

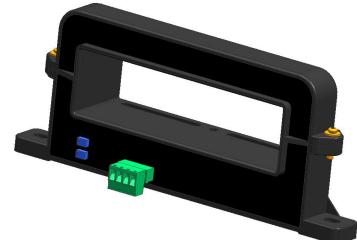
# Hall Current Sensor

# 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

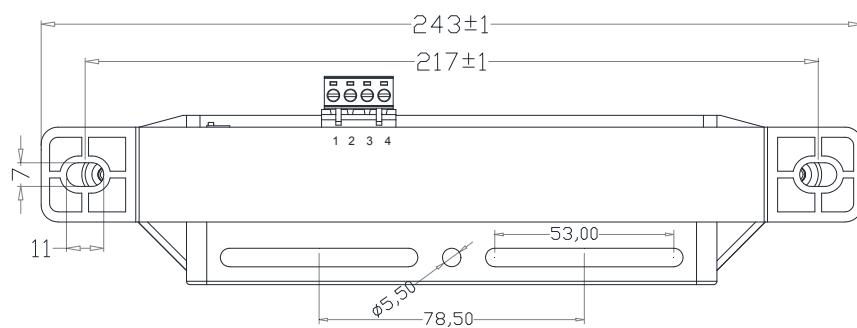
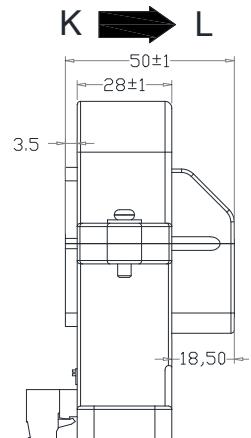
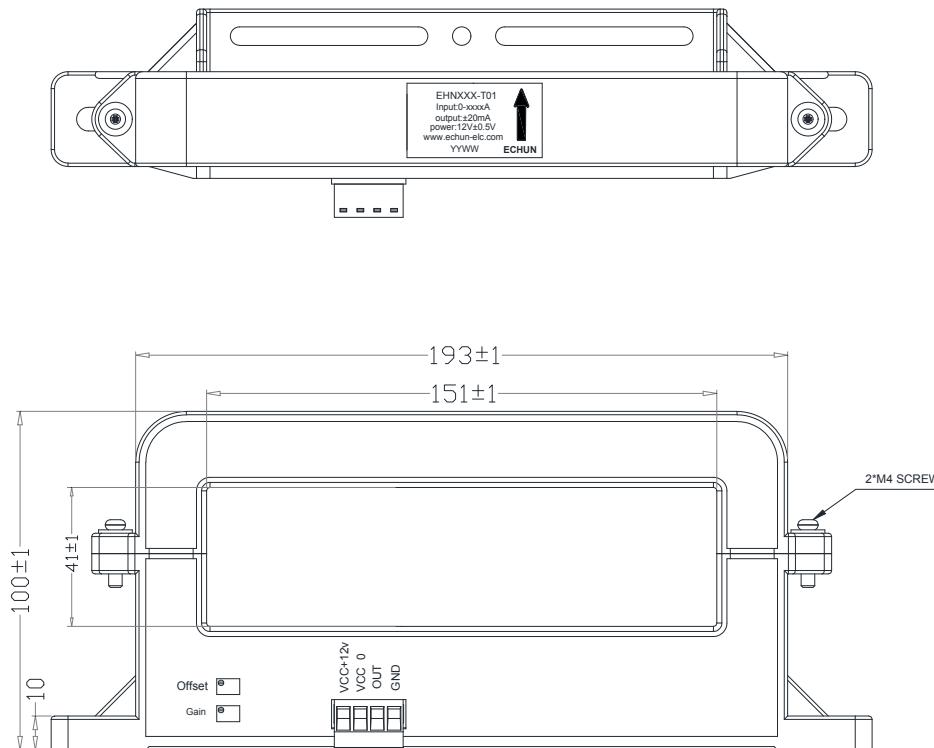
Type:SPEC EHN Series-T01(DC 4-20mA output)	EHN102-T01 (DC 4-20mA output)	EHN202-T01 (DC 4-20mA output)	EHN302-T01 (DC 4-20mA output)
Primary nominal DC. current	Ipn (A)	1000	2000
Primary current measuring range	Ip (A)	DC≤1200 AC≤1000	DC≤2400 AC≤1800
Accuracy TA = 25 °C (excluding offset)	X	±0.5 % of I <sub>PN</sub>	
Linearity (exclude the electrical offset)	L	±0.2 % of I <sub>PN</sub>	
Overload capability (I <sub>max</sub> )	Ip	18000A (The 18000A does not guarantee the accuracy)	
Output current	Iout	DC 4-20mA	
Offset current @ TA = 25 °C	Io	< ± 0.1mA	
Hysteresis offset current @ IP = 0, after an excursion of 1 × IPN	Ioh	< ± 0.1 mA	
Power Consumption	Ic	0.15 A	
Supply voltage	Vcc	12V	
Temperature coefficient of Iout (% of reading)		< ±0.1 %/K	
Isolation voltage	Vd	4.4 KV RMS/50Hz/min,	
Impulse withstand voltage 1.2/50 µs	Uw	8.3 kV	
Isolation resistance	RIs	DC500V / 1000MΩ min	

Step response time to 90 % of IPN	Tr	< 5 $\mu$ s
Frequency bandwidth (0 ... -3 dB)	f	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

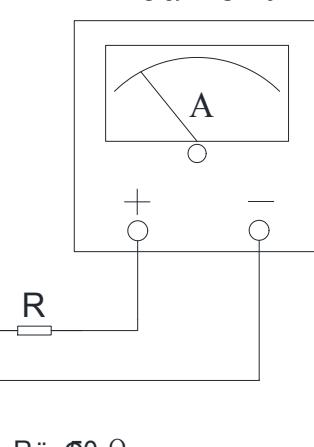
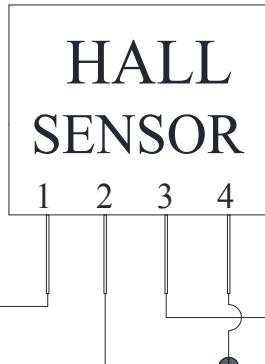
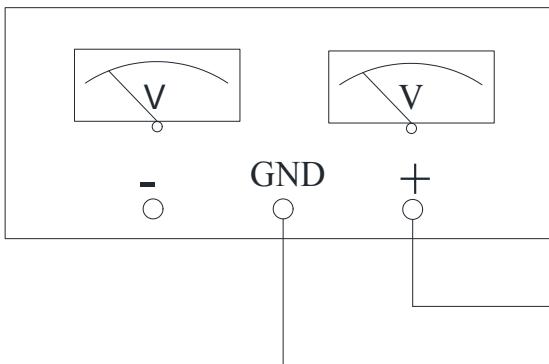
### Dimensions (unit: mm):



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).