

A NEW GENERATION

PD90 - PD Detection and Location for MV Cables

Partial Discharge (PD) diagnostics provide the test technician with a non-destructive means of evaluating the condition of a cable and its accessories.

The condition of an aged cable system may deteriorate and partial discharges can initiate in various parts of the cable system. These partial discharge locations continue to discharge slowly breaking down the dielectric and it is a matter of time, which varies from hours, to days or even years, before the cable or accessory will fail.

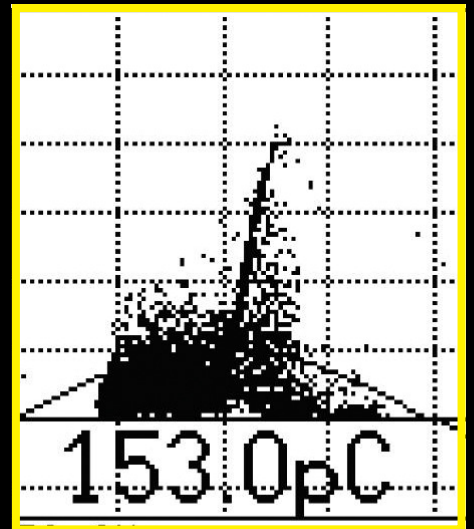
By locating these P.D. sites timeously, corrective measures can be taken before the cable fails thus avoiding power failures and customer outages.

Partial Discharge investigations can be used to accurately locate the position of potential damage within cables. This ability is not available with other diagnostic techniques.

The HVDSA Partial Discharge system for cables can be used to identify and locate partial discharge activity within a cable. An HVA series VLF generator is used to energise the cable and the PD series equipment allows an operator to monitor the cable for any signs of PD. If PD is detected then the system has TDR features that can be used to locate the position of the PD events.

BENEFITS

- Early detection of cable damage before fault
- Commissioning test to prove cable and accessories
- Direct measurement of physical phenomena
- Voltage control to determine inception and extinguishing voltages
- Damage location



OPERATIONAL FEATURES

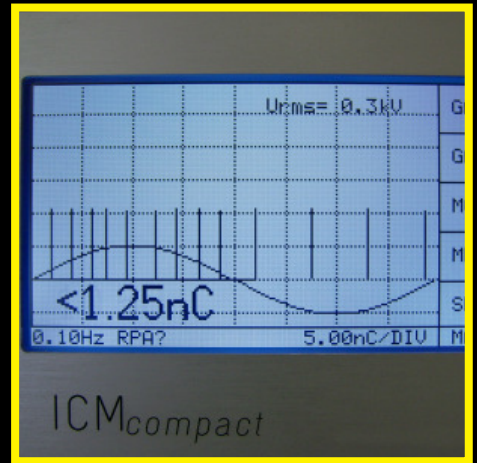
- Complete system for cable PD diagnostics
- Cable interface and PD Filter to filter PD from source
- PD calibration system included
- Accessory mapping and overlay
- Extensive signal amplification and flexible noise filtering
- Phase resolved data display
- TDR techniques for fault location and mapping
- Accurate and repeatable performance
- PC software for display, analysis and reporting
- PC data storage and review
- RS232 or USB interface to connect PC and PD Detector
- Easy to use with multi-language support

Applications TD Series

• Cables: XLPE, PE, EPR, PILC etc. • Capacitors • Switchgear • Transformers • Rotating Machines (IEEE 433) • Insulators • Bushings

TD Standards

• IEEE400-2 • IEC6100-4-2 • IEC6100-4-4 • EN55011 • EN60950 • EN50191 • EN61010-1



TECHNICAL DATA

HV FILTER AND COUPLING CAPACITOR	
Rated Voltage kV peak	90
Rated Current (amps)	1
Filter Capacitance (nF)	10
Dimensions (LxWxH)	550 x 360 x 900mm
Weight	55kg
CALIBRATOR	
Display pC	100 to 10,000
Weight	1kg
PARTIAL DISCHARGE DETECTOR	
Display / Resolution (Pixel)	Backlit LCD / 128 x 240
Input Impedance	10 kΩ / 50 pF
Lower Cut-off (kHz)	40, 80 or 100
Upper Cut-off (kHz)	250, 600 or 800
Synchronisation (Hz)	0.1, 0.05, 0.02
Auto Zero Crossing	Yes
Triggered Noise	Manual and Auto
Dimensions (LxWxH)	250 x 300 x 150mm
Weight	3kg
SOFTWARE	
Microsoft Windows	XP / Windows7
PD Mapping and Location	Yes

ORDER CODES

PRODUCT DESCRIPTION	PART NO.
*Standard PD90	SH0222
OPTIONAL ADD-ONS	

*STANDARD DELIVERY INCLUDES:	
• High voltage filter	• PC software for analysis
• Coupling capacitor	• Set of cables and corona rings
• PD detector	
• Calibrator	

GLOBAL THINKING, LOCAL ACTION



HV Diagnostics
www.hvdsa.com