

Features

- ☐ High rating general purpose miniature PCB Power Relays.
- ☐ Optional for 700mW coil and 530mW coil.
- ☐ 5mm planning 16A TV-10 ideally form high inrush current breaking application for UPS, power supply and Heading Element control of Home Appliances, and lighting controls.
- ☐ High dielectric strength 5000V between coil and contacts, 1000V between contacts.
- ☐ Optional for sealed flux free & sealed washable types.
- ☐ Comply with RoHS-Directive 2011/65/EU.



Type List

Terminal style	Contact form	UL Insulation system approval	Designation (provided with)		
			Flux tight	Sealed type	Sealed type washable
PCB terminal	1A (SPNO)	-----	793-P-1A	793-P-1A-V	793-P-1A-S
		F	793-P-1A-F	793-P-1A-F-V	793-P-1A-F-S
	1B (SPNC)	-----	793-P-1B	793-P-1B-V	793-P-1B-S
		F	793-P-1B-F	793-P-1B-F-V	793-P-1B-F-S
	1C (SPDT)	-----	793-P-1C	793-P-1C-V	793-P-1C-S
		F	793-P-1C-F	793-P-1C-F-V	793-P-1C-F-S

Ordering Information

793 - P - 1A - ☐ - ☐ ☐
1 2 3 4 5 6

- | | |
|---|---|
| 1. 793 -- Basic series designation | 4. Blank -- Standard type |
| | F -- Class F |
| 2. P -- PCB terminal | 5. Blank -- Flux tight |
| | V -- Sealed type |
| 3. 1A -- Single pole normally open | S -- Sealed type washable |
| 1B -- Single pole normally closed | |
| 1C -- Single pole double throw | 6. ☐ -- Coil voltage (please refer to the coil rating data for the availability) |

Contact Rating

Resistive load	16A 240VAC
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»» Coil Rating (DC)

◆ Standard Type

Rated voltage (V)	Rated current $\pm 10\%$ at 23°C (mA)	Coil resistance $\pm 10\%$ 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	234	12.8	160 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.7W
5	139	36				
6	118	51				
9	78	116				
12	58	206				
18	39	463				
24	29	825				
48	15	3,300				
60	11.7	5,100				
100	7.5	13,400				

◆ High Sensitivity Type

Rated voltage (V)	Rated current $\pm 10\%$ at 23°C (mA)	Coil resistance $\pm 10\%$ 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	176	17	170 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.53W
5	105	47.7				
6	88	68				
9	60	150				
12	44	275				
18	29	618				
24	22	1,100				
48	11	4,400				
60	8.8	6,800				

»» Specification

Contact material	AgSnO alloy	
Contact resistance ⁽¹⁾	100m Ω Max. (1A/6VDC by 4 pipes m Ω meter)	
Operate time ⁽¹⁾	20ms Max.	
Release time ⁽¹⁾	10ms Max.	
Insulation resistance ⁽¹⁾	1000M Ω Min. (DC 500V)	
Dielectric strength ⁽¹⁾	Between open contact : AC 1000V , 50/60Hz 1 min.	
	Between contact and coil : AC 4000V , 50/60Hz 1 min. (for 1B,1C)	
	: AC 5000V , 50/60Hz 1 min. (for 1A)	
Vibration resistance	Operating extremes	10~55Hz , amplitude 1.5 mm
	Damage limits	10~55Hz , amplitude 1.5 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 1,800 operations/hr)
Operating ambient temperature	-40~+70°C (no freezing)	
Weight	Approx. 17 g	

