

Check the safety of all your electrical instruments and equipment

**Multi-function
equipment
tester**

**IEC 60204 Edition 5
VDE 0701/0702
IEC 61439 (IEC 60439)**



- Electrical safety testing on portable electrical equipment, machines and switchgear.
- Preprogrammed test sequences adapted to the standards or your personal needs
- Extensive storage capacity allowing you to stored up to 6,000 measurements
- Delivered with data processing and report generation software as standard
- Large backlit graphic screen with an intuitive user interface and contextual help for each function
- Built-in keyboard for quick and easy customization of the measurements recorded

C.A 6155

The **C.A 6155** multi-function electrical equipment tester can be used for all the measurements needed to check the electrical safety of all portable electrical devices, machines and switchboards.

The **C.A 6155** is therefore ideal for electrical equipment safety testing and certification in the context of compliance verification, periodic checking or maintenance.

It will be particularly useful for:

- Electrical instrument and equipment manufacturers seeking to check their compliance («CE» marking)
- Industrial maintenance companies needing to check the compliance of equipment in a fleet or on an installation
- After-sales service companies repairing and checking the compliance of instruments or equipment presenting anomalies
- Certification organizations for periodic verifications
- Technical education.



All the measurements and tests required for compliance verification are available:

- 200 mA and 10 A continuity measurements
- Insulation resistance at 250 V_{DC} and 500 V_{DC}
- Leakage current measurement by the substitution method
- RCD leakage current
- Contact leakage current
- Mains power lead polarity test
- Measurement of TRMS leakage and load currents (current clamp available as an option)
- RCD test (including portable RCDs)
- Functional test with consumption measurement
- Loop impedance and line impedance with calculation of short-circuit currents
- Discharge time
- Dielectric test
- Phase rotation
- Voltage / frequency measurements
- Functional and visual inspection

The measurements are divided into four sections, depending on the standard applied:

- Tests on portable electrical appliances as per the VDE 0701/0702 standard
- Tests on machines as per the IEC / EN 60204 Ed. 5 standard
- Switchgear tests as per the IEC / EN 60439 standard and the latest edition: IEC 61439
- Miscellaneous tests: with its vast range of functions, the C.A 6155 is also ideal for safety tests in accordance with the standards for many other products.

The analysis part is made much simpler by the PC software delivered as standard, which lets you:

- Download the test results onto a PC to archive them in a database and generate a report
- Upload results from a PC onto the instrument so that you can track any changes in the measurements since the last test, directly on site.

PRODUCT DESCRIPTION

- 1 On-Off button with LED.
- 2 Two fuses to protect the instrument.
- 3 Mains power lead.
- 4 Graphic screen with backlighting.
- 5 IEC standardized socket for testing power leads.
- 6 Test probe connector (S/C1) for continuity measurements and probe input when testing Class-2 instruments.
- 7 8 Connectors for dielectric tests.
- 9 TP1 test socket for phase and loop measurement, for RCD (Residual Current Device) testing and for discharge time measurement.
- 10 C2 connector for continuity tests (machines, switchgear and other applications).
- 11 LN and PE sockets for measuring insulation resistance and leakage current by the substitution method.
- 12 Test socket (230 V).
- 13 Navigation pad and ENTER key for confirmation.
- 14 Alphanumeric keyboard.
- 15 STOP key.
- 16 START key.
- 17 ESCAPE key.
- 18 Function keys (F1 to F5).
- 19 Input terminals for current clamps.
- 20 USB connector for PC and printer.
- 21 RS232 connector for PC and printer.
- 22 RS232 connector for barcode or RFID reader.



