



APPLICATION NOTE

EARTH LEAKAGE RELAY WIRING UPDATE

WHAT IS THE CHANGE

Ampcontrol has recently detected an error in the specified wiring requirements of the ELV-PRO Earth Leakage Relay. The error originates from the transition from the VSD Guard to the ELV-PRO, which was an incorrectly identified pin, Plug 6 Terminal 4. The VSD Guard labelled this as a 'Shunt Earth' connection, whereas the ELV-PRO removed the Shunt wording, repurposing it as a general earth connection as opposed to removing the connection requirement.

The VSD Guard incorporated provisions for future developments for use with a Shunt Resistor as an alternative to the Earth Leakage CT, however in transition to ELV-PRO this future feature was no longer supported.

RELAY IMPACT

There are no safety implications of this connection being made. It has been identified however, that additional noise can be coupled into the relay causing difficulties with CT detect and nuisance EL readings being detected through the live web server interface.

WHAT DO I NEED TO DO?

To ensure the relay functions with minimal impact, it is recommended that this connection be removed from any installed relays. If an installed relay is not experiencing CT detection issues or is not seen to be affected by noise coupled into the detection circuitry, there will be limited improvements by removing this connection immediately. In this instance, the wiring update can be delayed until the next suitable maintenance shift and access to the relay is possible.

The wiring error is illustrated in the below images. Figure 1 outlines the correct wiring installation, while Figure 2 shows the incorrectly added earth connection and labelling.

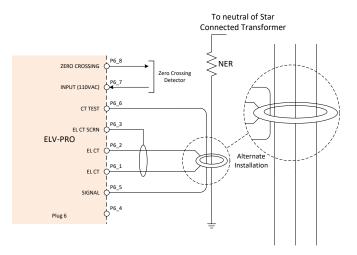


Figure 1: Correct Wiring, P6_4 Not Connected

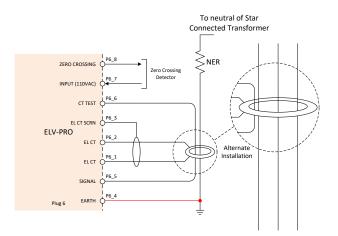


Figure 2: Incorrect Wiring, P6_4 Connected

Going forward the documentation will be updated along with the relay's facia labelling.

FIND OUT MORE

For more information on this product, please contact Ampcontrol Customer Service on +61 1300 267 373 or customerservice@ampcontrolgroup.com or visit the Ampcontrol website: www.ampcontrolgroup.com

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