



# HCT-1000SH

RoHS  
2002/95/EC

## Technical Specification

HALL EFFECT CURRENT TRANSDUCER 1000A CLOSED LOOP.

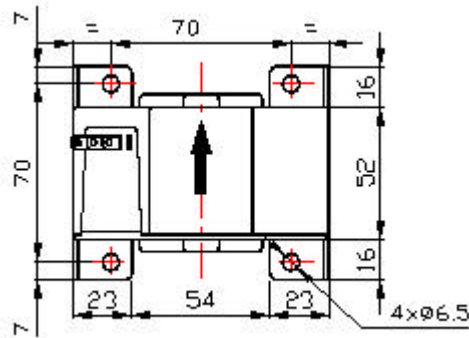
Edition	Changed by	Date	Change description
1 <sup>st</sup>	P. Colomer	10/10/2010	First edition



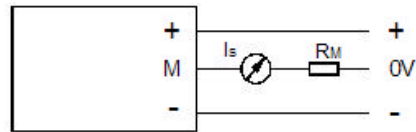
# HCT-1000SH

RoHS  
2002/95/EC

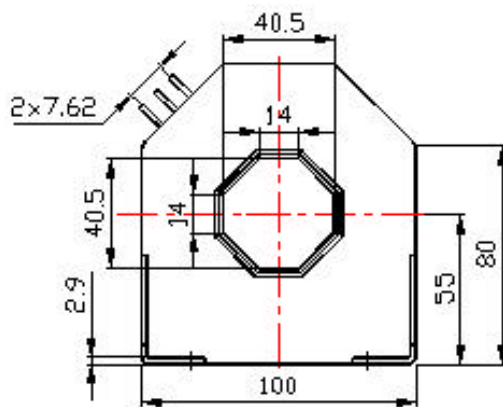
## 1. Dimensions



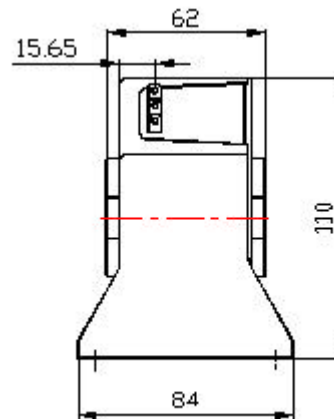
Bottom View



Connection of the Transducer



Front View



Side view

### Notes.

- General Tolerance according to ISO 2768-m
- All dimensions and mechanical fixations are subjected to change depending on the customer necessities and PREMO Transducer Development.



# HCT-1000SH

## 2. Electrical Parameters



Primary Nominal Current	10-1000 Arms	$I_{pn}$
Measuring Range $\pm 24 V_{in}$	$\pm 3000 A DC (22 \Omega)$	$I_p$
Burden Resistor Range $T = 25^\circ C$	With $\pm 15 V_{cc}$ $I_p \pm 1000:$ 36 Ohm MAX 0 Ohm MIN $I_p \pm 1200:$ 25 Ohm MAX 0 Ohm MIN With $\pm 24 V_{cc}$ $I_p \pm 1000:$ 75 Ohm MAX 0 Ohm MIN $I_p \pm 2000:$ 22 Ohm MAX 0 Ohm MIN	$R_B$
Secondary Nominal Current	200 mA RMS	$I_s$
Conversion Ratio	1:5000	N
Supply Voltage ( $\pm 10 \%$ )	$\pm 15..24 V$	$V_{cc}$
Current Consumption	$20 mA + I_s (V_{cc} = \pm 15 V)$	$I_{cc}$

## 3. Accuracy

Accuracy at $I_p T = 25^\circ C$	$< \pm 0.1 \%$	<b>a</b>
Linear Error ( $I_p > 200 A$ )	$< 0.1 \%$	$e_{LLR}$
Offset Current	$\pm 200\mu A Max$	$I_{OS}$
Offset Current Drift	$\pm 0.5 mA$ -40 to $85^\circ C$	$KI_{OS}$
Time Response ( 10% to 90% of $I_p$ ) Related to di/dt Specified	$< 1\mu s$	$T_R$
di/dt Followed Accurately	$> 100A/\mu s$	
Frequency Bandwidth ( $I_p = 10 A AC$ )	DC to 100kHz ( -3dB )	$F_c$

- \* Electrical Parameters and frequency response corresponds to typical values.



# HCT-1000SH

RoHS  
2002/95/EC

## 4. Output Connector

Connection	3-pins connector	
Maximum Primary Conductor Temperature	120°C	
Secondary coil DC Resistance (T=25°C)	32 Ohm typ	$R_c$

## 5. General Data

Operating Temperature	-40 to +85 °C	$T_A$
Storage Temperature	-40 to +125 °C	$T_S$
Weight	630 g	
Basic Insulation (Between Primary and Measurement Current)	6000 V AC 50Hz 1'	$V_I$

## 6. Packaging

- Single Packaging.