

# INSTRUCTION MANUAL DAAB OUTPUT CARD DB407

For automatic control unit DAAB EP104 with software version 4.07







### **Technical data**

Dimensions (WxHxD)	44x90x24 mm
Temperature range	0 to 50°C
Indications	6x LEDs
Outputs	1x triac output 0.75A, 24-230VAC 5x relay outputs max 6A resistive load per relay output at 230VAC or 2A at 24VDC
Degree of protection	The circuit board is intended for internal installation in an enclosure

## **Safety instructions**

See operating manual for automatic control unit EP104.

## **General description**

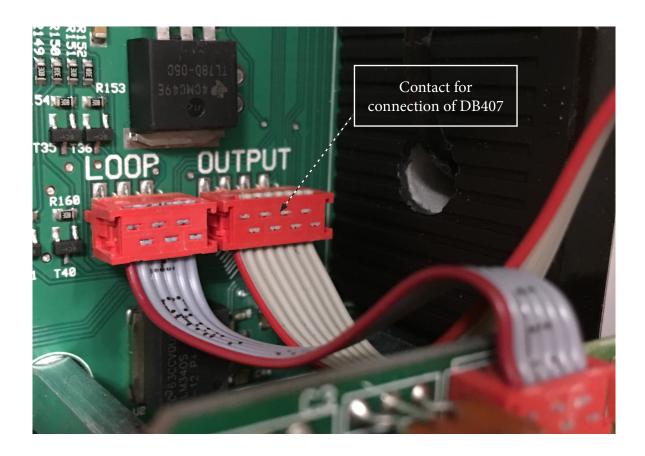
Add-in card to obtain 6x outputs on EP104. All the outputs have programmable function. Output functions are set on EP104.

If output o4 is used, the supply voltage must be of AC type, alternating current, as this output is of the triac type. Note that i2 is common to o3 and o4.

The status of the outputs indicated by LEDs installed at the top of the card. A lit LED indicates closed function.

#### Installation

- 1. Discharge any static charge in your body by touching an earthed connection before starting installation.
- 2. Disconnect power to EP104
- 3. Screw the DB407 board into place on the spacers on the EP104 using two M4x6 screws.
- 4. Connect cable to "OUTPUT" cable.
- 5. Connect the board as described in Connection.



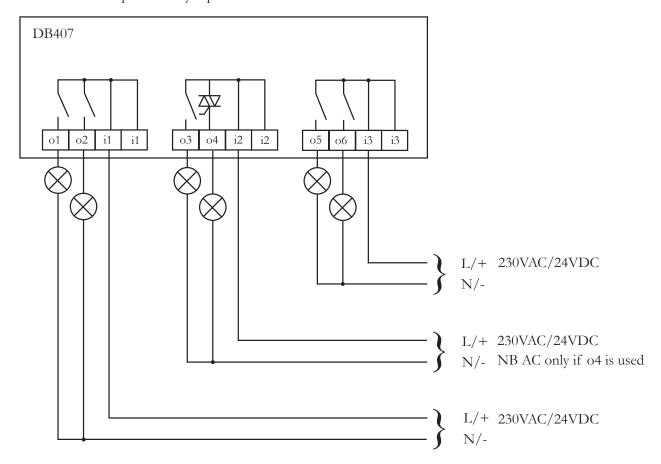




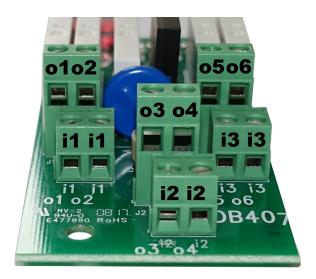
#### **Connection**

If extra low voltage is used together with low voltage, cables connected to groups i1, o1, o2 and i2, o3, o4 and i3, o5, o6 must be secured with cable ties as close to the terminal as possible.

Connection must be performed by a qualified electrician.



If o4 is used for AC and o3 is to be used for DC, o3 can control an interposing relay



When the board has been installed and connected, the power supply to EP104 can be switched on.



## Functions using add-in card DB407

With DB410 installed there is access to five programmable relay outputs and one triac output. These outputs are grouped into three groups with two common positions. Note that the positions located closest to the printed circuit board on each terminal are the common positions. These positions are marked i1, i2 and i3. The outputs are the upper terminal positions.

#### Functions of programmable outputs 1 - 6

The instructions are identical for all six programmable outputs, apart from the channel number – output 1 has channel number o1nn, output 2 has channel number o2nn, etc. The settings below are for output 1.

Activate programmable output 1 by setting o100 to the desired function. A value of 0 means that the output is disabled (open) regardless of the settings of other channels.

If you set the value to 1, the output can be used as a traffic light signal based on the position indication. Movement and warning time signals are also available with this setting. The value 2 is for presence detection in the vehicle loop, the value 3 is for motor locks, and the value four turns the output into an alarm output.

#### Channel o110 Open position

Set to 1 for a constant signal in the open position.

#### Channel o111 Mid position

Set 1 to obtain constant signal in mid position.

#### Channel o112 Closed position

Set 1 to obtain constant signal in closed position.

Example for a green light: o110 = 1, o111 = 0, o112 = 0.

