



HV SF6 or SF6 free Standard Capacitor

CG 400 & CG400-100

TECHNICAL SPECIFICATIONS



General information

Ensure precise capacitance measurement with the CG400 & CG400-100 series. Designed for high-voltage calibration and testing, these reference capacitors offer exceptional accuracy and stability.

Main applications

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

Environment

Operating temperature: -10°C up to +50°C
 Storage temperature: -20°C up to +70°C
 Operating Hydrometry: 1 to 95% (without condensation)
 Altitude: \leq 1000 m or consult us for higher elevation

Benefits

Voltage coefficient $\Delta C / [0-U_n] \leq 30$ ppm *
 Capacitance stability / year < 0.05 %
 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*

Main characteristic

Bulb electrode technology
 SF 6 Gas - 5 bar insulant (Or alternatively NG New Gas, SF6 Free)

Technical data

Nominal Voltage	400 kV rms (Continuous)
Maxi tested Voltage	440 kV rms (1 minute)
Nominal Capacitance	50 pF or 100pF
Tan delta	< 1.10 ⁻⁵
Partial Discharges level	< 5 pC
Frequency operating	1 Hz up to 1 kHz (At reduced Voltage)
Insulation resistance	> 1 G Ω
HV Terminal - Fixed Socket	Fixing Screw or/ & Hook
Cn Terminal - Fixed Socket	Lemo Coaxial type ERA 3S 250 CTL (Other type on request)
SF6 Fill-in Input	"DIL0" Quick coupling DN20

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...)

Pressure & Temperature coeff.

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




Dimensions & weight

Height	2 655 mm
Base	Ø 1520 mm
Head	Ø 1560 mm
Weight	450 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 (400 kV → 40 V)
 ≤ 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 shipped under reduced gas pressure in a wooden crate from our site in Lyon to the customer's site.

Ref	Description	Dimensions & weight
 CG 400 W01	Wooden packing Vertical freight (No SF6 during freight)	174 x 174 x 287 cm Gross weight: 720 kg ±10%

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