Current Transducer HTY 50 .. 100-P

I_{PN} = 50 .. 100 A

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	**HTY 50-P**
75	± 225	**HTY 75-P**
100	± 300	**HTY 100-P**

V_C	Supply voltage (± 5 %)	± 15	V
I_C	Current consumption	<± 20	mA
V_d	R.m.s. voltage for AC isolation test, 50/60Hz, 1 mn	2.5	kV
R_{IS}	Isolation resistance @ 500 VDC	> 500	MΩ
V_{OUT}	Output voltage @ ± I_{PN}, R_L = 10 kΩ, T_A = 25°C	± 4	V
R_L	Load resistance	>10	kΩ

Accuracy-Dynamic performance data

X	Accuracy @ I_{PN}, T_A = 25°C (without offset)		< ± 1.0	% of I_{PN}
ε_L	Linearity (0 .. ± I_{PN})		< ± 1.0	% of I_{PN}
V_{OE}	Electrical offset voltage, T_A = 25°C		< ± 30	mV
V_{OH}	Hysteresis offset voltage @ I_P = 0; after an excursion of 1 x I_{PN}		< ± 15	mV
V_{OT}	Thermal drift of V_{OE}	typ.	± 2.0	mV/K
		max.	± 3.0	mV/K
$TC\varepsilon_G$	Thermal drift (% of reading)		< ± 0.1	%/K
t_r	Response time @ 90% of I_P		< 7	µs
f	Frequency bandwidth (- 3 dB)[1)]		DC .. 50	kHz

General data

T_A	Ambient operating temperature	- 10 .. + 75	°C
T_S	Ambient storage temperature	- 15 .. + 85	°C
m	Mass	< 30	g

Notes : EN 50178 approval pending

[1)] Derating is needed to avoid excessive core heating at high frequency.

Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- Isolation voltage 2500 V~
- Low power consumption
- Extended measuring range (3 x I_{PN})

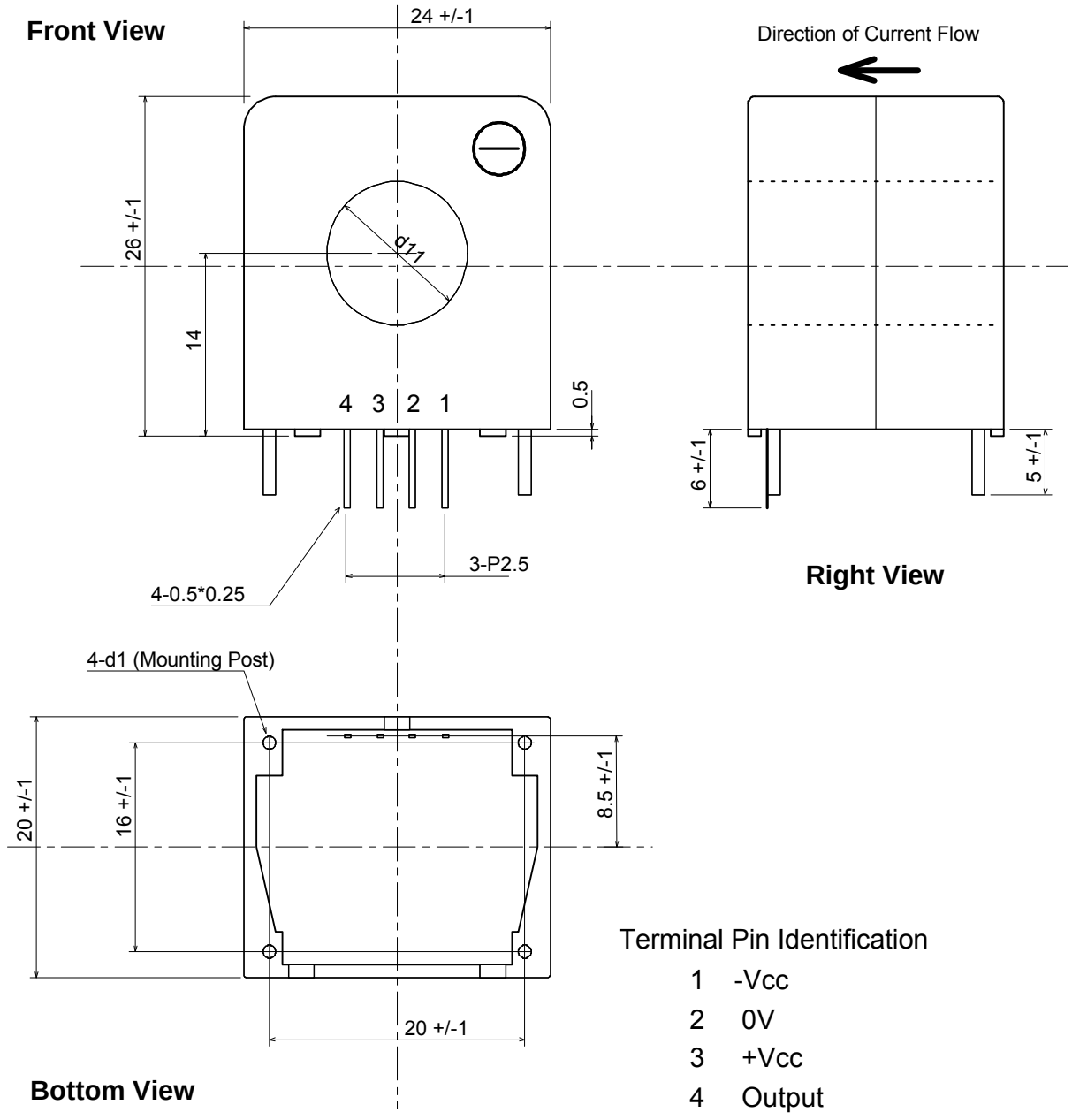
Advantages

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

Applications

- DC motor drives
- Switched Mode Power Supplies (SMPS)
- AC variable speed drives
- Uninterruptible Power Supplies (UPS)
- Battery supplied applications
- Inverters

HTY 50 ...100-P



Terminal Pin Identification

1 -Vcc
2 0V
3 +Vcc
4 Output

UNIT : mm