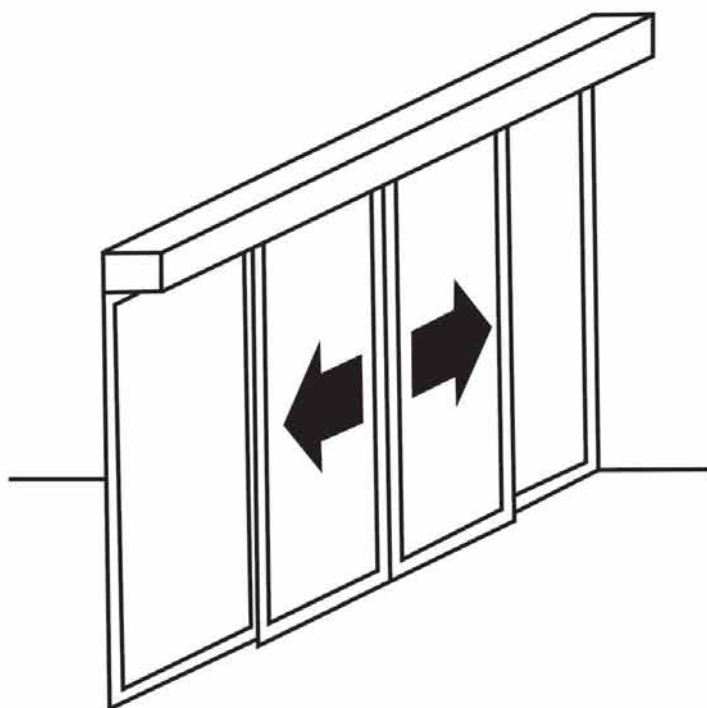
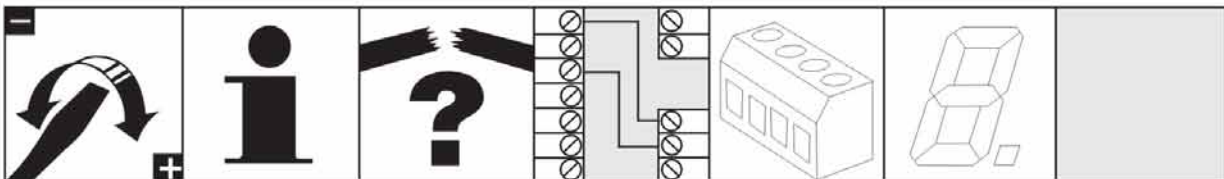


# Operation Manual

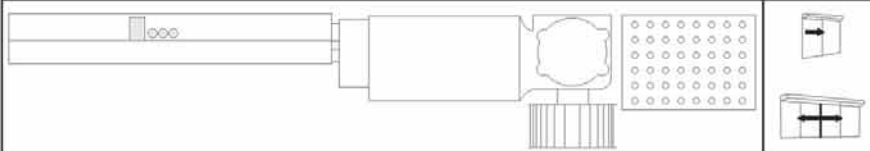
Assembly and operating instructions  
**ES200**



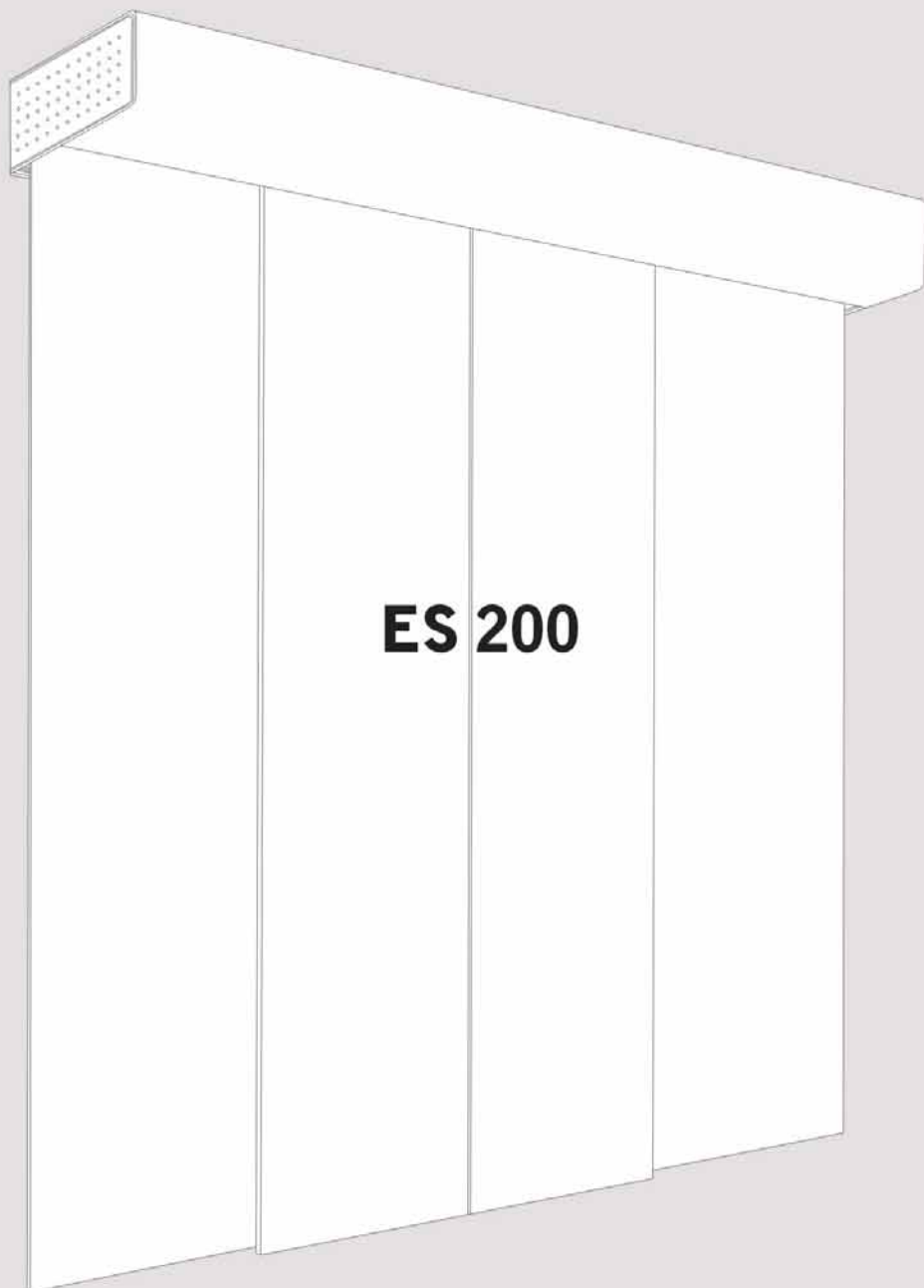
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m = 1 x 200 kg  
LW: 700 - 3000 mm  
m = 2 x 160 kg  
LW: 800 - 3000 mm



**ES 200**

Power supply data	230 V +/- 10% / 50 Hz			
Fuse	-			
Power supply for external accessories			27 V DC / 2 A	
power consumption: max.	250 W			
<b>Function programs</b> • = yes				
OFF	•	•	•	•
AUTOMATIC	•	•	•	•
PERMANENT OPENING	•	•	•	•
PARTIAL OPENING	•	•	•	•
EXIT	•	•	•	•
<b>Data and characteristics</b>				
Door leaf width, in mm, 1-panel sliding door	700 - 3000			
Door leaf width, in mm, 2-panel sliding door	800 - 3000			
Door leaf weight, in kg max., 1-panel	1 x 200			
Door leaf weight, in kg max., 2-panel	2 x 160			
<b>Parameter</b>				
		setting range		
		min.	max.	
Opening speed		10 cm/s	75 cm/s	
Closing speed (up to 71 kg)		10 cm/s	55 cm/s	
Creep speed OPENING	-	3 cm/s	9 cm/s	
Creep speed CLOSING	-	3 cm/s	9 cm/s	
brake ramp OPEN braking deceleration OPEN	-	1	9	
brake ramp CLOSE	-	1	9	
brake ramp reversing	-	1	9	
Hold open time		0 s	180 s	
Hold open time NIGHT/BANK		0 s	60 s	
Delayed opening NIGHT/BANK	-	0 s	10	
Partial Opening		25 cm	Open	
Creep speed distance OPENING	-	0 cm	30 cm	
Creep speed distance CLOSING	-	0 cm	30 cm	
Acceleration OPENING	-	1	9	
Acceleration CLOSING	-	1	9	
Force limitation OPENING		50 N	310 N	
Force limitation CLOSING		50 N	310 N	





**Inbetriebnahme /  
Einstellung / Funk-  
tionsprüfung**

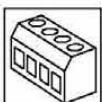
**Commissioning /  
Adjustment /  
Functional test**



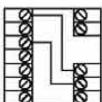
**Bedienungsanleitung  
Operating instruction**



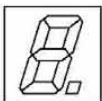
**Fehlersuchanleitung  
Troubleshooting**



**Klemmendefinition  
Terminal definitions**



**Anschlusspläne  
Connection diagrams**



**Parametrierung  
Parameterising**

## Before fixing:

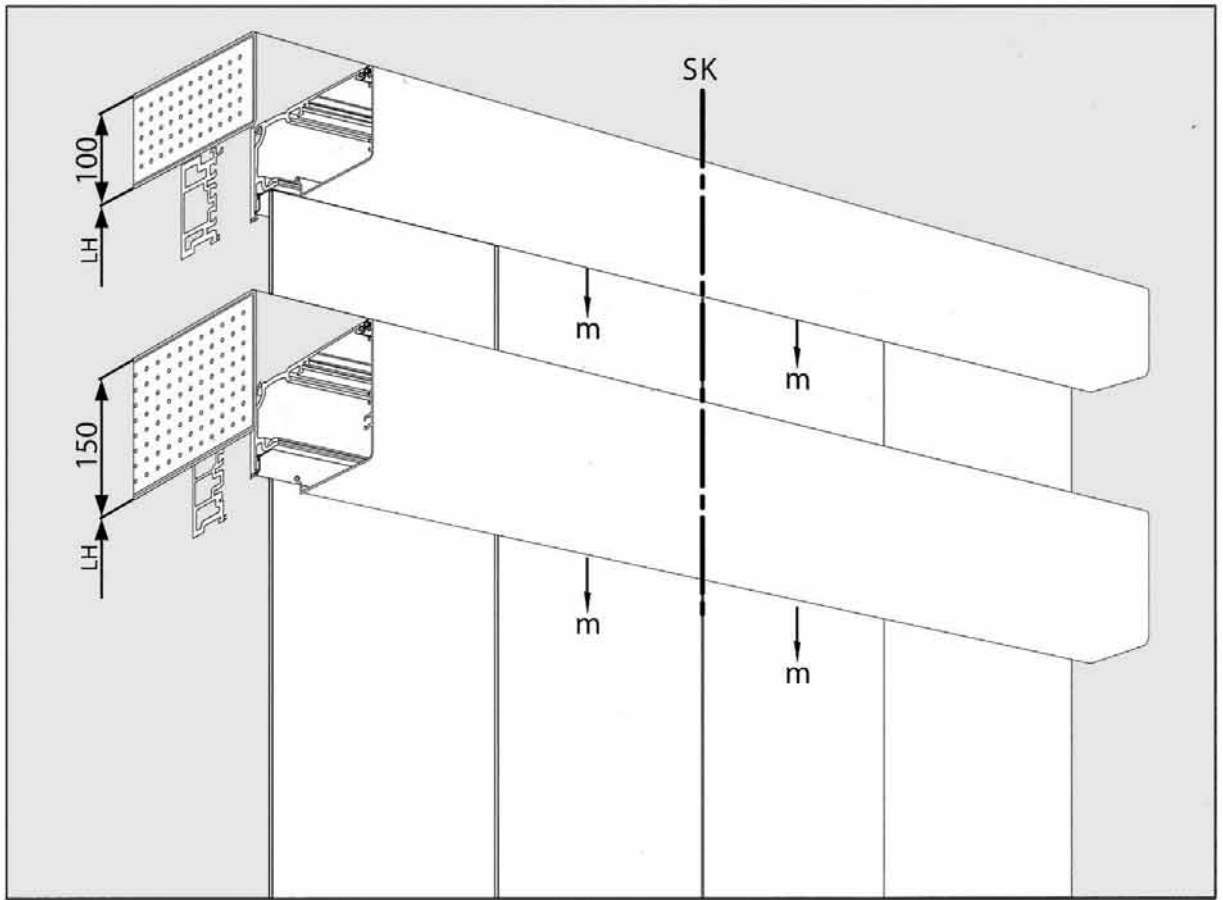
### **Important!**

This documentation is applicable for the following electro-mechanical sliding door operators:  
ES 200, ES 200 *Easy*, ES 200 2D & ES 200 CO48.

Discrepancies between the drawings and the actual drive unit are irrelevant and do not effect the fixing.

Differences in function and fixing between the drive units are mentioned and indicated by the following instructions or in a similar way:

- only for ES 200



D

GB

中文



messen

to measure

测量



sägen

to saw

切割



entgraten

to deburr

修毛边



Bohren

to bore

钻孔



senken

to lower

钻沉孔



schrauben

to screw

拧螺栓



Gewinde  
schneiden

to cut threads

攻丝



dübeln

to peg

固定膨胀管



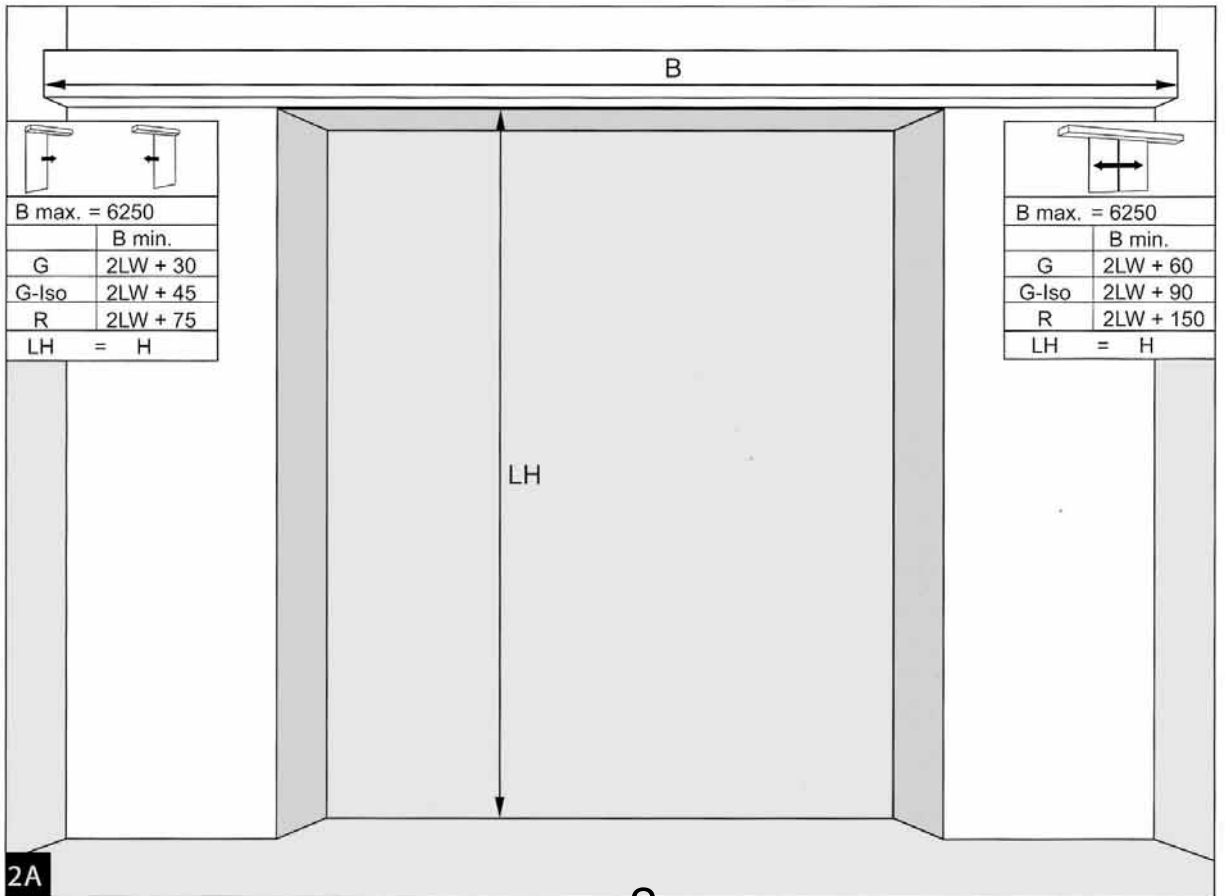
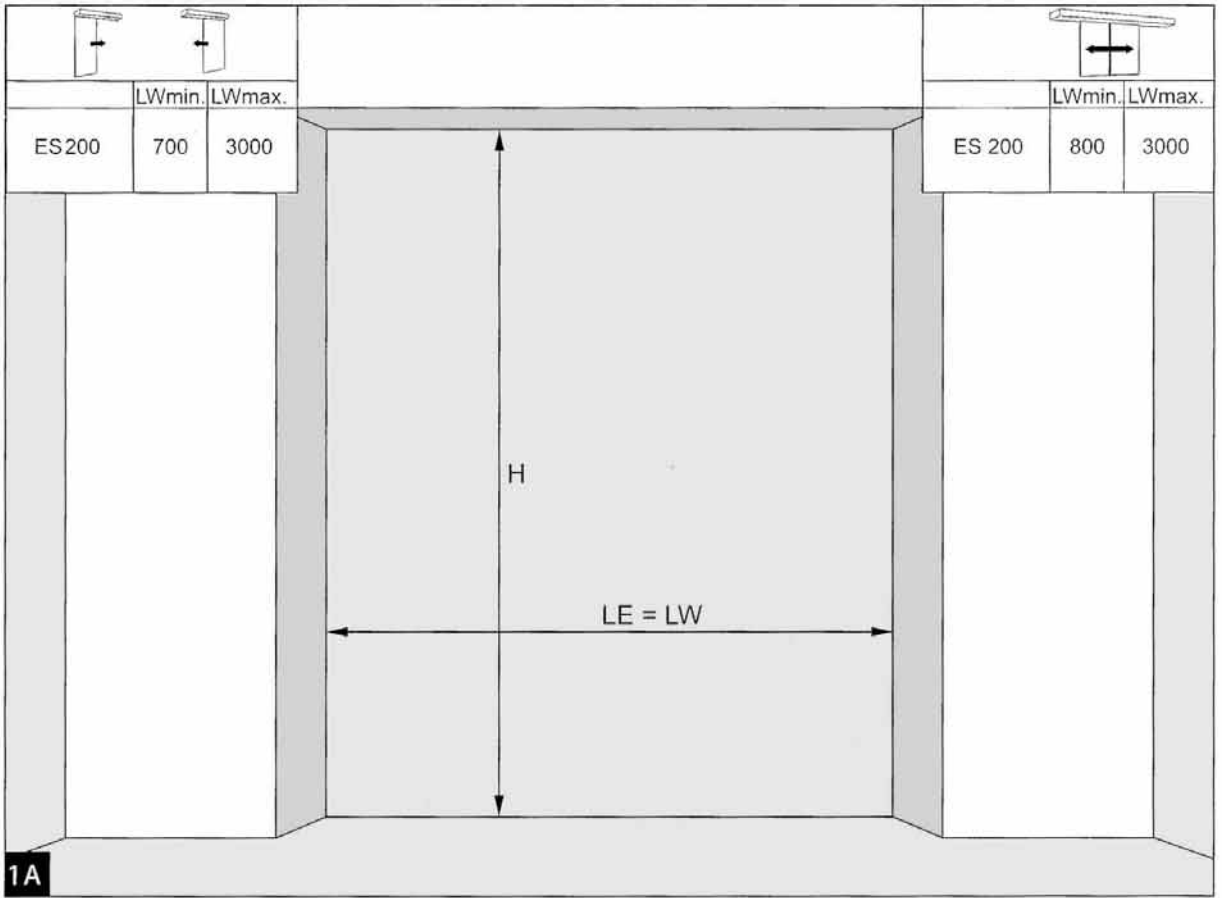
电器安装必须由受过专业培训且厂方认可的专业技术人员进行。  
现场必须提供电源方可进行感应门安装。  
如现场无电源，使用蓄电池仅用于测试，拆除控制器上的电池。

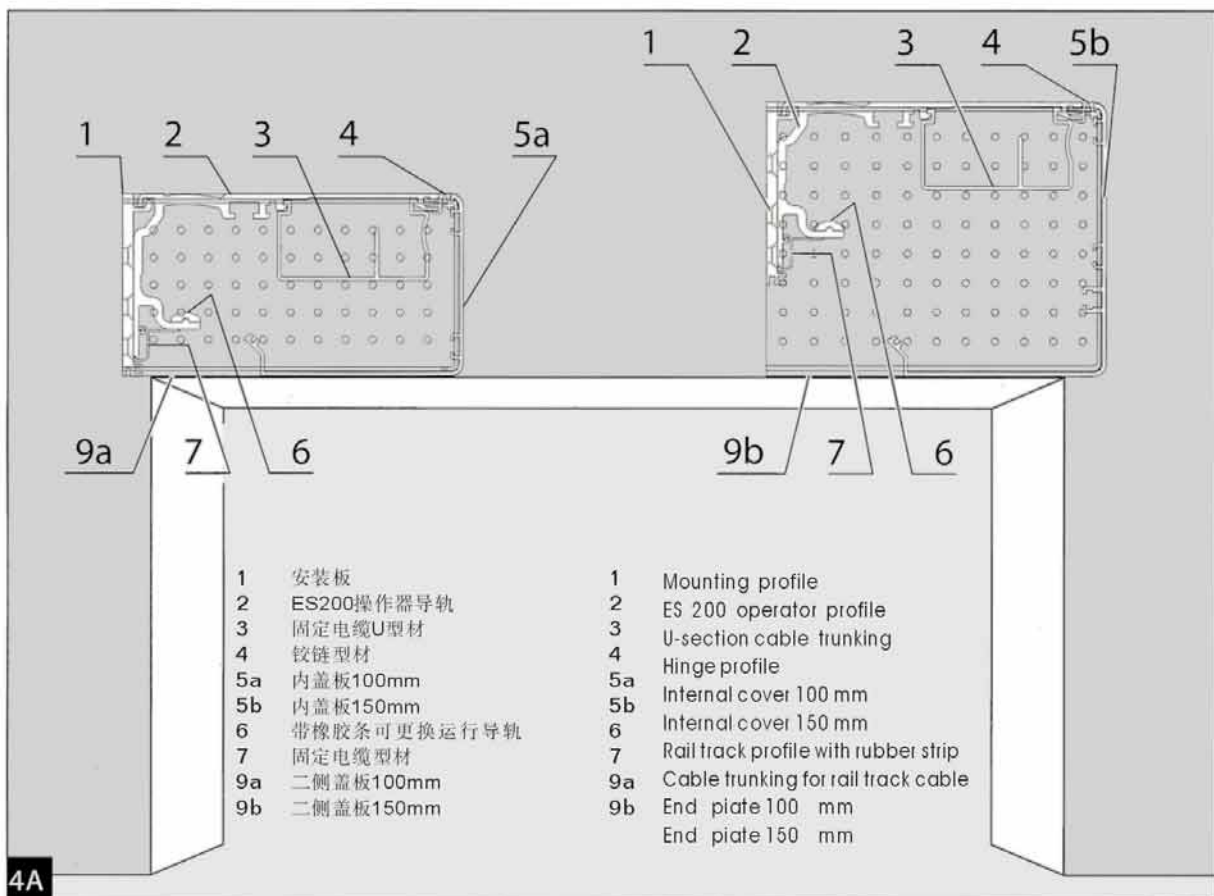
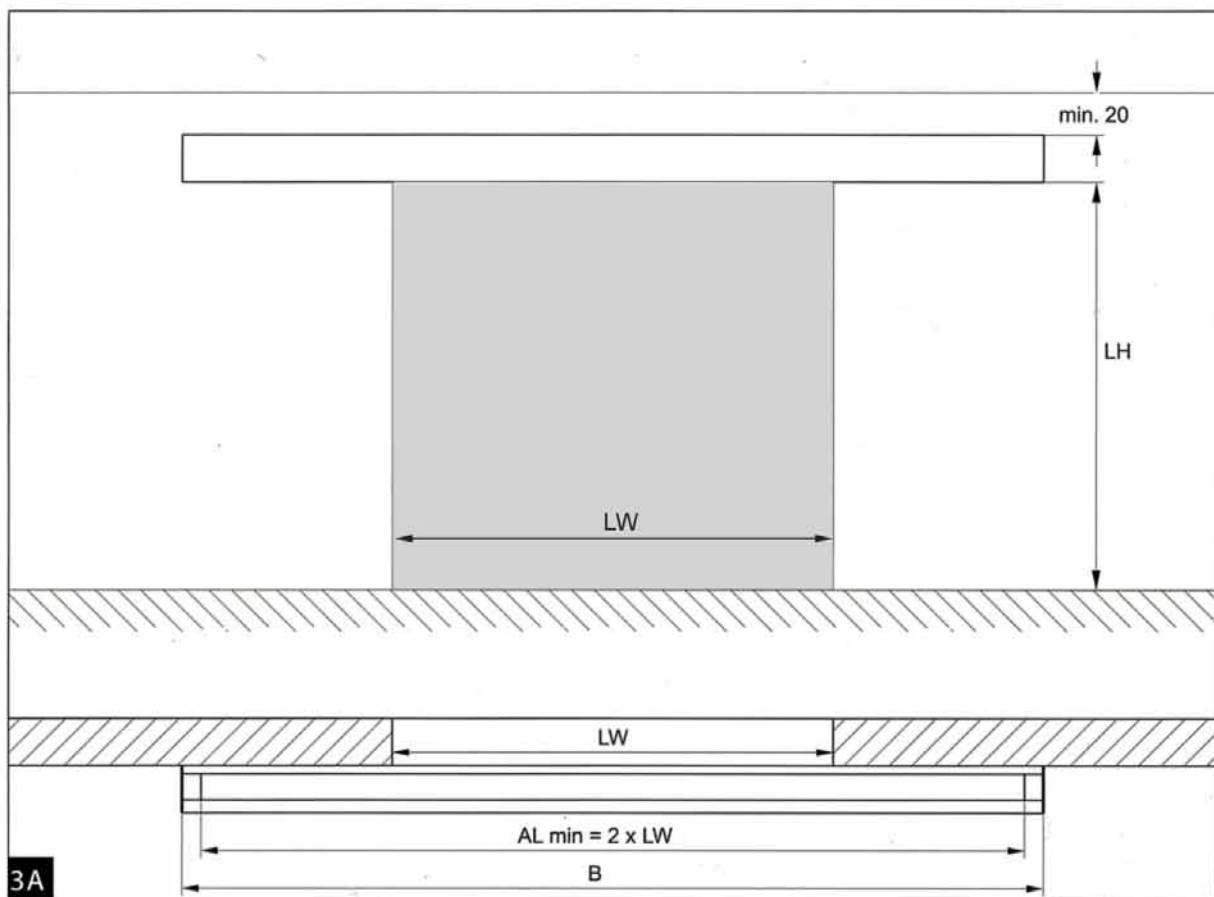
Work on electrical equipment may only be performed by properly qualified electricians.  
Before the installation locally: electrical links please.  
If there is no main power: connect the accumulator only to test  
By shutdown disconnect the battery from the control system

