

HDID-C31 series

Current Transducer



1. Brief introduction

HDID-C31 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 $\Phi 42$ mm aperture hole. 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

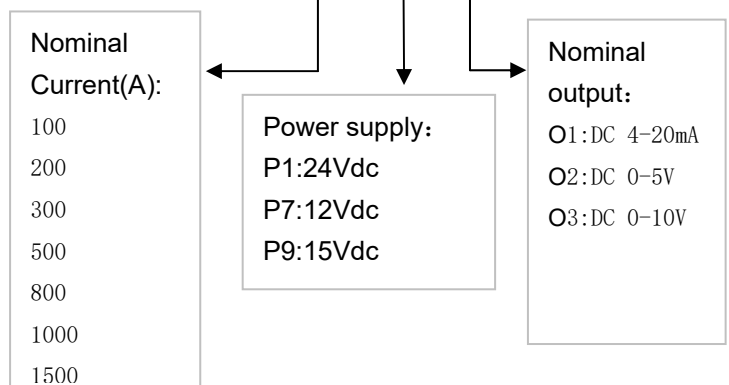
2. Order information (see right chart)

Nominal Current:
100 200 300 500 800 1000 1500A_{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}

HDID-C31-xxxPxOx



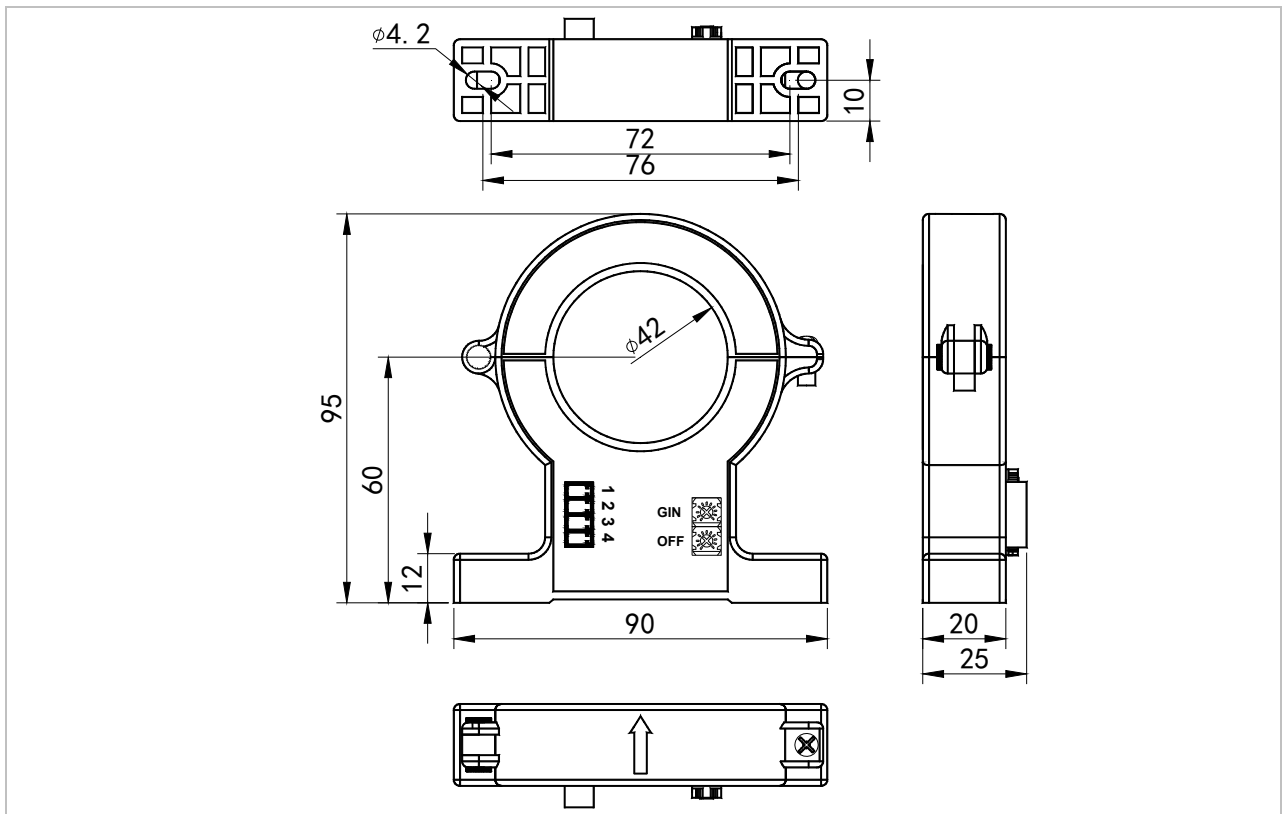
3. Electrical data

I_{pn}	Primary nominal current (Arms)	100 200 300 500 800 1000 1500
I_p	Primary Current, measuring range(Arms)	120% x I_{pn}
I_{oc}	Over load capacity	3000Arms
V_{sn} (for voltage output)	Secondary output (V _{rms})	DC0-5V, DC0-10V etc
I_{sn} (for current output)	Secondary output (mArms)	DC 4-20mA,DC 0-20mA etc
X	Accuracy ($T_a = +25^{\circ}C$)	$\leq 1\%$
EL	Linearity error	$\leq 0.5\%$
V_c	Power supply voltage	$P_n(\pm 5\%)$
