Electrical Equipment / Machine / Switchboard safety
MI 3340 **Alpha**EE XA

Electrical Equipment / Machine / Switchboard safety

The new cutting-edge AlphaEE XA, is designed with an innovative housing that redefines the ease and comfort of electrical equipment testing. The instrument is engineered for robust performance and perfect balance, the AlphaEE XA ensures effortless **one-handed operation**, making it an indispensable tool for professionals on the go. The user-friendly interface provides the flexibility of a touch screen or function keys catering to your preferred method of operation. This dual option enhances usability, ensuring a seamless experience whether you're conducting routine checks or detailed diagnostics.Designed with service organizations in mind, the AlphaEE XA boasts specialized measuring functions that cater to a wide range of applications. It offers both periodic testing and testing after repair with pre-defined AutoSequences and single measurements for on-the-spot servicing, providing unparalleled versatility. AlphaEE XA boosts the future of electrical equipment testing, with its unparalleled convenience, advanced functionality, and exceptional performance, all encapsulated in a sleek, user-centric design.

MEASURING FUNCTIONS

- **EN 50678 / EN 50699**
- Visual inspections;
- Auto test (Continuity + Insulation resistance + Alternative leakage)
- Continuity of protective earth 200mA;
- Insulation Resistance (Riso, Riso-S) 50V, 100V, 250V, 500V;
- Protective conductor current (Direct, Residual, Alternative);
- Touch leakage current (Direct, Alternative);
- Leakage current produced by a floating input, PE current (Direct, Residual);
- Leakage current produced by a floating input, Touch current (Direct);
- Leaks & Power (Itou, Idiff, P, S, Q, PF, THDu, THDi, CosØ, I, U);
- Point to Point Leakage current (Direct)
- Power (P, S, Q, PF, THDu, THDi, CosØ, I, U);
- PRCD test, (2 pole, 3 pole, K/ Di (varistor), S (3 - pole)), S+;
- PRCD test (PE conductor, Open conductor, PE probe);
- RCD test (type A, AC, B, B+, F);
- IC-CPD test (EV-RCD, PE conductor);
- Voltage, SELV/PELV;
- Socket test;
- Polarity / Active polarity test;
- EVSE Diagnostic test;
- Clamp current (With optional A1472)
- Functional inspections.

KEY FEATURES

- **Ergonomic housing:** Experience ultimate convenience with our ergonomic housing, designed for effortless single-handed operation.
- **Li-Ion battery:** Enjoy extended use and rapid recharging with Li-Ion battery, leveraging advanced Li-Ion technology for longer operation times and quicker charge cycles.
- **Performs tests to AS/NZS 3760** standard with tests including earth bond, insulation, polarity, leakage, RCD tests and more with **Pre-defined AUTOSEQUENCE®s** Also to EN 50678, EN 50699, EV-Cables, P-RCDs, Devices with Floating inputs, Audio/video, information and communication technology EN 62368-1.
- **Insulation resistance test (50V, 100V):** Lower test voltages at insulation resistance tests make it easy to safely evaluate sensitive electronic equipment or devices that may be damaged by higher test voltages.
- **IC-CPD:** Easily test Mode 2 and Mode 3 EV cables with the help of supported compatible adapters.
- **Active polarity test:** Ensure flawless functionality with our active polarity test, designed to verify devices requiring mains voltage for operation, including P-RCD switches, smart extension leads, and electric vehicle charging cables.
- **Colour touch screen:** Offers users a quick overview and effortless parameter adjustment, enhancing both efficiency and user experience.
- **Auto Continuity:** The **Auto start** feature enables a rapid and efficient assessment of devices with a larger number of metal parts that require inspection
- **Socket test:** a socket test function empowers users to troubleshoot connection points effectively. With this feature, you can verify mains voltage, and the integrity of "L / N / PE" wiring, ensuring reliable and accurate confirmation.
- **Standby power**: Testing of Standby power (Commission regulation No 2023/826).
- **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.
- **BlackBox protocol:** The primary purpose of the Black Box protocol is to enable execution of Single tests and AutoSequences via remote applications.
- **PC SW Metrel ES Manager (MESM):** Enables creation of test structures, user-defined AUTOSEQUENCE®s, professional test reports and data transfer for archiving. The Australian version comes with the **upgraded PRO license included.**
- **aMESM Android SW** : (optional) Enables QR code scanning, and uploading of pre-prepared user defined AUTOSEQUENCE®s.

