



29.6 × 18 × 20

# 4117-2

### Features

- Twin structure of 4117 type.
- Small size, light weight.
- Low coil power consumption.
- PC board mounting.
- Suitable for household appliances, electrical equipment, automation system, and automobile industry application.

### Ordering Information

**4117-2 2C S 12VDC**  
 1      2      3      4

1 Part number ; 4117-2

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

3 Enclosure ; S: Sealed type Z: Dust cover

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

### Contact Data

Contact Arrangement	2A (DPSTNO)	2C (DPDT(B-M))	2U (DPSTNODM)	2W (DPDTNC-NO)
Contact Material	AgNi AgSnO <sub>2</sub>			
Contact Rating (resistive)	2A,2C: 10A/120VAC,28VDC ; 2U,2W: 2 × 10A/120VAC, 28VDC			
Max. Switching Power	280W 1200VA			
Max. Switching Voltage	75VDC 380VAC		Max. Switching Current:10A	
Contact Resistance or Voltage drop	<50mΩ		Item 4.12 of IEC 61810-7	
Operation life	Electrical	10 <sup>5</sup>		Item 4.30 of IEC 61810-7
	Mechanical	10 <sup>7</sup>		Item 4.31 of IEC 61810-7

**CAUTION:** 1.For the intermediate current, it only applies to the room temperature.

### 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	2.25	0.3	≈ 1.0	≤ 10	≤ 5
005-1000	5	6.5	25 × 2	3.75	0.5			
006-1000	6	7.8	36 × 2	4.50	0.6			
009-1000	9	11.7	85 × 2	6.75	0.9			
012-1000	12	15.6	145 × 2	9.00	1.2			
018-1000	18	23.4	324 × 2	13.5	1.8			
024-1000	24	31.2	576 × 2	18.0	2.4			

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

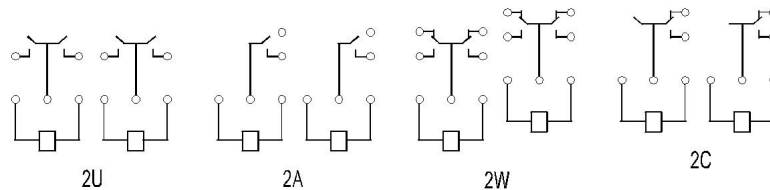
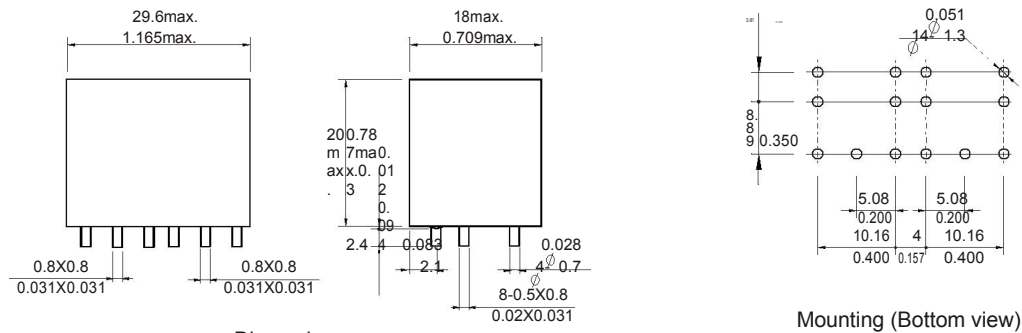
2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

## Operation condition

Insulation Resistance	100M $\Omega$ min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength Between contacts	50Hz 750V	Item 6 of IEC 60255-5
Between contact and coil	50Hz 1500V	Item 6 of IEC 60255-5
Shock resistance	100m/s <sup>2</sup> 11ms	IEC 68-2-27 Test Ea
Vibration resistance	10Hz~40Hz double amplitude 1.27mm	IEC 68-2-6 Test Fc
Terminals strength	10N	IEC 68-2-21 Test Ua1
Solderability	235 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C 3s $\pm$ 0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-40 $^{\circ}$ C ~105 $^{\circ}$ C	
Relative Humidity	85% (at 40 $^{\circ}$ C)	IEC 68-2-3 Test Ca
Mass	20g	

## Dimensions

mm /inch



Wiring diagram(Bottom view)

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

## Reference Data

