

Features

- 2 sets of 12A switching capability
- Breakdown voltage(between contact groups and contacts):2.5KV
- Breakdown voltage(between coil and contacts):5KV
- Creep age distance and air distance $\geq 15\text{mm}$
- Products with operating temperature of 105°C are available
- UL insulation system:Class F
- Environment-friendly product(RoHS compliant)
- Outline Dimensions:(29.0×12.7×15.7)mm
- Main application:Home appliance, Industrial Control



■ CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		2A, 2B, 2C
	Contact resistance(initial)		≤100mΩ(6VDC 1A)
	Contact material		AgNi, AgSnO ₂
Rated value	Rated load(Resistance load)		8A 250VAC/30VDC
	Max.switching voltage		400VAC/30VDC
	Max.switching current		12A
	Max.switching capacity		2000VA/240W
	Min.allowing load		5VDC 100mA
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	1000VAC, 1 min
		Between contact sets	2500VAC, 1 min
		Between coil&contacts	4000VAC, 1 min
	Operate time		≤15ms
	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		1×10 ⁶ ops
	Electrical(Room temperature)		8A 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.12g
Unit weight			Plastic sealed, Flux proofed

■ COIL DATA(23℃)

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.25	≥0.15	133.3mA	22.5Ω	400mW	DC 3.9V
DC 5V	≤3.75	≥0.25	80mA	62.6Ω		DC 6.5V
DC 6V	≤4.50	≥0.30	66.7mA	90Ω		DC 7.8V
DC 9V	≤6.75	≥0.45	44.4mA	202.5Ω		DC 11.7V
DC 12V	≤9.00	≥0.60	33.3mA	360Ω		DC 15.6V
DC 15V	≤11.25	≥0.75	26.7mA	562.5Ω		DC 19.5V
DC 18V	≤13.50	≥0.90	22.2mA	810Ω		DC 23.4V
DC 24V	≤18.00	≥1.20	16.7mA	1440Ω		DC 31.2V
DC 48V	≤36.00	≥2.40	8.3mA	5760Ω		DC 62.4V
DC 60V	≤45	≥3	6.67mA	9000Ω		DC 78V
DC 90V	≤67.5	≥4.5	4.44mA	20250Ω		DC 117V
DC 110V	≤82.5	≥5.5	3.64mA	30250Ω		DC 143V

■ ORDERING INFORMATION

W15 -2A S T -XXX DC12V

- ① Type
- ② Contact arrangement:2A=2 open contacts, 2B=2 close contacts, 2C=2 switched contacts
- ③ Construction(1):Nil=Flux proofed,S=Plastic sealed
- ④ Contact material:Nil=AgNi, T=AgSnO₂
- ⑤ Customer special code:numbers or letters denote customer's requirements, For example: G=Gold plating
- ⑥ Coil specification:DC3/5/6/9/12/15/18/24/48/60/90/110V

- (1) 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.

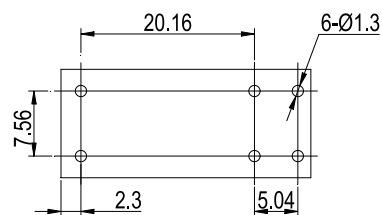
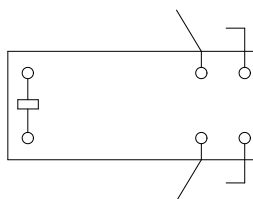
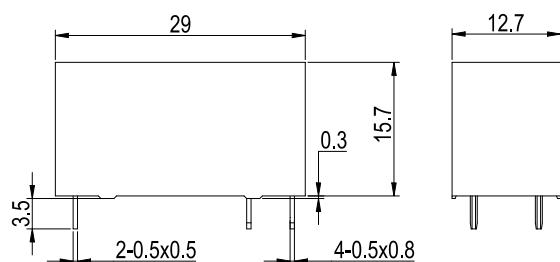
■ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

2A

Outline Dimensions

**Wiring Diagram
(Bottom view)**

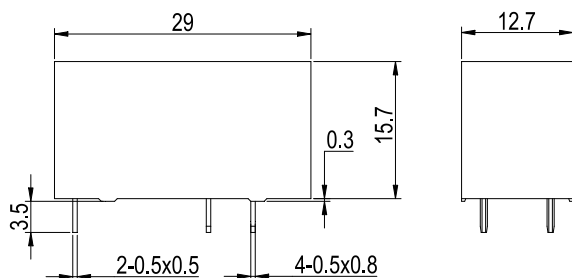
**PCB Layout
(Bottom view)**



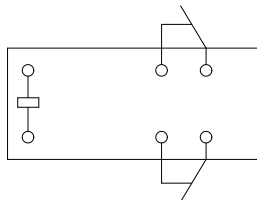
■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT (Unit:mm)

