Current Transducers HTC 1000..3000-S

I_{PN} = ±1000..3000 A

V_{OUT} = ±10 V

For the electronic measurement of currents: AC,DC, 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
1000	±1100	**HTC 1000-S**
2000	±2200	**HTC 2000-S**
3000	±3300	**HTC 3000-S**

V_C	Supply voltage (±3 %)	±15	V
I_C	Current consumption	< ±20	mA
R_{IS}	Insulation resistance @ 500 VDC	> 500	MΩ
V_{out}	Output voltage @ ± I_{PN}, R_L=2kΩ, T_A=25°C,	±10	V
R_{OUT}	Output internal resistance	< 100	Ω
V_d	R.m.s. voltage for AC insulation test, 50/60Hz,1mn	2.5	kV
R_L	Load resistance	≥ 2	kΩ

Accuracy-Dynamic performance data

X	Accuracy @ I_{PN}, T_A = 25°C	< ±1	%of I_{PN}
ε_L	Linearity (0 .. ± I_{PN})	< ±1	%of I_{PN}
TCE_G	Thermal drift of the gain	≤ ±0.1	%/K
V_{OE}	Eletrical offset voltage T_A = 25°C	< ±30	mV
V_{OH}	Hysteresis offset voltage @ I_P = 0; after an excursion of 1 x I_{PN}	< ±50	mV
V_{OT}	Thermal drift of offset	< ±1.0	mV/K
t_r	Response time @ 90% of I_P @ di/dt = 100A/µs	≤ 10	µs
f	Frequency bandwidth (- 3dB)	DC .. 10	kHz

General data

T_A	Ambient operating temperature	-40 .. +85	°C
T_S	Ambient storage temperature	-40 .. +85	°C
m	Mass	450	g
	Standards	EN 50155	

Notes :

Features

- Hall effect measuring principle
- Galvanic insulation between primary and secondary circuit
- UL 94-V0 rated

Advantages

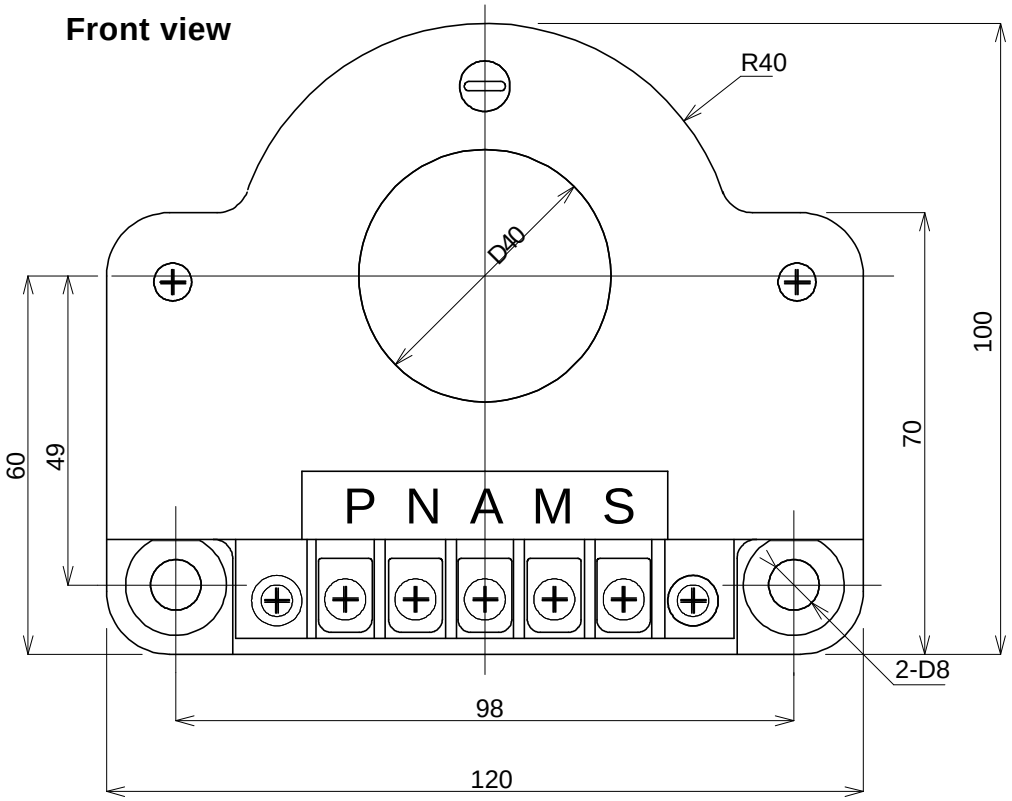
- Easy mounting
- Compact
- High immunity to external interference
- Low power consumption

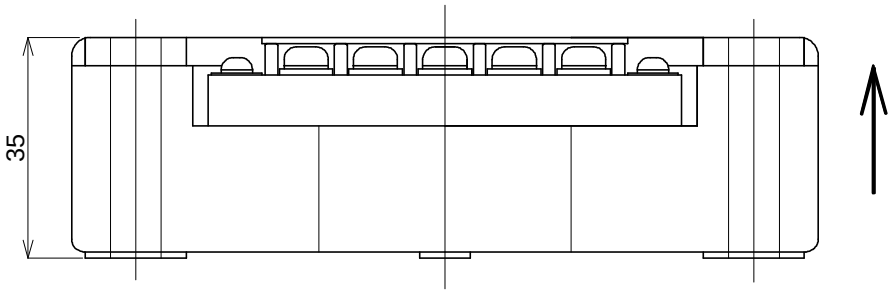
Applications

- Traction

HTC 1000..3000-S
Dimensions (in mm)

Front view





Bottom view

Pins Assignment

P : +V
N : -V
A : Output
M : 0V
S : 0V