



IEC ELECTRONIC VOLTAGE DETECTORS, "COMPACT SERIE" FOR INDOOR AND OUTDOOR USE

Ultimate technology of voltage detector "Head Capacitive Technology".
Compact and light, it offers a wide band (10/36 kV).

Operating check :

By pressing the TEST button:

- A **RED** LED flashes on.
 - Powerful rated audible signal > 60 dB(A)/2 m.
 - When loosening the button, the timed **GREEN** LED lights up.
- While remaining on, it indicates the good working order of the detector.

Characteristics :

- Precise and stable operating threshold.
- High environmental resistance (impacts, vibrations, moisture).
- Temperature conditions: class N (IEC -61243-1 standard).
- Use from 50 to 60 Hz.



IEC VOLTAGE DETECTOR

In compliance with IEC-61243-1.
CC-765 high environmental resistance : impacts, vibrations, moisture.
Recommended stick CE-4-21-C or K.

Refer to technical specifications on page 201.

IEC 61243-1
CE



CC-765-10/30 - C

Reference	Characteristic	~	mm	g
CC-765-55/20*	In storage box	5.5 - 20	Ø 59 x 270	350
CC-765-3/10*	In storage box	3 - 10	Ø 59 x 270	350
CC-765-10/36*	In storage box	10 - 36	Ø 59 x 270	350
CC-765-10/30*	In storage box	10 - 30	Ø 59 x 270	350

(*) Specify type of mounting when ordering : C or K.
Devices delivered with instructions in plastic box and batteries,
mixed contact electrode
Centring bracket/flag for use with Nevers equipment (refer to page 178)
and instruction manual.
Dimensions Ø 59 x 270 mm.
FOR OTHER VOLTAGE RANGE : CONTACT US.

IEC INSULATING STICK FOR VOLTAGE DETECTOR

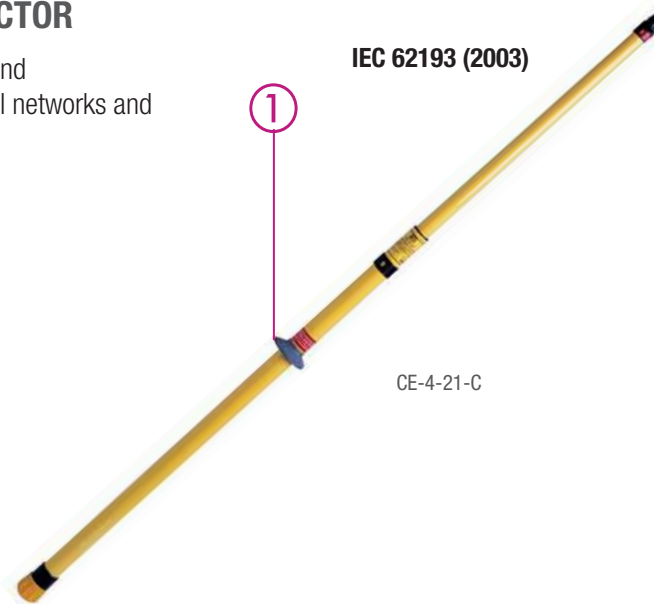
Parts made of composite epoxy resin and glass fibre tubes and polyurethane foam. Locked with a push button. Rod for aerial networks and electrical installations.

For VAT and Grounding.

Reference	~	↔	kg
CE-4-21-(*)	90 kV	2 m	1.5

(*) Add end-fitting: C-E-K.

IEC 62193 (2003)



CE-4-21-C

THE

1 Hand guard.

INSULATING STICKS FOR SUBSTATION USE

Short circuiting and earthing systems for substation.
Telescopic sticks for voltage detectors and earthing systems for use in dry and wet conditions.

