

DataView®

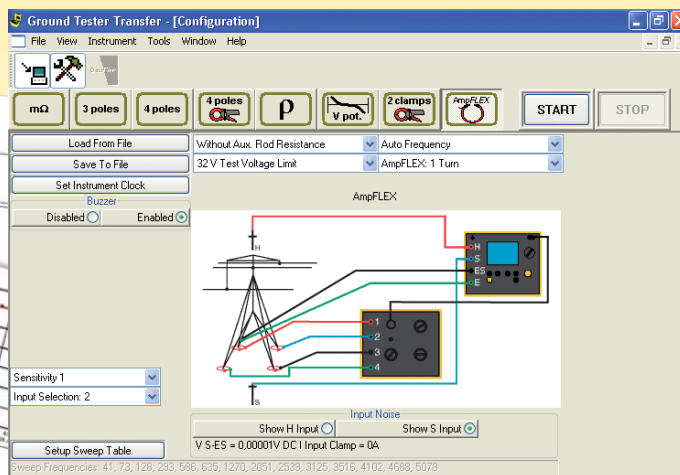
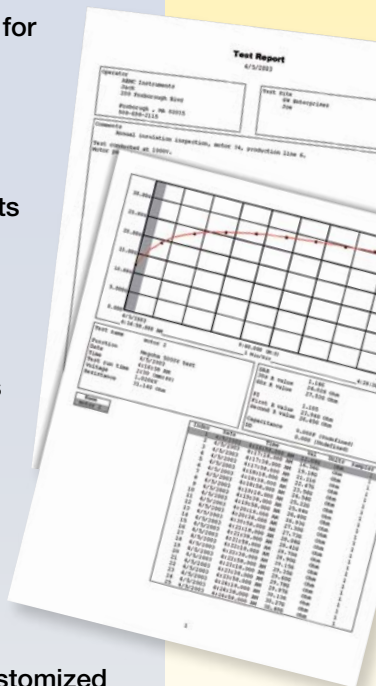
(for the C.A 6470N/C.A 6471 /C.A 6472 + C.A 6474)

The essential tool for real-time display of the data, retrieval of the recorded data and creation of standard or customized measurement reports.

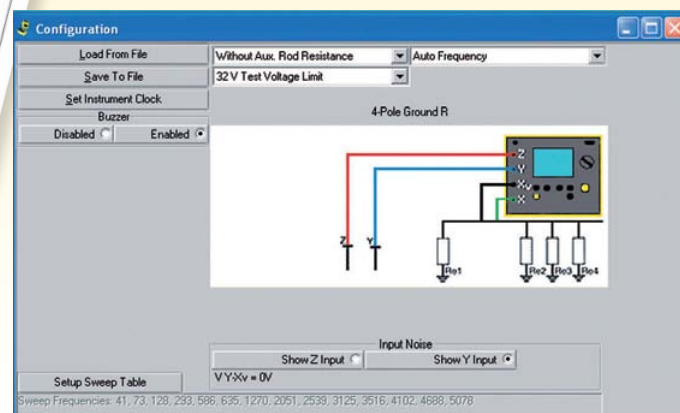
Also configures and remotely activates measurements.

(DataView® software is available in 5 languages: French, English, German, Spanish and Italian)

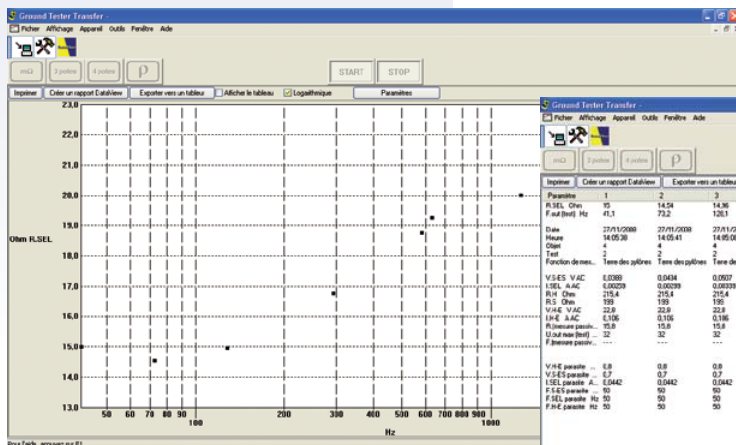
- Configuration of the measurement parameters for all the functions
- Remote activation of the tests with a single click
- Retrieval of the data recorded in the instruments
- Possibility of adding user comments directly to the measurement report
- Possibility of creating customized report models
- Display of the result curves: impedance measurement as a function of frequency, display of theoretical step voltage as a function of distance, etc.
- Printing of standard or customized measurement reports



Parameter settings for the measurement method selected and graphic display of the measurement set-up.



Parameter settings for the measurement method selected and graphic display of the measurement set-up.



