

SafeBlue® series

Residual current sensor for
EV charging applications

M | SafeBlue®

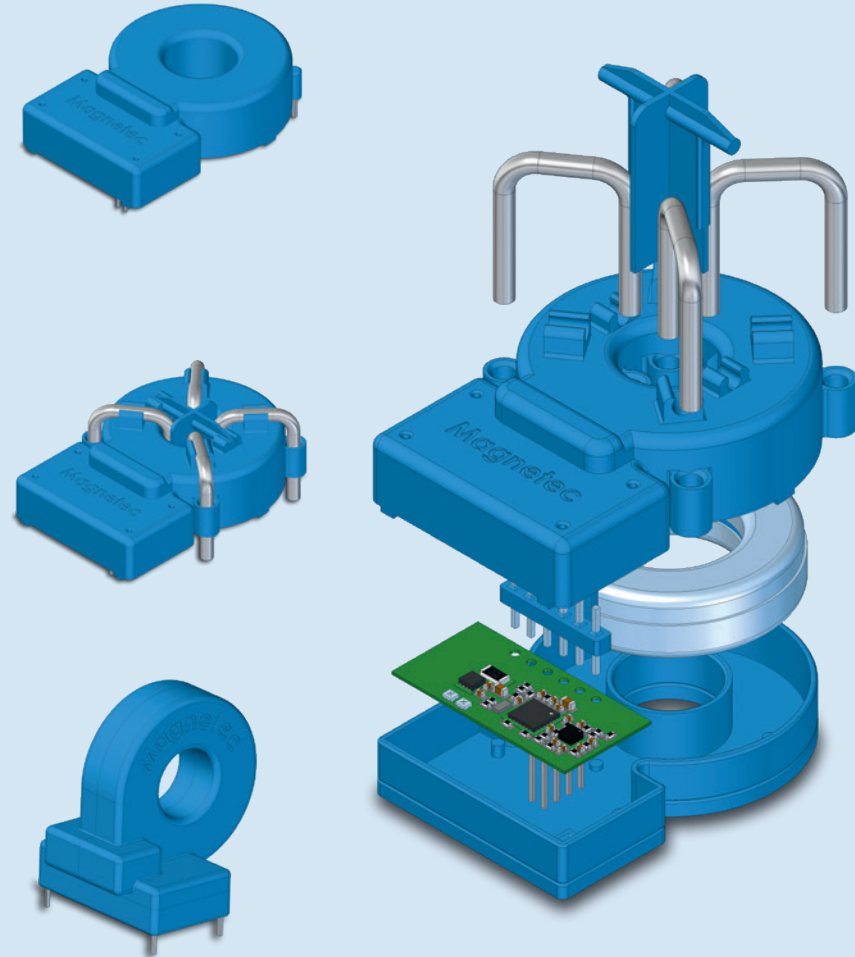
SB200 series



Charging Mode 2



Charging Mode 3



Technical Data

- Rated nominal current: up to 40/80A
- Operating Current: 6 mA DC / 30mA rms, 20mA rms
- Temperature range: -40°C ... +85°C
- 3000A surge current withstand

Benefit

- Flexible supply voltage: 3.3V or 5V
- Clearance and creepage distance >8mm (according to IEC 62955)

Certifications

- IEC 62752
- IEC 61851
- IEC 62955
- UL2231

Coming soon

SB300 series



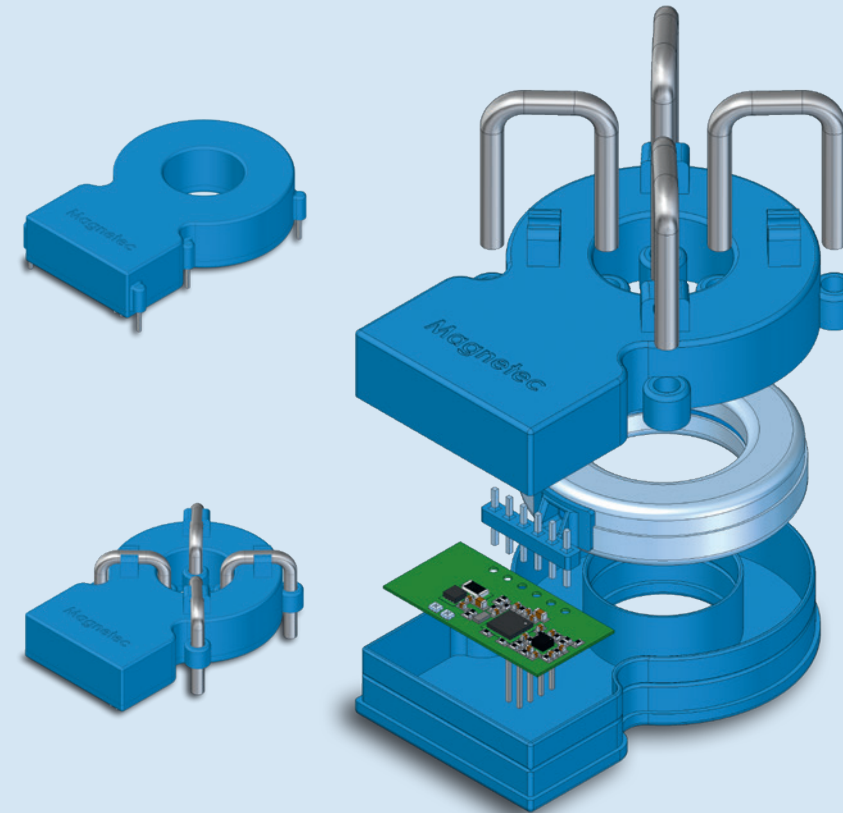
Charging Mode 2



Charging Mode 3



On-Board Charger



Technical Data

- Temperature range: -40°C ... +105°C

Benefit

- Bigger inner diameter / conductor cross section for higher charging power

Certifications

- IEC 62752
- IEC 61851
- IEC 62955
- UL2231
- Functional safety (IEC 61508 / UL1998)

MAGNETEC offers AC/DC-sensitive residual current sensors for charging cables (mode 2), AC wallbox (mode 3), DC charging station (mode 4) and, optionally, in on-board charging applications.

SafeBlue®, Residual Current Sensor for EV Charging Applications

What is inside?

- Shielded transformer core, with a high surge current capability
- Integrated evaluation unit
- Usable in systems according to IEC 62955, IEC 62752, IEC 61851, IEC 61008, IEC 61009, IEC 61543, UL 2231, UL 2594, GBT 18487
- Additional features planned, including functional safety according to IEC 61508 and UL 1998

What is your benefit?

- Perfectly aligned sensor and evaluation system
- Simplifies integration into your application
- Reliable detection of fault currents
- Proven technology with more than 3 million products on the market
- Designed in Germany, produced in Europe
- High availability and short leadtimes



If you want to learn more about our residual current sensors, please download our comprehensive MB-67x series brochure.



Customer-specific design options

MAGNETEC provides customers the single sensor or optionally the entire solution package (sensor and evaluation system).

The residual current sensors can be customized to fit customer specific application requirements.

There are numerous design options for customization available (size, materials, surface, electric characteristics). We look forward to discuss your specific design requirements with you.

Lead times for off-the-shelf products are available upon request. Please do not hesitate to contact our team.