METREL®

TESTERS TECHNICAL SPECIFICATIONS

FUNCTION		MEASURING RANGE	RESOLUTION	ACCURACY
Continuity / Protective earth resistance				
[1] Continuity (200 mA)	R	0.00 Ω … 19.99 Ω	0.01 Ω	±(2 % of reading + 2 D)
		20.0 Ω … 99.9 Ω	0.1 Ω	± 3 % of reading
		100.0 Ω … 199.9 Ω	0.1Ω	± 5 % of reading
		200 Ω … 1999 Ω	1 Ω	± 5 % of reading
Insulation Resistance (Riso, Riso-S)				
[2] Insulation resistance, Insulation resistance – S (50 V, 100 V)	Riso	0.00 MΩ … 19.99 MΩ	0.1 MΩ	±(3 % of reading + 2 D)
[2] Insulation resistance, Insulation resistance – S (250 V, 500 V)	Riso - S	0.00 MΩ … 19.99 MΩ	0.1 MΩ	±(3 % of reading + 2 D)
	Riso	20.0 MΩ … 99.9 MΩ	0.1 MΩ	± 5 % of reading
	Riso - S	100.0MΩ … 199.9 MΩ	0.1 MΩ	± 10 % of reading
Output voltage	Um	0 V … 600 V	1 V	±(3 % of reading + 2 D)
Substitute Leakage Current, Substitute leakage current – S				
[3] Substitute Leakage Current, Substitute leakage current – S	Isub	0.00 mA … 1.99 mA	0.01 mA	±(3 % of reading + 3 D)
	Isub—S	2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
Cont+Ins+Sub	Refer to technical specification for Continuity (R), Insulation Resistance (Riso) and Sub-Leakage current (Isub)			
Differential Leakage				
[4] Differential leakage current	Idiff	0.00 mA … 1.999 mA	0.01 mA	+(3 % of reading + 3 D)
		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
Power	P	0 W … 19.99 W	0.01 W	±(5 % of reading + 5 D)
		20 W … 199.9 W	0.1 W	± 5 % of reading
		200 W … 1999 W	1 W	± 5 % of reading
		2.00 kW … 3.70 kW	10 W	± 5 % of reading
Differential leakage current (with A 1830)				
[4] Differential leakage current	Idiff	0.10 mA ... 1.99 mA	0.01 mA	±(5 % of reading + 20 D)
		2.00 mA … 19.99 mA	0.01 mA	±5 % of reading
Touch Leakage				
[4] Touch leakage current	Itou	0.000 mA … 1.999 mA	1 µA	±(3 % of reading + 3 D)
		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
Power	P	0 W … 19.99 W	0.01 W	±(5 % of reading + 5 D)
		20 W … 199.9 W	0.1 W	± 5 % of reading
		200 W … 1999 W	1 W	± 5 % of reading
		2.00 kW … 3.70 kW	10 W	± 5 % of reading
Lpe Leakage				
[5] PE leakage current	Ipe	0.000 mA … 1.999 mA	1 µA	±(3 % of reading + 3 D)
		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
Power	P	0 W … 19.99 W	0.01 W	±(5 % of reading + 5 D)
		20 W … 199.9 W	0.1 W	± 5 % of reading
		200 W … 1999 W	1 W	± 5 % of reading
		2.00 kW … 3.70 kW	10 W	± 5 % of reading
Point to point leakage				
[5] point to point leakage	Ileak	0.000 mA … 1.999 mA	1 µA	A ±(3 % of reading + 3 D)
		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
Lpe+Ifloating input (Ipe+Ifi)				
[5] PE leakage current	Ipe	0.000 mA … 1.999 mA	1 µA	±(3 % of reading + 3 D)
		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
[4] Differential leakage current	Idiff	0.00 mA … 1.999 mA	0.01 mA	±(3 % of reading + 3 D)
		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
[6] Lfi	Lfi	0.000 mA … 1.999 mA	1 µA	±(3 % of reading + 3 D)
		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
Lpe+Ifi / Idiff+Ifi	Lpe+Ifi / Idiff+Ifi	0.000 mA … 1.999 mA	1 µA	Calculated values
		2.00 mA … 19.99 mA	0.01 mA	
Ltouch+Ifloating input (Itou+Ifi)	Ltou	0.000 mA … 1.999 mA	1 µA	±(3 % of reading + 3 D)
[5] Touch leakage current		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
[6] Ifi	Lfi	0.000 mA … 1.999 mA	1 µA	±(3 % of reading + 3 D)
		2.00 mA … 19.99 mA	0.01 mA	± 5 % of reading
Ltou+Ifi	Ltou+Ifi	0.000 mA … 1.999 mA	1 µA	Calculated values
		2.00 mA … 19.99 mA	0.01 mA	
Power	P	0 W … 19.99 W	0.01 W	±(5 % of reading + 5 D
Power (active)		20 W … 199.9 W	0.1 W	± 5 % of reading
		200 W … 1999 W	1 W	± 5 % of reading
		2.00 kW … 3.70 kW	10 W	± 5 % of reading
Power (apparent)	S	0 VA … 19.99 VA	0.01 VA	±(5 % of reading + 5 D
		20 VA … 199.9 VA	0.1 VA	± 5 % of reading
		200 VA … 1999 VA	1 VA	± 5 % of reading
		2.00 k VA … 3.70 k VA	10 VA	± 5 % of reading