中文

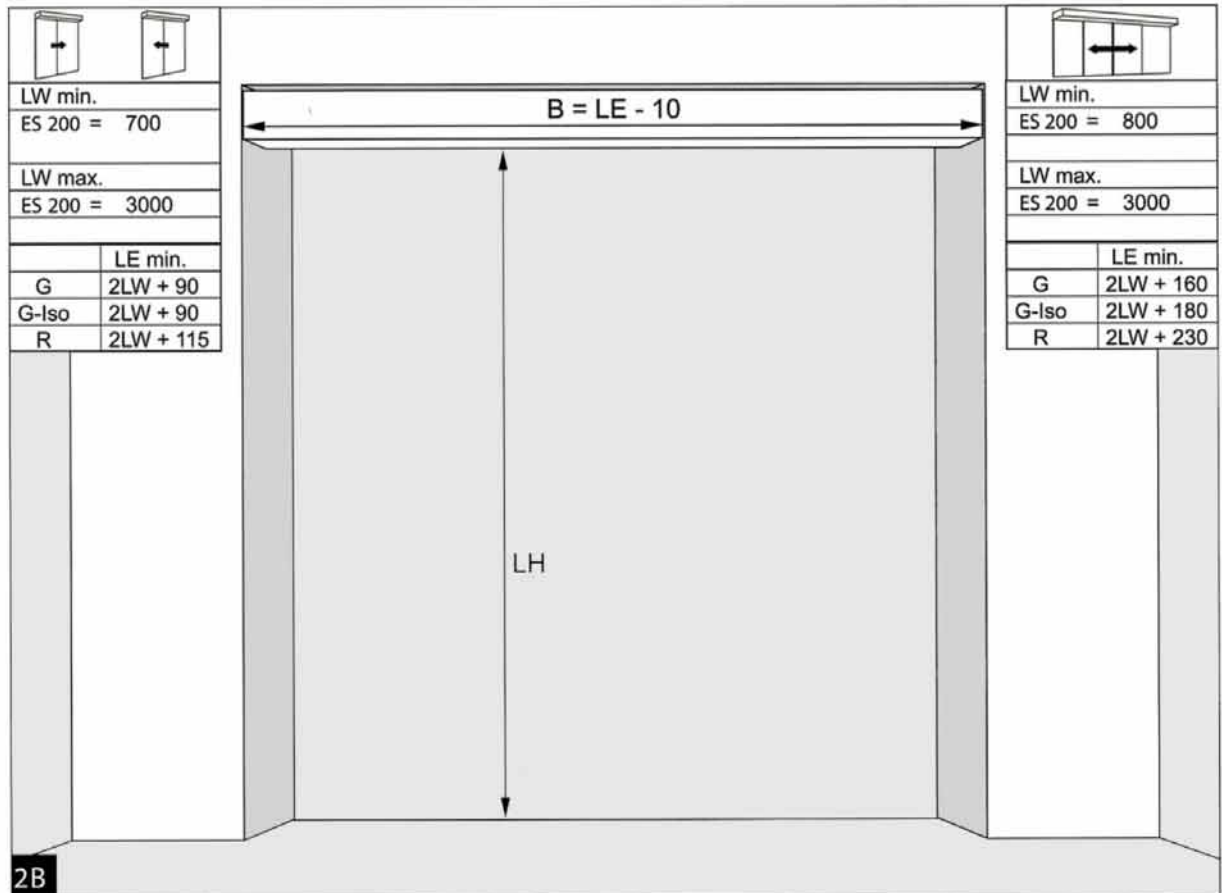
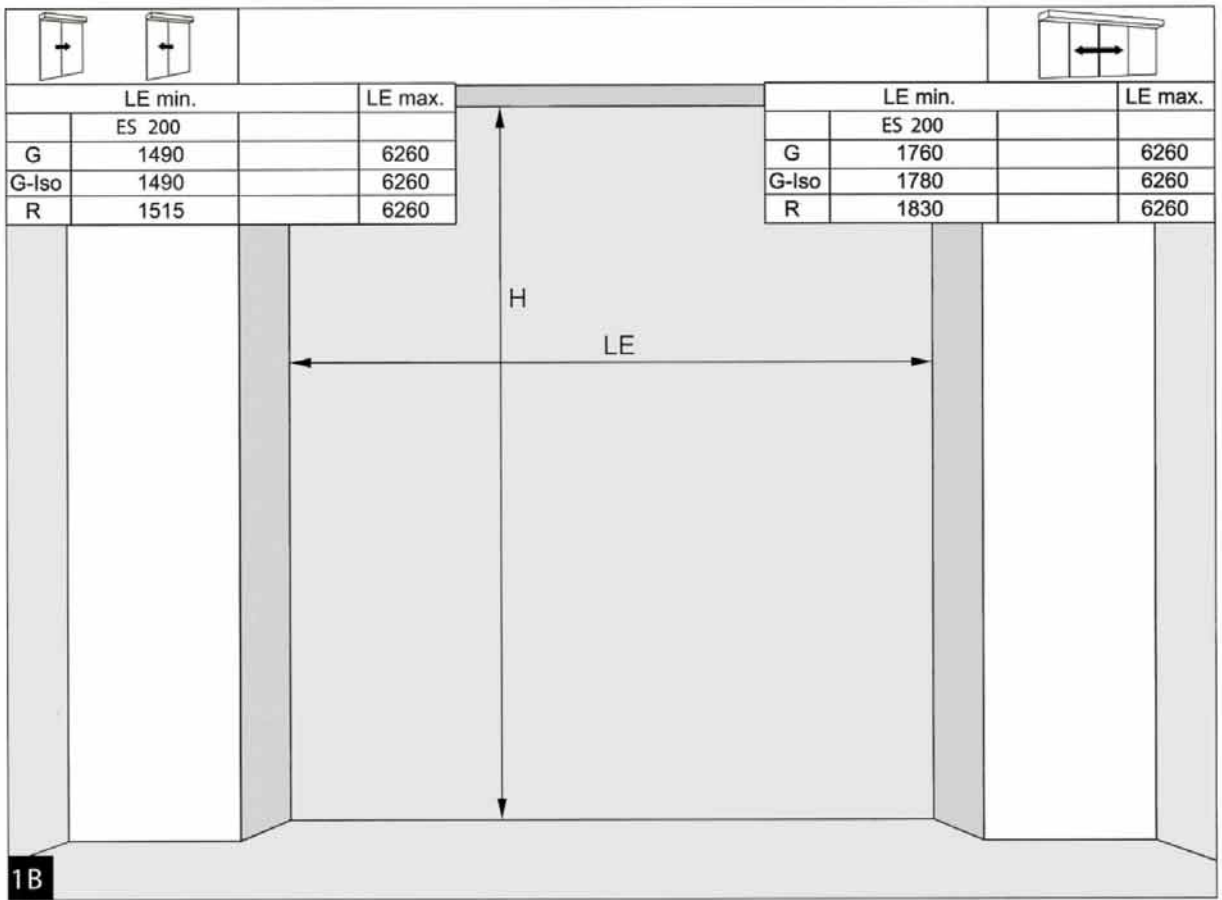
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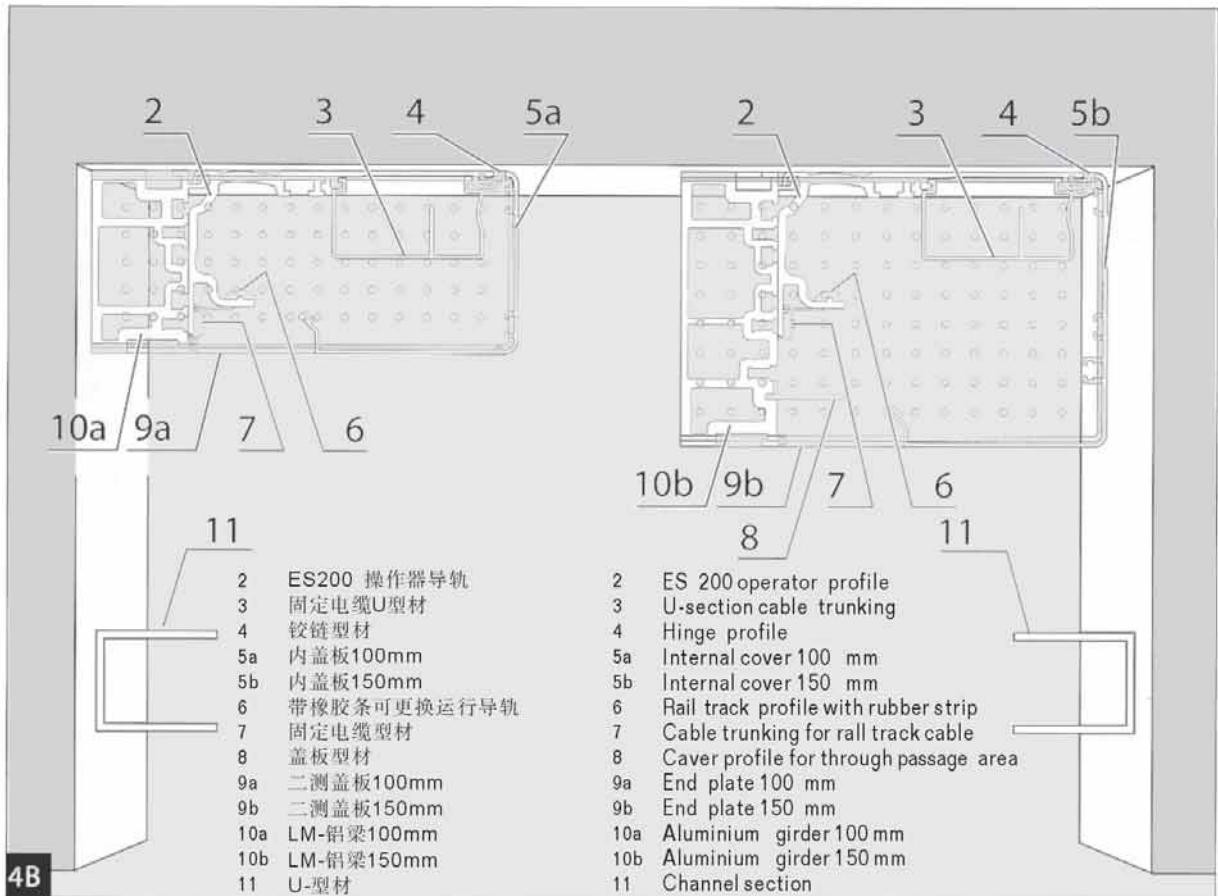
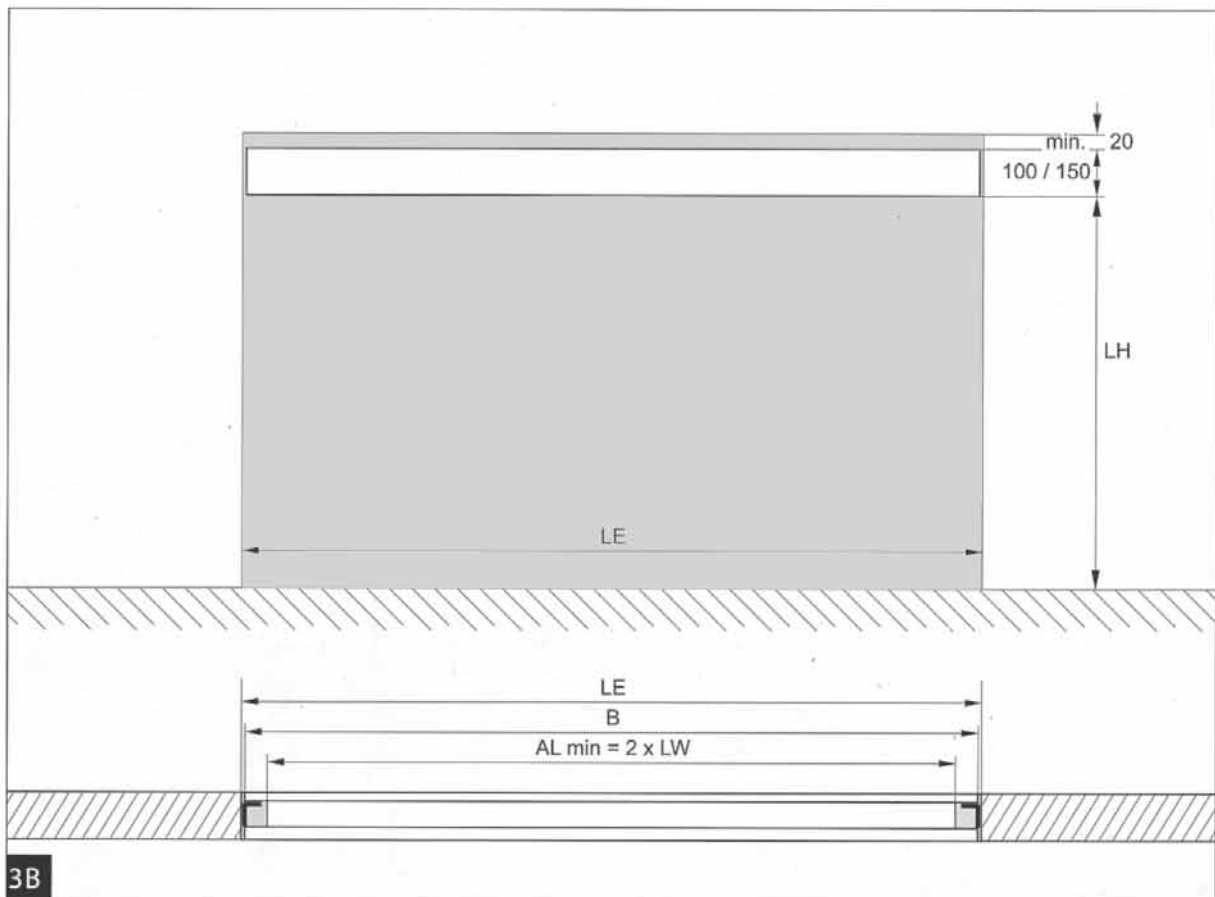
	单开门	Single leaf door
	单开门 无固定门页	single leaf door without side screen
	双开门	double leaf door
	双开门 无固定门页	double leaf door without side screen
	操作器盖板 100 mm	cover for mounting girder 100 mm
	操作器盖板 LM-铝梁100 mm	cover for LM-girder 100 mm
	操作器盖板 150 mm	cover for LM-girder 150 mm
	操作器盖板 LM-铝梁150 mm	cover for LM-girder 150 mm
	操作器导轨附 可更换导轨及限位块	mounting girder with track rail and end buffer
	驱动单元	mini drive unit
	承载架 门页重量100kg	carrige for door panel up tp 100 kg
	皮带连接单元	engaging unit
	驱动皮带	drive belt 2 x LW + 700
	被动轮	reversion (deflection device)
	电锁单元	locking device
	手动释放锁	release mechanism
	蓄电池	accumulator
	程序开关	program switch
	紧停按钮	emergency stop switch
	雷达感应器	radar motion detector









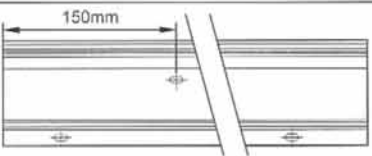





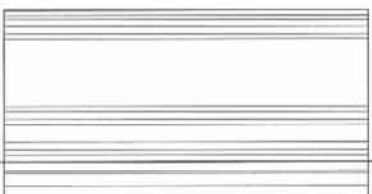






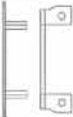
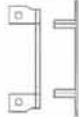



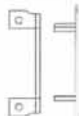



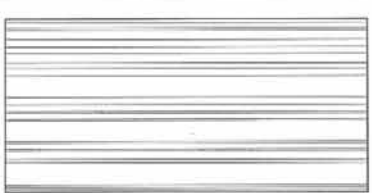



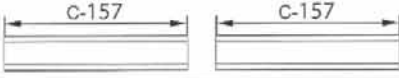




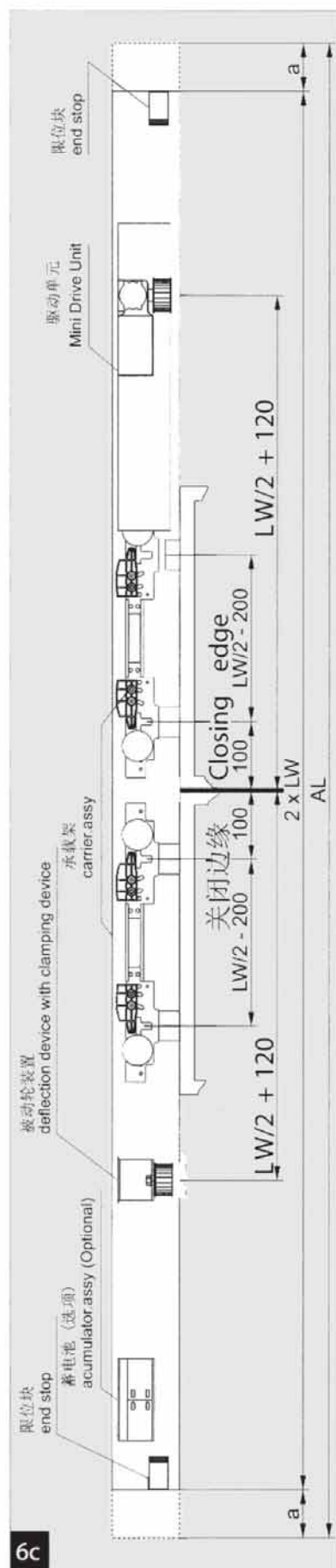
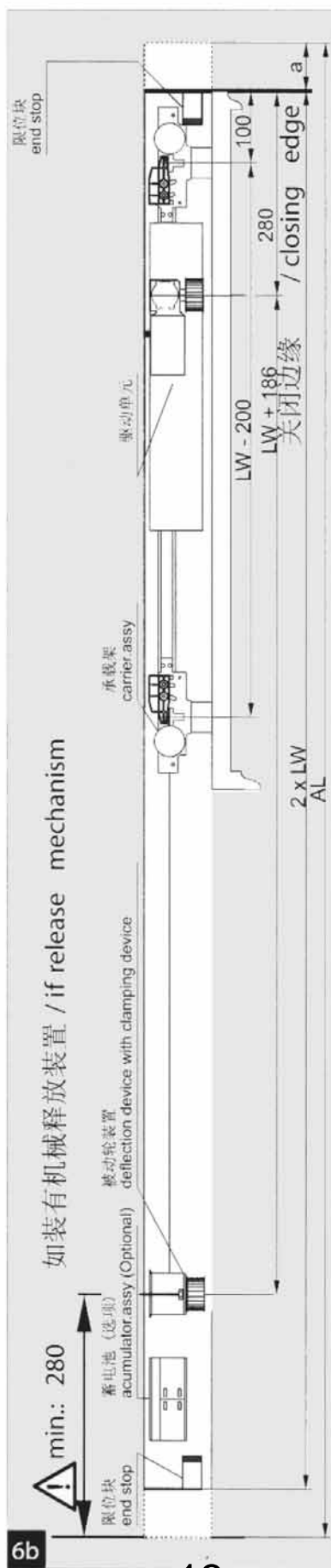
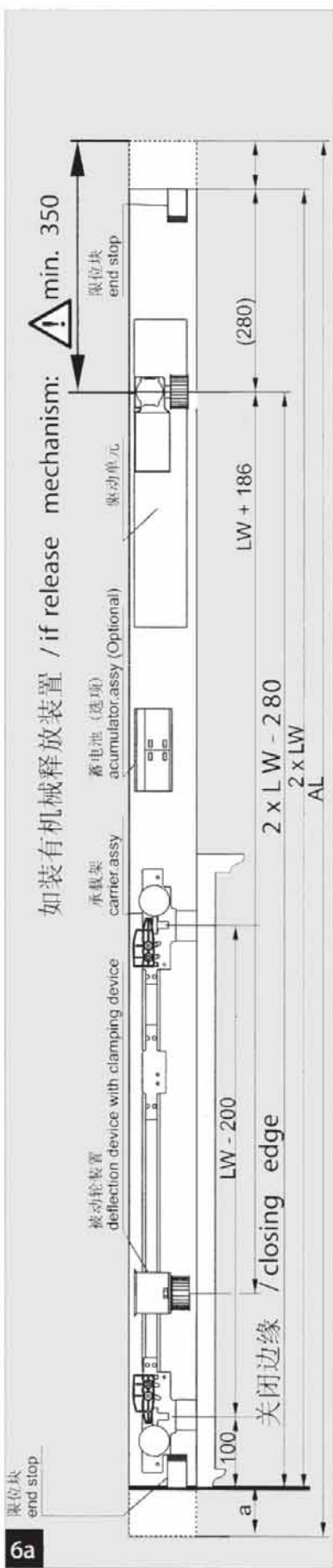
1	•	AL	-	-	-	<b>7A</b> 	
2	•	AL	-	-	-	<b>7A</b> 	
3	-	-	-	-	-		
4	-	-	-	-	-		
5a	•	AL	-	-	-		
5b	•	AL	-	-	-		
6	-	AL	-	-	-		
7	•	AL	-	-	-		
8a	-	-	-	-	-		
8b	-	-	-	-	-		
	•	•				<b>21a</b> 	
	•	•				<b>21a</b> 	
	•	•				<b>21b</b> 	
<b>5A</b>							

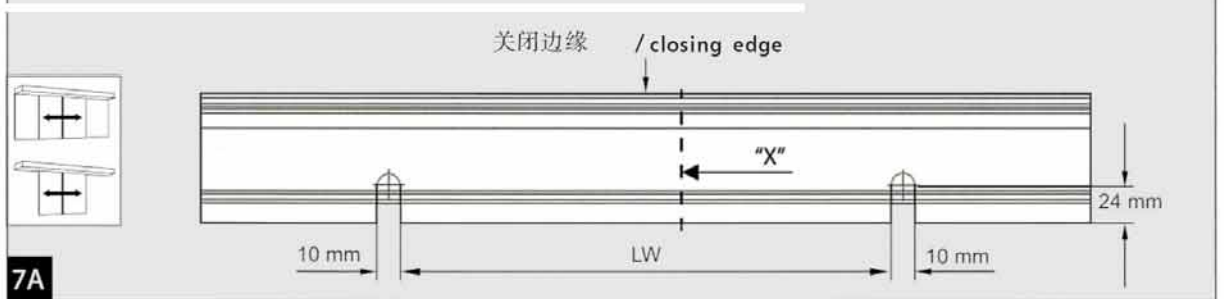
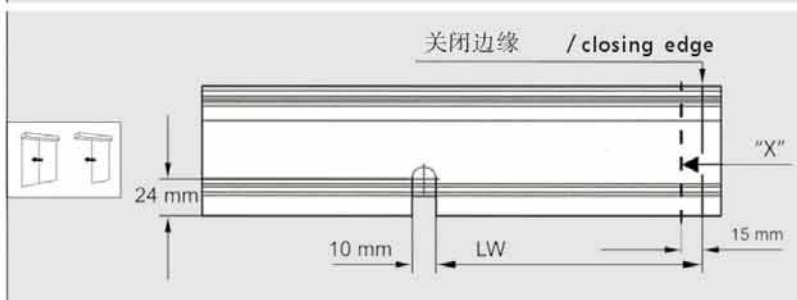
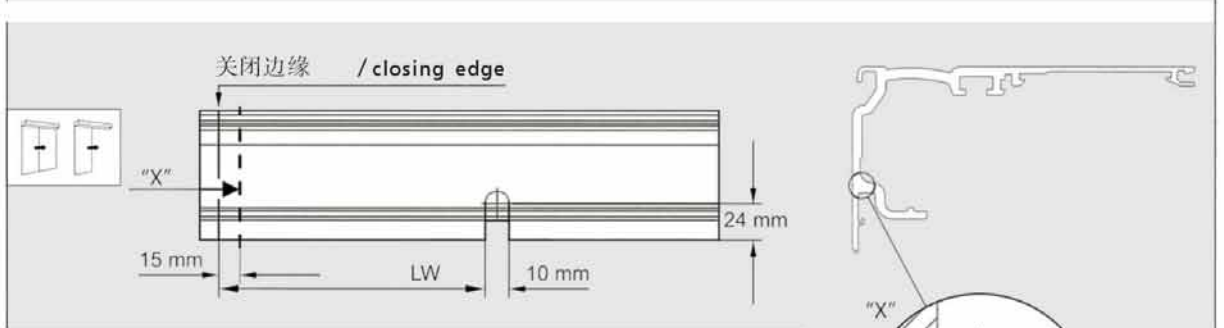
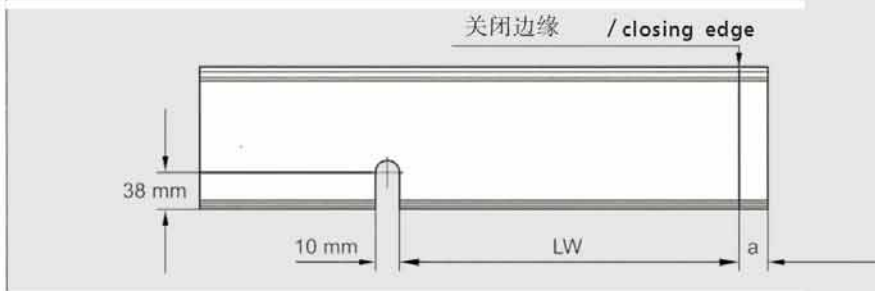
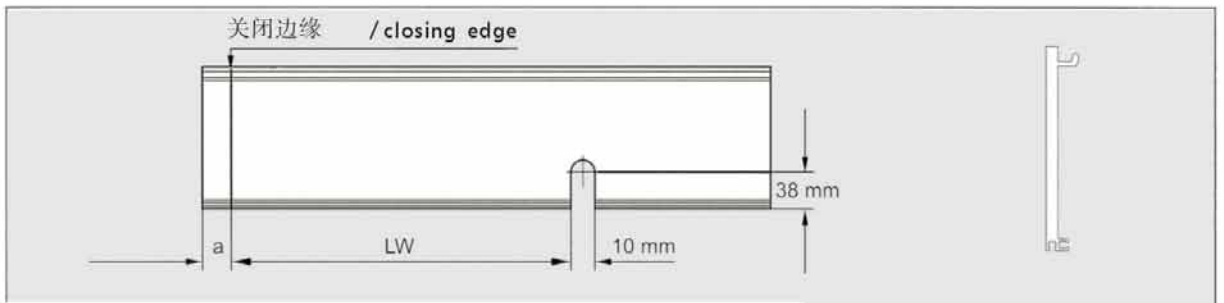






