

1. AC Current Sensor

SKU: ATO-CUS-AC10, ATO-CUS-AC150, ATO-CUS-AC400, ATO-CUS-AC800

AC current sensor is an isolation and conversion device suitable for AC current. It converts current signal into standard signal that can be directly collected and received by AD, DSP, and PLC, thus realizing transmission, processing, storage, display, recording and control of current signal.

AC current transducer with measuring range 0-800A is widely used for AC current measurement of various occasions, especially for sine-wave ac current with power frequency 50Hz.

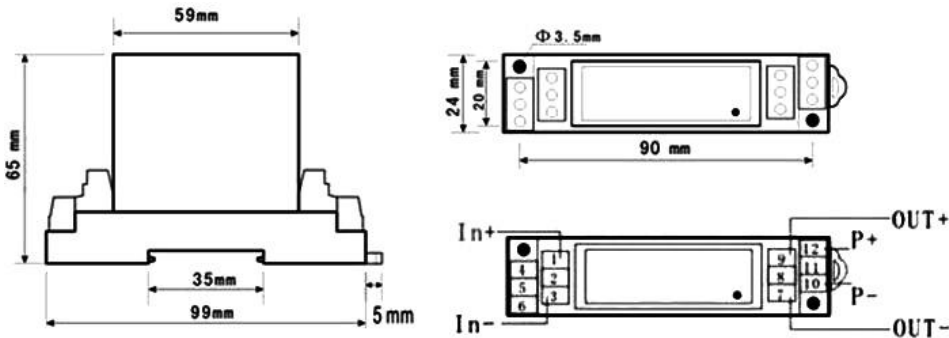
1.1 Specification:



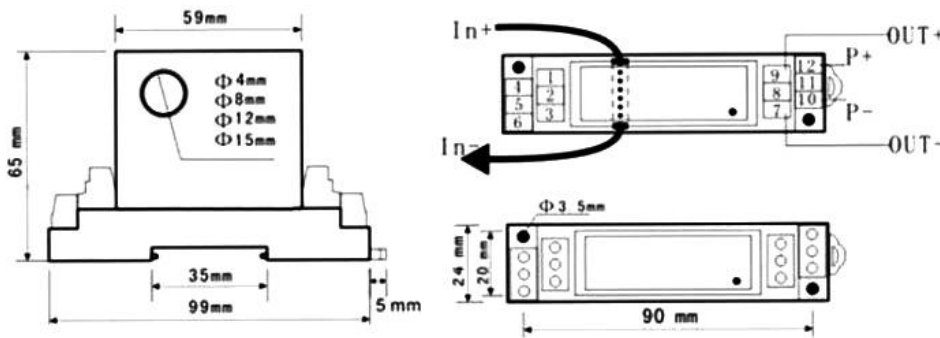
Model	ATO-CURTS-DJIA	ATO-CURTS-DJIB	ATO-CURTS-DJIC	ATO-CURTS-DJID
Measuring range	AC 0-10A	AC 0-150A	AC 0-400A	AC 0-800A
Output signal	4-20mA, 0-20mA, 1-5V, 0-5V	4-20mA, 0-20mA, 1-5V, 0-5V	4-20mA, 0-20mA, 1-5V, 0-5V	4-20mA, 0-20mA, 1-5V, 0-5V
Power supply	DC 24V, DC 12V, AC 220V	DC 24V, DC 12V, AC 220V, AC 110V	DC 24V, DC 12V, AC 220V, AC 110V	DC 24V, DC 12V, AC 220V, AC 110V
Accuracy	0.5%F.S.	0.5%F.S.	0.5%F.S.	0.5%F.S.
Isolation voltage	3KV/50Hz/1min	3KV/50Hz/1min	3KV/50Hz/1min	3KV/50Hz/1min
Offset voltage	≤10mV	≤10mV	≤10mV	≤10mV
Temperature drift	≤100PPM/°C	≤100PPM/°C	≤100PPM/°C	≤100PPM/°C
Frequency bandwidth	20~50KHz	20~50KHz	20~50KHz	20~50KHz
Current consumption	<5mA	<5mA	<5mA	<5mA
Load capacity	Voltage output: 5mA, current output: 6V	Voltage output: 5mA, current output: 6V	Voltage output: 5mA, current output: 6V	Voltage output: 5mA, current output: 6V
Response time	Photoelectric isolation: ≤15μs, modulation and demodulation: <150ms	<250ms	<250ms	<250ms
Overload capacity	10 times nominal input	30 times nominal input	30 times nominal input	30 times nominal input
Work temperature	-10~+70°C	-10~+70°C	-10~+70°C	-10~+70°C
Hole diameter	No hole	4mm, 8mm, 12mm, 15mm	22mm	35mm, 45mm, 55mm, 72mm
Installation	DIN rail and screw fixation	DIN rail and screw fixation	DIN rail and screw fixation	DIN rail and screw fixation

1.2 Dimension and wiring diagram:

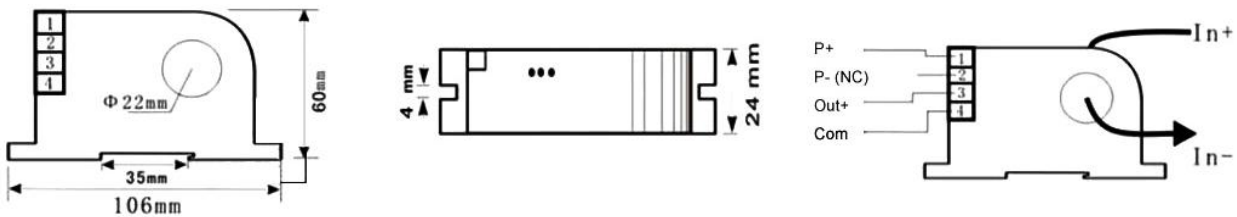
1.2.1 ATO-CURTS-DJIA & ATO-CURTS-DZIA



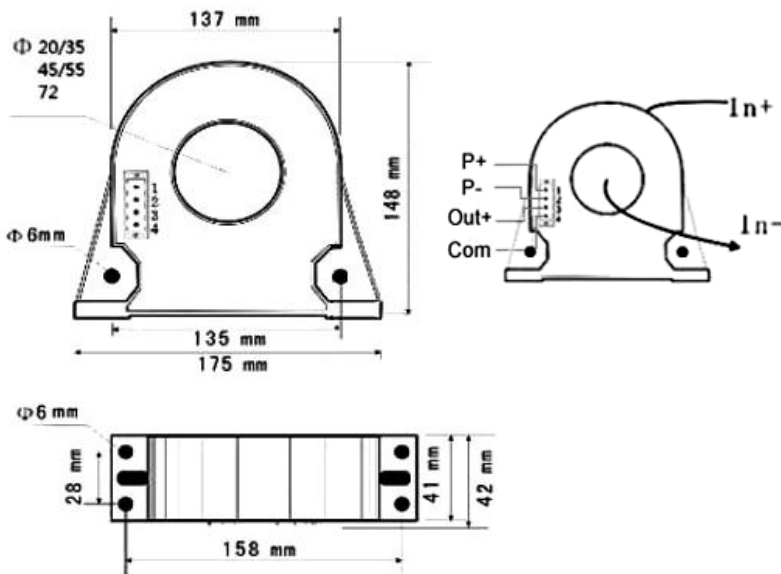
1.2.2 ATO-CURTS-DJIB & ATO-CURTS-DZIB



1.2.3 ATO-CURTS-DJIC & ATO-CURTS-DZIC



1.2.4 ATO-CURTS-DJID & ATO-CURTS-DZID



★Hole diameter and current reference list:

Hole diameter	Current
No hole	0-10mA ~ 0-10A
4mm	0-1A ~ 0-5A
8mm	0-10A ~ 0-50A
12mm	0-50A ~ 0-100A
15mm	0-100A ~ 0-150A
22mm	0-150A ~ 0-350A
35mm	0-350A ~ 0-800A
45mm	0-800A
55mm	0-800A

2. DC Current Sensor

SKU: ATO-CUS-DC800

DC current sensor 0-800A with electromagnetic isolation function has best cost performance, fast response, high accuracy, good stability, light weight, input current terminal connection or non invasive input type, DIN rail installation. It is widely used for DC current measurement of various occasions.

