

BAR-EC

BASIC CHARACTERISTIC



Turnstile **BAR-EC** is specially designed to the environments where the main demands are minimal dimensions together with keeping its all own high parameters: large throughput capacity, easy and quick person's identification, high quality and reliable running. Modern design and high-quality surface treatment make possible to install turnstile **BAR-EC** into the interior or exterior without the direct weather attack. Modern control electronics provides easy setting its own turnstile operating mode and at the same time ensures the communication with different types of identification and signalling devices. **BAR-EC** turnstile can be equipped with automatic folded arm function on request.

TURNSTILE BAR-EC IS SUPPLIED WITH TWO TYPES OF DRIVE UNIT:

Motor drive unit MT (standard)

BAR-EC turnstile motorised version is characteristic by its high comfort, reliable and maintenance-free running:

- effective blocking system in combination with motor-driven unit
- automatically adapts the rotation speed to the users
- silent and fluent running
- smooth slowing down and stopping the turnstile

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 - one-direction version

- self-centering position mechanism to ensure the complete turnstile turning to the basic position
- hydraulic shock absorber for the fluent and smooth running
- blocking system prevents the turnstile reverse during passing

This type of turnstile is applied to regulate and control the number of passing people generally 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:

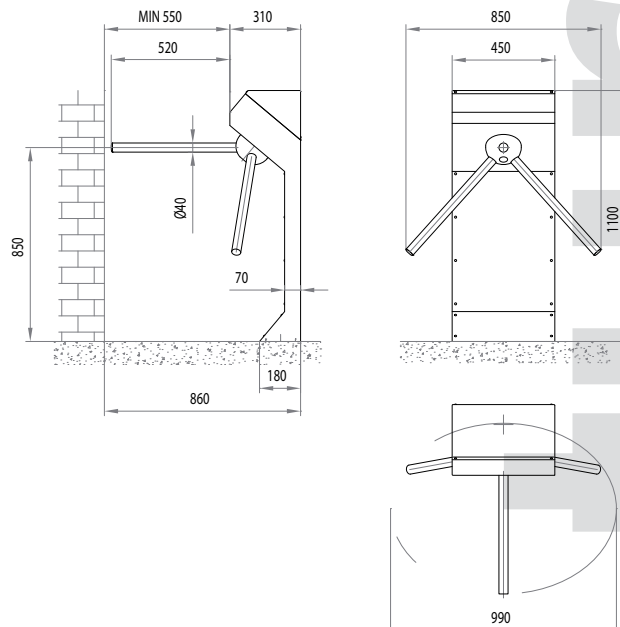
Frame: galvanized steel sheet, thickness 2.5mm, surface - finished by powder coating (standard - RAL 7040 GS - grey)

Covers: galvanized steel sheet, thickness 1.5mm surface-finished by powder colour (standard - Antigua silver + transparent paint)

Tripod hub: stainless (standard - brushed), but in the case of design with foldable bars the cover is from galvanized steel sheet, thickness 1.5mm surface-finished by powder coating (standard - Antiqua silver + transparent paint), or from stainless sheet (standard - polished).

Bars: stainless tube \varnothing 40 mm (standard - brushed).

Other mechanical parts of turnstile are zinc galvanized or blackened.



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 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.

The device makes possible to set up the function called **GO-CALL** which automatically rotates tripod head a few degrees forward to visually inform the user that access through turnstile is allowed identification of passing 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	3 W	12,5 W	25 W
Motorised FAIL-SAFE	12VDC	12,5 W	3 W	15 W

- standard range of working temperatures +10 ... +50 °C
- range of working temperature (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 dependance on type of control electronics, operating mode and the way of identification of passing people, rates between 15 to 30 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

Guiding railings:

For the right function it is suitable to add BAR turnstile with guiding railings with minimal length of 850 mm or install the turnstile to some suited object (for example: reception desk).

Traffic-Light information panel:

- information about the turnstile accessibility in set direction
- information about transit permission based on evaluation by access control system
- information about invalid card

Touch control panel

- device for remote manual control of turnstiles with wide range of operational mode settings
- LED diodes to inform operator about actual turnstile status including alarms
- control of up to 4 turnstiles or 3 turnstiles + general

Folding arm:

By customer's request, the turnstile BAR-EC can be equipped with FOLDING ARM function. When the turnstile horizontal arm is automatically fold down there is enough space for free passing or for moving some things.

The automatic folding of turnstile arm is activated by an impulse from control system (fire alarm system), external button or during the power failure (it needs the connection of back-up accumulator and the unit monitoring the power supply situation).

Warning: In reference to safety regulations it is necessary to consult with the local fire officer the using of BAR-EC turnstile in combination with folding arm function for people evacuation.

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 placed in 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 T-MON program
- it is possible to connect an external counter

AntiClimb sensor:

Sensors indicate an illegal attempt to climb over / crawl under turnstile's bar.

Identification systems:

In order to identify the passing people, it is possible to connect any type of barcode, magnetic card, proximity card, smart card, biometric terminal etc.

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 authorization 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 firmware upgrade. It is localized to many world languages. It is possible remotely connect any turnstile through Internet after fulfilment of all network qualifications

Specific variants:

- stainless steel design
- material combinations
- custom colour in spray according to RAL
- special brackets for identification terminals