HBC-LTB Hall-effect Current Sensor Series

HBC-LTB 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	HBC-100LTB	HBC-300LTB	HBC-500LTB	HBC-800LTB	HBC-1000LTB	
I_{PN}	Primary nominal input current	100	300	500	800	1000	A
I_P	Measuring primary current range	300	900	1200	1500	1500	A
V_{SN}	Nominal output voltage	4±1%					V
V_C	Supply voltage	±12~±15（±5%）					V
I_C	Current loss	V_C=±15V		≤25			mA
V_d	Insulation voltage	2.5KV AC/50Hz/1min					

Dynamic characteristics

ε_L	Linearity	(0~± I_{PN}) ±1	%FS
V_0	Offset voltage	T_A =25℃ ±10	mV
V_{OM}	Residual voltage	I_P→0 ±10	mV
V_{OT}	Offset voltage temperature drift	I_P=0 T_A=–25~ +85℃ ±0.75	mV/℃
T_R	Response time	≤3	μs
f	Band width（-3dB）	DC~20	KHz

Generic characteristics

T_A	Operation temperature	-25~+85	℃
T_S	Storage temperature	–40 ~+105	℃

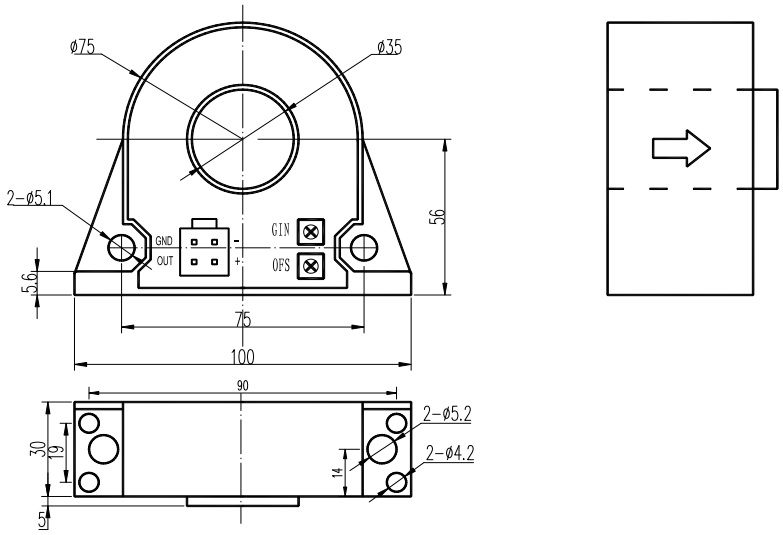
Advantages

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

Typical applications

- ◆ welding machine
- ◆ electric welding equipment for the control of the welding current
- ◆ frequency conversion timing system

package outline（mm）



OFS： zero adjustment GIN：gain adjustment