



cUL US E173485

■ Features

- 2 to 3 pole configurations
- Conform to RoHS, ELV directive

■ Ordering Code

| HJQ-22F — ZZ (P) — F — D / 12VDC | | | | | |
|----------------------------------|--|-----------------------------|----------------------------------|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Relay Model | 2. Contact Form: 2Z: Form 2C, 3Z: Form 3C | 3. P: PCB Type, Nil: B Type | 4. F: Flange Type, Nil: Standard | | |
| 5. D: With LED, Nil: Standard | 6. Coil Nominal Voltage: 5, 6, 12, 24, 48, 110VDC; 6, 12, 24, 48, 110, 120, 220/240VAC | | | | |

■ Coil Data (at 20°C)

| | | | | | | | | |
|--------------------------|--|------|-----|------|-------|---------|---------|-------|
| Nominal Voltage(VDC) | 5 | 6 | 12 | 24 | 48 | 110/120 | 220/240 | 0.9W |
| Coil Resistance(Ω) | 28 | 40 | 160 | 640 | 2560 | 11000 | | |
| Rated Current(mA) | 178.5 | 150 | 75 | 37.5 | 18.75 | 10 | | |
| Max Operate Voltage(VDC) | 3.75 | 4.5 | 9 | 18 | 36 | 82.5 | | |
| Min Release Voltage(VDC) | 0.5 | 0.6 | 1.2 | 2.4 | 4.8 | 11 | | |
| Nominal Voltage(VAC) | | 6 | 12 | 24 | 48 | 110/120 | 220/240 | 1.2VA |
| Coil Resistance(Ω) | | 11.5 | 46 | 184 | 735 | 4550 | 14400 | |
| Max Operate Voltage(VAC) | | 4.8 | 9.6 | 19.2 | 38.4 | 88 | 176 | |
| Min Release Voltage(VAC) | | 1.2 | 2.4 | 4.8 | 9.6 | 22 | 44 | |
| Max Applicable Voltage | 130% of nominal voltage at 70°C, 170% of nominal voltage at 23°C | | | | | | | |

Note: Coil Resistance Tolerance of $\pm 10\%$ for 5-24VDC/6-48VAC, Coil Resistance Tolerance of $\pm 15\%$ for 48-110VDC/110-240VAC.

■ Contact Data

| | |
|-----------------------|--|
| Contact Form | 2Z/3Z |
| Contact Material | Silver Alloy |
| Load | Resistive Load(COS ϕ =1) |
| Contact Ratings | 7A 240VAC 7A 30VDC |
| Minimum Load | 100mA 5VDC |
| Max Switching Voltage | 240VAC/30VDC |
| Max Switching Current | 7A |
| Max Switching Power | 1680VA/210W |
| Contact Resistance | 100mΩMax at 6VDC 1A |
| Life Expectancy | Electrical: 100,000 Operations (at 30 Operations/minute) |
| | Mechanical: 10,000,000 Operations (at 300 Operations/minute) |

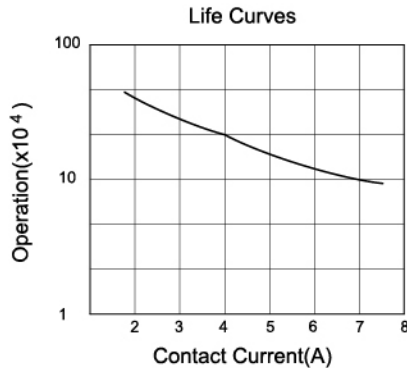
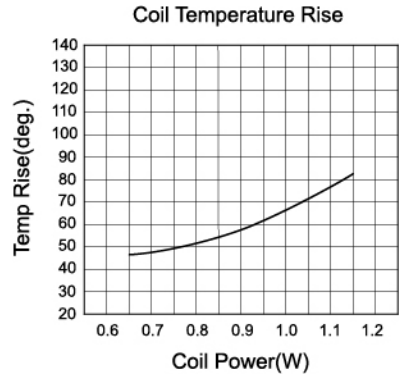
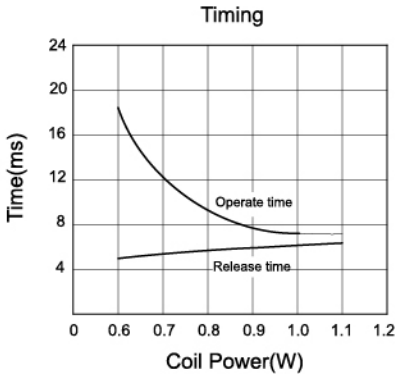
■ Approved Standards

