

# HDC-3000AK5 Series Hall Current Sensor

## Introduction

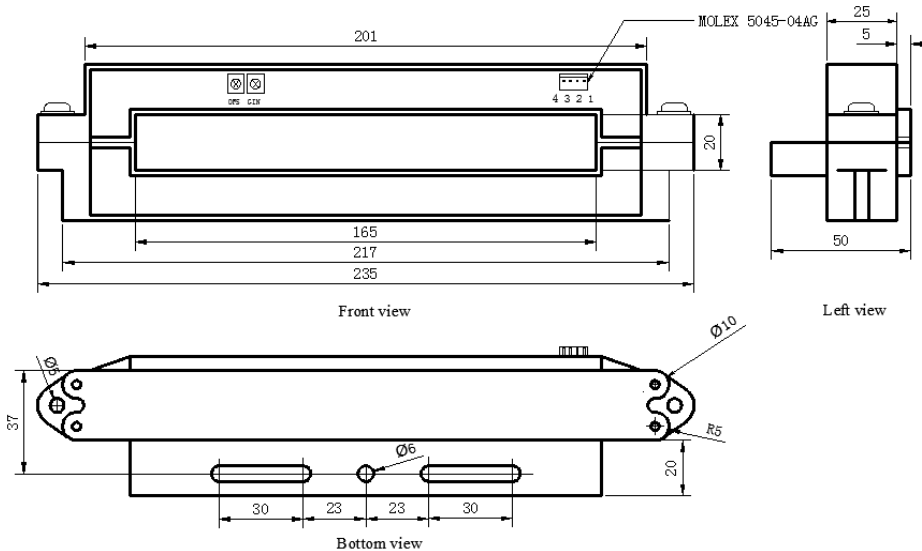
HDC-3000AK5 Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.



## △Electrical Parameters (Ta=25℃)

Type		HDC-500AK5	HDC-1000AK5	HDC-2000AK5	HDC-3000AK5
Parameters	Symbols				
Nominal measuring current	$I_{PN}$	500A	1000A	2000A	3000A
Linear range	$I_P$	0~±1500A	0~±3000A	0~±4000A	0~±4500A
Nominal output voltage	$V_{SN}$	±4V±0.04V( $R_L \geq 1K \Omega$ )			
Zero offset voltage	$V_O$	≤±0.02V( $I_{PN}=0$ )			
Temperature drift of bridge offset	$V_{OT}$	≤±1mV/℃			
Linear error	$\xi_L$	±1%			
Response time	$T_r$	≤20 μS			
Supply voltage	$V_C$	±15V±5%			
Isolation voltage	$V_d$	5.0KV/50 or 60Hz/1min			
Power dissipation current	$I_C$	±30mA			
Frequency bandwidth	f	DC~20KHz(-3dB)			
Operating temperature	$T_a$	-25℃~+85℃			
Storage temperature	$T_s$	-40℃~+90℃			

## △Dimensions: (mm)



## Features:

- ◆ Use open-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆ Pass CE certification (S.N.: A001E130424042E)
- ◆ Busbar-mounted and panel-mounted
- ◆ High insulation between primary side and secondary side
- ◆ Punching way has no insertion loss
- ◆ Dimidiate structure, easy for mounting

## Applications:

- ◆ Communication power supply
- ◆ Uninterruptible power supply (UPS)
- ◆ Switched-mode power supply
- ◆ Power supply for electric welding machine
- ◆ Battery supply
- ◆ Circuitry
- ◆ Railway system
- ◆ Variable-frequency speed control system

## Instructions for Use:

- ◆ Connect the wire of transducer in correct way as required.
- ◆ Inputting measured current from punched core of transducer, the in-phase current/voltage signal can be obtained from output end by sampling.
- ◆ The arrow indicates positive current direction.

## Connection and adjustment:

- ◆ 1: +Vc (+15V)
- ◆ 2: -Vc (-15V)
- ◆ 3: Output
- ◆ 4: 0V
- ◆ OFS: Offset
- ◆ GIN: Gain