891

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.
- Comply with RoHS-Directive 2002/95/EC, and ELV-Directive 2000/53/EC.

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	-	F	-	C
1	2		3		4		5

1. 891 -- Basic series designation
2. P -- PCB terminal
   WP -- Socket terminal & PCB terminal
3. 1A -- Single pole normally open
4. Blank -- Standard type
   F -- Class F
5. C -- Flux tight

Contact Rating

Resistive load	25A 250VAC
Inductive load / Compresser load	Inrush 80A 240VAC cosϕ0.7 Steady state 20A 240VAC cosϕ0.9

Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23˚C (mA)	Coil resistance ±10 % at 23˚C (Ω)	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(1)	100mΩ Max.	
Operate time(1)	20ms Max.	
Release time(1)	10ms Max.	
Insulation resistance(1)	1000 MΩ Min. (DC 500V)	
Dielectric strength(1)	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

Safety Approval

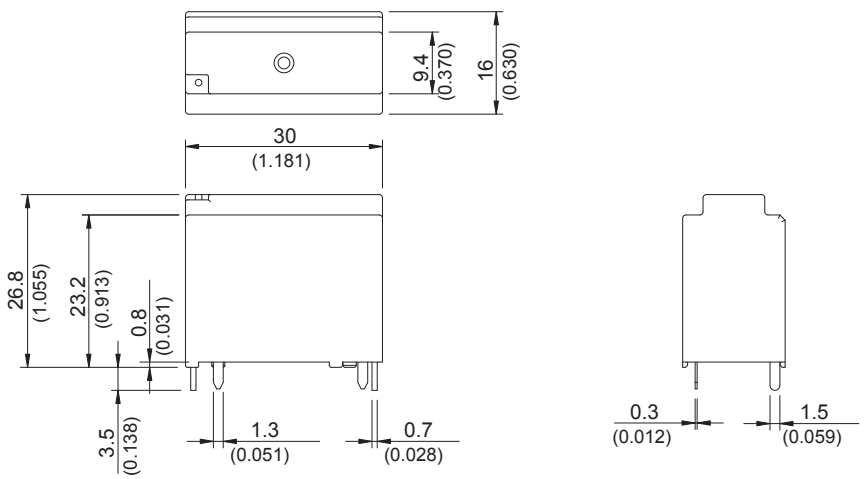
Certified	CSA / CUS	TUV	UL / CUL
File No.	1165173	R3-50003966	E88991

Safety Approval Rating

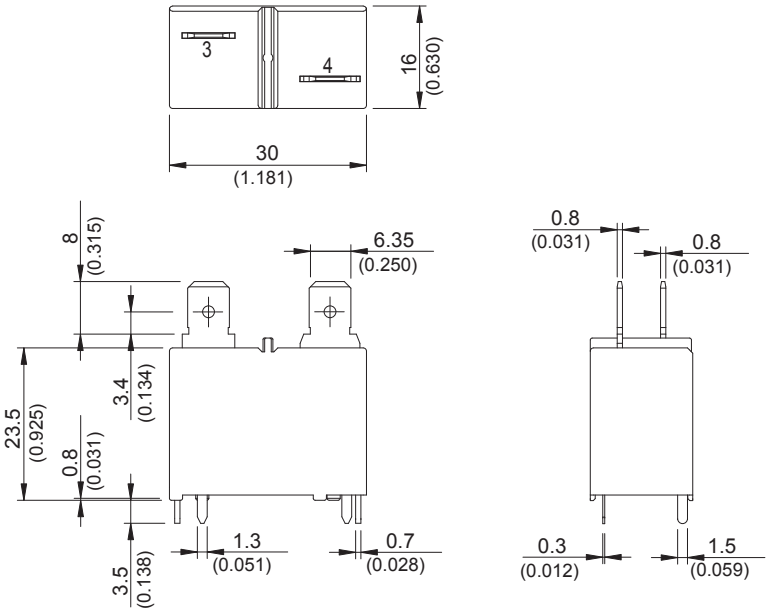
CSA / CUS	TUV	UL / CUL
25A 277VAC 1.5HP 125/250VAC	25A 250VAC 20A 250VAC cosϕ0.7	25A 277VAC 1.5HP 125VAC/250VAC 18FLA/98LRA 240VAC

Outline Dimensions

◆891P

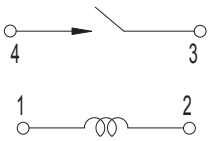


◆891WP



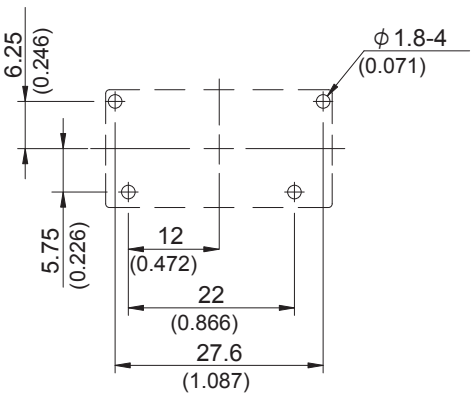
Wiring Diagram

BOTTOM VIEW



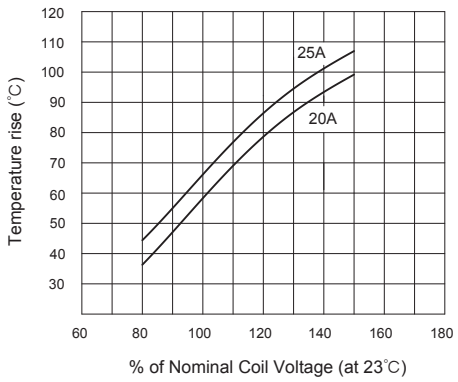
PC Board Layout

BOTTOM VIEW

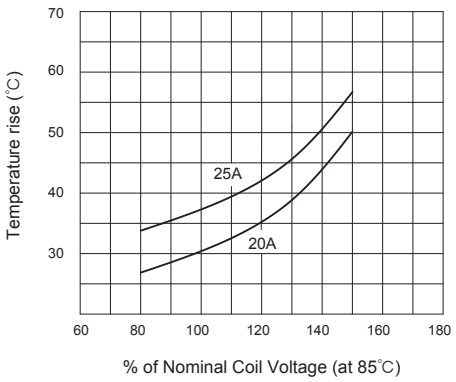


Engineering Data

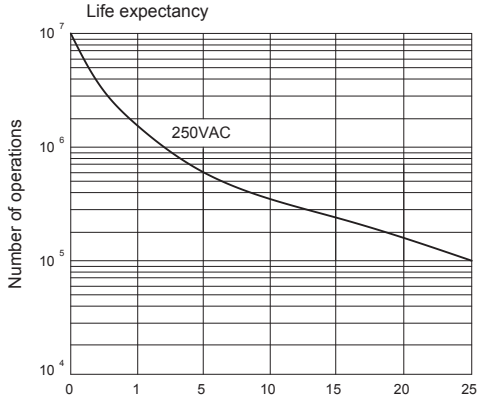
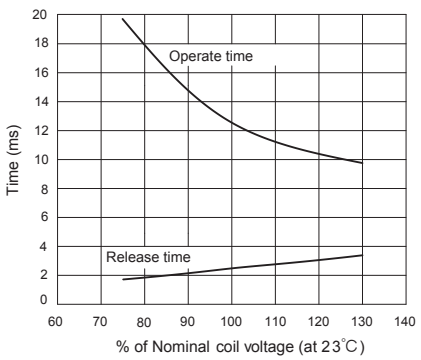
Coil temperature rise



Coil temperature rise



Life expectancy



Operate time/Release time