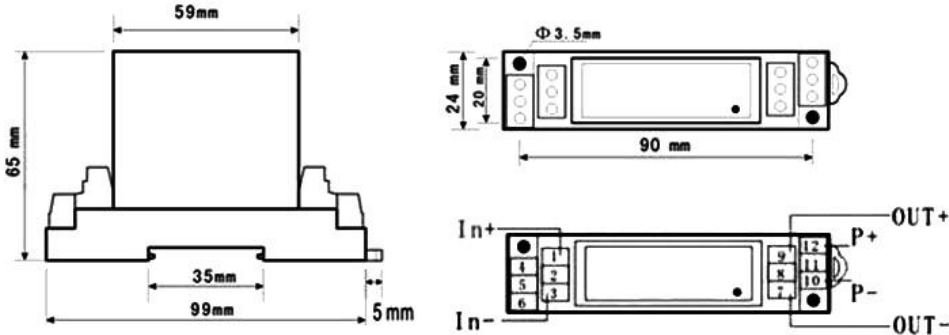
2.1 Specification:



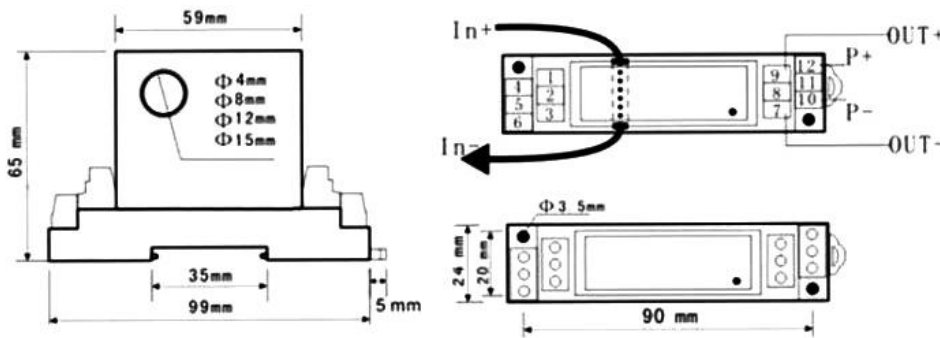
Model	ATO-CURTS-DZIA	ATO-CURTS-DZIB	ATO-CURTS-DZIC	ATO-CURTS-DZID
Measuring range	DC 0-10A	DC 0-150A	DC 0-400A	DC 0-800A
Output signal	4-20mA, 0-20mA, 1-5V, 0-5V	4-20mA, 0-20mA, 1-5V, 0-5V	4-20mA, 0-20mA, 1-5V, 0-5V	4-20mA, 0-20mA, 1-5V, 0-5V
Power supply	DC 24V, DC 12V, AC 220V	DC 24V, DC 12V, AC 220V, AC 110V	DC 24V, DC 12V, AC 220V, AC 110V	DC 24V, DC 12V, AC 220V, AC 110V
Accuracy	0.5%F.S.	0.5%F.S.	0.5%F.S.	0.5%F.S.
Isolation voltage	3KV/50Hz/1min	3KV/50Hz/1min	3KV/50Hz/1min	3KV/50Hz/1min
Offset voltage	≤10mV	≤10mV	≤10mV	≤10mV
Temperature drift	≤100PPM/°C	≤100PPM/°C	≤100PPM/°C	≤100PPM/°C
Frequency bandwidth	20~50KHz	20~50KHz	20~50KHz	20~50KHz
Current consumption	<5mA	<5mA	<5mA	<5mA
Load capacity	Voltage output: 5mA, current output: 6V	Voltage output: 5mA, current output: 6V	Voltage output: 5mA, current output: 6V	Voltage output: 5mA, current output: 6V
Response time	Photoelectric isolation: ≤15μs, modulation and demodulation: <150ms	<250ms	<250ms	<250ms
Overload capacity	10 times nominal input	30 times nominal input	30 times nominal input	30 times nominal input
Work temperature	-10~+70°C	-10~+70°C	-10~+70°C	-10~+70°C
Storage temperature	-25~+85°C	-25~+85°C	-25~+85°C	-25~+85°C
Hole diameter	No hole	4mm, 8mm, 12mm, 15mm	22mm	35mm, 45mm, 55mm, 72mm
Installation	DIN rail and screw fixation	DIN rail and screw fixation	DIN rail and screw fixation	DIN rail and screw fixation

2.2 Dimension and wiring diagram:

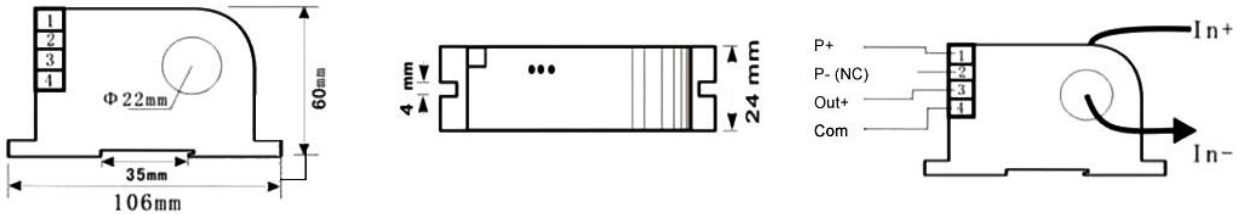
2.2.1 ATO-CURTS-DJIA & ATO-CURTS-DZIA



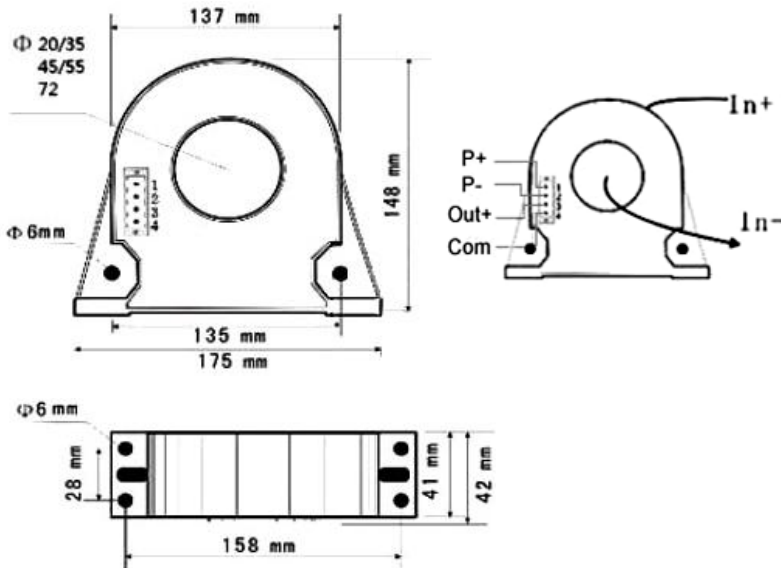
2.2.2 ATO-CURTS-DJIB & ATO-CURTS-DZIB



2.2.3 ATO-CURTS-DJIC & ATO-CURTS-DZIC



2.2.4 ATO-CURTS-DJID & ATO-CURTS-DZID



★Hole diameter and current reference list:

Hole diameter	Current
No hole	0-10A
4mm	0-20A ~ 0-30A
8mm	0-30A ~ 0-50A
12mm	0-50A ~ 0-100A
15mm	0-100A ~ 0-150A
22mm	0-150A ~ 0-350A
35mm	0-350A ~ 0-800A
45mm	0-800A
55mm	0-800A

3. AC/DC Current Sensor

SKU: ATO-CUS-ACDC5

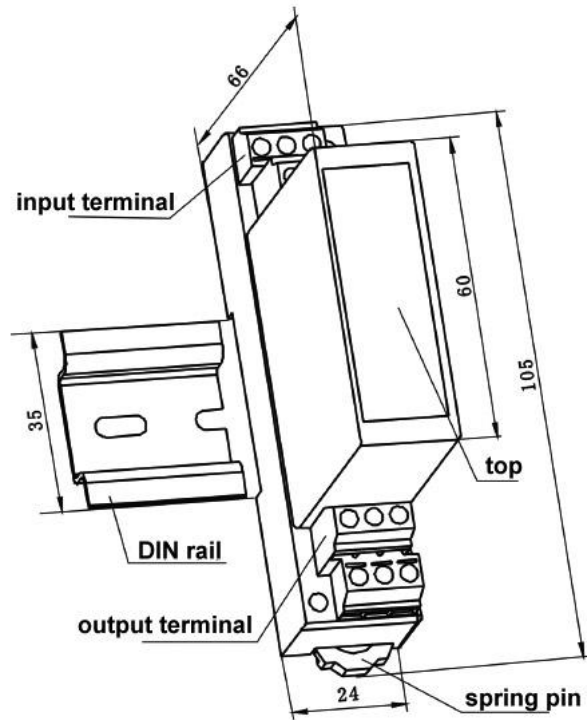
AC/DC current sensors are universal current sensor, with a low current measuring range from milliamp current 0.1mA to 5A. AC/DC current sensors adopt linear photoelectric isolation principle, with fast response, 0.5%FS high accuracy, good stability, small size, light weight, input current terminal connection and DIN rail installation. Isolated current transducers are widely used for AC sine wave current or DC bidirectional current measurement.

