



HV SF6 or SF6 free Standard Capacitor

# CG 100-50 & CG 100-100

## TECHNICAL SPECIFICATIONS

### General information

Ensure precise capacitance measurement with the CG100 series. Designed for high-voltage calibration and testing, these reference capacitors offer exceptional accuracy and stability.

#### Main applications

HV Tan  $\Delta$  & Capa. Standard  
HV AC Accurate divider (See options)  
HV Coupling capacitor std. (60 270 IEC std)

#### Benefits

Voltage coefficient  $\Delta C / [0-U_n] \leq 30$  ppm \*  
Capacitance stability / year < 0.05%  
Capacitance adjustment /  
Nominal capacitance < 1.0 pF  
Accuracy / Capa. Vettiner calibration 0.05 %  
Accuracy / Capa. External calibration  $\leq 0.02$  % \*  
No or reduced Maintenance  
Sturdiness & reliability over time  
Total operator safety & easy use

2 years warranty included, 3 or 5 or 10 years in option  
10 years of after sales service guaranteed, over 50 years recorded

#### Calibration

Vettiner calibration certificate included (ILAC Traceability)\*  
\*External laboratory calibration (ISO 17025,...) under request

#### Environment

Operating temperature: -10°C up to +50°C  
Storage temperature: -20°C up to +70°C  
Operating Hydrometry:  $\leq 70\%$  non-condensing (Ambiant T° 5°C mini > dew point T°C)  
Altitude:  $\leq 1000$  m or consult us for higher elevation



### Main characteristic

Bulb electrode technology  
SF6 Gas - 5 bar insulant (Or alternatively NG New Gas, SF6 Free)

#### Technical data

Nominal Voltage	100 kV rms (Continuous)
Maxi tested Voltage	120 kV rms (1 minute)
Nominal Capacitance	50 pF or 100pF
Tan delta	$< 1.10^{-5}$
Partial Discharges level	$< 2$ pC
Frequency operating	10 Hz up to 1 kHz
Insulation resistance	$> 500$ M $\Omega$
HV Terminal - Fixed Socket	Banana Terminal 4 mm or/& fixing Screw

Some of the above technical data are valid at the above-mentioned date but could change without any notice at any time (Ex. dimensions or weight or else...)

Cn Terminal - Fixed Socket	Lemo Unipole type ERA 3S 140 CTL (Other type on request)
SF6 Fill-in Input	DN 40 ISO-KF

## Pressure & Temperature coeff.

Def	Unit	Value
Pressure coeff.	$\Delta C / p$	+ 2.2.10 <sup>-3</sup> / bar
Temperature coeff.	$\Delta C / ^\circ C$	# + 2.10 <sup>-5</sup> / °C
Pressure drift / T°C	$\Delta p / ^\circ C$	# 0.02 bar / °C




## Dimensions & weight

Height	104 cm
Base	Ø 45 cm
Head	Ø 28 cm
Weight	36 kg

## Option and accessories

Set of measuring cables & instruments under request

### Use as HV AC divider

Accessories	Description
	Second measuring electrode Cn2 (/ HV Div.) 5 pF (Other value under request)
	0.5% divider with built-in LV capacitance Ratio 10 000 / 1(800 kV → 80 V) or else
	≤ 0.1% divider with ext. LV Std. Capacitance Under Request
	Adaptation for special ratio divider Under Request
	Digital Kilo-Voltmeter (AC & DC Comply) Under Request

All options and accessories specifications under request

## Freight & packaging

Std Capacitor is disassembled for freight & integrated inside a 40 feet container from Vettiner Lyon up to customer site

Ref	Description	Dimensions & weight
CG 100 PPACK	Common container (UN 1080 comply)	126 x 500 x 500 cm Net crates: 12.5 kg ±10% Gross weight: 48.5 kg ±10%
CG 100 WOI	Wooden packing 1 unit (UN 3538 & ISPM 15 comply)	126 x 840 x 840 cm Net crates: 55kg ±10% Gros weight: 90kg ±10%

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