CHAUVIN ARNOUX

C.A 6131 - C.A 6133

Electrical installation testers

Test the electrical safety of your installations

- Earth measurement by stake and loop methods
- Continuity measurement at 0.2A
- Insulation testing
- RCD testing: current and trip time
- Automatic test sequences
- Storage of test results
- ANDROID application for report generation
- Power supply by mains-rechargeable batteries, USB socket or vehicle cigarette lighter

600 V CAT III | IP 54 | Auto Script

Measure up

ELECTRICAL INSTALLATION TESTERS

ERGONOMICS AND FUNCTIONS

Designed for checking safety on electrical installations, the C.A 6131 and C.A 6133 can be used to test a new installation before powering it up, check an existing installation, whether in operation or not, and to troubleshoot a dysfunction.
For inspection organizations, these portable instruments are simple, effective and, above all, compliant with the applicable standards.

Terminal strip.

A battery charger input.

3 voltage inputs including one for the remote-control probe.

A specific 4-point socket for the MN73A current clamp (option).

Magnetized casing for magnetic mounting.

Measurement validation LED.

LED showing voltage present on PE.

Buzzer activation/deactivation. Cable compensation.

Activation of backlighting/ Bluetooth activation.

Data storage.

Direct access to the measurements.

Backlit LCD display.

Rereading/deletion of recorded measurements.

TEST button.

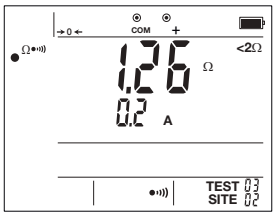
Navigation keys.

Neck strap for hands-free use.

Built-in stand for benchtop use..

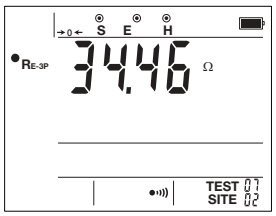
Charging via universal USB connections!

Functions



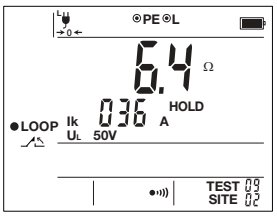
Continuity

Compliant with the IEC 61557-4 standard. If the buzzer is active, users are informed by a beep if the measurement is below the threshold, so they do not have to look at the screen.



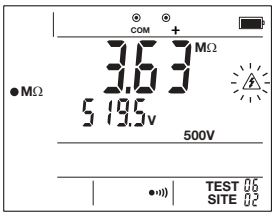
Earth

This function allows you to measure an earthy resistance using the stake method when the electrical installation to be tested is not powered up (new installation, for example). It is only available on the C.A 6133.



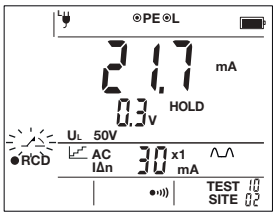
Loop

Loop measurement is performed in Trip or No Trip mode. On a TN or TT installation, loop impedance measurement can be used to size the protective systems for the installation (fuses or RCDs), particularly in terms of breaking capacity. On a TT installation, this measurement serves to determine the value of the earth resistance without setting up any stakes and without having to power down the installation.