The screenshot shows the data table in the 'Ground Tester Transfer' software. The table has columns for 'Parametre', '1', '2', '3', '4', '5', '6', '7', '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20', '21', '22', '23', '24', '25', '26', '27', '28', '29', '30', '31', '32', '33', '34', '35', '36', '37', '38', '39', '40', '41', '42', '43', '44', '45', '46', '47', '48', '49', '50', '51', '52', '53', '54', '55', '56', '57', '58', '59', '60', '61', '62', '63', '64', '65', '66', '67', '68', '69', '70', '71', '72', '73', '74', '75', '76', '77', '78', '79', '80', '81', '82', '83', '84', '85', '86', '87', '88', '89', '90', '91', '92', '93', '94', '95', '96', '97', '98', '99', '100'. The table contains numerical data for various parameters.

Activation of the test and results in graphic or numeric form.



	C.A 6421	C.A 6423	C.A 6460	C.A 6462	C.A 6470N TERCA 3	C.A 6471	C.A 6472	C.A 6410	C.A 6412	C.A 6415
Earth resistance										
3-pole method	●	●	●	●	●	●	●			
4-pole method			●	●	●	●	●			
Automatic coupling					●	●	●			
Selective earth resistance measurement										
4-pole + clamp method						●	●			
2-clamp method						●	●			
Earth clamp								●	●	●
Pylon earth										
with C.A 6474							●			
Soil resistivity										
Manual			●	●						
Automatic					●	●	●			
Potential measurement										
							●			
Continuity										
					●	●	●			
Measurement frequency										
Single frequency: 128 Hz	●	●	●	●						
Single frequency: 2,403 Hz								●	●	●
41 to 512 Hz					●	●				
41 to 5,078 Hz							●			
Rs, Rh measurements & displays (auxiliary state resistances)										
					●	●	●			
U disturbance measurement & display (noise on earth)										
					●	●	●			
Display										
Analogue	●									
LCD		●	●	●				●	●	●
Triple-display LCD					●	●	●			
Power supply										
Batteries	●	●	●					●	●	●
Rechargeable batteries				●	●	●	●			
Page no	16	16	18	18	20	22	24	30	30	30

3-pole earth resistance testers

C.A 6421 & C.A 6423

The standalone, leakproof C.A 6421 and C.A 6423 earth testers are very easy-to-operate, lightweight instruments designed for use in the field or in difficult conditions. They provide quick, accurate earth resistance measurements in comfortable, safe conditions with the traditional 3-pole stake-based method. After setting up and connecting the stakes, simply press a button to read the resistance measurement while monitoring the reliability by means of LEDs.



C.A 6421

Ergonomics

- Leakproof site case for use in the field
- Easy-to-read analogue or digital display
- Simple to operate
- Instant connection thanks to colour-coding of the terminals and leads

Measurements

- Resistance measurement by 2 or 3-pole method
- Designed to reject high levels of noise and interference
- Direct reading of the result between 0.5 Ω and 2,000 Ω (1000 Ω on the C.A 6421)
- Auto-ranging (for the C.A 6423)
- Measurement fault or disturbance indicator LEDs



C.A 6423

Power supply

- Battery-powered
- Battery life equivalent to 1,800 measurements each lasting 15 seconds

	C.A 6421	C.A 6423
Specifications		
Measurement	Earth resistance	Earth resistance
Type	2P & 3P	2P & 3P
Resistivity	No	No
Measurement range	0.5 Ω to 1,000 Ω	0.01 Ω to 2,000 Ω (3 automatic calibres)
Resolution	-	10 m Ω / 100 m Ω / 1 Ω (depending on calibre)
Accuracy	\pm (5 % + 0.1 % at full scale)	\pm (2 % + 1 count)
No-load voltage	\leq 24 V	\leq 48 V
Frequency	128 Hz	128 Hz
Alarms	3 fault-indicator LEDs to validate the measurement	3 fault-indicator LEDs to validate the measurement
Other features		
Power supply	8 x 1.5 V batteries	8 x 1.5 V batteries
Display	Analogue	2,000-count digital LCD screen
Electrical safety	IEC 61010 & IEC 61557	IEC 61010 & IEC 61557
Dimensions	238 x 136 x 150 mm	238 x 136 x 150 mm
Weight	1.3 kg	1.3 kg

References to order

> **C.A 6421** **P01123011**
Delivered with 1 carrying strap, 8 x LR6 1.5 V batteries, 1 operating manual in 5 languages

> **C.A 6423** **P01127013**
Delivered with 1 carrying strap, 8 x LR6 1.5 V batteries, 1 operating manual in 5 languages

Accessories / Spares

Carrying strap..... P01298005
0.1 A - 250 V HRC fuses (set of 10)..... P01297012
1.5 V ALK LR6 battery P01296033
1.5 V ALK LR6 batteries (x 12) P01296033A
1.5 V ALK LR6 batteries (x 24) P01296033B

See page 28 for the earth and/or resistivity kits



3 and 4 pole earth resistance and soil resistivity testers

C.A 6460 & C.A 6462

A genuine 3-in-1 tester delivered in a rugged, leakproof case, the C.A 6462 is specially designed for use in the field. Particularly simple to use wherever you need to set up an earth electrode or test an existing earth connection, this tester helps you to quickly make a precise, reliable diagnosis while maintaining user comfort and safety.

