CONTROLLER

Intelligent Door Management

Parameter Description

FEIG

⚠ Attention!

This document is a detailed documentation of the associated door controller.

The safety instructions and installation recommendations of the control manual shall be followed.

The functional description employs the following characters to indicate the different danger areas and useful tips.

⚠ Attention!

indicates a risk to persons if the procedure is not carried out as described.

⚠ Warning!

indicates that the controller is at risk.

⚠

points out information which is IMPORTANT to the operation of the gate controller and/or the gate.

ℹ

points out information which is useful but not essential for the use of the gate controller TST EWA4.

Contents

1 Door Cycle Counter

P.	[Unit] Range	Function	Description/ Note
P.000 rrr	[Cycles]	Cycle counter	The content of this parameter indicates the number of previously counted cycles.

2 Maintenance counter

P.	[Unit] Range	Function	Description/ Note
P.005 rrr	[Cycles]	Maintenance counter	The content of this parameter indicates the number of cycles remaining until maintenance is due. *The setting -1 means that the maintenance counter has not yet been activated.*
P.973 -ww	0 ... 1	Resetting the maintenance counter	By setting this parameter to 1 the maintenance counter is reset.

3 Hold open times / Auto close times

Which Auto close time runs depends on the arrived end position and on the OPEN command used. For each OPEN command you can use Parameter P.5x4 to set separately whether and which Auto close time runs
(X = Number of used input).

P.	[Unit] Range	Function	Description/ Note
P.010 www	[Seconds] 0 ... 9999	Auto close time 1	The door is held in the end position door OPEN for the set time. The door is then automatically closed.
P.011 www	[Seconds] 0 ... 9999	Auto close time 2	The door is held in the end position Intermediate Stop / Partial open for the set time. The door is then automatically closed.

4 Pre-warning time before door movement / Clearance time

P.	[Unit] Range	Function	Description/ Note
P.020 -rw	[10 ms] 0 ... 3000	Pre-warning time before open	The opening move is delayed following receipt of an OPEN command by the time specified in this parameter.
P.025 -rw	[Seconds] 0 ... 30	Pre-warning time before closing	The closing move is delayed following receipt of a CLOSE command or after expiration of the auto close time (forced close) by the time specified in this parameter.

P.	[Unit] Range	Function	Description/ Note
P.026 --r	0 ... 1	Pre-warning time before closing from between the end positions	By activating this parameter the pre-warning time runs always before closing, undependend from the input, also between end positions and not only in end position OPEN. The used time is set by P.025. 0: Pre-warning time set by input 1: Pre-warning time always active

5 Forced closing time

P.	[Unit] Range	Function	Description/ Note
P.012 -ww	[Seconds] 0 ... 200	Forced closing time	The closing starts after the time set with this parameter. The time starts as soon as no opening or closing is active. The hold open time and the clearance time have a higher priority. That means if one of these times is running the forced closing time will not run. The same is if the door or barrier is in the open position by switching on the controller.

6 Motor settings

The motor ratings are used to teach the door controller what it needs to know about the motor used.

P.	[Unit] Range	Function	Description/ Note
P.10A -ww	0 ... 2	Motor type	This parameter defines the type of used motor 0: 3-phase AC motor 1: 1-phase AC motor symmetrical 2: 1-phase AC motor asymmetrical
P.130 -ww	0 ... 1	Motor rotary field	This parameter specifies the rotary field of the motor for OPEN move. 0: Right rotating 1: Left rotating

7 Selecting the positioning system

P.	[Unit] Range	Function	Description/ Note
P.202 -rr	0 ... 17	Transmission ratio	With this parameter the transmission ratio of the encoder to the motor is set. As faster the drive shaft is as higher has the parameter value to be. *This parameter is only visible in case of TST PD is connected and set as limit switch.*

P.	[Unit] Range	Function	Description/ Note
P.205 -ww	0000 ... 1100	Selecting the positioning system profile	This profile sets the limit switch system. Select from the following settings: 0000: Mechanical limit switches 0001: Mechanical limit switches 0300: Absolute encoder DES-A (GfA) 0700: Absolute encoder DES-B (Kostal) 0800: Absolute encoder TST PD / TST PE 0900: Mechanical limit switches assists by timer (incremental mode) *This function is working only in automatic mode* 1100: Absolute encoder TST PD2-CA or TST DRAxSU *The exact settings which this profile involves can be found in Appendix: Position Sensor Profile.* **In addition, the standard functions of the controller inputs are matched to the limit switch type in use.**

8 End position correction

P.	[Unit] Range	Function	Description/ Note
P.210 -ww	0 ... 5	New teaching of the end positions	This parameter is used to start a new teaching of the end positions. The corresponding end positions are moved to in deadman mode after activating the procedure and saved by holding down the Stop key. Select from the following settings: 0: Cancel, no end positions are taught. 1: Limit switch Lower, limit switch Upper and if appropriate limit switch Intermediate Stop are taught. 2: Limit switch Upper and if appropriate limit switch Intermediate Stop are taught. 3: Limit switch Lower and limit switch Upper are taught. 4: Limit switch Intermediate Stop is taught. 5: All limit switches and the turndirection are taught. *Teaching the Intermediate Stop limit switch depends on the setting in Parameter P.244 (see section Partial Opening / Intermediate Stop).*

P.	[Unit] Range	Function	Description/ Note
P.215 -ww	0 ... 1	Requesting correction of the limit switch bands	If automatic calculation of the limit switch bands (P.216) is activated, this parameter can be used to start a new teaching of the limit switch bands. 0: Make no correction. 1: Start correction of the pre-limit switch and limit switch bands. *Correction of the limit switch bands is only possible if P.216 = 2.*

9 CLOSE

If automatic setting of the pre-limit switches and limit switch bands is used (P.216 = 2), Parameters P.222 and P.223 are automatically changed.
The parameters are even changed if the speed of the door or the steepness of a ramp is changed, since this results in a new start of automatic limit switch correction.
If you want to set these ramps manually, P.216 must be < 2.

9.1 End position door close modify

P.	[Unit] Range	Function	Description/ Note
P.221 www	[Increments] -120 ... 120	Correction value End position door CLOSE	This parameter is used to shift the entire lower end position, i.e., the end position is shifted together with the associated pre-limit switches. A change in the parameter value in the positive direction causes the end position to shift up. A change in the parameter value in the negative direction causes the end position to shift down.

10 Open

If automatic setting of the pre-limit switch and limit switch bands is used (P.216 = 2), Parameters P.232 and P.233 are automatically changed.
The parameters are even changed if the speed of the door or the steepness of a ramp is changed, since this results in a new start of automatic limit switch correction.
If you want to set these ramps manually, P.216 must be < 2.

10.1 Adjust the end position Door open

P.	[Unit] Range	Function	Description/ Note
P.231 -ww	[Increments] -60 ... 60	Correction value End position Door OPEN	This parameter is used to shift the entire Door OPEN end position, i.e., the end position is shifted together with the associated pre-limit switches. A change in the parameter value in a positive direction causes the end position to shift up. A change in the parameter value in the negative direction causes the end position to shift down.

11 Synchronisation

11.1 Synchronization type

P.	[Unit] Range	Function	Description/ Note
P.25F -ww	0 ... 10	Synchronization type profile	This profile is used to set the reference switches and automatic synchronization mode. 0: Deactivated 1: Synchronization to reference switch in Door CLOSE Endposition. 2: Synchronization to safety edge. 3: Synchronization to reference switch in Door OPEN endposition. 4: Synchronization to mechanical stop in Door OPEN endposition. 5: Synchronization to safety edge and then to mechanical stop in Door OPEN endposition. 6: Synchronization to safety edge and then to reference switch in Door OPEN endposition. 7: Synchronization to reference switch in Door CLOSE endposition and then to mechanical stop in Door OPEN Endposition.

P.	[Unit] Range	Function	Description/ Note
			8: Synchronization to mechanical stop in Door CLOSE Endposition and then to mechanical stop in Door OPEN Endposition. 9: Manual synchronization to Door CLOSE Endposition and to Door OPEN Endposition. 10: Timer-limit switch-mode. Synchronisation is done automatically to end switch CLOSE and OPEN. *The exact settings which this profile involves can be found in Appendix: Synchronization Type.*

12 Specialization of safety functions

P.	[Unit] Range	Function	Description/ Note
P.8BA --w	0 ... 4	Specialization of a safety function A to E in operating mode 7	Specialization of a safety function in operating mode 7. When function is activated, after tripping the safety edge during opening, a close command is generated. The behavior after reaching the end position door close can be selected by the control options. 0: Disabled, tripping the safety edge during opening will just stop the door. 1: Door closes after safety is free and opens again when door is closed. 2: Door closes slowly after safety is free and opens again when door is closed. 3: Door closes slowly after safety is free and stops in endposition close. 4: Door closes after safety is free, without opening when door is closed.

13 Light Curtain

P.	[Unit] Range	Function	Description/ Note
A.480	0 ... 7	Light curtain application	This parameter activates the Light curtain and automatically sets all the necessary parameters and input functions. 0: Light curtain deactivated 1: Light curtain TST LGB activated. 3: Light curtain TST LGD activated. 4: 2 TST LGD light curtains (stacked or parallel) activated. 5: 2 Additional light curtains (TST LGD in light barrier mode) activated. 6: Light curtain TST LGD and 2 additional light curtains (TST LGD in light barrier mode) activated. 7: 2 TST LGD light curtains (stacked or parallel) and 2 additional light curtains (TST LGD in light barrier mode) activated.

13.1 TST LGB

P.	[Unit] Range	Function	Description/ Note
P.44A -ww	[m] 0,5 ... 10,0	Range	This parameter sets the beam intensity or the door width in increments of 0.5 m.
P.931 rrr		Software version transmitter	Shows the software version of the transmitter.

P.	[Unit] Range	Function	Description/ Note
P.932 rrr		Software version receiver	Shows the software version of the receiver.
P.933 rrr		Serial number transmitter	Displays the serial number of the transmitter.
P.934 rrr		Serial number receiver	Displays the serial number of the receiver.
P.935 -rr	[Digits]	Error bit transmitter	Display the "System error bitmask" of transmitter.
P.936 -rr	[Digits]	Error bit receiver	Display the "System error bitmask" of receiver.
P.937 -ww		Aligning mode	Activation of the alignment mode in the light curtain (LED flashing codes). 0: Alignment mode deactivated. 1: Alignment mode activated.
P.938 -rr		Light line quality	Diagnostic display for commissioning as alignment aid or for troubleshooting purposes. Requires activation of P.937.
P.93C rww		Error counter RS485	The number of faulty protocols of the RS485 interface between the transmitter and the receiver of the light curtain is displayed. *The counter can be reset by holding the Stop key pressed.*

13.2 TST LGD

P.	[Unit] Range	Function	Description/ Note
L.201		Light curtain 1 Assignment	This parameter is used to select the light curtain that is connected to the CAN bus. The serial number of the selected light curtain is displayed and the light curtain's diagnostic LEDs are flashing.
L.207	0000 ... 1804	Light curtain 1 Input profile safety area	The reaction to a triggering in the safety area of the light curtain can be set via the following input profiles. The profile acts on parameters L.270 to L.27F.
L.208	0000 ... 1804	Light curtain 1 Input profile object protection area	The reaction to a triggering in the object protection area of the light curtain can be set via the following input profiles. The profile acts on parameters L.280 to L.28F.

P.	[Unit] Range	Function	Description/ Note
L.210	0 ... 4	Light curtain 1 Operating mode	This parameter is used to configure the operating mode of the light curtain. 0: Deactivated - The light curtain is deactivated and there is no monitoring of the danger area. The virtual outputs are triggered. 1: Autark mode - In autark mode, all tests and virtual outputs of the light curtain have full functionality. The blanking of the door leaf is done by light line assignments and not by position encoder data. 2: Photo eye mode - In the photo eye mode there is no door blanking. Each interruption of a light line triggers virtual output no. 2. Virtual output no. 1 is permanently triggered in this operating mode. 3: Stack mode - Currently not yet supported 4: Position encoder mode - The regular mode for operating the light curtain as a safety device. All tests and virtual outputs of the light curtain have full functionality. The door leaf is blanked using position encoder data. An intermediate stop with a door leaf that is narrower than the light line distance is possible.
L.214	0 ... 56	Light curtain 1 Blanking of a single light line	With this parameter, a single, individual light beam can be blanked. Only the available light beams are listed for selection. The 1 indicates the lowest available light line.
L.215	0 ... 1	Light curtain 1 Teach-in	This parameter is used to restart the teach-in / synchronization mode (same as P.210 = 5) 1: Teach-in of all limit switches: sets P.210 to 5 and jumps back to 0
L.251	0 ... 1	Light curtain 1 Recording of light beam interruption sequences	This parameter can be used to activate/deactivate a diagnostic function, which saves changes of the light beam interruption to the log file. Prerequisite for this is a connected USB stick and an active logging function. 0: Deactivated 1: Activated (automatically deactivated after restart)
L.252	0 ... 1	Light curtain 1 Recording Signal quality	With this parameter, cyclic storage of the light curtain signal quality in the log file can be activated / deactivated. 0: Deactivated 1: Activated
L.254		Light curtain 1 Signal quality in sections	This parameter displays the signal quality of the TST LGD in 3 sections (bottom/middle/top). For each range, a number from 0 (poor quality) to 9 (good quality) is displayed.
L.255		Light curtain 1 Signal quality single light beams	With this parameter, the current signal quality of each single light beam can be displayed.

P.	[Unit] Range	Function	Description/ Note
L.256	0 ... 100	Light curtain 1 Storage of door run curves	With this parameter, the door run curve of the light curtain can be recorded for an adjustable number of cycles. This function is limited to a maximum of 100 door cycles, as it requires a lot of communication with the light curtain and a lot of space on a USB stick.
L.257		Light curtain 1 VCC 24 V receiver	Displays the current value of the 24 V voltage supply of the light curtain receiver.
L.258		Light curtain 1 VCC 24 V transmitter	Displays the current value of the 24 V power supply of the light curtain transmitter.
L.260		Light curtain 1 Serial Number Receiver	This parameter displays the serial number of the light curtain receiver.
L.261		Light curtain 1 Serial number transmitter	This parameter displays the serial number of the light curtain transmitter.
L.262		Light curtain 1 Software Version Receiver	This parameter displays the software version of the light curtain receiver.
L.263		Light curtain 1 Software version transmitter	This parameter displays the software version of the light curtain transmitter.
L.264		Light curtain 1 Hardware Version Receiver	This parameter displays the hardware version of the light curtain receiver.
L.265		Light curtain 1 Hardware Version Transmitter	This parameter displays the hardware version of the light curtain transmitter.
L.266		Light curtain 1 Bus protocol version	This parameter displays the communication protocol version of the light curtain.
L.301		Light curtain 2 Assignment	This parameter is used to select the light curtain that is connected to the CAN bus. The serial number of the selected light curtain is displayed and the light curtain's diagnostic LEDs are flashing.
L.307	0000 ... 1804	Light curtain 2 Input profile safety area	The reaction to a triggering in the safety area of the light curtain can be set via the following input profiles. The profile acts on parameters L.370 to L.37F.
L.308	0000 ... 1804	Light curtain 2 Input profile object protection area	The reaction to a triggering in the object protection area of the light curtain can be set via the following input profiles. The profile acts on parameters L.380 to L.38F.

P.	[Unit] Range	Function	Description/ Note
L.310	0 ... 4	Light curtain 2 Operating mode	This parameter is used to configure the operating mode of the light curtain. 0: Deactivated - The light curtain is deactivated and there is no monitoring of the danger area. The virtual outputs are triggered. 1: Autark mode - In autark mode, all tests and virtual outputs of the light curtain have full functionality. The blanking of the door leaf is done by light line assignments and not by position encoder data. 2: Photo eye mode - In the photo eye mode there is no door blanking. Each interruption of a light line triggers virtual output no. 2. Virtual output no. 1 is permanently triggered in this operating mode. 3: Stack mode - Currently not yet supported 4: Position encoder mode - The regular mode for operating the light curtain as a safety device. All tests and virtual outputs of the light curtain have full functionality. The door leaf is blanked using position encoder data. An intermediate stop with a door leaf that is narrower than the light line distance is possible.
L.314	0 ... 56	Light curtain 2 Blanking of a single light line	With this parameter, a single, individual light beam can be blanked. Only the available light beams are listed for selection. The 1 indicates the lowest available light line.
L.315	0 ... 1	Light curtain 2 Teach-in	This parameter is used to restart the teach-in / synchronization mode (same as P.210 = 5) 1: Teach-in of all limit switches: sets P.210 to 5 and jumps back to 0
L.351	0 ... 1	Light curtain 2 Recording of light beam interruption sequences	This parameter can be used to activate/deactivate a diagnostic function, which saves changes of the light beam interruption to the log file. Prerequisite for this is a connected USB stick and an active logging function. 0: Deactivated 1: Activated (automatically deactivated after restart)
L.352	0 ... 1	Light curtain 2 Recording Signal quality	With this parameter, cyclic storage of the light curtain signal quality in the log file can be activated / deactivated. 0: Deactivated 1: Activated
L.354		Light curtain 2 Signal quality in sections	This parameter displays the signal quality of the TST LGD in 3 sections (bottom/middle/top). For each range, a number from 0 (poor quality) to 9 (good quality) is displayed.
L.355		Light curtain 2 Signal quality single light beams	With this parameter, the current signal quality of each single light beam can be displayed.

P.	[Unit] Range	Function	Description/ Note
L.356	0 ... 100	Light curtain 2 Storage of door run curves	With this parameter, the door run curve of the light curtain can be recorded for an adjustable number of cycles. This function is limited to a maximum of 100 door cycles, as it requires a lot of communication with the light curtain and a lot of space on a USB stick.
L.357		Light curtain 2 VCC 24 V receiver	Displays the current value of the 24 V voltage supply of the light curtain receiver.
L.358		Light curtain 2 VCC 24 V transmitter	Displays the current value of the 24 V power supply of the light curtain transmitter.
L.360		Light curtain 2 Serial Number Receiver	This parameter displays the serial number of the light curtain receiver.
L.361		Light curtain 2 Serial number transmitter	This parameter displays the serial number of the light curtain transmitter.
L.362		Light curtain 2 Software Version Receiver	This parameter displays the software version of the light curtain receiver.
L.363		Light curtain 2 Software version transmitter	This parameter displays the software version of the light curtain transmitter.
L.364		Light curtain 2 Hardware Version Receiver	This parameter displays the hardware version of the light curtain receiver.
L.365		Light curtain 2 Hardware Version Transmitter	This parameter displays the hardware version of the light curtain transmitter.
L.366		Light curtain 2 Bus protocol version	This parameter displays the communication protocol version of the light curtain.
L.401		Light curtain 3 Assignment	This parameter is used to select the light curtain that is connected to the CAN bus. The serial number of the selected light curtain is displayed and the light curtain's diagnostic LEDs are flashing.
L.407	0000 ... 1804	Light curtain 3 Input profile safety area	The reaction to a triggering in the safety area of the light curtain can be set via the following input profiles. The profile acts on parameters L.470 to L.47F.
L.408	0000 ... 1804	Light curtain 3 Input profile object protection area	The reaction to a triggering in the object protection area of the light curtain can be set via the following input profiles. The profile acts on parameters L.480 to L.48F.

