

Current Transducer FA-050 .. 100PV

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

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 .. ± 70	FA - 050PV
100	0 .. ± 130	FA - 100PV

		FA - 050PV	FA - 100PV	
V_{OUT}	Output voltage @ $\pm I_{PN}$, $R_L = 10 \text{ k}\Omega$, $T_A = 25^\circ\text{C} \pm 4$	± 4	± 4	V
I_C	Current consumption	$16 + I_{PN}/1000$	$16 + I_{PN}/2000$	mA
V_C	Supply voltage ($\pm 5\%$)		± 15	V
V_d	R.m.s. voltage for AC isolation test, AC50/60Hz, 1 min		2.5	kV

Accuracy-Dynamic performance data

X	Accuracy @ $T_A = 25^\circ\text{C}$, @ $\pm 15\text{V}$ ($\pm 5\%$)	$< \pm 1.5 @ I_{PN}$	%
e_L	Linearity (0 .. $\pm I_{PN}$)	$< \pm 0.25$	%
V_{OE}	Electrical offset voltage, $T_A = 25^\circ\text{C}$	± 0.016	V
V_{OH}	Hysteresis offset voltage @ $I_P = 0$, after an excursion of $1 \times I_{PN}$	$< \pm 0.012$	V
V_{OT}	Thermal drift of V_{OE}	$< \pm 0.04$	mV/ $^\circ\text{C}$
Tce_G	Thermal drift of the gain (% of reading)	$< \pm 0.1$	%/ $^\circ\text{C}$
t_r	Response time @ 90% of I_P	< 1	μs
f	Frequency bandwidth (-1 dB)	DC .. 100	kHz

General data

T_A	Ambient operating temperature	- 10 .. + 70	$^\circ\text{C}$
T_S	Ambient storage temperature	- 15 .. + 80	$^\circ\text{C}$
m	Mass	25	g

Features

- Hall effect measuring principle
- PC Board Mount Type
- Low power consumption
- Extended measuring range ($3 \times I_{PN}$)
- Galvanic isolation between Primary and Secondary circuit
- Isolation voltage 2000V

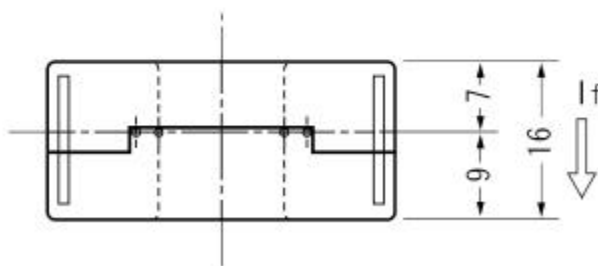
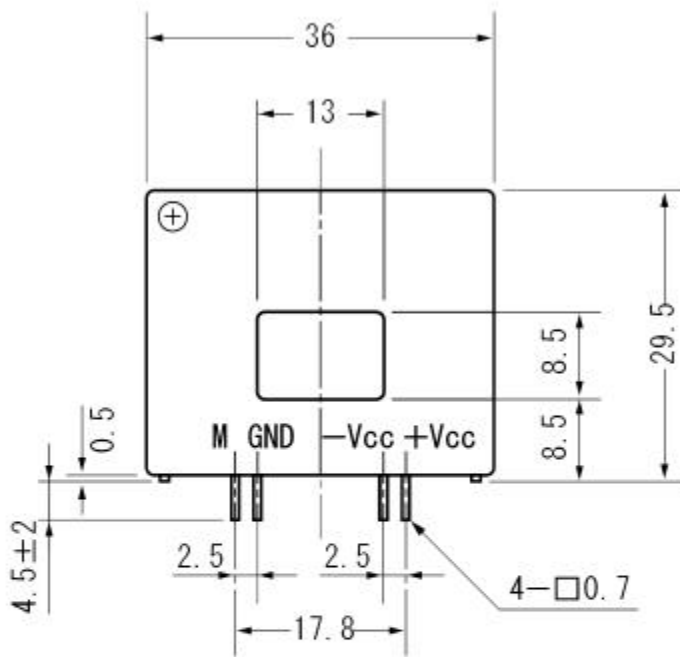
Advantages

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

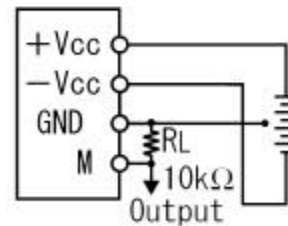
Applications

- DC motor drives
- Switched Mode Power Supplies (SMPS)
- AC variable speed drives
- Uninterruptible Power Supplies (UPS)
- Battery supplied applications
- Power supplies for welding applications.

FA- 050 .. 100PV



Terminal Pin Identification



UNIT: mm