

INSTRUCTION MANUAL DAAB OUTPUT CARD DB407

For DAAB Automatic control units EP104 version 4.07 or higher EP105







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
Protection class	The circuit board is intended for internal installation in an enclosure

Safety instructions

See instruction manual for automatic control unit EP104 or EP105.

General description

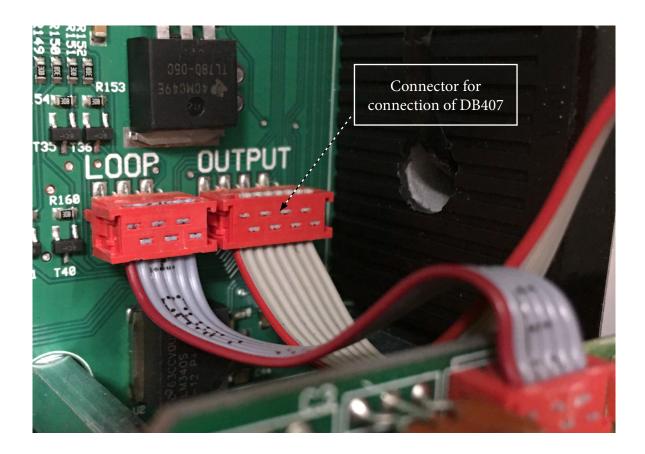
Add-in card to obtain 6x outputs on EP104 and EP105 automatic control units. All the outputs have programmable function. Output functions are set on the control unit.

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 both 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 the control unit
- 3. Screw the DB407 board into place on the spacers on the control unit using two M4x6 screws.
- 4. Connect cable to "OUTPUT" cable.
- 5. Connect the card as described in Connection.



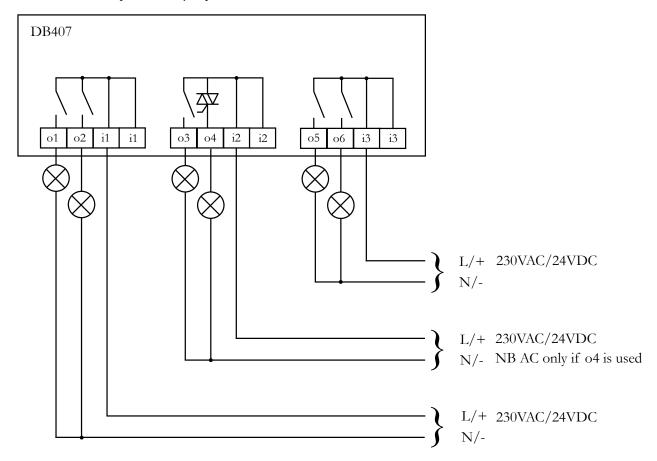




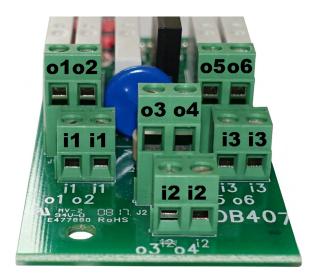
Connection

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 technician.



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



When the card 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 0.0 - 600.0 seconds, 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 alarm if there is an error as specified in o131 - o142. The alarm is delayed by the set time of 0.00 - 600.0 seconds. The factory setting is 0.00. When errors according to o131 - o142 cases, the output signal, the alarm, also ceases. There is no alarm acknowledgement.

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

Programmable output 1

No.	Nam	ne	Range	Factory	Setting		
o100	Func	ction of output 1	0 - 4	1			
	0	Disabled		•			
	1	Position indication/Movement/Warning. Signal as configured in o110 – o122					
	2 Presence detection/Direction sensing. Signal as configured in o191						
	3	Lock					
	4 Alarm output. Signal as configured in o114, 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	Clos	ed position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o113	Mov	ement	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 movemen	t				
	4	No signal during movement, used in combination wit	th 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	000.0-600.0 seconds	000.0			
o120	Warı	ning time before start	000.0-600.0 seconds	0.000			
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	•	-		
	2	Output signal as configured in o110-o113					