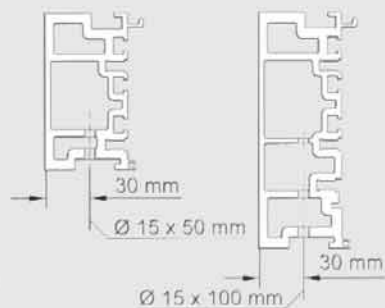
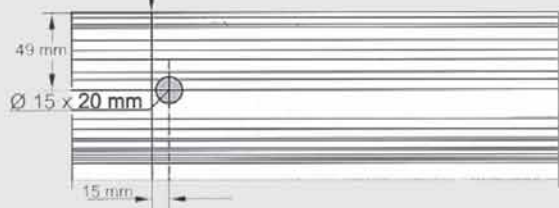
							
1	-	-	-	-	-		
2	•	AL	-	-	-	<b>7B</b> 	
3	-	-	-	-	-		
4	-	-	-	-	-		
5a	•	B					
5b	•	B					
6	-	AL	-	-	-		
7	•	AL	-	-	-		
8	•	AL	-	-	-		
9a	-	-	-	-	-	 	 
9b	-	-	-	-	-	 	 
10a	•	B				<b>7B</b> 	
10b	•	B				<b>7B</b> 	
	•	•				<b>21a</b> 	
	•	•				<b>21a</b> 	
	•	•				<b>21b</b> 	
<b>5B</b>							





7A

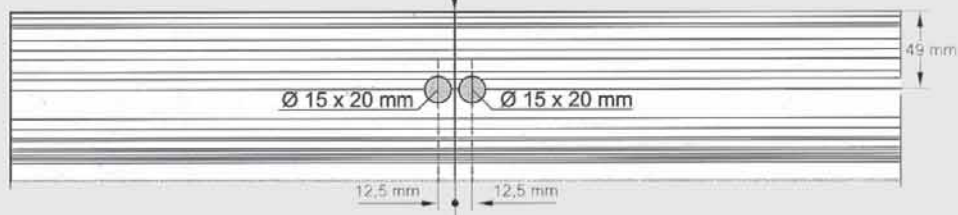
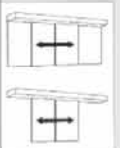
关闭边缘 / closing edge



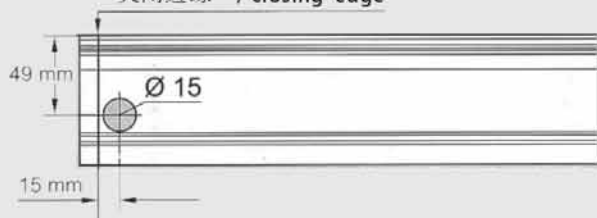
关闭边缘 / closing edge



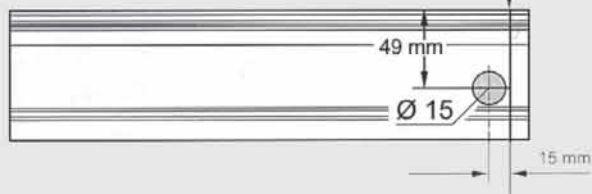
关闭边缘 / closing edge



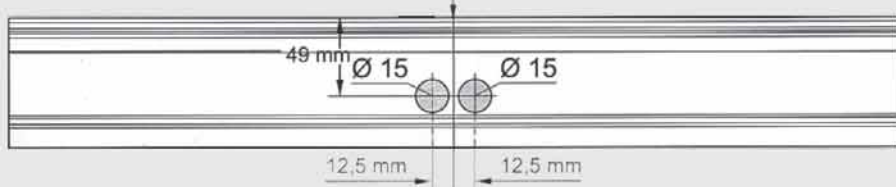
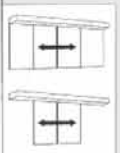
关闭边缘 / closing edge

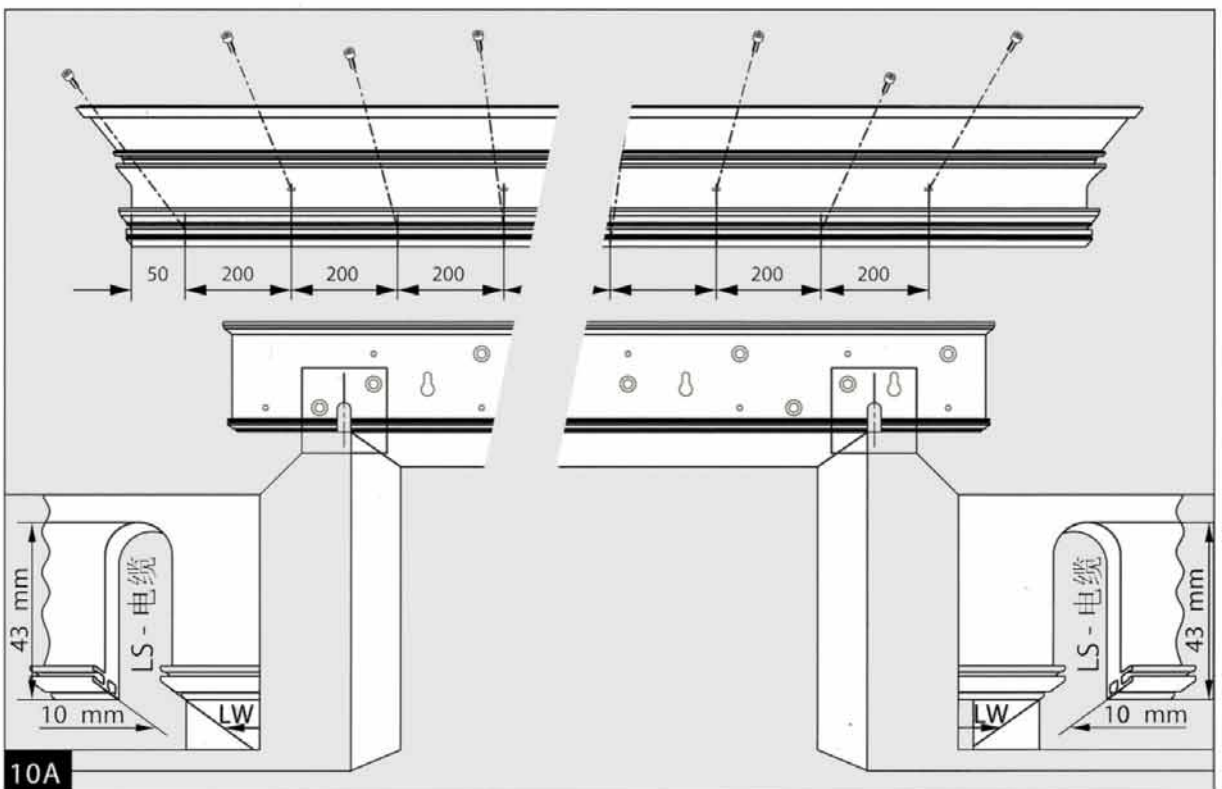
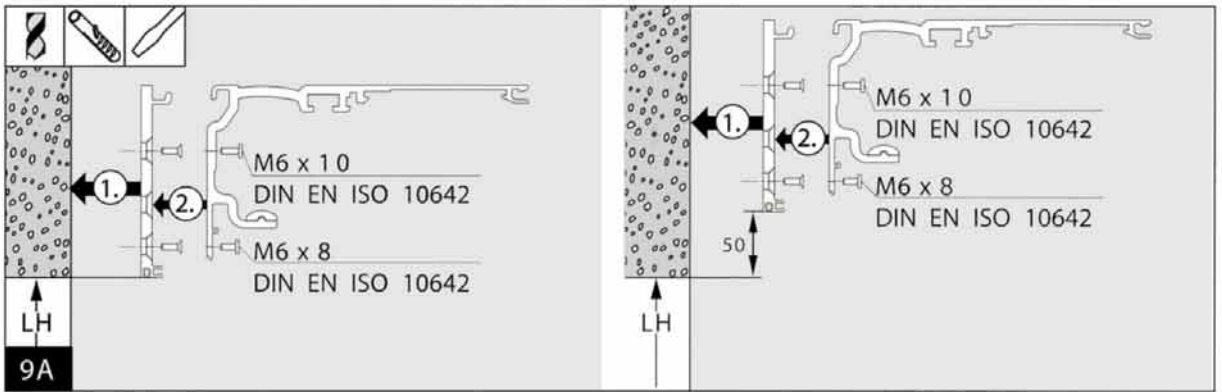
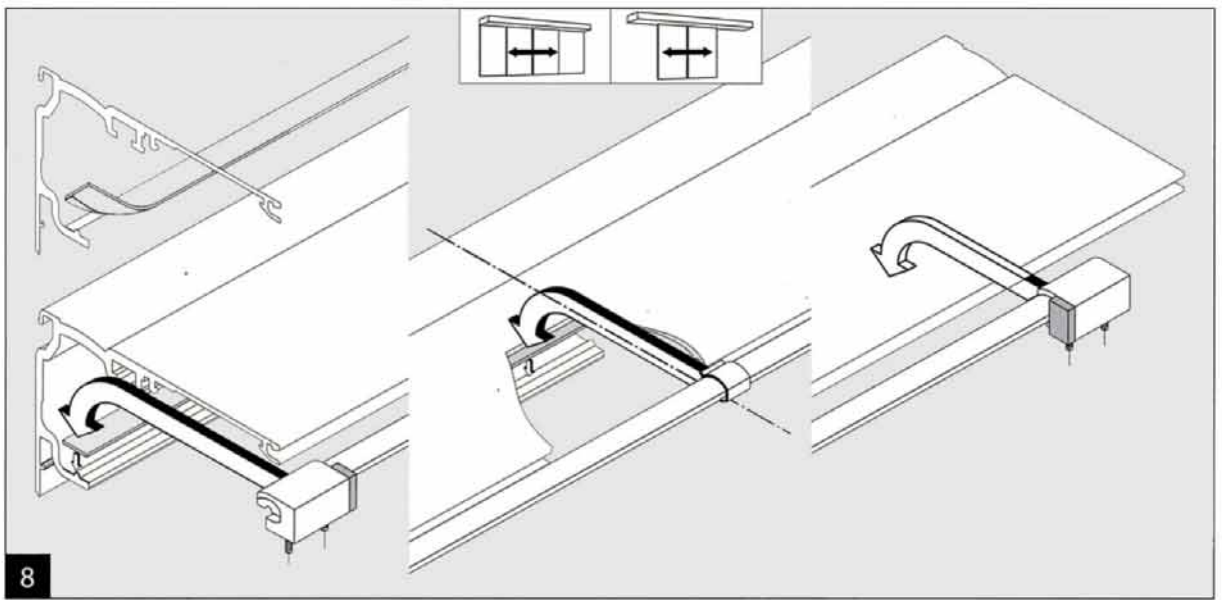


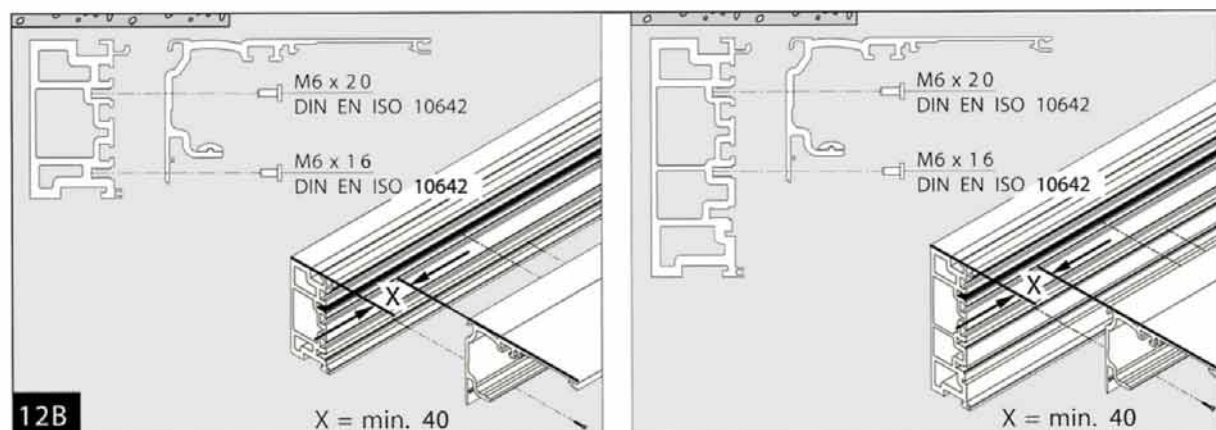
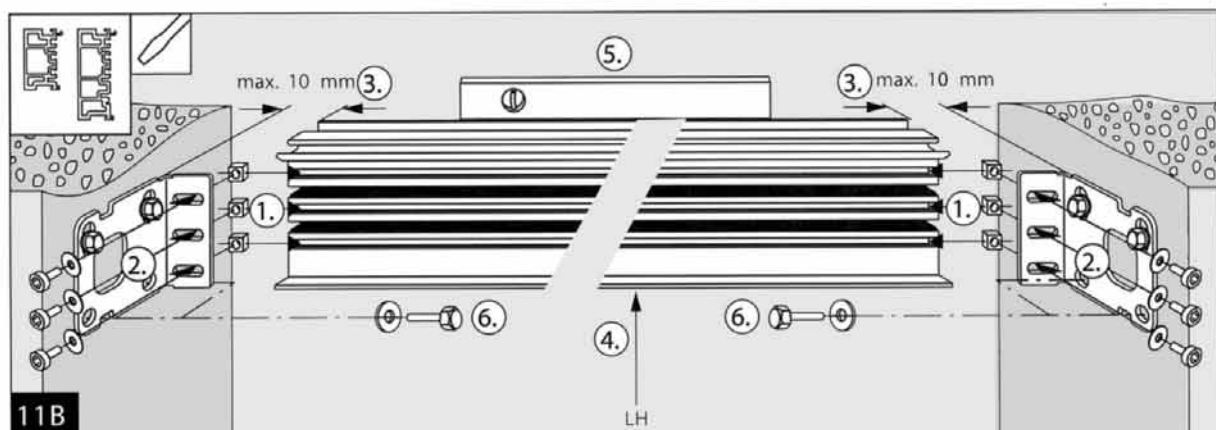
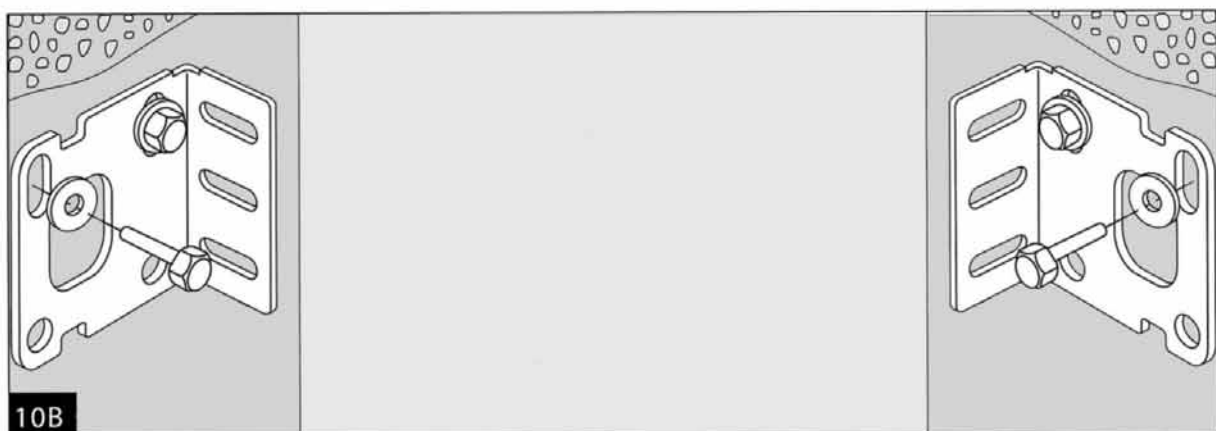
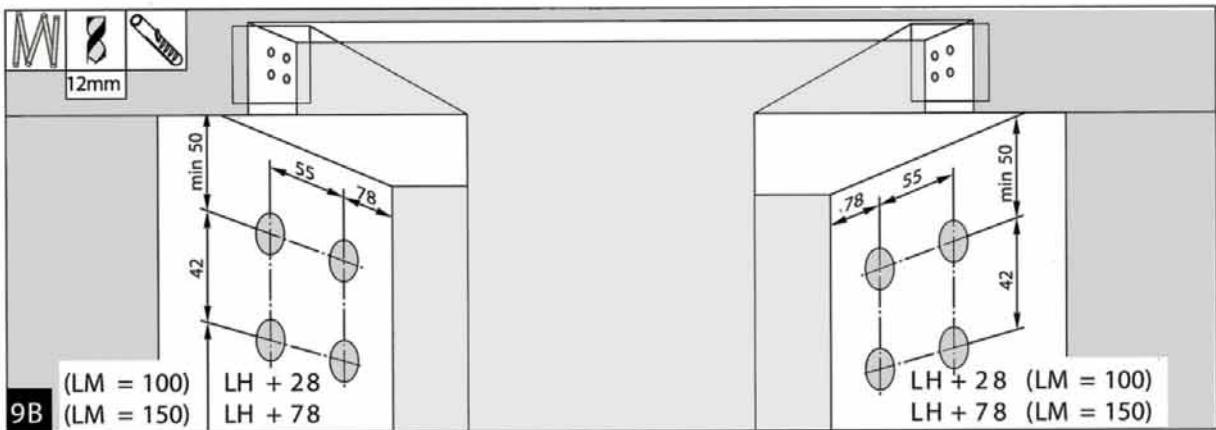
关闭边缘 / closing edge



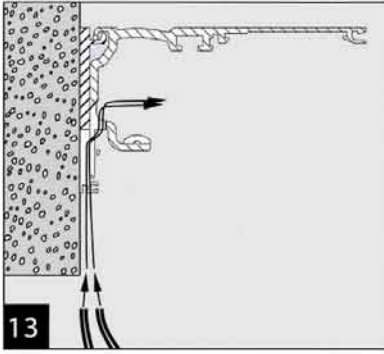
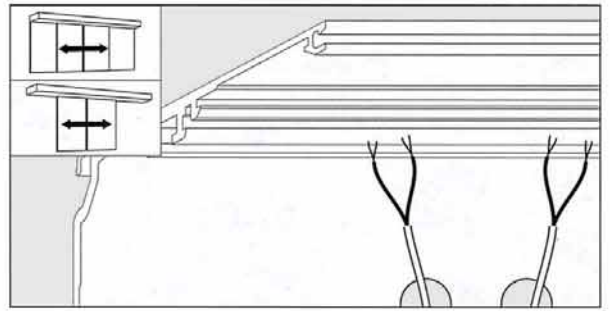
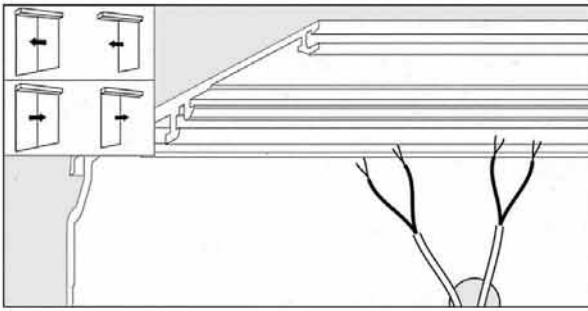
关闭边缘 / closing edge



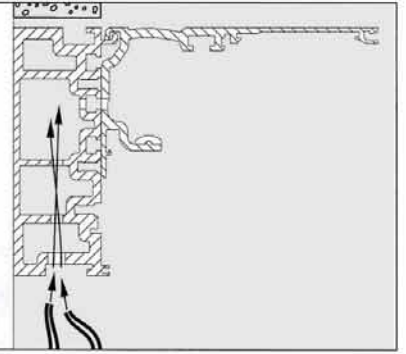
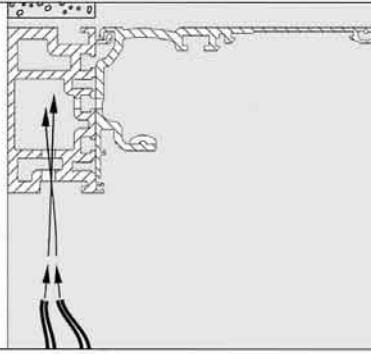




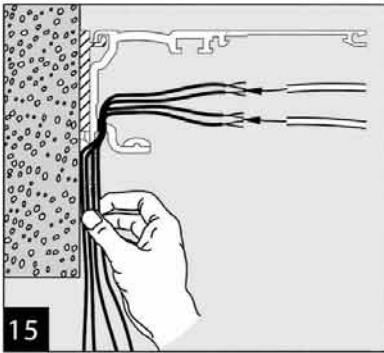
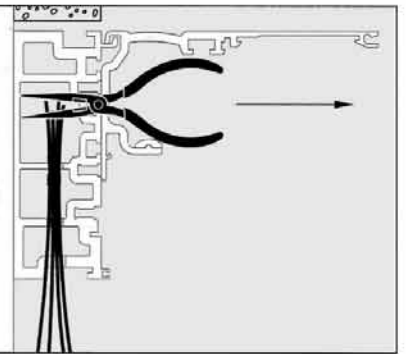
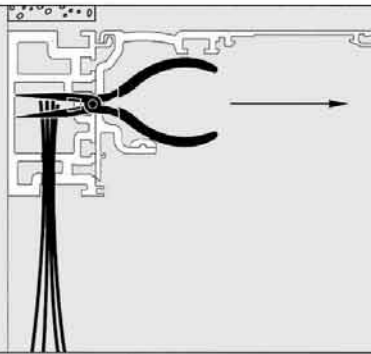




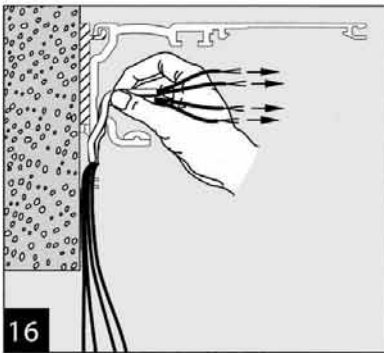
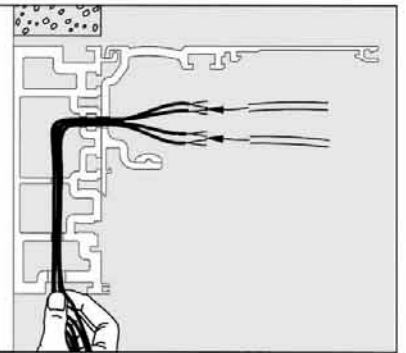
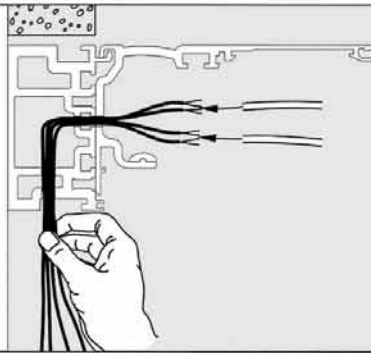
13



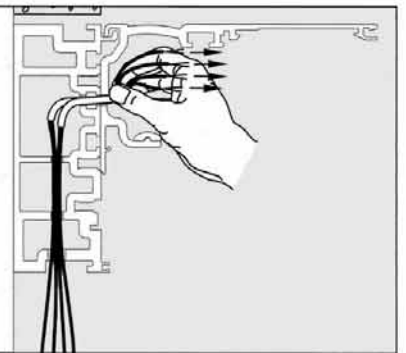
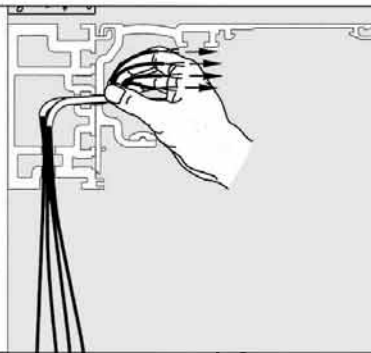
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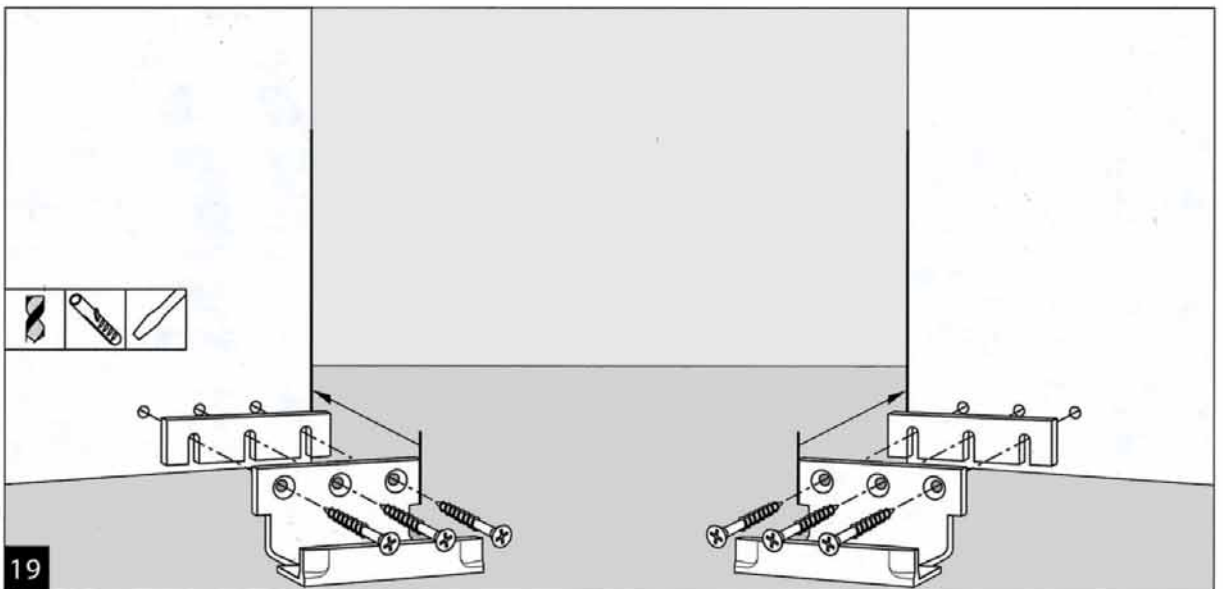
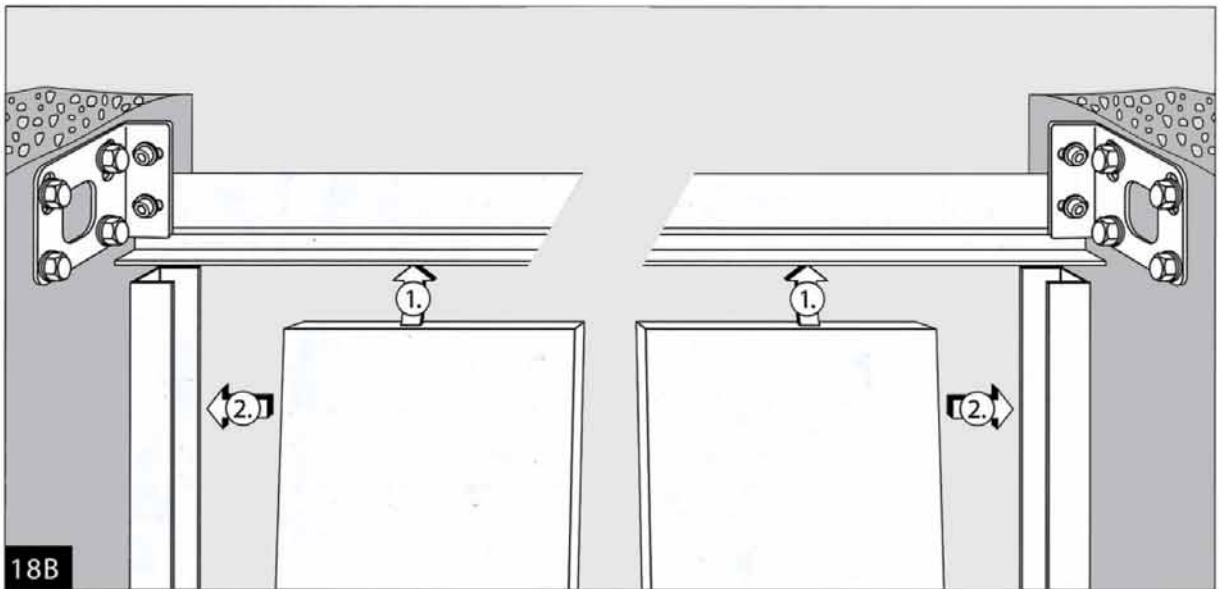
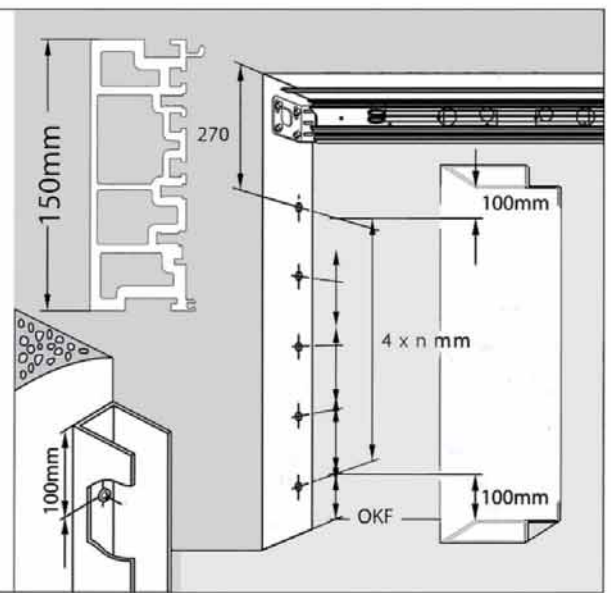
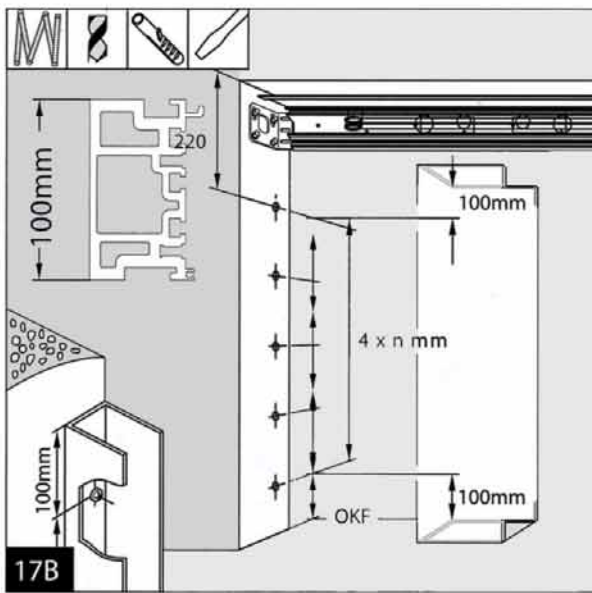


