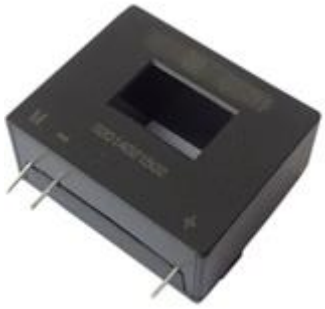
THB_AP15D_Y



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;
- Dual power supply operation: ± 9V ~ ± 15V DC

Application:

- AC/DC variable speed drive
- Switching power supply (SMPS)
- Welding power supply reference
- UPS uninterruptible power supply
- Current monitoring and control of induction cooker

电气特性:

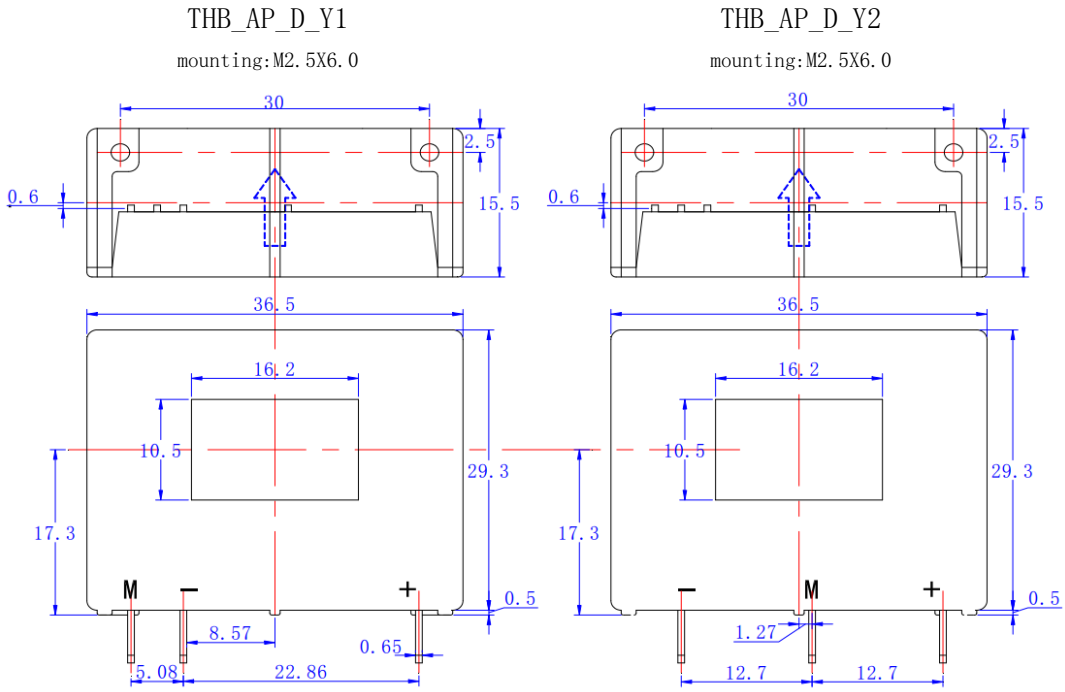
Parameter	Symbol	THB50AP 15D50Y1	THB100AP 15D50Y1	THB125AP 15D125Y2	THB200AP 15D100Y1
Rated current	I_{PN}(A), RMS	50	100	125	200
measuring range	I_P(A)	0～±150	0～±300	0～±375	0～±600
Turn Ratio	N_S(T)	1000	2000	1000	2000
Rated output current	I_{SN}(mA)	50	50	125	100
Coil internal resistance	R_S(Ω),@+75℃	31	45	31	45
Measure resistance	R_M(Ω),@+75℃,V_C	0～R_{Mmax}=((V_C−0.6V)/I_S) −R_S; I_S=I_P/N_S(mA), See Note 1			
Working power supply	V_C(V)	±9V～±15VDC±5%			
Insulation voltage	V_D(V)	50/60Hz, 1min, 3kV; RMS			
lightning surge	V_W(V)	@ at1.2/50μs,<4.5KV			

Note 1: if power supply V_C=15V,I_{Pmax}=150A,N_S=1000T,R_S=31Ω; Then the compensation current output by the product is I_S=150mA, In order to make the product test to 150A, the maximum sampling resistance R_{Mmax}=(15−0.6)/0.15−31Ω=65Ω;

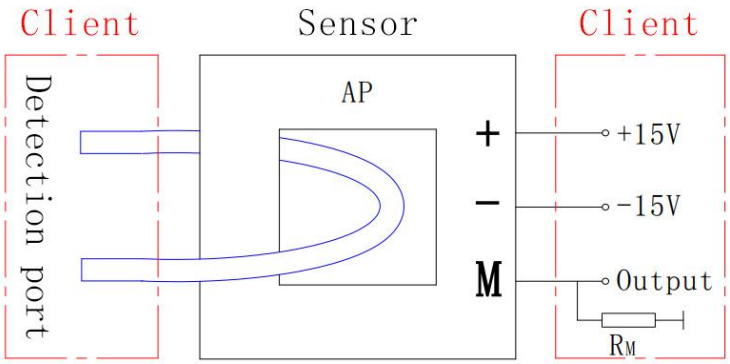
General parameters:

Project	Condition	Data	Company
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
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 T_S		55～+125	℃
Static power consumption I_C	@±15VDC	12+Is	mA
Secondary pin Recommended mounting hole size	Pin (+, −, M)	>1.2	mm
Product weight m	1000T	19	g
	2000T	21	g
Shell material	PBT material containing 30% glass fiber, Flame retardant grade:UL94− V0;		

Structure diagram: (mm)



Connection diagram:



Remarks:

1. Connect the current according to the calibration direction of the wiring diagram; Pay attention to the positive and negative current;

2. Wiring according to the definition of the calibrated functional pin in the structure diagram;

3. The temperature of primary conductor shall not exceed 100 degrees;

4. When the busbar should be fully filled with primary perforation, the dynamic response and di/dt follow-up accuracy are the best;

5. The above specifications are calibration specifications, and our company can customize products according to customers' requirements.

6. If there are new changes to our products, please do not notice otherwise, and the actual product parameters shall prevail;