

JQC-3FF (HF3FF)

SUBMINIATURE HIGH POWER RELAY



File No.:E133481



File No.:R50034671



File No.:CQC02001001953



Features

- 15A switching capability
- Extremely low cost
- 1 Form A and 1 Form C configurations
- Subminiature, standard PCB layout
- Sealed IP67 and flux proof types available
- Environmental friendly product available (RoHS compliant)
- Outline Dimensions: 19.0 x 15.5 x 15.0 mm

CONTACT DATA

Contact arrangement	1A	1C
Initial contact resistance Max.	100mΩ (at 1A 6VDC)	
Contact material	AgSnO ₂ , AgCdO	
Contact rating (Res. load)	10A 277VAC/28VDC	
Max. switching voltage	277VAC / 30VDC	
Max. switching current	15A	10A
Max. switching power	2770VA / 210W	
Mechanical life	1 x 10 ⁷ OPS	
Electrical life	1 x 10 ⁵ OPS	

COIL DATA

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Max. Allowable Voltage (VDC) 25°C	Coil Resistance (Ω)
5	3.80	0.5	6.5	70 ± 10%
6	4.50	0.6	7.8	100 ± 10%
9	6.80	0.9	11.7	225 ± 10%
12	9.00	1.2	15.6	400 ± 10%
18	13.5	1.8	23.4	900 ± 10%
24	18.0	2.4	31.2	1600 ± 10%
48	36.0	4.8	62.4	4500 ± 10%

CHARACTERISTICS

Initial insulation resistance	100MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	1500VAC 1min.
	Between open contacts	750VAC 1min.
Operate time (at nomi. volt.)	Max. 10ms	
Release time (at nomi. volt.)	Max. 5ms	
Temperature rise (at nomi. volt.)	Max. 60°C	
Shock resistance	Functional	98m/s ² (10g)
	Destructive	980m/s ² (100g)
Vibration resistance	10 to 55Hz 1.5mm	
Humidity	35 to 85% RH	
Ambient temperature	-40°C to +85°C	
Termination	PCB	
Unit weight	Approx. 10g	
Construction	Sealed IP67, Flux proof	

SAFETY APPROVAL RATINGS

Approval	Configuration	Rating
UL&CUR	1 Form A	10A 277VAC TV-5 120VAC 15A 125VAC 120VAC 125VAC 1/2hp, 125VAC
	1 Form C	10A 277 VAC 10A 120VAC 1/2 HP 125/250VAC
TÜV	1 Form A	10A 277VAC 12A 125VAC COSØ =1 5A 250VAC COSØ =1
	1 Form C	8A 250VAC 12A 125VAC COSØ =1 5A 250VAC COSØ =1

COIL

Coil power	5 to 24VDC: 360mW; 48VDC: 510mW
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HONGFA RELAY

ISO9001、ISO/TS16949、ISO14001、OHSAS18001 CERTIFIED

2006 Rev. 1.10

ORDERING INFORMATION

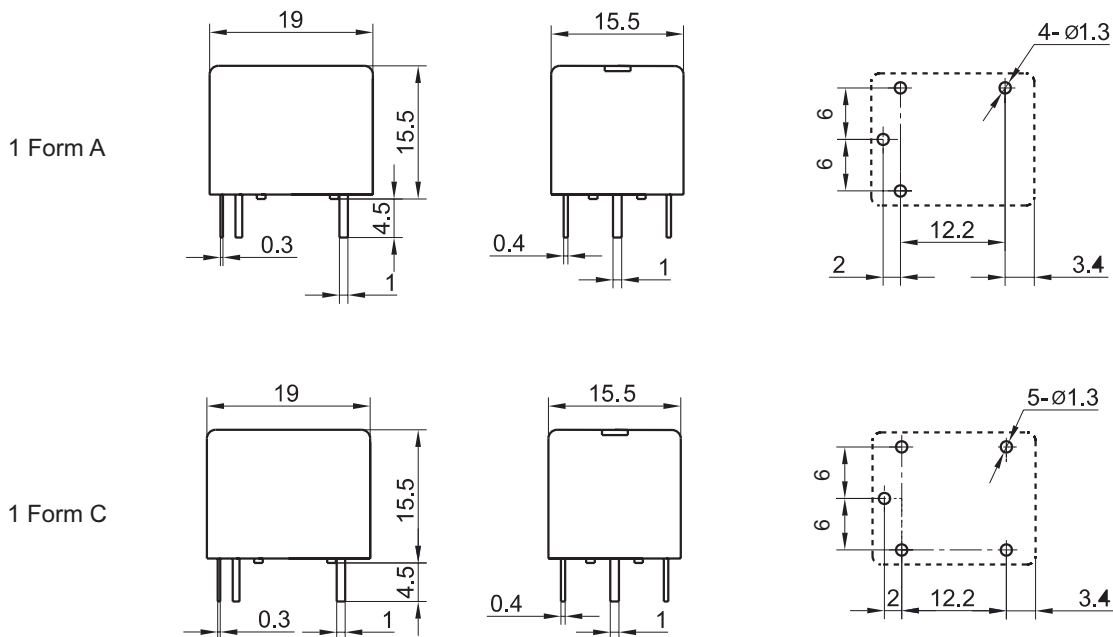
JQC-3FF / 012 1H S T F XXX	
Type	
Coil voltage	5, 6, 9, 12, 18, 24, 48VDC
Contact arrangement	1H:1 Form A 1Z:1 Form C
Construction	S: Sealed IP67 Nil: Flux proof
Contact material	T: AgSnO ₂ Nil: AgCdO
Insulation standard	F: Class F Nil: Class B
Customer special code (Only for special requirements)	e.g. 551 stands for RoHS compliant (Cadmium containing contacts) 555 stands for RoHS compliant (Cadmium-free contacts)

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB BOARD LAYOUT

Unit: mm

Outline Dimensions

PCB Layout

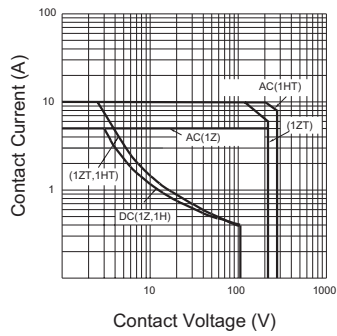


Wiring Diagram (Bottom view)

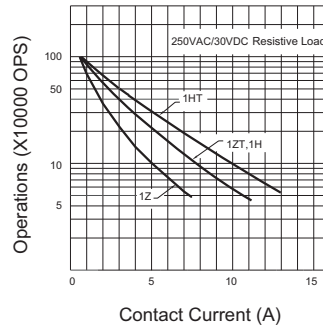


CHARACTERISTIC CURVES

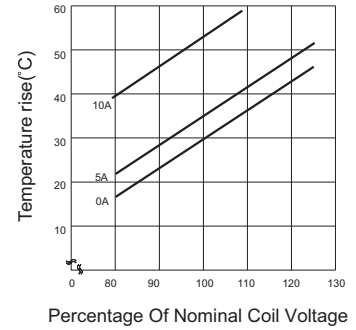
MAXIMUM SWITCHING POWER



LIFE CURVE



COIL TEMPERATURE RISE



Disclaimer

This datasheet is for the customers' reference. All the specifications are subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.