



## PRODUCT DATA SHEET

# Bertrandt HV Safety Guard – High-Voltage Safety Monitoring

### THE CHALLENGE

Electrified powertrains are the key to designing the type of future mobility that will protect the climate and conserve resources. For this purpose, we develop tailor-made, state-of-the-art testing systems for our customers. One of the decisive aspects is to ensure that these machines and systems are functionally safe.

### THE SOLUTION

With its HV safety monitoring system, the Testing Systems team provides a turnkey and compact solution for the monitoring of insulation resistance and the redundant monitoring of safety extra-low voltage (SELV) for DC voltages up to performance level e according to IEC/EN 61508.

### TECHNICAL FEATURES

- Monitoring of high voltages up to 1,500 V DC
- Insulation monitoring (optional: can also be temporarily deactivated using a key switch)
- Redundant monitoring of high voltages up to 1,500 V DC
- Safety-related control through the use of a safety PLC (B&R)
  - > Monitoring of DUT
  - > Release of power supplies (interlock)tion
- Automated activation / deactivation and monitoring of door locking and access control systems
- Digital and analog voltmeter with color coding for safety extra-low voltage limit (< 50 V = green / > 50 V = red)
- Compact design due to integration into 19" rack
- LAN interface
- From QIII/2021: user-friendly 10" touch display
- From /2021: event & alarm logging
- From QIII/2021: USB service interface for diagnosis
- Optional: switchable discharge circuit for intermediate electric circuits (external)