AC/DC Current transducers
HCT-LX series

Email: info@grupopremo.com
Web: http://www.grupopremo.com

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

Features

- Closed loop Hall Effect sensor.
- Bipolar 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-50LX	I_{PN}		50		A
Measuring range HCT-50LX	I_P	-150		150	A
Rated output voltage	V_S	-4		4	V
Supply voltage (±5 %)	V_{CC}		±15		V
Current consumption (measured at I_P = 0 A)	I_{CC}	20			mA
Turns ratio HCT-50LX			1:2500		
Secondary coil resistance	R_C		200		Ω

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2. Performance parameters

	Symbol	Min	Typ	Max	Unit
Accuracy (measured at full scale)		±0.5			%
Linearity (measured at full scale @ R_B = 3 Ω, V_{CC} = ±24 V)	ε_{LLR}			0.1	%
Offset voltage	V_{OS}			±40	mV
Offset voltage drift (starting at -40 °C)	KV_{OS}			±0.5	mV/°C
Response time	T_R			1	µs
di/dt					A/µs
Bandwith (-3 dB)	F_C				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		15		g

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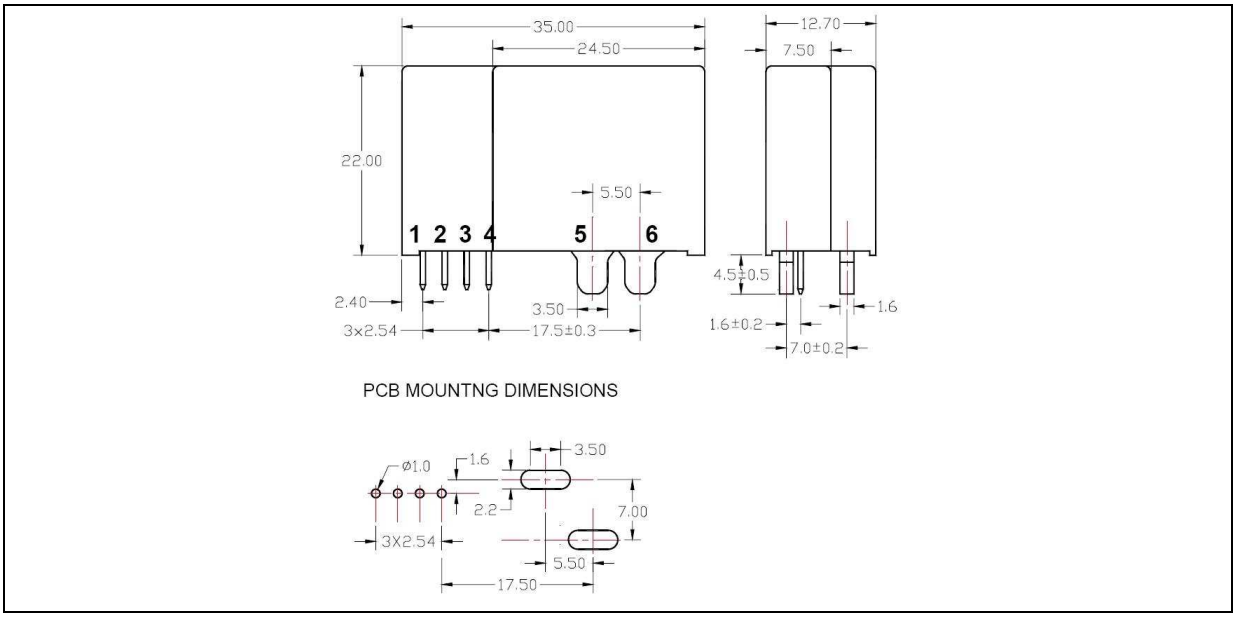
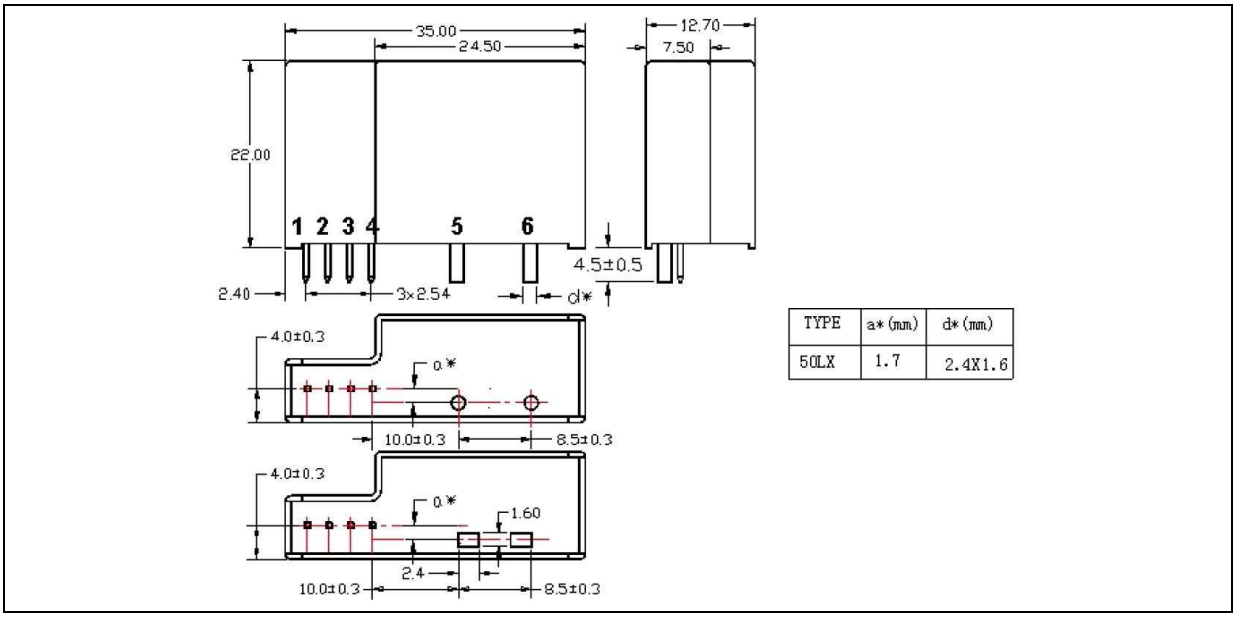
5. Dimensions

HCT-LX



HCT-LX-P



TYPE	a*(mm)	d*(mm)
50LX	1.7	2.4X1.6

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Pin description

Pin	Value
1	$+V_{CC}$
2	$-V_{CC}$
3	Output
4	Ground
5	Primary IN
6	Primary OUT

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.

6. Marking

HCT-LX

HCT-LX-P

Marking notes

1. Component is marked on the top side.