

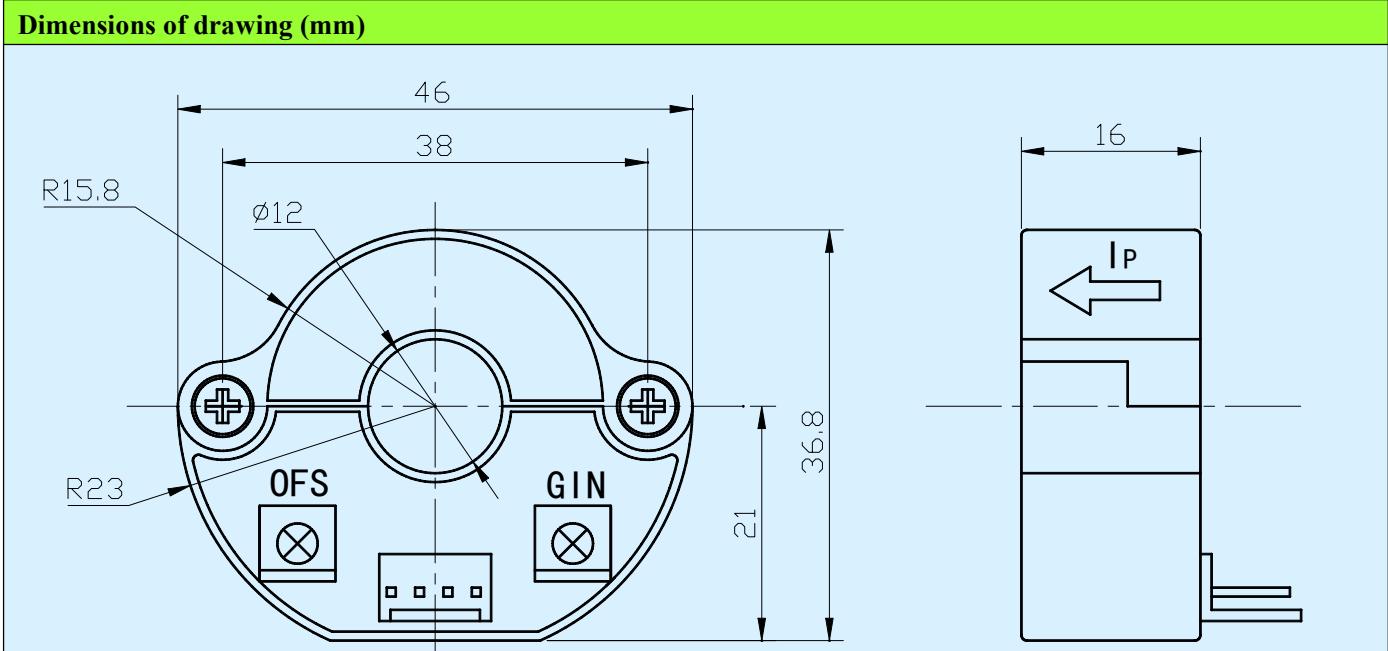


# CS400EKC Hall-effect Current Sensor Series



Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

| Electrical characteristics |                                    |   |          |              |          |          |
|----------------------------|------------------------------------|---|----------|--------------|----------|----------|
|                            | Type                               | CS050EKC                                    | CS100EKC | CS200EKC     | CS300EKC | CS400EKC |
| I <sub>PN</sub>            | Primary nominal input current      | 50  | 100      | 200          | 300      | 400      |
| I <sub>P</sub>             | Measuring range of primary current | 0~±100                                      | 0~±200   | 0~±400       | 0~±600   | 0~±800   |
| V <sub>OUT</sub>           | Nominal output voltage             |   |          | 4±1%         |          | V        |
| V <sub>C</sub>             | Supply voltage                     |   |          | ±12~±15(±5%) |          | V        |
| I <sub>C</sub>             | Current consumption                | V <sub>C</sub> =±15V                        |          | <25          |          | mA       |
| V <sub>D</sub>             | Insulation voltage                 | AC/50Hz/1min                                |          | 2.5          |          | kV       |
| ε <sub>L</sub>             | Linearity                          |   |          | <1           |          | %FS      |
| V <sub>O</sub>             | Offset voltage                     | T <sub>A</sub> =25°C                        |          | <±25         |          | mV       |
| V <sub>OM</sub>            | Residual voltage                   | I <sub>PN</sub> →0                          |          | <±25         |          | mV       |
| V <sub>OT</sub>            | Thermal drift of V <sub>0</sub>    | I <sub>P</sub> =0 T <sub>A</sub> =-25~+85°C |          | <±1          |          | mV/°C    |
| T <sub>R</sub>             | Response time                      |   |          | ≤7           |          | μs       |
| f                          | Frequency bandwidth(-3dB)          |   |          | DC~20        |          | kHz      |
| T <sub>A</sub>             | Ambient operating temperature      |   |          | -25~+85      |          | °C       |
| T <sub>S</sub>             | Ambient storage temperature        |   |          | -40~+100     |          | °C       |
| R <sub>L</sub>             | Load resistance                    |   |          | ≥10          |          | kΩ       |
|                            | Standard                           | Q/320115QHKJ01-2010                         |          |              |          |          |



Elucidation: 1:+15V 2:-15V 3:V<sub>OUT</sub> 4:0V(GND) OFS:Zero adjustment GIN:Gain adjustment

| Remarks  |
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| ·Incorrect connection may lead to the damage of the sensor.                                |
| ·V <sub>OUT</sub> is positive when the I <sub>P</sub> flows in the direction of the arrow. |