

# C.A 742 - C.A 742 IP2X, C.A 762 - C.A 762 IP2X

## Low-voltage two-pole voltage absence testers



### Essential before starting any work

- ▶ Full integrated autotest
- ▶ Voltage testing up to 690 V<sub>AC</sub> (16 2/3 Hz - 800 Hz) / 750 V<sub>DC</sub>
- ▶ Single-pole phase test
- ▶ Phase sequence testing up to 400 Hz
- ▶ Continuity testing
- ▶ Removable test probe and cable



IP2X versions  
for even greater safety

600 V CAT IV

CEI 61243-3



Measure up



# Voltage Absence Testing (V.A.T.),

In the context of work on installations connected to the electrical distribution network, it is recommended to perform the measurements with the power off (EN 50110-1, NF C 18-510, etc.) to prevent any electrical hazards.

The genuine absence of any voltage must be checked using a specific instrument which complies with the IEC 61243-3 standard: a [Voltage Detector](#).

## Comfortable use

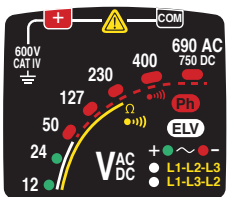
Specially designed for use with Individual Protective Equipment (IPE), the IP2X test probes are fitted with a spring ensuring a force of 10 N: this means users can perform quick tests in all situations.

## Removable:

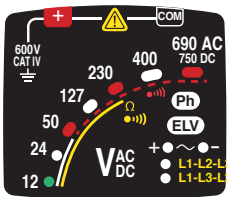
The cables and test probes can be replaced very easily.

## Full integrated autotest:

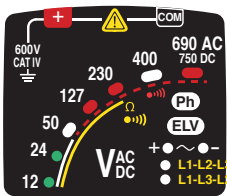
Checking of the power source.  
Checking of the indication system.  
Cable continuity test.



+ ● )))) = OK



Low battery



Cable fault



## Redundant safety in the event of power supply faults (batteries)

The independent **ELV** (Extra-Low Voltage) LED lights up when the voltage present exceeds 50 V<sub>AC</sub> / 120 V<sub>DC</sub>.

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

## Protective guard

More than 5 mm thick

## Continuity

The audible and visual continuity test is performed at 100 Ω, in compliance with Appendix B of the standard. The C.A 762 offers an extended continuity test with visual indications for R < 2 kΩ, 60 kΩ and 300 kΩ.

## Indoor and outdoor use

The IP65 protection rating is higher than recommended, allowing indoor and outdoor use down to -15 °C (type N).

# a clearly-defined procedure

## AC and DC voltage testing

The audible and visual AC and DC voltage detection function is characterized by:

- Use of 2 test probes in contact
- A bargraph made of extra-bright **green** LEDs for voltages under 25 V (very low voltage) and **red** LEDs for hazardous voltages
- One redundant **ELV**
- A loud audio signal which can be heard even in noisy environments



## 2-wire phase rotation with microprocessor



Simple and quick, phase rotation is a useful function, including for circuits isolated by an isolating transformer.

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

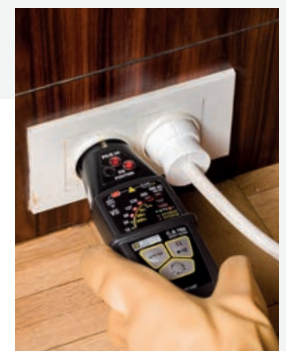
## Single-pole phase detection

With just one point connected, it is easy to detect the position of a phase simply and quickly.



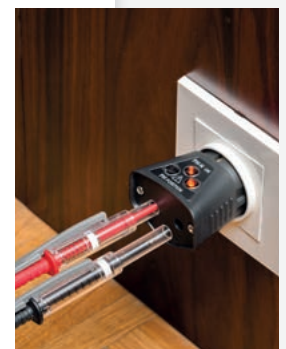
## Adapters for 2P+E safety sockets

The C.A 751 adapter can be used with a C.A 742 or C.A 762 VAT to detect voltages quickly and directly on 2P+E sockets.



The C.A 753 adapter's design means any test probes can be used ( $\varnothing 2$ ,  $\varnothing 4$ , IP2X, etc.). It avoids any risk of non-detection of voltage by guaranteeing good electrical and mechanical contact between the probes and the 2P+E socket.

Like the C.A 753, the C.A 751 provides a visual indication when a mains voltage ( $> 200$  V) is present and also shows the phase position.



## IP2X accessories

The IP2X accessory provides extra safety.

In France, the standards and governmental orders impose its use.



