FireRoll V1

Type: HW V1.6 SW V2.6

Versie: 20240702

RDA

Please carefully read this user manual before you use the controller. Store this information so that it can be referenced in the future!

Table of contents

1 Introduction

1.1 Intended Use

Safe use of this controller can only be guaranteed when it is used for its intended purpose. The manufacturer is not responsible for damage caused by external components or failure to comply with these instructions.

- Modifications are only permitted in agreement with the manufacturer. If modifications are applied without the manufacturer's consent, the manufacturer's declaration of conformity is no longer valid.
- During installation, commissioning, maintenance and inspection of the control system, the safety and accident prevention regulations applicable to the specific project must be observed.
- Only qualified personnel with the right equipment and knowledge are allowed to carry out work on this control system. Qualified personnel are persons who are familiar with the installation, configuration, commissioning and operation of electrically operated door and gate installations. They must be able to assess the entire installation, identify potential hazards and install the necessary safeguards
- Suitable and approved tools must be used for installation, commissioning, maintenance and inspection of the control system.
- The control unit must be installed in the immediate vicinity of the door to be operated. A good view of the door opening must be guaranteed.
- Only use safety products that comply with the applicable standards. Examples are: safety edges, photocells, smoke and heat detectors.
- Persons with lack of experience and knowledge can use this device provided they are supervised or instructed to use the device in a safe manner and understand the risks involved.
- Take special care to avoid hazards that could result in injury due to entrapment between components controlled by the automation system and fixed parts all around; Children should be supervised to ensure that they do not play with the equipment. The control cannot be used for moving parts with a pass door unless it can only be used with the pass door in the safety position.

For use for other purposes, please contact the supplier.

1.2 Prohibited Uses

The manufacturer assumes no liability for damage resulting from operating and connection errors, disregard of the operating instructions or inadequate maintenance and/or service, and hereby refers once again to the possible occurrence of dangerous situations as a result. Despite conformity with harmonised standards, not every possible hazard can be foreseen. For this reason, people should only enter the danger zone if necessary. If in doubt about the installation, do not proceed and contact the supplier for clarifications.

All information contained in this document (photographs, drawings, characteristics and dimensions) may be subject to change without prior notice.

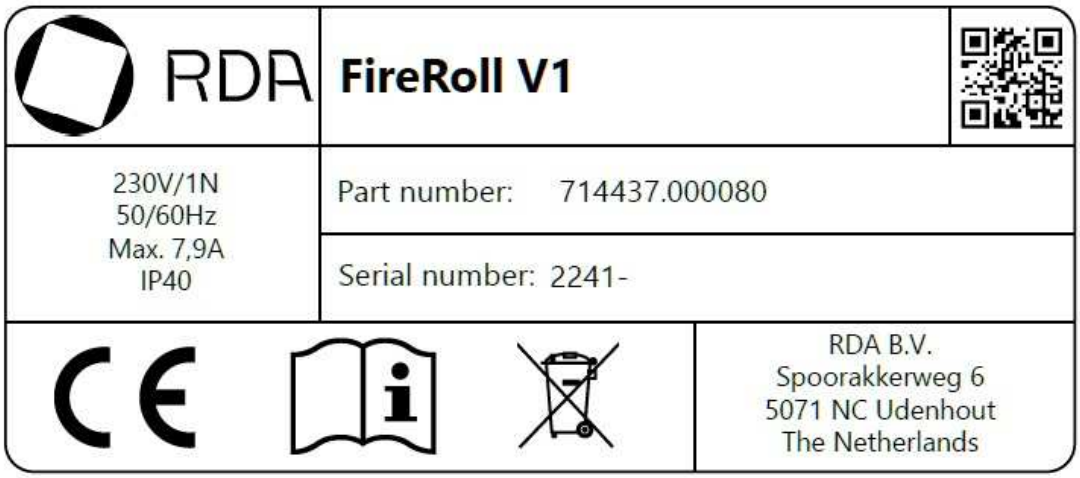
It is forbidden to connect parts to the controller that are not approved by the manufacturer.

These can:

- degrade the operation of the control,
- Endanger the safety of the user or other people,
- Reducing the life of the control system,
- Cancel compliance with CE directives.

It is forbidden to use the control for any purpose other than that stated in the intended use. Failure to comply with the intended use may endanger the safety of the user or other people.

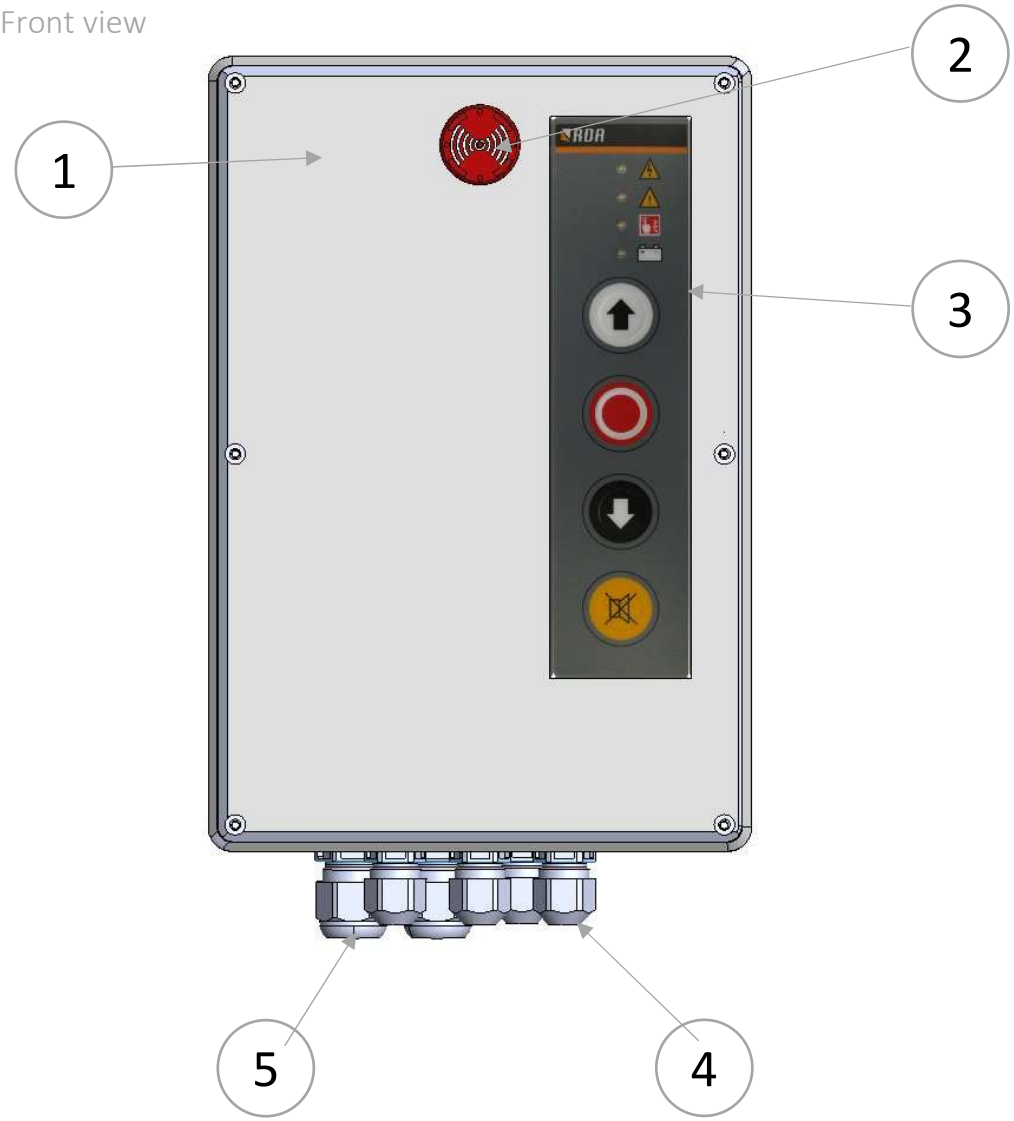
1.3 Type label



1.4 Technical data

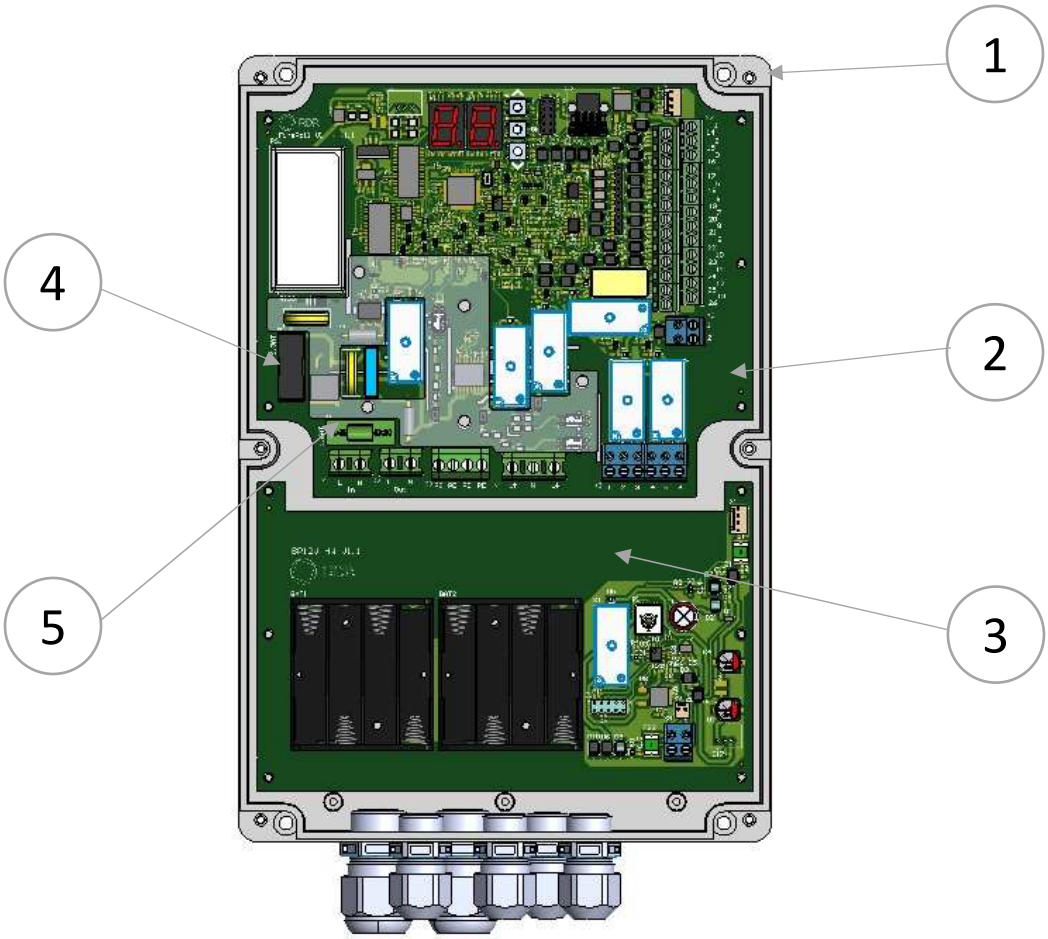
Data	Explanation
Weight	1,5 kg
Height	285 mm
Width	195 mm
Depth	100 mm
Electricity consumption	Max. 1,122 kW
Power supply	1N~230Vac +/-10%, 50/60 Hz
Fuse	FS1 Max. 6,3 A slow FS2 Max. 1.6A slow
Power drive	Max. 1,1 kW
Current	Max. 7,9 A
Brake	24 Vdc
Control voltage	24 Vdc
Control current	225 mA
External power supply	24 Vdc
External power supply current	Max 675 mA
Relay Outputs	Potential-free changeover contacts
Load relay outputs	Max. ohm load = 1 A / Max. inductive load = 1 A
Protection class	IP 40
Ambient temperature	+5...+40°C
Relative humidity	Max. 93% (non-condensing)
Vibratie	Vibration-free installation (e.g. masonry wall)