P.	[Unit] Range	Function	Description/ Note
L.410	0 ... 4	Light curtain 3 Operating mode	This parameter is used to configure the operating mode of the light curtain. 0: Deactivated - The light curtain is deactivated and there is no monitoring of the danger area. The virtual outputs are triggered. 1: Autark mode - In autark mode, all tests and virtual outputs of the light curtain have full functionality. The blanking of the door leaf is done by light line assignments and not by position encoder data. 2: Photo eye mode - In the photo eye mode there is no door blanking. Each interruption of a light line triggers virtual output no. 2. Virtual output no. 1 is permanently triggered in this operating mode. 3: Stack mode - Currently not yet supported 4: Position encoder mode - The regular mode for operating the light curtain as a safety device. All tests and virtual outputs of the light curtain have full functionality. The door leaf is blanked using position encoder data. An intermediate stop with a door leaf that is narrower than the light line distance is possible.
L.414	0 ... 56	Light curtain 3 Blanking of a single light line	With this parameter, a single, individual light beam can be blanked. Only the available light beams are listed for selection. The 1 indicates the lowest available light line.
L.415	0 ... 1	Light curtain 3 Teach-in	This parameter is used to restart the teach-in / synchronization mode (same as P.210 = 5) 1: Teach-in of all limit switches: sets P.210 to 5 and jumps back to 0
L.451	0 ... 1	Light curtain 3 Recording of light beam interruption sequences	This parameter can be used to activate/deactivate a diagnostic function, which saves changes of the light beam interruption to the log file. Prerequisite for this is a connected USB stick and an active logging function. 0: Deactivated 1: Activated (automatically deactivated after restart)
L.452	0 ... 1	Light curtain 3 Recording Signal quality	With this parameter, cyclic storage of the light curtain signal quality in the log file can be activated / deactivated. 0: Deactivated 1: Activated
L.454		Light curtain 3 Signal quality in sections	This parameter displays the signal quality of the TST LGD in 3 sections (bottom/middle/top). For each range, a number from 0 (poor quality) to 9 (good quality) is displayed.
L.455		Light curtain 3 Signal quality single light beams	With this parameter, the current signal quality of each single light beam can be displayed.

P.	[Unit] Range	Function	Description/ Note
L.456	0 ... 100	Light curtain 3 Storage of door run curves	With this parameter, the door run curve of the light curtain can be recorded for an adjustable number of cycles. This function is limited to a maximum of 100 door cycles, as it requires a lot of communication with the light curtain and a lot of space on a USB stick.
L.457		Light curtain 3 VCC 24 V receiver	Displays the current value of the 24 V voltage supply of the light curtain receiver.
L.458		Light curtain 3 VCC 24 V transmitter	Displays the current value of the 24 V power supply of the light curtain transmitter.
L.460		Light curtain 3 Serial Number Receiver	This parameter displays the serial number of the light curtain receiver.
L.461		Light curtain 3 Serial number transmitter	This parameter displays the serial number of the light curtain transmitter.
L.462		Light curtain 3 Software Version Receiver	This parameter displays the software version of the light curtain receiver.
L.463		Light curtain 3 Software version transmitter	This parameter displays the software version of the light curtain transmitter.
L.464		Light curtain 3 Hardware Version Receiver	This parameter displays the hardware version of the light curtain receiver.
L.465		Light curtain 3 Hardware Version Transmitter	This parameter displays the hardware version of the light curtain transmitter.
L.466		Light curtain 3 Bus protocol version	This parameter displays the communication protocol version of the light curtain.
L.501		Light curtain 4 Assignment	This parameter is used to select the light curtain that is connected to the CAN bus. The serial number of the selected light curtain is displayed and the light curtain's diagnostic LEDs are flashing.
L.507	0000 ... 1804	Light curtain 4 Input profile safety area	The reaction to a triggering in the safety area of the light curtain can be set via the following input profiles. The profile acts on parameters L.570 to L.57F.
L.508	0000 ... 1804	Light curtain 4 Input profile object protection area	The reaction to a triggering in the object protection area of the light curtain can be set via the following input profiles. The profile acts on parameters L.580 to L.58F.

P.	[Unit] Range	Function	Description/ Note
L.510	0 ... 4	Light curtain 4 Operating mode	This parameter is used to configure the operating mode of the light curtain. 0: Deactivated - The light curtain is deactivated and there is no monitoring of the danger area. The virtual outputs are triggered. 1: Autark mode - In autark mode, all tests and virtual outputs of the light curtain have full functionality. The blanking of the door leaf is done by light line assignments and not by position encoder data. 2: Photo eye mode - In the photo eye mode there is no door blanking. Each interruption of a light line triggers virtual output no. 2. Virtual output no. 1 is permanently triggered in this operating mode. 3: Stack mode - Currently not yet supported 4: Position encoder mode - The regular mode for operating the light curtain as a safety device. All tests and virtual outputs of the light curtain have full functionality. The door leaf is blanked using position encoder data. An intermediate stop with a door leaf that is narrower than the light line distance is possible.
L.514	0 ... 56	Light curtain 4 Blanking of a single light line	With this parameter, a single, individual light beam can be blanked. Only the available light beams are listed for selection. The 1 indicates the lowest available light line.
L.515	0 ... 1	Light curtain 4 Teach-in	This parameter is used to restart the teach-in / synchronization mode (same as P.210 = 5) 1: Teach-in of all limit switches: sets P.210 to 5 and jumps back to 0
L.551	0 ... 1	Light curtain 4 Recording of light beam interruption sequences	This parameter can be used to activate/deactivate a diagnostic function, which saves changes of the light beam interruption to the log file. Prerequisite for this is a connected USB stick and an active logging function. 0: Deactivated 1: Activated (automatically deactivated after restart)
L.552	0 ... 1	Light curtain 4 Recording Signal quality	With this parameter, cyclic storage of the light curtain signal quality in the log file can be activated / deactivated. 0: Deactivated 1: Activated
L.554		Light curtain 4 Signal quality in sections	This parameter displays the signal quality of the TST LGD in 3 sections (bottom/middle/top). For each range, a number from 0 (poor quality) to 9 (good quality) is displayed.
L.555		Light curtain 4 Signal quality single light beams	With this parameter, the current signal quality of each single light beam can be displayed.

P.	[Unit] Range	Function	Description/ Note
L.556	0 ... 100	Light curtain 4 Storage of door run curves	With this parameter, the door run curve of the light curtain can be recorded for an adjustable number of cycles. This function is limited to a maximum of 100 door cycles, as it requires a lot of communication with the light curtain and a lot of space on a USB stick.
L.557		Light curtain 4 VCC 24 V receiver	Displays the current value of the 24 V voltage supply of the light curtain receiver.
L.558		Light curtain 4 VCC 24 V transmitter	Displays the current value of the 24 V power supply of the light curtain transmitter.
L.560		Light curtain 4 Serial Number Receiver	This parameter displays the serial number of the light curtain receiver.
L.561		Light curtain 4 Serial number transmitter	This parameter displays the serial number of the light curtain transmitter.
L.562		Light curtain 4 Software Version Receiver	This parameter displays the software version of the light curtain receiver.
L.563		Light curtain 4 Software version transmitter	This parameter displays the software version of the light curtain transmitter.
L.564		Light curtain 4 Hardware Version Receiver	This parameter displays the hardware version of the light curtain receiver.
L.565		Light curtain 4 Hardware Version Transmitter	This parameter displays the hardware version of the light curtain transmitter.
L.566		Light curtain 4 Bus protocol version	This parameter displays the communication protocol version of the light curtain.

14 CAN-Bus diagnostic

P.	[Unit] Range	Function	Description/ Note
P.957 -rr		CAN error rate counter - Percent error rate per hour	The parameter shows the CAN error rate of the last hour of external CAN nodes. The error rate shows the ratio of the number of errors to the total number of telegrams within the last hour in percent [%]. Within the parameter you can navigate with UP and DOWN through the error rates of the individual CAN nodes. An additional option allows to clear the error rates (this also clears the CAN error counters which can be diagnosed with P.910). If a CAN node is selected the display changes between "X:YYY" and "E-ZZ". X stands for the number of the CAN node Y stands for the three-digit, integer percentage value of the error rate counter Z stands for the logarithm of the base 10 Example: The messages "0:123" and "E-3" mean "node 0: 123*10^-3" = CAN node 0 has an error rate of 0.123

15 Radio safety system

P.	[Unit] Range	Function	Description/ Note
P.92A rrr		Software version FSx mobile unit	Software version of the mobile unit of the wireless safety device.
P.92B rrr		Software version FSx stationary unit	Software version of the stationary unit of the wireless safety device.
P.9F0 -ww	[%] 0 ... 100	Capacity of battery	This parameter shows the actual capacity of the battery. *In order to set the value back to 100%, e.g. after changing the battery, you have to press the stop key for a long time.*
P.9F1 -rr	[Volt]	Battery voltage of radio safety system	Shows the battery voltage of the mobile unit if the radio safety system.
P.9F2 -rr	[%]	Wireless status	Shows the quality of the radio link to the mobile unit of the radio safety system.
P.9F3 -rr		Error counter FSx	Error counter of the wireless safety device. It shows the number of errors during the last door drive. This counter is resetet by the beginning of each door drive. Also possible: P.910 = 24.

P.	[Unit] Range	Function	Description/ Note
P.F00 -ww	0 ... 1	Activation of the wireless	Activation of the wireless 0: Deactivated 1: Activated
P.F01 -zz	[ms] 6 ... 250	Timeout for the wireless	Defines the time in which the radio safety system is set as tripped in case of an radio interruption.
P.F05 -ww	1 ... 10	Channelgroup	Sets the channel group which the radio safety system is using.
P.F07 -ww	00000000 ... 0FFFFFFF	Address of the mobile unit	Address of the mobile unit with which the wireless security system should communicate **ATTENTION** **After entering the address it is necessary to check whether the controller is connected to and works with the selected mobile unit.** *It is also possible to "learn" the address automatically. To do this, the parameter must be set to - then the mobile unit must be reset by removing the battery. The address is then entered into the parameter and can be saved*
P.F09 -ww	[Volt] 1,2 ... 3,6	Battery nominal voltage	Here the nominal voltage of the battery is put in.
P.FF2 -zz	0 ... 2	Mode output 2	Output mode of the output No. 2 Function is available from software version TST FSx-ST-V00-04.05 of the Stationary unit. 0: Automatic. If a digital Input is linked to this output, the output signal is digital. If a analogue input or mixed inputs are linked to this output the output signal is analogue. 1: Analogue output signal 2: Digital output signal

15.1 FSx input profiles

The settings that may be necessary for these profiles are available from the attachments.

P.	[Unit] Range	Function	Description/ Note
A.F00	0000 ... 21BA	FSx Wireless safety system profile	This Profile activates the radio safety system TST FSx and sets configurations for the typical door applications. 0000: No profile set 10BB: Sectional door, WiCab PE_FSBS and FSBM 20AA: Rolling door, WiCab PD_FSAS and FSAM 20BA: Rolling door, WiCab PE_FSBS and FSAM 21AA: Rolling door with breakaway sensor, WiCab PD_FSAS and FSAM 21BA: Rolling door with breakaway sensor, WiCab PE_FSBS and FSAM
P.F1F -ww	0000 ... F301	Function input 1	Selection of the Input configuration for the input 1of the FSx unit. 0000: Deactivated F101: Safety edge 8K2 F102: Dynamical optical safety edge F103: Like F101 but takes effect to output 2 of the stationary unit F104: 8K2 safety edge on output 3, for FSA digital put thru of an 8K2 input. F201: Flap door switch digital F202: Flap door switch 8k2 F203: Slack rope switch digital F206: Thermo pill F207: Crank switch F301: Crash impulse switch with handshake
P.F2F -ww	0000 ... F301	Function input 2	Selection of the Input configuration for the input 2 of the FSx unit. 0000: Deactivated F101: Safety edge 8K2 F102: Dynamical optical safety edge F103: Like F101 but takes effect to output 2 of the stationary unit F104: 8K2 safety edge on output 3, for FSA digital put thru of an 8K2 input. F201: Flap door switch digital F202: Flap door switch 8k2 F203: Slack rope switch digital F206: Thermo pill F207: Crank switch F301: Crash impulse switch with handshake

P.	[Unit] Range	Function	Description/ Note
P.F3F -ww	0000 ... F301	Function input 3	Selection of the Input configuration for the input 3 of the FSx unit. 0000: Deactivated F101: Safety edge 8K2 F102: Dynamical optical safety edge F103: Like F101 but takes effect to output 2 of the stationary unit F104: 8K2 safety edge on output 3, for FSA digital put thru of an 8K2 input. F201: Flap door switch digital F202: Flap door switch 8k2 F203: Slack rope switch digital F206: Thermo pill F207: Crank switch F301: Crash impulse switch with handshake
P.F4F -ww	0000 ... F301	Function input 4	Selection of the Input configuration for the input 4 of the FSx unit. 0000: Deactivated F101: Safety edge 8K2 F102: Dynamical optical safety edge F103: Like F101 but takes effect to output 2 of the stationary unit F104: 8K2 safety edge on output 3, for FSA digital put thru of an 8K2 input. F201: Flap door switch digital F202: Flap door switch 8k2 F203: Slack rope switch digital F206: Thermo pill F207: Crank switch F301: Crash impulse switch with handshake *This parameter is visible only in connection with TST FSBM mobile unit.*

15.2 FSx input 1

P.	[Unit] Range	Function	Description/ Note
P.F10 -zz	0 ... 4	Mode input 1	Defines the operation mode of input 1 of the mobile unit. 0: Deactivated 1: Analogue evaluation with 8K2 Ohm 2: Analogue evaluation with 1K2 Ohm 3: Dynamic optical system 4: Digital evaluation

P.	[Unit] Range	Function	Description/ Note
P.F11 -zz	0 ... 2	Safety	This parameter specifies how the input will work after the radio signal is missing. 0: Input active at missing radio signal and always in sleepmode. 1: Input active at missing radio signal 2: The last status of the input is given out (missing radio signal and sleepmode doesn`t change the output)
P.F12 -zz	0 ... 1	Contact type of the input	Specifies the contact type of the switch which is connected to the input. 0: Normally open 1: Normally closed
P.F13 -zz	0 ... 1	Debouncing time	This Parameter determine the debouncing time for the Input 0: Short debouncing time (3 ms) 1: Long debouncing time (30 ms)
P.F16 -zz	1 ... 3	Output	With this parameter the allocation from the input 1 of the mobile unit to the stationary unit is done. 1: Output 1 2: Output 2 3: Output 3
P.F17 -zz	0 ... 2	Direction 1	Drive direction at which the safety, connected on input 1, must be activated (at the moment only for optical systems evaluated). 0: Both directions 1: Door opening 2: Door closing
P.F18 -zz	0 ... 1	Handshake	With this Parameter a Handshake between an input of the mobile unit and an controller input can be activated. If the input of the mobile unit is tripped, the tripping will store and shown as long as the controller has confirmed it. Because of this e.g. a crash tripping during switched off controller will not get lost. 0: Handshake deactivated 1: Handshake between input of mobile unit and controller activated. ⚠ **The software version of the mobile unit as well as the software version of the stationary unit must support this function (from version Vxx-04.04 possible).**

P.	[Unit] Range	Function	Description/ Note
P.F19 -zz	0 ... 72	LCD Messages	Select the LCD Messages which are shown in the Display *The list of messages can be found in the Appendix LCD Messages*

15.3 FSx input 2

P.	[Unit] Range	Function	Description/ Note
P.F20 -zz	0 ... 4	Mode input 2	Defines the operation mode of input 2 of the mobile unit. 0: Deactivated 1: Analogue evaluation with 8K2 Ohm 2: Analogue evaluation with 1K2 Ohm 3: Dynamic optical system 4: Digital evaluation
P.F21 -zz	0 ... 2	Safety	This parameter specifies how the input will work after the radio signal is missing. 0: Input active at missing radio signal and always in sleepmode. 1: Input active at missing radio signal 2: The last status of the input is given out (missing radio signal and sleepmode doesn`t change the output)
P.F22 -zz	0 ... 1	Contact type of the input	Specifies the contact type of the switch which is connected to the input. 0: Normally open 1: Normally closed
P.F23 -zz	0 ... 1	Debouncing Time	This Parameter determine the debouncing time for the Input 0: Short debouncing time (3 ms) 1: Long debouncing time (30 ms)
P.F26 -zz	1 ... 3	Output	With this parameter the allocation from the input 2 of the mobile unit to the stationary unit is done. 1: Output 1 2: Output 2 3: Output 3
P.F27 -zz	0 ... 2	Direction 2	Drive direction at which the safety is activated (Only for optical systems) 0: Both directions 1: Door opening 2: Door closing

P.	[Unit] Range	Function	Description/ Note
P.F28 -zz	0 ... 1	Handshake	With this Parameter a Handshake between an input of the mobile unit and an controller input can be activated. If the input of the mobile unit is tripped, the tripping will store and shown as long as the controller has confirmed it. Because of this e.g. a crash tripping during switched off controller will not get lost. 0: Handshake deactivated 1: Handshake between input of mobile unit and controller activated. *The software version of the mobile unit as well as the software version of the stationary unit must support this function (from version Vxx-04.04 possible).*
P.F29 -zz	0 ... 72	LCD Messages	Select the LCD Messages which are shown in the Display *The list of messages can be found in the Appendix LCD Messages*

15.4 FSx input 3

P.	[Unit] Range	Function	Description/ Note
P.F30 -zz	0 ... 4	Mode input 3	Defines the operation mode of input 3 of the mobile unit. 0: Deactivated 1: Analogue evaluation with 8K2 Ohm 2: Analogue evaluation with 1K2 Ohm 3: Dynamic optical system 4: Digital evaluation
P.F31 -zz	0 ... 2	Safety	This parameter specifies how the input will work after the radio signal is missing. 0: Input active at missing radio signal and always in sleepmode. 1: Input active at missing radio signal 2: The last status of the input is given out (missing radio signal and sleepmode doesn`t change the output)
P.F32 -zz	0 ... 1	Contact type of the input	Specifies the contact type of the switch which is connected to the input. 0: Normally open 1: Normally closed
P.F33 -zz	0 ... 1	Debouncing time	This Parameter determine the debouncing time for the Input 0: Short debouncing time (3 ms) 1: Long debouncing time (30 ms)

P.	[Unit] Range	Function	Description/ Note
P.F36 -zz	1 ... 3	Output	With this parameter the allocation from the input 3 of the mobile unit to the stationary unit is done. 1: Output 1 2: Output 2 3: Output 3
P.F37 -zz	0 ... 2	Direction 3	Drive direction at which the safety is activated (Only for optical systems) 0: Both directions 1: Door opening 2: Door closing
P.F38 -zz	0 ... 1	Handshake	With this Parameter a Handshake between an input of the mobile unit and an controller input can be activated. If the input of the mobile unit is tripped, the tripping will store and shown as long as the controller has confirmed it. Because of this e.g. a crash tripping during switched off controller will not get lost. 0: Handshake deactivated 1: Handshake between input of mobile unit and controller activated. *The software version of the mobile unit as well as the software version of the stationary unit must support this function (from version Vxx-04.04 possible).*
P.F39 -zz	0 ... 72	LCD Messages	Select the LCD Messages which are shown in the Display *The list of messages can be found in the Appendix LCD Messages*

15.5 FSx input 4

The input 4 of the mobile unit is only possible with TST FSBM. The following parameters are only visible by using this mobile unit.

