

# 5 A<sub>rms</sub> NON-SATURATING CT FOR 500 A<sub>peak</sub> UNIPOLAR TRANSIENTS



In protection devices it is important to monitor transient currents which have peaks up to 500 A with high DC/unipolar bias. Transients are caused by short-circuits or lightning strikes and propagate along electricity lines.

When undetected, they may damage switchgear electronics and transformer insulation, requiring expensive repair or cause power outages. A non-saturating current transformer (CT) is an effective, non-invasive sensor for such transients.

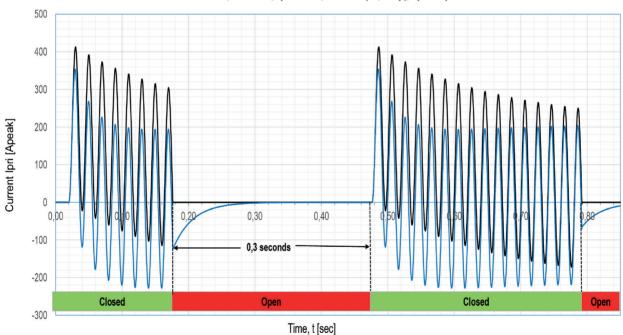
### **Product description:**

Toroidal core with 1000...3000 turns, for integration into casing, or fully encapsulated. OD x ID x HT  $\approx 52$  x 13 x 18 mm for 420  $A_{\text{peak}}$  (30 x nom. current). Customized versions on request.

#### Key benefits:

- No saturation up to approx. 500 A<sub>peak</sub> unipolar transients
- Toroidal core CTs without airgap, avoiding leakage fields
- Different apertures available for multiple primary wires
- Compact designs for use with low burden resistors
- Temperature range -40 °C...+85 °C





Above: 420  $A_{peak}$  unipolar transient primary short-circuit current (black), CT secondary current  $I_{sec}$  \*  $N_{sec}$  (blue) with Closed-Open-Closed-Open relay operation indicated, as in IEC 61869-13 "Instrument Transformers - Part 13: Stand-alone merging unit (SAMU)"



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