

2. Products

2.2 PHASE CURRENT SENSORS

The phase current sensors are available in different versions. The first version has a dividable ring core for retrofit purposes whereas the second one is available with closed ring cores for original equipment.

2.2.1 SMCS-JW1001 (closed core)



This type is designed for simple original equipment in switchgears. It is slide on the not mounted output T-connector in the substation. When the connector is screwed on the feed through, its sheathing expands. Thus, the sheathing presses against the inner surface of the current sensor and fixes it. Consequently, additional fixations of the sensor in the substation are not necessary.

Due to a stable production process, it is possible to provide sensors in a set of three with a standard deviation in absolute value and phase error of 0,05% and 0,05°, respectively. Consequently, a set of three sensors enables earth fault current detection in addition to the current measurement, without using earth fault detection transformers.

Due to their small size, up to three sensors can be mounted in a cable compartment with a width of 300mm and a phase distance of 95mm.

2.2.2 SMCS/T-JW1002 (split core)

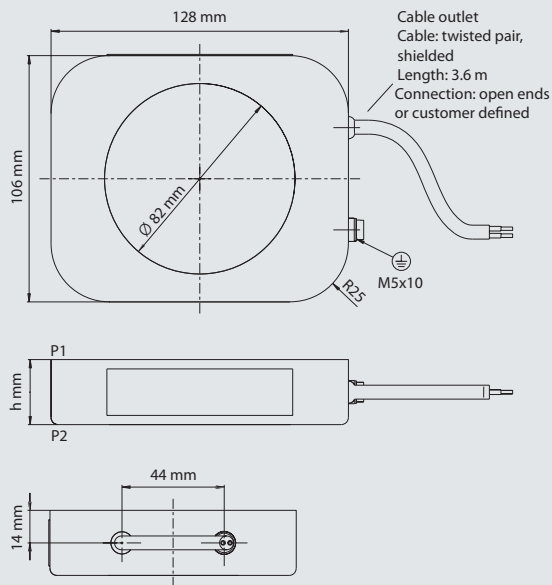


The retrofit application in existing installations is the primary field of application for this type. The click system enables a tool-free mounting of the sensor on site. Dismounting of the T-connector is not necessary, since the sensor is enclosing the cable.

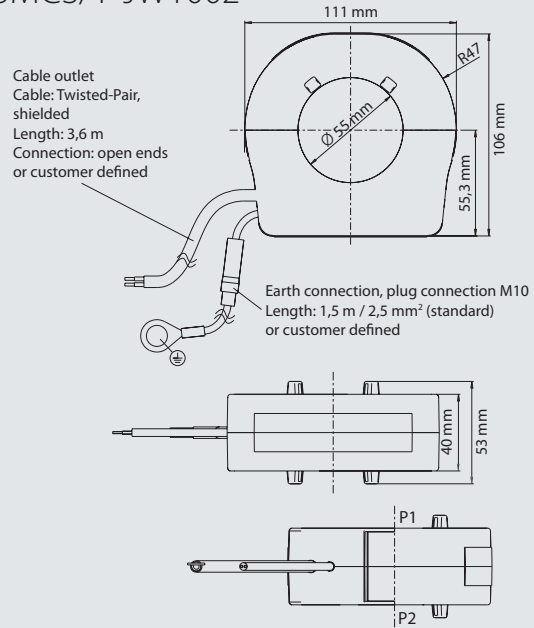
The sensor is delivered with two cable straps to fix it directly on the output cable. The cut surface of the iron core and a sophisticated spring system in the sensor housing ensure that the measurement precision of the sensor is guaranteed after assembly on the output cable.

The accuracy of this sensor, more precisely the absolute value error and the phase error is in class 1 according to IEC 60044-8.

SMCS-JW1001



SMCS/T-JW1002



Datasheet SMCS/T-JW1002 & SMCS-JW1001

Insulation level	0,72 kV			
Rated frequency	50 Hz / 60 Hz			
Rated short time thermal current	25 kA / 1 s			
Primary current	300 A; Ext. 200% *			
Accuracy class	SMCS/T - JW1002	0,5 / 1 & 5P10 ... 5P20		
		3 & 5P10 ... 5P20		
	SMCS - JW1001	28 mm	0,2s / 0,25 / 0,5 & 5P20	
			1 & 5P10	
		50 mm	3 & 5P10	
			0,2s / 0,25 / 0,5 & 5P20	
		1 & 5P20		
		3 & 5P20		
Output signal	225 mV according to IEC 60044-8			
Standard	IEC 60044-8 // IEC 61869-11			
External conditions	Operation: -25°C to +40°C or -40°C to +40°C, on request			
	Storage: -40°C to +80°C, on request			
Rated burden	≥ 20 k Ω			
Connection cable & interface	See configuration table page 11			

* Alternatives on request