

产品说明

Applications

该磁平衡式霍尔电流传感器适用于对交流、直流和脉冲电流的隔离精确测量，测量时一次侧与二次侧之间完全绝缘。

For the electronic measurement of currents: AC, DC, IMPL, etc., with galvanic isolation between the primary (high power) and the secondary (electronic) circuits.

产品优点 Advantages	产品应用 Applications	参照标准 Standards
高精度 Excellent accuracy	交流变频器 AC variable speed drives	EN50178
线性度好 Very good linearity	伺服电机驱动 Servo motor drives	EN50155
低温漂 Low temperature drift	电池供电 Battery supplied applications	
宽频带 Wide frequency bandwidth	变频器/逆变器 converter/inverter	
快速响应 Optimized response time	UPS/SVG	

主要电气参数 Main electrical data

额定测量电流 I_N (A)	Primary nominal current rms	300
测量范围 I_m (A)	Primary current measuring range	0~±500
变比 K	Conversion ratio	1:2000
电源电压 V_s (V)	Supply voltage	±15 V (±5%)
额定测量输出 I_{sN} (mA)	Secondary nominal current rms	150mA
测量电阻 R_m (Ω)	Measuring resistance	
		70°C
		85°C
	R_{Lmin}	R_{Lmax}
@±15V, ±300A:	4.5 Ω	48 Ω
@±15V, ±500A:	6.5 Ω	17 Ω
	R_{Lmin}	R_{Lmax}
@±15V, ±300A:	18.5 Ω	46 Ω
@±15V, ±500A:	10 Ω	15 Ω
二次侧电流消耗 I_{sc} (@±24V)	Current consumption	≤25mA+Secondary output current I_{sN}
隔离耐压	Isolation test: Between the primary circuit to the secondary circuit	3 kVrms/500Hz/1min

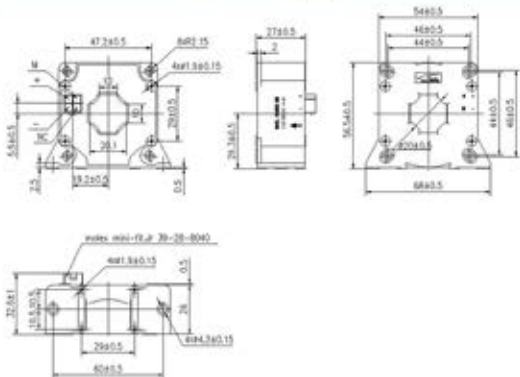
精度 - 动态参数 Accuracy - Dynamic performance data

基本误差 δI (@ I_N , $T_a=25^\circ\text{C}$)	Overall Accuracy	≤±0.5%
线性度误差 δL (@ I_N , $T_a=25^\circ\text{C}$)	Linearity error	<0.1%
零点输出电流 I_0 (@ $I=0$, $T_a=25^\circ\text{C}$)	Offset current	≤±0.2mA
零点温漂 I_{0T}	Thermal drift	≤±0.70mA (-40°C~+85°C)
响应时间 t_r	Response time to 90% of I_N step	≤1ms
负载精度	负载 Accurately followed	>100A I_N
频率带宽 BW	Frequency bandwidth(-1dB)	DC-100kHz

一般数据 General data

工作温度 T_a	Ambient operating temperature	-40℃~+85℃
储存温度 T_s	Ambient storage temperature	-40℃~+90℃
电气间隙	Clearance distance dCl mm	8.2 mm
爬电距离	Creepage distance dCp mm	21.1 mm
相对漏电起痕指数	CTI	> 175
重量 m	Mass	≤110g

外形图 Dimensions (in mm)



电气连接 Connection

Connection of secondary: MOLEX MINI-fit Jr 39-26-8040

