

Features

- 43A switching capability
- 1A contact form
- Provide the contact gap of the product is $\geq 2.0\text{mm}$, conforming to IEC62109-2-2011
- Save the power consumption of the whole machine, and keep working by reducing the coil voltage after starting
- UL insulation system: Class F
- Environment-friendly product (RoHS compliant)
- Outline Dimensions: (30.3×15.4×23.1)mm
- Main application: New energy and PV industry, Charging Piles



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)	43A 250VAC		
	Max.switching voltage	277VAC		
	Max.switching current	43A		
	Max.switching capacity	11250VA		
	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	1×10 ⁶ ops		
	Electrical(Room temperature)	43A 250VAC	2×10 ⁴ ops(ON/OFF=1s/9s)	
Operate condition	Ambient temperature	-40℃~85℃		
	Humidity	5% to 85%		
Termination		PCB		
Unit weight		Approx.23g		
Construction		Plastic sealed,Flux proofed		

COIL DATA(23°C)

Standard Type

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current ($\pm 10\%$)	Coil Resistance ($\pm 10\%$)	Nominal Power	Max Voltage
DC 5V	≤ 3.75	≥ 0.25	760mA	6.6 Ω	3800mW	DC 6.0V
DC 12V	≤ 9.00	≥ 0.60	316.7mA	37.9 Ω		DC 14.4V
DC 24V	≤ 18.00	≥ 1.20	158.3mA	151.6 Ω		DC 28.8V

Note: Holding voltage :40%~70%UN(Environment temperature 23°C);40%~55%UN(Environment temperature 85°C)

ORDERING INFORMATION

FH20T -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=1open 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: DC5/12/24V

- (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.

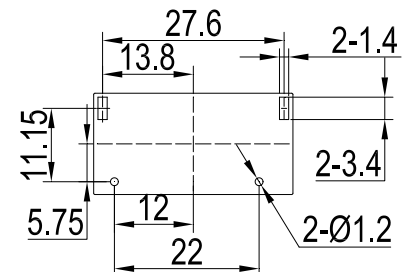
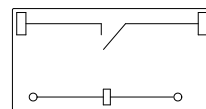
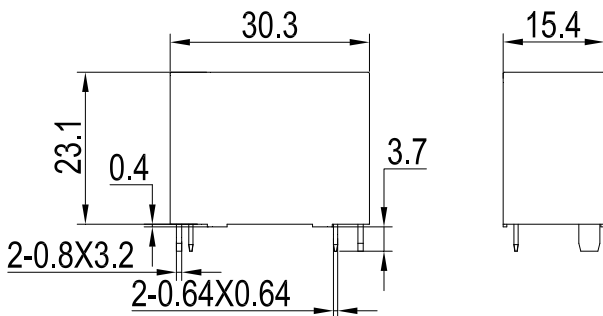
OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

1A

Outline Dimensions

Wiring Diagram
(Bottom view)

PCB Layout
(Bottom view)



Remark: (1) In case of no tolerance shown in outline dimension:outline dimension ≤ 1 mm,tolerance should be ± 0.2 mm;outline dimension > 1 mm and < 5 mm,tolerance should be ± 0.3 mm;outline dimension ≥ 5 mm,tolerance should be ± 0.5 mm.

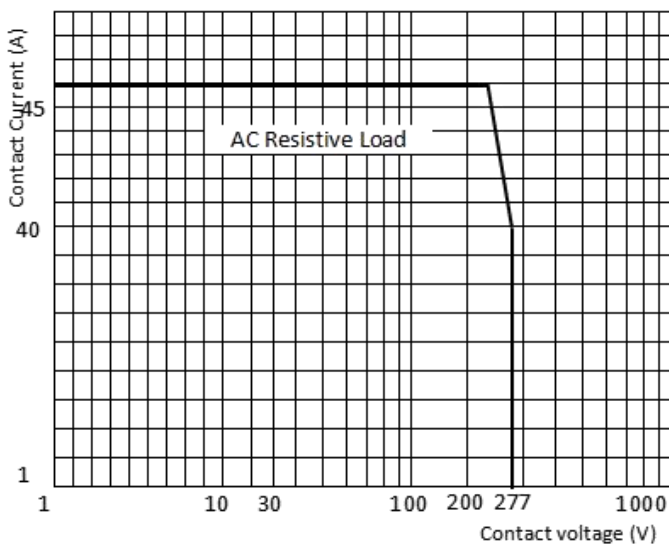
(2) The tolerance without indicating for PCB layout is always ± 0.1 mm.

SAFETY APPROVAL RATINGS

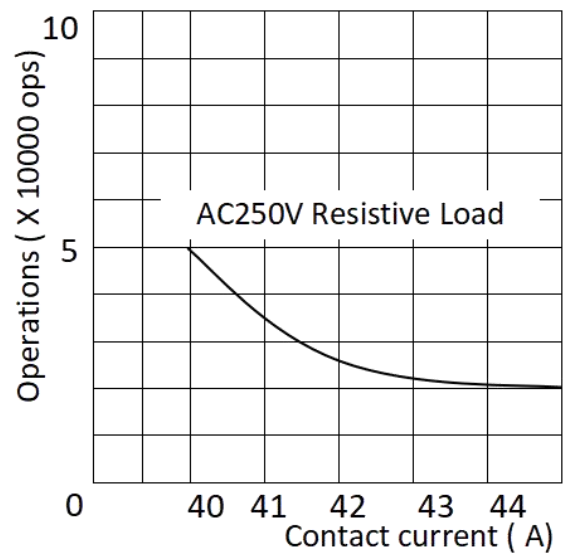
Approval	File No.	Contact arrangement	Contact material	Approved ratings	
UL/C-UL	E475405	1A	AgSnO ₂	50A 250VAC	85°C
				43A 250VAC	85°C
				40A 250VAC	85°C
TUV	R 50581364	1A	AgSnO ₂	50A 250VAC	85°C
				43A 250VAC	85°C
				40A 250VAC	85°C
CQC	CQC23002383075	1A	AgSnO ₂	50A 250VAC	85°C
				43A 250VAC	85°C
				40A 250VAC	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.