Technical specifications	C.A 742 / C.A 742 IP2X	C.A 762 / C.A 762 IP2X
<b>Voltage detection</b>		
Voltage	12 V ≤ U ≤ 690 V <sub>AC</sub> – 12 V ≤ U ≤ 750 V <sub>DC</sub>	
Frequency	DC, 16 2/3 Hz to 800 Hz	
Input impedance	> 300 kΩ	> 400 kΩ
Max. peak current	3.5 mA <sub>RMS</sub>	
Polarity indication	Yes	
Hazardous voltage indication	The red ELV (Extra Low Voltage) LED indicates that the voltage is higher than the SELV (Safety Extra Low Voltage) and the faster it flashes, the higher the voltage present.	
<b>Phase / Neutral identification</b>		
Above a typical value of 120 V* (45 - 65 Hz) – Above 400 V (16 2/3 Hz - 45 Hz)		
<b>Continuity with buzzer</b>		
Trigger threshold	100 Ω typical (150 Ω max.)	
Extended continuity test	-	2 kΩ, 60 kΩ, 300 kΩ
Test current	≤ 1 mA	
Open-circuit voltage	≤ 3.3 V	
Protection	up to 1,000 V	
<b>Phase rotation</b>		
Ph/Ph voltage	No	2-wire method
Frequency	-	50 V ≤ U ≤ 690 V <sub>AC</sub>
	-	45 Hz to 400 Hz
<b>Buzzer</b>		
Intermittent beep for voltage detection and continuous beep for continuity		
IEC 61010 600 V CAT IV		
<b>Standards and electrical safety</b>		
IEC 61243-3 concerning Voltage Detectors/ Voltage Absence Testers (VATs) (DDT/VAT)		
IEC 61326-1, emission and immunity in industrial environments		
<b>Enclosure protection</b>		
Casing: IP65 – Test probes (depending on reference and option): IP2X		
<b>Climatic conditions</b>		
Use from -15 °C to +45 °C / 20 %RH to 95 %RH		
<b>Power supply</b>		
2 x 1.5 V (AAA and LR3)		
<b>Battery life</b>	7,500 x 10 s measurements	7,000 x 10 s measurements
<b>Dimensions /weight</b>	163 x 64 x 40 mm / 210 g	

\* with standard individual protective equipment

## To order

**C.A 742** ..... P01191742Z

**C.A 762** ..... P01191762Z

Delivered in blister pack with 1 lead 0.85 m long with a black Ø 2 mm test probe fitted with a crystal safety cap, 1 wrist strap, 2 x 1.5 V LR03/AAA batteries & 1 user manual in 5 languages.

**C.A 742 IP2X** ..... P01191742D

**C.A 762 IP2X** ..... P01191762D

Delivered in blister pack with 1 black probe-holder lead 1.10 m long, 1 set of removable IP2X Ø 4 mm test probes (1 red/1 black), 1 wrist strap, 2 x 1.5 V LR03/AAA batteries and 1 user manual in 5 languages.



\* Probe-holder lead and IP2X test probes delivered with the C.A 742 IP2X and C.A 762 IP2X

\* A clever system for stowing the test probe and cable



Red Ø 2 mm test probe equipped with a crystal safety cap.....	P01102008Z
0.85 m black lead with Ø 2 mm test probe equipped with a crystal safety cap .....	P01102009Z
Adapter for safety rod (set of 2).....	P01102034
Crystal safety cap for Ø 2 mm test probe (set of 10) .....	P01102033
CAT IV test probes for VATs (1 red / 1 black) .....	P01102123Z
Ø 2 mm test probes equipped with a crystal safety cap for VATs (1 red / 1 black) .....	P01102124Z
Ø 4 mm test probes for VATs (1 red / 1 black) .....	P01102125Z
Set comprising 1 black probe-holder lead 1.10 m long, 1 set of IP2X Ø 4 mm test probes (1 red / 1 black).....	P01102121Z
IP2X CAT IV test probes for VATs (1 red / 1 black).....	P01102127Z
IP2X Ø 4 mm test probes for VATs (1 red / 1 black).....	P01102128Z
C.A 751 adapter for 2P+E sockets, compatible with C.A 74x and C.A 76x VATs.....	P01101997Z
C.A 753 universal adapter for 2P+E sockets .....	P01191748Z
Bag compatible with MultiFix accessory (120 x 200 x 60 mm).....	P01298074
MultiFix mounting accessory .....	P01102100Z
Soft case (200 x 100 x 40 mm).....	P01298065Z
Replacement wrist strap .....	P03100824

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