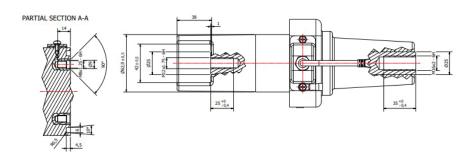
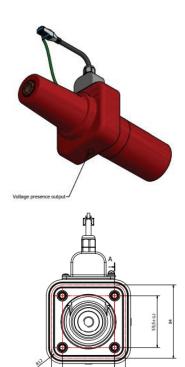


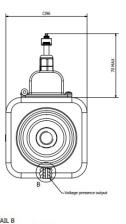
# CVS-P-24-SB

The G&W Electric Smart Bushing consists of a medium voltage bolted type-C interface as per EN50181:2010 with embedded highly accurate Low Power Current Transformer (LPCT) and Low Power Voltage Transformer (LPVT). The technology of the passive LPVT is capacitive voltage divider, the technology of the passive LPCT is Rogowski coil. The product is suitable for both measuring and protection purposes. The G&W Electric Smart Bushing embeds a capacitive coupler for Voltage Presence indicators per IEC 61243-5.

Bushing Type	Outside cone plug-in type bushing				
Interface Type (EN 50181)	С				
Maximum voltage, Um	24 kV				
Rated Current, Ir	630 A				
Rated power frequency withstand	50 kV				
Rated lightning impulse withstand	125 kV				
LPVT Transformation Ratio	10000 V: 1 V				
LPCT Transformation Ratio	DERIVATIVE TYPE 500 A: 150 mV at 50 Hz				
Voltage Presence Signal	11,5 pC ± 0,5 pF				
LPVT Accuracy Class	0.5 / 1P (with calibration coefficients of ratio and phase)				
LPCT Accuracy Class	0.5S / 5P (with calibration coefficients of ratio and phase)				
Weight	2.3 kg				
Temperature Range	-15°/+50°C indoor (plus heating due to rated current)				
Applicable Standards	EN 50181:2010 IEC 61869/10 IEC 61869/11 IEC 61243-5 GSCM004 (rev. 0 10/2019) GSCT005 rev.2 del 12/2019				









## TABLE 1

RJ-45 connector for:	PIN	1	2	3	4	5	6	7	8
Passive LPCT		S1	S2						
Passive LPVT								а	n
Reserved for TEDS				+			-		
Reserved for power sup	ply				+	-			

(CE)

If the signal cable length  $\geq$  10 m, the RJ-45 connector can be compliant to the requirements valid for cables with length < 10 m, as reported in Table 601 of the IC 61869-6. Use of Transducer Electronic Data Sheet - TEDS (for future developments)

## **Output Cable**

- Output cable length 2.2 m
- · CAT 6 shielded cable with RJ-45 connector
- Output cable RJ-45 pinout shown in Table 1

LPVT output signal is single-ended type, with pin n connected to ground. LPCT output signal is differential type, isolated from ground. The polarity of LPCT secondary signal is consistent with the polarity of a primary current injected into the bushing from the SF6 side connection. In other words: P1 is the connection to busbars into the tank, P2 is the C-type cable connection.

## Other components included in the kit

- Ground wire cable length 26 cm
- Rating marking plate

#### **MARKING PLATE**

R.I Te	Electric  L: 24/50/125 kV Weight: 1.7 kg mperature category: [-15, +50]°C condary terminal LL: 150 /820 / 1500 V detecting system: MR per IEC-61243-5	Low-Power PAssive Voltage & Current Transformer Voltage Presence Couplet CVS-P:24-SB 210550026 Ref. Std: ENEL-GSCT005-rev2, ENEL-GSCM004-rev0, ENEL-DY 811 Rated frequency: F, = 50 Hz
L P V T	Rated Primary Voltage Range: [6, 24]/3 kV Rated Transformation Ratio: K, = 10000/1 V/V Rated Voltage Factor F, = 1,9 / 8h Ratio Correction Factor: CF, =	Rated Phase Offset: or = 0* Phase Offset Correction: Po corr = \ Rated Burden: Rbru = 2 MD // 50 pF Accuracy Class: 1P
L P C T	Rated Primary Current I $_p$ = 500 A Rated Secondary Voltage: Us, = 150 mV Extended Primary Current Factor: $k_{op}$ = 100 Rated Thermal Current I $_{op}$ $l_{op}$ = 690 A, 20 kA Ratio Correction Factor: CF <sub>i</sub> = I	Rated Phase Offset: $P_{orio} = 0^{\circ}$ Phase Offset Correction: $P_{orio} = 1$ Rated Burden: $R_{orio} = 20 \text{ kD } / 500 \text{ pF}$ Accuracy Class: 0.5S 5P Type of output signal: Derivative

90mm

## For more information

please, visit our website: www.gwelectric.com/products/high-accuracy-sensors/



Since 1905, G&W Electric has been a leading provider of innovative power grid solutions including the latest in load and fault interrupting switches; reclosers; sensors; system protection equipment; power grid automation; transmission and distribution cable terminations; and joints and other cable accessories. G&W Electric is headquartered in Bolingbrook, Illinois, U.S.A., with manufacturing facilities and sales support in more than 100 countries, including Canada, Italy, China, Mexico, Brazil, India, UAE and Singapore. We help our customers meet their challenges and gain a competitive edge through a suite of advanced products and technical services.