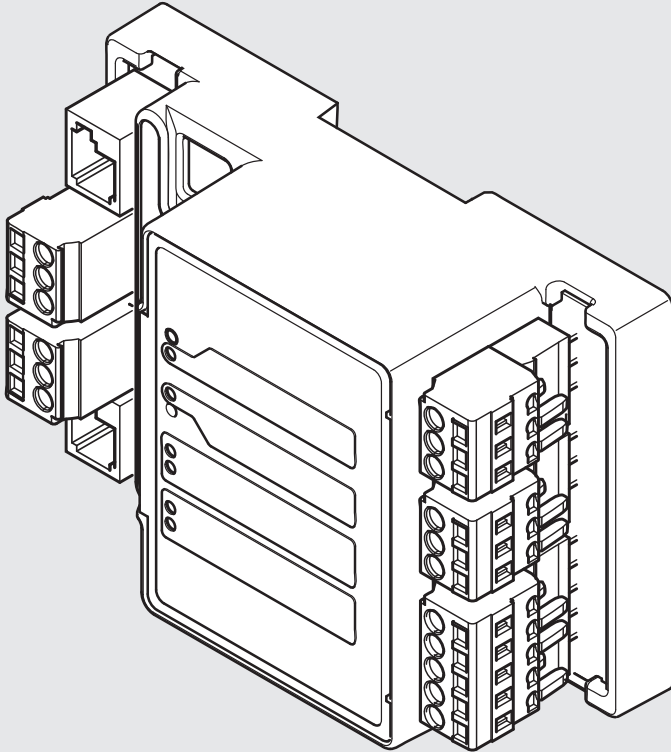


Expansion module EM 131

Two-way traffic control for Control vario

GB



Manual for installation and operation

1. Meaning of symbols

Advice



Caution!

Danger of personal injury!
The following safety advice must be observed at all times so as to avoid personal injury!



Attention!

Danger of material damage!
The following safety advice must be observed at all times so as to avoid material damage!



Advice / Tip



Check



Reference

2. Table of contents

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2.	Table of contents	2
3.	General safety advice	3
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3. General safety advice



Please read carefully!

Target group

This operator system may only be installed, connected and put into operation by qualified and trained professionals!

Qualified and trained specialist personnel are persons

- who have knowledge of the general and special safety regulations,
- who have knowledge of the relevant electro-technical regulations,
- with training in the use and maintenance of suitable safety equipment,
- who are sufficiently trained and supervised by qualified electricians,
- who are able to recognise the particular hazards involved when working with electricity,
- with knowledge regarding applications of the EN 12635 standard (installation and usage requirements).

Warranty

For an operations and safety warranty, the advice in this instruction manual has to be observed.

Disregarding these warnings may lead to personal injury or material damage. If this advice is disregarded, the manufacturer will not be liable for damages that might occur.

To avoid installation errors and damage to the device, it is imperative that the installation instructions are followed. The product may only be operated after reading these installation and operating instructions.

The installation and operating instructions are to be given to the door system user, who must keep them safe. They contain important advice for operation, checks and maintenance.

This item is produced according to the directives and standards mentioned in the Manufacturer's Declaration and in the Declaration of Conformity. The product has left the factory in perfect condition with regard to safety.

Power-operated windows, doors and gates must be checked by an expert (and this must be documented) before they are put into operation and thereafter as required, but at least once a year.

Correct use

The expansion module expands the Control vario control unit to include a two-way traffic control function.

Beside the advice in these instructions, please observe the general safety and accident prevention regulations! Our sales and supply terms and conditions are effective.

3. General safety advice



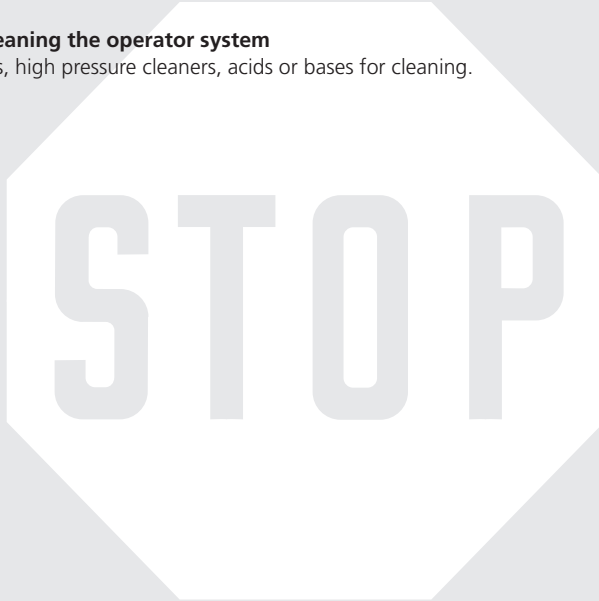
Please read carefully!

