

Multiple turnstiles of the RONDO line are the optimised solution for access control in outdoor areas, when many people have to enter or leave an area on separate ways within a short time. Due to their different drive variants RONDO-turnstiles can be precisely adjusted to your requirements. The multiple turnstile RONDO 1 has an electromechanical locking unit, the rotation is generated by the user himself, a popular variant in leisure parks and stadiums. The electromotive multiple turnstile RONDO 2 is actuated by an energy-efficient and maintenance-free MHTM™ drive unit, the first choice for the representative securing of outdoor areas and company premises. Both drive versions can be controlled by all common access control systems as well as optionally operated in both directions. The purely mechanical multiple turnstile RONDO 3 allows visitors to pass in one direction only and is particularly suitable for unguarded exits at swimming pools, sports facilities and parks. The RONDO turnstiles can also be individually adjusted to your requirements with different material designs, locking variants, additional attachments and extensions for bicycles, wheelchairs and material transport devices.



#### Attributes:

- · can be extended and combined as required
- two-way separation
- · reliable securing of outdoor areas and open-air grounds with a high visitor frequency
- · mechanical, electromechanical and motorised version
- · sensitive impact detection for the highest possible safety of people
- various options, such as the extension for a barrier-free access
- · designed for 10 million person passages

**Used** for the separation of persons, especially in areas which are in need of control and protection:

- · authority facilities
- · industrial plants and power plants
- · military facilities
- supply facilities
- airports (operating areas)
- · sports and leisure facilities

#### **Versions / Names:**

MDKR-Rondo 1 Duo: electromechanical drive, can be controlled from both sides

MDKR-Rondo 2 Duo: electromotive drive, both-way controllable MDKR-Rondo 3 Duo: mechanical turnstile, rotatable in one direction

#### Specifications:

### Triple System (example)

Passage width
Passage height
Ground clearance
Base area
Overall height
Partition

720 mm each 2,050 mm 90 mm 5,530 x 1,950 mm 2,450 mm 3x 120°

**Dimensional changes** are possible under consideration of the local conditions.

The **turnstile** is manufactured as an assembly unit consisting of the frame bracket, the guiding elements, the locking brackets, the turnstile spindle and the locking device.

The **frame bracket** consists of two lateral uprights and the upper support beam to accommodate the drive unit and a roof.

The **person guiding elements** each consist of a closed frame bent in a circle with a bar filling (bar spacing approx. 120 mm) and are arranged to the left and right of the turnstile on the



frame bracket, whereby a person guiding element is provided with locking bars made of round tube.

The turnstile spindles consist of a turnstile axle made of round tube,  $\emptyset$  100 mm (V4A) and sufficiently dimensioned neck and foot bearing. The locking arms made of V4A round tube, bent into a hairpin shape, are attached to the turnstile axis in 3 rows below 120°.

**Easily accessible components**: All components required for operation are accommodated inside the support beam. This simplifies assembly, commissioning and maintenance considerably.

**Control**: Microprocessor control unit **Voltage**: 110 - 240 V AC, 50/60 Hz

**Power consumption**: approx. 50 W (without accessories)

Duty cycle: 100 %

Class of protection: IP 43

#### The control functions are:

- · turnstile locked in both directions
- · turnstile permanently open in both directions
- · single opening by control devices, depending on the control side

**Behaviour in case of power failure:** The exit direction is automatically enabled, whereby the entrance is blocked. Other combinations are possible on request.

### Foundation plate as standard:

- · 300 mm upper edge area with spacious cable entry
- pairwise arrangement of dowel holes and levelling screws for an optimal perpendicular and flush assembly

# TORWERK - long-lasting corrosion protection in 4 steps:



The coating thickness is 260  $\mu$ m, all requirements on corrosion protection stresses according to DIN EN 12944-2 of the category C4 (long protective effect) are met.



