

## HKC-E Hall-effect Current Sensor Series

HKC-E series is a new generation of open loop 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	HKC-050E	HKC-100E	HKC-200E	HKC-300E	HKC-400E	HKC-500E		
$I_{PN}$	Primary nominal input current							A
$I_P$	Measuring primary current range							A
$V_{SN}$	Nominal output voltage						$4\pm 1\%$	V
$V_C$	Supply voltage						$\pm 12\sim\pm 15 (\pm 5\%)$	V
$I_C$	Current loss						$V_C=\pm 15V$ 20	mA
$V_d$	Insulation voltage						2.5KV AC/50Hz/1min	

### Dynamic characteristics

$\epsilon_L$	Linearity		$\leq 1$	%FS
$V_0$	Offset voltage	$T_A = 25^\circ C$	$\pm 20$	mV
$V_{OM}$	Residual voltage	$I_P \rightarrow 0$	$\pm 30$	mV
$V_{OT}$	Offset voltage temperature drift	$I_P = 0 \quad T_A = -10\sim +70^\circ C$	$\pm 1$	mV/ $^\circ C$
$T_R$	Response time		$\leq 3$	$\mu s$
f	Band width (-3dB)		DC~20	KHz

### Generic characteristics

$T_A$	Operation temperature		-40~ +85	$^\circ C$
$T_S$	Storage temperature		-55~ +125	$^\circ C$
$R_L$	Load resistance		$\geq 10$	K $\Omega$
	Standard			

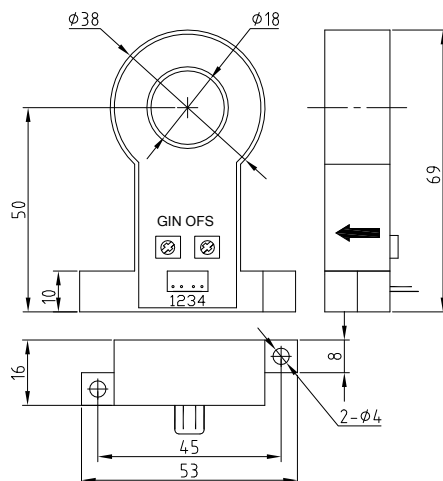
#### Advantages

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

#### Typical applications

- ◆ overload protection
- ◆ electric welding equipment for the control of the welding current
- ◆ UPS
- ◆ energy control system
- ◆ switching power supplies

#### package outline (mm)



#### Elucidation:

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