

IEE 16th:

Safety at all costs

C.A 6115N

Electrical
installation

Insulation

RCD

Earth

Loop

Continuity

Phase rotation



- The most **complete** installation tester in its generation with 14 different possible measurements.
- Excellent measurement **stability** even in disturbed industrial environments.

- **User-friendly** functioning and **rapidity** with access to different measurements in local and remote modes (completely **controllable** via PC).
- **Real loop impedance (Zs)** and short-circuit (**Ik**) measurements.

- **Reliable** and simple connections with supplied leads or with any \varnothing 4mm plug safety lead.



**CHAUVIN
ARNOUX**

The most complete installation tester of

Test and certify the electrical safety of your installation, in accordance with European IEE 16th, NF C 15-100, VDE 0100, NIN/NIV, ÖVE EN-1, IEC 164-8 standards.

NUMEROUS APPLICATIONS

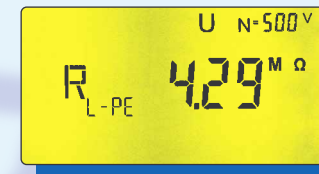
The C.A 6115N has its place in the domestic, commercial or industrial sectors: electricians can use it to verify new work and renovations, and verification institutes are able to fully certify the safety of the infrastructures which they are responsible for inspecting. With the C.A 6115N, measurements recommended by European-standards can be carried out on electrical installations easily and without any risk of error. In addition, it conforms to the new International IEC/EN 61557 standard, which calls for high level specifications and performance in installation test instruments.

FULLY-FEATURED DESIGN

- Its large rear-lit LCD screen allows the user to read off values in total comfort, at any time of day!
- To avoid handling errors, it automatically tests the installation it is connected to before performing each measurement: position of the phase, presence of voltage on the earth, earth disconnected...
- If there is a problem, no measurements can be made.
- The user can programme limits within each function, which activate visual or audible alarms (beeps)
- It compensates for measurement lead resistance (a plus for continuity and loop measurement).
- The C.A 6115N has an environmentally-friendly battery (NiMH). It can be charged up quickly, by plugging it directly into the mains (2 hours for a full charge 0 - 100%). In the field, the instrument is always operational, ready for use (no need to go looking for replacement batteries).



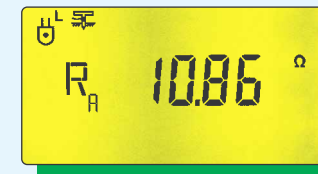
Insulation



Autoranging measurement to 600 M

- Swift automatic measurement between 3 points
- 100 V, 250 V and 500 V DC test voltages

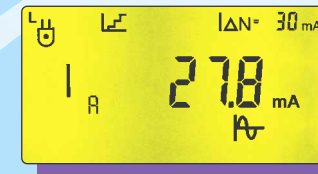
Earth



You can work faster, without disconnecting the earthing rod!

- Measurement with one auxiliary rod only, earth-to-earth
- Selective earth measurement (1 earth out of several others in parallel) using a current clamp
- Automatic save or print modes, at a programmable rate

RCD



Fully test all your differential circuit-breakers, even non-standard models (old 650 mA for example!)

- 10, 30, 100, 300 and 500 mA standard ranges
- Range variable from 6 to 1000 mA per 1 mA increment
- Testing of AC-type (alternating) differential circuit-breakers or A-type (alternating + pulsed direct)
- Trip failure test at $1/2 I_{\Delta N}$
- Measurement of trip time at $I_{\Delta N}$, $2 I_{\Delta N}$ (selective differential), $5 I_{\Delta N}$, 150 mA or 250 mA
- Measurement of exact activation current (high current ramp \pm accuracy)
- Additional automatic tests: fault voltage, loop resistance, short-circuit current and earth resistance

Connection for the remote control probe or printer

Direct access to all test and measurement functions

Mains charge position for battery

Starting the test or measurement

Scrolling through the various results

Setting of the various measurement parameters, alarm thresholds,...

