

Current Transducer LAH 50-P

Insulation coordination

U_d	RMS voltage for AC insulation test, 50 Hz, 1 min	5	kV
U_{Ni}	Impulse withstand voltage 1.2/50 μ s	12	kV
U_t	Partial discharge RMS test voltage ($q_m < 10$ pC)	> 2	kV
		Min	
d_{cp}	Creepage distance ¹⁾	11.75	mm
d_{ci}	Clearance ¹⁾	11.75	mm
CTI	Comparative tracking index (group IIIa)	175	

Note: ¹⁾ On PCB with soldering pattern UTEC93-703.

Applications examples

According to EN 50178 and IEC 61010-1 standards and following conditions:

- Over voltage category OV 3
- Pollution degree PD2
- Non-uniform field

	EN 50178	IEC 61010-1
d_{cp}, d_{ci}, U_{Ni}	Rated insulation voltage	Nominal voltage
Basic insulation	1000 V	1000 V
Reinforced insulation	500 V	500 V

Safety

This transducer must be used in limited-energy secondary circuits according to IEC 61010-1.



This transducer must be used in electric/electronic equipment with respect to applicable standards and safety requirements in accordance with the manufacturer's operating instructions.



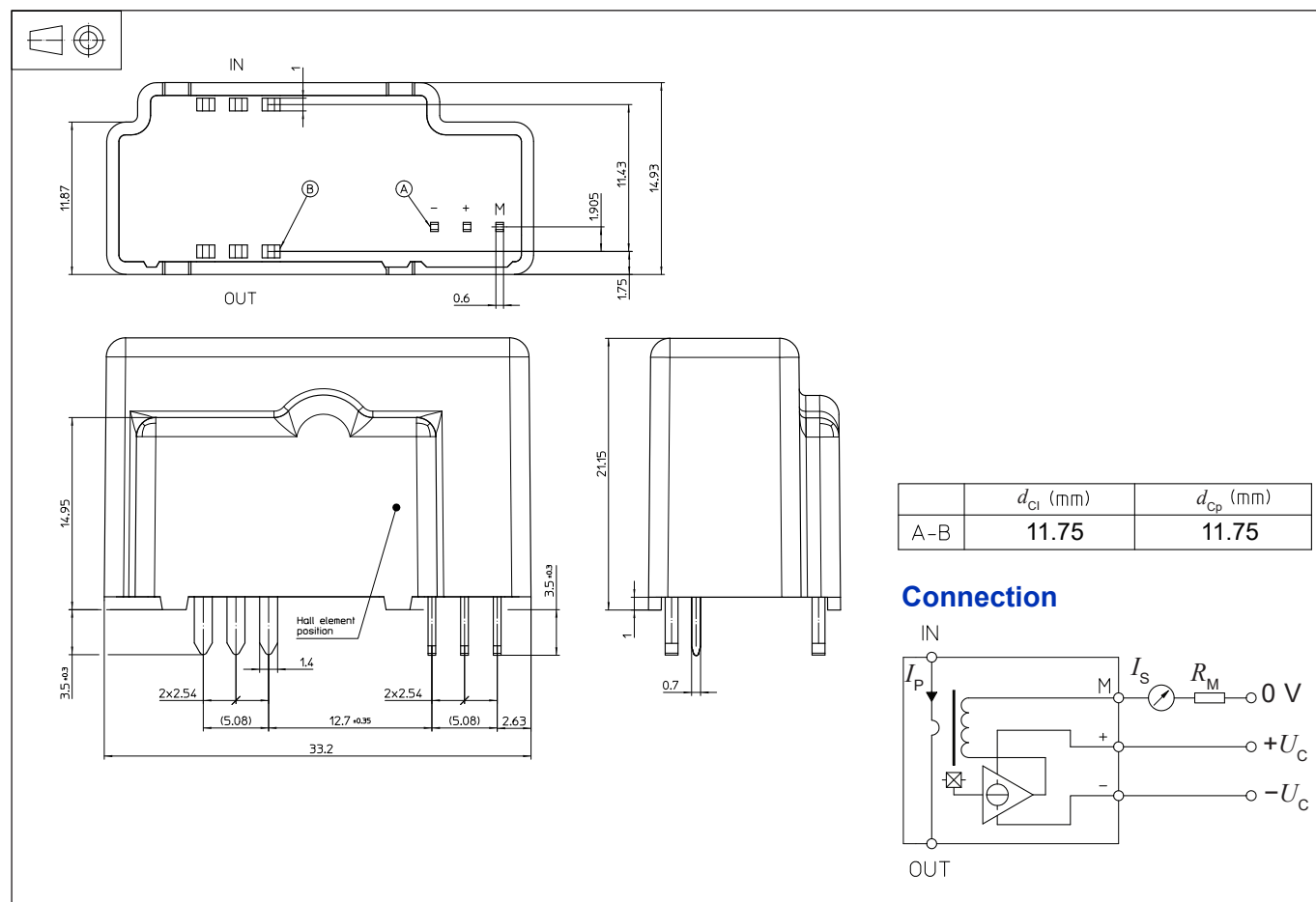
Caution, risk of electrical shock

When operating the transducer, certain parts of the module can carry hazardous voltage (eg. primary busbar, power supply). Ignoring this warning can lead to injury and/or cause serious damage.

This transducer is a build-in device, whose conducting parts must be inaccessible after installation. A protective housing or additional shield could be used.

Main supply must be able to be disconnected.

Dimensions LAH 50-P (in mm)



Number of primary turns	Primary current		Nominal output current I_{SN} [mA]	Turns ratio N_P/N_S	Primary resistance R_P [mΩ]	Primary insertion inductance L_P [μH]
	Nominal I_{PN} [A]	Maximum I_P [A]				
1	50	110	25	1 : 2000	0.12	0.008

Mechanical characteristics

- General tolerance ± 0.2 mm
- Fastening & connection of primary 6 pins 1.4×1 mm
- Recommended PCB hole 2 mm
- Fastening & connection of secondary 3 pins 0.7×0.6 mm
- Recommended PCB hole 1.2 mm

Remarks

- I_S is positive when I_P flows from terminals IN to terminals OUT.
- The jumper temperature and PCB should not exceed 100 °C.
- This is a standard model. For different versions (supply voltages, turns ratios, unidirectional measurements...), please contact us.

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