

TR0240-LKH Series Hall Effect Current Sensor

Product description

The sensor uses the Hall detection principle of direct measurement. The magnetic flux generated by the primary side current accumulates in the magnetoelectric circuit, and Hall voltage signal is detected by Hall device. After amplification, the voltage signal accurately reflects the primary side current.

Main characteristics

- ★ Measuring AC, DC and pulse signals
- ★ Strong anti-interference and high common-mode rejection ratio
- ★ Low temperature drift, fast response time, wide frequency bandwidth
- ★ Perforated structure, no insertion loss

Applications

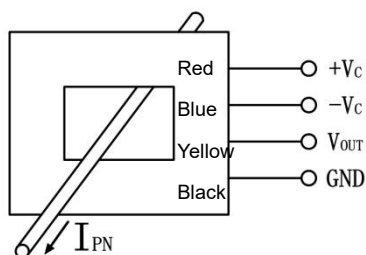
- ★ AC variable frequency speed regulating
- ★ Servo motor traction
- ★ UPS
- ★ Welding machine, battery power supply
- ★ Photovoltaic inverter device



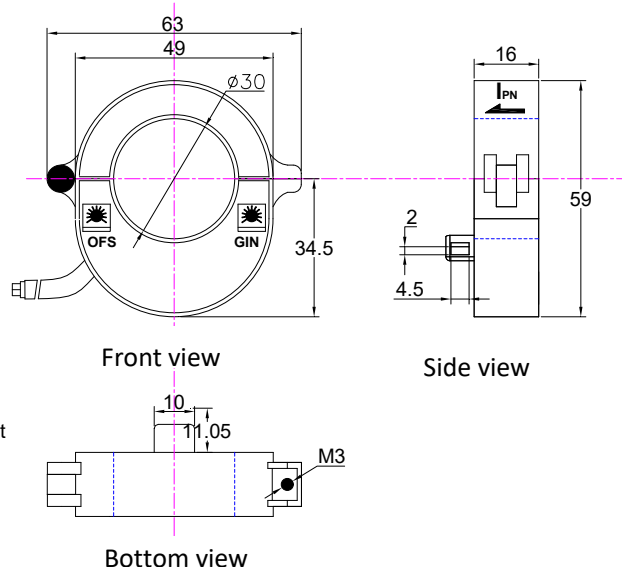
Certificates

- ★ RoHS/REACH compliant
- ★ CE certificate
- ★ UL flame retardant rating 94-V0(For the housing)

Instructions



Note:
IPN: Primary current input direction
Red :+12/15V power supply
Blue :-12/15V power supply
Yellow: Secondary signal output
Black :GND
OFS: Zero adjustment
GIN: Magnitude regulation



Electrical parameters

Dimensions(mm)

Specifications		100A/4V	200A/4V	500A/4V	Unit
IPN	Primary rated input current	100	200	500	A
IP	Measuring range	0~±200	0~±400	0~±1000	A
VSN	Secondary rated output voltage	4			V
IPN	Power supply	±12~15(±5%)			V
IP	Current consumption	25+IS			mA
VSN	Insulation voltage	Between primary and secondary side: 3kV/50Hz/1min			
IPN	Linearity	<1			%FS
IP	Precision	≤±1 @ TA=25℃			%
VSN	Offset voltage	≤±20 @ TA=25℃			mV
IPN	Offset voltage temperature drift	≤±1 @ IP=0 TA=-40~+80℃			mV/℃
IP	Response time	≤20			μs
VSN	Frequency bandwidth	-3dB DC~20			kHz
IPN	Operating ambient temperature	-40~+80			℃
IP	Storage temperature	-45~+100			℃
RL	Load resistance	≥10 @ TA =25℃			kΩ