Rongtech Industry (ShangHai) Inc.,

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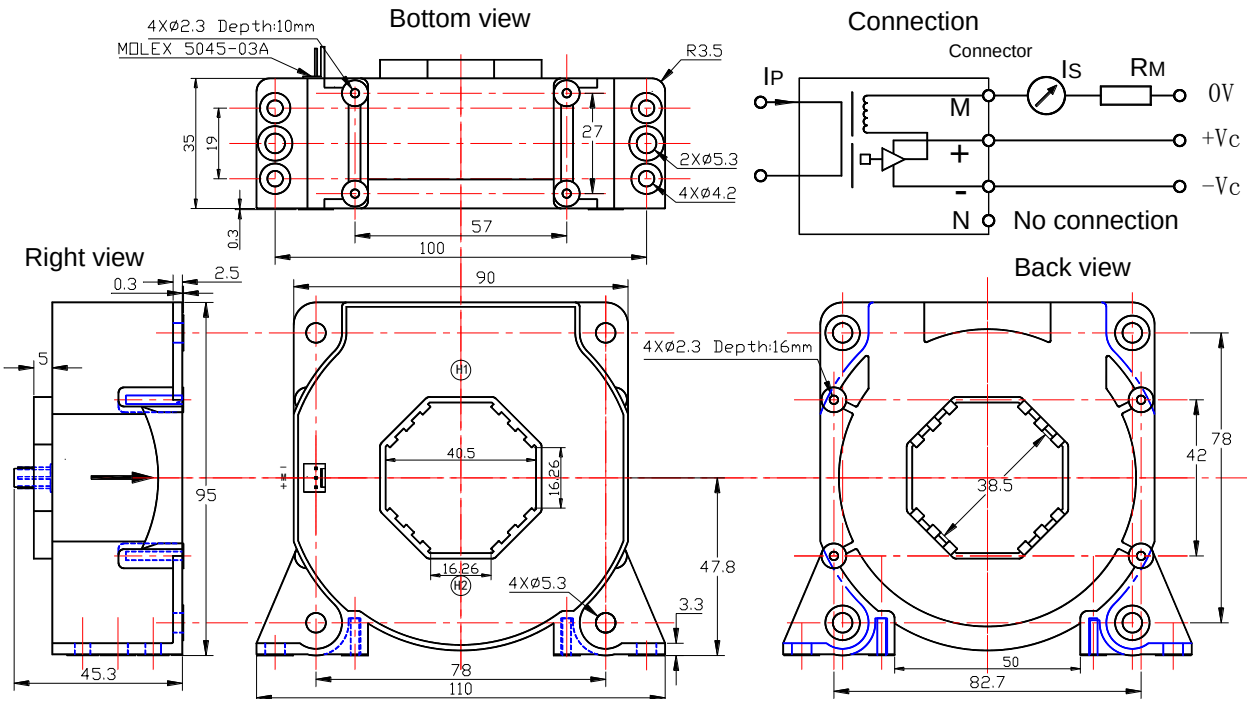
RTNT1000-C3 High precision Hall Effect Current Sensor

RTNT1000-C3 modle current sensor is a closed loop device based on the measuring principle of the hall effect ,with a galvanic isolation between primary and secondary circuit, the size of primary not effect test precision, no matter the location of primary in the hole of current sensor, It really measuring resolution 1000:1 and it use for precision measurement of DC, AC and pulse current.

ELECTRICAL DATA

type		RTNT1000-C3	
Rated current(Ip)		10-1000	A
Measure range		2000	A
Measure resister	with±15V @±500Amax	0(min) 20(max)	Ω
	@±1000Amax	0(min) 5.0(max)	Ω
	with±24V @±500Amax	0(min) 65(max)	Ω
	@±1000Amax	0(min) 5.0(max)	Ω
Turns Ratio		1:5000	Ω
Rated output current	2±0.2% **Accuracy**(10A)	200±0.2% **Accuracy**(1000A)	mA
Supply voltage		±15～±24	V
Currentconsumption(Is=0)		35+Is	mA
Offset drift curent		±0.2	mA
Offset current temp drift	-40℃～85℃	±0.5	mA
Response time		＜1	μs
Linearity		≤0.05	%FS
Galvanic isolation	50Hz,1min	6	KV
di/dt		＞100	A/μ s
Band with (-3dB)		DC…150	KHz
Secondary coilresister	70℃	65	Ω
Operating temperature		-40～+85	℃
Storage temperature		-40～+125	℃

MOUNTING DATA



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RoHS COMPLIANT 2002/95/EC CE

DIRECTIONS FOR USE

1. Is will be in a forward direction when the Ip flows according to the direction of the arrowhead.
2. The primary conductor should be≤120℃;
3. The dynamic performance (di/dt and the response time)is the best when the primary hole is fully filled with the bus bar.

General data

- General tolerance ISO 2768-c
- Isolated plastic case recognized according to UL 94-V0

Standards IEC60950-1:2001 Test Voltage: 1000V
EN50178:1998 Test Voltage: 1000V

- Mass 550±50 g

Isolation characteristics

- Vd Rms voltage for AC isolation test, 50Hz,1min 6.0Kv

Applications

- Welding machine
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Electrochemical
- Switched Mode Power Supplies(SMPS)
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