3.1 Specification:



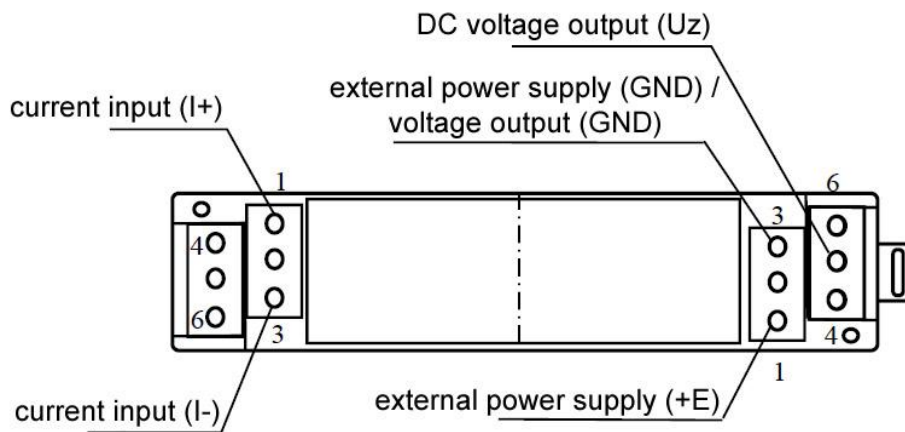
Model	ATO-WBI122S01	ATO-WBI124S01
Measuring range	AC/DC 0-0.1mA ~ 0-5A	AC/DC 0-0.1mA ~ 0-5A
Allowed input over-current	10times of nominal input current, 1s in duration, interval time 300s, repeat five times	10times of nominal input current, 1s in duration, interval time 300s, repeat five times
Linear measurement range	0% ~ 120% measuring range	0% ~ 120% measuring range
Frequency range	±DC/20Hz ~ 10kHz	±DC/20Hz ~ 10kHz
Input impedance	Ri=50mV/Ix (Ix is the current to be measured.)	Ri=50mV/Ix (Ix is the current to be measured.)
Output signal	DC 0-5V, 0-10V	DC 4-20mA, 0-20mA
Power supply	DC 24V, DC 12V	DC 24V, DC 12V
Accuracy	0.5%F.S.	0.5%F.S.
Load capacity	5mA	6V
Response time	≤250ms	≤250ms
Temperature drift	250*10-6/°C	250*10-6/°C
Quiescent current	≤34mA	≤34mA (0-20mA output), ≤38mA (4-20mA output)
Isolation features	Isolation between input and output, output terminals provides power supply	Isolation between input and output, output terminals provides power supply
Isolation voltage	DC 1.5kV, 1min	DC 1.5kV, 1min
Work temperature	-25~+70°C	-25~+70°C
Protection class	IP20	IP20
Mean time between failures	>50000h	>50000h
Housing material	Fire-retardant ABS	Fire-retardant ABS
Wiring	Terminal connection	Terminal connection
Installation	DIN rail (NS35/7.5, NS35/15, EN50022), or screw (M3) fixation	DIN rail (NS35/7.5, NS35/15, EN50022), or screw (M3) fixation

3.2 Dimension (unit: mm):

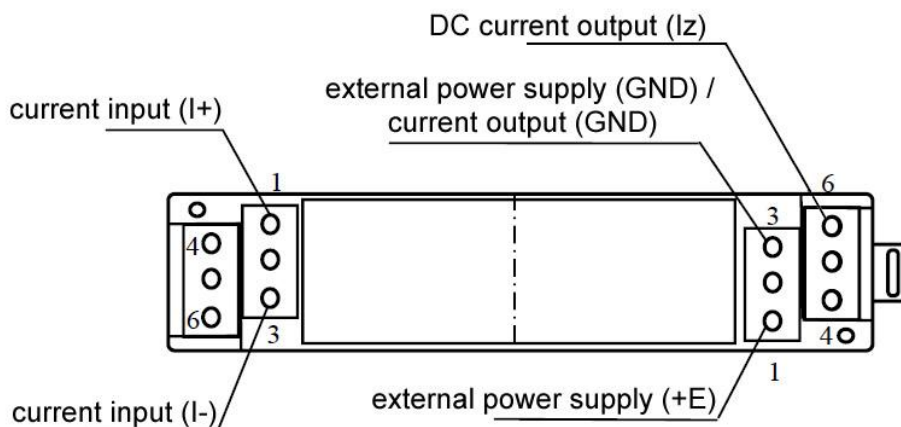


3.3 Wiring diagram:

3.3.1 ATO-WBI122S01



3.3.2 ATO-WBI124S01



4. Hall Effect Current Sensor (Split-core)

4.1 SKU: ATO-CUS-ACDC1500

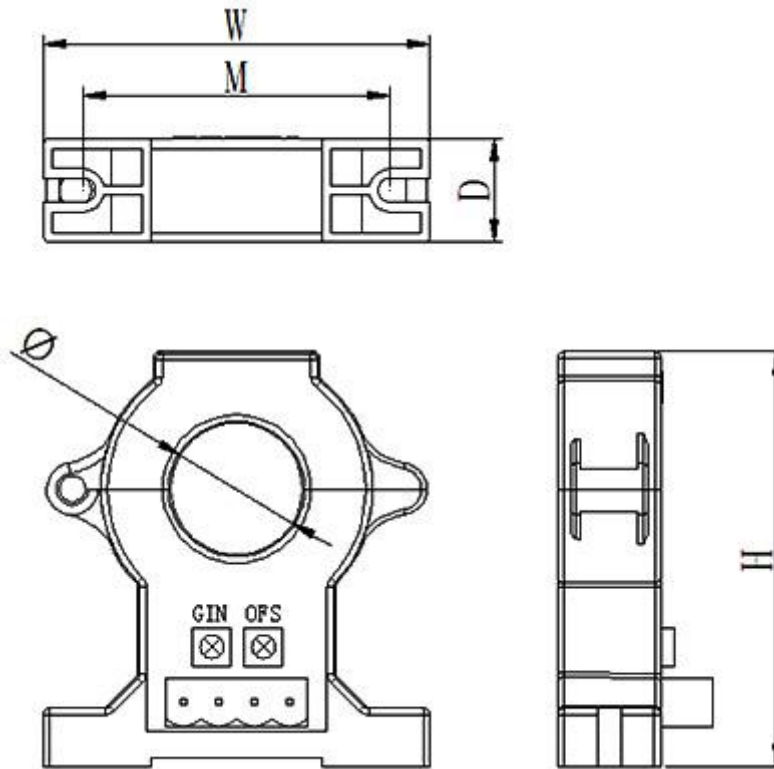
Open-loop Hall effect current sensors are AC/DC universal current sensors, with round split-core structure, AC/DC 0-1500A measuring range, 5 μ s fast response time, 1.0%FS accuracy, 0-5V output signal, \pm 15V power supply and screw fixed installation. Hall current transducers are widely used for AC and DC current monitoring, system signal acquisition and feedback control.

4.1.1 Specification:



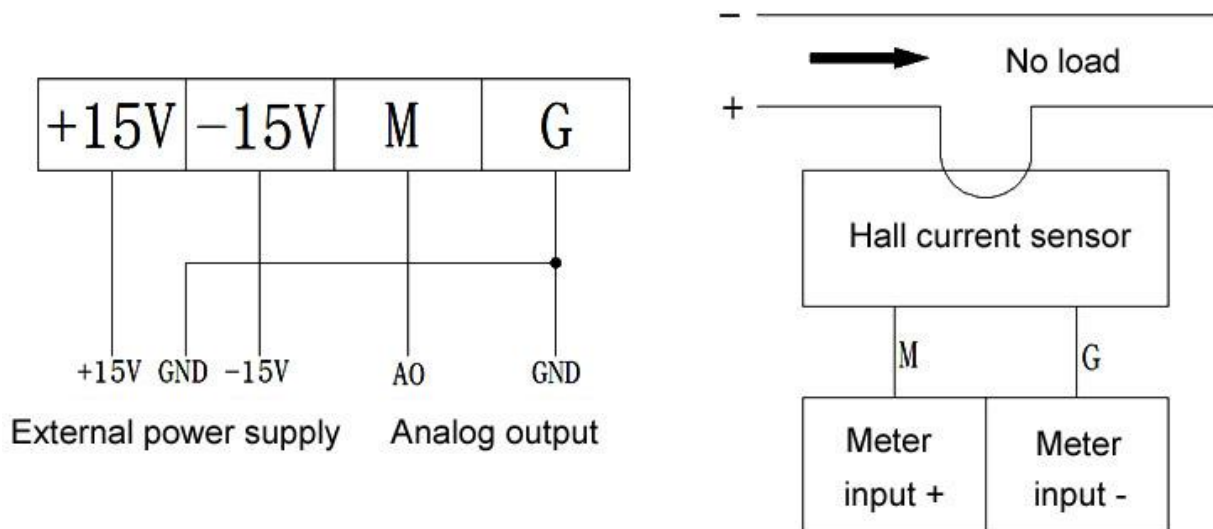
Model	ATO-AHKC-EKA	ATO-AHKC-EKB	ATO-AHKC-EKC
Hole diameter	20mm	40mm	55mm
Measuring range	AC/DC 0-50A ~ 0-500A	AC/DC 0-200A ~ 0-1000A	AC/DC 0-500A ~ 0-1500A
Output signal	0-5VDC	0-5VDC	0-5VDC
Zero offset voltage	\pm 20mV	\pm 20mV	\pm 20mV
Offset voltage drift	\leq \pm 1.0mV/ $^{\circ}$ C	\leq \pm 1.0mV/ $^{\circ}$ C	\leq \pm 1.0mV/ $^{\circ}$ C
Linearity	\leq 0.2%FS	\leq 0.2%FS	\leq 0.2%FS
Power supply	\pm 15VDC	\pm 15VDC	\pm 15VDC
Accuracy	1.0%F.S.	1.0%F.S.	1.0%F.S.
Bandwidth	0~20kHz	0~20kHz	0~20kHz
Response time	\leq 5 μ s	\leq 5 μ s	\leq 5 μ s
Withstand voltage	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)
Work temperature	-25~+70 $^{\circ}$ C	-25~+70 $^{\circ}$ C	-25~+70 $^{\circ}$ C
Storage temperature	-40~+85 $^{\circ}$ C	-40~+85 $^{\circ}$ C	-40~+85 $^{\circ}$ C
Humidity	\leq 95%RH (no dew formation, no corrosive gas)	\leq 95%RH (no dew formation, no corrosive gas)	\leq 95%RH (no dew formation, no corrosive gas)
Elevation	\leq 3500m	\leq 3500m	\leq 3500m
Measuring method	Split-core type	Split-core type	Split-core type
Installation	Screw fixation	Screw fixation	Screw fixation

4.1.2 Dimension:



Model	Dimension (mm)				
	W	H	D	Φ (Hole diameter)	M (Mounting)
ATO-AHKC-EKA	60	64	16	20	47
ATO-AHKC-EKB	100	102	24	40	80
ATO-AHKC-EKC	115	110	27	55	95.5

