SHINHOM

SHAANXI SHINHOM ENTERPRISE CO.,LTD

HBC-LTA Hall-effect Current Sensor Series

HBC-LTA series is a new generation of closed 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	HBC-050LTA	HBC-100LTA	HBC-200LTA	HBC-300LT	
I_{PN}	Primary nominal input current	50	100	200	300	A
I_P	Measuring primary current range	0～±150	0～±300	0～±600	0～±900	A
I_{SN}	Nominal output current	25	50	100	150	mA
K_N	Turns ratio	1：2000				
V_C	Supply voltage	±12～±18（±5%）				V
I_C	Current loss	V_C=±15V	20+Is			mA
V_d	Insulation voltage	6KV AC/50Hz/1min				

Dynamic characteristics

ε_L	Linearity	<0.1	%FS
X	Precision	T_A =25℃ V_C=±15V ±0.7	%
I_0	Offset current	T_A =25℃ <±0.20	mA
I_{OM}	Residual current	I_P→0 <±0.20	mA
I_{OT}	Offset current temperature drift	I_P=0 T_A =-25～+85℃ ±0.10～±0.65	mA/℃
T_R	Response time	<1	μs
f	Band width（-3dB）	DC~100	KHz

Generic characteristics

T_A	Operation temperature	-40～+85				℃
T_S	Storage temperature	–40～+125				℃
R_S	Secondary internal resistance T_A =25℃	29	25	21	32	Ω
	Standard					

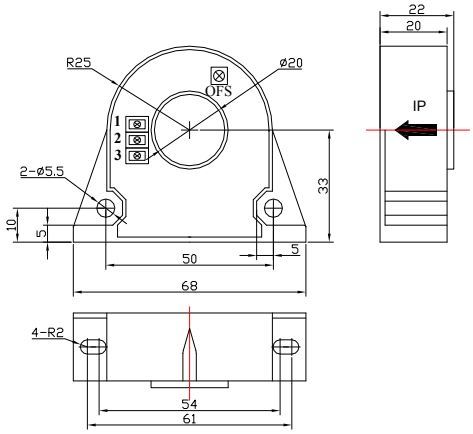
Advantages

- excellent precision ,good linearity
- better anti-jamming capability
- low temperature drift, quick response time
- broad frequency band width
- good over-current capability

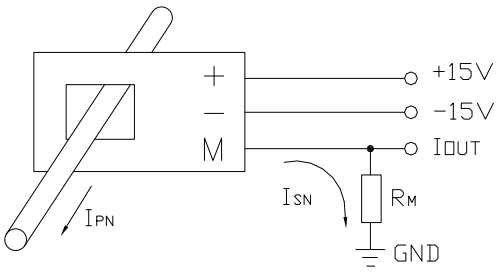
Typical applications

- alternating current variable-speed generator tracking
- welding equipment source
- DC generator static electricity commutation
- communication source 、battery source
- UPS, switching power supplies

package outline（*mm*）



circuit connection diagram



Elucidation：

1：+15V 2：－15V

3：Iout OFS：zero adjustment

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