Reference	~	∅ mm	Folded	Unfolded length	kg
CE-3-24-C	36 kV	∅ 32/27.5	0.56 m	0.80 m	0.37
CE-75-(**)	75 kV	41/32	1.15 m	2 m	2
CE-4-21-(*)	90 kV	41/32	1.15 m	2 m	1.5
CE-4-30-C	150 kV	41/32	1.75 m	3 m	2
GM-7-10-A	Extension	36	-	1 m	1

(*) Specify type of mounting when ordering : C, K or E.

(**) Specify type of mounting when ordering : C or K.

Reference	~	∅ mm	Folded	Unfolded length	kg
CE-5-105-X	220 kV	63.5/27.5	1.66 m	10.75 m	5.4
CE-5-90-X	220 kV	57.5/27.5	1.61 m	9.25 m	4.2
CE-5-70-X	220 kV	52.5/27.5	1.56 m	7.8 m	3.3
CE-5-60-X	220 kV	47.5/27.5	1.51 m	6.4 m	2.5
CE-5-50-X	220 kV	42.5/27.5	1.46 m	5 m	1.9

X : Specify type of mounting when ordering.
(K : universal ; C : hexagonal, 12 mm on flat surfaces)

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- CE-4-21-(*) et CE-4-30-C** : Certified telescopic rod IEC 62193 (2003) and IEC 61235. Hand shield.
CE-75-(*) : Certified telescopic rod IEC 62193 (2003) and tube IEC 60855-1.
CE-75-C : EDF authorisation: 18-130 B
- CE-5-(**)** : Certified telescopic rod IEC 61235.

STANDARD STICKS

For short circuiting and earthing system.
For use in dry conditions.

Reference	~	∅ mm	↔	kg
CF-3-72...-(*)	72.5 kV	36	1.50 m	0.88
CF-3-90...-(*)	90 kV	36	2 m	1.06

(*) Specify type of mounting when ordering : C, K or E.
Delivered with wall mounting CI-10-D

STICKS WITH SKIRTS

For short circuiting and earthing system.
Epoxy resin / fiberglass composite tubes on foam
Polyurethane. With polycarbonate insulating skirt ∅ 100mm,
Height 90mm, impact resistant. Use in rain.

Reference	~	∅ mm	↔	kg
CF-5-40-(*)	40 kV	36	1.50 m	1.15
CF-5-90-(*)	90 kV	36	2 m	1.55

(*) Specify type of mounting when ordering : C, K or E.

An upper orange element made of glass fiber/resin epoxy foam filled of 32 mm diameter (**).

Insulating skirts polycarbonate, shock resistant.



Hand guard

CE-4-21-C

CE-75-C

CE-5

CF-3

CF-5

Terminal element in resin of polyester/glass fiber foam filled.

GM-7-10-A

CE-3-24-C





TELESCOPIC STICKS FOR VOLTAGE DETECTOR

Suitable for wet conditions.

Reference	~	∅ mm	Folded up	↔	kg
CE-4-21-(*)	90 kV	41/32	1.15 m	2 m	1.5
CE-4-30-C	150 kV	41/32	1.75 m	3 m	2
CM-7-10-A	Extension*	36	-	1 m	1
CE-75-(*)	75 kV	41/32	1.15 m	2 m	2

(*) Please specify type C, K and E when ordering.
Delivered with wall mounted supports CI-10-D.
* For CE-4-21.

Reference	~	∅ mm	Folded up	↔	kg
CE-5-105-X	220 kV	63.5/27.5	1.66 m	10/75 m	5.4
CE-5-90-X	220 kV	57.5/27.5	1.61 m	9.25 m	4.2
CE-5-70-X	220 kV	52.5/27.5	1.56 m	7.8 m	3.3
CE-5-60-X	220 kV	47.5/27.5	1.51 m	6.4 m	2.5
CE-5-50-X	220 kV	42.5/27.5	1.46 m	5 m	1.9

X : Please specify type C or K when ordering.

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- 1 CE-4-21-(*) and CE-4-30-C : Certified IEC 62193 (2003) and IEC 61235. Hand shield.
- CE-75-(*) : Certified IEC 62193 (2003) and IEC 60855-1.
- E-75-C : EDF authorisation: 18-130 B

FIXED LENGTH STICKS

Suitable for wet conditions.

