


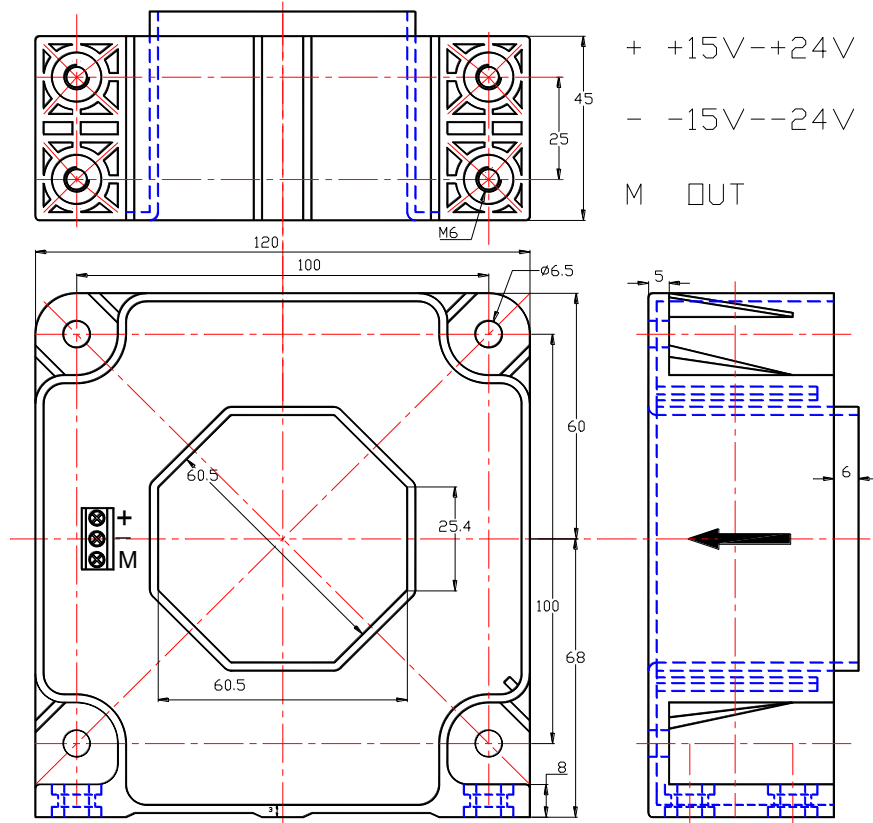
	CUSTOMER	CUSTOMER CODE	PART DESCRIPTION HALL EFFECT CURRENT SENSOR CLOSED LOOP 2000A		
	INTERNAL CODE HCT-LF	DATE 24-01-11	EDITION 1	DOCUMENT NAME HCT-LF_1.doc	PAGE 1/8

# HCT-2000LF SERIES HALL EFFECT CURRENT SENSOR CLOSED LOOP

NOTES	
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## 1.- DIMENSIONS AND PINS CONFIGURATION



All dimensions are in mm.

General Tolerance  $\pm 0.5$  mm.

All dimensions and mechanical fixations are subjected to change depending on the customer necessities and PREMO Transducer Development.

### NOTES

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## 2.- ELECTRICAL PARAMETERS

Primary Nominal Current	20-2000 A RMS	I <sub>pn</sub>
Measuring Range (10Ω, ±18V)	3000 A DC	I <sub>p</sub>
Galvanic isolation (50 Hz, 1min)	6 KV	
Turns ratio	1:5000	
Supply Voltage	±15 ~ ±24V	V <sub>cc</sub>
Rated output (mA)	4(20A) - 400(2000A) ±0.2%	I <sub>s</sub>
Measure resister	With ± 15 V <sub>cc</sub> I <sub>p</sub> ± 2000 : 5.0 Ohm MAX I <sub>p</sub> ± 2500 : 2.0 Ohm MAX With ± 24 V <sub>cc</sub> I <sub>p</sub> ± 2000 : 25 Ohm MAX I <sub>p</sub> ± 3000 : 5.0 Ohm MAX	
Current consumption (I <sub>s</sub> =0)	I <sub>s</sub> +35 mA	I <sub>cc</sub>

## 3.- ACCURACY

Linear Error	≤ 0.1 % Full Scale	e <sub>LLR</sub>
Offset Drift Curent	±0.2 mA	
Offset Current Temp Drift (-40°C~85°C)	±0.5 mA/°C	K <sub>Ios</sub>
Response Time (di/dt>100 A/μS)	<1μs	T <sub>R</sub>
Frequency Bandwidth	DC to 150kHz ( -3dB )	F <sub>c</sub>

- \* Electrical Parameters and frequency response to be checked with samples.

## 4.- OUTPUT CONNECTOR

Connection	M2. 5x6. 0	
Maximum Primary Conductor Temperature	120°C	
Secondary coilresister	28 Ω	


## 5.- GENERAL DATA

Operating Temperature	-40 to +85 °C	T <sub>A</sub>
Storage Temperature	-40 to +125 °C	T <sub>s</sub>