Installation tips

- Ensure that the devices to be connected (doors etc.) are in a mechanically faultless state.
- Before commencing cabling works it is very important to disconnect the system from the electricity supply. Ensure that the electricity supply remains disconnected throughout the cabling works.
- Adhere to the local protection regulations.
- Lay the electricity supply cables and control cables; these **MUST** be laid separately.
The operating voltage is 12 V.

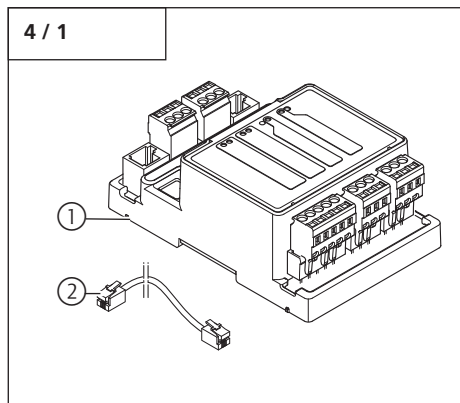
Information on cleaning the operator system

Never use water jets, high pressure cleaners, acids or bases for cleaning.



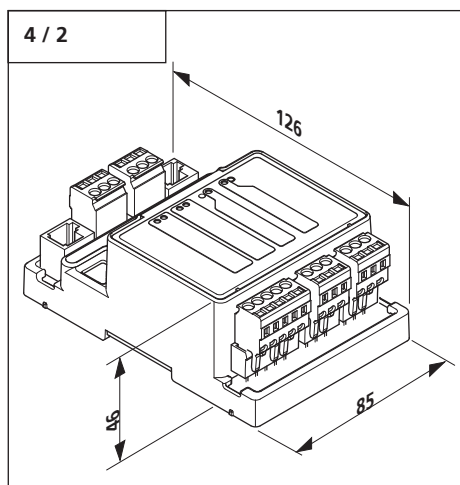
4. Product overview

Supply package



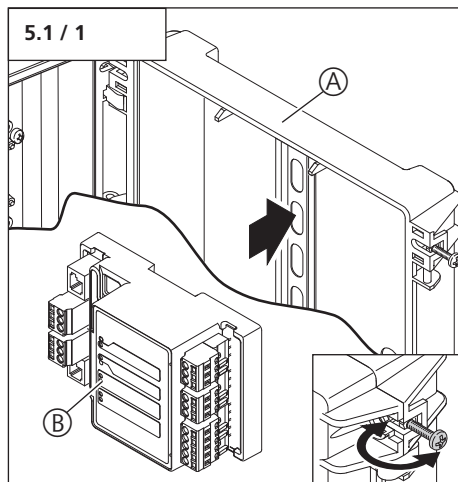
- 1 Expansion module
- 2 System cable coded

Dimensions



5. Installation

5.1 Install expansion module

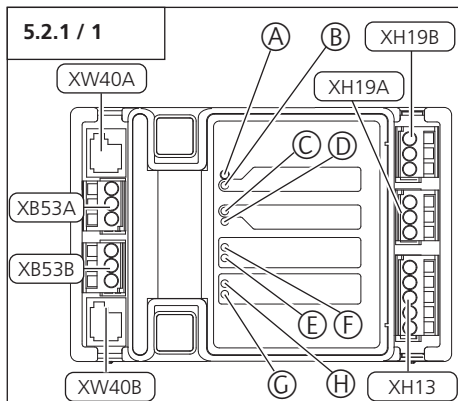


- Fit the expansion module (B) in the type 4 / type 5 (A) expansion housing type.

