

Demonstration boards

MI 3399 Electrical Safety & Quality Application Trainer



The MI 3399 Electrical Safety & Quality Application Trainer is a 3D simulator of real-life safety and quality situation's with many adjustable risks and errors. The model is designed as a stand-alone unit for demonstrations, trainings and educational purposes. The MI 3399 is ideally suited for training and education of larger groups of people as well as for independent practice. Due to various integrated electrical elements the model enables complete testing and troubleshooting of power quality analysis as well as LV electrical installations, lightning systems, earthing systems, PV systems, appliances, equipment, machines or switchboards by using modern methods, testing procedures and instruments.

KEY FEATURES

- Continuity of PE conductors;
- Earth bonding 4-wire (with MI 3242);
- Insulation resistance;
- HV Insulation analysing, PI, DAR factors (with MI 3121H);
- Line impedance;
- Loop impedance;
- RCD testing (Contact voltage, trip-out time, trip-out current, Autotest);
- IMD, ELM, RCM leakage and insulation monitors adjustment and testing;
- Earth resistance (4-wire, 3-wire, 2-wire, two current clamps);
- Specific earth resistance;
- Lightning protection loops and legs resistance;
- Surge protector test;
- Leakage current;
- Phase rotation;
- AUTO SEQUENCE[®] procedure for TN, TT or IT earthing system;
- Power quality;
- Voltage;
- Frequency.

More than 65 different measurements and testing methods could be demonstrated all in accordance to IEC 61557 and IEC 60364-6.

The most significant elements are integrated: RCDs of different types, Fuses, PE equalization bars, 1-phase and 3-phase sockets, various grounding systems (TT, TN, IT), Surge protector, IMD insulation monitor and more. More than 20 different errors can be set where problems on the field could be analysed and troubleshooting procedures trained.

APPLICATION

- Education, trainings and seminars with theoretical and practical exercising and testing for upgrading knowledge of professional's competence.
- Education and practical training of electrical contractors about safety procedures, measuring methods and knowledge.
- Demonstration on how to use different measurement instruments and testers.

MODULES AND COURSES

- LV Electrical Installation Safety Trainer Module;
- TN / TT / IT Earthing Systems Trainer Module;
- Lightning Protection Trainer, Surge Protection Trainer Module;
- Special Installations and Locations Safety Trainer Module;
- Vehicles and Mobile Units Safety Trainer Module.

Additionally there are several optional modules available:

- Power and Voltage Quality Trainer Module;
- Appliances and Machines Safety Trainer Module;
- Photovoltaic Systems Trainer Module.

Modules are supported by Handbook with Exercises, Posters, Charts, Presentations, Catalogues of Knowledge and Certification of Competencies.

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STANDARDS

Functionality

- IEC 61557

Safety

- IEC 60364-6

MI 3399 APPLICATION TRAINER SET MODULES

AD1 MI 3399 – EIS

ELECTRICAL INSTALLATION SAFETY TRAINER

Module includes:

- MI 3155 ST EurotestXD - Multifunctional installation tester
- MI 3110 EurotestIM - Special installation tester
- MI 3242 MicroOhm 2A - Earth bonding 4-wire
- MI 3121H Smartec 2,5 kV - HV Insulation analyser
- MI 3123 Smartec - Earth/Clamp tester
- MD 9272 Leakage clamp TRMS with Power & Harmonics
- A 1018 Current clamp (low range, leakage)

- A 1019 Current clamp
- S 2009 Test lead set, 2 m, 4 pcs
- 25 pcs Electrical Inspector's guide
- 25 pcs chart: Verification on Low-voltage electrical installations
- Poster: Verification on Low-voltage electrical installations
- Poster: Medical sites
- Poster: Firebrigades



Picture of AD1 MI 3399



AD2 MI 3399 – PQA

POWER AND VOLTAGE QUALITY TRAINER

Module includes:

- MI-2892 Power Master - Power Quality Analyser
- Quick guide: Power Quality Analysing and troubleshooting procedures



Picture of AD2 MI 3399

AD3 MI 3399 – PAT

APPLIANCES & MACHINES SAFETY TRAINER

Module includes:

- MI 3309 BT DeltaGT
- A 1488 BT Able printer (with battery charger and one role of labels)
- 25 pcs chart: Machines & switchboards safety & quality testing
- 25 pcs chart: Testing and verification of electrical equipment
- Poster: Testing and verification of electrical equipment



Picture of AD3 MI 3399

AD4 MI 3399 – PV

PHOTOVOLTAIC SYSTEMS TRAINER

Module includes:

- MI 3109 PS EurotestPV Pro Set including:
 - A 1378 EurotestPV Remote
 - A 1427 PV Reference cell
 - A 1400 PV Temperature probe
 - A 1384 PV Safety probe
- A 1391 AC/DC Current clamp or alternatively MD 9231 - Industrial TRMS AC/DC Current Clamp Meter



Picture of AD4 MI 3399

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Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery. Subject to technical change without notice.