Current Transducer NNC-10..40GFP

I_{PN} = 50 .. 600 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
100	± 300	**NNC-10GFP**
200	± 600	**NNC-20GFP**
300	± 900	**NNC-30GFP**
400	± 1000	**NNC-40GFP**

V_C	Supply voltage (±5 %)	±15	V
I_C	Current consumption	<±18	mA
V_d	R.m.s. voltage for AC isolation test, 50/60 Hz, 1 mn	2.5	kV
R_{IS}	Isolation resistance @ 500 VDC	> 1000	MΩ
V_{OUT}	Output voltage @ ± I_{PN}, R_L = 10 kΩ, T_A = 25°C	±4	V
R_{OUT}	Output internal resistance	< 100	Ω
R_L	Load resistance	10	kΩ

Accuracy - Dynamic performance data

X	Accuracy @ T_A = 25°C (without offset)		<±1	% of I_{PN}
ε_L	Linearity[1] (0 .. ± I_{PN})		<±1	% of I_{PN}
V_{OE}	Electrical offset voltage, T_A = 25°C		<±30	mV
V_{OH}	Hysteresis offset voltage @ I_P = 0; after an excursion of 1 x I_{PN}		<±35	mV
V_{OT}	Thermal drift of V_{OE}	NNC-10GFP	<±2	mV/K
		NNC-20..40GFP	<±1	mV/K
$TC\varepsilon_G$	Thermal drift of the gain (% of reading)		<±0.1	%/K
t_r	Response time @ 90% of I_P		< 7	µs

General data

T_A	Ambient operating temperature	-10 .. +80	°C
T_S	Ambient storage temperature	-15 .. +85	°C
m	Mass	50	g

Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- Isolation voltage 2500V
- Low power consumption
- Extended measuring range (3 x I_{PN})

Advantages

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

Applications

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

Notes : [1] Linearity data exclude the electrical offset.

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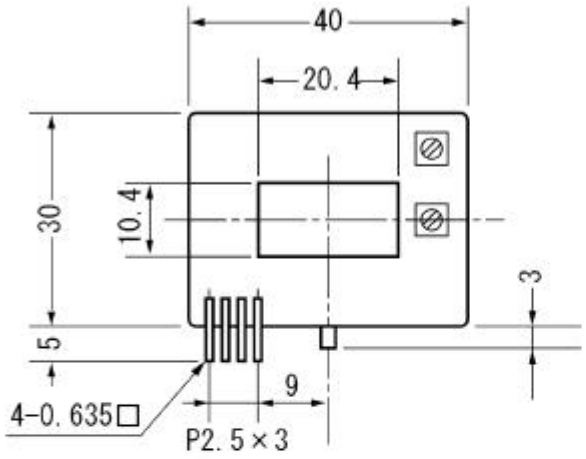
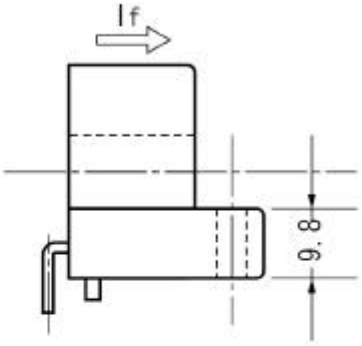
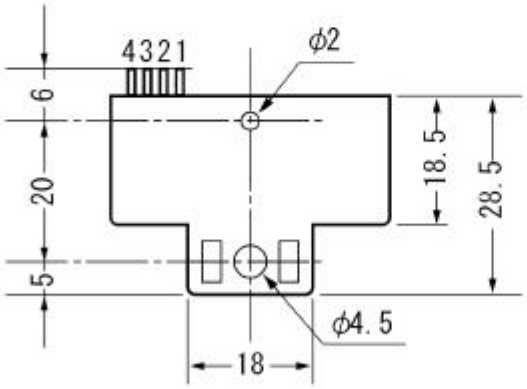
NNC-10..40GFP
Dimensions (in mm)







Terminal Pin Identification