4.1.3 Wiring diagram:



4. Hall Effect Current Sensor (Split-core)

4.2 SKU: ATO-CUS-AC1500

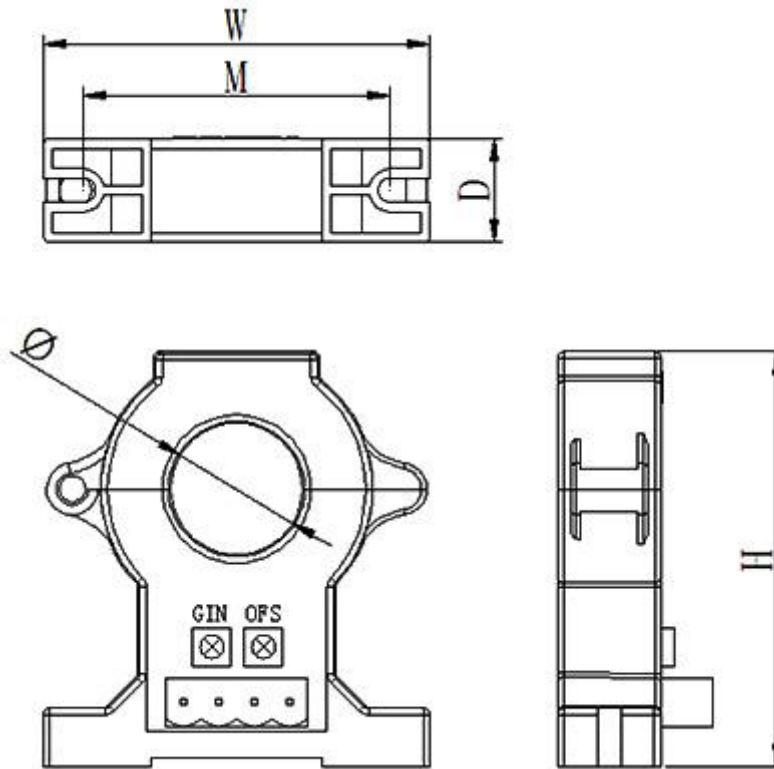
Open-loop Hall effect current sensors have round split-core structure, optional hole diameter 20mm/40mm/60mm, AC 0-1500A measuring range, 1ms fast response time, 1.0%FS accuracy, 4-20mA output signal, optional power supply DC 24V/12V and screw fixed installation. Split-core Hall current sensors are widely used for AC current isolation and conversion, system signal acquisition and feedback control.

4.2.1 Specification:



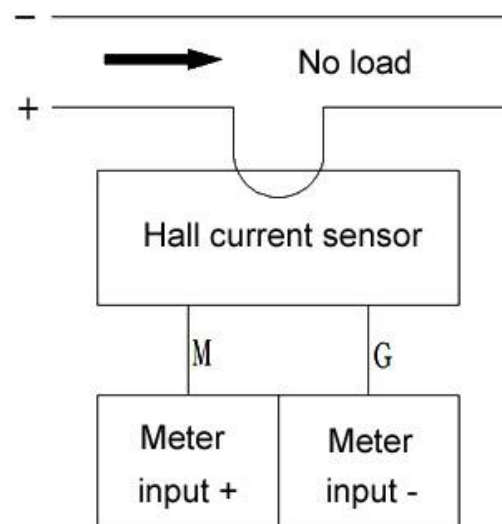
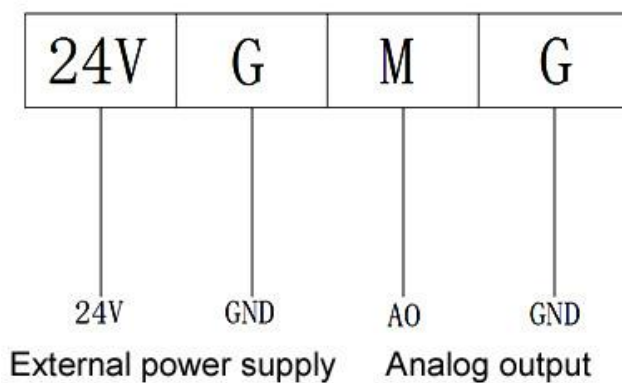
Model	ATO-AHKC-EKDA	ATO-AHKC-EKBDA	ATO-AHKC-EKCDA
Hole diameter	20mm	40mm	55mm
Measuring range	AC 0-50A ~ 0-500A	AC 0-200A ~ 0-1000A	AC 0-500A ~ 0-1500A
Output signal	DC 4-20mA	DC 4-20mA	DC 4-20mA
Zero offset current	±0.05mA	±0.05mA	±0.05mA
Offset current drift	≤±0.04mA/°C	≤±0.04mA/°C	≤±0.04mA/°C
Linearity	≤0.2%FS	≤0.2%FS	≤0.2%FS
Power supply	DC 24V or DC 12V	DC 24V or DC 12V	DC 24V or DC 12V
Accuracy	1.0%F.S.	1.0%F.S.	1.0%F.S.
Response time	≤1ms	≤1ms	≤1ms
Withstand voltage	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)
Work temperature	-25~+70°C	-25~+70°C	-25~+70°C
Storage temperature	-40~+85°C	-40~+85°C	-40~+85°C
Humidity	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)
Elevation	≤3500m	≤3500m	≤3500m
Measuring method	Split-core type	Split-core type	Split-core type
Installation	Screw fixation	Screw fixation	Screw fixation

4.2.2 Dimension:



Model	Dimension (mm)				
	W	H	D	Φ (Hole diameter)	M (Mounting)
ATO-AHKC-EKDA	60	64	16	20	47
ATO-AHKC-EKBDA	100	102	24	40	80
ATO-AHKC-EKCDA	115	110	27	55	95.5

4.2.3 Wiring diagram:



4. Hall Effect Current Sensor (Split-core)

4.3 SKU: ATO-CUS-DC1500

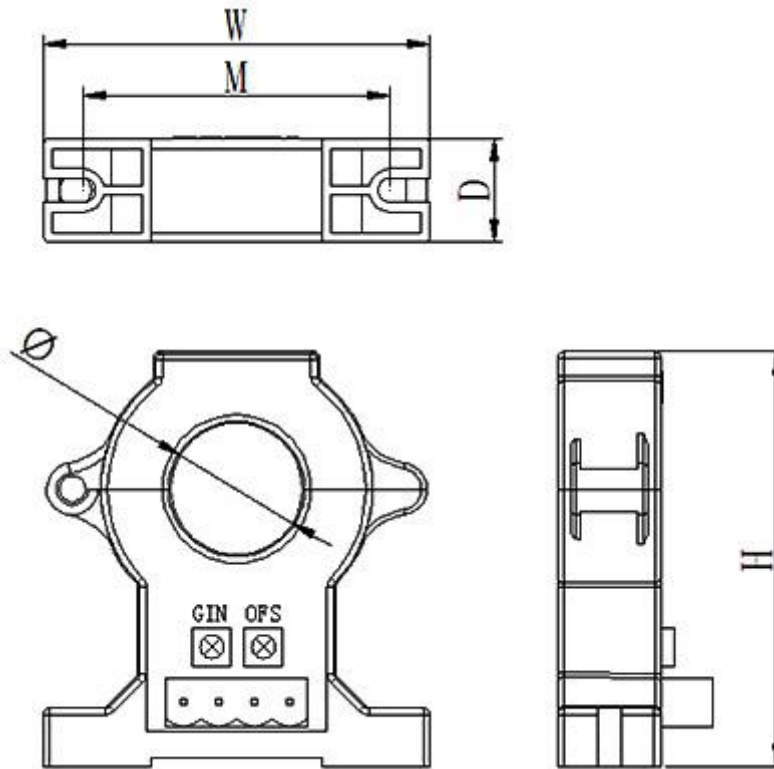
Open-loop Hall effect current sensors have round split-core structure, optional hole diameter 20mm/40mm/60mm, DC 0-1500A measuring range, 4-20mA output signal, optional power supply DC 24V/12V, 1.0%FS accuracy, 1ms fast response time, -25~+70°C working temperature and screw fixation installation. Split-core Hall effect current sensors are widely used for DC current isolation and conversion, battery/inverter power supply/UPS system current signal acquisition and feedback control.

