



CIT[®] Relay & Switch

J115F 50amp

21.5 x 15.8 x 16.5 mm

Features

- 50A version
- Small size and light weight, low coil power consumption
- Heavy contact load, strong shock and vibration resistance

UL
c US
E197852



Contact Data*

Contact Rating	N.O.	50A @ 240VAC Resistive, 10K cycles 40°C
	N.C.	35A @ 240VAC Resistive, 10K cycles 40°C
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	1200W, 12000VA
Maximum Switching Voltage	277VAC, 110VDC
Maximum Switching Current	50A

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	.9W	1.5W	75% of rated voltage	10% of rated voltage			
5	6.5	28	16.7	3.75	.5	1.5W	15	10
9	11.7	90	54	6.75	.9			
12	15.6	160	96	9.00	1.2			
24	31.2	640	384	18.00	2.4			
48	62.4	2560	1536	36.00	4.8			

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	2.7VA	75% of rated voltage	30% of rated voltage			
24	31.2	96	18.0	7.2	2.7VA	15	10
120	156	2320	90.0	36.0			
220	286	9500	165.0	66.0			
240	312	11600	180.0	72.0			
277	360	15600	207.0	83.1			

J115F 50amp

General Data*

Electrical Life @ rated load	100K cycles, average	
Mechanical Life	10M cycles, average	
Insulation Resistance	100M Ω min. @ 500VDC initial	
Dielectric Strength,	Coil to Contact	4000V rms min. @ sea level initial (H = high dielectric strength option)
	Contact to Contact	2500V rms min. @ sea level initial 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 F Class	
Storage Temperature	-55°C to +155°C F Class	
Solderability	260°C for 5 s	
Weight	J115F1 30g, 27g no cover; J115F2 35g; J115F3 37g	

* 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.

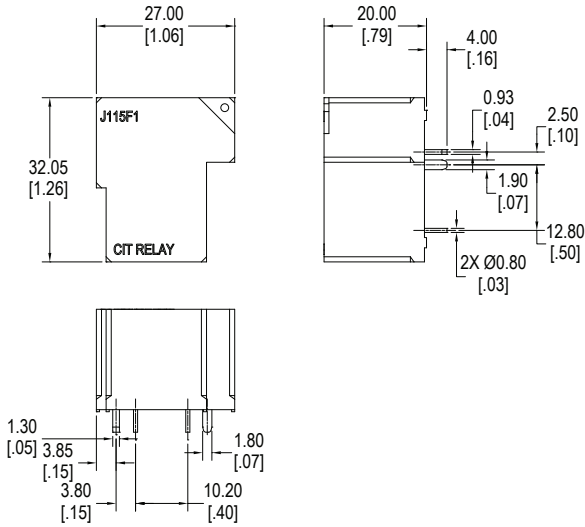
Ordering Information

1. Series	J115F3	1A	H		12VDC	S		1.5											
J115F1 (PC terminals only) J115F2 (PC and quick connect terminals) J115F3 (quick connect terminals only)																			
2. Contact Arrangement	1A = SPST N.O. 1B = SPST N.C. 1C = SPDT																		
3. Contact Rating	H = 50A																		
4. Profile	Blank = Standard Profile N = No Cover																		
5. Coil Voltage	<table border="0"> <tr><td>5VDC</td><td>24VAC</td></tr> <tr><td>9VDC</td><td>120VAC</td></tr> <tr><td>12VDC</td><td>220VAC</td></tr> <tr><td>24VDC</td><td>240VAC</td></tr> <tr><td>48VDC</td><td>277VAC</td></tr> </table>									5VDC	24VAC	9VDC	120VAC	12VDC	220VAC	24VDC	240VAC	48VDC	277VAC
5VDC	24VAC																		
9VDC	120VAC																		
12VDC	220VAC																		
24VDC	240VAC																		
48VDC	277VAC																		
6. Sealing Option	S = Sealed standard N = No cover, non-sealed																		
7. High Dielectric Strength Option	6 = Standard dielectric strength H = High dielectric strength *J115F1 style only																		
8. Coil Power	.9 = .9W 1.5 = 1.5W																		
9. Contact Material	Blank = AgSnO ₂ U = AgSnO ₂ In ₂ O ₃																		

