

### »» Features



- 10 general purpose Power Relay.
- Contact rating up to 12A 250VAC (DPNO).
- Epoxy sealed type and flux free.
- Quick connect terminal or PCB terminal available.
- Special version of larger contact gap 1.9mm.  
(IEC 255/VDE 0436) (DPNO Only)
- Optional to be equipped with lamp, stud, diode, flashed contact, and flanged cover.

### »» Type List

Terminal style	Contact form	Designation (provided with)	Enclosure style			
			Straight cover	Flanged cover	Sealed type	Sealed type washable
Quick terminal	DPDT	-----	SCL-DPDT	SCL-DPDT-C1	SCL-DPDT-V	SCL-DPDT-S
	DPNO	-----	SCL-DPNO	SCL-DPNO-C1	SCL-DPNO-V	SCL-DPNO-S
	DPDT	Diode	SCL-D-DPDT	SCL-D-DPDT-C1	SCL-D-DPDT-V	SCL-D-DPDT-S
	DPNO	Diode	SCL-D-DPNO	SCL-D-DPNO-C1	SCL-D-DPNO-V	SCL-D-DPNO-S
	DPDT	Stud	SCL-G-DPDT	SCL-G-DPDT-C1	SCL-G-DPDT-V	SCL-G-DPDT-S
	DPNO	Stud	SCL-G-DPNO	SCL-G-DPNO-C1	SCL-G-DPNO-V	SCL-G-DPNO-S
	DPDT	Lamp	SCL-L-DPDT	SCL-L-DPDT-C1	SCL-L-DPDT-V	SCL-L-DPDT-S
	DPNO	Lamp	SCL-L-DPNO	SCL-L-DPNO-C1	SCL-L-DPNO-V	SCL-L-DPNO-S
PCB terminal	DPDT	-----	SCL-1-DPDT	SCL-1-DPDT-C1	SCL-1-DPDT-V	SCL-1-DPDT-S
	DPNO	-----	SCL-1-DPNO	SCL-1-DPNO-C1	SCL-1-DPNO-V	SCL-1-DPNO-S
	DPDT	Diode	SCL-1-D-DPDT	SCL-1-D-DPDT-C1	SCL-1-D-DPDT-V	SCL-1-D-DPDT-S
	DPNO	Diode	SCL-1-D-DPNO	SCL-1-D-DPNO-C1	SCL-1-D-DPNO-V	SCL-1-D-DPNO-S
	DPDT	Stud	SCL-1-G-DPDT	SCL-1-G-DPDT-C1	SCL-1-G-DPDT-V	SCL-1-G-DPDT-S
	DPNO	Stud	SCL-1-G-DPNO	SCL-1-G-DPNO-C1	SCL-1-G-DPNO-V	SCL-1-G-DPNO-S
	DPDT	Lamp	SCL-1-L-DPDT	SCL-1-L-DPDT-C1	SCL-1-L-DPDT-V	SCL-1-L-DPDT-S
	DPNO	Lamp	SCL-1-L-DPNO	SCL-1-L-DPNO-C1	SCL-1-L-DPNO-V	SCL-1-L-DPNO-S
	DPDT	Manual	SCL-1-M-DPDT	SCL-1-M-DPDT-C1	-----	-----
	DPNO	Manual	SCL-1-M-DPNO	SCL-1-M-DPNO-C1	-----	-----

### »» Ordering Information

SCL - 1 - L - DPDT - F - C1  
 1        2        3        4        5        6

1. SCL -- Basic series designation (1.0 mm thick)

2. Blank -- Quick terminal

1 -- PCB terminal



3. Blank -- Without special features  
 L -- Provided with pilot light  
 D -- Diode across coil  
 G -- Provided with stud secured to base  
 M -- Provided with manual operator  
 H -- 2 mm contact gap (For DPNO and DC coil type only)
4. DPDT -- Double pole double throw  
 DPNO -- Double pole normally open
5. Blank -- Standard type  
 F -- Class F
6. Blank -- Straight cover  
 C1 -- Flanged cover  
 V -- Sealed type  
 S -- Sealed type washable

### »» Contact Rating

Resistive load	10A 240VAC , 10A 28VDC
----------------	------------------------

### »» Coil Rating (DC)

#### ◆ Standard Type

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	110 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.9W
9	100	90				
12	75	160				
15	60	250				
24	37	650				
48	19	2600				
60	15	4000				
110	10	11000				
120	11	11000				

#### ◆ SCL-H Type

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
3	400	7.5	115 % of rated voltage	80 % of rated voltage	10 % of rated voltage	approx. 1.2W
6	200	30				
9	133.3	67.5				
12	100	120				
24	50	480				
48	25	1920				
60	20	3000				
100	12	8330				
110	10.9	10080				
120	10	12000				

