CIT Relay & Switch

L114FL

29.2 x 13.2 x 15.7 mm

Features

- Single coil or double latching power relay
- Creepage distance 8.4mm
- Heavy contact load, strong shock and vibration resistance
- UL/CUL certified

c UL us
E197851

RoHS COMPLIANT

Contact Data*

Contact Arrangement	1A = SPST 1C = SPDT
Contact Resistance	< 50 milliohms initial
Contact Material	$AgSnO_2$, $AgSnO_2In_2O_3$
Maximum Switching Power	4000VA
Maximum Switching Voltage	300VAC
Maximum Switching Current	20A

Contact Rating N.O.	16A @ 250VAC resistive, 50k cycles, 85C ambient
N.C.	16A @ 250VAC resistive, 50k cycles, 85C ambient

Coil Data*

Coil Voltage VDC		Coil Resistance Ω +/- 10%		Pick Up Voltage VDC (max)	Pulse Magnitude ms	Coil Power W	Operate Time ms	Reset Time ms
Rated	Max	.4W	.6W	70% of rated voltage				
5	6.5	62.5	42	3.5	≥50	.4 .6	≤10	≤10
9	11.7	202.5	135	6.3				
12	15.6	360.0	240	8.4				
24	31.2	1440.0	886	16.8				

General Data*

Electrical Life @ rated load	50K cycles, average
Mechanical Life	500K cycles, average
Insulation Resistance	1000 Ω min. @ 500VDC initial
Dielectric Strength Coil to Contact	5000V rms min. @ sea level initial
Contact to Contact	1000V rms min. @ sea level initial
Shock Resistance	98m/s^2 for 11 ms
Vibration Resistance	1.50mm double amplitude 10~55Hz
Operating Temperature	-40ºC to +105ºC
Storage Temperature	-40ºC to +155ºC
Solderability	260ºC for 5 s
Weight	13g

** 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.*

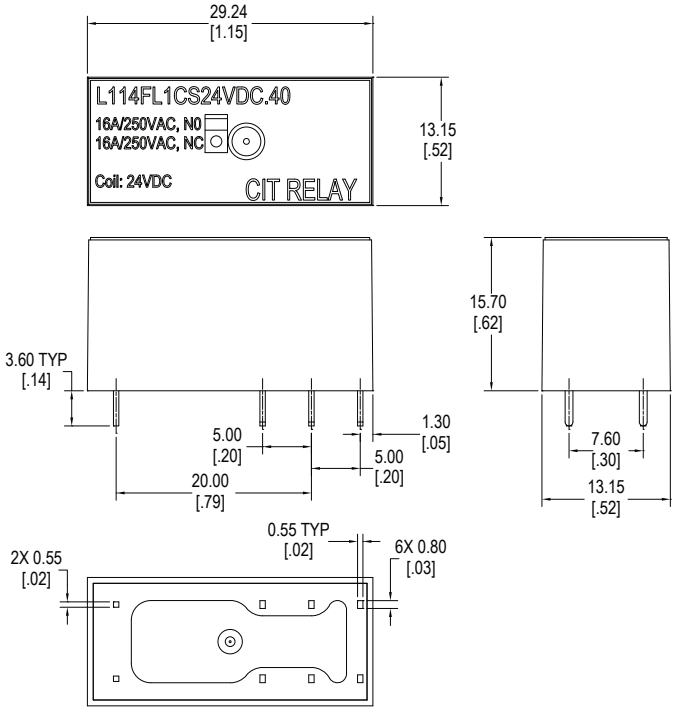
Ordering Information

1. Series	L114FL	1C	S	12VDC	.40			
L114FL								
2. Contact Arrangement 1A = SPST 1C = SPDT								
3. Sealing Option S = Sealed (standard)								
4. Coil Voltage 3VDC 5VDC 6VDC 9VDC 12VDC 24VDC								
5. Coil Power .40 = .40W (single coil only) .60 = .60W (double coil only)								
6. Coil Polarity Blank = Standard Polarity (standard) R = Reversed Polarity								
7. Latching Options Blank - Single Coil Latching (standard) D = Double Coil Latching DA = Double Coil Latching - Alternate Set & Reset Positions								
8. Contact Material Blank = $AgSnO_2$ U = $AgSnO_2In_2O_3$								

