

The simplified diagrams below show how a Socket & See VIP ESI two pole tester may be used during a meter change and what indications could be expected under different conditions.

All diagrams show the installation being supplied by a TN-C-S system and the cut out fuse removed.

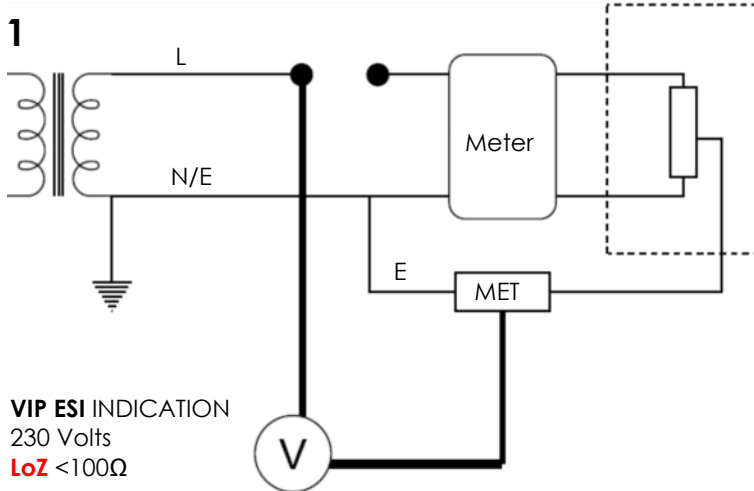


Diagram 1 shows the VIP ESI with the main probe on the network side of the cut out fuse carrier and the passive probe is on the Main Earth Terminal (MET).

The engineer would expect a voltage indication of 230V and a LoZ Light. The Low impedance measured is the earth fault loop.

Diagram 2 shows the VIP ESI with the main probe on the network side of the fuse carrier and the passive probe on the meter side of the fuse carrier (fuse removed).

If the installed meter has been fitted correctly and there is no damage to any cables the engineer would expect a reading of 230V and a **GREEN HiZ** Light.

This HiZ indication gives the engineer the piece of mind that there is no low impedance fault and that the cut out fuse can be refitted.

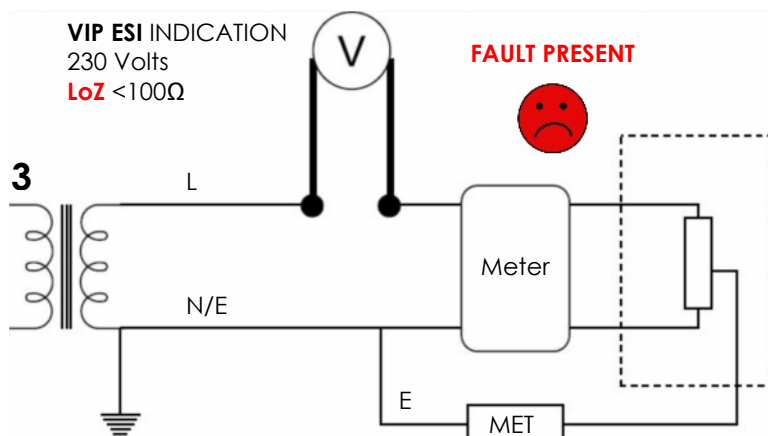
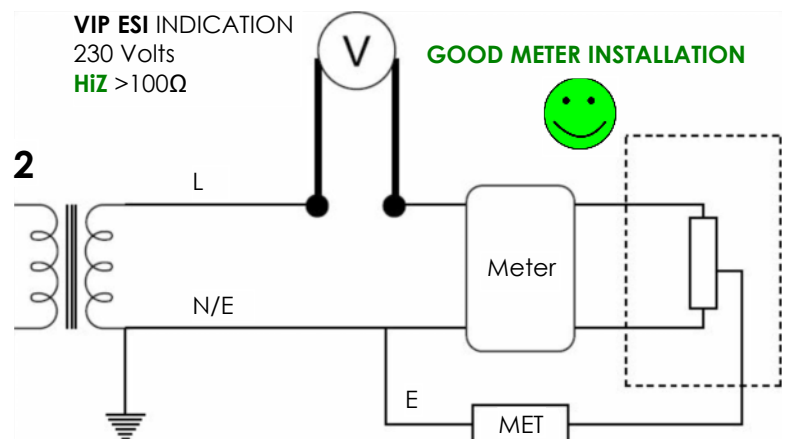


Diagram 3 shows the VIP ESI in the same position as diagram 2 but in this case the meter installation has caused a low impedance fault (short circuit). Possibly caused by trapped / chaffing cables or cables that have come loose and made contact with the metal fuse box during the meter installation.

In the case of a low impedance fault the engineer would see a voltage indication of 230V and a **RED LoZ** Light.

This LoZ indication tells the engineer that it is not safe to refit the fuse as a potentially dangerous high fault current would flow. Further investigation would be required.

