Current Transducers HAS 50..600-P

I_{PN} = 50..600 A

V_{OUT} = ±4 V

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).

Electrical data

Primary nominal r.m.s. current I_{PN} (A)	Primary current measuring range I_P (A)	Type
50	±150	**HAS 50-P**
100	±300	**HAS 100-P**
200	±600	**HAS 200-P**
300	±900	**HAS 300-P**
400	±900	**HAS 400-P**
500	±900	**HAS 500-P**
600	±900	**HAS 600-P**

V_C	Supply voltage (± 5 %)		±15	V
I_C	Current consumption		±15	mA
I_{OC}	Overload capacity		30,000	At
V_d	R.m.s. voltage for AC isolation test, 60 Hz, 1 mn		3	kV
V_b	R.m.s. rated voltage, safe separation		500[1]	V
R_{IS}	Isolation resistance @ 500 VDC		> 1000	MΩ
V_{OUT}	Output voltage @ ± I_{PN}, R_L = 10 kΩ, T_A = 25°C		±4V ±40	mV
R_{OUT}	Output internal resistance	approx.	100	Ω
R_L	Load resistance		> 1	kΩ

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}
V_{OE}	Electrical offset voltage, T_A = 25°C		< ±40	mV
V_{OH}	Hysteresis offset voltage @ I_{PN} → 0		< ±20	mV
V_{OT}	Thermal drift of V_{OE} **HAS 50-P**		< ±2	mV/K
	HAS 100..600-P		< ±1	mV/K
$TC\varepsilon_G$	Thermal drift of the gain (% of reading)		< ±0.1	%/K
t_r	Response time @ 90% of I_P		< 3	µs
di/dt	di/dt accurately followed		> 50	A/µs
f	Frequency bandwidth (small signal, -1dB) [3] [4]		DC .. 25	kHz

General data

T_A	Ambient operating temperature		- 25 .. + 85	°C
T_S	Ambient storage temperature		- 25 .. + 85	°C
m	Mass	approx.	80	g
	Standards [5]		EN 50082-2	

Notes : [1] Pollution class 2, overvoltage category III.

[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] Amorphous core option for high frequency application.

[5] Please consult characterisation report for more technical details and application advice.

Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- Isolation voltage 3000 V~
- Low power consumption
- Extended measuring range (3 x I_{PN})
- Insulated plastic case made of polycarbonate PBT recognized according to UL 94-V0
- Right angle pins for direct PCB mounting

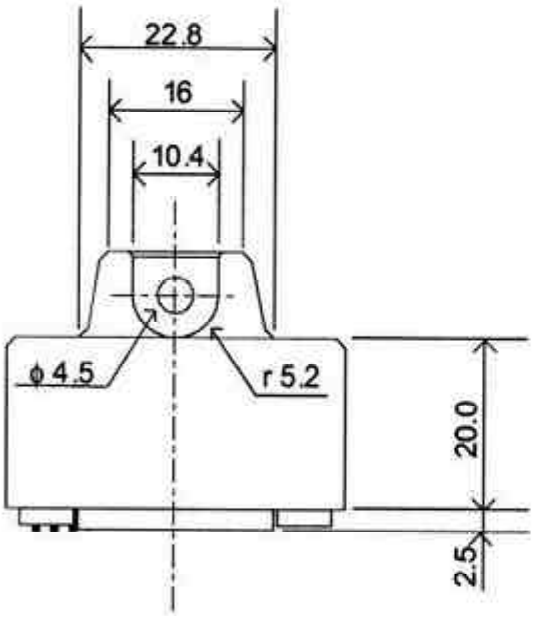
Advantages

- Easy mounting
- Small size and space saving
- Only one design for wide current ratings range
- High immunity to external interference.

Applications

- AC variable speed drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications.

HAS 50..600-P
Dimensions (in mm)



PINS ARRANGEMENT

1. +15V
2. –15V
3. OUTPUT
4. 0V