Note : (1) initial value

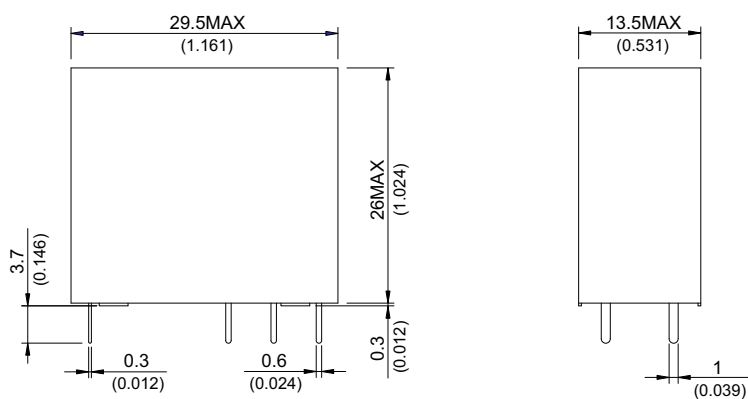
»» Safety Approval

Certified	UL / CUL	CSA	TUV
File No.	E88991	1616947	R50056914

»» Safety Approval Rating

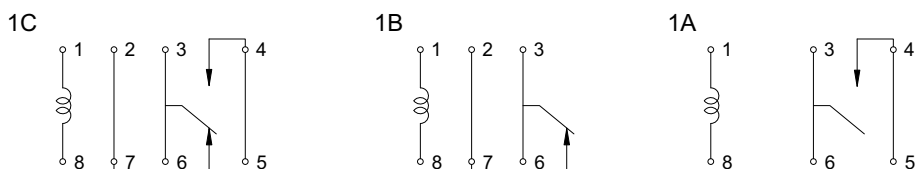
UL / CUL 、 CSA		TUV
NO	NC	
20A 277VAC	16A 250VAC	16A 250VAC
25A 125VAC	25A 125VAC	6A 125VAC $\cos \phi$ 0.5
TV-10	16A 30VDC	16A 30VDC
20A 30VDC	1/2HP 250/125VAC	8A 250VAC $\cos \phi$ 0.4
1/2HP 250/125VAC	8A FLA, 250VAC	
8A FLA, 250VAC		

»» Outline Dimensions

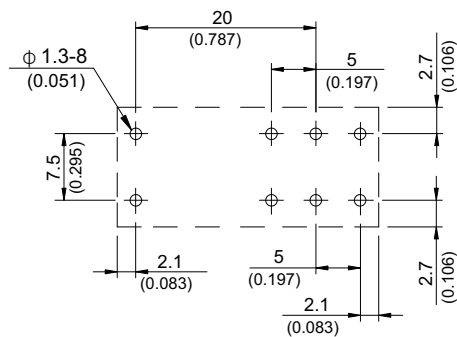


»» Wiring Diagram

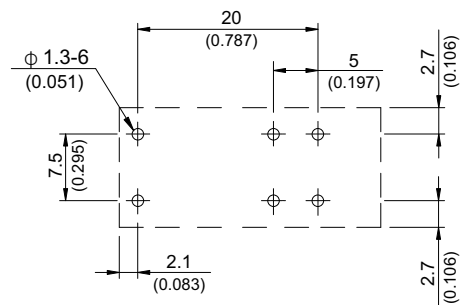
BOTTOM VIEW



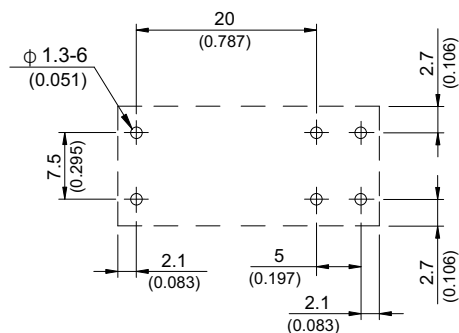
1C



1B



1A



The graph illustrates the relationship between the percentage of nominal coil voltage and the resulting coil temperature rise for three different current ratings: 12A, 16A, and 20A. The temperature rise increases linearly with voltage percentage for all ratings. The 20A rating shows the highest temperature rise, followed by 16A, and then 12A.

% of Nominal Coil Voltage (at 23°C)	12A Temperature Rise (°C)	16A Temperature Rise (°C)	20A Temperature Rise (°C)
80	32	38	43
100	40	46	51
120	48	54	59
140	56	62	67
160	64	70	75

