

## »» Features



- Body Sugar Cube Relay.
- 10A 277VAC ; 15A 125VAC ; UL/CUL, VDE Approvals.
- High Insulation up to 2000V ( 899B type ).
- High CTI material greater than 250.
- Comply with RoHS-Directive 2002/95/EC.

## »» Type List

Terminal style	Contact form	UL Insulation system approval	Designation (provided with)		
			Flux tight	Sealed type	Sealed type washable
PCB terminal	1A (SPNO)	-----	899-1A-C	899-1A-V	899-1A-S
		F	899-1A-F-C	899-1A-F-V	899-1A-F-S
	1B (SPNC)	-----	899-1B-C	899-1B-V	899-1B-S
		F	899-1B-F-C	899-1B-F-V	899-1B-F-S
	1C (SPDT)	-----	899-1C-C	899-1C-V	899-1C-S
		F	899-1C-F-C	899-1C-F-V	899-1C-F-S
	1A (SPNO)	F	899B-1A-F-C	899B-1A-F-V	899B-1A-F-S
	1B (SPNC)	F	899B-1B-F-C	899B-1B-F-V	899B-1B-F-S
	1C (SPDT)	F	899B-1C-F-C	899B-1C-F-V	899B-1C-F-S

## »» Ordering Information

899    -    1A    -    F    -    C            E  
       1        2        3        4        5

- |          |   |          |                         |
|----------|---|----------|-------------------------|
| 1. 899   | -- Basic series designation                         | F        | -- Class F              |
| 899B     | -- Basic series designation with insulation barrier | 4. C     | -- Flux tight           |
|          |   | V        | -- Sealed type          |
| 2. 1A    | -- Single pole normally open                        | S        | -- Sealed type washable |
| 1B       | -- Single pole normally closed                      |          |                         |
| 1C       | -- Single pole double throw                         | 5. Blank | -- Standard type        |
| 3. Blank | -- Standard type                                    | E        | -- CTI 250V             |

## »» Contact Rating

Resistive load	NO : 7A 240VAC , 10A 120VAC ; NC : 7A 240VAC
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## »» Coil Rating (DC)

Rated voltage (V)	Rated current 10 % at 23 °C (mA)	Coil resistance 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
3	120	25	150 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.36W
5	72	70				
6	60	100				
9	40	225				
12	30	400				
15	24	625				
18	20	900				
24	15	1600				
36	10	3600				
48	7.5	6400				

## »» Specification

Contact material	AgNi alloy <sup>(2)</sup>	
Contact resistance <sup>(1)</sup>	100m $\Omega$ Max.	
Operate time <sup>(1)</sup>	10ms Max.	
Release time <sup>(1)</sup>	5ms Max.	
Insulation resistance <sup>(1)</sup>	100M $\Omega$ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 750V , 50/60Hz 1 min. : AC 1000V , 50/60Hz 1 min. (for 899B type)
	Between contact and coil	: AC 1500V , 50/60Hz 1 min. : AC 2000V , 50/60Hz 1 min. (for 899B type)
Vibration resistance	Operating extremes	10~50Hz , amplitude 1.5 mm
	Damage limits	10~50Hz , 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 360 operations/hr)
Operating ambient temperature	-40~+70 °C (no freezing) <sup>(3)</sup>	
Weight	Approx. 10 g	

Note : (1) initial value

(2) AgSnO alloy contact material is available.

(3) -40~+85 °C is available.

## »» Safety Approval

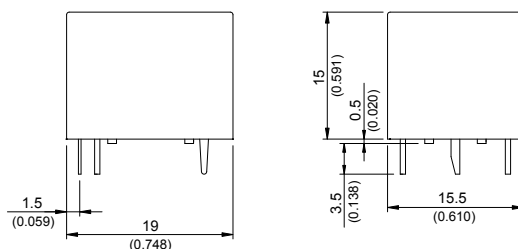
Certified	UL / CUL	VDE
File No.	E88991	40012174

## »» Safety Approval Rating

UL / CUL	VDE	
	NO	NC
※ 15A 125VAC 10A 277VAC 1/3HP 125/250VAC (NO) 1/4HP 125/250VAC (NC)	10A 250VAC T85 6A 250VAC T105	6A 250VAC T85

- Notes: 1. More details can be provide on request  
 2. ※ -- Class F only

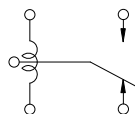
## »» Outline Dimensions



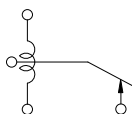
## »» Wiring Diagram

BOTTOM VIEW

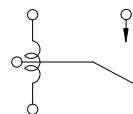
1C



1B



1A



## »» PC Board Layout

BOTTOM VIEW

