



### FEATURES

- Inbuilt Core Balance Current Transformer (CBCT)
- Monitors true RMS earth fault current
- LED indication for presence of power supply and fault current
- 'Test' and 'Reset' function
- 1SPDT Output protection relay

### SPECIFICATIONS

#### AUXILIARY SUPPLY

230 VAC ( $\pm 15\%$ ), 50/60 Hz

#### ELECTRICAL CONNECTION

3  $\emptyset$  3 wire, 3  $\emptyset$  4 wire or 1  $\emptyset$  2 wire systems

#### VA RATING

15VA max.

#### TRIP CONDITION

75% of  $I_{\Delta n}$

#### RESET TIME

Instantaneous

#### RESPONSE TIME

< 30ms (For 5x  $I_{\Delta n}$ )

< 50ms (For 1x  $I_{\Delta n}$ )

#### HYSTERESIS

8% of  $I_{\Delta n}$

#### ACCURACY

CURRENT :  $\pm 5\%$  of  $I_{\Delta n}$

TIME :  $\pm 5\%$  of Response Time

#### OUTPUT SPECIFICATION

Relay : 1C/O (SPDT)

#### OUTPUT RATING

N.O. (5A @ 250V AC)

N.C. (5A @ 30V DC)

#### TEST/RESET FACILITY

Test/Reset function by application of key on

Front panel

Reset on power interruption

#### MEMORY

Storage of the leakage fault (fault storage clear by pressing 'Reset' or on power interruption)

### ENVIRONMENTAL SPECIFICATIONS

- Indoor use
- Altitude of up to 2000meters
- Pollution degree 2
- Complies IEC60947-2
- Temperature : Operating : 0°C to 55°C
- Storage : -20°C to 70°C
- Humidity : Up to 95% RH, non-condensing

### MECHANICAL SPECIFICATION

- No of Push Buttons : 02
- Mounting : Din Rail Mount
- Screw tightening torque : 0.5 N-M

### Weight

### LED INDICATION CHART

Conditions	'ON' LED	'R' LED	Relay
Healthy condition	ON	OFF	De-energized
50% Leakage Current of $I_{\Delta n}$	ON	BLINK	De-energized
75% Leakage Current of $I_{\Delta n}$	ON	ON	Energized

### SAFETY PRECAUTIONS

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 the equipment is not used 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.

### WIRING GUIDELINES

#### WARNING

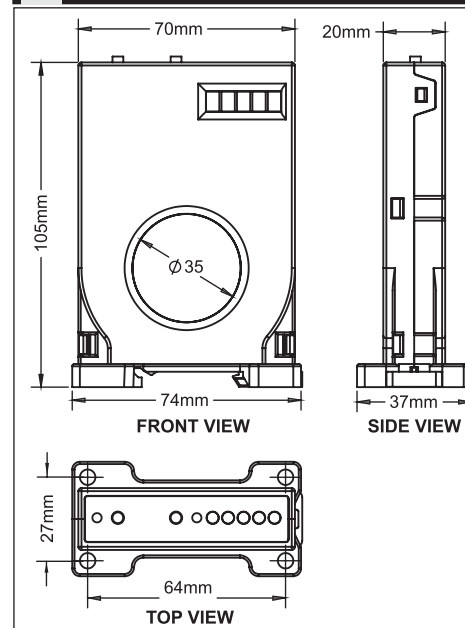
1. To prevent the risk of electric shock power supply to the equipment must be kept OFF while doing the wiring arrangement.
2. Wiring shall be done strictly according to the terminal layout with shortest connections. Confirm that all connections are correct.

#### CAUTION

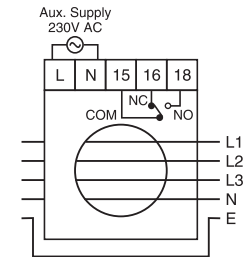
1. To ensure the safe operation of unit, check the wiring and connections.
2. It is recommended to test the unit periodically to satisfy the regulations.

**NOTE :** - For ELCTR35-1-30mA-230V-CE-RoHS  
 $I_{\Delta n} = 30\text{mA}$   
- For ELCTR35-1-300mA-230V-CE-RoHS  
 $I_{\Delta n} = 300\text{mA}$

### MECHANICAL INSTALLATION



### TERMINAL CONNECTIONS



### USER GUIDE

#### Significance of the Test button :

Test button is used to check the proper functioning of the unit even in the absence of leakage current. i.e To check the proper functioning of unit when there is no leakage current and CBCT connected to unit press the TST button. On pressing TST button, 'R' LED glows and trip relay energises instantly, showing that the unit is working properly.

#### Significance of the Reset button :

When there is leakage current above 75% of  $I_{\Delta n}$  unit trips ie 'R' LED illuminate. At that time to reset the unit to prior to the fault condition press reset button.

#### Trip time delay :

The time taken by unit to trip when fault occurs is called trip time delay.

The time delay should be long enough to avoid nuisance tripping caused by harmless transients, yet fast enough to open the circuit when a hazard exists.

### WARRANTY / LIMITATIONS OF LIABILITY

Selec warrants the products to be free from defects in the materials and workmanship for a period of one year (or other period specified, if any) from the date of sale by Selec.

The warranty does not apply to defects resulting from any action of the buyer, including but not limited to improper handling, operating the product outside the specification limits or unauthorized disassembling / altering of the product. The warranty shall be VOID if the product shows evidence of having been tampered or being damaged due to usage in corrosive environment ; or current, heat, moisture or vibration ; improper specification ; wrong usage in an application ; misuse or other operating conditions outside of Selec's control.

Selec shall not be responsible for special, indirect or consequential damages, loss of profits or commercial loss in any way connected with the products, whether such claim is based on contract, warranty, negligence or strict liability.

In no event shall the responsibility of Selec for any act exceed the individual price of the product on which liability is asserted.

In no event shall Selec be responsible for warranty or other claims regarding the products unless Selec's analysis confirms that the products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification or repair.

### ORDER CODE INFORMATION

PRODUCT	SUPPLY	CERTIFICATION	
ELCTR35-1-30mA-230V-CE-RoHS	230V AC ( $\pm 15\%$ ), 50/60 Hz	CE	UL LISTED
ELCTR35-1-300mA-230V-CE-RoHS	230V AC ( $\pm 15\%$ ), 50/60 Hz	CE	UL LISTED

(Specifications are subject to change, since development is a continuous process.)

### Selec Controls Pvt. Ltd., India

Factory Address :

EL-27/1, Electronic Zone, TTC Industrial Area, MIDC, Mahape, Navi Mumbai - 400 710, INDIA.

Tel. No. : +91-22-41 418 419/430 | Fax No. : +91-22-28471733

Toll free : 1800 227 353 (BSNL/MTNL Subscribers only)

Website : www.selec.com | Email : sales@selec.com