

**Ultrastab 868-20I**

PRELIMINARY DRAFT: 18.01.2008 R01

Part no.:8100089463

Current transducer

Parameter	Symbol	Condition	Value	Unit
Primary current	I_p			
Nominal primary current	I_{pn}		±12.5	A
Polarity			Bipolar	
Secondary current	I_s			
Nominal secondary current	I_{sn}		± 50	mA
External burden resistor	R_b			
Max.	$R_{b, max}$		31	Ω
Min.	$R_{b, min}$		0	Ω
Current transfer ratio	N		250	
Overload capacity				
Max. nondestructive overload	$I_{p, max}$	@ 0.1s	500	% I_{pn}
Min. overload trip value	$I_{p, trip}$		200	% I_{pn}
DC accuracy				
Offset				
Initial	I_{so}		< 500	ppm
Drift vs. Temp.	$I_{so, temp}$		< 2	ppm / K
Drift vs. Time	$I_{so, time}$		< 5	ppm / month
Drift vs. supply voltage	$I_{so, supply}$		< 1	ppm / %
Transfer ratio				
Deviation	N_d		< 4	ppm
Deviation vs. Temp.	$N_{d, temp}$		< 0.5	ppm / K
Deviation vs. Time	$N_{d, time}$		< 2	ppm / month
Linearity				
Deviation	X_d		< 4	ppm
Deviation vs. Temp.	$X_{d, temp}$		< 0.5	ppm / K

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Parameter	Symbol	Condition	Value	Unit
Output noise	$I_{s, noise}$	0 - 10Hz	< 0.4	ppm (RMS)
		0 - 100Hz	< 0.5	ppm (RMS)
		0 - 1kHz	< 0.7	ppm (RMS)
		0 - 10kHz	< 5	ppm (RMS)
		0 - 100kHz	< 10	ppm (RMS)
Dynamic response				
Slew rate	dI/dt	10 - 90%	> 20	A / μ S
Delay time	t_d		< 1	μ S
Bandwidth	f			
± 1 dB			> 100	kHz
± 3 dB			> 500	kHz
B-field susceptibility	B_{ex}			
Max influence on sec. Current		DC / 40uT	< 0.1	ppm
Max influence on sec. Current		30Hz / 40uT	< 0.1	ppm (RMS)
Busbar noise	U_b			
Measured on primary cable, one turn		DC - 50kHz	< 5	μ V RMS
Test voltages				
Busbar to GND	$V_{t, b}$		1683	VAC RMS
Power supply				
Supply voltage	V_s	$\pm 5\%$	± 15	V
Maximum quiescent current	I_q		± 60	mA
Maximum current consumption	I_{max}		± 160	mA
Operating environment				
Temperature	T_a		10 - 45	$^{\circ}$ C
Humidity	RH _a	Noncondensing	20 - 80	%RH

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Parameter	Symbol	Condition	Value	Unit
Storage environment				
Temperature	T_s		-20 - 85	°C
Humidity	RH_s	Noncondensing	20 - 80	%RH
Mechanical dimension				
Width	W		66	mm
Height	H		46	mm
Depth	D		64	mm
Weight (approx.)	m		0.35	kg

Notes:

1: All ppm figures refer to nominal current