UHF Sensors for Power Transformers

TFS1 and TVS2

UHF Sensors can be used to detect internal PD on Power Transformers in a frequency range between 300 MHz and 1 GHz. The UHF frequency range can be chosen under difficult on-site conditions, such as high impact of the measurements due to corona discharges or other disturbances within the typical HF range (100 kHz–10 MHz). UHF sensors are suitable for retrofitting as well as for pre-installation. The sensitivity can be proven by injecting an impulse generator signal in the UHF range into the system. UHF PD signals can be used for PD pattern analysis as well as for triggering acoustic measurement systems, like the FOS4, for instance. Power Diagnostix provides sensors for valve flanges and for oil valves. Both sensors can be modified and designed in accordance of special specifications of the customer. Below two sensors are displayed as example.

Transformer Flange Sensor TFS1

- Adapted to spare flange
- Wideband characteristic
- Oil-tight
- Built-in logarithmic UHF converter unit FCU2

Frequency range:
300 MHz – 1 GHz

Output: TNC connector

Transformer Valve Sensor TVS2

- Built-in logarithmic UHF converter unit FCU2
- For DN 40–DN 50 flanges with diameters 88–135 mm or for DN 100 flanges
- Wideband characteristic
- Oil-tight

Frequency range:
300 MHz – 1 GHz

Output: TNC connector

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