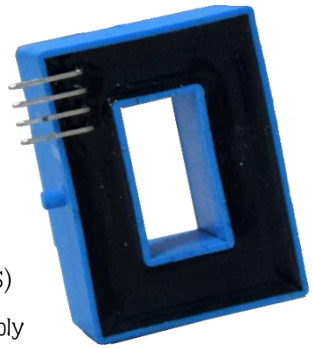
THB_BP15D_



Product introduction:

- Hall effect principle — closed loop current sensor;
- The primary and secondary of the current sensor are insulated and can measure DC, AC, pulse, etc;
- Power supply: ± 12V ~ ± 15V DC

Application:

- Application on Inverter
- Ac/dc variable speed drive
- Switching power supply (SMPS)
- UPS uninterruptible power supply
- Current monitoring and control of induction cooker

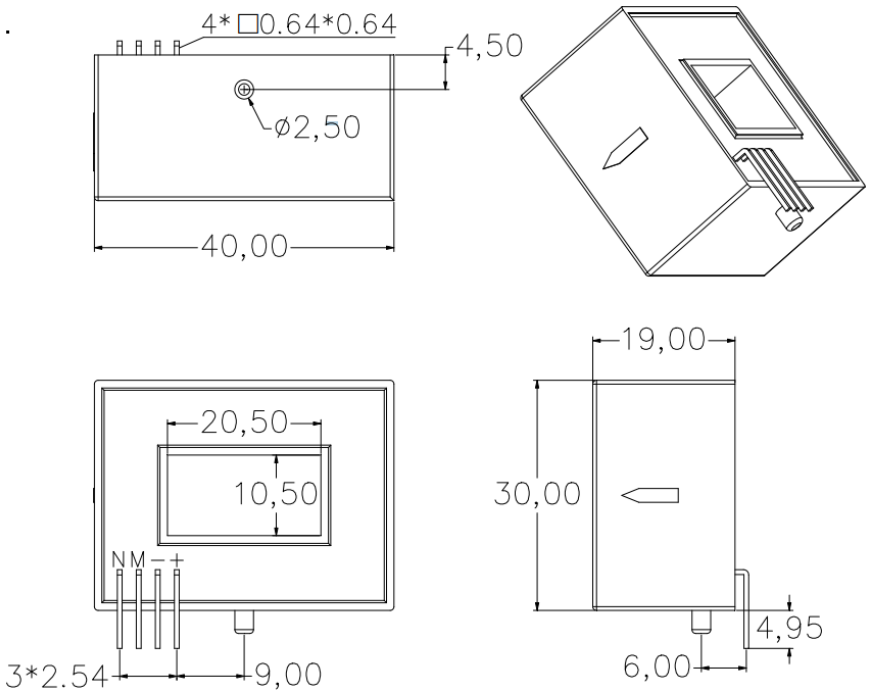
Electrical characteristics:

Parameter	Symbol	THB50 BP15D50	THB100 BP15D50	THB200 BP15D100
Rated current	I_{PN}(A), RMS	50	100	200
Measuring range	I_P(A)	0～±150	0～±200	0～±300
Turn Ratio	N_S(T)	1000	2000	2000
Rated output current	I_{SN}(mA)	±50*I_P/I_{PN}	±50*I_P/I_{PN}	±100*I_P/I_{PN}
Coil internal resistance	R_S(Ω),@+75℃	30	50	50
Measure resistance	R_M(Ω),@+75℃,V_C	[(V_C—2.0V)/(I_S*0.001)]—R_S		
Working power supply	V_C(V)	±12V～±15V DC±5%		
Insulation voltage	V_D(V)	50/60Hz, 1min, 2.5kV; RMS		

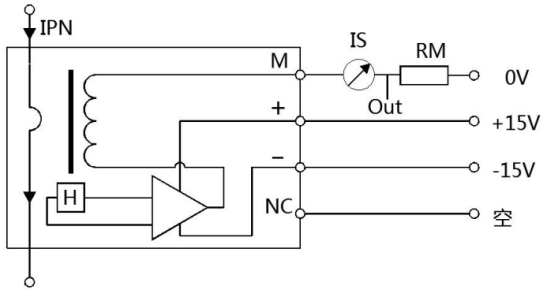
General parameters:

Project	Condition	Data	Unit
Accuracy X_G	@ I_{PN},T=25℃	<±0.5	%
Zero offset current I_O	@ I_P=0,T=25℃	<±0.2	mA
Current offset temperature drift I_{OT}	@ I_P=0,—40～+85℃	<±0.005	mA/℃
Linearity εr		≤0.1	%FS
Follow accuracy di/dt		>100	A/μs
Response time tra	@ 90% of I_{PN}	<1.0	μs
Operating bandwidth Bw	—3dB	DC—200	kHZ
Working temperature T_A		—40～+85	℃
Storage temperature Ts		55～+125	℃
Static power consumption I_C		15+Is	mA
Product weight m		50	g
Shell material	PBT material containing 30% glass fiber, Flame retardant grade: UL94—V0;		
Standard	IEC60950—1:2001 EN50178:1998 SJ20790—2000		

Structure diagram: (mm)



Connection diagram:



Remarks:

1, When the measured current passes through the primary pin of the sensor, there is a corresponding current signal output at the output end;(Note: wrong wiring may damage the sensor)

2, Products with different rated current can be designed according to the requirements of customers, and the output voltage of the sensor can be selected;

3, When the busbar is fully filled with holes, the dynamic performance is the best;

4, The temperature of primary conductor shall not exceed 100℃;