



Open Type
13.2×14×18

Dust Covered
18×16.4×20

4 1 1 7

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.

Contact Data

Contact Arrangement	1A, 1C, 1U, 1W
Contact Material	Ag·SnO ₂
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 Item 3.12 of IEC255-7
Operation life	Electrical 10 ⁵ Item 3.30 of IEC255-7
	Mechanical 10 ⁷ Item 3.31 of IEC255-7

Coil Parameter

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.						
3	3.9	9	2.25	0.3	1.0(1.2)	≤10	≤5
5	6.5	25	3.75	0.5			
6	7.8	36	4.50	0.6			
9	11.7	85	6.75	0.9			
12	15.6	145(120)	9.00	1.2			
18	23.4	324	13.5	1.8			
24	31.2	576	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	100MΩ min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50Hz 750V	Item 6 of IEC255-5
Between contact and coil	50Hz 1500V	Item 6 of IEC255-5
Shock resistance	100m/s ² 11ms	IEC68-2-27 Test Ea method 1
Vibration resistance	10~40Hz double amplitude 1.27mm	IEC68-2-6 Test Fc
Terminals strength	10N	IEC68-2-21 Test Ua1
Solderability	230℃ ±2℃ 10 ±0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~85℃	
Relative Humidity	85% (at 40℃)	IEC68-2-3Test Ca
Mass	9g(Open type) 12g	

Qualification inspection:

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

Ordering Information				
4117	A	S	10	12VDC 1.0
Coil power consumption: 1.0: 1.0W, 1.2: 1.2W				
Coil rated DC Voltage 3V, 5V, 6V, 9V, 12V, 18V, 24V				
Coil Rating 10: 10A; 20: 20A				
S: Sealed type, Z: Dust Cover, O: Open Type				
Contact Arrangement: A: 1A, C: 1C, U: 1U, W: 1W				
Part number: 4117				

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

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

