

Detect the presence
or absence of a voltage
in total safety

C.A 701
C.A 711

**Voltage
detectors**



Voltages
50 V/127 V/230 V/400 V

Phase rotation

Phase/neutral

Continuity

**"2-wire" or "3-wire"
phase rotation**

- Comply with the IEC 61243-3 / 61557-7 norms
- EDF-approved: n° C 211 640

The new C.A 701 and C.A 711 detectors clearly indicate the presence or absence of a voltage with a high level of safety for the user, in accordance with the UTE C 18-510 publication "instructions concerning electrical safety".

They comply with the new IEC 1243-3 international norm regarding Class A voltage detectors ($U \leq 500 \text{ V} \sim$ and $750 \text{ V} \dots$).
EDF certification n° C 211 640
They comply with the specific regulations concerning live-line work:

- High level of electrical safety for qualified users.
- Electronic protection up to $1000 \text{ V}_{\text{eff}}$ for continuity detection if the circuit is accidentally live.
- High level of protection provided by the casing: IP65
- Retractable touch prods with IP 2X protection.
- Casing that can be fitted onto an operating rod for remote work.



The C.A 711 uses the traditional "3-wire" method for testing phase rotation



The C.A 701 uses an original "2-wire" method for testing phase rotation

- 1 Insulated retractable touch prod, $\varnothing 2 \text{ mm}$, IP 2 X (patented system)
- 2 Non-slip guard
- 3 Trigger for keeping the touch prod extended
- 4 Insulated input with colour coding
- 5 Autotest pushbutton for checking the operation of the detector and the battery charge life
- 6 Voltage LED ramp and phase neutral (PH) LED
- 7 Phase rotation LED
- 8 Continuity test LED
- 9 Phototransistor that adjusts the brightness of the LEDs according to the lighting conditions
- 10 "START Ph" pushbutton and LED for beginning a phase rotation test
- 11 Earth terminal for phase/neutral identification
- 12 "⚡" LED which indicates the presence of a voltage greater than $50 \text{ V} \sim$ if the batteries are low.



Voltage detection in a public lighting control box.



Remote voltage detection in a low-voltage HPC box using insulated operating rods.



Phase rotation test in a low-voltage panel.



Fuse continuity test.



Phase identification in a low-voltage HPC box.

The C.A 701 and C.A 711 detectors offer audio and visual detection of:

- nominal voltage: 50 V/124 V/230 V/400 V (DC or AC)
- phase rotation
- phase/neutral identification
- continuity ($R < 80 \Omega$).

The autotest function checks that all the parts of the detector (electronics, buzzer, leads, etc.) are operating correctly and also indicates the battery charge life.

Furthermore, they are equipped with a redundant safety system: if used for voltage detection when the batteries are low, the " \triangle " LED lights up to indicate the presence of a DC or AC voltage greater than 50 V.

Voltage detection

- Voltage: $50 \text{ V} \leq U \leq 400 \text{ V}$
- Frequency: DC, 16 ... 500 Hz
- Impedance: $\geq 20 \text{ k}\Omega$
- Max. peak current at 400 V : $I_s = 27 \text{ mA}$



The C.A 701 and C.A 711 are delivered in their carrying case with the necessary leads.

References for ordering

C.A 701 **P01.1917.25**

delivered in its carrying case with:
 a lead with a crocodile clamp (yellow - IP 2X),
 a lead with a retractable touch prod (black - IP 2X),
 Three 1.5 V batteries and a user's manual.

C.A 711 **P01.1917.26**

delivered in its carrying case with:
 a lead with a crocodile clamp (yellow - IP 2X),
 a lead with a retractable touch prod (brown - IP 2X),
 Three 1.5 V batteries and a user's manual.

The detector is always to hand with its carrying case worn at the waist.



Phase rotation

- Voltage: $50 \text{ V} \leq U \leq 400 \text{ V}$
- Frequency: 50 Hz and 60 Hz

Phase/neutral

- Voltage: $50 \text{ V} \leq U \leq 400 \text{ V}$
- Frequency: 16 ... 500 Hz

Continuity

- Max. test current: 130 μA
- Test voltage at open circuit: 1.25 V
- Protection: up to 1000 V eff

Buzzer

- Repeated 2 kHz buzzes for voltage presence test between 50 V and 230 V
- Continuous 2 kHz buzzing for voltage presence test $\geq 400 \text{ V}$

Power supply

- Three 1.5 V batteries (R6 or LR6 type)
- Battery charge life: 10,000 measurements lasting 10 seconds each (with LR6 batteries)

Electrical safety (according to IEC 1010-1)

- Pollution level: 2
- Installation category III for 600 V rated voltage
- Installation category IV for 300 V rated voltage

Electromagnetic compatibility: complies with EC norms

- Emission (EN 50081-1) ■ Immunity (EN 50082-1)

Protection level of covering (according to IEC 529)

- Casing: IP 65
- Touch prods: IP 2X

Dimensions / Weight: 175 x 67 x 30 mm / 250 g

The best in measurement is available from your distributor

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 190, rue Championnet
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