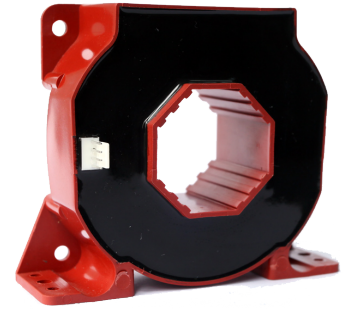


MCT-E-1000LF 高精度闭环型霍尔电流传感器的初、次级之间是绝缘的，无位置误差，能真正测量分辨 1000: 1，用于精密测量直流、交流和脉冲电流。The MCT-E-1000LF current sensor is a closed loop device based on the measuring principle of the hall effect and null balance method, with a galvanic isolation between primary and secondary circuit, the size of primary not affect test precision no matter the location of primary in the hole of current sensor. It can really measure resolution 1000:1 and it uses for precision measurement of DC, AC and pulse current.



电参数 Electrical data(Ta=25℃±5℃)

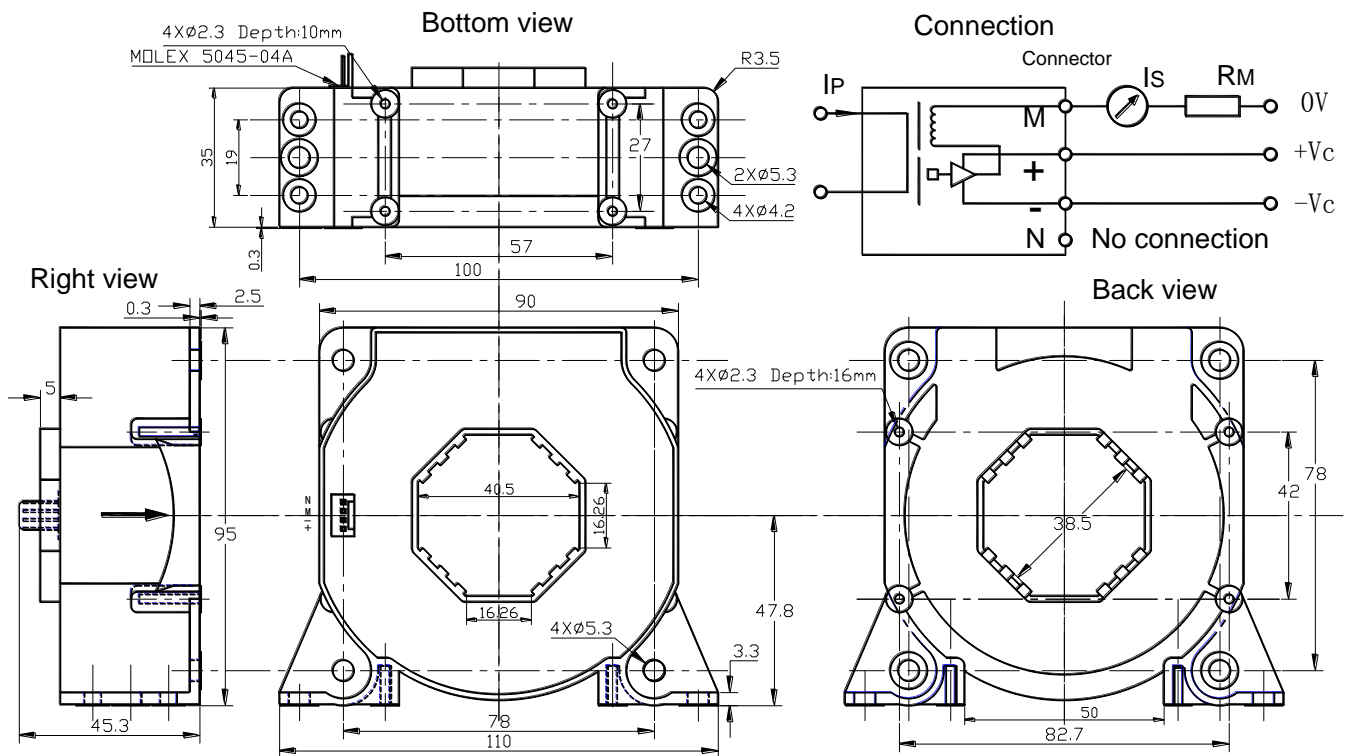
参数 Parameter	型号 Type	MCT-E-1000LF	单位 Unit
额定输入电流 (I _{pn}) Rated input I _{pn})		10-1000	A
测量电流范围 (I _p) Measure range (I _p)		2000	A
次级线圈内阻 Coil resister	@ 85℃	48	Ω
测量电阻 Measure resister	with±15V @±1000Amax	0 (min) 20 (max)	Ω
	with±15V @±1200Amax	0 (min) 7.5 (max)	Ω
	with±24V @±1000Amax	0 (min) 65 (max)	Ω
	with±24V @±2000Amax	0 (min) 7.5 (max)	Ω
匝比 (N _p /N _s) Turns ratio (N _p /N _s)		1:5000	
额定输出电流 (I _{sn}) Rated output (I _{sn})		2±0.1%FS (10A), 200±0.1%FS (1000A)	mA
电源电压 Supply voltage		±15~±24	V
功耗电流 Power consumption		≤20+I _p X (N _p /N _s)	mA
失调电流 Zero offset	@I _p =0	≤±0.2	mA
失调电流温漂 Offset drift	@ -40℃~85℃	≤±0.5	mA
响应时间 Response time	@100A/μ S, 10%-90%	<1	μs
线性度 Linearity	@I _p =0-±I _{pn}	≤0.05	%FS
绝缘电压 Galvanic isolation	@ 50HZ, AC, 1min	6	KV
di/dt 跟随精度 di/dt accurately followed		>100	A/μs
带宽 Bandwidth	@ -3dB	DC~150	KHz

应用 Applications

- 交流变频驱动器和伺服电机驱动器 AC variable speed drives and servo motor drives
- 静态转换的直流电动机驱动器 Static converters for DC motor drives
- 电池供电应用 Battery supplied applications
- 不间断电源 Uninterruptible Power Supplies (UPS)
- 开关电源 Switched Mode Power Supplies (SMPS)
- 电焊机供电装置 Power supplies for welding applications

结构参数 Mechanical dimension(for reference only)

1. All dimensions are in mm.
2. General tolerance ± 1 mm.



使用说明 Directions for use

1. 在 IP 按箭头方向流动时，IS 是正向。

Is will be in a forward direction when the Ip flows according to the direction of the arrowhead.

2. 初级导体温度不应超过 120℃。

The primary conductor should be $\leq 120^{\circ}\text{C}$.

3. 母排完全充满初级穿孔时动态表现 (di/dt 和响应时间) 为最佳。

The dynamic performance (di/dt and the response time) is the best when the primary hole is fully filled with the bus bar.

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	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)	570	g	M