



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
	N.C.	30A @ 277VAC General Purpose
		2hp @ 250VAC, 40C; 1hp @ 125VAC, 50K cycles, 40C
		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 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			
240	312	15320	180.00	72.0			
277	360	20210	207.00	83.1			

J115F1

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 4000V rms min. @ sea level initial (H = high dielectric strength option)
	2500V rms min. @ sea level initial (with Pin 6 removed)
	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	-55°C to +125°C
Storage Temperature	-55°C to +155°C
Solderability	260°C for 5 s
Weight	30g, 27g (no cover)

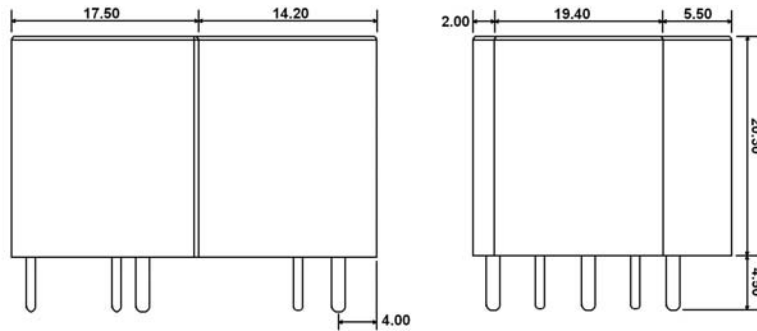
* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application.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

Ordering Information

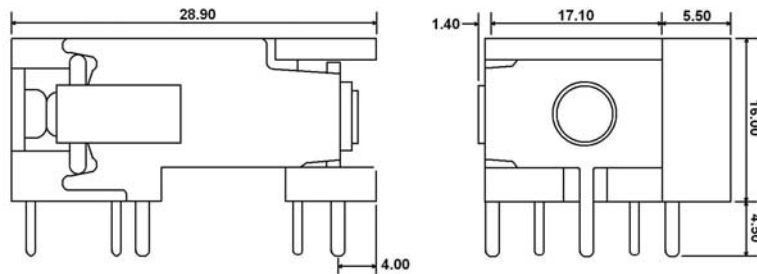
1. Series	J115F1	1C	12VDC	S	6	.6	
J115F1							
2. Contact Arrangement							
1A = SPST N.O.							
1B = SPST N.C.							
1C = SPDT							
3. Coil Voltage							
5VDC	12VAC						
9VDC	24VAC						
12VDC	110VAC						
24VDC	120VAC						
48VDC	220VAC						
110VDC	240VAC						
	277VAC						
4. Sealing Options							
S = Sealed (standard)							
N = No cover							
5. Option							
None = Pin 6 included **not available with AC coils							
6 = Pin 6 removed							
H = Pin 6 removed & high dielectric strength resistant **not available with AC coils							
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



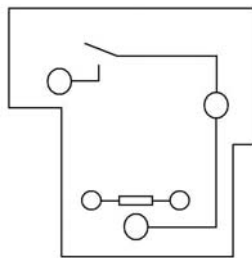
S = Sealed



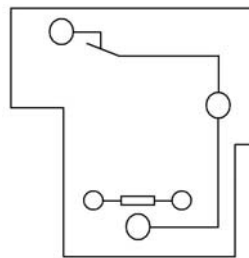
N = No Cover

Schematics & PC Layouts

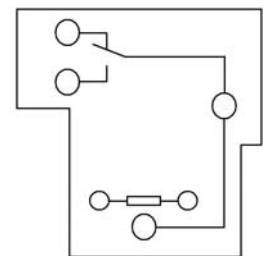
Bottom Views



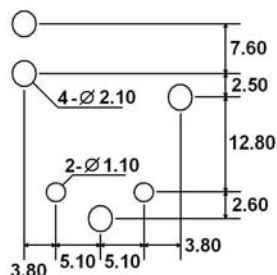
1A



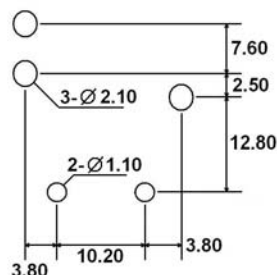
1B



1C



With Pin 6



Without Pin 6