5. Installation

5.2 Wiring of the expansion module

5.2.1 Overview of the module connections



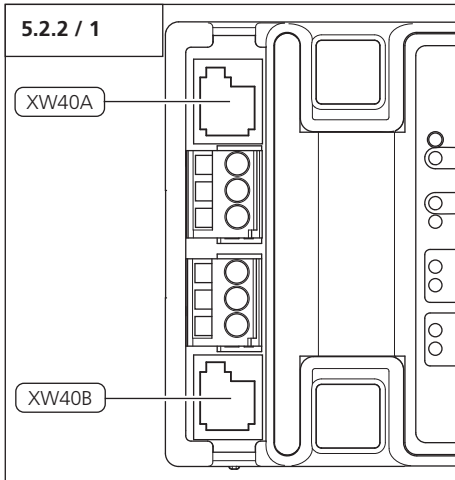
Label	Type / function	
A	Operating indicator Light on In operation Light flashes Cable break Light flashes rapidly ... Diagnostic mode	-
B	Display for output XH19B	-
C	Display for output XH19A	-
D	Hand transmitter display activated	-
E	Exit display RED	-
F	Exit display GREEN	-
G	Entry display RED	-
H	Entry display GREEN	-

Label	Type / function	
XW40A	Connection of further module	5.2.2 / 1
XW40B	Connection of further module	5.2.2 / 1
XB53A	Connection of entry / exit impulse button	5.2.2 / 2
XB53B	Connection of automatic functions	-
XH13	Connection of entry / exit signalling device	5.2.2 / 7
XH19A	Connection of signalling device	5.2.2 / 5
XH19B	Connection of signalling device	5.2.2 / 6

5. Installation

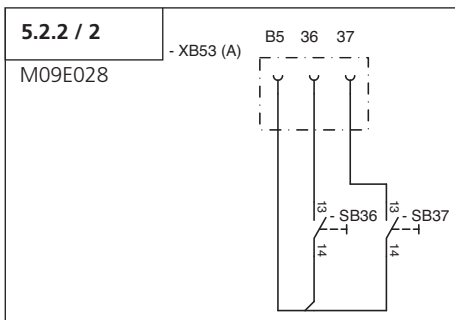
5.2.2 Connection of the modules

Connection of the control unit and a further module



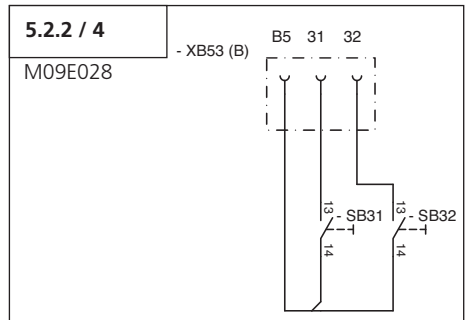
- Connect the Control vario control unit to the connecting socket XW40A.
- Connect further modules to socket XW40B as required.

Connection of entry / exit button (XB53A)



Label	Type / function
SB36	Entry button
SB37	Exit button

Connection of further control elements (XB53B)



Label	Type / function
SB31	Switching contact for entry / exit priority function
SB32	Switching contact for automatic function

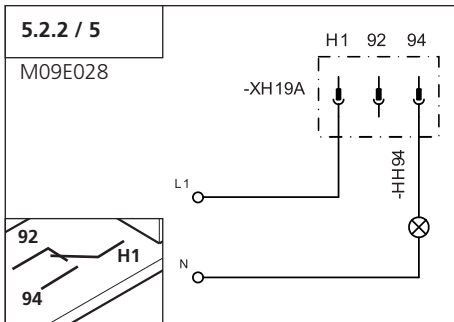
5. Installation



Attention!

To avoid damage being caused to the circuit board, the contact loading (max. 230 V / 0.5 A) must be observed.

Connection for signal light (XH19A)



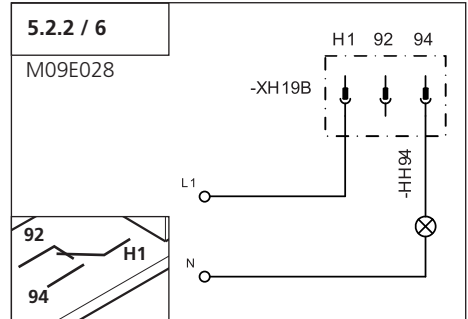
Label	Type / function
HH94	Signal light supplied by customer
XH19A	Connection of signalling device



Reference:

The programming of the signalling device XH19A is described in the Control vario documentation (Level 3 / Menu 7).

