

This article presents the application of a phase-shifted full bridge (PSFB) converter for medium voltage dc collection networks suited to photovoltaic power plants.

Typically, the maximum voltage generated by PV strings is 1.5 kV, which is the upper limit of the low voltage (LV) range. Hence, to interface PV strings with the MVdc network, a high-ratio dc-dc ...

In order to achieve low-cost, high-efficiency and long-distance transmission of PV power, this paper adopted a DC grid-connected topology by using multi-modular cascaded DC-DC ...

Electrical installations use contactors, quick-connects, and other termination methods to form current-carrying bridges between two or more circuit components. But, just like the overpass by ...

This paper focuses on a bidirectional dual active bridge (DAB) based dc/dc converter to fulfill the required function of regulating the battery bank energy and the DC bus voltage to confirm a stiff ...

DC-DC converters must meet three main requirements: power flow directionality, galvanic isolation, and modularity. Specifically, for interfacing PV strings with an MVDC network, only unidirectional power ...

Using low-voltage DC as power decoupling bus of the pre-stage and last-stage of the converter, a multi-port control strategy is proposed to coordinate the power flow of PV, energy storage and output ports ...

DAB bidirectional DC-DC converter is a topology with the advantages of a decreased number of devices, soft-switching commutations, low cost, and high efficiency. This work describes ...

Retaining its Art Deco feel and décor, the building has been converted into a DC-powered building featuring cutting edge green technology. Opening in the summer of 2019, the building is also serving ...

Overall, the objective of DC cable management is to route string wire in a manner that prevents damage to the insulation and conductor by avoiding sharp edges, abrasive surfaces (e.g., roof shingles), ...

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