P.	[Unit] Range	Function	Description/ Note
P.F40 -zz	0 ... 4	Mode input 4	Defines the operation mode of input 4 of the mobile unit. 0: Deactivated 1: Analogue evaluation with 8K2 Ohm 2: Analogue evaluation with 1K2 Ohm 3: Dynamic optical system 4: Digital evaluation

P.	[Unit] Range	Function	Description/ Note
P.F41 -zz	0 ... 2	Safety	This parameter specifies how the input will work after the radio signal is missing. 0: Input active at missing radio signal and always in sleepmode. 1: Input active at missing radio signal 2: The last status of the input is given out (missing radio signal and sleepmode doesn`t change the output)
P.F42 -zz	0 ... 1	Contact type of the input	Specifies the contact type of the switch which is connected to the input. 0: Normally open 1: Normally closed
P.F43 -zz	0 ... 1	Debouncing time	This Parameter determine the debouncing time for the Input 0: Short debouncing time (3 ms) 1: Long debouncing time (30 ms)
P.F46 -zz	1 ... 3	Output	With this parameter the allocation from the input 4 of the mobile unit to the stationary unit is done. 1: Output 1 2: Output 2 3: Output 3
P.F47 -zz	0 ... 2	Direction 4	Drive direction at which the safety is activated (Only for optical systems) 0: Both directions 1: Door opening 2: Door closing
P.F48 -zz	0 ... 1	Handshake	With this Parameter a Handshake between an input of the mobile unit and an controller input can be activated. If the input of the mobile unit is tripped, the tripping will store and shown as long as the controller has confirmed it. Because of this e.g. a crash tripping during switched off controller will not get lost. 0: Handshake deactivated 1: Handshake between input of mobile unit and controller activated. *The software version of the mobile unit as well as the software version of the stationary unit must support this function (from version Vxx-04.04 possible).*
P.F49 -zz	0 ... 72	LCD Messages	Select the LCD Messages which are shown in the Display *The list of messages can be found in the Appendix LCD Messages*

15.6 FSx stationary unit inputs

The stationary inputs are existing only on TST PE FSB stationary unit.

P.	[Unit] Range	Function	Description/ Note
P.FA9 -zz	0 ... 72	LCD- Messages	Select the LCD Messages which are shown in the Display *The list of messages can be found in the Appendix LCD Messages*
P.FB9 -zz	0 ... 72	LCD Messages	Select the LCD Messages which are shown in the Display *The list of messages can be found in the Appendix LCD Messages*
P.FC9 -zz	0 ... 72	LCD Messages	Select the LCD Messages which are shown in the Display *The list of messages can be found in the Appendix LCD Messages*

16 Safety Edges

The following parameters can be set both for integrated safety edge processing as well as for external safety edge processing (optional for different controllers) .

16.1 Integrated safety edge processing

The controllers have a safety edge processor already on the motherboard.
No additional plug-in cards are necessary.

P.	[Unit] Range	Function	Description/ Note
P.460 --r	0 ... 10	profile internal safety edge	With this profile the parameter´s for the function of the internal safety edge are set. 0: Deactivated 1: 8,2k Safety Edge N.O., redundantly processed 2: 1,2k Safety Edge N.C., redundantly processed 3: Electrical safety edge with testing in Door close end position, functioning as normally open 4: Electrical safety edge with testing in Door close end position, functioning as normally closed 5: Dynamic optical system 6: Automatically detection of the connected safety edge. Electrical N.O. edges and dynamic optical systems are recognized automatically. 9: Electrical safety edge 1,2k , redundantly processed, functioning as normally open 10: Electrical safety edge 8,2k , redundantly processed, functioning as normally closed *The exact settings which this profile involves can be found in the Appendix :Safety edge profile*
P.466 -zz	0 ... 2	External testing of safety edge	With this parameter a testing of the safety edge can requested. Testing is possible in door CLOSE or OPEN position. 0: No test 1: Test in the endpostion Door Open and after start up of the controller 2: Test in the endpostion Door Close and after start up of the controller

17 External control unit

P.	[Unit] Range	Function	Description/ Note
L.B01		TST UTA 1 Assignment	For the user, the lowest four digits of the serial number are displayed and the currently selected TST UTA flashes with its LEDs.

P.	[Unit] Range	Function	Description/ Note
L.B02	0 ... 1	TST UTA 1 Activation	Activates/deactivates the corresponding device. 0: Deactivated 1: TST UTA
L.B07	0000 ... 1804	TST UTA 1 Function of the Open key	This profile can be used to specify the function of the input. All parameters needed for the function of the input are changed in one step. *The exact settings which this profile involves can be found in Chapter "Overview of Input Profiles"*
L.B08	0000 ... 1804	TST UTA 1 Input Profile STOP button	This profile can be used to specify the function of the input. All parameters needed for the function of the input are changed in one step. *The exact settings which this profile involves can be found in Chapter "Overview of Input Profiles"*
L.B09	0000 ... 1804	TST UTA 1 Inputprofile CLOSE button	This profile can be used to specify the function of the input. All parameters needed for the function of the input are changed in one step. *The exact settings which this profile involves can be found in Chapter "Overview of Input Profiles"*
L.B0C	0000 ... 3202	TST UTA 1 Outputprofile RED LED	The function of the output can be defined with this profile.
L.B0D	0000 ... 3202	TST UTA 1 Outputprofile GREEN LED	The function of the output can be defined with this profile.
L.B0E	0000 ... 3202	TST UTA 1 Outputprofile BLUE LED	The function of the output can be defined with this profile.

P.	[Unit] Range	Function	Description/ Note
L.B13	0 ... A9	TST UTA 1 Linking of an output with OPEN LED	This parameter defines the output number to which the output LED "OPEN" of the UTA is to be linked. If this output is active, the output LED "OPEN" becomes active. 0: Deactivated 1: Output 1 2: Output 2 3: Output 3 4: Output 4 5: Output 5 6: Output 6 7: Output 7 8: Output 8 9: Output 9 10: Output 10 11: Output 11 12: Output 12 13: Output 13 14: Output 14 15: Output 15 21: Output 21 22: Output 22 23: Output 23 24: Output 24 25: Output 25 26: Output 26 27: Output 27 28: Output 28 29: Output 29 2A: Output 2A 2B: Output 2B 2C: Output 2C 2D: Output 2D 2E: Output 2E 2F: Output 2F 31: Output 31 32: Output 32 33: Output 33 34: Output 34 35: Output 35 36: Output 36 37: Output 37 38: Output 38 A2: TST UTA 1 Output 1 A3: TST UTA 1 Output 2 A4: TST UTA 1 Output 3 A7: TST UTA 2 Output 1 A8: TST UTA 2 Output 2 A9: TST UTA 2 Output 3

P.	[Unit] Range	Function	Description/ Note
L.B14	0 ... A9	TST UTA 1 Linking of an output with CLOSE LED	This parameter defines the output number to which the output LED "CLOSE" of the UTA is to be linked. If this output is active, the output LED "CLOSE" becomes active. 0: Deactivated 1: Output 1 2: Output 2 3: Output 3 4: Output 4 5: Output 5 6: Output 6 7: Output 7 8: Output 8 9: Output 9 10: Output 10 11: Output 11 12: Output 12 13: Output 13 14: Output 14 15: Output 15 21: Output 21 22: Output 22 23: Output 23 24: Output 24 25: Output 25 26: Output 26 27: Output 27 28: Output 28 29: Output 29 2A: Output 2A 2B: Output 2B 2C: Output 2C 2D: Output 2D 2E: Output 2E 2F: Output 2F 31: Output 31 32: Output 32 33: Output 33 34: Output 34 35: Output 35 36: Output 36 37: Output 37 38: Output 38 A2: TST UTA 1 Output 1 A3: TST UTA 1 Output 2 A4: TST UTA 1 Output 3 A7: TST UTA 2 Output 1 A8: TST UTA 2 Output 2 A9: TST UTA 2 Output 3
L.B15	0 ... A9	TST UTA 1 Linking of an output with STOP LED	This parameter defines the output number to which the output LED "STOP" of the UTA is to be linked. If this output is active, the output LED "STOP" becomes active. 0: Deactivated 1: Output 1 2: Output 2 3: Output 3

P.	[Unit] Range	Function	Description/ Note
			4: Output 4 5: Output 5 6: Output 6 7: Output 7 8: Output 8 9: Output 9 10: Output 10 11: Output 11 12: Output 12 13: Output 13 14: Output 14 15: Output 15 21: Output 21 22: Output 22 23: Output 23 24: Output 24 25: Output 25 26: Output 26 27: Output 27 28: Output 28 29: Output 29 2A: Output 2A 2B: Output 2B 2C: Output 2C 2D: Output 2D 2E: Output 2E 2F: Output 2F 31: Output 31 32: Output 32 33: Output 33 34: Output 34 35: Output 35 36: Output 36 37: Output 37 38: Output 38 A2: TST UTA 1 Output 1 A3: TST UTA 1 Output 2 A4: TST UTA 1 Output 3 A7: TST UTA 2 Output 1 A8: TST UTA 2 Output 2 A9: TST UTA 2 Output 3
L.B16	0 ... 1	TST UTA 1 Activate Bluetooth interface	This parameter activates the Bluetooth interface of the TST UTA. 0: Deactivated 1: Activated
L.B60		TST UTA 1 Serial number	This parameter displays the TST UTA serial number.
L.B62		TST UTA 1 Software version	This parameter displays the software version of the TST UTA.
L.B64		TST UTA 1 Hardware version	With this parameter the hardware version of the TST UTA 1 is displayed

P.	[Unit] Range	Function	Description/ Note
L.B66		TST UTA 1 Bus protocol version	This parameter displays the communication protocol version of the TST UTA.
L.C01		TST UTA 2 Assignment	For the user, the lowest four digits of the serial number are displayed and the currently selected TST UTA flashes with its LEDs.
L.C02	0 ... 1	TST UTA 2 Activation	Activates/deactivates the corresponding device. 0: Deactivated 1: TST UTA
L.C07	0000 ... 1804	TST UTA 2 Function of the Open key	This profile can be used to specify the function of the input. All parameters needed for the function of the input are changed in one step. *The exact settings which this profile involves can be found in Chapter "Overview of Input Profiles"*
L.C08	0000 ... 1804	TST UTA 2 Input Profile STOP button	This profile can be used to specify the function of the input. All parameters needed for the function of the input are changed in one step. *The exact settings which this profile involves can be found in Chapter "Overview of Input Profiles"*
L.C09	0000 ... 1804	TST UTA 2 Input Profile CLOSE button	This profile can be used to specify the function of the input. All parameters needed for the function of the input are changed in one step. *The exact settings which this profile involves can be found in Chapter "Overview of Input Profiles"*
L.C0C	0000 ... 3202	TST UTA 2 Outputprofile Red LED	The function of the output can be defined with this profile.
L.C0D	0000 ... 3202	TST UTA 2 Outputprofile Green LED	The function of the output can be defined with this profile.
L.C0E	0000 ... 3202	TST UTA 2 Outputprofile Blue LED	The function of the output can be defined with this profile.

P.	[Unit] Range	Function	Description/ Note
L.C13	0 ... A9	TST UTA 2 Linking of an output with OPEN LED	This parameter defines the output number to which the output LED "OPEN" of the UTA is to be linked. If this output is active, the output LED "OPEN" becomes active. 0: Deactivated 1: Output 1 2: Output 2 3: Output 3 4: Output 4 5: Output 5 6: Output 6 7: Output 7 8: Output 8 9: Output 9 10: Output 10 11: Output 11 12: Output 12 13: Output 13 14: Output 14 15: Output 15 21: Output 21 22: Output 22 23: Output 23 24: Output 24 25: Output 25 26: Output 26 27: Output 27 28: Output 28 29: Output 29 2A: Output 2A 2B: Output 2B 2C: Output 2C 2D: Output 2D 2E: Output 2E 2F: Output 2F 31: Output 31 32: Output 32 33: Output 33 34: Output 34 35: Output 35 36: Output 36 37: Output 37 38: Output 38 A2: TST UTA 1 Output 1 A3: TST UTA 1 Output 2 A4: TST UTA 1 Output 3 A7: TST UTA 2 Output 1 A8: TST UTA 2 Output 2 A9: TST UTA 2 Output 3

P.	[Unit] Range	Function	Description/ Note
L.C14	0 ... A9	TST UTA 2 Linking of an output with CLOSE LED	This parameter defines the output number to which the output LED "CLOSE" of the UTA is to be linked. If this output is active, the output LED "CLOSE" becomes active. 0: Deactivated 1: Output 1 2: Output 2 3: Output 3 4: Output 4 5: Output 5 6: Output 6 7: Output 7 8: Output 8 9: Output 9 10: Output 10 11: Output 11 12: Output 12 13: Output 13 14: Output 14 15: Output 15 21: Output 21 22: Output 22 23: Output 23 24: Output 24 25: Output 25 26: Output 26 27: Output 27 28: Output 28 29: Output 29 2A: Output 2A 2B: Output 2B 2C: Output 2C 2D: Output 2D 2E: Output 2E 2F: Output 2F 31: Output 31 32: Output 32 33: Output 33 34: Output 34 35: Output 35 36: Output 36 37: Output 37 38: Output 38 A2: TST UTA 1 Output 1 A3: TST UTA 1 Output 2 A4: TST UTA 1 Output 3 A7: TST UTA 2 Output 1 A8: TST UTA 2 Output 2 A9: TST UTA 2 Output 3
L.C15	0 ... A9	TST UTA 2 Linking of an output with STOP LED	This parameter defines the output number to which the output LED "STOP" of the TST UTA is to be linked. If this output is active, the output LED "STOP" becomes active. 0: Deactivated 1: Output 1 2: Output 2 3: Output 3

P.	[Unit] Range	Function	Description/ Note
			4: Output 4 5: Output 5 6: Output 6 7: Output 7 8: Output 8 9: Output 9 10: Output 10 11: Output 11 12: Output 12 13: Output 13 14: Output 14 15: Output 15 21: Output 21 22: Output 22 23: Output 23 24: Output 24 25: Output 25 26: Output 26 27: Output 27 28: Output 28 29: Output 29 2A: Output 2A 2B: Output 2B 2C: Output 2C 2D: Output 2D 2E: Output 2E 2F: Output 2F 31: Output 31 32: Output 32 33: Output 33 34: Output 34 35: Output 35 36: Output 36 37: Output 37 38: Output 38 A2: TST UTA 1 Output 1 A3: TST UTA 1 Output 2 A4: TST UTA 1 Output 3 A7: TST UTA 2 Output 1 A8: TST UTA 2 Output 2 A9: TST UTA 2 Output 3
L.C16	0 ... 1	TST UTA 2 Activate Bluetooth interface	This parameter activates the Bluetooth interface of the TST UTA. 0: Deactivated 1: Activated
L.C60		TST UTA 2 Serial number	This parameter displays the TST UTA serial number.
L.C62		TST UTA 2 Software version	This parameter displays the software version of the TST UTA.
L.C64		TST UTA 2 Hardware version	With this parameter the hardware version of the UTA 2 is displayed

P.	[Unit] Range	Function	Description/ Note
L.C66		TST UTA 2 Bus protocol version	This parameter displays the communication protocol version of the TST UTA.

