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Adphox Corporation

XT-250 Corona Tester

Adphox is proud to announce the production and distribution of the XT-250 Corona Tester, the latest addition to its corona tester series.

One feature of the XT-250 Corona Tester is its ability to generate an open-terminal output frequency of 1 to 2 MHz and a maximum open-terminal output voltage of 70 kV pp (70,000 V) using intermittent sine waves. The generation of such ultrahigh frequencies and voltages makes it possible to inspect parts that use ultrahigh frequencies and voltages such as igniters in HID lamps, which were impossible to inspect until now.

In addition, applied test pulse intervals as short as 2 ms permit high speed testing. These ultrahigh frequencies and voltages can be generated for testing because the main unit of the XT-250 Corona Tester is separated from the high-voltage transformer probe PB7a.

Corona discharges are generated when air is ionized in a high electric field.

Corona discharges are weak pulses so coils and transformers continue to operate normally initially, which makes detection difficult.

However, when corona discharges occur, oxidation is unusually strong and generates ozone and ions breakdown insulating films. This promotes long-term deterioration of insulation, which carries the risk of flashover.

To prevent these problems, corona discharges must be reliably tested for and prevented.

Exterior



Features of the XT-250

1. Generates a maximum open-terminal output voltage of 70 kV pp
2. Generates an open-terminal output frequency of 1 to 2 MHz (depending on the length of the test object)
3. The drive pulse interval can be adjusted from 2 to 20 ms, in steps of 2 ms.
4. The small, desktop form makes it easy to handle
5. The high voltage waveform is a damped sine waveform

Usage

Designed to measure items such as trigger coils (coils for camera flashes) and HID igniters (coils of car lights).

Main specifications

Open-terminal output frequency	1 to 2 MHz
Maximum open-terminal output voltage	70 kV pp
Drive pulse intervals (ms)	2, 4, 6, 8, 10, 12, 14, 16, 18, 20
Drive pulse current	Maximum 80 A peak
Flashover counter	0 to 127
Corona discharge counter	0 to 127
External dimensions (main unit)	430(W) x 470(D) x 180(H) mm
(PB7a)	240(W) x 320(D) x 120(H) mm
Weight (main unit)	14 kg
(PB7a)	5.5 kg