

Title (en)

MODULAR CONVERTER AND MODULAR CONVERTER SYSTEM

Title (de)

MODULARER UMRICHTER UND MODULARES UMRICHTERSYSTEM

Title (fr)

CONVERTISSEUR MODULAIRE ET SYSTÈME CONVERTISSEUR MODULAIRE

Publication

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Application

EP 18779231 A 20180913

Priority

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Abstract (en)

[origin: WO2019063303A1] The invention relates to a modular converter (1) having a connection assembly (2), a control assembly (3), a supply assembly (4), a rear wall assembly (5), and a load assembly (6). An input and an output signal (7, 8) and an input and an output alternating voltage (9, 10) can be distributed by means of the connection assembly (2); first control signals (12) for an inverter (15) can be generated by a control unit (11) of the control assembly (3); the input alternating voltage (9) of a primary network (30) can be converted into an intermediate circuit direct voltage (16) by means of a rectifier (13) of the supply assembly (4); the intermediate circuit direct voltage (16) and the first control signals (12) for the inverter (15) can be distributed by means of a direct voltage intermediate circuit (17) and a control signal circuit (18) of the rear wall assembly (5); the intermediate circuit direct voltage (16) can be converted into the output alternating voltage (10) for a load (27) or a secondary network by means of the inverter (15) of the load assembly (6); the inverter (15) has power semiconductor switches (19) which are made of GaN or InGaN and which can be operated with a blocking voltage of at least 400V and with a clock frequency of at least 40 kHz; and the connection assembly (2) and the rear wall assembly (5) are each electrically connected to the control assembly (3), the supply assembly (4), and the load assembly (6) by means of releasable mechanical connections (31). The invention further relates to a modular converter system (23) comprising the modular converter (1) and a converter expansion module (24).

IPC 8 full level

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