Current Transducer HNC- 050 .. 100P

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).

Primary nominal DC current I_{PN} (A)	Primary current measuring range I_P (A)	Type
50	0 .. ± 75	HNC - 050P
100	0 .. ± 140	HNC - 100P

Electrical data

		HNC - 050P	HNC - 100P	
R_M	Measuring resistance	60 .. 90	60 .. 80	Ω
I_{SN}	Second nominal current	50	50	mA
K_N	Turns ratio	1 : 1000	1 : 2000	
V_C	Supply voltage (± 5 %)		± 15	V
I_C	Current consumption		15 + I_{SN}	mA
V_d	R.m.s. voltage for AC isolation test, 50/60Hz, 1 min		2.5	kV

Accuracy-Dynamic performance data

X	Accuracy @ T_A = 25°C	± 1	% of I_{PN}
e_L	Linearity (0 .. ± I_{PN})	< ± 0.5	%
I_O	Electrical offset current @I_P = 0, @T_A = 25°C	± 0.2	mA
I_{HC}	Hysteresis offset current @ I_P = 0, after an excursion of I_{PN}	± 0.15	mA
I_{OT}	Thermal drift of I_O 0°C .. +70°C	± 0.005	mA/°C
t_r	Response time @ 90% of I_P	<1	µs
TCe_G	Thermal drift of the gain (% of reading)	< ± 0.004	%/°C

General data

T_A	Ambient operating temperature		- 10 .. + 80	°C
T_S	Ambient storage temperature		- 15 .. + 85	°C
		HNC - 200P	HNC - 300P	
R_S	Secondary coil Resistance @T_A = 25°C	75	95	Ω
m	Mass		30	g

Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- Isolation voltage 2500 V
- Low power consumption

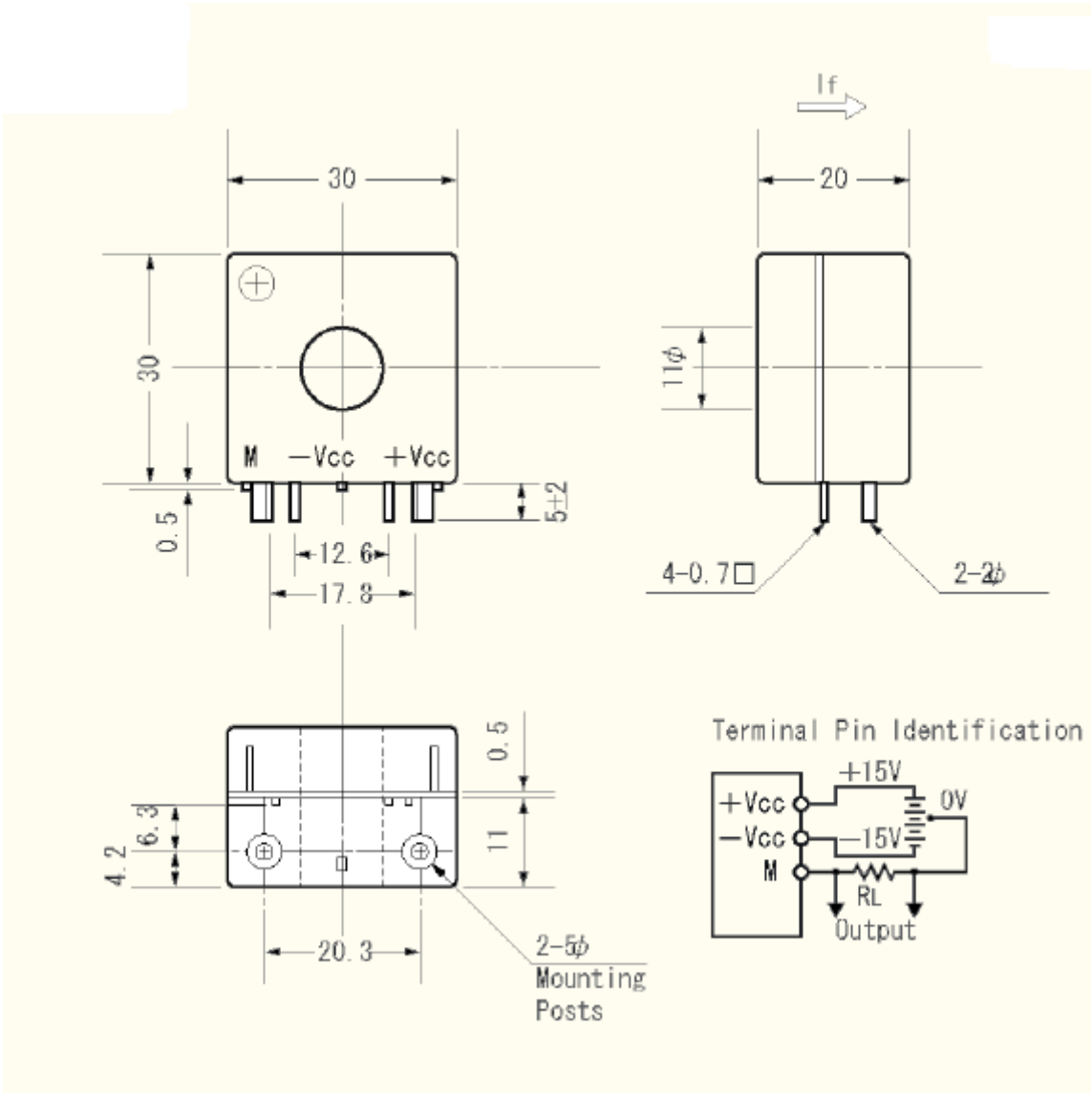
Advantages

- 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

HNC- 050 .. 100P



UNIT: mm