

Title (en)

CURRENT TRANSFORMER ARRANGEMENT FOR THREE-WIRE THREE-PHASE SYSTEMS, ESPECIALLY TO DETECT THE ACTUAL CURRENT FOR CONTROLLED DC CONSUMERS POWERED VIA CURRENT RECTIFIERS

Publication

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Application

EP 90903165 A 19900216

Priority

AT 53989 A 19890309

Abstract (en)

[origin: WO9010940A1] According to the invention, a single bushing transformr (4) on the three-phase side is used in a current transformer arrangement for three-wire three-phase systems. Two of the total of three phase conductors are taken through it, either with the same number of turns and in mutually opposite directions or in the same direction and with a 2:1 difference in the number of turns or in the same direction and with a current flow halved in a phase conductor by a shunt (15). These arrangements prevent the occurrence of a zero resultant flux. The double secondary voltage generated by a double AW value occurring twice during each period is halved by an electronic correcting circuit. Its control commands are derived from suitable control pulses for the thyristors (21-26) of the three-phase bridge circuit (16). Two correcting circuits are given. The main advantage lies in the considerable saving in transformer material and hence also in space.

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IPC 8 full level

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