



***Closed Loop Hall AC/DC Current Sensor***

HO-HACL-XXX-T45 series of high-precision current sensors, using the hall closed loop (magnetic balance) principle. The former side of the sensor is insulated and has no position error. It is used for precise measurement of DC, AC and pulse currents.

***Product Features:***

- Excellent accuracy
- Very good linearity
- Optimized response time
- No insertion losses
- High immunity to external interference
- Low temperature drift

***Application:***

- Photovoltaic equipment
- General Purpose Inverters
- AC/DC Variable Speed Drivers
- Battery Supplied Applications
- Uninterruptible Power Supplies
- Switched Mode Power Supplies

***Electric Specifications***

P/N	LO-HACL-1000-T45	Unit
Rated input (I <sub>pn</sub> )	1000	A
Measuring range (I <sub>p</sub> ) DC	0~±2000	A
Rated output current(I <sub>sn</sub> )	200	mA
Turns ratio (N <sub>p</sub> /N <sub>s</sub> )	1:5000	T
Measure resistor with ±15V	@±1000Amax 30(max)	Ω
	@±1200Amax 20(max)	
Measure resistor with ±24V	@±1000Amax 75(max)	Ω
	@±1200Amax 15(max)	
Secondary DCR@25°C	37	Ω
Accuracy	±0.4%	%
Supply voltage	±15~±24	V
Power consumption current	≤18+I <sub>p</sub> X(N <sub>p</sub> /N <sub>s</sub> )	mA
Zero offset current	≤±0.25 @I <sub>p</sub> =0	mA
Offset Current Temperature Drift	≤±0.5 @-25°C~+85°C	mA
Linearity	≤0.1 @I <sub>p</sub> =0-±I <sub>pn</sub>	%FS
Di/dt following precision	>100	A/us
Response time	<1.0 @100A/μ S,10%-90%	us
Band width	DC-100 @-3dB	KHz
Dielectric strength	AC6KV 50Hz 60s	KV

**Instructions**

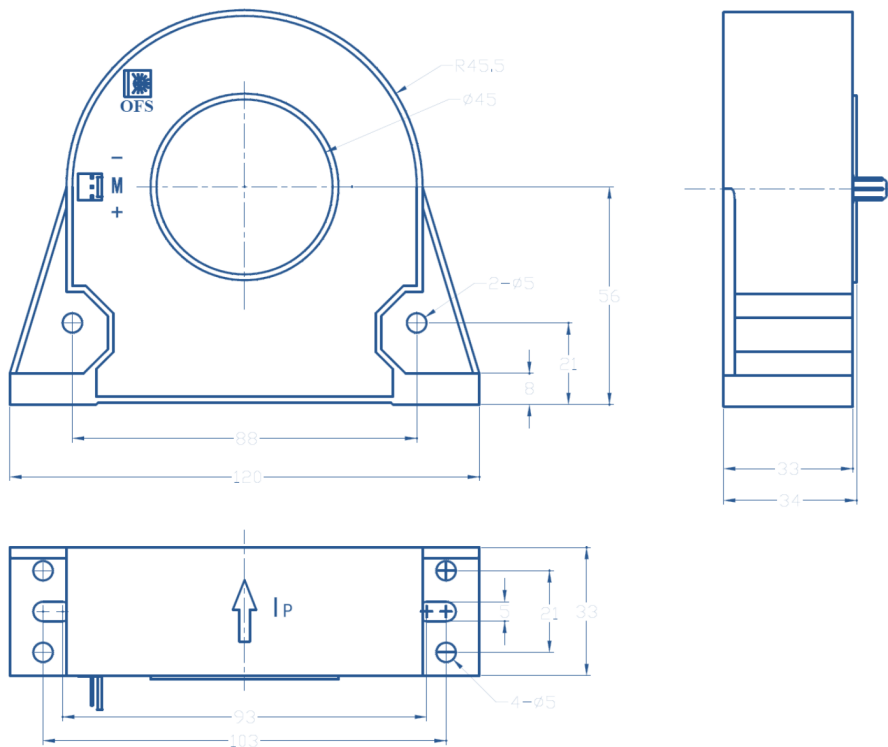
1. Incorrect wiring may cause the damage of sensor.
2. When the measured current through the center hole of the sensor, the current will be measured at the output end.
3. The dynamic performance (di/dt and the response time) is the best when the primary hole is fully filled with the bus bar.
4. User can adjust the output extent of sensor if necessary.
5. Rated input current and output voltage of sensor can be customized.

**Standards**

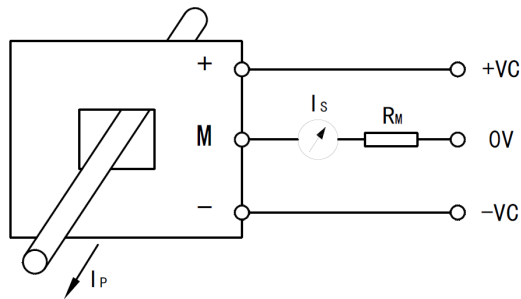
- IEC61010-1
- EN50178
- IEC61800-5-1
- UL94V-0
- RoHS Reach

Operating Conditions			
	Value	Unit	Symbol
Operating temperature	-40℃~+80℃	℃	TA
Storage temperature	40℃~+100℃	℃	TA
Weight(Appro)	460	g	M

**Dimensions:**



**Connection Schematic:**



**+**: +15V~-15V

**-**: -15V~-24V

**M**: Iout

**OFS**: Zero offset adjust