1A (SPNO)		SCLA-S-L-SPNO-C	SCLA-S-L-SPNO-C1
	1B (SPNC)		SCLA-S-L-SPNC-C	SCLA-S-L-SPNC-C1
	1C (SPDT)	Manual	SCLA-S-M-SPDT-C	SCLA-S-M-SPDT-C1
	1A (SPNO)		SCLA-S-M-SPNO-C	SCLA-S-M-SPNO-C1
	1B (SPNC)		SCLA-S-M-SPNC-C	SCLA-S-M-SPNC-C1
	1C (SPDT)	Lamp & Manual	SCLA-S-LM-SPDT-C	SCLA-S-LM-SPDT-C1
	1A (SPNO)		SCLA-S-LM-SPNO-C	SCLA-S-LM-SPNO-C1
	1B (SPNC)		SCLA-S-LM-SPNC-C	SCLA-S-LM-SPNC-C1
P (PCB terminal)	1C (SPDT)	-----	SCLA-P-SPDT-C	-----
	1A (SPNO)		SCLA-P-SPNO-C	-----
	1B (SPNC)		SCLA-P-SPNC-C	-----
	1C (SPDT)	Lamp	SCLA-P-L-SPDT-C	-----
	1A (SPNO)		SCLA-P-L-SPNO-C	-----
	1B (SPNC)		SCLA-P-L-SPNC-C	-----
	1C (SPDT)	Manual	SCLA-P-M-SPDT-C	-----
	1A (SPNO)		SCLA-P-M-SPNO-C	-----
	1B (SPNC)		SCLA-P-M-SPNC-C	-----
	1C (SPDT)	Lamp & Manual	SCLA-P-LM-SPDT-C	-----
	1A (SPNO)		SCLA-P-LM-SPNO-C	-----
	1B (SPNC)		SCLA-P-LM-SPNC-C	-----

»» Ordering Information

SCL A - S - ☐ - SPNO - ☐ - C ☐

1 2 3 4 5 6 7 8

- | | | | |
|----------|----------------------------------|-----------------------------|---|
| 1. SCL | -- Basic series designation | SPNC | -- Single pole normally closed |
| 2. A | -- Single pole | SPDT | -- Single pole double throw |
| 3. P | -- PCB terminal | 6. Blank | -- Standard type |
| S | -- Quick terminal | F | -- Class F |
| 4. Blank | -- Without pilot light | 7. C | -- Dust cover |
| L | -- Provided with pilot light | C1 | -- Flanged cover |
| M | -- Provided with manual operator | 8. ☐ | -- Coil voltage (please refer to the coil rating data for the availability) |
| 5. SPNO | -- Single pole normally open | | |

»» Contact Rating

Resistive load	15A 240VAC 15A 28VDC
Max. switching current	18A
Max. switching voltage	277VAC
Max. switching capacity	3600VA

»» Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23°C (mA)	Coil resistance ±10 % at 23°C (Ω)	Max. continuous voltage at 70°C	Pick up voltage(Max.) at 23°C	Drop out voltage(Min.) at 23°C	Power consumption at rated voltage
6	150	40	120 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.9W
12	75	160				
15	60	250				
24	37	650				
48	19	2,600				
110	10	11,000				
120	11	11,000				

»» Coil Rating (AC)

Rated voltage (V)	Coil resistance ±10 % at 23°C (Ω)	Max. continuous voltage at 70°C	Pick up voltage(Max.) at 23°C	Drop out voltage(Min.) at 23°C	Power consumption at rated voltage
12	40	110 % of rated voltage	85 % of rated voltage	30 % of rated voltage	approx. 1.2VA
24	160				
100	3,400				

110	3,400	110 % of rated voltage	85 % of rated voltage	30 % of rated voltage	approx. 1.2VA
115	3,400				
120	3,400				
220	13,600				
230	13,600				
240	13,600				

»» Specification

Contact material	AgSnO alloy	
Contact resistance ⁽¹⁾	30 mΩ Max. (at 1A/6VDC by 4-wire resistance measurement)	
Operate time ⁽¹⁾	25 ms Max.	
Release time ⁽¹⁾	25 ms Max.	
Vibration resistance	Operating extremes	10~55Hz , amplitude 1.0 mm
	Damage limits	10~55Hz , amplitude 1.0 mm
Shock resistance	Operating extremes	20G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 ops. (frequency 18,000 ops./hr)
	Electrical	100,000 ops. (frequency 1,800 ops./hr)
Operating ambient temperature	-25~+70°C (no freezing)	
Weight	Approx. 32 g	

Note : (1) Initial value. Operate and release time excluding contact bounce.

(2) Unless otherwise specified, all tests are under room temperature and humidity.

(3) Consider the heat of PCB is necessary, please check the actual condition of PCB.

(4) Applying no diode to this relay. The life expectancy will be lower when a diode is used. To use a varistor (ZNR) could absorb the coil surge of relay that is recommended.

