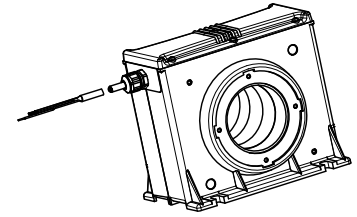


Current Transducer CD 1000-S/SP6

For the detection of a differential current between two primary conductors carrying opposing currents, with galvanic isolation between the primary circuit (high power) and the secondary circuit (electronic circuit).



$$I_{PN} = 2 \times 1200 \text{ A}$$



Electrical data

I_{PN}	Primary nominal RMS current	2 x 1200	A
\hat{I}_{Pmax}	Primary withstand peak current (maximum)	2 x 3	kA
I_{PRN}	Primary nominal residual RMS current	±2	A
I_{PRM}	Primary residual current, measuring range	±0 ... 8	A
R_M	Measuring resistance with ±15 ... 24 V @ ± I_{PRM}	R_{Mmin} R_{Mmax} 0 70	Ω
I_{out}	Output current @ I_{PRN}	20	mA
U_C	Supply voltage (± 5 %)	±15 ... 24	V
I_C	Current consumption @ $U_C = ±24 \text{ V}$, @ $I_{PRN} = 0 \text{ A}$	< 40	mA

Accuracy - Dynamic performance data

ϵ_{tot}	Total error @ I_{PRN} , $T_A = 25 \text{ °C}$	< ±3	%
ϵ_L	Linearity error	< 1	%
I_O	Offset current @ $I_p = 0$, $T_A = 25 \text{ °C}$	±0.1	mA
I_{OT}	Temperature variation of I_O -25 °C ... +70 °C	±0.2	mA
t_{D90}	Delay time to 90 % of the final output value for I_{PN} step	< 40	µs
BW	Frequency bandwidth (-3 dB)	DC ... 10	kHz

General data

T_A	Ambient operating temperature	-25 ... +70	°C
T_{Ast}	Ambient storage temperature	-40 ... +85	°C
m	Mass	1.5	kg
	Standard	EN 50155: 2017 ¹⁾	

Note: ¹⁾ Additional information available on request.

Features

- Closed loop (compensated) current transducer
- Insulating plastic case recognized according to UL 94-V0.

Special feature

- Analog current output.

Advantages

- Very good linearity
- Low temperature drift
- Optimized response time
- Wide frequency bandwidth
- No insertion losses
- Current overload capability.

Application

- Leakage current detection.

Application Domain

- Railway (fixed installations and onboard).

Current Transducer CD 1000-S/SP6

Insulation coordination

U_d	RMS voltage for AC insulation test, 50 Hz, 1 min	6 ¹⁾	kV
d_{cp}	Creepage distance	42.5 ²⁾	mm
d_{ci}	Clearance distance	38.4 ²⁾	mm
CTI	Comparative tracking index (group III)	225	

Notes: ¹⁾ Between primary and secondary
²⁾ Between primary tube and secondary.

