

JI1-C51 series

AC Current Transducer (DIN)

1. Brief introduction

JI1-C51 AC current transducer uses CT principle to measure AC current with a DIN mounting case. Usually, it works with a CT together. The output signal could be standard DC signals that can be accepted by electronic circuit e.g. PLC. The primary input current and the output signal is highly electric isolated. It can be used in Power Utility, Telecom, Oil & Gas, and New energy fields.



★ AC current measurement

★ DIN rail installation

★ Good linearity ★ Galvanic isolation between primary and secondary circuit ★ Low power consumption

★ Compact size ★ Standard RMS signal output

2. Order information (see right chart)

Nominal Current:

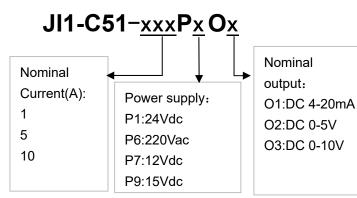
10 Arms 5

Nominal output:

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

Power supply:

P1:24Vdc P6:220Vac P7:12Vdc P9:15Vdc



3. Eletrical data

Ipn Primary nominal current (Arms)		1 5 10		
lp	Primary Current, measuring range(Arms)	120% x lpn		
loc	Over load capacity	200% x lpn		
Vsn (for volta output)	age Secondary Voltage output	DC0-5V, DC0-10V etc		
Isn (for curroutput)	ent Secondary Current output	DC 4-20mA,DC 0-20mA etc		
Χ	Accuracy (Ta =+25℃)	≤0.5%		
EL	Linearity error	≤0.2%		
Vc	Power supply voltage	Pn(±5%)		
Vofs/lofs	Offset voltage/Offset current (Ta =+25°C)	≤20mV(for voltage output)/ ≤80uA (for current output)		
Tr	Response time	≤ 300mS		
f	Frequency bandwidth	40-200HZ		
Ic	Current consumption	20mA (for current output : + Is)		
R_L	Load resistance	>5K Ω (for voltage output)/ \leq 450 Ω (for current output)		
Vd	Isolation test(50HZ,1min)	3KV		

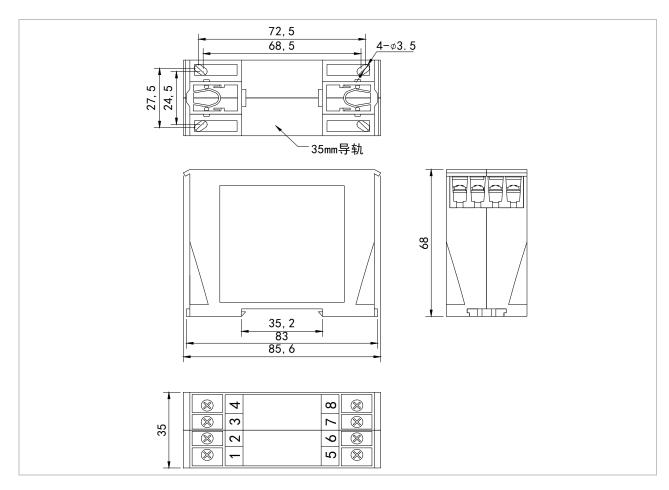
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4. General data:

Та	Ambient operating temperature -10 - +70 ℃	
Ts	Ambient storage temperature	-40 - +85 ℃
W	Mass	200g
St	Standards	IEC688:1992;EN61326
На	Ambient operating humidity 0-95% RH	
	Case material	According to UL94-V0

5. Dimensions

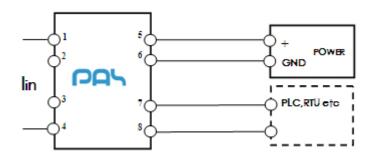


General tolerance	± 1 mm
Primary hole size	NO holes
Fastening	Bottom: 4 x Φ3.5mm , 35mm DIN Rail

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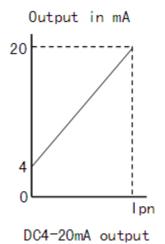


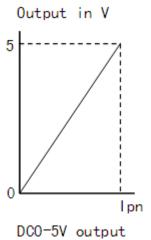
6. Connection

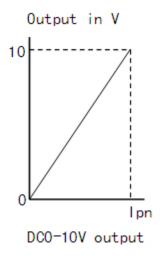


PIN	Defines	PIN	Defines
1	Input	5	Supply voltage +
2	NC	6	Supply GND
3	NC	7	Output signal +
4	Input	8	Output signal -

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.