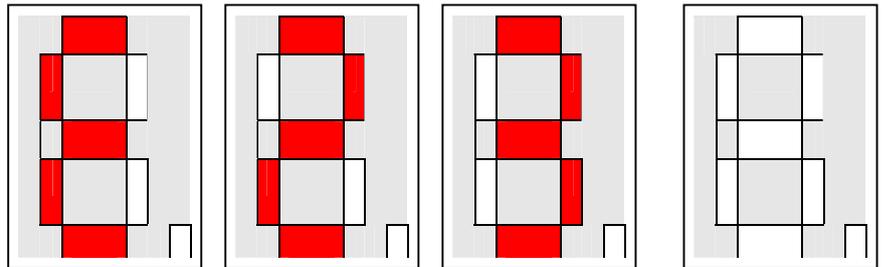### 11.2.7 Display Error Code

First, the character *E* (Error) is displayed, successively followed by the first number, and then the second number of the error code and at last a pause, recurring in sequences. Each status is displayed during 2 seconds (defined in "delay_mes").

Example for error code 23

Legend Error Code:

Error Code	Description	Automatic Reset Function
01	Operating time control	Yes
02	Emergency access activated	Yes
03	Breach control activated	Yes
04	Contact mat energized	Yes
05	Access attempt wrong direction	Yes
06	Drop arm magnet currentless	No
07	Recognition vandalism	
08	Reserve	
09	Reserve	
10 - 19	Reserve	
20 - 39	Software failure (still to define)	No
40 - 59	Hardware failure (still to define)	No
60 - 79	Communication failure (still to define)	No
80 - 99	Reserve	

All those status and error codes, that are with automatic reset function, will be displayed during a period of max. 10 minutes after the error is rectified but however, as long as the failure is existing.

All other errors will cause pedestrian pivot barriers to be set out of operation. The error code will be displayed permanently until new start of the controller after rectification of the fault.

11.2.8 LED Green

The LED indicate, which outputs have been activated by the controller. Each LED is assigned to the according output (i. e. output 6 is assigned to LED 6 etc.).

11.2.9 LED Red

The LED indicate, which inputs have been activated by the controller. Each LED is assigned to the according input (i. e. input 6 is assigned to LED 6 etc.).

11.3 Functions of the Inputs

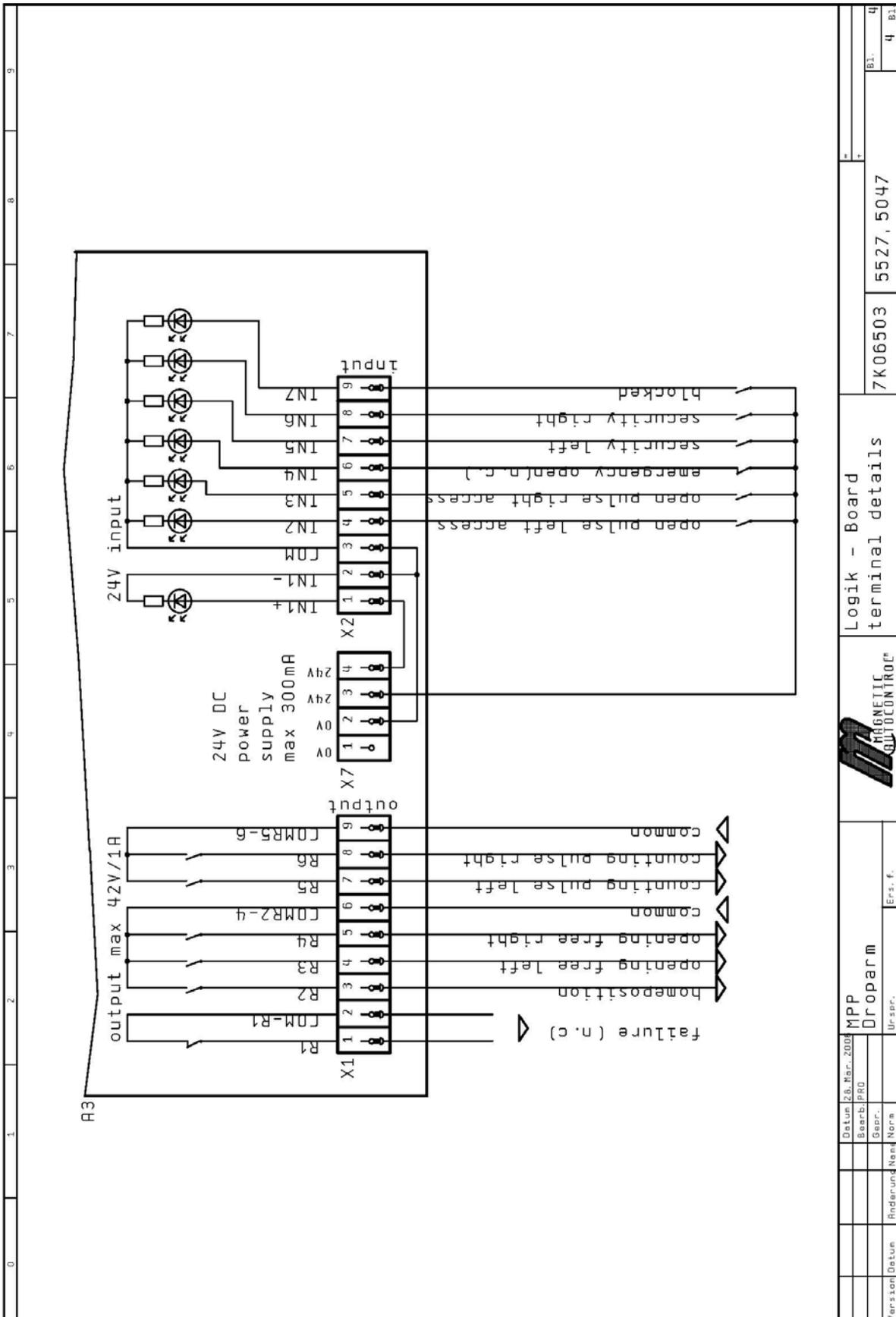(Please refer to the wiring diagram)