Ergonomics

- Rugged, leakproof site case for use in the field
- Large 2,000-count backlit LCD screen for easy reading
- Digital display of the values measured and the units
- Simple to operate
- Instant connection thanks to colour-coding of the terminals and leads

Measurements

- Earth resistance measurement with the 3 or 4-pole method and soil resistivity measurement
- Designed to reject high levels of noise and interference
- Auto-ranging
- 3 warning LEDs: high noise level, high auxiliary stake resistance, connection fault

Power supply

- Battery-powered (C.A 6460) or rechargeable battery (C.A 6462)



C.A 6460



C.A 6462

	C.A 6460	C.A 6462
Specifications		
Measurements	Earth resistance / Soil resistivity / Coupling	Earth resistance / Soil resistivity / Coupling
Type	3-pole & 4-pole	3-pole & 4-pole
Measurement range	0.01 Ω to 2,000 Ω (3 automatic ranges))	0.01 Ω to 2,000 Ω (3 automatic ranges))
Resolution	10 m Ω / 100 m Ω / 1 Ω (depending on range)	10 m Ω / 100 m Ω / 1 Ω (depending on range)
Accuracy	\pm (2 % + 1 count)	\pm (2 % + 1 count)
No-load voltage	\leq 24 V	\leq 48 V
Frequency	128 Hz	128 Hz
Warnings	3 fault-indication LEDs to validate the measurement	3 fault-indication LEDs to validate the measurement
Other features		
Power supply	8 x 1.5 V batteries	Rechargeable NiMH battery
Display	2,000-count digital LCD	2,000-count digital LCD
Electrical safety	IEC 61010 & IEC 61557	IEC 61010 & IEC 61557
Dimensions	270 x 250 x 110 mm	270 x 250 x 110 mm
Weight	2.8 kg	3.3 kg

References to order

> **C.A 6460** **P01126501**
Delivered with 8 x 1.5 V LR6 batteries and 1 operating manual in 5 languages

> **C.A 6462** **P01126502**
Delivered with 1 mains lead for recharging and 1 operating manual in 5 languages

Accessories / Spares

0.1 A - 250 V HRC fuses (set of 10)..... P01297012
Battery pack P01296021
1.5 V ALK LR6 battery P01296033
1.5 V ALK LR6 batteries (x 12) P01296033A
1.5 V ALK LR6 batteries (x 24) P01296033B

See page 28 for the earth and/or resistivity kits



3 and 4 pole earth resistance and soil resistivity tester

C.A 6470N TERCA 3

This earth resistance and soil resistivity tester is part of Chauvin Arnoux's comprehensive range of multi-function testers. An expert instrument which is nevertheless simple to operate, delivered in a rugged, leakproof site case for use in the field, its ergonomics are functional: large backlit screen, automatic identification of connections by means of colour coding, switch for direct access to the measurements – all helping to ensure total user safety.

Ergonomics

- Leakproof site case for use in the field
- Large backlit LCD screen and particularly legible multi-display
- Simple to operate
- Automatic detection of connection errors
- Instant connection thanks to colour-coding of the terminals and leads
- Improved safety with display of connections on the screen
- USB communication interface
- Compatible with the DataView® software



C.A 6470N TERCA 3

Measurements

- Earth resistance measurement with the 3 or 4-pole method
- Soil resistivity: automatic calculation (Wenner and Schlumberger methods)
- Coupling measurement
- 200 mA continuity / bound resistance test (2 and 4 wire)
- Measurement test frequency: 41 to 512 Hz
- Measurement of auxiliary stake resistance
- High rejection of disturbance voltages up to 60 V peak
- Data storage for retrieval and reporting

Power supply

- Powered by rechargeable batteries
- Adapters for battery charging on 12 V vehicle cigarette lighter or mains supply



