DATA SHEET

LIFEVIEW QLF

Analyser

An offline test instrument designed to assess rotating machine electrical insulation condition at very low frequency.

The LIFEVIEW® QLF is an offline test instrument which must be used in conjunction with an external very low frequency (VLF) power source, supplied with the kit. The equipment's sophisticated design allows the user to measure Insulation Resistance (IR), Polarisation Index (PI), Dissipation Factor (Tan Delta) and Partial Discharge (PD) at 01.Hz. The test instrument is designed for testing up to 20kV phase to ground at 0.1Hz, meaning it is suitable for almost all HV motors and generators world-wide. Communication with the device is established through a fiber optic link ensuring maximum safety for the user while testing HV equipment.

Key Features

- IR, PI and Tan Delta measurements
- PD measurement with Phase Resolved Partial Discharge patterns (PRPD)
- Gain configuration options to allow for accurate PD analysis
- Auto report function
- Testing up to 20kV at 0.1Hz
- PD calibrator (QCAL) included
- Fibre optic communication link ensuring safety for the user
- Provides insights into insulation condition, traditional test methods would not
- Test equipment and power source are fully portable (2 Peli Cases), can be placed in commercial air travel hold luggage

Measures:

- Partial Discharge
- Insulation Resistance and Polarisation Index
- Capacitance
- Dissipation Factor (Tan Delta)

Compatible for use on:

- HV Generators
- HV Motors

#LIFEVIEWConditionMonitoring

Technical Specification

VLF HV Power Source

- Input Voltage : 100V - 240 V, 50/60Hz
- Output Voltages:
    - Sinusoidal : 0-34kVpeak, 0 - 24kVrms
    - DC: ±34kV
    - Square Wave: 34kV
- Output Current: 20mArms max
- Output frequency: 0.01 - 0.1Hz

Mechanical Dimensions

- Transport Cases: 676mm (W) x 378mm (H) x 525mm (D)
- Transport Case (1) inc. HV Power Source: 30kg
- Transport Case (2) inc. measuring kit: 24kg

Data Acquisition

- Partial Discharge: Single channel, measurements in accordance with IEC 60270 & IEC 60034-27
- Relative humidity: 10-90%
- A/D converter resolution: 16 bits
- Coupling capacitor: 1 nF
- Input frequency: 0.1Hz
- Partial discharge measurement frequency: 0.1-10MHz
- Current range: Maximum 3.5mA (selectable shunts for accurate measurements according to capacitance of test object)
- Harmonics: Numerically rejected
- Test Voltage Range: Up to 20kVrms

Interfaces

- Power supply: 5V DC rechargeable battery supplied with the kit (one spare also supplied)

Environment

- Operating Temperature: 0 - 45ºC
- Relative Humidity: 10-85%, non condensing
- Hazardous Area ATEX/IECEx rating: Safe area only

Why QLF?

- Designed for High Voltage testing
- Test kit includes a portable VLF Power Source
- Light weight and portable option for mobile HV testing
- Designed for the assessment of rotating machine electrical insulation condition
- Auto-Report PD phase resolved patterns

Order Code

QLF Kit

- LIFEVIEW QLF Measurement System for Tan Delta, PD, PI and IR using a portable VLF HV Source.

QLF Kit includes:

Measuring device, Laptop, QCAL, fiber optic adapter, battery, connection cable set, VLF (0.1Hz) HV source & 2 transport cases

Software

- Partial Discharge: Phase Resolved Partial Discharge patterns
- Partial Discharge values: Apparent charge (Qm, Qapp) in [nC] or [pC]
- Dissipation Factor (Tan Delta) measurement
- Capacitance, voltage and current measurement
- IR and PI measurement
- Instrument data acquisition control panel
- Auto-report: Generate measurement report (Excel Export)

Key Contact Information

To request a quotation or further information please contact

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