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

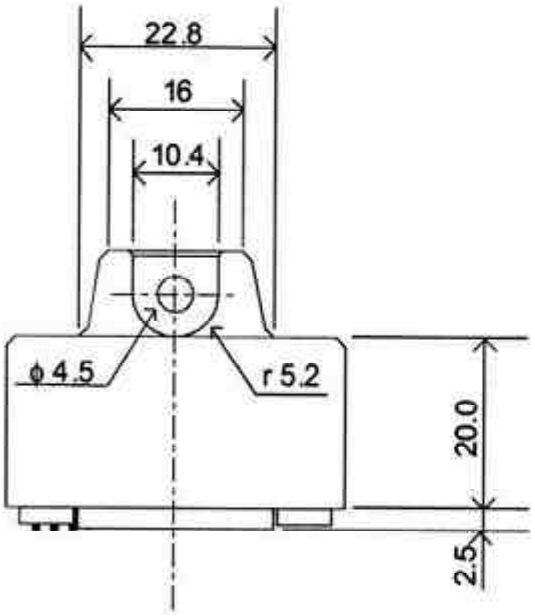
- Easy mounting
- Small size and space saving
- Only one design for wide current ratings range
- High immunity to external interference.

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.

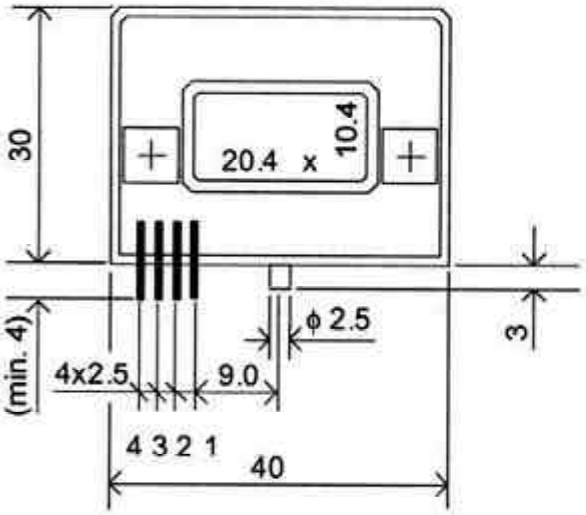
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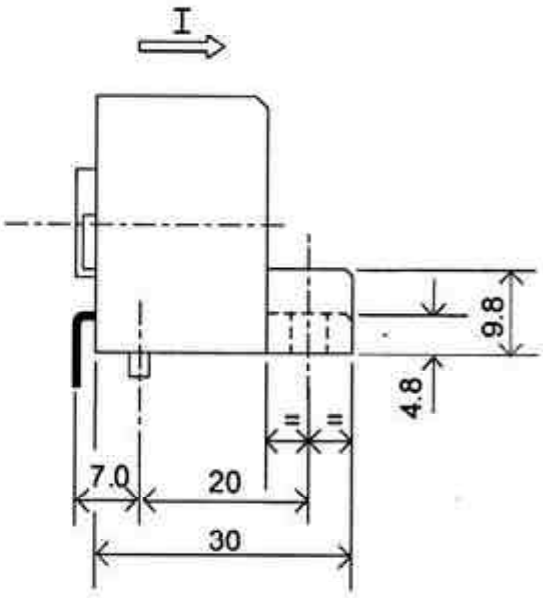
HAS 50..600-P
Dimensions (in mm)



PINS ARRANGEMENT

1. +15V
2. –15V
3. OUTPUT
4. 0V





LEM reserves the right to change limits and dimensions.