Title (en)

THREE-PHASE TRANSFORMER FOR TWELVE-PHASE RECTIFIER

Title (de

DREIPHASIGER TRANSFORMATOR FÜR ZWÖLFPHASIGEN GLEICHRICHTER

Title (fr)

TRANSFORMATEUR TRIPHASÉ POUR REDRESSEUR DODÉCAPHASÉ

Publication

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Application

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Abstract (en)

[origin: WO2016151225A1] The invention relates to a three-phase transformer (10) for a twelve-phase rectifier including two three-phase, double-alternation rectifiers (3, 4) connected in parallel or in series, comprising: a main magnetic core (50) comprising three columns (51, 52, 53) connected magnetically in parallel at the ends thereof by two yokes (54, 55), and on each of which are wound: a pair of primary windings (11, 14; 12, 15; 13, 16) connected in parallel; two secondary windings (21-26), three of the secondary windings (21-23) wound onto separate columns being triangle-connected to the transformer terminals (31-33) connected to a first three-phase, double-alternation rectifier (3), the other three secondary windings (24-26) being star-connected to the transformer terminals (34-36) connected to the second three-phase, double-alternation rectifier (4); and an auxiliary core (60) comprising three columns (61, 62, 63) connected magnetically at the ends thereof by two yokes (64, 65) for closing the field, one of said pairs of primary windings (11, 14; 12, 15; 13, 16) being wound onto each of the columns, characterised in that the auxiliary core (60) comprises a median magnetic portion (69) connecting the mid-points of each column (61, 62, 63) located between two primary windings of the same pair (11, 14; 12, 15; 13, 16).

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