1.5 Front view



Nr	Part
1	Enclosure
2	Signalling device
3	Front foil
4	Cable entry 4 x M16
5	Cable entry 2 x M20

1.6 Interior view



Nr	Part
1	Enclosure
2	Fireroll Control Board
3	BP12V Battery PCB
4	Fuse F1 (6.3 A slow)
5	Fuse F2 (1.6 A slow)

WARNING

Only use accessories that comply with the applicable standards.

2 Description of the control unit

The FireRoll is a control system for tubular motors with internal and possibly external limit switches. This control is also suitable for tubular motors with a 24VDC centrifugal brake. So that the doors/shutters/screens can close in gravity.

The FireRoll includes a cabinet with control board in combination with an optional battery board with 8 batteries (12V). On the lid of the cabinet is a control foil with 4 status LEDs.

Features of this control:

- Dead Man or Automatic Operation
- Operation via foil on enclosure lid or external control
- Status display by means of 4 LEDs on enclosure lid
- Buzzer with mute function
- Fire alarm input (up to 6 smoke detectors)
- Input for safety edge
- Input for safety contacts (Photocell)
- Input for impulse control
- 2 programmable potential-free points contacts
- Output for signalling device

In the event of a fire alarm or power failure, the door lowers because the power to the electric brake is lost (if a 24 V DC brake is connected). If there is still mains power available, the door will lower until limit switch closed is reached. After the fire alarm disappears, the door will be closed immediately (par.5.3) or after extended time (par.3.4).

3 Safety

3.1 Safety Systems

Only use safety products that comply with the applicable standards.
Examples are: safety edges, smoke photocells and heat detectors.

3.2 Safety measures

Only qualified personnel with the right equipment and knowledge are allowed to carry out work on this control system. Qualified personnel are persons who are familiar with the installation, configuration, commissioning and operation of electrically operated door and gate installations. They must be able to assess the entire installation, identify potential hazards and install the necessary protections.
This control is a part of a machine. Ensure that each component used in the installation is suitable for application in the intended system as a whole.
Do not proceed with the installation if one of the parts is not suitable!
Carry out a risk analysis, including a list of essential safety requirements as provided for in Annex I of the Machinery Directive, in which the solutions applied are listed. The risk analysis is one of the documents that is included in the technical file of the electrically operated door. This should be assembled by a professional installer.

3.3 Specific safety regulations

Safe use of this controller can only be guaranteed when it is used for its intended purpose. The manufacturer is not responsible for damage caused by external components or failure to comply with these instructions.
Modifications are only permitted in agreement with the manufacturer. If modifications are applied without the manufacturer's consent, the manufacturer's declaration of conformity is no longer valid.

During installation, commissioning, maintenance and inspection of the control system, the specific project safety and accident prevention regulations applicable to the to be taken.

Suitable and approved tools must be used for installation, commissioning, maintenance and inspection of the control system. Before starting any work on this control system, the door must first be moved to a safe position, then the mains supply must be disconnected and 1 of the batteries must be disconnected.

WARNING

Carrying out live work on this control system is life-threatening and can cause serious injury!

WARNING

Use the control only for the purpose for which it was designed. See 1.1 Intended Use on page 3.

WARNING

The control unit may only be operated by persons who have read the user manual and are therefore sufficiently familiar with the operation, operation, maintenance, etc. of the control system, as described in the user manual.

DANGER

It is forbidden to remove, bypass or switch off safety devices, guards.

CAUTION

Make sure that after each maintenance or intervention on the controller, all safety devices are correctly reinstalled.

ENVIRONMENT

For all products used in the control and for all products used for the maintenance and cleaning of the control, please follow current local legal regulations.

3.4 Signs and symbols

Icon	Explanation
	Please read the manual carefully before using this device.
	Electrocution hazard. Lockspanning – 230V AC
	Warning Possible Injury or Danger
	Calamity
	Battery
	Disable Buzzer
	Factory settings

CAUTION

Make sure the icons remain visible at all times. Clean the pictograms regularly and replace the pictograms in case of wear and tear.

4 Transport and storage

4.1 Transporting the device

The device is supplied by specialist companies and assembled and installed by an authorized installer. As an operator, you are responsible for following the conditions at the place of installation. . The temperature should be within a range of -25 °C to +55 °C and the relative humidity should be Max. 93% (non-condensing).

4.2 Storing the device for a longer period of time

When storing, suitable means should be applied to prevent damage caused by moisture, vibration and shock. Storage temperatures should be within a range of -25 °C to +55 °C and relative humidity should be up to 93% (non-condensing).

Ambient temperatures above 40°C or below 5°C during use or above 55°C or below -25°C when stored may affect the life and/or proper operation of the batteries

Upon delivery, one of the batteries is disconnected due to discharge!

Remove 1 battery when the control is not in use, this to prevent deep discharge.

5 Assembly and installation

For a proper, professional installation of this controller, the following points must be controlled and checked:

- This control unit should only be installed on dry, vibration-free and level surfaces located indoors. **Check that the maximum permissible loads of walls and fasteners are not exceeded.**
- The control unit must be mounted in an easily accessible and accessible position and in the immediate vicinity of the door to be operated. A good view of the door opening must be guaranteed.
- In order to meet the required IP value, any unused cable passages must be sealed.
- Cabling must comply with:
    - Flame retardant according to IEC 60332-1-2
    - No flame spread according to IEC 60332-3-22 , IEC 60332-3-24/ IEC 60332-3-25
    - Halogen-free according to IEC 60754-1
    - Corrosivity of combustion gases according to IEC 60754-2
    - Low smoke density according to IEC 61034-2
- The phase of the power supply (1N~230Vac-50Hz, +/-10%) must be protected against short circuits and overloads by means of a suitable fuse protection or 16 A circuit breaker with B characteristic.
- The following applies to a power supply cable with a 3-pin 16A CEE plug (1 phase, neutral & earth): mount a 16A wall socket in a clear and accessible location (so that the power supply can be interrupted in the event of an emergency) in the immediate vicinity of the control and certainly the power supply in accordance with applicable standards/guidelines. After installing the control unit and the power supply line with wall socket, check that the screw connections are properly tightened and that everything is connected correctly.
- The installer must draw up a hazard analysis of the entire installation. Make sure that the door in question is properly secured and that it cannot cause a risk of entrapment to persons or objects.
- The installation must at least comply with all European and local applicable laws and standards.
- The door must be protected from the end adjustment being passed by means of safety limit switches, mechanical stops or other safety systems.
- The technical data of any external components used, such as photoelectric sensors, must be checked. Together, they must not exceed the maximum permissible load of the control unit.
- Tighten the cable glands securely. So that a strain relief is realized for the inserted cable.
- Check the mains power cable to make sure it is not damaged. If it is damaged, replace it with an original cable from the manufacturer.

- When the system is put into operation, an inspection by a designated installer must be carried out. During this inspection, the following must be observed:
    - A list of approved, connected components must be filled in.
    - Supplied documents of all components should be kept in a safe place together with this manual.
    - The interaction between all components should be tested by means of a simulation of fire and by activation of the test input (if set in menu).
    - A test should be performed to see if the system closes the door in the event of a component failure (e.g. by removing a detector, interruption of the power supply or other similar actions).
    - Finally, it should be checked that all components are attached as described in the supplied manual.

A fully completed and signed inspection report must be handed over by the installer to the end user.

