

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	TÜV Contact Rating N.O.	40A @ 240VAC; 14VDC 30A @ 277VAC
	N.C.	5A @ 280VAC Ballast 5A @ 280VAC General Purpose 30A @ 240VAC Resistive, 40C 30A @ 30VDC, 40C 20A @ 277VAC General Purpose 1-1/2hp @ 250VAC		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 ₂ In ₂ O 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)	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

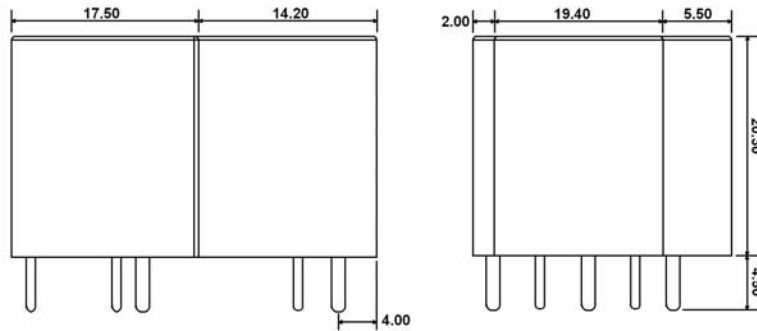
Electrical Life @ rated load	100K cycles, typical
Mechanical Life	10M cycles, typical
Insulation Resistance	1000M Ω min. @ 500VDC
Dielectric Strength	Coil to Contact 4000V rms min. @ sea level (H = high dielectric strength option) 2500V rms min. @ sea level (with Pin 6 removed)
	Contact to Contact 1500V rms min. @ sea level
Shock Resistance	200m/s ² 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

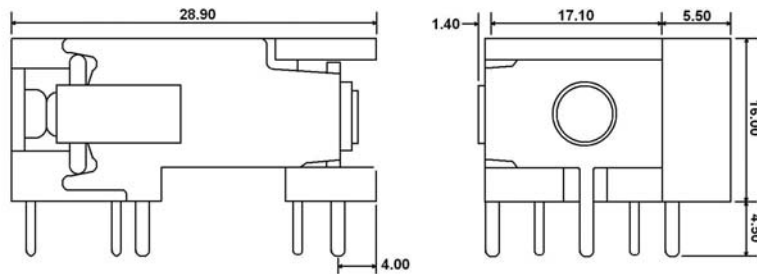
1. Series	J115F1	1C	12VDC	S	6	.6
J115F1						
2. Contact Arrangement						
1A = SPST N.O.						
1B = SPST N.C.						
1C = SPDT						
3. Coil Voltage						
5VDC	12VAC					
9VDC	24VAC					
12VDC	110VAC					
24VDC	120VAC					
48VDC	220VAC					
110VDC						
4. Sealing Options						
S = Sealed (standard)						
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 ₂						
U = AgSnO ₂ In ₂ O ₃						

Dimensions

Units = mm



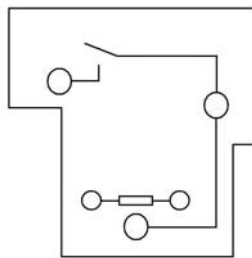
S = Sealed



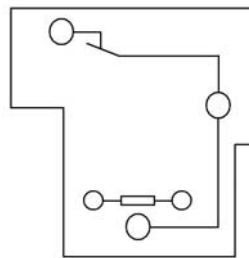
N = No Cover

Schematics & PC Layouts

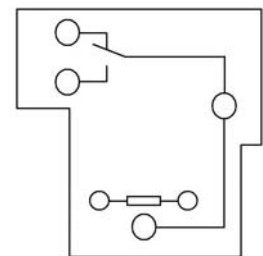
Bottom Views



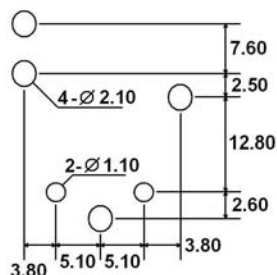
1A



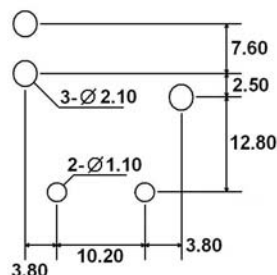
1B



1C



With Pin 6



Without Pin 6