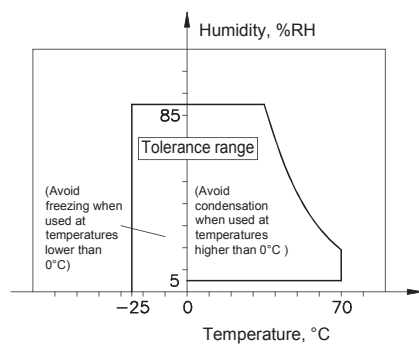
(5) Do not use the relay exceeding the coil rating, contact rating and life expectancy, or this may cause the risk of overheating.

(6) To assure optimum performance, avoid the relay from dropping, hitting, or other unnecessary shocks.

(7) Use suitable harnesses and bus bars according to the current as below :
15A type : Min. 3.0 mm²

(8) Usage, transport and storage conditions

- 1. Temperature: -25~+70°C
- 2. Humidity: 5 to 85% R.H.
- 3. Pressure: 86 to 106 kPa
- Furthermore, the humidity range varies with the temperature. So, use relays within the range indicated in the graph below.



(9) Please contact Song Chuan for the detailed information.

»» Insulation Data

Insulation resistance ⁽¹⁾	100 MΩ Min. (DC 500V)	
Dielectric strength ⁽¹⁾	Between open contact	: AC 1000V , 50/60Hz 1 min.
	Between contact and coil	: AC 1500V , 50/60Hz 1 min.
	Between live parts & ground	: AC 1500V , 50/60Hz 1 min.
Insulation of IEC 61810-1		
Clearance / creepage distances	Between coil to contact	: Basic, $\geq 1.5\text{mm}$ / $\geq 2.5\text{mm}$
	Between open contact	: Functional
Rated insulation voltage	250V	
Rated impulse withstand voltage	2500V	
Pollution degree	2	
Rated voltage	230 / 400V	
Overvoltage category	II	

Note : (1) Initial value.

»» Safety Approval

Certified	UL / CUL	CSA	TUV
File No.	E88991	1474292	R9452081

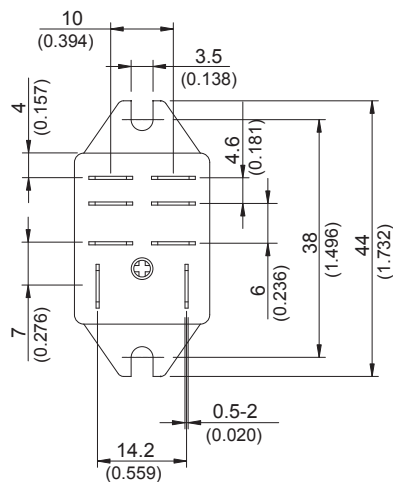
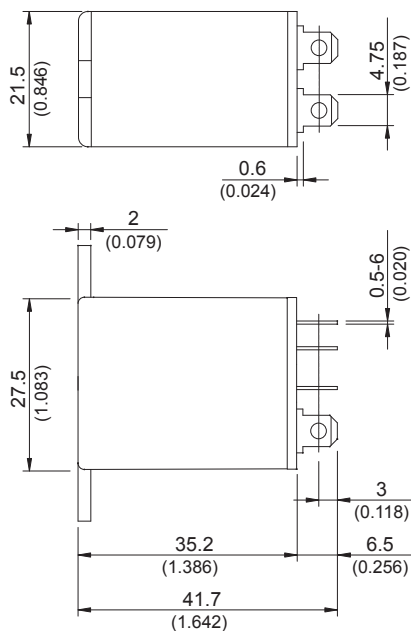
»» Safety Approval Rating

UL / CUL	CSA	TUV
15A 277VAC (※)	15A 277VAC	15A 250VAC
18A 120VAC (※)	18A 120VAC	15A 30VDC
15A 120VAC	15A 28VDC	6.2A 120VAC $\cos\phi$ 0.5
10A 277VAC	1/2HP 120VAC	
15A 28VDC		
1/2HP 120VAC		

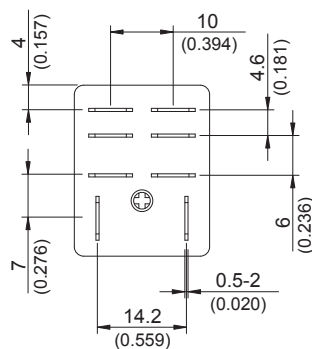
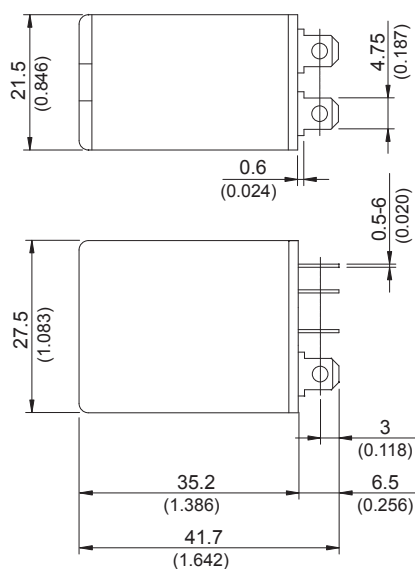
Note : (※) For non-industrial application.

