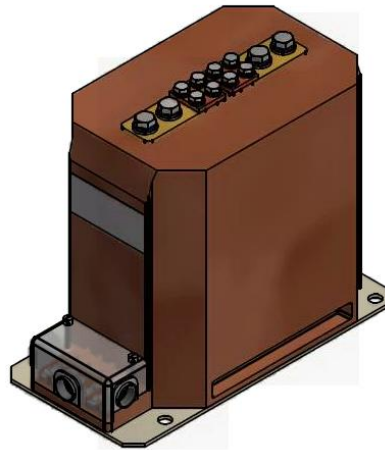




Data sheet

GSWS24 with optional extended frequency range (wideband transformer)



- Support current transformers $U_m=24$ kV
- Optimised frequency transfer characteristics up to 9 kHz
- Specifically designed for applications in the power quality field
- Slimline design to DIN 42600
- Calibratable (50 Hz)

General description

In general, current transformers compared to voltage transformers exhibit good frequency transmission characteristics up to 9 kHz. However, inductive components of load, cable resistance and various core materials can also adversely affect the transducer transmission characteristics for harmonic currents.

The GSWS24 with optional extended frequency range is optimised for future standards and measurements up to 9 kHz. Up to this frequency a class accuracy of <3 % is assured. A proven transformer principle is applied. This support current transformer is used in 20 kV medium voltage networks. In addition to permanent monitoring of electro-energetic quality parameters (e.g. harmonics limit values, THD) at grid transition points (EN 50160), for permanent monitoring the use of non-linear operating devices is also conceivable.

Wideband transformers, however, can also be used in conjunction with electrical energy meters, which can detect actual output beyond 50 Hz.



Data sheet

In our test field current transformers are tested with a cable (shielded 4 mm² copper braid) specially suited to HF harmonics. The part of the load which corresponds to the supply cable, must be taken into account by customers when selecting transformer rating.

Specification (Example – further data on request)

General	
Standards	IEC 61869-2, DIN 42600
Insulation	24 / 50 / 125 kV
Ambient temperature	-5 °C +40 °C
Weight	28 kg
Class of insulation material	E

Rated data for line frequency	
Frequency	50 Hz
Primary rated current I_{pr}	5 A ... 2500 A
Secondary rated current I_{sr}	5 A, 1 A
Thermal continuous rated current I_{cth}	$1.2 \times I_{pr}$, $1.0 \times I_{pr}$
Output	for example 5, 10, 15, 30... VA
Class	0.2; 0.5; 0.2S; 0.5S; 10P, 5P
Thermal short-time rated current I_{th}	16 kA/1 s ... max. $1000 \times I_{pr}$
Rated peak current I_{dyn}	$2.5 \times I_{th}$
Primary switchable	1: 2
Ck terminal for voltage indication with surge arrester	optional

Additional PQ data	
Frequency range	50 Hz ... 9 kHz
Accuracy	< 3 % (Measurement according to the frequency sweep test up to a maximum of 200 A)
Output	0 ... 5 VA
Resistive load	cos beta = 1
Incl. special wideband connection cable	3 m

Order reference: "GSWS24 with frequency option"

