Current Sensor for Inverter

Detect three-phase alternating current from a motor.
Transmit current values to control circuits for being proper value.

It's required to develop a current sensor to detect three-phase alternating current for BEV/HEV motor.

Feature

1 Voltage output proportional measuring current

2 Customize current detective range (±1000A) by using Hall IC with built-in EEPROM

3 Compact design for current measurement range

Performance/Specification

Supply voltage	5.0V±0.5V
Usage temperature	-40 to 125degC
Current detective range	±1000A (3 output)
Output accuracy	Up to ±4.5A (offset)
	Up to ±2% (gain)
Output system	Analog (ratiometric output)
Reaction speed	Max. 6μs
Detective system	Detect magnetic flux density by Hall IC
Current consumption	Up to 42mA

Busbar

155   22   20

Magnetic field   Wire
Core
Current   Hall IC (built-in EEPROM)

Wiring Assy   Cover
Core
Terminal
Housing