



RoHS Compliant



E197852

31.9 x 26.8 x 28.1 mm

## Features

- UL F class rated standard
- Small size and light weight, low coil power consumption
- Heavy contact load, strong shock and vibration resistance
- UL/CUL, TÜV certified

## Contact Data\*

|                   |      |   |
|-------------------|------|---|
| UL Contact Rating | N.O. | 5A @ 280VAC Ballast<br>5A @ 280VAC General Purpose<br>20A @ 240VAC Resistive, 250k cycles, 40C<br>25A @ 277VAC, Resistive 100k cycles, 40C<br>40A @ 240VAC Resistive, 40C<br>30A @ 277VAC General Purpose<br>2hp @ 250VAC, 40C; 1hp @ 125VAC, 50K cycles, 40C |
|                   | N.C. | 5A @ 280VAC Ballast<br>5A @ 280VAC General Purpose<br>30A @ 240VAC Resistive, 40C<br>30A @ 30VDC, 40C<br>20A @ 277VAC General Purpose<br>1-1/2hp @ 250VAC; 1/4hp @ 125VAC, 50K cycles, 40C  |

|                    |      |                                     |
|--------------------|------|-------------------------------------|
| TÜV Contact Rating | N.O. | 40A @ 240VAC; 14VDC<br>30A @ 277VAC |
|                    | N.C. | 30A @ 240VAC; 14VDC<br>20A @ 277VAC |

|                           |  |
|---------------------------|--|
| Contact Arrangement       | 1A = SPST N.O.<br>1B = SPST N.C.<br>1C = SPDT                        |
| Contact Resistance        | < 30 milliohms initial   |
| Contact Material          | AgSnO <sub>2</sub> AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> |
| Maximum Switching Power   | 9600VA, 1120 W   |
| Maximum Switching Voltage | 277VAC, 110VDC   |
| Maximum Switching Current | 40A  |

## Coil Data DC Parameters\*

| Coil Voltage VDC |       | Coil Resistance Ω +/- 10% |       | Pick Up Voltage VDC (max) | Release Voltage VDC (min) | Coil Power W | Operate Time ms | Release Time ms |
|------------------|-------|---------------------------|-------|---------------------------|---------------------------|--------------|-----------------|-----------------|
| Rated            | Max   | .6W                       | .9W   | 75% of rated voltage      | 10% of rated voltage      |              |                 |                 |
| 5                | 6.5   | 42                        | 28    | 3.75                      | .5                        | .60<br>.90   | 15              | 10              |
| 9                | 11.7  | 135                       | 90    | 6.75                      | .9                        |              |                 |                 |
| 12               | 15.6  | 240                       | 160   | 9.00                      | 1.2                       |              |                 |                 |
| 24               | 31.2  | 960                       | 640   | 18.00                     | 2.4                       |              |                 |                 |
| 48               | 62.4  | 3840                      | 2560  | 36.00                     | 4.8                       |              |                 |                 |
| 110              | 140.3 | 20167                     | 13445 | 82.50                     | 11.0                      |              |                 |                 |

## Coil Data AC Parameters\*

| Coil Voltage VAC |      | Coil Resistance Ω +/- 10% |  | Pick Up Voltage VAC (max) | Release Voltage VAC (min) | Coil Power VA | Operate Time ms | Release Time ms |
|------------------|------|---------------------------|--|---------------------------|---------------------------|---------------|-----------------|-----------------|
| Rated            | Max  |                           |  | 75% of rated voltage      | 30% of rated voltage      |               |                 |                 |
| 12               | 15.6 | 27                        |  | 9.00                      | 3.6                       | 2VA           | 15              | 10              |
| 24               | 31.2 | 120                       |  | 18.00                     | 7.2                       |               |                 |                 |
| 110              | 143  | 2360                      |  | 82.50                     | 33.0                      |               |                 |                 |
| 120              | 156  | 3040                      |  | 90.00                     | 36.0                      |               |                 |                 |
| 220              | 286  | 13490                     |  | 165.00                    | 66.0                      |               |                 |                 |
| 240              | 312  | 15320                     |  | 180.00                    | 72.0                      |               |                 |                 |
| 277              | 360  | 20210                     |  | 207.00                    | 83.1                      |               |                 |                 |

# J115F2

## General Data\*

|  |  |
|--|--|
| Electrical Life @ rated load                               | 100K cycles, average   |
| Mechanical Life  | 10M cycles, average  |
| Insulation Resistance                                      | 1000M Ω min. @ 500VDC initial  |
| Dielectric Strength, Coil to Contact<br>Contact to Contact | 2500V rms min. @ sea level initial<br>1500V rms min. @ sea level initial |
| Shock Resistance   | 200m/s <sup>2</sup> for 11 ms  |
| Vibration Resistance                                       | 1.50mm double amplitude 10~40Hz  |
| Terminal (Copper Alloy) Strength                           | 10N  |
| Operating Temperature                                      | -55°C to +125°C  |
| Storage Temperature  | -55°C to +155°C  |
| Solderability  | 260°C for 5 s  |
| Weight   | 35g  |

\* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

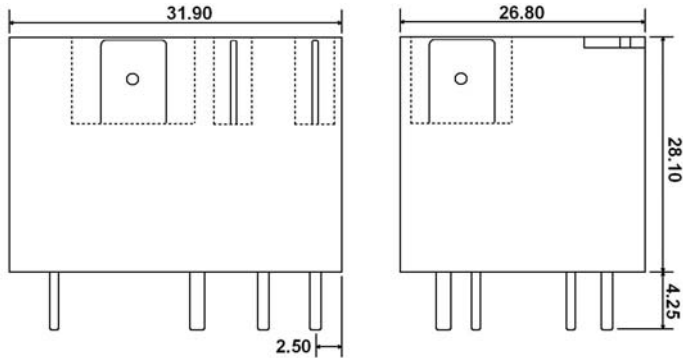
## Ordering Information

|   |        |    |       |   |    |
|---|--------|----|-------|---|----|
| 1. Series   | J115F2 | 1C | 12VDC | S | .9 |
| J115F2  |        |    |       |   |    |
| 2. Contact Arrangement                                |        |    |       |   |    |
| 1A = SPST N.O.  |        |    |       |   |    |
| 1B = SPST N.C.  |        |    |       |   |    |
| 1C = SPDT   |        |    |       |   |    |
| 3. Profile  |        |    |       |   |    |
| Blank = Standard                                      |        |    |       |   |    |
| L = Low profile                                       |        |    |       |   |    |
| 4. Coil Voltage                                       |        |    |       |   |    |
| 5VDC  | 12VAC  |    |       |   |    |
| 9VDC  | 24VAC  |    |       |   |    |
| 12VDC   | 110VAC |    |       |   |    |
| 24VDC   | 120VAC |    |       |   |    |
| 48VDC   | 220VAC |    |       |   |    |
| 110VDC  | 240VAC |    |       |   |    |
|   | 277VAC |    |       |   |    |
| 5. Sealing Option                                     |        |    |       |   |    |
| S = Sealed (standard)                                 |        |    |       |   |    |
| N = No cover  |        |    |       |   |    |
| 6. Coil Power   |        |    |       |   |    |
| .9 = .9W  |        |    |       |   |    |
| .6 = .6W  |        |    |       |   |    |
| Blank = 2VA (AC Coil)                                 |        |    |       |   |    |
| 7. Contact Material                                   |        |    |       |   |    |
| Blank = AgSnO <sub>2</sub>                            |        |    |       |   |    |
| U = AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> |        |    |       |   |    |

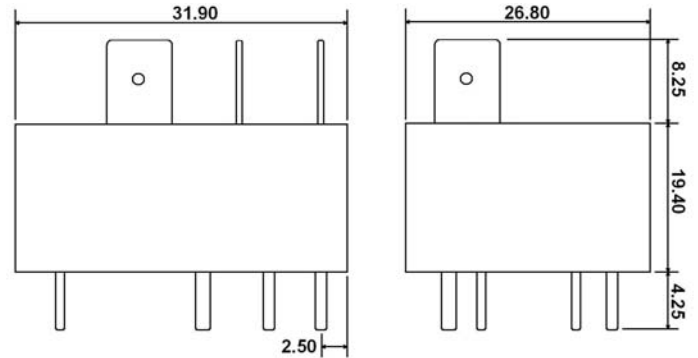
# J115F2

## Dimensions

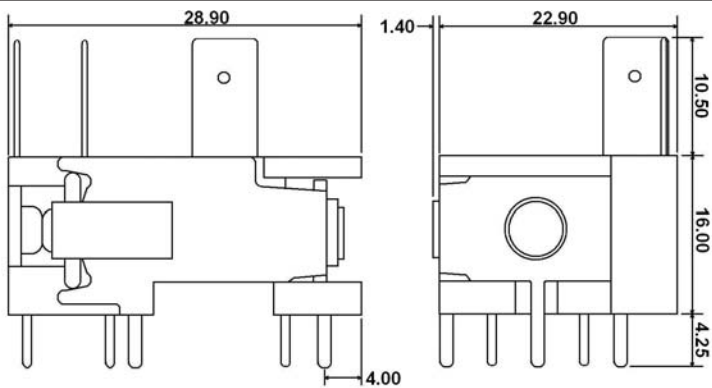
Units = mm



**Blank = Standard Profile**



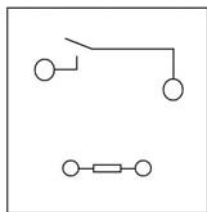
**L = Low Profile**



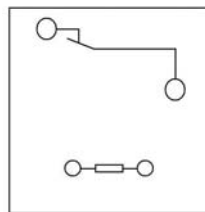
**N = No Cover**

## Schematics & PC Layouts

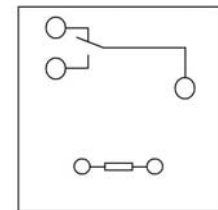
Bottom Views



**1A**



**1B**



**1C**