Example for a red light: o110 = 0, o111 = 1, o112 = 1.

#### Channel o113 Movement

Use this channel to specify function during movement. The function will be active as soon as the door starts moving. See the channel reference for the available options. Only output 4 is able to send a flashing signal.

#### Channel o120 Warning time before start

Settable time 0.00 – 9.59 minutes, where 0.0 means closed. Which function is to be warned is selected in o121.

#### Channel o121 Warning function in combination with channel o120

Set value 1 to obtain constant signal before automatic close, 2 to obtain constant signal before park and automatic close, 3 to obtain constant signal before close signal, park and automatic close, 4 for signal before all control signals.

#### Channel o122 Function during warning

Select 1 if the output signal is to be disabled during storing in any output.

Select 2 if the output is to continue to indicate position or movement regardless of warning.

Channel o130 Delay for alarms specified in o131 and o132. The alarm is delayed by the set time of 0.00 - 9.59 minutes. The factory setting is 0.00.

#### Channel o131-o142 Alarm in different conditions

If it is set to 1, the output gives a signal when the condition, according to the channel specification, has been fulfilled for longer than the time set in o130.

Select the output to be normally open or normally closed by setting channel o183 to:

The value 1 is for normally open (NO) and the value 2 is for normally closed (NC).

#### Channel o191 Function when LOOP1, LOOP2 or PHOTO are activated:

Used to set the presence detection required from the vehicle loop. See the channel reference for the available options.

#### Function of programmable output 4

In principle, programmable output 4 is the same as outputs 1, 2, 3, 5 and 6, except that it is a triac output. The settings are the same for outputs 1 to 6, except that the alternative for flashing signal only exists for output 4. See the channel reference for the channel settings.





#### Fence alarm

Outputs o1 or 2 are available for fence alarms. Note that i1+i1 are two common inputs for o1 and o2. If there is a voltage drop, these outputs are open, NO. Remember that the outputs must be connected so that the fence alarm is activated if a cable is detached, there is a break in a cable or the EP104 loses its power supply. Specify the following settings to use output 1 for fence alarm.

- o100 = 1, Position indication.
- o110 = 1, Signal in open position.
- o111 = 1, Signal in mid position.
- o113 = 3, Signal in opening/closing movement.
- o114 = Delay in switch-off, at least 1 second according to alarm manufacturer's instructions.
- o120 = Warning test before start, according to the alarm manufacturer's instructions.
- o121 = 4, Constant signal before all movements.
- o122 = 2, Output signal as configured in o110-o113.





## • Channel list, o-channels

No.	Nam	ne	Range	Factory	Setting		
o100	Func	ction of output 1	0 - 4	1			
	0	Disabled	•				
	1	Position indication/Movement/Warning. Signal as co.	nfigured in o110 – o122				
	2 Presence detection/Direction sensing. Signal as configured in o191						
	3	3 Lock					
	4	Alarm output Signal as configured in o130 – o142					
o110	Opei	n position	0 - 1	1			
	0	Disabled					
	1	Constant signal					
o111	Mid	position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o112	Close	ed position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o113	Movement		0 - 4	4			
	0	Disabled					
	1	Constant signal in the opening movement					
	2	2 Constant signal in the closing movement					
	3	3 Constant signal in the opening and closing movement					
	4 No signal during movement, used in combination with o110, o111 and o112.						
o114		yed switch-off Switch off after the specified time For aple to switch off lighting a specified time after closing	0.00-9.59 minutes	0.00			
o120	Warı	ning time before start	0.00-9.59 minutes	0.00			
o121	Warı	ning function in combination with o120	1 - 4	2			
	1	Constant signal before automatic closing					
	2 Constant signal before park and automatic closing						
	3 Constant signal before close signal, park and automatic closing						
	4	Constant signal before all signals					
o122	Func	tion during warning time	1 - 2	1			
	1	Output signal disabled during warning in other outpu	ıt				
!							





No.	Name	Range	Factory	Setting		
o130*	Alarm if there is an error as configured in o131-o139. The alarm is activated for at least the time set in this channel.	0.00-9.59 minutes	0.00			
o131*	Alarm for faulty safety edge. Time as in o130.	0 - 1	0			
	0 Disabled					
	1 Constant signal					
o132*	Alarm for critical error message in display	0 - 1	0			
	0 Disabled					
	1 Constant signal					
o133*	Alarm if stop circuit interrupted	0 - 1	0			
	0 Disabled					
	1 Constant signal					
o134*	Alarm if door open 0 - 1 0					
	0 Disabled	·	•			
	1 Constant signal		,			
o135*	Alarm if door is in mid position	0 - 1	0			
	0 Disabled	•	•	•		
	1 Constant signal					
o136*	Alarm if door is in closed position	0 - 1	0			
	0 Disabled	<u>'</u>		•		
	1 Constant signal		,			
o137*	Alarm if vehicle loop 1 is activated 0 - 1 0					
	0 Disabled	·		•		
	1 Constant signal					
o138*	Alarm if vehicle loop 2 is activated	0 - 1	0			
	0 Disabled	'				
	1 Constant signal					
o139*	Alarm if photocell interrupted	0 - 1	0			
	0 Disabled	,				
	1 Constant signal					
o142*	Alarm for uncritical error message in display	0 - 1	0			
	0 Disabled					
	1 Constant signal					
o183	Inversion of contact function for output	1 - 2	1			
	1 Normally open, NO					
	2 Normally closed, NC		,			

