



ekorsys units: protection,
telemangement & communication

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Generator set protection unit

Model: 110240611

Reliable innovation. Personal solutions.

Preface

The **ekor.upg** unit is an easy-application portable unit, based on zero-sequence voltage detection, which can be installed in a wide range of configurations.

- » It does not need an earthing network.
- » The installation and removal times of the unit are minimal.
- » Zero-sequence overvoltage detection
- » History log
- » DC auxiliary battery
- » Cables and interconnections

Protects generator sets used to supply power to Low Voltage customers in the event of an incident. Allows to protect an area of the distribution network, energised by the generator set through the MV / LV transformer. Provides safety for people and devices in the event of faults.

➔ Individual components of the **ekor.upg** unit:

ekor.upg.p: Zero-sequence overvoltage protection unit and alarm signalling for generator set

ekor.evt.i: assembly of auxiliary elements: includes voltage sensors, interconnection wiring with **ekor.upg.p** and metal parts for connection between the MV network and the sensors.

➔ As a complement to the generator set connected to the Low Voltage board, this portable unit offers essential features:

- Portability and agility in equipment deployment
- Detention of generator set run order in the event of fault

Applications

- » Generator set protection in case of:
 - » Maintenance operations
 - » Network remodelling
 - » Incidents at installations

Tests

Electromagnetic Compatibility

- IEC 60255-11
- IEC 60255-2
- IEC 60255-4
- IEC 60255-6
- IEC 61000-4-8
- IEC 60255-22-1
- IEC 60255-3
- IEC 60255-5
- IEC 60255-25
- IEC 61000-4-12

Climatic

- IEC 60068-2-1
- IEC 60068-2-30
- IEC 60068-2-2
- IEC 60068-2-78

Mechanical

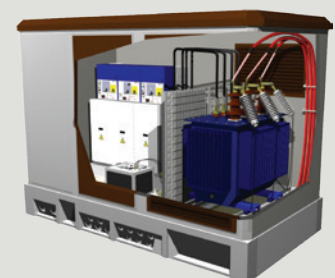
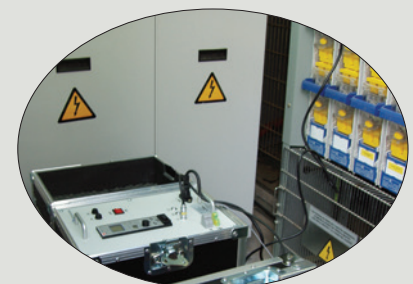
- UNE 49-908-79
- ISO2247:1985 / EN22247:1992



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Technical Characteristics

General

Consumption [VA] < 1

Accuracy Time setting 5% (minimum 20 ms)

Frequency [Hz] 50; 60 +/- 1%

Maximum frequency (operations / hour) Without load 72000
With load 600

Maximum switching voltage [Vac] 400
300

Switching power [VA] Maximum 2000

Protection Functions

Voltage absence/presence detection

Zero-sequence overvoltage detection 64

Zero-sequence detection

Zero-sequence voltage U0 [kV] 1 to 25,5

Insulation Tests

Power frequency for 36 kV networks [kV] 70 / 1 minute

Lightning-type impulse for 36 kV networks 170 / ±15 pulses

Partial discharge test [kV] Stress 24 (rms)
21 < 10 pC

Mechanical design

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Dimensions [mm] 344 x 235 x 335

Weight [kg] 7,25

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Dimensions [mm] 491 x 565 x 224

Weight [kg] 15,5

