

MI 3399 ADDITIONAL TRAINER PACKAGE SETS

AD2 MI 3399 - PQA Power and Voltage Quality Trainer

- MI 2892 Power Master - Power Quality Analyzer
- 25 pcs Handbook "Modern Power Quality Measurements"
- 25 pcs Chart PQA "Guide through Setting Power Quality Analyzing and trouble shooting procedures"



Power Quality Simulator Package Set

enables performing of the following tests:

- Periodics Recording
- Min.,Max., Avg. graphs
- Phase diagram
- Harmonics Recording
- Frequency measurement
- Voltage Quality Recording
- Voltage events recording
- Dips, Swells, Sags, Interruptions
- Waveforms
- Transients
- Inrushes
- Flickers
- Voltage Unsymetry



AD3 MI 3399 - PAT Appliances & Machines Safety Trainer

- MI 3309 BT DeltaPAT
- A 1318 BT Label Printer
- 25 pcs Handbook "Verification of safety of machines"
- 25 pcs Handbook "Electrical equipment testing"
- 25 pcs Chart PAT "Guide through verification of electrical equipment"
- Handbook "Exercises for Appliances and Machines Systems Trainer"



Appliances/ Machines/ Switchboard Package Set

enables performing of the following tests and fault simulation:

- Continuity of equipotential bonding
- Insulation resistance
- PE Leakage current
- Substitute Leakage Current
- Touch leakage current
- Polarity of cables
- Functional operation
- AUTOSEQUENCE® procedure

Examples are on following electrical equipment simulators:

- Portable appliance of class I (flat iron)
- Portable appliance of class II (radio receiver)
- Portable appliance of class I (extension drum)
- Portable appliance of class I (coffee machine)
- Portable appliance of class I (washing machine)
- Low voltage switchgear
- Electrical machine
- IEC cord



AD4 MI 3399 - PV Photovoltaic Systems Trainer

- MI 3109 PS EurotestPV
- 25 pcs Handbook "Measurements on PV systems"
- Handbook "Exercises for Photovoltaic Systems Trainer"



Photo Voltaic Package Set

enables performing of the following tests:

- PV string insulation resistance,
- Bonding resistance of PV panel metallic support to protective earthing,
- PV string U/I characteristics,
- PV string d.c. current,
- PV string d.c. power,
- Irradiance,
- Temperature on PV panels,
- Inverter output a.c. current,
- Inverter output a.c. voltage,
- Inverter output a.c. power,
- Inverter and PV system efficiency.



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APPLICATION TRAINING SUPPORT ON ELECTRICAL SAFETY AND QUALITY

- LV Electrical Installation Safety,
- TN / TT / IT Earthing,
- Lightning Protection, Surge Protection,
- Special Installations and Locations Safety,
- Vehicles and Mobile Units,
- Portable Appliances, Machines and Switchboards,
- Power Quality Troubleshooting and Analyzing,
- Photo Voltaic Installations and Systems,
- LAN and ICT Quality.



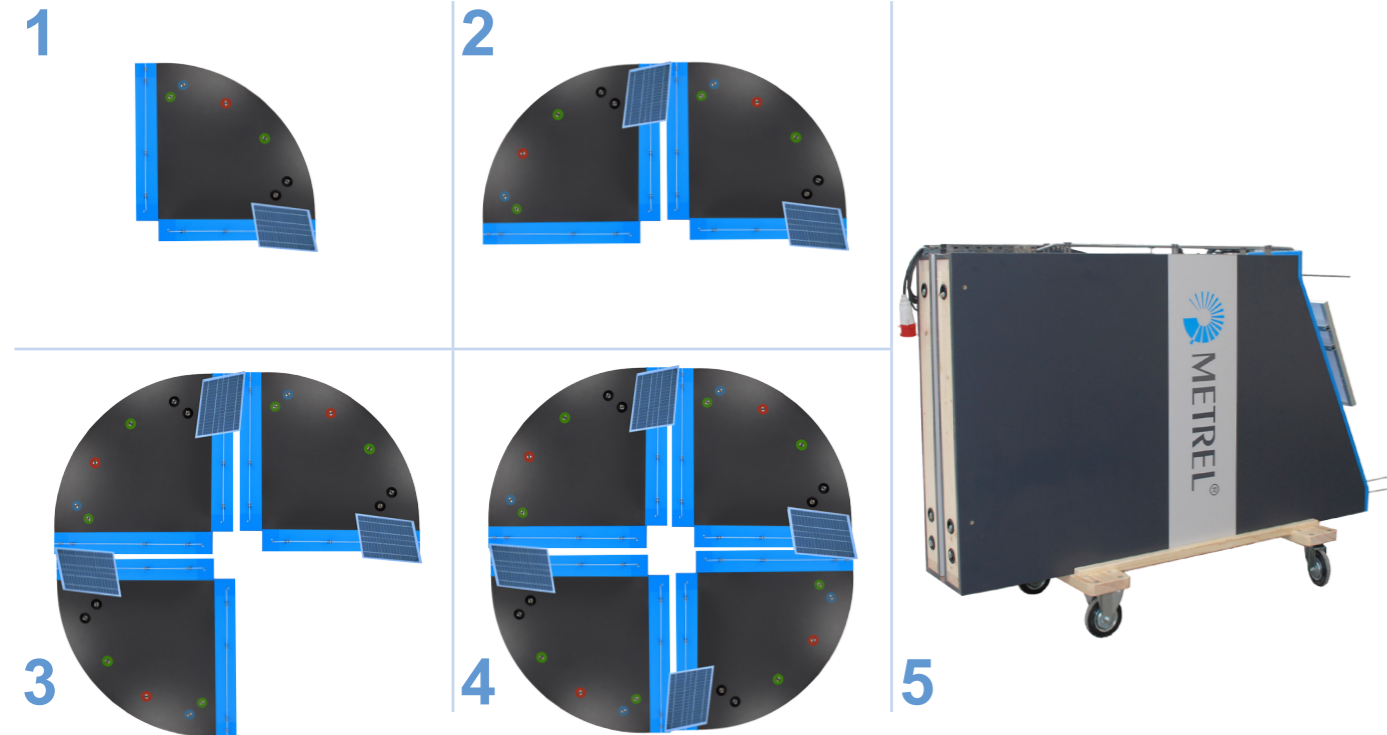
Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery.
Subject to technical change without notice.

