

Earth Leakage Relay

ST-ELR30

Protecting lives and equipment from earth leakage hazards.

Earth leakage protection for control panels, switchboards, motors, transformers, feeders and generators. Supports fault diagnosis, including loose connections and damaged insulation, and helps prevent equipment damage and unplanned downtime.



Measurement & Protection

Measurement	True RMS measurement; microcontroller-based design.
Safety distances	Clearance and creepage distances meet UL 61010.
Intelligent tripping	Trip time inversely proportional to fault current ($T \propto 1/A$).
Sensitivity	300 mA to 30 A; Class 5 FS.
Programmable trip time	30 ms–30 s through front-panel keys.
Settings security	Password-protected field programming of trip current and time.
Soft-key selection	No DIP switches; supports IP protection and longer life.

Display, Control & Communication

Live leakage display	Continuous leakage-current display for online monitoring and troubleshooting; can be disabled through setup.
Trip & peak information	Peak detection and value display. Four-digit trip-current capture and display for fault analysis; can be disabled through setup.
Scrolling display	Set current, set time, trip information and peak fault current.
Local controls	Manual test and reset keys.
Communication option	RS485; automatic configuration and reset in trip condition through communication.

Applications include oil refineries, pulp industries, electrical distribution, control engineering and mining.

Specifications & Dimensions

Technical Specifications

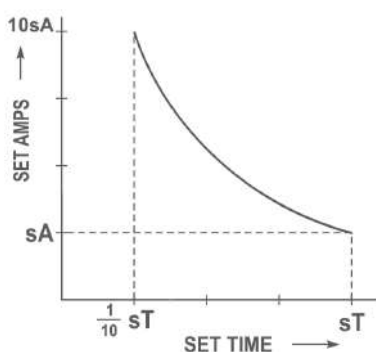
Model / mounting	ST-ELR30 / DIN rail
Display	4 digits
Input current	300 mA to 30 A
Trip current	Programmable
Tripping time	100 ms–30 s
Contact rating	2 A at 240 V AC / 24 V DC
Accuracy	Class 5.0 FS (default)
Auxiliary supply	80–300 V AC/DC; 4 VA maximum
CBCT	Round or rectangular
Core balance CT type	Tape-wound limited round size; epoxy-coated and plastic options.
Torque	1 N·m for panel mount; 0.2 N·m for DIN rail
Wire gauge	11 AWG

Core Balance Current Transformer / CBCT

Input range: 300 mA–30 A for ST-ELR30; Class 5 FS. Plastic case-mounted versions with 35, 70, 120 and 210 mm internal diameters.

Model	D / mm	L / mm	W / mm	H / mm
ST-CBCT35	35	75	23.5	111
ST-CBCT70	70	110	23.5	152
ST-CBCT120	120	166	20	171
ST-CBCT210	210	256	20	262

Trip Characteristics



Mechanical Dimensions / mm

