Megger

COMPACT CITY

1-phased test system with manual operating mode selection

Fault location module with 2-, 3- or 4-step surge generator (thumper)	
Resistance measurement	
Ranges	1 kΩ, 1 MΩ, 100 MΩ; automatische Bereichswahl
Voltage	500 V .... 5000 V in 500 V steps
DC Test with breakdown recognition	
Voltage	0 ... 40 kV, 10 mA
Leakage current	0 ... 1; 1 ... 10; 10 ... 100 mA with automatic measuring area setting
Cable sheath testing	
Voltage	0 ... 5 kV; 0 ... 10 kV
Cable fault location – Prelocation methods	
Pulse reflectometry, ARM® Multishot, Decay method, ICE current pulse method, IFL Intermittent fault localisation	
Pulse reflectometry (Teleflex SX – 2-phased)	
Operating modes	Symmetric/asymmetric reflection measurement, differential and comparative measurement, IFL (for intermittent faults)
Automatic functions	Determination of cable length and fault distance, amplification, measurement range
Amplification	Default: - 37 ... + 37 dB; ProRange: max. 22 dB
Measurement range	20 m ... 160 km (for v/2 = 80 m/µs); resolution 0.1 m
Runtime factor v/2	10 ... 149.9 m/µs
Precision	0.1 % of measurement range
Sampling rate	400 MHz
Output Impedance	50 Ω
Adjustment	8 Ω ... 500 Ω
Pulse width	20 ns ... 10 µs
Pulse voltage	10 ... 50 V
HV prelocation methods	
ARM®-Multishot (15 fault patterns per surge pulse)	
Surge voltage	0 ... 32 kV (opt. 0 ... 25 kV)
Decay method	
Voltage	0 ... 40 kV
ICE - Current pulse method	
Surge voltage	0 ... 32 kV (opt. 0 ... 25 kV)
Fault conversion	
0 ... 8 kV, 750 mA; 0 ... 20 kV, 0.1 A	
Cable fault location – Pinpointing methods	
Acoustic pinpointing	
Voltage levels	0 ... 4; 0 ... 8; 0 ... 16; 0 ... 32 kV
optional	0 ... 3; 0 ... 6; 0 ... 12.5; 0 ... 25 kV
Surge energy	1.000 J or 2.000 J in every voltage range
Surge sequence	6 ... 20 surges/min; individual surge; automatic; controllable
Step voltage method	
Output voltage; Current	0 ... 5 kV; 0 ... 10 kV; I_{max} 750 mA
Pulse duty factor	1:3; 1:4; 1:6 (low hazard potential due to clocked DC voltage)
Weight	
starting from 140 kg	

Connection of the test system		
HV connection	Economy 25:	25 m, 1-phased cable; manual cable drum
	Economy 50:	50 m, 1-phased cable; manual cable drum
	Pro:	50 m, 1-phased cable; motor-driven cable drum
LV connection	Economy:	50 m mains/protective earth cable, 10 m auxiliary earth; manual cable drums
	Comfort:	50 m mains/protective earth cable, 10 m auxiliary earth; belt pull cable drums
Reflectometer connection	Economy:	50 m, 3-phase coax-cable; manual cable drum
	Comfort:	50 m, 3-phase coax-cable; belt pull cable drum
External emergency stop unit	Economy:	15 m connection cable
	Comfort:	50 m connection cable; belt pull cable drum

Test & Diagnosis module	
VLF-voltage testing according to DIN VDE 0276	
VLF CR 40 test system	
Voltage	0 ... 40 kV_{eff}
Max. load	4.8 µF for 40 kV_{eff} @ 0.1 Hz
Prüfsystem VLF CR 60	
Voltage	0 ... 40 kV_{eff}
Max. load	2 µF for 60 kV_{eff} @ 0.1 Hz
TDM 4540 Test set	
CR / 50 Hz Slope	
Voltage	0 ... 40 kV_{eff}
Max. load	5.5 µF for 36 kV_{eff} @ 0.1 Hz
Sinus	
Voltage	0 ... 45 kV
Max. load	0.6 µF for 32 kVeff @ 0.1 Hz (10 µF for lower voltage/frequency)
DAC (option)	For non-destructive PD diagnosis
Voltage	0 ... 32 kV_{eff}
Max. load	7 µF for 20 kV_{eff}
PD Diagnosis with 50 Hz Slope-Technology (option)	
tanDelta-Diagnosis and Monitored Withstand Test (option)	
Weight	
starting from 100 kg	

Operating system and display for Fault Location (Teleflex SX)	
Operating system	Linux
Memory	2 GB mSATA
Display	10" Colour-TFT XGA; 1024 x 768; capacitive touchscreen

Operating system and display for Testing and Diagnosis (Laptop)	
Operating system	Windows
Memory	at least 256 GB
Display	at least 13.3"; Full HD, 1.920 x 1.080

Safety and protection equipment	
Earth monitoring	Operational earth and protective earth to station earth
Step voltage	Auxiliary earth to vehicle chassis
Monitoring	Key switch, rear door switch, emergency stop switch (int./ext.) EN 50919
Supply voltage	Overvolt protection, undervoltage protection, residual current circuit breaker
Isolating transformer	3.6 kVA

System supply an operating conditions	
Input Voltage	230 V, 50 Hz (110 V, 60 Hz)
Power consumption	< 3 kVA
Operating temperature	- 10°C ... + 55°C
Storage temperature	- 25°C ... + 70°C

System supply and comfort (optional)
Travel Power generator 5 kVA
Electric heating 2.000 W
Air conditioning on car roof

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