## »» Coil Rating (AC)

Rated voltage (V)	Coil resistance $\pm 10\%$ at 23 °C ( $\Omega$ )	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	3400				
110	3400				
115	3400				
120	3400				
220	13600				
230	13600				
240	13600				

## »» Specification

Contact material	AgCdO alloy	
Contact resistance <sup>(1)</sup>	30 m $\Omega$ Max.	
Operate time <sup>(1)</sup>	25 ms Max.	
Release time <sup>(1)</sup>	25 ms Max.	
Insulation resistance <sup>(1)</sup>	100 M $\Omega$ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 1000V , 50/60Hz 1 min.
	Between contact and coil	: AC 1500V , 50/60Hz 1 min.
	Between contact circuits	: AC 1500V , 50/60Hz 1 min.
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 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 1,800 operations/hr)
Operating ambient temperature	-25~+70 °C (no freezing)	
Weight	Approx. 35 g	

Note : (1) initial value

## »» Safety Approval

Certified	UL / CUL	CSA	TUV	FIMKO
File No.	E88991	LR90143	R3-09452079	12746

### »» Safety Approval Rating

UL / CUL	CSA	TUV	FIMKO
10A 277VAC	10A 277VAC	10A 250VAC	10A 250VAC (DPDT)
15A 125VAC	10A 28VDC	10A 30VDC	15A 250VAC(DPNO)
10A 28VDC	1/2HP 7.5FLA 125VAC		
1/3HP 7.5FLA 125VAC	1/3HP 5.0FLA 240VAC		
1/2HP 5.0FLA 250VAC	15A 240VAC (DPNO ONLY)		
1/3HP 3.0FLA 277VAC			
15A 240VAC (DPNO ONLY)			

### »» Outline Dimensions

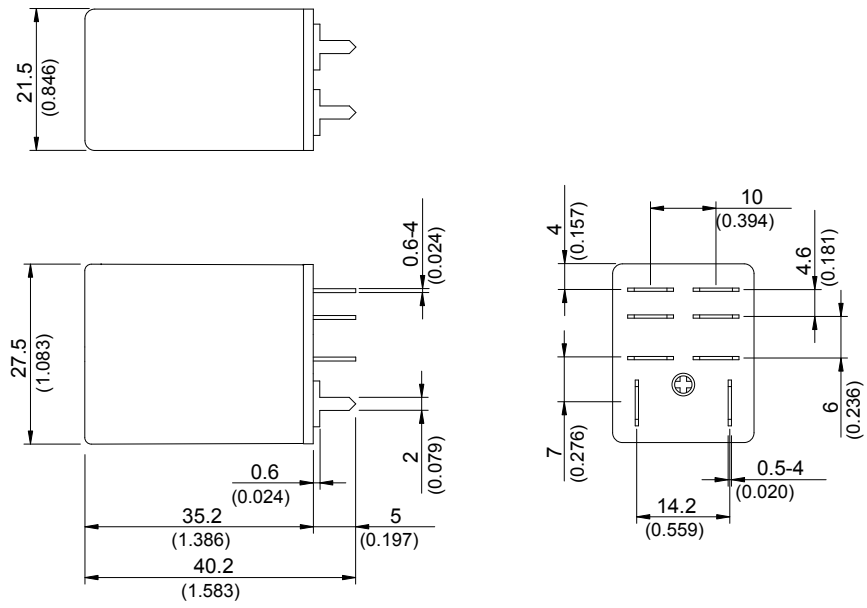
#### ◆ SCL (C1)



#### ◆ SCL

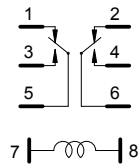


◆ SCL-1

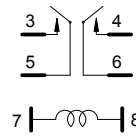


»» Wiring Diagram  
BOTTOM VIEW

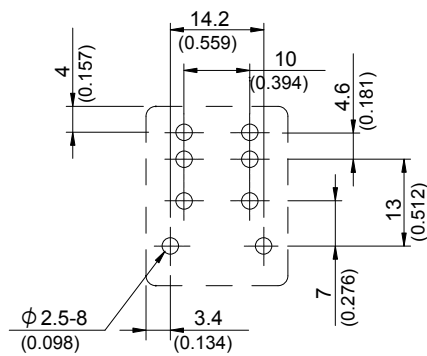
DPDT



DPNO

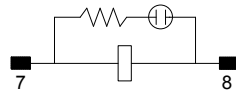


»» PC Board Layout  
BOTTOM VIEW

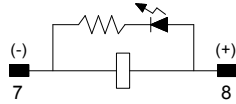


»» Designation(Provided with)  
BOTTOM VIEW

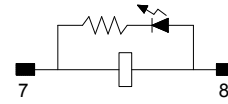
Lamp



(100~240VAC)

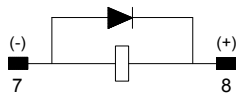


(6~48VDC)



(6~48VAC)

Diode



»» Engineering Data

