Model No. YNC-A1

Product description

The sensor series are open-loop Hall current sensors. The primary and secondary coils of the sensors are insulated, which are for controlling or measuring DC, AC and pulse currents.

Work principles

The magnetic flux generated by the primary current aggregates in the magnetic circuit, which is detected by the Hall element in the air gap.The output voltage of the Hall element is processed, to output the standard voltage signal at the output end of the sensor. The voltage signal accurately reflects the changes of the primary current.

Main electrical parameters

Rated current IPN(A)	Measuring range IPM(A)	Isolation voltage KV/50Hz/1min	Model No.
50	0-±150	3	YNC-50A1
100	0-±300	3	YNC-100A1
200	0-±600	3	YNC-200A1
300	0-±900	3	YNC-300A1
400	0-±900	3	YNC-400A1
500	0-±900	3	YNC-500A1
600	0-±900	3	YNC-600A1

Rated measurement output VOUT	±4V
Load resistor RM	≥10KΩ
Supply voltage VC	±15V (±5%)
Current consumption IC	≤15mA

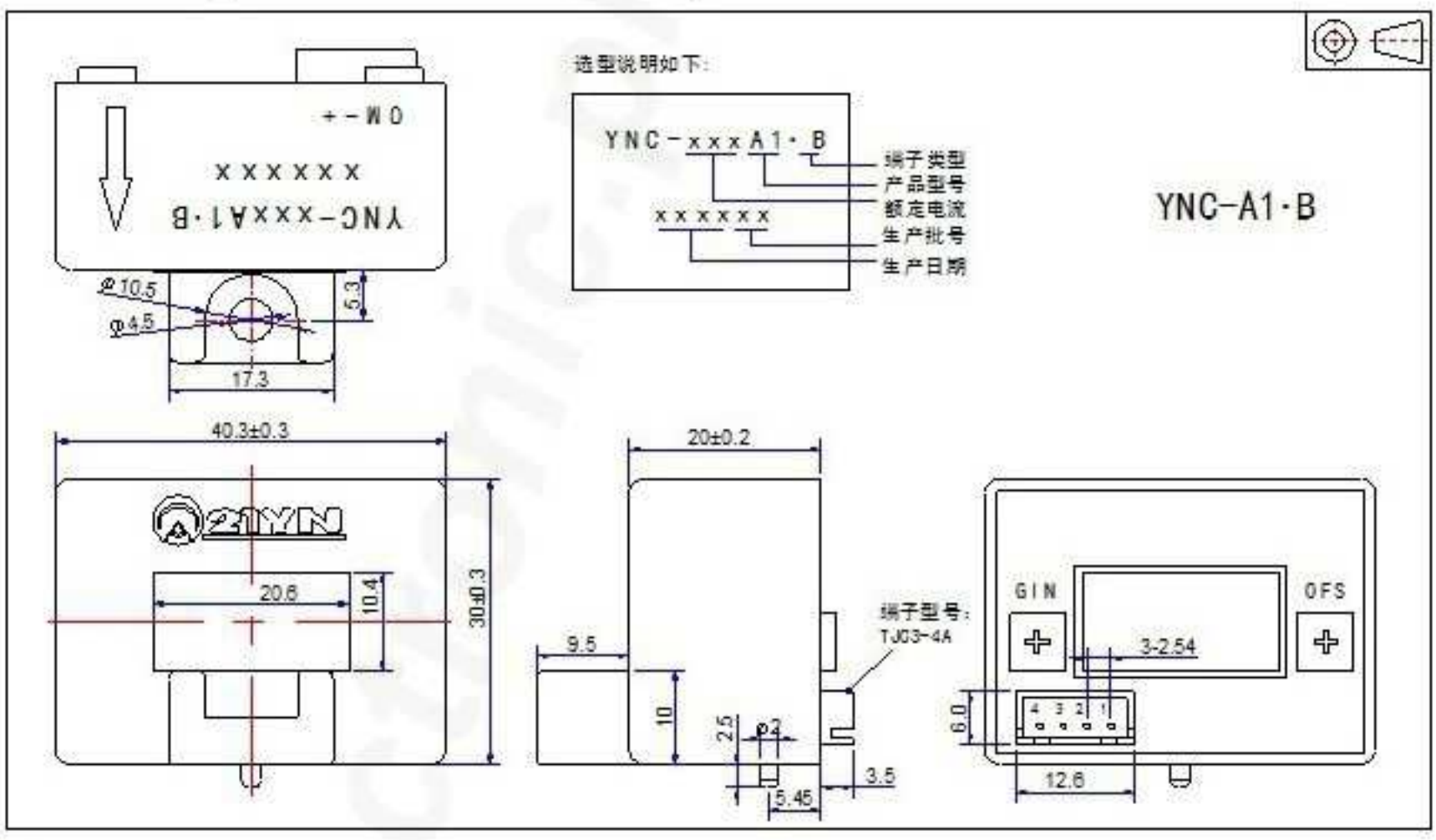
Dynamic performance parameters

Accuracy X	≤1% (+25℃)
Linearity εL	≤1% (+25℃)
Zero offset voltage VOE	≤±20mV (+25℃)
Zero temperature drift TCVOE	≤±1mV/℃ (-40℃ ~ +85℃)
Temperature drift TCVOUT	≤0.1%/℃
Bandwidth(-3db) BW	DC...50KHZ
Response time Tr	≤3us
Follow-up accuracy di/dt	> 50A/us

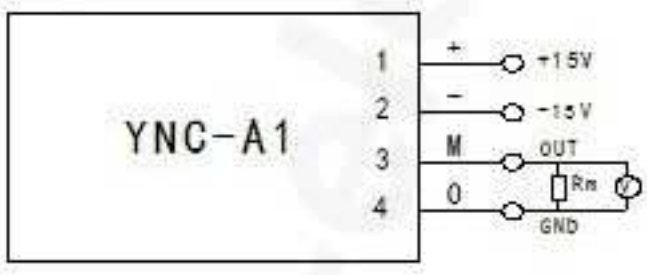
General parameters

Operating temperature TA	-40℃ ~ +85℃
Storage temperature TS	-40℃ ~ +120℃
Weight M	55g

Dimensions: (unstated tolerance ± 0.5mm)



Wiring



1:+15V（正电源）
2:-15V（负电源）
3:OUT （输出端）
4:GND （ 地 ）

Remarks

1. When the current to be measured flows through the input pin of a sensor, it can measure the current magnitude at the output.(Note: incorrect wiring may cause damage to the sensor).
2. The dynamic performance (di/dt and the response time) is the best when the primary hole is fully filled with the bus bar.
3. Sensors of different rated input currents and output voltages are customizable according to user needs.