Alpha Pro Print Pack The latest advanced portable appliance testing kit



The Alpha Pro Print pack is a complete portable appliance testing package. The kit can operate on mains or battery power making it highly portable. This comprehensive kit includes the new AlphaEE MI3340 tester, a Zebra ZQ521 Bluetooth printer and a Socket pocket sized 2D/QR BT barcode scanner protected by a heavy duty carry case with custom cut foam insert.

The kit provides a comprehensive, easy to use, portable appliance testing solution.

Test tags are printed complete with test and retest date, custom logo and QR code which can be scanned with the barcode scanner for rapid retesting.

OVERVIEW

The Alpha Pro Print pack is a complete portable appliance testing package. The kit can operate on mains or battery power making it highly portable. This kit includes the new highly comprehensive Alpha MI3340 tester, a Zebra ZQ521 Bluetooth barcode printer pocket sized BT barcode scanner. Test tags are printed complete with test and retest date, custom logo and QR code which can be scanned with the barcode scanner for rapid retesting.

This comprehensive kit is a professional solution for all your testing and tagging needs and includes features and functions to expand your testing capability for example into the 3 phase testing field and EV cable testing fields

The ergonomic light weight set has a tester and printer which is powered by high capacity li-ion batteries allowing extended use in the field and rapid recharging.

The colour touch screen provides a clear and recognizable smartphone like interface for easy data entry and parameter adjustment. Upon completion of testing measurement results can be uploaded to the included software 'Metrel ES Manager' to customize and generate professional test reports. A pro version of the software license is included with the Australian variant of this tester.

KEY FEATURES OF THE KIT

- Custom heavy duty carry case with custom cut foam insert to keep the kit neat, tidy and well protected.
- Full portability can operate on batteries or mains power. Tester and printer have high capacity li-ion batteries allowing extended use and rapid recharging.
- Zebra ZQ521 allows printing of direct thermal test tags
- Socket S740 2D/QR BT barcode scanner is pocket sized and easy to use to scan last test tag to rapidly re-test
- Includes everything you need to get started with some optional accessories available to expand your testing capability
- Includes a pro license of 'Metrel ES Manager' PC SW to customize and generate professional test reports.

KEY FEATURES OF THE TESTER

- Performs tests to AS/NZS 3760 standard with tests including earth bond, insulation, polarity, leakage, RCD tests and more with Pre-defined AUTOSEQUENCE®s
- 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.
- Auto Continuity: The Auto start feature enables a rapid and efficient assessment of devices with a larger number of metal parts that require inspection.
- The colour touch screen provides a clear and recognizable smartphone like interface for easy data entry and parameter adjustment.

Colour touch screen offers effortless parameter adjustment



Protected by a heavy duty water resistant, air and dust proof safe case









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.

EXTENDED TESTER FEATURES

- Ergonomic housing: Experience ultimate convenience with our ergonomic housing, designed for effortless single-handed operation.
- 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.
- 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: 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 AU-TOSEQUENCE[®]s.





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TESTERS TECHNICAL SPECIFICATIONS

