REXON
ERA DUO 3

Basic characteristic

Light-weight steel dimensional construction of high quality, trouble-free and simple operation are the hallmarks of the **REXON - ERA DUO 3** turnstile making it ideal for high security applications where the fully automatic and unmanned identification of people with high throughput capacity is required. **REXON - ERA DUO 3** is an economical version of a robust turnstile **REXON - DEA DUO**. Anti-corrosive treatment of all components and high quality final finish of **REXON - ERA DUO 3** turnstile guarantee long-life and reliable operation not only for interior but also during extreme conditions of outdoor installations. Functional design, constructive and color variability make **REXON - ERA DUO 3** turnstile to be a unique part of entrance control system.

REXON - ERA DUO 3 turnstile is a bi-directional turnstile with electronic access control, the 120° openings ensure comfortable, easy and safe access for one person. Sophisticated control electronics enables easy setting of its own operating mode and at the same time it provides the communication with different types of identification and signaling.

Turnstile REXON-ERA DUO 3 is offered with the following types of drive unit:

Motor drive unit MT (standard):

REXON-ERA DUO 3 turnstile motorized version provides high comfort along with reliable and maintenance-free running:

- double-brake system for total security in combination with motor-drive unit
- automatically adapts the rotation speed to the users
- provides a high level of safety – in the event the turnstile detects an obstruction it will stop the moving
- silent and fluent running

Motor-driven unit is supplied in two variants.

1) FAIL-LOCK: turnstile is blocked during the power failure
2) FAIL-SAFE: turnstile is unblocked for free passage during the power failure

Mechanical unit

Mechanical unit – one-way version:

- enables setting – one of directions permanently blocked and the other unblocked for free passage
- blocking system prevents the turnstile reverse during passing

This type of turnstile is applied to regulate and control the number of passing people in one-direction and it is not controlled by any superior devices.

Mechanical unit does not require the power supply.

Turnstile Materials And Surface Treatment:

Top panel: steel sheet, thickness 3 mm, surface-finished by powder coating (standard: RAL 9006 PE)

Cover of top panel: steel sheet, thickness 1.5 mm, surface finished by powder coating (standard: RAL 9006 PE)
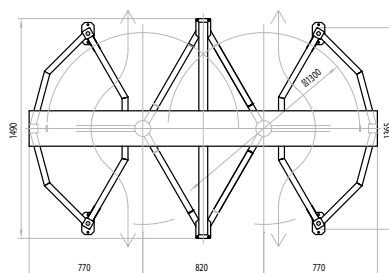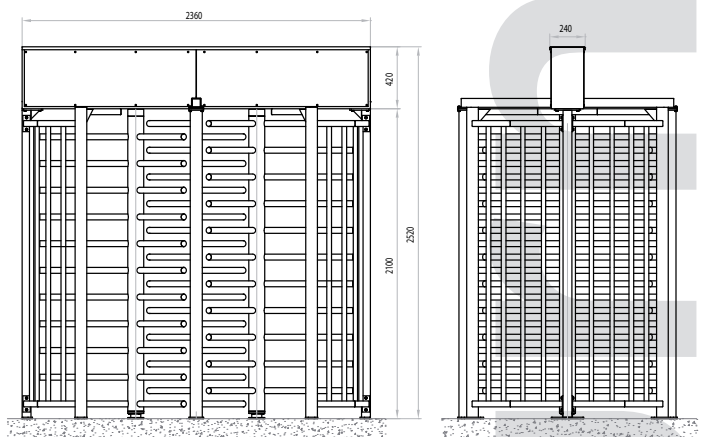
Rotor column: steel tube ø 108 mm, hot-dip galvanized

Rotor arms: steel tube ø 40 mm, hot-dip galvanized

Internal barrier: closed thin-walled profile and steel tube ø 40 mm, hot-dip galvanized

Outer barrier: steel profile, hot-dip galvanized

Other mechanical parts of turnstile are finished by galvanic zincing or blackening.

Interface:

Turnstiles are controlled by microprocessor control units that is equipped with high effective processor. Control electronics is equipped with extensive subsystem that enables the connection of many input and output devices, all of them are galvanically isolated.

