

Features

- 35A switching capability
- Contact arrangement:1A
- Provide the contact gap of the product is ≥ 2.0 mm,conforming to IEC62109-2-2011
- Save the power consumption of the whole machine, and reduce the coil voltage to keep working after starting
- UL insulation system:Class F
- Environment-friendly product(RoHS compliant)
- Outline Dimensions:(30.3 \times 15.4 \times 23.1)mm
- Main application:New energy and PV industry, EV Charger



CHARACTERISTICS

Specifications	Item	Standard	BG Type	
Contact Data	Contact arrangement	1.8mm	2.0mm	
	Contact arrangement	1A		
	Contact resistance(initial)	$\leq 100\text{m}\Omega$ (6VDC 1A)		
	Contact material	AgSnO ₂		
Rated value	Rated load(Resistance load)	32A 250VAC		
	Max.switching voltage	277VAC		
	Max.switching current	35A		
	Max.switching capacity	8750VA		
	Min.allowing load	5VDC 100mA		
Electrical performance	Insulation resistance(initial)	1000M Ω (500VDC)		
	Dielectric strength (initial)	Between open contacts	2500VAC,1min	
		Between coil&contacts	4500VAC,1min	
	Operate time	$\leq 20\text{ms}$		
	Release time	$\leq 10\text{ms}$		
Mechanical performance	Shock resistance	Functional	196m/s ² (20g)	
		Destructive	980m/s ² (100g)	
	Vibration resistance	10Hz~55Hz 1.5mm DA		
Endurance	Mechanical	2 $\times 10^5$ ops		
	Electrical(Room temperature)	32A 250VAC	3 $\times 10^4$ ops(ON/OFF=1s/9s)	
Operate condition	Ambient temperature	-40 $^{\circ}\text{C}$ ~85 $^{\circ}\text{C}$		
	Humidity	5% to 85%		
Termination		PCB		
Unit weight		Approx.20.7g		
Construction		Plastic sealed,Flux proofed		

COIL DATA(23°C)

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 5V	≤3.75	≥0.25	280mA	17.8Ω	1400mW	DC 6.0V
DC 12V	≤9.00	≥0.60	116.7mA	102.8Ω		DC 14.4V
DC 18V	≤13.50	≥0.90	77.8mA	231.4Ω		DC 21.6V
DC 24V	≤18.00	≥1.20	58.3mA	411.4Ω		DC 28.8V

ORDERING INFORMATION

FH20 -BG -1A S T -XXX DC12V

- ① Type
- ② Contact gap: Nil=1.8mm contact gap
BG=2.0mm contact gap
- ③ Contact arrangement: 1A=1 open contacts
- ④ Construction(1): Nil=Flux proofed, S=Plastic sealed
- ⑤ Contact material: T=AgSnO₂
- ⑥ Customer special code: numbers or letters denote customer's requirements
- ⑦ Coil specification: DC5/12/18/24V

- (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.

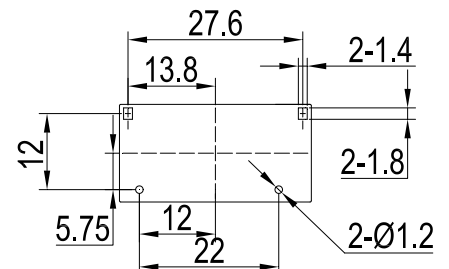
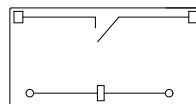
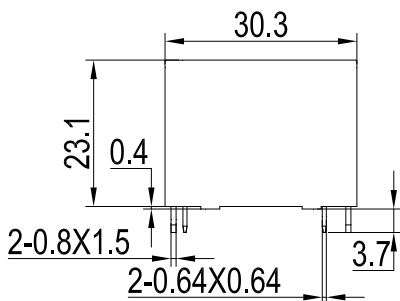
OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

1A

Outline Dimensions

Wiring Diagram
(Bottom view)

PCB Layout
(Bottom view)



Remark: (1) 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 ±0.5mm.

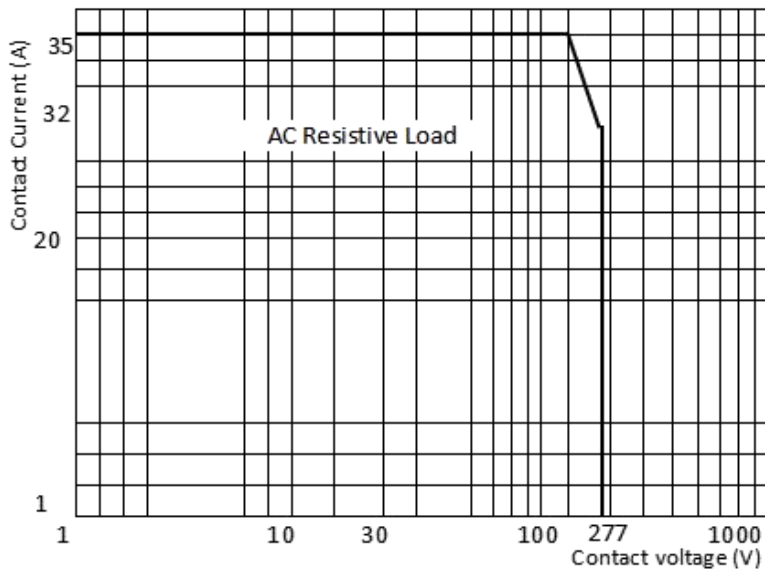
(2) The tolerance without indicating for PCB layout is always ±0.1mm.

SAFETY APPROVAL RATINGS

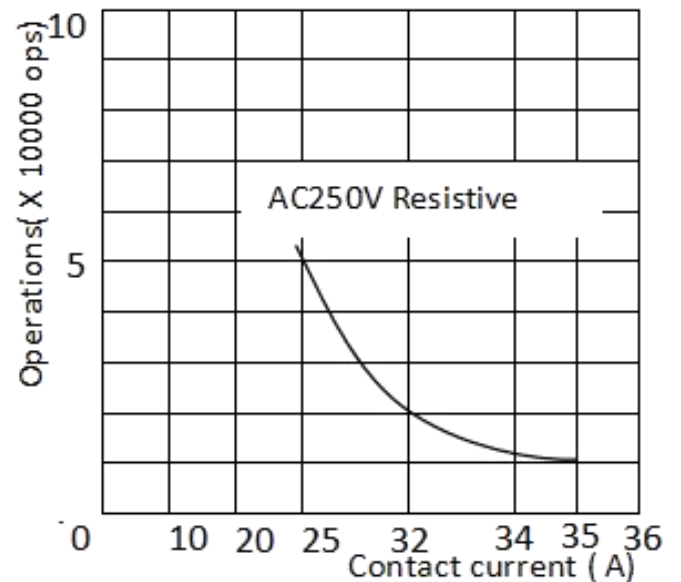
Approval	File No.	Contact arrangement	Contact material	Approved ratings	
UL/C-UL	E475405	1A	AgSnO ₂	32A 250VAC 35A 250VAC	85°C 85°C
TUV	R 50581364	1A	AgSnO ₂	32A 250VAC 35A 250VAC	85°C 85°C
CQC	CQC23002383075	1A	AgSnO ₂	32A 250VAC 35A 250VAC	85°C 85°C

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.