FUNCTION		MEASURING RANGE	RESOLUTION	ACCURACY
Continuity / Protective earth resistance				
1Continuity (200 mA)	R	0.00 Ω 19.99 Ω	0.01.0	±(2 % of reading + 2 D)
		20.0 Ω 99.9 Ω	0.01 0	± 3 % of reading
		100.0 Ω 199.9 Ω	0.1 0	± 5 % of reading
		200 0 1999 0	1.0	+ 5% of reading
Insulation Desistance (Disc. Disc. C)		200 11 11 2000 11	1 32	_ 0 /0 01 (Cddm)B
Insulation Resistance (RISO, RISO-S)	D '		0.4.140	
$_{2}$ Insulation resistance, insulation resistance – S (50 V, 100 V)	RISO		0.1 MΩ	$\pm (3\% \text{ of reading} \pm 2D)$
² Insulation resistance, Insulation resistance – S (250 V, 500 V)	Riso - S	0.00 ΜΩ 19.99 ΜΩ	0.1 MΩ	\pm (3 % of reading + 2 D)
	RISO	20.0 MΩ 99.9 MΩ	0.1 MΩ	± 5 % of reading
	Riso - S	100.0ΜΩ 199.9 ΜΩ	0.1 ΜΩ	± 10 % of reading
Output voltage	Um	0 V 600 V	1 V	±(3 % of reading + 2 D)
Substitute Leakage Current, Substitute leakage current – S				
3Substitute 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 t	echnical specification for Cor	ntinuity (R), Insulati	ion Resistance (Riso) and Sub-Leakage
	current (i	subj		
Differential Leakage				
4 Differential leakage current	Iditt	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	Р	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	Р	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	$\pm 5\%$ of reading
		2 00 kW 3 70 kW	10 W	+ 5 % of reading
		2.00 kW 5.70 kW	10 10	
- DE loakage current	Ino	0.000 m $1.000 m$	1	+(2% of roading + 2D)
SPL leakage current	ipe	2.00 mA 10.00 mA	$1 \mu A$	$\pm (5\% \text{ of reading} \pm 5D)$
Devuer	0	2.00 IIIA 19.99 IIIA	0.01 MA	± 5 % of reading
Power	Р	0 W 19.99 W	0.01 W	\pm (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				
₅point to point leakage	lleak	0.000 mA 1.999 mA	1 μΑ	A \pm (3 % of reading + 3 D)
		2.00 mA 19.99 mA	0.01 mA	± 5 % of reading
Lpe+lfloating input (lpe+lfi)				
s 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
4Differential 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
٥Lfi	Lfi	0.000 mA 1.999 mA	1 μΑ	±(3 % of reading + 3 D)
		2.00 mA 19.99 mA	0.01 mA	±5% of reading
Lpe+lfi / ldiff+lfi	Lpe+lfi/	0.000 mA 1.999 mA	1 μA	Calculated values
	ldiff+lfi	2.00 mA 19.99 mA	0.01 mA	
Ltouch+Ifloating input (Itou+Ifi)	Itou	0.000 mA 1.999 mA	1 µA	+(3 % of reading + 3 D)
Touch leakage current		2.00 mA 19.99 mA	0.01 mA	+5% of reading
	l fi	0.000 mA 1.999 mA	1 μΔ	+(3% of reading + 3D)
511	L11	2 00 mA 19 99 mA	$1 \mu \Lambda$	$\pm 5\%$ of reading $+ 5D$
Itoulfi	Itoulfi	0.000 mA 1.000 mA	1.01 MA	
	Llou+III	0.000 IIIA 1.999 IIIA	1 μA	Calculated values
	D	2.00 IIIA 19.99 IIIA	0.01 114	1/5 0/ of models and 5 D
Power	٢	0 W 19.99 W	0.01 W	\pm (5 % of reading + 5 D
Power (active)		20 W 199.9 W	U.1 W	\pm 5 % of reading
		200 W 1999 W	1 VV	I 5 % of reading
		2.00 KW 3.70 KW	10 W	± 5 % OF reading
Power (apparent)	S	U VA 19.99 VA	0.01 VA	\pm (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)	0.01 var	$\pm(5\% \text{ of reading} + 5 \text{ D})$
