

# WCS17A

$I_p = 500 \dots 2500A$



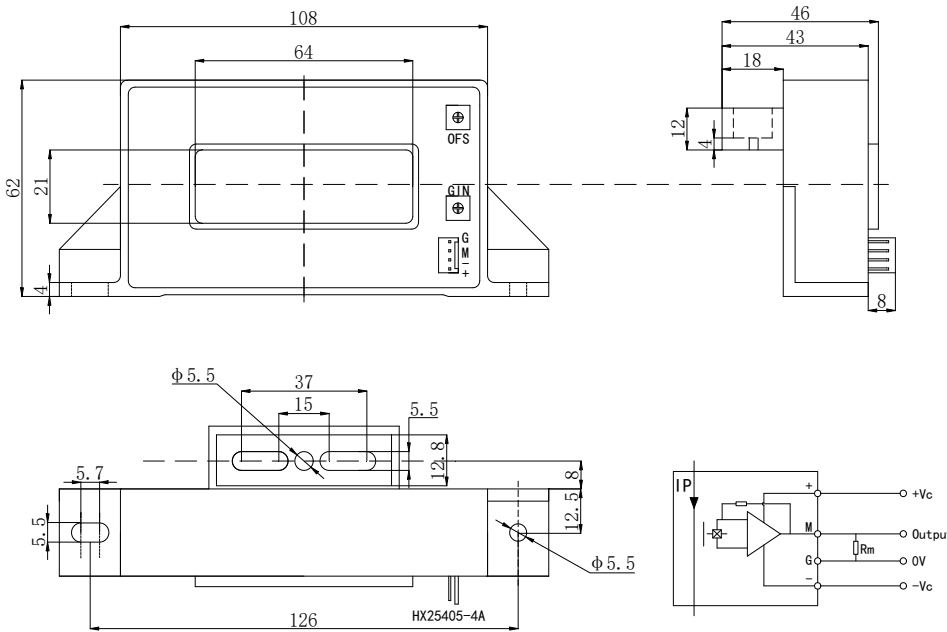
## 产品特点 Products Features

- 安装方便  
Easy mounting
- 体积小, 节省空间  
Small size and space saving
- 无插入损耗  
No insertion losses
- 抗干扰能力强  
High immunity to external interference

## 应用领域 Applications

- 直流电机驱动静态转换器  
Static converters for DC motor drives
- 通讯电源  
Battery supplied applications
- 不间断电源 (UPS)  
Uninterruptible Power Supplies
- 开关电源 (SMPS)  
SWITCHED Mode Power Supplies
- 电焊机  
Power supplies for welding applications

## 机械尺寸 Mechanical dimension



## 机械特性 Mechanical characteristics

一般公差  
General tolerance  
 $\pm 0.5 \text{ mm}$

其它公差执行  
Other tolerance execution  
GB/T 1804-2000-M

固定孔尺寸  
Fixing hole size  
 $\Phi 4.5 \text{ mm}$

紧固螺丝  
Fastening steel screw  
M4

建议紧固扭矩  
Recommended fastening torque  
 $1.5 \text{ Nm} (\pm 10 \%)$

连接器  
Connection of secondary  
HX25405-4A

## 注意 Remarks

- 错误的接线可能导致传感器损坏。  
The false wiring may result in the damage of the sensor.
- $I_p$ 方向与产品箭头方向一致时, 输出电压为正极。  
 $V_{out}$  is positive when  $I_p$  flows in the direction of the arrow.
- 当初级导体完全充满初级孔径时动态表现 ( $di/dt$ 和响应时间) 为最佳效果。  
Dynamic performances ( $di/dt$  and response time) are best with a single bar completely filling the primary hole.
- 初级导体的温度不应超过  $100^\circ\text{C}$ 。  
Temperature of the primary conductor should not exceed  $100^\circ\text{C}$ .

**电气参数Electrical data** **WCS17A-xxxA**除非另有说明，否则环境参数均为@  $T_A = 25^\circ\text{C}$ ,  $R_L = 10\text{ k}\Omega$ 

型号 Type	WCS17A- 500A	WCS17A- 1000A	WCS17A- 1500A	WCS17A- 2000A	WCS17A- 2500A
额定测量电流 $I_P$ Rated input	500A	1000A	1500A	2000A	2500A
测量范围 $I_{PM}$ Measure range	1500A	3000A	3000A	3000A	3000A
额定输出电压 $V_{OUT}$ Rated output voltage	$\pm 4V$				
零点电压 $V_{off}$ Offset voltage	$\pm 20\text{mV}$				
零点失调电压温漂 $V_{OUT}$ Offset voltage drift	$\pm 0.5\text{mV}/^\circ\text{C}$				
幅度电压温度漂移 $V_{OUT}$ Amplitude voltage temperature drift	$\leq 0.1\%/^\circ\text{C}$				
电源电压 $V_C$ Supply voltage	$\pm 12\text{VDC} \sim \pm 15\text{VDC} (\pm 5\%)$				
负载电阻 $R_M$ Load resistance	$\geq 10\text{K}\Omega$				
线性度 $\epsilon_L$ Linearity	$\leq 1\%\text{FS}$				
总体精度 $X$ Overall accuracy	$\pm 1\%\text{FS}$				
静态电流消耗 $I_C$ Current consumption	$\leq 20\text{mA}$				
响应时间 $T_R$ Response time	$< 7\mu\text{s}$				
频带宽度 $BW$ Frequency bandwidth-3db	$\text{DC} \sim 25\text{KHz}$				
$di/dt$ 跟随精度 $di/dt$ accurately followed	$> 50\text{A}/\mu\text{s}$				
绝缘耐压 $V_D$ Galvanic isolation	50Hz, 1min, 5KV				
工作环境温度 $T_A$ Ambient operating temperature	$-25 \sim +105^\circ\text{C}$				
储存环境温度 $T_s$ Ambient storage temperature	$-25 \sim +105^\circ\text{C}$				
质量 $m$ Mass	$\approx 400\text{g}$				
执行标准 Standards	JB/T 7490-2007				

**定制Customized**

这是一个标准的产品，需要其他规格（测量电流、电源电压、输出电压、连接器、转换比率等）请联系我们。

This is a standard model. For different versions (IP, supply voltages, output voltages, connection of secondary turns ratio, ...) please contact us.

**联系方式Contact information**

李伟军 18576410868 www.gchsensord.com victor801@vicorv.com