闭环霍尔电流传感器 AHKB-1005-TS

I_P=1000A

产品特点 Products Features

精度高
Excellent accuracy
良好的线性度
Very good linearity
高带宽
Wide frequency bandwidth
无插入损耗
No insertion losses
抗干扰能力强
High immunity to external interference

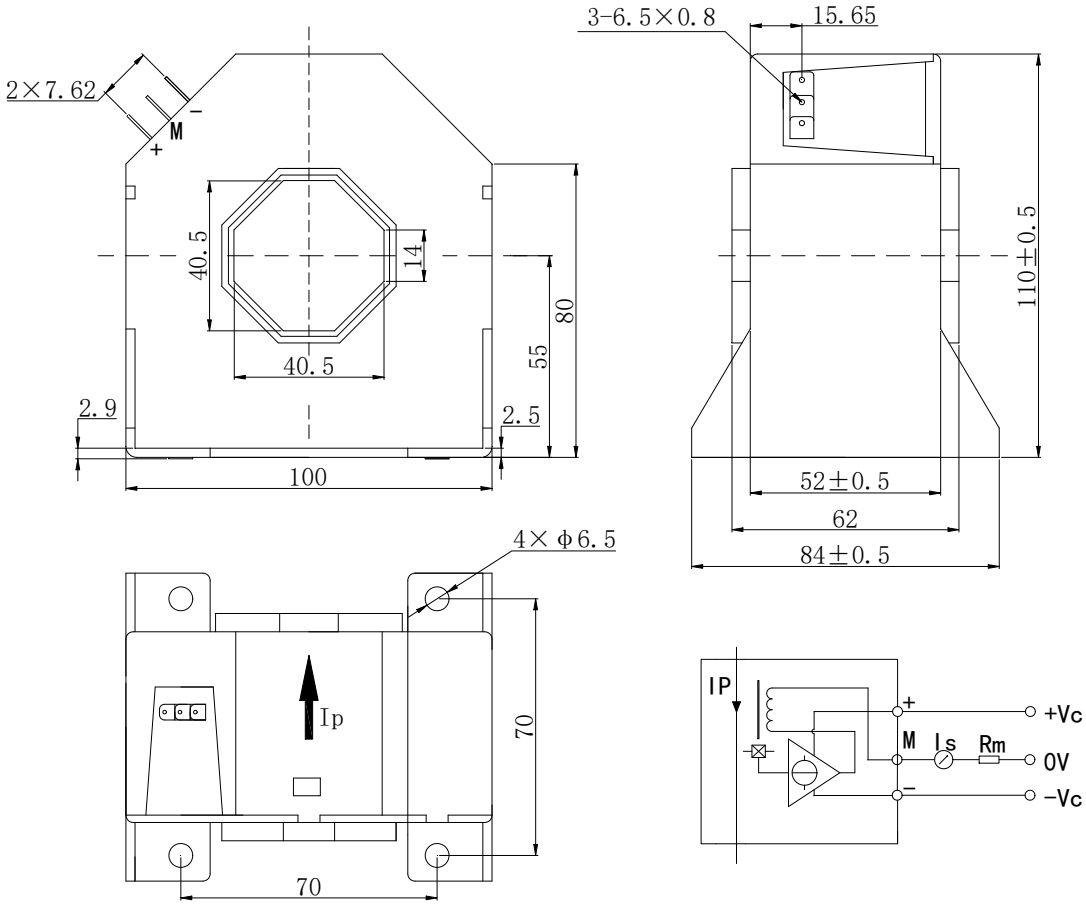
应用领域 Applications

交流变速驱动器
AC variable speed drives
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

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.
Ip 方向与产品箭头方向一致时，输出电压为正极。
VOUT is positive when IP 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℃。
Temperature of the primary conductor should not exceed 100°C.
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 ratios...),please contact us.

机械尺寸 Mechanical dimension



机械特性 Mechanical characteristics

一般公差 General tolerance	± 0.5 mm
其它公差执行 Other tolerance execution	GB/T 1804-2000-M
固定孔尺 寸 Fixing hole size	Φ6.5mm
紧固螺丝 fastening steel screw	M6
建议紧固扭矩 Recommended fastening torque	5Nm (± 10 %)
连接器 Connection of secondary	6.5mm×0.8mm(×3)

电气参数 Electrical data AHKB-1005-TS

除非另有说明，否则环境参数均为@ T_A = 25 °C

型号 Type		AHKB-1005-TS
额定测量电流 I_P Rated input		±1000A
测量范围 I_{PM} Measure range		±1500A
额定输出电流 I_S Rated output current		±200mA
转换比率 K_N Conversion ratio		1:5000
测量电阻范围 R_M Measure resister range	With±15V @I_P With±15V @I_{PM} With±24V @I_P With±24V @I_{PM}	max 18Ω max 7Ω max 61Ω max 24Ω
次级线圈电阻 Secondary coil resistance		37Ω
电源电压 V_C Supply voltage		±15VDC～±24VDC（± 5%）
绝缘耐压 V_D Galvanic isolation		50Hz，1min，6KV
总体精度 X Overall accuraty		±0.4%FS
线性度 ε_L Linearity		≤0.1%FS
零点失调电流 I_O Offset current		±0.2mA
零点失调电流温漂 I_{OT} Offset current drift		±0.5mA
静态电流消耗 I_C Current consumption		45mA+I_S
响应时间 T_R Response time		<1μs
频带宽度 BW Frequency bandwidth-3db		DC～150KHz
di/dt 跟随精度 di/dt accurately followed		>100A/μS
工作环境温度 T_A Ambient operating temperature		-40～+85℃
储存环境温度 T_S Ambient storage temperature		-40～+125℃
质量 m Mass		≈750g
执行标准 Standards		SJ 20790-2000；JB/T 7490-2007