Reference	~	↔	∅ mm	Skirt nbr	kg
CF-5-40-(*)	40 kV	1.50 m	36	1	1.15
CF-5-90-(*)	90 kV	2 m	36	1	1.55
CF-5-110-(*)	110 kV	2.50 m	36	2	2
CF-5-170-(*)	170 kV	3 m	36	3	2.4

(*) Please specify type C, K or E when ordering.

THE ⊕

- 1 CF-5 : Insulating skirts (∅ 100 mm, H90 mm) for use in rain.

WALL MOUNTED SUPPORTS

For sticks and voltage detectors. Plastic.

Reference	Top ∅ mm	Bottom ∅ mm
CI-06-D	28-30	36 max
CI-10-D	32-36	58 max
CI-12-D	28-30	56 max
CI-08	16-20	36 max

An upper orange element made of glass fiber/resin epoxy foam filled of 32 mm diameter.

Isolated skirts polycarbonate ∅ 100 mm, height 90 mm, Shock resistant.



Hand guard.

Element made of resin polyester/glass fiber.

CE-4-21-C
CE-4-30-C

CM-7-10-A

CE-75-C

CE-5

Series CF-5

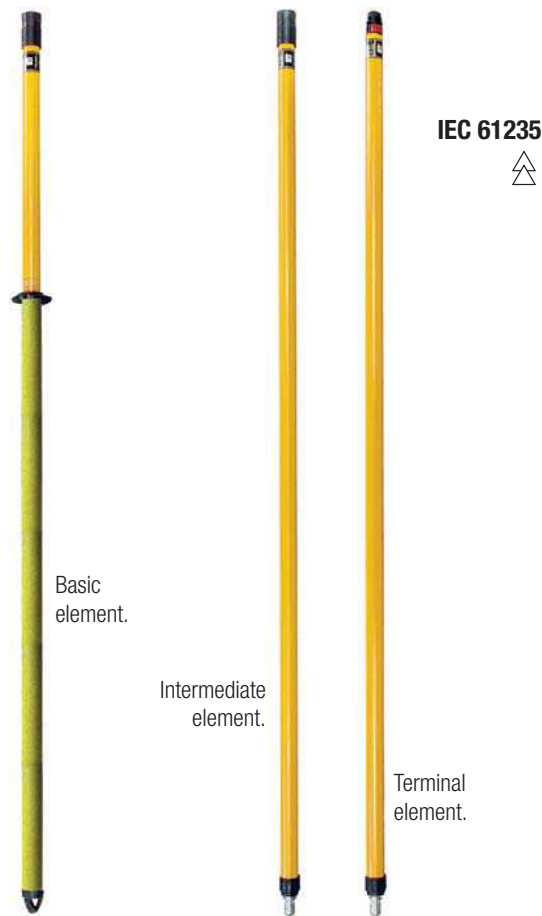


INSULATING STICKS FOR SHORT-CIRCUITING AND EARTHING SYSTEMS

This range allows a stick-length limitation in case of space requirements and carrying capabilities.
For common applications a serie of complete sets including 2 or 3 elements are made to give simple solutions for working distance from 2 to 6 meters.

	Reference	smallest end fitting	biggest end fitting	isolation	kg
Basic	CM-4410	1.13 m	–	0.12 m	1.25
	CM-4415	1.63 m	–	0.38 m	1.70
	CM-4420	2.13 m	–	0.38 m	2.70
	CM-4425	2.63 m	–	0.88 m	3.20
Intermediate	CM-4410-I	1.165 m	–	0.80 m	1.20
	CM-4415-I	1.665 m	–	1.30 m	1.60
	CM-4420-I	2.165 m	–	1.80 m	2.50
	CM-4425-I	2.665 m	–	2.30 m	3.00
Terminal	CM-4410-(*)	1.115 m	1.21 m	0.70 m	0.90
	CM-4415-(*)	1.615 m	1.71 m	1.20 m	1.30
	CM-4420-(*)	2.115 m	2.21 m	1.70 m	2.10
	CM-4425-(*)	2.615 m	2.71 m	2.20 m	2.60

(*) Add end-fitting: B-C-E-H-K-T-D

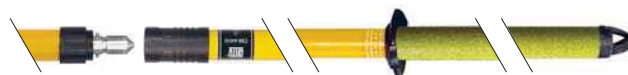


Basic element.