Power (reactive)	Q	± (0.00 var … 19.99 var) ± (20.0 var … 199.9 var) ± (200 var … 1999 var) ± (2.00 k var … 3.70 k var)	0.01 var 0.1 var 1 var 10 var	±(5 % of reading + 5 D) ± 5 % of reading ± 5 % of reading ± 5 % of reading
Power factor	PF	0.00 i … 1.00 l 0.00 c … 1.00 c	0.01	±(5 % of reading + 5 D)
Total Harmonic Distortion (voltage)	THDU	0.0 % … 99.9 %	0.1 %	±(5 % of reading + 5 D)
Total Harmonic Distortion (current)	THDI	0 mA … 999 mA 1.00 mA … 16.00 A	1 mA 10 mA	±(3 % of reading + 5 D) ± 5 % of reading
Cosine f	Cos fi	0.00 i … 1.00 l 0.00 c … 1.00 c	0.01	±(5 % of reading + 5 D)
Current	I	0 mA … 999 mA 1.00 A … 16.00 A	1 mA 10 mA	±(3 % of reading + 5 D) ± 3 % of reading
Voltage	U	0.0 V … 199.9 V 200 V … 264 V	0.1 V 1 V	±(3 % of reading + 10 D) ± 3 % of reading
Leak's & Power [5]Touch leakage current	Ltou	0.000 mA … 1.999 mA 2.00 mA … 19.99 mA	1 µA 0.01 mA	±(3 % of reading + 3 D) ± 5 % of reading
[4]Differential leakage current	Ldiff	0.00 mA … 1.999 mA 2.00 mA … 19.99 mA	0.01 mA 0.01 mA	±(3 % of reading + 3 D) ± 5 % of reading
Power (active)	P	0 W … 19.99 W 20 W … 199.9 W 200 W … 1999 W 2.00 kW … 3.70 kW	0.01 W 0.1 W 1 W 10 W	±(5 % of reading + 5 D) ± 5 % of reading ± 5 % of reading ± 5 % of reading
Power (apparent)	S	0 VA … 19.99 VA 20 VA … 199.9 VA 200 VA … 1999 VA 2.00 k VA … 3.70 k VA	0.01 VA 0.1 VA 1 VA 10 VA	±(5 % of reading + 5 D) ± 5 % of reading ± 5 % of reading ± 5 % of reading
Power (reactive)	Q	± (0.00 var … 19.99 var) ± (20.0 var … 199.9 var) ± (200 var … 1999 var) ± (2.00 k var … 3.70 k var)	0.01 var 0.1 var 1 var 10 var	±(5 % of reading + 5 D) ± 5 % of reading ± 5 % of reading ± 5 % of reading
Power factor	PF	0.00 i … 1.00 l 0.00 c … 1.00 c	0.01	±(5 % of reading + 5 D)
Total Harmonic Distortion (voltage)	THDU	0.0 % … 99.9 %	0.1 %	±(5 % of reading + 5 D)
FUNCTION	TEST PRINCI-PLE	0 mA … 999 A 1.00 mA … 16.00 A	1 mA 10 mA	±(3 % of reading + 5 D) ± 5 % of reading
Cosine f	Cos fi	0.00 i … 1.00 l 0.00 c … 1.00 c	0.01	±(5 % of reading + 5 D)
Current	I	0 mA … 999 A 1.00 A … 16.00 A	1 mA 110 mA	±(3 % of reading + 5 D) ± 3 % of reading
Voltage	U	0.0 V … 199.9A 200 V … 264 V	0.1 V 1 V	±(3 % of reading + 10 D) ± 3 % of reading
PRCD test [7]Trip-out time		0 ms … 300 ms (½xIΔN) 0 ms … 300 ms (40 ms*) (IΔN) 0 ms … 40 ms (5xIΔN)	1 ms 1 ms 1 ms	± 3 ms ± 3 ms ± 3 ms
[7]Trip-out current	IΔ	0.2x IΔN … 2.2x IΔN	0.05x IΔN	± 0.1x IΔN
RCD test [8]Trip-out time	tΔN	0 ms … 300 ms (½xIΔN) 0 ms … 300 ms (40 ms*) (IΔN) 0 ms … 40 ms (5xIΔN)	1 ms 1 ms 1 ms	± 3 ms ± 3 ms ± 3 ms
Contact voltage	Uc	0.0 V … 19.9 V 20.0 V … 99.9 V	0.1 V 0.1 V	(-0 %/+15 %) of reading ± 20 D (-0 %/+15 %) of reading
PE conductor(PRCD) [9]PE conductor (Tye = 2pole, 3 pole, S(3 pole), S+)	R	0.00 Ω … 19.99 Ω	0.01 Ω	±(2 % of reading + 2 D)

