

2. Products

2.4 MULTIFUNCTIONAL CURRENT SENSORS (phase current- and earth fault detection)

2.4.1. SMCS3-JW1004 (closed core)

The current sensor in 3-phase design combines maximal flexibility with maximal functionality. It is possible to add the earth fault detection to the three single phase converter in the sensor.

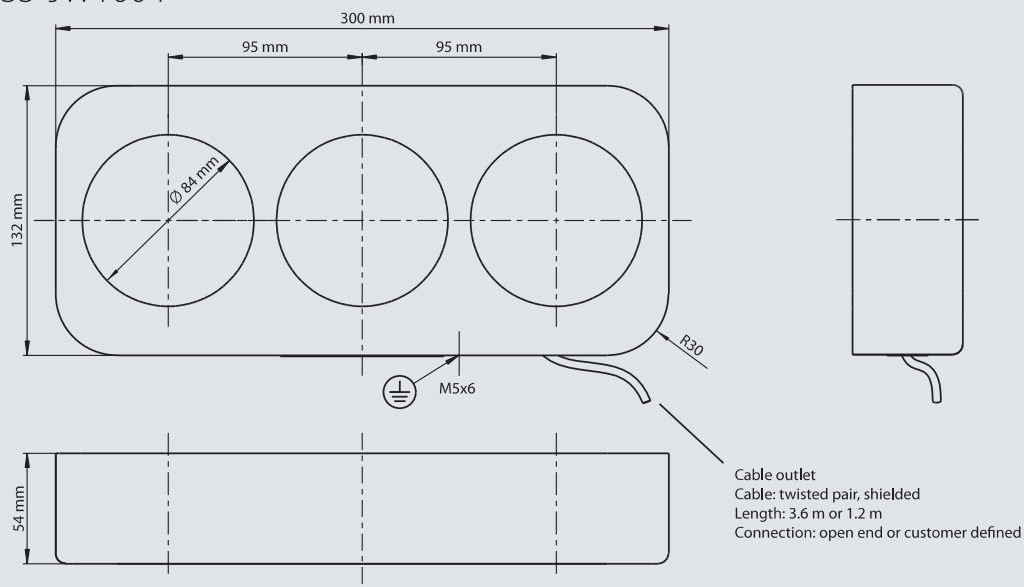


In addition to the extended version, consisting in three current sensors and a sensor for the earth fault detection, different simpler layouts can be provided in accordance with customers' requirements. This sensor is designed for original equipment in switchgears.

An advantage of this system is a simple and easy assembling of a single sensor, which takes over the tasks of up to four different sensors.

The size of the device is always the same, regardless of the configuration chosen by the customer. Due to the closed design of the sensor core, significantly higher accuracies, than with cut iron cores, are achieved. The design of the sensor can be adapted to the customer's request regarding the distance between the poles and the external dimensions.

SMCS3-JW1004



Datasheet SMCS3-JW1004

Insulation level	0,72 / 3 kV	
Rated frequency	50 Hz / 60 Hz	
Rated short time thermal current	25 kA / 1 s	
Ratio phase current sensor	300 A // 225 mV Ext. 200% *	
Ratio earth fault detection	60 A // 225 mV *	
Accuracy class phase current	0,5 & 5P10	
	1 & 5P10	
	3 & 5P10	
Accuracy class earth fault detection	Primary current: from 1 to 60 A	Phase displacement: ± 120 minutes
	1	
Output signal at rated current	225 mV	
Integrable sensor options	3x phase	
	2x phase + 1 earth fault	
	3x phase + 1 earth fault	
Standard	IEC 60044-8 // IEC 61869-10	
External conditions	Operation: -25°C to +40°C or -40°C to +40°C *	
	Storage: -40°C to +80°C *	
Rated burden	$\geq 20 \text{ k}\Omega$	
Connection cable & interface	See configuration table page 11	
Phase distance	95 mm; other phase distances possible on request	

* Alternatives on request