		± (20.0 var 199.9 var)	0.1 var	± 5 % of reading
		± (200 var 1999 var)	1 var	± 5 % of reading
		± (2.00 k var 3.70 k var)	10 var	± 5 % of reading
Power factor	PF	0.00 i 1.00 l	0.01	±(5 % of reading + 5 D)
		0.00 c 1.00 c		
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 mA	$\pm(3\% \text{ of reading} + 5 \text{ D})$
		1.00 mA 16.00 A	10 mA	± 5 % of reading
Cosino f	Casfi	0.00; 1.001	0.01	+/F % of roading + F D)
Cosine i	COSTI	$0.001 \dots 1.001$	0.01	\pm (5 % of reading + 5 D)
Current		0.00 t 1.00 t	1 4	+/2 % of roading + 5 D)
Current	I	0 MA 999 MA	1 MA	$\pm (3\% \text{ of reading} \pm 3\text{ D})$
		1.00 A 10.00 A	10 111A	
Voltage	U	0.0 V 199.9 V	0.1 V	\pm (3 % of reading + 10 D)
		200 V 264 V	1 V	± 3 % of reading
Leak's & Power	Ltou	0.000 mA 1.999 mA	1 μΑ	\pm (3 % of reading + 3 D)
sTouch leakage current		2.00 mA 19.99 mA	0.01 mA	± 5 % of reading
4Differential leakage current	Ldiff	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 (active)	P	0 W 19.99 W	0.01 W	$\pm(5\% \text{ of reading } + 5\text{ D})$
		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
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)	0.01 var	±(5 % of reading + 5 D)
		± (20.0 var 199.9 var)	0.1 var	± 5 % of reading
		± (200 var 1999 var)	1 var	± 5 % of reading
		± (2.00 k var 3.70 k var)	10 var	± 5 % of reading
Power factor	PF	0.00 i 1.00 l	0.01	±(5 % of reading + 5 D)
		0.00 c 1.00 c		
Total Harmonic Distortion (voltage)	THDU	0.0 % 99.9 %	0.1 %	±(5 % of reading + 5 D)
FUNCTION		0 mA 999 A	1 mA	±(3 % of reading + 5 D)
	PLE	1.00 mA 16.00 A	10 mA	± 5 % of reading
Cosine f	Cos fi	0.00 i 1.00 l	0.01	$\pm(5\% \text{ of reading} + 5\text{ D})$
		0.00 c 1.00 c		
Current	I	0 mA 999	1 mA	\pm (3 % of reading + 5 D)
		A 1.00 A 16.00 A	110 mA	± 3 % of reading
Voltage	U	0.0 V 199.9A	0.1 V	±(3 % of reading + 10 D)
		200 V 264 V	1 V	± 3 % of reading
PRCD test		0 ms 300 ms (½xl∆N)	1 ms	± 3 ms
⁷ Trip-out time		0 ms 300 ms (40 ms*) (ΙΔΝ)	1 ms	± 3 ms
		0 ms 40 ms (5xl∆N)	1 ms	± 3 ms
⁷ Trip-out current	ΙΔ	0.2x ΙΔΝ 2.2x ΙΔΝ	0.05x ΙΔΝ	± 0.1x ΙΔΝ
RCD test	tΔN	0 ms 300 ms (½xl∆N)	1 ms	± 3 ms
₅Trip-out time		0 ms 300 ms (40 ms*) (I∆N)	1 ms	± 3 ms
		0 ms 40 ms (5xl∆N)	1 ms	± 3 ms
Contact voltage	Uc	0.0 V 19.9 V	0.1 V	(-0 %/+15 %) of reading
		20.0 V 99.9 V	0.1 V	± 20 D
				(-0 %/+15 %) of reading
PE conductor(PRCD)	R	0.00 Ω 19.99 Ω	0.01 Ω	$\pm(2\% \text{ of reading} + 2 \text{ D})$
PE conductor (Tye = 2pole, 3 pole, S(3 pole), S+)				,
FUNCTION	TECT DRI	NCIPLE		
			analyst D'	and a state to be store and the
Open conductor (PKCD)	Mains vo is perforr	mage is applied to the mains test med inside the instrument. There	socket. Disconi	nection of the L, N and PE connections le PRCD trips
		have been bedracht and an eine state		aller and the second
IUPRCD PE probe test	Mains vo protectio	ntage is applied to the mains test on circuit in the PRCD is applied to	socket. A safe to the P/S termin	voltage sumclently high to activate the hal.