FUNCTION	**TEST PRINCIPLE**
Open conductor (PRCD)	Mains voltage is applied to the mains test socket. Disconnection of the L, N and PE connections is performed inside the instrument. There is a 'PASS' if the PRCD trips
10PRCD PE probe test	Mains voltage is applied to the mains test socket. A safe voltage sufficiently high to activate the protection circuit in the PRCD is applied to the P/S terminal.

Function	Result	Test Current		Range	Resolution	Accuracy
EV RCD test						
[11]Trip-out time	tΔN	a.c.	½xIΔN	0.0 ms … 300.0 ms	0.1 ms	± 3 ms
		pulse d.c. (A)	IΔN	0.0 ms … 300.0 ms	0.1 ms	± 3 ms
			2xIΔN	0.0 ms … 150.0 ms	0.1 ms	± 3 ms
			5xIΔN	0.0 ms … 40.0 ms	0.1 ms	± 3 ms
		Smooth d.c.	½xIΔN	0.0 ms … 999.9 ms	0.1 ms	± 3 ms
				1.0 s … 9.99s	0.01 s	± 30 ms
			IΔN	0.0 ms … 999.9 ms	0.1 ms	± 3 ms
				1.0 s … 9.99s	0.01 s	± 30 ms
			10xIΔN	0.0 ms … 300.0 ms	0.1 ms	± 3 ms
[11]Trip-out current		IΔN	a.c.	0.2x IΔN … 1.1x IΔN	0.05x IΔN	±0.1x IΔN
			pulse d.c. (A)	0.2x IΔN … 1.5x IΔN	0.05x IΔN	±0.1x IΔN
			smooth d.c.	1.5 mA … 6.0 mA	0.05x IΔN	±0.1x IΔN

FUNCTION	TEST PRINCIPLE
EVSE Diagnostic test (A 1632)	This test is performed in combination with an external test adapter / instrument. For technical specification refer to A 1632 eMobility Analyser Instruction manual.

