
$31.7 \times 26.9 \times 20.3 \mathrm{~mm}$

## Features

- Small size and light weight, low coil power consumption
- Heavy contact load, strong shock and vibration resistance


## Contact Data*

| Contact Rating $\quad$ N.O. | 50A @ 240VAC Resistive, 10K cycles $40^{\circ} \mathrm{C}$ |
| :--- | :--- |
|  | N.C. |${35 \mathrm{~A} \text { @ 240VAC Resistive, 10K cycles } 40^{\circ} \mathrm{C}}^{\text {Contact Arrangement }}$| $1 \mathrm{~A}=$ SPST N.O. |  |
| :--- | :--- |
|  | $1 \mathrm{~B}=$ SPST N.C. |
|  | $1 \mathrm{C}=$ SPDT |


| Contact Resistance | $<30$ milliohms initial |
| :--- | :--- |
| Contact Material | $\mathrm{AgSnO}_{2}, \mathrm{AgSnO}_{2} \mathrm{In}_{2} \mathrm{O}_{3}$ |
| Maximum Switching Power | $1200 \mathrm{~W}, 12000 \mathrm{VA}$ |
| Maximum Switching Voltage | $277 \mathrm{VAC}, 110 \mathrm{VDC}$ |
| Maximum Switching Current | 50 A |

## Coil Data DC Parameters*

| Coil Voltage VDC |  | Coil Resistance$\Omega+/-10 \%$ |  | Pick Up Voltage VDC (max) $75 \%$ of rated voltage | Release Voltage VDC (min) <br> $10 \%$ of rated voltage | Coil Power W | Operate Time ms | Release Time ms |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rated | Max | .9W | 1.5 W |  |  |  |  |  |
| 5 | 6.5 | 28 | 16.7 | 3.75 | . 5 |  |  |  |
| 9 | 11.7 | 90 | 54 | 6.75 | . 9 |  |  |  |
| 12 | 15.6 | 160 | 96 | 9.00 | 1.2 | 1.5W | 15 | 10 |
| 24 | 31.2 | 640 | 384 | 18.00 | 2.4 |  |  |  |
| 48 | 62.4 | 2560 | 1536 | 36.00 | 4.8 |  |  |  |

## Coil Data AC Parameters*

| Coil Voltage |  | Coil Resistance <br> $\Omega+/-10 \%$ | Pick Up Voltage <br> VAC (max) <br> $75 \%$ of rated <br> Voltage | Release Voltage <br> VAC (min) <br> $30 \%$ of rated <br> voltage | Coil Power <br> VA | Operate Time <br> ms | Release Time <br> ms |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rated | Max | 2.7 VA | Tim |  |  |  |  |
| 24 | 31.2 | 96 | 18.0 | 7.2 |  |  |  |
| 120 | 156 | 2320 | 90.0 | 36.0 | 2.7 VA | 15 | 10 |
| 220 | 286 | 9500 | 165.0 | 66.0 |  |  |  |
| 240 | 312 | 11600 | 180.0 | 72.0 |  |  |  |
| 277 | 360 | 15600 | 207.0 | 83.1 |  |  |  |

## General Data*

| Electrical Life @ rated load | 100 K cycles, average |
| :--- | :--- |
| Mechanical Life | 10 M cycles, avereage |
| Insulation Resistance | $100 \mathrm{M} \Omega$ min. @ 500 VDC initial |
| Dielectric Strength, Coil to Contact | 4000 V rms min. @ sea level initial(H = high dielectric strength option) <br> 2500 V rms min. @ sea level initial <br>  <br>  <br> Contact to Contact <br> $1500 \mathrm{~V} \mathrm{rms} \mathrm{min} @ sea level initial$. |
| Shock Resistance | $200 \mathrm{~m} / \mathrm{s}^{2}$ for 11 ms |
| Vibration Resistance | 1.50 mm double amplitude $10 \sim 40 \mathrm{~Hz}$ |
| Terminal (Copper Alloy) Strength | 10 N |
| Operating Temperature | $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C} \mathrm{F} \mathrm{Class}$ |
| Storage Temperature | $-55^{\circ} \mathrm{C}$ to $+155^{\circ} \mathrm{C} \mathrm{F} \mathrm{Class}$ |
| Solderability | $260^{\circ} \mathrm{C}$ for 5 s |
| Weight | $30 \mathrm{~g}, 27 \mathrm{~g} \mathrm{no} \mathrm{cover}$ |

[^0]
## Ordering Information



## CIT <br> Relay \& Switch <br> J115l-1 50amp

## Dimensions

## Units $=m m$



## Schematics \& PC Layouts

## Bottom View




[^0]:    * 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
     the operation of the relay.

