

Current Transducer JHAO-XXXG(A/B)

For the electronic measurement of currents : AC current sensor, JHAO series has a good stability in high currents and has a highly insulated between primary and secondary circuit.



Features

- Closed loop (compensated) current transducer using the Hall effect
- Insulated plastic case recognized according to UL 94-V0
- Panel mounting

Applications

- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications.

Advantages

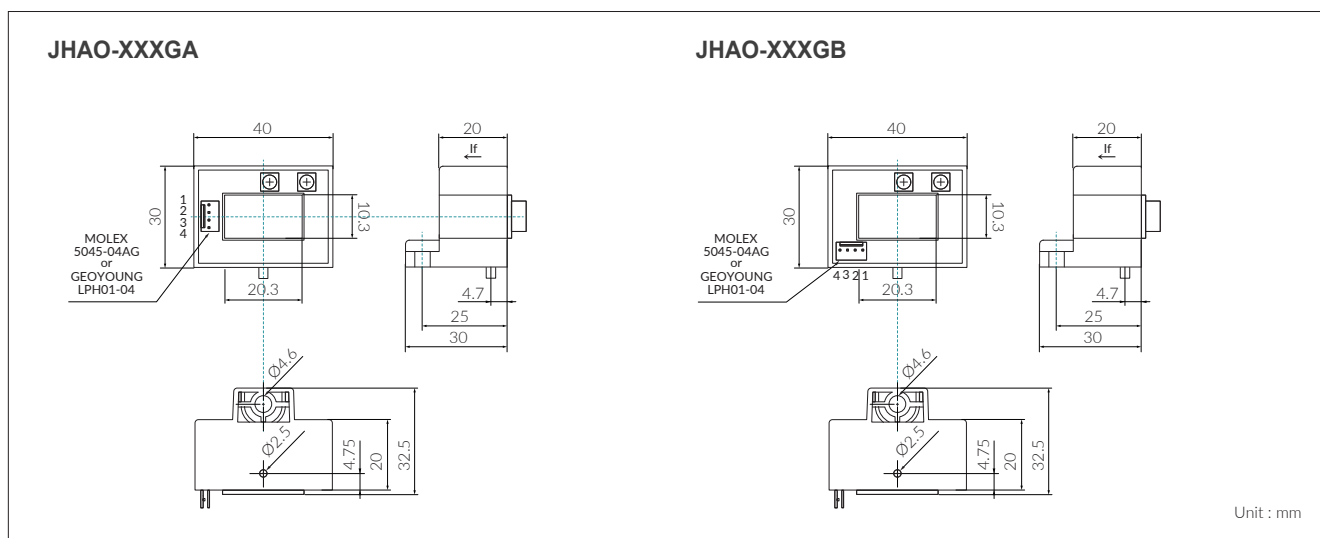
- Low temperature drift
- Optimized response time
- Wide frequency bandwidth
- No insertion losses
- High immunity to external interference
- Current overload capability.
- Excellent accuracy
- Very good linearity

Specification

SPEC \ MODEL	JHAO-050G(X)	JHAO-075G(X)	JHAO-100G(X)	JHAO-150G(X)	JHAO-200G(X)	JHAO-300G(X)	JHAO-400G(X)	JHAO-500G(X)	JHAO-600G(X)
Rating current	50A	75A	100A	150A	200A	300A	400A	500A	600A
Saturation current	150AT	225AT	300AT	450AT	600AT	900AT			
Output voltage	±4 V, 1% at rated current RL=10KΩ								
Offset voltage	±30 mV max Less than	±15 mV max						±50 mV max	
Output linearity	±1% rated current								
Power supply	±15 V (±5%) 20mA								
Di/dt response time	3 μ sec (Typ.) at di/dt = F.S/μ Sec.								
Output temperature character	± 0.1% / °C (Typ.)								
Offset voltage temperature character	± 2mV/°C	± 1mV / °C (Typ.)							
Hysteresis error	±30 mV max Less than	25mV(IF=F.S) Less than 25mV							
Insulation withstand voltage	AC 2500V / 1min.								
Insulation resistance	DC 500V / 500MΩ max								
Frequency bandwidth	20kHz								
Operating Condition	-15°C~+80°C								
Storage Condition	-15°C~+85°C								

Current Transducer JHAO-XXXG(A/B)

Dimensions JHAO-XXXG(A/B) (in mm)



Safety

The J&D CTs are UL/EN 61010-1, CE, RoHS compliant and certified, are also conformed up to Pollution degree 2, 600Vac CAT III rated devices.



Please be sure that Failure to follow these instructions can result in serious injury and/or cause damage. The transducer shall be used in electric/electronic equipment in accordance with the operating instructions of all related systems and component manufacturers with respect to applicable standards and safety requirements.

Follow corresponding national regulations and safe electrical work practices.

This equipment must only be installed and serviced by qualified personnel. And the qualified personnel is one who has skills and knowledge related to the construction and operation of this electrical equipment and installations, and has received safety training to recognize and avoid the hazards involved.

In addition, the installation and maintenance shall be done with the main power supply disconnected except if there are no hazardous live parts in or in close proximity to the system and if the applicable national regulations are fully observed.



When operating the transducer, there may be dangerous active voltages (e.g. primary conductor) in certain parts of the module. Users should make sure to take all necessary steps to protect against electric shock. The transducer is a built-in device containing conductive parts that are inaccessible after installation.

Therefore, a protective enclosure or additional insulation barrier is necessary.

Safe and trouble-free operation of this converter can only be guaranteed if transport, storage and installation are carried out correctly and operation and maintenance are carried out carefully.

Remark

- I_o is positive when I_p flows in the direction of the arrow. (o : output, p : primary current)
- Temperature of the primary conductor should not exceed 75°C(167°F).
- Dynamic performances (di/dt and delay time) are the best with a single bar when the primary hole is completely filled.

Attention

Contact areas (air gap) must be kept clean (particle free) to ensure proper performance.