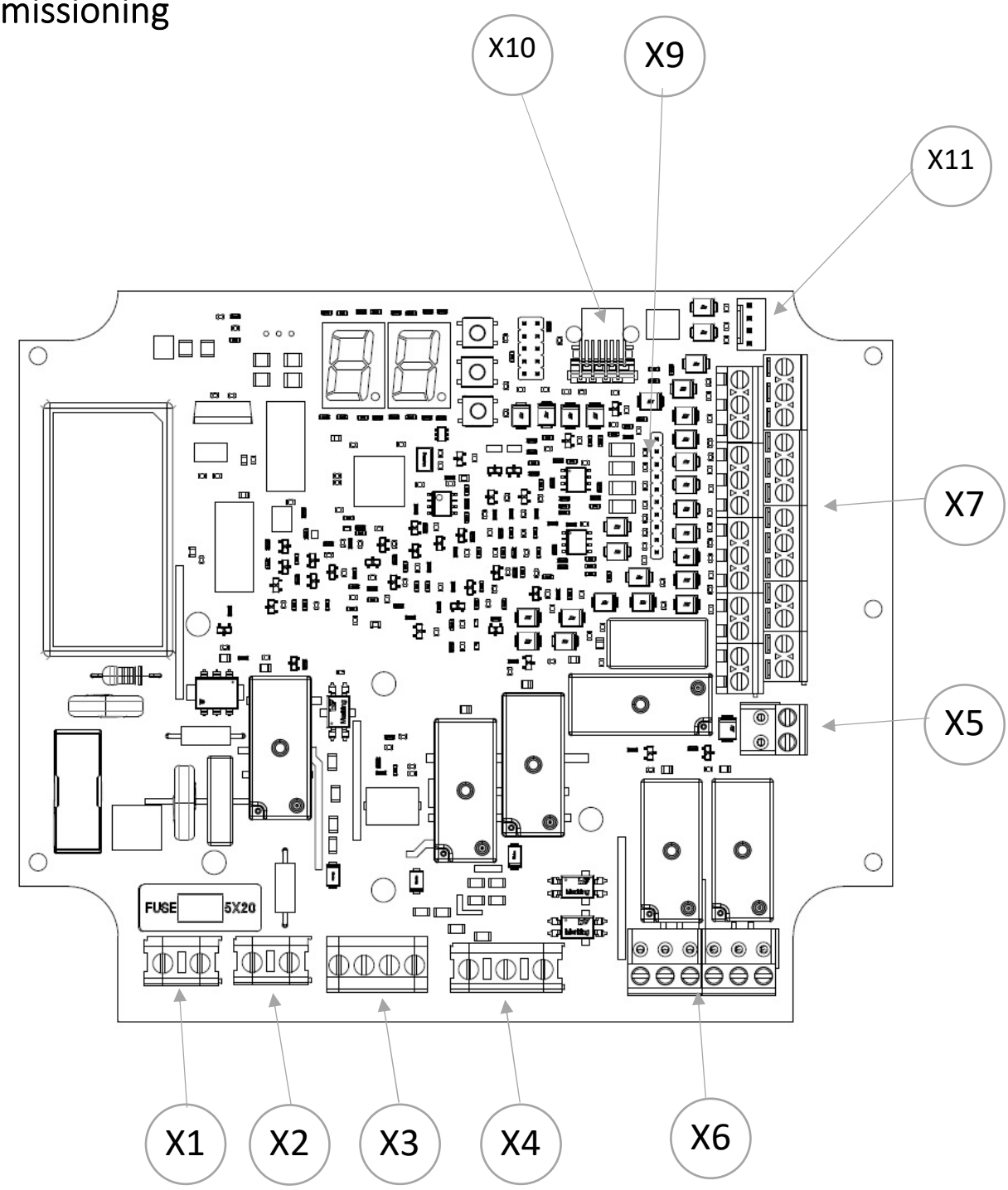
5.1 Connection cables

Clamp nr.	Definition	Cable (min. Diameter)	Max. length
X1	Mains power supply in	1,5 mm2	1,5 Meter
X2	Power supply (external accessory)	0,75 mm2	< 30 Meter
X3	Ground	N.V.T.	N.V.T.
X4	Tubular motor connection	0,75 mm2	< 30 Meter
X5	Brake 24 VDC	0,75 mm2	< 30 Meter
X6	2 potential-free programmable contacts Output 1 (par. 5.1) = Klem 1+2+3 Output 2 (par. 5.2) = Klem 4+5+6	0,75 mm2	< 100 Meter
X7	1 = Safety edge Opto / OSE close 2 = Safety edge 8K2 close 3 = GND 4 = Safety edge Opto / OSE open 5 = Safety edge 8K2 open	0,75 mm2	< 30 Meter
	6 = External limit switch closed 7 = External limit switch open	0,75 mm2	< 30 Meter
	8 = Com 24 VDC 9 = Pulse input	0,75 mm2	< 30 Meter
	10 = Mute 11 = External Control Close 12 = External Control Open 13 = Com 24 VDC	0,75 mm2	< 100 Meter
	14 = GND 15= + 24 VDC test Photocell 16 = 24 VDC 17 = 12 VDC 18 = Photocell Open 19 = Com 24 VDC 20 = Photocell close 21 = Thermal contact 22 = Com 24 VDC	0,75 mm2	< 30 Meter
	23 = External Control Stop	0,75 mm2	< 100 Meter
	24 = Programmable input	0,75 mm2	< 30 Meter
	25 = Fire alarm input 26 = Com Fire alarm input	0,75 mm2	< 100 Meter
X9	Control foil cover	N.V.T.	N.V.T.
X10	RJ 45 connector	N.V.T.	N.V.T.
X11	Communication with BP12V	N.V.T.	N.V.T.

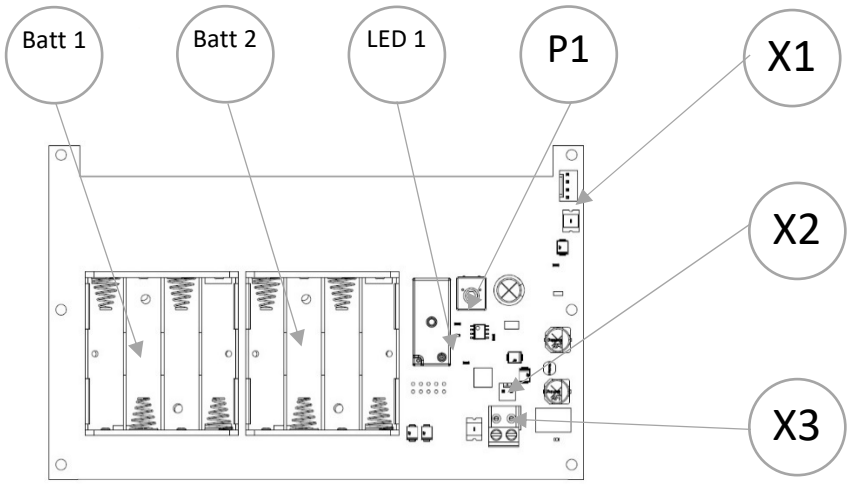
CAUTION !!

The earth connection (PE) must be reliably connected.

6 Commissioning



Clamp nr.	Definition	Connection
X1	Mains power supply in	L, N
X2	Power supply (external accessory)	L, N
X3	Ground	PE
X4	Tubular motor connection	N = nul L ↑ = op L ↓ = neer
X5	Brake 24 VDC	1 = + 2 = -
X6	2 potential-free programmable contacts Output 1 (par. 5.1) = Klem 1+2+3 Output 2 (par. 5.2) = Klem 4+5+6	1 + 4 = No 2 + 5 = Nc 3 + 6 = Com
X7	Various inputs	1 = Safety edge Opto / OSE close 2 = Safety edge 8K2 close 3 = GND 4 = Safety edge Opto / OSE open 5 = Safety edge 8K2 open 6 = External limit switch closed 7 = External limit switch open 8 = Com 24 VDC 9 = Pulse input 10 = Mute 11 = External Control Close 12 = External Control Open 13 = Com 24 VDC 14 = GND 15= + 24 VDC test Photocell 16 = 24 VDC 17 = 12 VDC 18 = Photocell Open 19 = Com 24 VDC 20 = Photocell close 21 = Thermal contact 22 = Com 24 VDC 23 = External Control Stop 24 = Programmable input 25 = Fire alarm input 26 = Com Fire alarm input
X9	Control foil cover	
X10	RJ 45 connector	
X11	Communication with BP12V	



Clamp nr.	Definition	Connection
LED 1	LED for indicating low voltage	
P1	Potentiometer for setting alarm time	
X1	Connection for FireRoll control	
X2	Connection signaller cover	
X3	External signalling device connection	
Bat 1	Battery holder	
Bat 2	Battery holder	

CAUTION !!

Do not remove or replace the cable between the battery board and the control board under voltage.

CAUTION !!

The operating speed of gravity-operated doors must not exceed 0.3 m/s. The force of the door touching the human body or any part of it should not exceed 200 N according to the EN12604.

If this is not possible, an audio-visual warning device should be fitted to the door and be activated as soon as the door begins to close.

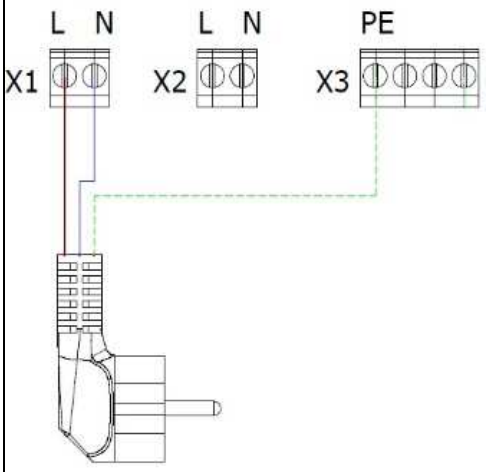
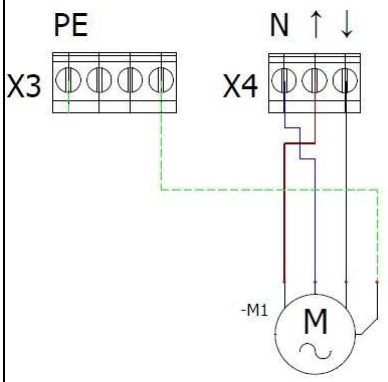
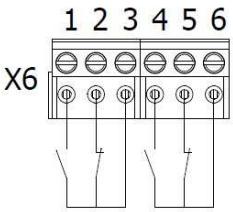
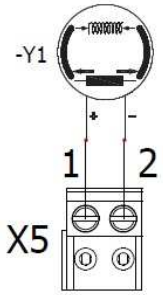
6.1 Commissioning