4.3.1 Specification:



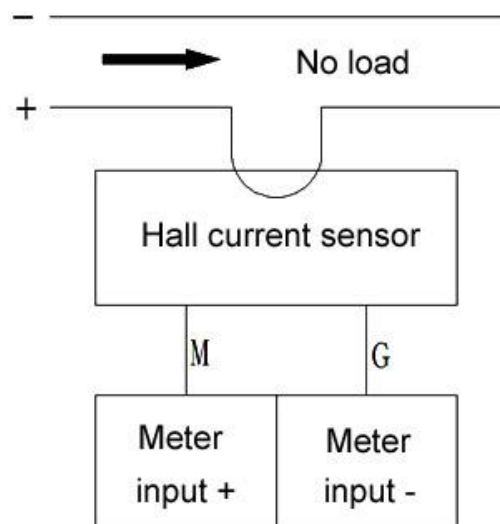
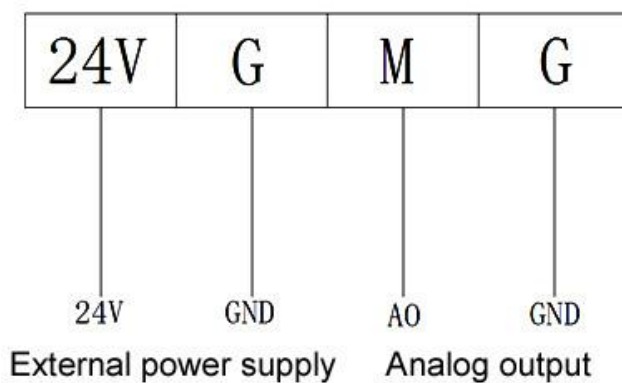
Model	ATO-AHKC-EKAA	ATO-AHKC-EKBA	ATO-AHKC-EKCA
Hole diameter	20mm	40mm	55mm
Measuring range	DC 0-50A ~ 0-500A	DC 0-200A ~ 0-1000A	DC 0-500A ~ 0-1500A
Output signal	DC 4-20mA	DC 4-20mA	DC 4-20mA
Zero offset current	±0.05mA	±0.05mA	±0.05mA
Offset current drift	≤±0.04mA/°C	≤±0.04mA/°C	≤±0.04mA/°C
Linearity	≤0.2%FS	≤0.2%FS	≤0.2%FS
Power supply	DC 24V or DC 12V	DC 24V or DC 12V	DC 24V or DC 12V
Accuracy	1.0%F.S.	1.0%F.S.	1.0%F.S.
Response time	≤1ms	≤1ms	≤1ms
Withstand voltage	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)
Work temperature	-25~+70°C	-25~+70°C	-25~+70°C
Storage temperature	-40~+85°C	-40~+85°C	-40~+85°C
Humidity	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)
Elevation	≤3500m	≤3500m	≤3500m
Measuring method	Split-core type	Split-core type	Split-core type
Installation	Screw fixation	Screw fixation	Screw fixation

4.3.2 Dimension:



Model	Dimension (mm)				
	W	H	D	Φ (Hole diameter)	M (Mounting)
ATO-AHKC-EKAA	60	64	16	20	47
ATO-AHKC-EKBA	100	102	24	40	80
ATO-AHKC-EKCA	115	110	27	55	95.5

4.3.3 Wiring diagram:



4. Hall Effect Current Sensor (Split-core)

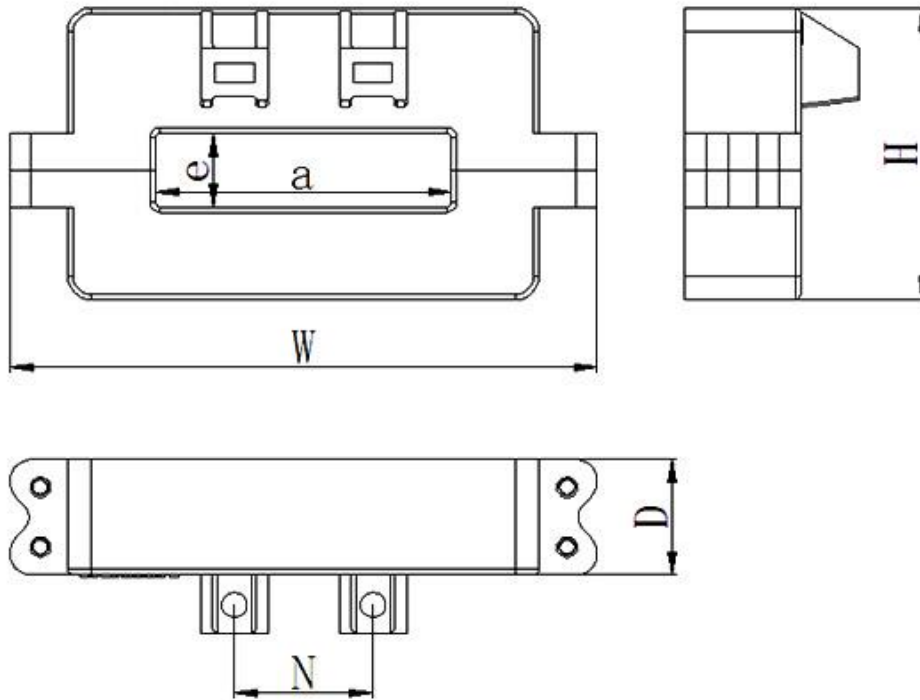
4.4 SKU: ATO-CUS-ACDC20000

Open-loop Hall effect current sensors are AC/DC universal current sensors, with square split-core structure, AC/DC 0-20000A measuring range, 5 μ s fast response time, 1.0%FS accuracy, DC 0-5V output signal, \pm 15V power supply and screw fixed installation. Hall effect current transducers are widely used for AC and DC current monitoring, servo control system or solar power management system current signal acquisition and feedback control.



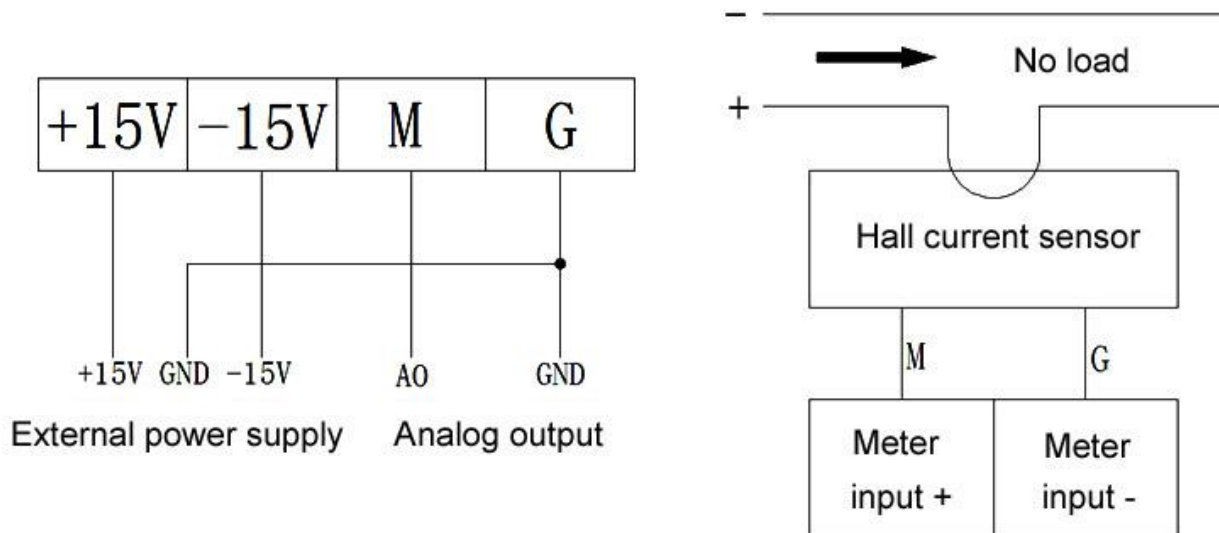
Model	ATO-AHKC-K	ATO-AHKC-H	ATO-AHKC-KA	ATO-AHKC-HB
Hole size	64*16mm	82*32mm	104*36mm	132*52mm
Measuring range	AC/DC 0-400A ~ 0-2000A	AC/DC 0-500A ~ 0-3000A	AC/DC 0-500A ~ 0-5000A	AC/DC 0-2000A ~ 0-20000A
Output signal	0-5VDC	0-5VDC	0-5VDC	0-5VDC
Zero offset voltage	\pm 20mV	\pm 20mV	\pm 20mV	\pm 20mV
Offset voltage drift	\leq \pm 1.0mV/ $^{\circ}$ C	\leq \pm 1.0mV/ $^{\circ}$ C	\leq \pm 1.0mV/ $^{\circ}$ C	\leq \pm 1.0mV/ $^{\circ}$ C
Linearity	\leq 0.2%FS	\leq 0.2%FS	\leq 0.2%FS	\leq 0.2%FS
Power supply	\pm 15VDC	\pm 15VDC	\pm 15VDC	\pm 15VDC
Accuracy	1.0%F.S.	1.0%F.S.	1.0%F.S.	1.0%F.S.
Bandwidth	0~20kHz	0~20kHz	0~20kHz	0~20kHz
Response time	\leq 5 μ s	\leq 5 μ s	\leq 5 μ s	\leq 5 μ s
Withstand voltage	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)
Work temperature	-25~+70 $^{\circ}$ C	-25~+70 $^{\circ}$ C	-25~+70 $^{\circ}$ C	-25~+70 $^{\circ}$ C
Storage temperature	-40~+85 $^{\circ}$ C	-40~+85 $^{\circ}$ C	-40~+85 $^{\circ}$ C	-40~+85 $^{\circ}$ C
Humidity	\leq 95%RH (no dew formation, no corrosive gas)	\leq 95%RH (no dew formation, no corrosive gas)	\leq 95%RH (no dew formation, no corrosive gas)	\leq 95%RH (no dew formation, no corrosive gas)
Elevation	\leq 3500m	\leq 3500m	\leq 3500m	\leq 3500m
Measuring method	Split-core type	Split-core type	Split-core type	Split-core type
Installation	Screw fixation	Screw fixation	Screw fixation	Screw fixation

4.4.2 Dimension:



Model	Dimension (mm)					
	W	H	D	a	e	N (Mounting)
ATO-AHKC-K	127	63	25	64	16	30
ATO-AHKC-H	149	79	25	82	32	46
ATO-AHKC-KA	176	95.5	29	104	36	60
ATO-AHKC-HB	204	111.5	29	132	52	48*2

