

Premo presents HCT-LAS5 series AC/DC current transducer, a new design based on the Hall Effect principle. HCT-LAS5 series has good stability in high currents and a highly insulated primary and secondary.



Features

- Closed loop Hall Effect sensor.
- Unipolar power supply.
- High currents measurement.
- High precision.
- High linearity.
- Isolated plastic case recognized according to UL94-V0.
- EN60947:2004, IEC60950-1:2001, EN50178:1998 compliant.



1. Electrical parameters

	Symbol	Min	Typ	Max	Unit
Nominal current HCT-100LAS5	I_{PN}		100		A
Measuring range HCT-100LAS5	I_P	-300		300	A
Rated output voltage	V_S	-0.625		0.625	V
Reference voltage (at $I_P = 0$ A)	V_O		2.5		V
Supply voltage (± 5 %)	V_{CC}		5		V
Current consumption (measured at $I_P = 0$ A)	I_{CC}	20			mA
Turns ratio HCT-100LAS5			1:2000		

2. Performance parameters

	Symbol	Min	Typ	Max	Unit
Accuracy (measured at full scale)		±0.4			%
Linearity (measured at full scale @ $R_B = 3 \Omega$, $V_{CC} = \pm 24 V$)	ϵ_{LLR}			0.1	%
Offset voltage	V_{OS}			±15	mV
Offset voltage drift (starting at -40 °C)	KV_{OS}			±0.3	mV/°C
Response time	T_R			0.5	µs
di/dt		100			A/µs
Bandwidth (-3 dB)	F_C	0		100	kHz

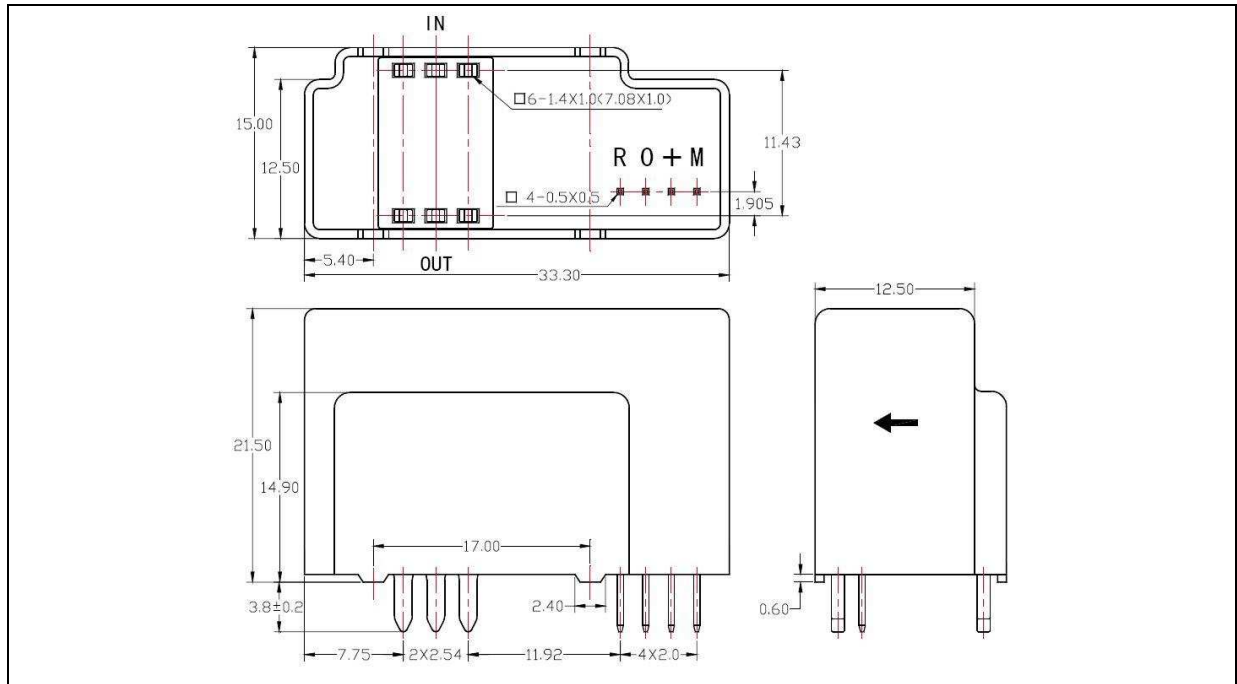
3. Isolation parameters

	Symbol	Min	Typ	Max	Unit
Galvanic isolation (50 Hz, 1 min)	V_I		5		kV

4. General parameters

	Symbol	Min	Typ	Max	Unit
Operating temperature	T_A	-40		85	°C
Storage temperature	T_S	-40		125	°C
Mass	m		22		g

5. Dimensions



Pin description

Pin	Value
+	+V _{CC}
0	Ground
M	Output
R	Reference output voltage

Mechanical notes

1. All dimensions are in mm.
2. General tolerances according ISO 2768-c.
3. All dimensions and mechanical fixations could be changed upon user needs or PREMO transducer development.
4. Arrow indicates direction of positive currents.

6. Marking



(HCT-100LAS5 marking sample)

Marking notes

1. Component is marked on the top side.