Connection for signal light (XH19B)



Label	Type / function
HH94	Signal light supplied by customer
XH19B	Connection of signalling device



Reference:

Programming the signalling device XH19B is described in Section 6 (Level 3 / Menu 8).

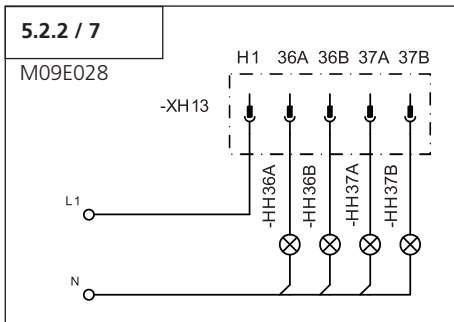
5. Installation



Attention!

To avoid damage being caused to the circuit board, the contact loading (max. 230 V / 6 A) must be observed.

Connection of entry / exit signalling device (XH13)



Label	Type / function
HH36A	Entry signal light RED
HH36B	Entry signal light GREEN
HH37A	Exit signal light RED
HH37B	Exit signal light GREEN
XH13	Connection of signal light

6. Programming

An activated module changes Level 1 and results in the following menu being activated:

Level 1 – Basic functions																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Menu 7: Relay output																	
	A7	B7	C7	D7	E7	F7	G7	H7	I7	J7	K7	L7	-	-	-	-	

Menu 7: Relay output extension

Setting	Function (with optional signal light relay only)	Explanation / Advice	
A7	Signal light	Function	Level 3 Menu 7
B7	Door position: OPEN	-	-
C7	Door position: CLOSED	-	-
D7	Intermediate position OPEN	-	-
E7	Intermediate position CLOSED	-	-
F7	Drive system starts running	Wiping impulse 1 second	-
G7	Problem	-	-
H7	Lighting	Lighting duration	Level 5 / Menu 4
I7	Automatic locking release	Drive system is running	-
J7	Lock release	Drive system starts running / Wiping impulse 3 seconds	-
K7	Push-open security device	-	-
L7	Radio remote control	Relay switches for the duration of the impulse	-

6. Programming

An activated module changes Level 3 and results in the following menu being activated:

Level 3 - Automatic closing timer / Two-way traffic control																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Menu 2: Lane regulation																
	A2	B2	C2	D2	E2	F2	G2	H2	I2	J2	K2	L2	-	-	-	-
Menu 3: Door open duration / green phase (in seconds)																
	2	5	10	15	20	25	30	35	40	50	80	100	120	150	180	255
Menu 4: Warning time / red phase (in seconds)																
	1	2	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Menu 7: Signal light																
	A7	B7	C7	D7	E7	F7	-	-	-	-	-	-	-	-	-	-
Menu 8: Expansion module relay output - XB19																
	A8	B8	C8	D8	E8	-	-	-	-	-	-	-	-	-	-	-

Legend:	
LED off	
LED on	
LED flashes slowly	
LED pulses	
LED flashes quickly	
Factory default setting	
Not possible	-

6. Programming

Menu 2: **Extension module, automatic closing timer / two-way traffic control**

The operating mode and function of the automatic closing timer / two-way traffic control expansion module is set here.

Stage	Function	SB32	SB31
A2	Restart of green phase after photocell has been driven through Entry impulse and exit impulse open the door	OFF	
B2	Green phase ends after photocell has been driven through Entry impulse and exit impulse open the door		
C2	Green phase and red phase end after photocell has been driven through Entry impulse and exit impulse open the door		
D2	Green and red phase not influenced if photocell is driven through Entry impulse and exit impulse open the door		
E2	Green and red phase not influenced if photocell is driven through Entry impulse and exit impulse open the door	OFF	
	Entry priority function	ON	OFF
	Exit priority function	ON	
F2	Green and red phase not influenced if photocell is driven through Entry impulse and exit impulse open the door	OFF	
	Automatic alternation of entry/exit	ON	OFF
G2	Restart of green phase after photocell has been driven through Entry impulse and exit impulse open the door	OFF	
	Door opens automatically, entry or exit requests	ON	OFF
H2	Green phase ends after photocell has been driven through Entry impulse and exit impulse open the door	OFF	
	Door opens automatically, entry or exit requests	ON	OFF