<sup>\*</sup> = Only when o100 is set to 4.





o191		ction when LOOP2, LOOP2 or PHOTO vated	01 - 14	01			
	01	Presence detection Signal when LOOP1 is acti	vated, remains until LO	OP1 is clea	ır.		
	02	Presence detection Signal when LOOP2 is acti	vated, remains until LO	OP2 is clea	ır.		
	03	Presence detection Signal when both LOOP1 a LOOP1 or LOOP2 is clear.	and LOOP2 are activated	d, remains	until either		
	04	Presence detection Signal when PHOTO is act	ivated, remains until PH	HOTO is cl	ear.		
	05	Presence detection Signal when PHOTO and I or LOOP1 is clear.	LOOP1 are activated, rea	mains unti	l either PHOTO		
	06	Of Presence detection Signal when PHOTO and LOOP2 are activated, remains until either PHOTO or LOOP2 is clear.					
	07	Presence detection Signal when PHOTO, LOC PHOTO, LOOP1 or LOOP2 is clear.	P1 and LOOP2 are acti	vated, rem	ains until either		
	08	Presence detection Signal when either LOOP1 LOOP1 or LOOP2 is clear.	or LOOP2 is activated,	remains u	ntil either		
	09	Direction sensing Signal when first LOOP1 and then LOOP2 are activated. The signal remains until LOOP2 is clear.					
	10	Direction sensing Signal when first LOOP1 an until PHOTO is clear.	d then PHOTO are activ	vated. The	signal remains		
	11	Direction sensing Signal when first LOOP2 an until LOOP1 is clear.	d then LOOP1 are activ	ated. The s	ignal remains		
	12	Direction sensing Signal when first LOOP2 an until PHOTO is clear.	d then PHOTO are activ	vated. The	signal remains		
	13	Direction sensing Signal when first PHOTO at until LOOP1 is clear.	nd then LOOP1 are activ	vated. The	signal remains		
	14	Direction sensing Signal when first PHOTO at until LOOP2 is clear.	nd then LOOP2 are activ	vated. The	signal remains		





No.	Nam	ne	Range	Factory	Setting			
o200	Func	ction of output 2	0 - 4	1				
	0	Disabled			•			
	1	Position indication/Movement/Warning. Signal as configured in o210 – o222						
	2	2 Presence detection/Direction sensing. Signal as configured in o291						
	3	Lock						
	4	Alarm output Signal as configured in o230 – o242						
o210	Ope	Open position 0 - 1 0						
	0	Disabled						
	1 Constant signal							
o211	Mid	position	0 - 1	0				
	0	Disabled	•	•				
	1	Constant signal						
o212	Clos	ed position	0 - 1	1				
	0	Disabled						
	1	Constant signal						
o213	Movement		0 - 4	4				
	0	Disabled		•	•			
	1	Constant signal in the opening movement						
	2 Constant signal in the closing movement							
	3	3 Constant signal in the opening and closing movement						
	4 No signal during movement, used in combination with o210, o211 and o212.							
o214		yed switch-off Switch off after the specified time For nple to switch off lighting a specified time after closing	0.00-9.59 minutes	0.00				
o220	Warı	ning time before start	0.00-9.59 minutes	0.00				
o221	War	ning function in combination with o220	1 - 4	2				
	1	Constant signal before automatic closing		•	•			
	2	Constant signal before park and automatic closing						
	3 Constant signal before close signal, park and automatic closing							
	4	Constant signal before all signals						
o222	Func	ction during warning time	1 - 2	1				
	1	Output signal disabled during warning in other output						
	2	Output signal as configured in o210-o213						





No.	Nam	ne	Range	Factory	Setting		
o230*		m if there is an error as configured in o231-o239. The n is activated for at least the time set in this channel.	0.00-9.59 minutes	0.00			
o231*	Alar	m for faulty safety edge. Time as in o230.	0 - 1	0			
	0	Constant signal					
	1	Active					
o232*	Alar	m for uncritical error message in display	0 - 1	0			
	0	Constant signal					
	1	Active					
o233*	Alar	m if stop circuit interrupted	0 - 1	0			
	0	Disabled					
	1 Constant signal						
o234*	Alar	m if door open	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o235*	Alar	m if door is in mid position	0 - 1	0			
	0	Disabled	•	•			
	1	Constant signal					
o236*	Alar	m if door is in closed position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o237*	Alar	m if vehicle loop 1 is activated	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o238*	Alar	m if vehicle loop 2 is activated	0 - 1	0			
	0	Disabled	•	•			
	1	Constant signal					
o239*	Alar	m if photocell interrupted	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o242*	Alar	m for uncritical error message in display	0 - 1	0			
	0	Disabled	,				
	1	Constant signal					
o283	Inve	rsion of contact function for output	1 - 2	1			
	1	Normally open, NO					
	2	Normally closed, NC		,			

<sup>\*</sup> = Only when o200 is set to 4.