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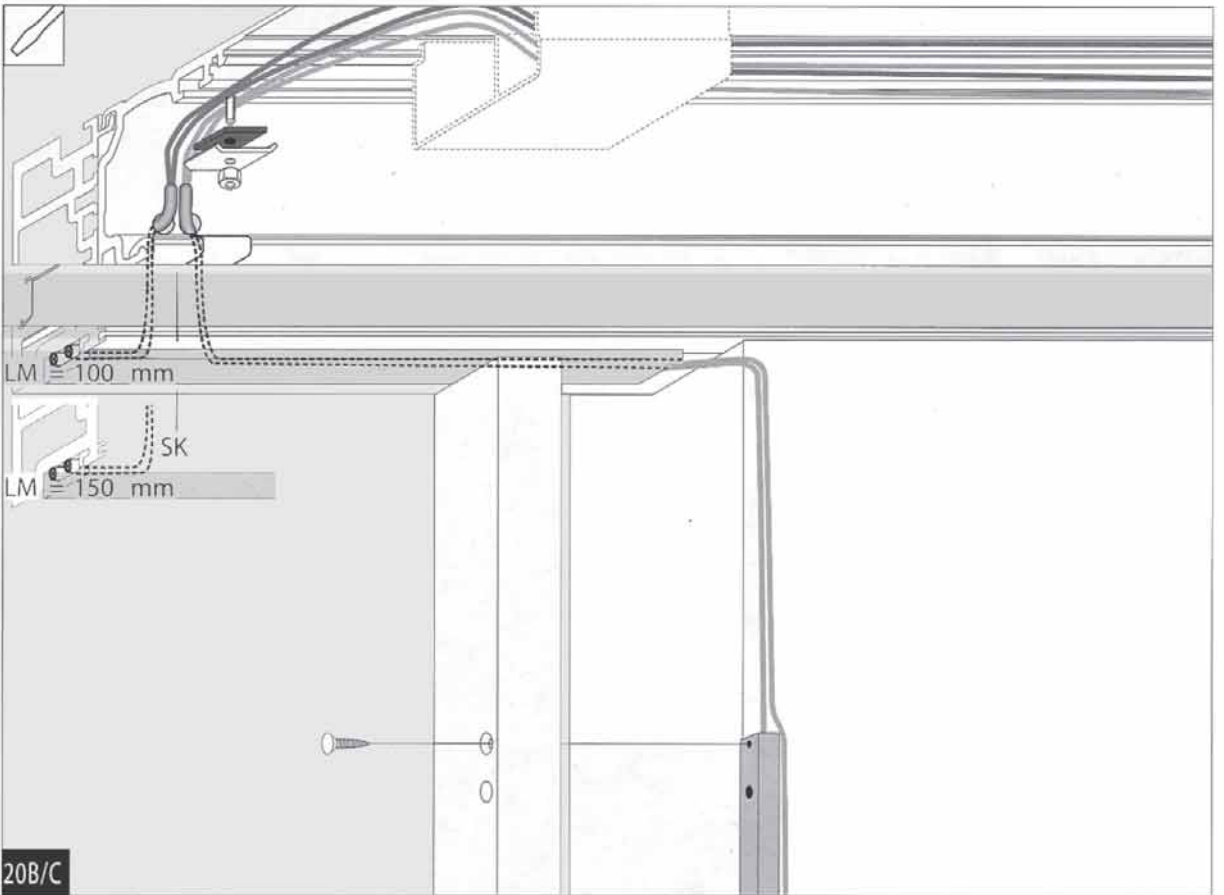
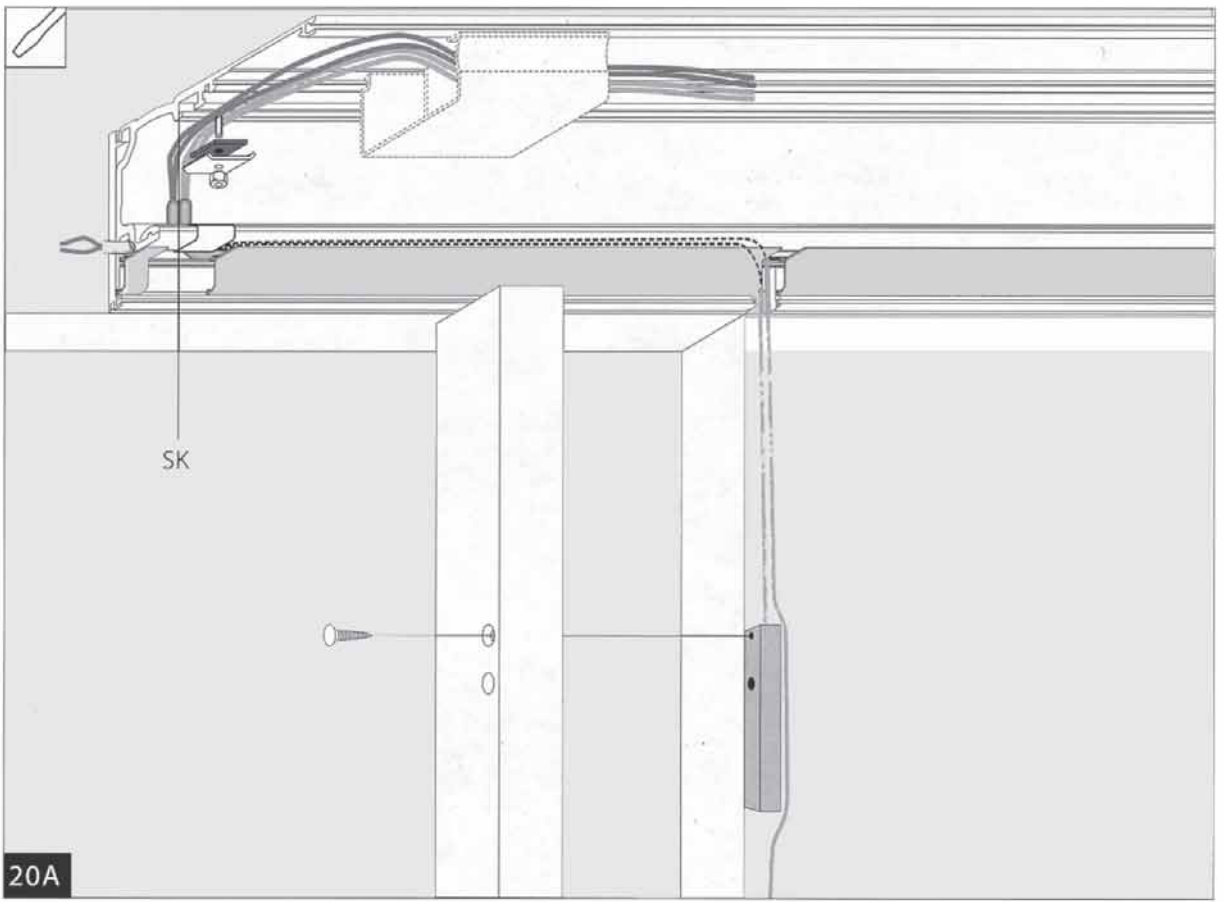


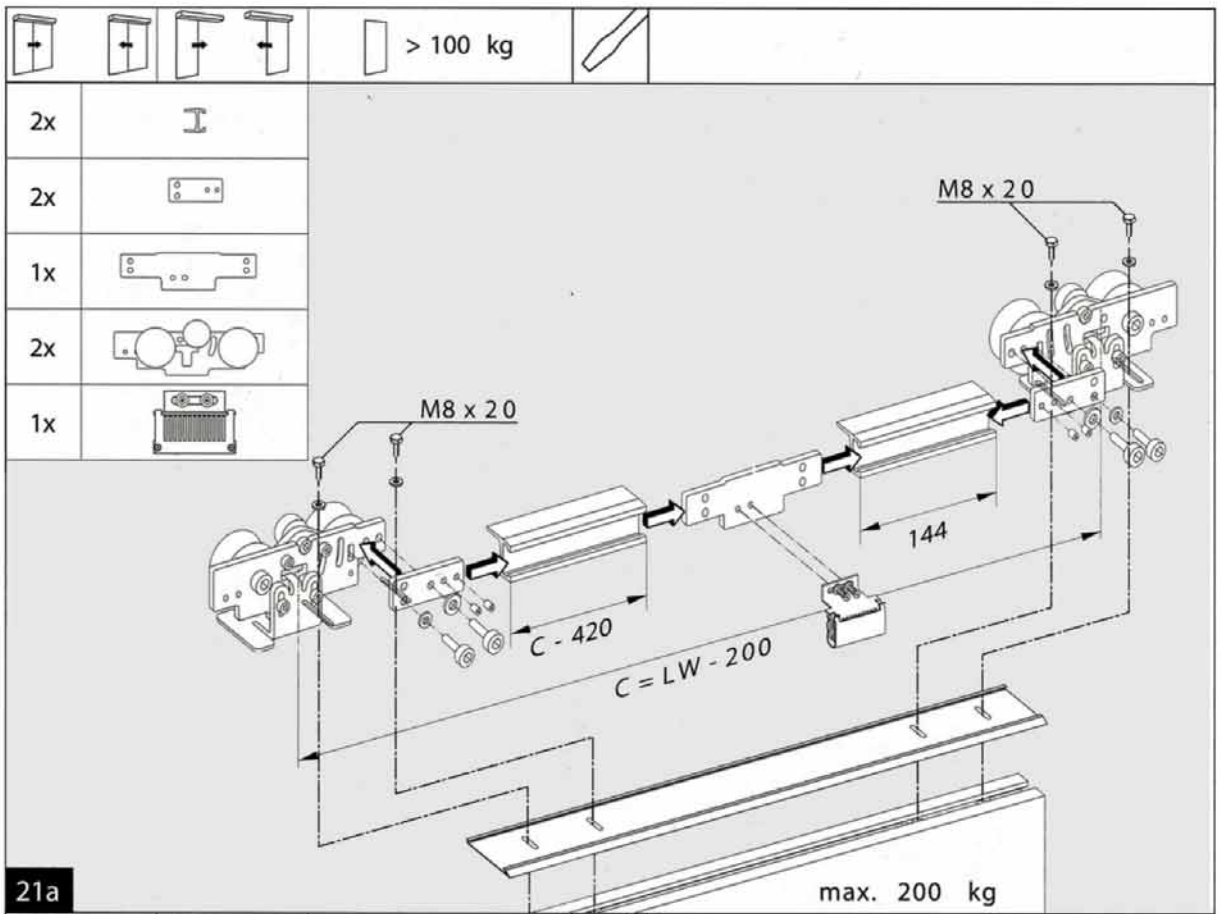
16



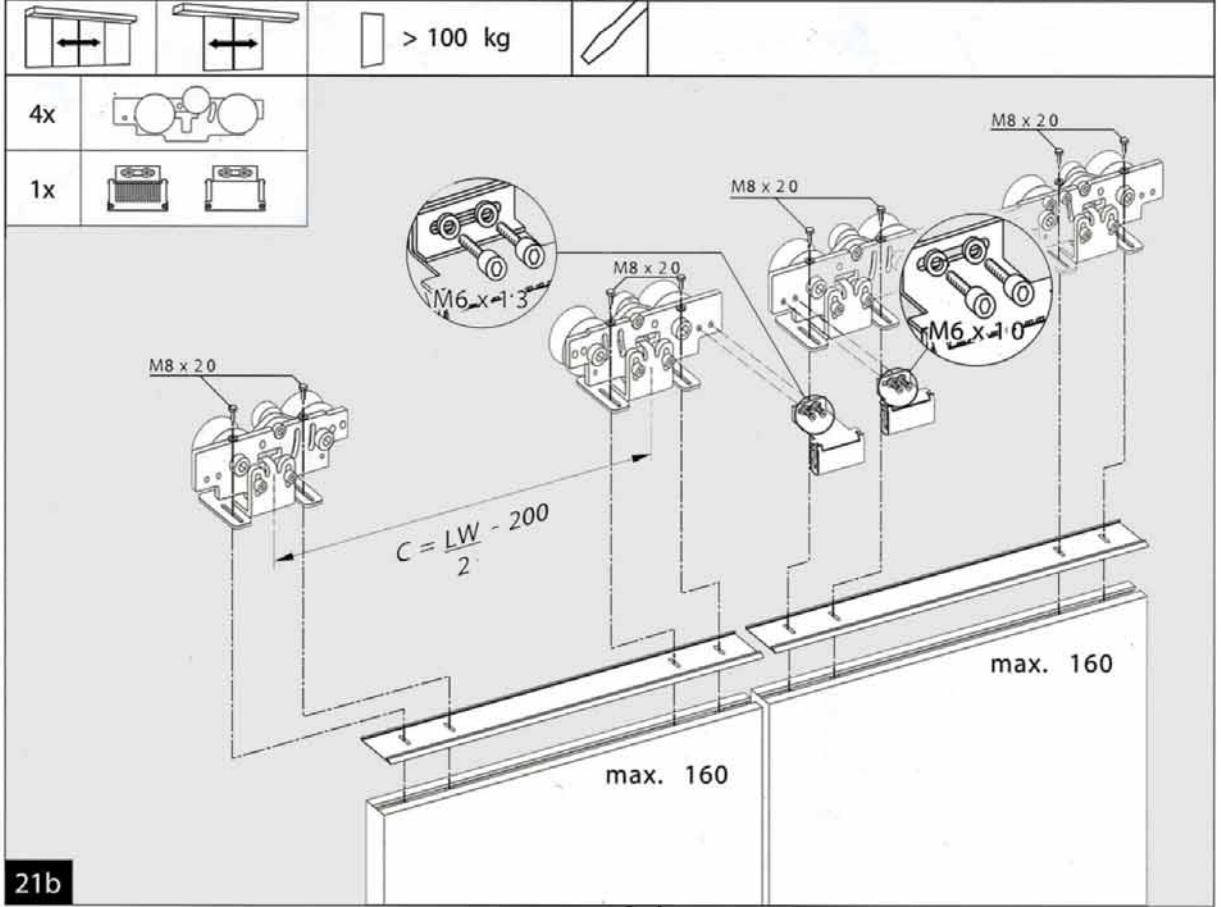




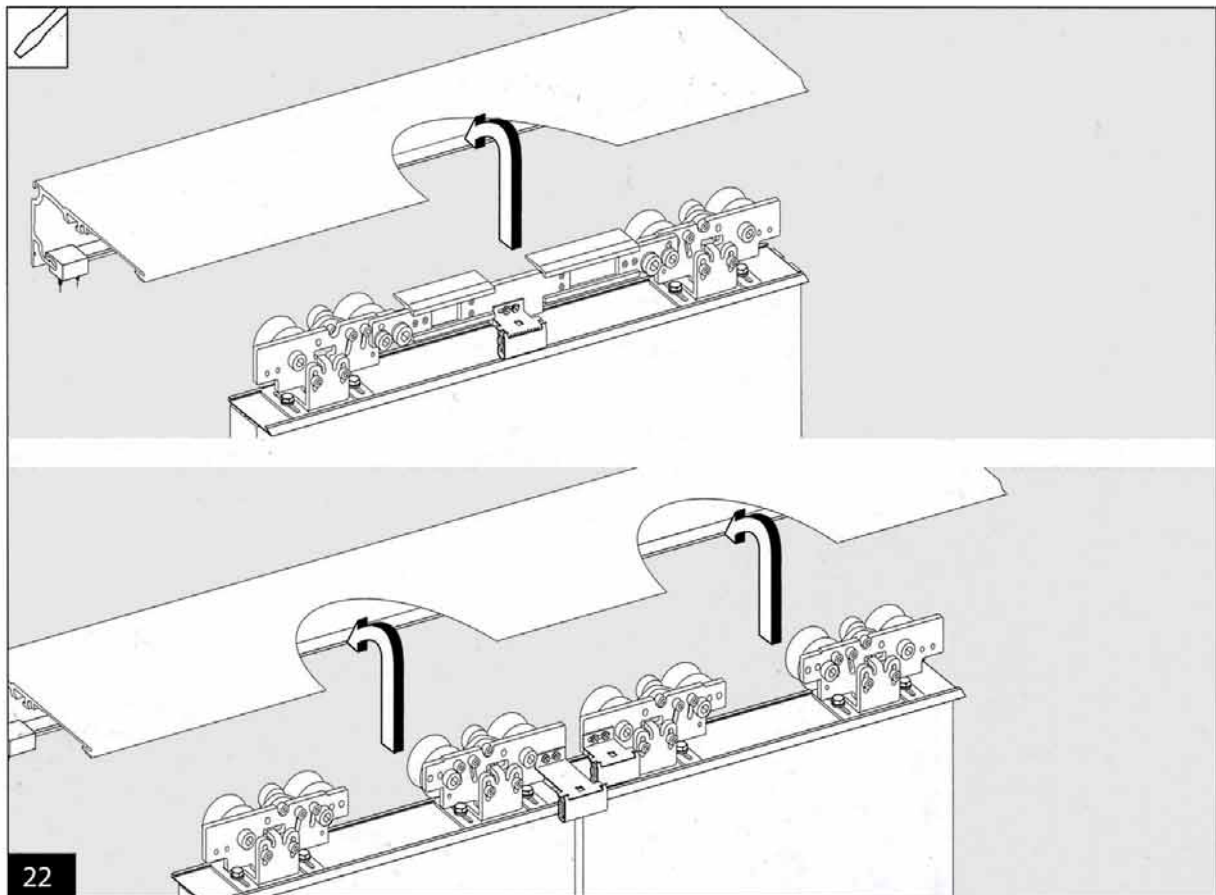


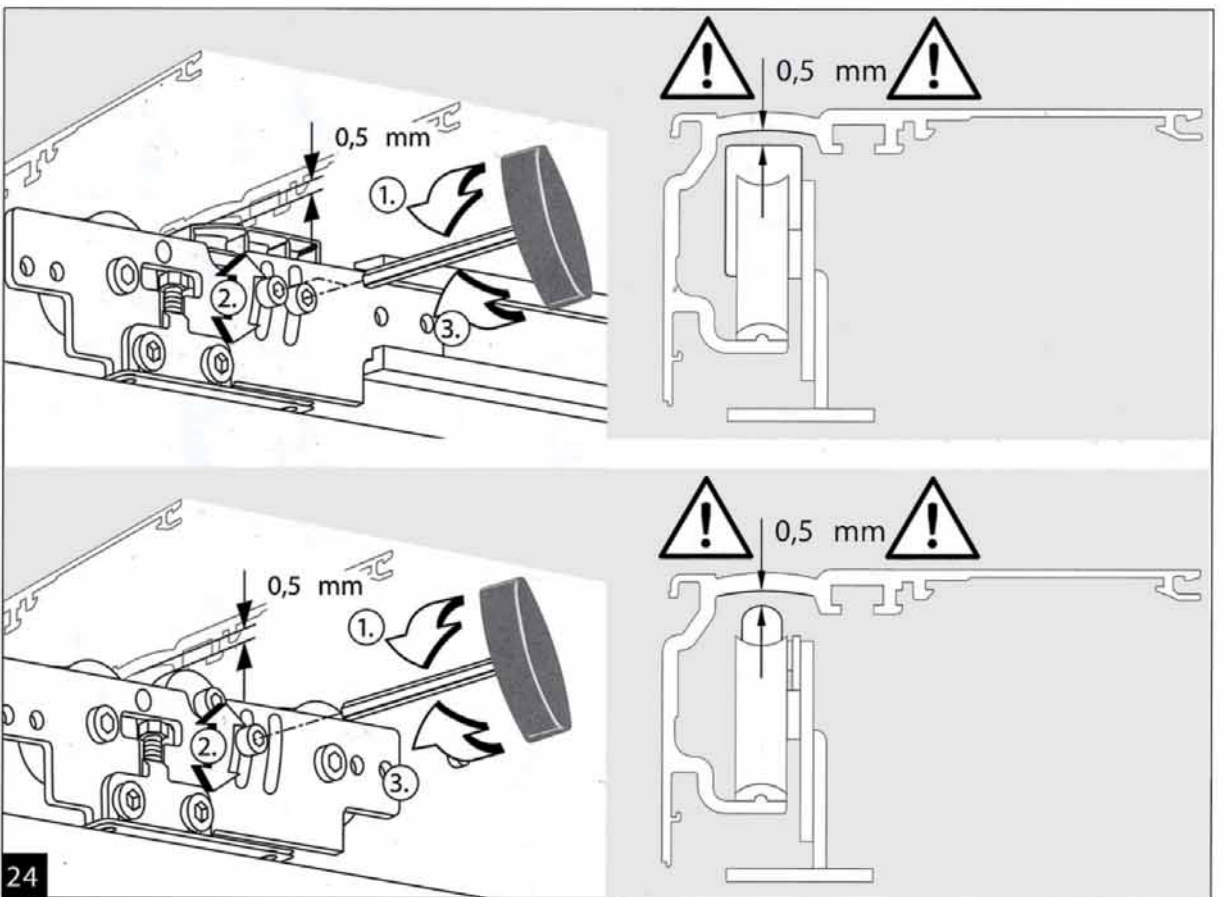
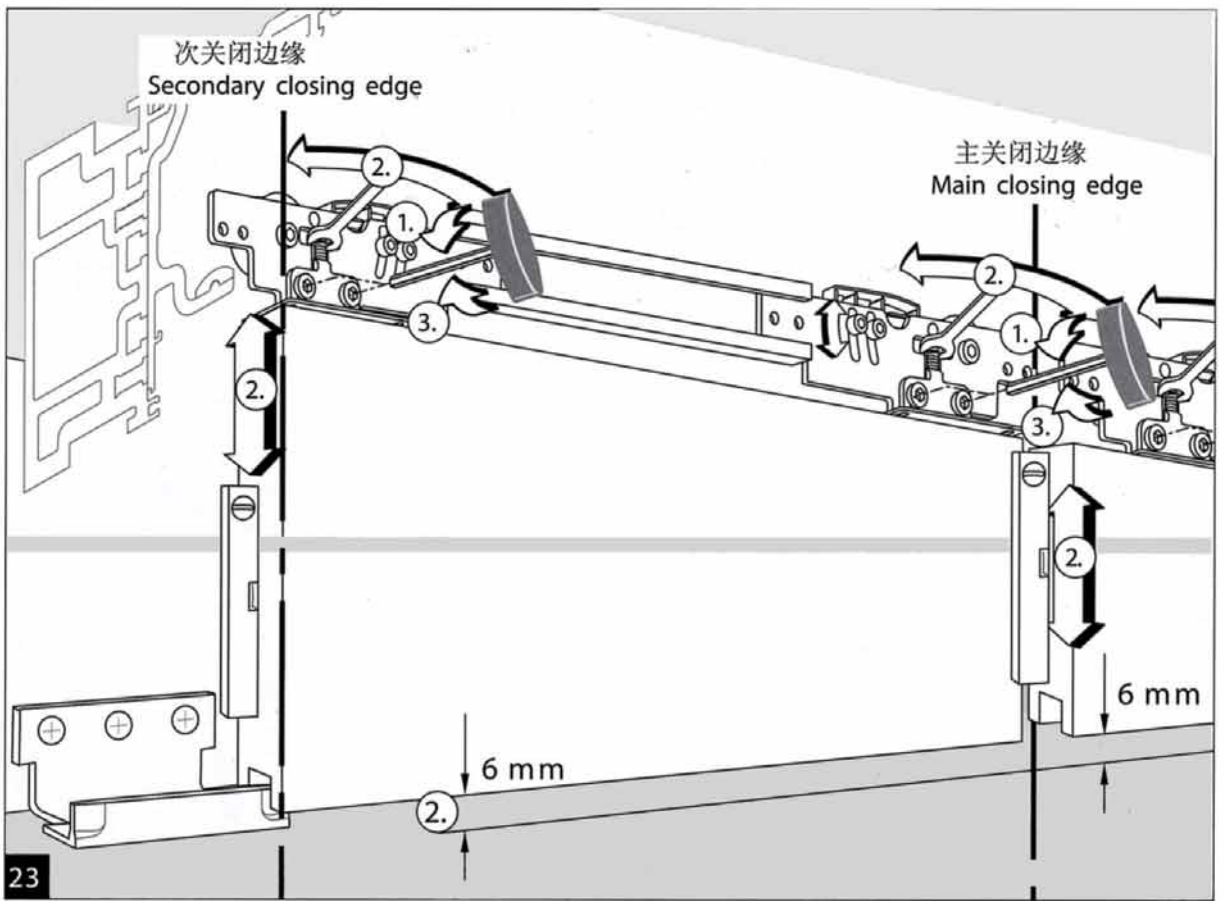