4.4.3 Wiring diagram:



4. Hall Effect Current Sensor (Split-core)

4.5 SKU: ATO-CUS-AC20000

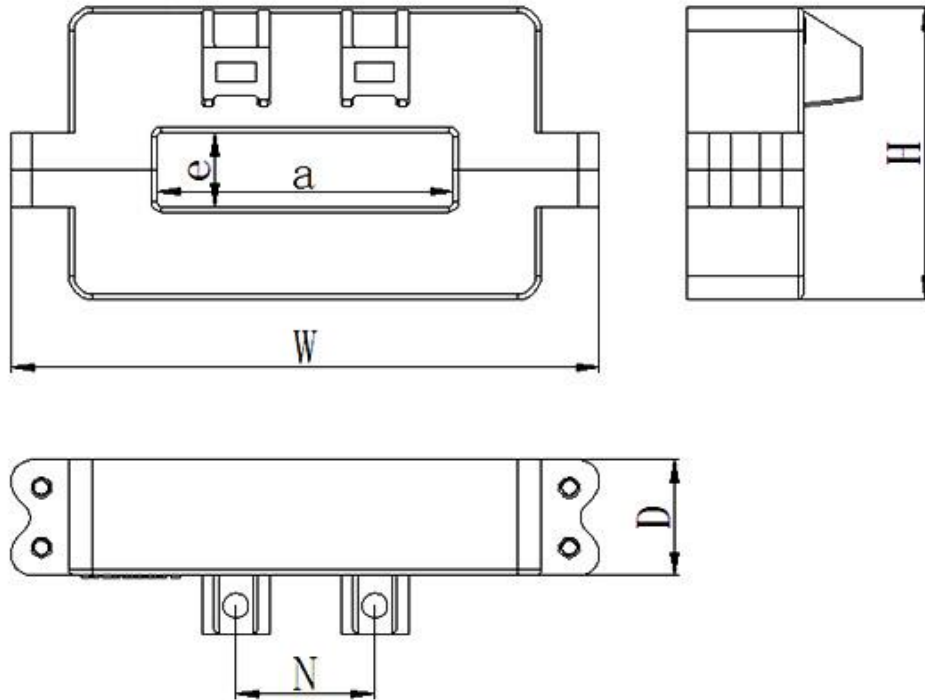
Open-loop Hall effect current sensors have square split-core structure, optional hole size 64*16mm/132*52mm, AC 0-20000A measuring range, 1ms fast response time, 1.0%FS accuracy, 4-20mA output signal, optional power supply 24VDC/12VDC and screw fixed installation. Split-core Hall current sensor can be used for electroplating, welding and VFD control system. The AC current signal is isolated and transmitted to standard DC 4-20mA signal, and can be collected directly by AD/DSP/PLC/current meters.

4.5.1 Specification:



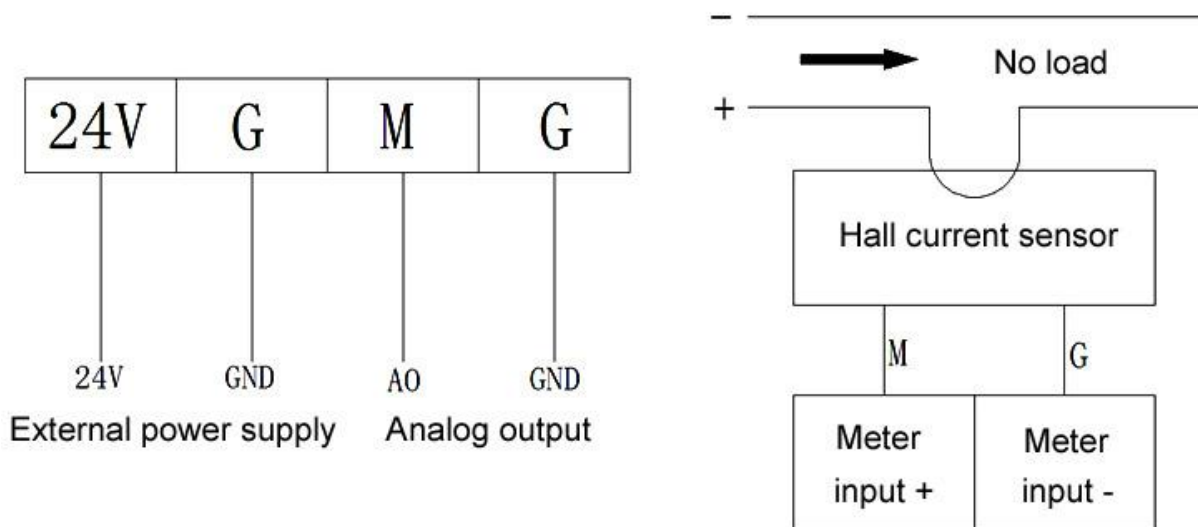
Model	ATO-AHKC-KDA	ATO-AHKC-HBDA
Hole size	64*16mm	132*52mm
Measuring range	AC 0-400A ~ 0-2000A	AC 0-2000A ~ 0-20000A
Output signal	DC 4-20mA	DC 4-20mA
Zero offset current	±0.05mA	±0.05mA
Offset current drift	≤±0.04mA/°C	≤±0.04mA/°C
Linearity	≤0.2%FS	≤0.2%FS
Power supply	DC 24V or DC 12V	DC 24V or DC 12V
Accuracy	1.0%F.S.	1.0%F.S.
Response time	≤1ms	≤1ms
Withstand voltage	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)
Work temperature	-25~+70°C	-25~+70°C
Storage temperature	-40~+85°C	-40~+85°C
Humidity	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)
Elevation	≤3500m	≤3500m
Measuring method	Split-core type	Split-core type
Installation	Screw fixation	Screw fixation

4.5.2 Dimension:



Model	Dimension (mm)					
	W	H	D	a	e	N (Mounting)
ATO-AHKC-KDA	127	63	25	64	16	30
ATO-AHKC-HBDA	204	111.5	29	132	52	48*2

4.5.3 Wiring diagram:



4. Hall Effect Current Sensor (Split-core)

4.6 SKU: ATO-CUS-DC20000

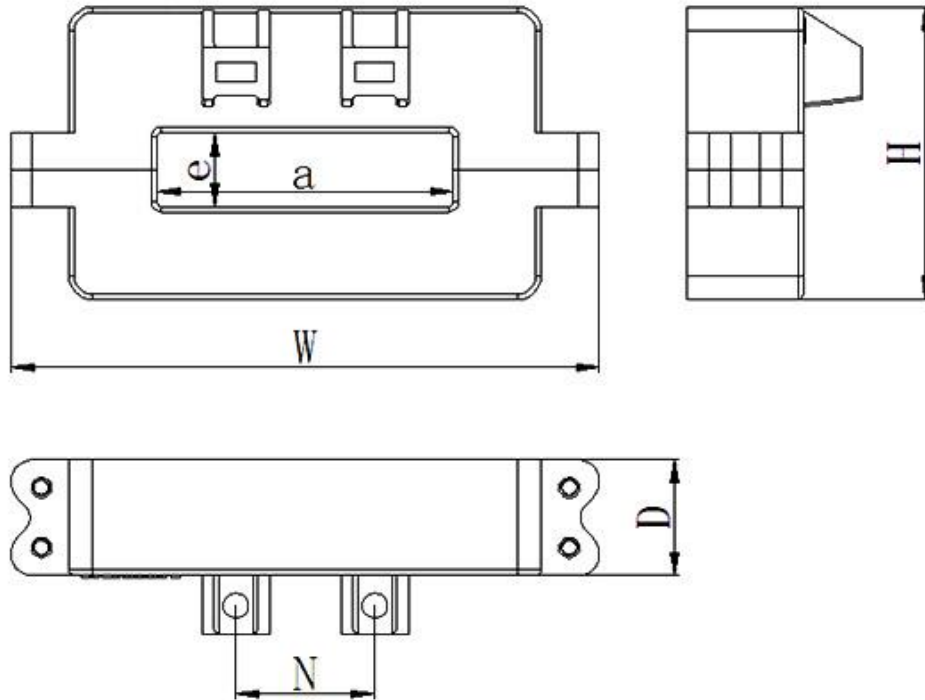
Open-loop Hall effect current transducers have square split-core structure, optional hole size 64*16mm/132*52mm, DC 0-20000A measuring range, 1ms fast response time, 1.0%FS accuracy, 4-20mA output signal, optional power supply 24VDC/12VDC and screw fixed installation. Split-core Hall current sensors can isolate and convert current signal of inverter power supply or DC motor driver, and send to AD/DSP/PLC/current meters, to achieve system signal acquisition and feedback control.