6. Programming

Stage	Function	SB32	SB31
I2	Green phase and red phase end after photocell has been driven through Entry impulse and exit impulse open the door	OFF	
	Door opens automatically, entry or exit requests	ON	OFF
J2	Green and red phase not influenced if photocell is driven through Entry impulse and exit impulse open the door	OFF	
	Door opens automatically, entry or exit requests	ON	OFF
K2	Green and red phase not influenced if photocell is driven through Entry impulse and exit impulse open the door	OFF	
	Door opens automatically, entry priority function	ON	OFF
	Door opens automatically, exit priority function	ON	
L2	Green and red phase not influenced if photocell is driven through Entry impulse and exit impulse open the door	OFF	
	Door opens automatically, exit priority function	ON	OFF

Menu 7: Signal light

Setting	Door movement / Warning	Door stoppage
A7	flashing	OFF (Electricity saving)
B7	lighting	OFF (Electricity saving)
C7	flashing	flashing
D7	lighting	lighting
E7	flashing	lighting
F7	lighting	flashing




6. Programming

Menu 8: Expansion module relay output

The relay output function of the expansion module is programmed here.

Stage	Function	Explanation / Advice
A8	Reporting faults	1 second
B8	Every request wiping impulse	1 second
C8	Entry impulse	1 second
D8	Exit impulse	1 second
E8	Start of locking impulse	1 second

The expansion module expands Level 4 to include the following menus:

Level 4 – Remote programming	
	
Menu 6: Entry request	
	LED 7 flashes slowly -> press the hand transmitter button -> LED 7 flashes quickly
Menu 7: Exit request	
	LED 7 flashes slowly -> press the hand transmitter button -> LED 7 flashes quickly

Menu 6: Entry request

The entry request function is assigned here to a hand transmitter button.

Menu 7: Exit request

The exit request function is assigned here to a hand transmitter button.

Legend:	
LED off	○
LED on	●
LED flashes slowly	☀
LED pulses	⚙
LED flashes quickly	☀
Factory default setting	—
Not possible	—

6. Programming

Programming examples for two-way traffic control

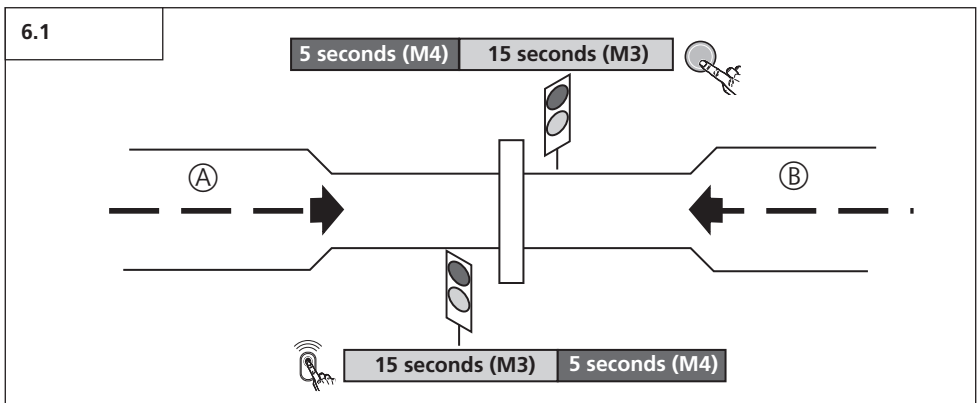
Example 1:

Door system and vehicle access (factory default settings)

- The traffic lights and the buttons for entry and exit are located in the direct vicinity of the door.
- The green phase time is identical for entry and exit.
- The red phase time is identical for entry and exit.
- The green phase should be extended if a photocell is driven through.

Description of the parameters:

- Two-way traffic control operation with extension of the green phase after a vehicle has driven through the photocell (A2).
- Times: Green phase for entry and exit = 15 seconds
 Red phase for entry and exit = 5 seconds



Legende:

- A Entry
- B Exit

English

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Subject to changes which are in the interest of technical improvements.



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