Intermediate element.

Terminal element.

Example of assembly



INTERMEDIATE ELEMENTS WITH RAIN SKIRTS

Intermediary element with skirt, which can be located on all the references mentioned above.

Reference	smallest end fitting	kg
CM-4400-J	0.362 m	0.95



CM-4400-J

INSULATING STICK BAGS

Strong waterproof canvas cases with a heavy duty zipper closure. Shoulder strap. Transparent plastic window for inspection.

CM-1-(*) : For 1 to 3 poles.

CM-3-(*) : For elements series CM-6. For 5 simple elements or 4 double elements.

Reference	Dimensions mm
CM-1-10	1.30 m length
CM-1-15	1.80 m length
CM-1-20	2.40 m length
CM-3-03	0.575 x 1.950 (elmt 1.75 m length)
CM-3-04	0.575 x 2.450 (elmt 2 m length)
CM-3-05	0.575 x 2.850 (elmt 2.50 m length)
CM-3-06	0.575 x 3.400 (elmt 3 m length)



CM-1-XX

CM-3-XX

IEC 61235





CONNECTION ADAPTORS FOR INSULATING STICKS

	<p>C Hexagonal femal 6 sides</p>		<p>K Universal</p>		<p>E Bayonet</p>		<p>S Clamp stick</p>		<p>A ou B For stick CM-4 / CM-6 / CM-7.</p>		<p>*</p>		<p>H</p>		
Accessories	<p>C</p>				<p>K</p>				<p>E</p>		<p>*</p>		<p>H</p>		
Connection adaptors	CI-7-C	CI-3-C	CI-6-C2	CI-5-C	CI-3-K	CI-4-K	CI-6-K	CI-7-K	CI-5-K	CI-3-E	CI-7-E	CI-4-E	CI-D-K	CI-6-H	CI-3-H
Sticks	E	AB	K	S	AB	C	K	E	S	AB	K	C	K	K	AB

With this range any accessory can be attached to any stick by using connection adaptors. Other models, please consult us.



INSULATING STICKS FOR MANOEUVERING DETECTORS & SHORT-CIRCUITING AND EARTHING SYSTEMS

This range thus allows a stick-length limitation in case of space requirements and carrying capabilities.
For common applications a serie of complete sets including 2 or 3 elements are providing simple solutions for working distance from 2 to 6 meters.

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1 Quick and simple use.

	Reference	↔ smallest end fitting	↔ longest end fitting	↔ mm Insulating	kg
Basic	CM-4610	1.13 m	-	0.12 m	1.25
	CM-4615	1.63 m	-	0.38 m	1.70
	CM-4620	2.13 m	-	0.38 m	2.70
	CM-4625	2.63 m	-	0.88 m	3.20
Intermediate	CM-4610-I	1.165 m	-	0.80 m	1.20
	CM-4615-I	1.665 m	-	1.30 m	1.60
	CM-4620-I	2.165 m	-	1.80 m	2.50
	CM-4625-I	2.665 m	-	2.30 m	3.00
Terminal	CM-4610-(*)	1.115 m	1.21 m	0.70 m	0.90
	CM-4615-(*)	1.615 m	1.71 m	1.20 m	1.30
	CM-4620-(*)	2.115 m	2.21 m	1.80 m	2.10
	CM-4625-(*)	2.615 m	2.71 m	2.20 m	2.60
Fixed sticks	CM-4115-(*)	1.575 m	1.675 m	0.82 m	1.35
	CM-4120-(*)	2.075 m	2.175 m	1.07 m	1.8
	CM-4125-(*)	2.575 m	2.675 m	1.32 m	2.8
	CM-4130-(*)	3.075 m	3.175 m	1.82 m	3.3

(*) Reference to be completed by fitting: C-E-H-K-T-D.

