

HDIE-C42 series

Current Transducer



1. Brief introduction

HDIE-C42 current transducer uses Hall effect(open loop principle) to measure DC current. The output signal could be small current or low voltage that can be accepted by electronic circuit. The primary input current and the output signal is highly electric isolated. This kind of transducer has a compact size but with a 104 x 22mm size window. It can be used in Power Utility, Telecom, Oil & Gas, welding machine and New energy fields.

- ★ DC current measurement ★ Good overload capacity
- ★ Good linearity ★ Galvanic isolation between primary and secondary circuit ★ Low power consumption
- ★ Split core

2. Order information (see right chart)

Nominal Current:

500 800 1000 1500 2000A_{dc}

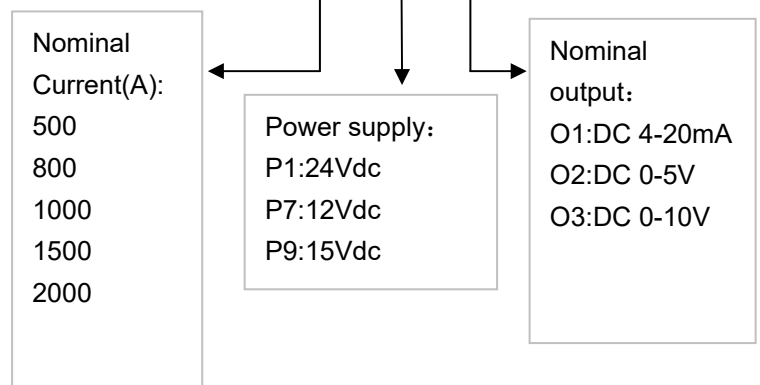
Nominal output:

O1:DC 4-20mA ,O2:DC 0-5V ,O3:DC 0-10V

Power supply:

