

Current Transducer HNC-40CA

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).

$$I_{PN} = 400 \text{ A}$$



Electrical data

I_{PN}	Primary nominal DC or rms current	400	A
I_P	Primary current, measuring range	0 .. ± 800	A
R_M	Measuring resistance	20	Ω
I_{SN}	Second nominal current	100	mA
K_N	Turns ratio	1 : 4000	
V_C	Supply voltage ($\pm 5\%$)	± 15	V
I_C	Current consumption	$20 + I_{SN}$	mA
V_d	R.m.s. voltage for AC isolation test, 50/60Hz, 1 min	2.0	kV

Features

- Hall effect measuring principle
- Panel mount type

Accuracy-Dynamic performance data

X	Accuracy @ $T_A = 25^\circ\text{C}$	$< \pm 1$	% of I_{PN}
e_L	Linearity (0 .. $\pm I_{PN}$)	$< \pm 0.5$	% of I_{PN}
I_O	Electrical offset current @ $I_P = 0$, @ $T_A = 25^\circ\text{C}$	± 0.5	mA
I_{HC}	Hysteresis offset current @ $I_P = 0$, after an excursion of I_{PN}	± 0.6	mA
I_{OT}	Thermal drift of I_O 0°C .. +70°C	± 0.03	mA/°C
t_r	Response time @ 90% of I_P	< 3	μs
TCE_G	Thermal drift of the gain (% of reading)	$< \pm 0.04$	%/°C

General data

T_A	Ambient operating temperature	- 10 .. + 80	°C
T_S	Ambient storage temperature	- 15 .. + 85	°C
R_S	Secondary coil Resistance @ $T_A = 25^\circ\text{C}$	30	Ω
m	Mass	310	g

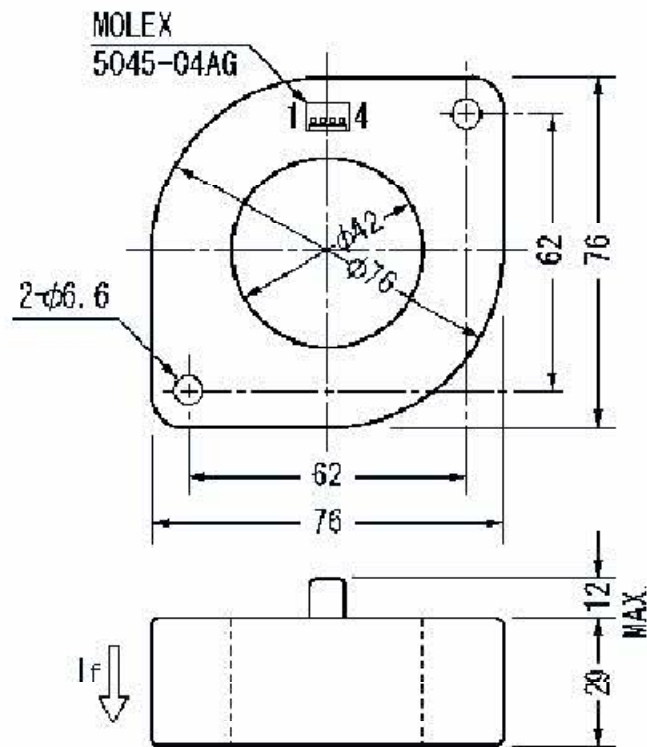
Advantages

- High accuracy
- Excellent linearity
- Low temperature drift
- Good response time
- Wide frequency range
- Compact
- 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- 40CA (in mm)



Connector Pin Identification

