# Appliance / Machine / Switchboard safety MI 3360 OmegaPAT XA



New series of OmegaPAT XA brings 4 models of the instrument, intended for professional use in the most demanding applications. All of them support user accounts, which means that one device can be used by several electricians. Model versions cover the following fields of testing: portable appliances, welding equipment, medical devices and professional testing of PRCD devices. All instruments have an advanced built-in user interface that enables the execution of pre-defined and user-created AUTOSEQUENCE®s. Large memory capacity (8 GB microSD card) enables the user long term saving and archiving of data. All the instruments are specially designed for long-term testing, since their memory structure enables simple searching through the archive of devices and quick re-execution of (periodic) tests. Great emphasis was put on support for peripheral devices such as printers and barcode or QR code scanners and RFID readers (in Bluetooth and wired versions). On top of that, all instrument versions are supported by our Metrel ES Manager PC software.

# MEASURING FUNCTIONS

- · Visual inspections;
- Fuse test;
- Continuity // Protective earth resistance 200mA;
- Continuity // Protective earth resistance 10A, 25A (25A, M, F, models only):
- Insulation Resistance (Riso, Riso-S);
- Sub-Leakage Current, Substitute Leakage Current S;
- Differential Leakage current;
- PE leakage current;
- Touch leakage current;
- Insulation resistance, IEC/EN 62353;
- Touch leakage current, IEC/EN 62353;
- Equipment leakage (direct, differential, alternative) IEC/EN 62353:
- Applied part leakage (direct, alternative), IEC/EN 62353;
- Insulation resistance, (optional A 1422) IEC/EN 60974-4-
- Welding circuit leakage, (optional A 1422) IEC/EN 60974-4;
- Primary leakage, (optional A 1422) IEC/EN 60974-4;
- No-load voltage, (optional A 1422) IEC/EN 60974-4;
- Power (P, S, Q, PF, THDu, THDi, CosØ, I, U,);
- PRCD test, (2 pole, 3 pole, K/ Di (varistor), S (3-pole));
- PRCD PE probe test, PRCD open conductor test, PE conductor (PRCD) test;
- RCD test, (type A, AC, B, B+, F);
- Flash test, (1500V, 3000V);
- Polarity / Active polarity test;
- Clamp current (with optional A 1283).

### **KEY FEATURES**

- Touch screen: high resolution colour touch screen, 4.3" TFT.
- Double manipulation: keyboard and touch screen enable the user to control the instrument in any manner they like.
- Pre-defined AUTOSEQUENCE®s: enable the user simple and quick execution of test sequence for the chosen device.
- Read the code and test: QR and barcode system of labelling in combination with AUTOSEQUENCE®s enables the user quick and simple testing of electrical devices.
- Testing groups: the instruments have built-in filters in accordance with their area of application, which enables the user simple choice of needed test sequences.
- Support for PRCD testing: support for all types of PRCDs, including 2-pole, 3-pole, K/Di (varistor), S (3 pole) and testing with the PE probe.
- Support for RCD testing: all instruments support testing of A, AC, B, B+ and F RCDs.
- Fuse testing: the instrument has a special, integrated testing module for quick testing of all types of fuses.
- Hard-wired devices: the instruments have integrated additional test terminals that enable the user simple testing of hard-wired devices.
- High-voltage testing (only MI 3360 F): the instrument enables insulation resistance

- measurement that has to be performed after repairs or maintenance of electrical devices.
- Testing of medical devices (only MI 3360 M): the instrument enables testing of medical devices in accordance with IEC/EN 62353.
- Testing of welding equipment (only in combination with A 1422): all models of OmegaPAT XA support testing of welding equipment in accordance with IEC/EN 60974-4.
- Large memory: support for microSD memory cards, 8 GB card already integrated in the instrument, although that can be expanded to 32 GB.
- PC SW Metrel ES Manager: enables creation of test structures, user-defined AUTOSEQUENCE®s, professional test reports and data transfer for archiving.
- aMESM Android SW: enables QR code scanning, and uploading of pre-prepared user-defined AUTOSEQUENCE®s.



# **APPLICATIONS**

- Testing of portable electrical equipment;
- Testing of fixed installed electrical equipment;
- Testing of medical electrical equipment;
- Testing of 3-phase electrical equipment;
- Testing of electrical welding equipment;



Colour touch screen

## EMC

• EN 61326-1

• EN 61557

# QUICK, EFFICIENT AND DEPENDABLE TESTING OF ELECTRICAL SAFETY OF DEVICES FROM THE FOLLOWING AREAS:

- Portable appliances according to VDE 0701-0702
- Medical electrical devices according to IEC/EN 62353
- Welding equipment according to VDE 0544-4, IEC/EN 60974 (in combination with A 1422 Active 3-phase adapter)



#### SUPPORTED INSTRUMENTS

Due to the differences in testing standards globally, it has becoming increasingly important for manufacturers to ensure that their products are safe for the consumer and industrial markets. Depending on the application Metrel offers different sets in combination of tester plus accessories.

