1. Record Nr. UNISA996574666303316 2862-2020 - IEEE recommended practice for partial discharge **Titolo** measurements under ac voltage with VHF/UHF sensors during routine tests on factory and pre-molded joints of HVDC extruded cable systems up to 800 kV / / IEEE Pubbl/distr/stampa [Place of publication not identified]:,: IEEE,, 2021 **ISBN** 1-5044-7257-8 Descrizione fisica 1 online resource Disciplina 537.52 Soggetti Electric discharges Power electronics Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Sommario/riassunto The aim of this recommended practice is to establish a protocol for the measurement of partial discharges using ac voltages and VHF/UHF electromagnetic sensors, for quality control during routine tests on factory and pre-molded joints of high-voltage direct-current (HVDC) extruded cable systems having voltage ratings up to 800 kV. The various steps of the protocol for the measurement of partial discharges in such cables are carefully described. Details are given about the procedure for a sensor performance check, test setup preparation, and success criteria. The ultimate goal of this recommended practice is not verifying the compliance with any maximum acceptable limit of partial discharge amplitude, but rather focusing on the whole phenomenon of partial discharges, in order to assess whether critical partial discharges are present in the tested object (either a factory joint or a pre-molded joint of a HVDC extruded cable system). "Critical partial discharge" is used here to mean a discharge within the insulation of the object under test, excluding all external discharges that can be present during the ac

leads related to the test setup).

voltage test, (e.g., corona discharges due to HV electrodes, conducting