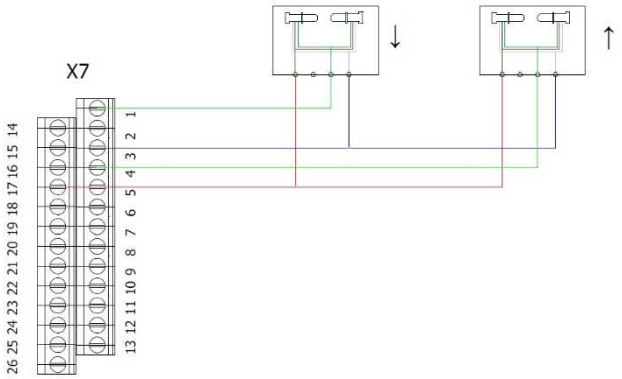
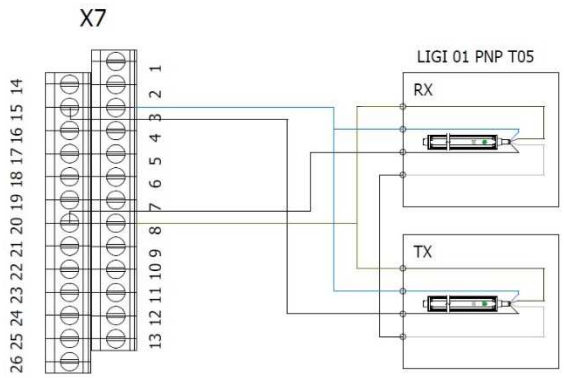
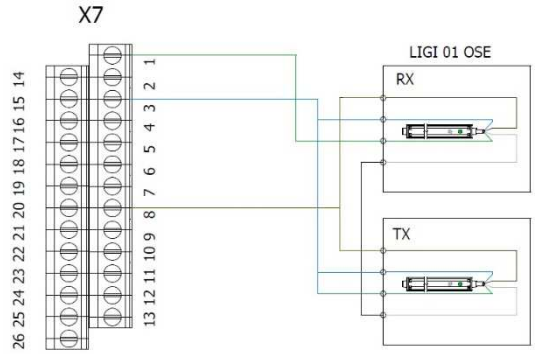
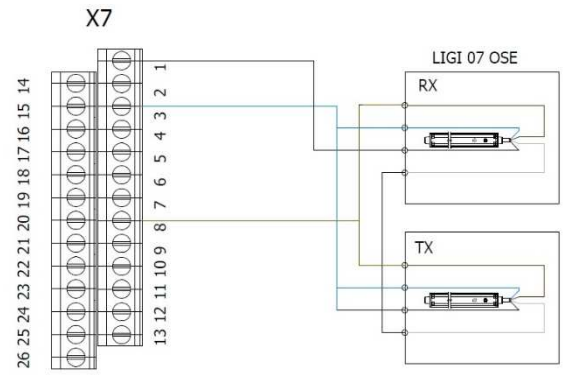
Before the running times are taught, the limit switches of the drive must be set / connected. Only after setting the end positions can the control be configured to your liking via the menu.

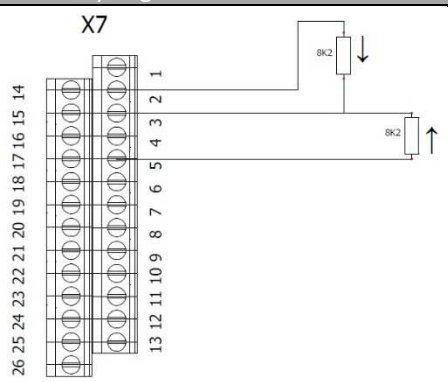
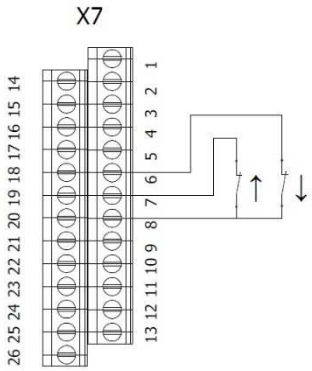
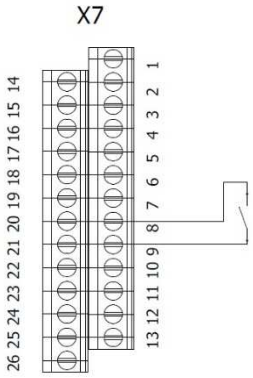
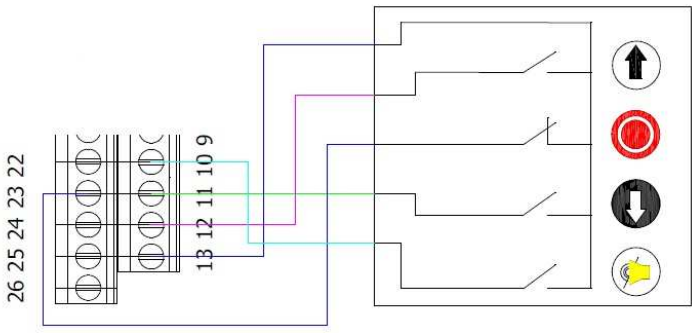
The battery PCB supplies power to the signalling devices if the mains power is lost and the roller shutter closes gravitationally. Battery life with normal use 1 year.

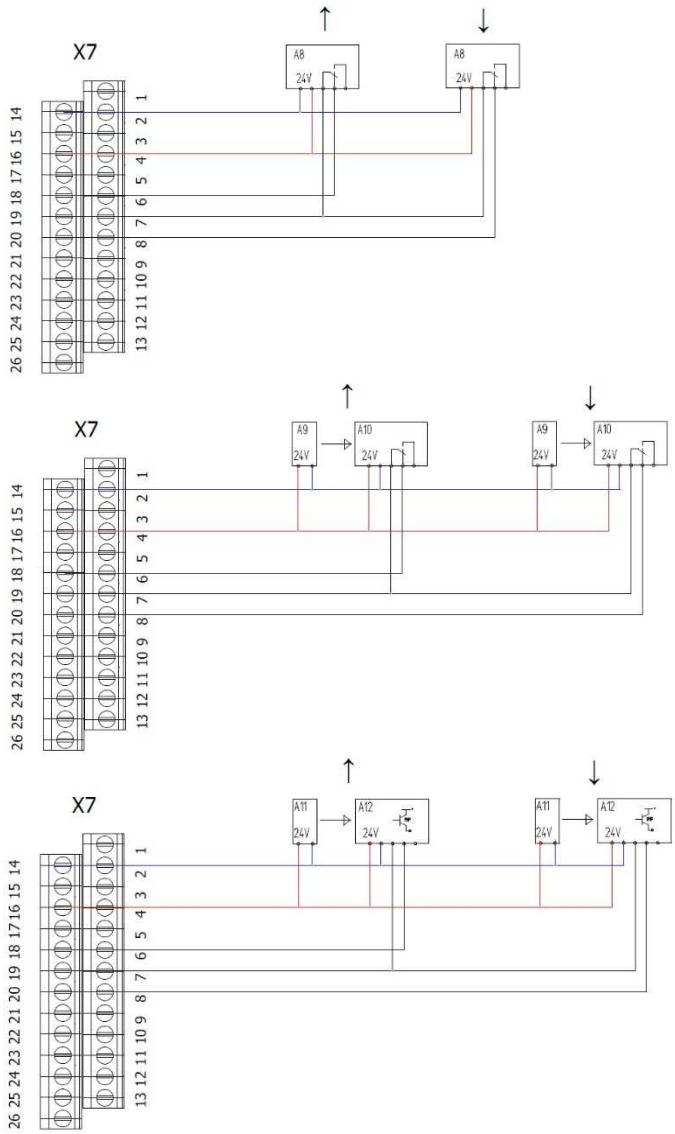
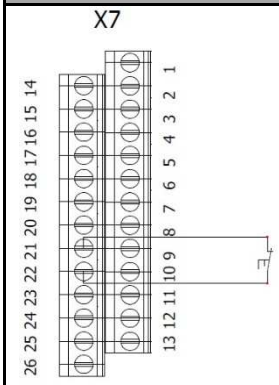
There is an LED on the battery PCB that lights up when the battery voltage drops below 11.5 V DC. It also has a potentiometer with which you can set the time for how long the alarm will go off in the event of an emergency. Shortest time is 1 minute, longest time is 2 minutes

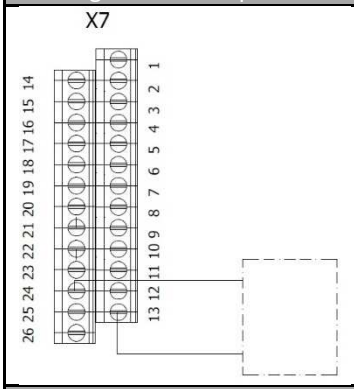
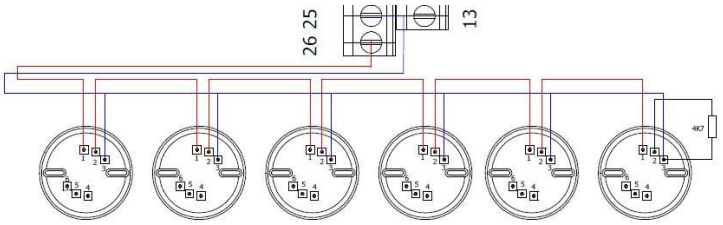
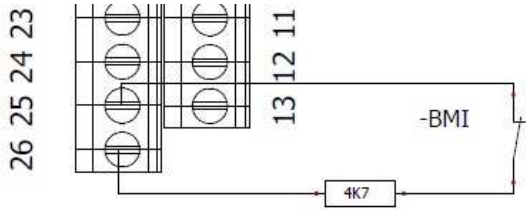
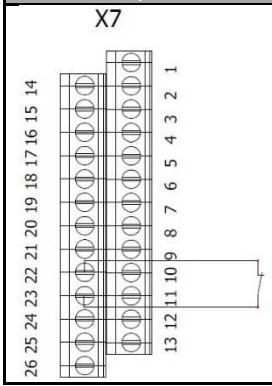
6.2 Connection

Power supply	
	Power supply: 1~, N, PE, 220 – 230 V 50 - 60 Hz
Drive	
	On X4, connect the drive. X4-N = Neutral X4-↑ = Clockwise rotation X4-↓ = Direction of rotation counterclockwise
Potential-free contacts	
	On X6, two potential-free Changeover contacts are present. These can be set via parameter 5.1 and 5.2 for various functions.
Brake	
	A 24 V DC brake can be connected to X5. Make sure that the + (terminal 1) and – (terminal 2) are connected correctly (Brake does not release correctly if incorrectly connected).