Values can be saved or read off

Results can be printed or transferred

its generation

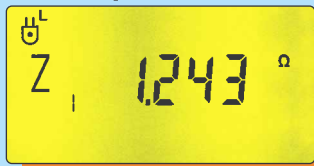
Continuity



*With the C.A 6115N,
you can choose the type
of beep you wish!
(programmable limits)*

- Standard mode: automatic current direction reversal and average value calculation
- Practical mode: continuous circuit generates immediate "beep"

Loop



*Our "ALT" system
to prevent tripping of 30 mA
differentials is so effective
that we have patented it!*

- Measurement of impedance, resistance and short-circuit current of phase-earth, phase-neutral and phase-phase loops
- Exceptional 0,001 Ω resolution
- Automatic save or print modes, at a user-definable rate

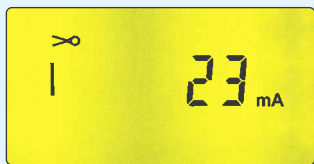
Phase rotation



*Plug in all 3 phases
and read off the direction
of rotation:
it's as simple as that!*

- Phase rotation direction clearly indicated on the display

Current



*Leak current
measurement:
a vital function
for detecting faults!*

- Automatic I, U and f measurement upon connection, on all switch positions
- Measurement of leak current starting from 4 mA
- Measurement of alternating current up to 300 A
- Two types of current clamp available, according to wiring section

INSULATION (IEC/EN 61557- 2)

- Rated voltage: 100 V - 250 V - 500 V DC
- Range: 0.05...300 / 600 MΩ
- Resolution: 1kΩ...1MΩ
- Accuracy : +/- (6% measurement + 1 digit)
- Rated current: > 1 mA DC
- Short-circuit current: < 12 mA DC

EARTH (IEC/EN 61557- 5)

- Power supply: 95...145 V; 175...300 V AC
- Frequency: 15.3...17.5 Hz; 45...65 Hz
- Range: 0.15 Ω...10 kΩ
- Resolution: 0.01...10 Ω
- Accuracy: +/- (10% measurement + 3 digit)
- Method: only 1 auxiliary rod (earth to earth)
- Selective measurement of earth (one particular earth out of several others in parallel) possible, with clamp..
- Values can be saved or printed at programmable intervals.

RCD (IEC/EN 61557- 6)

- L-N-PE Voltage: 95...145 V; 175...300 V AC
- Frequency: 15.3...17.5 Hz; 45...65 Hz
- IΔn = 10-30-100-300-500 mA or 6...1000 mA (in 1 mA increments)
- Trip-failure test: at 1/2 IΔn; Duration: 1000 ms
- Measurement of trip time: at IΔn, 2 IΔn (selective), 5 IΔn, 150 mA, 250 mA
Duration: 500 ms Resolution: 0.1 ms Accuracy: ± 2 ms
- Measurement of trip current / time:
0.5...1.033 IΔn ramp, in 3% increments
Duration of each increment: 200 ms
- Fault voltage: 1.5...100 V AC

CONTINUITY (IEC/EN 61557- 4)

- Test voltage: 18 V DC
- Rated I: > 200 mA to 10 Ω
- Range: 0.16 Ω...2 kΩ
- Resolution : 0.01...1 Ω
- Accuracy: +/- (5% measurement + 4 digit)

LOOP (IEC/EN 61557- 3)

- L-N-PE Voltage: 95...145 V; 175...300 V; 330...440 V AC
- Frequency: 15.3...17.5 Hz; 45...65 Hz
- Range: 0.08 Ω...200 Ω (resistance and impedance)
- Resolution : 0.001...0.1 Ω
- Accuracy: +/- (5% mesure + 3 digit)
- **Short-circuit current calculation: 0.5 A...30 kA**
- **Patented "ALT" system: does not trip 30 mA RCD**
- Values can be saved or printed at programmable intervals.