4.6.1 Specification:



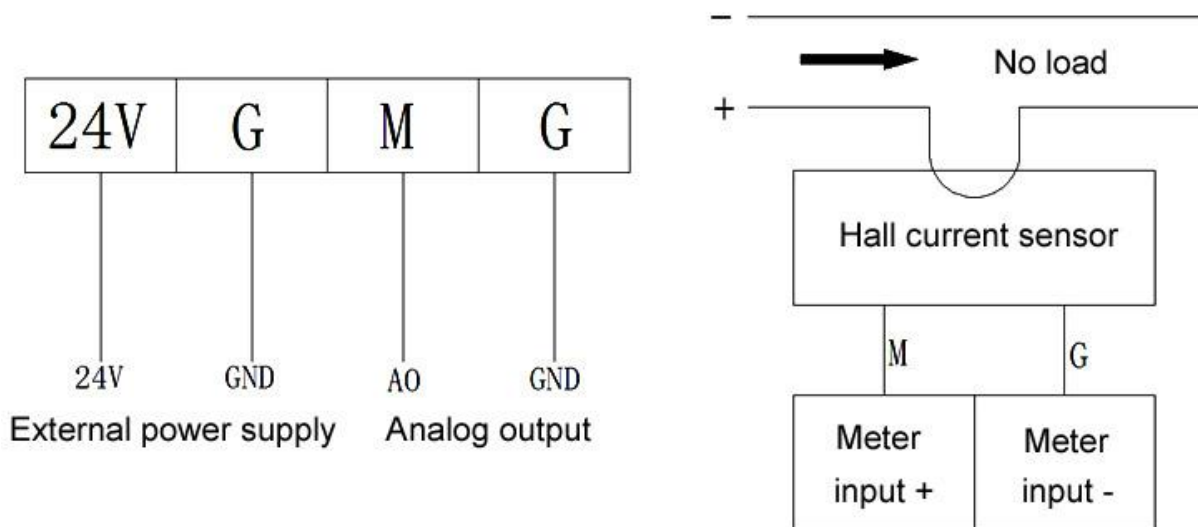
Model	ATO-AHKC-KAA	ATO-AHKC-HBAA
Hole size	64*16mm	132*52mm
Measuring range	DC 0-400A ~ 0-2000A	DC 0-2000A ~ 0-20000A
Output signal	DC 4-20mA	DC 4-20mA
Zero offset current	±0.05mA	±0.05mA
Offset current drift	≤±0.04mA/°C	≤±0.04mA/°C
Linearity	≤0.2%FS	≤0.2%FS
Power supply	DC 24V or DC 12V	DC 24V or DC 12V
Accuracy	1.0%F.S.	1.0%F.S.
Response time	≤1ms	≤1ms
Withstand voltage	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)
Work temperature	-25~+70°C	-25~+70°C
Storage temperature	-40~+85°C	-40~+85°C
Humidity	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)
Elevation	≤3500m	≤3500m
Measuring method	Split-core type	Split-core type
Installation	Screw fixation	Screw fixation

4.6.2 Dimension:



Model	Dimension (mm)					
	W	H	D	a	e	N (Mounting)
ATO-AHKC-KAA	127	63	25	64	16	30
ATO-AHKC-HBAA	204	111.5	29	132	52	48*2

4.6.3 Wiring diagram:



5. Hall Effect Current Sensor (Through-hole)

5.1 SKU: ATO-CUS-ACDC2000

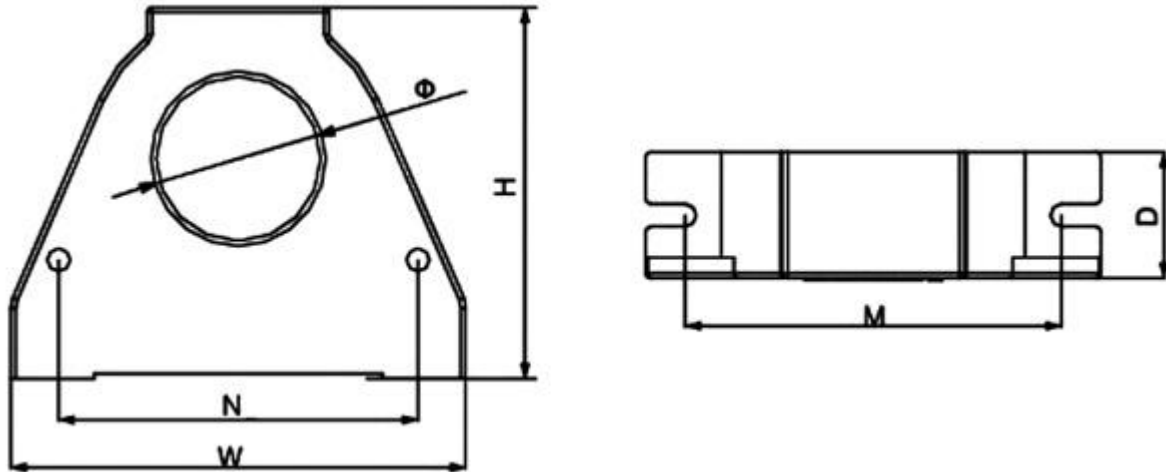
Open-loop Hall effect current sensors are AC/DC universal current sensors, round through-hole design, AC/DC 0-2000A measuring range, 1.0%FS accuracy, optional 0-4V/0-5V output signal, ±15V power supply, 5us fast response time, screw fixation installation. Hall AC/DC current transducers are widely used for AC/DC current measurement of VFD, DC motor drive and servo control system.

5.1.1 Specification:



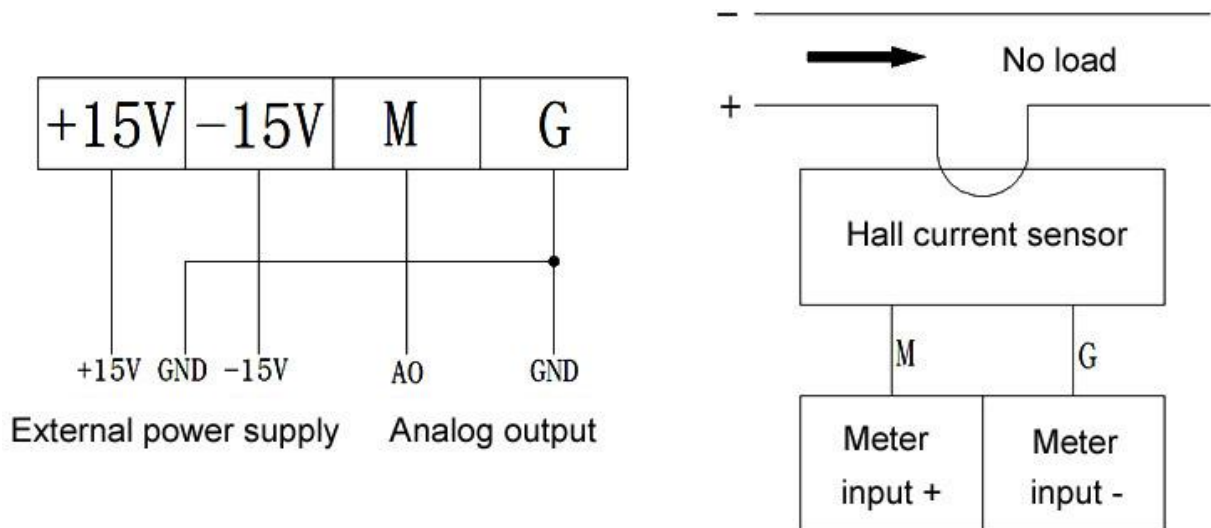
Model	ATO-AHKC-E	ATO-AHKC-LT	ATO-AHKC-EA	ATO-AHKC-EB
Hole diameter	20mm	32.5mm	40mm	60mm
Measuring range	AC/DC 0-50A ~ 0-500A	AC/DC 0-100A ~ 0-800A	AC/DC 0-200A ~ 0-2000A	AC/DC 0-200A ~ 0-2000A
Output signal	0-5VDC or 0-4VDC	0-5VDC or 0-4VDC	0-5VDC or 0-4VDC	0-5VDC or 0-4VDC
Zero offset voltage	±20mV	±20mV	±20mV	±20mV
Offset voltage drift	≤±1.0mV/°C	≤±1.0mV/°C	≤±1.0mV/°C	≤±1.0mV/°C
Linearity	≤0.2%FS	≤0.2%FS	≤0.2%FS	≤0.2%FS
Power supply	±15VDC	±15VDC	±15VDC	±15VDC
Accuracy	1.0%F.S.	1.0%F.S.	1.0%F.S.	1.0%F.S.
Bandwidth	0~20kHz	0~20kHz	0~20kHz	0~20kHz
Response time	≤5μs	≤5μs	≤5μs	≤5μs
Withstand voltage	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)
Work temperature	-25~+70°C	-25~+70°C	-25~+70°C	-25~+70°C
Storage temperature	-40~+85°C	-40~+85°C	-40~+85°C	-40~+85°C
Humidity	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)	≤95%RH (no dew formation, no corrosive gas)
Elevation	≤3500m	≤3500m	≤3500m	≤3500m
Measuring method	Through-hole type	Through-hole type	Through-hole type	Through-hole type
Installation	Screw fixation	Screw fixation	Screw fixation	Screw fixation

5.1.2 Dimension:



Model	Dimension (mm)					
	W	H	D	Φ (Hole diameter)	M (Mounting)	N (Mounting)
ATO-AHKC-E	53	72	16	21	47	-
ATO-AHKC-LT	90	73.5	25	32.5	74.5	71
ATO-AHKC-EA	100	108	30	40	78	-
ATO-AHKC-EB	120	112	30	60	98	-

5.1.3 Wiring diagram:



5. Hall Effect Current Sensor (Through-hole)

5.2 SKU: ATO-CUS-ACDC2000S

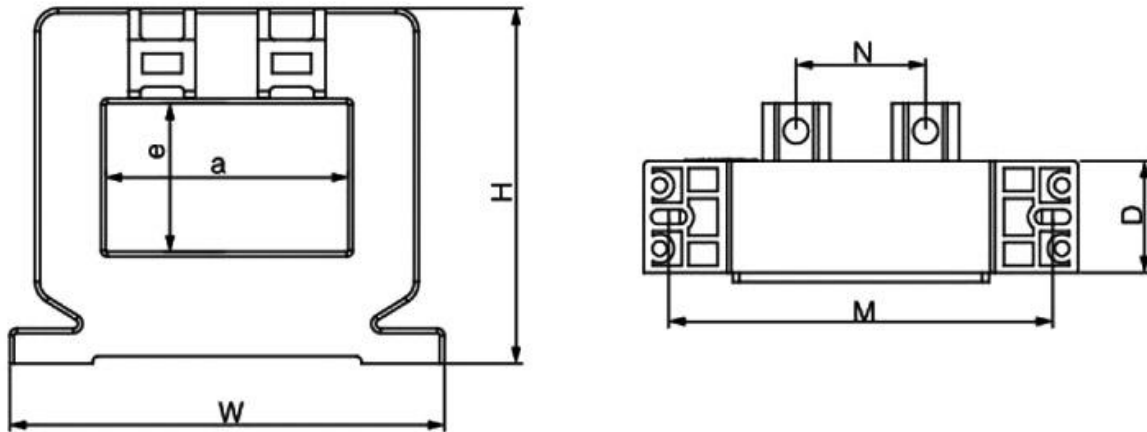
Open-loop Hall effect current sensors are AC/DC universal current sensors, square through-hole design, AC/DC 0-2000A measuring range, 1.0%FS accuracy, optional 0-4V/0-5V output signal, $\pm 15V$ power supply, 5 μs fast response time, screw fixation installation. Hall effect AC/DC current sensors are widely used for AC/DC current measurement of inverter power supply, UPS, DC power supply cabinet and solar power management system.

