



22×16.2×20.8

# JZC-22F<sub>4</sub>

c US E160644

R50631259

## Features

- Small size, light weight , low coil power consumption.
- Switching capacity can reach 32A/277VAC.
- High dielectric strength.
- Contact gap ≥ 2.1mm.
- PC board mounting is available.
- High-performance power relay, suitable for photovoltaic systems (solar-inverters), automotive applications, motor control, compressor control, and home appliances.

## Ordering Information

**JZC-22F<sub>4</sub>**   **F**   **A**   **32**   **T**   **12VDC**   **F**  
 1                      2                      3                      4                      5                      6                      7

|   |  |
|---|--|
| 1 Part number: JZC-22F <sub>4</sub>       | 4 Contact rating: 32A/277VAC               |
| 2 Enclosure: S: Wash tight; F: Flux proof | 5 Coil power: T:2.8W; H:1.67W; L:1.2W      |
| 3 Contact arrangement: A:1A               | 6 Coil rated voltage(V): DC:5,9,12,24,48   |
|   | 7 Resist heat class: NIL:Standard; F:155°C |

## Contact Data

|                                       |  |  |                          |
|---------------------------------------|--|--|--------------------------|
| Contact Arrangement                   | 1A(SPSTNO)   |  |                          |
| Contact Material                      | AgSnO <sub>2</sub>   |  |                          |
| Contact Rating                        | 32A/277VAC   |  |                          |
| Max. continuous current <sup>1)</sup> | 50A (at 55°C,65%of rated voltage)<br>40A (at 70°C,65%of rated voltage)<br>32A (at 105°C,65%of rated voltage) |  |                          |
| Max. Switching Power                  | 8864VA   |  |                          |
| Max. Switching Voltage                | 400VAC   | Max. Switching Current:32A                           |                          |
| Contact Resistance                    | ≤100mΩ   | Item 4.12 of IEC 61810-7                             |                          |
| Operation Life                        | Electrical   | 1×10 <sup>4</sup><br>1×10 <sup>4</sup> (1.67W 105°C) | Item 4.30 of IEC 61810-7 |
|                                       | Mechanical   | 5×10 <sup>5</sup>                                    | Item 4.31 of IEC 61810-7 |

**CAUTION:** 1).The relay is mounted on the PCB, the coil is applied with 100% rated voltage for 200ms, the coil excitation voltage is reduced to 65% of the rated voltage.

## Coil Parameter

| Dash numbers | Coil voltage VDC |      | Coil resistance Ω ± 10% | Pick-up voltage VDC(max) (80%of rated voltage ) | Drop-out voltage VDC(min) (5% of rated voltage) | Coil power W | Operate time ms | Release time ms |
|--------------|------------------|------|-------------------------|---|---|--------------|-----------------|-----------------|
|              | Rated            | Max. |                         |   |   |              |                 |                 |
| 009-2800     | 9                | 11.7 | 28.9                    | 7.2   | 0.45  | 2.8          | ≤15             | ≤10             |
| 012-2800     | 12               | 15.6 | 51.4                    | 9.6   | 0.6   |              |                 |                 |
| 024-2800     | 24               | 31.2 | 205.7                   | 19.2  | 1.2   |              |                 |                 |
| 005-1670     | 5                | 6.5  | 14.97                   | 4   | 0.25  | 1.67         | ≤15             | ≤10             |
| 009-1670     | 9                | 11.7 | 48.5                    | 7.2   | 0.45  |              |                 |                 |
| 012-1670     | 12               | 15.6 | 86.2                    | 9.6   | 0.6   |              |                 |                 |
| 024-1670     | 24               | 31.2 | 344.9                   | 19.2  | 1.2   |              |                 |                 |
| 048-1670     | 48               | 62.4 | 1379.6                  | 38.4  | 2.4   |              |                 |                 |
| 005-1200     | 5                | 6.5  | 20.8                    | 4   | 0.25  | 1.2          | ≤15             | ≤10             |
| 009-1200     | 9                | 11.7 | 67.5                    | 7.2   | 0.45  |              |                 |                 |
| 012-1200     | 12               | 15.6 | 120                     | 9.6   | 0.6   |              |                 |                 |
| 024-1200     | 24               | 31.2 | 480                     | 19.2  | 1.2   |              |                 |                 |
| 048-1200     | 48               | 62.4 | 1920                    | 38.4  | 2.4   |              |                 |                 |

**CAUTION:** 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
 2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.  
 3.Coil holding voltage is 36% of nominal voltage after applying nominal voltage for 200 ms.

## Characteristics

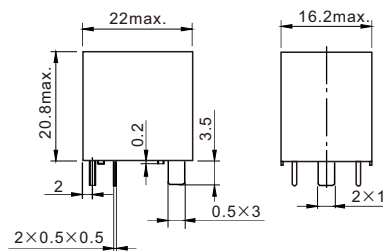
|   |  |  |
|---|--|--|
| Insulation Resistance   | 1000M $\Omega$ min (at 500VDC)                                     | Item 4.11 of IEC 61810-7                             |
| Dielectric Strength<br>Between Contacts<br>Between Contact and Coil | 50/60Hz 2000V 1min<br>50/60Hz 4000V 1min                           | Item 4.9 of IEC 61810-7<br>Item 4.9 of IEC 61810-7   |
| Shock Resistance  | Functional: 98m/s <sup>2</sup><br>Destructive: 980m/s <sup>2</sup> | Item 4.26 of IEC 61810-7<br>Item 4.26 of IEC 61810-7 |
| Vibration Resistance  | 10Hz~55Hz Double amplitude 1.5mm                                   | Item 4.28 of IEC 61810-7                             |
| Terminals Strength  | 10N  | Item 4.24 of IEC 61810-7                             |
| Ambient Temperature   | -40℃~105℃  |  |
| Relative Humidity   | 5% to 85%  | Item 4.16 of IEC 61810-7                             |
| Mass  | 16g  | Item 4.7 of IEC61810-7                               |

## Safety Approvals

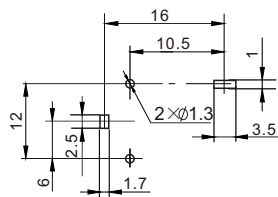
| Safety approval | UL&CUR            | TUV               |
|-----------------|-------------------|-------------------|
| Load            | 32A/277VAC,250VAC | 32A/277VAC,250VAC |

## Dimensions

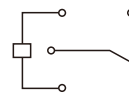
mm



Dimensions



Mounting(Bottom view)



Wiring diagram (Bottom view)

**CAUTION:** In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm ;  
outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.