

BAUR High voltage testing and diagnostic device

frida, frida TD

The mobile BAUR testing and diagnostic device frida is used

- for testing medium-voltage cables and electrical equipment,
- for cable sheath testing,
- for cable diagnostics: integrated tan delta measurement, and/or partial discharge measurement and location in combination with BAUR's partial discharge diagnostic system 'PD Portable'



Integrated tan delta measurement

Easy test setup

Fully automatic test and diagnosis sequence

Maximum precision

Maximum safety



Features

- Testing electrical equipment and medium-voltage cables up to 15 kV
- Max. test voltage 24 kV_{eff}
- Cable testing according to: VDE DIN 0276-620/621 (CENELEC HD 620/621), IEEE P 400.2-2004, IEEE 400-2001
- VLF true sine[®] test technology enables exact load-independent sinusoidal high voltage
- Cable sheath testing according to: IEEE 433, IEC 60502, VDE 0276-620
- Tan delta diagnostics for electrical equipment and medium-voltage cables up to 20 kV
- Precise tan delta measurement with an accuracy of 1×10^{-4}
- Quicker and easier measurement structure
- Fully automated and individually programmable diagnostic sequences incl. evaluation
- Easy and intuitive operation
- No additional external hardware required for tan delta measurements
- Integrated measurement data storage
- Data export via USB interface
- Management of test and measurement data with PC software
- Integrated cable compartment with connecting cable
- Automatic discharging device
- Optional partial discharge diagnostic system
- Small, compact and light

Technical data

General

Frequency range	0.01 ... 0.1 Hz	Conforming to CE	EN 61010-01; EN 50191; EN 55011; EN 61000-4
Input voltage	110...240 V, 50/60 Hz	Data interface	USB 2.0
Max. power consumption	300 W	Protection class	IP 54
Ambient temperature	-10...+50 °C	Languages	German, English, Dutch, French, Spanish, Italian, Portuguese, Czech, Polish, Russian, Korean, Malay, Chinese (Cn), Chinese (Tw)
Storage temperature	-20...+60 °C	Dimensions (W x H x D)	438 x 412 x 220 mm
Weight	19.5 kg		

Output voltage

VLF true sine	1...24 kV _{eff} (34 kV _{peak})
VLF rectangular wave voltage	1...34 kV
DC voltage	±34 kV
Resolution	0.1 kV
Accuracy	1 %
Load range	10 nF...8 µF

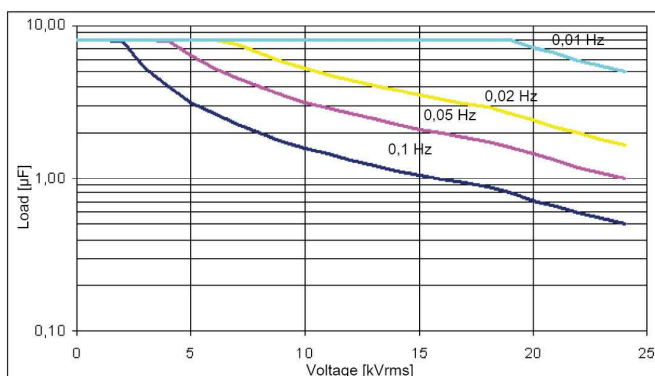
Output current

Measurement range	0...14 mA
Resolution	1 µA
Accuracy	1 %
Max. load	0.5 µF at 0.1 Hz, 24 kV _{eff}
	1.0 µF at 0.05 Hz, 24 kV _{eff}
	8.0 µF at 0.01 Hz, 18 kV _{eff}

Tan delta measurement (frida TD)

VLF true sine	1...24 kV _{eff}	Tan delta measurement frequency	0.1 Hz
Load range	10 nF...8 µF	Detection of termination surface leakage currents	with VSE box (optional)
Accuracy	1x10 ⁻⁴	Resolution	1x10 ⁻⁵

Load diagram VLF true sine



frida delivery includes

- HV testing device with 5 m HV connection cable (connected)
- Ground and discharge rod
- Earth cable
- Jumper plug for external emergency-stop unit
- Mains connection cable, User manual

Options

- Partial discharge location system PD portable
- External emergency-stop unit with signal lamps (25 m or 50 m)

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- VSE box incl. connecting cable
- Partial discharge location system PD portable
- External emergency-stop unit with signal lamps (25 m or 50 m)