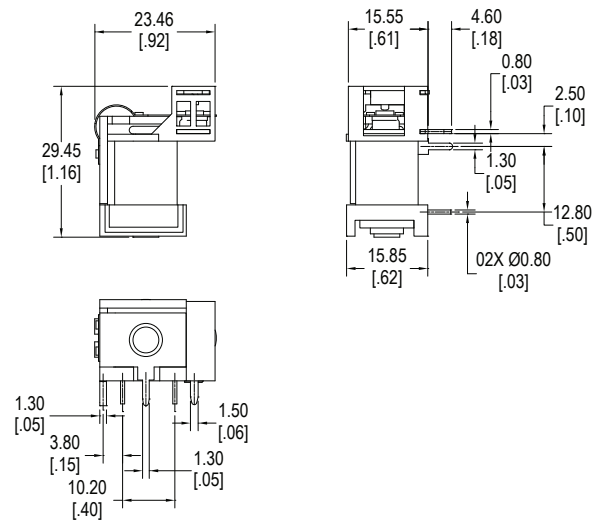
CIT[®] Relay & Switch J115F 50amp

Dimensions - J115F1

Units = mm



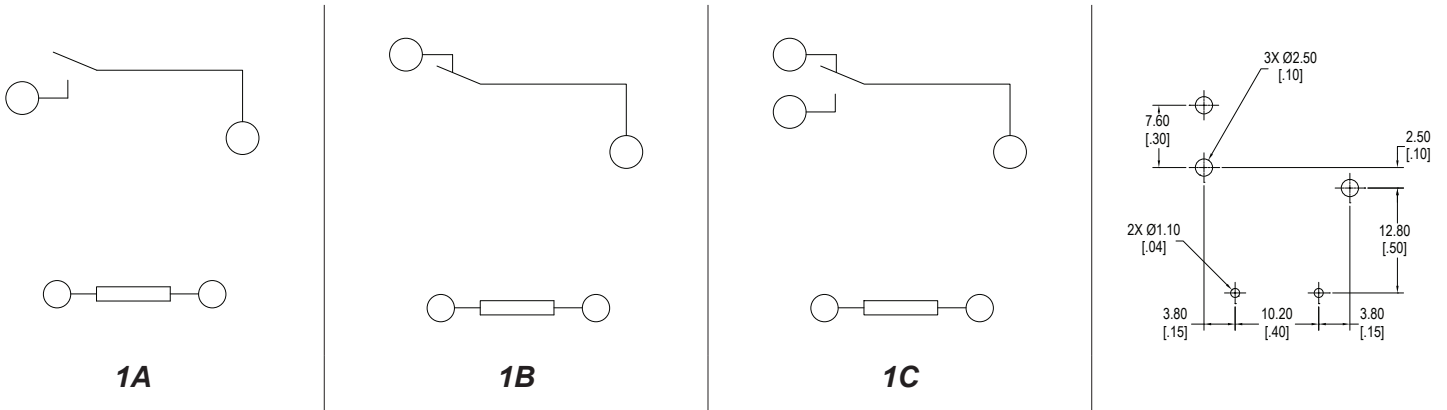
Standard Profile



N = No Cover

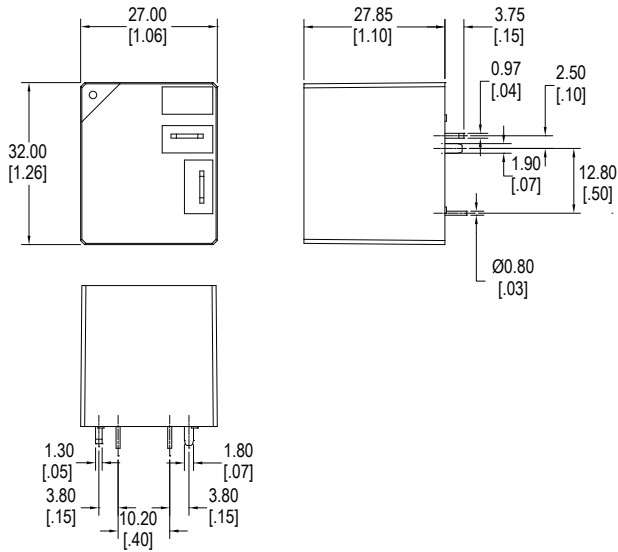
Schematics & PC Layouts - J115F1

Bottom View



Dimensions - J115F2

Units = mm



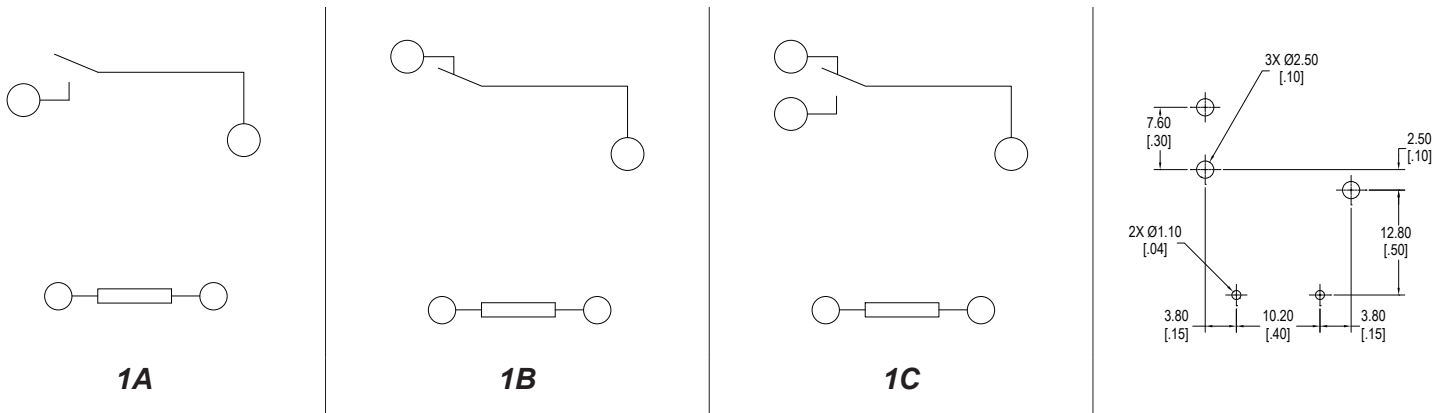
Standard Profile

