



ISOMETER[®] iso685

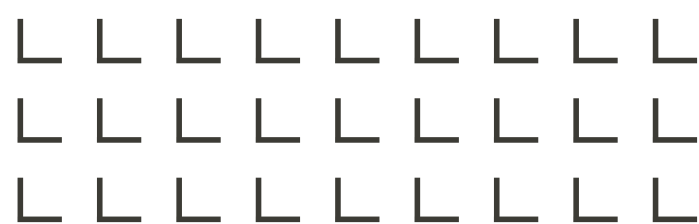
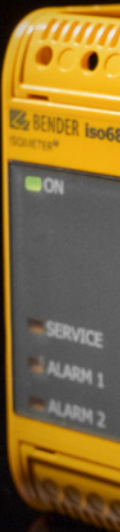
Insulation monitoring for
the highest demands



Innovative insulation monitoring for maximum system availability

Do you want to save costs and increase the safety level of your electrical system even further? With the numerous variants of the iso685 insulation monitoring device, you have the right device for every application and benefit from the simplest operation with maximum reliability and innovative measuring methods.

Insulation monitoring devices continuously monitor the insulation resistance of a system to earth. In addition, the iso685 is state of the art with its voltage, frequency and capacitance measurement.





Key features:

- Early detection of insulation faults
- Insulation fault analysis with scalable history memory
- Find insulation faults without switching off

Key benefits:

- Increased operational safety
- Planability of maintenance

Product features:

- Measurement V/f/C
- IsoGraph
- Predefined measuring profiles
- Customised measuring profiles
- Configurable inputs and outputs
- Web server
- Modbus TCP
- Permanent coupling monitoring
- Commissioning wizard

Cost benefits:

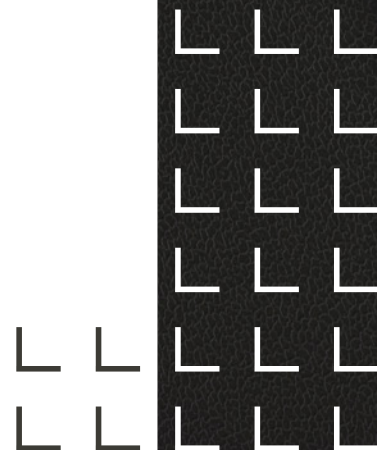
- No additional devices required
- Self-explanatory commissioning
- Extensively configurable
- Simple operability

Simple commissioning, reliable analysis

Commissioning wizard

All device variants offer a commissioning wizard that queries the most important settings immediately after switching on for the first time. Pre-selection of the appropriate measurement method and the associated parameters is conveniently carried out using predefined profiles:

<p>System type 1.3</p> <hr/> <ul style="list-style-type: none">* DC<input type="radio"/> AC<input type="radio"/> 3AC	<p>Coupling 1.4</p> <hr/> <ul style="list-style-type: none">* None<input type="radio"/> AGH150W-AK16C<input type="radio"/> AGH204S-AK80<input type="radio"/> AGH204S-AK160<input type="radio"/> AGH520S<input type="radio"/> AGH676S-4	<p>Language 5.1</p> <hr/> <ul style="list-style-type: none"><input type="radio"/> Deutsch* English<input type="radio"/> Español<input type="radio"/> Français<input type="radio"/> Norsk
<p>Commissioning 5.6</p> <hr/> <p>Please set response value for R(ani) for Alarm 1.</p> <hr/> <p>8/9</p>	<p>Profile 5.6.7</p> <hr/> <ul style="list-style-type: none">* Power circuits<input type="radio"/> Control circuits<input type="radio"/> Generator<input type="radio"/> High capacitance<input type="radio"/> Inverter >10 Hz<input type="radio"/> Inverter <10 Hz	<p>Alarm 2 5.6.9</p> <hr/> <p>10 kΩ</p> <hr/> <p>min. 1 kΩ max. 10MΩ</p>





Web server

The devices in the iso685 product family have an integrated web server. This enables convenient access to all device parameters from PCs or mobile devices as well as analysing the data recorded by the iso685.

Interfaces

The integrated Ethernet interface supports data exchange both within the Bender product portfolio (BCOM) and with third-party devices or software packages (Modbus TCP). Configurable inputs and outputs allow simple exchange of status information or measured values. Sensors for insulation fault location (EDS) are integrated via a serial interface.

