

Features

- 10A switching capability
- Contact arrangement: 1A, 1C
- Products with operating temperature of 105℃ are available
- Provide high sensitive type, coil power is :200mW
- UL insulation system: Class F
- Environment-friendly product(RoHS compliant)
- Outline Dimensions:(20.5×10.5×15.6)mm
- Main application: Home appliance, Electric power meter



CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A, 1B, 1C
	Contact resistance(initial)		≤100mΩ(6VDC 1A)
	Contact material		AgNi, AgSnO ₂
Rated value	Rated load(Resistance load)		5A 250VAC/30VDC 10A 250VAC/30VDC
	Max.switching voltage		277VAC/30VDC
	Max.switching current		10A
	Max.switching capacity		2500VA/300W
	Min.allowing load		5VDC 100mA
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	1000VAC,1 min
		Between coil&contacts	4000VAC,1 min
	Operate time		≤10ms
	Release time		≤5ms
Mechanical performance	Shock resistance	Functional	98m/s ² (10g)
		Destructive	980m/s ² (100g)
	Vibration resistance		10Hz~55Hz 1.5mm DA
Endurance	Mechanical		5×10 ⁶ ops
	Electrical(Room temperature)		5A 250VAC/30VDC 1×10 ⁵ ops(ON/OFF=1s/9s) 10A 250VAC/30VDC 5×10 ⁴ ops(ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃~85/105℃
	Humidity		5% to 90%
Termination			PCB
Unit weight			Approx 6g
Construction			Plastic sealed, Flux proofed

■ COIL DATA(23℃)

■ Standard Type

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.25	≥0.15	150mA	20Ω	450mW	DC 3.9V
DC 5V	≤3.75	≥0.25	90mA	55.5Ω		DC 6.5V
DC 6V	≤4.50	≥0.30	75mA	80Ω		DC 7.8V
DC 9V	≤6.75	≥0.45	50mA	180Ω		DC 11.7V
DC 12V	≤9.00	≥0.60	37.5mA	320Ω		DC 15.6V
DC 15V	≤11.25	≥0.75	30mA	500Ω		DC 19.5V
DC 18V	≤13.50	≥0.90	25mA	720Ω		DC 23.4V
DC 24V	≤18.00	≥1.20	18.8mA	1280Ω		DC 31.2V
DC 48V	≤36.00	≥2.40	10.4mA	4608Ω	500mW	DC 62.4V

■ Sensitive Type

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.4	≥0.15	66.7mA	45Ω	200mW	DC 3.9V
DC 5V	≤4.0	≥0.25	40mA	125Ω		DC 6.5V
DC 6V	≤4.8	≥0.30	33.3mA	180Ω		DC 7.8V
DC 9V	≤7.2	≥0.45	22.2mA	405Ω		DC 11.7V
DC 12V	≤9.6	≥0.60	16.7mA	720Ω		DC 15.6V
DC 15V	≤12.0	≥0.75	13.3mA	1128Ω		DC 19.5V
DC 18V	≤14.4	≥0.90	11.1mA	1620Ω		DC 23.4V
DC 24V	≤19.2	≥1.20	8.3mA	2880Ω		DC 31.2V

■ ORDERING INFORMATION

FH16 -1A 2 S T L E -XXX DC12V

① Type

② Contact arrangement(1):1A=1 open contacts,
1B=1 close contacts, 1C=1 switched contacts

