

# SIEMENS



## SMART AND INTELLIGENT BUSHING

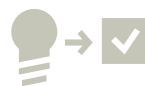
# Empower your switchgear: Smart monitoring with **SIBushing**

[siemens.com/bluegis](https://www.siemens.com/bluegis)

SIBushing is an intelligent monitoring solution for switchgear, featuring advanced sensors that ensure precise data and enhanced grid protection. Its compact design facilitates easy installation, boosting operational efficiency and safety. The integration of the SIBushing with devices such as SICAM FCM plus or SIPROTEC 7SY82 provides real-time data, which can be used to extend equipment lifespan.

### Your benefits

- Safety: Enhanced personnel safety during protection test thanks to low output voltages and reduced fault potential during commissioning through simple handling
- Availability: One-fits-all sensor does not require any adjustments when network parameters change, e.g. the supply current
- Sustainability: Material savings of iron, copper and cast resin, compared with conventional instrument transformers (2.1 kg as against up to 50 kg)
- Easy project execution: less configuration and logistics thanks to no handling of specific transformer variations



Advanced sensor technology



Real-time data



Compact, easy-to-install design



## General Information

- Cable connection bushing type C according to EN 50181
- Rogowski coil for current measurement according to IEC 61869-10
- Capacitive voltage divider for voltage measurement according to IEC 61869-11 with ratio 10,000/1
- Additional capacitive voltage divider for capacitive voltage detecting and indicating systems according to IEC 62271-213
- PT100 temperature sensor with the option to monitor the temperature at the cable connection
- Connection of secondary devices with standardized RJ45 connectors

## Available devices for connection to SIBushing

- 7SY82 SIPROTEC 5 as non-modular universal protection relay with low power instrument transformer inputs
- SICAM FCM plus as an intelligent short-circuit and earth-fault directional indicator



SICAM FCM plus and SIBushing Sensor

## Technical Data

		SIBushing 630 A	SIBushing 1250 A
General	Cable connection bushing	Type C acc. EN 50181	Type C acc. EN 50181
	Rated voltage $U_r$	40.5 kV	40.5 kV
	Rated continuous current $I_r$	630 A	1250 A
	Rated frequency $f_r$	50 Hz / 60 Hz	50 Hz / 60 Hz
	Rated short-time withstand current $I_k$	25 kA (3s)	31.5 kA (3s)
	Ambient temperature T	-40°C up to +70°C	-40°C up to +70°C
	Weight	2.1 kg	2.4 kg
	Harmonics measurement frequency range	up to 9 kHz	up to 9 kHz
	Applied standard	IEC 61869	IEC 61869
LPCT <sup>1</sup>	Transition ratio	50 A / 22.5 mV at 50 Hz 50 A / 27.0 mV at 60 Hz	50 A / 22.5 mV at 50 Hz 50 A / 27.0 mV at 60 Hz
	Accuracy class	0.5 / 5P	0.5 / 5P
	Rated symmetrical short-circuit current factor $K_{SSC}$	500	630
	Rated extended primary current factor $K_{PCR}$	12.6	25
	Rated burden	2 MΩ / 50 pF	2 MΩ / 50 pF
LPVT <sup>2</sup>	Rated primary voltage $U_{pr}$	33 / $\sqrt{3}$ kV	33 / $\sqrt{3}$ kV
	Transition ratio	10,000 / 1	10,000 / 1
	Accuracy class	0.5 / 3P	0.5 / 3P
	Rated voltage factor $F_v$ and permissible duration	1.9 / 8 h	1.9 / 8 h
	Rated burden	2 MΩ / 50 pF	2 MΩ / 50 pF

<sup>1</sup> Low Power Current Transformer

<sup>2</sup> Low Power Voltage Transformer

[➔ Webinar: Powering sustainable and reliable energy distribution](#)

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Siemens AG  
Smart Infrastructure  
Electrification & Automation  
Mozartstrasse 31c,  
91052 Erlangen, Germany

Siemens Industry Inc.  
3617 Parkway Lane  
Peachtree Corners, GA 30092  
United States