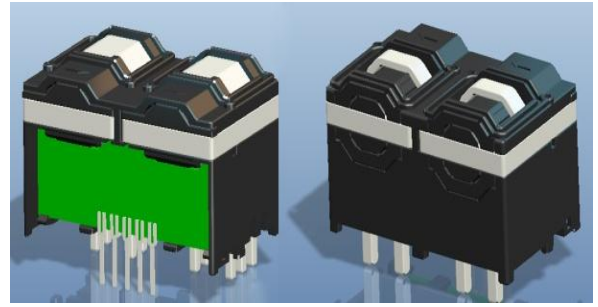


QBC07P-X 系列闭环型霍尔电流传感器

QBC07P-X Series closed Loop Mode Hall Effect Current Sensor



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℃±5℃, 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 (Ipn) Rated input (Ipn)		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 (Np/Ns) Turns ratio (Np/Ns)		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=±Ipn	±4±0.5%									V
电源电压 Supply voltage		±15±5%									V
功耗电流 Power consumption		20+IpX(Np/Ns)									mA
零点失调电压 Zero voltage	@Ip=0	≤±0.03									V
失调温漂 Offset drift	@ -40℃~+85℃	≤0.5									mV/℃
输出温漂 Output drift	@ -40℃~+85℃	≤0.5									mV/℃
线性度 Linearity	@ Ip=0~±Ipn	≤0.1									%FS
响应时间 Response time	@ Ip=Ipn, 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

QBC07P-X 系列闭环型霍尔电流传感器

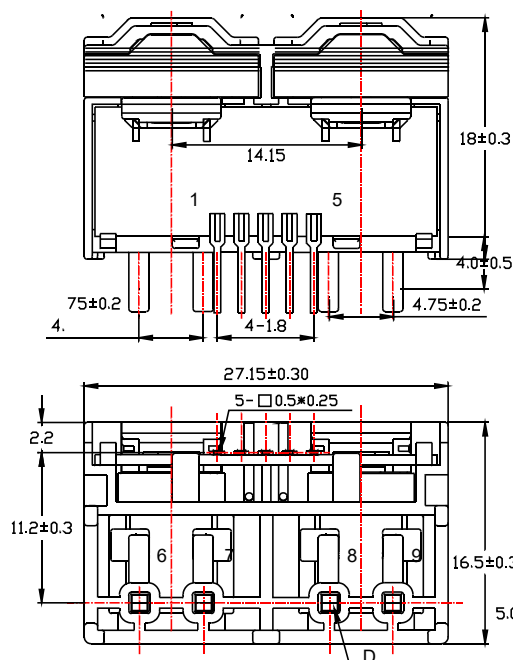
QBC07P-X Series closed Loop Mode Hall Effect Current Sensor

总体参数	General date
名称	Name
规格	Specification
数量	Quantity
重量	Weight
体积	Volume
产地	Origin
用途	Purpose
备注	Remarks

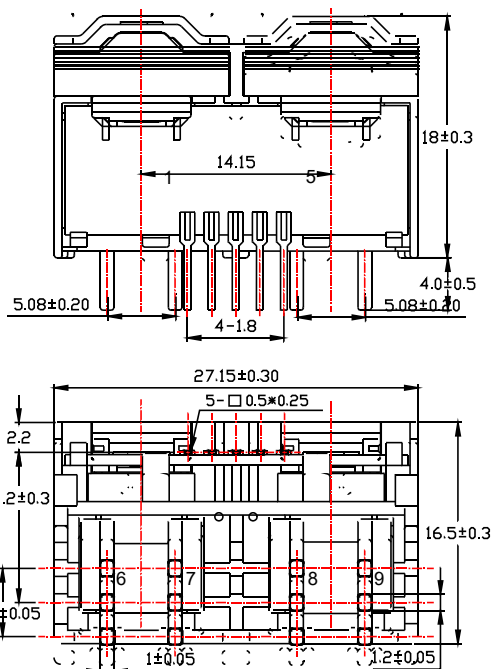
	数值 Value	单位 Unit	符号 Symbol
工作温度 Operating temperature	-40 to +85	°C	TA
储存温度 Storage temperature	-40 to +125	°C	TS
毛重(约) Mass (approx)	16	g	M

结构参数	Mechanical dimension(for reference only)
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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.