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o291	Func	nction when SL.1, SL.2 or photocell/loop activated 01 - 14 01	
	01	Presence detection Signal when LOOP1 is activated, remains until LOOP1 is clear.	
	02	Presence detection Signal when LOOP2 is activated, remains until LOOP2 is clear.	
	03	Presence detection Signal when both LOOP1 and LOOP2 are activated, remains until eit or LOOP2 is clear.	her LOOP1
	04	Presence detection Signal when PHOTO is activated, remains until PHOTO is clear.	
	05	Presence detection Signal when PHOTO and LOOP1 are activated, remains until either LOOP1 is clear.	PHOTO or
	06	Presence detection Signal when PHOTO and LOOP2 are activated, remains until either LOOP2 is clear.	PHOTO or
	07	Presence detection Signal when PHOTO, LOOP1 and LOOP2 are activated, remains unt PHOTO, LOOP1 or LOOP2 is clear.	il either
	08	Presence detection Signal when either LOOP1 or LOOP2 is activated, remains until either to LOOP2 is clear.	er LOOP1
	09	Direction sensing Signal when first LOOP1 and then LOOP2 are activated. The signal red LOOP2 is clear.	mains until
	10	Direction sensing Signal when first LOOP1 and then PHOTO are activated. The signal reuntil PHOTO is clear.	emains
	11	Direction sensing Signal when first LOOP2 and then LOOP1 are activated. The signal red LOOP1 is clear.	mains until
	12	Direction sensing Signal when first LOOP2 and then PHOTO are activated. The signal reuntil PHOTO is clear.	emains
	13	Direction sensing Signal when first PHOTO and then LOOP1 are activated. The signal reuntil LOOP1 is clear.	emains
	14	Direction sensing Signal when first PHOTO and then LOOP2 are activated. The signal reuntil LOOP2 is clear.	emains





No.	Nan	ne	Range	Factory	Setting		
o300	Fund	ction of output 3	0 - 4	1			
	0	Disabled	•	•			
	Position indication/Movement/Warning. Signal as configured in o310 – o322						
	2 Presence detection/Direction sensing. Signal as configured in o391						
	3	Lock					
	4	Alarm output Signal as configured in o330 – o342					
o310	Ope	n position	0 - 1	1			
	0	Disabled		•	-		
	1	Constant signal					
o311	Mid	position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o312	Clos	ed position	0 - 1	0			
	0	Disabled	I.				
	1	Constant signal		,	1		
o313	Movement		0 - 4	4			
	0	Disabled			•		
	1	Constant signal in the opening movement					
	2						
	3	3 Constant signal in the opening and closing movement					
	4 No signal during movement, used in combination with o310, o311 and o312.						
o314		yed switch-off Switch off after the specified time For nple to switch off lighting a specified time after closing	0.00-9.59 minutes	0.00			
o320	War	ning time before start	0.00-9.59 minutes	0.00			
o321	War	ning function in combination with o320	1 - 4	2			
	1	Constant signal before automatic closing			•		
	2						
	3 Constant signal before close signal, park and automatic closing						
	3	Constant signal before close signal, park and automat	ic closing				
	3	Constant signal before close signal, park and automat  Constant signal before all signals	ic closing				
o322	4	9 9	1 - 2	1			
o322	4	Constant signal before all signals	1 - 2	1			





No.	Name	Range	Factory	Setting				
o330*	Alarm if there is an error as configured in o331-o339. The alarm is activated for at least the time set in this channel.		0.00					
o331*	Alarm for faulty safety edge. Time as in o330.	0 - 1	0					
	0 Disabled		,					
	1 Constant signal							
o332*	Alarm for critical error message in display	0 - 1	0					
	0 Disabled							
	1 Constant signal							
o333*	Alarm if stop circuit interrupted	0 - 1	0					
	0 Disabled							
	1 Constant signal							
o334*	Alarm if door open	0 - 1	0					
	0 Disabled							
	1 Constant signal		'					
o335*	Alarm if door is in mid position	0 - 1	0					
	0 Disabled	•						
	1 Constant signal							
o336*	Alarm if door is in closed position	0 - 1	0					
	0 Disabled							
	1 Constant signal							
o337*	Alarm if vehicle loop 1 is activated	0 - 1	0					
	0 Disabled	•	·	•				
	1 Constant signal	,						
o338*	Alarm if vehicle loop 2 is activated	0 - 1	0					
	0 Disabled	'						
	1 Constant signal							
o339*	Alarm if photocell interrupted	0 - 1	0					
	0 Disabled							
	1 Constant signal							
o342*	Alarm for uncritical error message in display	0 - 1	0					
	0 Disabled	<u> </u>						
	1 Constant signal							
o383	Inversion of contact function for output	1 - 2	1					
	1 Normally open, NO		1					
	2 Normally closed, NC	,	1					

<sup>\*</sup> = Only when o300 is set to 4.