No.	Name	Range	Factory	Setting
o130	Alarm delay. Alarm in channels o131 – o142 must be active in this time to produce output signal.	000.0-600.0 seconds	000.0	
o131	Alarm if pressed safety edge.	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		•	
	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. E008, E015, E028, E046, E047, E048, E201, E202, E206, E207, E931, E932	0 - 1	0	
	0 Disabled			
	1 Constant signal			
o183	Selection of contact function for output	1 - 2	1	
	1 Normally open, NO	·		
	2 Normally closed, NC			



o191		ction when LOOP2, LOOP2 or PHOTO rated	01 - 14	01	
	01	Presence detection. Signal when LOOP1 is act	ivated, remains until LO	OP1 is cle	ar.
	02	Presence detection. Signal when LOOP2 is act	ivated, remains until LO	OP2 is cle	ar.
	03	Presence detection. Signal when both LOOP1 LOOP1 or LOOP2 is clear.	and LOOP2 are activate	d, remains	until either
	04	Presence detection. Signal when PHOTO is ac	tivated, remains until PI	HOTO is c	lear.
	05	Presence detection. Signal when PHOTO and or LOOP1 is clear.	LOOP1 are activated, re	mains unt	il either PHOTO
	06	Presence detection. Signal when PHOTO and or LOOP2 is clear.	LOOP2 are activated, re	mains unt	il either PHOTO
	07	Presence detection. Signal when PHOTO, LOOP PHOTO, LOOP1 or LOOP2 is clear.	OP1 and LOOP2 are act	ivated, rem	nains 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 ar until LOOP2 is clear.	nd then LOOP2 are activ	ated. The	signal remains
	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 ar until LOOP1 is clear.	nd then LOOP1 are activ	ated. The	signal remains
Direction sensing. Signal when first LOOP2 and then PHOTO are activated. The until PHOTO is clear.				vated. The	signal remains
	Direction sensing Signal when first PHOTO and then LOOP1 are activated. The sig until LOOP1 is clear.				signal remains
	14	Direction sensing Signal when first PHOTO at until LOOP2 is clear.	nd then LOOP2 are activ	vated. The	signal remains





Note that the display of the o-channels is determined by the setting in C707 and C710 for EP105

No.	Nam	ne ,	Range	Factory	Setting	
o200	Func	tion of output 2	0 - 4	1		
	0	Disabled	•	•	•	
	1	Position indication/Movement/Warning. Signal as conf	igured in o210 – o222			
	2	Presence detection/Direction sensing. Signal as configu	red in o291			
	3	Lock				
	4	Alarm output. Signal as configured in o214, o230 – o24	2			
o210	Oper	Open position 0 - 1 0				
	0	Disabled				
	1	Constant signal				
o211	Mid	position	0 - 1	0		
	0	Disabled	•	•		
	1	Constant signal				
o212	Close	ed position	0 - 1	1		
	0	Disabled	•	•	•	
	1	Constant signal				
o213	Move	ement	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	o210, o211 and o212.			
o214		yed switch-off. Switch off after the specified time. For aple to switch off lighting a specified time after closing	000.0-600.0 seconds	0.000		
o220	Warr	ning time before start	000.0-600.0 seconds	0.000		
o221	Warı	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	tion 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 delay. Alarm in channels o231 – o242 must be re in this time to produce output signal.	000.0-600.0 seconds	0.000	
o231	Alar	m if pressed safety edge.	0 - 1	0	
	0	Disabled			
	1	Constant signal			
o232	Alar	m for critical error message in display	0 - 1	0	
	0	Disabled			
	1	Constant signal	_		
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	E008	m for uncritical error message in display. 3, E015, E028, E046, E047, E048, E201, E202, E206, 7, E931, E932	0 - 1	0	
	0	Disabled			
	1	Constant signal			
o283	Selec	ction of contact function for output	1 - 2	1	
	1	Normally open, NO	·		
	2	Normally closed, NC			





o291	Function 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.						
	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.	Nam	ne	Range	Factory	Setting		
o300	Func	ction of output 3	0 - 4	1			
	0	Disabled		•			
	1	Position indication/Movement/Warning. Signal as co.	nfigured in o310 – o322				
	2	Presence detection/Direction sensing. Signal as config	gured in o391				
	3	3 Lock					
	4	Alarm output. Signal as configured in o314, o330 – o3	342				
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	•				
	1	Constant signal					
o313	Mov	ement	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 movemen	t				
	4 No signal during movement, used in combination with o310, o311 and o312.						
o314		yed switch-off. Switch off after the specified time. For aple to switch off lighting a specified time after closing	000.0-600.0 seconds	000.0			
o320	Warı	ning time before start	000.0-600.0 seconds	0.000			
o321	Warı	ning function in combination with o320	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 automat	ic closing				
	4	Constant signal before all signals					
o322	Func	ction during warning time	1 - 2	1			
	1	Output signal disabled during warning in other output	ıt				
	2	Signal as configured in o310-o313					