| Model | Coil Rating | Safety Standard | Contact Rating |
|---------|---------------|-----------------|-----------------------|
| HJQ-22F | 12 to 110VDC | UL/cUL | 7A 240VAC 7A 30VDC |
| | 24 to 240VAC | | |
| | 24 to 240VAC | | |
| | 12 to 110VDC | CQC | 5A 240VAC 5A 28VDC |
| | 120 to 240VAC | | |

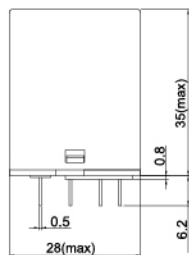
■ Characteristics Data

| | |
|---|---|
| Insulation Resistance | 100M Ω Min at 500VDC |
| Dielectric Strength Between Open Contacts | 1000VAC (for one minute) |
| Between Contacts and Coil | 1500VAC (for one minute) |
| Operate Time | 25ms |
| Release Time | 25ms |
| Temperature Range | -40°C to +70°C |
| Shock Resistance | Operating Extremes: 20G Damage Limits: 100G |
| Vibration Resistance | 10-55Hz, 1.5mm |
| Max. Switching Frequency | Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr |
| Humidity | 40-85% |
| Weight | Approx: 35g |
| Safety Standard | UL cUL CQC |

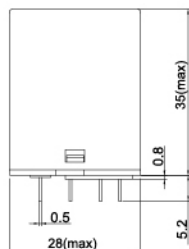
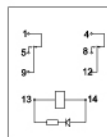
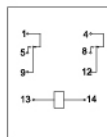
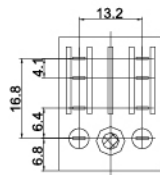
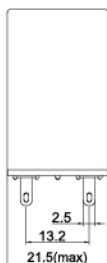
■ Engineering Data



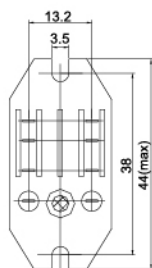
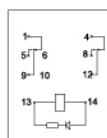
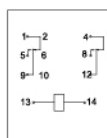
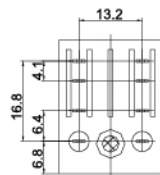
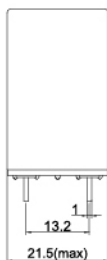
Overall and Mounting Dimensions



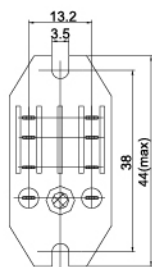
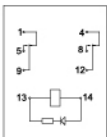
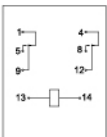
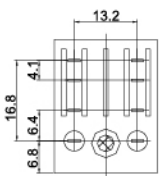
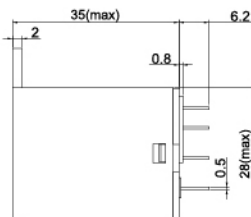
B Type



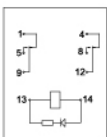
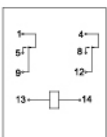
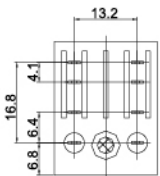
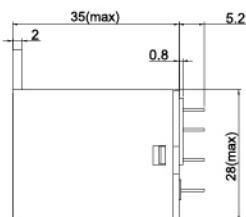
P Type



B Type (Flanger Type)



P Type (Flanger Type)



Remark:

- 1). In case the tolerance is not shown in outline dimension, the tolerance should be $\pm 0.2\text{mm}$ for outline dimension $\leq 1\text{mm}$; $\pm 0.3\text{mm}$ for outline dimension: $1 \sim 5\text{mm}$ and $\pm 0.4\text{mm}$ for outline dimension $> 5\text{mm}$.
- 2). The tolerance without indication is always $\pm 0.1\text{mm}$ for the dimension of PCB layout.

Disclaimer:

These specifications are just for customers' reference and subject to change without notice.