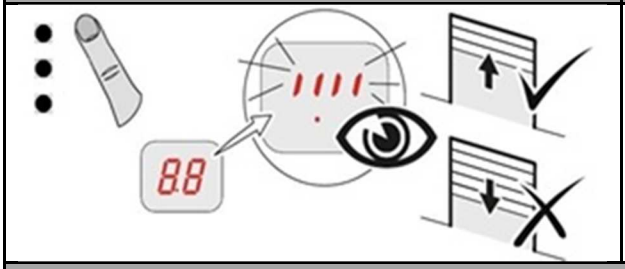
X7 Safety edge Opto / OSE	
	Optical Safety edge close: X7-17 = Brown X7-3 = White X7-1 = Green Optical Safety edge Open: X7-17 = Brown X7-3 = White X7-4 = Green
	LIGI 01 PNP T05: Transmitter X7-8 = Brown X7-3 = Blue X7-15 = Black Receiver X7-8 = Brown X7-3 = Blue X7-20 = Black Connect both white wires together (par.5.2 on 9).
	LIGI 01 OSE: Transmitter X7-8 = Brown X7-3 = White X7-3 = Green Receiver X7-8 = Brown X7-3 = White X7-1 = Green Connect both yellow wires together.
	LIGI 07 OSE: Transmitter X7-8 = Brown X7-3 = Blue X7-3 = Black Receiver X7-8 = Brown X7-3 = Blue X7-1 = Black Connect both white wires together.

X7 Safety edge 8K2	
	Safety edge close : X7-2 = 8K2 X7-3 = 8K2 Safety edge Open: X7-5 = 8K2 X7-3 = 8K2
X7 External limit switches	
	External limit switches can also be connected to X7 (6+7+8) if the operator is not equipped with one. X7-6 = External limit switch closed X7-7 = External limit switch open X7-8 = Com 24 VDC When this input is not in use, a wire bridge must be placed between terminals 6+8 and 7+8.
X7 Pulse input	
	Connection of an impulse or external remote control receiver via the terminals X7-8 and X7-9. The switching contact must be potential-free (no contact).
X7 External Control	
	X7 (10, 11, 12, 13, 23) can be used for connecting an external UP-STOP-DOWN control. When X7 external plug is not used, connect terminals 22 and 23 with a wire bridge. There is also an input for an external "mute" button. If this input is not in use, a wire bridge must be placed between terminals 22 and 23.

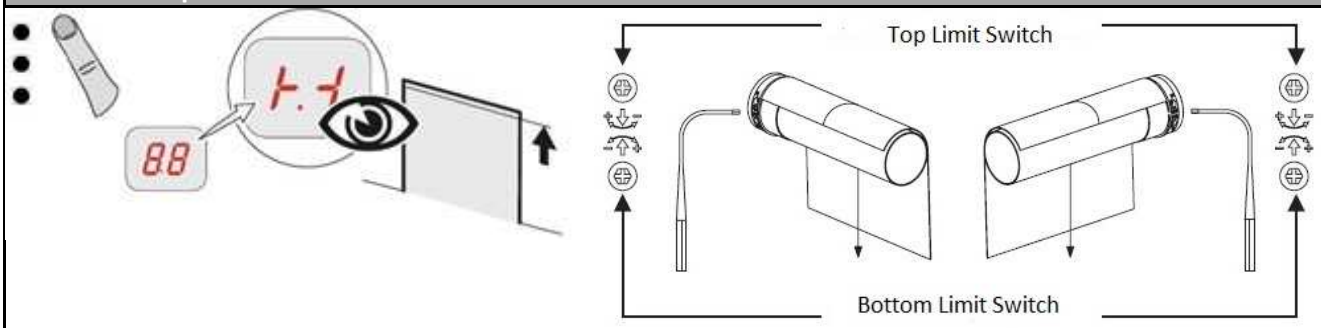
X7 Photocell	
	A 8 Reflection photocell X7-16 = Brown X7-14 = Blue X7-19 = Com Switching contact X7-18 = Switching contact photocell open X7-20 = Switching contact photocell close Single-sided photocell A9 = Transmitter A10 = Receiver X7-16 = Brown X7-14 = Blue X7-19 = Com Switching contact X7-18 = Switching contact photocell open X7-20 = Switching contact photocell close Single-sided photocell A11 = Transmitter A12 = Receiver X7-16 = Brown X7-14 = Blue X7-19 = Com Switching contact X7-18 = Switching contact photocell open X7-20 = Switching contact photocell close If this input is not used, a wire bridge must be placed between terminals 18+19 and 19+20.
X7 thermal contact	
	A thermal contact of an drive can be connected to X7 21+22. If necessary, the contact of the roll-off protection can also be connected to this input. This will be connected as an N.C. contact. When this input is not in use, a wire bridge must be placed between terminals 21 and 22.

X7 Programmable input	
	This input can be programmed by parameter 5.4.
X7 Fire alarm input	
 **RESET** Smoke detectors with a 2-wire system (potential difference) can be reset by pressing the lid Stop and Mute at the same time.	Input for fire / smoke alarm (X7 25+26) with detectors for potential difference for up to 6 detectors (short-circuit detection via resistor 4K7). X7-25 = Fire alarm input X7-26 = Com 24 V DC If this input is not used, a 4K7 resistor must be placed between terminals 25 and 26.
X7 BMI input	
	Input for fire / smoke alarm (X7 25+26) via fire alarm panel (short-circuit detection via resistor 4K7). X7-25 = BMI Input X7-26 = Com 24 V DC If this input is not used, a 4K7 resistor must be placed between terminals 25 and 26.
X7 Roll-off protection	
	X7-22+23 is an input with a stop function. At this input, the contact of the roll-off protection can be connected. This will be connected as an N.C. contact. If this input is not in use, a wire bridge must be placed between terminals 22 and 23.

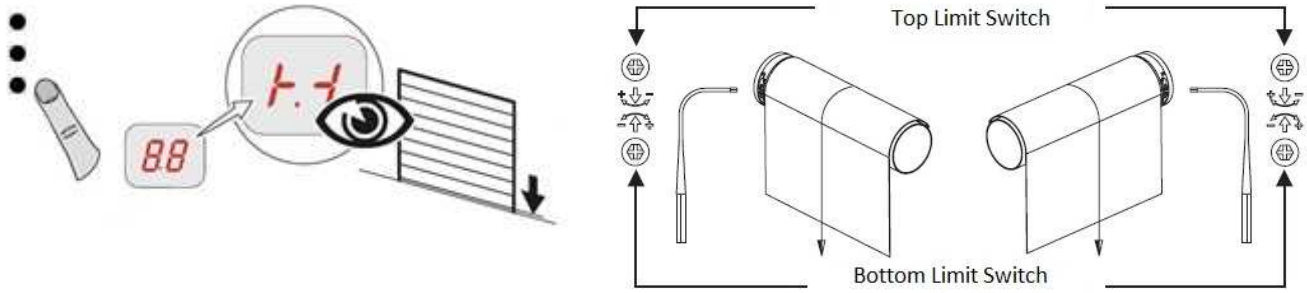
6.3 Adjusting limit switches

Start programming: Check direction of rotation	Change the direction of rotation if necessary
	

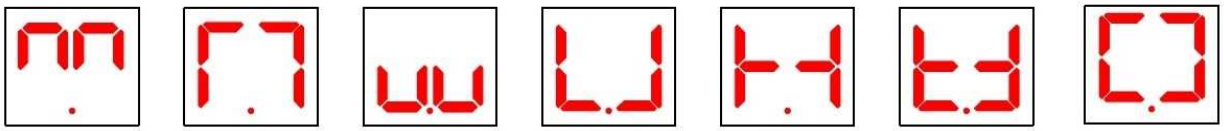
Move to end position OPEN and set limit switch OPEN



Move to end position CLOSE and set limit switch CLOSE



After learning the end position, the status of the door is indicated on the display by means of the symbols below.



Move open | *End position Open* | *Move close* | *End position Close* | *Random Position* | *Pre-end Position* | *Both limit switches actuated*

6.4 Drive Runtime

The running time (parameter 1.2) is set to 120 seconds by default. The teach-in procedure for the durations can be done via parameter 1.1 in the menu. As a result, the running time is adjusted to the running times of the door. After installation, set the run time more generously than the time it takes for the door to go from fully closed to fully open position. If the operator takes longer than the set time, the door movement will stop.

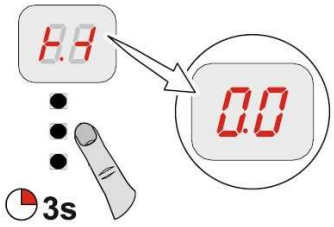
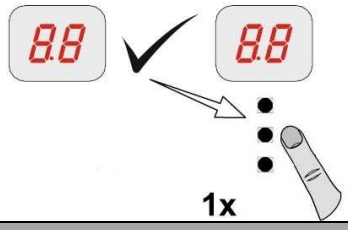
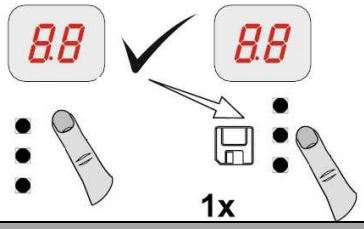
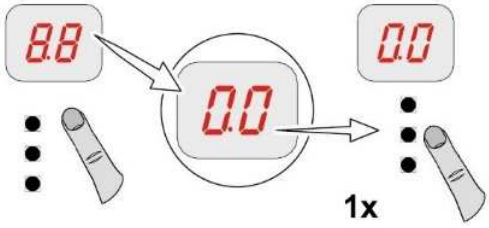
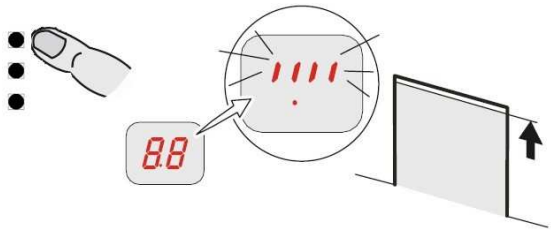
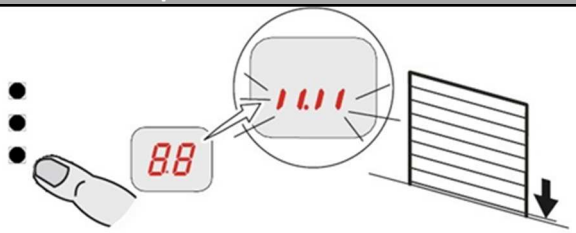
6.5 Malfunction/unexpected stop

In the event of a malfunction/unexpected stop, view the error message on the display and eliminate the error in question, restart the control system by issuing a new command. If the fault persists, consult the installer.