Function	Result	Test Current		Range	Resolution	Accuracy
EV RCD test						
11Trip-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.	%χΙΛΝ	0.0 ms 999.9 ms	0.1 ms	+ 3 ms
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	105 9995	0.01 s	+ 30 ms
			ΙΛΝ	0.0 ms 999 9 ms	0.1 ms	± 3 ms
				10 s 9 99s	0.01 s	+ 30 ms
			10χΙΔΝ	$0.0 \mathrm{ms}$ 300.0 ms	0.01 ms	+ 3 ms
Trip out current			2.0			+0.1× IAN
			a.e. (Λ)			
			smooth d c	15 m $60 m$		
FUNCTION			Sillootii u.c.	1.5 IIIA 0.0 IIIA	0.037 1211	
			1. 1		<u>.</u>	
EVSE Diagnostic test (/	A 1632)	cation refer to A 1	med in combination with L632 eMobility Analyser Ir	an external test adapter / il istruction manual.	nstrument. For tec	hnical specifi-
FUNCTION			MEASURING RANGE	RESOLUTION	ACCURACY	
PE conductor (EV RCD)		R				
• PE conductor (I test =	(Standard)	i.	0 00 0 19 99 0	0.01.0	+/2 % of readin	a + 5 D)
PE conductor (I tost -	Low		0.00 0 19.90	0.1.0	±(5 % of readin	g + 5 D)
	LOW)		0.00 \2 19.9 \2	0.1 12		g + 5 0)
FUNCTION		TEST PRINCIPLE				
Polarity		Normal test vol	tage (230 V a.c.)			
		Active test volta	age (mains voltage)			
FUNCTION			MEASURING RANGE	RESOLUTION	ACCURACY	
Clamp current (A 1472)	1	0.10 mA 9.99 mA	0.01 mA	±(5 % of reading	g + 10 D)
		Idiff	10.0 mA 99.9 mA	0.1 mA	±(5 % of reading	g + 5 D)
		lpe	100 mA 999 mA	1 mA	±(5 % of reading	g + 5 D)
			1.00 mA 9.99 mA	0.01 A	±(5 % of reading	g + 5 D)
			10.0 A 24.9 mA	0.1 A	±(5 % of reading	g + 5 D)
Enhanced TRMS test		Uln, Unpe, Ulpel	103 V 253 V	1 V	±(3 % of reading	g + 3 D)
13Voltage						<i>.</i> ,
R loop		RI	0.0 kΩ 9.9 kΩ	0.1kΩ	±(5 % of reading	g + 5 D)
SELV/PELV Voltage						
14Voltage (u trms, Uac)		Utrms	0.0 V 199.9 V	0.1 V	±(2 % of reading	g + 10 D)
		U ac	200 V 264 V	1 V	± 2 % of reading	g
Voltage Udc		Udc	0.0 V 199.9 V	0.1 V	±(2 % of reading	g + 10 D)
			200 V 264 V	1 V	± 2 % of reading	g
Frequency		Freq	0 Hz (DC)		Indicative	
		·	15.0 Hz 499.9 Hz	0.1 Hz	±(0.2 % of read	ing + 1 D)
1 Operating range (acc. to	EN 61557-4)	0.08 Ω 199.9 Ω				0,
Test currents Test polarity	•	0.2 A d.c. bidirectional. contin	uous			
Current source		> 0.2 A d.c. at R < 20	2			
	EN (4557 3)	0.00.040 10.0.040	-+ 11 50.1/ 100.1/		-	
2 Operating range (acc. to Nominal voltages Un	EN 61557-2)	0.08 MΩ 19.9 MΩ 0.08 MΩ 199.9 MΩ	at Un: 50 V, 100 V Ω at Un: 250 V, 500 V			
Short circuit current		50 V, 100 V, 250 V, 5 max. 2.0 mA	500 V (- 0 %, + 10 %)			
3 Operating range (acc. to	EN 61557-2	0.02 mA 19.99 mA	A			
Open circuit voltage Short circuit current		230 V a.c., 110 V a.c < 2 mA				
Current calculated to main V) is displayed	ns supply voltage (110 V or 230					
4 Operating range (acc. to	EN 61557-16)	0.10 mA 19.99 mA	A			
Influence of load current	· · · · · · · · · · · · · · · · · · ·	< 0.03 mA / A				
5 Operating range (acc. to	EN 61557-16)	0.010 mA 19.99 m	A			
6 Operating range (acc. to	o EN 61557-16)	0.020 mA 19.99 m	A mA			
		sin wave (AC) nulse				
Test currents (IAN)	· · · · · · · · · · · · · · · · · · ·	10 mA, 15 mA, 30 m	а (А, Р), smooth DC (В, В+) А			
Test current size (general)	tandard is AS/NZS 3017)	± 5% -0/+10%				
Test current type		sin-wave (AC), pulse	d (A, F), smooth DC (B, B+)			
Test currents (IDN) Test current size (PRCD sta	andard is AS/NZS 3017)	10 mA, 15 mA, 30 m ± 5%	A			
Test current size (EN 6100	98/EN 61009)	-0/+10%				
Operating range (acc. to Current source)	EN 61557-4)	0.08 Ω 19.99 Ω > 0 2 A d c at B < 2 0	0			
10 Test voltage (active)		> 250 V a c				
Maximal current		< 2 mA				
11 Test current type		sin-wave (a.c.), pulse	ed d.c. (A), smooth d.c.			
Test current size		-0/+10%	10 mm, 10 mm, 00 mm			
12 Current source		$< 3 \text{ mA at R} < 2 \Omega$				
13* Specified accuracy is va	alid in circuits with Rline < 20 Ω					
14 Result type		True r.m.s (TRMS), A	AC, DC			
Neminal fragment		Input P/S 200 kΩ to e	earth			
Bandwidth		0 Hz (DC), 15 Hz 5 1 kHz a	UU HZ			

