# 900CPR-1-BL-U

# Curent Protection Relay

DIN 35mm

## Features :

- 1Ø - 2 Wire Input
- Monitors Under Current & Over Current
- True RMS Measurement
- Power ON Delay, Trip Time Delay and Recovery Time Delay
- Adjustable Switching Hysteresis
- Two Alarm Relay with NC or NO operation selectable
- DIN Rail Mount

Certifications : CE

### Display Specifications

| | |
|---|---|
| Type | Digital |
| Display | Liquid Crystal Display with backlight |
| No of LED | 1 |
| No of Push Button | 3 |

### LED Indication Chart

| Condition | 'R1' LED | 'R2' LED |
|---|---|---|
| Nominal Condition | OFF | OFF |
| Fault Condition (if Programming Relay1) | ON | OFF |
| Fault Condition (if Programming Relay2) | OFF | ON |
| Fault Condition (if Programming for both relay) | ON | ON |

### Input Specifications

| | |
|---|---|
| **Functions** | |
| Measurements | Under current and Over current |
| Time Settings | Power ON delay, Trip time delay, Recovery time delay |
| Alarm Indications | Trip |
| Latching | Selectable |
| Reset | Auto / Manual (Selectable) |
| Electrical Connection | 1Ø - 2 wire |
| **CT Settings** | |
| CT Primary | 1A / 5A - 999A (Selectable) |
| CT Secondary | 1A / 5A (Selectable) |
| **Current Rating** | |
| Measuring Range (RMS Value) | 0 - 1.19kA |
| **Trip Settings** | |
| Under Current | 0 - 999A (0 - 100% of CT Primary Setting) |
| Over Current | 0.5A - 1.19kA (10 - 120% of CT Primary Setting) |
| Current Asymmetry | 5.0 - 99.9% |
| **Trip Time Settings** | |
| Power ON Delay | 0 .5 - 99.9sec |
| Trip Time Delay | 0 - 99.9sec |
| Recovery Time Delay | 0 - 99.9sec (In Auto Reset Mode) |
| Response Time | < 200ms |
| **Hysteresis** | |
| Current | 0.1 - 99.9A |
| **Resolution** | |
| Current | 0.01, 0.1, 1A, 0.01kA (Depends of CT Setting) |
| **Accuracy** | |
| Current | ±1% of Setting ±2 digits |
| Time Setting Accuracy | ±5% of Setting ± 200ms |

### Output Specifications

| | |
|---|---|
| No. of Relays | 2 |
| Type of Output (Relay 1) | 1C/O (SPDT) |
| Type of Output (Relay 2) | 1C/O (SPDT) |
| Relay Rating | NO / 5A, 250V AC<br>NC / 3A, 250V AC |

### Auxiliary Supply Specifications

| | |
|---|---|
| Supply Voltage (Factory Set) | 85 to 270V AC / DC |
| Frequency | 50 - 60Hz |
| VA Rating | 4VA max |

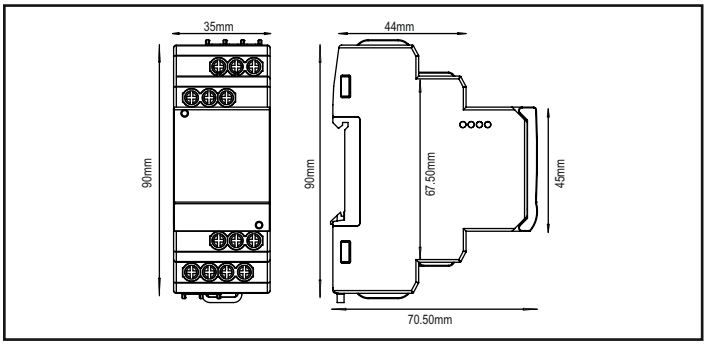
### Environmental Specifications

| | |
|---|---|
| Temperature | Operating Temperature : 0 to +50°C<br>Storage Temperature : -20 to +70°C |
| Humidity (non - condensing) | Upto 95% RH |
| Pollution Degree | |
| For PCB | 2 |
| For Product | 3 |
| Degree of Protection Device | IP20 |