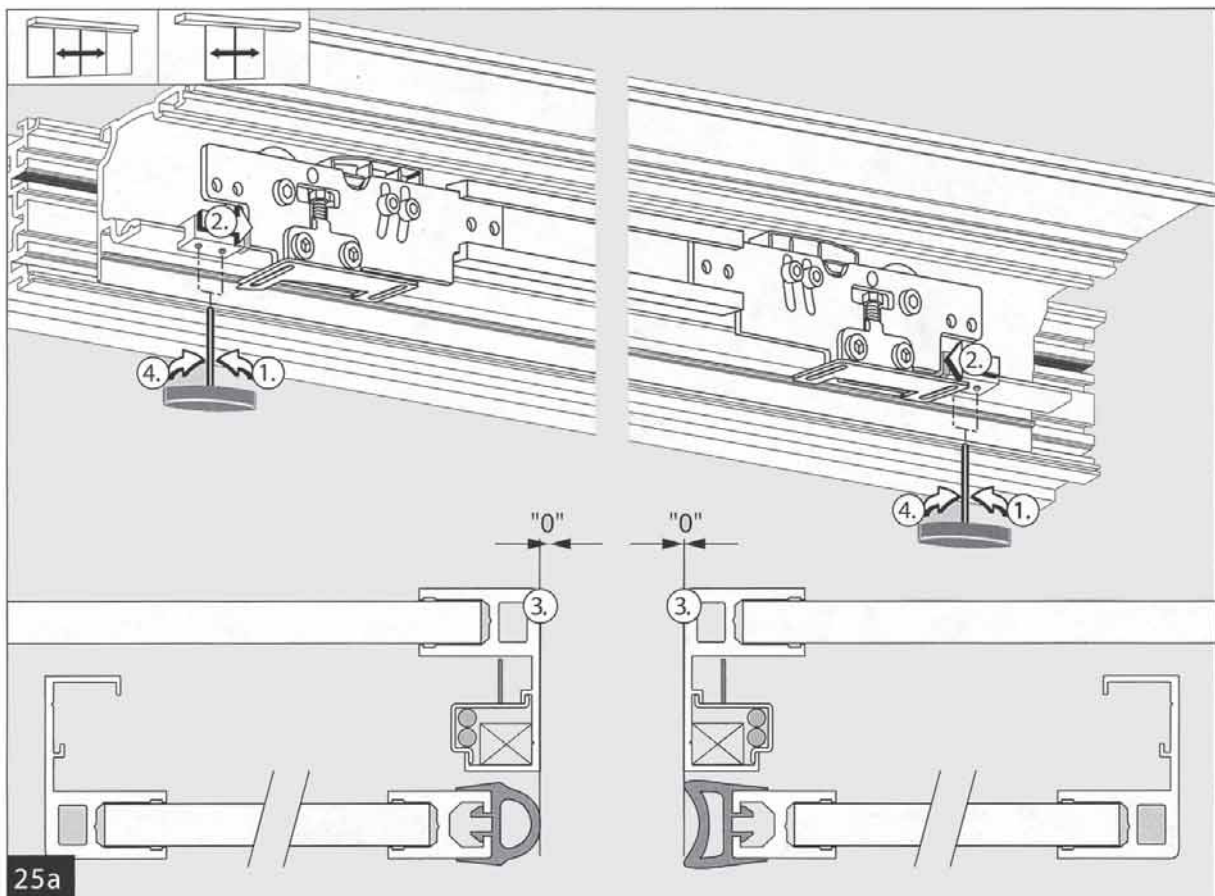
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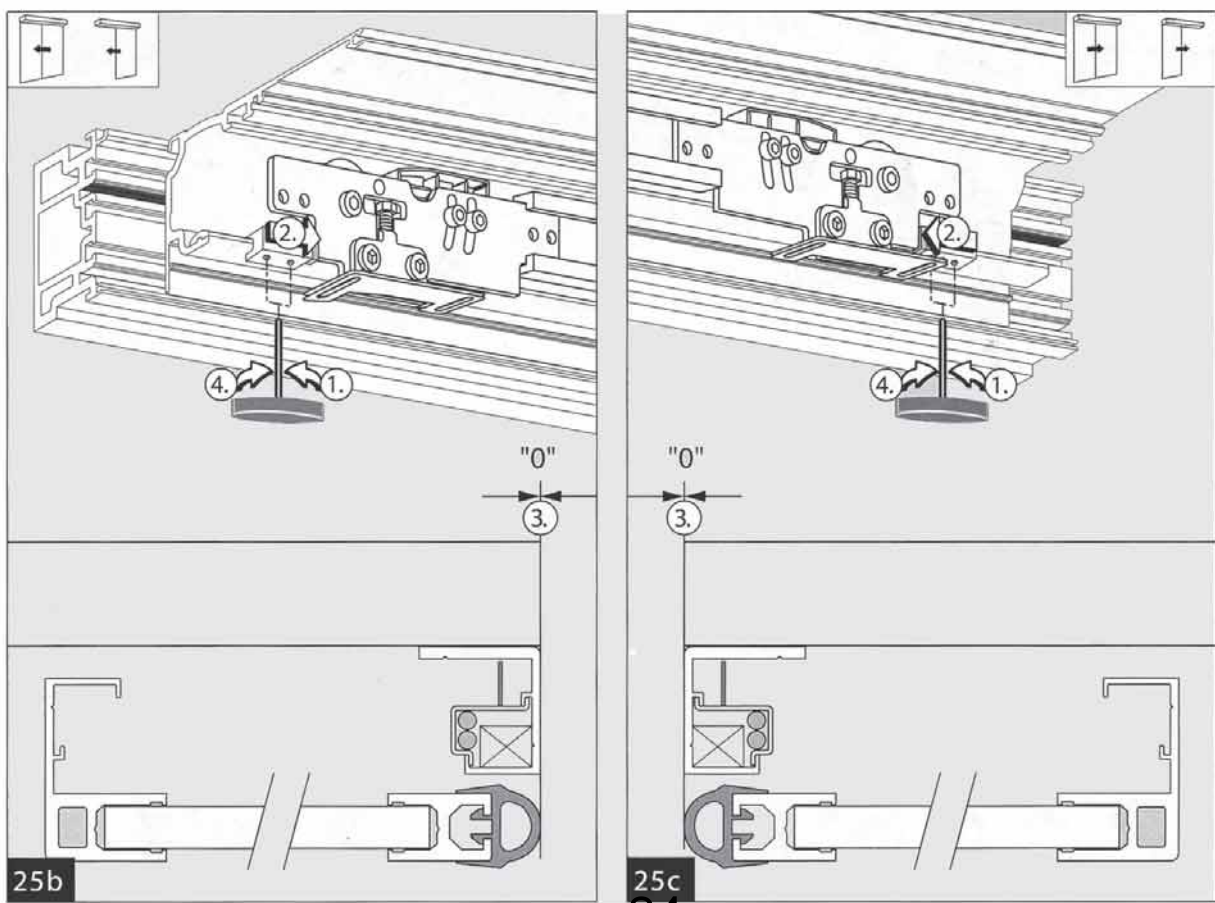
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25a



25b

25c



ES 200

M6 x 12

26

马达轴  
axle of the motor

6a  
6b  
6c

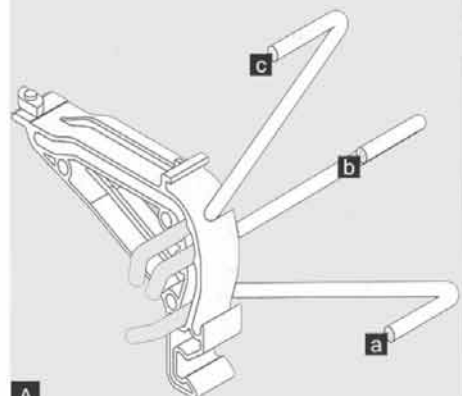
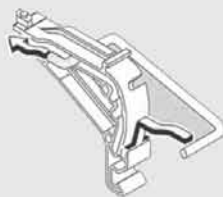
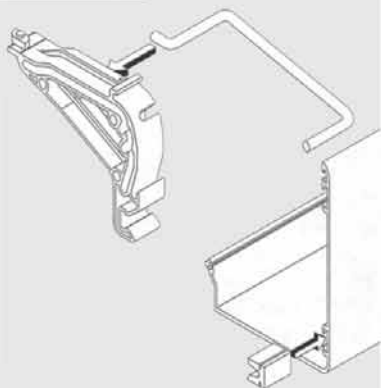
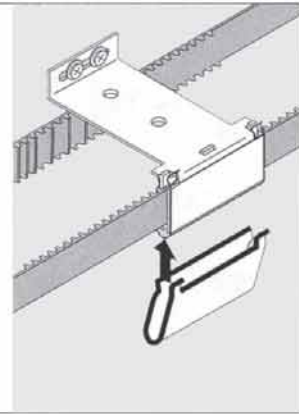
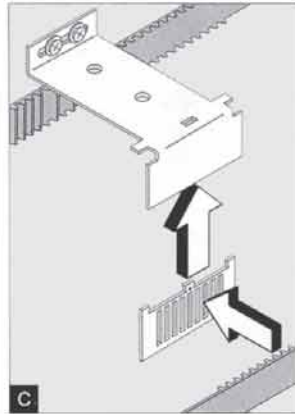
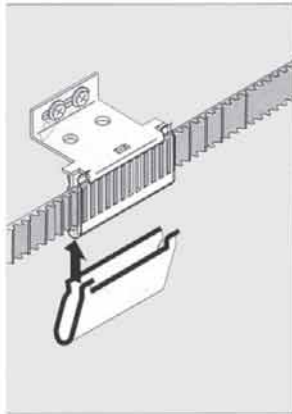
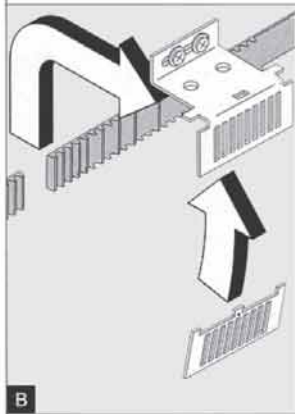
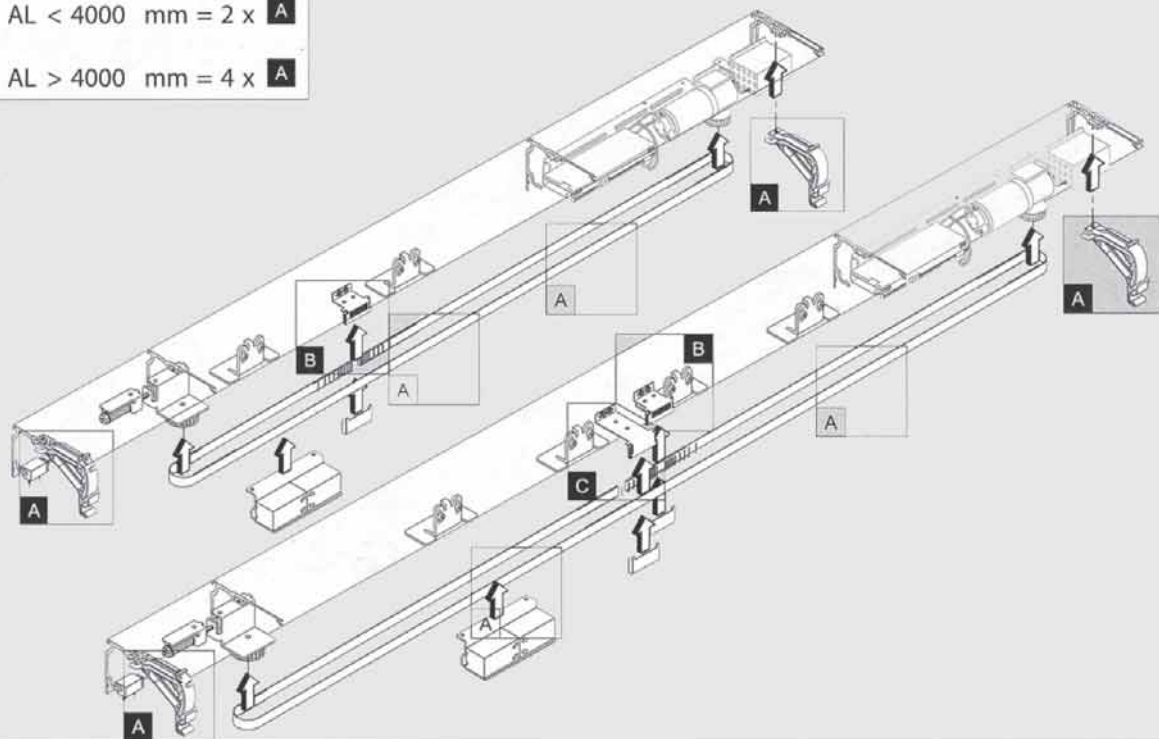
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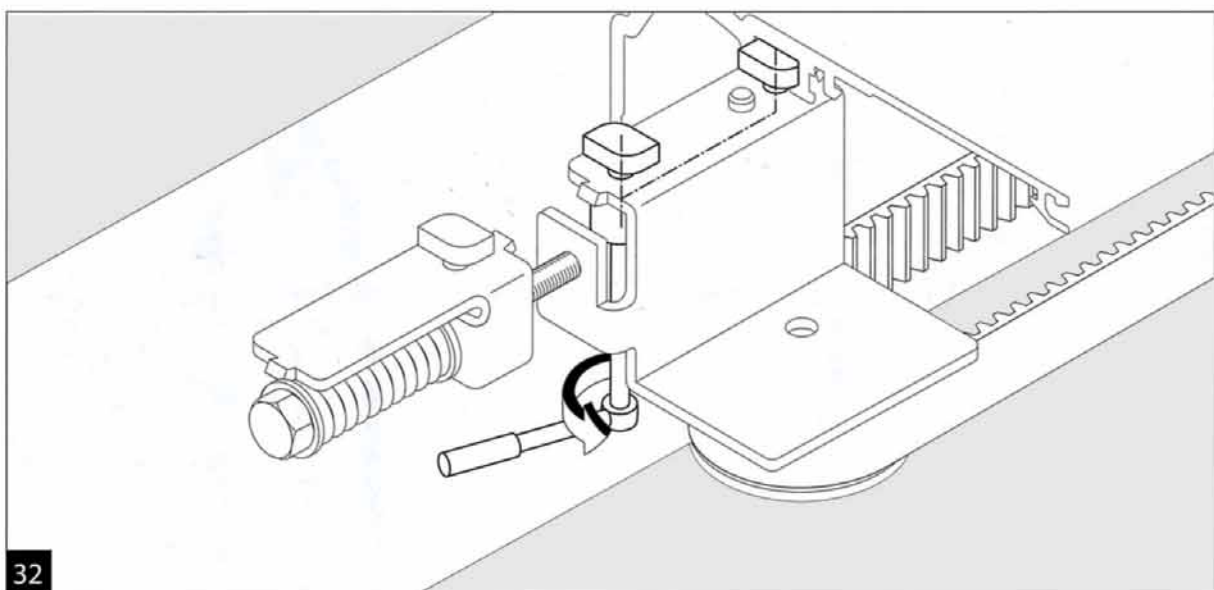
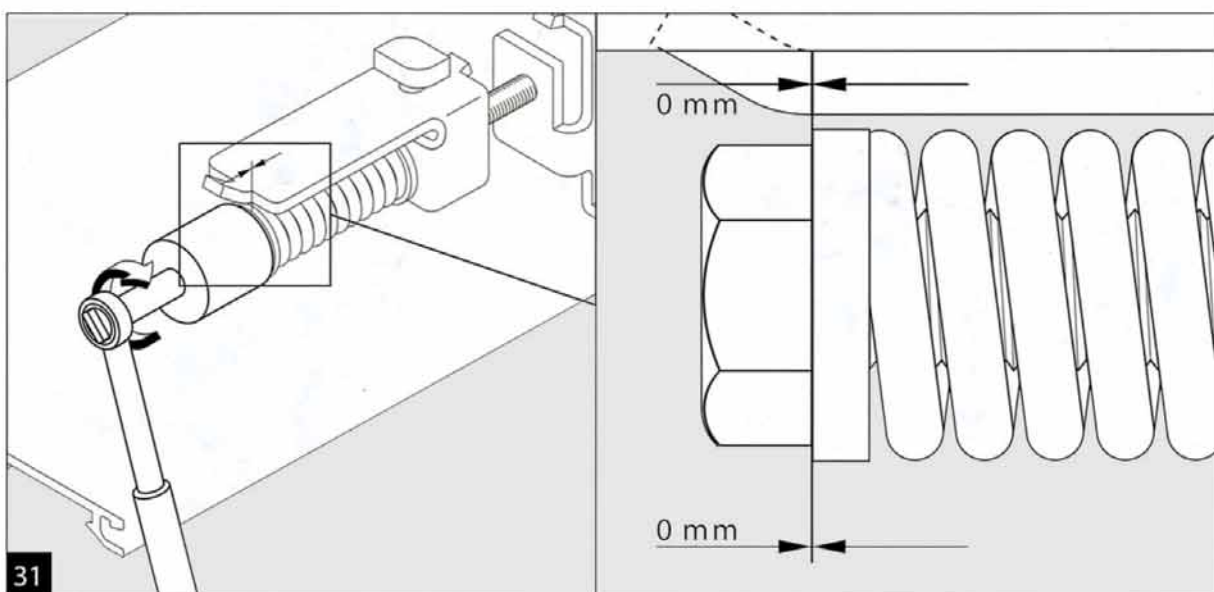
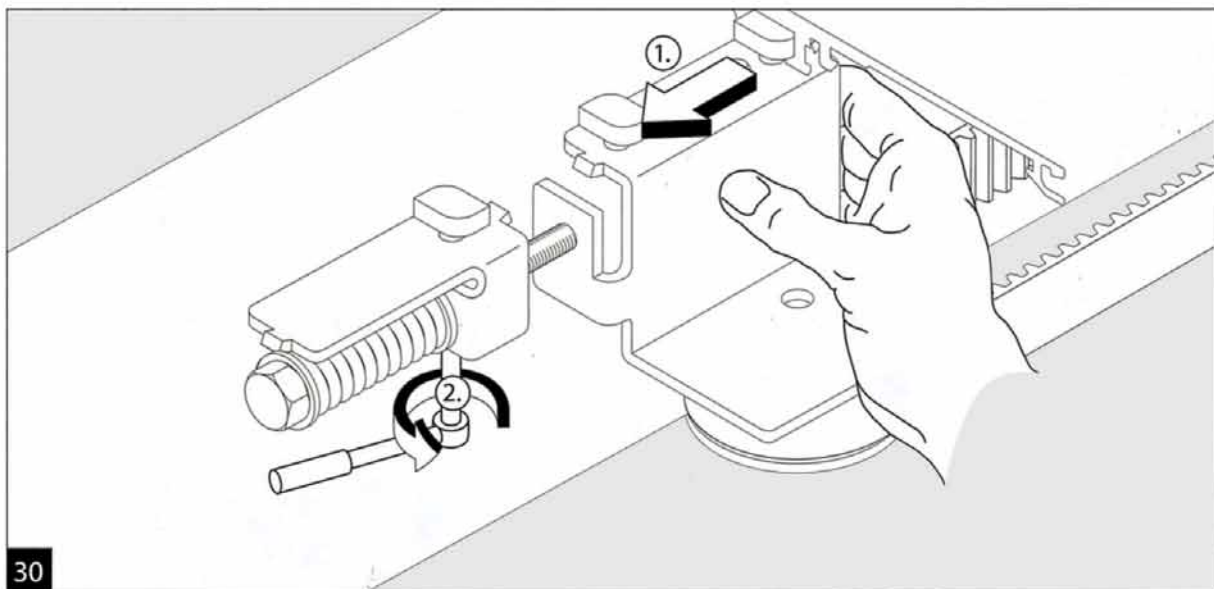
28a