PHASE ROTATION (IEC/EN 61557- 7)

- Voltage: 20...440 V AC
- Frequency: 15.3...450 Hz

CURRENT / VOLTAGE / FREQUENCY

- **Current range:** 4 mA...100 A with an MN 21 clamp and up to 300 A with a C 103 clamp. Resolution: 1 mA...1 A
Accuracy : +/- (2% measurement + 1 digit)
- **Voltage range:** 10...440 V AC/DC Resolution: 1 V,
Accuracy: +/- (1% measurement + 1 digit)
- **Frequency range:** 15.3...450 Hz Resolution: 0.1...1 Hz,
Accuracy: +/- (0.1% measurement + 1 digit)

GENERAL SPECIFICATIONS

- Compliant with IEC 1010-1 standard Cat III 300 V
- Double insulation
- Memory holds 800 measurements
- RS232C Interface
- **Programmable thresholds for each function**
- NiMH battery + internal charger
- Dimensions: 295 x 230 x 108 mm (L x W x D)
- Weight: 2.1 kg

ete installation tester of

High-performance accessories to get the most out of your C.A 6115N

Windows software to retrieve your data and set instrument parameters

The C.A 6115N UTILITY programme enables the user to retrieve all the data stored in the instrument. A protocol (measurement summary table) can be set up in no time at all and a file generated for processing with spreadsheet software such as Excel, for example.

With this software, all the appliance's parameters can be defined on a PC: modification of programmed thresholds, choice of language for texts printed in the field with the C.A 6115N (French, English, German, Italian or Spanish); the users details are saved in the instrument for automatic generation on printouts,...

Current measurement, another plus!

- Two types of clamps can be used, according to your applications and the sections of your cables.
- Measurement of alternating current up to 300 A.
- Measurement of leak current to earth from 4 mA upwards, to ensure rapid location of isolation faults.
- "Selective" measurement of an earth, by clamping one particular earthed cable amid several others in parallel, without disconnecting from the power supply.



Remote control probe: for easy measurement taking even in difficult conditions!

With the same function as the "TEST" key on the C.A 6115N, the yellow button located on the probe enables direct measurement taking. The probe links to the RS232 plug and has a 4mm safety terminal on its lower half for connecting one of the 3 test leads (L, N or PE according to preference). A button on the back lights up the measuring point, a very useful function during de-energized measurements, for example with insulation.

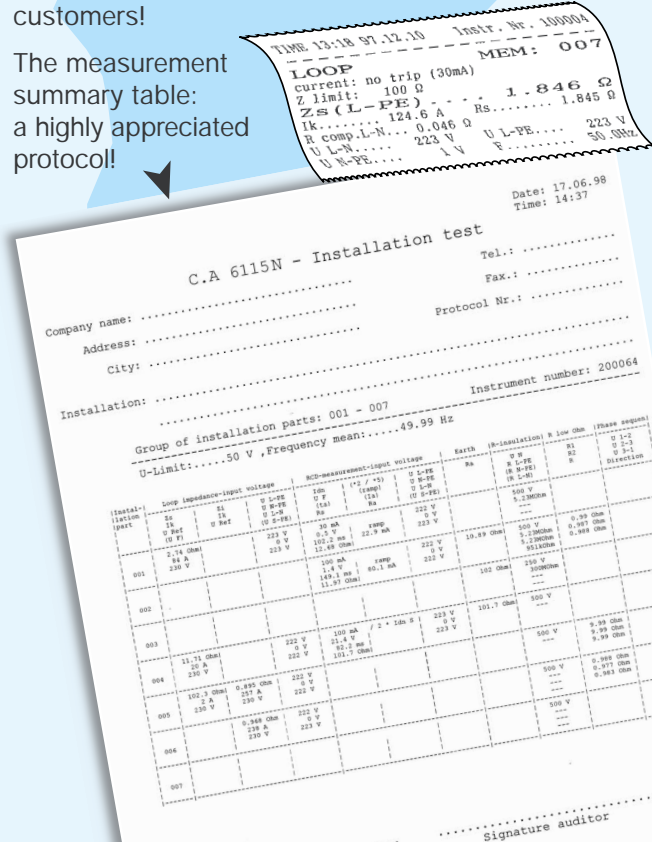


A printout of your measurements directly in the field

The C.A 6115N has two printing possibilities: Either you print a result slip showing the different measurement results, on the A6 serial printer available as an optional accessory. Or you can generate a table summarising all your measurements; in this case, you will use the serial-parallel adapter (also available as an option) to link up with a standard A4 format printer.