No.	Name	Range	Factory Setting
o330	Alarm delay. Alarm in channels o331 – o342 must be active in this time to produce output signal.	000.0-600.0 seconds	000.0
o331	Alarm if pressed safety edge.	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. E008, E015, E028, E046, E047, E048, E201, E202, E206, E207, E931, E932	0 - 1	0
	0 Disabled		
	1 Constant signal		
o383	Selection of contact function for output	1 - 2	1
	1 Normally open, NO		<u></u>
	2 Normally closed, NC		



o391	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.				
	O3 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 of LOOP1 is clear.				
	06	Presence detection. Signal when PHOTO and LOOP2 are activated, remains until either PHOTO of LOOP2 is clear.				
	O7 Presence detection. Signal when PHOTO, LOOP1 and LOOP2 are activated, remains u 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 unt 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 unt LOOP1 is clear.				
	Direction sensing. Signal when first LOOP2 and then PHOTO are activated. The signa until PHOTO is clear.					
	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.	Nam	е	Range	Factory	Setting
o400	Func	tion of output 4	0 - 4	0	
	0	Disabled			
	1	Position indication/Movement/Warning. Signal as conf	igured in o410 – o422		
	2	Presence detection/Direction sensing. Signal as configu	red in 0491		
	3	Lock			
	4	Alarm output. Signal as configured in o414, o430 – o44	2		
o410	Oper	position	0 - 2	0	
	0	Disabled			
	1	Constant signal			
	2	Flashing signal			
o411	Mid j	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	000.0-600.0 seconds	000.0	
o420	Warn	ing time before start	000.0-600.0 seconds	0.000	
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			



o422 Fu:		Range	Factory Se	ung
	nction during warning time	1 - 2	1	
1	Output signal disabled during warning in other output		1	
2	Output signal as configured in o410-o413			
o423 Fla	shing frequency	0.1-2.0 seconds	0.5	
	arm delay. Alarm in channels o431 – o442 must be	000.0-600.0 seconds	000.0	
	ive in this time to produce output signal.	000.0-000.0 seconds	000.0	
o431 Ala	arm if pressed safety edge.	0 - 1	0	
0	Disabled			
1	Constant signal			
o432 Ala	arm for critical error message in display	0 - 1	0	
0	Disabled			
1	Constant signal			
o433 Ala	arm if stop circuit interrupted	0 - 1	0	
0	Disabled			
1	Constant signal			
o434 Ala	arm if door open	0 - 1	0	
0	Disabled			
1	Constant signal			
o435 Ala	arm if door is in mid position	0 - 1	0	
0	Disabled	•		
1	Constant signal			
o436 Ala	arm if door is in closed position	0 - 1	0	
0	Disabled	•		
1	Constant signal			
o437 Ala	arm if vehicle loop 1 is activated	0 - 1	0	
0	Disabled		'	
1	Constant signal			
o438 Ala	arm if vehicle loop 2 is activated	0 - 1	0	
0	Disabled	•		
1	Constant signal			
o439 Ala	arm if photocell interrupted	0 - 1	0	
0	Disabled			
1	Constant signal			
E0	arm for uncritical error message in display. 08, E015, E028, E046, E047, E048, E201, E202, E206, D7, E931, E932	0 - 1	0	
0	Disabled			
1	Constant signal			
o483 Sel	ection of contact function for output	1 - 2	1	
1	Normally open, NO			
2	Normally closed, NC			





o491	Fun	ction when LOOP2, LOOP2 or PHOTO activated	01 - 14	01			
	01	Presence detection. Signal when LOOP1 is activated, rea	mains until LOOP1 is cl	ear.			
	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 a LOOP2 is clear.	re activated, remains ur	itil either F	PHOTO or		
	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 LOOl or LOOP2 is clear.	P2 is activated, remains	until eithe	r LOOP1		
	09	Direction sensing. Signal when first LOOP1 and then LO LOOP2 is clear.	OOP2 are activated. The	e signal rer	nains until		
	10	Direction sensing. Signal when first LOOP1 and then Pluntil PHOTO is clear.	HOTO are activated. Th	e signal re	mains		
	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 I until LOOP1 is clear.	OOP1 are activated. Th	ie signal re	mains		
	14	Direction sensing. Signal when first PHOTO and then I until LOOP2 is clear.	OOP2 are activated. Th	e signal re	mains		



No.	Nam	e	Range	Factory	Setting		
o500	Func	tion of output 1	0 - 4	0			
	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 o514, o530 – o542							
o510	Oper	n position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o511	Mid	position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o512	Close	ed position	0 - 1	0			
	0	Disabled		l.			
	1	Constant signal					
o513	Move	ement	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	Delayed switch-off. Switch off after the specified time. For example to switch off lighting a specified time after closing						
o520	Warı	ning time before start	000.0-600.0 seconds	0.000			
o521	Warr	ning function in combination with o520	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						
o522	Func	tion during warning time	1 - 2	1			
	1	Output signal disabled during warning in other outpu	it		•		
	2 Output signal as configured in o510-o513						