FUNCTION		MEASURING RANGE	RESOLUTION	ACCURACY
PE conductor (EV RCD)	R			
[9] PE conductor (I test = Standard)		0.00 Ω … 19.99 Ω	0.01 Ω	±(2 % of reading + 2 D)
[2]PE conductor (I test = Low)		0.00 Ω … 19.9 Ω	0.1 Ω	±(5 % of reading + 5 D)

FUNCTION	TEST PRINCIPLE
Polarity	Normal … test voltage (230 V a.c.) Active … test voltage (mains voltage)

FUNCTION		MEASURING RANGE	RESOLUTION	ACCURACY
Clamp current (A 1472)	I	0.10 mA … 9.99 mA	0.01 mA	±(5 % of reading + 10 D)
	Idiff	10.0 mA … 99.9 mA	0.1 mA	±(5 % of reading + 5 D)
	Ipe	100 mA … 999 mA	1 mA	±(5 % of reading + 5 D)
		1.00 mA … 9.99 mA	0.01 A	±(5 % of reading + 5 D)
		10.0 A … 24.9 mA	0.1 A	±(5 % of reading + 5 D)
Enhanced TRMS test [13]Voltage	Uln, Unpe, Ulpel	103 V … 253 V	1 V	±(3 % of reading + 3 D)
R loop	Rl	0.0 kΩ … 9.9 kΩ	0.1kΩ	±(5 % of reading + 5 D)
SELV/PELV Voltage				
[14]Voltage (u trms, Uac)	Utrms	0.0 V … 199.9 V	0.1 V	±(2 % of reading + 10 D)
	U ac	200 V … 264 V	1 V	± 2 % of reading
Voltage Udc	Udc	0.0 V … 199.9 V	0.1 V	±(2 % of reading + 10 D)
		200 V … 264 V	1 V	± 2 % of reading
Frequency	Freq	0 Hz (DC)		Indicative
		15.0 Hz … 499.9 Hz	0.1 Hz	±(0.2 % of reading + 1 D)

[1] **Operating range (acc. to EN 61557-4)** Test currents Test polarity Current source Open circuit voltage	0.08 Ω … 199.9 Ω 0.2 A d.c. bidirectional, continuous > 0.2 A d.c. at R < 2 Ω 4 V r.m.s … 6 V r.m.s
[2] **Operating range (acc. to EN 61557-2)** Nominal voltages Un Short circuit current	0.08 MΩ … 19.9 MΩ at Un: 50 V, 100 V 0.08 MΩ … 199.9 MΩ at Un: 250 V, 500 V 50 V, 100 V, 250 V, 500 V (- 0 %, + 10 %) max. 2.0 mA
[3] **Operating range (acc. to EN 61557-2** Open circuit voltage Short circuit current Current calculated to mains supply voltage (110 V or 230 V) is displayed	0.02 mA … 19.99 mA 230 V a.c., 110 V a.c. < 2 mA
[4] **Operating range (acc. to EN 61557-16)** Influence of load current	0.10 mA … 19.99 mA < 0.03 mA / A
[5] **Operating range (acc. to EN 61557-16)**	0.010 mA … 19.99 mA
6 Operating range (acc. to EN 61557-16) Output voltage	0.020 mA … 19.99 mA ≤250 V a.c., max, ≤2 mA
[7] **Test current type** Test currents (IΔN) *Test current size (PRCD standard is AS/NZS 3017) Test current size (general)	sin-wave (AC), pulsed (A, F), smooth DC (B, B+) 10 mA, 15 mA, 30 mA ± 5% -0/+10%
[8] **Test current type** Test currents (IΔN) Test current size (PRCD standard is AS/NZS 3017) Test current size (EN 61008/EN 61009)	sin-wave (AC), pulsed (A, F), smooth DC (B, B+) 10 mA, 15 mA, 30 mA ± 5% -0/+10%
[9] **Operating range (acc. to EN 61557-4)** Current source	0.08 Ω … 19.99 Ω > 0.2 A d.c. at R < 2 Ω
[10] **Test voltage (active)** Maximal current	> 250 V a.c. < 2 mA
[11] **Test current type** Test currents (IΔN) Test current size	sin-wave (a.c.), pulsed d.c. (A), smooth d.c. 6 mA (smooth d.c.), 10 mA, 15 mA, 30 mA -0/+10%
[12] **Current source**	< 3 mA at R < 2 Ω
[13*] **Specified accuracy is valid in circuits with Rline < 20 Ω**	
[14] **Result type** Input resistance Nominal frequency range Bandwidth	True r.m.s (TRMS), AC, DC Input P/S 200 kΩ to earth Input PE 200 kΩ to earth 0 Hz (DC), 15 Hz … 500 Hz 1 kHz a

