# **HDC-60AY Series Hall Current Sensor**

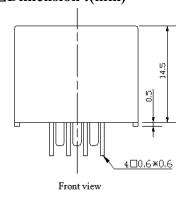
### Introduction

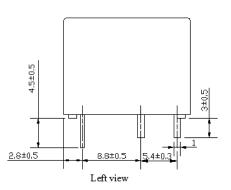
HDC-60AY Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.

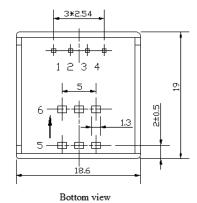
# △Electrical Parameters (Ta=25°C)

(1w 2e 0)				
Туре		HDC 404M	HDC 50AV	HDC (0AV
Parameters	Symbols	HDC-40AY	HDC-50AY	HDC-60AY
Nominal measuring current	$I_{PN}$	40A	50A	60A
Linear range	$I_P$	0~±120A	0~±150A	0~±180A
Nominal output voltage	$\mathbf{V}_{ ext{SN}}$	$\pm 4V\pm 0.04V(R_L=10K~\Omega)$		
Zero offset voltage	Vo	$\leq 0.04 \text{V}(I_{PN}=0)$		
Temperature drift of bridge offset	$V_{OT}$	≤±1mV/°C		
Linear error	ξL	±1%		
Response time	Tr	≤5 µ S		
Supply voltage	Vc	±15V±5%		
Isolation voltage	$V_{d}$	2.0KV/50 or 60H <sub>Z</sub> /1min		
Power dissipation current	$I_{C}$	±20mA		
Frequency bandwidth	f	DC~50KH <sub>Z</sub> (-3dB)		
Operating temperature	Та	-25℃~+85℃		
Storage temperature	Ts	-40°C∼+90°C		

# △Dimension :(mm)







Hall Current Sensor

HDC-60AY

ZHONGXU EL CO.,LTD

#### Features:

- ◆ Use open-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆Small size and space saving
- ◆Low power consumption
- ◆High immunity against external disturbance

## Applications:

- ◆ AC variable-frequency speed control system and servo motor
- ◆Uninterruptible power suppers (UPS)
- ◆Switched-mode power supply
- ◆ Power supply for electric welding machine

#### **Instructions for Use:**

- ◆Connect the wire of transducer in correct way as required.
- ◆Inputting measured current from input end of transducer, the in-phase voltage signal can be obtained from output end by sampling.

### Pin arrangement:

- ♦1: -Vc (-15V)
- **♦**2: 0V
- ♦3: +Vc (+15V)
- ♦4: Output
- ♦5: primary In
- ♦6: primary Out