# **M** MULTISPAN

## **CURRENT PROTECTION RELAY CPR 35**



### **TECHNICAL SPECIFICATION**

### FEATURES:

True RMS Measurement

Protection available

- Over Current
- Under Current
- Current Asymmetry
- . Single phase prevention (i.e it can trip relay in case of any phase current is become zero)

Auto/Manual /ZVR (Zero Value Reset) reset option

Three phase current display

Auto save out feature

Time parameter: Power on delay

Trip delay

Initial time delay

Recovery time (Auto reset / ZVR)

### INPUT SPECIFICATION:

Primary CT value	5 to 999 Selectable
Secondary current AC	0.05 to 5 Amp AC
Resolution	0.01A, 0.1A, 1A

#### **DISPLAY AND KEY:**

Display	UPPER: 3 Digit 7 Seg 0.4" LOWER: 3 Digit 7 Seg 0.28"
Keys	SET, INC, DEC/ RST

#### **OUTPUT SPECIFICATION:**

Relay	1 nos.
Relay Type	1 C/O (NO-C-NC)
Rating	5A, 250V AC/30 V DC

#### ACCURACY

Class 1.0 (Standard)

### **GENERAL SPECIFICATION:**

Dimension (mm)	90 (H) x 35 (W) x 61.5 (D) mm
Trip Setting	Under current : 0.00 to 100% of primary C.T value
mp octaing	Over current : 0.00 - 120% of primary C.T value
Time parameter	Trip delay time: 0 to 999 sec Power on time: 0 to 99 sec Initial time delay: 0 to 99 sec Recovery time: 0 to 99 sec

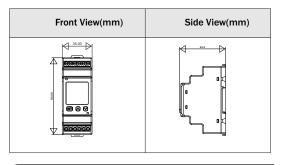
### AUXILIARY SUPPLY:

Supply voltage	100 to 250V AC, 50-60Hz
Power consumption (VA RATING)	3 VA @ 230V AC MAX

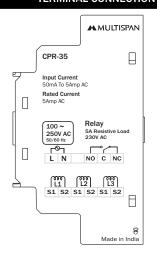
### **ENVIRONMENT CONDITION:**

Operating Temp.	0°C to 55°C
Relative Humidity	UP to 95% RH (non-condensing)

## MECHANICAL INSTALLATION



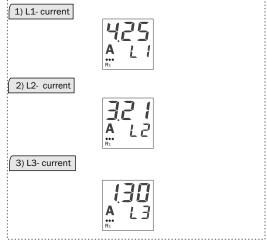
## TERMINAL CONNECTION



### **KEY OPERATION**

FUNCTION	PRESS KEY
OPERATOR M	ODE
To enter in parameter setting	SET For 5 sec
To view individual phase current	△ OR ▼RST
To Scroll & Hold Page	SET +
To reset the relay contact in manual mode after tripping	RST
PARAMETER SETTIN	IG MODE
It is used to set parameter value and to be save & exit from menu	SET
To increment value in parameter setting	
To decrement value in parameter setting	RST

### **DISPLAY PAGE**



### **MAINTENANCE**

- 1) The equipment should be cleaned regularly to avoid blockage of ventilating parts.
- 2) Clean the equipment with a clean soft cloth. Do not use isopropyl alcohol or any other cleaning agent.
- 3) Fusible resistor must not be replaced by operator.

## MECHANICAL INSTALLATION GUIDELINES

- 1) To install the instrument on a DIN rail, raise the clamp at the back of the instrument and place it on the rail. Now release the clamp, so the instrument fits on the DIN rail.
- 2) Ensure proper fitting of the instrument by pulling it outwards.
- 3) To remove the instrument raise the clamp to release it from the DIN rail.
- 4) The equipment in its installed state must not come in close proximity to any heating source, caustic vapors, oil steam, or other unwanted process byproducts.
- 5) Do not connect anything to unused terminals.

### INSTALLATION GUIDELINES

- 1) Do not allow pieces of metal, wire clippings, or fine metallic fillings from installation to enter the product or else it may lead to a safety hazard that may in turn endanger life or cause electrical shock to the operator.
- 2) Circuit breaker or mains switch must be installed between power source and supply terminal to facilitate power 'ON' or 'OFF' function. However this mains switch or circuit breaker must be installed at convenient place normally accessible to the operator.
- 3) Use and store the instrument within the specified ambient temperature and humidity ranges as mentioned in this manual.