P1: 24V_{dc} P7: 12V_{dc} P9:15V_{dc}

HDIE-C42-xxxPxOx



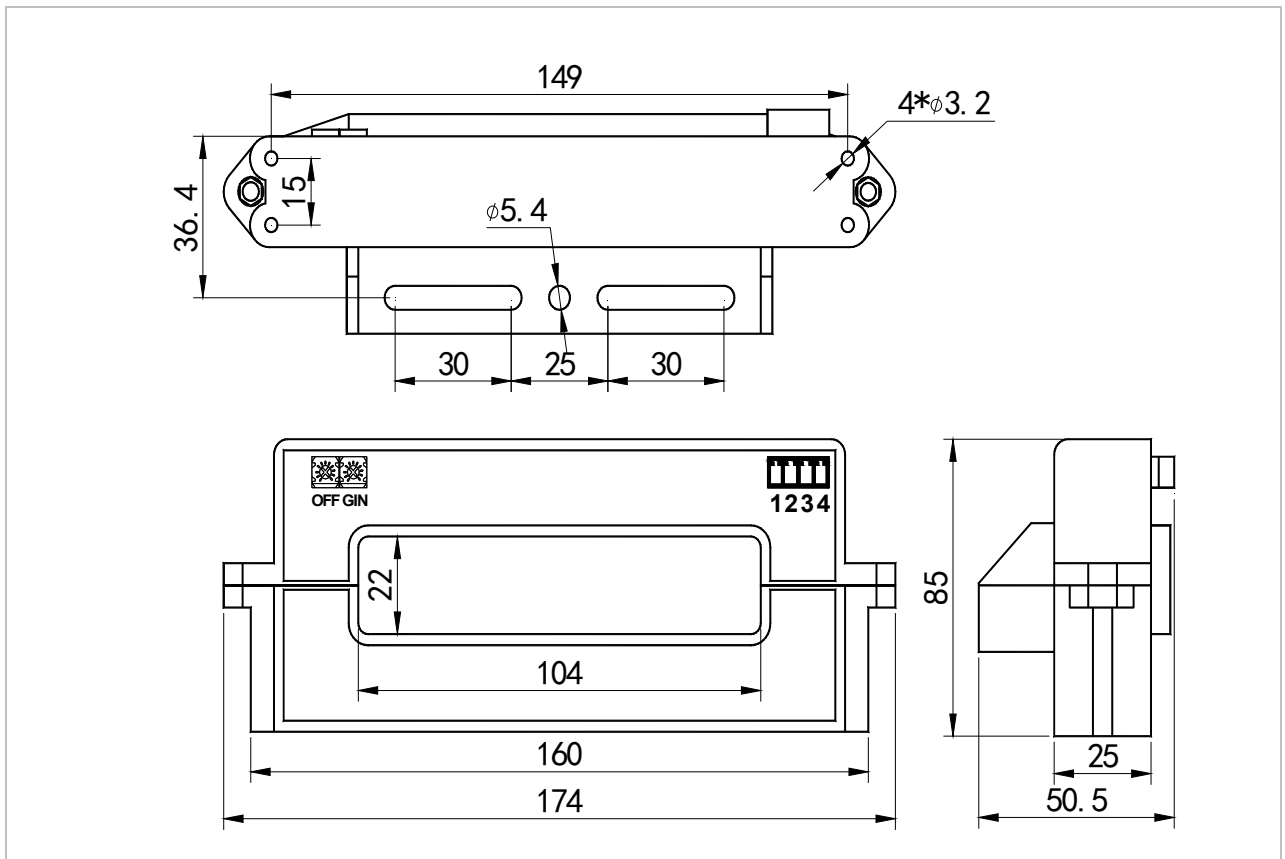
3. Eletrical data

I_{pn}	Primary nominal current (Arms)	500 800 1000 1500 2000
I_p	Primary Current, measuring range(Arms)	120% x I_{pn}
I_{oc}	Over load capacity	10000Arms
V_{sn} (for voltage output)	Secondary output (Vrms)	DC0-5V, DC0-10V etc
I_{sn} (for current output)	Secondary output (mArms)	DC 4-20mA,DC 0-20mA etc
X	Accuracy (Ta =+25°C)	≤1%
E_L	Linearity error	≤0.5%
V_c	Power supply voltage	$P_n(\pm 5\%)$
Vofs/lofs	Offset voltage/Offset current (Ta =+25°C)	≤50mV(for voltage output)/ ≤80uA (for current output)
T_r	Response time	≤ 10mS
f	Frequency bandwidth	DC
I_c	Current consumption	30mA (for current output : + I_s)
R_L	Load resistance	>5KΩ(for voltage output)/ ≤450Ω(for current output)
Vd	Isolation test(50HZ,1min)	6KV

4. General data:

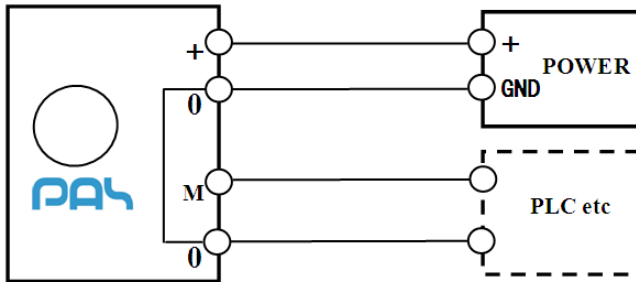
Ta	Ambient operating temperature	-25 - +70 °C
Ts	Ambient storage temperature	-40 - +85 °C
W	Mass	550g
St	Standards	IEC688:1992;EN61326
Ha	Ambient operating humidity	0-95% RH
	Case material	According to UL94-V0

5. Dimensions



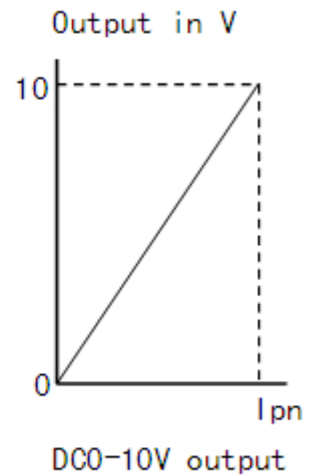
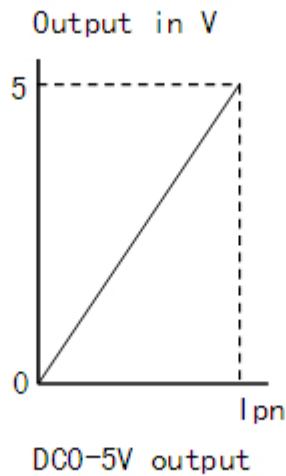
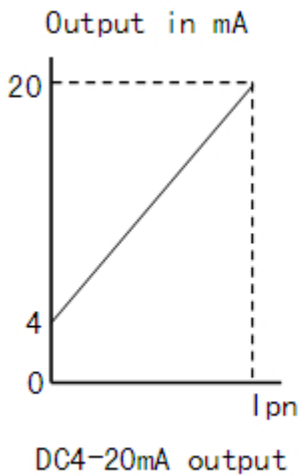
General tolerance	± 1mm
Primary window size	104 x 22mm
Fastening	Bottom: 2 x Φ5.5mm

6. Connection



Pin	Definition
1	(+)supply voltage+
2	(0)supply Gnd
3	(M)output signal +
4	(0) output signal -

7. Output figure



8. Safety items



1. Only qualified people can operate with such electrical products.
2. Wrong connection may destroy the products.
3. ESD protection is necessary, please follow the correct process.
4. Do not use in the environment with conductive dust and corrosive gas.
5. The Potentiometers on the product are used by PAS internal, the user can not calibrate.
6. Strong vibration and very high temperature may damage the products.



1. After the installation, the bus bar may be connected to the high voltage equipment, please do not touch the exposed parts of the transducers to avoid electric shock!



Note: 1.Passion technology company reserves the right to modify the datasheets at any time without previous notifications.
2.Any question about the datasheet, please contact our TCS.