



### »» Features

- 25A miniature general purpose Power Relay.
- With or without quick terminal & PCB terminal.
- CSA/CUS, TUV,UL/CUL approved.
- Designed for compressor load switching application and office equipment of motor control or lamp load switching.
- Complies with RoHS-Directive 2011/65/EU.

### »» Type List

Terminal style	Contact form	Designation
WP (Quick terminal & PCB terminal)	SPNO	891WP-1A-C
P (PCB terminal)	SPNO	891P-1A-C

### »» Ordering Information

891 WP - 1A -  - C   
 1 2 3 4 5 6

- |                                      |   |
|--------------------------------------|---|
| 1. 891 -- Basic series designation   | 4. Blank -- Standard type   |
|                                      | F -- Class F  |
| 2. P -- PCB terminal                 |   |
| WP -- Socket terminal & PCB terminal | 5. C -- Flux tight  |
| 3. 1A -- Single pole normally open   | 6. <input type="checkbox"/> -- Coil voltage (please refer to the coil rating data for the availability) |

### »» Contact Rating

Resistive load	25A 250VAC
Inductive load / Compressor load	Inrush 80A 240VAC cos $\phi$ 0.7 Steady state 20A 240VAC cos $\phi$ 0.9

### »» Coil Rating (DC)

Rated voltage (V)	Rated current $\pm 10\%$ at 23°C (mA)	Coil resistance $\pm 10\%$ at 23°C ( $\Omega$ )	Max. continuous voltage at 85°C	Pick up voltage(Max.) at 23°C	Drop out voltage(Min.) at 23°C	Power consumption at rated voltage
5	180	27.8	150 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.9W
6	150	40				
9	100	90				
12	75	160				
24	38	640				
48	19	2560				

### »» Specification

Contact material	AgSnO alloy	
Contact resistance <sup>(1)</sup>	100mΩ Max. (at 1A/6VDC by 4-wire resistance measurement)	
Operate time <sup>(1)</sup>	20ms Max.	
Release time <sup>(1)</sup>	10ms Max.	
Insulation resistance <sup>(1)</sup>	1000 MΩ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 1000V , 50/60Hz 1 min.
	Between contact and coil	: AC 4500V , 50/60Hz 1 min.
Vibration resistance	Operating extremes	10~55Hz , amplitude 1.5 mm
	Damage limits	10~55Hz , amplitude 2.0 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	5,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 360 operations/hr)
Operating ambient temperature	-40~+ 85°C (no freezing)	
Weight	Approx. 22g	

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

### »» Safety Approval

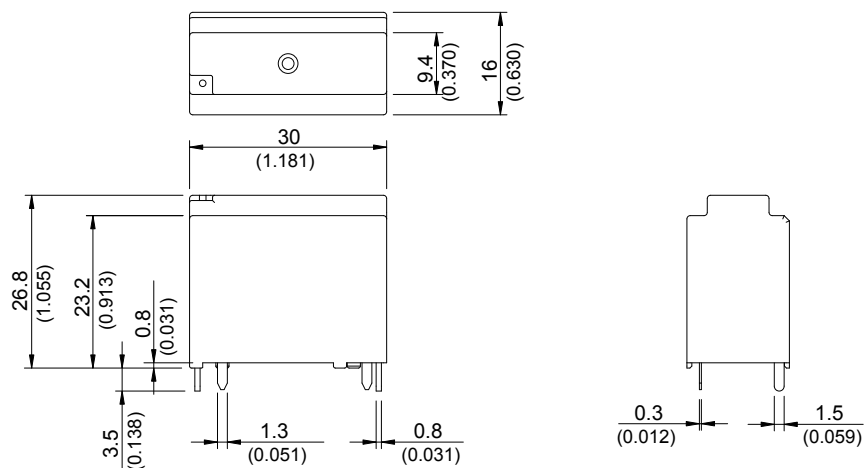
Certified	CSA / CUS	TUV	UL / CUL
File No.	1165173	R50003966	E88991

### »» Safety Approval Rating

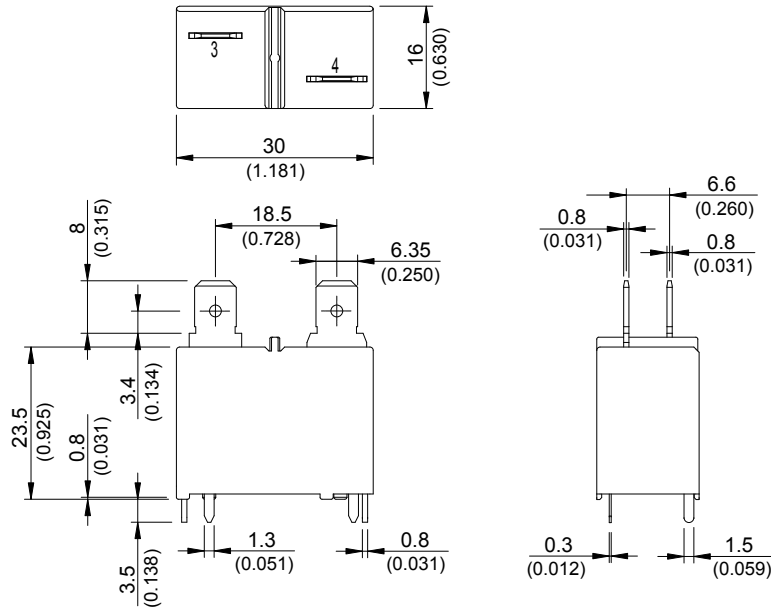
CSA / CUS	TUV	UL / CUL
25A 277VAC 1.5HP 125/250VAC	25A 250VAC 20A 250VAC cosφ0.7	25A 277VAC 1.5HP 125VAC/250VAC 18FLA/98LRA 240VAC

### »» Outline Dimensions

#### ◆ 891P

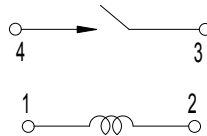


◆ 891WP

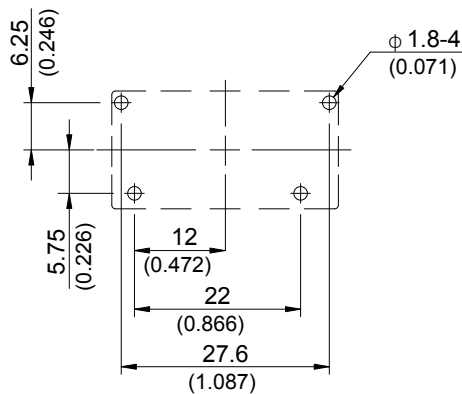


TOLERANCE:  
 LESS THAN: 1(0.039) ±0.1(0.004)  
 5(0.197) ±0.3(0.012)  
 20(0.787) ±0.5(0.020)  
 MORE THAN: 20(0.787) ±1(0.039)

»» Wiring Diagram  
 BOTTOM VIEW



»» PC Board Layout  
 BOTTOM VIEW



## »» Engineering Data