7 Connection

7.1 Operating Instructions

On the PCB there are 3 push buttons to the right of the display, namely: "**˅**", "**^**" and "**stop/ok**" (see image). These buttons work in normal operation as an up-stop-down operation.
To access the menu, a password must be entered in advance (default 99, can be changed in menu 9.6), after entering this password the menu will remain accessible for 10 minutes without a password.

Start Programming	Selecting and Confirming Programming Point
	
Setting up and saving features	**Exit Programming**
	
Move to end position OPEN	**Move to end position CLOSE**
	

7.2 Settings

Parameter series 0; Basic settings

Parameter	Definition	Settings	
0.0	Exit Menu	Exit from menu	
0.1	Choice of operating mode automatic or dead man	.1) Dead man open, dead man close	X
		.2) Auto-open, deadman close	
		.3) Automatic opening and closing with no view of the door when operating the external control	
		.4) Automatic with a view of the door when operating the external control	
0.2	Type safety edge close	.1) Auto-detect	X
		.2) OSE	
		.3) 8K2 Electrical safety edge	
		.4) No safety edge (only deadman possible)	
0.3	Safety edge function closing direction	.1) Door fully open	
		.2) Door stops and opens for 1 sec.	X
		.3) Stops	
0.4	Safety edge function opening direction	.1) Door fully closed	
		.2) Door stops and closes for 1 sec	X
		.3) Stops	
0.5	Return time safety edge closing direction	.0) Faster	
		.1)	X
		.2)	
		.3) Slower	
0.6	Return time safety edge opening direction	.0) Faster	
		.1)	X
		.2)	
		.3) Slower	

0.7	Type safety edge open	.1) Auto-detect	X
		.2) OSE	
		.3) 8K2 Electrical safety edge	
		.4) No safety edge (only deadman possible)	
0.8	Function safety edge close in case of emergency (parameter 3.1 on .1)	.1)Disabled	X
		.2) Stop	
		.3) Open for one second	
		.4) Fully open	
0.9	Function photocell in closing direction in case of emergency (parameter 3.1 to .1)	.1) Disabled	X
		.2) Stop	
		.3) Open for one second	
		.4) Fully open	

Parameter Series 1; running time

Parameter	Definition	Settings	
1.1	Automatically reset the running times	Door opens and closes twice. Can be stopped with the "Ok" button of the PCB or with the stop button on the lid.	
1.2	Maximum running time (automatically becomes 5 seconds longer than the running time of the door from end position to end position, when automatically teach-in)	3 t/m 240 seconds	120s
1.3	Time for end limit switch in 10msec increments	1 t/m 240	50
1.4	Delay time 24 VDC brake, in steps of 10msec	0 t/m 240	0
1.9	Reset with limit switch. (Ok button press for 5 sec)	.1) External Mechanical Limit Switches	
		.2) Current measurement for motors with internal limit switches	

Parameter series 2; Action settings

Parameter	Definition	Settings	
2.1	Function safety edge close at pre-limit switch closed (default setting .1)	.1) Door stops	
		.2) Disabling safety edge	
		.3) Door opens fully	
2.3	Auto-closing time	1 t/m 240 seconds 0 = disabled	0
2.4	Photocell function during countdown automatic closing time in normal operation.	.0) Time is restarted in case of interruption of photocell	X
		.1) Time is interrupted	
		.2) After interruption photocell the door will close after 3 seconds regardless of the time left	
		.3) After 1.5 seconds of interruption, close immediately	
		.4) Auto close to pass photocell at 1.5 second interruption, without time lock	
2.5	Number of re-openings in case of automatic closing and actuating safety edge	1 t/m 10 0 = Disabled (infinite)	2
2.6	Impulse input function	.1) Stop disabled in the open direction	
		.2) Stop enabled in the open direction	X
2.7	Close Pre-Warning Time	1 t/m 60 seconds 0 = disabled	0
2.8	Open Pre-Warning Time (default setting 0)	1 t/m 60 seconds 0 = disabled	0
2.9	Fire alarm/calamity pre-warning time	0 t/m 60 seconds	0

Parameter series 3; Calamity settings

Parameter	Definition	Settings	
3.1	Fire alarm function (default setting .1)	.1) Closes the door	1
		.2) Opens the door	
3.2	Time for closing after automatic opening with open button in case of fire alarm (parameter 3.3 set to .3)	1 t/m 240 seconds	1
3.3	Function open button in case of fire alarm and door close (parameter 3.1 set to .1)	.1) Disabled	X
		.2) Opening deadman after release, closes the door immediately	
		.3) Automatic opening , closes after set time in parameter 3.2.	
3.4	Extend BM function after BMC has been active and close door (parameter 3.1 set to .1)	0 t/m 240 seconds	0
3.5	Number of attempts to activate the safety edge/photocell when closing the door in the event of an emergency (parameter 3.1 set to .1)	0 t/m 10 0 = infinite	0
3.6	Action if safety edge and/or photocell is not detected when the fire alarm becomes active and the door closes (parameter 3.1 set to .1)	.1) Ignore: door closes without protection Activation of safety edge during closing >120 sec. , closes the door without protection	X
		.2) Do not ignore: Door will remain open for up to 120s. If the security is still activated, the door will close without protection.	
		.3) Don't ignore: door remains open	
3.7	Time for closing after activation of safety edge/photocell closing in the event of an emergency (parameter 3.1 set to .1)	1 t/m 240 seconds	1

3.8	Stop button in case of fire alarm (Default setting .1)	.1) disabled	X
		.2) Switched on after release, movement continues	
3.9	Function of safety edge and/or photocell after reaching set maximum number of attempts (parameter 3.5) (parameter 3.1 set to .1)	.1) Closing up further without security	X
		.2) Open back two seconds and stop	
		.3) Stop	

Parameter series 4; Delay Times

Parameter	Definition	Settings	
4.1	Test photocell output (turn off +24V transmitter before test)	.0) Disabled	X
		.1) Enabled test photocell in closing direction	
		.2) Enabled Test photocell in open direction	
		.3) Enabled Test photocells in both directions	
4.2	Drive with centrifugal brake / 24VDC brake	.1) Standard drive	X
		.2) Drive with 24 Vdc centrifugal brake	
4.3	Option closing in case of fire alarm (Parameter 4.2 on 2)	.1) On electric motor	X
		.2) On Gravity	
4.4	Minimal time that the door has to be sent open before a close command can be given again after fire alarm or power failure/restart of the control (Parameter 4.2 on 2)	1 t/m 10 seconds	2
4.5	Delay time response to the start of the alarm/emergency notification	0 t/m 10 minutes	0
4.6	Time to ignore the fire alarm input	0 t/m 15 seconds	0

Parameter series 5; Output settings

Parameter	Definition	Settings	
5.1/5.2	Function Potential-free contact 1/2	.1) Disabled	X
		.2) End position open	
		.3) End position closed	
		.4) Green light (switches on at end position open and turns off at pre-warning)	
		.5) Red light continuous during door movement, flashing during pre-warning	
		.6) Red light flashing during door movement, flashing during pre-warning	
		.7 Pulse at each open command	
		.8 Brake control (switches during door movement)	
		.9 Test pulse light curtain, when closing movement	
		1.0 Test pulse wireless transmission system for safety edge open, before closing movement	
		1.1 Test pulse wireless transmission system for safety edge close, before opening movement	
		1.2 Switches on activation safety edge or defective safety edge	
		1.3 Switches when an error message is active except for the safety edge	
		1.4 Switches when maintenance cycle counter is on and reaches 0	
		1.5 Switches when fire alarm procedure is active	
		1.6 Switches when fire alarm input is active	
5.3	Function after activation of fire alarm	.1) Door closes until an open button, impulse input or stop button is operated	X
		.2) Door stops immediately	

5.4	Programmable Input Function	.1) Disabled .2) Disable auto-close	X
		.3) Disable open-stop-close	
		.4) Disable open and close	
		.5) Disdable open	
		.6) Mute	
5.5	Function buzzer at gravitational closing	.1) For all error messages and fire alarms / calamity Only in the case of photocell and/or safety edge is activate more than 30 seconds.	X
		.2) For all error messages and calamities	
		.3) Only in the event of a fire alarm/calamity	
		.4) Disabled	

Parameter series 8; Maintenance settings

Parameter	Definition	Settings	
8.5	Number of cycles for maintenance per 100 cycles adjustable from 100 (= 1) to 9900 (= 99)	1 t/m 99	
8.7	Enabling/disabling the maintenance counter	.1) Disabled	X
		.2) Enabled	
8.9	Maintenance Cycle Counter Display	Maintenance cycle counter is displayed. It counts down from the set value to 0. At zero, a notification is given to carry out maintenance.	

