

QBC07P-X 系列闭环型霍尔电流传感器
 QBC07P-X Series closed Loop Mode
 Hall Effect Current Sensor

南京强能传感技术有限公司



QBC07P-X 系列闭环型电流传感器的初、次级之间是绝缘的，具有超强抗干扰能力；用于测量直流、交流和脉动电流。

QBC07P-X series current sensor is closed loop device based on the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It has strong anti-jamming ability and provides accurate electronic measurement of DC, AC or pulsed currents.

电参数 Electrical data (Ta=25°C ±5°C, RL=2KΩ, CL=10000PF)

参数 Parameter \ 型号 Type	QBC07P 03-X	QBC07P 05-X	QBC07P 10-X	QBC07P 15-X	QBC07P 20-X	QBC07P 25-X	QBC07P 30-X	QBC07P 40-X	QBC07P 50-X	单位 Unit
额定输入电流 (Ip _n) Rated input (Ip _n)	3	5	10	15	20	25	30	40	50	A
测量电流范围(Ip) Measuring range(Ip)	9	15	30	45	60	75	90	120	150	A
匝比 (N _p /N _s) Turns ratio(N _p /N _s)	7: 2100	7: 1750	2: 2000	2: 2250	1: 2000	1: 2500	1: 2250	1: 2000	1: 2000	T
输入脚尺寸 Size of input pins	ø0.8	ø0.8	ø1.1	ø1.1	□1.5 ×1.5	□1.5 ×1.5	□1.5 ×1.5	□6.28 ×1.0	□6.28 ×1.0	mm
内接测量电阻 Inside resistance	200 ±0.1%	100 ±0.1%	200 ±0.1%	100 ±0.1%	200 ±0.1%	200 ±0.1%	100 ±0.1%	50 ±0.1%	40 ±0.1%	Ω
额定输出电压 Rated output	@ Ip=±Ip _n ±4±0.5%									V
电源电压 Supply voltage	±15±5%									V
功耗电流 Power consumption	20+IpX (N _p /N _s)									mA
零点失调电压 Zero voltage	@Ip=0 ≤±0.03									V
失调温漂 Offset drift	@ -40°C ~ +85°C ≤0.5									mV/°C
输出温漂 Output drift	@ -40°C ~ +85°C ≤0.5									mV/°C
线性度 Linearity	@ Ip=0-±Ip _n ≤0.1									%FS
响应时间 Response time	@ Ip=Ip _n , 50 A/μS , 10%-90% <1.0									μs
带宽 Bandwidth	@ -3dB 0—100									KHz
绝缘电压 Galvanic isolation	@ 50/60Hz, AC, 1min 3.0									kV
绝缘强度 Dielectric strength	>1000									MΩ

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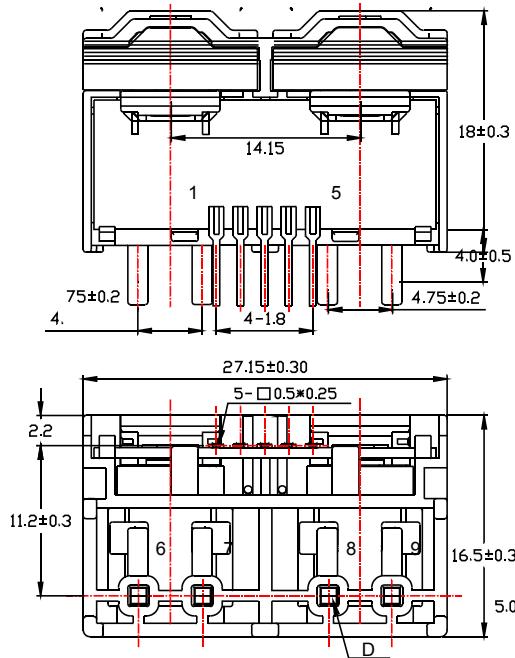
Hall Effect Current Sensor

总体参数 General date

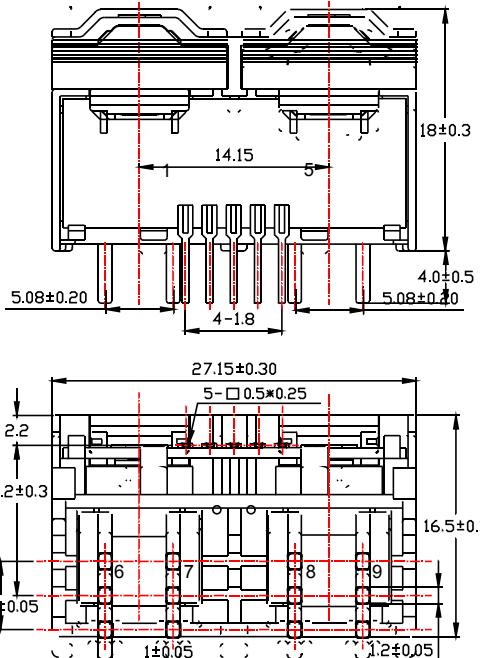
	数值 Value	单位 Unit	符号 Symbol
工作温度 Operating temperature	-40 to +85	°C	TA
储存温度 Storage temperature	-40 to +125	°C	TS
毛重(约) Mass(approx)	16	g	M

结构参数 Mechanical dimension(for reference only)

QBC07P(03-30)-X



QBC07P(40-50)-X



Terminal Pin Identification

- 1.....+15V
- 2.....-15V
- 3.....Output1
- 4.....Output2
- 5.....0V
- 6.....primary input current(+)
- 7.....primary input current(--)
- 8.....primary input current(+)
- 9.....primary input current(--)

Primary conductor diameter

QBC	07P03/05-X	07P10/15-X
D	Φ0.8	Φ1.1
QBC	07P20/25/30-X	07P40/50-X
D	1.5X1.5	6.28X1.0

使用说明 Directions for use

1. 当待测电流从传感器穿过，即可在输出端测得电压大小。(注意：错误的接线可能导致传感器损坏)
When the current will be measured goes through a sensor, the voltage will be measured at the output end.
(Note: The false wiring may result in the damage of the sensor).
2. 可按用户需求定制不同额定输入电流和输出电压的传感器。
Custom design in the different rated input current and the output voltage available.

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