DataView®



C.A 6470N Terca 3

Specifications		
<i>Earth resistance 3-pole method</i>	Range	0.01 Ω to 99.99 k Ω
	Resolution	0.01 Ω to 100 Ω
	Test voltage	16 V or 32 V, selectable
	Measurement frequency	40 Hz to 512 Hz automatic or manual
	Test current	Up to 250 mA
	Accuracy	± 2 % of value ± 1 count
<i>Earth resistance 4-pole method</i>	Range	0.001 Ω to 99.99 k Ω
	Resolution	0.001 Ω to 100 Ω
	Test voltage	16 V or 32 V
	Measurement frequency	40 Hz to 512 Hz automatic or manual
	Test current	Up to 250 mA
	Accuracy	± 2 % R ± 1 count
<i>Earth resistance Soil resistivity measurement 4-pole method</i>	Measurement method	Wenner or Schlumberger method with automatic calculation of results and display in Ω -metres or Ω -feet
	Range (automatic selection)	0.01 Ω to 99.99 k Ω
	Resolution	0.01 Ω to 100 Ω
	Test voltage	16 or 32 V, selectable
	Measurement frequency	73 – 91.5 – 101 – 128 Hz selectable
<i>External voltage measurement</i>	Range (automatic selection)	0.1 to 65.0 VAC/DC – DC to 450 kHz
	Accuracy	± 2 % R + 2 counts
<i>Resistance measurement/ continuity and bounding</i>	Type of measurement	2 wire or 4 wire, selectable
	Range (automatic selection)	2 wire: 0.01 Ω to 99.9 k Ω – 4 wire: 0.001 Ω to 99.99 k Ω
	Accuracy	± 2 % R + 2 counts
	Test voltage	16 VDC (polarity +, - or auto)
	Test current	> 200 mA max. for R < 20 Ω
<i>Data Storage</i>	Memory capacity	512 test results
	Communication	Optically-isolated USB
Other features		
Power supply	Rechargeable battery	
Battery-charger power supply	External power supply with 18 Vdc / 1.9 A output or 12 Vdc vehicle power supply	
Electrical safety	50 V CAT IV	
Dimensions / Weight	272 x 250 x 128 mm / 3 kg	

Reference to order

> C.A 6470N Terca 3 P01126506

Delivered with 1 mains adapter + 2-pole mains cable for recharging the battery from the mains, data export software + 1 optical/USB communication cable, 5 operating manuals (one per language) on CD-ROM, 5 simplified operating manuals, each in a different language, 5 identification labels, each in a different language.



Accessories / Spares

DataView® report generation software	P01102095
Adapter for recharging on vehicle cigarette lighter	P01102036
Optical/RS communication cable	P01295252
GB mains power cable	P01295253
Set of 10 fuses –	
F 0.63 A - 250 V - 5 x 20 mm - 1.5 kA	AT0094
Adapter for charging battery from the mains	P01102035
Battery pack	P01296021
Optical/USB communication cable	HX0056-Z

See page 28 for the earth and/or resistivity kits

Expert earth resistance and soil resistivity tester

C.A 6471

This earth resistance and soil resistivity tester, which is part of Chauvin Arnoux's comprehensive range of multi-function testers, is a 5-in-1 tool: earth, selective earth, resistivity, coupling and continuity in an expert on-site instrument delivered in a rugged, leakproof site case. It is simple to use, with functional ergonomics: large backlit screen, automatic identification of connections by colour coding, switch for direct access to the measurements, etc., ensuring total user safety and reliable measurements even in highly resistive soils.

Ergonomics

- Leakproof site case for use in the field
- Large backlit LCD screen and particularly legible multi-display (3 lines)
- Simple to operate
- Automatic recognition of connections
- Instant connection thanks to colour-coding of the terminals and leads
- Improved safety with display of connections on the screen
- USB communication interface
- Compatible with the DataView® software



C.A 6471



DataView®

Measurements

- Earth resistance measurement with the 3 or 4-pole method
- Selective earth resistance measurement (4-pole method with clamp, loop measurement with 2 clamps)
- Soil resistivity: automatic calculation (Wenner and Schlumberger methods)
- Coupling measurement
- 200 mA continuity / bound resistance test (2 or 4 wire)
- Measurement frequency: 41 to 512 Hz (stake earth) and 128 Hz to 1758 Hz (selective measurement with clamps)
- Measurement of auxiliary stake resistance
- High rejection of disturbance voltages up to 60 V
- Data storage for retrieval and reporting



Power supply

- Powered by rechargeable batteries
- Adapters for battery charging on 12 V vehicle cigarette lighter or mains supply

