

# Current Transducer HNC- 050 .. 100P

$$I_{PN} = 50 \dots 100 \text{ A}$$

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

		HNC - 050P	HNC - 100P	
$R_M$	Measuring resistance	60 .. 90	60 .. 80	$\Omega$
$I_{SN}$	Second nominal current	50	50	mA
$K_N$	Turns ratio	1 : 1000	1 : 2000	
$V_C$	Supply voltage ( $\pm 5\%$ )		$\pm 15$	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

## Features

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

Accuracy-Dynamic performance data		
$X$	Accuracy @ $T_A = 25^\circ\text{C}$	$\pm 1$ % of $I_{PN}$
$e_L$	Linearity (0 .. $\pm I_{PN}$ )	$< \pm 0.5$ %
$I_O$	Electrical offset current @ $I_p = 0$ , @ $T_A = 25^\circ\text{C}$	$\pm 0.2$ mA
$I_{HC}$	Hysteresis offset current @ $I_p = 0$ , after an excursion of $I_{PN}$	$\pm 0.15$ mA
$I_{OT}$	Thermal drift of $I_O$ 0°C .. +70°C	$\pm 0.005$ ms/°C
$t_r$	Response time @ 90% of $I_p$	$< 1$ $\mu\text{s}$
$TCE_G$	Thermal drift of the gain (% of reading)	$< \pm 0.004$ %/°C

## Advantages

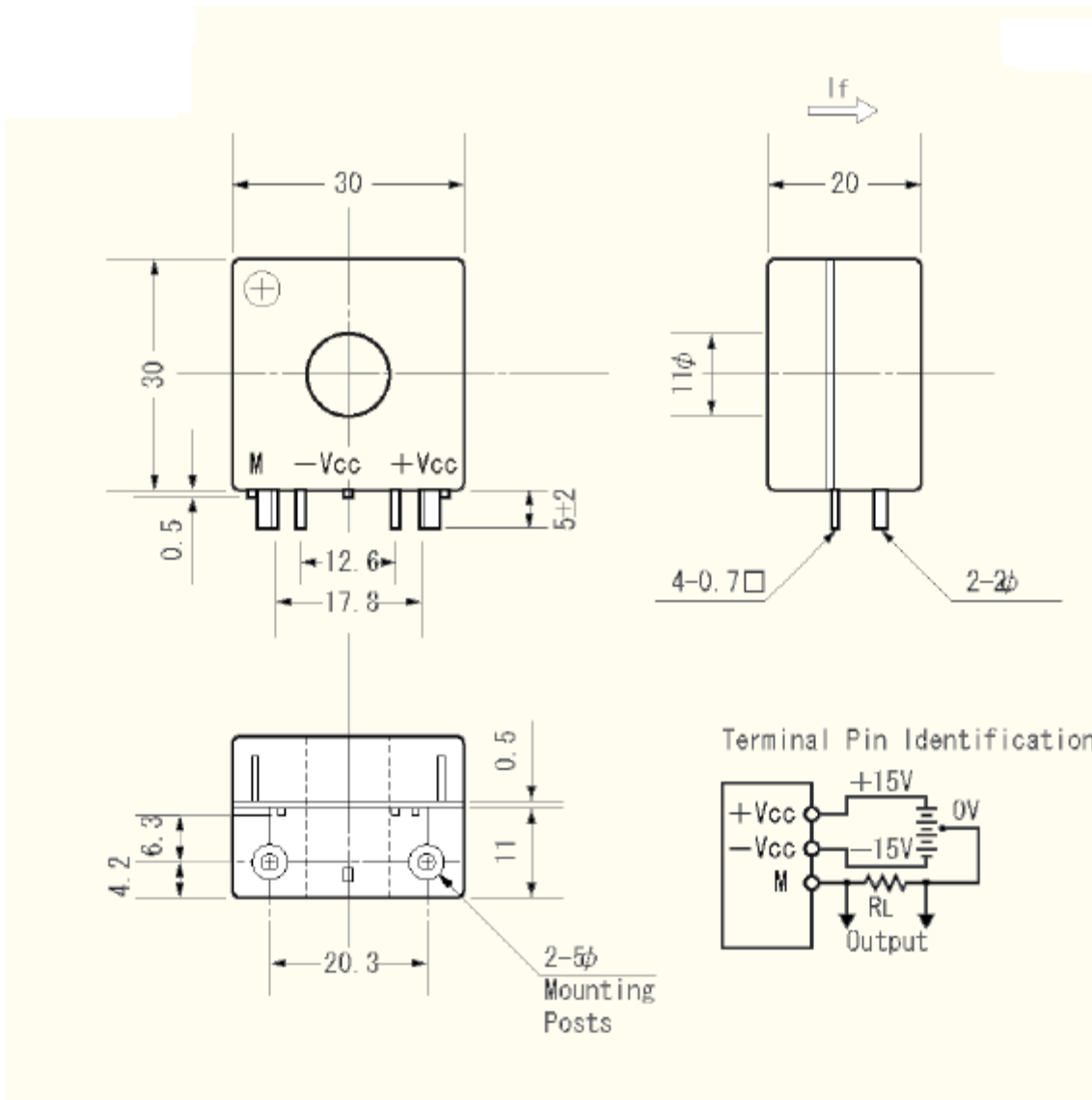
- Easy mounting
- Small size and space saving
- Only one design for wide current ratings range
- High immunity to external interference

## Applications

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

General data		
$T_A$	Ambient operating temperature	- 10 .. + 80 °C
$T_S$	Ambient storage temperature	- 15 .. + 85 °C
$R_S$	Secondary coil Resistance @ $T_A = 25^\circ\text{C}$	HNC - 200P   HNC - 300P
		75   95 $\Omega$
$m$	Mass	30 g

**HNC- 050 .. 100P**



UNIT: mm

This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.