CIT Relay & Switch

J115F2

31.9 x 26.8 x 28.1 mm

Features

- UL F class rated standard
- Small size and light weight, low coil power consumption
- Heavy contact load, strong shock and vibration resistance
- UL/CUL, TÜV certified

TÜV

c UL us E197852

RoHS COMPLIANT

Contact Data*

UL Contact Rating	N.O.	5A @ 280VAC Ballast
		5A @ 280VAC General Purpose
		20A @ 240VAC Resistive, 250k cycles, 40C
		25A @ 277VAC, Resistive 100k cycles, 40C
		40A @ 240VAC Resistive, 40C
		30A @ 277VAC General Purpose
		2hp @ 250VAC, 40C; 1hp @ 125VAC, 50K cycles, 40C
	N.C.	5A @ 280VAC Ballast
		5A @ 280VAC General Purpose
		30A @ 240VAC Resistive, 40C
		30A @ 30VDC, 40C
		20A @ 277VAC General Purpose
		1-1/2hp @ 250VAC; 1/4hp @ 125VAC, 50K cycles, 40C

TÜV Contact Rating N.O.	40A @ 240VAC; 14VDC
	30A @ 277VAC
N.C.	30A @ 240VAC; 14VDC
	20A @ 277VAC

Contact Arrangement	1A = SPST N.O. 1B = SPST N.C. 1C = SPDT
Contact Resistance	< 30 milliohms initial
Contact Material	$AgSnO_2$ $AgSnO_2In_2O_3$
Maximum Switching Power	9600VA, 1120 W
Maximum Switching Voltage	277VAC, 110VDC
Maximum Switching Current	40A

Coil Data DC Parameters*

Coil Voltage VDC		Coil Resistance Ω +/- 10%		Pick Up Voltage VDC (max) 75% of rated voltage	Release Voltage VDC (min) 10% of rated voltage	Coil Power W	Operate Time ms	Release Time ms
Rated	Max	.6W	.9W					
5	6.5	42	28	3.75	0.5	0.6 0.9	15	10
9	11.7	135	90	6.75	0.9			
12	15.6	240	160	9.00	1.2			
24	31.2	960	640	18.00	2.4			
48	62.4	3840	2560	36.00	4.8			
110	140.3	20167	13445	82.50	11.0			

Coil Data AC Parameters*

Coil Voltage VAC		Coil Resistance Ω +/- 10%	Pick Up Voltage VAC (max) 75% of rated voltage	Release Voltage VAC (min) 10% of rated voltage	Coil Power VA	Operate Time ms	Release Time ms
Rated	Max						
12	15.6	27	9.0	3.6	2VA	15	10
24	31.2	120	18.0	7.2			
110	143	2360	82.5	33.0			
120	156	3040	90.0	36.0			
220	286	13490	165.0	66.0			
240	312	15320	180.0	72.0			
277	360	20210	207.0	83.1			

General Data*

Electrical Life @ rated load	100K cycles, average
Mechanical Life	10M cycles, average
Insulation Resistance	1000M Ω min. @ 500VDC initial
Dielectric Strength, Coil to Contact	2500V rms min. @ sea level initial
Contact to Contact	1500V rms min. @ sea level initial
Shock Resistance	200m/s^2 for 11 ms
Vibration Resistance	1.50mm double amplitude 10~40Hz
Terminal (Copper Alloy) Strength	10N
Operating Temperature	-55ºC to +125ºC
Storage Temperature	-55ºC to +155ºC
Solderability	260ºC for 5 s
Weight	35g

** Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.*

Ordering Information

1. Series	J115F2	1C		12VDC	S	.9	
J115F2							

2. Contact Arrangement
- 1A = SPST N.O.
- 1B = SPST N.C.
- 1C = SPDT

3. Profile
- Blank = Standard
- L = Low profile

4. Coil Voltage

5VDC	12VAC
9VDC	24VAC
12VDC	110VAC
24VDC	120VAC
48VDC	220VAC
110VDC	240VAC
	277VAC

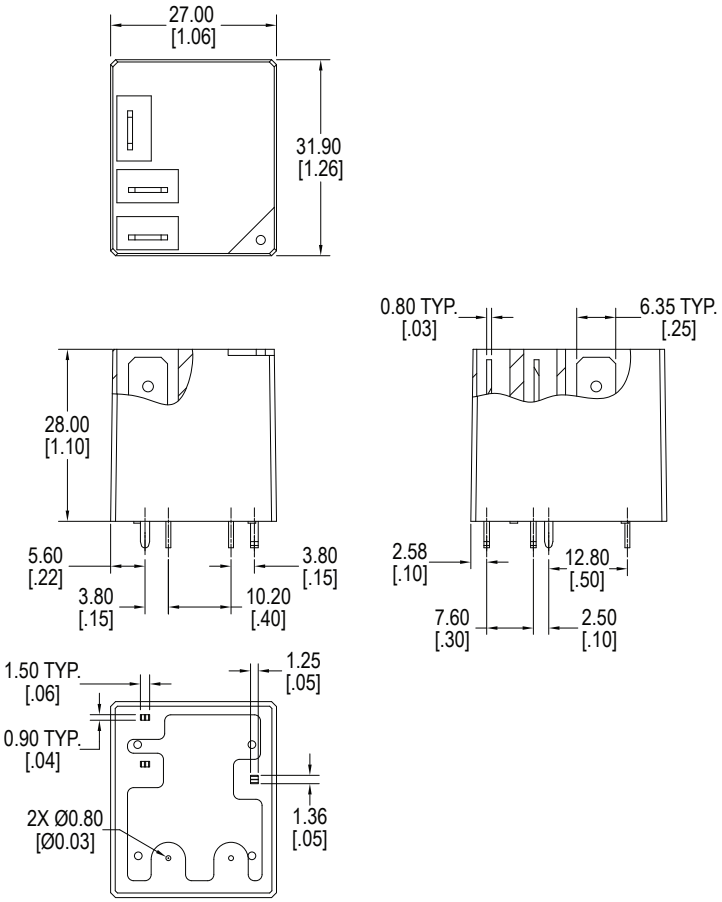
5. Sealing Option
- S = Sealed (standard)
- N = No cover