18 Input profiles

P.	[Unit] Range	Function	Description/ Note
P.501 --w	0000 ... 1804	Function of Input 1	This profile can be used to specify the function of the input. All parameters needed for the function of the input are changed in one step. 0000: Input deactivated 0101: OPEN1, NO contact, OPEN till final position is reached, with hold open time, with clearance time, both directions 0102: OPEN1, NO contact, till intermediate stop, with hold open time, with clearance time, both directions 0103: OPEN lockage, NO contact, till intermediate stop, with hold open time, with clearance time, both directions 0104: OPEN 1, NO contact, till intermediate stop, with hold open time, with clearance time, direction from the outside 0105: OPEN 2, NO contact, OPEN till final position is reached, with hold open time, with clearance time, both directions 0106: OPEN 2, NO contact, OPEN till final position is reached, with hold open time, with clearance time, direction from the inside 0107: OPEN 4, NO contact, OPEN till final position is reached, with hold open time, with clearance time, both directions 0108: OPEN 2, NO contact, till intermediate stop, with hold open time, with clearance time, both directions 0109: OPEN 3, NO contact, till intermediate stop, with hold open time, with clearance time, both directions 0110: OPEN 1, NO contact, OPEN till final position is reached, with hold open time, with clearance time, direction from the outside 0111: OPEN 1, NC contact, OPEN till final position is reached, without hold open time, without clearance time, both directions 0112: OPEN 1, NO contact, OPEN till final position is reached, without hold open time, with clearance time, both directions 0113: OPEN-legitimation, with hold open time, with clearance time *OPEN command will performed if detector channel 1 is active at the same time (P.660 = 7)* 0114: OPEN lockage, not lockable, NO contact, till final position is reached intermediate stop, with hold open time, with clearance time, direction from the inside 0116: OPEN 1, NO contact, OPEN till final position is reached, without hold open time, with clearance time, direction from the outside

P.	[Unit] Range	Function	Description/ Note
			0117: OPEN 1, NO contact, OPEN till final position is reached, without hold open time, with clearance time, direction from the inside
			0120: OPEN 2, NO contact, OPEN till final position is reached, with hold open time, without clearance time, direction from the inside
			0121: OPEN 1, NO contact, OPEN till final position is reached, with hold open time, without clearance time, direction from the outside
			0124: OPEN 2, NO contact, till intermediate stop, with hold open time, with clearance time, direction from the inside
			0129: OPEN 2, NO contact, till intermediate stop, with hold open time, with clearance time, direction from the outside
			0152: OPEN Command which starts additionally the emergency opening test. For this P.494 = 2 must be set.
			0165: OPEN 1 may be locked. Special functions for traffic light switching behavior in end position OPEN (selected by P.7x9> = 5) are ignored
			0180: OPEN 5, deadman travel possible, N.O. contact, OPEN till final position is reached, with hold open time, with clearance time, direction from the inside
			0201: Pull switch, OPEN-> final position-> CLOSE->OPEN, NO contact, 1. Intermediate stop 2. Final position OPEN, with hold open time, with clearance time, both directions
			0202: Pull switch, OPEN-> final position-> CLOSE->OPEN, NO contact, 1. Intermediate stop 2. Final position OPEN, without hold open time, with clearance time, both directions
			0204: Pull switch OPEN-> final position-> CLOSE->OPEN, NO contact, OPEN till final position is reached, without hold open time, with clearance time, both directions
			0205: Pull switch, OPEN-> STOP -> CLOSE->OPEN, NO contact, Final position OPEN, without Hold open time, without clearance time, both directions
			0223: Pull switch, OPEN-> STOP -> CLOSE->OPEN, NO contact, Final position OPEN, with Hold open time, with clearance time, both directions
			0301: Permanent-OPEN, NO contact, 1. Intermediate stop 2. OPEN, without hold open time, without clearance time, both directions
			0302: Permanent-OPEN (summer mode lock), NO contact, OPEN till final position is reached, without hold open time, with clearance time, both directions
			0304: Permanent-OPEN, NO contact, OPEN till final position is reached, without hold open time, without clearance time, no direction
			0401: Stop-command, NC contact
			0402: Stop-command, NO contact
			0403: Stop-command acknowledgement possible, NC contact
			0404: Stop-command acknowledgement possible, NO contact

P.	[Unit] Range	Function	Description/ Note
			0407: Crash impulse as N.O. contact 0411: Crash impulse as N.C. contact 0501: Safety B reversing when CLOSING, NC contact, final position as before, hold open time as before, with clearance time 0504: Safety B reversing when CLOSING, NC contact, final position as before, at least with hold open time, with clearance time 0505: Safety B reversing when CLOSING, NO contact, final position as before, hold open time as before, with clearance time 0509: Safety B with reversing when closing, with open holding time, with clearance time 0520: Safety B: Reversing when CLOSING, NO contact, with testing in end position OPEN 0522: Safety input B: Reversing when OPENING, 8K2 contact, End position as before, with Clearance time *This Function works only with inputs for 8K2 evaluation, e.g. IN10* 0530: Security B reversing during the CLOSING run, normally closed, end position as before, open holding time, as before, with evacuation time, LC message Safety. 0601: Manual operation for OPENING and CLOSING, NO contact 0602: Manual operation for CLOSING, NO contact 0701: CLOSE-command, NO contact, with Clearance time 0703: CLOSE-command which interrupts the OPENING and locks CLOSE commands, NO contact, with Clearance time 0704: CLOSE-command which interrupts the OPENING, reversing is possible, NO contact, with Clearance time 0713: CLOSE command, N.C., with clearance time 0714: CLOSE command which stops the opening movement, Opening is possible, N.O., with clearance time. 0801: Interlock in final CLOSED position, no dead man move is possible, NO contact 0802: Interlock in final CLOSED position, dead man move is possible, NO contact 0803: Stop, followed by automatic OPENING, NO contact, wait for CLOSE-command 0804: Stop, followed by automatic CLOSING, NO contact 0901: Cross traffic, locking of OPEN 1 and detector 1 commands, NO contact 0902: Cross traffic, locking of OPEN 2 and detector 2 commands, NO contact 0903: Cross traffic, locking of OPEN 1 and OPEN 2 as well as detector 1 and detector 2 commands, NO contact 1001: Disable hold open time, NO contact 1002: Disable lockage, NO contact 1003: Disable intermediate stop, NO contact 1004: Disabled detector commands from the direction outside, NO contact

P.	[Unit] Range	Function	Description/ Note
			1005: Deactivation of detector open and close commands, the safety function of the detector remains active. 1101: Pre-limit switch light barrier, NO contact 1102: Limit switch intermediate stop, NO contact 1103: Pre-limit switch intermediate stop, NO contact 1104: Pre-limit switch safety edge, NO contact 1105: Pre-limit switch safety edge, NC contact 1106: Pre-limit switch door OPEN, NO contact 1107: Pre-limit switch door OPEN, NC contact 1108: Pre-limit switch door CLOSE, NO contact 1109: Pre-limit switch door CLOSE, NC contact 1110: Limit switch door OPEN, NC contact 1111: Limit switch door CLOSE, NC contact 1114: Crash switch, NO contact 1116: Limit switch door CLOSE, NO contact 1401: Safety A, stop during CLOSING, NC contact 1402: Safety A, reversing when CLOSING, NC contact, final position as before, hold open time as before, with clearance time 1403: Safety A, stop when CLOSING after release, move continues when CLOSED, NC contact, with Clearance time 1404: Safety A, stop when OPENING and CLOSING, NC contact 1405: Safety A, stop when OPENING and CLOSING, after release, the CLOSING move continues until CLOSED, NC contact, with Clearance time 1406: Safety A, reversing when OPENING, NC contact, final position as before, hold open time as before, with clearance time 1407: Safety A, stop when OPENING, NC contact 1408: Safety A, pull-in protection, stop when OPENING, then only dead man CLOSING possible, NC contact, final position as before, auto-close time as before, without clearance time 1418: Safety A, stop when OPENING or CLOSING, N.C. contact 1420: Safety A, reversing when CLOSING, 8K2 contact, Final position as before, with clearance time *This Function works only with inputs for 8K2 evaluation, e.g. IN10* 1422: Safety A, reversing when OPENING, 8K2 contact, End position as before, with clearance time *This Function works only with inputs for 8K2 evaluation, e.g. IN10* 1501: Simulation foil keypad OPEN 1502: Simulation foil keypad CLOSE 1506: Simulation foil keypad STOP 1612: Safety C when OPENING, free ride as long as input is active, 8K2 contact, Final position OPEN, without Clearance time *This Function works only with inputs for 8K2 evaluation, e.g. IN10*

P.	[Unit] Range	Function	Description/ Note
			1613: Safety C, reversing when CLOSING, 8K2 contact, End position as before, with Hold open time, with Clearance time *This Function works only with inputs for 8K2 evaluation, e.g. IN10* 1615: Safety C. Reversing when closing, NC 1624: Safety C, Safety during OPENING: reversing in CLOSE- direction during automatic OPENING, Stop during dead man OPENING, no reaction during CLOSING, N. C. contact, endposition as before, hold open time as before, with clearance time 1701: Driving to intermediate stop / partial open from each position, NO contact, with Hold open time, with Clearance time, both directions 1801: External detector channel 1 *To adjust the detector the parameters P.66x are used* 1802: External detector channel 2 *To adjust the detector the parameters P.67x are used* 1803: External detector channel 3 *To adjust the detector the parameters P.6Cx are used* 1804: External detector channel 4 *To adjust the detector the parameters P.6Dx are used* *The exact settings which this profile involves can be found in Chapter "Overview of Input Profiles"*
P.502 --w	0000 ... 1804	Function of Input 2	see P.501
P.503 --w	0000 ... 1804	Function of Input 3	see P.501
P.504 --w	0000 ... 1804	Function of Input 4	see P.501
P.505 --w	0000 ... 1804	Function of Input 5	see P.501
P.506 --w	0000 ... 1804	Function of Input 6	see P.501
P.507 --w	0000 ... 1804	Function of Input 7	see P.501
P.508 --w	0000 ... 1804	Function of Input 8	see P.501
P.509 --w	0000 ... 1804	Function of Input 9	see P.501
P.50A --w	0000 ... 1804	Function of Input 10	see P.501

18.1 Input profiles with expansion card

The expansion board is activated by P.800

The expansion board can not be used with all controllers.

P.	[Unit] Range	Function	Description/ Note
P.A01 --w	0000 ... 1804	Function of Input 21	see P.501
P.A02 --w	0000 ... 1804	Function of Input 22	see P.501
P.A03 --w	0000 ... 1804	Function of Input 23	see P.501
P.A04 --w	0000 ... 1804	Function of Input 24	see P.501
P.A05 --w	0000 ... 1804	Function of Input 25	see P.501
P.A06 --w	0000 ... 1804	Function of Input 26	see P.501

18.2 Overview of Input Profiles

0000	**Function of the input**	Input deactivated
	Mode of the input	-
	Contact type of the input	-
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	-
	Test of the input	-

0101	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0102	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position intermediate stop / partial opening
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0103	**Function of the input**	OPEN command
	Mode of the input	OPEN airlock move, not lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position intermediate stop / partial opening
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0104	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position intermediate stop / partial opening
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From outside to inside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

0105	**Function of the input**	OPEN command
	Mode of the input	OPEN 2, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0106	**Function of the input**	OPEN command
	Mode of the input	OPEN 2, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From inside to outside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open inside
	Test of the input	No test

0107	**Function of the input**	OPEN command
	Mode of the input	OPEN 4, not lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0108	**Function of the input**	OPEN command
	Mode of the input	OPEN 2, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position intermediate stop / partial opening
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0109	**Function of the input**	OPEN command
	Mode of the input	OPEN 3, not lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position intermediate stop / partial opening
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0110	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From outside to inside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

0111	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.C., Normally closed
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	No clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Default
	Test of the input	No test

0112	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0113	**Function of the input**	OPEN command
	Mode of the input	Open-Legitimation, Open command works, if the detector 1 was busy (P660=25)
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0114	**Function of the input**	OPEN command
	Mode of the input	OPEN airlock move, not lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position intermediate stop / partial opening
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From inside to outside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0116	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From outside to inside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0117	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From inside to outside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0120	**Function of the input**	OPEN command
	Mode of the input	OPEN 2, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	No clear time / pre-warning time
	Direction of the input	From inside to outside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0121	**Function of the input**	OPEN command
	Mode of the input	OPEN 1, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	No clear time / pre-warning time
	Direction of the input	From outside to inside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

0124	**Function of the input**	OPEN command
	Mode of the input	OPEN 2, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position intermediate stop / partial opening
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From inside to outside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open inside
	Test of the input	No test

0129	**Function of the input**	OPEN command
	Mode of the input	OPEN 2, lockable
	Contact type of the input	N.O., Normally open
	End position of the input	End position intermediate stop / partial opening
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From outside to inside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

0152	**Function of the input**	OPEN command
	Mode of the input	Open command which starts the emergency opening test in case of P.494 = 2.
	Contact type of the input	N.C., Normally closed
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	Test in the endpostion Door Open and after start up of the controller

0165	**Function of the input**	OPEN command
	Mode of the input	OPEN 1 lockable. Special functions for traffic light behavior in end position open (adjustable with P.7x9>= 5) are ignored.
	Contact type of the input	N.C., Normally closed
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With minimum auto close time (P.015)
	Clearance time of the input	No clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0180	**Function of the input**	OPEN command
	Mode of the input	OPEN 5, not lockable and deadman travel possible
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	From inside to outside
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open inside
	Test of the input	No test

0201	**Function of the input**	Single channel / pull switch
	Mode of the input	OPEN -> End position -> CLOSE -> OPEN
	Contact type of the input	N.O., Normally open
	End position of the input	When activating in Door CLOSE end position, the door travels up to the intermediate stop / partial opening end position, when activating in intermediate stop position the door travels up to the Door OPEN end position.
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Single channel
	Test of the input	No test

0202	**Function of the input**	Single channel / pull switch
	Mode of the input	OPEN -> End position -> CLOSE -> OPEN
	Contact type of the input	N.O., Normally open
	End position of the input	Like 2., but the door travels directly to the Door OPEN end position if activation takes place 2x in quick succession in the Lower end position.
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Single channel
	Test of the input	No test

0204	**Function of the input**	Single channel / pull switch
	Mode of the input	OPEN -> End position -> CLOSE -> OPEN
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Single channel
	Test of the input	No test

0205	**Function of the input**	Single channel / pull switch
	Mode of the input	OPEN -> STOP -> CLOSE -> STOP
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	No clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Single channel
	Test of the input	No test

0223	**Function of the input**	Single channel / pull switch
	Mode of the input	OPEN -> STOP -> CLOSE -> STOP
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Single channel
	Test of the input	No test

0301	**Function of the input**	Permanent open command
	Mode of the input	Permanent open command
	Contact type of the input	N.O., Normally open
	End position of the input	When activating in Door CLOSE end position, the door travels up to the intermediate stop / partial opening end position, when activating in intermediate stop position the door travels up to the Door OPEN end position.
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	-
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Permanent open
	Test of the input	No test

0302	**Function of the input**	Permanent open command
	Mode of the input	Summer function for Airlock
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	-
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open
	Test of the input	No test

0304	**Function of the input**	Permanent open command
	Mode of the input	Permanent open command
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	-
	Direction of the input	No direction specified
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Permanent open
	Test of the input	No test

0401	**Function of the input**	Stop command
	Mode of the input	Stop function
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

0402	**Function of the input**	Stop command
	Mode of the input	Stop function
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

0403	**Function of the input**	Stop command
	Mode of the input	Stop function and also acknowledgement function, i.e. this input is used for an acknowledgement. An acknowledgement must be performed e.g. under the conditions defined in P.408
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

0404	**Function of the input**	Stop command
	Mode of the input	Stop function and also acknowledgement function, i.e. this input is used for an acknowledgement. An acknowledgement must be performed e.g. under the conditions defined in P.408
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

0407	**Function of the input**	Stop command
	Mode of the input	A deadman mode open and close move is possible. To quit with foil keypad stop (a long time) is every time possible when the input is not active. Till the failure is quit F.060 appears.
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

	Function of the input	Stop command
	Mode of the input	A deadman mode open and close move is possible. To quit with foil keypad stop (a long time) is every time possible when the input is not active. Till the failure is quit F.060 appears.
	Contact type of the input	N.C., Normally closed
	End position of the input	-
0411	**Hold-open time / Priority of the input**	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Crash
	Test of the input	No test

	Function of the input	Safety B
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
0501	**Hold-open time / Priority of the input**	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

	Function of the input	Safety B
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
0504	**Hold-open time / Priority of the input**	With minimum auto close time (P.015)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

0505	**Function of the input**	Safety B
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	N.O., Normally open
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

0509	**Function of the input**	Safety B
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	The auto close time is stopped after activating in end position door OPEN and will go on after deactivation. By reversing during closing the min. auto close time is running.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

0520	**Function of the input**	Safety B
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	Test in the endpostion Door Open and after start up of the controller

	Function of the input	Safety B
	Mode of the input	Safety during opening: Reversing during automatic opening, stopping during jog opening, no reaction during closing
	Contact type of the input	-
	End position of the input	Same end position as the previously activated input moved to.
0522	**Hold-open time / Priority of the input**	With minimum auto close time (P.015)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Safety Edge
	Test of the input	No test

	Function of the input	Safety B
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
0530	**Hold-open time / Priority of the input**	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light curtain occupied
	Test of the input	No test

	Function of the input	Jog mode / Automatic switch
	Mode of the input	Manual permits opening and closing
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
0601	**Clearance time of the input**	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Dead man mode
	Test of the input	No test

	Function of the input	Jog mode / Automatic switch
	Mode of the input	Manual permits closing only
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
0602	**Clearance time of the input**	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Dead man mode
	Test of the input	No test

0701	**Function of the input**	Close command
	Mode of the input	Closing in automatic mode only
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Close
	Test of the input	No test

0703	**Function of the input**	Close command
	Mode of the input	CLOSE-command in automatic mode of opening interrupted, when closing OPENING is disabled
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Close
	Test of the input	No test

0704	**Function of the input**	Close command
	Mode of the input	CLOSE-command in automatic mode of opening interrupted, when closing OPENING is enabled
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Close
	Test of the input	No test

0713	**Function of the input**	Close command
	Mode of the input	Closing in automatic mode only
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Close
	Test of the input	No test

0714	**Function of the input**	Close command
	Mode of the input	CLOSE-command in automatic mode of opening interrupted, when closing OPENING is enabled
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Close
	Test of the input	No test

0801	**Function of the input**	Door locking in end position
	Mode of the input	Door locking in end position Door-CLOSE, no deadman move permitted
	Contact type of the input	N.O., Normally open
	End position of the input	Locking in end position Door-OPEN
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Locked close
	Test of the input	No test

0802	**Function of the input**	Door locking in end position
	Mode of the input	Door locking in end position Door-CLOSE, Deadman move permitted
	Contact type of the input	N.O., Normally open
	End position of the input	Locking in end position Door-OPEN
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Locked close
	Test of the input	No test

0803	**Function of the input**	Door locking in end position
	Mode of the input	-
	Contact type of the input	N.O., Normally open
	End position of the input	Locking in end position Door-OPEN
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Locking in intermediate stop 2
	Test of the input	No test

0804	**Function of the input**	Door locking in end position
	Mode of the input	-
	Contact type of the input	N.O., Normally open
	End position of the input	Locking in end position Door-CLOSE
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Locking in intermediate stop 2
	Test of the input	No test

0901	**Function of the input**	Cross traffic input
	Mode of the input	Detector channel1 and OPEN 1 commands
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Cross traffic
	Test of the input	No test

0902	**Function of the input**	Cross traffic input
	Mode of the input	Is locked by partner detector. Additionally open commands of the partner are locked.
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Cross traffic
	Test of the input	No test

0903	**Function of the input**	Cross traffic input
	Mode of the input	Detector Channels 1 and 2 as well as OPEN 1 and 2 commands
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Cross traffic
	Test of the input	No test

1001	**Function of the input**	Deactivation input
	Mode of the input	Hold-open time / Forced closing
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	No direction specified
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Deactivation
	Test of the input	No test

1002	**Function of the input**	Deactivation input
	Mode of the input	Airlock function
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	No direction specified
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Deactivation
	Test of the input	No test

1003	**Function of the input**	Deactivation input
	Mode of the input	Intermediate stop / partial opening
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	No direction specified
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Deactivation intermediate stop
	Test of the input	No test

1004	**Function of the input**	Deactivation input
	Mode of the input	Switch off of detector OPEN commands with direction from the outside
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	No direction specified
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Deactivation
	Test of the input	No test

1005	**Function of the input**	Deactivation input
	Mode of the input	Disabling of detector OPEN and CLOSE commands, the safety function of the detectors remains active.
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	No direction specified
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Deactivation
	Test of the input	No test

1101	**Function of the input**	Limit switch input
	Mode of the input	Pre-limit switch Photoeye
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Pre limit switch light beam
	Test of the input	No test

1102	**Function of the input**	Limit switch input
	Mode of the input	Intermediate stop / partial opening limit switch
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Limit switch intermediate stop
	Test of the input	No test

1103	**Function of the input**	Limit switch input
	Mode of the input	Pre-limit switch Intermediate stop / partial opening
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Pre limit switch intermediate stop
	Test of the input	No test

1104	**Function of the input**	Limit switch input
	Mode of the input	Pre-limit switch safety edge
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Pre limit switch safety edge
	Test of the input	No test