**** Quick Connect Terminals :**

Contacts - 6.35 x .81mm (.250" x .032")

Schematics & PC Layouts - J115F2

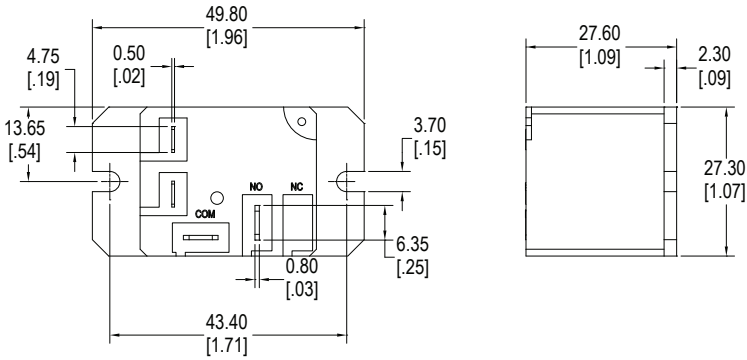
Bottom View



J115F 50amp

Dimensions - J115F3

Units = mm



Standard Profile

Standard Profile

** Quick Connect Terminals :

Contacts - 6.35 x .81mm (.250" x .032")

Coil - 4.75 x .50mm (.187" x .020")

Schematics & Panel Mount Layouts - J115F3

Top View