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Func	tion when SL.1, SL.2 or photocell/loop activated	01 - 14	01	
01	Presence detection Signal when LOOP1 is activated, r	remains until LOOP1 is	clear.	
02	Presence detection Signal when LOOP2 is activated, r	remains until LOOP2 is	clear.	
03	Presence detection Signal when both LOOP1 and LO or LOOP2 is clear.	OP2 are activated, rema	ins until ei	ther LOOP1
<ul> <li>Presence detection Signal when PHOTO is activated, remains until PHOTO is clear.</li> <li>Presence detection Signal when PHOTO and LOOP1 are activated, remains until either PHOTO of LOOP1 is clear.</li> </ul>				
til either				
08	Presence detection Signal when either LOOP1 or LOO or LOOP2 is clear.	OP2 is activated, remain	s until eith	er LOOP1
09	Direction sensing Signal when first LOOP1 and then LOOP2 is clear.	LOOP2 are activated. The	ne signal re	emains until
10	Direction sensing Signal when first LOOP1 and then until PHOTO is clear.	PHOTO are activated. T	he signal 1	remains
11	Direction sensing Signal when first LOOP2 and then LOOP1 is clear.	LOOP1 are activated. The	ne signal re	emains until
Direction sensing Signal when first LOOP2 and then PHOTO are activated. The signal remains until PHOTO is clear.				
13	Direction sensing Signal when first PHOTO and then until LOOP1 is clear.	LOOP1 are activated. T	he signal 1	remains
14	Direction sensing Signal when first PHOTO and then until LOOP2 is clear.	LOOP2 are activated. T	he signal 1	remains
	01 02 03 04 05 06 07 08 09 10 11 12	Presence detection Signal when LOOP2 is activated, ror LOOP2 is clear.  Or LOOP2 is clear.  Presence detection Signal when PHOTO is activated, presence detection Signal when PHOTO and LOOP1 LOOP1 is clear.  Presence detection Signal when PHOTO and LOOP1 LOOP2 is clear.  Presence detection Signal when PHOTO and LOOP2 LOOP2 is clear.  Presence detection Signal when PHOTO, LOOP1 and PHOTO, LOOP1 or LOOP2 is clear.  Presence detection Signal when either LOOP1 or LOOp1 or LOOP2 is clear.  Direction sensing Signal when first LOOP1 and then LOOP2 is clear.  Direction sensing Signal when first LOOP1 and then until PHOTO is clear.  Direction sensing Signal when first LOOP2 and then LOOP1 is clear.  Direction sensing Signal when first LOOP2 and then until PHOTO is clear.  Direction sensing Signal when first PHOTO and then until LOOP1 is clear.  Direction sensing Signal when first PHOTO and then until LOOP1 is clear.	<ul> <li>Presence detection Signal when LOOP1 is activated, remains until LOOP1 is</li> <li>Presence detection Signal when LOOP2 is activated, remains until LOOP2 is</li> <li>Presence detection Signal when both LOOP1 and LOOP2 are activated, remains or LOOP2 is clear.</li> <li>Presence detection Signal when PHOTO is activated, remains until PHOTO is</li> <li>Presence detection Signal when PHOTO and LOOP1 are activated, remains undoP1 is clear.</li> <li>Presence detection Signal when PHOTO and LOOP2 are activated, remains undoP1 is clear.</li> <li>Presence detection Signal when PHOTO, LOOP1 and LOOP2 are activated, remains undoPHOTO, LOOP1 or LOOP2 is clear.</li> <li>Presence detection Signal when either LOOP1 or LOOP2 is activated, remain or LOOP2 is clear.</li> <li>Direction sensing Signal when first LOOP1 and then LOOP2 are activated. The LOOP2 is clear.</li> <li>Direction sensing Signal when first LOOP1 and then PHOTO are activated. The LOOP1 is clear.</li> <li>Direction sensing Signal when first LOOP2 and then LOOP1 are activated. The LOOP1 is clear.</li> <li>Direction sensing Signal when first LOOP2 and then PHOTO are activated. The LOOP1 is clear.</li> <li>Direction sensing Signal when first LOOP2 and then PHOTO are activated. The LOOP1 is clear.</li> <li>Direction sensing Signal when first PHOTO and then LOOP1 are activated. The Until PHOTO is clear.</li> <li>Direction sensing Signal when first PHOTO and then LOOP1 are activated. The Until LOOP1 is clear.</li> <li>Direction sensing Signal when first PHOTO and then LOOP2 are activated. The Until LOOP1 is clear.</li> </ul>	Presence detection Signal when LOOP1 is activated, remains until LOOP1 is clear.  Presence detection Signal when LOOP2 is activated, remains until LOOP2 is clear.  Presence detection Signal when both LOOP1 and LOOP2 are activated, remains until eigon LOOP2 is clear.  Presence detection Signal when PHOTO is activated, remains until PHOTO is clear.  Presence detection Signal when PHOTO and LOOP1 are activated, remains until either LOOP1 is clear.  Presence detection Signal when PHOTO and LOOP2 are activated, remains until either LOOP2 is clear.  Presence detection Signal when PHOTO, LOOP1 and LOOP2 are activated, remains until either LOOP2 is clear.  Presence detection Signal when either LOOP1 or LOOP2 is activated, remains until either LOOP2 is clear.  Presence detection Signal when either LOOP1 or LOOP2 is activated, remains until either LOOP2 is clear.  Direction sensing Signal when first LOOP1 and then LOOP2 are activated. The signal relativated is clear.  Direction sensing Signal when first LOOP1 and then PHOTO are activated. The signal relativated is clear.  Direction sensing Signal when first LOOP2 and then LOOP1 are activated. The signal relativated is clear.  Direction sensing Signal when first LOOP2 and then PHOTO are activated. The signal relativated is clear.  Direction sensing Signal when first LOOP2 and then PHOTO are activated. The signal relativated is clear.  Direction sensing Signal when first PHOTO and then LOOP1 are activated. The signal relativated is clear.





