

high performance PD and tan-δ sensors



Tap Adaptors for HV Transformer Bushings

TechImp High Voltage Bushing Tap Adapter allows the user to connect to the test tap (sometimes called power factor tap) of high voltage transformer bushings. While keeping the test tap well below the safety voltage level required by the manufacturer, the Tap Adapter lets the user to drain high frequency PD signals for diagnostic assessment of insulating materials. A synchronization signal can be derived as well. It is suitable for both single shot as well as continuous PD monitoring.

Although it must be customized on the basis of the shape and dimension of the test tap (to be provided by the Customer), many models are readily available for the most established transformer bushings. A list of the presently available models is reported below.

Several thousands of hours of operation are a guarantee of reliability and accurate design.

Long lasting materials such as stainless steel and brass are used to guarantee a reliable contact.

A BNC termination is available to connect the Voltage Tap to the coaxial cable. The cable ends into the Derivation Box which usually lays at ground level. The proper measurement impedance and an overvoltage protection are integrated into the Tap Adapter.

Values of the above electrical components are chosen on the basis of the bushing capacitance (commonly referred as C1, to be provided by the Customer).

In case of long term overvoltage the units has a fail safe protection which shunts the measurement impedance to ground, thus preventing the bushing from overvoltage and sparkover on the test tap. Even in the case of accidental disconnection of the output cable, the unit will keep the transformer bushing in a state of absolute safety. It has a fully sealed body suitable for reliable outdoor installation. A multipolar detachable connector is available (as an option) to completely disconnect the internal resistor, as well as the internal SVP, in order to perform a true $\tan\delta$ measurement by means of an external suitable equipment.

lap Adapter DATA SHEET [ENG] – REV.20200325

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Specifications

Voltage output @ 50Hz or 60Hz Max output transient voltage Vout vs Vin phase shift Operating temperature Output connector Protection degree Current to ground @ 50Hz or 60Hz 1 ÷ 10Vrms 90Vpeak 90° -25°C ÷ +65°C BNC IP66 Below 10mApC

Bushing Models Currently Equipped

GOB ABB ABB formerly HSP EKTG ABB formerly ASEA GOA PASSONI & VILLA PNO PASSONI & VILLA POBO PASSONI & VILLA PCTO TRENCH ETG TRENCH COT ...and others!





Several different sensors are available, fully compatible with Techimp Global Diagnostic platform. They can be freely combined at customer needs provided they can be applied for the specific application.



www.altanova-group.com



TECHIMP - ALTANOVA GROUP Via Toscana 11, 40069 Zola Predosa (Bo) - Italy T +39 051 199 86 050 Email sales@altanova-group.com



ISA - ALTANOVA GROUP Via Prati Bassi 22, 21020 Taino (Va) - Italy T +39 0331 95 60 81 Email isa@altanova-group.com



intelliSAW - ALTANOVA GROUP 100 Burtt Rd Andover, MA 01810, USA T +1 978-409-1534 Email contact@intellisaw.com