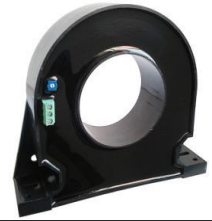


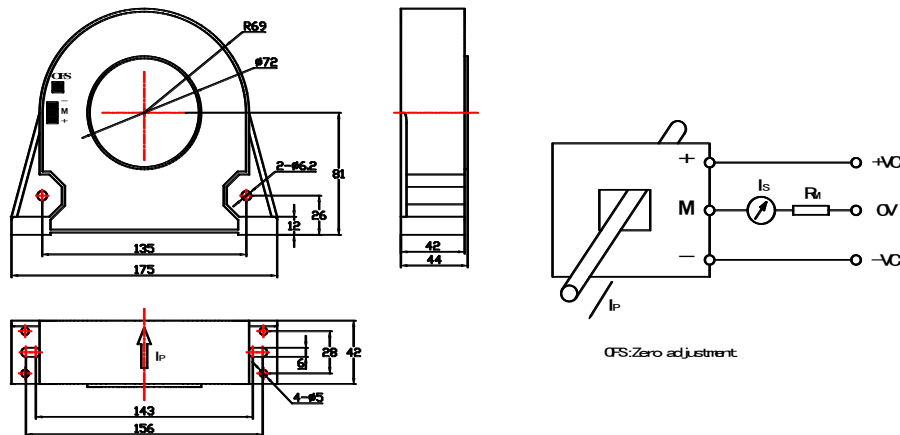
# MCSM2000LTE Hall-effect Current Sensor Series

Closed 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  | MCSM2000LTE                            |           |
| $I_{PN}$                   | Primary nominal input current                 | 2000                                   |           |
| $I_P$                      | Measuring range of primary current            | 0~±3000                                |           |
| $I_{SN}$                   | Secondary nominal output current              | 400±0.25%                              |           |
| $K_N$                      | Conversion ratio                              | 1:5000                                 |           |
| $R_M$                      | Measuring resistance ( $V_C=±15V$ )           | $V_C=±15V$ $I_P=±2000$                 | 0~8       |
|                            | ( $V_C=±15V$ )                                | $V_C=±15V$ $I_P=±2200$                 | 0~5       |
|                            | ( $V_C=±18V$ )                                | $V_C=±24V$ $I_P=±2000$                 | 5~29      |
|                            | ( $V_C=±18V$ )                                | $V_C=±24V$ $I_P=±3000$                 | 5~11      |
| $V_C$                      | Supply voltage                                | ±15~±24(±5%)                           |           |
| $I_C$                      | Current consumption                           | $V_C=±24V$                             | 28+ $I_S$ |
| $V_D$                      | Insulation voltage                            | AC/50Hz/1min                           | 6         |
| $\epsilon_L$               | Linearity                                     | <0.1                                   |           |
| X                          | Accuracy                                      | $T_A=25^\circ C$                       | <±0.7     |
| $I_0$                      | Zero offset current                           | $T_A=25^\circ C$                       | <±0.25    |
| $I_{OT}$                   | Thermal drift of $I_0$                        | $I_P = 0$ $T_A = -25 \sim +85^\circ C$ | <±0.005   |
| $T_r$                      | Response time                                 | 90% $I_{PN}$                           | <1        |
| di/dt                      | di/dt accurately followed                     | >100                                   |           |
| f                          | Frequency bandwidth(-1dB)                     | DC~100                                 |           |
| $T_A$                      | Ambient operating temperature                 | -25~+85                                |           |
| $T_S$                      | Ambient storage temperature                   | -40~+100                               |           |
| $R_S$                      | Secondary coil resistance( $T_A=25^\circ C$ ) | 25                                     |           |
|                            | Standard                                      | Q/320115QHKJ01-2010                    |           |

## Dimensions of drawing (mm) Connection



## Remarks

- Incorrect connection may lead to the damage of the sensor.  $I_{SN}$  is positive when the  $I_P$  flows in the direction of the arrow.
- Dynamic performance (di/dt and response time) are best with a primary bar in the center of the through-hole.