

# JQX-105F-4

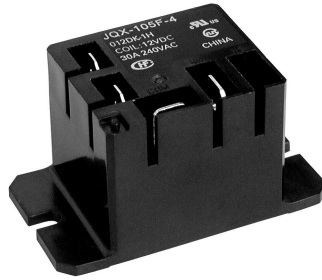
# MINIATURE HIGH POWER RELAY



File No.:E134517



File No.:CH0023315-2002A



### Features

- 30A switching capabilities
- 2.5KV dielectric coil to contacts
- Heavy load up to 7,200VA
- 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	AgCdO			
Max. Switching Capacity	7200VA/560W	3600VA/280W	4800VA/560W	2400VA/280W
Max. Switching Voltage	277VAC/28VDC			
Max. Switching Current	30A	15A	20A	10A
UL/CUR rating	30A 277VAC	15A 277VAC	20A 277VAC	10A 277VAC
	30A 28VDC		20A 28VDC	10A 28VDC
	2HP 250VAC		2HP 250VAC	1/4HP 250VAC
	1HP 125VAC		1HP 250VAC	1/2HP 125VAC
JQX-105F-4 Rating	30A 240VAC	15A 240VAC	20A 240VAC	10A 240VAC
	20A 28VDC	10A 28VDC	20A 28VDC	10A 28VDC
JQX-105F-4L Rating	25A 240VAC	15A 240VAC	20A 240VAC	10A 240VAC
	20A 28VDC	10A 28VDC	20A 28VDC	10A 28VDC
Mechanical life	1 x 10 <sup>7</sup> OPS			
Electrical life	1 x 10 <sup>5</sup> OPS			

### 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°C to 85°C AC:-55°C to 60°C
	Class F	DC:-55°C to 105°C AC:-55°C to 85°C
Shock Resistance	Functional	98 m/s <sup>2</sup>
	Destructive	980 m/s <sup>2</sup>
Vibration Resistance	DA: 1.5mm, 10 to 55Hz	
Humidity	98%, +40°C	
Termination	PCB & QC	
Unit weight	Approx. 36g	
Construction	Sealed & Dust Cover	

### COIL

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

### COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Coil Resistance Ω
5	3.75	0.5	27 ± 10%
6	4.50	0.6	40 ± 10%
9	6.75	0.9	97 ± 10%
12	9.00	1.2	155 ± 10%
15	11.25	1.5	256 ± 10%
18	13.50	1.8	380 ± 10%
24	18.00	2.4	660 ± 10%
48	36.00	4.8	2560 ± 10%
70	52.50	7.0	5500 ± 10%
110	82.50	11	13450 ± 10%

Nominal Voltage VAC	Pick-up Voltage VAC	Drop-out Voltage VAC	Coil Resistance Ω
12	9.6	2.4	25 ± 10%
24	19.2	4.8	100 ± 10%
120	96.0	24.0	2500 ± 10%
208	166.4	41	11000 ± 10%
220/240	192	48	13490 ± 10%
277	220	54	15000 ± 10%

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



## ORDERING INFORMATION

**JQX-105F-4 / 018 D K 1H S F**

**Type** JQX-105F-4: 30A JQX-105-4L: 25A

**Coil voltage** DC:5 to 110VDC AC:12 to 277VAC

**Coil Input** D: DC A: AC

**Coil terminal width** K: 4.8mm Nil: 2.8mm

**Contact arrangement** 1H:1A(SPST-NO) 1D:1B(SPST-NC) 1Z:1C(SPDT)

**Structure** S: Sealed Nil: Cover

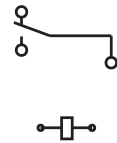
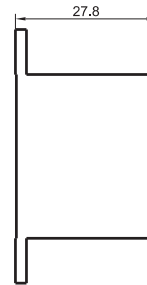
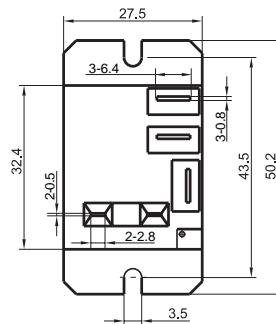
**Insulation Standard** F: Class F Nil: Class B

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

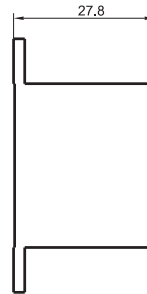
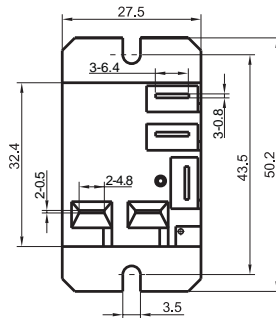
Outline Dimensions

Wiring Diagram

JQX-105F-4/ - - - -  
2.8mm Coil terminal width

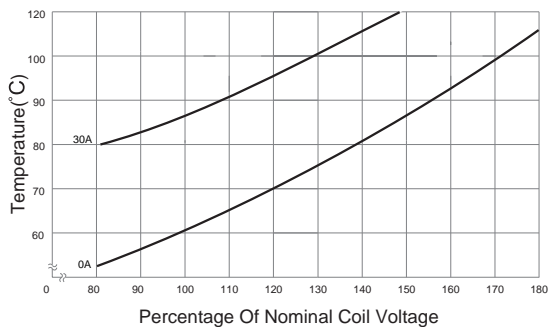


JQX-105F-4/ - -K- - -  
4.8mm Coil terminal width



## CHARACTERISTICS CURVE

COIL TEMPERATURE RISE



MAXIMUM SWITCHING POWER

