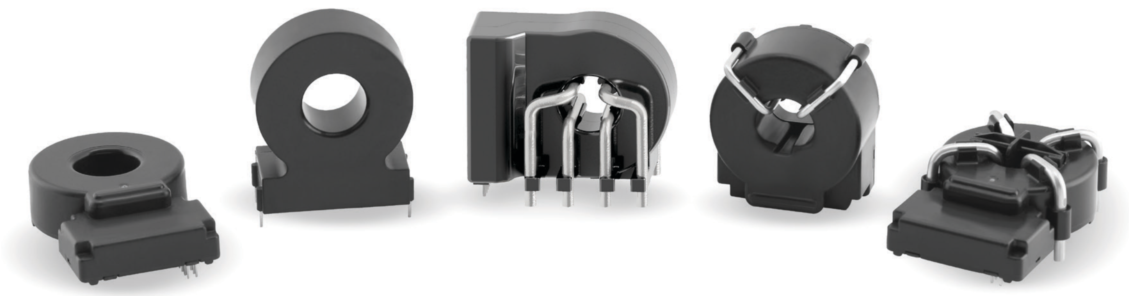
BENVAC - ELECTRICAL SAFETY FOR EV-CHARGING



Charging of electric vehicles at a wall socket or a wallbox requires protection devices against DC leakage currents. Installed type A residual current circuit-breakers (RCCBs) are unable to detect DC fault currents. benvac® differential current sensors can detect AC and DC fault currents to protect the electrical circuit. At the same time, it saves costs since no high-priced type B RCCB is necessary to install.

Benefits:

- Saves costly type B RCCB
- Volume optimized, small footprint
- Cost efficient design
- Easy to integrate in application

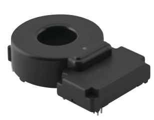
- AC/DC-current measurement at low cost
- Self-monitoring and test functions
- Robust mechanical design suitable for IC-CPD
- Proven technology from market leader

Application:
benvac differential current sensors are designed to be used in IC-CPD (Mode 2), wallbox (Mode 3) and in on-board applications.

Applicable standards:
IEC 61851-1, IEC 62955, IEC 62752, UL 2231

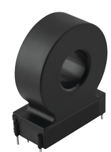
Patents:
EP2571128 / US9397494 / CN103001175 // EP2813856

Type	Acc. to standard	Trip tolerance X6 / pin 3	Trip tolerance X30 / pin 4
4641-X803	IEC 62752 + UL 2231	6 mA DC + 30 mA rms	20 mA rms
4641-X804	IEC 62955 + UL 2231	6 mA DC	20 mA rms
4641-X805	IEC 62752	6 mA DC + 30 mA rms	30 mA rms
4641-X820	IEC 62752	6 mA DC + 30 mA rms	30 mA rms
4641-X825	IEC 62955 + UL 2231	6 mA DC	20 mA rms
4641-X827	IEC 62955 + UL 2231	6 mA DC	20 mA rms
4641-X836	IEC 62955 + UL 2231	6 mA DC	20 mA rms
4641-X843	IEC 62752	6 mA DC + 30 mA rms	20 mA rms
4641-X854	IEC 62955 + UL 2231	6 mA DC	20 mA rms

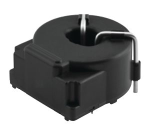


4641-X80x

4641-X82x



4641-X83x



4641-X84x

4641-X85x

Features:

- AC and DC differential current measurement based on magnetic fluxgate principle
- Excellent resolution and accuracy even under harsh environmental conditions
- Shielding of CTs made of VAC-own material grants high surge capability
- Integrated evaluation electronic with signal output to meet standard requirements
- Sensor with industrial grade and AEC-Q qualified components available
- Primary current up to 80 A single phase / 40 A 3-phase
- Differential current measuring range +/- 300 mA
- Temperature range -40 °C up to +85 °C (+105 °C optional – contact us)
- Bandwidth DC – 2 kHz
- Low temperature drift

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