

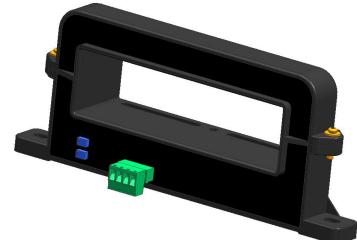
# Hall Current Sensor

# EHN Series-T01

The EHN1000~3000A series are For the electronic measurement of currents:DC,AC,pulsed, with a galvanic isolation between the primary(high power) circuit and the secondary(electronic) circuit.

## Features:

- 1/Hall effect measuring principle.
  - 2/Using a programmable high-speed Hall integrated circuit current sensor.
  - 3/The perfect combination of digital circuit and analog circuit is realized; the accuracy, offset and other indicators are optimized.
- Application domain:**
- 1/Industrial.
  - 2/DC AC Electric motor.
  - 3/Battery,Electroplating,UPS,electrolytic and other industries.
  - 4/DC AC Power supply current metering and measurement etc.



## Electrical Specifications

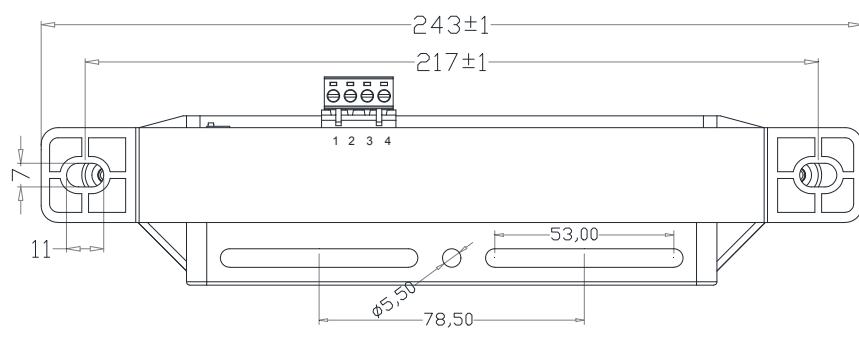
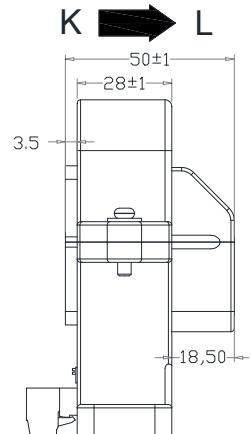
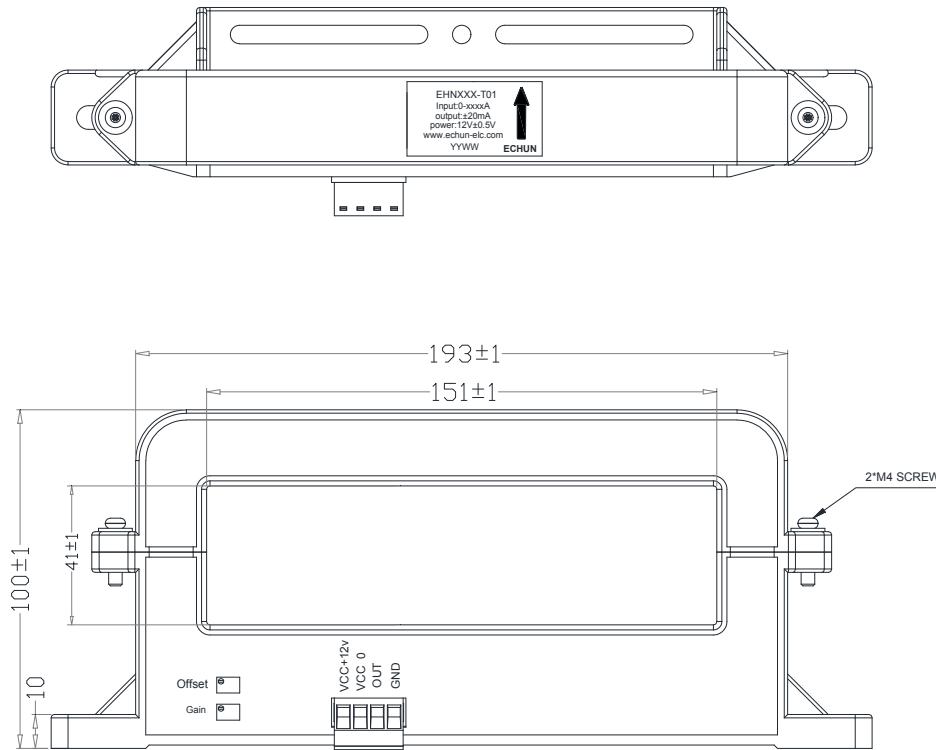
Type		EHN 102-T01	EHN 202-T01	EHN 302-T01
Primary nominal DC. current	Ip <sub>n</sub> (A)	1000	2000	3000
Primary current measuring range	Ip (A)	DC≤1200 AC≤1000	DC≤2400 AC≤1800	DC≤3600 AC≤2600
Accuracy TA = 25 °C (excluding offset)	X	±0.5 % of I <sub>Pn</sub>		
Linearity (exclude the electrical offset)	L	±0.2 % of I <sub>Pn</sub>		
Overload capability (I <sub>max</sub> )	I <sub>p</sub>	18000A (The 18000A does not guarantee the accuracy)		
Output current	I <sub>out</sub>	0~± 4V		
Offset current @ TA = 25 °C	I <sub>o</sub>	< ±0.02V		
Hysteresis offset current @ IP = 0, after an excursion of 1 × IPN	I <sub>oh</sub>	< ± 0.02V		
Power Consumption	I <sub>c</sub>	0.15 A		
Supply voltage	V <sub>cc</sub>	12V		
Temperature coefficient of I <sub>out</sub> (% of reading)		< ±0.1 %/K		
Isolation voltage	V <sub>d</sub>	4.4 KV RMS/50Hz/min,		
Impulse withstand voltage 1.2/50 µs	U <sub>w</sub>	8.3 kV		
Output current	I <sub>out</sub>	DC500V / 1000MΩ min		

