

JQX-105F-4

MINIATURE HIGH POWER RELAY



File No.:E134517



File No.:CQC02001001955



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 | 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 | | | |

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 | NO | 10A 28VDC |
| | | 1/2HP 250VAC |
| | NC | 1/4HP 125VAC |
| | | 277VAC(FLA=10)(LRA=33) |

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 | PCB & QC | |
| Unit weight | Approx. 36g | |
| Construction | Sealed IP67 & Dust Cover | |



HONGFA RELAY
ISO9001、ISO/TS16949、ISO14001 CERTIFIED

VERSION: EN02-20040601

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

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

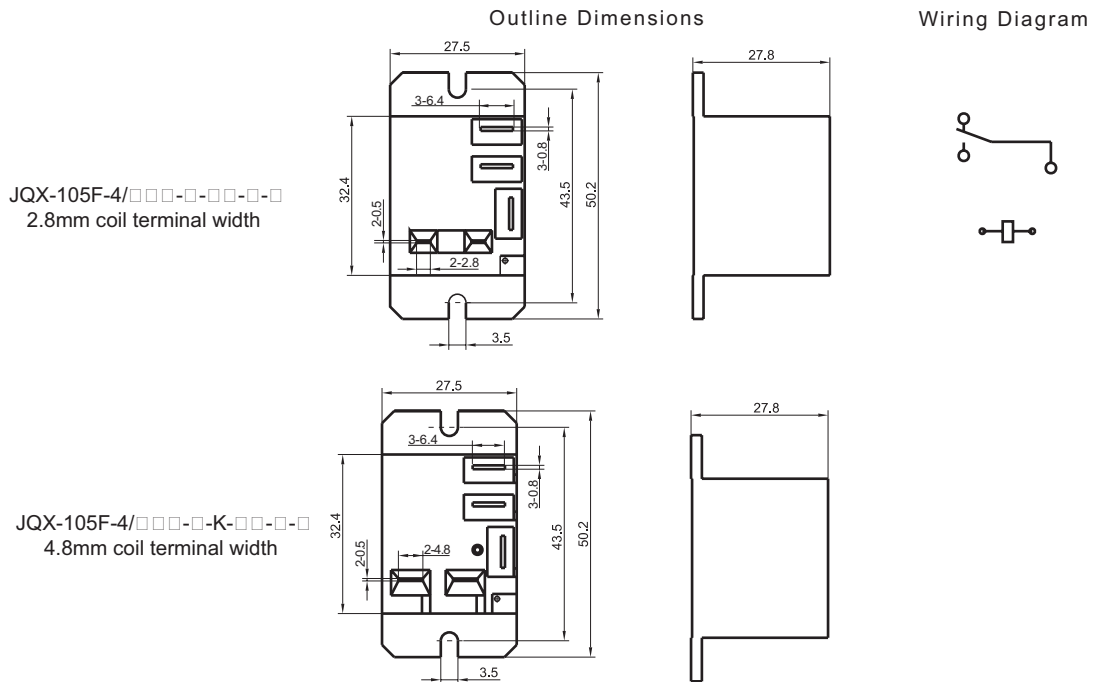
Contact arrangement 1H:1A(SPST-NO) 1D:1B(SPST-NC) 1Z:1C(SPDT)

Structure S: Sealed IP67 Nil: Dust Cover

Contact Material T: AgSnO₂ Nil: AgCdO

Insulation Standard F: Class F Nil: Class B

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT



CHARACTERISTICS CURVE