1105	**Function of the input**	Limit switch input
	Mode of the input	Pre-limit switch safety edge
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Pre limit switch safety edge
	Test of the input	No test

1106	**Function of the input**	Limit switch input
	Mode of the input	Pre-limit switch Door OPEN
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Pre limit switch open
	Test of the input	No test

1107	**Function of the input**	Limit switch input
	Mode of the input	Pre-limit switch Door OPEN
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Pre limit switch open
	Test of the input	No test

1108	**Function of the input**	Limit switch input
	Mode of the input	Pre-limit switch Door CLOSE
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Pre limit switch close
	Test of the input	No test

1109	**Function of the input**	Limit switch input
	Mode of the input	Pre-limit switch Door CLOSE
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Pre limit switch close
	Test of the input	No test

1110	**Function of the input**	Limit switch input
	Mode of the input	Limit switch Door Open
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Limit switch open
	Test of the input	No test

1111	**Function of the input**	Limit switch input
	Mode of the input	Limit switch Door Close
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Limit switch close
	Test of the input	No test

1114	**Function of the input**	Limit switch input
	Mode of the input	crash switch
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Default
	Test of the input	No test

1116	**Function of the input**	Limit switch input
	Mode of the input	Limit switch Door Close
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Limit switch close
	Test of the input	No test

1401	**Function of the input**	Safety A
	Mode of the input	Safety during closing: Stopping during automatic closing without reversing, stop during jog closing, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

1402	**Function of the input**	Safety A
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

1403	**Function of the input**	Safety A
	Mode of the input	Safety during closing: Stopping during automatic or jog closing, after releasing the input the door moves on to door close position, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

1404	**Function of the input**	Safety A
	Mode of the input	Safety during closing and opening: Stopping during automatic or jog opening or closing
	Contact type of the input	N.C., Normally closed
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

1405	**Function of the input**	Safety A
	Mode of the input	Safety during closing and opening: Stopping during automatic or jog opening or closing, after releasing the input the door moves on to door close position
	Contact type of the input	N.C., Normally closed
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

1406	**Function of the input**	Safety A
	Mode of the input	Safety during opening: Reversing during automatic opening, stopping during jog opening, no reaction during closing
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

1407	**Function of the input**	Safety A
	Mode of the input	Safety during opening: Stopping during automatic or jog opening
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

1408	**Function of the input**	Safety A
	Mode of the input	Draw in safety: Stopping during automatic or jog opening, then only jog closing possible, no reaction during closing
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Feed retention
	Test of the input	Test in the endpostion Door Close and after start up of the controller

1418	**Function of the input**	Safety A
	Mode of the input	Safety during closing and opening: Stopping during automatic or jog opening or closing
	Contact type of the input	N.O., Normally open
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	No clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

1420	**Function of the input**	Safety A
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	-
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Safety Edge
	Test of the input	No test

1422	**Function of the input**	Safety A
	Mode of the input	Safety during opening: Reversing during automatic opening, stopping during jog opening, no reaction during closing
	Contact type of the input	-
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	With minimum auto close time (P.015)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Safety Edge
	Test of the input	No test

1501	**Function of the input**	Simulation of foil keypad
	Mode of the input	OPEN foil key
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

1502	**Function of the input**	Simulation of foil keypad
	Mode of the input	CLOSE foil key
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Close
	Test of the input	No test

1506	**Function of the input**	Simulation of foil keypad
	Mode of the input	STOP foil key
	Contact type of the input	N.C., Normally closed
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Stop
	Test of the input	No test

1612	**Function of the input**	Safety C
	Mode of the input	Safety during opening: P.4xB = 0: Reversing during opening until the safety input get´s inactive. P.4xb > 0: Reversing for the adjusted number of increments, doesn´t matter if input is released or not.
	Contact type of the input	-
	End position of the input	End position Door OPEN
	Hold-open time / Priority of the input	Without auto close time
	Clearance time of the input	No clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Safety Edge
	Test of the input	No test

1613	**Function of the input**	Safety C
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	-
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Safety Edge
	Test of the input	No test

1615	**Function of the input**	Safety C
	Mode of the input	Safety during closing: Reversing during automatic closing, stop during jog closing, no reaction during opening
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

1624	**Function of the input**	Safety C
	Mode of the input	Safety during opening: Reversing during automatic opening, stopping during jog opening, no reaction during closing
	Contact type of the input	N.C., Normally closed
	End position of the input	Same end position as the previously activated input moved to.
	Hold-open time / Priority of the input	Auto close time as used before with the last open command.
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Light beam
	Test of the input	No test

1701	**Function of the input**	Door drive to intermediate stop / partial open
	Mode of the input	The door will go from each position to the partial open position.
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	With auto close time (P.010 or P.011)
	Clearance time of the input	With clear time / pre-warning time
	Direction of the input	Both directions are cleared
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Limit switch intermediate stop
	Test of the input	No test

1801	**Function of the input**	External detector
	Mode of the input	External Loop 1
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

1802	**Function of the input**	External detector
	Mode of the input	External Loop 2
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

1803	**Function of the input**	External detector
	Mode of the input	External Loop 3
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

1804	**Function of the input**	External detector
	Mode of the input	External Loop 4
	Contact type of the input	N.O., Normally open
	End position of the input	-
	Hold-open time / Priority of the input	-
	Clearance time of the input	-
	Direction of the input	-
	Switch on delay of the input	0,0 [Seconds]
	Switch off delay of the input	0,0 [Seconds]
	LCD-Text of the input	Open outside
	Test of the input	No test

19 Input parameterizing of standard digital and radio inputs

Any desired function can be set for each input on the door controller.
You can set the function either by selecting an input profile or individually using the following Parameters .

x = Number of the input you wish to configure

P.5x0 / P.Ex0 / P.Ax0 = Basic function of the input
P.5x1 / P.Ex1 / P.Ax1 = Mode of the basic function that was set under P.5x0
P.5x2 / P.Ex2 / P.Ax2 = Connected contact type: N.O. / normally open or N.C. / normally closed
P.5x3 / P.Ex3 / P.Ax3 = End position to move to
P.5x4 / P.Ex4 / P.Ax4 = Type of hold-open time / forced closing which runs after activating the input (P.010 to P.015)
P.5x5 / P.Ex5 / P.Ax5 = Specifies whether the clear time runs after activating the input (P.020 and P.025)
P.5x6 / P.Ex6 / P.Ax6 = Logical direction of the input
P.5x7 / P.Ex7 / P.Ax7 = Switch on delay of input
P.5x8 / P.Ex8 / P.Ax8 = Switch off delay of input
P.5x9 / P.Ex9 / P.Ax9 = LCD-Text, to be displayed when activating the input
P.5xA / P.ExA / P.AxA =Test of the input
P.5xF / P.ExF / P.AxF = Assignment to the output of the stationary unit of the radio safety system

Setting under P.5x0 / P.Ex0 / P.Ax0 also involves various settings for Parameters P.5x1 / P.Ex1 / P.Ax1 to P.5xF / P.ExF / P.AxF.

19.1 Cross-traffic input P.5x0 / P.Ex0 / P.Ax0 = 9

Parameter P.5x0 / P.Ex0 / P.Ax0 must be set to 9 in order to activate the basic function Cross-traffic for this input.

X = number of the input you wish to configure

P.	[Unit] Range	Function	Description/ Note
P.810 --w	[Seconds] 0 ... 30	Block time Detector Channel 1 and OPEN 1	Detector channel 1 and OPEN 1 commands are locked out for the time specified in this parameter after activating a cross-traffic input.
P.820 --w	[Seconds] 0 ... 30	Block time Detector Channel 2 and OPEN 2	Detector channel 2 and OPEN 2 commands are locked out for the time specified in this parameter after activating a cross-traffic input.

20 Induction loop detectors

P.	[Unit] Range	Function	Description/ Note
P.890 --w	0 ... 2	Locking of Close commands from detector	Locking of Close commands from detectors at oncoming traffic and/or convoy traffic. The close command is suppressed as long as cross- or convoy traffic is there. 0: No locking of CLOSE commands of the detectors 1: Locking of CLOSE commands in case of recognized oncoming traffic 2: Locking of CLOSE commands in case of recognized oncoming traffic and convoy traffic.
P.B6D --w	0 ... 1	Sampled-data filter	The parameter shows if the sample-signals will be filtered. 0: No Filter (high sensitivity) 1: With Filter (Low sensitivity) *This function works only for detectors placed on extension boards but not for plug in detectors.*
P.B6E --w	0 ... 1	Calling new adjustment	After setting the parameter to 1 a new adjustment of all loops will be performed. 0: No function 1: Ask for retuning *This function works only for detectors placed on extension boards but not for plug in detectors.*

20.1 Detector channel 3

The detector channel 3 is only useable in connection with the additional board TST MNST / TST RFUxK (TST RFUxK is no longer supported in TST EWA4) or as input function external detector.

P.	[Unit] Range	Function	Description/ Note
P.BC2 -ww	0 ... 5	Frequency range of detector channel 3	This parameter specifies the frequency range on which detector channel 3 works 0: Range will set automatically dependend on the address. 1: Range 30-40 kHz 2: Range 45-55 kHz 3: Range 60-75 kHz 4: Range 80-100 kHz 5: Range 105-140 kHz *To prevent mutual influencing of the detectors among each others different working frequencies have to be adjusted.*
P.BC3 -ww	1 ... 255	Threshold level of detector channel 3	Threshold value at which detector channel 3 is rated as tripped. 0: Threshold level 6 0,005% delta f/f 1: Threshold level 10 0,008% delta f/f ... 12: Threshold level 120 0,100% delta f/f ... 255: Threshold level 2550 2,125% delta f/f
P.BC4 -ww	20 ... 80	Hysteresis of detector channel 3	To prevent a momentary drop-out of the busy signal caused by vehicles such as articulated busses, streetcars, trucks with trailers, etc., it is possible to change the switching hysteresis. Interruption-free detection of critical vehicles is than possible even when the on sensitivity is set low. With the factory default setting the off threshold is 75%.

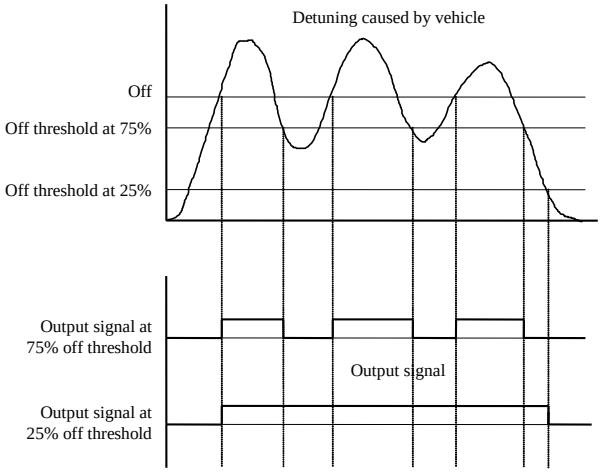

Figure 1 Waste hysteresis detector channel 3

P.	[Unit] Range	Function	Description/ Note
P.BC5 -ww	0 ... 255	Holding time of detector channel 3	Defines the min. trigger time at which the detector starts a retuning of channel 3.

20.2 Detector Channel 4

The detector channel 4 is only useable in connection with the additional board TST MNST / TST RFUxK (TST RFUxK is no longer supported in TST EWA4) or as input function external detector.

P.	[Unit] Range	Function	Description/ Note
P.BD2 -ww	0 ... 5	Frequency range of detector channel 4	This parameter specifies the frequency range on which detector channel 4 works 0: Range will set automatically dependend on the address. 1: Range 30-40 kHz 2: Range 45-55 kHz 3: Range 60-75 kHz 4: Range 80-100 kHz 5: Range 105-140 kHz *To prevent mutual influencing of the detectors among each others different working frequencies have to be adjusted.*
P.BD3 -ww	1 ... 255	Threshold level of detector channel 4	Threshold value at which detector channel 4 is rated as tripped. 0: Threshold level 6 0,005% delta f/f 1: Threshold level 10 0,008% delta f/f ... 12: Threshold level 120 0,100% delta f/f ... 255: Threshold level 2550 2,125% delta f/f

P.	[Unit] Range	Function	Description/ Note
P.BD4 -ww	20 ... 80	Hysteresis of detector channel 4	To prevent a momentary drop-out of the busy signal caused by vehicles such as articulated busses, streetcars, trucks with trailers, etc., it is possible to change the switching hysteresis. Interruption-free detection of critical vehicles is than possible even when the on sensitivity is set low. With the factory default setting the off threshold is 75%.

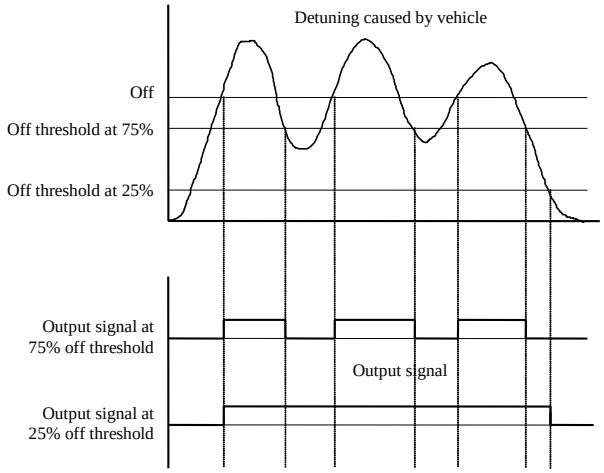

Figure 2 Waste hysteresis detector channel 4

P.BD5 -ww	0 ... 255	Holding time of detector channel 4	Defines the min. trigger time at which the detector starts a retuning of channel 4.

21 Induction loop detector VEK MNST

P.	[Unit] Range	Function	Description/ Note
L.102	0 ... 1	VEK MNST Deactivate	This parameter can be used to temporarily deactivate the detector without deleting the slot assignment. 0: Detector Inactive 1: Detector active
L.111	0 ... 1	VEK MNST Request new adjustment	A new adjustment of all loops is made. 0: No function 1: Ask for retuning

21.1 VEK MNST channel 1

P.	[Unit] Range	Function	Description/ Note
L.120	0 ... 18	Frequency range of the detector VEK MNST Channel 1	The parameter defines the frequency range in which channel 1 of the VEK MNST detector operates. 0: Detector channel deactivated 17: Low frequency range 18: High frequency range
L.121	4 ... 2550	Threshold value of the VEK MNST detector Channel 1	Threshold value above which channel 1 of detector VEK MNST is rated as tripped (in increments (or delta f/f)). 4: Threshold value 4 (0.004%) 10: Threshold value 10 (0.010%) . 120: Threshold 120 (0.120%) . 255: Threshold value 2550 (2.55%)
L.122	[%] 20 ... 80	Off Threshold of the VEK MNST detector Channel 1	For vehicles with a high substructure, like buses, trams, trucks with trailers, etc. It is possible to change the switching hysteresis in order to avoid a temporary drop in the occupant signal. An uninterrupted detection of critical vehicles is then also possible with a low set trigger sensitivity.
L.123	[Minutes] 0 ... 255	Hold time of the VEK MNST detector Channel 1	Defines the smallest busy time at which the VEK MNST detector starts a new calibration for channel 1. 0: Infinite hold time (no recalibration) 1-255: Hold time in minutes

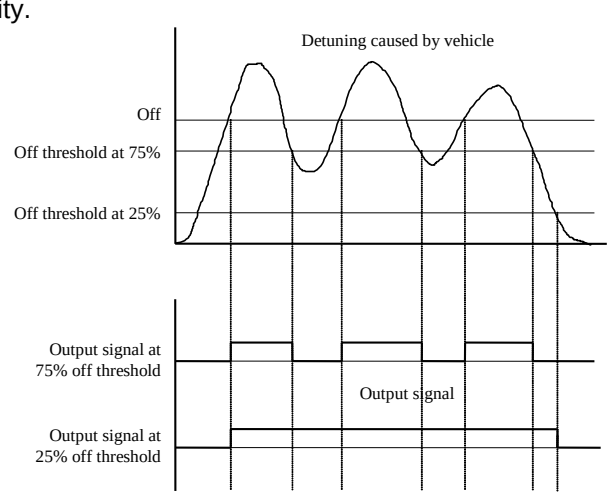

Figure 3 Off Threshold of the VEK MNST detector Channel 1

21.2 VEK MNST channel 2

P.	[Unit] Range	Function	Description/ Note
L.124	0 ... 18	Frequency range of the detector VEK MNST Channel 2	The parameter defines the frequency range in which channel 2 of the VEK MNST detector operates. 0: Detector channel deactivated 17: Low frequency range 18: High frequency range
L.125	4 ... 2550	Threshold value of the VEK MNST detector Channel 2	Threshold value above which channel 2 of detector VEK MNST is evaluated as occupied (in increments (or delta f/f)). 4: Threshold value 4 (0.004%) 10: Threshold value 10 (0.010%) . 120: Threshold 120 (0.120%) . 255: Threshold value 2550 (2.55%)
L.126	[%] 20 ... 80	Off Threshold of the VEK MNST detector Channel 2	For vehicles with a high substructure, like buses, trams, trucks with trailers, etc. It is possible to change the switching hysteresis in order to avoid a temporary drop in the occupant signal. An uninterrupted detection of critical vehicles is then also possible with a low set trigger sensitivity.
L.127	[Minutes] 0 ... 255	Hold time of the VEK MNST detector Channel 2	Defines the smallest busy time at which the VEK MNST detector starts a new calibration for channel 2. 0: Infinite hold time (no recalibration) 1-255: Hold time in minutes

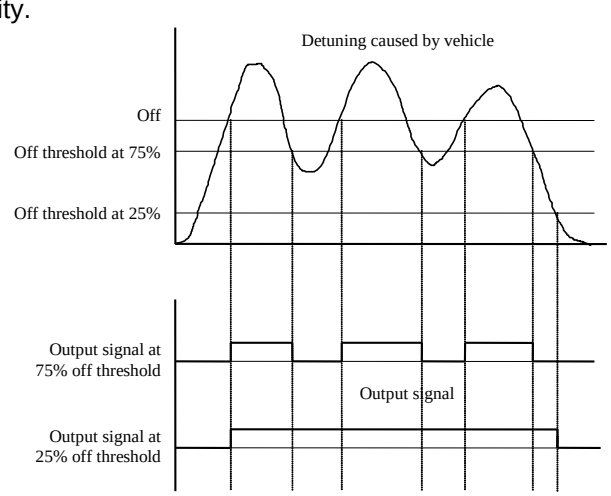

Figure 4 Off Threshold of the VEK MNST detector Channel 2

21.3 VEK MNST channel 3

P.	[Unit] Range	Function	Description/ Note
L.128	0 ... 18	Frequency range of the detector VEK MNST Channel 3	The parameter defines the frequency range in which channel 3 of the VEK MNST detector operates. 0: Detector channel deactivated 17: Low frequency range 18: High frequency range
L.129	4 ... 2550	Threshold value of the VEK MNST detector Channel 3	Threshold value above which channel 3 of detector VEK MNST is evaluated as occupied (in increments (or delta f/f)). 4: Threshold value 4 (0.004%) 10: Threshold value 10 (0.010%) . 120: Threshold 120 (0.120%) . 255: Threshold value 2550 (2.55%)
L.12A	[%] 20 ... 80	Off Threshold of the VEK MNST detector Channel 3	For vehicles with a high substructure, like buses, trams, trucks with trailers, etc. It is possible to change the switching hysteresis in order to avoid a temporary drop in the occupant signal. An uninterrupted detection of critical vehicles is then also possible with a low set trigger sensitivity.
L.12B	[minutes] 0 ... 255	Hold time of the VEK MNST detector Channel 3	Defines the smallest busy time at which the VEK MNST detector starts a new calibration for channel 3. 0: Infinite hold time (no recalibration) 1-255: Hold time in minutes