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 testing₁
- Mode 3 EV, Charging cables testing²
- P-RCD Testing (PRCD, PRCD-S, PRCD -S pro, 2-pole, 3-pole)
- Testing devices with floating inputs (unique measuring function)
- 3-Phase equipment testing₃

1In 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: Audio/video, information and communication technology equipment
- IEC 62752² In-cable control and protection device for mode 2 charging of electric road vehicles (IC - CPD)

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

CAN BE USED TOGETHER WITH

A 1830	A 1632	A 1789	A1532 XA	A 1832
Active 3-phase adapter	eMobility Analyser	Single Fault Condition Adapter	EVSE adapter XA	Mode 3 Charging Cable Adapter
			\bigcap	



The A 1830 3-phase Active Leakage Adapter is designed for testing, devices which are 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 designed for testing single phase electrical equipment. If aused 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.



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 cablebased report creation with MESM software.

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.



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

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

(state-by-state) electrically and functionally with a push

of a button. It is possible to create a professional station-



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 is intended for testing Mode 3 AUTOSEQUENCES®, integrated in the newer multi-functional testers, the EV charging cable can be used together with Metrel AutoSequences®, prebuilt in the newer multifunctional testers, the complete EVSE charging station can be tested 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	Photo	Part No.	Description
00	3PMA	3 phase adapter - with schuko connector	-	A 1331	Test lead, Black, 1.5m, 1.5mm ₂
\mathbf{s}					Heavy duty earth clip
69	A 1472	Leakage current clamp, 100 A, Dia=40 mm		A 1309	Crocodile clip, green
Q.				A 1297	Crocodile clip, brown
\mathbf{Q}	3PTL	Various styles 3 phase adaptors with exposed earth core for clamps		A 1062	Test probe, green
No.			ĪĪ	A 1298	Test probe, brown
	RCD-3P	3 Phase RCD adaptor with separate L1, L2, L3 test sockets to enable testing 3 phase RCDs (various variants)	×	A 1670	Test lead, BLK/GRN/ BLU, 1.5m, 0.75mm2, 3x stack ban plug/IEC C13
	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.	*	TDD-XXX	Printable direct thermal test tags, available in various colours
0	A 1759	Test lead, Brown, 1m, 1.5mm2		IECCLOV	IEC to clover leaf adapter
0	A 1760	Test lead, Green, 1m, 1.5mm2	5	IECFIG8	IEC to figure 8 adapter
	TAGCUT	Satety tag cutter		INSCLOAK	Insulation Stainless Cloak

INCLUDED IN THE SET



Heavy duty carry case

- Custom foam with cut outs
- Zebra ZQ521 printer + charger
- Socket 2D BT barcode scanner
- Instrument MI3340 Alpha
- Testers factory calibration certificate
- Pro license for MESM PC software
- IEC cable, 2m, black, 2pc
- Test lead, black, 1.5m
- Crocodile clip, black
- Test probe, black
- USB cable

METREL d.o.o.

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