

JQX-105F-4(HF105F-4) MINIATURE HIGH POWER RELAY

cRUUS



Features

- 30A switching capability
- 2.5KV dielectric strength (between coil and contacts)
- Heavy load up to 7,200VA
- Class B, Class F insulation available
- Environmental protection product available (RoHs & WEEE compliant)

CONTACT DATA

Contact Arrangement	1A	1B	1C (NO)	1C (NC)
Initial Contact Resistance	50mΩ (at 1A 24VDC)			
Contact Material	AgSnO ₂ , 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-4 Rating	30A 240VAC 20A 28VDC	15A 240VAC 10A 28VDC	20A 240VAC 20A 28VDC	10A 240VAC 10A 28VDC
JQX-105F-4L 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			

CHARACTERISTICS

Initial Insulation Resistance	1000MΩ, 500VDC	
Dielectric Strength	Between coil and contacts	2500VAC 1min.
	Between open contacts	1500VAC 1min.
Operate time (at nomi. Volt.)	Max. 15ms	
Release time (at nomi. Volt.)	Max. 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 ²
	Destructive	980 m/s ²
Vibration Resistance	DA: 1.5mm, 10 to 55Hz	
Humidity	98%, +40°C	
Termination	QC	
Unit weight	Approx. 36g	
Construction	Sealed IP67 & Dust Cover	

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

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-4 / 018 D K 1H S T F XXX

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 IP67 Nil: Dust Cover

Contact Material T: AgSnO₂ Nil: AgCdO

Insulation Standard F: Class F Nil: Class B

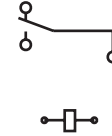
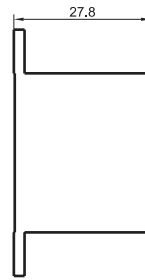
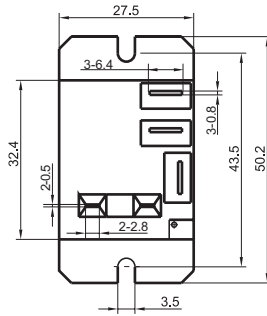
Special request code (For example: 551: Lead-free 555: RoHs & WEEE compliant)

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

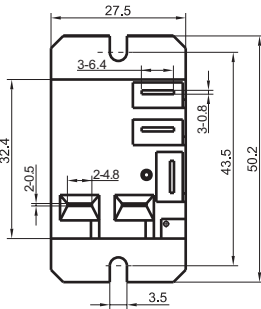
Outline Dimensions

Wiring Diagram

JQX-105F-4 L / □□□□-□-□□-□-□
2.8mm coil terminal width

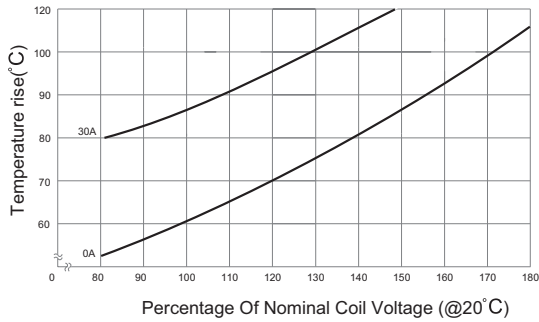


JQX-105F-4L / □□□□-□-□-□-□-□
4.8mm coil terminal width



CHARACTERISTICS CURVE

COIL TEMPERATURE RISE



MAXIMUM SWITCHING POWER