SPECIFICATIONS

Dielectric testing	
Test voltage	1,000 V / 1,890 V / 2,500 V
I limit	0.1 to 100 mA (1,890 V / 2,500 V)
	0.1 to 200 mA (1,000 V)
I _{max} of HV/Power source	200 VA
Timer	2, 3, 5, 10, 30 s
Insulation resistance measurement	
U _{test}	250 / 500 V _{DC}
Range	Up to 200 MΩ
Timer	5, 10, 30, 60, 120 s
Continuity testing	
Range	0.01 to 1.99 Ω
I test	0.20 / 10 A
U test	< 9 V
Timer	5, 10, 30, 60, 120, 180 s
Leakage current measurement	
Substitution method	0.00 to 19.99 mA
Differential method	0.00 to 9.99 mA
Accuracy	± (5 % of reading + 5 cts)
Contact leakage current measurement	
Measurement range	0.00 to 2.50 mA
Accuracy	± (5 % of reading + 3 cts)
60 V discharge time measurement	
Voltage range (peak value)	0 to 550 V
Time range	0 to 10 s
Functional test	
Apparent power	0.00 to 4.00 kVA
Power-lead polarity test	
	YES
Current measurement with clamp	
	0.00 mA to 24.9 A
PRCD testing	
Calibre	10, 15, 30 mA
Test current	0,5xI _{Δn} , I _{Δn} , 5xI _{Δn}
Other	Automatic PRCD test
RCD testing	
Calibre	10, 30, 100, 300, 500, 1,000 mA
Test current	0,5xI _{Δn} , I _{Δn} , 2xI _{Δn} , 5xI _{Δn}
Current type	AC / A
RCD type	General / Selective
Test type	Step / Pulse
U _c contact voltage measurement	YES
Other	Automatic RCD test

High-current Z _s loop measurement	
Test current	6.5 A
Range	0.00 to 1,999 Ω
Accuracy	± (5% of reading + 5 digits)
I _k calculation	0.00 to 23.0 kA
Z _s loop measurement (without RCD tripping)	
Range	0.00 to 1,999 Ω
Accuracy	± (5% of reading + 10 digits)
I _k calculation	0.00 to 23.0 kA
Z _i loop measurement	
Test current	6.5 A
Range	0.00 to 1,999 Ω
Accuracy	± (5% of reading + 5 digits)
I _k calculation	0.00 to 199 kA
Voltage / frequency	
	0 to 550 V / 14.0 to 499.9 Hz
Phase rotation	
Voltage	100 to 550 V _{AC}
Frequency	14 to 500 Hz

OTHER SPECIFICATIONS

RS 232	1 connection for barcode / RFID reader + 1 connection for printer / PC
USB	1 printer / PC connection
Alarms	Yes for all functions
Storage	6,000 memory locations
Software	Yes, delivered as standard

POWER SUPPLY

230V / 50-60Hz

FUNCTIONAL STANDARDS

VDE 701 702 / IEC / 60204 Ed.5
/ IEC / 60439 / IEC 61439

STANDARDS

IEC 61010-1 / IEC / 61557
(parts 1, 2, 3, 4, 6, 7 and 10)

ELECTRICAL SAFETY

Cat II / 300 V

DIMENSIONS / WEIGHT

33.5 cm × 16.0 cm × 33.5 cm - 8.4 kg

To order

C.A 6155 P01146001

Delivered with an accessories bag containing:

- 1 high-voltage test probe
- 1 mains-socket test cable
- 1 test cable with separate wires
- 1 red lead 1.5 m long
- 1 black lead 1.5 m long
- 1 green lead 1.5 m long
- 1 red lead 4 m long
- 4 test probes
- 3 crocodile clamps
- 1 operating manual in 5 languages
- 1 USB communication cable
- 1 RS232 communication cable
- Data transfer software



Your distributor

FRANCE

Chauvin Arnoux
190, rue Championnet
75876 PARIS Cedex 18
Tel: +33 1 44 85 44 86
Fax: +33 1 46 27 95 59
export@chauvin-arnoux.fr
www.chauvin-arnoux.fr

UNITED KINGDOM

Chauvin Arnoux Ltd
Waldeck House - Waldeck Road
MAIDENHEAD SL6 8BR
Tel: +44 1628 788 888
Fax: +44 1628 628 099
info@chauvin-arnoux.co.uk
www.chauvin-arnoux.com

MIDDLE EAST

Chauvin Arnoux Middle East
P.O. BOX 60-154
1241 2020 JAL EL DIB (Beirut) - LEBANON
Tel: +961 1 890 425
Fax: +961 1 890 424
camie@chauvin-arnoux.com
www.chauvin-arnoux.com

 **CHAUVIN
ARNOUX**
GROUP