Offset current @ TA = 25 °C	Io	< 5 µs
Hysteresis offset current @ IP = 0, after an excursion of 1 × IPN	Ioh	DC ... 25 kHz
Operating temperature	To	-35 ~ +80°C
Storage temperature	Ts	-40C ~ +85°C

### Mechanical Specifications

Output Type	Current(2EDG 5.08-4P)
Approx. Weight	860g

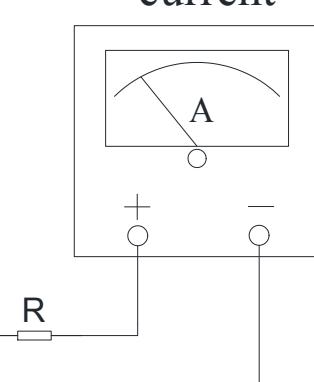
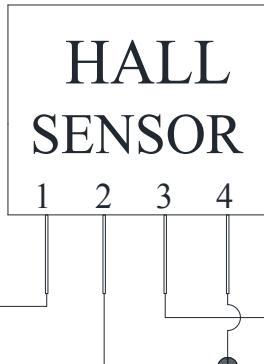
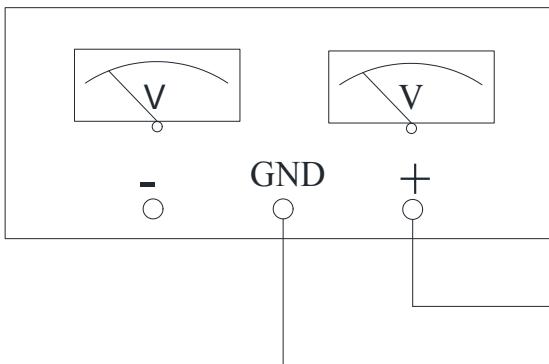
### Dimensions (unit: mm):



DC Current Sensor with Split Core 2KA-20mA

### Connection:

## DC POWER SUPPLY

 $R = 50 \Omega$ 

## Notes:

1. Adjust the offset potentiometer to power it on for 3 minutes.
2. Two potentiometers can be adjusted, only if necessary, by turning slowly to the required accuracy with a small screwdriver.
3. Connect the terminals of power source, output respectively and correctly, never make wrong connection.
4. The best accuracy can be achieved when the window is fully filled with bus-bar (current carrying conductor).
5. The in-phase output can be obtained when the direction of current of current carrying conductor is the same as the direction of arrow marked on the transducer case.
6. The BUSBAR must be installed in the center of the window!
7. The OFFSET Used to adjust the zero point ( $I_p = 0$ ), usually the output value < 0.03mA.
8. The GAIN Adjust the output current value (accuracy adjustment).