③ PCB mounting:2=type 2

④ Construction(2):Nil=Flux proofed,S=Plastic sealed

⑤ Contact material(3):Nil=AgNi, T=AgSnO₂

⑥ Coil power:Nil=Standard, L=Sensitive

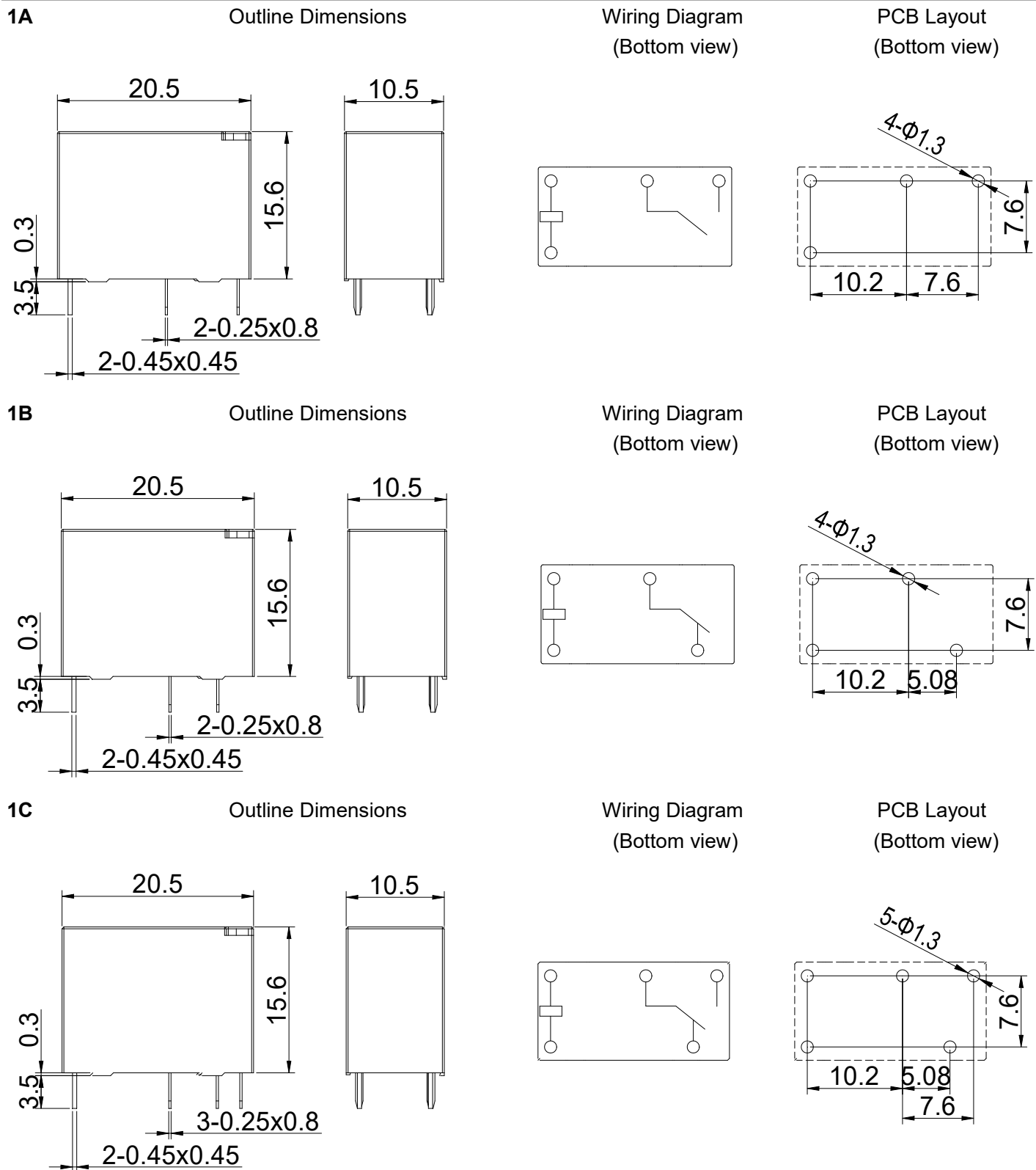
⑦ Load:Nil=Standard load, E=High load(10A is not available under the sensitive type of 1C)

⑧ Customer special code:numbers or letters denote customer's requirements

⑨ Coil specification:DC3/5/6/9/12/15/18/24/48V

- (1) If need the contact arrangement is 1B,please contact with the salesman to ask for the outline dimensions,wiring diagram and PC board layout.
- (2) When used in clean environment(excluding H₂S,SO₂,NO₂,dust and other pollutants), it is recommended to choose the Flux proofed type;When used in unclean environment(contain H₂S,SO₂,NO₂,dust and other pollutants), it is recommended to choose the Plastic sealed.
- (3) Due to the high surge current of relay connection,we propose to use AgSnO₂ contacts.

