

RTU



ekorsys units: protection,
telemangement & communication

ekor.uct

Compact remote control and
automation unit

Reliable innovation. Personal solutions.

Preface

Compact unit for remote control and automation of Transformer Substations and Switching Substations.

- » **ekor.uct-m**: wall-mounted unit.
- » **ekor.uct-s**: unit for installation on top of Medium Voltage cubicles.

Most notable features of the **ekor.uct** unit:

- » Independent of the number of cubicles to be controlled (fitted with integrated control). It facilitates subsequent extensions.
- » Standard interconnections. It does not require wire hose.
- » Commissioning without MV discharge.
- » Factory-tested components.
- » Web server.

Applications

Remote control and automation via integrated control:

- » Transformer Substations and Switching Substations
- » Second operation points
- » Remote management (SmartGrid)

Sectors:

- » Public distribution (Utility)
- » Service sector
- » Industry
- » Infrastructures



Features

Single control box with all the elements for automation and remote control.

It consists of two differentiated compartments:

- » Distribution compartment (RTU). Houses the power supply and control elements.
 - » Remote control unit (**ekor.ccp**) (*)
 - » Batteries and charger/rectifier
 - » 10 kV insulation
 - » Protection miniature circuit-breakers
- » Communications compartment (COMMS). Houses the communication elements:
 - » Space for communications equipment (**)

➔ (*) Option to include multiple remote units: Ormazabal's **ekor.ccp**, SETIS, MRC-100, CAP/16, etc.
 (***) Equipment NOT supplied by default, only if specified by customer.

Technical Characteristics

Power supply

AC [Vac...Vac]	230 +/-30%
Insulation [kV]	10
Max. ekor.uct consumption [W _{peak}]	200 ; 500
Cubicle consumption [W]	1,5 (load disconnecter) 7 (circuit-breaker)

Frequency

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

Output power supply voltages

[Vdc; Vdc]	24 ; 48
------------	---------

Standalone operation

[A/h]	Batteries of 18
-------	-----------------

Communications

LAN protocols	MODBUS (RTU) PROCOME
WAN protocols	IEC-870-5-101 IEC-870-5-104 MODBUS (RTU) Web server

Other proprietary protocols of the customer

Functions

- Remote terminal
- Communications
- Uninterruptible power supply
- Batteries periodical tests and status check

Mechanical Design

Maximum dimensions

wall-mounted box [mm]	584 x 877 x 320
cubicle-mounted [mm]	1096 x 288,5 x 465 (width x height x depth)

Internal dimensions of the communications compartment

wall-mounted box (ekor.uct-m) [mm]	570 x 170 x 280
cubicle-mounted (ekor.uct-s) [mm]	300 x 290 x 440 (width x height x depth)

Weight

[kg]	80
------	----

External connections

- Power supply from the LVB
- Installation alarms