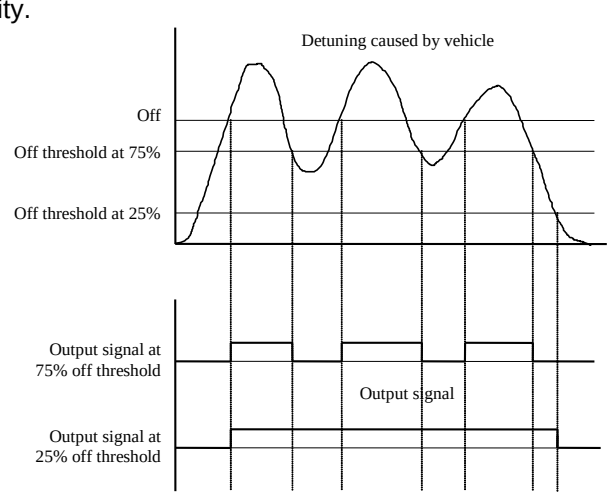

Figure 5 Off Threshold of the VEK MNST detector Channel 3

21.4 VEK MNST channel 4

P.	[Unit] Range	Function	Description/ Note
L.12C	0 ... 18	Frequency range of the detector VEK MNST Channel 4	The parameter defines the frequency range in which channel 4 of the VEK MNST detector operates. 0: Detector channel deactivated 17: Low frequency range 18: High frequency range
L.12D	4 ... 2550	Threshold value of the VEK MNST detector Channel 4	Threshold value above which channel 4 of detector VEK MNST is evaluated as occupied (in increments (or delta f/f)). 4: Threshold value 4 (0.004%) 10: Threshold value 10 (0.010%) . 120: Threshold 120 (0.120%) . 255: Threshold value 2550 (2.55%)
L.12E	[%] 20 ... 80	Off Threshold of the VEK MNST detector Channel 4	For vehicles with a high substructure, like buses, trams, trucks with trailers, etc. It is possible to change the switching hysteresis in order to avoid a temporary drop in the occupant signal. An uninterrupted detection of critical vehicles is then also possible with a low set trigger sensitivity.
L.12F	[minutes] 0 ... 255	Hold time of the VEK MNST detector Channel 4	Defines the smallest busy time at which the VEK MNST detector starts a new calibration for channel 4. 0: Infinite hold time (no recalibration) 1-255: Hold time in minutes

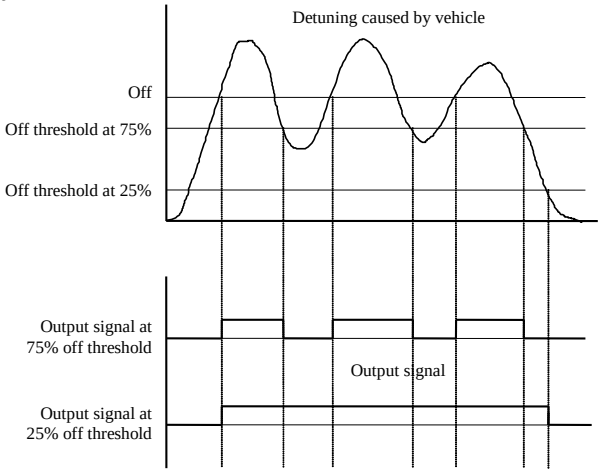

Figure 6 Off Threshold of the VEK MNST detector Channel 4

21.5 VEK MNST diagnostic

P.	[Unit] Range	Function	Description/ Note
L.150	1 ... 4	VEK MNST detector channel selection for diagnosis	The channel of the VEK MNST detector to be diagnosed is selected here. Subsequently, the parameters L.152 to L.155 can be used to call up various diagnostic data for the set channel. 1: Retrieve diagnostic data for channel 1 2: Retrieve diagnostic data for channel 2 3: Retrieve diagnostic data for channel 3 4: Retrieve diagnostic data for channel 4
L.152		Current frequency of the VEK MNST detector channel	This parameter displays the current frequency of the oscillating circuit of the channel of the VEK MNST detector selected via parameter L.150.
L.153		Current detuning of the VEK MNST detector channel	This parameter indicates the current detuning of the channel of detector VEK MNST selected via parameter L.150.
L.154		Maximum detuning of the VEK MNST detector channel	This parameter indicates the maximum detuning caused by the last metallic object that occupied the loop of the detector channel VEK MNST selected by parameter L.150.
L.155		Presence counter of the VEK MNST detector channel	This parameter displays the presence counter of the channel of detector VEK MNST selected via parameter L.150.
L.160		Serial number Detector VEK MNST	Displays the serial number of the inserted VEK MNST detector.
L.162		Software version Detector VEK MNST	Displays the software version of the inserted VEK MNST detector.
L.164		Hardware version Detector VEK MNST	Displays the hardware version of the inserted VEK MNST detector.
L.166		Bus protocol version Detector VEK MNST	Displays the bus protocol version of the inserted VEK MNST detector. This version is used to determine which parameters objects the detector supports.

22 Interface FEIG motion detector

22.1 Motion detector 1

P.	[Unit] Range	Function	Description/ Note
L.602	0 ... 1	Motion detector 1 deactivation	This parameter can be used to temporarily deactivate motion detector 1. 0: Deactivated 1: Activated
L.660		Motion detector 1 Serial number	This Parameter shows the serial number of the Motion detector 1.
L.662		Motion detector 1 Software version	This Parameter shows the software version of Motion detector 1.
L.664		Motion detector 1 Hardware version	This Parameter shows the Hardware version of Motion detector 1.
L.601		Motion detector 1 MWD BPC Assignment	This parameter explicitly assigns a serial number of a connected motion detector to the MWD BPC motion detector 1. The lowest four digits of the serial number are displayed and the currently selected sensor flashes with its LEDs.
L.61F	0001 ... 0006	Motion detector 1 profile	This profile sets all associated parameters of motion detector 1. 0001: Default values for motion detector 1 0002: Channel 1 all settings, channel 2 deactivated 0004: Channel 1 persons only (medium), channel 2 vehicles only (medium) 0005: Channel 1 all settings, channel 2 without cross traffic (medium) 0006: Channel 1 all settings, channel 2 with detecting slowly moving objects *The exact settings that this profile entails can be found in the appendix Motion Detector Profiles.*
L.666		Bus protocol version	This parameter displays the communication protocol version of the motion detector 1.

22.2 Motion detector 2

P.	[Unit] Range	Function	Description/ Note
L.702	0 ... 1	Motion detector 2 deactivation	This parameter can be used to temporarily deactivate motion detector 2. 0: Deactivated 1: Activated
L.760		Motion detector 2 Serial number	This Parameter shows the serial number of the Motion detector 2.
L.762		Motion detector 2 Software version	This Parameter shows the software version of Motion detector 2.
L.764		Motion detector 2 Hardware version	This Parameter shows the Hardware version of Motion detector 2.
L.701		Motion detector 2 MWD BPC Assignment	This parameter explicitly assigns a serial number of a connected motion detector to the MWD BPC motion detector 2. The lowest four digits of the serial number are displayed and the currently selected sensor flashes with its LEDs.
L.71F	0001 ... 0006	Motion detector 2 profile	This profile sets all associated parameters of motion detector 2. 0001: Default values for motion detector 1 0002: Channel 1 all settings, channel 2 deactivated 0004: Channel 1 persons only (medium), channel 2 vehicles only (medium) 0005: Channel 1 all settings, channel 2 without cross traffic (medium) 0006: Channel 1 all settings, channel 2 with detecting slowly moving objects *The exact settings that this profile entails can be found in the appendix Motion Detector Profiles.*
L.766		Bus protocol version	This parameter displays the communication protocol version of the motion detector 2.

22.3 Motion detector 3

P.	[Unit] Range	Function	Description/ Note
L.802	0 ... 1	Motion detector 3 deactivation	This parameter can be used to temporarily deactivate motion detector 3. 0: Deactivated 1: Activated
L.860		Motion detector 3 Serial number	This Parameter shows the serial number of the Motion detector 3.
L.862		Motion detector 3 Software version	This Parameter shows the software version of Motion detector 3.
L.864		Motion detector 3 Hardware version	This Parameter shows the Hardware version of Motion detector 3.
L.801		Motion detector 3 MWD BPC Assignment	This parameter explicitly assigns a serial number of a connected motion detector to the MWD BPC motion detector 3. The lowest four digits of the serial number are displayed and the currently selected sensor flashes with its LEDs.
L.81F	0001 ... 0006	Motion detector 3 profile	This profile sets all associated parameters of motion detector 3. 0001: Default values for motion detector 1 0002: Channel 1 all settings, channel 2 deactivated 0004: Channel 1 persons only (medium), channel 2 vehicles only (medium) 0005: Channel 1 all settings, channel 2 without cross traffic (medium) 0006: Channel 1 all settings, channel 2 with detecting slowly moving objects *The exact settings that this profile entails can be found in the appendix Motion Detector Profiles.*
L.866		Bus protocol version	This parameter displays the communication protocol version of the motion detector 3.

22.4 Motion detector 4

P.	[Unit] Range	Function	Description/ Note
L.902	0 ... 1	Motion detector 4 deactivation	This parameter can be used to temporarily deactivate motion detector 4. 0: Deactivated 1: Activated
L.960		Motion detector 4 Serial number	This Parameter shows the serial number of the Motion detector 4.
L.962		Motion detector 4 Software version	This Parameter shows the software version of Motion detector 4.
L.964		Motion detector 4 Hardware version	This Parameter shows the Hardware version of Motion detector 4.
L.901		Motion detector 4 MWD BPC Assignment	This parameter explicitly assigns a serial number of a connected motion detector to the MWD BPC motion detector 4. The lowest four digits of the serial number are displayed and the currently selected sensor flashes with its LEDs.
L.91F	0001 ... 0006	Motion detector 4 profile	This profile sets all associated parameters of motion detector 4. 0001: Default values for motion detector 1 0002: Channel 1 all settings, channel 2 deactivated 0004: Channel 1 persons only (medium), channel 2 vehicles only (medium) 0005: Channel 1 all settings, channel 2 without cross traffic (medium) 0006: Channel 1 all settings, channel 2 with detecting slowly moving objects **ATTENTION** **The exact settings that this profile entails can be found in the appendix Motion Detector Profiles.**
L.966		Bus protocol version	This parameter displays the communication protocol version of the motion detector 4.

23 Output Profiles

P.	[Unit] Range	Function	Description/ Note
P.701 --w	0000 ... 3202	Function of Output 1	The function of the output relay can be specified using this profile. All parameters needed for the function of the output are changed in one step. 0000: Output deactivated 0001: Continuously turned on 0101: Door is Open *The message depends on the logical status of the door* 0103: Door is Open *The message depends on the position of the door* 0201: Door is Closed *The message depends on the logical status of the door* 0203: Door is Closed *The message depends on the position of the door* 0401: There is no error 0501: Courtyard light function, switched ON during opening and closing with 10 s switch off delay after closing. 0601: Passing on detector channel 1 0602: Passing on detector channel 2 0605: Synchronous control OPEN, signal duration 0.5 seconds. The output is active during opening, in End position OPEN and during locking in end open position. 0606: Synchronous control CLOSE, signal duration 0.5 seconds. The output is active during Closing, in End position Close and during locking in end position close. 0607: Synchronous control STOP, signal duration 0.5 seconds. The output is active when the door is not moving, no end position is approached and no locking in any end position is active. 0612: Passing on leaving detector 1 0613: Passing on leaving detector 2 0634: Forwarding, of an low Battery from the WiCab mobile Unit 0659: F.363: forwarding disturbance of the internal safety edge. 0660: Forwarding: maximum number of trips of the safety edges has been exceeded. 0665: Forwarding detector channel 3 0666: Forwarding detector channel 4 0701: Flashing during opening and closing 0703: Switched on during Opening and Closing 0801: Active during opening and closing and during active pre-warning / clearance time. 1001: Locking second door 1002: Locking second door, 1 s switch off delay

P.	[Unit] Range	Function	Description/ Note
			1102: Magnet voltage during Closing and in end position CLOSE 1201: Green traffic light on inside of door 1210: Green traffic light on outside of door 1220: Red traffic light on inside of door 1 1221: Flashing red traffic light on inside of door 1 1222: Red traffic light on inside of door 2 1223: Flashing red traffic light on inside of door 2 1224: Red traffic light on inside of door 1232: Red traffic light on inside 1233: Red traffic light on inside, inverted 1250: Red traffic light on outside of door 1, flashing during clearance time 1251: Flashing red traffic light on outside of door 1 1252: Red traffic light on outside of door 2 1253: Flashing red traffic light on outside of door 2 1255: Red traffic light on outside of door 1263: Red traffic light on outside 1264: Red traffic light on outside, inverted 1295: Green traffic light, flashing during pre-warning / clearance time, ON in end position OPEN 1298: Direction dependent red traffic light. On for opening and closing movement. Off when CLOSED and when OPEN. Flashes during evacuation time 12AD: Direction-independent traffic light, flashing during clearing time, switched on during OPEN and CLOSE movement, flashing during stop 1601: Airlock OPEN 1701: Testing in end position close 1801: Counting + *The function is only possible with detectors 1 and 2. At first you have to activate the + loop and then the - loop.* 1901: Counting - *The function is only possible with detectors 1 and 2. At first you have to activate the - loop and then the + loop.* 2001: Warning light 1, always ON if door is not closed. 2101: Warning light 2, switched ON during closing 2201: Active green traffic light, ON in endposition OPEN until a close command is given or detector 2 gets active. 2301: Active green traffic light, ON in endposition OPEN until a close command is given or detector 1 gets active. 2501: Testing in endposition OPEN 2601: Emergency opening test 3201: Output function brake 3202: Output function brake (N.C., output turned) *The exact settings which this profile involves can be found in Appendix Output Profile.*
P.702 --w	0000 ... 3202	Function of Output 2	see P.701 or P.704
P.70F --w	0000 ... 3202	Function of output 15	see P.701 or P.704

P.	[Unit] Range	Function	Description/ Note
P.D0A --w	0000 ... 3202	Function of output 2A	see P.701 or P.704

23.1 Output profiles with expansion card

P.	[Unit] Range	Function	Description/ Note
P.705 --w	0000 ... 3202	Function of Output 5	see P.701 or P.704
P.706 --w	0000 ... 3202	Function of Output 6	see P.701 or P.704
P.707 --w	0000 ... 3202	Function of Output 7	see P.701 or P.704
P.708 --w	0000 ... 3202	Function of Output 8	see P.701 or P.704
P.709 --w	0000 ... 3202	Function of Output 9	see P.701 or P.704
P.70A --w	0000 ... 3202	Function of Output 10	See P.701 or P.704
P.70B --w	0000 ... 3202	Function of Output 11	see P.701 or P.704
P.D0B --w	0000 ... 3202	Function of output 2B	see P.701 or P.704
P.D0C --w	0000 ... 3202	Function of output 2C	see P.701 or P.704
P.D0D --w	0000 ... 3202	Function of output 2D	see P.701 or P.704
P.D0E --w	0000 ... 3202	Function of output 2E	see P.701 or P.704
P.D0F --w	0000 ... 3202	Function of output 2F	see P.701 or P.704

23.2 Overview output profiles

0000	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

0001	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

0101	**Switching condition of Output**	If End position Door OPEN was reliably detected
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

0103	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Forwarding door OPEN position (The forwarding depends only on position and will not interrupted by the clearance time or door drive)

0201	**Switching condition of Output**	If End position Door CLOSE was reliably detected
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

0203	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Forwarding door CLOSE position (The forwarding depends only on position and will not interrupted by the clearance time or door drive)

0401	**Switching condition of Output**	If there is no fault condition or emergency stop, controller in Automatic mode. The relay does not switch when the crash is active.
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

0501	**Switching condition of Output**	Courtyard light function, during every OPEN and CLOSE move with 10 turn-off delay after opening.
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

0601	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Detector channel 1

0602	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Detector channel 2

0605	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	0,5 [Seconds]
	Turn-on delay of the output	0,1 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Opening, open position, locked in open position (synchronous control open)

0606	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	0,5 [Seconds]
	Turn-on delay of the output	0,1 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Closing, close position, locked in close position (Synchron controller close)

0607	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	0,5 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Neither opening or closing, open or closed position remain locked in open or closed position (synchronous control stop)

0612	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	1,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Detector 1 is released. Switch-off delay required via P.7x3.

0613	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	1,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Detector 2 is released. Switch-off delay required via P.7x3.

0634	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Forwarding battery error of the wireless safety device.

0659	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Interruption safety edge 1

0660	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Forwarding: number of trips of a safety A to E is exceeded.