Insulation

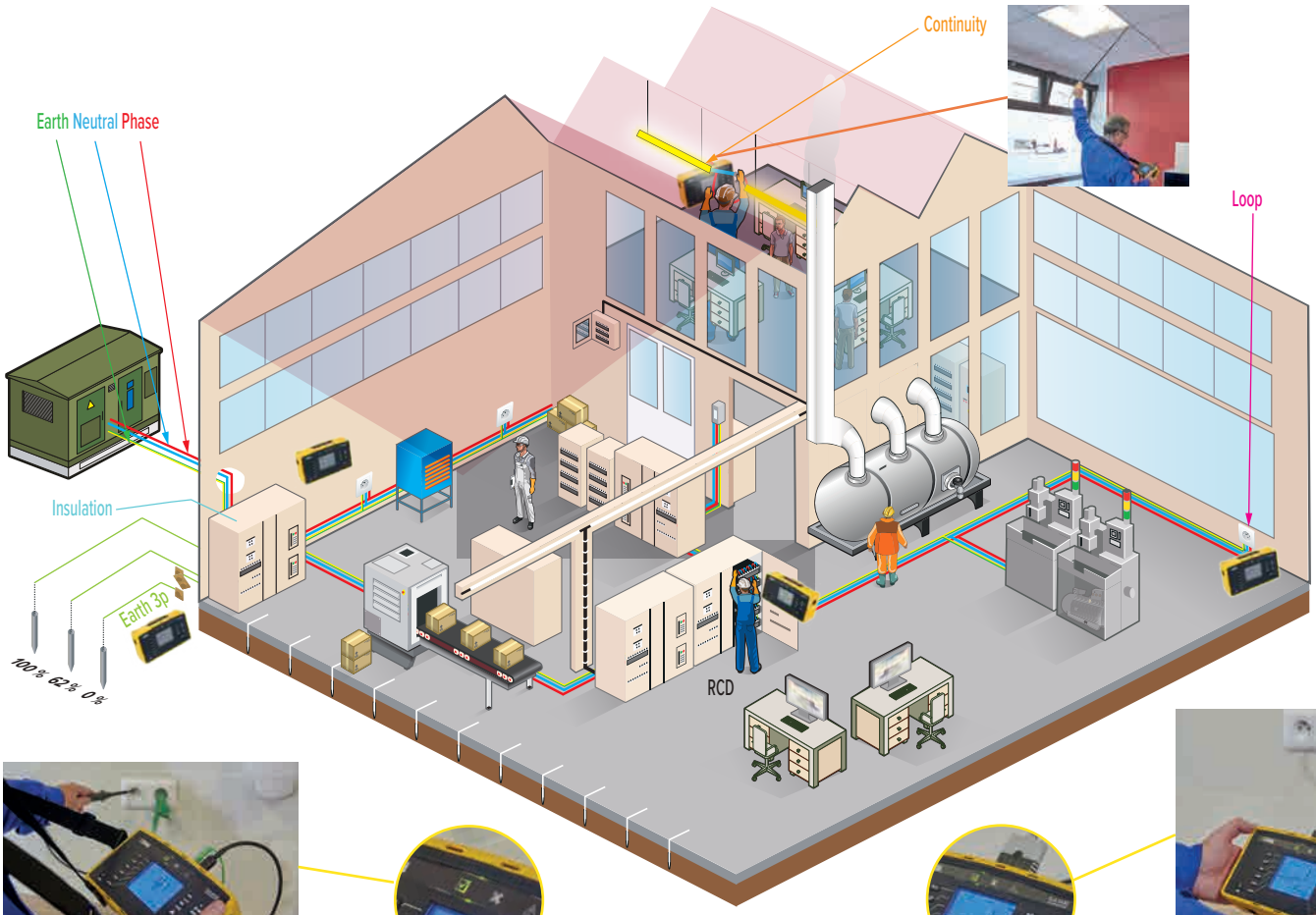
The user selects the test voltage and chooses the set of alarm thresholds. A visual indication instantaneously shows whether the test is OK or not: if the measurement is higher than the threshold, the V LED lights up. If the measurement is lower than the threshold, the X LED lights up.



RCD

The comprehensive RCD test can be used with type A and AC RCDs. 3 types of test are available:
- No Trip test,
- Trip test in pulse mode,
- Trip test in ramp mode.

CHECK THE COMPLIANCE OF ELECTRICAL INSTALLATIONS WITH A SINGLE INSTRUMENT



PASS/FAIL LED for viewing the results instantaneously.

3-pole cable for direct measurements on 2P+E sockets.