TECHNICAL SPECIFICATIONS	
Mains supply	
Supply voltage, frequency	115 V / 230 V a.c., 50 Hz / 60 Hz
Supply voltage tolerance	± 10 %
Max. power consumption	30 VA (without load on test socket)
Max. load Mains	10 A continuous, 16 A short duration, 1.5 kW motor
supply overvoltage category	CAT II / 300V
Altitude	≤ 2000 m
Measuring categories	
Instrument	Cat II / 300 V
Test socket	Cat II / 300 V
Plug test cable	Cat II / 300 V
Altitude	≤ 2000 m
Protection classifications	
Power supply	Class I, (mains supply), Class II, (battery supply)
Pollution degree	2
Degree of protection	IP 40 / IP 20 (mains test socket)
Case	Shock proof plastic / portable
Operation	Indoor use
Display	Colour TFT display, 4.3 inch, 480 x 272 pixels
Touch screen	Capacitive
EMC classifications	
Emission	Class B (Group 1)
Immunity	Industrial environment
Communication	
Memory	depends on microSD card size
USB 2.0	Standard USB Type Ba
Bluetooth	Class 1
Dimensions (w×h×d)	15 cm × 8 cm × 28 cm
Weight	1.7 kg
Reference conditions	
Reference temperature range	15 ºC … 35 ºC
Reference humidity range	35 % … 65 % RH
Operation conditions	
Working temperature range	0 ºC … +40 ºC
Maximum relative humidity	85 % RH (0 ºC … 40 ºC), non-condensing
Storage conditions	
Temperature range	-10 ºC … +60 ºC
Maximum relative humidity	90 % RH (-10 ºC … +40 ºC)
	80 % RH (40 ºC … 60 ºC)

APPLICATION

- Electrical equipment testing, general
- Mode 2 EV, Emergency charging cables testing[1]
- Mode 3 EV, Charging cables testing[2]
- P-RCD Testing (PRCD, PRCD-S, PRCD -S pro, 2-pole, 3-pole)
- Testing devices with floating inputs (unique measuring function)
- 3-Phase equipment testing[3]

[1]In combination with A 1532 XA or A 1632 / [2] In combination with A 1832 / [3] In combination with A 1830

STANDARDS

- **EN 50699** Recurrent Tests of Electrical Equipment
- **EN 50678** Verification of Electrical Equipment After Repair
- **IEC 62368-1**[1] Audio/video, information and communication technology equipment
- **IEC 62752**[2] In-cable control and protection device for mode 2 charging of electric road vehicles (IC – CPD)

[1]In combination with A 1789 / [2]In combination with A 1532 XA or A 1632

CAN BE USED TOGETHER WITH

A 1830
Active 3-phase adapter

The A 1830 3-phase Active Leakage Adapter is designed for testing, devices which are equipped with a CEE 3-PH/16A 5 pin or CEE 3-PH/32A 5 pin plug. It enables quick and efficient active leakage testing using test instruments primarily designed for testing single phase electrical equipment. If used together with Metrel AUTOSEQUENCES®, prebuilt in the newer multifunctional testers, the complete 3-phase electrical device can be tested with a push of a button. It is possible to create a professional report with MESM SW.

