

# C.A 740N C.A 760N

## **Essential before starting any work**



Low-voltage Two-pole Voltage Absence Tester



- Compliant with Edition 2 of the IEC 61243-3 standard
- Complete integrated Autotest
- ✓ Voltage test up to 690 V<sub>AC</sub> (16 2/3-800 Hz) / 750 V<sub>DC</sub>
- ✓ Single-pole phase test
- → Phase order test up to 400 Hz
- Continuity test
- Removable test probe and lead
- Automatic wake-up and shutdown
- ✓ Fulfil the requirements of the main standards: EN 50110-1, etc.



## **Voltage Absence Testing: a fully-defined procedure**

In the context of operations on installations connected to the electricity distribution network, it is recommended to perform these measurements with the **power off** (EN 50110-1) to prevent electrical hazards.

The installation is made safe and the power is switched off by means of a procedure called **Separation**.

A specific instrument compliant with the IEC 61243-3 standard must be used to check the actual absence of any voltage: a Voltage Detector.

## **Compliance with Edition 2 of the IEC 61243-3 standard means:**

TEST

DOT-VAT

#### Removable:

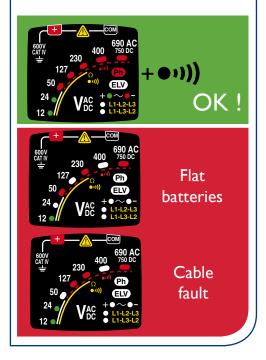
The lead and test probes are simple to replace.

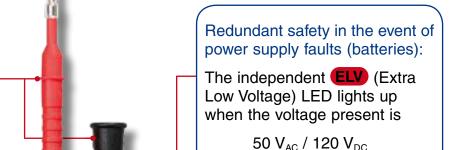
IP2X accessories can be used, as required by the legislation in some countries.

## The voltage detectors must have a built-in test system:

A comprehensive, built-in autotest system:

- Test of the power source
- Test of indicator operation
- Test of cable continuity





The higher the voltage present, the faster the **ELV** LED flashes.

#### Protective guard:

More than 5 mm thick

### Continuity:

The audible and visual continuity test is based on a 100  $\Omega$  resistance, as recommended in Appendix B of the standard,

The **C.A 760N** continuity test is **extended** with visual indications for R< 2 k $\Omega$ , 60 k $\Omega$  and 300 k $\Omega$ 

#### Indoor and outdoor use:

The IP65 protection rating is higher than the recommended specifications and enables the instruments to be used both indoors and outdoors at temperatures as low as -15 °C (type N)

### **AC and DC voltage test**

The automatic voltage detector, which is given priority over the other tests, can be used for visual and audible testing of AC and DC voltages.

- Bargraph
- Redundant **ELV** LED
- Powerful audio signal audible even in noisy environments
- Green LEDs for voltages lower than the ELV and red LEDs for hazardous voltages.



## **Continuity**

A continuity test is performed automatically if no voltage is present.

However, if a voltage appears, priority is still given to voltage detection.



# 2-wire phase rotation with microprocessor

The quick and simple phase rotation test is useful even for circuits isolated by an isolation transformer.

The indication L1-L2-L3 (or L1-L3-L2) is clear and consensual whatever the convention used (clockwise and anticlockwise) for vectorial representation (Fresnel diagram)



## Single-pole phase detection

A single contact is sufficient to detect the phase positions simply and quickly.



# **C.A 751 ( option ):** adapter for european 2P+E sockets

The C.A 751 adapter can be used to check visually that any european 2P+E socket is wired up correctly.

When used with the voltage detector, it enables you to identify the phase and detect the voltage.



<b>Technical Specifications</b>	C.A 740N	C.A 760N	
Voltage detection			
Voltage	$12 \text{ V} \leq \text{U} \leq 690 \text{ V}_{AC}$		
Frequency	12 V ≤ U ≤ 750 V <sub>AC</sub> DC, 16 2/3 to 800 Hz		
Input impedance	> 300 kΩ > 400 kΩ		
Max peak current		nA <sub>RMS</sub>	
Polarity indication	Yes		
Indication of hazardous voltage	The red ELV (Extra Low Voltage) LED indicates that the voltage is higher than the ELV and clicks faster the higher the voltage present		
Phase / Neutral identification	above 50 V (45 – 65 Hz) above 150 V (16 2/3 – 45 Hz)		
Continuity with buzzer			
Trigger threshold	100 $\Omega$ typical (150 $\Omega$ max.)		
Extended continuity test	-	$2 \text{ k}\Omega$ , $60 \text{ k}\Omega$ , $300 \text{ k}\Omega$	
Test current	≤1 mA		
Open-circuit voltage	≤ 3.3 V		
Protection	up to 1,000 V		
Phase rotation Ph/Ph voltage	No -	2-wire method $50 \text{ V} \leq \text{U} \leq 690 \text{ V}_{AC}$	
Frequency	-	45 to 400 Hz	
riequency	Intermittent Beep for voltage detection		
Buzzer	Continuous Beep for continuity		
Standards and electrical safety	,	,	
	IEC 61010 600 V CAT IV		
	IEC 61243-3 Ed. 2 concerning Voltage Detectors (VAT)		
	IEC 61326-1, emission and immunity in industrial environments		
Envelope protection rating	Casing : IP65 Test probes (option) : IP2X		
Climatic conditions	Use from -15 °C to +45 °C / 20 to 95% RH		
Power supply	2 x 1.5 V batteri	2 x 1.5 V batteries (AAA and LR3)	
Battery life	7,500 x 10 s measurements	7,000 x 10 s measurements	
Dimensions / Weight	163 x 64 x 40 mm / 210 g		



C.A 740N	P01191741Z
C.A 760N	P01191761Z
Delivered in blister pack with 1 x $\emptyset$ 2 mm black test-probe lead and crystal safety of 1 x $\emptyset$ 2 mm red test-probe and crystal safety cover, 1 wrist-strap, 2 x 1.5V LR03/AAA batteries and 1 operating manual in 5 languages.	over ,
C.A 751 socket tester (adapter for 2P+E sockets)	P01101997Z
Red test probe compliant with IEC 61243-3	P01102008Z
Black test-probe lead compliant with IEC 61243-3	P01102009Z
Adapter for safety rod (set of 2)	P01102034
Crystal safety cover for D2 test probe (x10)	P01102033
Set of 2 leads 0.25m and 0.85m long with Ø4 IP2X probes	P01295285Z
Set of 2 leads 1.5m long with Ø4 IP2X probes	P01295462Z
MF bag, 120 x 200 x 60	P01298074
Soft case, 200 x 100 x 40	P01298065Z
Wrist-strap	P03100824



Your Distributor

#### FRANCE Chauvin Arnoux

190, rue Championnet 75876 PARIS Cedex 18 Tél: +33 1 44 85 44 85 Fax: +33 1 46 27 73 89 info@chauvin-arnoux.fr www.chauvin-arnoux.fr

#### UNITED KINGDOM Chauvin Arnoux Ltd

Unit 1 Nelson Ct, Flagship Sq, Shaw Cross Business Pk Dewsbury, West Yorkshire - WF12 7TH

Tel: +44 1924 460 494 Fax: +44 1924 455 328 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 - LEBANON Tel: +961 1 890 425 Fax: +961 1 890 424 camie@chauvin-arnoux.com www.chauvin-arnoux.com

