

MCT-F-A02 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。

The MCT-F-A02 series 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. It provides accurate electronic measurement of DC, AC or pulsed currents.



电参数 Electrical data(Ta=25℃±5℃)

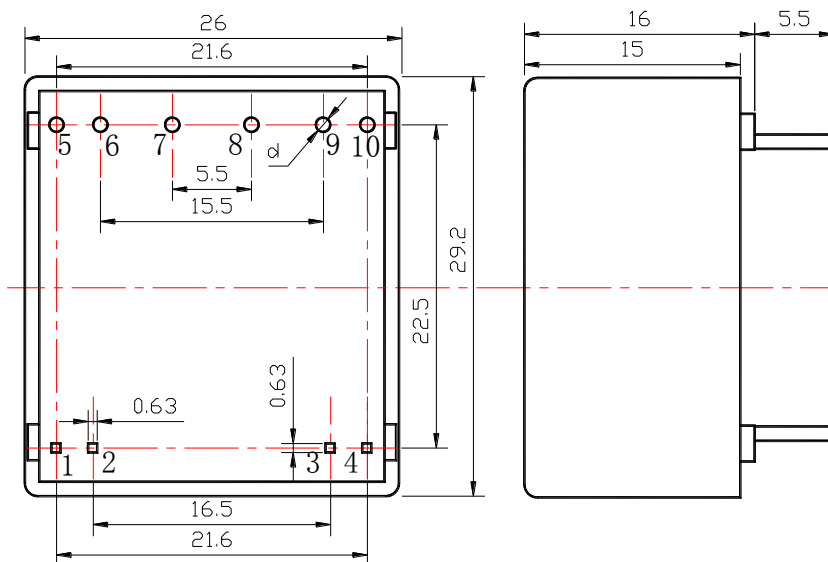
型号 Type 参数 Parameter	MCT-F-500A02	MCT-F-1AA02	MCT-F-2AA02	MCT-F-5AA02	MCT-F-10AA02	MCT-F-20AA02	单位 Unit
额定输入电流 (I _{pn}) Rated input (I _{pn})	0.5	1	2	5	10	20	A
测量电流范围 (I _p) Measure range (I _p)	1.5	3.0	6	15	30	60	A
匝比 (N _p /N _s) Turns ratio (N _p /N _s)	30:1500	15:1500	8:1600	3:1500	2:2000	1:2000	T
内接取样电阻 Internal measuring resistor	400±0.1%	400±0.1%	400±0.1%	400±0.1%	400±0.1%	400±0.1%	Ω
额定输出电压 Rated output voltage	@ I _p =±I _{pn} ±4±0.5%						V
电源电压 Supply voltage	±15 ±5%						V
功耗电流 Power consumption	≤20+I _p X (N _p /N _s)						mA
零点失调电压 Zero offset voltage	@ I _p =0 ≤±20						mV
失调电压温漂 Offset voltage drift	@-40 to +85℃ ≤±0.5						mV/℃
线性度 Linearity	@ I _p =0-±I _{pn} ≤0.1						%FS
响应时间 Response time	@100A/μ S, 10%-90% ≤1						μ S
绝缘电压 Galvanic isolation	@ 50HZ, AC, 1min 2.5						KV

应用 Applications

- 交流变速与伺服马达驱动器 AC variable speed drives and servo motor drives
- 直流电机驱动静态转换器 Static converters for DC motor drives
- 变频调速系统 Variable speed drives
- 电焊机 Power supplies for welding applications
- 通讯电源 Battery supplied applications
- 不间断电源 Uninterruptible Power Supplies (UPS)
- 开关电源 Switched Mode Power Supplies (SMPS)

结构参数 Mechanical dimension(for reference only)

1. All dimensions are in mm.
2. General tolerance $\pm 1\text{mm}$.



Terminal Pin Identification

- 1.....+15V
- 2.....-15V
- 3.....0V
- 4.....Output
- 5,6,7...primary input current(+)
- 8,9,10...primary input current(--)

	Current	d	Connected
1	0.5A-3A	2- \varnothing 0.6	5、10
2	5A、10A	2- \varnothing 1.6	6、9
3	20A	4- \varnothing 1.6	6-7、8-9

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压大小。(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 voltage 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压的传感器。
Custom design in the different rated input current and the output voltage 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	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)	21	g	M