



Search for capacitive type electrical defaults (Corona effect, electrical path, arcing, partial discharge...) on middle and high voltage installations HTA & HTB (U > 1000 V)



HTB installation

Application Note No 3: July 2013



What are the problems with capacitive electrical defaults on medium and high voltage lines?

Capacitive electrical defaults (who generate ultrasonic waves) on middle and high voltage installation create problems on connections, cables, insulators, disruptors...and are problem sources of:

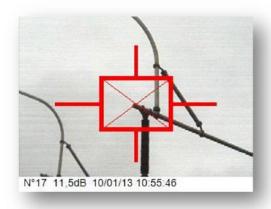
- Safety of people and property (fire, explosion, mechanical piece breakdown, corrosion, ...)
- Noise, audible parasite noise
- Electromagnetic interference by conduction or by air transmission (radio interference)
- Chemical pollutions (CORONA creates Ozone, NH4, NO3...)

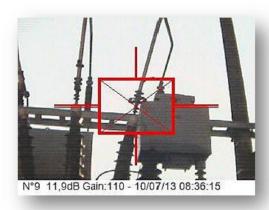
Capacitive electrical default search solution :

With the LEAK**SHOOTER** LKS1000, equipped with combined vision/ultrasonic detection technology with standard cone use, it is possible to easily detect these electrical defaults by scanning the cables, the connections, the insulators,... from 5-10 m distance or more (regarding security rules in these installations).

Then, when the default zone is identified with the cone, it is possible to take a photo to make a future technical report for reparation.

This whole procedure can be realized with or without the headphone, thanks to the automatic and dynamic target on screen during this detection (see below).

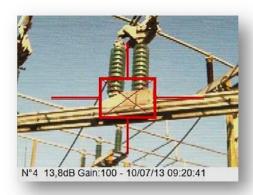




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Example with a 63.000 V installation:

Bad mechanical and ground connection under 63.000 V, electrical arcing is easily detected with the LEAKSHOOTER LKS1000 at 3 m distance thanks to it automatic/dynamic target and with the headphones which with we can hear arcing characteristic sound.

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For more information on the leakshooter. Please do not hesitate to contact: Hugo Gallagher

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