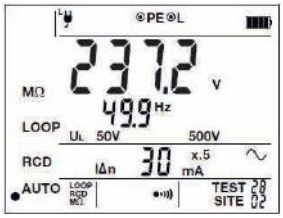
COMPLEMENTARY FUNCTIONS AVAILABLE ON THE C.A 6133

Automatic test sequence

Save time! The AUTO-RCD automatic test sequence performs the following operations:
- the No-Trip test, the Trip test at 1 x IΔn and the Trip test at 5 x IΔn,
- if necessary, the Trip test in ramp mode. A single press on the backup buttons saves all the tests performed.

Another automatic test sequence is also available which performs the following tests, successively:

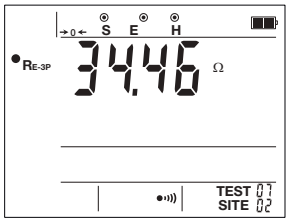
LOOP – RCD – INSULATION



Current measurement

The MN73A clamp is recognized automatically when it is connected, as is the measurement calibre.

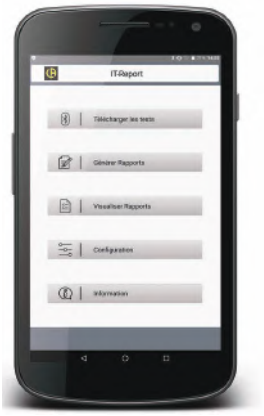
Data storage



The data storage function can be used to store your measurement results: up to 99 tests per site on up to 30 sites!

Bluetooth communication for Android IT-Report application

The ANDROID IT-Report application can be used to transfer the test results stored in the C.A 6133 onto a tablet or smartphone via Bluetooth. Test reports are then generated and sent automatically by email or simply stored for processing later on.



Technical Specifications

	C.A 6131	C.A 6133		
Continuity				
Range / Resolution / Accuracy	0.00 to 9.99 Ω – Compensation of cables up to 5 Ω; I ⩾ 200 mA / 0.01 Ω / ± (2 % R* + 2 cts)			
Resistance				
Range / Resolution / Accuracy	1 to 9,999 Ω – 10.00 to 99.99 kΩ / 1 Ω – 10 Ω / ± (1 % R + 5 cts)			
Insulation				
Test voltage	250 V / 500 V	250 V / 500 V / 1 000 V		
Range / Resolution / Accuracy	0.01 to 999.9 MΩ / 10 kΩ or 100 kΩ / ± (3 % R + 3 cts)			
Earth resistance - 3P method				
Range	-	0.50 to 99.99 Ω	100.0 to 999.9 Ω	1,000 to 2,000 Ω
Resolution	-	0.01 Ω	0.1 Ω	1 Ω
Accuracy	-	±(2 % R + 10 cts)	±(2 % R + 5 cts)	±(2 % R + 5 cts)
Measurement frequency	-	128 Hz		
Earth loop (Zs) measurement				
No Trip (12 mA)				
Range / Resolution / Accuracy	1 to 19 Ω – 20 to 39 Ω – 40 to 2,000 Ω / 1 Ω / ± (2 cts) – ±(15 % R + 3 < cts) – ± (5 % R + 2 cts)			
Calculation of Ik	1 to 999 A			
With Trip (300 mA)				
Range / Resolution / Accuracy	0.1 to 0.9 Ω – 1.0 to 399.9 Ω / 0.1 Ω / ±(2 cts) – ±(5 % R + 2 cts)			
Calculation of Ik	1 to 9,999 A			
Fault loop (Zi) measurement				
Type of connection	Banana cables			
Range / Resolution / Accuracy	300 mA measurement current: 0.1 to 0.9 Ω – 1.0 to 399.9 Ω / 0.1 Ω / ± (2 cts) – ± (5% R + 2 cts)			
Calculation of Ik	1 to 9,999 A			
RCD test				
Installation voltage	90 to 450 V; 45 to 65 Hz			
Types and calibres	AC and A; 30 mA - 100 mA - 300 mA - 500 mA - 650 mA			
Trip time	0.5 x I ΔN ; 1 x I ΔN ; 5 x I ΔN / 5.0 to 300 ms			
Trip current	30 mA: 0 .. +(7%R +3.3% I ΔN + 2 mA)			
Fault voltage: Range / Resolution / Accuracy	1.0 to 25.0 V – 25.0 to 70.0 V / 0.1 V / ± (15% R + 3 cts) – ± (5% R + 2 cts)			
Automatic test sequences	No	RCD, Loop-RCD-Insulation		
Voltage & Frequency				
Voltage: Range / Resolution / Accuracy	2.0 to 550.0 VAC – 0.0 to 800.0 VDC / 0.1 V / ± (1%R+2cts)			
Frequency: Range / Resolution / Accuracy	-	30.0 to 999.9 Hz / 0.1 Hz / ±(0.1 % R + 1 ct) - Voltage > 2V		
Phase rotation	45 to 550 V – 45 to 65 Hz			
Current				
	Via clamp with voltage output using the voltage sensor function (AUX)	Via MN73A clamp with 2A calibre: 10.0 mA to 2,400 mA, 200 A calibre: 1.00 to 200 A		
AUX sensor function (C.A 6131)				
AC+DC range: Range / Resolution / Accuracy	2.0 to 999.9 mV / 1.000 to 1.2000 V / 0.1 mV – 1 mV / ±(1 % R + 2 cts)	-		
DC range / Resolution / Accuracy	±(0.0 to 999.9 mV) – ±(1.000 to 2.000 V) / 0.1 mV – 1 mV / ±(1 % R + 2 cts)	-		