No.	Nam	e	Range	Factory	Setting		
o400	Func	tion of output 4	0 - 4	0			
	0	Disabled					
	1	Position indication/Movement/Warning. Signal as configured in o410 – o422					
	2	Presence detection/Direction sensing. Signal as configured in o491					
	3	Lock					
	4	Alarm output Signal as configured in o430 – o442					
o410	Oper	position	0 - 2	0			
	0	Disabled	'				
	1	Constant signal					
	2	Flashing signal					
o411	Mid	position	0 - 2	1			
	0	Disabled					
	1	Constant signal					
	2	Flashing signal					
o412	Close	ed position	0 - 2	1			
	0	Disabled					
	1	Constant signal					
	2	Flashing signal					
o413	Move	ement	0 - 7	0			
	0	Disabled					
	1	Constant signal in the opening movement					
	2	Constant signal in the closing movement					
	3	Constant signal in the opening and closing movement					
	4	No signal during movement, used in combination with o410, o411 and o412.					
	5	Flashing signal in the opening movement					
	6	Flashing signal in the closing movement					
	7	Flashing signal in the opening and closing movement					
o414		yed switch-off Switch off after the specified time For ple to switch off lighting a specified time after closing	0.00-9.59 minutes	0.00			
o420	Warr	ing time before start	0.00-9.59 minutes	0.00			
o421	Warr	ning function in combination with o420	1 - 8	2			
	1	Constant signal before automatic closing	•	•	•		
	2	Constant signal before park and automatic closing					
	3	Constant signal before close signal, park and automatic	closing				
	4	Constant signal before all signals					
	5	Flashing signal before automatic closing					
	6	Flashing signal before park and automatic closing					
	7	Flashing signal before close signal, park and automatic	closing				
	8	Flashing signal before all signals					





No.	Name	Range	Factory	Setting
0422	Function during warning time	1 - 2	1	
	Output signal disabled during warning in other output	ļ	1 -	
	2 Output signal as configured in o410-o413			
o423	Flashing frequency	0.1-2.0 seconds	0.5	
o430*	Alarm if there is an error as configured in o431-o439. The alarm is activated for at least the time set in this channel.	0.00-9.59 minutes	0.00	
o431*	Alarm for faulty safety edge. Time as in o430.	0 - 1	0	
	0 Constant signal			
	1 Active			
o432*	Alarm for critical error message in display	0 - 1	0	
	0 Constant signal			
	1 Active			
o433*	Alarm if stop circuit interrupted	0 - 1	0	
	0 Disabled	•		
	1 Constant signal		,	
o434*	Alarm if door open	0 - 1	0	
	0 Disabled	•	•	
	1 Constant signal			
o435*	Alarm if door is in mid position	0 - 1	0	
	0 Disabled	,	,	
	1 Constant signal			
o436*	Alarm if door is in closed position	0 - 1	0	
	0 Disabled	•	•	
	1 Constant signal			
o437*	Alarm if vehicle loop 1 is activated	0 - 1	0	
	0 Disabled			
	1 Constant signal			
o438*	Alarm if vehicle loop 2 is activated	0 - 1	0	
	0 Disabled	,		
	1 Constant signal			
o439*	Alarm if photocell interrupted	0 - 1	0	
	0 Disabled			1
	1 Constant signal			
o442*	Alarm for uncritical error message in display	0 - 1	0	
	0 Disabled			
L_	1 Constant signal			
o483	Inversion of contact function for output	1 - 2	1	
	1 Normally open, NO	1		•
	2 Normally closed, NC			

<sup>\*</sup> = Only when o400 is set to 4.





o491	Func	ction when LOOP2, LOOP2 or PHOTO activated 01 - 14 01						
	01	Presence detection Signal when LOOP1 is activated, remains until LOOP1 is clear.						
	02	Presence detection Signal when LOOP2 is activated, remains until LOOP2 is clear.						
	03	Presence detection Signal when both LOOP1 and LOOP2 are activated, remains until either LOOP1 or LOOP2 is clear.						
	04	Presence detection Signal when PHOTO is activated, remains until PHOTO is clear.						
	05	Presence detection Signal when PHOTO and LOOP1 are activated, remains until either PHOTO or LOOP1 is clear.						
	06	Presence detection Signal when PHOTO and LOOP2 are activated, remains until either PHOTO or LOOP2 is clear.						
	07	Presence detection Signal when PHOTO, LOOP1 and LOOP2 are activated, remains until either PHOTO, LOOP1 or LOOP2 is clear.						
	08	Presence detection Signal when either LOOP1 or LOOP2 is activated, remains until either LOOP1 or LOOP2 is clear.						
	09	Direction sensing Signal when first LOOP1 and then LOOP2 are activated. The signal remains until LOOP2 is clear.						
	10	Direction sensing Signal when first LOOP1 and then PHOTO are activated. The signal remains until PHOTO is clear.						
	11	Direction sensing Signal when first LOOP2 and then LOOP1 are activated. The signal remains until LOOP1 is clear.						
	12	Direction sensing Signal when first LOOP2 and then PHOTO are activated. The signal remains until PHOTO is clear.						
	13	Direction sensing Signal when first PHOTO and then LOOP1 are activated. The signal remains until LOOP1 is clear.						
	14	Direction sensing Signal when first PHOTO and then LOOP2 are activated. The signal remains until LOOP2 is clear.						





