



## V300 Series Turnstiles



### General Description

V300 Series is the ideal solution especially for the applications like transit systems where there is vandalism, high flow and 'corridor-type directing' requirement. Advanced microprocessor controlled electronics (PLC); fine mechanics processed on CNC machines; contactless position sensing technology; hydraulic damper with adjustable damping ratio and hardened steel cam manufactured on CNC machines are some of the main factors resulting V 300 Series turnstiles' trouble free, long operation life.

### CABINET

Cabinet is either AISI 304/316 Quality Stainless Steel or A1 Quality Steel (galvanized + RAL 7032 emboss painted + furnace). Thickness of the sheet metal used for the cabinet is 1.2mm. Access to the mechanism, control electronics and led-matrix way-mode indicators are reached from the top lid.. No vibrations occur while passing because of the strong structure and stable design. Led way-mode indicators and AISI 304 Quality pre-figured stainless steel top and bottom lids are standard in all of the V 300 Series turnstiles.

### CONTROL ELECTRONICS

Optima V300 turnstiles are controlled by a PLC (programmable logic control). Position sensors are contactless; consequently preventing problems arising from long period applications of micro switches with mechanical legs. For safety reasons, only 24V and 5V are running through the control electronics and the whole turnstile. The turnstile works with 220V 50Hz. A pair of led-matrix way-mode indicators are supplied with the turnstile (green arrow/red cross). As a solution for the applications where there is 'high' flow in 'both' directions, control electronics has the ability to remember 10 readings with respect to the reader side and give permission respectively. Control electronics has trigger inputs, sensor inputs, alarm inputs, solenoid outputs, led-matrix way-mode indicator outputs, 'cycle (one turn) completed' outputs. The time that the turnstile waits open after the reader input is 30 seconds and can be adjusted in 6 steps as multiplies of 5 seconds. Turnstile can be supplied either fail-locked or fail-open. In other words, when electricity is off, turnstile will stay locked or will freely rotate according to the requirement.

### TRIPOD ASSEMBLY

The arms which are AISI 304 Quality Stainless Steel tubing have 34mm diameter and a thickness of 1.2mm. Tip of the arms are closed by welding a concave AISI 304 Stainless Steel piece. Arms are mirror polished completely. Core of the tripod assembly is cast aluminium; outer surface is emboss painted to dull black and baked.

## MECHANISM WITH HYDRAULIC DAMPER

The mechanism is silent, without vibrations and self-centering. Hydraulic damper is the main factor in achieving these goals. As the damping ratio of the hydraulic damper can be adjusted according to the requirements, both high flow rates and vibration less operation is achieved. Outcome is straight forward: Long operation life, no service needs. The cam which provide the 120 degree rotation is manufactured by CNC machines the material being special alloy hardened steel. A similar material is used for the locking arms. Steel parts are all galvanized; others being plastics and aluminium, rusting is prevented throughout the turnstile.

## ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT

Between -15°C and +55 °C, %95 non-condensing humidity; 220V 50Hz

## OPTINAL ACCESSORIES

1. Anti-panic dropping arms
2. Motor-driven mechanism
3. Alarm sensor to detect crawling under the arms
4. Alarm sensor to detect jumping over the arms
5. Alarm sensors to detect false passage (turning the tripod assembly by hand without entering)
6. Red/green lights on outer surface of the top lid
7. Six digit counter (with or without reset)
8. Folding arms
9. Coin mechanism and coins
10. Remote keyboard

## TYPE DESCRIPTION

- V300 - 001 Electromechanical, Cabinet And Top Lid AISI 304 Quality Stainless Steel  
V300 - 002 Electromechanical, Cabinet A1 Quality Steel (Galvanized + Painted + Baked), Top Lid AISI 304 Quality Stainless Steel  
V300 - 010 Mechanical, Cabinet And Top Lid AISI 304 Quality Stainless Steel  
V300 - 011 Mechanical, Cabinet A1 Quality Steel (Galvanized + Painted + Baked). Top Lid AISI 304 Quality  
V300 - 012 Mechanical, Cabinet And Top Lid AISI 304 Quality Stainless Steel. Cabinet (Painted + Baked)