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## 6.- EDITION CONTROL

Edition	Date	Change description	Made by
1st	09/09/10	First Edition	Marta Escolar

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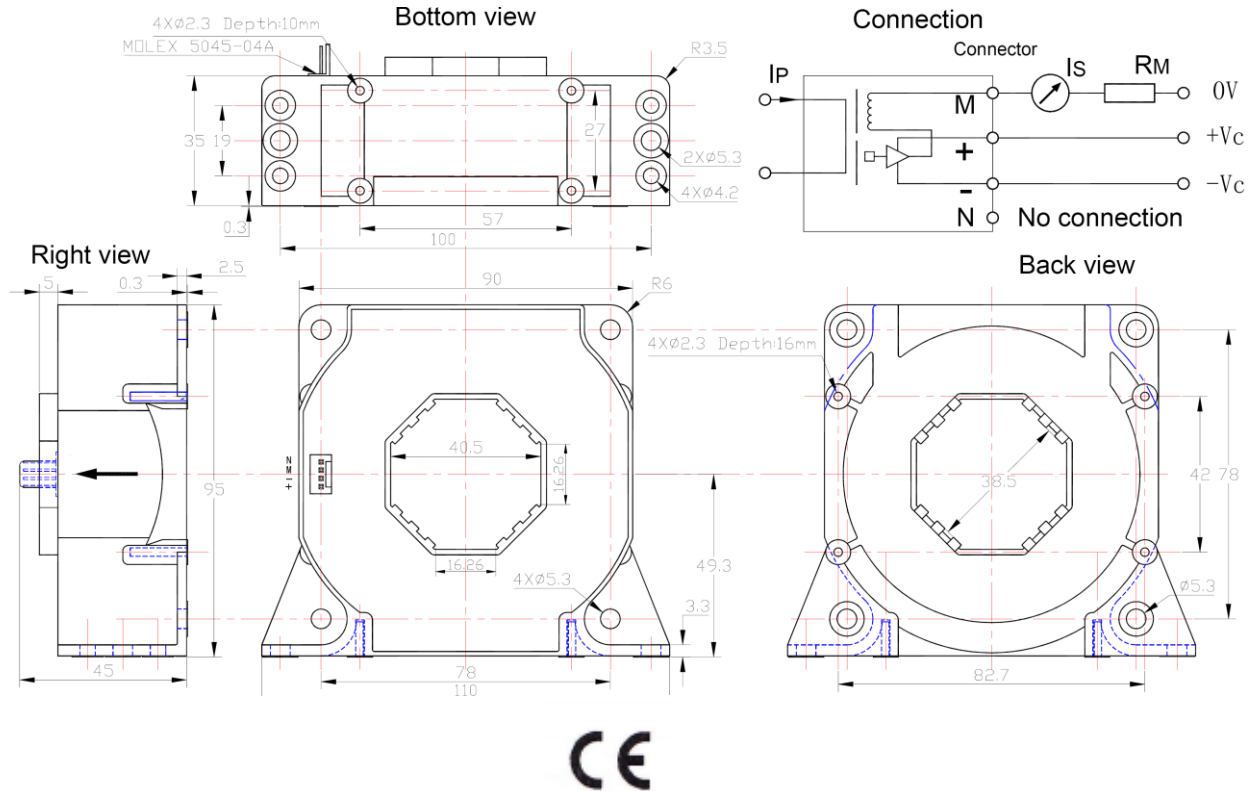
# CLOSE LOOP HCT 10-1000A 1:5000

NOTES
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## 1.- DIMENSIONS



All dimensions are in mm.

General Tolerance according to ISO2768-C.

All dimensions and mechanical fixations are subjected to change depending on the customer necessities and PREMO Transducer Development.

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RoHS  
COMPLIANT  
2002/95/EC

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## 2.- ELECTRICAL PARAMETERS

Rated Current	10-1000 A	
Measuring Range	2000A	<b>I<sub>p</sub></b>
Rated output current	2±0.1% F <sub>s</sub> mA(10A) 200±0.1% F <sub>s</sub> mA(1000A)	<b>I<sub>s</sub></b>
Turns Ratio	1:5000	<b>N</b>
Supply Voltage	± 15~±24V	<b>V<sub>cc</sub></b>
Secondary coilresistance (T = 70°C)	50 Ω	<b>R<sub>c</sub></b>
Burden Resistor Range T = 25°C	0-20ohm (with ±15V @±1000A max)	
	0-7.5ohm (with ±15V @±1200A max)	
	0-65ohm (with ±24V @±1000A max)	
	0-7.5ohm (with ±24V @±2000A max)	

## 3.- ACCURACY

Linear Error ( Full Scale )	≤0.05 %FS	<b>e<sub>LLR</sub></b>
Response time	<1us	
Offset drift Current	± 0.2mA	<b>I<sub>os</sub></b>
Offset Current temp -40°C-85°C Drift	± 0.5 mA	<b>KI<sub>os</sub></b>
di/dt Followed Accurately	> 100A/us	
Frequency Bandwidth	DC to 150kHz( -3dB )	<b>F<sub>c</sub></b>

## 4.- GENERAL DATA

Operating Temperature	-40 to +85 °C	<b>T<sub>A</sub></b>
Storage Temperature	-40 to +125 °C	<b>T<sub>s</sub></b>

## 5.- ISOLATION CHARACTERISTICS

Galvanic isolation (50 Hz, 1min)	6KV	<b>V<sub>i</sub></b>
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### STANDARDS

- Isolated plastic case recognized according to UL94-V0.
- EN60947-1: 2004
- IEC60950-1 : 2001
- EN-50178:1998




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## 6.- Marking

 <b>PREMO</b>	
N	HCT-1000LF
M	NOM:200mA/1000A
-	MIN:2mA/10A
+	MAX:600mA/2000A

## 7.- EDITION CONTROL

Edition	Date	Change description	Made by
1 <sup>st</sup>	24/01/10	First Edition	Maria

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