Parameter series 9; Registration

Parameter	Definition	Settings	
9.1	Cyclus counter	Number of openings made by the door.	
9.2	Last 20 error messages	Displays the last 20 error messages that were caused.	
9.3	Number of cycles after last programming change	The number of cycles after the last programming change is shown here	
9.4	Software version	Software version is displayed	
9.5	Reset to factory settings	.0) Do not perform a reset back to menu	
		.1) Perform Reset , Restart Control	

8 Notifications

8.1 Status Notifications

Notification	Definition
E 1.1	Operation open active
E 1.2	Operation stop active
E 1.3	Operation close active
E 1.4	Fire alarm input active
E 1.8	Mute active
C.S.	Maintenance cycle achieved (service the door/shutter and reset parameter 8.5)

8.2 Error messages

Melding	Definition	Recommendation/explanation
F 1.3	Thermal contact activated	In the case of an drive with external cams, check the thermal contact. Then wait for the engine to cool down.
F 1.5	Cable break smoke detector / removal of smoke detector	Short cicuit in connection cables of the detectors, 1 of the detectors from the chain removed from the socket.
F 2.0	No safety edge in the closing direction	If the safety edge is not detected during the start-up of the controller, this message will appear. If an safety edge is connected, check that it is connected correctly. Check that the safety edge is not activated If so, it will be recognized as soon as it is no longer activated.
F 2.1	Photocell activated	The photocell(s) are interrupted. This can be by passing through the door. If this message persists, check that the photocell is properly aligned and that the lens is clean. Check the electrical circuit connected to the terminal block. If the photocells are not interrupted, the electrical circuit on the terminal strip must be closed. If no photocells are used, place a wire bridge under this connection.
F 2.2	Safety edge in closing direction during automatic closing	Check if there is an obstacle in the door opening. If so, remove it and give a new command to close the door. If this is not the case, check that the safety edge is still in order, that the pre-limit switch closed

	Reached set number of attempts parameter 2.5	is correctly adjusted and that parameter 2.1 is not set to .4 and that the door returns when it is almost closed.
F 2.4	8K2 safety edge activated in closing direction	The 8K2 safety edge is activated, this can be due to a barrier in the door opening. If there is no barrier in the door opening and this message continues to appear, check if the resistance of the strip on the terminal block (GND and 1K2/8K2 input) is still 8.2KOhm.
F 2.5	8K2 safety edge in closing direction defective	check the resistance of the safety edghe on terminal block (GND and 1K2/8K2 input) is still 8.2KOhm. Check the coiled cord for any cable breaks.
F 2.9	Optical Safety edge in the closing direction activated	The optical safety edge has been interrupted. This can be done by an obstacle in the door opening. If this is not, and this message continues to appear, check that the eyes are still seeing each other. Also check the connections on the terminal block (+12V and – for the 12V power supply and opto input for the signal). Check if the sensors are still working or need to be replaced.
F 4.6	Light curtain/photocell activated	Light cuertain / photocell input activated. Or photocell with test activated.
F 4.7	Photocell/Photocell Test Negative	Check that the test for the photocell is correctly connected. During the test, the controller expects a short interruption at the input of the photoelectric contact unit. Check the photocells and replace them if defective.
F 4.8	Test wireless transfer system for safety edge close negative	Check that the test for the wireless transfer system is connected correctly. The controller expects a short interruption at the safety edge in the closing direction. Check the safety edge and the wireless transmission system and replace it if defective.
F 4.9	Photocell Test Negative	If parameter 4.1 is set to .1, the photocell is tested. The 24V of the transmitter is briefly switched off before opening and/or closing. If the input signal is not interrupted, the test is negative. Check the photocells and the cabling.
F 5.1	Error in ROM memory	ROM memory check failed. Restart the control. If this does not work, exchange the controls.
F 5.2	Error in CPU	CPU registry test error. De-energize the control unit and re-energize. If this message keeps coming back, exchange the control board.
F 5.3	Error in RAM	RAM test error. De-energize the control unit and re-energize. If this message keeps coming back, exchange the control board.
F 5.4	Internal Control Error	Plausibility error. De-energize the control unit and re-energize. If this message keeps coming back, exchange the control board.

F 5.9	Runtime monitoring exceeded	Check that the door moves mechanically correct. Check whether the time of parameter 1.2 is long enough and adjust it if necessary.
F 7.0	No safety edge in the open direction	If the safety edge is not detected during the start-up of the controller, this message will appear. If an safety edge is connected, check that it is connected correctly. Check that the safety edge is not activated. If so, it will be recognized as soon as it is no longer activated.
F 7.1	Photocell open activated	Photocell(s) activated in the open direction.
F 7.2	Low battery voltage or no batteries present	Low voltage of battery in battery module. Or no batteries present in the module. Insert new batteries into the battery module.
F 7.4	8K2 safety edge activated in the open direction	The 8K2 safety edge is activated, this can be due to a barrier in the door opening. If there is no barrier in the door opening and this message continues to appear, check if the resistance of the strip on the terminal block (GND and 1K2/8K2 input) is still 8.2KOhm
F 7.5	8K2 safety edge in the open direction defective	check the resistance of the safety edghe on terminal block (GND and 1K2/8K2 input) is still 8.2KOhm. Check the coiled cord for any cable breaks.
F 7.7	Fault in main relay	Fault in main relay, F1 fuse defective. Check fuse
F 7.8	Error in reversal relay	Error in reversal relay.
F 7.9	Optical Safety edge in the open direction activated	The optical safety edge has been interrupted. This can be done by an obstacle in the door opening. If this is not, and this message continues to appear, check that the eyes are still seeing each other. Also check the connections on the terminal block (+12V and – for the 12V power supply and opto input for the signal). Check if the sensors are still working or need to be replaced.

9 Maintenance

In order to ensure proper operation, the user must inspect the complete system with all components every 3 months.
It must be established that the door is fully functional during normal operation and closes as desired in the event of an emergency. This inspection must be recorded and stored by the user.
Children should not clean the appliance or carry out user maintenance without supervision!
The complete system should also be checked by a professional installer at least once a year. This annual inspection must be recorded and kept by the installer. A copy of this annual inspection report must also be left with the user.

9.1 Maintenance plan

Part	Action	Interval	Performer
Visual inspection control-unit	Control	Monthly	User
Visual inspection control-unit	Control	Yearly	Installer
Visual inspection control-unit	Control	2 yearly	Installer
Visual inspection drive-unit	Control	Monthly	User
Visual inspection drive-unit	Control	Yearly	Installer
Visual inspection drive-unit	Control	2 yearly	Installer
Visual inspection of peripheral equipment	Control	Monthly	User
Visual inspection of peripheral equipment	Control	Yearly	Installer
Visual inspection of peripheral equipment	Control	2 yearly	Installer
Functional inspection control-unit	Control	Monthly	User
Functional inspection control-unit	Control	Yearly	Installer
Functional inspection control-unit	Control	2 yearly	Installer
Functional inspection drive-unit	Control	Monthly	User
Functional inspection drive-unit	Control	Yearly	Installer
Functional inspection drive-unit	Control	2 yearly	Installer
Functional inspection Safety Components	Control	Monthly	User
Functional inspection Safety Components	Control	Yearly	Installer
Functional inspection Safety Components	Control	2 yearly	Installer
Operation of the fire alarm with mains voltage	Control	Monthly	User
Operation of the fire alarm with mains voltage	Control	Yearly	Installer
Werking Brandmelding met netspanning	Control	2 yearly	Installer
Operation of fire alarm without mains voltage	Control	Monthly	User
Operation of fire alarm without mains voltage	Control	Yearly	Installer
Operation of fire alarm without mains voltage	Control	2 yearly	Installer

9.2 Maintenance instruction

Below is the instruction for carrying out the maintenance:

1. Visual inspection of the controls: Check that the controls are free of damage or defects.
2. Check the mains power cable to make sure it is not damaged. If it is damaged, replace it with an original cable from the manufacturer.
3. Visual inspection of the drive: Check that the drive is not damaged or defective.
4. Visual inspection of peripheral equipment: Check that peripheral equipment has no damage or defects.
5. Functional inspection control-unit: check whether the door is opening and closing and stops by pressing the corresponding buttons.
6. Functional check of the drive: Check that the drive is moving in the right direction by pressing the corresponding buttons and that it does not make any noises.
7. Functional control Safety components: When moving the door, operate the installed safety components (photocell, light strip, underrun protection, etc.) The door should stop/turn over at this point.
8. Operation of the fire alarm with mains supply: Simulate a fire alarm via the FireRoll control unit and the fire alarm panel with the door open while the mains voltage is still present, the door needs to close.
9. Operation of the fire alarm without mains voltage: Remove the mains voltage, simulate a fire alarm with the door open, the door must close.
10. Replaced batteries: After the prescribed year, replace the batteries according to the instruction in the manual.

9.3 Cleaning the appliance

WARNING

Never use compressed air, abrasive sponges, abrasive cleaners or aggressive liquids such as gasoline or acetone to clean the appliance.

WARNING

Do not use a high-pressure cleaner to clean the appliance or in the vicinity of the appliance.

10 Decommissioning and disposal

10.1 Decommissioning

To decommission this control system, disconnect the mains supply and disconnect 1 battery.
Carrying out live work on this control system is life-threatening and can cause serious injury!

WARNING

Use the control only for the purpose for which it was designed. See 1.1 Intended Use on page 3.

WARNING

The control system may only be managed by persons who have read the user manual and are therefore sufficiently familiar with its operation, operation, maintenance, etc. of the control system, as described in the user manual.

DANGER

It is forbidden to remove, bypass or switch off safeguards.

10.2 Disposal

The symbol below (crossed-out dustbin) means that the end user must ensure the disposal of this product separately from household waste in accordance with the regulations in the country of use. Please note that the batteries must be removed and returned separately.

The purpose of identification with the corresponding symbol is to minimise the disposal of household electrical and electronic appliances as "unsortable waste", thus avoiding as much as possible the burden on the environment and health.

