

# AC Current Sensor

BA Series (DIN Rail mounting)

## 1. General

BA Series AC current sensors transmit the AC current signal to standard DC analog signal (4-20mA or 0-5V) by accurate constant current technology and Temperature Linearity Compensation technology.

They can all work under DC24V and 12V, and they have good capacity of overload, high accuracy, excellent isolation and low consumption. They are applied widely in the field of industrial automatization and comply IEC60688:1992 and IEC1851987.



## 2. Technical feature

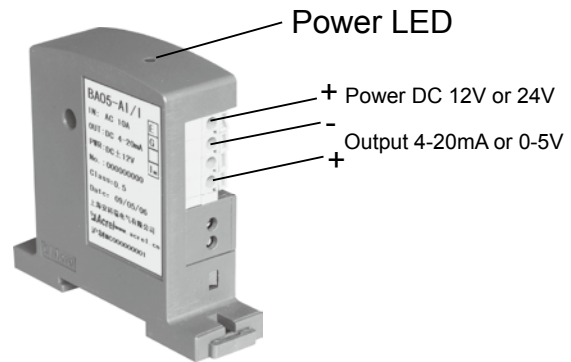
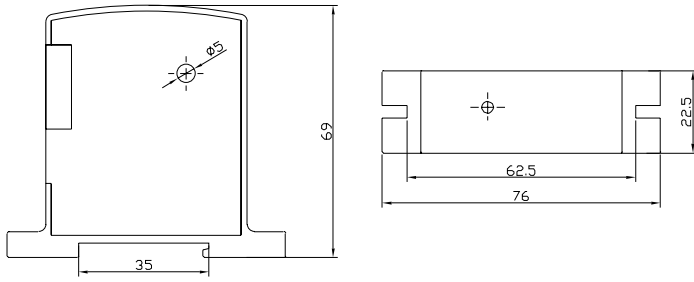
Type		BA05	BA10	BA20	BA50
Input	Hole diameter	Φ5mm	Φ10mm	Φ20mm	Φ50mm
	Current range	AC 0~10A	AC €~50A	AC 0~200A	AC 0~600A
	Overload	Continual 1.2 times; Instantaneous 10 times/5s			
	Frequency	25Hz~5KHz			
Output	Range	DC 4-20mA; 0-20mA; DC 1-5V, 0-5V			
	Load resistance	Output current: ≤400Ω(12Vpower); ≤800Ω(24Vpower)			
	Ripple factor	Output voltage:≥1kΩ < 0.5% peak value			
Accuracy		0.5 or 0.2			
Response time		≤350ms			
Power supply	Voltage	DC 12V or DC 24V			
	Consumption	≤0.5VA (DC12V) ; ≤1VA (DC 24V)			
Insulation resistance		≥ 100MΩ			
Isolation		AC 3kV/min between input and connectors			
Temperature drift		≤ 200ppm			
MTBF		>50000h			
ENV	Work T:	-20C ~ +55C			
	Storage T:	-20C ~ +70C			
	Relative humidity:	5% ~ 95% (no condensation)			
	Altitude:	< 2500m			
Mounting		35mm standard DIN rail			

## 3. Specification

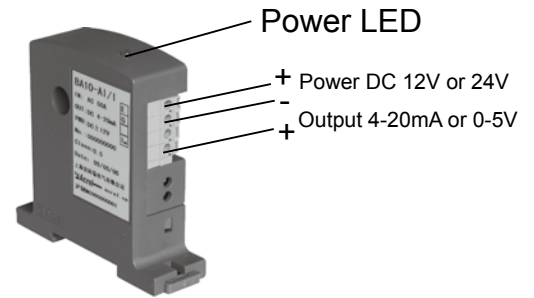
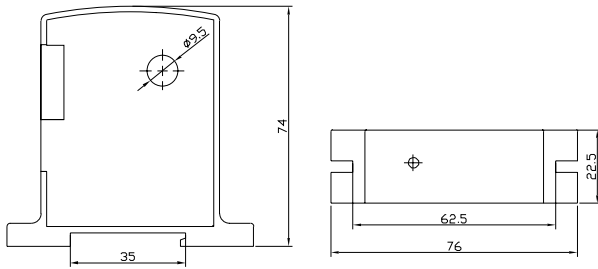
Type	Input	Output	Option
BA05-AI	AC 0.5~10A	DC 4-20mA; 0-20mA	-T: RMS measurement -1: DC12V power -2: DC24V power (If no T, sensors measure average value)
BA05-AV		DC 1-5V, 0-5V	
BA10-AI	AC 8~50A	DC 4-20mA; 0-20mA	
BA10-AV		DC 1-5V, 0-5V	
BA20-AI	AC 40~150A	DC 4-20mA; 0-20mA	
BA20-AV		DC 1-5V, 0-5V	
BA50-AI	AC 60~600A	DC 4-20mA; 0-20mA	
BA50-AV		DC 1-5V, 0-5V	

## 4. Outlines

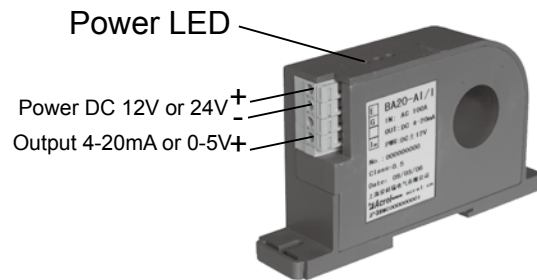
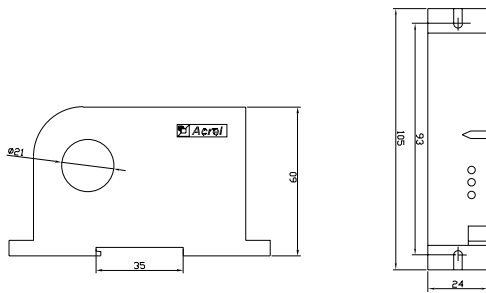
### BA-05



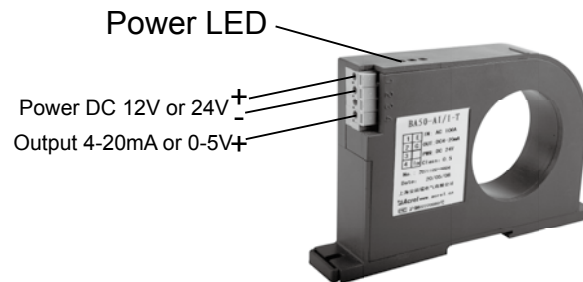
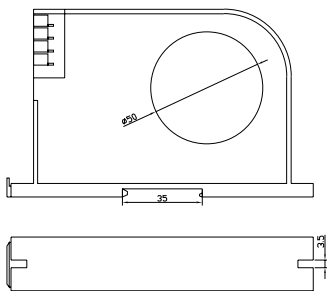
### BA-10



### BA-20



### BA-50



## 5. Order example

Need a current sensor, input AC 500A, output 4-20mA, with RMS measurement and 24Vdc power. The product type is BA50-AI-T-2