Default setting of the inputs

INPUT	Default Function
IN1	ASB signal for servo controller (hard-coded)
IN2	Opening passage direction LH
IN3	Opening passage direction RH
IN4	Emergency entrance (attempt to reach the next end position)
IN5	Surveillance LH / Protection against breach
IN6	Surveillance RH / Recognition of illegal passage by means of a contact mat
IN7	Lock of the pedestrian pivot
IN8	End Stop of drop arm disabled
IN9	Recognition power failure (of main power)

The inputs can be operated either with 24V or even with 0V (high active or low active).

The function of IN1 can not be changed because of the input is hardware-sided connected with the ASB-input of the servo's final stage(s).

Release of the servo controller via IN1. The logic is inverted (recognition of broken wire), i. e. the controller is only energized in case of an permanent contact is activated. Otherwise the motor will be currentless and the drop arm magnet will release (if existing).

IN2 up to IN9 can be used for other functions via a parameter set.

input

IN7 blocked
IN6 security right
IN5 security left
IN4 emergency open (n.c.)
IN3 open pulse right access
IN2 open pulse left access
COM
IN1−
IN1+

24V input

X2

24V DC
power
supply
max 300mA

24V
24V
0V
0V

X7

output

COMR5-6 common
R6 counting pulse right
R5 counting pulse left
COMR2-4 common
R4 opening free right
R3 opening free left
R2 homeposition
COM-R1
R1 failure (n.c)

output max 42V/1A

X1

A3

Logik – Board
terminal details

7K06503 | 5527,5047

MAGNETIC
AUTOCONTROL

MPP
Droparm

Datum 28.Mar.2008
Bearb. PRO
Gepr.
Norm
Ers.f.
Ursp.r.

11.3.1 Functional Description of the Inputs

<u>Note:</u> The function of IN1 can not be changed because of the input is hardware-sided connected with the ASB-input of the servo's final stage(s).

11.3.1.1. Input 2 Function Opening Pulse/Signal Aisle LH
Opening pulse for entry / left hand passage.
In the event of the signal is activated more than 5 seconds, a permanent contact is set.

11.3.1.2. Input 3 Function Opening Pulse/Signal Aisle RH
Opening pulse for exit / right hand passage.
In the event of the signal is activated more than 5 seconds, a permanent contact is set.