General Specifications

Display	Custom 231-segment LCD with blue backlighting	
Data storage	-	30 sites x 99 tests
Communication	-	Bluetooth Class 1; range > 10m
Software	-	Android IT-Report application
Power supply	6 x LR 6 or AA batteries	6 NiMH mains-rechargeable batteries, charging < 6 hrs , USB or vehicle cigarette lighter
Battery life	> 1,900 continuity measurements at 1 Ω	> 1,700 continuity measurements at 1 Ω
Dimensions / weight	223 x 126 x 70 mm / 700 g approx.	
Environment	Use: 0 to 40 °C / Storage: - 10 to 70 °C (RH 80%)	
Protection	IP 54 (IEC 60 529) ; IK 04 (IEC 50102)	
Standards / Electrical safety	EMV: IEC 61326-1 ; IEC 61010-1 ; IEC 61010-2-030 ; IEC 61010-2-034, 600V CAT III, 300V CAT II on charger input	
Compliance with IEC 61557	Parts 1, 2, 3, 4, 6, 7 and 10	Parts 1, 2, 3, 4, 5, 6, 7 and 10

State at delivery and references

C.A 6131 **P01146011**
Low-voltage installation tester delivered in a cardboard box containing:

- 1 carrying bag
- 1 neck strap
- 1 EURO mains 3-pole cable
- 3 x 1.5m/4 mm safety cables (red/black/green),
- 3 crocodile clips (red/black/green),
- 1 black test probe, 6 x LR6 1.5V batteries,
- 1 User's manual on CD-ROM (5 languages),
- 1 quick startup guide on paper,
- 1 safety datasheet,
- 1 test report with measurement report

C.A 6133 **P01146013**
Low-voltage installation tester delivered in a cardboard box containing:

- 1 carrying bag
- 1 neck strap
- 1 EURO mains 3-pole cable
- 3 x 1.5m/4 mm safety cables (red/black/green),
- 3 crocodile clips (red/black/green),
- 1 black test probe,
- 6 x NiMH batteries,
- 1 x 2A USB power supply,
- 1 razor-type USB power cable,
- 1 User's manual on CD-ROM (5 languages),
- 1 quick startup guide on paper,
- 1 safety datasheet,
- 1 test report with measurement report
- 1 battery information sheet

Accessories

- Remote-control probe: **P01102157**
- MN 73A 2A/200A bi-calibre current clamp with 4-point connectors (C.A 6133): **P01120439**
- MN 73 2A/200A bi-calibre current clamp with banana connections (C.A 6131): **P01120421**
- Continuity rod **P01102084A**

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