HCT-25A05

RoHS
2002/95/EC

Technical Specification

HALL EFFECT CURRENT TRANSDUCER Closed Loop
HCT 25A 1:1000(C.Output)

Edition	Changed by	Date	Change description
1st	V.Repecho	27/01/10	First edition

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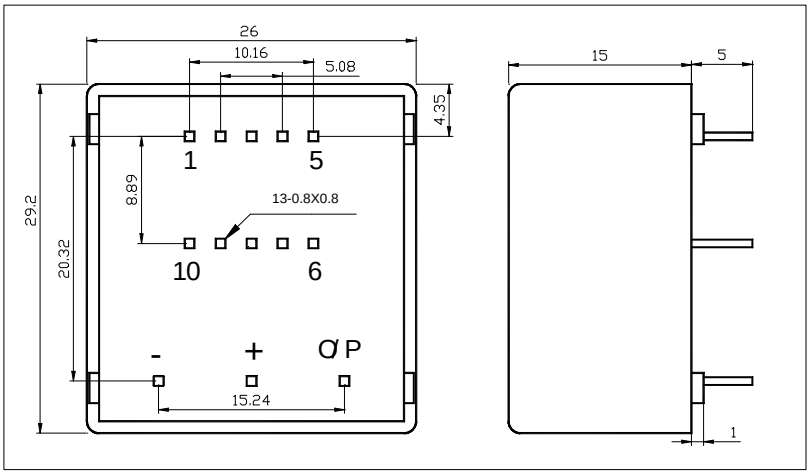
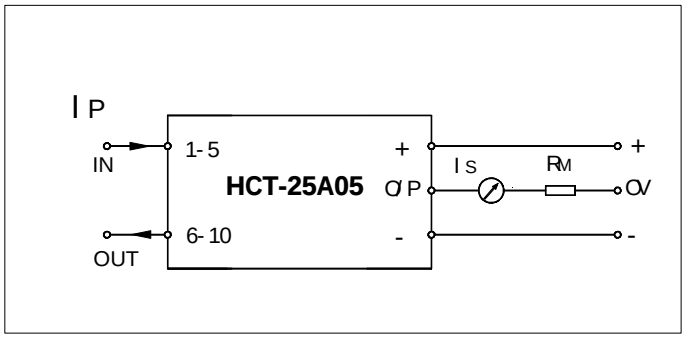
1. Dimensions



Bottom View

Side View



Connection Diagram

Notes.

- General Tolerance ± 0.5 mm
- All dimensions and mechanical fixations are subjected to change depending on the customer necessities and PREMO Transducer Development.

HCT-25A05

2. Electrical Parameters

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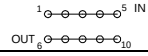
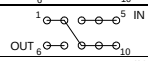
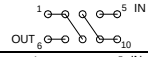
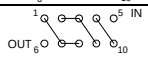
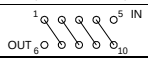
Primary Nominal Current	25 A RMS	Ipn
Measuring Range	± 50 A DC	Ip
Secondary Nominal Current	25 mA RMS	I_S
Conversion Ratio	1,2,3,4,5:1000 (Can be selected with pins 1 to 10 diferents connections)	N
Supply Voltage (± 5 %)	± 15V	Vcc
Current Consumption	9.5 mA + I_S (Vcc = ± 15 V)	Icc

2.1 Connection configuration and Current Range.

CONNECTIONS

Turns	Rated current (A)	Measure range (A)	Rated output current (mA)	Secondary turns	Primary resister (mO)	Primary inductance (uH)	Pins connections
1	25(35)	50(70)	25(35)	1/1000	0.3	0.023	
2	12(17.5)	24(35)	24(35)	2/1000	1.1	0.09	
3	8(12)	16(24)	24(36)	3/1000	2.5	0.21	
4	6(9)	12(18)	24(36)	4/1000	4.4	0.37	
5	5(7)	10(14)	25(35)	5/1000	6.3	0.58	

3. Accuracy

Accuracy at Ip T = 25 ºC	< ± 0.5 %	**a**
Linear Error (Full Scale) Vcc = ±15V, Rb =12 Ohm	< 0.2 %	e_{LLR}
Offset Current	± 150uA Max	I_{OS}
Offser Current Drift	± 0.5 mA	KI_{OS}
Time Response (10% to 90% of Ip) Related to di/dt Specificated	<1us	T_R
di/dt Followed Accurately	> 50A/us	
Frequency Bandwidth	DC to 150kHz (-3dB)	F_C

- * Electrical Parameters and frequency response to be checked with samples.
-* Electrical parameters at connection table given at 10kHz/100mVac and 25ºC

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4. Output Connector

Connection	PTH	
Compensation Winding Maximum Resistance (T = 25ºC)	45 Ohm	R_C

5. General Data

Operating Temperature	-40 to +85 ºC	T_A
Storage Temperature	-40 to +125 ºC	T_S
Weight	25 g	
Basic Insulation (Between Primary and Measurement Current)	2500 V AC 50Hz 1'	V_I

6. Standards

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7. Packaging

- Single Packaging.

END OF DOCUMENT