TECHNICAL MANUAL

TURNSTILE LOGIC – TL300TUR

CONTENTS

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2. OVERVIEW

2.1 Logic functionality

The TL300TUR is a turnstile logic unit which has been developed to control turnstiles using magnetic solenoid locks and limit switches. The TL300TUR accepts inputs from card readers or push buttons and performs all the required timing and interlock logic.

2.2 Applications

Typical applications are the control of turnstiles in access control environments.

2.3 Logic features

a) Bi-directional turnstile with two inputs. One input for entry and a separate input for exit.

b) Automatic/Manual mode. This mode allows the turnstile to be manually operated for maintenance purposes using the toggle switch mounted on front of the unit.

c) Solid state solenoid driver outputs. A separate out is used for entry and exit. The solenoids can be wired directly to the output driver circuit.

d) Selectable Fail-Safe outputs. DIP switches can be used to invert the outputs for Fail-Safe operation.

e) Holding timeout. This feature locks the solenoid after a set time if the limit switch is not triggered. If a turnstile is triggered to unlock and the person decides not to pass through the turnstile within the timeout period, then the solenoid will automatically lock again.

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2.4 Indicators

a) Power Indicator. This LED Indicator illuminates when power is present.

b) Entry Indicator. This LED Indicator is illuminated when the turnstile output is switched on for Entry.

c) Exit Indicator. This LED Indicator is illuminated when the turnstile output is switched on for Exit.

3. SPECIFICATIONS

3.1 Technical Specifications

Power supply	24VDC 1.5VA
Entry and Exit Inputs	These inputs may be activated by a potential free relay contact or open collector NPN transistor output.
Limit Switch Inputs	These inputs may be activated by a potential free relay contact or open collector NPN transistor output.
Entry and Exit solenoid outputs.	These outputs are a solid state MOSFET rated at 1.5A/24VDC
EOT Output Relays	These outputs are a normally open relay output rated at 0.5A/24VDC.
Indicators	LED indicators show: Power, Entry and Exit. The LEDs also indicate the state of the limit switches which is useful for diagnostic purposes.
Connector	11 Pin Connector on rear of unit.
Dimensions	80mm (height) X 40mm (width) X 79mm (Depth excl. connector).
Operating Temperature	-40°C to +70°C
Storage Temperature	-40°C to +85°C

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4. SETTINGS

4.1 Switch Settings

Switch	Function	ON	OFF
10	Not Used	Reset	Off
9	Not Used	-	Off
8	Timeout	10 Sec.	20 Sec.
7	Trigger memory	On	Off
6	Exit trigger latch	Enable	Off
5	Entry trigger latch	Enable	Off
4	EOT Mode	LED	Normal
3	Entry/Exit trigger input	N/C	N/O
2	Exit Solenoid	Fail Safe	Fail Secure
1	Entry Solenoid	Fail Safe	Fail Secure

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