

Hall current transducer

Model: YDG-HTD-4-A

Name:

Hall current transducer

YDG-HTD-4-□A□/□ Hall Current Transducer

1. Summary

Aiming at the defect of big temperature drift in hall transducers, compensating circuit is adopted in order to reduce ill effect in measurement accuracy. Hall transducers of YDG series can measure currents and voltages in any wave style. The output can reflect the I/V input in any wave style truly. And the output could be the standard parameters (such as DC 0~5V, 1~5V, 0~20mA, 4~20mA and so on). The transducers have characters of high accuracy, convenient installment and low price.

Hall transducers of YDG series are applied in frequency inverter, UPS power, communication power, electric melding machine, electric engine, transformer substation, numerical control machine tool, PC control, electric network control and others needing measure currents and voltages separately.

2. Theory

Primary current and final current of the hall transducers are insulated totally. And the transducer can convert DC, AC, pulse current and other signals into linear DC/DV output. The transducer has good temperature characters, linearity, stability, convenient installation and other merits. The two-piece transducer can open and close conveniently.

3. Model specification

4. Technology index


Overload capacity	$2I_N$	Frequency characteristic	0~10kHz
Accuracy class	$<1.0\%I_N$	Insulating endurance	AC2kV/min·1

			mA
Linearity	Excelled 0.2%	Working condition	0~45℃
T drift	Excelled $\pm 100\text{ppm}/^\circ\text{C}$	Working power	$\pm 12\text{V} \sim \pm 15\text{V}$, +12V, +15V+24V
Response time	Less than 100ms	Flame retardancy	UL94-V ₀
Off-tune voltage is less than $\pm 20\text{mV}$, off-tune current is less than $\pm 0.2\text{mA}$		Power consumption V output $\leq 30\text{mA}$ I output $\leq 30\text{mA} + I_M$	

5. Excutive criterion

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6. Model and parameter

Model	Input AC, DC/output DC	Pin
YDG-HTD-4-100A	0~100A/ DC 0~5V、1~5V、0~20 mA、4~20 mA	1: positive 2: negative 3: output 4: ground 
YDG-HTD-4-150A	0~150A/ DC 0~5V、1~5V、0~20 mA、4~20 mA	
YDG-HTD-4-200A	0~200A/ DC 0~5V、1~5V、0~20 mA、4~20 mA	
YDG-HTD-4-300A	0~300A/ DC 0~5V、1~5V、0~20 mA、4~20 mA	

7. External dimension

8. Notice

- 1) The power port and the output port should be connected correctly.
- 2) The temperature of original border generatrix must be less than 60℃.
- 3) Please do not adjust outer variable resistances at random. If do, circumrotate slowly to the demanded precision by the little screwdriver.

4) Get the best measuring precision when current generatrix fill in the hole of primary current fully.

5) No electric dust or corrosive metal exist in working condition, altitude is less than 2500 miles.

6) When the current direction should be same as the arrowhead direction marked on the box on measurement of DC, the correct direction output will be gotten.