

◆ Features

- Small footprint.
- Miniature PCB surge cube relay.
- Reverse contact terminal position version is available.
- SPNO, SPNC, SPDT and Sealed flux free & sealed Washable type are available.

◆ Coil Data [at 20°C]

Rated voltage (V)	Coil Resistance ± 10% (Ω)	Rated Current ± 10% (mA)	Pick up Voltage (Max)	Drop out Voltage (Min)	Max continuous Voltage	Power consumption At rated Voltage
3	23	130	75% of rated voltage	5% of rated voltage	150% Max of Rated voltage	Approx.0.4W
5	63	79				
6	90	67				
9	203	44				
12	360	33				
18	810	22				
24	1440	17				
36	3240	11				
48	5760	8				

◆ High sensitivity Type

Rated voltage (V)	Coil Resistance ± 10% (Ω)	Rated Current ± 10% (mA)	Pick up Voltage (Max)	Drop out Voltage (Min)	Max continuous Voltage	Power consumption At rated Voltage
3	25	120	75% of rated voltage	5% of rated voltage	110% Max of Rated voltage	Approx.0.36W
5	70	72				
6	100	60				
9	225	40				
12	400	30				
18	900	20				
24	1600	15				
36	3600	10				
48	6400	7.5				

◆ Contact Rating

Resistive load	20A 277VAC, 17A 250VAC, 20A 125VAC, 16A 30VDC, 17A 24VDC, TV-10 125VAC
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◆ S22 RELAY

◆ SHORI

◆ Type List

Terminal style	Contact form	Designation(provided with)	
		Sealed type	Sealed type washable
PCB terminal	1A (SPNO)	S22-12-1A	S22-12-1AS
	1B (SPNC)	S22-12-1B	S22-12-1BS
	1C (SPDT)	S22-12-1C	S22-12-1CS

◆ Ordering information

S22 - 12 - 1A S
1 2 3 4

1. S22 -- Basic series designation

2. 12 -- Coil Voltage (3V~48V)

12B -- High Sensitivity type

3. 1A -- Form A, normally open (SPNO)

1B -- Form B, normally closed (SPNC)

1C -- Form C, double-throw (SPDT)

4. Blank -- Sealed type

S -- Sealed type washable

◆ Specification

Contact material	Silver Alloy	
Contact resistance	100mΩ Max	
Operate time	15ms Max	
Release time	10ms Max	
Insulation resistance	100 MΩ Min. (DC 500V)	
Dielectric strength	Between open contact : AC 1000V ,50/60Hz 1 min.	
	Between contact and coil : AC 2500V, 50/60Hz 1 min.	
Vibration resistance	Operating extremes	10~50Hz, amplitude 1.0 mm
	Damage limits	10~50Hz, amplitude 1.0 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 360 operations/hr)
Operating ambient temperature	-40~+85℃(no freezing)	
Weight	Approx.13g	

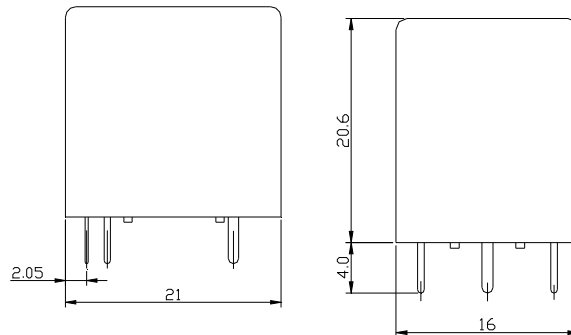
◆ Safety Approval

Certified	UL/CUL	TUV
File No.	E188091	

◆ Safety Approval Rating

UL/CUL		VDE
1A	20A 277VAC 17A 250VAC 16A 30VDC 17A 24VDC 20A 125VAC TV-10 125VAC	20A 125VAC 17A 250VAC 16A 30VDC 17A 24VDC
1B	20A 277VAC 15A 250VAC 15A 30VDC 15A 24VDC 20A 125VAC TV-8 125VAC	
1C	NO:20A 125VAC 17A 250VAC 16A 30VDC NC:16A 125VAC 15A 250VAC 15A 30VDC	

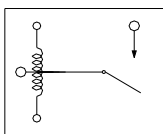
◆ Outline dimensions



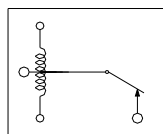
◆ Wiring Diagram

BOTTOM VIEW

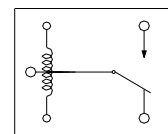
1A



1B



1C



◆ PC BOARD LAYOUT

BOTTOM VIEW

