

HKC-B Hall-effect Current Sensor Series

HKC-B series is a new generation of current sensor based on the principle of Hall-effect. It can be used for detecting DC, pulse and various irregular waveform current under electrical isolation between output and input.

Electrical characteristics

	Type	HKC050B	HKC100B	HKC200B	HKC400B	HKC500B	HKC600B	
I_{PN}	Primary nominal input current	50	100	200	400	500	600	A
I_P	Measuring primary current range	150	300	600	900	900	900	A
V_{SN}	Nominal output voltage	4±1%						V
V_C	Supply voltage	±12~±15 (±5%)						V
I_C	Current loss	$V_C=±15V$		20				mA
V_d	Insulation voltage	2.5KV AC/50Hz/1min						

Dynamic characteristics

ϵ_L	Linearity	±1						%FS
V_0	Offset voltage	$T_A=25^\circ C$		±25				mV
V_{OM}	Residual voltage	$I_P \rightarrow 0$		±25				mV
V_{OT}	Offset voltage temperature drift	$I_P=0$		$T_A=-10 \sim +70^\circ C$				mV/°C
T_R	Response time	≤3						μs
f	Band width (-3dB)	DC~20						KHz

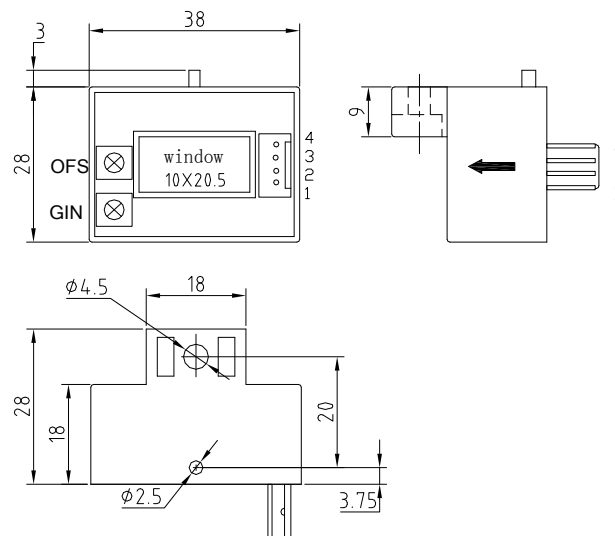
Generic characteristics

T_A	Operation temperature	-40~+85						°C
T_S	Storage temperature	-55 ~+125						°C
R_L	Load resistance	≥10						KΩ
	Standard							

Advantages

- ◆ insulation between input and output
- ◆ competitive quality /price rate
- ◆ no insertion loss
- ◆ easy to installation
- ◆ small size, light heavy

package outline (mm)



Elucidation: 1: +15V 2: -15V 3: Vout 4: 0V OFS: zero adjustment GIN: gain adjustment

Typical applications

- ◆ welding machine
- ◆ electric welding equipment for the control of the welding current
- ◆ frequency conversion timing system
- ◆ UPS ,switching power supplies