A 1632
eMobility Analyser

The A 1632 eMobility Analyser is a special accessory designed for diagnostic testing of Electric Vehicle Supply Equipment (EVSE) together with supported METREL installation testers. It supports verification of electrical safety and functional testing of Type 1 and/or Type 2 EVSE as well as testing of Mode 2 and Mode 3 electrical vehicle (EV) charging cables and communication monitoring between the charging station and the EV during charging. Fully supported professional station-based and cable-based report creation with MESM software.

A 1789
Single Fault Condition Adapter

Single Fault Condition Adapter is designed to simulate abnormal operating or single-fault conditions (SFC). Product standard such as EN 62368 demand testing leakage currents in single fault conditions. The adapter is designed to work with master instrument MI 3340 supporting single-fault condition parameters.

A1532 XA
EVSE adapter XA

The A 1532 EVSE XA adapter is used for verification of electrical safety and functional testing of EVSE together with supported METREL installation testers. It is intended for testing Mode 3 EV supply equipment with a type 2 connector. XA version supports 3 phase load testing up to 13 A and different error types, including PE open. If used together with Metrel AutoSequences®, prebuilt in the newer multifunctional testers, the complete EVSE charging station can be tested (state-by-state) electrically and functionally with a push of a button. It is possible to create a professional station-

A 1832
Mode 3 Charging Cable Adapter

The A 1832 Mode 3 Charging cable adapter is used for verification of electrical safety testing of Mode 3 EV charging cables with Type 2 connectors together with supported METREL testers. If used together with Metrel AUTOSEQUENCES®, integrated in the newer multi-functional testers, the EV charging cable can be comprehensively tested (including functionally) with a push of a button. It is possible to create a professional report with MESM SW

OPTIONAL ACCESSORIES

Photo	Part No.	Description
	3PMA	3 phase adapter - with schuko connector
	A 1472	Leakage current clamp, 100 A, Dia=40 mm
	3PTL...	Various styles 3 phase adaptors with exposed earth core for clamps
	RCD-3P	3 Phase RCD adaptor with separate L1, L2, L3 test sockets to enable testing 3 phase RCDs (various variants)
	3PSA...	Available in a few variants and used with the 3PMA, these adap-tors remove the need to hold the S/EB probe onto the earth pin of the extension cord.
	A 1759	Test lead, Brown, 1m, 1.5mm2
	A 1760	Test lead, Green, 1m, 1.5mm2
	TAGCUT	Satety tag cutter
	IN-SCLOAK	Insulation Stainless Cloak

Photo	Part No.	Description
	A 1331	Test lead, Black, 1.5m, 1.5mm2 Heavy duty earth clip
	A 1309	Crocodile clip, green
	A 1297	Crocodile clip, brown
	A 1062	Test probe, green
	A 1298	Test probe, brown
	A 1670	Test lead, BLK/GRN/BLU, 1.5m, 0.75mm2, 3x stack ban plug/IEC C13
	IECCLOV	IEC to clover leaf adapter
	IECFIG8	IEC to figure 8 adapter

INCLUDED IN THE SET

Standard set MI 3340 (AUS Version)

- Instrument MI 3340 AlphaEE XA
- A 1493 IEC cable, 2m, black, 2pc
- A 1340 Test lead, 1.5m, black banana lead
- A 1014 Test probe, black
- A 1013 Crocodile clip, black
- A 1727 USB cable Type A/B
- Calibration certificate
- Short instruction manual
- Instruction manual*
- Metrel ES Manager software PRO License*

*SW 1201 Metrel ES Manager and all documentation can be downloaded free of charge from Metrel Web server (https://www.metrel.si/en/downloads/) or Metrel Documentation center (https://doc.metrel.si).

After a full print kit? You may want to consider one of our full print kit options. Contact us to discuss the options.

Alpha Pro Print Pack (option)

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