5.2.1 Specification:



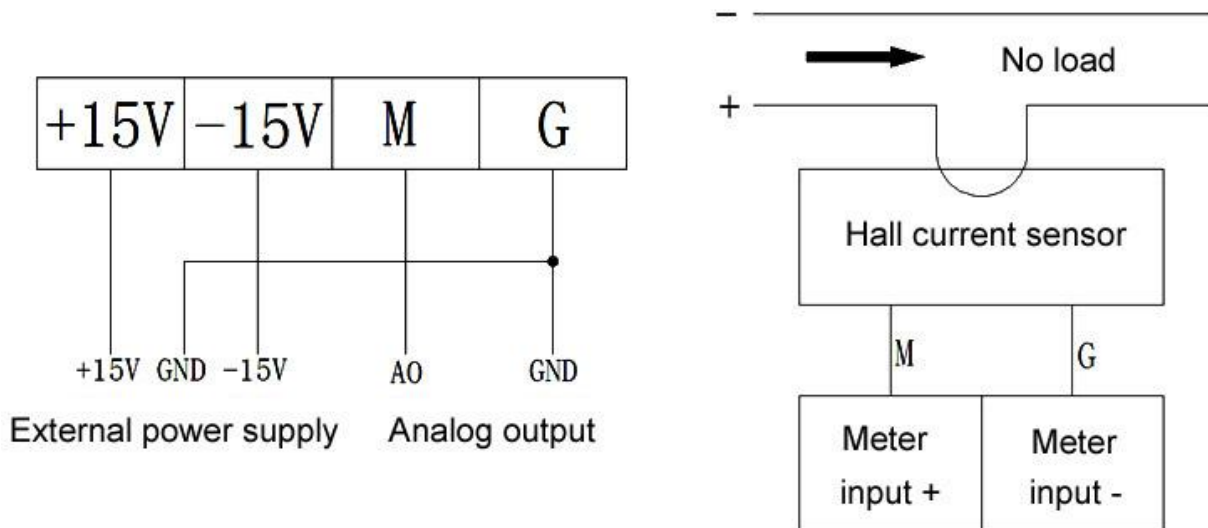
Model	ATO-AHKC-BS	ATO-AHKC-F	ATO-AHKC-FA	ATO-AHKC-HAT
Hole size	20.5*10.5mm	43*13mm	52*15mm	52*32mm
Measuring range	AC/DC 0-50A ~ 0-500A	AC/DC 0-200A ~ 0-1000A	AC/DC 0-200A ~ 0-1500A	AC/DC 0-400A ~ 0-2000A
Output signal	0-5VDC or 0-4VDC	0-5VDC or 0-4VDC	0-5VDC or 0-4VDC	0-5VDC or 0-4VDC
Zero offset voltage	$\pm 20mV$	$\pm 20mV$	$\pm 20mV$	$\pm 20mV$
Offset voltage drift	$\leq \pm 1.0mV/^\circ C$	$\leq \pm 1.0mV/^\circ C$	$\leq \pm 1.0mV/^\circ C$	$\leq \pm 1.0mV/^\circ C$
Linearity	$\leq 0.2\%FS$	$\leq 0.2\%FS$	$\leq 0.2\%FS$	$\leq 0.2\%FS$
Power supply	$\pm 15VDC$	$\pm 15VDC$	$\pm 15VDC$	$\pm 15VDC$
Accuracy	1.0%F.S.	1.0%F.S.	1.0%F.S.	1.0%F.S.
Bandwidth	0~20kHz	0~20kHz	0~20kHz	0~20kHz
Response time	$\leq 5\mu s$	$\leq 5\mu s$	$\leq 5\mu s$	$\leq 5\mu s$
Withstand voltage	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)	AC 2500V (between input, output and power supply)
Work temperature	-25~+70 $^\circ C$	-25~+70 $^\circ C$	-25~+70 $^\circ C$	-25~+70 $^\circ C$
Storage temperature	-40~+85 $^\circ C$	-40~+85 $^\circ C$	-40~+85 $^\circ C$	-40~+85 $^\circ C$
Humidity	$\leq 95\%RH$ (no dew formation, no corrosive gas)	$\leq 95\%RH$ (no dew formation, no corrosive gas)	$\leq 95\%RH$ (no dew formation, no corrosive gas)	$\leq 95\%RH$ (no dew formation, no corrosive gas)
Elevation	$\leq 3500m$	$\leq 3500m$	$\leq 3500m$	$\leq 3500m$
Measuring method	Through-hole type	Through-hole type	Through-hole type	Through-hole type
Installation	Screw fixation	Screw fixation	Screw fixation	Screw fixation

5.2.2 Dimension:



Model	Dimension (mm)						
	W	H	D	a	e	M (Mounting)	N (Mounting)
ATO-AHKC-BS	43	32.5	19	20.5	10.5	-	-
ATO-AHKC-F	74	57	22	43	13	-	22
ATO-AHKC-FA	94	60.5	26.5	52	15	83	28
ATO-AHKC-HAT	94	76.5	24	52.5	32	83	28

5.2.3 Wiring diagram:



6. Three Phase AC Current Sensor

SKU: ATO-CUS-3AC80

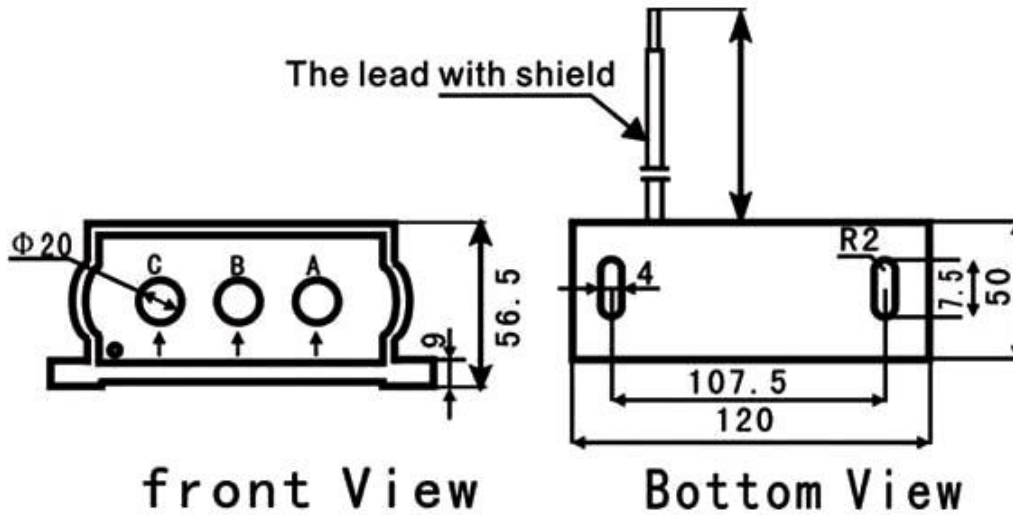
AC current transducer is a special current sensor for 3 phase AC current measurement. Three phase current transducer adopts epoxy resin pouring sealant to ensure the stability of components, with 0.5%FS accuracy, three output signals 4-20mA/0-20mA/0-5V/0-10V, power supply DC 5V/12V/24V, fixed installation. 3 phase AC current transducer is widely used for real-time monitoring of power grid AC current.

6.1 Specification:



Model	ATO-HKT27-3I
Measuring range	3 phase AC 0-0.5A ~ 0-80A
Output signal	DC 4-20mA, DC 0-20mA, DC 0-5V, DC 0-10V
Power supply	DC 12V, DC 24V
Accuracy	0.5%FS
Linearity	0.1%FS
Isolation voltage	3kV/50Hz/1min
Offset voltage	≤10mV
Temperature drift	≤100PPM/°C
Frequency bandwidth	20~5kHz
Current consumption	<5mA+output current
Load capacity	Voltage output: 5mA, current output: 6V
Response time	<250ms
Overload capacity	30 times nominal input
Work temperature	-10~+70°C
Storage temperature	-25~+85°C
Measuring method	Through-hole type
Hole diameter	20mm
Installation	Screw fixation

6.2 Dimension (unit: mm):



6.3 Wiring diagram:

