

JQX-105F-1

MINIATURE HIGH POWER RELAY



File No.:E134517



50010669



File No.:CQC02001001951



Features

- 30A switching capabilities
- PCB coil terminals, ideal for heavy duty load
- 4KV dielectric coil to contact
- Heavy load up to 7,200VA
- Open, Sealed & Unsealed type available
- Class B, Class F insulation available

CONTACT DATA

Contact Arrangement	1A	1B	1C(NO)	1C(NC)
Initial Contact Resistance	50mΩ(at 1A 24VDC)			
Contact Material	AgSnO, AgCdO			
Max. Switching Capacity	7200VA/560W	3600VA/280W	4800VA/560W	2400VA/280W
Max. Switching Voltage	277VAC/28VDC			
Max. Switching Current	30A	15A	20A	10A
JQX-105F-1 Rating	30A 240VAC 20A 28VDC	15A 240VAC 10A 28VDC	20A 240VAC 20A 28VDC	10A 240VAC 10A 28VDC
JQX-105F-1L Rating	25A 240VAC 20A 28VDC	15A 240VAC 10A 28VDC	20A 240VAC 20A 28VDC	10A 240VAC 10A 28VDC
Mechanical life	1 x 10 ⁷ OPS			
Electrical life	1 x 10 ⁵ OPS			

COIL

Coil power	DC:0.9W AC:2VA
Coil Voltage	5 to 110VDC 12 to 277VAC
Coil Resistance	See table below

SAFETY APPROVAL RATINGS

UL	1 Form A	30A@277VAC 20A@28VDC 2HP@250VAC 1HP@125VAC 277VAC(FLA=20)(LRA=60)
	1 Form B (NC)	15A@277VAC 10A@28VDC 1/2HP@250VAC 1/4HP@125VAC 277VAC(FLA=10)(LRA=33)
	1 Form C (NO)	20A 277VAC 20A 28VDC 2HP,250VAC 1HP,125VAC 277VAC(FLA=20)(LRA=60)
UL	1 Form C (NC)	10A@277VAC 10A@28VDC 1/2HP@250VAC 1/4HP@125VAC 277VAC(FLA=10)(LRA=33)
	TUV	15A 250VAC cos phi=0.4

CHARACTERISTICS

Initial Insulation Resistance	1000MΩ, 500VDC	
Dielectric Strength	Between coil and Contacts	2500VAC 1min.
	Between open contacts	1500VAC 1min.
Operate time (at nomi. Volt.)	15ms	
Release time (at nomi. Volt.)	10ms	
Ambient temperature	Class B	DC:-55 to 85°C;AC:-55 to 60°C
	Class F	DC:-55 to 105°C;AC:-55 to 85°C
Shock Resistance	Functional	98 m/s ²
	Destructive	980 m/s ²
Vibration Resistance	DA:1.5mm, 10 to 55Hz	
Humidity	98%, +40°C	
Termination	PCB	
Unit weight	Approx. 36g	
Construction	Sealed, Unsealed, Open (Only for DC Type)	

General Purpose Power Relays JQX-105F-1



HONGFA RELAY
ISO9001/QS9000/ISO14001 CERTIFIED

VERSION: EN01-20030910

COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. allowable Voltage VDC(at 25°C)	Coil Resistance Ω
5	3.75	0.5	6.5	27 ± 10%
6	4.50	0.6	7.8	40 ± 10%
9	6.75	0.9	11.7	97 ± 10%
12	9.00	1.2	15.6	155 ± 10%
15	11.25	1.5	19.5	256 ± 10%
18	13.50	1.8	23.4	380 ± 10%
24	18.00	2.4	31.2	660 ± 10%
48	36.00	4.8	62.4	2560 ± 10%
70	52.50	7.0	91	5500 ± 10%
110	82.50	11	143	13450 ± 10%

Nominal Voltage VAC	Pick-up Voltage VAC	Drop-out Voltage VAC	Max. allowable Voltage VDC(at 25°C)	Coil Resistance Ω
12	9.6	2.4	15.6	25 ± 10%
24	19.2	4.8	31.2	100 ± 10%
120	96.0	24.0	156	2500 ± 10%
208	166.4	41	270.4	11000 ± 10%
220/240	192	48	286/312	13490 ± 10%
277	220	54	360.1	15000 ± 10%

Note: When require pick-up voltage < 80% of nominal voltage, special order allowed.

ORDERING INFORMATION

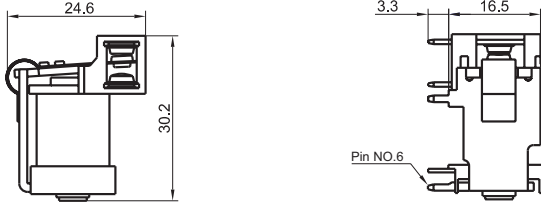
JQX-105F-1 / 018		D	T	1H	S	F
Type JQX-105-1: Open * JQX-105F-1L:25A JQX-105F-1:30A						
Coil voltage DC:5 to 110VDC AC:12 to 277VAC						
Coil Input D: DC A: AC						
Termination 6 : With Pin NO.6, Dielectric Strength Between Coil and Contact: 2500VAC T : Without Pin NO.6, Dielectric Strength Between Coil and Contact: 4000VAC NIL: Without Pin NO.6, Dielectric Strength Between Coil and Contact: 2500VAC						
Contact arrangement 1H:1A(SPST-NO) 1D: 1B(SPST-NC) 1Z: 1C(SPDT)						
Structure Nil: Unsealed S: Sealed						
Insulation Standard F: Class F Nil: Class B						

Note:* JQX-105-1 : Open, Only for DC type.

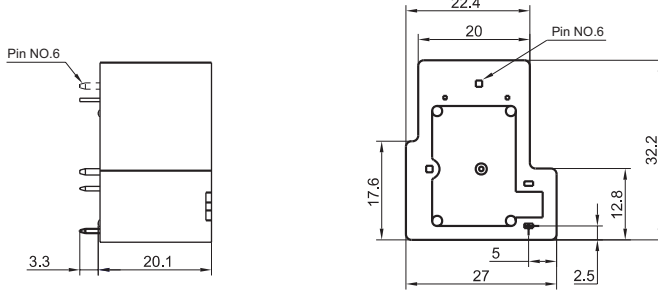
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Outline Dimensions

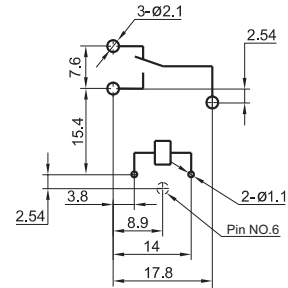
JQX-105-1



JQX-105F-1

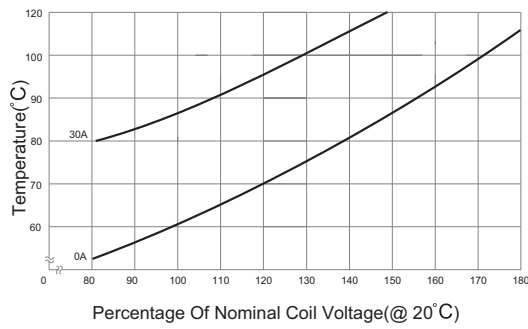


PCB layout



CHARACTERISTICS CURVE

COIL TEMPERATURE RISE



MAXIMUM SWITCHING POWER