0665	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Detector channel 3

0666	**Switching condition of Output**	Command forwarding
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Detector channel 4

0701	**Switching condition of Output**	During each OPEN and CLOSE move
	Switching behavior of the output	0,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

0703	**Switching condition of Output**	During each OPEN and CLOSE move
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

0801	**Switching condition of Output**	During each OPEN and CLOSE move and during active clearing time.
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1001	**Switching condition of Output**	Forward external door locking (e.g., airlock operation)
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1002	**Switching condition of Output**	Forward external door locking (e.g., airlock operation)
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	1,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1102	**Switching condition of Output**	Magnet voltage during closing and in end position close
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1201	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously on
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1210	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green light on outside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously on
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1220	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 1Hz
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

1221	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Flashing at 1Hz
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 2Hz
	Behavior during closing of the output	Flashing at 1Hz
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

1222	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 1Hz
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

1223	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Flashing at 1Hz
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 2Hz
	Behavior during closing of the output	Flashing at 1Hz
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

1224	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Turned on in case that the condition of parameter P.7xF is fulfilled. Stays turned on in case that the condition of parameter P.7xF was fulfilled one time.
	Behavior during the clearing phaseof the output	Continuously on
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Detector channel 2

1232	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Turned on in case that the condition of parameter P.7xF is fulfilled. Stays turned on in case that the condition of parameter P.7xF was fulfilled one time.
	Behavior during the clearing phaseof the output	Continuously on
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Detector channel 4

1233	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Turned on in case that the condition of parameter P.7xF is fulfilled. Stays turned on in case that the condition of parameter P.7xF was fulfilled one time.
	Behavior during the clearing phaseof the output	Continuously on
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Detector channel 4

1250	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on outside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 1Hz
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

1251	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on outside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Flashing at 1Hz
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 2Hz
	Behavior during closing of the output	Flashing at 1Hz
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

1252	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on outside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 1Hz
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

1253	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on outside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Flashing at 1Hz
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 2Hz
	Behavior during closing of the output	Flashing at 1Hz
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

1255	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on outside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Turned on in case that the condition of parameter P.7xF is fulfilled. Stays turned on in case that the condition of parameter P.7xF was fulfilled one time.
	Behavior during the clearing phaseof the output	Continuously on
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Detector channel 1

1263	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on outside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Turned on in case that the condition of parameter P.7xF is fulfilled. Stays turned on in case that the condition of parameter P.7xF was fulfilled one time.
	Behavior during the clearing phaseof the output	Continuously on
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Detector channel 3

1264	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Red traffic light on outside of door
	Behavior in Door CLOSE end position of the output	Continuously on
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Turned on in case that the condition of parameter P.7xF is fulfilled. Stays turned on in case that the condition of parameter P.7xF was fulfilled one time.
	Behavior during the clearing phaseof the output	Continuously on
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Detector channel 3

1295	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Direction undepend traffic light
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously on
	Behavior during the clearing phaseof the output	Flashing at 1Hz
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1298	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Direction undepend traffic light
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 1Hz
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Continuously on
	Command forwarding of the output	Output permanent off

12AD	**Switching condition of Output**	Traffic light function
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Direction undepend traffic light
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously on
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Flashing at 1Hz
	Behavior during closing of the output	Continuously on
	Behavior at stop of the output	Continuously on
	Behavior when there is no automatic function of the output	Flashing at 0.5Hz
	Command forwarding of the output	Output permanent off

1601	**Switching condition of Output**	Airlock OPEN, forwards OPEN command to second airlock door
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1701	**Switching condition of Output**	Test of draw in safety device. Output is switched off in Endposition Close and is used e.g. to switch off the photo eye of the draw in safety in order to test it.
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1801	**Switching condition of Output**	Plus counting by loop detector with direction from outside to inside. The function of the detector doesn`t matter. Only for detector 1 and 2.
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,5 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

1901	**Switching condition of Output**	Minus counting by loop detector with direction from inside to outside. The function of the detector doesn`t matter. Only for detector 1 and 2.
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,5 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

2001	**Switching condition of Output**	If not at end position close and during clearance time (warning light 1)
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

2101	**Switching condition of Output**	During clearance time before and during closing (warning light 2)
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

2201	**Switching condition of Output**	In automatic mode in the final position open until a detector close command is active or detector channel 2 is occupied, by active input (P.5x0 = 10, P.5x1 = 7) in final position open (active green traffic light / inactive red traffic light)
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

2301	**Switching condition of Output**	In automatic mode in the final position open until a detector close command is active or detector channel 1 is occupied, by active input (P.5x0 = 10, P.5x1 = 7) in final position open (active green traffic light / inactive red traffic light)
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

2501	**Switching condition of Output**	Test in End-Position Door Open Output switches off in End- Position Door Open
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

2601	**Switching condition of Output**	Output is switching during emergency open test
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

3201	**Switching condition of Output**	Output as a brake
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Not turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

3202	**Switching condition of Output**	Output as a brake
	Switching behavior of the output	1000,0 [Seconds]
	Turn-on delay of the output	0,0 [Seconds]
	Turn-off delay of the output	0,0 [Seconds]
	Switch on logic of the output	Turned
	Position forwarding of the output	0 [Increments]
	Select traffic light type of the output	Green traffic light on inside of door
	Behavior in Door CLOSE end position of the output	Continuously off
	Behavior during opening of the output	Continuously off
	Behavior in Door OPEN end position of the output	Continuously off
	Behavior during the clearing phaseof the output	Continuously off
	Behavior during closing of the output	Continuously off
	Behavior at stop of the output	Continuously off
	Behavior when there is no automatic function of the output	Continuously off
	Command forwarding of the output	Output permanent off

24 Output parameterizing

Any desired function can be set for each output on the door controller.
You can set the function either by selecting an output profile or individually using the following Parameters.

X = number of the output you wish to configure

25 Airlock function

An airlock consists of two doors. These are locked against each other so that only one door can be opened at same time. In addition, after the first door has been closed, an OPEN command is sent to the second gate via an interface. This means that OPEN command switches can be saved inside the airlock.

An OPEN command is issued at the first door. The input of the OPEN command must have the direction "from outside". When the airlock function is activated, the airlock operation is initiated.
The first door opens, the hold-open time expires and the door closes again. While the door is opened, the second door is locked in the end position door CLOSED.
The locking of the second door can optionally be canceled by pressing the stop button on the locked door in order to deliberately deactivate the airlock for one operation.
After reaching the end position door CLOSED, the interlock of the second door is released again and, in addition, an OPEN command is issued to the second door.
Optionally, it is also possible to activate a drive through detection by means of a light barrier. If no vehicle enters the airlock, the process is interrupted.
This door will now be opened and closed again. The airlock operation is now complete.
If the second door can not open, e.g. by an actuated EMERGENCY STOP, the first door re-opens to allow the person or vehicle inside the airlock to exit the airlock.

P.	[Unit] Range	Function	Description/ Note
A.830	0000 ... 0301	Airlock mode	This parameter specifies the mode of the airlock system. 0000: Airlock deactivated 0200: Comfortable Airlock Slave, Commands will be forwarded. 0201: Comfortable Airlock Master 0300: Comfortable Airlock with drive thru recognition by photo eye, Slave 0301: Comfortable Airlock with drive thru recognition by photo eye, Master

26 Diagnostics display

P.	[Unit] Range	Function	Description/ Note
P.910 -ww	0 ... 274	Display mode selection	With the aid of this parameter you can show the variables listed below in the display of the door controller. The following variables are displayed 0: The control sequence is displayed (Automatic) 2: Effective motor current 6: [°C]Temperature of the 24V power supply in °C 7: [°F]Temperature of the 24V power supply in °Fahrenheit 8: [s] The run-time of the motor during the last door operation 9: [Increments] The current position 10: [Increments] The position of the reference 11: [Dig] Channel 1 value of the absolute encoder 12: [Dig] Channel 2 value of the absolute encoder 14: [°C] Temperature inside the housing in °Celsius 15: [°F] Temperature inside the housing in °Fahrenheit 16: Transmission ratio from motor to encoder during opening 17: Transmission ratio from motor to encoder during closing 21: Number of position requisition without answer from encoder 22: Number of wrong received signs in TST PD encoder (activates also the output in P.955) 23: Radio quality of the wireless safety device in %. 24: Number of errors of the wireless safety device during the last door drive. 25: Time of the real time clock module 29: Address of the partner controller (only in Master mode senseful) 49: Motor peak current 50: 24V power supply energy consumption 51: Voltage 24V power supply 269: CAN error counter: number of errors per hour of CAN 1 (CAN connection expansion board) 270: CAN error counter: number of errors per hour of CAN 2 (CAN connection main board) 271: CAN error counter: number of errors per cycle of CAN 1 (CAN connection expansion board) 272: CAN error counter: number of errors per cycle of CAN 2 (CAN connection main board) 273: CAN error counter of the last 24 hours for CAN 1 (CAN connection expansion board) 274: CAN error counter of the last 24 hours for CAN 2 (CAN connection main board)

27 Error Memory

P.	[Unit] Range	Function	Description/ Note
P.920 rww		Error Memory	The controller stores the last eight errors in the error memory. After opening Parameter P.920: - Change level using OPEN and CLOSE keys - Opening the error memory with the STOP key - Closing the error memory with the STOP key - Exiting Parameter P.920 with Eb - *Er- in the display means that no error was entered.*

28 Information memory

P.	[Unit] Range	Function	Description/ Note
P.91F rww		Information memory	The controller stores the last eight occurred information messages in the information memory. After entering the parameter P.91F: - Changing the level with foil key OPEN and foil key CLOSED - Clear the information memory by selecting and confirming the "Clear" or "cl" entry on 7-segment - Exit the parameter by short pressing of the STOP key

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P.	[Unit] Range	Function	Description/ Note
P.921 rrr		Feig serial number	Display of the Feig serial number. This serial number cannot be changed.
P.922 rrr		Customer number	Display of the customer number. If no number is entered, "not set" appears
P.923 rrr	00000 ... 65533	Authorisation number	The authorisation number is an individual ID that can be set by the customer purchasing the door control unit. Customer who purchases the door control unit.
P.925 rrr		Software Version	This parameter displays the version of the currently used software.
P.926 rrr		Software version of additional board	This parameter shows the current used software version of the additional board.

P.	[Unit] Range	Function	Description/ Note
P.927 rrr		Serial number	Display of serial number. The serial number can be set on highest password level. As long no serial number is set "Not Set" is displayed
P.929 rrr		RFUxIO Software version	Software version of the TST RFUxIO expansion board
P.92C rrr		TST RBA Serial number	This parameter is used to display the serial number of the TST RBA is displayed
P.92D rrr		TST RBA Software version	This parameter displays the software version of the TST RBA is displayed.

30 Door run-Time

P.	[Unit] Range	Function	Description/ Note
P.930 -rr	[Seconds]	Motor run-time	In this parameter the time required for the last drive operation is stored.

31 Testing of emergency opening

This function is used to make sure that the emergency opening is working. For that the time that the door needs for a full opening, is measured. If it takes to long, the errormessage F.021 appears and a user intervention is necessary.

The testing happens every time from endposition close, under the following conditions:
1. After power on with the first message door is close.
2. After the door cycles set in P.492, after power on or after the last testing.
3. After the time set in P.493, after power on or after the last testing.

P.	[Unit] Range	Function	Description/ Note
A.490	0 ... 1	Application emergency opening test	With this application the checking of the emergency opening test is set. 0: Deactivation emergency opening test 1: Mechanical emergency opening test
P.495 -zz	[Increments] 0 ... 9999	Endposition of testing	This parameter specifies a position in increments relate to endposition close, if the door passes this position the test is ok. *This function prevents that the test fails if the endposition open is not reached completely.*

32 Electronic Position Encoder Diagnostics

P.	[Unit] Range	Function	Description/ Note
P.950 -rr	[Increments]	Current position	In this parameter the current position of the door referenced to the Door CLOSE end position is displayed.
P.951 -rr	[Digits]	Current counter state	This parameter indicates the current counter state of the incremental encoder.
P.953 -rr	[Digits]	Diagnostic of TST PD	Displays the diagnostic information.
P.954 -rr		Bus diagnostic of encoder	This parameter shows the number of position requisitions without guilty answer. By opening the parameter and afterwards long time STOP pressing the counter will reset.
P.955 -rr		Bus Diagnostic of TST PD	This parameter shows the number of protocols which were not understood by TST PD. The number can only shown if P.910 = 22. By opening the parameter and afterwards long time STOP pressing the counter will reset (only possible if the communication with TST PD is O.K.).
P.958 rrr		Software version of position encoder TST PD2	This parameter shows the current used software version of the position encoder TST PD2. *This Parameter is only visible if a TST PD2 is connected.*
P.959 rrr		Serial number of position encoder TST PD2	Display of serial number of the position encoder TST PD2. *This Parameter is only visible if a TST PD2 is connected.*

33 Activation of the Expansion Board

P.	[Unit] Range	Function	Description/ Note
P.800 -ww	0 ... 8	Activate Expansion board	The expansion board is activated with this parameter. 0: Board deactivated 8: TST RFUxIO
P.802 -ww	0000 ... 0400	Function of the expansion slot	This parameter defines the hardware that was inserted into the expansion slot. 0000: Expansion slot deactivated 0101: TST SURA1 activated 0106: TST SURA6 activated 0202: Radio module activated 0302: Detector activated 0400: TST MNST activated

P.	[Unit] Range	Function	Description/ Note
P.94C -rr		CAN-Bus-Diagnoses of extension board	The counter shows the number of time outs which are caused by missing telegrams of the extension board.

34 Operating Mode of the Controller

P.	[Unit] Range	Function	Description/ Note
P.894 --w	0 ... 1	Automatic open command	This parameter can be used to generate an automatic OPEN command if the door has not reached the end position CLOSED. 0: No automatic open command 1: Automatically open command if end position CLOSED has not been reached *This function is only active if the operating mode automatic (P.980 = 0) or semi-automatic (P.980 = 1) has been set.*
P.980 -ww	0 ... 4	Operating mode	This parameter is used to set the operating mode for the controller. The following modes are possible: 0: OPEN and CLOSE move in self-holding (Automatic) 1: OPEN move in self-holding, CLOSE move in manual mode (partial automatic) 2: OPEN and CLOSE move in Manual mode (deadman) 3: Deadman emergency operation **ATTENTION** **All safety devices and limit switches are ignored.** *After turning off the controller, the controller changes in the operating mode "deadman"* 4: Endurance test with safety devices Automatic OPEN and CLOSE operation. Before each new operation the hold-open time P.010 is in effect. *The endurance test setting is lost after turning off the controller. The controller then reverts to manual mode.*

35 Display Text Language

P.	[Unit] Range	Function	Description/ Note
P.984 -ww	0 ... 1	Screensaver	Scrolling text specifically for use with OLED displays to protect against premature aging of individual pixels. 0: Deactivated 1: Activated
P.985 www	0 ... 3	Text language	The language used for displaying texts can be set with this parameter. 0: English text 1: German text 2: Spanish text 3: French text

36 Password

The password is not settable on the customer level

P.	[Unit] Range	Function	Description/ Note
P.996 www	0000 ... FFFF	Bridgeover DIP-Switch	Entry of the pre defined Password to bridgeover the Program mode-DIP-switch. If the right password is put in the DIP-switch is active.
P.999 -ww	0000 ... FFFF	Password	The password provides access to the various parameter levels. **There are different parameters visible depending on the password level.** **A changing of parameters without to know there functionality is forbidden.** **In order to avoid failure and endangering because of unauthorized access passwords are only allowed to give to trained staff.**

37 Factory Setting / Defaults

P.	[Unit] Range	Function	Description/ Note
P.990 -zz	0 ... 3	Factory setting	By setting and saving this parameter all parameter values are restored. 1: Load parameter set, which are adjusted ex works 2: Loads parameter set, which was stored before with P.997 = 2, from the internal storage. *After a software update the stored parameter set should not fit to the new program structure.* 3: Load the second duplicated parameter set that was previously saved with P.997 = 3 from internal memory. *After a software update the stored parameter set should not fit to the new program structure.*
P.997 -ww	0 ... 3	Storage of actual parameter settings	The actual parameter settings are stored in the internal storage. 0: The current parameter set is not saved. 2: The current parameter set is saved and can be loaded via P990 = 2 again. 3: The current parameter set is saved and can again be loaded via P 990 = 3 *The second parameter set can only be stored at the highest password level.*

38 Write access via remote connection

P.	[Unit] Range	Function	Description/ Note
P.83C --w	0 ... 1	Activate write access via remote connection	This parameter activates write access for remote connections. Parameters can only be written via RS485 if this is active. 0: Deactivated 1: Activated

39 Software update with RS485 Interface

The controller software can be updated with the RS485 Interface of the position encoder.

P.	[Unit] Range	Function	Description/ Note
P.989 -ww	0 ... 1	Start a software update	Starts the boot loader. Now the firmware update can be programmed via the encoder interface. The Cycle LED flashes while the bootloader is running. 1: With saving this setting the bootloader will start. **⚠ATTENTION** **Before starting the update, bring the gate into a safe position and secure it against unintentional movement.** **During the update process, outputs of the control unit may change their switching state. In the worst case, this can lead to an unintentional movement of the door, e.g. when the brake is released.**

40 Digital timer

40.1 Real time clock

P.	[Unit] Range	Function	Description/ Note
P.C00 rrr		The current time and date is shown.	The current time and date of the clock device is shown. This parameter is "read only". The shown text can be scrolled by pressing the OPEN or CLOSE key.
P.C01 -ww	00 ... 23	Adjusting of hours	This parameter is for adjusting the hours of the current time.
P.C02 -ww	00 ... 59	Adjusting of minutes	This parameter is for adjusting the minutes of the current time.
P.C03 -ww	00 ... 59	Adjusting of seconds	This parameter is for adjusting the seconds of the current time.
P.C04 -ww	0101 ... 1231	Adjusting of day and month	This parameter is for adjusting the day and month of the current date.
P.C06 -ww	2000 ... 2099	Adjusting of year	This parameter is for adjusting the year of the current date.

P.	[Unit] Range	Function	Description/ Note
P.C07 -ww	0 ... 3	Summer- / Wintertime adjustment	This parameter is for adjusting the automatic Summer- / Wintertime switching. 0: Change over deactivated 1: EU: Change over last Sunday in March from 02:00 am to 03:00 am and last Sunday in October from 03:00 am to 02:00 am 2: UK: Change over on last Sunday in March from 01:00 am to 02:00 am and on last Sunday in October from 02:00 am to 01:00 am 3: USA since 2007: Change over on second Sunday in March from 02:00 am to 03:00 am and on first Sunday in November from 03:00 am to 02:00 am

41 Diagnostic of the detector channels of the extension board.

P.	[Unit] Range	Function	Description/ Note
P.945 -ww	3 ... 4	Choice of detector channel for diagnosis	Choice of detector channel 3: Diagnosis data for detector channel 1 4: Diagnosis data for detector channel 2
P.946 -rr	[Hz]	Current frequency	This parameter shows the current frequency of the oscillating circuit of the detector channel set with parameter P.945.
P.947 -rr		Current disgruntlement	This parameter shows the current disgruntlement of the detector channel set with parameter P.945.
P.948 -rr		Max. disgruntlement	This parameter shows the max. disgruntlement, caused by the last metal object which activates the detector channel set by parameter P.945.
P.949 -rr		Presence counter	This parameter shows the presence counter of the detector channel set by parameter P.945

42 Breakaway-function

In case of an tripped breakaway input the breakaway counter will count up by 1.
In case of breakaway only dead man move is possible. The breakaway error must be resetet manually.

P.	[Unit] Range	Function	Description/ Note
P.871 rrr		Breakaway counter	This parameter shows the number of counted crashes.

