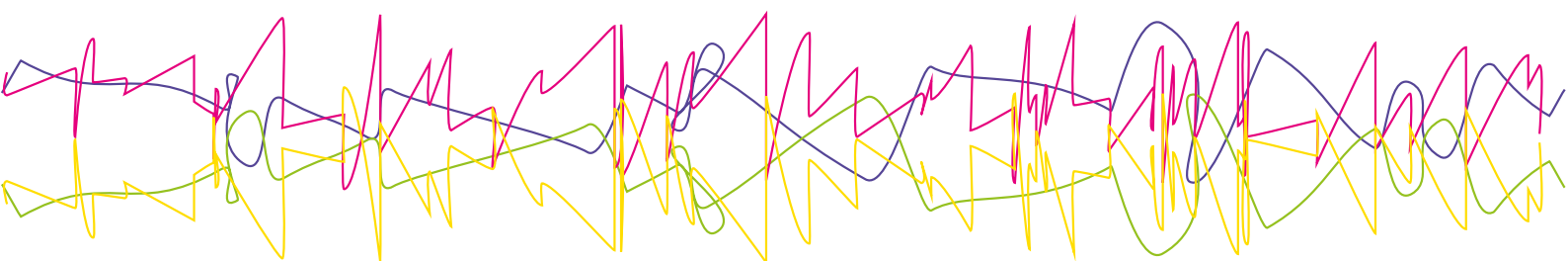


Specification of the TOPACC

Accuracy makes the difference

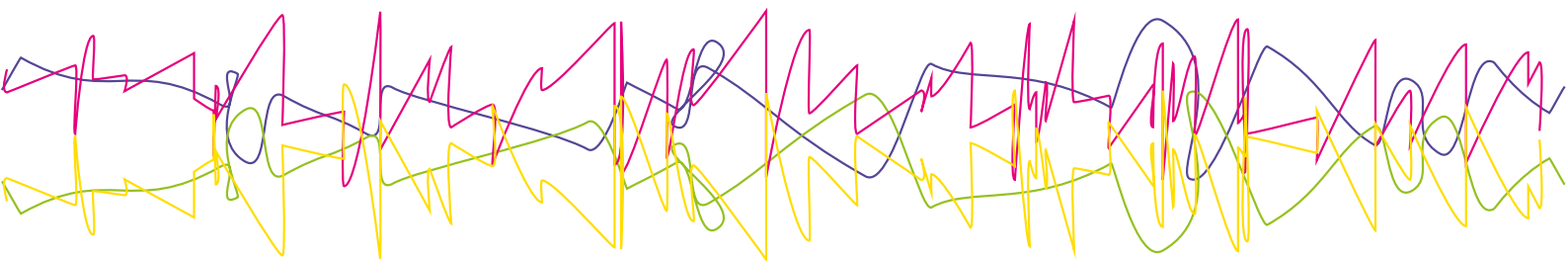


Main characteristics	
Rated input current (I_{PN})	up to ± 6000 A (customer defined)
Permissible over current ¹ (10 s)	115 % of I_{PN}
Permissible over current (0.1 s)	1000 % of I_{PN}
Output transfer ratio	10 V at I_{PN}
Output load	< 5 mA (equals 2 k Ω at 10V)
Output max.	13.5 V (no load)
Output impedance	< 10 m Ω
Output rise/fall time (10...90 % of step height)	< 4 μ s
Small signal bandwidth ² (5 % of I_{PN}) see note	500 kHz (-3 dB)
Output noise ³ (related to I_{PN})	
BW = 10 Hz	< 0.1 ppm _{RMS}
BW = 100 Hz	< 0.3 ppm _{RMS}
BW = 10 kHz	< 1.5 ppm _{RMS}
Output offset error at 23 °C (related to I_{PN})	< 2.5 ppm (delivery figure, adjustable at site)
Offset drift (TC)	< 0.5 ppm/K
Offset error versus time	< 5 ppm/year
Offset error versus supply voltage	< 0.1 ppm (for 5 % change in supply voltage)
Offset error versus external magnetic field (< 5 mT)	< 1 ppm/mT (DC-field)
Output ratio error at 23 °C (related to actual I_p)	< 25 ppm (delivery figure, adjustable at site)
Ratio drift (TC)	< 1 ppm/K
Ratio error versus time	< 5 ppm/year
Linearity error (related to actual I_p)	< 2.5 ppm
Distance (E) return bar to measuring head	E (mm) > 50 * I_p (I_p in kA)
Induced voltage into a 1-turn primary bus bar	< 0.4 mV _{pp}
¹ Above 115% the measuring head might saturate, resulting in an undefined output value	
² Full power bandwidth 1kHz. Derate from 100% at 1kHz to 5% at 20kHz.	
³ The noise peak-to-peak value aprox. is 5 times the RMS-value	



Specification of the TOPACC

Accuracy makes the difference



General data	
Supply voltage ($\pm 10\%$)	230 Vac - 1 ph - 50 Hz (alternative ± 24 , ± 32 or ± 40 V _{DC})
Power consumption at I_{PN}	< 80 VA (max. 50 W if DC-supplied)
Output valid indicator (lit at normal operation)	LED (green)
Output valid signal (closed at normal operation)	Relay contact ($I_{MAX} = 0.5$ A, $V_{MAX} = 60$ V)
Zero current indicator (lit if $I_p < 0.1\%$ of I_{PN})	LED (green)
Zero current signal (closed if $I_p < 0.1\%$ of I_{PN})	Relay contact
Ambient operating temp. electronics / measuring head	10 ... 40 °C / 0 ... 55 °C
Relative Humidity (operating)	20 ... 80 % (non condensing)
Ambient storage temperature	0 ... 55 °C
Relative Humidity (storage)	20 ... 80 % (non condensing)
Pollution degree	2

