



## THD\_BS15D4H

### Product introduction:

- Power supply:  $\pm 12V \sim \pm 15V$  DC
- Hall effect principle — open loop current sensor;
- The primary and secondary of the current sensor are insulated and can measure DC, AC, pulse, etc;

### 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:

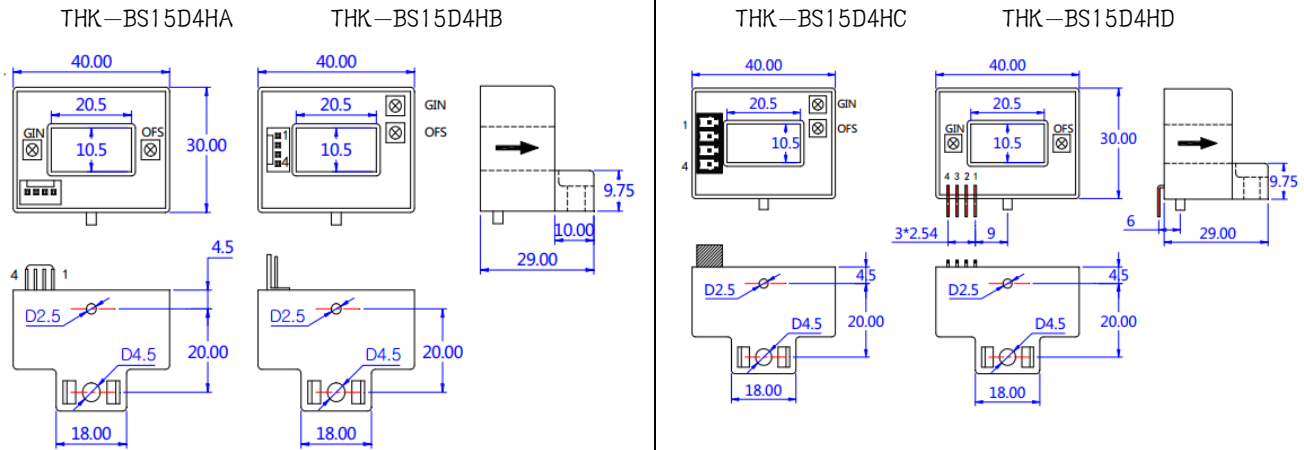
Parameter	Symbol	THK50 BS15D4H	THK100 BS15D4H	THK200 BS15D4H	THK300 BS15D4H	THK400 BS15D4H	THK600 BS15D4H
Rated current	$I_{PN}(A)$	50	100	200	300	400	600
Measuring range	$I_P(A)$	$0 \sim \pm 150$	$0 \sim \pm 300$	$0 \sim \pm 600$	$0 \sim \pm 900$	$0 \sim \pm 900$	$0 \sim \pm 900$
Output voltage	$V_O(V)$	$\pm 4.0 * (I_P / I_{PN}), DC$					
Load resistance	$R_L(k\Omega)$	$> 1.0$					
Working power supply	$V_C(V)$	$\pm 12V \sim \pm 15V$ DC $\pm 5\%$					
Insulation voltage	$V_D(V)$	50/60Hz, 1min, 2.5kV; RMS					

### General parameters:

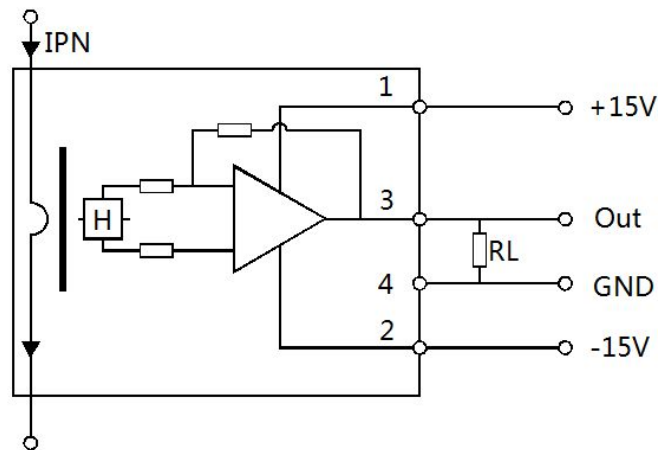
Project	Condition	Date	Unit
Accuracy $X_G$	@ $I_{PN}, T=25^\circ C$	$< \pm 0.5$	%
Offset voltage $V_{OE}$	@ $I_P=0, T=25^\circ C$	$< \pm 20$	mV
Voltage offset temperature drift $V_{OT}$	@ $I_P=0, -40 \sim +85^\circ C$	$< \pm 1.0$	mV/ $^\circ C$
Hysteresis offset voltage $V_{OH}$	@ $I_P=0, \text{after } 1 * I_{PN}$	$< \pm 20$	mV
Linearity $\epsilon_r$		$\leq 0.5$	%FS
Follow accuracy $di/dt$		$> 100$	A/ $\mu s$
Response time $t_{ra}$	@ 90% of $I_{PN}$	$< 3.0$	$\mu s$
Operating bandwidth $B_w$	-3dB	DC-20	kHZ
Working temperature $T_A$		$-40 \sim +85$	$^\circ C$
Storage temperature $T_s$		$-55 \sim +125$	$^\circ C$
Static power consumption $I_c$		15+Is	mA
Product weight $m$		65	g
Shell material	PBT material containing 30% glass fiber, flame retardant grade: UL94- V0;		
Standard	IEC60950-1:2001	EN50178:1998	SJ20790-2000



## Structural drawing: (mm)



## Connection diagram:



## Remarks:

1. When the measured current passes through the primary pin of the sensor, there is a corresponding voltage 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°C ;