C.A 6471

Specifications		
<i>Earth resistance Measurement with 2 clamps</i>	Range	0.01 Ω to 500 Ω
	Resolution	0.01 Ω to 1 Ω
	Measurement frequency	Auto: 1367 Hz ; Manual: 128 Hz - 1367 Hz - 1611 Hz - 1758 Hz
<i>Earth resistance 3-pole method</i>	Range	0.01 Ω to 99.99 k Ω
	Resolution	0.01 Ω to 100 Ω
	Test voltage	16 V or 32 Vrms rated voltage, selectable by user
	Measurement frequency	41 Hz to 512 Hz, automatic or manual
	Test current	Up to 250 mA
	Accuracy	$\pm 2\%$ L + 1 count to 128 Hz
<i>Earth resistance 4P measurements / 4P + measurements with clamps</i>	Range	0.001 Ω to 99.99 k Ω
	Resolution	0.001 Ω to 100 Ω
	Test voltage	16 V or 32 V selectable
	Measurement frequency	41 Hz to 512 Hz automatic or manual
	Test current	Up to 250 mA
	Accuracy	$\pm 2\%$ of value ± 1 count
<i>Soil resistivity measurement</i>	Measurement method	Wenner or Schlumberger method with automatic calculation of results and display in Ω -metres or Ω -feet
	Range (automatic selection)	0.01 Ω to 99.99 k Ω ; P max. 999 k Ω m
	Resolution	0.01 Ω to 100 Ω
	Test voltage	16 V or 32 V, selectable
	Measurement frequency	41 Hz to 512 Hz selectable
<i>External voltage measurement</i>	Range (automatic selection)	0.1 to 65.0 VAC/DC – DC to 450 kHz
	Accuracy	$\pm 2\%$ R + 1 count
<i>Resistance measurement/ continuity and bounding</i>	Type of measurement	2 wire or 4 wire method, selectable by user
	Range (automatic selection)	2 wire: 0.01 Ω to 99.9 k Ω – 4 wire: 0.001 Ω to 99.99 k Ω
	Accuracy	$\pm 2\%$ R + 2 counts
	Test voltage	16 VDC (polarity +, - or auto)
	Test current	> 200 mA max. for R < 20 Ω
<i>Data storage</i>	Storage capacity	512 test results
	Communication	Optically-isolated USB
Other features		
Power supply	Rechargeable battery	
Battery-charger power supply	External power supply with 18 VDC / 1.9 A output or 12 VDC vehicle power supply	
Electrical safety	50 V CAT IV	
Dimensions / Weight	272 x 250 x 128 mm / 3 kg	

Reference to order

> **C.A 6471** **P01126505**
Delivered with 1 mains adapter + 2-pole mains power lead for recharging the battery, data export software + optical/USB communication lead, 2 x C182 clamps with 2 safety leads, 5 operating manuals (1 per language) on CD-ROM, 5 simplified operating manuals each in a different language, 8 specifications labels each in a different language, 1 carrying bag.



Accessories / Spares

DataView® report printing software..... P01102095
Adapter for battery charging on vehicle cigarette-lighter P01102036
Optical / RS communication cable P01295252
GB mains power cable P01295253
Set of 10 fuses F 0,63 A - 250 V - 5 x 20 mm - 1.5 kA AT0094
Adapter for battery charging on mains P01102035
Battery pack P01296021
Optical/USB communication cable HX0056-Z
MN62 clamp (Ø. 20 mm)
(with 2 m cable for ES terminal connection) P01120452
C182 clamp (Ø 20 mm)
(with 2 m cable for ES terminal connection) P01120333

See page 28 for the earth and/or resistivity kits

Expert earth resistance and soil resistivity tester

C.A 6472

The C.A 6472 earth resistance and soil resistivity tester is a versatile instrument capable of carrying out a quick but thorough survey of all the earthing configurations by combining all the earth resistance measurement functions in a single tool. Maintaining the same simple ergonomics as its predecessors, it is delivered in a rugged, leakproof site case. In addition, when coupled with the C.A 6474, it can be used to measure pylon earth resistances, making it an essential tool for diagnostics and maintenance of earthing systems on all types of pylons.

Ergonomics

- Leakproof site case for use in the field
- Large backlit LCD screen and particularly legible multi-display
- Simple to operate
- Automatic recognition of connections
- Instant connection thanks to colour-coding of the terminals and leads
- Improved safety with display of connections on the screen
- USB communication interface
- Compatible with the DataView® software



C.A 6472



DataView®

Measurements

- Earth resistance measurement by 3 or 4-pole method
- Soil resistivity: automatic calculation (Wenner and Schlumberger methods)
- Selective earth resistance measurement (4-pole measurement with clamp, loop measurement with 2 clamps)
- Measurement of ground potential according to the distance
- Pylon earth resistance measurement (when used with C.A 6474)
- Coupling measurement
- 200 mA continuity
- Measurement frequency range from 41 to 5,078 Hz (automatic for the most appropriate measurement frequency, as well as manual or sweep modes)
- Measurement of auxiliary stake resistance
- High rejection of disturbance voltages up to 60 V peak
- Data storage



Power supply

- Powered by rechargeable batteries
- Adapters for battery charging on vehicle cigarette lighter or mains supply