11.3.1.3. Input 4 Function

Free passage in both direction in case of emergency. Drop arm turns down automatically.

11.3.1.4. Input 5 Function Safety LH
Wiring of a monitoring system for recognition of a fraudulent access attempt by breach.

11.3.1.5. Input 6 Function Safety RH
Wiring of a monitoring system for recognition of a fraudulent access attempt by breach.

11.3.1.6. Input 7 Function Locked Gate
Input for lock of the pedestrian pivot in both directions. Any subsequent opening pulses will not be accepted then, despite a pulse is given by the higher ranking IN1 (emergency). In this case the locked barrier can released for free exit /entry.

11.3.1.7. Inputs 8 und 9 are for internal use.

11.4 Hardware of the Relay Outputs

The relay outputs REL1 to REL6 are wired on a shared connection plug board. Groups are combined to a pool in order to safe terminal clamps.
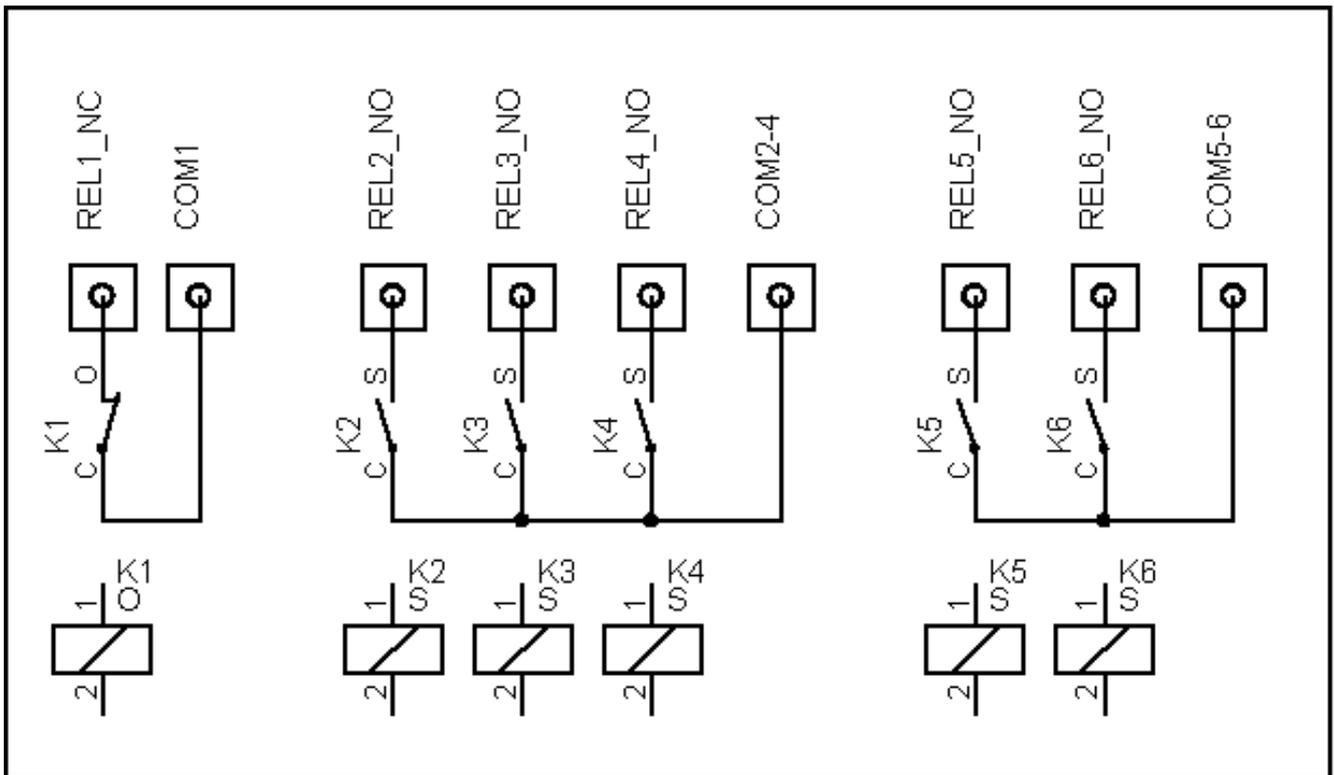

Fig. 13 Wiring Diagram Relay OUTPUTS (simplified drawing)

11.4.1 Possible Output Functions

Note: The function of REL1 can not be changed because of the output is also engaged for feedback in the event of power failure.

