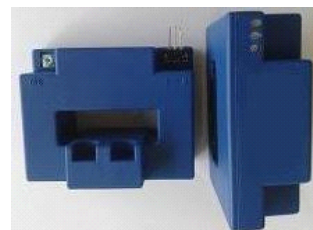


正角电子™



B4X 系列闭环型霍尔电流传感器的初、次级之间是绝缘的，可用于测量直流、交流和脉冲电流。

B4X series current sensor is a closed loop device based on the principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It provides accurate electronic measurement of DC, AC or pulsed currents.



**电参数 Electrical data (Ta=25°C ± 5°C)**

Type	B4X-200A	B4X-300A	B4X-400A	B4X-500A	单位 Unit
额定输入电流(Ipn) Rated current(Ipn)	± 200	± 300	± 400	± 500	A
测量电流范围(Ip) Measure range(Ip)	0—±300	0—±450	0—±600	0—±750	A
匝比 (Np/Ns) Turns ratio(Np/Ns)	1: 2000	1: 3000	1: 4000	1: 5000	T
测量电阻 Measure resister with ± 12V	@± 200Amax 0(min)88(max)	@± 300Amax 0(min)76(max)	@± 400Amax 0(min)63(max)	@± 500Amax 0(min)46(max)	Ω
	@± 300Amax 0(min)50(max)	@± 450Amax 0(min)38(max)	@± 600Amax 0(min)25(max)	@± 750Amax 0(min)8 (max)	Ω
测量电阻 Measure resister with ± 15V	@± 200Amax 0(min)117(max)	@± 300Amax 0(min)105(max)	@± 400Amax 0(min)92(max)	@± 500Amax 0(min)75(max)	Ω
	@± 300Amax 0(min)69(max)	@± 450Amax 0(min)57(max)	@± 600Amax 0(min)44(max)	@± 750Amax 0(min)27(max)	Ω
次级线圈内阻 Coil resister	19	31	44	61	Ω
额定输出电流 Rated output	@Ip=±Ipn ± 100± 1%				mA
电源电压 Supply voltage	± 12, ± 15, ± 18				V
功耗电流 Power Consumption	≤ 20+IpX(Np/Ns)				mA
失调电流 Offset current	@Ip=0 ± 0.2				mA
失调电流温漂 Offset drift	@ -40~+85°C ≤ ± 0.5				mA

**B4X 系列闭环型霍尔电流传感器**  
**B4X Series Closed Loop Mode**  
**Hall Effect Current Sensor**

线性度 Linearity	@ $I_p=0-\pm I_{pn}$	$\leq 0.1$	%FS
响应时间 Response time	@50A/ $\mu$ S, 10%-90%	$\leq 1$	$\mu$ S
绝缘电压 Galvanic isolation	@ 50HZ,AC,1min	6	KV
跟随精度 di/dt		$>100$	A/us
带宽 Bandwidth	@ -1dB	0~150	KHZ

**应用 Applications**

- 变频调速系统

Variable speed drives

- 电焊机

Welding machine

- 通讯电源

Battery supplied applications

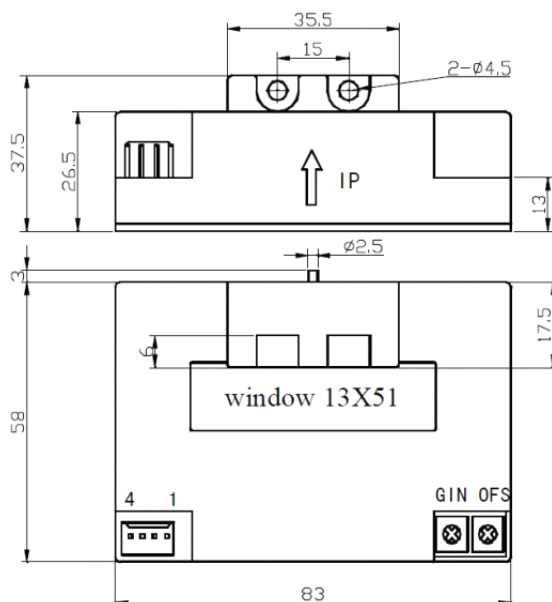
- 不间断电源 UPS

Uninterruptible Power Supplies (UPS)

- 电化学

Electrochemical

**结构参数 Mechanical dimension(for reference only)**



Remarks:

1. All dimensions are in mm.
2. General tolerance  $\pm 1$ mm.
3. Elucidation: 1:+15V 2:-15V 3:IOUT 4:NC

**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流大小。(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 current 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流的传感器。

Custom design in the different rated input current and the output current are available.

**执行标准 Standards**

- UL94-V0.
- EN60947-1:2004
- IEC60950-1:2001
- EN50178:1998
- SJ 20790-2000

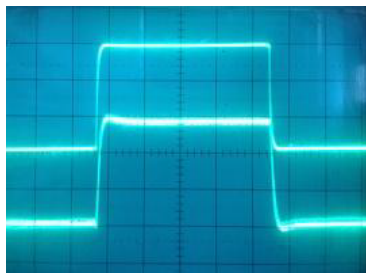
**总体参数 General date**

	数值 Value	单位Unit
工作温度 (TA) Operating temperature	-40 to +85	℃
储存温度 (TS) Storage temperature	-40 to +125	℃
毛重(约) (M) Mass(approx)	162	g

**特性图 Characteristics chart**

脉冲电流信号响应特性

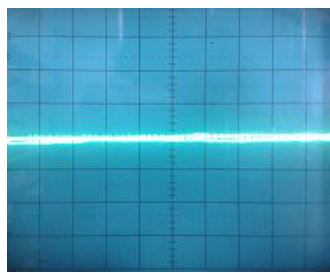
Pulse current signal response characteristic



输入信号  
( Input signal )  
输出信号  
( Output signal )

抗脉冲电压干扰特性

Effects of impulse noise



输出电压  
( Output voltage )