Fast insulation fault location during operation

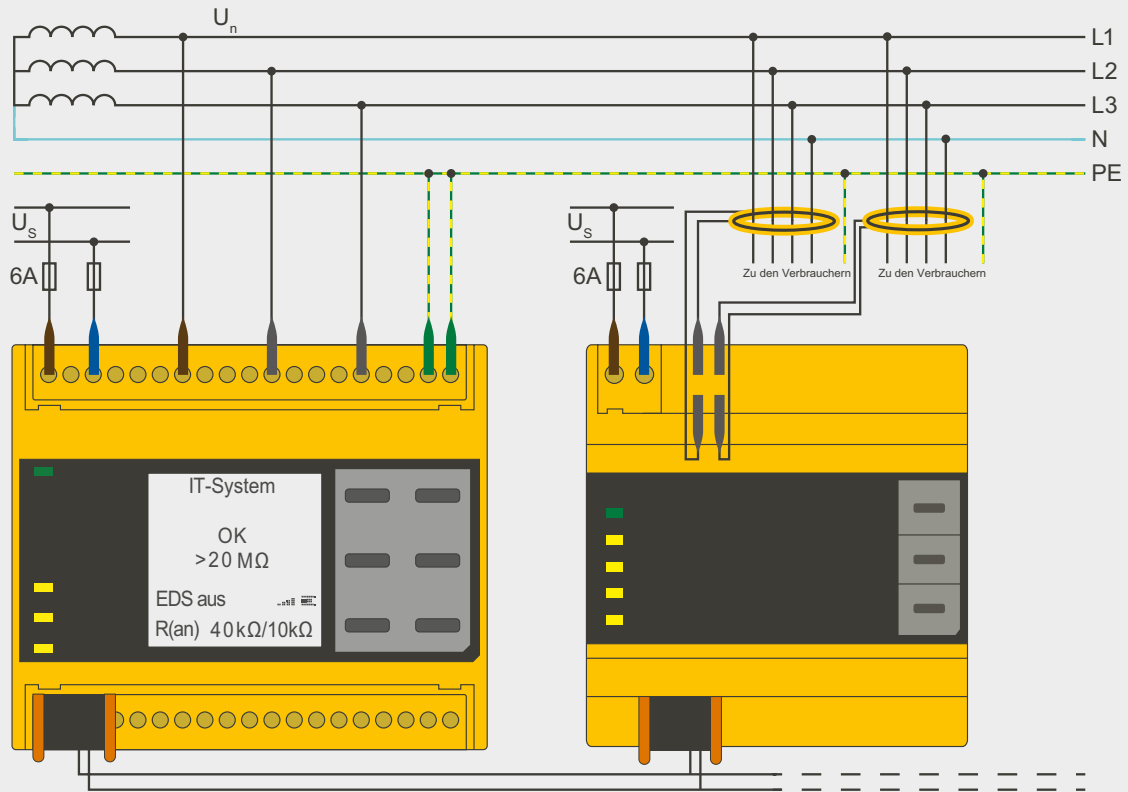


Locate insulation faults quickly and easily

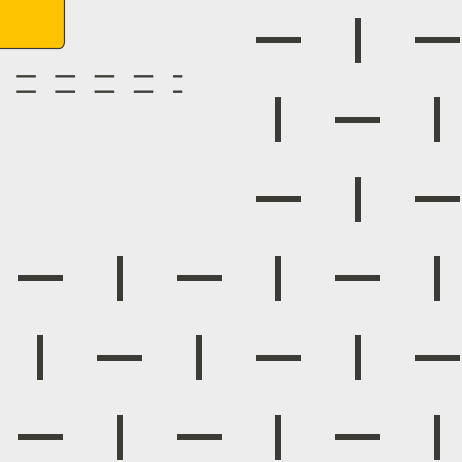
The iso685-...-P device variant has an integrated test current generator. Together with the insulation fault locators of the ISOSCAN family (e.g. EDS44x and EDS309x) and the corresponding measuring current transformers, a system for insulation fault location can easily be set up.

This enables the faulty part of the system to be localised quickly. Insulation fault location is carried out during operation; it is not necessary to switch off the system for this purpose. Information about the fault location is displayed in a central location.





iso685 and EDS44x



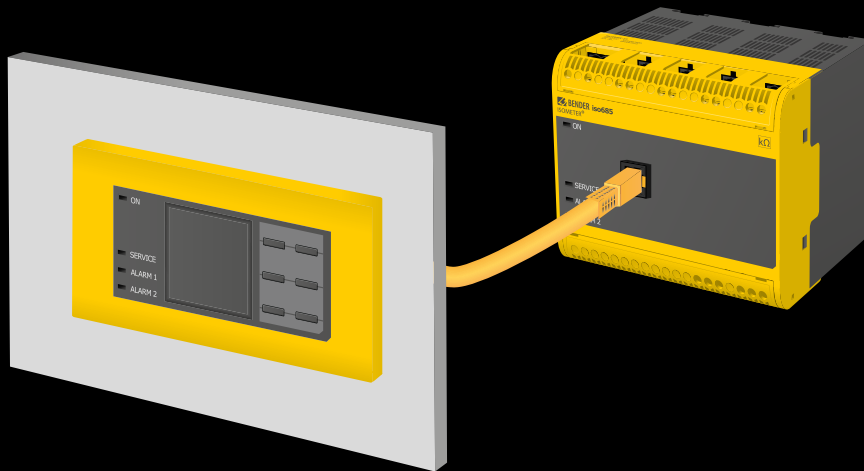
Installation variants



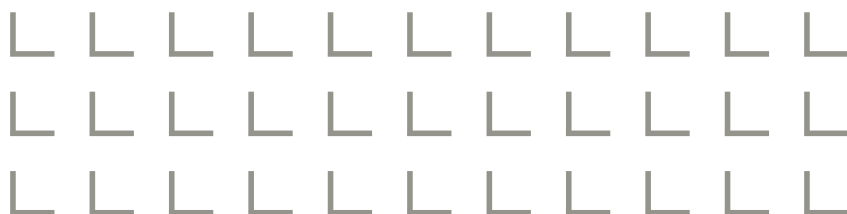
The iso685 is available in different installation variants:

- For mounting on a top-hat rail or with a screw fastening
- iso685-D with integrated display
- iso685-S with remote display for mounting in the switch cabinet door or as a combination of basic device on the top-hat rail and operating unit in the switch cabinet door





The FP200 display unit is mounted in the front using retaining clips and connected to the displayless base unit via a RJ45 connection cable supplied. This installation variant allows the device to be displayed in the front of the switch cabinet without having to install the mains connection with up to 1,000 V.



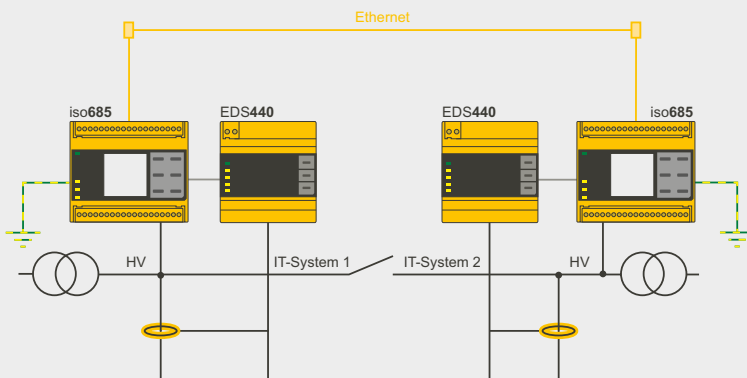
Insulation monitoring

As individual as your needs

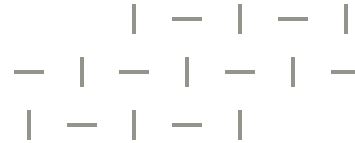
Standardised insulation monitoring in coupled systems

The variants with the identifier '-B' or '-P' are suitable for use in coupled networks. The iso685 can actively and independently disconnect itself from the network to be monitored via an internal mains disconnecter. This makes it possible to operate several insulation monitoring devices in coupled systems without them influencing each other when the coupling switches are closed. This function, which Bender calls ISOnet, corresponds to the REDC (Remote enabling and disabling command).

All iso685s working in ISOnet mode are connected to each other via Ethernet and regulate the measuring sequence fully automatically. This enables ISOnet operation with up to 20 linked IT systems.

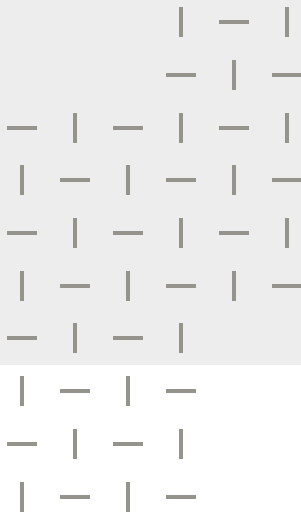


Schematic diagram of a coupled IT system



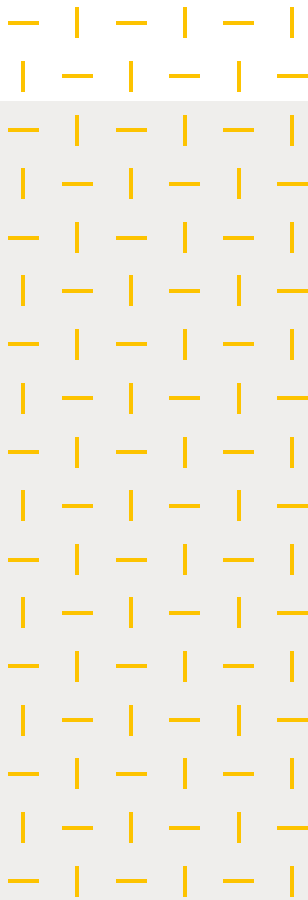
Other variants

iso685-...-B	decoupling switch for mains disconnection in coupled networks	mains disconnection via digital input, mains disconnection via ISOnet
iso685-...-P	same function as -B + integrated test current generator	automatic or manual insulation fault location
isoRW685W-D(-B)	especially for railway applications/rolling stock	tested according to DIN EN 50155
isox685W-...	devices with increased shock and vibration resistance	increased temperature range from -40 to +70 °C
isoHR685W	especially for monitoring submarine cables in the oil and gas industry	ISOsync for capacitively coupled networks



Further information on the iso685 can be found here:





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