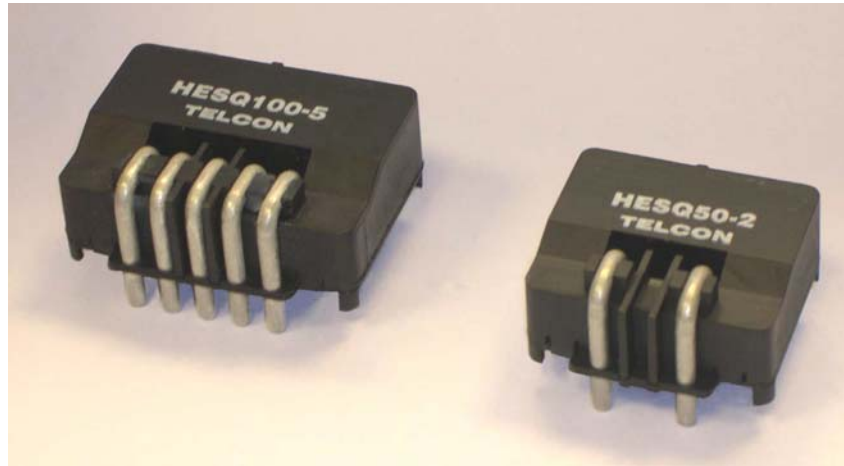


Miniature Electronicless Closed Loop Current Transformer HESQ50 & HESQ100



The HESQ50 & HESQ100 are both Hall Element coil and lamination stack assemblies, fitted with isolated primary turns, enabling the implementation of a full Closed Loop Hall Effect Current Transformer by the addition of the requisite electronic circuitry.

The HESQ range complements the existing HES range giving PCB mounting for all connections including the primary while offering the most cost effective current sensor implementation.

Features

- Integrated Multiple Package
- 4.5kV Proof Stress
- Fast Response
- All Contacts Via PCB
- Designed In Quality

Applications

- Variable Speed Drives
- UP Systems
- D.C. Power Supplies
- Low Frequency Current Measurement

Benefits

- Component Placement Under Device
- Ease of Assembly
- Small PCB Footprint
- Galvanic Isolation
- High Accuracy

- Overcurrent Protection
- Robotics
- Frequency Inverters
- Power Factor Monitoring

Electrical	HESQ50	HESQ100
Nominal Primary Current (total all hoops)	50A	100A
Max total continuous primary current	70A	150A
Primary Current per hoop	40A	40A
Turns Ratio	1000:1 x 2	1000:1 x 5
Coil Resistance	51Ω	41Ω
Proof Stress Voltage	4kV	4kV
Creepage Distance (pri - sec)	7.5mm	7.3mm
Clearance Distance	7.5mm	7.3mm
Operating Temperature Range	-10 to 85°C	-10 to 85°C
Storage Temperature Range	-40 to 100°C	-40 to 100°C
Typical Dynamic Performance – in Application Circuit		
Linearity	0.1%	0.1%
Limit of Linearity (total of all hoops)	85A	150A
Ratio Error	0.5%	0.5%
Zero Offset Drift (dc)	5μA/°C	3μA/°C
Bandwidth (1dB)	(DC - 25kHz)	(DC - 25kHz)
Delay time	1.5μs	1.5μs
Nominal Power Supply	±15V	±15V
Minimum Load Resistance	22Ω	15Ω
General		
Weight	15g	19g
Housing	Noryl	Noryl
Mounting	PCB	PCB
Hoop Temperature rise @ I _{max tot.}	18°C	18°C
Hoop Resistance	148μΩ	148μΩ

As part of our policy of continuous product improvement we reserve the right to make modifications to this product without prior notice.