

## Features

- Superminiature, heavy power.
- Low coil power consumption.
- Switching current up to 2×10A.
- PC board mounting.
- Suitable for household appliance, electrical equipment, automation system, and automobile industry application.

## Ordering Information

**4117 C S 10 12VDC 1.0**

1 2 3 4 5 6

1 Part number: 4117

2 Contact arrangement: A:1A; B:1B; C:1C; U:1U; W:1W

3 Enclosure: S: Sealed type; Z: Dust cover  
O: open type

4 Contact Current: 10:10A; 20:20A

5 Coil rated Voltage(V): DC:3,5,6,9,12,18,24

6 Coil power consumption: 1.0:1.0W; 1.2:1.2W

## Contact Data

Contact Arrangement

1A (SPSTNO), 1C (SPDT(B-M)), 1U (SPSTNODM), 1W (SPDTNC-NO)

Contact Material

Ag·SnO<sub>2</sub>

Contact Rating (resistive)

1A, 1C: 10A/120VAC,28VDC 20A/14VDC ;

1U: 2×10A/120VAC,28VDC 2×20A/14VDC ;

1W: 2×10A/120VAC,28VDC 2×20A/14VDC

Max. Switching Power

1C: 280W 1200VA 1W: 2×280W 2×1200VA

Max. Switching Voltage

75VDC 380VAC

Max. Switching Current:20A

Contact Resistance or Voltage drop

≤50mΩ

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Operation | Electrical

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life | Mechanical

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## Coil Parameter

Dash Numbers	Coil voltage VDC		Coil resistance Ω±10%	Pickup voltage VDC(max) (75%of rated voltage)	release voltage VDC(min) (10% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
003-1000	3	3.9	9	2.25	0.3	1.0	≤10	≤5
005-1000	5	6.5	25	3.75	0.5			
006-1000	6	7.8	36	4.50	0.6			
009-1000	9	11.7	85	6.75	0.9			
012-1000	12	15.6	145	9.00	1.2			
018-1000	18	23.4	324	13.5	1.8			
024-1000	24	31.2	576	18.0	2.4			
012-1200	12	15.6	120	9.00	1.2	1.2	≤10	≤5

**CAUTION:** 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.

2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

Considerability  
 Ambient Temperature -40~85℃  
 Relative Humidity 85% (at 40℃)  
 Mass 9g(Open type) 12g

IEC608-2-3Test Ca

**Qualification inspection:**

Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size 24.

**Dimensions (Unit: mm)**

	mm	inch
0.3	0.3	0.012
0.4	0.4	0.016
0.5	0.5	0.020
0.6	0.6	0.024
0.8	0.8	0.031
1.0	1.0	0.039
1.3	1.3	0.051
2.1	2.1	0.083
3.3	3.3	0.130
3.4	3.4	0.134
3.81	3.81	0.150
4.6	4.6	0.181
5.08	5.08	0.200
8.89	8.89	0.350
10.16	10.16	0.400
13.2	13.2	0.520
14	14	0.511
16.4	16.4	0.646
18	18	0.709
20	20	0.787

**Dimensions**  
**Mounting (Bottomz views)**  
**Wiring diagram (Bottom views)**  
 1A 1C 1U 1W

NOTES 1).Dimensions are in millimeter.  
 2).Inch equivalents are given for general information only.

**Reference Data**

**Operaton time**  
 Time (in sec) vs Coil Power (W). Operate time and Release time curves.

**Coil temp rise**  
 Temperature Rise (deg) vs Coil Power (W).

**Life expectancy**  
 Operation (X1000) vs Contact Current (A) for 10A 120VAC.

**Contact switching capacity**  
 Contact Current (A) vs Contact Voltage (V) for DC Resistive and AC Resistive.