

HIC-C23 series

Current Transducer

1. Brief introduction

HIC-C23 current transducer uses Hall effect(closed loop principle) to measure any kinds of electric current. The output signal could be small current or low voltage that can be accepted by electronic circuit. The primary input current and the secondary output signal is highly electric isolated. This kind of transducer has a compact size but with a big hole aperture. It can be used in Power Utility, Telecom, Oil & Gas, Traction and Railway ,New energy fields.



- ★ AC/DC/Pulsed and Mixed current ★ Excellent accuracy
- ★ Optimized response time ★ Very good linearity ★ High immunity to external interference ★ Wide frequency bandwidth ★ Low temperature drift

2. Order information (see right chart)

HIC-C23-500P5O10

Nominal Current:
500Arms

Nominal output:
O10: $0 \pm 100\text{mA}$

Power supply:
P5: $\pm 15\text{-}24\text{Vdc}$

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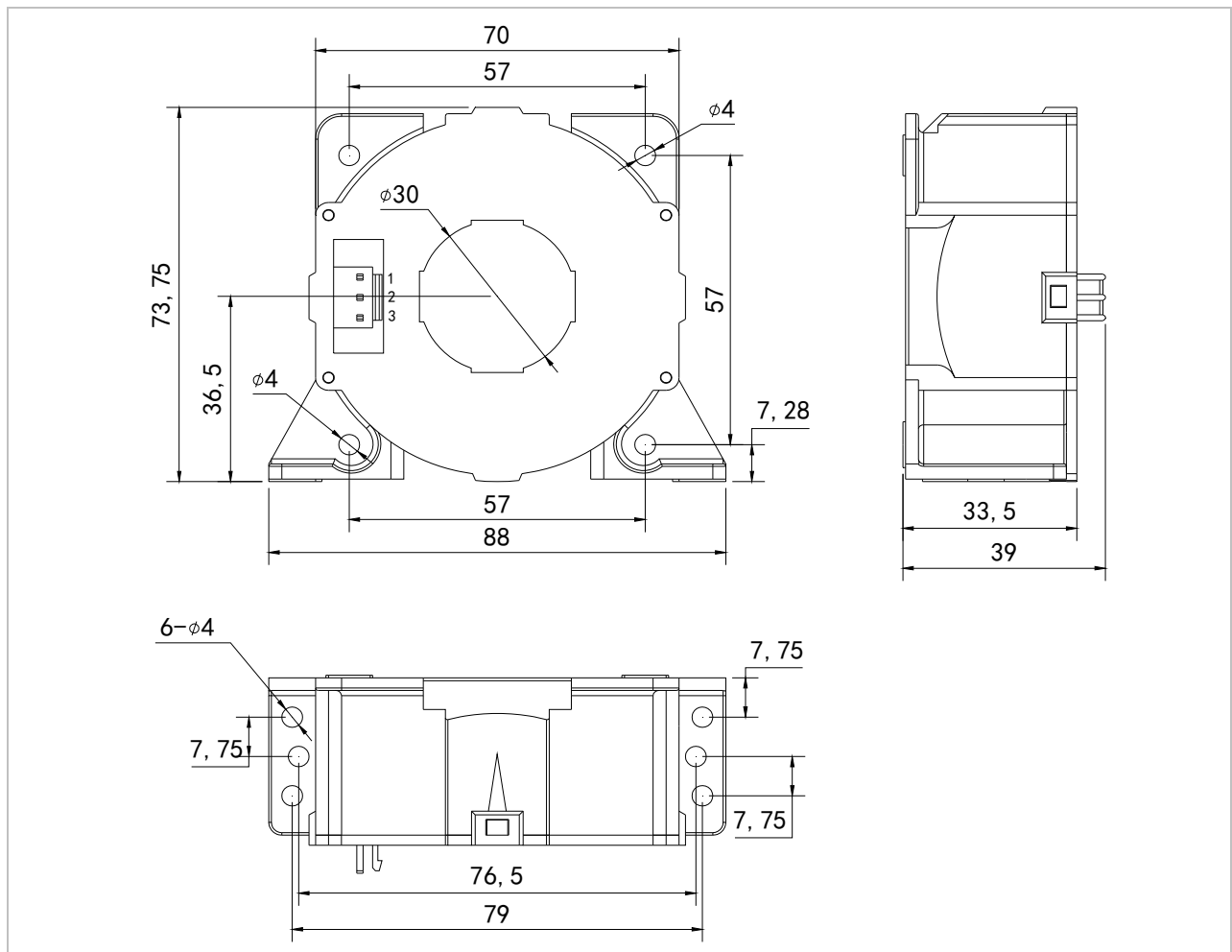
3. Eletrical data