Output	Default Function
Relay 1	Collective fault / Power failure
Relay 2	Pedestrian Pivot in idle position
Relay 3	Free passage LH
Relay 4	Free passage RH
Relay 5	Counter pulse LH
Relay 6	Counter pulse RH
MOSFET-Output 1	Controlling holding solenoid drop arm
MOSFET-Output 2	Controlling retracting solenoid drop arm
MOSFET-Output 3	Heartbeat
MOSFET-Output 4	Reserve

Relay performance data max. 42V/1A

11.4.1.1. REL1 = Collective Errors and Alarm Outputs

In case of certain errors arise, a signal is activated via REL1 and stays active as long the error is pending.

Possible failures might be:
1. Running time of the MPP too long = obstacle recognized
2. Manual reset expected
3. Magnet of drop arm currentless = aisle open
4. Emergency open activated (inverted -> no signal pending)
5. Protection against breach activated
6. Contact mat energized
7. Failure between CAN communication and the final stage
8. Hardware failure final stage
9. Software failure final stage
10. Power failure

Important Information:

A power failure is to indicate at the collective output. For this reason, REL1 is operated inverted. From this it follows, that the relay is activated as long no failure occurs. As soon as one of the above mentioned collective errors arise, the relay will release.

11.4.1.2. Relay 2 Function Pedestrian Pivot in Home Position

A permanent contact is activated via this output as long as the pedestrian pivot is in home position.

11.4.1.3. Relay 3 Function Display free passage LH

A signal is activated via this output in case of free passage at left hand direction. This output can also be used to lock the pulse transmitter for right hand passage, if left hand passage is released.

11.4.1.4. Relay 4 Function Display free passage RH

A signal is activated via this output in case of free passage at right hand direction. This output can also be used to lock the pulse transmitter for left hand passage, if right hand passage is released.

11.4.1.5. Relay 5 Function Counter LH

A counter pulse is given via this output when the end position is reached after passing in left hand direction. This is also true for permanent open mode.

11.4.1.6. Relay 6 Function Counter RH

A counter pulse is given via this output when the end position is reached after passing in right hand direction. This is also true for permanent open mode.

12. Controller MMC-120-200

The MMC controller has been wired and adjusted und left the factory in a fully operational condition. Other adjustments are not possible by default. The DIP switches are for scheduling the CAN Bus and cannot be changed.

Conversions and modifications to the control module are not permitted. If, at any time you require to replace this controller (e. g. in case of repair) please arrange the terms of replacement with TURNSTILES before as otherwise any liability and warranty is declined by the manufacturer.
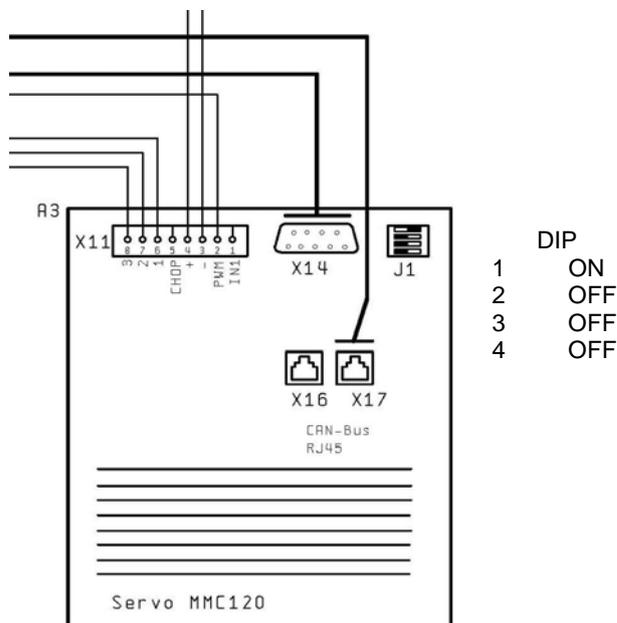

Fig. 14 Servo controller MMC120

Turnstiles * EntraPASS Access Control

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