

Isolated Current Transformer - ICT

DESCRIPTION

ICT was primarily developed for testing three-phase or single-phase electricity meters with an indivisible voltage and current branches. A current transformer – which provides the necessary isolation between a large numbers of simultaneously tested meters – converts a primary generated current precisely at a ratio of 1:1 to its secondary side. Current transformer is electronically compensated owing to the required high accuracy of 0.1% as well as a wide current range. A 120 A_{RMS} / 60 VA version of ICT with single primary and secondary turn was developed. An industrialization of the product and its sale is provided by Iskra AMESI, Slovenia.

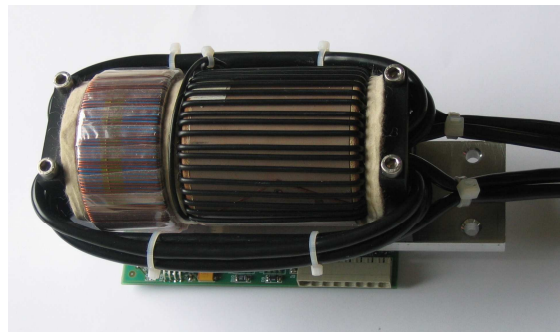
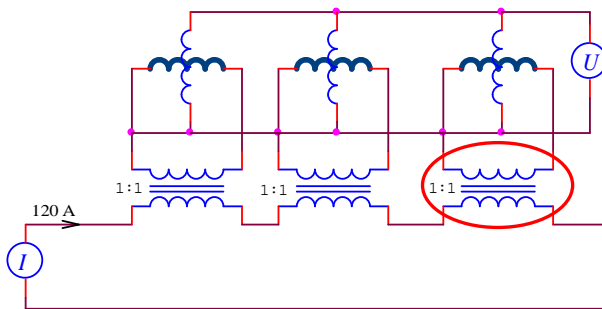


Fig: Example of the ICT use and one of its first prototypes

KEY ADVANTAGES/SKILLS

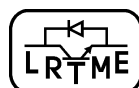
Linear amplifier, DC premagnetization control, magnetic compensation

PUBLICATIONS

1. Peter Zajec, Danijel Vončina, **Ločevanje električnih tokokrogov s precizijskimi aktivnimi tokovnimi transformatorji**, Zbornik petnajste mednarodne Elektrotehniške in računalniške konference ERK 2006, 25. - 27. september 2006, Portorož, Slovenija, zv. A, str. 467-470.

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