I _{pn}	Primary nominal current (Arms)	500
I _p	Primary Current, measuring range(Arms)	150% x I _{pn}
K _N	Conversion ratio	1: 5000
I _{sn}	Secondary nominal current (mArms)	100mA
X	Accuracy (Ta =+25℃)	≤0.5%
EL	Linearity error	≤0.1%
V _c	Power supply voltage	Pn(±5%)
I _{ofs}	Offset current (Ta =+25℃)	0.35mA
Tr	Response time	≤ 1uS
di/dt	di/dt	> 100A/uS
f	Frequency bandwidth	DC-100K Hz
I _c	Current consumption	30mA + I _s (@±24V)
R _M	Measuring resistance (@I _{pN} ,@ ±15V)	70Ω
R _s	Secondary coil resistance	70Ω
V _d	Isolation test(50HZ,1min)	3KV

4. General data :

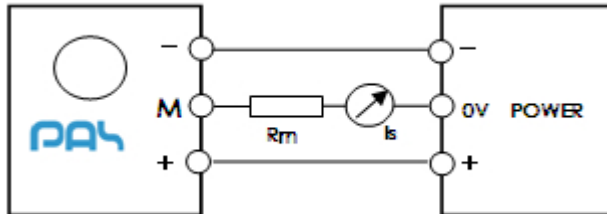
Ta	Ambient operating temperature	-40 - +85 °C
Ts	Ambient storage temperature	-45 - +100 °C
W	Mass	260g
St	Standards	EN50178:1997
Ha	Ambient operating humidity	20-90% RH
	Case material	According to UL94-V0

5. Dimensions



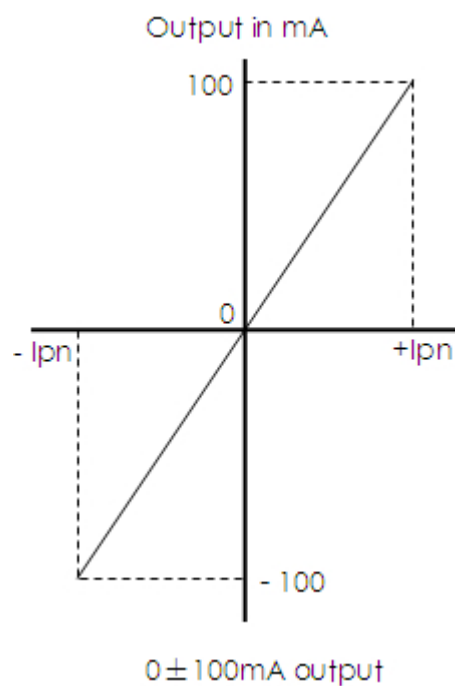
General tolerance	$\pm 1\text{mm}$	
Primary hole size	$\Phi 30\text{mm}$	
fastening	Bottom: 6 x $\Phi 4\text{mm}$	Side: 4 x $\Phi 4\text{mm}$

6. Connection



Pin	definition
1	(-) supply voltage
2	(M) measure
3	(+) supply voltage

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.

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