



# DATA SHEET

## Hall Effect Current Sensor

PN:CHK\_EK15D4

I<sub>PN</sub>=3A-200A

### Feature

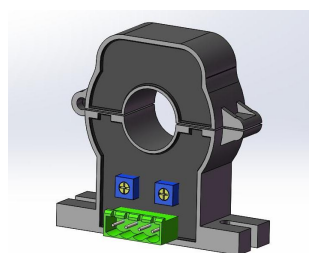
- Open- loop
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- Internal circuit adopts ASIC packaging technology products
- Supply voltage: DC±9V~±16VDC

### Advantages

- Integrated design
- Easy mounting
- No insertion loss
- Wide application

### Applications

- AC variable speed drives
- Communication power supply
- Machine tool equipment
- Large welding machine
- other



RoHS

Electrical data: (Ta=25°C, V<sub>c</sub>=±15VDC,RL=10KΩ )

|                                           | CHK05EK<br>15D4 | CHK10EK<br>15D4 | CHK20EK<br>15D4 | CHK50EK<br>15D4 | CHK100E<br>K15D4 | CHK200EK1<br>5D4 |
|-------------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|
| Rated input I <sub>pn</sub> (A)           | ±5A             | ±10A            | ±20A            | ±50A            | ±100A            | ±200A            |
| Measuring range I <sub>p</sub> (A)        | ±6A             | ±12A            | ±24A            | ±60A            | ±120A            | ±240A            |
| Rated output volatage (V <sub>OUT</sub> ) | ±4V or ±5V      |                 |                 |                 |                  |                  |
| Supply voltage V <sub>C</sub> (V)         | ±9V~±16VDC      |                 |                 |                 |                  |                  |
| Current consumption(I <sub>c</sub> )      | ≤40mA           |                 |                 |                 |                  |                  |
| Galvanic isolation(V <sub>D</sub> )       | 50Hz,1min,5kV   |                 |                 |                 |                  |                  |
| Offset current(I <sub>o</sub> )           | ±5mA            |                 |                 |                 |                  |                  |
| Output voltage(T <sub>R</sub> )           | <7 μ s          |                 |                 |                 |                  |                  |
| Offset current drift(I <sub>OT</sub> )    | ≤0.05mV/°C      |                 |                 |                 |                  |                  |
| Accuracy (x)                              | 0.5%            |                 |                 |                 |                  |                  |
| Linearity error ε <sub>r</sub> (%FS)      | 1%              |                 |                 |                 |                  |                  |
| Bandwidth-3db(BW)                         | DC-25KHZ        |                 |                 |                 |                  |                  |

### General data:



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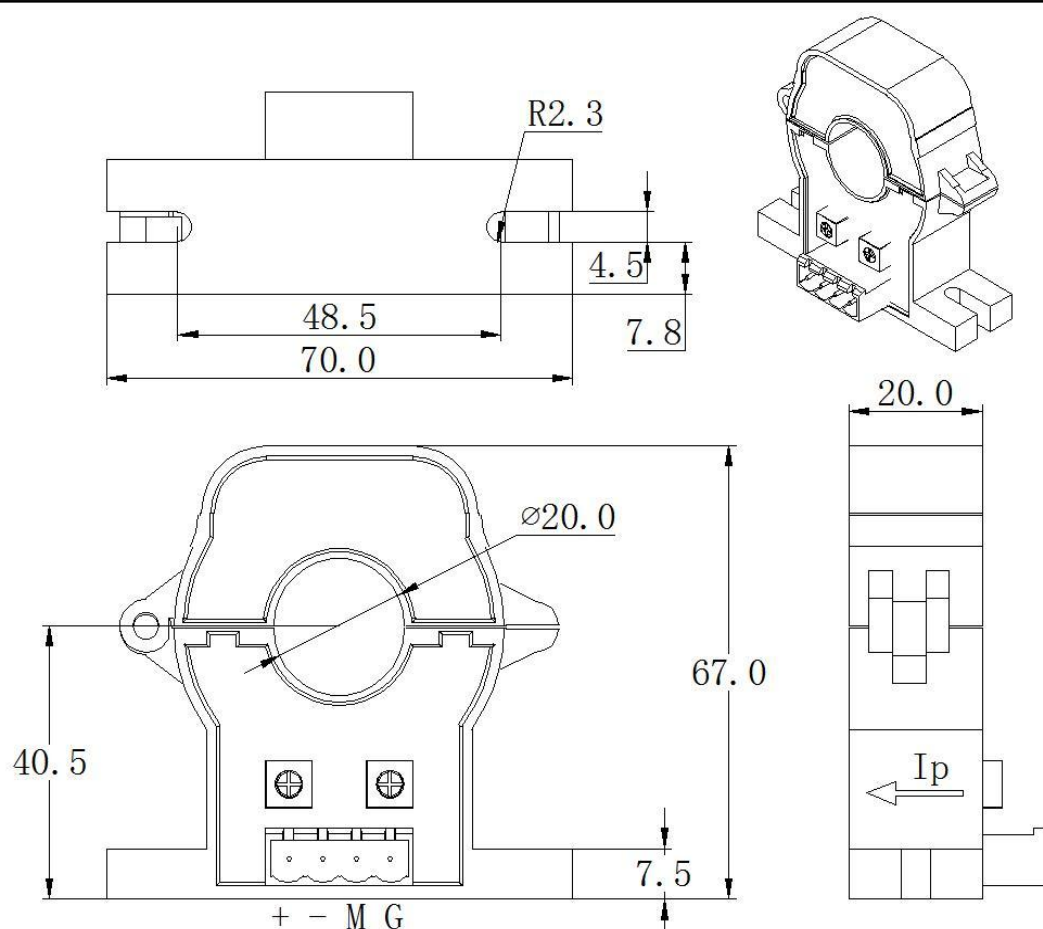
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| Parameter                    | Value                  |
|------------------------------|------------------------|
| Operating temperature TA(°C) | -40 ~ +85              |
| Storage temperature TS(°C)   | -40~ +125              |
| Mass M(g)                    | ≈80g                   |
| Plastic material             | PBT G30/G15, UL94- V0; |
| Standards                    | IEC60950-1:2001        |
|                              | EN50178:1998           |
|                              | SJ20790-2000           |

## Dimensions(mm):



## Remarks:

- When the current goes through the primary pin of a sensor, the voltage will be measured at the output end.
- Custom design is available for the different rated input current and the output voltage.
- The dynamic performance is the best when the primary hole is fully filled with.
- The primary conductor should be  $<100^{\circ}\text{C}$ .

**WARNING : Incorrect wiring may cause damage to the sensor.**

