Current Sensor with Terminal Block

Under development

Mass production available in 2028

- Improves space efficiency by integrating terminal block
- Customizable to meet specifications such as current detection range, form, etc.

Background or Challenges

Demand for smaller and lighter drive units, such as e-Axle, etc., for vehicle electrification

Solutions to Challenges or Features

Application: Measures AC current converted by inverters in BEVs/HEVs/PHEVs

Features/Effects

1: Integrates current sensor and terminal block with oil resistance

2: Customizable
(detection range, form, etc.)

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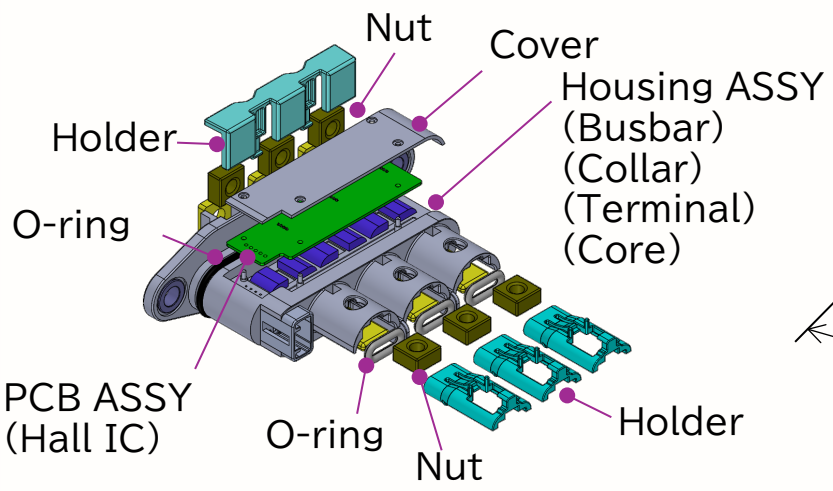
Reduces the size and weight of drive units and the number of parts

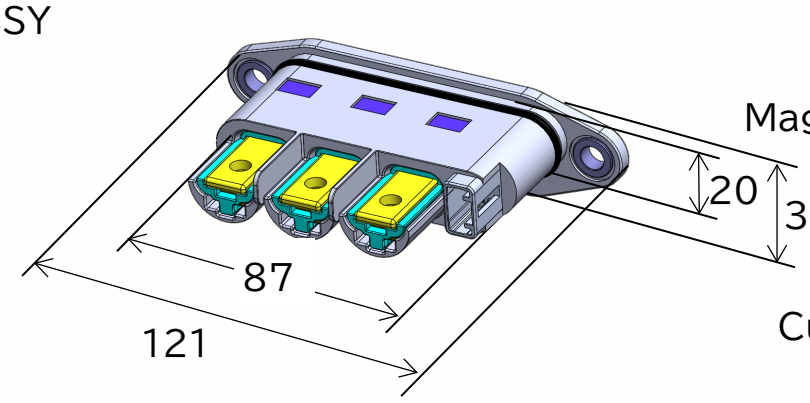
Specifications/Functions

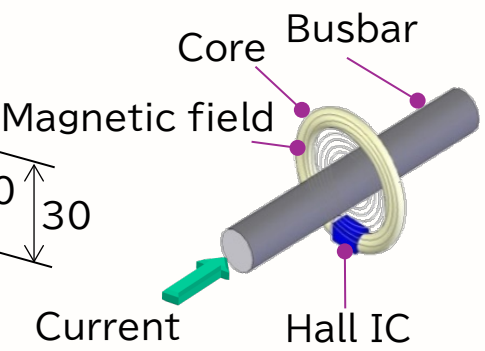
Supply voltage: 5.0V±0.5V
Operating temperature: -40°C to 125°C
Current detection range: ±1,000A
Output accuracy: ±7.5A or less (offset)
±2.5% or less (gain)
Output system: Analog (ratiometric output)
Response time: 6μs or less
Detection method: Detects magnetic flux density using Hall IC
Current consumption: 42mA or less

(Detailed specifications will be individually considered based on your requirements)

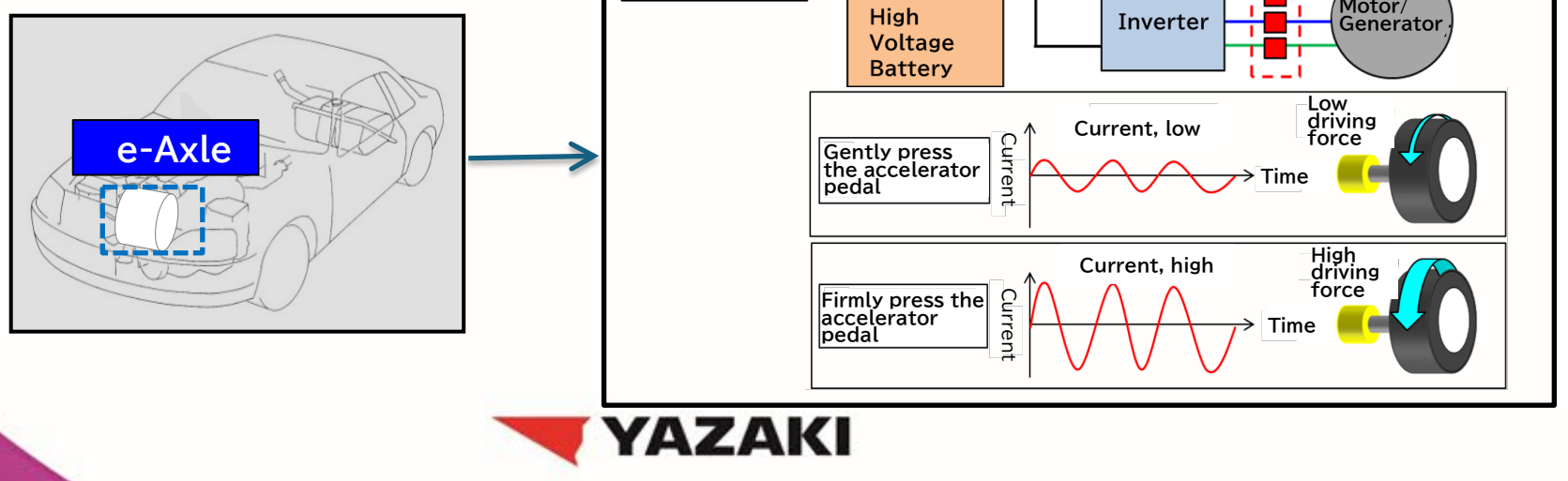
Appearance/Structure







System



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