

# JZX-22F Miniature Relay



## 1. Overview

Available in three contact configurations: 2Z, 3Z, and 4Z. Complete range of AC/DC specifications with versatile mounting options. Comes with various socket choices, including models with indicator lights.

Similar models: HH52P(-L), MY2(N), JZX-18F(L), HH53P(-L), MY3(N), HH54P(-L) MY4(N).



## 2. Normal working conditions

|                            |               |
|----------------------------|---------------|
| <b>Ambient temperature</b> | -25°C ~ +70°C |
| Relative humidity          | +20~90%       |
| Atmospheric pressure       | 86kPa~106kPa  |
| Altitude                   | ≤2000m        |



## 3. Technical parameters

### 3.1 Contact data

| <b>Contact form</b>           | <b>2Z(C), 3Z(C), 4Z(C)</b>                        |
|-------------------------------|---|
| Contact resistance            | 100mΩ(6VDC 100mA)                                 |
| Material                      | Silver alloy(6VDC 100mA)                          |
| Contact capacity (COSΦ = 1.0) | 2Z, 3Z: 5A; 4Z: 3A(250VAC/30VDC)                  |
| Max. switching voltage        | 250VAC/30VDC                                      |
| Max. switching current        | 2Z, 3Z, 5A, 4Z, 3A                                |
| Max. switching power          | 2Z, 3Z, 1250VA/150W<br>4Z: 750VA/90W              |
| Electrical life (times)       | 1×10 <sup>5</sup>                                 |
| Mechanical life (times)       | 2Z, 4Z: 5×10 <sup>7</sup> ; 3Z: 1×10 <sup>7</sup> |

### 3.2 Performance data

| <b>Insulation resistance</b> |                                      | <b>100MΩ(500VDC)</b>                                   |
|------------------------------|--------------------------------------|--|
| Dielectric withstand voltage | Between contacts of different groups | 2000VAC, 1min  |
|                              | Between open contacts                | 1000VAC, 1min  |
| Pull-in time                 |                                      | ≤ 25ms   |
| Release time                 |                                      | ≤ 25ms   |
| Shock (stability)            |                                      | Acceleration 200m/S <sup>2</sup> , pulse duration 11ms |
| Vibration                    |                                      | Double amplitude 1mm, (10~55)Hz                        |
| Lead terminal type           |                                      | Plug-in type, PCB type (welding)                       |
| Max. overall dimensions (mm) |                                      | 27.8×21.8×43   |
| IP degree                    |                                      | IP50 (2Z, 4Z)  |

### 3.3 General coil data

| <b>Rated power loss</b> | <b>DC: 0.9~1.2W, AC: 1.8~2.0VA</b> |
|-------------------------|------------------------------------|
| Pull-in voltage         | DC: ≤ 80% Us; AC: ≤ 80% Us         |
| Release voltage         | DC: ≥ 10% Us; AC: ≥ 20% Us         |
| Max. voltage            | 110% Us                            |

## 3.4 Specific coil data

| Coil voltage VDC | Pull-in voltage VDC(≤) | Release voltage VDC(≥) | Coil resistance Ω           |
|------------------|------------------------|------------------------|-----------------------------|
| 5                | 4.0                    | 0.5                    | $28 \times (1 \pm 10\%)$    |
| 6                | 4.8                    | 0.6                    | $44 \times (1 \pm 10\%)$    |
| 12               | 9.6                    | 1.2                    | $160 \times (1 \pm 10\%)$   |
| 24               | 19.2                   | 2.4                    | $640 \times (1 \pm 10\%)$   |
| 36               | 28.8                   | 3.6                    | $1440 \times (1 \pm 10\%)$  |
| 48               | 38.4                   | 4.8                    | $2300 \times (1 \pm 10\%)$  |
| 100/110          | 88.0                   | 11.0                   | $11300 \times (1 \pm 10\%)$ |
| 220              | 176.0                  | 22.0                   | $44000 \times (1 \pm 10\%)$ |

| Coil voltage VAC | Pull-in voltage VAC(≤) | Release voltage VAC(≥) | Coil resistance Ω           |
|------------------|------------------------|------------------------|-----------------------------|
| 6                | 4.8                    | 1.2                    | $10.5 \times (1 \pm 10\%)$  |
| 12               | 9.6                    | 2.4                    | $44 \times (1 \pm 10\%)$    |
| 24               | 19.2                   | 4.8                    | $180 \times (1 \pm 10\%)$   |
| 36               | 28.8                   | 7.2                    | $380 \times (1 \pm 10\%)$   |
| 48               | 38.4                   | 9.6                    | $650 \times (1 \pm 10\%)$   |
| 100/110          | 88.0                   | 20.0                   | $3600 \times (1 \pm 10\%)$  |
| 110/120          | 96.0                   | 22.0                   | $3900 \times (1 \pm 10\%)$  |
| 200/220          | 176.0                  | 40.0                   | $13500 \times (1 \pm 10\%)$ |
| 220              | 176.0                  | 44.0                   | $14500 \times (1 \pm 10\%)$ |
| 220/240          | 192.0                  | 44.0                   | $16300 \times (1 \pm 10\%)$ |
| 380              | 304.0                  | 76.0                   | $42000 \times (1 \pm 10\%)$ |

Note 1: Coil parameters and specification values are measured at a coil temperature of 25°C.