No.	Nan	ne	Range	Factory	Setting			
o500	Fund	ction of output 1	0 - 4	0	1			
	0	Disabled						
	1	Position indication/Movement/Warning. Signal as configured in o510 – o522						
	2	Presence detection/Direction sensing. Signal as configured in o591						
	3	Lock						
	4 Alarm output Signal as configured in o530 – o542							
o510	Ope	n position	0 - 1	0				
	0	Disabled		•				
	1	Constant signal						
o511	Mid	position	0 - 1	0				
	0	Disabled	•					
	1	Constant signal						
o512	Closed position		0 - 1	0				
	0	Disabled	L					
	1	Constant signal			1			
o513	Movement		0 - 4	4				
	0	Disabled						
	1	Constant signal in the opening movement						
	2	Constant signal in the closing movement						
	3	Constant signal in the opening and closing movement						
	4 No signal during movement, used in combination with o510, o511 and o512.							
o514		yed switch-off Switch off after the specified time For nple to switch off lighting a specified time after closing	0.00-9.59 minutes	0.00				
o520	War	ning time before start	0.00-9.59 minutes	0.00				
o521	War	ning function in combination with o520	1 - 4	2	1			
	1	Constant signal before automatic closing	•	•				
	2	Constant signal before park and automatic closing						
	3	Constant signal before close signal, park and automatic closing						
	4 Constant signal before all signals							
o522	Fund	ction during warning time	1 - 2	1				
	1	Output signal disabled during warning in other output	ıt					
	2	Output signal as configured in o510-o513						





No.	Name	Range	Factory	Setting
o530*	Alarm if there is an error as configured in o531-o539. The alarm is activated for at least the time set in this channel.	0.00-9.59 minutes	0.00	
o531*	Alarm for faulty safety edge. Time as in o530.	0 - 1	0	
	0 Disabled			
	1 Constant signal			
o532*	Alarm for critical error message in display	0 - 1	0	
	0 Disabled		,	,
	1 Constant signal			
o533*	Alarm if stop circuit interrupted	0 - 1	0	
	0 Disabled			
	1 Constant signal			
o534*	Alarm if door open	0 - 1	0	
	0 Disabled	•		•
	1 Constant signal		,	
o535*	Alarm if door is in mid position	0 - 1	0	
	0 Disabled	·	•	
	1 Constant signal			
o536*	Alarm if door is in closed position	0 - 1	0	
	0 Disabled			
	1 Constant signal			
o537*	Alarm if vehicle loop 1 is activated	0 - 1	0	
	0 Disabled	·		•
	1 Constant signal			
o538*	Alarm if vehicle loop 2 is activated	0 - 1	0	
	0 Disabled	•	!	
	1 Constant signal			
o539*	Alarm if photocell interrupted	0 - 1	0	
	0 Disabled			
	1 Constant signal		'	
o542*	Alarm for uncritical error message in display	0 - 1	0	
	0 Disabled	, , , , , , , , , , , , , , , , , , ,		
	1 Constant signal			
o583	Inversion of contact function for output	1 - 2	1	
	1 Normally open, NO	L	1	1
	2 Normally closed, NC	,	ı	

<sup>\*</sup> = Only when o500 is set to 4.





o591	Fun	ction when LOOP2, LOOP2 or PHOTO activated 01 - 14 01					
	01	Presence detection Signal when LOOP1 is activated, remains until LOOP1 is clear.					
	02	Presence detection Signal when LOOP2 is activated, remains until LOOP2 is clear.					
	03	Presence detection Signal when both LOOP1 and LOOP2 are activated, remains until either LOOP1 or LOOP2 is clear.					
	04	Presence detection Signal when PHOTO is activated, remains until PHOTO is clear.					
	05	Presence detection Signal when PHOTO and LOOP1 are activated, remains until either PHOTO or LOOP1 is clear.					
	06	Presence detection Signal when PHOTO and LOOP2 are activated, remains until either PHOTO or LOOP2 is clear.					
	07	Presence detection Signal when PHOTO, LOOP1 and LOOP2 are activated, remains until either PHOTO, LOOP1 or LOOP2 is clear.					
	08	Presence detection Signal when either LOOP1 or LOOP2 is activated, remains until either LOOP1 or LOOP2 is clear.					
	09	Direction sensing Signal when first LOOP1 and then LOOP2 are activated. The signal remains until LOOP2 is clear.					
	10	Direction sensing Signal when first LOOP1 and then PHOTO are activated. The signal remains until PHOTO is clear.					
	11	Direction sensing Signal when first LOOP2 and then LOOP1 are activated. The signal remains until LOOP1 is clear.					
	12	Direction sensing Signal when first LOOP2 and then PHOTO are activated. The signal remains until PHOTO is clear.					
	13	Direction sensing Signal when first PHOTO and then LOOP1 are activated. The signal remains until LOOP1 is clear.					
	14	Direction sensing Signal when first PHOTO and then LOOP2 are activated. The signal remains until LOOP2 is clear.					