No.	Name	Range	Factory Setting
o530	Alarm delay. Alarm in channels o531 – o542 must be active in this time to produce output signal.	000.0-600.0 seconds	000.0
o531	Alarm if pressed safety edge.	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. E008, E015, E028, E046, E047, E048, E201, E202, E206, E207, E931, E932	0 - 1	0
	0 Disabled		
	1 Constant signal		
o583	Selection of contact function for output	1 - 2	1
	1 Normally open, NO		<u>, , , , , , , , , , , , , , , , , , , </u>
	2 Normally closed, NC		



o591	Fun	nction 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 action LOOP2 is clear.	vated, remains ı	until eithe	r PHOTO			
	07	Presence detection. Signal when PHOTO, LOOP1 and LOOP2 PHOTO, LOOP1 or LOOP2 is clear.	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 until LOOP2 is clear.	are activated. T	he signal r	emains			
	10	Direction sensing. Signal when first LOOP1 and then PHOTO until PHOTO is clear.	are activated.	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 until PHOTO is clear.	are activated.	The signal	remains			
	13	Direction sensing. Signal when first PHOTO and then LOOP1 until LOOP1 is clear.	are activated.	The signal	remains			
	14	Direction sensing. Signal when first PHOTO and then LOOP2 until LOOP2 is clear.	2 are activated.	The signal	remains			





Note that the display of the o-channels is determined by the setting in C707 and C710 for EP105

No.	Nam	e	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	Alarm output. Signal as configured in o614, o630 – o64	Signal as configured in 0614, 0630 – 0642				
o610	Oper	n position	0 - 1	0			
	0	Disabled					
	1	Constant signal					
o611	Mid	position	0 - 1	0			
	0	Disabled	•				
	1	Constant signal					
o612	Close	ed position	0 - 1	0			
	0	Disabled	•				
	1	Constant signal					
o613	Move	ement	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	o610, o611 and o612.				
o614		yed switch-off. Switch off after the specified time. For aple to switch off lighting a specified time after closing	000.0-600.0 seconds	000.0			
o620	Warı	ning time before start	000.0-600.0 seconds	0.000			
o621	Warning function in combination with o620 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						
o622	Func	tion during warning time	1 - 2	1			
	1	Output signal disabled during warning in other output					
	2 Output signal as configured in o610-o613						



No.	Name	Range	Factory	Setting				
o630	Alarm delay. Alarm in channels o631 – of active in this time to produce output sign		000.0					
o631	Alarm if pressed safety edge.	0 - 1	0					
	0 Disabled		•	•				
	1 Constant signal							
o632	Alarm for critical error message in displa	y 0 - 1	0					
	0 Disabled	·						
	1 Constant signal							
o633	Alarm if stop circuit interrupted	0 - 1	0					
	0 Disabled		-					
	1 Constant signal							
o634	Alarm if door open	0 - 1	0					
	0 Disabled							
	1 Constant signal							
o635	Alarm if door is in mid position	0 - 1	0					
	0 Disabled		-					
	1 Constant signal							
0636	Alarm if door is in closed position	0 - 1	0					
	0 Disabled							
	1 Constant signal							
o637	Alarm if vehicle loop 1 is activated	0 - 1	0					
	0 Disabled		-					
	1 Constant signal							
o638	Alarm if vehicle loop 2 is activated	0 - 1	0					
	0 Disabled							
	1 Constant signal							
o639	Alarm if photocell interrupted	0 - 1	0					
	0 Disabled							
	1 Constant signal		,					
o642	Alarm for uncritical error message in disp E008, E015, E028, E046, E047, E048, E20 E207, E931, E932		0					
	0 Disabled							
	1 Constant signal							
o683	Selection of contact function for output	1 - 2	1					
	1 Normally open, NO	·	,					
	2 Normally closed, NC		'	1				





o691	Func	ction when LOOP2, LOOP2 or PHOTO rated	01 - 14	01			
	01	01 Presence detection. Signal when LOOP1 is activated, remains until LOOP1 is clear.					
	02	Presence detection. Signal when LOOP2 is ac	tivated, remains until LC	OOP2 is cle	ear.		
	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 LOOP or LOOP2 is clear.	1 or LOOP2 is activated	, remains ı	until either LOOP1		
	09	Direction sensing. Signal when first LOOP1 a LOOP2 is clear.	nd then LOOP2 are acti	vated. The	signal remains until		
	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 a until LOOP1 is clear.	and then LOOP1 are act	ivated. The	e signal remains		
	14	Direction sensing. Signal when first PHOTO a until LOOP2 is clear.	and then LOOP2 are act	ivated. The	e signal remains		