Note 2: For reliable operation of the 380VAC coil, avoid continuous energization for extended periods.

Note 3: In high-temperature or high-humidity environments with rapid temperature changes, condensation may occur inside the relay. Dehumidification measures should be taken in such cases.

Note 4: Due to individual product variations, the predicted actual operating voltage is  $\leq 80\%$  of the rated value. The relay will operate normally at  $\geq 80\%$  of the rated voltage, but to ensure specified performance, apply the full rated voltage to the coil.

Note 5: Due to individual product variations, the predicted actual release voltage is  $\geq 20\%$  for AC coils and  $\geq 10\%$  for DC coils. To ensure reliable release, the voltage must be reduced below these values.

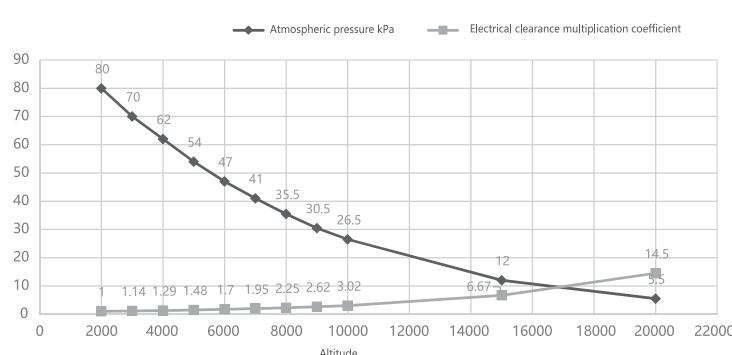
Note 6: Maximum voltage refers to the peak voltage that the relay coil can withstand for short durations.

Note 7: Altitude derating coefficient curve (reference multiplier for product capacity derating).

Note 8: Contact material parameters indicate the minimum applicable load, serving as a general guideline for switching micro-loads (e.g., electronic circuits). These values are not guaranteed and may vary based on switching frequency, environment, etc. Verify performance under actual operating conditions.

Note 9: It is recommended to power four sets of products using the same phase. If adjacent sets require different phases, select models with arc shields to prevent phase-to-phase short circuits caused by arcing.

## Altitude derating coefficient curve



#### 4. Matched socket

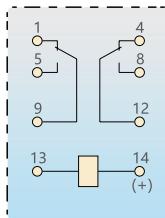
| Relay model                  | JZX-22F/2Z(D)                       |                                |                             |
|------------------------------|-------------------------------------|--------------------------------|-----------------------------|
| Matching socket + hook model | CZY08A-E( finger protection )+NG102 | CZY08A-02( Narrow body )+NG102 | CZY08B-01( widebody )+NG103 |
| Socket dimensions(mm)        | 72×23×31                            | 72×23×31                       | 63×30.5×26                  |
| Connection                   | Screw type                          |                                |                             |

| Relay model                  | JZX-22F/3Z(D)                       |              |              |
|------------------------------|-------------------------------------|--------------|--------------|
| Matching socket + hook model | CZY11A-E( finger protection )+NG102 | CZY11B+NG103 | CZY11A+NG102 |
| Socket dimensions(mm)        | 72×30×31                            | 63×30.5×26   | 72×30×31     |
| Connection                   | Screw type                          |              |              |

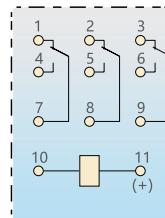
| Relay model                  | JZX-22F/4Z(D) |              |                                     |                                     |
|------------------------------|---------------|--------------|-------------------------------------|-------------------------------------|
| Matching socket + hook model | CZY14A+NG102  | CZY14B+NG103 | CZY14B-E( finger protection )+NG103 | CZY14A-E( finger protection )+NG102 |
| Socket dimensions(mm)        | 72×30×31      | 63×30.5×26   | 63×31×30                            | 72×30×31                            |
| Connection                   | Screw type    |              |                                     |                                     |

## 5. Overall dimensions

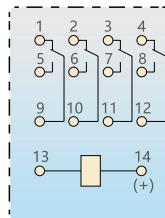
Connection diagram (2Z)



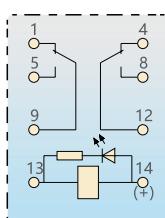
Connection diagram (3Z)



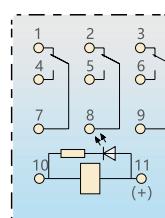
Connection diagram (4Z)