- device operating by status signals, serial bus RS 485, USB or Ethernet (with external converter)
- configurable two-state outputs about turnstile status
- motor control by digital power bridges with overload protection and current measurement
- include generating log file with a list of all faults accompanied with time/date mark
- possibility of remote firmware upgrade
- wide range of configuration and diagnostics parameters for remote customization using T-CONF software
- full remote control of turnstile network including passage counters status shown on PC using T-MON program
- possibility to connect the supplementary ultrasonic, laser or infra-red sensors
- enables back up accumulator connection directly in the turnstile (supports charging, measuring and auto-switching for power supply from accumulator in case of power failure)
- connectors for all input/output signals for fast and easy installation, service and replacement
- top-quality control electronics enables high operational reliability

Operating of turnstile in case of power failure

FAIL-SAFE unit: turnstile is automatically unblocked and it is possible to pass through the turnstile in both directions.

FAIL-LOCK unit: it is possible to ensure 6 hours operating in case of backup accumulator usage.

Operating modes

If input signal from access control system or button controller is received it is possible to turn round the turnstile 120° and by that way enable the passing to one person.

For each way of direction it is possible to define the different operating modes:

1. **free passage**
2. **controlled passage**
3. **permanently blocked**

This setting can be set-up for any direction eventually for both directions at the same time.

BASIC TECHNICAL PARAMETERS

Table of drive unit electric parameters

Type of drive unit	Rated supply voltage	Power consumption in basic operation modes		
		Standby mode break activated / break released		Transit mode
Motorised FAIL-LOCK	12VDC	6 W	25 W	50 W
Motorised FAIL-SAFE	12VDC	25 W	6 W	30 W

- standard range of working temperatures: +10°...+50°C
- range of working temperatures (with heating module) –25°... +50°C
- range of storage temperatures 0°... +50°C
- maximum relative humidity 80% (non-aggressive environment)
- MCBF: 3 000 000 cycles (number of cycles before error)

  The number of passages, in dependence on type of control electronics, operating mode and the way of identification of passing people, rates between 30 to 60 persons per minute.

  Increase of power supply on motor drive unit with automatic heating module is 24 W. The power supply can be also increased by using optional accessories..

ACCESSORIES

Additional locking:

Additional electromagnetic brake to increase the turnstile resistivity against illegal passage.

Columns and holders for accessories:

Columns and holders for placing of identification readers or other accessories (for example: LED information panel).

Lighting:

Lighting of turnstile interior

Anchoring frame:

Steely frame to fix the turnstile for example through the interlocking pavement

Traffic-Light information panel:

- animation of identification card alarming necessary identification of the passing person
- information about the turnstile accessibility in set direction
- information about transit permission based on evaluation by access control system
- information about reading of invalid identification card

Touch control panel

- animation of identification card alarming necessary identification of the passing person
- information about the turnstile accessibility in set direction
- information about transit permission based on evalution by access control system
- information about reading of invalid identification card

Back-up accumulator:

During a power failure the accumulator ensures the turnstile continuous operation for a period of minimally 6 hours. It is possible to use two backup modes.

- accumulator in external power supply unit (back up > 6 hours)
- accumulator inside the turnstile (emergency back up about 30 minutes in case of feed cables disconnection).

Counter:

- included in program T-MON • it is possible to connect the external counter

Identification systems:

In order to identify the passing people, it is possible to connect to these turnstiles REXON-ERA DUO 3 any type of barcode, magnetic card, proximity chip card, smart card, biometrical sensor.

Software accessories:

COMMUNICATION CLIENT – software that enables the connection of turnstile network with PC. This program runs on the background (its activity is hidden) and enables to any PC with valid authority to make setting and control the turnstile network.

T-MON – program that enables to control the turnstile system from any PC with valid authorization in customer´s network. Remote control of the same turnstile is possible from different PC at the same time. It is fully graphic application that can be used even with touchscreen monitors.

T-CONF – program that enables to change the turnstile configuration, configuration backup, record new configuration, error report and vypustit z textu firmware upgrade. It is localized to many world languages. It is possible remotely connect to any turnstile through Internet after fulfillment of all network qualifications.

Specific variants:

- stainless steel rotor with arms • stainless steel design
- RAL custom color

cominfo ®