

# Grid-Demonstrator

Type GDC2I55

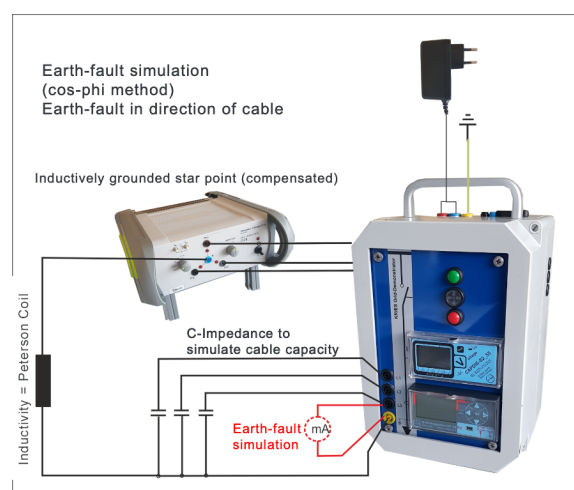
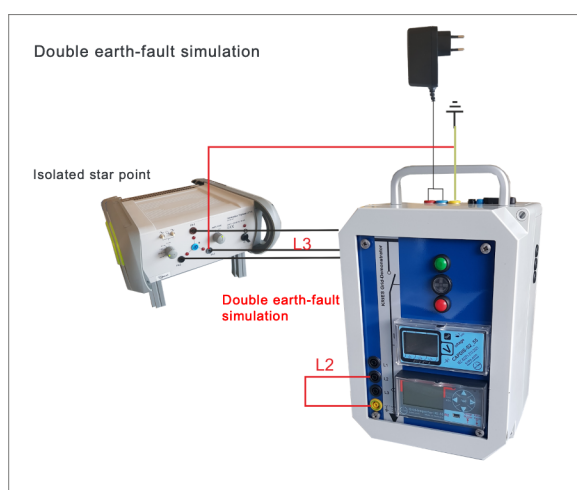
The Voltage Detecting Systems CAPDIS, IKI-Fault Indicators and IKI-Feeder Control Units are today fixed components of intelligent distribution grid stations for monitoring grid stability and for digital grid operation management. The grid demonstrators are used to simulate distribution grid conditions and faults as well as digital grid operation management in order to learn how to use the devices and integrate them into the distribution grid.



## Applications

The grid demonstrator can be used in different ways:

- Conducting training courses for on-call staff
- Conducting training courses for network planners
- Simulating fault situations in the distribution network



## Features

With the grid demonstrator, the function of a control panel with CAPDIS and IKI in a distribution grid station can be demonstrated very clearly. Different grid states as well as different types of faults can be simulated easily. In addition, distribution network sections can be simulated by interconnecting further grid demonstrators.

The following functions can be simulated:



- directional load flow simulation (resistive and capacitive)
- directional short circuit detection (2-/ 3- pole)
- directional earth short-circuit detection in the network with low-impedance star point grounding
- directional earth short-circuit detection in the network with isolated star point grounding (transient and static)
- directional double earth short-circuit detection
- directional earth short-circuit detection in the network with inductively grounded star point (transient and static)
- Communication via network interface via IEC-104 and MQTT
- Parameterization/firmware update via the network interface
- Modbus communication and remote switching of the load switch via Modbus

## Variants

Item number	Description
2502385	Grid demonstrator type GDC2I50
2502396	Grid demonstrator type GDC2I23
2502385	Grid demonstrator type GDC2I55

## Technical Data

### Device data

Article number	2502385
Quantity unit	Piece
Product designation	Grid demonstrator type GDC2I55

### Dimensions and mounting instructions

Case height x width x depth	300 x 180 x 190 mm
Installation type	desk, lab

### Operating conditions

Operating temperature	0°C ... 50°C
Storage temperature	0°C ... 50°C



Power supply	24 V DC (AC/DC-Converter pluggable in scope of delivery)
--------------	--

## Scope of delivery

Article number	Product designation	Number
--	AC/DC Adapter	1

## Accessories

Article number	Product designation
2502388	Three-phase generator for Grid-Demonstrator
2502391	Connecting cables set for Grid-Demonstrator
2502389	R impedance for Grid-Demonstrator
2502390	C impedance for Grid-Demonstrator
2502184_H011	Cable set high-voltage cable simulation for Grid-Demonstrator
2502393	Compensation coil for Grid-Demonstrator
2502395	Cross calibration set for Grid-Demonstrator
2502394	PD simulation set for Grid-Demonstrator

## Notes

The three-phase generator for grid demonstrator is not included in the scope of delivery. Equivalent three-phase generators of other makes can also be used.

### Notes

It is also possible to connect different versions of grid demonstrators.