V_{ofs}/I_{ofs}	Offset voltage/Offset current ($T_a = +25^{\circ}C$)	$\leq 50mV$ (for voltage output)/ $\leq 80\mu A$ (for current output)
T_r	Response time	$\leq 10mS$
f	Frequency bandwidth	DC
I_c	Current consumption	25mA (for current output : + I_s)
R_L	Load resistance	$>5K\Omega$ (for voltage output)/ $\leq 450\Omega$ (for current output)
V_d	Isolation test(50HZ,1min)	6KV

4. General data:

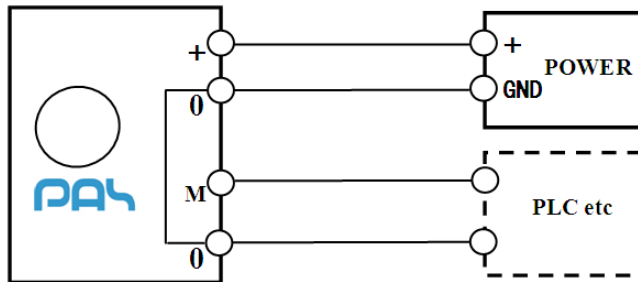
Ta	Ambient operating temperature	-25 - +70 °C
Ts	Ambient storage temperature	-40 - +85 °C
W	Mass	200g
St	Standards	IEC688:1992;EN61326
Ha	Ambient operating humidity	0-95% RH
	Case material	According to UL94-V0

5. Dimensions



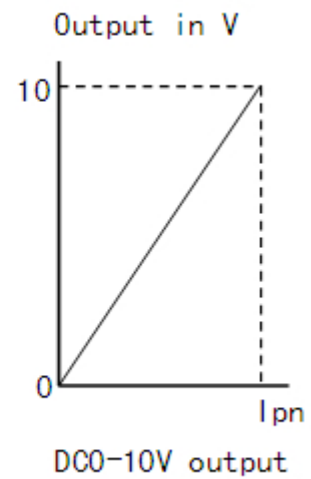
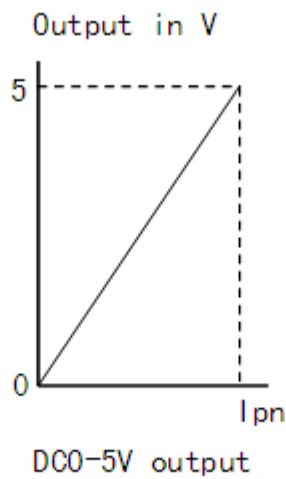
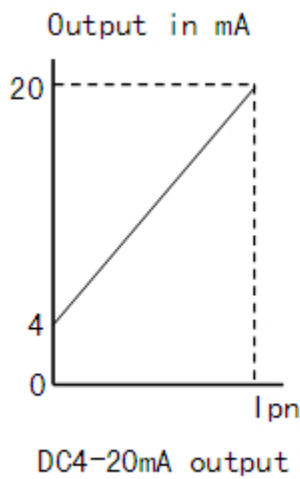
General tolerance	$\pm 1\text{mm}$
Primary hole size	$\phi 42\text{mm}$
Fastening	Bottom: 2 x $\phi 4.2\text{mm}$

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.