

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 DC12V  
 1            2            3            4

1 Part number: 4117-2  
 2 Contact arrangement: 2A:2A; 2C:2C; 2U:2U; 2W:2W  
 3 Enclosure: S: Wash tight ; Z: Flux proof  
 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	AgSnO <sub>2</sub> AgNi		
Contact Rating (Resistive)	2A,2C: 10A/120VAC,28VDC,20A/14VDC ; 2U,2W: 2×10A/120VAC, 28VDC,2×20A/14VDC		
Max. Switching Power	280W 1200VA		
Max. Switching Voltage	30VDC 277VAC                      Max. Switching Current:20A		
Voltage Drop(Initial)	Typ. 50mV(at 10A)                      Item 4.12 of IEC 61810-7		
Operation	Electrical	1×10 <sup>5</sup> Item 4.30 of IEC 61810-7	
Life	Mechanical	1×10 <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%	Pick-up voltage VDC(max) (75%of rated voltage )	Drop-out voltage VDC(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
	Rated	Max.						
003-1000	3	3.9	9×2	2.25	0.3	2×1.0	≤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			

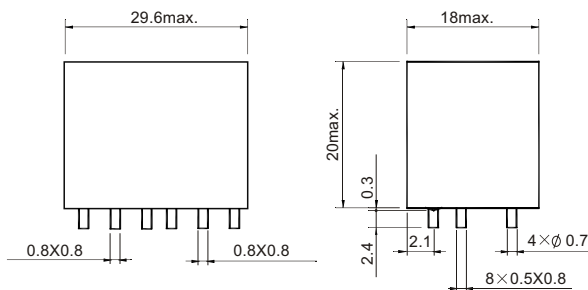
**CAUTION:** 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
 2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

## Characteristics

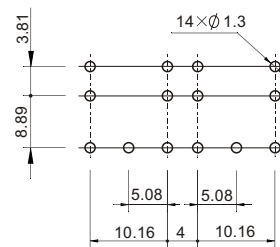
Insulation Resistance	100M $\Omega$ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	50Hz 750V 50Hz 1500V	Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7
Shock Resistance	98m/s <sup>2</sup> 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~40Hz Double amplitude 1.27mm	Item 4.28 of IEC 61810-7
Terminals Strength	10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40 $^{\circ}$ C~105 $^{\circ}$ C	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Mass	20g	Item 4.7 of IEC 61810-7

## Dimensions

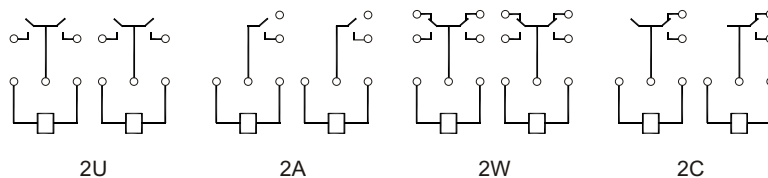
mm



Dimensions



Mounting (Bottom view)



Wiring diagram(Bottom view)

**CAUTION:** In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.