Accessories :

Reference	↔ smallest end fitting	kg
CM-3900-J	0.36 m	0.95



IEC 60855
EN 50508

Basic element. Intermediate element. Terminal element.



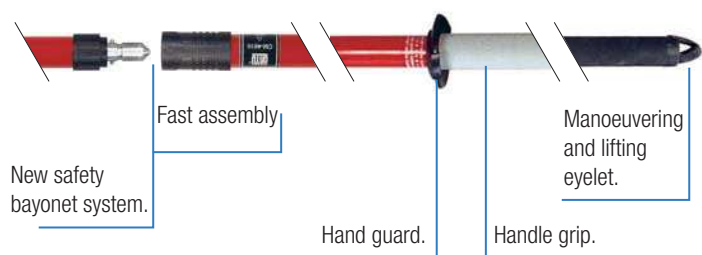
Intermediate element with rain skirts.

SET OF STICKS

Complete sets of sticks for common applications.

Reference	Composition	↔
CM-4220-(*)	2 elements : CM-4610+CM-4610-(*)	2 m
CM-4230-(*)	2 elements : CM-4615+CM-4615-(*)	3 m
CM-4240-(*)	2 elements : CM-4620+CM-4620-(*)	4 m
CM-4345-(*)	3 elements : CM-4615+CM-4615-I+CM-4615-(*)	4.5 m
CM-4360-(*)	3 elements : CM-4620+CM-4620-I+CM-4620-(*)	6 m

(*) Reference to be completed by fitting: C, E, H, K, T et D.



INSULATING STICKS FOR SHORT CIRCUITING AND EARTHING SYSTEMS

CM-6 series is recommended for cables $\geq 95 \text{ mm}^2$. Yellow colour elements, with superior characteristics, they are connected between them without any prior order of assembly.

These elements allow "long length" assemblies which can support short-circuit systems with large cross-section cables. Shockproof guard and pole end cap. Yellow colour elements.

Composite tube fiber glass and epoxy resin, yellow colour.

Reference	\longleftrightarrow	\varnothing mm	kg
CM-6-15	1.5 m	47	2.4
CM-6-20	2 m	47	3.2
CM-6-25	2.5 m	47	4
CM-6-30	3 m	47	4.8



Example of assembly of clamps on the stick.



IEC 61235



EARTH CLAMPS FOR OVERHEAD LIVE NETWORKS AND SUBSTATIONS

Copper aluminium bronze earth clamps.



Reference	Rating	Use	Connection \varnothing (mm)	Dimensions mm	Clamp capacity mm	kg
MT-843	40 kA/1 s	Substation/ Overhead line	Hole : \varnothing 12.5	45 x 106 x 165	\bullet \varnothing 6 - 25 \blacksquare 0 - 35	0.95
MT-843-P	40 kA/1 s	Substation	3 Holes : \varnothing 12.5	45 x 106 x 165	\bullet \varnothing 6 - 35 \blacksquare 0 - 35	0.95
MT-847	25 kA/0.5 s	Overhead line	Hole : \varnothing 13	45 x 106 x 170	\blacksquare 0 - 30	1.00
MT-852	63 kA/0.5 s	Substation	Hole : \varnothing 13	70 x 125 x 155	Fixed points	1.40
MT-853	40 kA/0.5 s	Substation	Hole : \varnothing 13	65 x 130 x 135	Fixed points	1.00



COPPER CABLES

Extra-flexible braided multi-strand copper.

Delivered to the meter with a minimum of 5 meters.

Available in vinyl or silicone sheath.



IEC 61230

