

Title (en)
40° PHASE-SHIFTING AUTOTRANSFORMER

Title (de)
AUTOTRANSFORMATOR MIT 40-GRAD-PHASENVERSCHIEBUNG

Title (fr)
AUTOTRANSFORMATEUR A DEPHASAGE DE 40°

Publication
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Application
EP 05717117 A 20050321

Priority
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• FR 0404955 A 20040507

Abstract (en)
[origin: WO2005109457A1] The invention relates to a transformer for converting three-phase power into nine-phase power, in particular for a rectifier. The inventive autotransformer is embodied in the form of a step-up or step-down transformer. For a step-down transformer, three-phase input terminals (E1,E2, E3) are delta-connected to one of main windings, mounted on the respective magnetic legs (M12, M23, M31) of a magnetic circuit. The leg main winding (B12) is provided with intermediate connections (K1,K'1, K"1) from which auxiliary windings (X31, Y23, Z31) mounted on the other legs extend away. Said auxiliary windings produce on output terminals (A1, B1, C1) voltages one of which is in phase with the supply three-phase voltage on the (E1), the other is +40 DEG phase-shifted and the third is + 80 DEG phase-shifted. The number of turns of the auxiliary windings and the position of the intermediate connections are calculated in such a way that said result is obtainable. The identical windings of the other legs produce other output voltages on terminals (A2,B2, C2, A3, B3) in such a way that a nine-phase system is embodied.

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