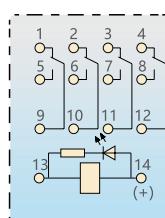
Connection diagram (2Z with indicator)



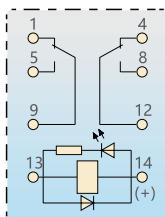
Connection diagram (3Z with indicator)



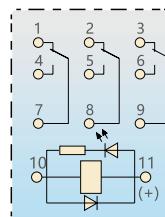
Connection diagram (4Z with indicator)



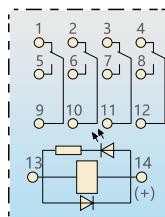
Connection diagram (2Z with indicator and diode)



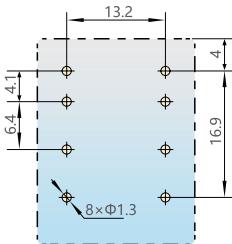
Connection diagram (3Z with indicator and diode)



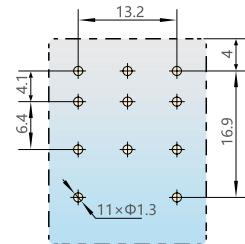
Connection diagram (4Z with indicator and diode)



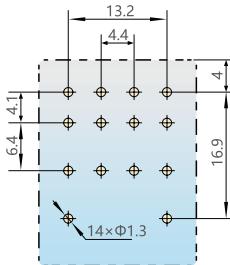
PCB mounting hole layout (2Z)

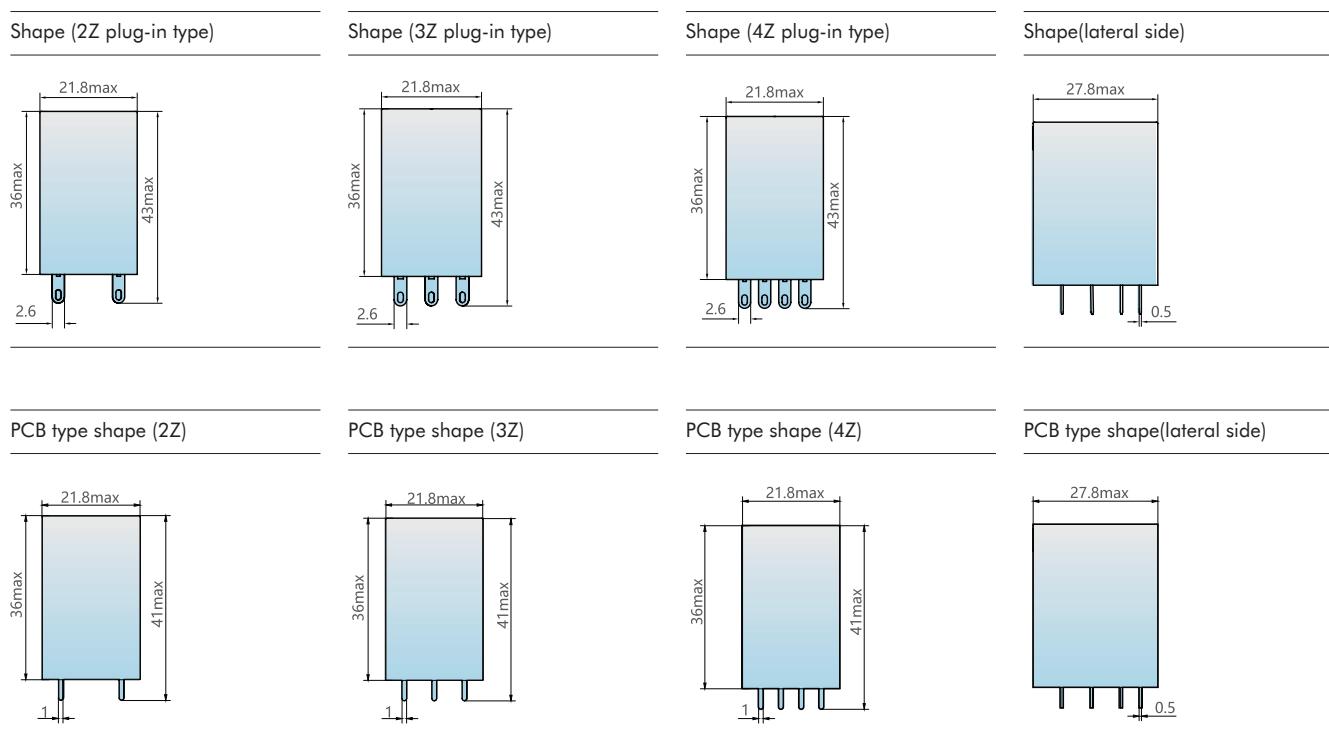


PCB mounting hole layout (3Z)



PCB mounting hole layout (4Z)





## 6. Ordering information

