Coreless Coil Current Transducer
RH 100 .. 1000-P

I_{PN} = 100 .. 1000 A

For the electronic measurement of currents: AC, pulsed, mixed, with a galvanic isolation between the primary circuit (high power) and the secondary circuit (electronic circuit).



Electrical data

Primary nominal r.m.s. current I_{PN} (A)	Type
100	**RH 100-P**
200	**RH 200-P**
500	**RH 500-P**
1000	**RH 1000-P**

V_{OUT}	Output voltage(r.m.s)@ ± I_{PN}, R_L = 10 kΩ, T_A = 25°C	4	V
V_C	Supply voltage (± 5 %)	±15	V
V_d	R.m.s. voltage for AC isolation test, 50/60Hz, 1 mn	> 2.5	kV
I_C	Current consumption	10	mA
R_{IS}	Isolation resistance@ 500 V DC	> 500	MΩ
R_L	Load resistance	≥ 100	KΩ

Accuracy-Dynamic performance data

ε_L	Linearity (0 .. ± I_{PN})	≤ ±0.5	% of I_{PN}
V_{OE}	Electrical offset voltage, T_A = 25°C	±5	mV
V_{OT}	Thermal drift of V_{OE}	≤ ±0.3	mV/K
$TC\varepsilon_G$	Thermal drift of the gain (% of reading)	±0.03	%/K
t_r	Response time @ 90% of I_P	1	µs
f	Frequency bandwidth (±3 dB)	20Hz .. 100KHz	

General data

T_A	Ambient operating temperature	-10 .. +75	°C
T_S	Ambient storage temperature	-15 .. +80	°C
m	Mass	20	g
	Min. internal creepage distance/clearance	ø11±0.5	mm

Features

- No magnetic core
- Rogowski Coil principle
- Highly accurate integration circuit
- Voltage output

Advantages

- Wide sensing range
- Wide frequency range
- Quick response
- No hysteresis error
- No insertion impedance
- Small size and lightweight

Applications

- Observing complicated current waveforms
- High speed and high current sensing such as IGBT
- Welding
- Power unit
- Electric power regulator
- Discharge tube
- Antenna
- Monitoring for irruptive current

Notes :

RH 100 .. 1000-P (in mm)