10.3 Installation data (to be filled in by installer)

Details of the Door	
Order number	
Serial number	
Location	
Date of Installation	
Manufacturer Details	
Name	
Adres	
Telephone number	
E-mail	
Website	
Installer Details	
Name	
Adres	
Telephone number	
E-mail	
Website	
Control Details	
Manufacturer	
Product number	
Serial number	
Software version	
Replace Date Batteries	
Drive details	
Manufacturer	
Product number	
Serial number	

Data Safety features	
Manufacturer	
Product number	
Serial number	

10.4 Service Sheet

Date	Performer	Maintenance performed

11 Attachments

11.1 EC declaration or declaration of incorporation

As referred to in the Machinery Directive 2006/42/EC for incomplete machinery, Annex II.1.B.
As referred to in the EMC Directive 2014/30/EU

RDA bv, established at Spoorakkerweg 6 in 5071 NC Udenhout, hereby declares that the product mentioned below complies with the above-mentioned EC directive and is exclusively intended for installation in a door installation as described in the manual.

FireRoll

(FireRoll, Fire door control, FireRoll, sr. nr.: ……., Year: ……..)

Applied (parts of) European standards:

EN 12453:2017+A1:2021	Industrial, commercial and garage doors and gates – Safety in use of powered doors – requirements
EN 60204-1:2018	Safety of machinery - Electrical equipment of machinery - Part 1: General requirements
EN 61000-6-2:2019	Electromagnetic Compatibility (EMC) Part 6-2 General Standard – Interference Immunity for Industrial Environments
EN 61000-6-3:2021	Electromagnetic Compatibility (EMC) Part 6-3 General Standards – Interference Emission for Domestic, Commercial and Light Industrial Environments

At the reasoned request of the national authorities, we provide the relevant information of this unfinished machine

Authorised Representative for the Compilation of Technical Documents
(EU-adres intern)
Ing. Teun Tielemans
Documentation Agent

This product is an incomplete machine within the meaning of the EC Directive 2006/42/EC and is intended to be incorporated into or joined with other machinery (or other incomplete machinery/equipment) to form a complete machine within the meaning of the Directive. Therefore, this product may only be put into operation if it has been established that the entire machine/plant in which it is installed complies with the provisions of the above-mentioned Directive.

Udenhout 17-05-2022 Corné Ribbers Signature

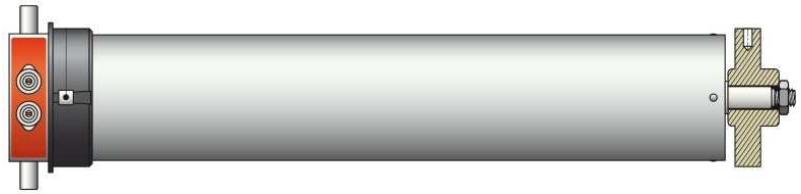
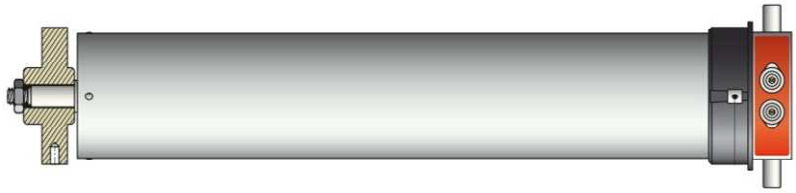
director

Essential health and safety requirements for the design and construction of machinery according to the Machinery Directive 2006/42/EC

bijlage I	toegepast / vervuld	bijlage I	toegepast / vervuld	bijlage I	toegepast / vervuld
Algemene beginselen		1.5.11	n.v.t.	3.6.1	n.v.t.
1	nee	1.5.12	n.v.t.	3.6.2	n.v.t.
2	nee	1.5.13	n.v.t.	3.6.3	---
3	nee	1.5.14	n.v.t.	3.6.3.1	n.v.t.
4	nee	1.5.15	n.v.t.	3.6.3.2	n.v.t.
essentiele veiligheids- en gezondheidseisen		1.5.16	nee	4	n.v.t.
1	---	1.6	---	4.1	---
1.1	---	1.6.1	nee	4.1.1	n.v.t.
1.1.1	nee	1.6.2	nee	4.1.2	---
1.1.2	nee	1.6.3	ja *1	4.1.2.1	n.v.t.
1.1.3	nee	1.6.4	ja	4.1.2.	n.v.t.
1.1.4	nee	1.6.5	n.v.t.	4.1.2.3	n.v.t.
1.1.5	nee	1.7.1	nee *2	4.1.2.4	n.v.t.
1.1.6	nee	1.7.1.1	ja	4.1.2.5	n.v.t.
1.1.7	nee	1.7.1.2	n.v.t.	4.1.2.6	n.v.t.
1.1.8	n.v.t.	1.7.3	n.v.t.	4.1.2.7	n.v.t.
1.2	---	1.7.4.	nee *1	4.1.2.8	---
1.2.1	ja *1	1.7.4.1	nee *1	4.1.2.8.1	n.v.t.
1.2.2	ja	1.7.4.2	nee *1	4.1.2.8.2	n.v.t.
1.2.3	ja	1.7.4.3	nee	4.1.2.8.3	n.v.t.
1.2.4	---	2	n.v.t.	4.1.2.8.4	n.v.t.
1.2.4.1	ja	2.1	---	4.1.2.8.5	n.v.t.
1.2.4.2	nee	2.1.1	n.v.t.	4.1.3	n.v.t.
1.2.4.3	n.v.t.	2.1.2	n.v.t.	4.2	---
1.2.4.4	n.v.t.	2.2	---	4.2.1	n.v.t.
1.2.5	ja	2.2.1	n.v.t.	4.2.2	n.v.t.
1.2.6	ja *1	2.2.1.1	n.v.t.	4.2.3	n.v.t.
1.3	---	2.2.2	---	4.3	---
1.3.1	nee	2.2.2.1	n.v.t.	4.3.1	n.v.t.
1.3.2	nee	2.2.2.2	n.v.t.	4.3.2	n.v.t.
1.3.3	n.v.t.	2.3	n.v.t.	4.3.3	n.v.t.
1.3.4	nee	3	n.v.t.	4.4	---
1.3.5	n.v.t.	3.1	---	4.4.1	n.v.t.
1.3.6	nee	3.1.1	n.v.t.	4.4.2	n.v.t.
1.3.7	nee	3.2	---	5	n.v.t.
1.3.8	n.v.t.	3.2.1	n.v.t.	5.1	n.v.t.
1.3.8.1	n.v.t.	3.2.2	n.v.t.	5.2	n.v.t.
1.3.8.2	nee	3.2.3	n.v.t.	5.3	n.v.t.
1.3.9	nee	3.3	n.v.t.	5.4	n.v.t.
1.4	---	3.3.1	n.v.t.	5.5	n.v.t.
1.4.1	nee	3.3.2	n.v.t.	5.6	n.v.t.
1.4.2	---	3.3.3	n.v.t.	6	n.v.t.
1.4.2.1	nee	3.3.4	n.v.t.	6.1	---
1.4.2.2	nee.	3.3.5	n.v.t.	6.1.1	n.v.t.
1.4.2.3	n.v.t.	3.4	---	6.1.2	n.v.t.
1.4.3	ja *1	3.4.1	n.v.t.	6.2	n.v.t.
1.5	---	3.4.2	n.v.t.	6.3	---
1.5.1	ja	3.4.3	n.v.t.	6.3.1	n.v.t.
1.5.2	ja	3.4.4	n.v.t.	6.3.2	n.v.t.
1.5.3	ja	3.4.5	n.v.t.	6.3.3	n.v.t.
1.5.4	ja *1	3.4.6	n.v.t.	6.4	---
1.5.5	ja	3.4.7	n.v.t.	6.4.1	n.v.t.
1.5.6	nee	3.5	---	6.4.2	n.v.t.
1.5.7	nee	3.5.1	n.v.t.	6.4.3	n.v.t.
1.5.8	nee	3.5.2	n.v.t.	6.5	n.v.t.
1.5.9	nee	3.5.3	n.v.t.		
1.5.10	n.v.t.	3.6	---		

*1: Additional conditions included in the installation instructions,
*2: other language agreed
*3: CE marking not affixed

11.2 Connection SIMU drive

Simu T8F 300 Nm with motor head left	Wire color	Wire nr	Fireroll
	Blue	2	X4-N
	Red	5	X4-up
	White	4	X4-down
	Yellow/Green		X3
	Purple	6	X7-6
	Purple	9	X7-8
	Black	3	X7-7
	Black	8	X7-8
	Grey	1	X5-1
	Grey	7	X5-2
Simu T8F 300 Nm with motor head right	Wire color	Wire nr	Fireroll
	Blue	2	X4-N
	Red	5	X4-down
	White	4	X4-up
	Yellow/Green		X3
	Purple	6	X7-7
	Purple	9	X7-8
	Black	3	X7-6
	Black	8	X7-8
	Grey	1	X5-1
	Grey	7	X5-2

11.3 Connection Becker drive

Becker Type XL 60/120/11M FBK 16 7A motor head left	Definition	Wire nr	Fireroll
	N motor	1	X4-N
	230V F Motor up	2	X4-up
	230V F Motor down	3	X4-down
	PE		X3
	Brake 24V -	4	X5-2
	Brake 24V +	5	X5-1
Becker Type XL 60120/11M FBK 16 7A motor head right	**Definition**	**Wire nr**	**Fireroll**
	N motor	1	X4-N
	230V F Motor down	3	X4-down
	230V F Motor up	2	X4-up
	PE		X3
	Brake 24V -	4	X5-2
	Brake 24V +	5	X5-1
Becker Type XL 60/120/11 FBK 9A motor head left	**Definition**	**Wire nr**	**Fireroll**
	N motor	1	X4-N
	230V F Motor up	2	X4-up
	230V F Motor down	3	X4-down
	PE		X3
	Brake 24V -	4	X5-2
	Brake 24V +	5	X5-1
	Com ES up/down	6	X7-8
	ES down	7	X7-7
	ES up	8	X7-6
Becker Type XL 60/120/11 FBK 9A motor head right	**Definition**	**Wire nr**	**Fireroll**
	N motor	1	X4-N
	230V F Motor down	2	X4-up
	230V F Motor up	3	X4-down
	PE		X3
	Brake 24V -	4	X5-2
	Brake 24V +	5	X5-1
	Com ES up/down	6	X7-8
	ES up	7	X7-6
	ES down	8	X7-7

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MetacoN Next
fire door solutions