4117

Unenclosed
13.2×15.3×18

Wash tight
17.5×15×20

Features

- Superminiature, heavy power.
- Low coil power consumption.
- Switching current up to 20A.
- PC board mounting.
- Suitable for household appliances, electrical equipment, automation system, and automobile industry application.

Ordering Information

4117	C	S	10	DC12V	1.0
1	2	3	4	5	6

1 Part number: 4117
2 Contact arrangement: A:1A; B:1B; C:1C; U:IU; V:1V; W:1W
3 Enclosure: S: Wash tight; Z: Flux proof; O: Unenclosed
4 Contact rating: 10:10A; 20:20A
5 Coil rated voltage(V): DC:3,5,6,9,12,18,24
6 Coil power: 1.0:1.0W; 1.1:1.1W; 1.2:1.2W

Contact Data

Contact Arrangement	1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M)) 1U(SPSTNODM) 1V(SPSTNCDB) 1W(SPDTNC-NO)	
Contact Material	$AgSnO_2$ AgNi	
Contact Rating	1A,1B,1C: 10A/120VAC,28VDC; 20A/14VDC 1U,1V,1W: 2×10A/120VAC,28VDC; 2×20A/14VDC	
Max. Switching Power	1C: 280W 1200VA 1W: 2×280W 2×1200VA	
Max. Switching Voltage	30VDC 277VAC	Max. Switching Current:20A
Voltage Drop(Initial)	Typ.: 50mV(at 10A)	Item 4.12 of IEC 61810-7
Electrical Endurance	1×10^5	Item 4.30 of IEC 61810-7
Mechanical Endurance	1×10^7	Item 4.31 of IEC 61810-7

Notes: For the open type relays, the min. contact switching is 100mA/6VDC.

Coil Parameter

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.						
3	3.9	9	2.25	0.3	1.0	≤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	9.00	1.2			
18	23.4	324	13.5	1.8			
24	31.2	576	18.0	2.4			
12	15.6	130.9	9.00	1.2	1.1	≤10	≤5
24	31.2	523.6	18.0	2.4			
12	15.6	120	9.00	1.2	1.2	≤10	≤5

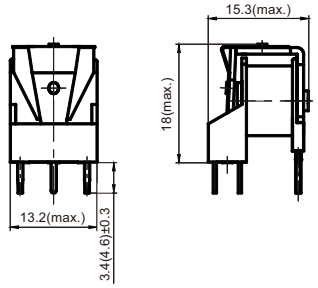
Notes: 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
2.Pick-up and drop-out voltage are for test purposes only and are not to be used as design criteria.

Characteristics

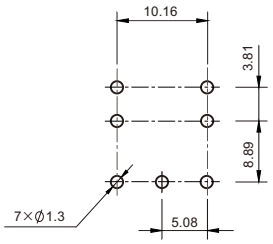
Insulation Resistance	100MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Open Contacts Between Contact and Coil	 750VAC 1min 1500VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	98m/s^2 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~40Hz Double amplitude 1.27mm	Item 4.28 of IEC 61810-7
Terminals Strength	10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40℃~105℃	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Weight (Approx.)	9g (Unenclosed) 12g	Item 4.7 of IEC 61810-7

Dimensions

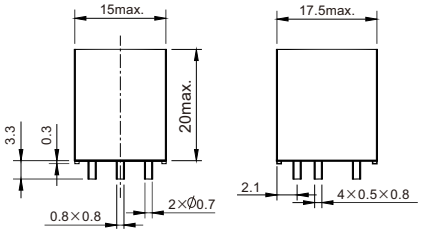
mm



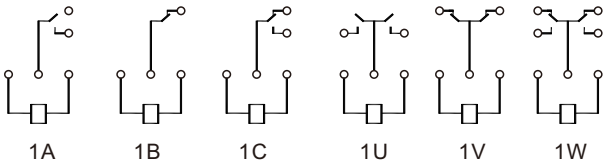
Unenclosed



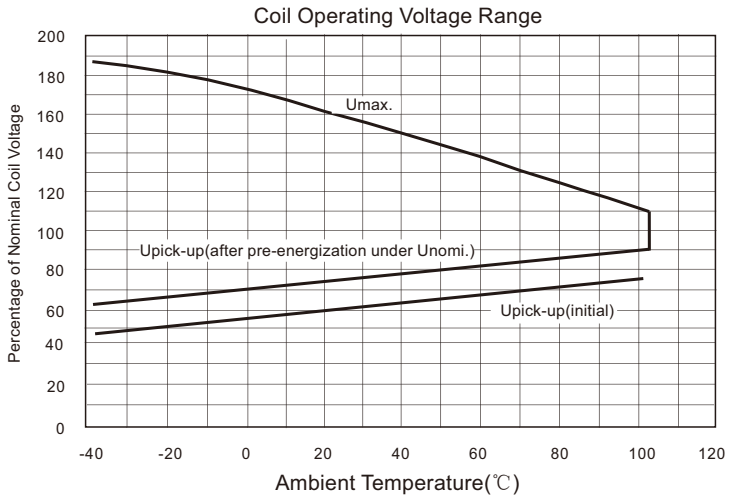
Mounting (Bottom view)



Wash tight/Flux proof Dimensions



Wiring diagram (Bottom view)

Remark: In case of no tolerance shown in outline dimension: outline dimension≤1mm,tolerance should be ±0.2mm ; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

Reference Data