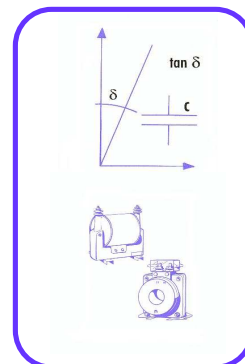
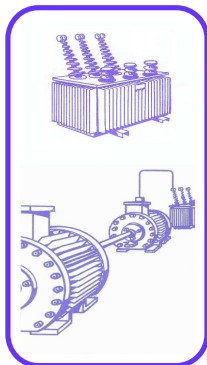


AIR STANDARD CAPACITORS

CA Type

1 kV up to 5 kV application



FUNCTION

- Standard reference value used for very accurate measurement of capacitance and dielectric dissipation factor (Tan δ) in high and low voltage
- Measurements from some Volts up to over 5 kV as a reference & additional characteristics available in other Vettiner Standard Capacitors ranges
- Calibration / Traceability linked to BNM Channel / LNE French National Laboratory

APPLICATIONS

- HV Standard Capacitor for capacitance & Tan delta measurements,
- HV standard Capacitor for very accurate capacitive voltage divider,
- HV standard Capacitor for coupling capacitor in Partial Discharges measurements
- Manufacturers, repairers, maintenance of all HV insulated equipments (oil, impregnated paper, transformers, turning machines, cables, bushings...
- Production, transmission and distribution of energy on national grid networks or local (including internal networks of industries)

CA RANGE BENEFITS

- High accuracy technology
- Operating simplicity
- Fast measurement
- Total safety of operator
- Reliability
- Sturdiness
- No maintenance
- Easy check of calibration
- Convenient and simple calibration



STANDARDS

- Conformity to IEC 76, NFC 52 Standards

QUALITY

- of Manpower
- of Know-how
- of Procedures
- of Components

ACCURACY

- High accuracy of measurements
- Stability of components

CALIBRATION

- Primary Standards linked to LNE
- Traceability

WARRANTY

1 YEAR

AFTER SALES SERVICE

10 YEARS

AIR STANDARD CAPACITORS

CA Type

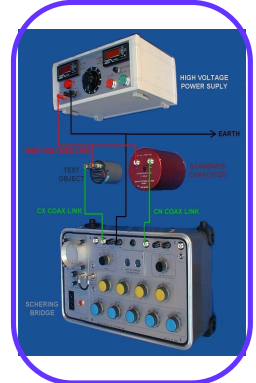
1 kV up to 5 kV application

PRINCIPLE

- Capacitor is made with the special assembly of metallic multi-plates and their surface with quantities allows to reach expected final capacitance value.
- An assembly disc, fixed to a metallic cover, supports the plates
- Whole system is fixed inside anodized metallic cylinder box which insures perfect stability, rigidity and protections.
- Temperature coefficient of capacitance is lower as possible thanks to selected materials' performances.
- External connections are with coaxial terminals

MAIN CHARACTERISTICS

- Dielectric Gas used : Air
- Gas operating pressure : 1 bar
- Temperature coefficient $\Delta C/C$: $\pm 2 \cdot 10^{-5} / ^\circ\text{C}$
- Operating temperature range : -20°C up to $+70^\circ\text{C}$
- Operating hygrometry : up to 80 %
- Dissipation factor of C (Tan δ) : $< 2 \cdot 10^{-5}$ (< 20 ppm)
- Voltage Coefficient $\Delta C/kV$: < 10 ppm / kV
- Accuracy when used as divider : 0.1 % rdg. ± 0.03 %
- Accuracy of calibration of C : 0.02 % rdg. ± 0.01 pF
- Stability : < 0.05 % / year



CA RANGE TECHNICAL SPECIFICATION

Note : Technical characteristics may change without any notice

Main CA range standard capacitors

PARAMETERS		1 kV			2 kV		3 kV		5 kV
Vettiner reference		CA 1-100	CA 1-1000	CA 1-5000	CA 2-100	CA 2-1000	CA 3-100	CA 3-1000	CA 5-100
• Rated Voltage RMS	(kV)	1 kV	1 kV	1 kV	2 kV	2 kV	3 kV	3 kV	5 kV
• Test Voltage RMS	(kV)	1.2 kV	1.2 kV	1.2 kV	2.4 kV	2.4 kV	3.6 kV	3.6 kV	6 kV
• Rated Capacitance	(pF)	100 pF	1000 pF	5000 pF	100 pF	1000 pF	100 pF	1000 pF	100 pF
Dimensions									
• Height	(mm)	160 mm	190 mm	240 mm	160 mm	190 mm	190 mm	160 mm	190 mm
• Diameter Ø	(mm)	120 mm	120 mm	190 mm	120 mm	120 mm	120 mm	120 mm	120 mm
• Weight	(kg)	1.8 kg	2.3 kg	5.0 kg	1.8 kg	2.5 kg	1.9 kg	2.8 kg	2.0 kg

PRESENTATION

- Shielded cylinder and terminals
 - Dust free
 - External connections : UHF type terminals (Lemo or other terminals on simple request)
 - Other values of Rated Capacitances or/and Rated Voltages possible on simple request.
- Feel free to contact us !

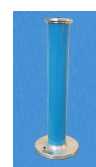


OTHER POSSIBILITIES

- For additional possibilities, don't forget also to think to other Vettiner Standard Capacitors : (From some hundred Volts up to 800 kV)



CS range



CP range



CG plates range



CG bulb range