■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT (Unit:mm)



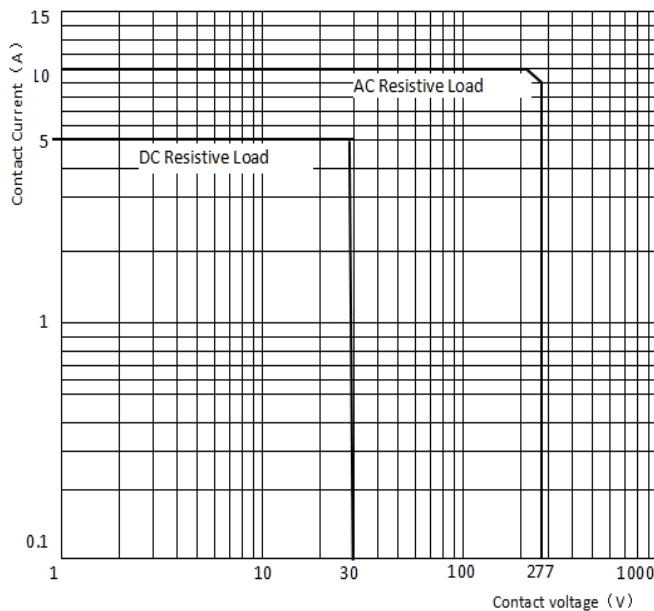
Remark: (1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $< 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $\geq 5\text{mm}$, tolerance should be $\pm 0.5\text{mm}$.

(2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

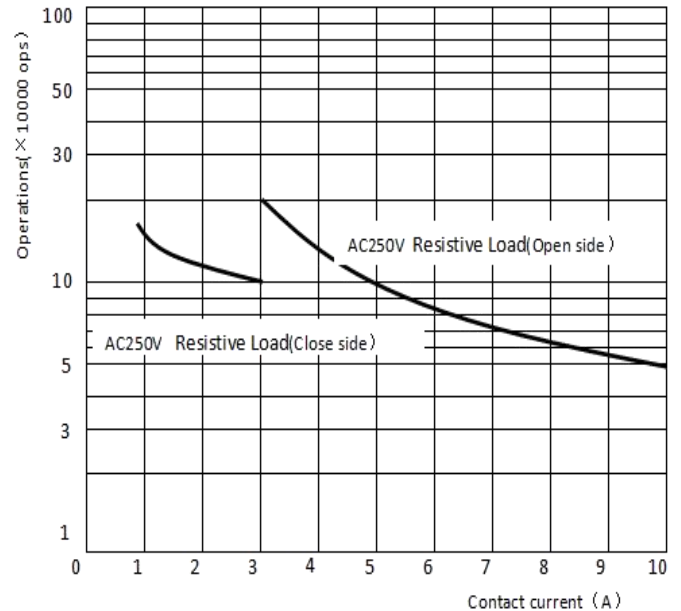
SAFETY APPROVAL RATINGS

Approval	File No.	Contact arrangement	Contact material	Approved ratings		
UL/C-UL	E475405	1A (NO)	AgSnO ₂	10A	250/125VAC	85℃
		1C(NO/NC)		5A	250VAC	105℃
TUV	R50346373	1A(NO)	AgNi, AgSnO ₂	10A	250VAC/30VDC	85℃
		1B(NC)		5A	250VAC/30VDC	85℃
		1C(NO/NC)		5A/3A	250VAC/30VDC	85℃
CQC	CQC16002144114	1A(NO)	AgNi, AgSnO ₂	10A/7A	250VAC/30VDC	85℃
		1B(NC)		5A/3A	250VAC/30VDC	85℃
		1C(NO/NC)		5A/3A	250VAC/30VDC	85℃

PERFORMANCE CURVES



MAXIMUM SWITCHING POWER



ENDURANCE CURVE

NOTICE

- ① In order to maintain the initial performance parameters of the relay, please be careful not to drop the product;
- ② The specification is for reference only.Specifications subject to change without notice.