2B

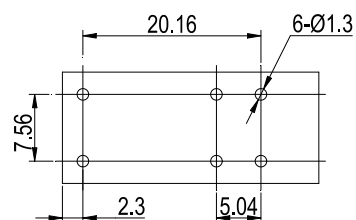
Outline Dimensions



Wiring Diagram
(Bottom view)

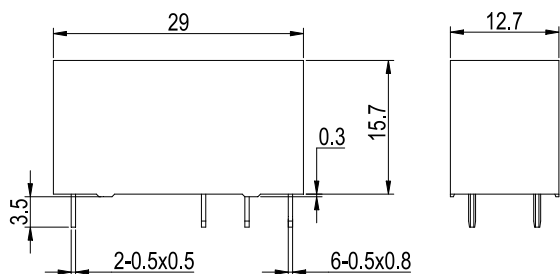


PCB Layout
(Bottom view)

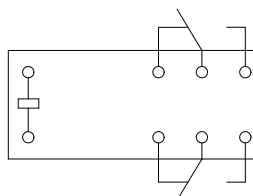


2C

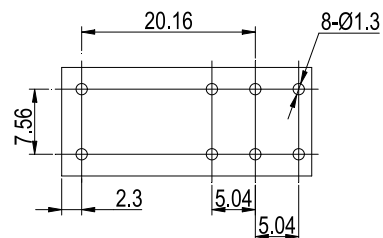
Outline Dimensions



Wiring Diagram
(Bottom view)



PCB Layout
(Bottom view)



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

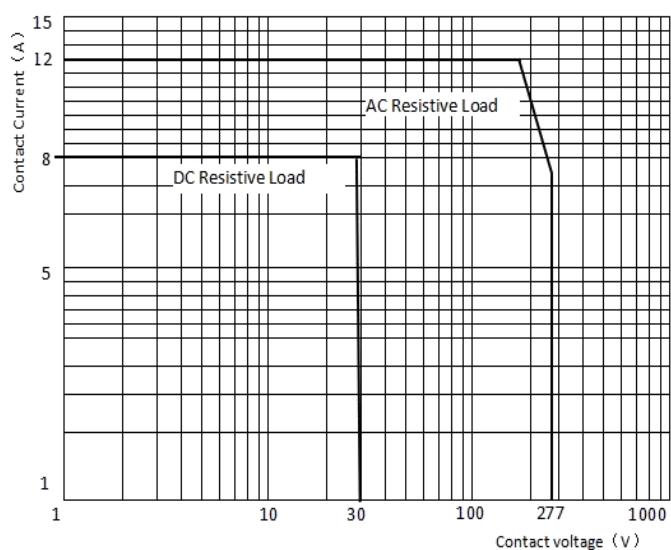
(2) The tolerance without indicating for PCB layout is always $\pm$ 0.1mm.

■ SAFETY APPROVAL RATINGS

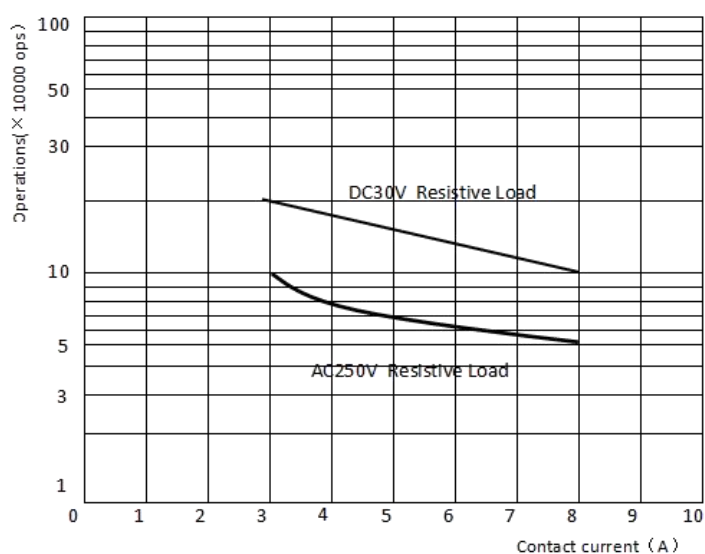
Approval	File No.	Contact arrangement	Contact material	Approved ratings		
UL/C-UL	E475405	2A, 2C(NO)	AgNi, AgSnO ₂	8A	250VAC/30VDC	85°C
		2B, 2C(NC)		1/4HP	250VAC	85°C
TUV	R 50332875	2A(NO)	AgNi, AgSnO ₂	3A	250VAC (PF=0.6)	85°C
				10A	125VAC	85°C
				8A	250VAC/30VDC	85°C
		2B(NC)		8A	250VAC/30VDC	85°C
		2C(CO)		5A/5A	250VAC/30VDC	85°C
CQC	CQC15002137649	2A(NO) 2B(NC) 2C(CO)	AgNi, AgSnO ₂	8A	250VAC/30VDC	85°C

■ 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.