Melexis

IMC-Hall Current Sensor

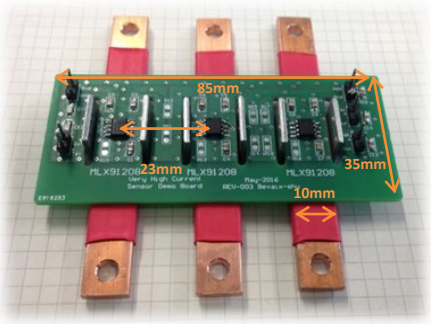
3 Phases Demo MLX91208CAV

https://www.melexis.com/product/MLX91208

3 Phases Demonstrator

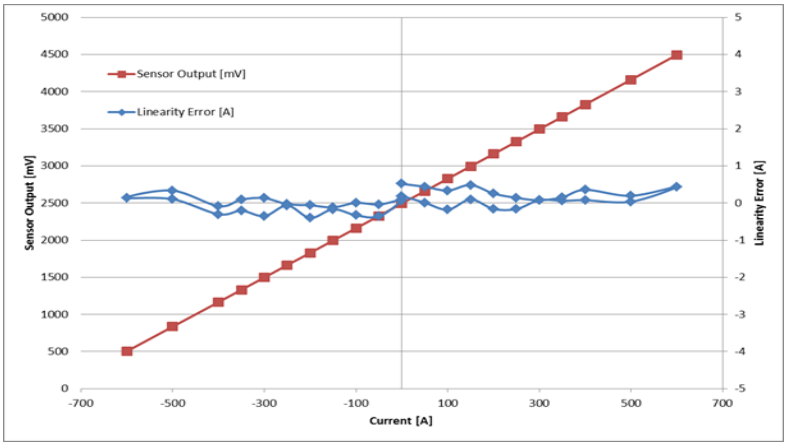
USP

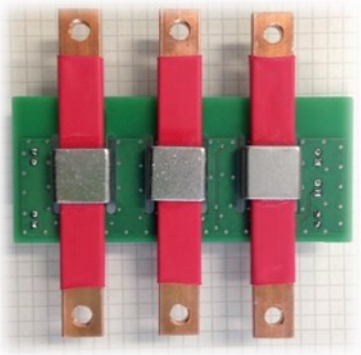
- Small size, low weight, low cost planar solution for inverter application (motor control), designed and calibrated for **±600A**.
  - 3x planar IMC Hall current sensors MLX91208CAV sensitivity 40mV/mT
  - 3x bus bars (10mm x 3mm)
  - 3x U12 shields
- Robust to mechanical tolerances and vibrations (low weight)
- High signal-to-noise and very fast response time (2-3µs)
- On-chip compensation for thermal and lifetime drifts
- Low cross-talk and high external field immunity



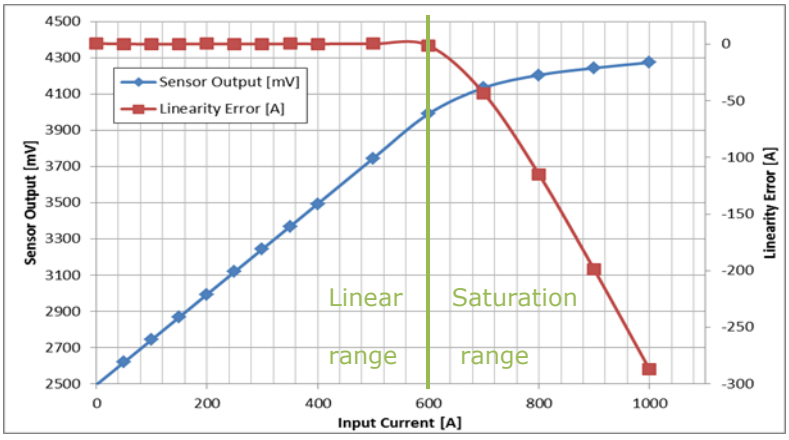
Typical Performances

Designed to feature a linear output for +/- 600A. Very good non-linearity.





The demo can be calibrated to cover larger current ranges. The IMC and the U-shield start to saturate for currents higher than 600A leading to a non-linear output behavior. This behavior is stable and repeatable and can therefore be used to monitor higher currents. A wider U-shield can also be used to extend the linear range to higher currents.



U12 : A typical shield