The measurement ticket (A6 format): a trace on site for your customers!

The measurement summary table: a highly appreciated protocol!



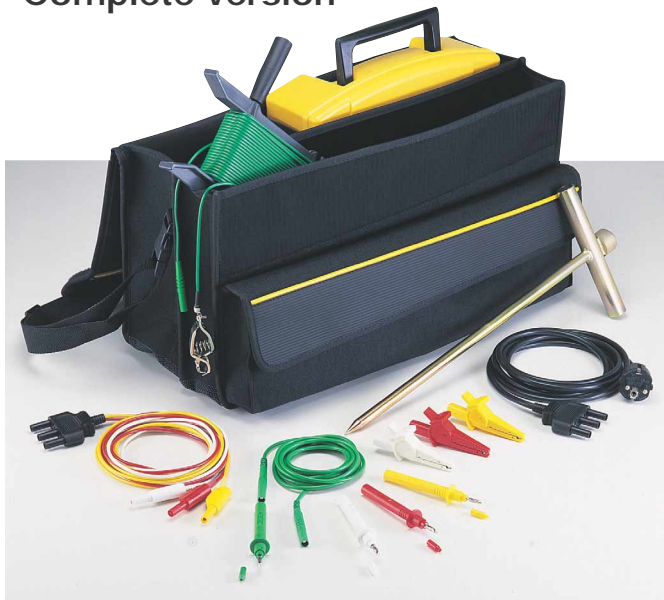
TO ORDER

Standard version



- C.A 6115N TESTER (GB).....P01.1454.12B
Comes with a small shoulder bag containing a 2.5 m measurement or charge cable with 2P + E mains plug, a 2.5 m measurement cable with 3 separate leads, 3 touch-pins, 3 crocodile clips, a green 3-m lead + touch-pin and an English user manual.

Complete version



- C.A 6115N + T TESTER (GB) P01.1454.22A
Comes with a rigid shoulder bag for the instrument + accessories, a 2.5 m measurement or charge cable with 2P + E mains plug, a 2.5 m measurement cable with 3 separate leads, 3 touch-pins, 3 crocodile clips, a green 3-m lead + touch-pin, an Earth set comprising a 30 m cable on a reel + earthing rod for measurement with the auxiliary rod and an English user manual.

Special 520 V version

- Adaptation for the C.A 6115N for operating on 520 V network available. Please specify when ordering.

Customised order

To adapt your order (language of user manual, mains cable...), please complete the chart below:

C	A	6	1	1	5	N							
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Language of user's manual
and lexan label
(to be stuck on the lid
of the instrument
as a reminder for connections) :

English	G	B
French	F	X
German	D	X
Italian	I	X
Spanish	E	X

Mains cable for charging and measurement:

Great Britain	G	B
France/Germany/Spain (schuko)	F	R
USA/Brazil	U	S
Italy	I	T
Switzerland	C	H

Version (*) :

Standard	1
Complete	2

(*) Presentation of standard or complete versions is the same, with operating instructions and the mains cable of your choice.

Accessories

- C.A 6115N UTILITY SOFTWARE..... P01.1019.02
comes with DB9M / DB25F cable + DB9M / DB9M adaptor
 - SERIAL PRINTER N°5..... P01.1029.03
comes with DB9M / DB9M cable + DB9M / DB9M adaptor
 - REMOTE CONTROL PROBE N°2..... P01.1019.42
for controlling at a distance
 - EARTH KIT
- | | |
|-------------------------------------|-------------|
| | P01.1019.03 |
| (30 m cable on reel + earthing rod) | |
| ■ RIGID SHOULDER BAG | P01.2980.31 |
| ■ PARALLEL SERIAL ADAPTOR | P01.1019.04 |
| ■ C103 CURRENT CLAMP | P01.1203.03 |
| ■ MN21 MINI CURRENT CLAMP | P01.1204.18 |

YOUR DISTRIBUTOR

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