Current Transducers HAZ 4000..20000-SRI

I_{PN} = 4000..20000 A

I_{OUT} = 0 - 20 mA

For the electronic measurement of currents: DC, AC, pulsed, mixed, with a galvanic isolation between the primary circuit (high power) and the secondary circuit (electronic circuit).

Preliminary

Electrical data

Primary nominal current I_{PN} (A)	Primary current measuring range I_P (A)	Type
4000	± 4000	HAZ 4000-SRI
6000	± 6000	HAZ 6000-SRI
10000	± 10000	HAZ 10000-SRI
12000	± 12000	HAZ 12000-SRI
14000	± 14000	HAZ 14000-SRI
20000	± 20000	HAZ 20000-SRI

V_C	Supply voltage (± 5 %)		± 15	V
I_C	Current consumption		± 50	mA
I_{OC}	Overload capacity		30,000	At
V_d	R.m.s. voltage for AC isolation test, 60 Hz, 1 mn		12	kV
V_b	R.m.s. rated voltage, safe separation		2000[1)]	V
R_{IS}	Isolation resistance @ 500 VDC		> 1000	MΩ
I_{OUT}	Output current @ ± I_{PN}, T_A = 25°C		0-20	mA DC
R_{OUT}	Output internal resistance	approx.	20	Ω
R_L	Load resistance		< 300	Ω

Accuracy - Dynamic performance data

X	Accuracy @ I_{PN}, T_A = 25°C (without offset)		< ± 1	%
ε_L	Linearity [2)] (0 .. ± I_{PN})		< ± 1	% of I_{PN}
I_{OE}	Electrical offset current, T_A = 25°C		< ± 0.08	mA
I_{OM}	Residud offset current @ I_P = 0; after an excursion of 1 x I_{PN}		< ± 0.025	mA
I_{OT}	Thermal drift of I_{OE}		< ± 0.05	%of I_N/K
TCE_G	Thermal drift of the gain (% of reading)		< ± 0.05	%/K
t_r	Arranging time constant		< 400	m s
f	Frequency bandwidth [3)](- 3 dB)		DC .. 3	kHz

General data

T_A	Ambient operating temperature		- 10 .. + 80	°C
T_S	Ambient storage temperature		- 25 .. + 80	°C
m	Mass	approx.	6	kg
	Standards [4)]		EN 50178	
	Minimum creepage & clearance		45	m m
	Housing PBT 30% glassfiber		CTI IIIa, UL94-V0	

Notes :
1) Pollution class 2, overvoltage category III, reinforced insulation
2) Linearity data exclude the electrical offset.
3) Please refer to derating curves in the technical file to avoid excessive core heating at high frequency
4) Please consult characterisation report for more technical details and application advice.

Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- True-rms, 0-20mA DC current output
- Isolation voltage 12kV~
- Low power consumption
- Package in PBT meets UL 94-V0

Advantages

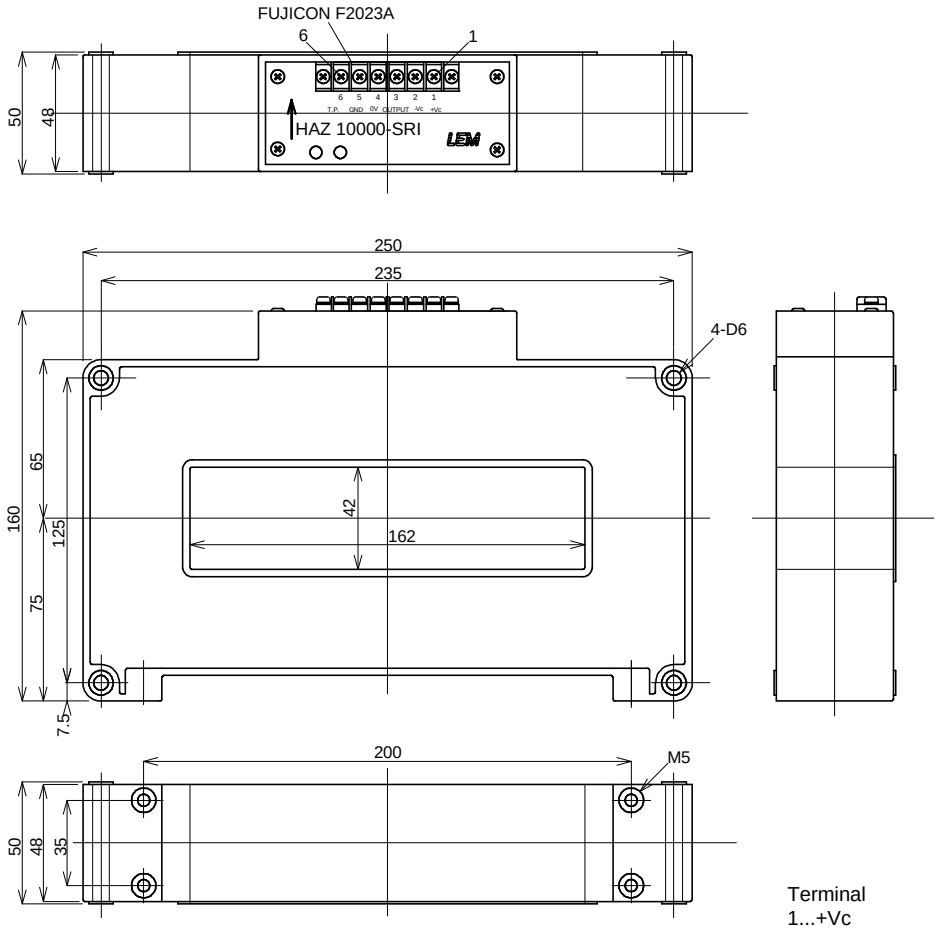
- Easy mounting
- Small size and space savings
- Only one design for wide current ratings range
- High immunity against external interference

Applications

- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Power supplies for welding and telecommunication applications.

HAZ 4000 .. 20000-SRI (in mm)

Preliminary



Terminal
1...+Vc
2...-Vc
3...OUTPUT
4...0V
5...GND
6...T.P.