

# Ultrastab 867-1000I HF

PRELIMINARY DRAFT: 21.08.2007

Part no.:8100089351

## Current transducer

Parameter	Symbol	Condition	Value	Unit
<b>Primary current</b>	<b><math>I_p</math></b>			
Nominal primary current	$I_{pn}$		± 1000	A
Polarity			Bipolar	
<b>Secondary current</b>	<b><math>I_s</math></b>			
Nominal secondary current	$I_{sn}$		± 1000	mA
<b>External burden resistor</b>	<b><math>R_b</math></b>			
Max.	$R_{b, max}$		3	$\Omega$
Min.	$R_{b, min}$		0	$\Omega$
<b>Current transfer ratio</b>	<b>N</b>		1000	
<b>Overload capacity</b>				
Max. nondestructive overload	$I_{p, max}$	@ 0.1s	400	% $I_{pn}$
Min. overload trip value	$I_{p, trip}$		110	% $I_{pn}$
<b>DC accuracy</b>				
Offset				
Initial	$I_{so}$		< 50	ppm
Drift vs. Temp.	$I_{so, temp}$		< 0.5	ppm / K
Drift vs. supply voltage	$I_{so, supply}$		< 3	ppm / %
Transfer ratio				
Deviation	$N_d$		< 2	ppm
Deviation vs. Temp.	$N_{d, temp}$		< 0.3	ppm / K
Deviation vs. Time	$N_{d, time}$		< 1	ppm / month
Linearity				
Deviation	$X_d$		< 3	ppm
<b>Output noise</b>	<b><math>I_{s, noise}</math></b>			
		0 - 10Hz	0.05	ppm (RMS)
		0 - 10kHz	3	ppm (RMS)
		0 - 50kHz	6	ppm (RMS)



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<b>Dynamic response</b> Slew rate	dI/dt	10 - 90%	> 100	A / $\mu$ S
<b>Bandwidth</b> $\pm 3$ dB	<b>f</b>		0 - 500	kHz
<b>Busbar noise</b> Measured on primary cable, one turn	<b>U<sub>b</sub></b>	DC - 50kHz	5	$\mu$ V RMS
<b>Busbar free zone</b> Length Radius	l r		220 110	mm mm
<b>Test voltages</b> Busbar to GND	V <sub>t, b</sub>		5000	VAC RMS
<b>Power supply</b> Supply voltage Maximum quiescent current Maximum current consumption	V <sub>s</sub> I <sub>q</sub> I <sub>max</sub>	$\pm 5\%$	$\pm 15$ $\pm 70$ $\pm 1070$	V mA mA
<b>Operating environment</b> Temperature Humidity	T <sub>a</sub> RH <sub>a</sub>	Noncondensing	10 - 50 10 - 80	$^{\circ}$ C %RH
<b>Storage environment</b> Temperature Humidity	T <sub>s</sub> RH <sub>s</sub>	Noncondensing	-20 - 85 20 - 80	$^{\circ}$ C %RH

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Parameter	Symbol	Condition	Value	Unit
<b>Mechanical dimension</b>				
Width	W		104	mm
Height	H		106	mm
Depth	D		85	mm
Weight (approx.)	m		1.0	kg
Inner hole diameter	O		30	mm

### Notes:

- 1: All ppm figures refer to nominal current
- 2: Specifications is subject to change without notice