Safety



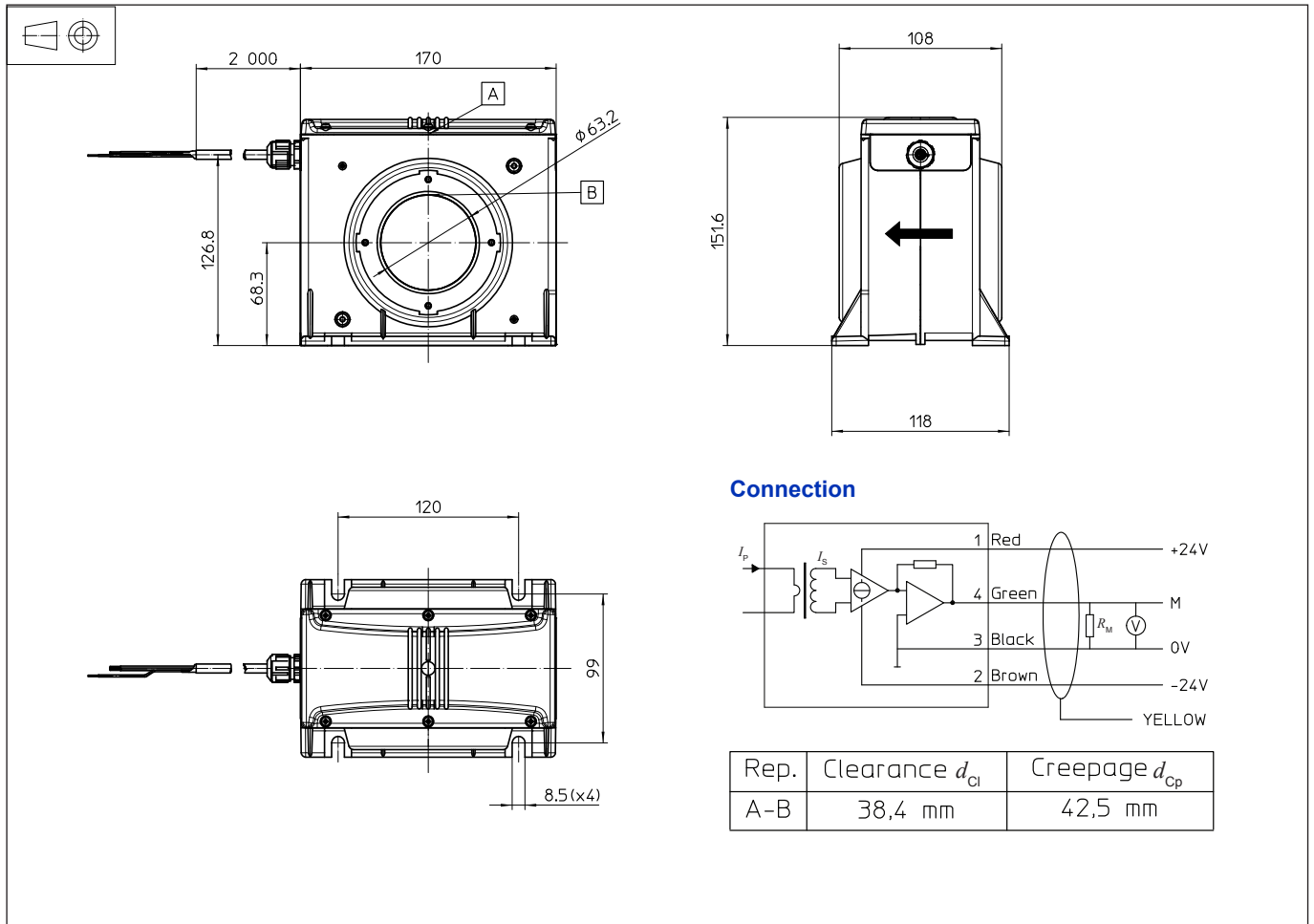
This transducer must be used in electric/electronic equipment with respect to applicable standards and safety requirements in accordance with the manufacturer’s operating instructions.



Caution, risk of electrical shock

When operating the transducer, certain parts of the module can carry hazardous voltage (e.g. 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 CD 1000-S/SP6 (in mm)



Mechanical characteristics

- General tolerance ± 0.5 mm
- Transducer fastening
or
Recommended fastening torque 4 holes $\varnothing 8.5$ mm
4 M8 steel screws 7.2 N·m
- Primary through-hole $\varnothing 63.2$ mm
- Connection of secondary Shielded cable

Remarks

- U_{out} is positive when I_p flows in the direction of the arrow.
- Temperature of the primary conductor should not exceed 100°C.
- Installation of the transducer must be done unless otherwise specified on the datasheet, according to LEM Transducer Generic Mounting Rules. Please refer to LEM document N°ANE120504 available on our Web site: <https://www.lem.com/en/file/3137/download/>.

单击下面可查看定价，库存，交付和生命周期等信息

[>>LEM\(莱姆\)](#)