Measuring function	MI 3360	MI 3360 25A	MI 3360 M	MI 3360 F
Visual inspections	•	•	•	•
Fuse test	•	•	•	•
Continuity // Protective earth resistance 200mA	•	•	•	•
Continuity // Protective earth resistance 10A, 25A		•	•	•
Insulation Resistance (Riso, Riso-S),	•	•	•	•
Substitute Leakage Current, Substitute Leakage Current - S		•	•	•
Differential Leakage current		•	•	•
PE leakage current	•	•	•	•
Touch leakage current	•	•	•	•
Polarity / Active polarity test	•	•	•	•
Power (P, S, Q, PF, THDu, THDi, CosØ, I, U)	•	•	•	•
P-RCD, (2 pole, 3 pole, K/ Di (varistor), S (3-pole))	•	•	•	•
PRCD PE probe test, open conductor test, PE conductor test	•	•	•	•
RCD test, (type A, AC, B, B+, F)		•	•	•
Flash test, (1500V, 3000V)				•
Insulation resistance, IEC/EN 62353			•	
Touch leakage current, IEC/EN 62353			•	
Equipment leakage (direct, differential, alternative) IEC/EN 62353 •				
Applied part leakage (direct, alternative), IEC/EN 62353			•	
Insulation resistance, (optional A 1422) IEC/EN 60974-4	٠	•	•	•
Welding circuit leakage, (optional A 1422) IEC/EN 60974-4		•	•	•
Primary leakage, (optional A 1422) IEC/EN 60974-4	•	٠	٠	٠
No-load voltage, (optional A 1422) IEC/EN 60974-4	•	٠	٠	٠
Clamp current (with optional A 1283)	٠	•	•	•

# Notes:

in combination with optional accessories,

measurements are supported with active 3-phase adapter A 1422 only, IEC/EN 60974-4

Clamp current leakage measurements are supported with optional clamps A 1283

# WHY TEST PORTABLE APPLIANCES?

The need for portable and fixed appliance testing is becoming more profound, since devices such as air conditioning units, hand dryers, electrical heaters and many more similar ones have become ubiquitous. But, with frequent use come heightened risks for mechanical an electrical failures. Current legislation therefore dictates, that all devices in public use require periodic testing to determine their safety. If they are damaged, they can cause a fire or even death through electrocution.

We have prepared four different models of the MI 3360 OmegaPAT XA to cover the entire spectrum of testing applications and give the user greater flexibility.

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#### ORDERING INFORMATION



#### Standard set MI 3360

- Instrument MI 3360 (25A, M, F) OmegaPAT XA
- Bag for accessories
- Smartball pen with touch screen function
  Flash test probe (MI 3360 F only)
  Crocodile clip, red (MI 3360 F only)

- Crocodile clip, black
- Test lead, black
- · Test tip, black
- IEC test cable, 2 m
- Mains cable
- USB cable
- Calibration Certificate
- Short form instruction manual
- CD with instruction manual (full version) and PC SW Metrel ES Manager

#### **OPTIONAL ACCESSORIES**

Photo	Order No	. Acc. decription
	A 1322	Active 3-phas Adapter
	A 1422	Active 3-phas Adapter Plus
	A 1207	Three phase adapter
	A 1316	3-phase adapter (16 A CEE-Schuko)
	A 1317	3-phase adapter (32 A CEE-Schuko)
	A 1388	Adapter Schuko / Schuko
$\overline{\cap}$	A 1389	Adapter CEE 5-P 16A / CEE 5-P 16A
1 1	A 1390	Adapter CEE 5-P 32A / CEE 5-P 32A
	A 1474	115 V test adapter
	A 1579	Leakage current clamp
	A 1488	BT Able printer, (battery or mains operated)
	A 1489	Label printer Able, with power and data cables
14 8, 8,	S 2062	BT label printer set, (mains operated)
	A 1105	Barcode scanner
3	A 1321	Barcode scanner (Bluetooth)
	A 1545	OR / Barcode scanner (Bluetooth)
	A 1522	aMESM android SW
	P 1101	Licence key for advanced Metrel ES Manager



RS232 to USB adapter

for external USB