

Reference: **827**

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Type:

**Technical Brochures**

Title:

**DC-DC converters in HVDC grids and for connections to HVDC systems**

Technical Brochure 827 presents a comprehensive evaluation of feasibility of DC-DC converters for applications within DC transmission grids. It elaborates on motivations and applications of DC-DC converters, and describes design, modelling, control and performance in normal DC grid operation and under DC faults. Two HVDC DC-DC converter test systems of 600 MW rating have been developed by the working group on PSCAD platform and are used throughout the brochure for illustrating conclusions by the way of simulation. The simulation models are available on e-cigre. DC-DC converter topologies requiring larger step ratios for interconnecting HVDC and MVDC and for HVDC line power tapping are separately analysed. A comprehensive survey of all worldwide DC-DC manufacturers was conducted in 2019, and a summary is provided in the Appendix.

**The ZIP file includes the Technical Brochure and the PSCAD models of this Working Group**

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More Informations :**File Size:9,1 MB Pages NB:196 Study Committee : B4 WG (TF):WG B4.76 Year:2021**

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