

Title (en)

FLUX-COMPENSATED CURRENT TRANSFORMER

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Application

EP 87115924 A 19871029

Priority

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- DE 3718756 A 19870604

Abstract (en)

[origin: EP0267498A1] The invention relates to a flux-compensated current transformer having a primary winding (1a), a secondary winding (1c) and a detector winding (1b) for the magnetic flux. A measurement error is caused in current transformers by an external alternating magnetic field (external field), which error has a considerable adverse effect on the precision of the measurement. The object of the invention is to specify a simplified solution for reducing the influence of external magnetic fields on flux-compensated current transformers. This object is achieved according to the invention by an external field detector winding (2) being spatially arranged such that it is subjected at least approximately to the same external field as the windings (1a-1c) and by the signal produced at the external field detector winding (2) influencing the measurement signal of the current transformer (1) such that it compensates for the influence of the external field. In this arrangement, compensation can be carried out either in the electrical circuit, by connecting the output signal of the external field detector winding (2) to the measurement signal circuit, or in the magnetic circuit, by connecting the signal of the external field detector winding (2) to a further winding (8) of the current transformer (1). <IMAGE>

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