### SAFETY PRECAUTION

All safety related codifications, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument.

If all the equipment is not handled in a manner specified by the manufacturer, it might impair the protection provided by the equipment.



Read complete instructions prior to installation and operation of the unit.



WARNING: Risk of electric shock.

## WARNING GUIDELINES



WARNING : Risk of electric shock.

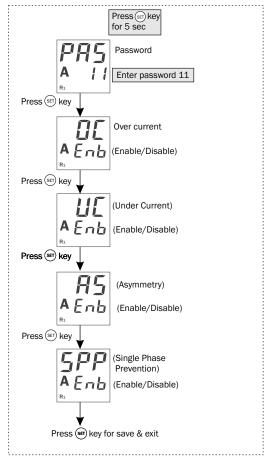
- 1) To prevent the risk of electric shock, power supply to the equipment must be kept OFF while doing the wiring arrangement. Do not touch the terminals while power is being supplied.
- 2) To reduce electro magnetic interference, use wire with adequate rating and twists of the same of equal size shall be made with shortest connection.
- 3. Cable used for connection to power source, must have a cross section of 1mm or greater. These wires should have insulations capacity made of at least 1.5kV.
- 4) A better anti-noise effect can be expected by using standard power supply cable for the instrument.

### PARAMETER SETTING

Password 11 : To Enable / Disable trip parameter (Over current, Under current, Asymmetry, Single phase prevention)

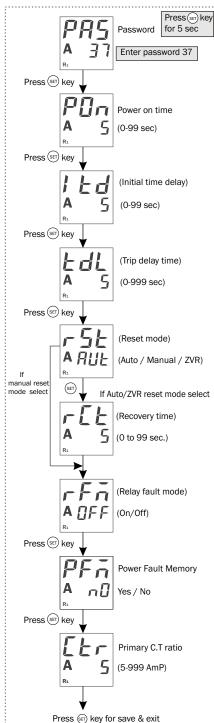
Password 73 : To set trip value of Over current, Under current, Asymmetry percentage

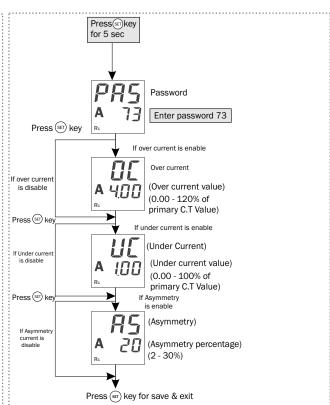
Password 37: To set Power on time, ITD, Trip delay time reset Mode, Relay Fault mode, C.T ratio, Power fault memory



### NOTE :-

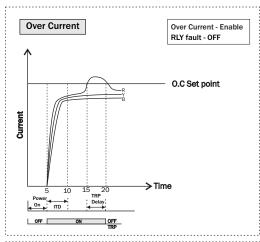
- If power fault memory selected as a YES If Auxiliary supply cut out without fault Reset, Then fault will be display at next power on.
- To Reset fault press RST key.
- If Reset Mode Selected As ZVR (Zero Value Reset), then the Relay will be reset after Selected Reset time once the healthy condition achieved OR Zero Value reached.

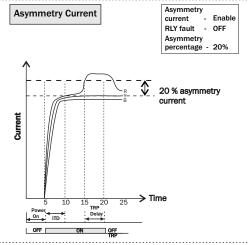


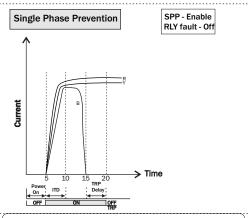


FAULT MESSAGE	
340 <u>a</u> 00	Over current in L1 Over current Value = 3.40 A
<u> 100</u>	Under current in L2 Under current Value = 1.00 A
20 A. RS	"Asymmetry current between L1 & L2 "Asymmetry percentage=20%
L I a.spp	Single phase prevention fault occurred in L1
Note : LED Status- ★blinking LED • LED on	O LED off

CONTROL FUNCTION	
Power on time = 5 sec Trip delay time = 5 sec	Initial time delay = 5 sec Reset mode = Manual
Under Current	Under Current - Enable RLY fault - OFF
Post To Select T	U.C Set point







Specifications are subject to change, since development is a continuous process So for more updated operating information and Support, Please contact our Helpline: 9081078681/9081078683 or Email at <u>service@multispanindia.com</u> Ver:191201