

ZMK41R12DAM 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 head cabinet
- UPS uninterruptible power supply
- SMPS Switched Mode Power Supplies
- Central air conditioning
- Grid monitoring
- Industrial grade

Performance parameter

Electrical parameters

Rated current rms	I _{pn}	200A	400A	800A	1000A	1200A	2000A
Measuring range	I _{pm}	400A	800A	1600A	2000A	2400A	3000A
Rated output @I _p	V _o	4V					
Load Resistance	R _L	>10KΩ					
Supply Voltage	U _c	±12V~±15V					
Current consumption	I _c	≤15mA					
Insulation voltage	V _d	5kVAC/50Hz/1min					

Dynamic parameter

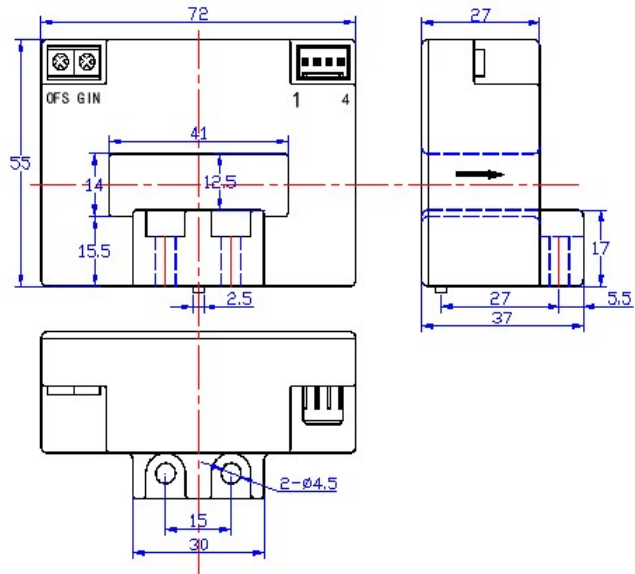
Precision (@I _{pn} , Ta=25°C)	X _G	<±1.0%					
Linearity (@Ta=25°C)	E _r	<±1.0%FS					
Zero offset voltage (@Ta=25°C, I _p =0)	V _{0E}	<±25mV					
Magnetic offset voltage(I _{pn} ->0)	V _{0H}	<±25mV					
Zero temperature drift	TCV _{0E}	<±1.0mV/°C					
Response time	T _r	<5us					
Accurately followed	d i / dt	>100A/us					
Frequency bandwidth (@-3dB)	BW	DC~20kHz					

General parameters

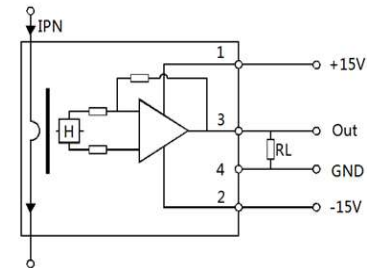
Ambient operating temperature	T _a	-40~+85°C					
Ambient storage temperature	T _s	-55~+125°C					
Weight	m	90g					
Case material		PBT G30/G15 UL94-V0					
Executive standard		EN50178:1998 IEC60950-1:2001 SJ20790-2000					

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.