

RoHS Compliant



**CIT** RELAY & SWITCH™  
Division of Circuit Interruption Technology, Inc.

# J115F1

E197852

31.7 x 26.9 x 20.3 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

## 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
	N.C.	5A @ 280VAC Ballast
		5A @ 280VAC General Purpose
		30A @ 240VAC Resistive, 40C
		30A @ 30VDC, 40C
		20A @ 277VAC General Purpose
		1-1/2hp @ 250VAC

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 <sub>2</sub> AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>
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)	Release Voltage VDC (min)	Coil Power W	Operate Time ms	Release Time ms
Rated	Max	.6W	.9W	75% of rated voltage	10% of rated voltage			
5	6.5	42	28	3.75	.5	.60 .90	15	10
9	11.7	135	90	6.75	.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)	Release Voltage VAC (min)	Coil Power VA	Operate Time ms	Release Time ms
Rated	Max		75% of rated voltage	30% of rated voltage			
12	15.6	27	9.00	3.6	2VA	15	10
24	31.2	120	18.00	7.2			
110	143	2360	82.50	33.0			
120	156	3040	90.00	36.0			
220	286	13490	165.00	66.0			

# J115F1

## General Data

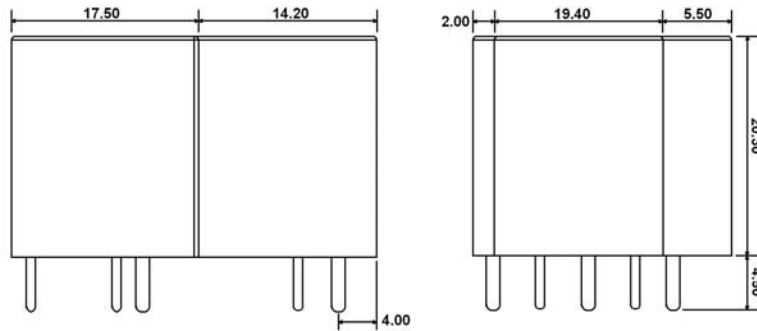
Electrical Life @ rated load	100K cycles, typical
Mechanical Life	10M cycles, typical
Insulation Resistance	1000M $\Omega$ min. @ 500VDC
Dielectric Strength	Coil to Contact 4000V rms min. @ sea level (H = high dielectric strength option) 2500V rms min. @ sea level (with Pin 6 removed)
	Contact to Contact 1500V rms min. @ sea level
Shock Resistance	200m/s <sup>2</sup> for 11 ms
Vibration Resistance	1.50mm double amplitude 10~40Hz
Terminal (Copper Alloy) Strength	10N
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +155°C
Solderability	260°C for 5 s
Weight	30g, 27g (no cover)

## Ordering Information

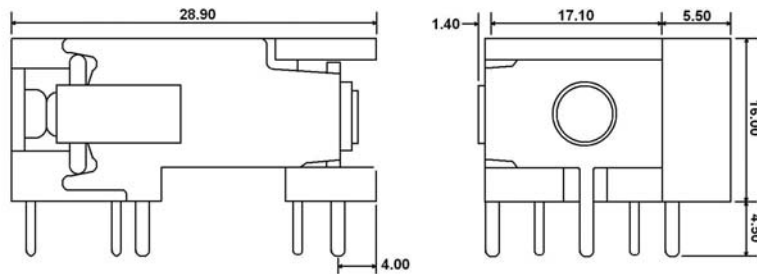
1. Series	J115F1	1C	12VDC	S	6	.6
J115F1						
2. Contact Arrangement						
1A = SPST N.O.						
1B = SPST N.C.						
1C = SPDT						
3. Coil Voltage						
5VDC	12VAC					
9VDC	24VAC					
12VDC	110VAC					
24VDC	120VAC					
48VDC	220VAC					
110VDC						
4. Sealing Options						
S = Sealed (standard)						
N = No cover						
5. Option						
None = Pin 6 included						
6 = Pin 6 removed						
H = Pin 6 removed & high dielectric strength resistant						
6. Coil Power						
.9 = .9W						
.6 = .6W						
Blank = 2VA (AC Coil)						
7. Contact Material						
Blank = AgSnO <sub>2</sub>						
U = AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>						

## Dimensions

Units = mm



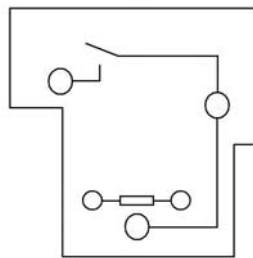
**S = Sealed**



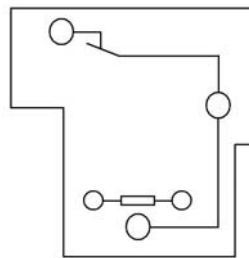
**N = No Cover**

## Schematics & PC Layouts

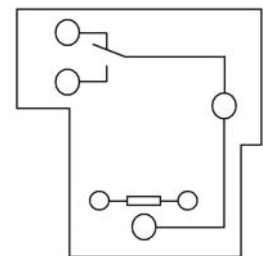
Bottom Views



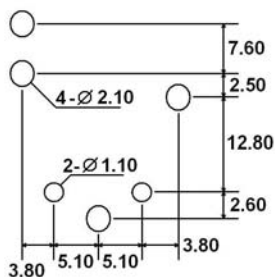
**1A**



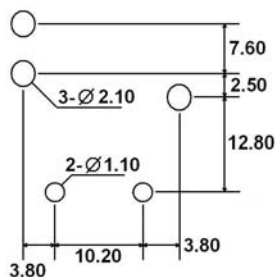
**1B**



**1C**



**With Pin 6**



**Without Pin 6**