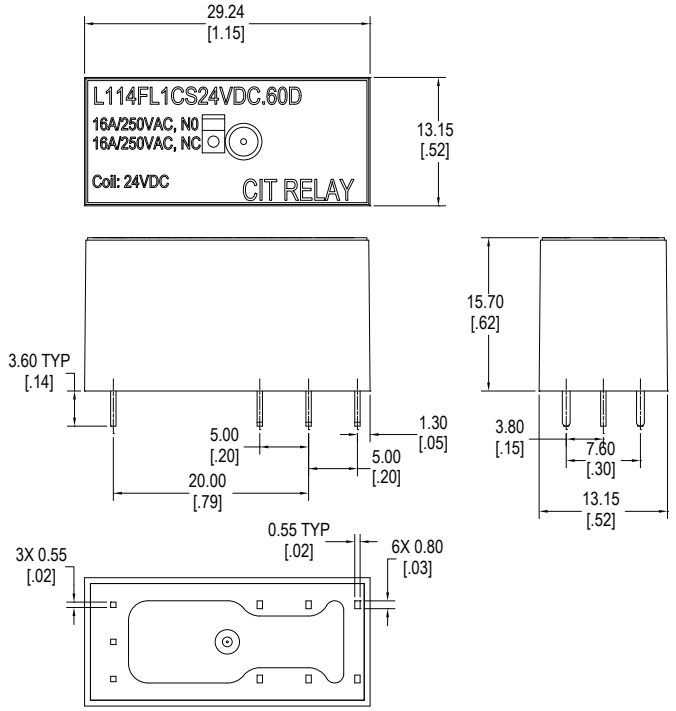
Dimensions

Units = mm

Standard Sealed - Single Coil



Standard Sealed - Double Coil



CIT Relay & Switch

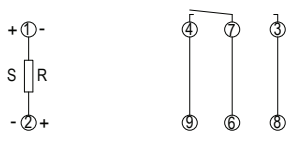
L114FL

Schematics & PC Layouts - Single Coil

Shown and supplied in the RESET position

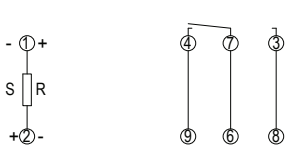
Bottom Views

1A

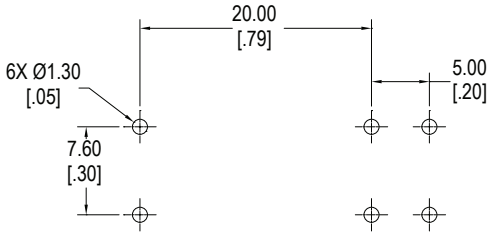


1C

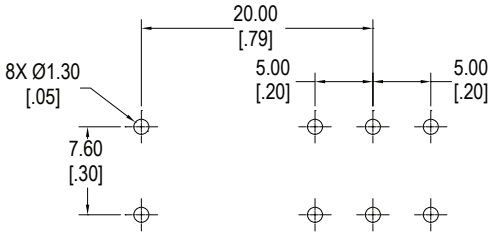
1A Reversed Polarity



1C Reversed Polarity



1A Single Coil



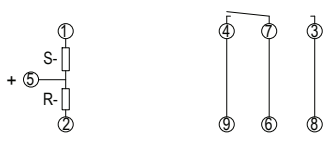
1C Single Coil

Schematics & PC Layouts - Double Coil

Shown and supplied in the RESET position

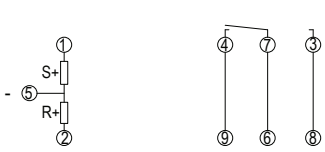
Bottom Views

1A



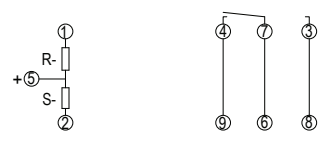
1C

1A Reversed Polarity



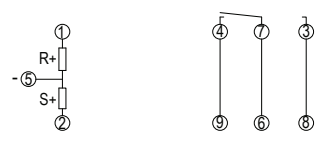
1C Reversed Polarity

1A Alternate Set & Reset

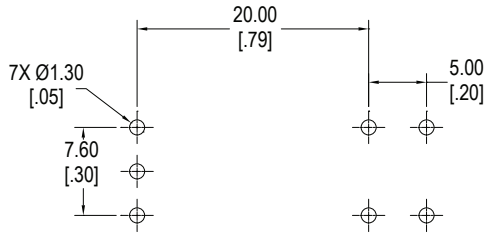


1C Alternate Set & Reset

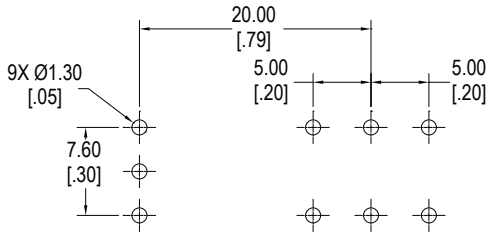
1A Reversed Polarity Alternate Set & Reset



1C Reversed Polarity Alternate Set & Reset



1A Double Coil



1C Double Coil