28b

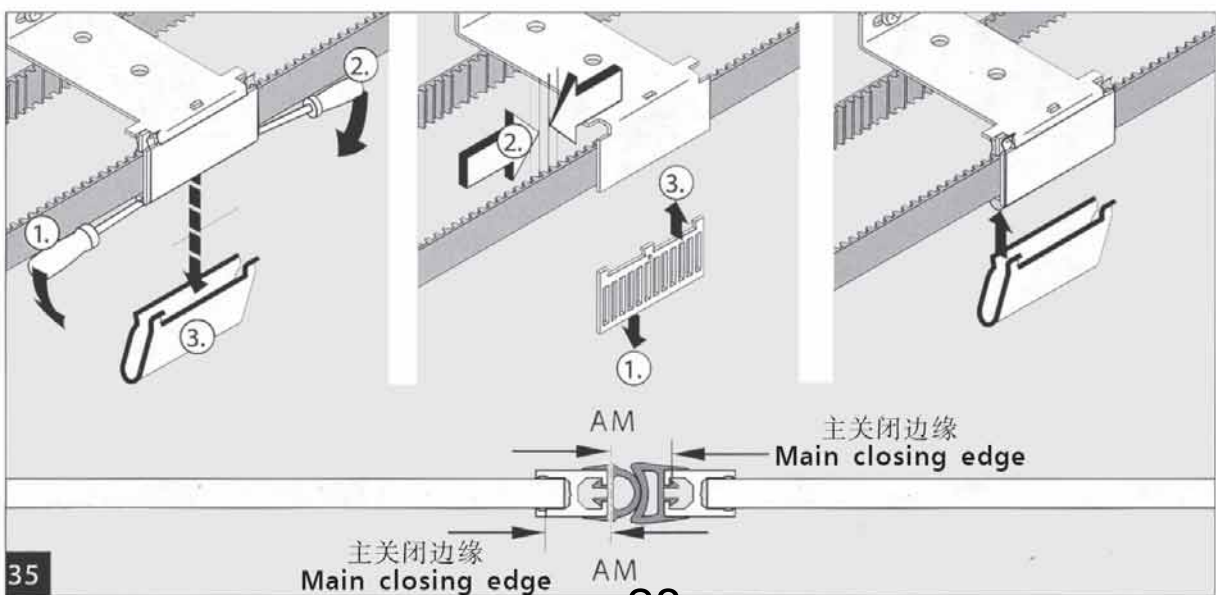
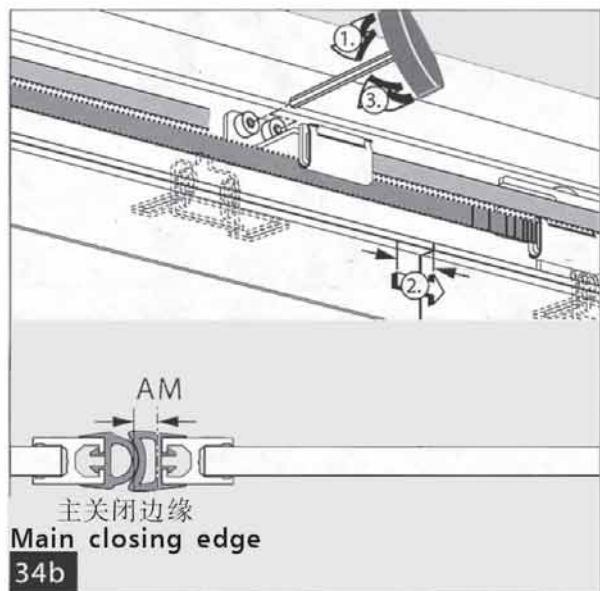
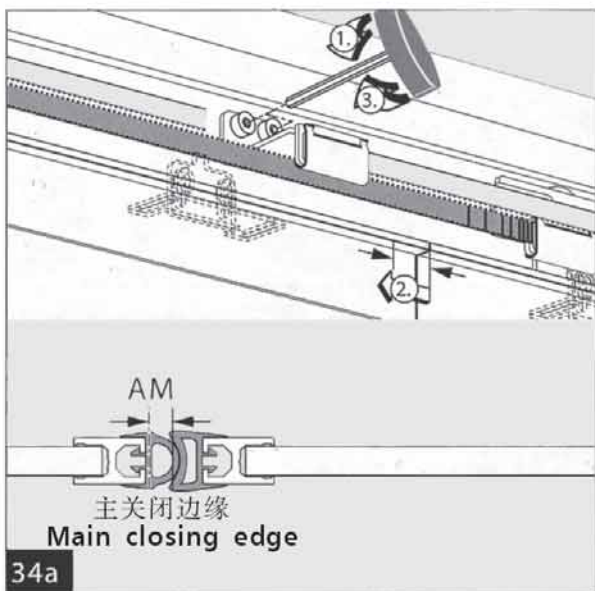
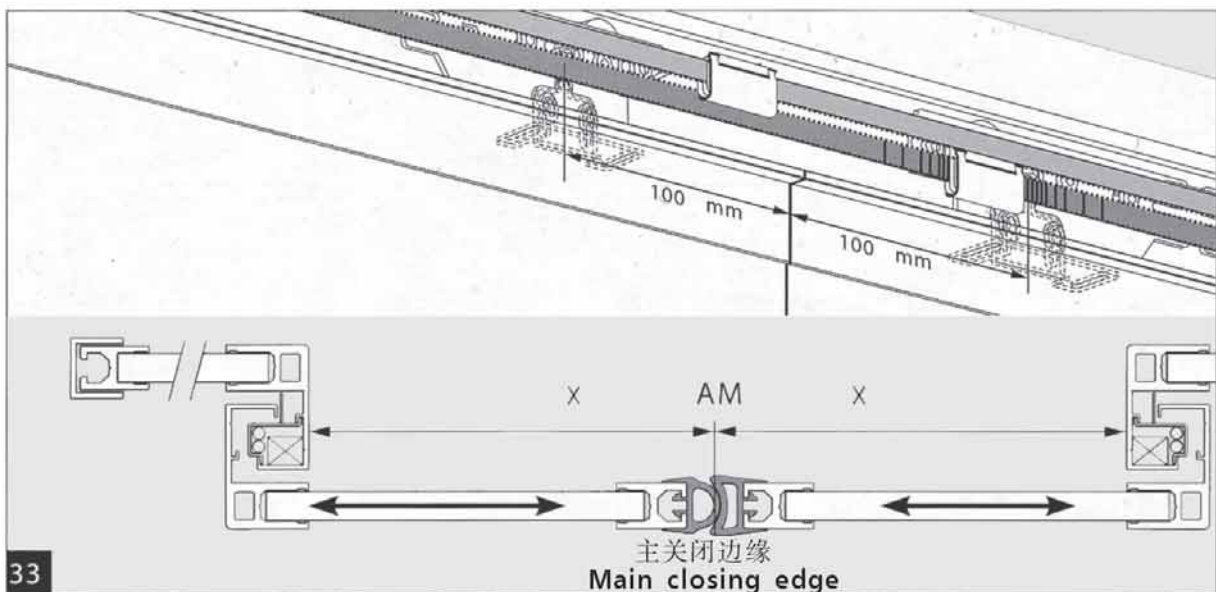
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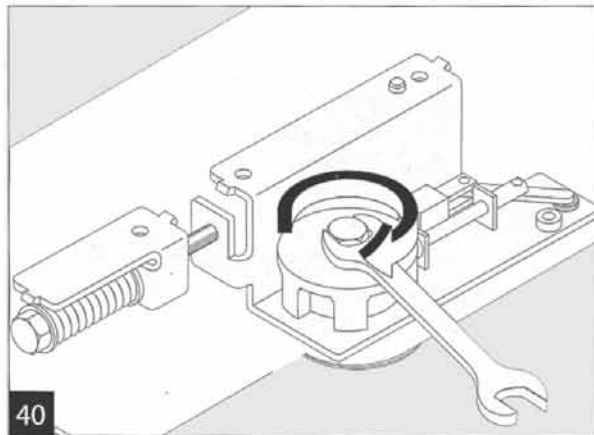
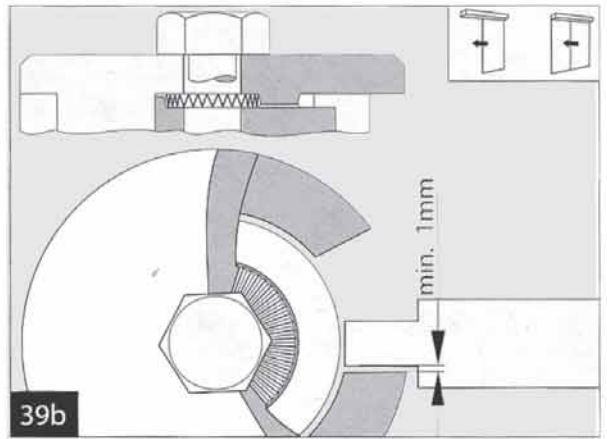
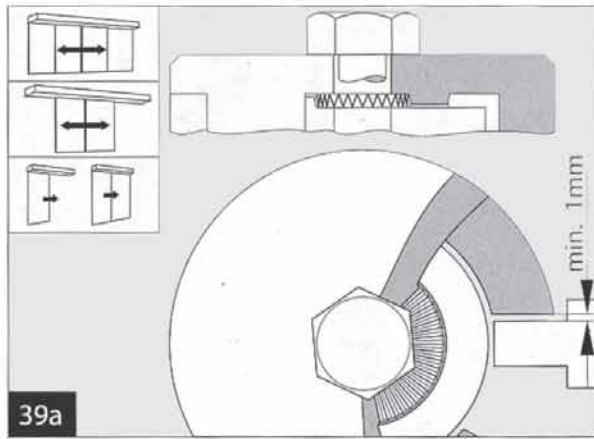
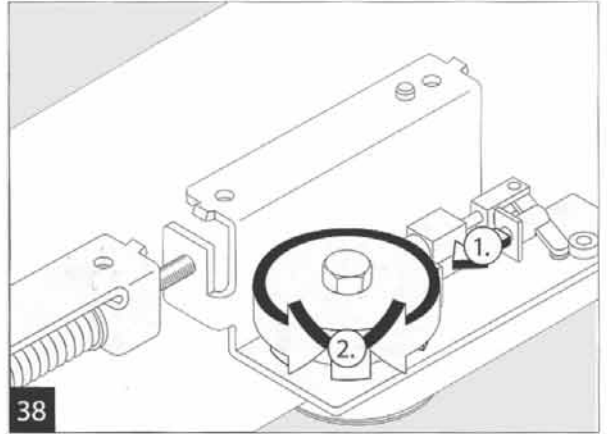
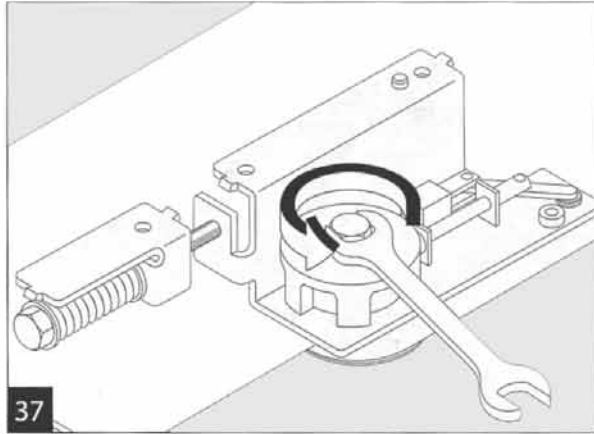
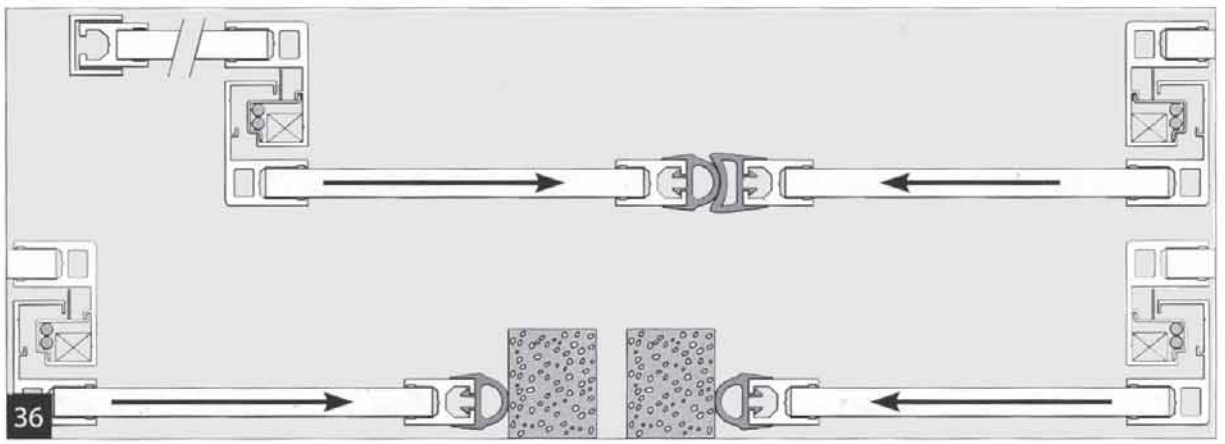
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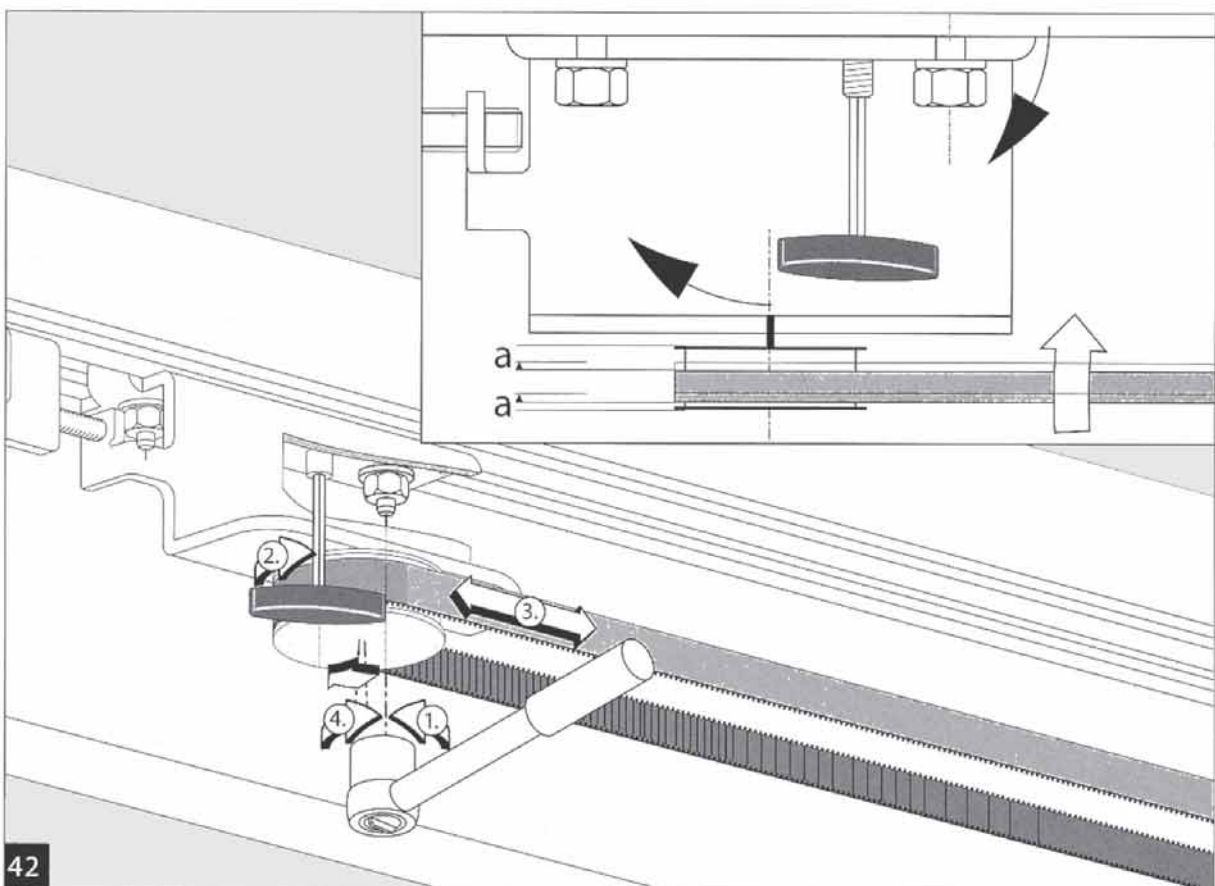
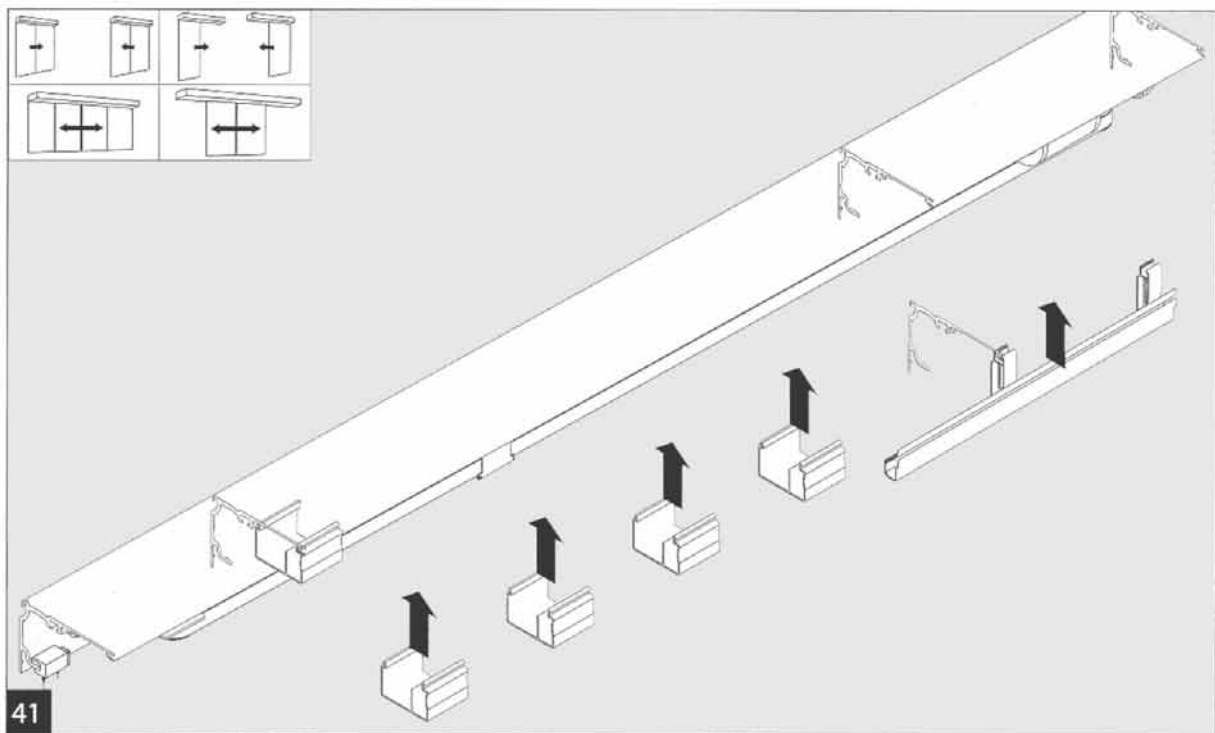
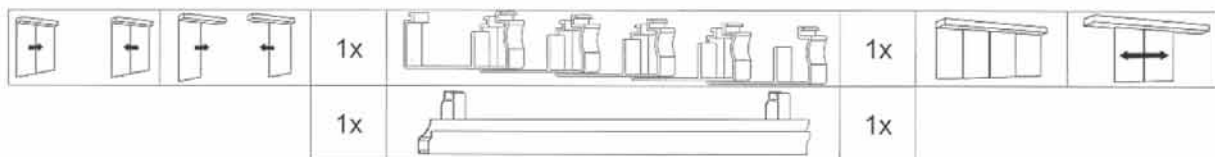




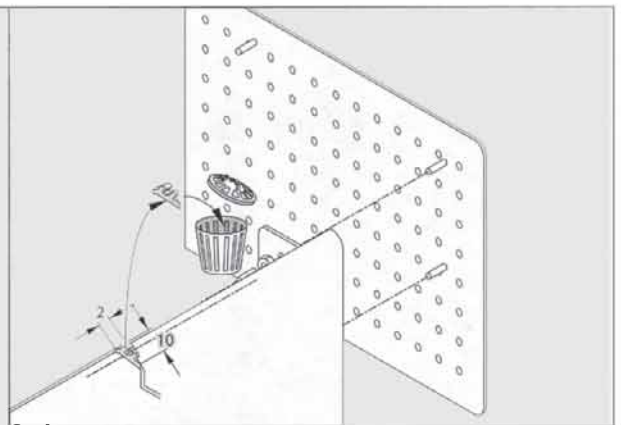
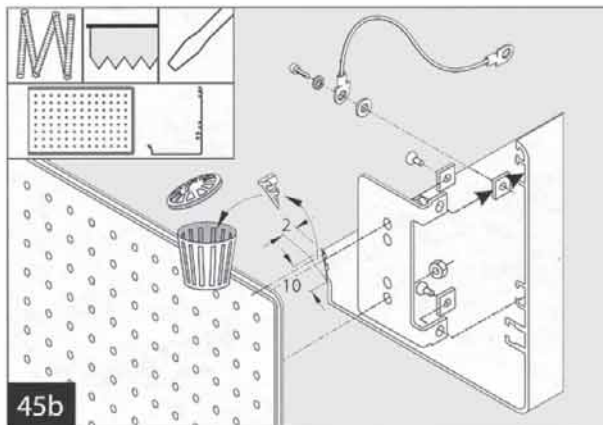
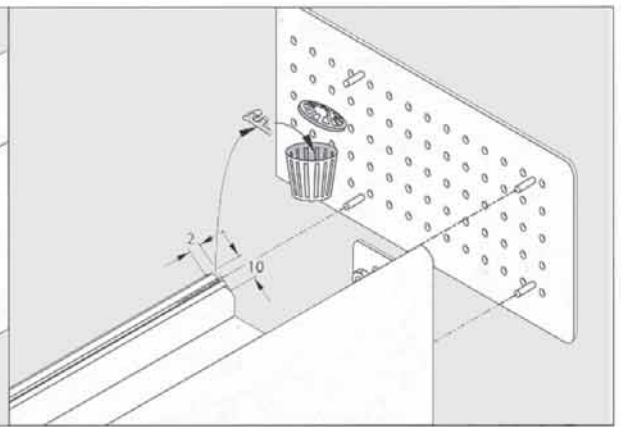
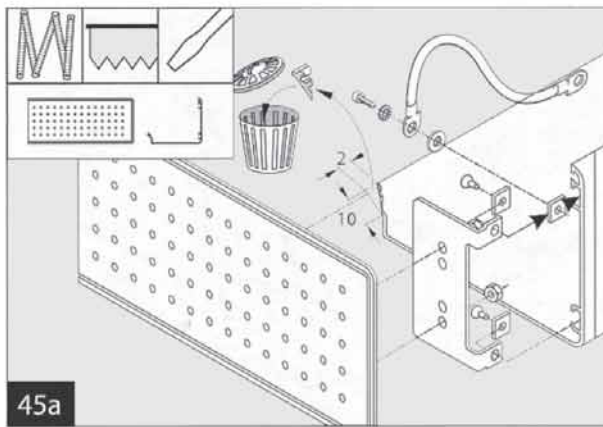
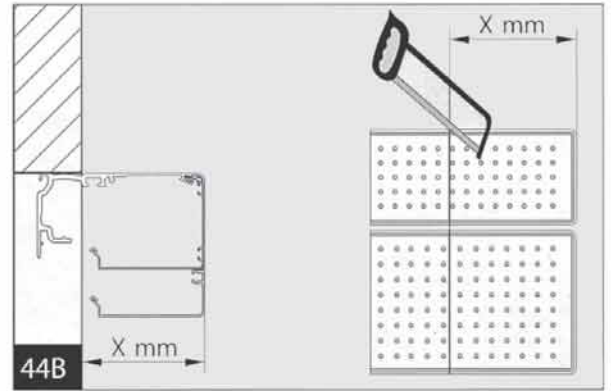
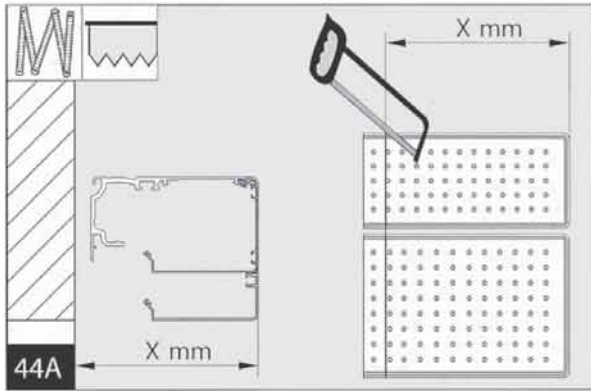
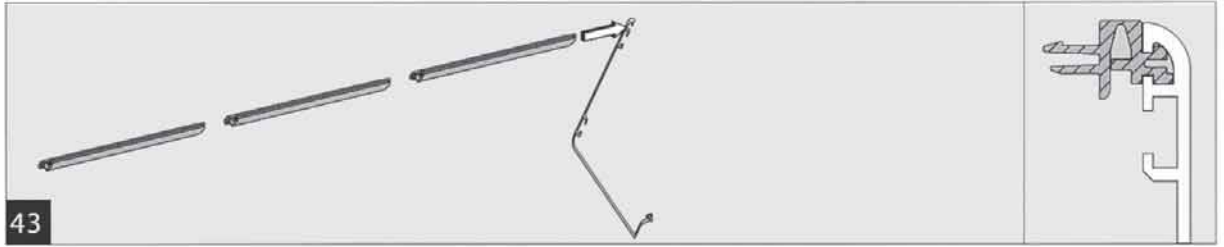




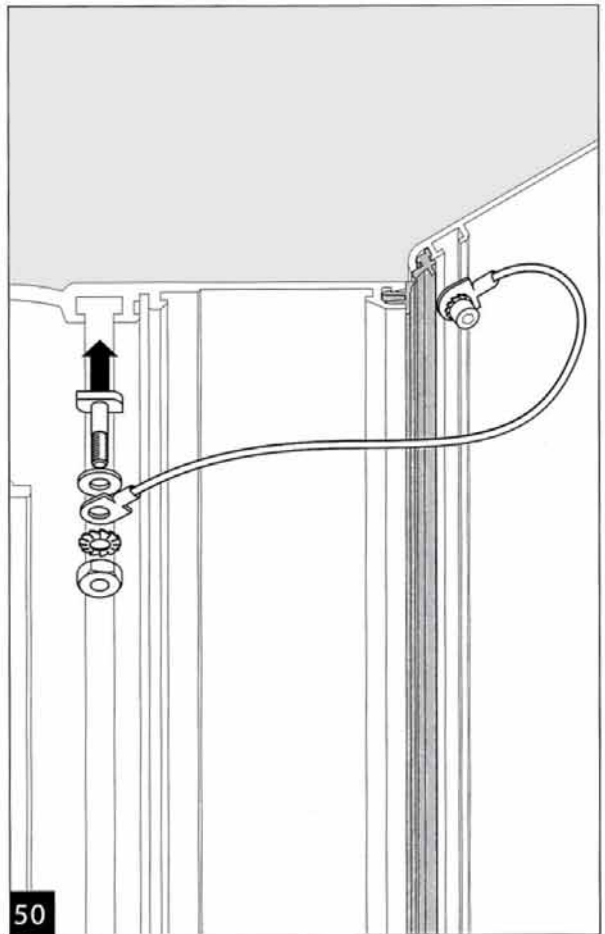
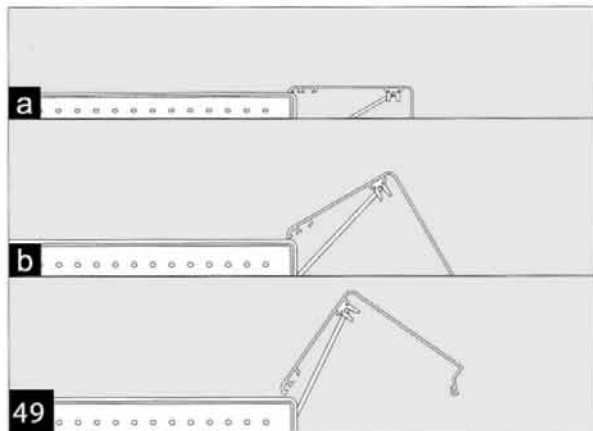
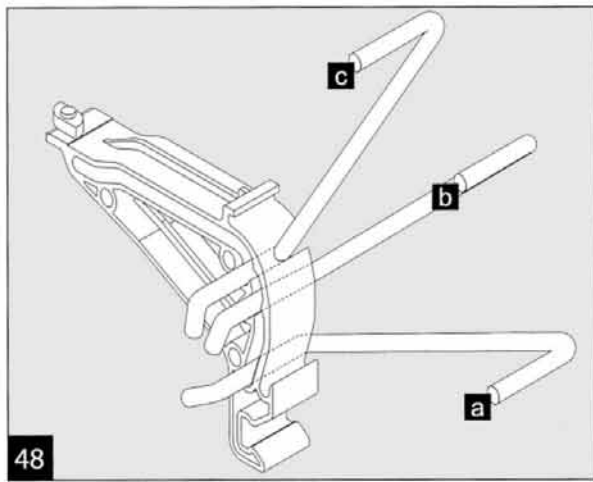
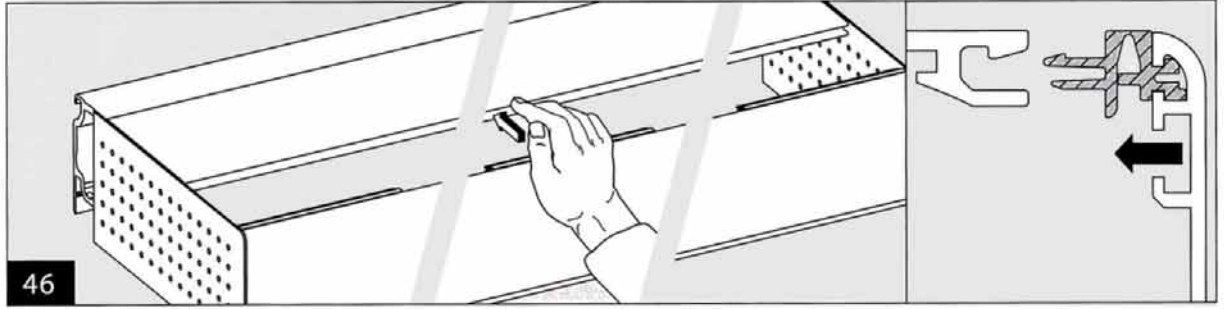
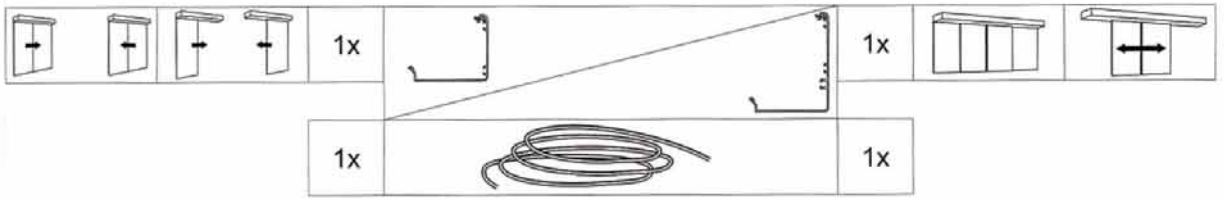




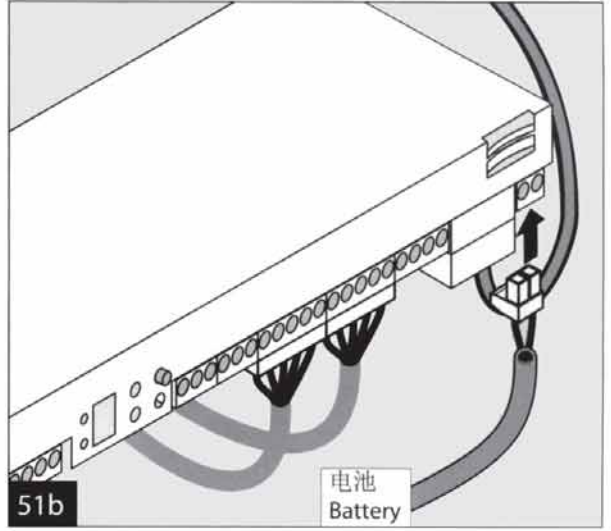
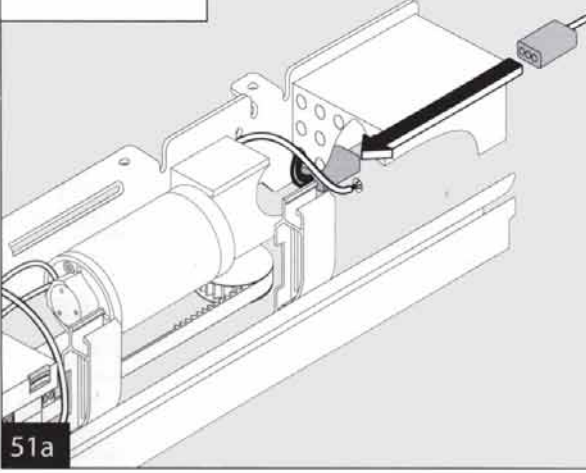
	2x			2x	
	1x			1x	
	1x			1x	







ES 200



如调试时无电源，可使用临时电源  
进行调试。

If there is no main power:  
connect the accumulator only to test

# 1. Commissioning

## 1. Commissioning

### 1.1 Please note:

Work on electrical equipment may only be performed by properly qualified electricians.

