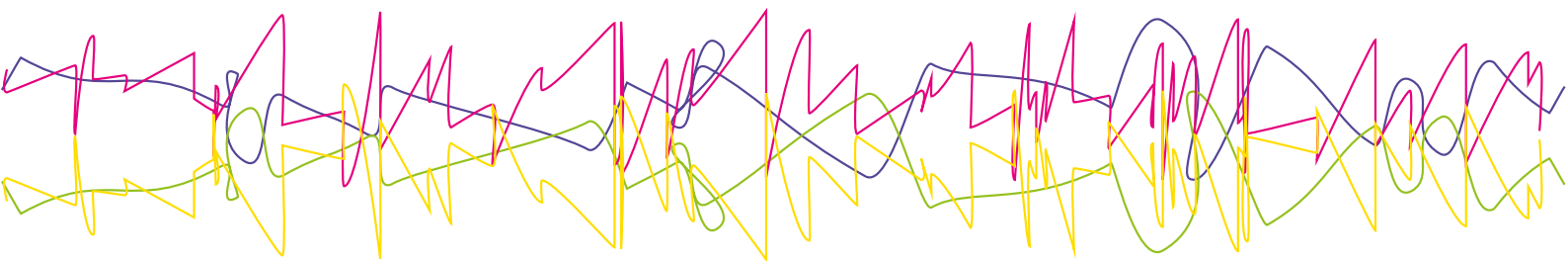


# Specification of the SC1000-I

Accuracy makes the difference



## Main characteristics

Rated input current ( $I_{PN}$ )	$\pm 1000 A_{PK}$
Output transfer ratio	0.5 A at $I_{PN}$
Output load	0 ... 20 $\Omega$ (Burden resistor at $I_{PN}$ )
Output max.	$\pm 0.6 A$
Small signal bandwidth (5% of $I_{PN}$ )	100 kHz (-3 dB)
Output noise (BW = 10kHz)	< 10 ppm <sub>pp</sub>
Output offset error at 23°C (related to $I_{PN}$ )	< 100 ppm
Offset drift (TC)	< 25 ppm/K
Output error versus ext.magn. Field (< 5mT)	< 50 ppm/mT (AC and DC field)
Linearity error (related to actual $I_{OUT}$ )	< 250 ppm <sup>1</sup>
Induced voltage into a 1-turn primary busbar	< 5 mV <sub>pp</sub>

<sup>1</sup> Depends on usage of the measuring head (opening / closing) without readjusting offset

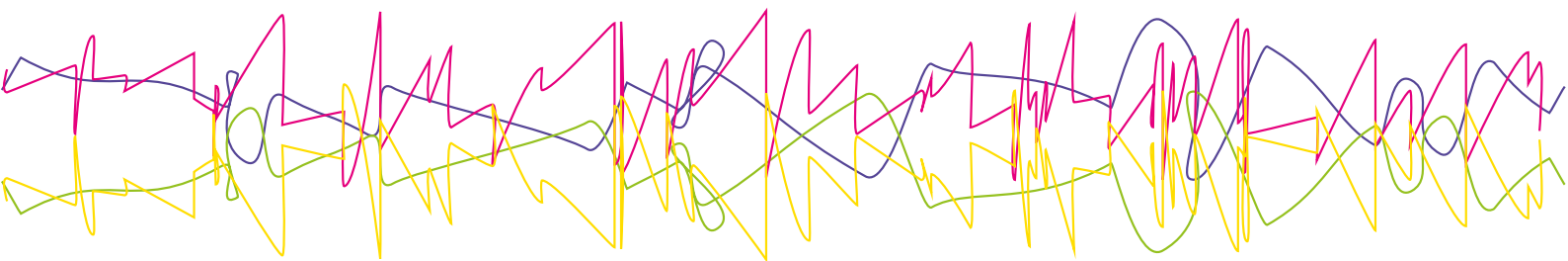
## General data

Supply voltage	$\pm 14.5 V \dots \pm 15.5 V$
Power consumption at $I_{PN}$	< 8.4 W ( $R_b = 0 \Omega$ )
Polarity protection	No
Output Valid indicator (lit at normal operation)	LED (pure green)
Output Valid contact (closed at normal operation)	Open drain
	$I_{MAX} = 50 mA, V_{MAX} = 40 V_p$
Ambient operating temperature	0 ... +40 °C
Relative Humidity	20 ... 80 % (Non condensing)
Ambient storage temperature	-40 ... +75 °C
Relative Humidity	20 ... 80 % (Non condensing)
Pollution degree	2



# Specification of the SC1000-I

Accuracy makes the difference



<b>Housing</b>	
Dimensions (H x W x D)	110 x 82 x 43 mm, incl. isolator 67 mm.
Material	
Housing	Aluminium
Measuring head	Araldit
Weight	< 3.5 kg
<b>Safety</b>	
Protection Class	III (IEC 60 950-1, Supplied by external SELV power source)
Protection degree	
Terminals	IP20 (Test finger, EN 60 529)
Housing	IP40 (Test finger, EN 60 529)
Flammability class acc. UL94	V-0
Isolation characteristics	
Creepage distance	10 mm (between primary busbar and housing)
Clearance distance	10 mm (between primary busbar and housing)
CTI	600 (primary isolator)
Isolation test voltage	
Prim.busbar to output	5 kV / 50 Hz, 1 min (IEC61010-1)
Electronics to housing	500 Vdc
Impuls voltage (surge)	
Prim.busbar to output	5kV 1.2/50 $\mu$ s



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