

## ZMKD40-100SCM Series Hall Current Sensor

Hall current sensor uses Hall effect principle to measure DC, AC, pulse and various irregular waveform currents under the condition that the original and secondary sides are completely isolated.



RoHS



### Feature

- Hall effect measurement principle
- Meet UL94-V0 standard

### Advantage

- Easy to install
- Low power consumption
- Wide measuring range
- High precision and good linearity
- Low temperature drift
- Strong anti-interference ability
- Strong overload capability

### Application

- AC frequency conversion speed control device
- DC motor driven static converter
- UPS uninterruptible power supply
- SMPS switching power supply
- Electric welder machine
- Grid monitoring
- Industrial grade

### Performance parameter

#### Electrical parameters

Rated current rms	I <sub>pn</sub>	200A 400A 800A 1000A 1500A 2000A
Measuring range	I <sub>pm</sub>	200A 400A 800A 1000A 1500A 2000A
Rated output @I <sub>p</sub>	V <sub>o</sub>	2.5 ± (2*I <sub>p</sub> /I <sub>pn</sub> )V
@I <sub>p</sub> =0		2.5V
Load Resistance	R <sub>L</sub>	>2KΩ
Supply Voltage	U <sub>c</sub>	+5V
Current consumption	I <sub>c</sub>	≤15mA
Insulation voltage	V <sub>d</sub>	2.5kVAC/50Hz/1min

#### Dynamic parameter

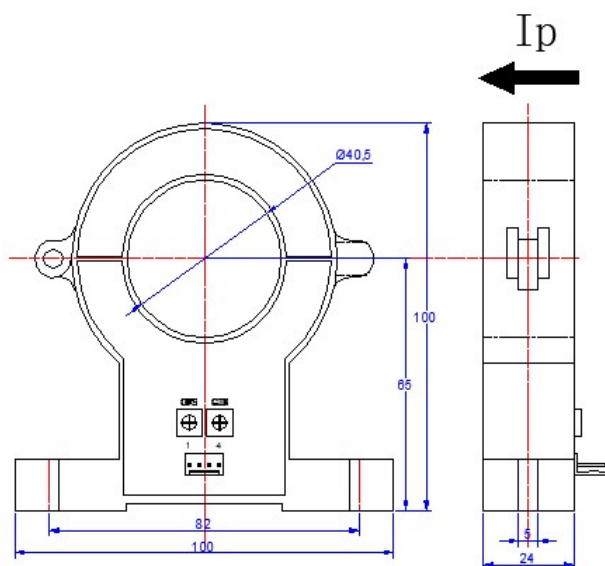
Precision (@I <sub>pn</sub> , Ta=25°C)	X <sub>G</sub>	< ±1.0%
Linearity (@Ta=25°C)	E <sub>r</sub>	< ±1.0%FS
Zero offset voltage (@Ta=25°C, I <sub>p</sub> =0)	V <sub>0E</sub>	< ±25mV
Magnetic offset voltage(I <sub>pn</sub> >0)	V <sub>0H</sub>	< ±20mV
Zero temperature drift	TCV <sub>0E</sub>	< ±1.0mV/°C
Response time	T <sub>r</sub>	< 3μs
Accurately followed	dI/dt	> 100A/μs
Frequency bandwidth (@-3dB)	BW	DC~20kHz

#### General parameters

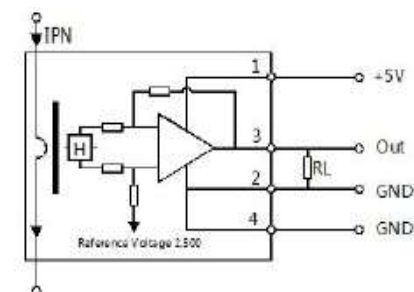
Ambient operating temperature	T <sub>a</sub>	-40~+85°C
Ambient storage temperature	T <sub>s</sub>	-55~+125°C
Weight	m	300g
Case material		PBT G30/G15 UL94-V0
Executive standard		EN50178:1998 IEC60950-1:2001 SJ20790-2000

## structure

Unit: mm



## Instructions



1. The direction of the current should be the same as the direction of the arrow of the casing;
2. Please refer to the wiring definition on the physical shell, the wrong wiring will Damaged module;
3. In order to obtain better dynamic characteristics and sensitivity, it is recommended to use a single turn wire and the wire fills the module through the wire hole best;
4. The primary side wire temperature should not exceed 100 °C;
5. The above parameters are standard specifications, and the products can be customized according to customer needs.