Application trainer MI 3399_February_2015_Ang_Ver_1.3

Certified Training Modules and Seminars for Operator's Competence
Training Courses, Exercises, Testing and Measuring Practices, Test and Measurement Equipment and Instruments, Handbooks, Quick Guide Charts, Wall Posters, Know-How Package, Knowledge and Exam's Catalogues and Approved Certificates.

MI 3399 ELECTRICAL SAFETY & QUALITY APPLICATION TRAINER

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 the LV electrical installations, appliances, equipment, machines or switchboards by using modern methods, testing procedures and instruments.



1. One set for corner situation in training room
2. Two sets for wall line situation
3. Three sets for back corner situation
4. Four sets for training "island"
5. Optional wheels for easier transport

The MI 3399 is foldable for simplified transport. The MI 3399 is designed to easy assemble with only two screws on the site for training, seminar or fairground. The dimensions of the single set are: 210 cm high x 125 cm x 125 cm.

The MI 3399 Electrical Safety and Quality Application Trainer ensures absolute safety which makes it suitable for schools and training centers.

The MI 3399 Electrical Safety & Quality Application Trainer set enables several main training 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
- LAN & Telecommunication Installations Quality Trainer Module

Modules are supported with Handbooks, Posters, Charts, Presentations, Exercises, Catalogues of Knowledge and Catalogues of Exam plus Approved Certificate optionally when separate training module is localized.

Applications:

- 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.

MI 3399 ELECTRICAL SAFETY & QUALITY APPLICATION TRAINER

The MI 3399 Electrical Safety & Quality Application Trainer is a 3D simulator of real situation's safety and quality issues with many adjustable risks and errors. The model is designed as stand alone unit for demonstrations, trainings and educational purposes.



MI 3399 ELECTRICAL SAFETY & QUALITY APPLICATION TRAINER PACKAGE SET

AD1 MI 3399 - EIS

- Low Voltage Electrical Installation Safety Trainer
- TN / TT / IT Earthing Systems Trainer
- Lightning Protection trainer, Surge Protection Trainer
- Special Installations and Locations Safety Trainer

- MI 3152 Eurotest XC - Multifunctional Installation Tester
- MI 3110 EurotestIM - Special Installation Tester
- MI 3242 MicroOhm 2A-Earth Bonding 4-wire
- MI 3121H 2,5 kV HV Insulation Analyser
- MI 3123 Smartec - Earth/Clamp Tester
- MI 2014 Cable Scanner - LAN Cable Tester
- MD 9272 Leakage Clamp TRMS with Power & Harmonics
- A 1018 Current clamp - (low range, leakage)
- A 1019 Current clamp
- 25 pcs Handbook "Guide for testing and verification of low voltage installations"
- 25 pcs Handbook "Measurements on IT power installation"
- 25 pcs Chart EIS "Guide through verification on low voltage installations"
- Poster EIS "Guide through verification on low voltage installations"
- Poster "Medical Sites Periodic Safety on Board Inspection"
- Poster "Fire Brigades After Intervention Safety Inspection"
- Handbook "Exercises for MI 3399 Electrical Safety & Quality Application Trainer"

Electrical Safety and Quality Application Trainer Package Set enables performing of the following tests:

- Insulation resistance
- HV Insulation Analysing, PI, DAR factors (with MI3121H)
- Continuity of PE conductors
- Earth Bonding 4-wire (with MI 3242)
- Line impedance
- Loop impedance
- RCD testing (Contact voltage, trip-out time, trip-out current, Autotest)
- IMD, ELM, RCM leakage and insulation monitors adjustment and test
- 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
- **AUTOSEQUENCE®** procedure for TN, TT or IT earthing system.

- More than 65 different measurements and testing methods could be demonstrated all in accordance to IEC 61557 and IEC 60364-6 (insulation resistance, continuity of PE conductors, earth resistance, specific earth resistance, line and loop impedance, phase rotation, leakage current, RCD testing, voltage and frequency and other).
- 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 analyzed and troubleshooting procedures trained.

