

Terminal Protection to IP20



Dims: to DIN 43880
W. 17.5mm

- For use in electric vehicle (EV) charging applications
- Trip thresholds aligned with BS 7671:2018 Amendment 1:2020 Section 722
- Designed for single phase, 230V AC supplies
- Fixed Under voltage trip level – 207V AC
- Fixed Over voltage trip level – 256V AC
- Fixed Time delay (from Under or Over voltage condition) – 4s
- True R.M.S. monitoring
- Monitors own supply and detects if the supply exceeds the fixed Under or Over voltage trip levels
- 1 x SPDT relay output 8A
- Green LED indication for supply status
- Red LED indication for relay/timing status
- 17.5mm DIN rail housing



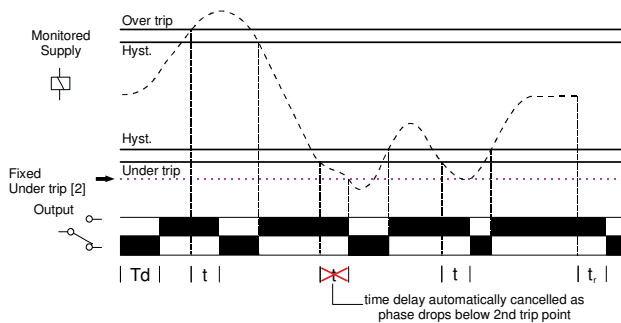
OVERVIEW

The LXCVR-EV is a single-phase voltage monitoring relay designed for use in electric vehicle (EV) charging applications. It continuously monitors the supply voltage and provides a relay output when pre-set under or overvoltage thresholds are exceeded.

With fixed trip levels aligned to those defined in BS 7671:2018 Amendment 1:2020 Section 722, the device supports detection of abnormal supply conditions associated with open PEN faults. The LXCVR-EV is intended for use as part of a complete protection system, where external switching devices are used to disconnect the supply.

FUNCTION DIAGRAM

Under and Over Voltage Monitoring



INSTALLATION

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- The Connection Diagram below shows a basic EV installation, whereby the supply is being monitored by the Voltage monitoring relay. If an under or over voltage condition should occur the internal relay will de-energise and de-energise the Contactor as well.



Installation work must be carried out by qualified personnel.

Applying power.

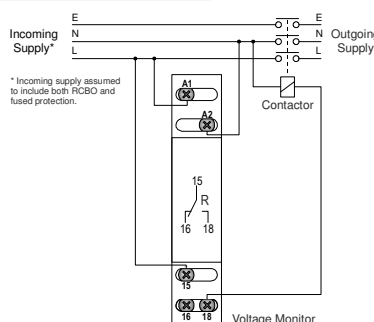
- Apply power and the green "Power supply" ① and red "Relay" ② LED's will illuminate, the relay will energise and contacts 15 and 18 will close. Refer to the troubleshooting table if the unit fails to operate correctly.

Troubleshooting.

The table below shows the status of the unit during a fault condition.

Supply fault	Green LED	Red LED	Relay
No supply	Off	Off	De-energised
Under or Over Voltage condition (during timing)	On	Flashing	Energised for set delay (t)
Under or Over Voltage condition (after timing)	On	Off	De-energised
Supply below 70% of Un (fixed under trip level [2])	On	Off	De-energised

CONNECTION DIAGRAM



LED INDICATION

1. Power supply status (Green) LED
2. Relay output / Timing status (Red) LED



DIMENSIONS

