

DESCRIPTION



The MX32 is a minimised test and fault locating system for mobile integration with powerful extension options. It is built on the MX-platform that can integrate most modern test methods into an easy to operate and economic design without compromising safety or original measurement performance.

The complete system and the plug-compatible extension modules are operated via central unified control unit. HV switching to test leads is semi-automatic and requires manual plug-over switching for high voltage testing and in case of multiple modules.

Numerous additional available modules allow upgrading and customising the system to individual user requirements.



MX32 has Central Computerised User Interface Flexible With Numerous Extension Options and Minimised High Performance System.

MAIN FEATURES

- ★ Comprehensive fault locating in underground LV/MV/HV cable networks;
- ★ Covering full cycle from trouble shooting to isolating and precise fault pinpointing;
- ★ Central control unit with menu guided operation following the working algorithm of cable fault locating;
- ★ Separation of system control circuit from front-end data display based on Windows®;
- ★ Inductive Arc Reflection Tech (ARTi) pre-location featuring no loss HV impulse voltage & energy conversion to fault including arc extension;
- ★ Total low power consumption under 4kVA including high current burning;
- ★ Broad range of additional plug-compatible or external test modules and devices.



MX - 32



INTEGRATED MEASUREMENT FUNCTIONS

- ★ Analysis & Qualification of Faults
- ★ Isolation & Pre-Location of Faults
- ★ Mapping & Pinpointing of Faults
- ★ Testing & Diagnostics with DC/VLF

SPECIFICATIONS

SPECIFIC CHARACTERISTICS	BASIC	OPTIONAL
Automatic HV Switch to Output	-1phase 32kV over HV cable for core integrated modules	-1phase 40kV over HV cable for locating modules combined with plug-over switching for additional modules
Integrated Safety System	-PROSAFE 6D	-PROSAFE 8D
ANALYSIS & QUALIFICATION OF FAULTS		
Insulation resistance measurement		-10kΩ to 3GΩ*
HV withstand testing	-DC32kV (proof) -Breakdown detection	T - DC40 or 80kV VT* - DC60/VLF40kV (cos) VTD* - DC68/VLF48kV or DC90/64kV (sin) HV Test & Distance to Fault (SyncTest)
Cable sheath testing	-DC10kV (proof)	-15kV DC; 300mA
ISOLATION & PRE-LOCATION OF FAULTS		
Integrated TDR Unit	-Measurement range: 95km (250km transient) -Measurement impulse: 160V; 50ns to 10μs -Impedance matching: 25 to 1600Ω	
Pre-location TDR-LV modes	-Direct 1ph over HV cable	-Direct 3ph over TDR cable -Intermittent Fault Scanning
Pre-location TDR-HV modes	-Arc Reflection Technology inductive (ARTi)	-Decay Voltage Coupling -Surge Current Coupling
Fault Conversion modes		-1A -25A @ 0 to 15kV -Monitored Fault Conversion (SyncTest)
Sheath fault pre-location modes		-Bridge type fault locator 6kV
MAPPING & PINPOINTING OF FAULTS		
Acoustic pinpointing in combination with Kamphone	-1000J @ 8/16/32kV	-2000 to 2500J @ 8/16/32kV -1000 to 2000J @ 4kV
Sheath fault pinpointing in combination with Locator S	-10kV; 50mA	-15kV; 300mA
AF tracing and fault locating in combination with Tracer		-10W; 512Hz to 200kHz -250W; 512Hz to 9,95kHz
Mapping of trace and location		-GNSS sensor & software
TESTING & DIAGNOSTICS		
Insulation resistance diagnostics		-PI, DAR,DD, SV and ramping
HV testing & diagnostics		VTD -48kV rms, 1,6μF @ 0.1Hz (sin) VTD -64kV rms, 1μF @ 0.1Hz (sin)
Partial discharge diagnostics & tan-delta diagnostics		VTD -0 to 64kVrms ; ± 1 x 10 ⁻⁴ ; MWT (SyncTest)
GENERAL DATA		
Connection assemblies	-25m (HV + LV)	-50m; 75m (HV + LV + TDR + BFL)
Power supply & consumption	-230V/50Hz; max. 2,5kVA	-230V/50Hz; max. 4kVA
Weight	-min. 260kg	-min. 620kg