## First-class surface haptics through:

- · hermetically welded construction
- · a surface free of zinc cavities
- · no protrusion of flat ground weld seams (mitre corners) after zinc coating
- · no warping caused by zinc blowholes in the surface

# **Environmentally friendly procedure:**

- no use of solvents
- recycling of the overspray

#### Options:

### Colour design / labelling:

Roof, supporting beams (drive), supporting columns and side elements can be designed in various RAL/DB colours.

The support beam can also be labelled with a door designation.

#### Attachments:

- Terminal "S" 220 x 150 mm with panel cut-out 135 x 65 mm
- Terminal "L" 580 x 220 mm with panel cut-out 495 x 135 mm
- Terminal "XL" 580 x 310 mm with panel cut-out 495 x 225 mm

for control and communication elements in ergonomic design and spacious assembly area, attaching possible on the in- and outside or as terminal arrangement one above the other.

### Signaller:

- · LED-pictogram red cross/green arrow
- · LED-button lights red and green
- · turnstile specification on supporting beam

#### Controls:

- release push-button illuminated, key switch, key switch On/Off
- · code card reader and other communication systems possible on request



### **Roofings:**

When selecting the roof design, a distinction is made between the following versions:

- octagonal design roof made of a light supporting frame, sheet metal filling and circumferential fascia
- 5,535 x 1,950 mm, height 80 mm
- drainage at the roof edges laterally via downpipe (nominal connection diameter DN 50)
- optionally with 2 flat LED lighting panels on the profile underneath the roof in combination with a twilight switch
- rectangular roof made of a light supporting frame, sheet metal filling and circumferential fascia
- 5,535 x 1.950 mm, height 80 mm
- · drainage at the roof edges laterally via downpipe (nominal connection diameter DN 50)
- optionally with 2 flat LED lighting panels on the profile underneath the roof in combination with a twilight switch

### Design of the person guiding elements:

 instead of bar filling, optionally closed sheet filling or perforated sheet filling in powdercoated version in brushed stainless steel

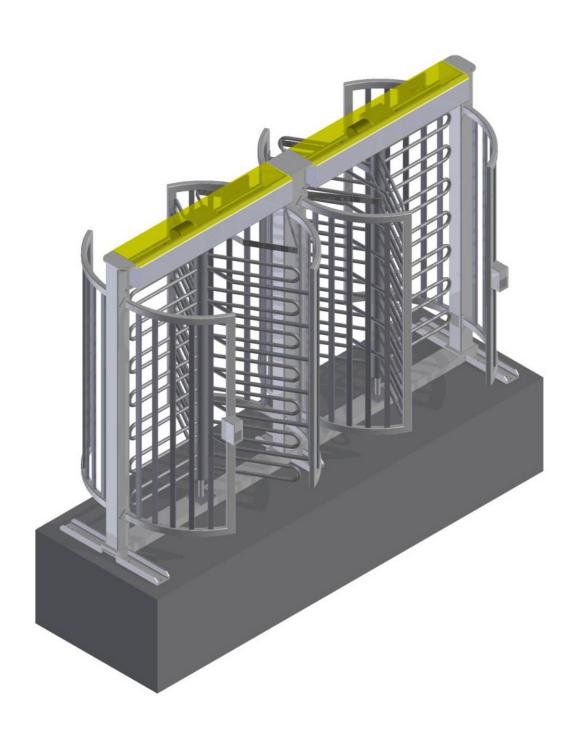


### Torwerk - assembly service:

Each configured turnstile is supplied completely pre-assembled at the factory and internally wired and connected ready for operation. The installers/assemblers only have to unload the turnstile onto the foundation prefabricated by the customer, align it, level it using the



adjusting screws and anchor it with the dowels supplied. An electrician connects the turnstile to the mains and the turnstile is ready for operation. Time-consuming studying of assembly instructions, sorting of assemblies and connecting elements is no longer necessary.





Construction and design: Siegmund Huth / Andreas Panek / Electrotechnical equipment: Matthias Martius