Power supply (by others) with 16 A fuse protection must be available.

Power cord must be double-insulated, for example: NYM. Do not use flat webbed house wires!

The maximum cable length of the external components must not exceed 30 m.

### 1.2 Basic requirements:

- The operator is fully assembled.
- The protective earth (PE) is connected.
- The safety sensors are connected.
- Components supplied separately, such as program switches, activators, radar motion detectors, Night-/Bank keyswitches and EMERGENCY OFF pushbuttons are installed and connected.
- The end stops are adjusted so that both active panels touch the end stops when the panels have reached maximum opening width.
- When the door is closed, the active and the passive door panel must not collide with the sealing profiles.
- The door has to run smoothly. Check the length of the connection screws of the toothed belt and replace the screws if necessary.



#### Update (small motor)

The ES 200 control unit can be installed as a replacement for older systems with GR 63x25 motors. However, a special cable for the incremental encoder with a pulse divider is required.

The following procedure has to be observed:

- Install hardware.
- Set program switch to "OFF" and activate the EMERGENCY OFF pushbutton.
- Reset system to original settings (factory settings): Press and hold service key, switch on power supply.
- Release the service key as soon as the 8 on the seven-segment display blinks twice.
- Adjust the GR 63x25 Motor via the pushbuttons on the basic module (b = 0) or via PDA.
- Unlatch the EMERGENCY OFF pushbutton.
- Perform a learning cycle.

### 1.3 First Commissioning

#### 1.3.1 Open the sliding panels half way.

#### ES 200

- Set program switch to OFF

1.3.3 Unlatch the EMERGENCY OFF pushbutton and bridge the light barriers. During the first commissioning of the system the infrared light curtains or light barriers shall be replaced by jumpers. (See connection diagram 056632-45532) Following the learning cycle, the first closing cycle and the parameterization of the control unit, the infrared light curtains or light barriers have to be connected and checked for proper functioning.

1.3.4 Insert the power plug and connect immediately thereafter the rechargeable battery pack. (within max. 8 sec.)



**The door must perform a closing cycle at low (creep) speed.**

**If the door performs an opening cycle, the system must be set back to original settings.**

**Disconnect the power plug so that the opening cycle stops.**

**Proceed on 2. original settings**

If the door performs a closing cycle, proceed with the learning cycle starting with the door closed.

#### Please note:

The light barriers and radar motion detectors are disabled during the learning cycle, as it has to be performed without interruptions.

In case that a fault or error should occur during this procedure, the learning cycle will be interrupted and needs to be started anew.

#### 1.3.5 Performing the learning cycle:

#### ES 200

press SERVICE button.

- Press and hold SERVICE/SELECT button until the door commences with the learning cycle. The external segments of the 7-segment display will illuminate in turn.
- The door accelerates in order to determine the door weight.
- The door opens at low (creep) speed to determine the opening width.

# 1. Commissioning

1.3.6 Set program switch to AUTOMATIC.

1.3.7 Activate the SERVICE button for a short time

- so that the door performs an opening cycle and closes on expiry of the hold-open time.

The following system parameters must be checked and amended if required.

Settings: operating instructions of parameterisation.

Perform amendments with the aid of the parameterisation instructions and the buttons located on the control unit.

**Menu P.:**

Program mode - original settings = 0

**Menu A.:**

Operation via rechargeable battery pack – original settings = 0

**Menu r.:**

Locking action depending on position of program switch – original settings = 0

**Menu L.:**

Locking type – original settings = 1

**Menu b.:**

Motor type – original settings = 1

## ES 200

The motor- and locking type are not learned automatically during the learning cycle.

1.4 Country-specific settings for first commissioning.



## 2. Settings / 3. Functional test

### 2. Settings

The control unit is preset with basic settings (original settings). If you require another setting, you will have to implement this either with the aid of the buttons next to the 7-segment display on the control unit (see parameterisation instructions)

General information concerning the original settings.



The system should only be reset to original settings in case that several settings have been changed and the door no longer works properly.

#### ES200

- Set program switch to OFF
- Open the door leaves to 50 p.c.:
- Please consider the country-specific settings.
- Connect power plug.
- Press and hold the SERVICE button until the door performs a closing cycle.

#### ES200

- In case the door starts an opening cycle, press the minus button on the control unit to change the rotation direction of the motor.

#### ES200

- Following the restoring of the original settings, differing settings (e.g. motor type, door type) have to be made manually either via the buttons on the control unit or via PDA (parameterisation) and a learning cycle has to be performed (see 1.3.5).

### 3. Functional tests

**Please note:**

All connected activators must be checked in each program switch position.

The activators must be adjusted according to the respective installation instructions/documentation texts.

#### 3.1 Light barriers

##### Automatic light barrier self-test (internal test via control unit)

The light barriers are automatically tested before each closing cycle. If the test fails (the door does not close) the system must be checked by a service engineer.

The movement range between the sliding panels is monitored by light barriers. If a person or an object enters the movement range or detection range of the light barriers, the closing cycle is reversed into an opening cycle and the door remains open until the monitored area is free and the hold-open time has expired.

##### Manual light barrier check with test piece

###### a) during closing cycle:

Interrupt one light barrier after the other during the closing cycle. The respective LED on the control unit goes out and the closing cycle is reversed.

###### b) while the door is open:

Interrupt the light barriers for several seconds while the door is open.

The door should remain open for as long as the light barriers are interrupted. Once the light barriers are uninterrupted, the door should close on expiry of the preset hold-open time.

#### 3.2 External detector

The external detector is a radar motion detector that responds to movements. The system is activated by approaching people or objects.

##### Functional test.

###### Basic requirements:

- The external detector is connected.
- The program switch is set to AUTOMATIC or PARTIAL OPEN position.

###### Function:

If a person or an object comes within the range of the sensor, the door opens, and then closes on expiry of the hold-open time.

## 3. Functional test

### 3.3 Internal detector

#### Checking the function.

##### Basic requirements:

- The internal detector has been connected.
- The program switch must be set to AUTOMATIC, EXIT ONLY or PARTIAL OPEN position.

##### The operator responds as follows:

When a person or an obstacle enters the detection range of the sensor, the door travels to "open" position and closes on expiry of the hold-open time.

### 3.4 Night-/Bank activator (optional)

#### ES 200 Easy:

##### Checking the function.

##### Basic requirements:

- The Night-/Bank activator has been connected.
- The emergency power supply has been activated (The rechargeable battery pack has been connected)

##### Approach:

- Activate the contact of the switch so that it is permanently activated.
- The door remains open as long as the switch is activated. The door closes on expiry of the Night-/Bank hold-open time as soon as the contact is interrupted.

#### ES 200

##### Checking the function.

##### Basic requirements:

- The Night-/Bank switch has been connected.
- The program switch is set to OFF position.

##### Approach:

- Trigger an opening pulse via the Night-/Bank activator.
- The door is unlocked and performs an opening cycle.
- A permanent pulse activates the "PERMANENT OPEN" function.
- After the user has passed the door or on expiry of the Night-/Bank hold-open time, the door performs a closing cycle and is locked in "closed" position.

### 3.5 Monitoring of closing and opening force

#### 3.5.1 Obstacle during closing cycle:

- The door runs into an obstacle during a closing cycle.

##### The operator responds as follows:

- The closing cycle is reversed into an opening cycle.
- The door travels to full opening width. The door closes at low (creep) speed on expiry of the adjusted hold-open time.

This procedure is repeated until the obstacle has been removed.

#### 3.5.2 Obstruction during opening cycle:

If the door panels run into an obstruction, the door will stop and perform a further opening attempt at low (creep) speed. If the obstruction is still present, the door will stop again. After a total of six opening attempts, the door will close. Once the obstruction has been removed, the next opening cycle is performed at low (creep) speed. Then the door resumes operation at the adjusted speed.

### 3.6. EMERGENCY OFF pushbutton (optional)

##### Basic requirements:

- The program switch must be set to AUTOMATIC, PARTIAL OPEN, EXIT ONLY, OFF (not locked) or PERMANENT OPEN.

##### Approach:

- Press the EMERGENCY OFF pushbutton.
- The motor circuit is interrupted.
- The door panels come to a halt and can be moved manually.

### 3.7 Locking device (NO rod lock system) optional

The door is locked while it is closed when the program switch is set to OFF.

### 3.8. EMERGENCY OPEN FUNCTION in the event of a power failure (optional)

#### ES 200

##### Basic requirements:

- The rechargeable battery pack (optional) is connected.
- The EMERGENCY OPEN FUNCTION is adjusted.

In the event of a power failure:

If the program switch is in OFF position:

- The door will remain closed.

If the program switch is in AUTOMATIC, PARTIAL OPEN or EXIT ONLY position:

- An automatic emergency opening is performed.
- The door will be opened with the aid of the rechargeable battery pack (optional).

The door may be manually unlocked and opened from the inside.

## 3. Functional test

### 3.9 EMERGENCY CLOSING in the event of a power failure (optional)

#### ES200

##### Basic requirements:

- The rechargeable battery pack (optional) has been connected.
- The EMERGENCY CLOSING FUNCTION is adjusted.


##### Approach:

- Set the program switch to AUTOMATIC, EXIT ONLY, PARTIAL OPEN or PERMANENT OPEN position.
- The door is in "open" position
- Remove power plug (power failure).
- The door travels to "closed" position with the aid of the rechargeable battery pack.

### 3.10 EMERGENCY OPERATION in the event of a power failure.

#### ES200

##### Basic requirements:

- The EMERGENCY OPERATION FUNCTION is set: „A“ = 
- The rechargeable battery pack (optional) is connected.

##### Function:

- As soon as the system is activated the sliding panels move at low (creep) speed.
- Furthermore all functions remain operational until the rechargeable battery pack (optional) is empty.

##### Function module

#### ES 200

Function module DIN 18650 see 057015 45532

### 3.F.1 Additional functions may be set/selected with the aid of the function module.

The following additional functions are available:

- 3.F.2 Protection of secondary closing edges
- 3.F.2 Protection of main closing edge
- 3.F.3 Panic Closing Function
- 3.F.4 Door status contacts
- 3.F.6 Airlock Function
- 3.F.9 Pharmacy Function

The functions may be connected via two different DCW addresses.

#### The system must be disconnected from power supply while the DCW address of the function module is set or amended.

Setting the DCW address:

- Set both DIP switches of the control unit to OFF position.
- The DCW address 48 is now set.

### 3.F.2 Protection of secondary closing edges via "DCW address 48" (IN 1 and IN 2)

see connection diagram of function module

Presence sensors monitor the movement range behind the sliding panels in "open" direction. (For example the active panel that moves towards the wall for systems without safety screens.) If a person or an object enters the detection range of the presence sensor, the opening cycle is stopped and the door will not open until the obstruction has been removed.

#### Protection of main closing edge (IN 3)

see connection diagram of function module

Presence sensors monitor the movement range between the sliding panels while the door closes. If a person or an object enters the detection range of the presence sensor, the closing cycle is reversed into an opening cycle.

### 3.F.3 Adjustment of Panic Closing Function (IN 4)

see wiring diagrams of function module

#### The Panic Closing Function is subject to special legal provisions, therefore the provisions of the relevant country have to be observed.

The Panic Closing Function has to be adjusted via the PDA for safety reasons.

The Panic Closing Function must be triggered via safety deactivation (Totman system).

##### Basic requirements:

- The Panic Closing Function must be activated.

##### Function:

- Press and hold the pushbutton to close the door. The door will only close while the pushbutton is activated (the contact is closed).
  - The door will close immediately (it will even reverse an opening cycle).
  - The safety functions such as blocking recognition, light barriers and radar motion detectors are deactivated. The door closes and locks.
  - In case the door is blocked by a person or an obstacle during this closing cycle, the door will press with all its might against the obstruction in order to close. The door will not respond to an activation via NIGHT-/BANK, INTERNAL or EXTERNAL DETECTOR as soon as it has reached „closed“ position.
  - This procedure can only be stopped when the motor is overloaded. The motor will switch off for 10 seconds following 10 seconds of constant operation. On expiry of these 10-seconds, the door will try to close until it succeeds to close and lock (the blocking is removed).
- In case the motor overloads, this error may be redeemed by setting the program switch to OFF position. This sets the waiting period to "0" in order to enable a prompt response of the door.

### 3. Functional test

#### 3.F.3 Cancelling the Panic Closing Function / Quitting

##### Approach:

- Set program switch to OFF position.
- The system has now quit the Panic Closing Function. By setting the program switch to OFF position, the control unit resumes its standard functions.

#### 3.F.4 Door status contacts

- see connection diagram

##### 3.F.4.1 Door status contact 1 (OUT-1)

- (original setting door "open")

The relay contact is closed when the door performs an opening cycle, is in "open" position or performs a closing cycle.

##### 3.F.4.2 Door status contact 2 (OUT-2)

- (original setting door "closed")

The relay contact is closed when the door is in "closed" position.

##### 3.F.4.3 Door status contact 3 (OUT-3)

- (original setting "malfunction")

The relay contact is closed in the event of a malfunction.

##### 3.F.4.4 Door status contact – Bell contact (OUT-4)

The relay contact is closed when one or both light barriers are interrupted. The function is deactivated when the door is closed.

#### 3.F.5 Expansion module –

- Setting of "DCW address 49"

The system must be disconnected from power supply while the DCW address of the expansion module is set or amended.

**DIP switches** - switch 1 must be set to ON

- switch 2 must be set to OFF

#### 3.F.6 Airlock pulse (IN 1)

The input pulse is treated like an INTERNAL DETECTOR pulse.

##### Fields of application/Information

An airlock with pulse relaying is especially suitable for buildings where one door is installed very close to the next door and where no detectors can be installed inside the building as they would be activated by the door panels of the other doors when these perform opening cycles. In this case the control unit of the first door (the door where the external activator has been triggered) will trigger an opening pulse at the second door as soon as the first door has performed a complete opening and closing cycle. The duration of the pulse depends on the detection period of the external detector. This pulse extension can be switched off via PDA so that the pulse is passed on within one second. (See connection diagram 056712-45532, page 2)

#### Pulse relaying via door 1

After door 1 has been activated (opening pulse):  
- Door 1 opens and deactivates door 2 during its opening cycle. (Internal and external detectors are deactivated)

As soon as door 1 is in „closed“ position, it activates door 2 (pulse relaying)

During its opening cycle, door 2 locks door 1. Then door 2 does not activate door 1.

#### Pulse relaying via door 2

After door 2 has been activated (opening pulse):  
- Door 2 opens and deactivates door 1 during its opening cycle. (Internal and external detectors are deactivated)

As soon as door 2 is in „closed“ position, it activates door 1 (pulse relaying)

During its opening cycle, door 1 locks door 2. Then door 1 does not activate door 2.

#### 3.F.7 Locking the airlock (IN 3)

As soon as the airlock function is activated while the door is still closed, INTERNAL and EXTERNAL DETECTOR signals are blocked, i.e. the door does not respond to their activation signals. An opening or closing cycle cannot be interrupted. All airlock functions are realized via direct wiring (no bus connection). The different functions may be realised as follows:

##### Airlock function:

- Door 2 is locked during the opening cycle of door 1. (Internal and external detectors are deactivated.)
- The locking function is disabled as soon as the door is closed.
- Door 1 is locked during the opening cycle of door 2. (Internal and external detectors are deactivated.)
- The locking function is disabled as soon as the door is closed.

#### 3.F.8 Airlock pulse (OUT 3)

The relay contact is closed for approx. 500 ms as soon as the door has reached "closed" position. In this airlock version even both sliding doors may be open.

##### Fields of application/Information

When using the system as timed airlock, the activation time of door 2 (e. g. the time when the door opens) has to be adjusted with the aid of the PDA (pulse relaying). The duration of the pulse depends on the detection of the external detector. This pulse extension can be switched off via PDA so that the pulse is limited to one second. The timed airlock is no „real“ airlock system, as also both doors can be open in this function. It is especially suitable for application in hospitals with long corridors or workshops with vehicle traffic on the corridors. (See connection diagram 056712-45532, page 3)

### 3. Functional test

#### **Door 1 activates door 2**

After door 1 has been activated:

Door 1 performs an opening cycle and activates door 2 on expiry of the preset delay time. Door 2 performs an opening cycle but does not activate door 1 again.

#### **Door 2 activates door 1**

After door 2 has been activated:

Door 2 performs an opening cycle and activates door 1 on expiry of the preset delay time. Door 1 performs an opening cycle but does not activate door 2.

The pulse relaying is only activated when an activation via one of the detectors (internal or external) has been received.

#### **Door status contact 2 (OUT 2) (Locking of airlock if required)**

The relay contact is closed as soon as the door commences an opening cycle. (Same function as function module with "DCW address 48".)

#### **3.F.9 Pharmacy Function (IN 2)**

##### **Basic requirements:**

There is an ES 200 locking device on the pulley

- Either a bistable or monostable locking is set.
- The program switch is in OFF position.

Once the Pharmacy Function is activated, the door opens to a preset opening width and locks in this position. As soon as the Pharmacy Function is deactivated, the door unlocks, performs a closing cycle and relocks in this position.

#### **3.F.10 Panic Closing Function (IN 4) & Door status contact 1 (OUT 1)**

Same function as function module with „DCW address 48“.

#### **3.F.11 Bell contact (OUT 4)**

The relay contact is closed when one or both light barriers are interrupted. This function is deactivated while the door is closed.

## 4. Care and maintenance

### Care and maintenance

The unit must be checked and, if necessary, serviced before it is commissioned for the first time and thereafter as required, but at least once a year

### Wear parts

The following wear parts must be checked in regular intervals and replaced if required in order to ensure the smooth function of the unit.

- Track rollers: every 2 years
- Rechargeable battery pack: every 3 years
- Rubber end stops: at every service check
- Track rail: every 5 years
- Toothed belt: every 1,000,000 opening/closing cycle
- Floor guides: at every service check

### Cleaning

During cleaning, the program switch must be set to OFF or PERMANENT OPEN in order to avoid inadvertent movements of the door. The whole of the sliding door unit (aluminium, glass, covers) can be cleaned with a damp cloth and normal commercial detergents. The light barriers have to be cleaned with a dry cloth and the floor guide rails must be cleaned.



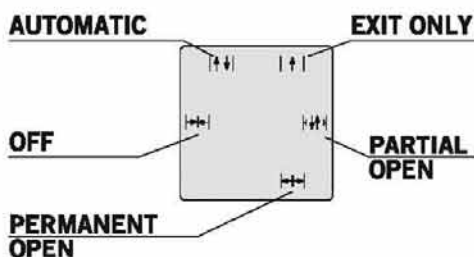
## 5. Operating instructions

### 5.1. Program switch

The program switch to activate the door system is located at the door system. During commissioning the EMERGENCY OFF pushbutton, which is normally situated next to the program switch, must be unlocked by turning the switch.

The following five functions can be selected at the program switch.

(Remote control program switch available)



#### Program switch settings:

**OFF** The system cannot be used automatically. In the case of units with locking device, the door is locked mechanically.

**AUTOMATIC** If a person or an object enters the range of the detectors, the door opens to its full opening width and closes on expiry of the preset hold-open time. The hold-open time can be adjusted at the basic module or with the aid of the PDA.

**EXIT ONLY** The external detector is deactivated; the door is only accessible from the inside (e.g. one-way function on close of business). If a person or an object enters the range of the internal detector, the door opens to its full opening width and closes on expiry of the preset hold-open time.

**PARTIAL OPEN** If a person or an object enters the range of the detectors, the door opens to the preset partial open width and closes on expiry of the hold-open time.

**PERMANENT OPEN** The door opens at low (creep) speed to its full opening width and remains in this position until another function is selected

#### Malfunction LED

The Malfunction LED indicates a fault, which might constrain the escape route.  
The door travels to its „open position“ and comes to a halt.

### 5.2 Setting the PARTIAL OPEN Function

The PARTIAL OPEN Function can be selected or set by program switch or PDA.

The opening width of the door can be adjusted individually. Starting from the full opening width, a **reduced opening width = partial opening width** may be set (e.g. in winter to reduce drafts.)

- Close the door.
- Set program switch to PERMANENT OPEN
- The door opens at low (creep) speed.
- As soon as the door reaches the desired partial opening width, set the program switch to PARTIAL OPEN.  
The door stops and the control unit stores the desired position.  
The door performs a closing cycle.

### 5.3 EMERGENCY OFF pushbutton (optional) Only for ES 200

The program switch is set to AUTOMATIC, PARTIAL OPEN or EXIT ONLY.

- Push the EMERGENCY OFF pushbutton so that the motor circuit is interrupted.
- The door comes to a halt and the leaves may be moved manually.

#### EMERGENCY OPEN pushbutton (optional)

## 6. Troubleshooting

Ensure that the following instructions: COMMISSIONING – ADJUSTMENT - FUNCTIONAL TEST and PARAMETERISATION are ready to hand.

**How does the control unit respond to a short circuit?**

### ES200

The 27 V power supply for radar motion detectors, the locking device etc. is short circuit proof. In the event of a short circuit, both control LED lights of the light barriers go out and the 7-segment display indicates error 3 (program switch) Once the short circuit is removed, the 27 V power supply is restored automatically.

### ES200

The motor amplifier is additionally short circuit proof. Once the short circuit is removed, the motor is supplied with power.

If, during commissioning or operation, faults arise, check the following points:

- Have all maintenance intervals been observed/has the maintenance been performed?
- Have all wear parts been checked and replaced if required?
- Is the power supply connected?
- Is the EMERGENCY OFF pushbutton off, i.e. unlatched?
- Is the program switch set correctly?
- Are the areas monitored by the light barriers clear and clean?
- Is the door blocked by an obstruction?
- Is the door running smoothly (counter rollers, floor guides)?
- Are all external activators, EMERGENCY OFF pushbutton, program switch and locking device connected correctly?
- All connection points checked?
- Is the rechargeable battery pack correctly connected?

For further assistance, consult the following troubleshooting table.

**Should you perform installation work, disconnect the power plug and the battery pack in order to keep the control unit voltage-free. After a fault is redeemed, the error code must be deleted.**

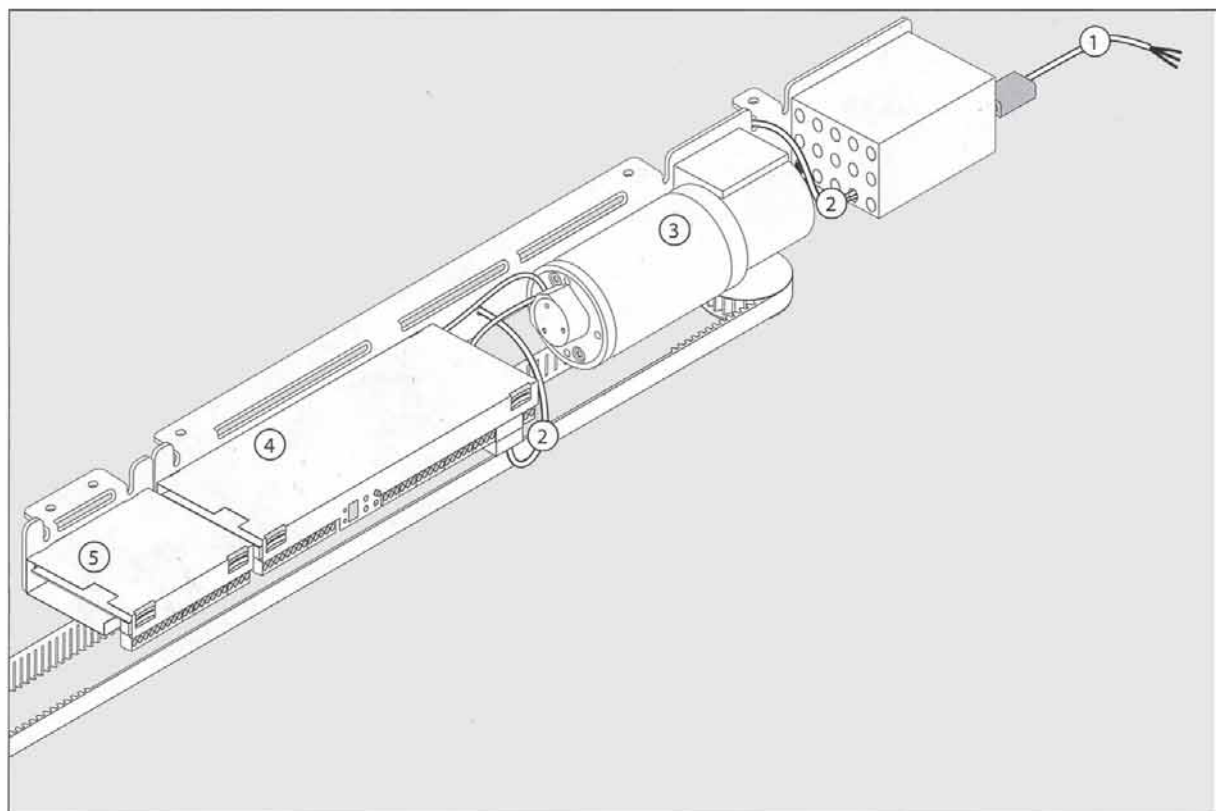
**Deleting of error codes: - Set program switch to OFF.**

Fault	Possible causes	Remedy
The door don't perform the learning cycle	Light barriers / safety sensors are activ	Bridge the feeder clip of the safety wiring.
Door runs jerkily and out of control	The connector cable is not fixed properly The incremental encoder cable is defect	Fit connector cable properly Replace cable
Door remains open after rotational self-check (every 4 hours).	The rechargeable battery pack is not fully recharged or empty	Check battery voltage Change rechargeable battery pack
Door remains open, in all program switch settings	Light barriers (LS)	Check light barrier function with the help of the LED on the basic module.
	EMERGENCY OFF pushbutton	Bridge the connector inputs. If fault is cured by this, check EMERGENCY OFF pushbutton,



## 6. Troubleshooting

Door remains open in the program switch settings: AUTOMATIC, PERMANT OPENING, and PARTIAL OPENING	Detector is emitting a continuous signal	Remove connector of radar motion detector. If fault is cured by this, replace radar movement detector
Basic module indicates error "1" (obstruction during commissioning)	The learning cycle has not been performed (the door weight is still undetermined)	Perform learning cycle
	The blocking sensor is too sensitive for the door set (e.g. small, high and heavy door leaves)	Adjust blocking sensor to door set
Door does not open when the program switch is set to: AUTOMATIC, EXIT ONLY, PERMANT OPEN, and PARTIAL OPEN	External detector	Remove activator connector and bridge the input. If the fault is cured by this, check supply voltage (27 V) of the basic module and the detectors. If it is okay check and replace detectors if required.
	Internal detector	Remove activator connector. If the door opens, check supply voltage (27 V) of the basic module and the detectors. If it is okay check whether self-monitoring detector that works according to the fail-safe principle is connected.
Unpleasant operating noise	Screw presses against track roller	Replace or trim screw