43 Parameter Summary

P.	Function	Default	Changed of: at:	Page
A.480	Light curtain application	0		12
A.490	Application emergency opening test	0		123
A.830	Airlock mode	0000		120
A.F00	FSx Wireless safety system profile	0000		24
L.102	VEK MNST Deactivate	1		78
L.111	VEK MNST Request new adjustment	0		78
L.120	Frequency range of the detector VEK MNST Channel 1	17		79
L.121	Threshold value of the VEK MNST detector Channel 1	120		79
L.122	Off Threshold of the VEK MNST detector Channel 1	75 [%]		79
L.123	Hold time of the VEK MNST detector Channel 1	0 [minutes]		79
L.124	Frequency range of the detector VEK MNST Channel 2	17		80
L.125	Threshold value of the VEK MNST detector Channel 2	120		80
L.126	Off Threshold of the VEK MNST detector Channel 2	75 [%]		80
L.127	Hold time of the VEK MNST detector Channel 2	0 [minutes]		80
L.128	Frequency range of the detector VEK MNST Channel 3	17		81
L.129	Threshold value of the VEK MNST detector Channel 3	120		81
L.12A	Off Threshold of the VEK MNST detector Channel 3	75 [%]		81
L.12B	Hold time of the VEK MNST detector Channel 3	0 [minutes]		81
L.12C	Frequency range of the detector VEK MNST Channel 4	17		82
L.12D	Threshold value of the VEK MNST detector Channel 4	120		82
L.12E	Off Threshold of the VEK MNST detector Channel 4	75 [%]		82
L.12F	Hold time of the VEK MNST detector Channel 4	0 [minutes]		82
L.150	VEK MNST detector channel selection for diagnosis	1		83
L.152	Current frequency of the VEK MNST detector channel	ND		83
L.153	Current detuning of the VEK MNST detector channel	ND		83
L.154	Maximum detuning of the VEK MNST detector channel	ND		83
L.155	Presence counter of the VEK MNST detector channel	ND		83
L.160	Serial number Detector VEK MNST	ND		83
L.162	Software version Detector VEK MNST	ND		83
L.164	Hardware version Detector VEK MNST	ND		83
L.166	Bus protocol version Detector VEK MNST	ND		83
L.201	Light curtain 1 Assignment	0		13
L.207	Light curtain 1 Input profile safety area Input	1615		46
L.208	Light curtain 1 Input profile object protection area Input	0501		46
L.210	Light curtain 1 Operating mode	4		14
L.214	Light curtain 1 Blanking of a single light line	0		14
L.215	Light curtain 1 Teach-in	0		14
L.251	Light curtain 1 Recording of light beam interruption sequences	0		14
L.252	Light curtain 1 Recording Signal quality	0		14
L.254	Light curtain 1 Signal quality in sections	ND		14
L.255	Light curtain 1 Signal quality single light beams	ND		14
L.256	Light curtain 1 Storage of door run curves	0		15
L.257	Light curtain 1 VCC 24 V receiver	ND		15
L.258	Light curtain 1 VCC 24 V transmitter	ND		15
L.260	Light curtain 1 Serial Number Receiver	ND		15
L.261	Light curtain 1 Serial number transmitter	ND		15
L.262	Light curtain 1 Software Version Receiver	ND		15
L.263	Light curtain 1 Software version transmitter	ND		15

P.	Function	Default	Changed of: at:	Page
L.264	Light curtain 1 Hardware Version Receiver	ND		15
L.265	Light curtain 1 Hardware Version Transmitter	ND		15
L.266	Light curtain 1 Bus protocol version	ND		15
L.301	Light curtain 2 Assignment	0		15
L.307	Light curtain 2 Input profile safety area Input	1615		46
L.308	Light curtain 2 Input profile object protection area Input	0501		46
L.310	Light curtain 2 Operating mode	4		16
L.314	Light curtain 2 Blanking of a single light line	0		16
L.315	Light curtain 2 Teach-in	0		16
L.351	Light curtain 2 Recording of light beam interruption sequences	0		16
L.352	Light curtain 2 Recording Signal quality	0		16
L.354	Light curtain 2 Signal quality in sections	ND		16
L.355	Light curtain 2 Signal quality single light beams	ND		16
L.356	Light curtain 2 Storage of door run curves	0		17
L.357	Light curtain 2 VCC 24 V receiver	ND		17
L.358	Light curtain 2 VCC 24 V transmitter	ND		17
L.360	Light curtain 2 Serial Number Receiver	ND		17
L.361	Light curtain 2 Serial number transmitter	ND		17
L.362	Light curtain 2 Software Version Receiver	ND		17
L.363	Light curtain 2 Software version transmitter	ND		17
L.364	Light curtain 2 Hardware Version Receiver	ND		17
L.365	Light curtain 2 Hardware Version Transmitter	ND		17
L.366	Light curtain 2 Bus protocol version	ND		17
L.401	Light curtain 3 Assignment	0		17
L.407	Light curtain 3 Input profile safety area Input	1615		46
L.408	Light curtain 3 Input profile object protection area Input	0501		46
L.410	Light curtain 3 Operating mode	4		18
L.414	Light curtain 3 Blanking of a single light line	0		18
L.415	Light curtain 3 Teach-in	0		18
L.451	Light curtain 3 Recording of light beam interruption sequences	0		18
L.452	Light curtain 3 Recording Signal quality	0		18
L.454	Light curtain 3 Signal quality in sections	ND		18
L.455	Light curtain 3 Signal quality single light beams	ND		18
L.456	Light curtain 3 Storage of door run curves	0		19
L.457	Light curtain 3 VCC 24 V receiver	ND		19
L.458	Light curtain 3 VCC 24 V transmitter	ND		19
L.460	Light curtain 3 Serial Number Receiver	ND		19
L.461	Light curtain 3 Serial number transmitter	ND		19
L.462	Light curtain 3 Software Version Receiver	ND		19
L.463	Light curtain 3 Software version transmitter	ND		19
L.464	Light curtain 3 Hardware Version Receiver	ND		19
L.465	Light curtain 3 Hardware Version Transmitter	ND		19
L.466	Light curtain 3 Bus protocol version	ND		19
L.501	Light curtain 4 Assignment	0		19
L.507	Light curtain 4 Input profile safety area Input	1615		46
L.508	Light curtain 4 Input profile object protection area Input	0501		46
L.510	Light curtain 4 Operating mode	4		20
L.514	Light curtain 4 Blanking of a single light line	0		20
L.515	Light curtain 4 Teach-in	0		20
L.551	Light curtain 4 Recording of light beam interruption sequences	0		20
L.552	Light curtain 4 Recording Signal quality	0		20
L.554	Light curtain 4 Signal quality in sections	ND		20

P.	Function	Default	Changed of: at:	Page
L.555	Light curtain 4 Signal quality single light beams	ND		20
L.556	Light curtain 4 Storage of door run curves	0		21
L.557	Light curtain 4 VCC 24 V receiver	ND		21
L.558	Light curtain 4 VCC 24 V transmitter	ND		21
L.560	Light curtain 4 Serial Number Receiver	ND		21
L.561	Light curtain 4 Serial number transmitter	ND		21
L.562	Light curtain 4 Software Version Receiver	ND		21
L.563	Light curtain 4 Software version transmitter	ND		21
L.564	Light curtain 4 Hardware Version Receiver	ND		21
L.565	Light curtain 4 Hardware Version Transmitter	ND		21
L.566	Light curtain 4 Bus protocol version	ND		21
L.601	Motion detector 1 MWD BPC Assignment	0		84
L.602	Motion detector 1 Deactivation	1		84
L.61F	Motion detector 1 Profile	0001		84
L.660	Motion detector 1 Serial number	ND		84
L.662	Motion detector 1 Software version	ND		84
L.664	Motion detector 1 Hardware version	ND		84
L.666	Bus protocol version	ND		84
L.701	Motion detector 2 MWD BPC Assignment	0		85
L.702	Motion detector 2 Deactivation	1		85
L.71F	Motion detector 2 Profile	0001		85
L.760	Motion detector 2 Serial number	ND		85
L.762	Motion detector 2 Software version	ND		85
L.764	Motion detector 2 Hardware version	ND		85
L.766	Bus protocol version	ND		85
L.801	Motion detector 3 MWD BPC Assignment	0		86
L.802	Motion detector 3 Deactivation	1		86
L.81F	Motion detector 3 Profile	0001		86
L.860	Motion detector 3 Serial number	ND		86
L.862	Motion detector 3 Software version	ND		86
L.864	Motion detector 3 Hardware version	ND		86
L.866	Bus protocol version	ND		86
L.901	Motion detector 4 MWD BPC Assignment	0		87
L.902	Motion detector 4 Deactivation	1		87
L.91F	Motion detector 4 Profile	0001		87
L.960	Motion detector 4 Serial number	ND		87
L.962	Motion detector 4 Software version	ND		87
L.964	Motion detector 4 Hardware version	ND		87
L.966	Bus protocol version	ND		87
L.B01	TST UTA 1 Assignment	0		32
L.B02	TST UTA 1 Activation	1		33
L.B07	TST UTA 1 Function of the Open key Input	1501		46
L.B08	TST UTA 1 Input Profile STOP button Input	1506		46
L.B09	TST UTA 1 Inputprofile CLOSE button Input	1502		46
L.B0C	TST UTA 1 Outputprofile RED LED Output 0	12AD		89
L.B0D	TST UTA 1 Outputprofile GREEN LED Output 0	1295		89
L.B0E	TST UTA 1 Outputprofile BLUE LED Output 0	0000		89
L.B13	TST UTA 1 Linking of an output with OPEN LED	0		34
L.B14	TST UTA 1 Linking of an output with CLOSE LED	0		35
L.B15	TST UTA 1 Linking of an output with STOP LED	0		35
L.B16	TST UTA 1 Activate Bluetooth interface	0		36
L.B60	TST UTA 1 Serial number	ND		36
L.B62	TST UTA 1 Software version	ND		36
L.B64	TST UTA 1 Hardware version	ND		36
L.B66	TST UTA 1 Bus protocol version	ND		37

P.	Function	Default	Changed of: at:	Page
L.C01	TST UTA 2 Assignment	0		37
L.C02	TST UTA 2 Activation	1		37
L.C07	TST UTA 2 Function of the Open key Input	1501		46
L.C08	TST UTA 2 Input Profile STOP button Input	1506		46
L.C09	TST UTA 2 Input Profile CLOSE button Input	1502		46
L.C0C	TST UTA 2 Outputprofile Red LED Output 0	12AD		89
L.C0D	TST UTA 2 Outputprofile green LED Output 0	1295		89
L.C0E	TST UTA 2 Outputprofile BLUE LED Output 0	0000		89
L.C13	TST UTA 2 Linking of an output with OPEN LED	0		38
L.C14	TST UTA 2 Linking of an output with CLOSE LED	0		39
L.C15	TST UTA 2 Linking of an output with STOP LED	0		39
L.C16	TST UTA 2 Activate Bluetooth interface	0		40
L.C60	TST UTA 2 serial number	ND		40
L.C62	TST UTA 2 Software version	ND		40
L.C64	TST UTA 2 Hardware version	ND		40
L.C66	TST UTA 2 Bus protocol version	ND		41
P.000	Cycle counter	ND [Cycles]		6
P.005	Maintenance counter	ND [Cycles]		6
P.010	Auto close time 1	10 [Seconds]		6
P.011	Auto close time 2	10 [Seconds]		6
P.012	Forced closing time	0 [Seconds]		7
P.020	Pre-warning time before open	0 [10 ms]		6
P.025	Pre-warning time before closing	0 [Seconds]		6
P.026	Pre-warning time before closing from between the end positions	0		7
P.10A	Motor type	0		7
P.130	Motor rotary field	0		7
P.202	Transmission ratio	ND		7
P.205	Selecting the positioning system profile	ZW		8
P.210	New teaching of the end positions	5		8
P.215	Requesting correction of the limit switch bands	0		9
P.221	Correction value End position door CLOSE	0 [Increments]		9
P.231	Correction value End position Door OPEN	0 [Increments]		10
P.25F	Synchronization type profile	ND		10
P.44A	Range	4,0 [m]		12
P.460	Profile internal safety edge	6		32
P.466	External testing of safety edge	0		32
P.495	Endposition of testing	0 [Increments]		123
P.501	Function of Input 1	0101		42
P.502	Function of Input 2	0401		46
P.503	Function of Input 3	0701		46
P.504	Function of Input 4	0201		46
P.505	Function of Input 5	0501		46
P.506	Function of Input 6	0301		46
P.507	Function of Input 7	0601		46
P.508	Function of Input 8	ND		46
P.509	Function of Input 9	ND		46
P.50A	Function of Input 10	1001		46
P.701	Function of Output 1	0101		74
P.702	Function of Output 2	0201		74
P.705	Function of Output 5	1220		74
P.706	Function of Output 6	1201		74
P.707	Function of Output 7	1250		74
P.708	Function of Output 8	1210		74
P.709	Function of Output 9	0000		74

P.	Function	Default	Changed of: at:	Page
P.70A	Function of Output 10	0000		74
P.70B	Function of Output 11	0001		74
P.70F	Function of output 15	0001		74
P.800	Activate Expansion board	0		124
P.802	Function of the expansion slot	0202		124
P.810	Block time Detector Channel 1 and OPEN 1	0 [Seconds]		75
P.820	Block time Detector Channel 2 and OPEN 2	0 [Seconds]		75
P.83C	Activate write access via remote connection	0		127
P.871	Breakaway counter	ND		129
P.890	Locking of Close commands from detector	1		75
P.894	Automatic open command	0		125
P.8BA	Specialization of a safety function A to E in operating mode 7	0		12
P.910	Display mode selection	0		121
P.91F	Information memory	0		122
P.920	Error Memory	0		122
P.921	Feig serial number	ND		122
P.922	Customer number	0000000000		122
P.923	Authorisation number	00000		122
P.925	Software Version	ND		122
P.926	Software version of additional board	ND		122
P.927	Serial number	0000000000		123
P.929	RFUxIO software version	ND		123
P.92A	Software version FSx mobile unit	ND		22
P.92B	Software version FSx stationary unit	ND		22
P.92C	TST RBA Serial number	ND		123
P.92D	TST RBA Software version	ND		123
P.930	Motor run-time	ND [Seconds]		123
P.931	Software version transmitter	ND		12
P.932	Software version receiver	ND		13
P.933	Serial number transmitter	ND		13
P.934	Serial number receiver	ND		13
P.935	Error bit transmitter	ND [Digits]		13
P.936	Error bit receiver	ND [Digits]		13
P.937	Aligning mode	0		13
P.938	Light line quality	ND		13
P.93C	Error counter RS485	0		13
P.945	Choice of detector channel for diagnosis	3		129
P.946	Current frequency	ND [Hz]		129
P.947	Current disgruntlement	ND		129
P.948	Max. disgruntlement	ND		129
P.949	Presence counter	ND		129
P.94C	CAN-Bus-Diagnoses of extension board	ND		125
P.950	Current position	ND [Increments]		124
P.951	Current counter state	ND [Digits]		124
P.953	Diagnostic of TST PD	ND [Digits]		124
P.954	Bus diagnostic of encoder	0		124
P.955	Bus Diagnostic of TST PD	0		124
P.957	CAN error rate counter - Percent error rate per hour	ND		22
P.958	Software version of position encoder TST PD2	ND		124
P.959	Serial number of position encoder TST PD2	ND		124
P.973	Resetting the maintenance counter	0		6
P.980	Operating mode	ND		125
P.984	Screensaver	0		126

P.	Function	Default	Changed of: at:	Page
P.985	Text language	1		126
P.989	Start a software update	0		128
P.990	Factory setting	0		127
P.996	Bridgeover DIP-Switch	0000		126
P.997	Storage of actual parameter settings	0		127
P.999	Password	0000		126
P.9F0	Capacity of battery	0 [%]		22
P.9F1	Battery voltage of radio safety system	ND [Volt]		22
P.9F2	Wireless status	ND [%]		22
P.9F3	Error counter FSx	ND		22
P.A01	Function of Input 21	0104		47
P.A02	Function of Input 22	0901		47
P.A03	Function of Input 23	0501		47
P.A04	Function of Input 24	0106		47
P.A05	Function of Input 25	0109		47
P.A06	Function of Input 26	1002		47
P.B6D	Sampled-data filter	1		75
P.B6E	Calling new adjustment	0		75
P.BC2	Frequency range of detector channel 3	4		76
P.BC3	Threshold level of detector channel 3	12		76
P.BC4	Hysteresis of detector channel 3	75		76
P.BC5	Holding time of detector channel 3	0		77
P.BD2	Frequency range of detector channel 4	4		77
P.BD3	Threshold level of detector channel 4	12		77
P.BD4	Hysteresis of detector channel 4	75		78
P.BD5	Holding time of detector channel 4	0		78
P.C00	The current time and date is shown.	ND		128
P.C01	Adjusting of hours	ND		128
P.C02	Adjusting of minutes	ND		128
P.C03	Adjusting of seconds	ND		128
P.C04	Adjusting of day and month	ND		128
P.C06	Adjusting of year	ND		128
P.C07	Summer- / Wintertime adjustment	0		129
P.D0A	Function of output 2A	0000		90
P.D0B	Function of output 2B	0001		90
P.D0C	Function of output 2C	0001		90
P.D0D	Function of output 2D	0001		90
P.D0E	Function of output 2E	0001		90
P.D0F	Function of output 2F	0001		90
P.F00	Activation of the wireless	0		23
P.F01	Timeout for the wireless	50 [ms]		23
P.F05	Channelgroup	1		23
P.F07	Address of the mobile unit	00000000		23
P.F09	Battery nominal voltage	3,6 [Volt]		23
P.F10	Mode input 1	0		25
P.F11	Safety	2		26
P.F12	Contact type of the input	0		26
P.F13	Debouncing time	1		26
P.F16	Output	1		26
P.F17	Direction 1	0		26
P.F18	Handshake	0		26
P.F19	LCD Messages	0		27
P.F1F	Function input 1	0000		24
P.F20	Mode input 2	0		27
P.F21	Safety	2		27

P.	Function	Default	Changed of: at:	Page
P.F22	Contact type of the input	0		27
P.F23	Debouncing Time	1		27
P.F26	Output	1		27
P.F27	Direction 2	0		27
P.F28	Handshake	0		28
P.F29	LCD Messages	0		28
P.F2F	Function input 2	0000		24
P.F30	Mode input 3	0		28
P.F31	Safety	2		28
P.F32	Contact type of the input	0		28
P.F33	Debouncing time	1		28
P.F36	Output	1		29
P.F37	Direction 3	0		29
P.F38	Handshake	0		29
P.F39	LCD Messages	0		29
P.F3F	Function input 3	0000		25
P.F40	Mode input 4	0		29
P.F41	Safety	2		30
P.F42	Contact type of the input	0		30
P.F43	Debouncing time	1		30
P.F46	Output	1		30
P.F47	Direction 4	0		30
P.F48	Handshake	0		30
P.F49	LCD Messages	0		30
P.F4F	Function input 4	0000		25
P.FA9	LCD- Messages	0		31
P.FB9	LCD Messages	0		31
P.FC9	LCD Messages	0		31
P.FF2	Mode output 2	0		23