

# 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

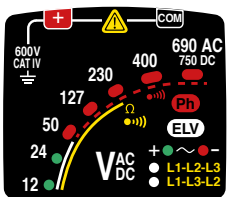
Specially designed for use with Individual Protective Equipment (IPE), the IP2X test probes are fitted with a spring ensuring a force of 10 N: this means users can perform quick tests in all situations.

## Removable:

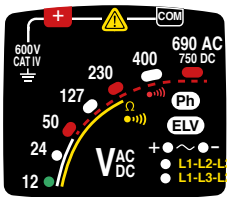
The cables and test probes can be replaced very easily.

## Full integrated autotest:

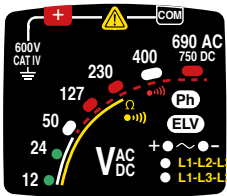
- Checking of the power source.
- Checking of the indication system.
- Cable continuity test.



+ ● )))) = 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).

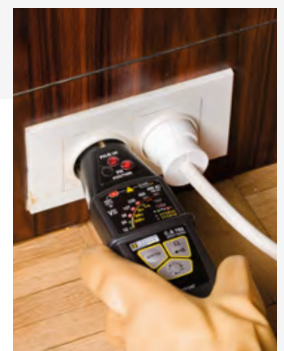
## Single-pole phase detection

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 (Ø 2, Ø 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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