Current Transducer FA-050 .. 100PV

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 DC current I_{PN} (A)	Primary current measuring range I_P (A)	Type
50	0 .. ± 70	**FA - 050PV**
100	0 .. ± 130	**FA - 100PV**

		FA - 050PV	FA - 100PV	
V_{OUT}	Output voltage @ ± I_{PN}, R_L = 10 kΩ, T_A = 25°C	± 4	± 4	V
I_C	Current consumption	16 + I_{PN}/1000	16+I_{PN}/2000	mA
V_C	Supply voltage (± 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°C, @ ± 15V (± 5%)	< ± 1.5 @I_{PN}	%
ε_L	Linearity (0 .. ± I_{PN})	< ± 0.25	%
V_{OE}	Electrical offset voltage, T_A = 25°C	± 0.016	V
V_{OH}	Hysteresis offset voltage @ I_P = 0, after an excursion of 1 x I_{PN}	< ± 0.012	V
V_{OT}	Thermal drift of V_{OE}	< ± 0.04	mV/°C
TCE_G	Thermal drift of the gain (% of reading)	< ± 0.1	%/°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	°C
T_S	Ambient storage temperature	- 15 .. + 80	°C
m	Mass	25	g

Features

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

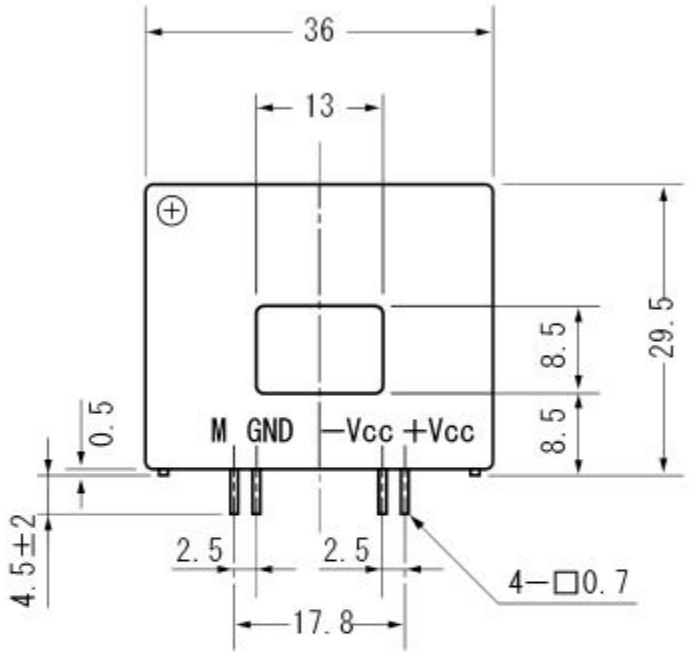
Advantages

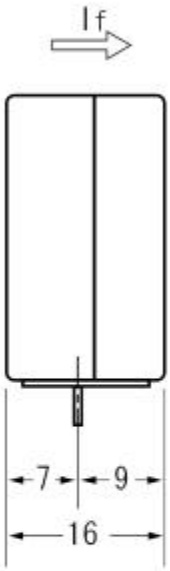
- Easy Mounting
- Small size and space saving
- Only one design for wide current ratings range
- High immunity to external inteference

Applications

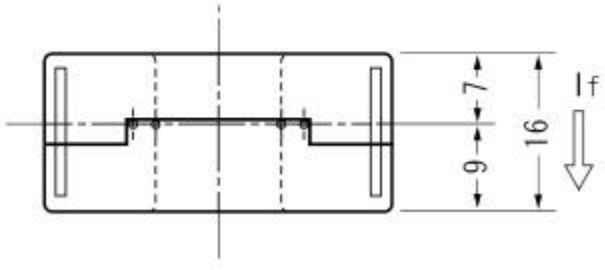
- DC motor drives
- Switched Mode Power Supplies (SMPS)
- AC variable speed drives
- Uninterruptible Power Supplies (UPS)
- Battery supplied applications
- Power supplies for welding applications.

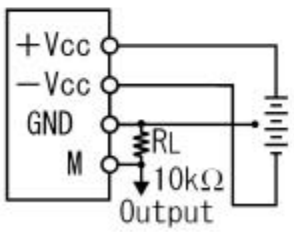
FA- 050 .. 100PV





Terminal Pin Identification





UNIT: mm