C.A 6472

Specifications		
<i>Earth resistance Measurements with 2 clamps</i>	Range	0.01 Ω to 500 Ω
	Resolution	0.01 Ω to 1 Ω
	Measurement frequency	Auto: 1,367 Hz ; Manual: 128 Hz - 1,367 Hz - 1,611 Hz - 1,758 Hz
<i>Earth resistance 3-pole measurements</i>	Range (automatic selection)	0.01 Ω to 99.99 k Ω
	Resolution	0.01 Ω to 100 Ω
	Test voltage	16 V or 32 Vrms rated voltage, selectable by user
	Measurement frequency	41 Hz to 5078 Hz automatic or manual
	Test current	Up to 250 mA
	Accuracy	$\pm 2\%$ R + 1 count at 128 Hz
<i>Earth resistance 4P measurements/ 4P measurements with clamps</i>	Range	0.001 Ω to 99.99 k Ω
	Resolution	0.001 Ω to 100 Ω
	Test voltage	16 V or 32 V selectable
	Measurement frequency	De 40 Hz to 512 Hz automatic or manual
	Test current	Up to 250 mA
	Accuracy	$\pm 2\%$ R ± 1 count
<i>Soil resistivity measurement – 4-pole method</i>	Measurement method	Wenner or Schlumberger method with automatic calculation of results and display in Ω -metres or Ω -feet
	Range (automatic selection)	0.01 Ω to 99.99 k Ω ; P max. 999 k Ω m
	Resolution	0.01 Ω to 100 Ω
	Test voltage	16 or 32 V, selectable
	Measurement frequency	41 to 512 Hz, selectable
<i>External voltage measurement</i>	Range (automatic selection)	0.1 to 65.0 VAC/DC – DC to 450 kHz
	Accuracy	$\pm 2\%$ R + 1 count
<i>Resistance measurement/ continuity and bounding</i>	Type of measurement	2 wire and 4 wire method, selectable by user
	Range (automatic selection)	2 wire: 0.01 Ω to 99.9 k Ω – 4 wire: 0.001 Ω to 99.99 k Ω
	Accuracy	$\pm 2\%$ R + 2 counts
	Test voltage	16 VDC (polarity +, - or auto)
	Test current	> 200 mA for R < 20 Ω
<i>Data storage</i>	Storage capacity	512 test results
	Communication	Optically-isolated USB
Other features		
Power supply	Rechargeable battery	
Battery-charger power supply	External power supply with 18 VDC / 1.9 A output or 12 VDC vehicle power supply	
Electrical safety	50 V CAT IV	
Dimensions / Weight	272 x 250 x 128 mm / 3.2 kg	

Reference to order

> **C.A 6472** **P01126504**
delivered with 1 mains adapter + 2-pole mains power lead for recharging the battery, data export software + optical/USB communication lead, 2 x C182 clamps with 2 safety leads, 5 operating manuals (1 per language) on CD-ROM, 5 simplified operating manuals each in a different language, 8 specifications labels each in a different language, 1 carrying bag



Accessories / Spares

DataView® report printing software..... P01102095
Adapter for battery charging on vehicle cigarette-lighter P01102036
Optical / RS communication cable P01295252
GB mains power cable P01295253
Set of 10 fuses F 0,63 A - 250 V - 5 x 20 mm - 1.5 kA AT0094
Adapter for battery charging on mains P01102035
Battery pack P01296021
Optical/USB communication cable HX0056-Z
MN62 clamp (Ø. 20 mm)
(with 2 m cable for ES terminal connection) P01120452
C182 clamp (Ø 20 mm)
(with 2 m cable for ES terminal connection) P01120333

See page 28 for the earth and/or resistivity kits

Pylon earth resistance measurement

C.A 6474

"When it is hooked up to the C.A 6472 expert earth resistance and soil resistivity tester, the C.A 6474 provides a unique solution for measuring pylon earth networks. By means of specific selective earth resistance measurements, it is possible to determine the various resistance values for a particular pylon without disconnecting the overhead earth wire of the pylon network, which is a dangerous and time-consuming task. In addition, by using AmpFLEX™ flexible sensors, you can measure the earth whatever the pylon's geometric configuration."



C.A 6474

Ergonomics

- Leakproof site case for use in the field
- Use of flexible current sensors for easy clamping around pylon footings
- Equipment adaptable to all types of pylon configurations (1, 2, 3 or 4 legs)
- Compatible with the DataView® software

Measurements

- Pylon earth resistance measurements: selective measurement for determining the pylon's earth resistance without disconnection from the network. Measurements can be carried out at up to 5 kHz in automatic, fixed-frequency or sweep mode
- Measurement of the pylon's overall earth resistance
- Measurement of the earth resistance of each pylon footing
- Measurement of the overall line impedance
- Measurement of the overhead earth-wire (counterpoise, guard line) resistance without disconnection

Power supply

- Powered by the C.A 6472



DataView®



	C.A 6474
Specifications	
Type of measurement	Overall pylon earth resistance Earth resistance of each pylon footing Overall line impedance Quality of overhead earth wire connection. Active measurement (injection by the C.A 6472) Passive measurement (use of disturbance currents) Sensor turns: 1, 2, 3 or 4 Sensitivity selector: x 10, x 1, x 0.1 Current measurement: 0.1 mA to 99.9 A
Measurement range	0.001 Ω to 99.99 kΩ
Accuracy	± (5 % + 1 count)
Frequency	41 to 5,078 Hz
Frequency sweep	Yes
Other features	
Power supply / Storage / Display	Provided by the C.A 6472
Dimensions / Weight	260 x 240 x 120 mm / 2.3 kg