No.	Nan	ne	Range	Factory	Setting			
o600	Function of output 1		0 - 4	0				
	0	Disabled						
	1	Position indication/Movement/Warning. Signal as configured in o610 – o622						
	2	Presence detection/Direction sensing. Signal as configured in o691						
	3	Lock						
	4	4 Alarm output Signal as configured in o630 – o642						
o610	Ope	n position	0 - 1	0				
	0	Disabled	•					
	1	1 Constant signal						
o611	Mid	position	0 - 1	0				
	0	Disabled		•				
	1	Constant signal						
o612	Closed position		0 - 1	0				
	0	Disabled	Į.					
	1	Constant signal						
o613	Movement		0 - 4	4				
	0	Disabled						
	1	1 Constant signal in the opening movement						
	2	2 Constant signal in the closing movement						
	3	3 Constant signal in the opening and closing movement						
	4 No signal during movement, used in combination with o610, o611 and o612.							
o614	Delayed switch-off Switch off after the specified time For example to switch off lighting a specified time after closing		0.00-9.59 minutes	0.00				
o620	War	ning time before start	0.00-9.59 minutes	0.00				
o621	War	ning function in combination with o620	1 - 4	2				
	1	Constant signal before automatic closing	•					
	2	Constant signal before park and automatic closing						
	3	3 Constant signal before close signal, park and automatic closing						
	4 Constant signal before all signals							
o622	Fund	ction during warning time	1 - 2	1				
	1	Output signal disabled during warning in other output	•	-				
	2	Output signal as configured in o610-o613						





No.	Nam	ne	Range	Factory	Setting		
o630*		m if there is an error as configured in o631-o639. The n is activated for at least the time set in this channel.	0.00-9.59 minutes	0.00			
o631*	Alar	m for faulty safety edge. Time as in o630.	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o632*	Alar	m for critical error message in display	0 - 1	0			
	0 Disabled						
	1 Constant signal						
o633*	Alar	m if stop circuit interrupted	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o634*	Alar	m if door open	0 - 1	0			
	0	Disabled	•	•			
	1	Constant signal					
o635*	Alar	m if door is in mid position	0 - 1	0			
	0	Disabled	•	•	•		
	1	Constant signal					
o636*	Alar	m if door is in closed position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o637*	Alar	m if vehicle loop 1 is activated	0 - 1	0			
	0	Disabled	•	•			
	1	Constant signal					
o638*	Alar	m if vehicle loop 2 is activated	0 - 1	0			
	0	Disabled	•	•			
	1	Constant signal					
o639*	Alar	m if photocell interrupted	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o642*	Alar	m for uncritical error message in display	0 - 1	0			
	0	Disabled	,				
	1	Constant signal					
0683	Inve	rsion of contact function for output	1 - 2	1			
	1	Normally open, NO					
	2	Normally closed, NC		,			

<sup>\*</sup> = Only when o600 is set to 4.





0691		ction when LOOP2, LOOP2 or PHOTO vated	01 - 14	01			
	01	01 Presence detection Signal when LOOP1 is activated, remains until LOOP1 is clear.					
	02	Presence detection Signal when LOOP2 is act	ivated, remains until LO	OP2 is cle	ar.		
	03	Presence detection Signal when both LOOP1 and LOOP2 are activated, remains until either LOOP1 or LOOP2 is clear.					
	04	Presence detection Signal when PHOTO is activated, remains until PHOTO is clear.					
	05	Presence detection Signal when PHOTO and LOOP1 are activated, remains until either PHOTO or LOOP1 is clear.					
	06	Presence detection Signal when PHOTO and LOOP2 are activated, remains until either PHOTO or LOOP2 is clear.					
	07	Presence detection Signal when PHOTO, LOOP1 and LOOP2 are activated, remains until either PHOTO, LOOP1 or LOOP2 is clear.					
	08	Presence detection Signal when either LOOP1 or LOOP2 is clear.	or LOOP2 is activated,	remains u	intil either LOOP1		
	09	Direction sensing Signal when first LOOP1 and then LOOP2 are activated. The signal remains until LOOP2 is clear.					
	10	Direction sensing Signal when first LOOP1 ar until PHOTO is clear.	nd then PHOTO are acti	vated. The	signal remains		
	11	Direction sensing Signal when first LOOP2 and then LOOP1 are activated. The signal remains until LOOP1 is clear.					
	12	Direction sensing Signal when first LOOP2 and then PHOTO are activated. The signal remains until PHOTO is clear.					
	13	Direction sensing Signal when first PHOTO a until LOOP1 is clear.	and then LOOP1 are acti	vated. The	signal remains		
	14	Direction sensing Signal when first PHOTO a until LOOP2 is clear.	and then LOOP2 are acti	vated. The	signal remains		