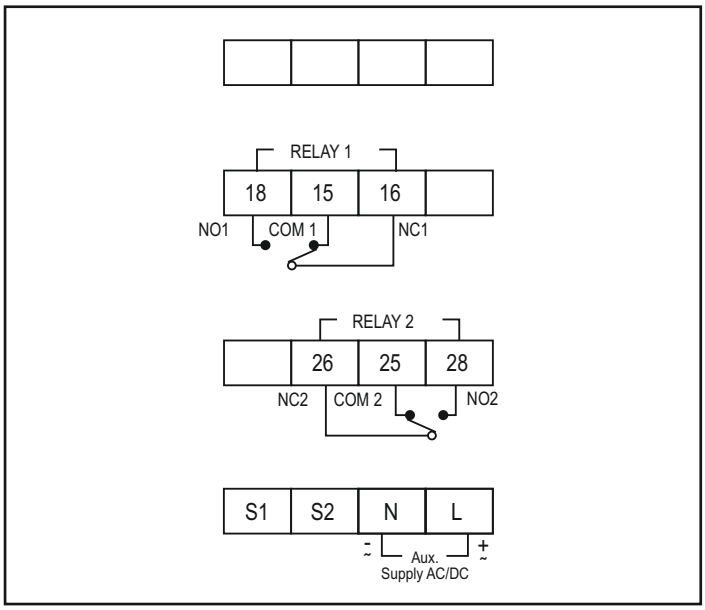
### Mechanical Specifications

| | |
|---|---|
| Mounting | DIN Rail |
| Weight | 150gms |
| Screw tightening torque | 0.5 NM |

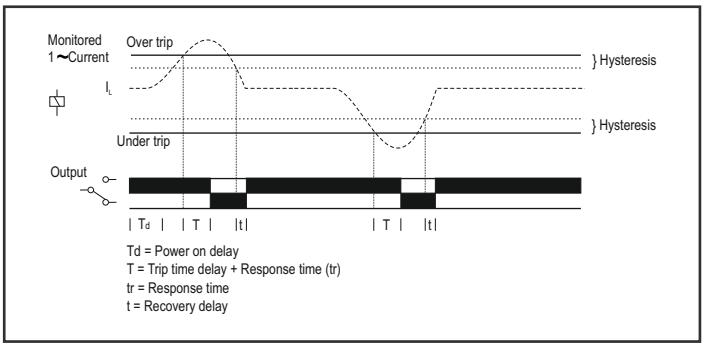
### Dimensions




### Terminal Connection




### Timing Diagram




### Compliance

| Applicable EMI / EMC Standards | | |
|---|---|---|
| Product Standard : IEC 60947-2 | | |
| **Category** | **Reference Standards** | **Testing Level** |
| Electrostatic Discharge | IEC 61000-4-2 | Level-3 |
| Electrical Fast Transient / Brust | IEC 61000-4-4 | Level-3 |
| Electromagnetic Field | IEC 61000-4-3 | Level-3 |
| Surge | IEC 61000-4-5 | Level-3 |
| Conducted RF | IEC 61000-4-6 | Level-2 |
| Rated Power Frequency | IEC 61000-4-8 | Level-4 |
| Voltage Dip / Short Interruptions | IEC 61000-4-11 | Level-3 |
| Conducted Emissions | CISPR-11 | Class-B |
| Radiated Emission | CISPR-11 | Class-A |
| Emission & Immunity | IEC 61326-1 | |
| Safety | IEC 61010-1 | |

## Ordering Information

| Product Code | Supply Voltage | Certification |
|---|---|---|
| **900CPR-1-BL-U-CE** | 85 to 270V AC / DC | CE |