>>> Outline Dimensions

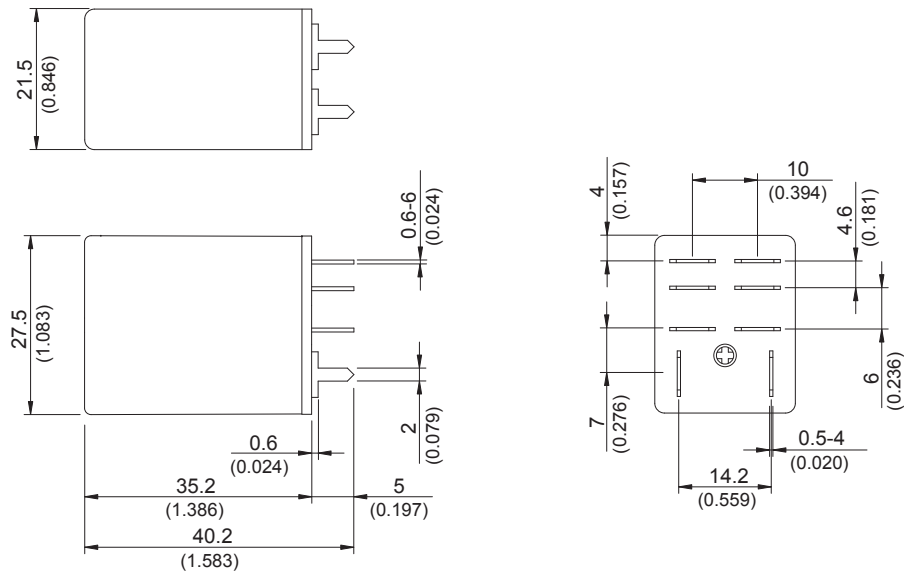
◆LA-S C1



◆LA-S C



◆LA-P C

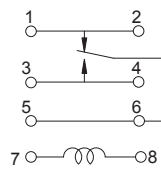


TOLERANCE:
 LESS THAN: 1(0.039) $\pm$ 0.1(0.004)
 5(0.197) $\pm$ 0.3(0.012)
 20(0.787) $\pm$ 0.5(0.020)
 MORE THAN: 20(0.787) $\pm$ 1(0.039)

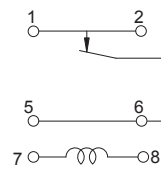
»» Wiring Diagram

BOTTOM VIEW

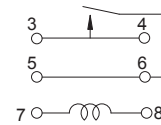
SPDT



SPNC



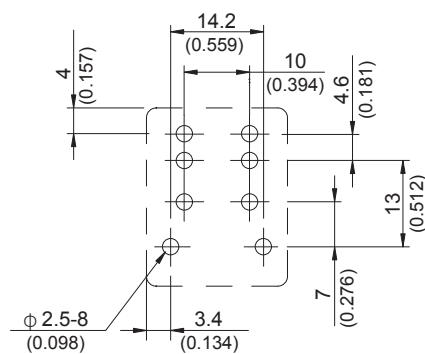
SPNO



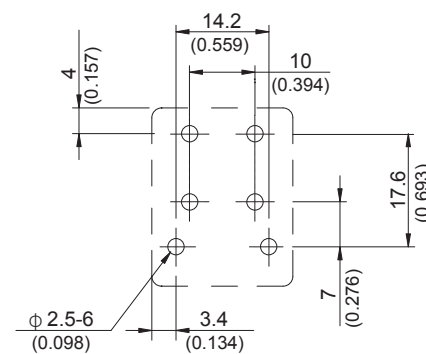
»» PC Board Layout

BOTTOM VIEW

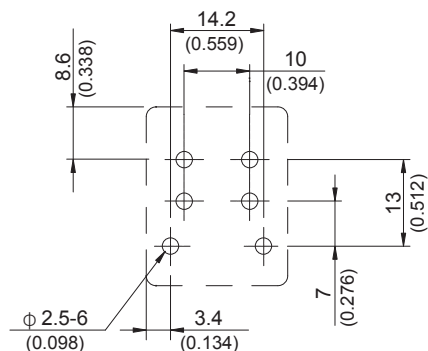
SPDT



SPNC

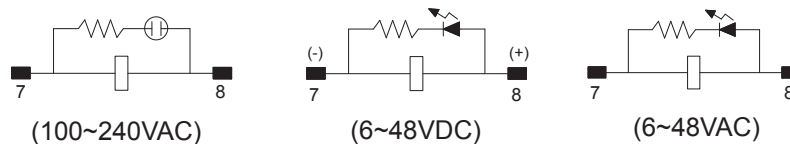


SPNO



Designation (Provided with)
BOTTOM VIEW

Lamp



Engineering Data