6. Coil Power
- .9 = .9W
- .6 = .6W
- Blank = 2VA (AC Coil)

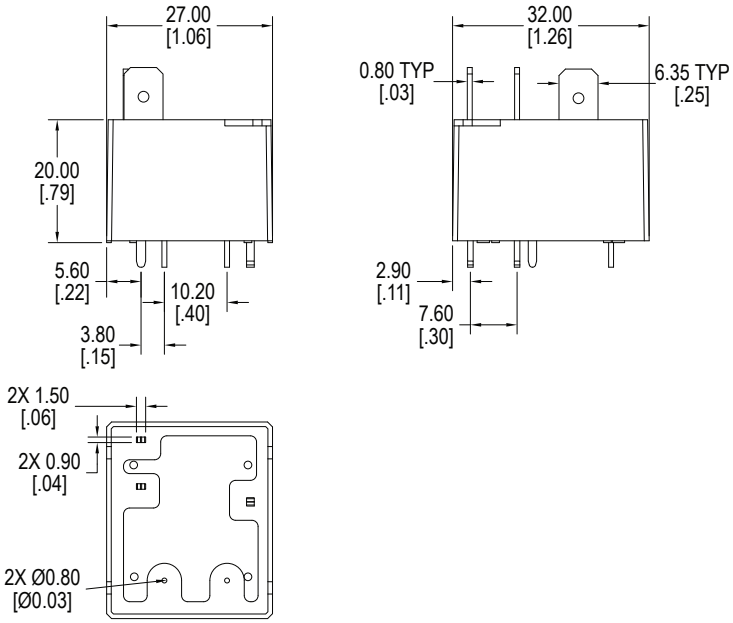
7. Contact Material
- Blank = $AgSnO_2$
- U = $AgSnO_2In_2O_3$

Dimensions

Units = mm



Blank = Standard Profile

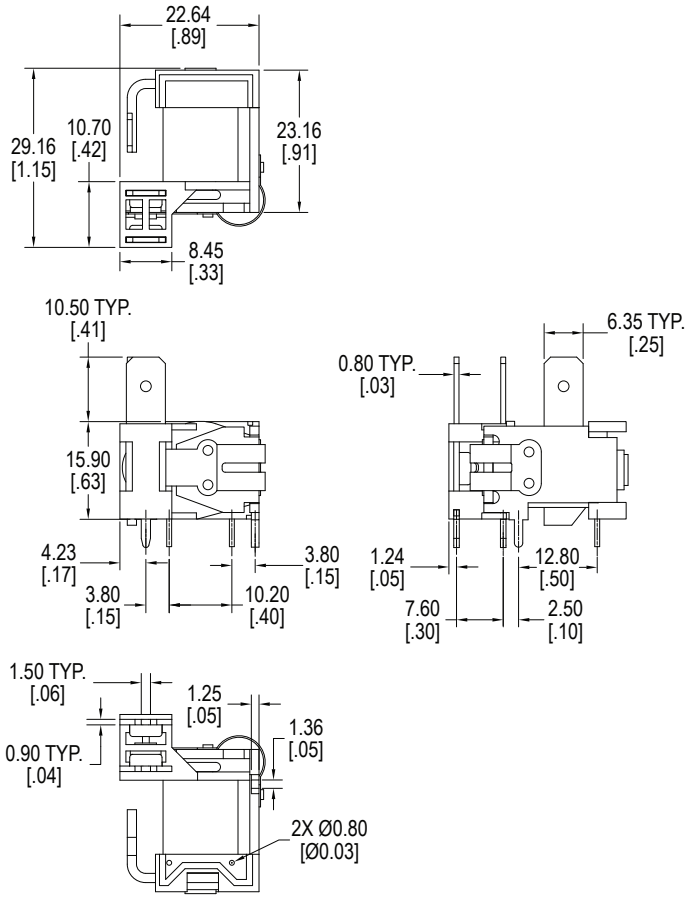


L = Low Profile

J115F2

Dimensions

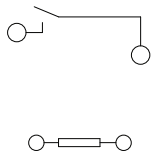
Units = mm



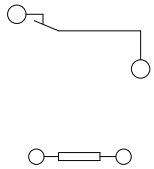
N = No Cover

Schematics

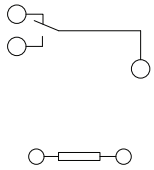
Bottom Views



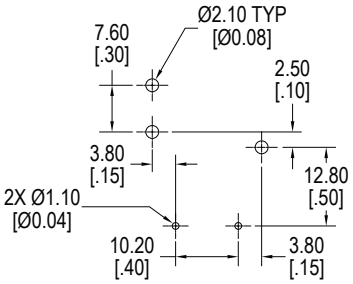
1A



1B



1C

PC Layouts

Bottom Views