Reference to order

> C.A 6474P01126510

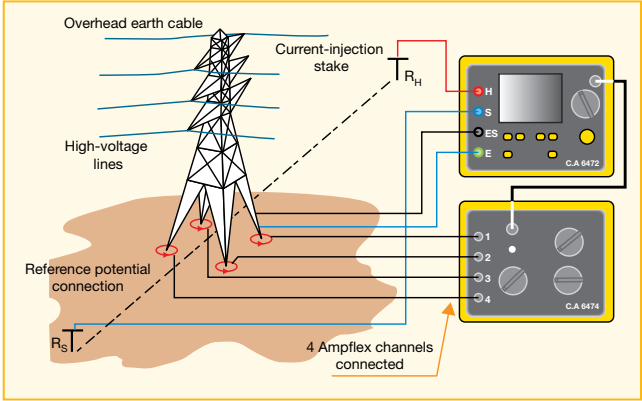
Delivered with a carrying bag for accessories containing: one C.A6472–C.A6474 connection lead, 6 BNC/BNC cables 15 m long, 4 AmpFLEX™ flexible current sensors 5 m long, 1 set of 12 AmpFLEX™ identification rings, 2 cables (5 m green, 5 m black) with safety connectors on winder, 5 spade lug/banana plug converters Ø 4 mm, 3 adjustable clamps, 1 calibration loop, 5 operating manuals and 5 specification labels, each in a different language.

Accessories / Spares

- C.A 6472 – C.A 6474 connection cable P01295271
- 15 m BNC/BNC cable P01295272
- 5 m AmpFLEX™ flexible current sensor P01120550
- Set of 12 AmpFLEX™ identification rings..... P01102045
- Set of 3 adjustable clamps..... P01102046
- 5 m green cable (E terminal connection) P01295291
- 5 m black cable (ES terminal connection) P01295292
- Spade lug/banana plug adapters P01102028
- Calibration loop..... P01295294
- AmpFLEX™ flexible current sensors:
other lengths are available on request



By using AmpFLEX™ sensors, you can measure on any pylon configuration.



Pylon earth resistance measurement using the C.A 6472 and C.A 6474

Earth resistance and soil resistivity accessories

Chauvin Arnoux proposes high-quality accessories for your earth resistance and/or soil resistivity measurements. Ingenious colour coding of the cables and terminals helps to ensure error-free connections.

The cable lengths are specially designed to suit the applications for which our kits are intended.

For easy handling during installation, the cable reels are equipped with handles which can be removed when the accessories are stored.

These kits are compatible with all our instruments, whatever their connection technology, thanks to the banana plug-spade lug adapters supplied. These adapters allow universal use of these accessories, whatever the method used.

All the accessories, earth stakes, cables, reels, crocodile clips, etc., can be transported easily in a single compartmented bag.



Earth kit:
for measuring existing earth resistances
using the 3-pole method (Standard carrying bag)



Earth and resistivity kit:
earth resistance and soil resistivity measurements
using any method (Prestige carrying bag)

Composition		
<i>Earth resistance 1-pole loop kit</i>		Comprising 1 x 30 m green cable reel, 1 T-rod
<i>Earth resistance 3-pole earth kit</i>	50 m	Comprising 2 T-rods, 2 cable reels (50 m red, 50 m blue), 1 cable winder (10 m green), 1 mallet, 5 spade lug / Ø 4 mm banana plug adapters, 1 carrying bag
	100 m	Comprising 2 T-rods, 2 cable reels (100 m red, 100 m blue), 1 cable winder (10 m green), 1 mallet, 5 spade lug / Ø 4 mm banana plug adapters, 1 carrying bag
	150 m	Comprising 2 T-rods, 2 cable reels (150 m red, 150 m blue), 1 cable winder (10 m green), 1 mallet, 5 spade lug / Ø 4 mm banana plug adapters, 1 carrying bag
<i>Earth and resistivity kit – 4-pole</i>	100 m	Comprising 4 T-rods, 4 cable reels (100 m red, 100 m blue, 100 m green, 30 m black), 1 cable winder (10 m green), 1 mallet, 5 spade lug / Ø 4 mm banana plug adapters, 1 prestige carrying bag
	150 m	Comprising 4 T-rods, 4 cable reels (150 m red, 150 m blue, 150 m green, 30 m black), 1 cable winder (10 m green), 1 mallet, 5 spade lug / Ø 4 mm banana plug adapters, 1 prestige carrying bag
<i>Resistivity add-on kit</i>	100 m	Comprising 2 cable reels (100 m green and 30 m black), 1 standard carrying case, 2 T-rods
<i>C.A 647X continuity bound test kit ($\mu\Omega$ position)</i>		Comprising 4 x 1.5 m cables terminated by Ø 4 mm banana plugs, 4 crocodile clips, 2 test probes

