

## HIB-C15 series

# **Current Transducer**

#### 1. Brief introduction

HIB-C15 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 \$\Pi\$20mm 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)

Nominal Current: 50 100 200 300A HIB-C15-100P2 O9 HIB-C15-200P2 O10

HIB-C15-50 P2 O9

Nominal output:

O9:  $0 \pm 50 \text{mA}$ 

O10:  $0 \pm 100 \text{mA}$ O12:  $0 \pm 150 \text{mA}$ 

Power supply: P2: ±12-15Vdc

HIB-C15-300P2 O12 Nominal Current: 50A

100A 200A

300A

Power supply:

P2: ±12-15Vdc

Nominal output:

O9:  $0 \pm 50 \text{mA}$ O10:  $0 \pm 100 \text{mA}$ 

O12:  $0 \pm 150 \text{mA}$ 

#### 3. Eletrical data

lpn	Primary nominal current (Arms)	50	100	200	300
lp	Primary Current, measuring range(Arms)	150% x	lpn		
K <sub>N</sub>	Conversion ratio	1:1000	1:2000	1:2000	1:2000
Isn	Secondary nominal current (mArms)	50mA	50mA	100mA	150mA
Χ	Accuracy (Ta =+25°C)	≤0.5%			
EL	Linearity error	≤0.2%			
Vc	Power supply voltage	Pn(±5%	<b>%</b> )		
lofs	Offset current (Ta =+25℃)	0.2mA			
Tr	Response time	≤ 1uS			
di/dt	di/dt	> 100A/	uS		
f	Frequency bandwidth	DC-100K Hz			
Ic	Current consumption	20mA + Is			
$R_{M}$	Measuring resistance (@IpN,@ ±15V)	200Ω	175Ω	73Ω	43Ω
Rs	Secondary coil resistance	11Ω	32Ω	21Ω	21Ω
Vd	Isolation test(50HZ,1min)	6KV			

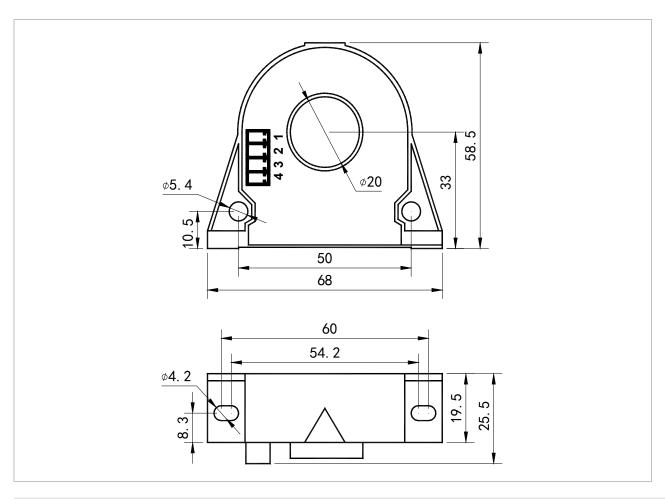
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## 4. General data:

Та	Ambient operating temperature	-25 - +70 °C
Ts	Ambient storage temperature	-45 - +85 °C
W	Mass	70g
St	Standards	EN50178:1997
На	Ambient operating humidity	20-90% RH
	Case material	According to UL94-V0

## 5. Dimensions

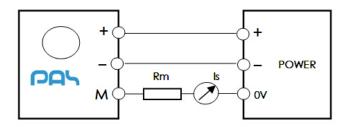


General tolerance	$\pm 1$ mm	
Primary hole size	Ф20mm	
Fastening	Bottom: 2 x Φ4.2mm	Side: 4 x Φ5.4mm

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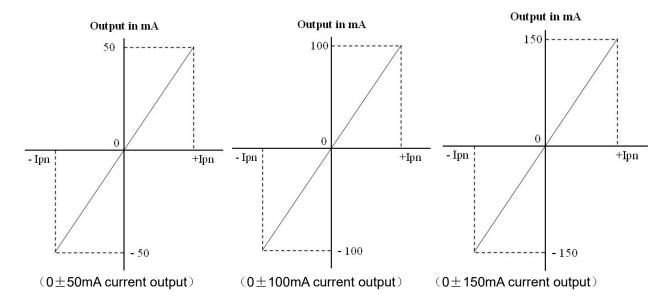


## 6. Connection



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

# 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.