

Technical Bulletin

TB 0240 – Installation of CTs in Siemens 8DJH switchgear

Purpose

To detail the correct method of installing and verifying the installation of non-conventional instrument transformers (NCIT) as a current transformer (CT) in Siemens 8DJH distribution switchgear with circuit breaker function.

Background

Endeavour Energy has been using Siemens 8DJH RLR & RLRR switchgear with circuit breaker functionality since 2014. The IKI 30 self-powered protection relay supplied by KRIES is used in this switchgear to operate the circuit breaker under fault conditions based on current sensing by the CT installed in the cable box.

There have been three (3) incidents of false tripping of the circuit breaker as a result of CT misalignment primarily as a result of loose cable ties which are used to hold the CT in place.

Actions

Confirm CT is centralised around the cable.



Figure 1- check cable tie

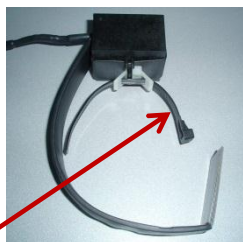


Figure 2- open CT

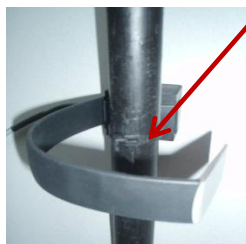


Figure 3-Tighten tie around cable



Figure 4-Close CT loop, ensure cable is in centre of loop

All CT's installed in a RLR / RLRR switchgear must be installed in accordance with the figures 1, 2, 3 & 4 and the manufacturer's instructions. Confirm the cable ties are securely fitted during installation. If the cable ties are unsatisfactory, utilise standard cable ties from the stores (stock code: ST16250).

CT's must be checked to be secured prior to commissioning and shall be inspected during routine maintenance.

All inspection and installation works shall be done in accordance with the Electrical Safety Rules.

Implementation

The contents of this Technical Bulletin shall be implemented immediately.

Impacted Standards

The contents of this technical bulletin will be included in the next update of the following standard(s):

- SDI 120– Testing and commissioning for distribution systems
- SDI 210 - Siemens 8DJH and 8DJ10/8DJ20 12/24kV switchgear

Contacts

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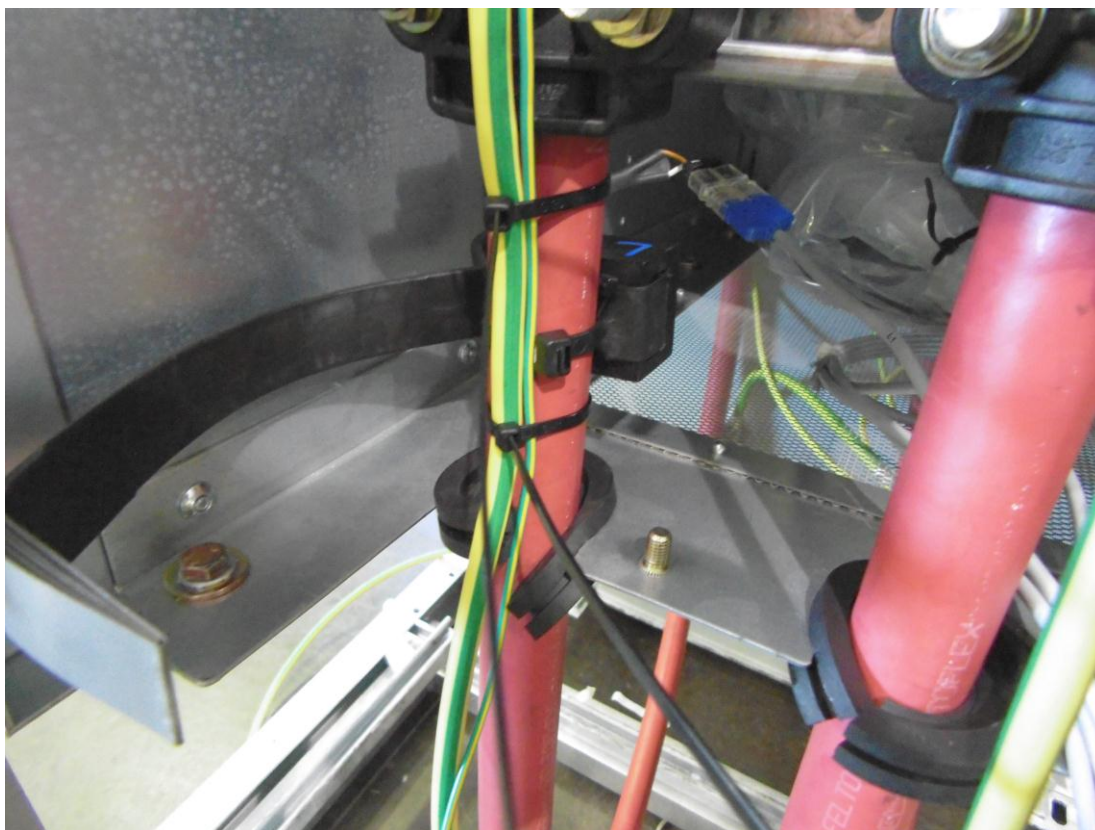


Figure 5-Cable tie tight around cable and under earth wire to reduce possibility of movement



Figure 6-All CTs are to be level and with the cable passing through the centre of the CT core