References to order

- > 1P loop kit **P01102020**
- > 50 m 3P earth kit **P01102021**
- > 100 m 3P earth kit **P01102022**
- > 150 m 3P earth kit **P01102023**
- > 100 m earth and resistivity kit **P01102024**
- > 150 m earth and resistivity kit **P01102025**
- > Resistivity add-on kit (100 m) **P01102030**
- > C.A 647X continuity bound test kit **P01102037**
($\mu\Omega$ position)

Accessories / Spares

- > **For earth and resistivity kits:**
- 10 m H-shaped green cable winder P01102026
- Set of 5 adapters for terminals P01102028
- Set of 4 reel handles P01102029
- 1 earth T-rod P01102031
- C172 current clamp P01120310
- 166 m red cable reel P01295260
- 100 m red cable reel P01295261
- 50 m red cable reel P01295262
- 166 m blue cable reel P01295263
- 100 m blue cable reel P01295264
- 50 m blue cable reel P01295265
- 100 m green cable reel P01295266
- 33 m black cable reel P01295267
- 33 m green cable reel P01295268
- Standard carrying bag P01298066
- Prestige carrying bag P01298067

Earth clamps

C.A 6410, C.A 6412 & C.A 6415

In addition to providing the traditional earth resistance tests, the C.A 6410, C.A 6412 and C.A 6415 earth clamps are both quick and safe: measurement is carried out on the electrical installation without disconnecting the earth bar and no auxiliary stakes are needed. Designed for easy handling and simple use by clamping, they are also capable of measuring the leakage currents draining to earth. Each clamp, delivered in a carrying case, is a functional tool ideal for electrical maintenance.

Ergonomics

- Simple earth resistance testing
- Rugged clamp design for intensive use in the field
- Clamp ergonomics specially designed for easy handling
- Indication of faults (disturbance current or incorrect closure) by symbol display
- 3,000-count LCD screen
- Smooth jaw interface surfaces

Measurements

- Earth loop measurement: 0.1 to 1,200 Ω
- Direct measurement of leakage currents from 1 mA to 30 A (C.A 6412 & C.A 6415)
- Storage of up to 99 measurement results (C.A 6415)
- Configurable alarms (C.A 6415) for quick tests
- High immunity to electrical noise for use near distribution lines or substations

Power supply

- Battery powered
- Battery life of up to 1,000 measurements lasting 30 seconds each



C.A 6410



C.A 6412



C.A 6415



Head construction:

The measurement head is the key component of the earth clamp, guaranteeing high product performance. Chauvin Arnoux® earth clamps are built with two independent, shielded magnetic circuits for excellent measurement noise rejection. The mechanical design ensures stable, repeated jaw alignment, thus guaranteeing measurement accuracy. The smooth finish of the contact surfaces prevents the accumulation of particles which might affect the measurements.

	Measurement range	Resolution	Accuracy
Specifications			
Earth resistance	0.00 to 1.00 Ω	0.01 Ω	±2 % ±2 counts
	1.0 to 50.0 Ω	0.1 Ω	±1.5 % ±1 count
	50.0 to 100.0 Ω	0.5 Ω	±2 % ±1 count
	100 to 200 Ω	1 Ω	±3 % ±1 count
	200 to 400 Ω	5 Ω	±6 % ±1 count
	400 to 600 Ω	10 Ω	±10 % ±1 count
	600 to 1,200 Ω	50 Ω	±25 % ±1 count
Measurement frequency	2403 Hz		
Current / leakage current (C.A 6412 & C.A 6415)	1 to 299 mA	1 mA	±2.5 % ±2 counts
	0.300 to 2.999 A	0.001 A	±2.5 % ±2 counts
	3.00 to 29.99 A	0.01 A	±2.5 % ±2 counts
Current measurement frequency	47 to 800 Hz		
Indication of disturbance currents and incorrect closure	By symbol displayed on LCD		
Alarm (C.A 6415)	User configurable		
Storage (C.A 6415)	99 measurements		
Other features			
Power supply	9 V battery		
Display	3,000-count LCD		
Electrical safety	IEC 61010 - CAT III 150 V		
Dimensions / Weight	55 x 100 x 240 mm / 1 kg		

References to order

- > C.A 6410 P01122011
- > C.A 6412 P01122012
- > C.A 6415 P01122013

Each earth clamp is delivered in a carrying case with a 9 V battery and an operating manual in 5 languages

Accessories / Spares

- Calibration loop..... P01122301
- MLT 100 carrying case P01298011
- 9 V alkaline battery P01100620
- 9 V alkaline batteries (x 12)..... P01100620A
- 9 V alkaline batteries (x 24)..... P01100620B



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Chauvin Arnoux's role as a French instrument manufacturer and its work to implement energy management and control systems place it at the heart of the electrical measurement business and the Group is now acknowledged as a major player in the electrical sector, as well as a leader in the temperature measurement market.

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From transformation of the raw materials through to after-sales service, our teams strive to innovate every day in order to provide a global solution meeting the needs of cutting edge industries, tertiary infrastructures and self-employed electricians.

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