**Beschreibung und Klemmendefinition**

(D)

**Description and terminal connections**

(GB)

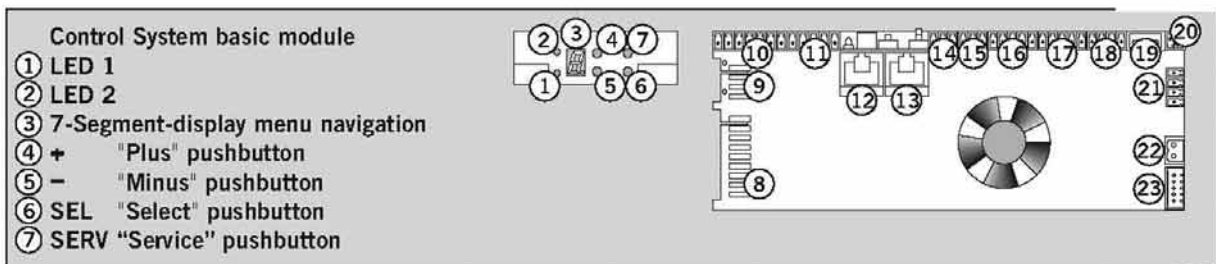
**接线柱描述**

(中文)

- ① ←← 230 V AC Netzversorgung
- ② ←← 35 V DC Anschluß zur Steuerung
- ③ Motor
- ④ Steuerung
- ⑤ Erweiterungsmodul

- mains supply
- connection to the control system
- Motor
- Control system
- extension module

- 电源
- 电源 连接控制模块
- 马达
- 控制模块
- 扩展模块

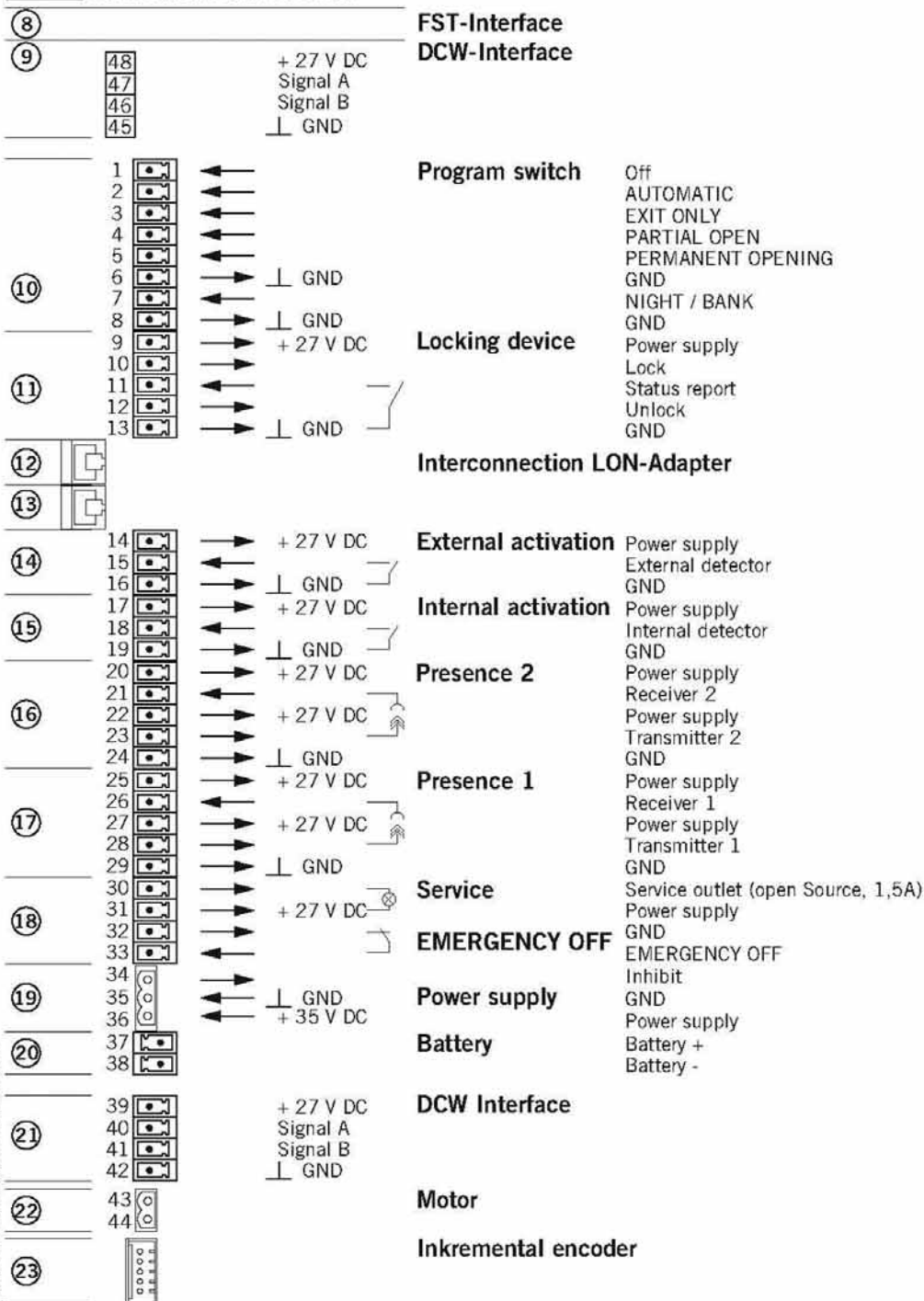


Description and terminal diagram

GB



When connecting a DCW device via cable, the wiring has to be checked again. Interchanged DCW connections (e.g. 27 V DC to A or B), or missing GND connection, may destroy all connected DCW devices.

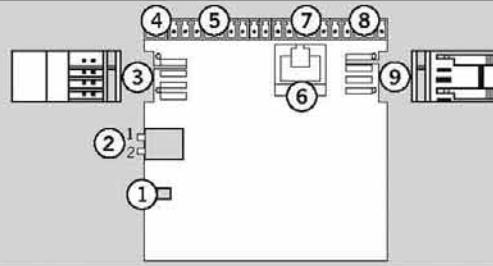


Subject to change without notice

## Control system function module

Breaking capacity of digital outlets:

1A 30V DC  
0,5 A 125V AC  
0,3 A 60V DC

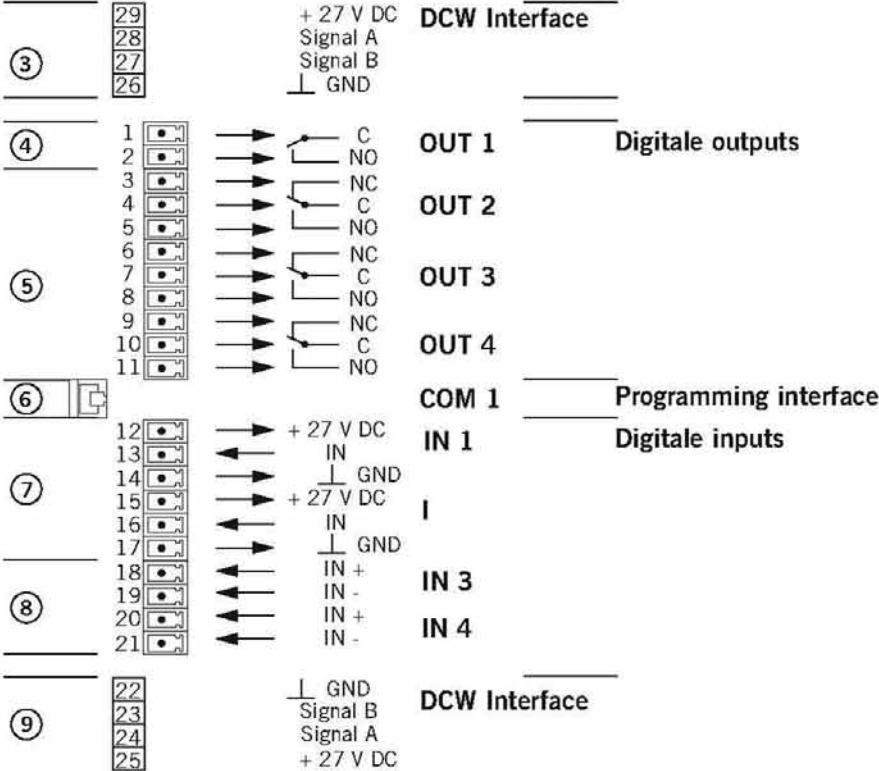


Description and terminal diagram

(GB)



When connecting a DCW device via cable, the wiring has to be checked again. Interchanged DCW connections (e.g. 27 V DC to A or B), or missing GND connected DCW devices.



DCW Adresse	FST	Original settings	Digitale inputs				Digitale outputs				
			1	2	3	4	1	2	3	4	
<b>DCW Adresse 48</b> 		Secondary closing edges Sensor 1	X								
		Secondary closing edges Sensor 2		X							
	✓	Main closing edge			X						
		Panic closing function				X					
	✓	Door status contact 1	"DOOR OPEN"				X				
	✓	Door status contact 2	"DOOR CLOSED"					X			
	✓	Door status contact 3	"OPERATIONAL FAULT"						X		
	✓	Door status contact 4	Bell contact								X
<b>DCW Adresse 49</b> 		Airlock function impulse	X								
	✓	Pharmacy control impulse		X							
		Disable airlock			X						
		Panic closing function				X					
	✓	Door status contact 5	Door closed				X				
		Door status contact 6	Disable airlock (exit)					X			
		Door status contact 7	Airlock impulse (exit)								
	✓	Door status contact 8	Bell contact								X

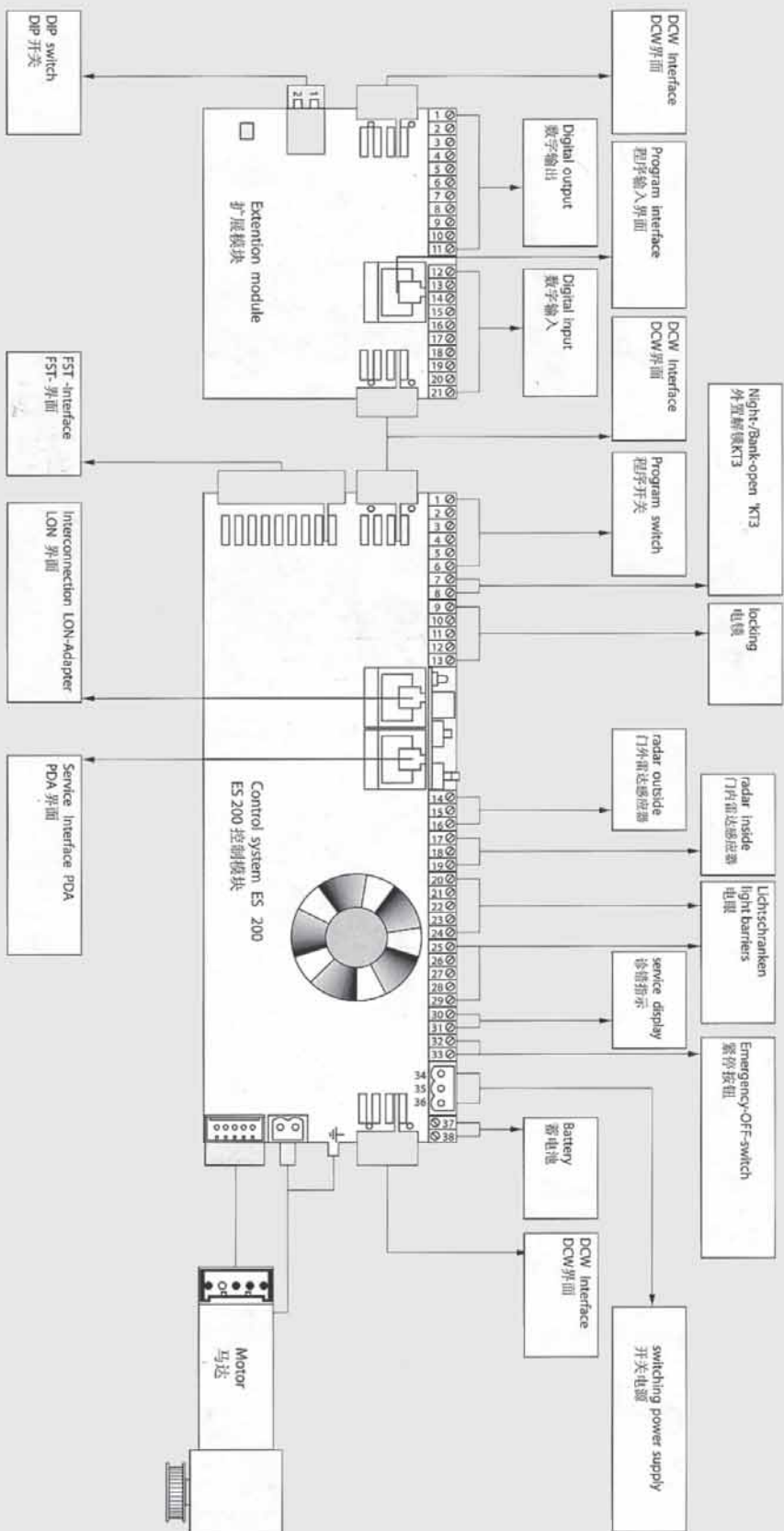
(2)

DIP switch

(1)

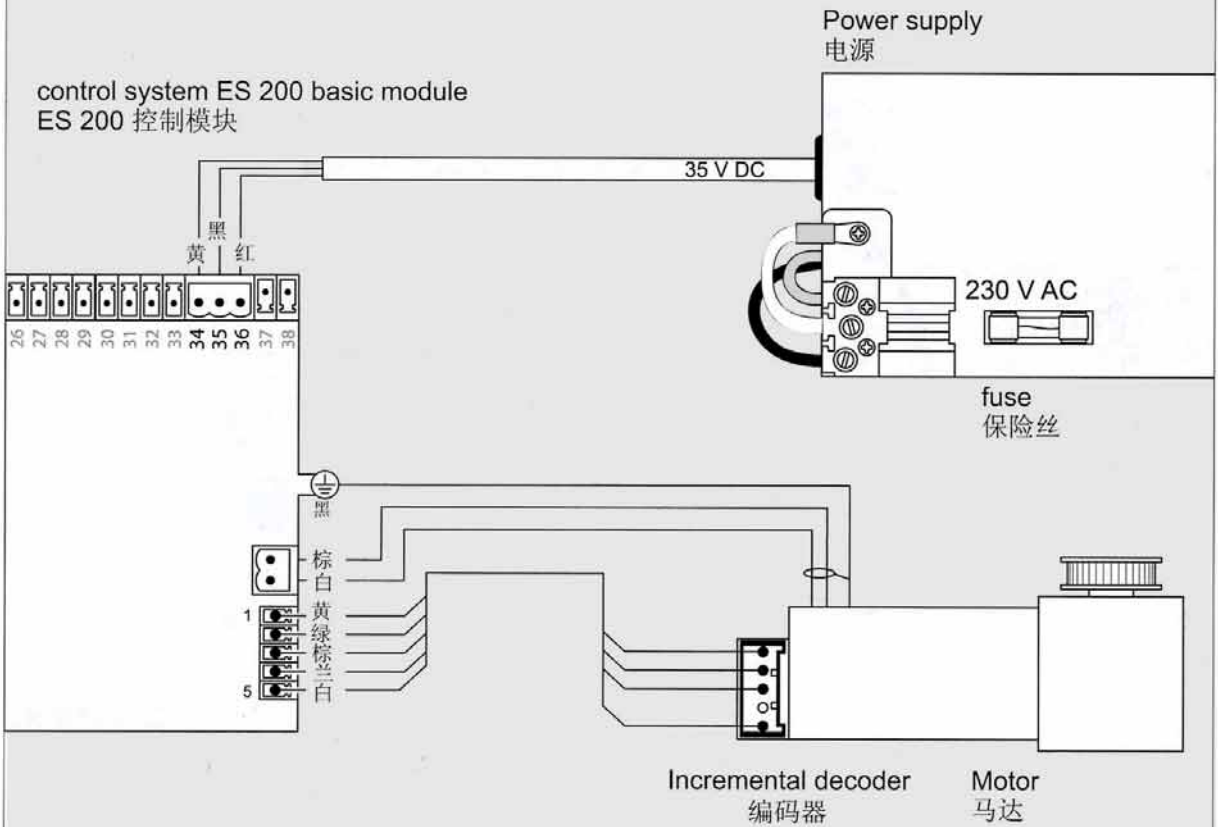
LED status indicator

	(D)	(GB)	(中文)	(I)	(NL)	(S)	(E)
WH	Weiß	White	白	bianco	wit	vit	blanco
BN	Braun	brown	棕	marrone	bruin	brun	marrón
GN	Grün	green	绿	verde	groen	grön	verde
YE	Gelb	yellow	黄	giallo	geel	gul	amarillo
GY	Grau	grey	灰	grigio	grijs	grå	gris
PK	Rosa	pink	粉红	rosa	roze	rosa	rosa
BU	Blau	blue	兰	blu	blauw	blå	azul
RD	Rot	red	红	rosso	rood	röd	rojo
BK	Schwarz	black	黑	nera	zwart	svart	negro
VT	Violett	violet	紫	viola	paars	lila	violeta
GYPK	Grau-rosa	grey-pink	灰-粉红	grigio-rosa	grijs-roze	grå-rosa	gris-rosa



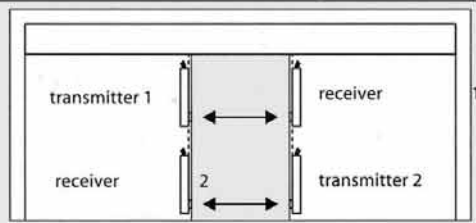


Wiring diagram of the motor, control system and powerly  
马达、控制器、电源接线图



Wiring diagram for 2 light barriers SBK111 or LB03

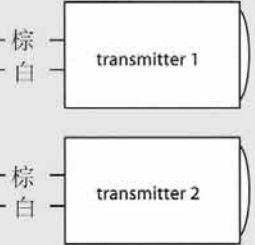
二对电眼接线图SBK111或 LB03



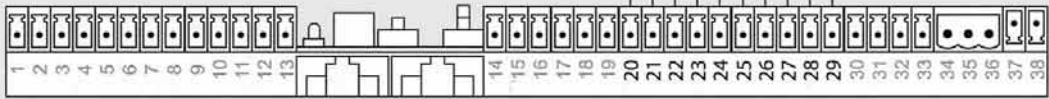
light barrier  
接收电眼



light barrier  
发射电眼



Control system ES 200 basic module  
ES 200 控制模块



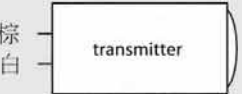
Wiring diagram for 2 light barriers SBK111 or LB03

一对电眼接线图SBK111或 LB03

light barrier  
接收电眼



light barrier  
发射电眼



Control system ES 200 basic module  
ES 200 控制模块



Wiring diagram WITHOUT light barrier

无电眼接线图

Control system ES 200 basic module  
ES 200 控制模块



Beschreibung und  
Klemmendefinition

(D)

Description and  
terminal connections

(GB)

接线柱描述

(中文)

Steuerung

control system

控制模块

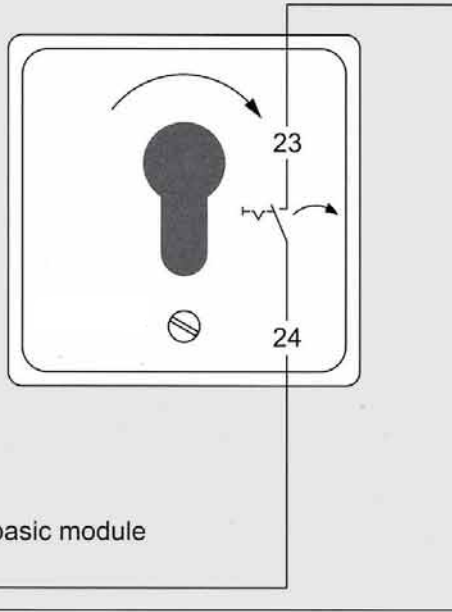
20	→	+ 27 V DC	
21	←		LS2 - Empfänger
22	→	+ 27 V DC	
23	←		LS2 - Sender
24	→	⊥ GND	
25	→	+ 27 V DC	
26	←		LS1 - Empfänger
27	→	+ 27 V DC	
28	←		LS1 - Sender
29	→	⊥ GND	

LS2 - receiver
LS2 - transmitter
LS1 - receiver
LS1 - transmitter

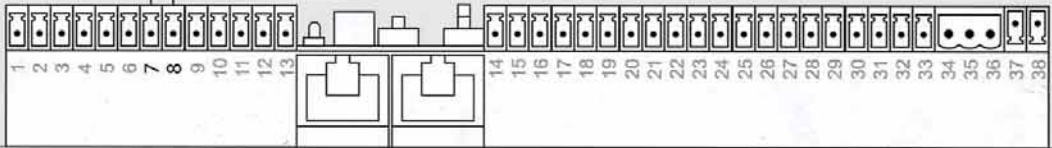
LS 2 - 接收电眼
LS 2 - 发射电眼
LS 1 - 接收电眼
LS 1 - 发射电眼

Wiringdiagram night-/bank-open  
with keyswitch KT3  
KT3外置解锁开关接线图

keyswitch KT 3  
K T3外置解锁开关



control system ES 200 basic module  
E S 200 控制模块



Beschreibung und  
Klemmendefinition

Steuerung

NACHT-BANK Eingang

D

Description and  
terminal connections

controlsystem

NIGHT-BANK-open

GB

接线柱描述

控制系统

外置解锁

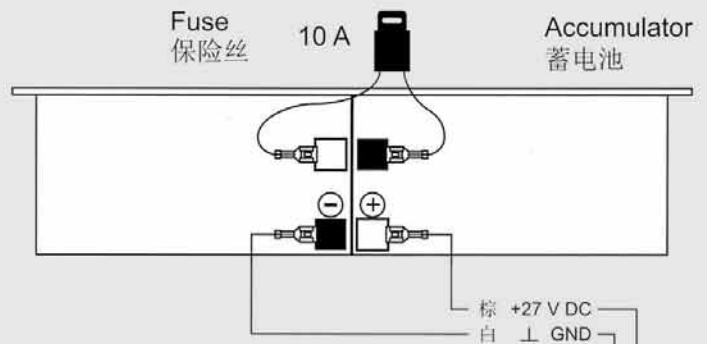
中文



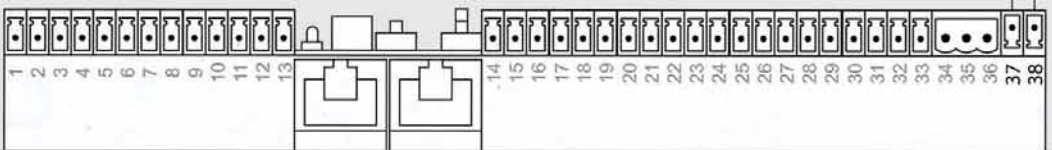
Wiring diagram of the battery  
 蓄电池接线图

- Battery: - Attach ONLY for the functional test and directly before the commissioning  
 - Disconnect the accumulator before you work on the ES-200

- 蓄电池: - 系统首次启动时必须对蓄电池进行功能测试  
 - ES-200在维修保养前, 需先拆蓄电池



Control system ES 200 basic modul  
 ES 200 控制模块



37 ⊕ +27 V DC  
 38 ⊖ ⊥ GND

Beschreibung und Klemmendefinition  
 Steuerung  
 Akku-Anschluß

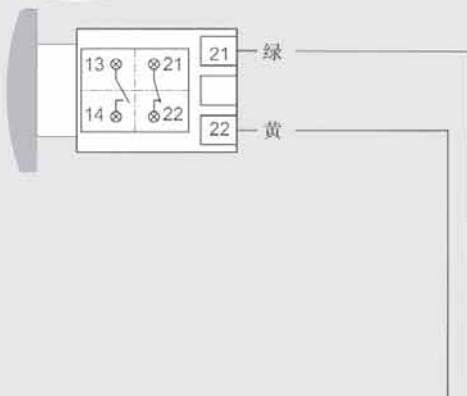
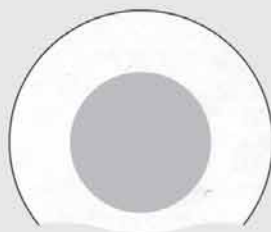
(D) Description and terminal connections  
 controlsystem  
 Accumulator

(GB) 接线柱描述  
 控制系统  
 蓄电池

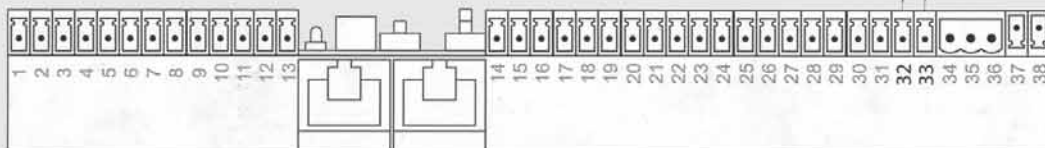
(中文)

Wiring diagram Emergency-OFF-switch  
紧停按钮接线图

E emergency-OFF-switch  
紧停按钮



controler ES 200 Grundmodul  
ES 200 控制模块

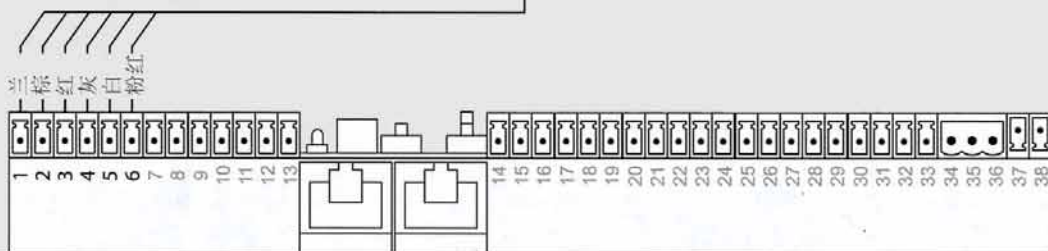


Wiring diagram Program switch  
程序开关接线图

program switch  
程序开关



control system ES 200 basic module  
E S 200控制模块



Beschreibung und  
Klemmendefinition

D

Description and  
terminal connections

GB

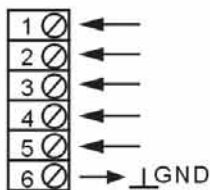
接线柱描述

中文

Steuerung

controlsystem

控制系统



AUS  
Automatic  
Ausgang  
Teiloffen  
Dauerauf

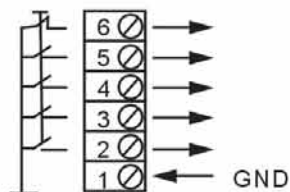
OFF  
automatic  
exit only  
partial opening  
permanent open

关闭  
自动  
单向开启  
局部开启  
长期开启

programmschalter

program switch

程序开关



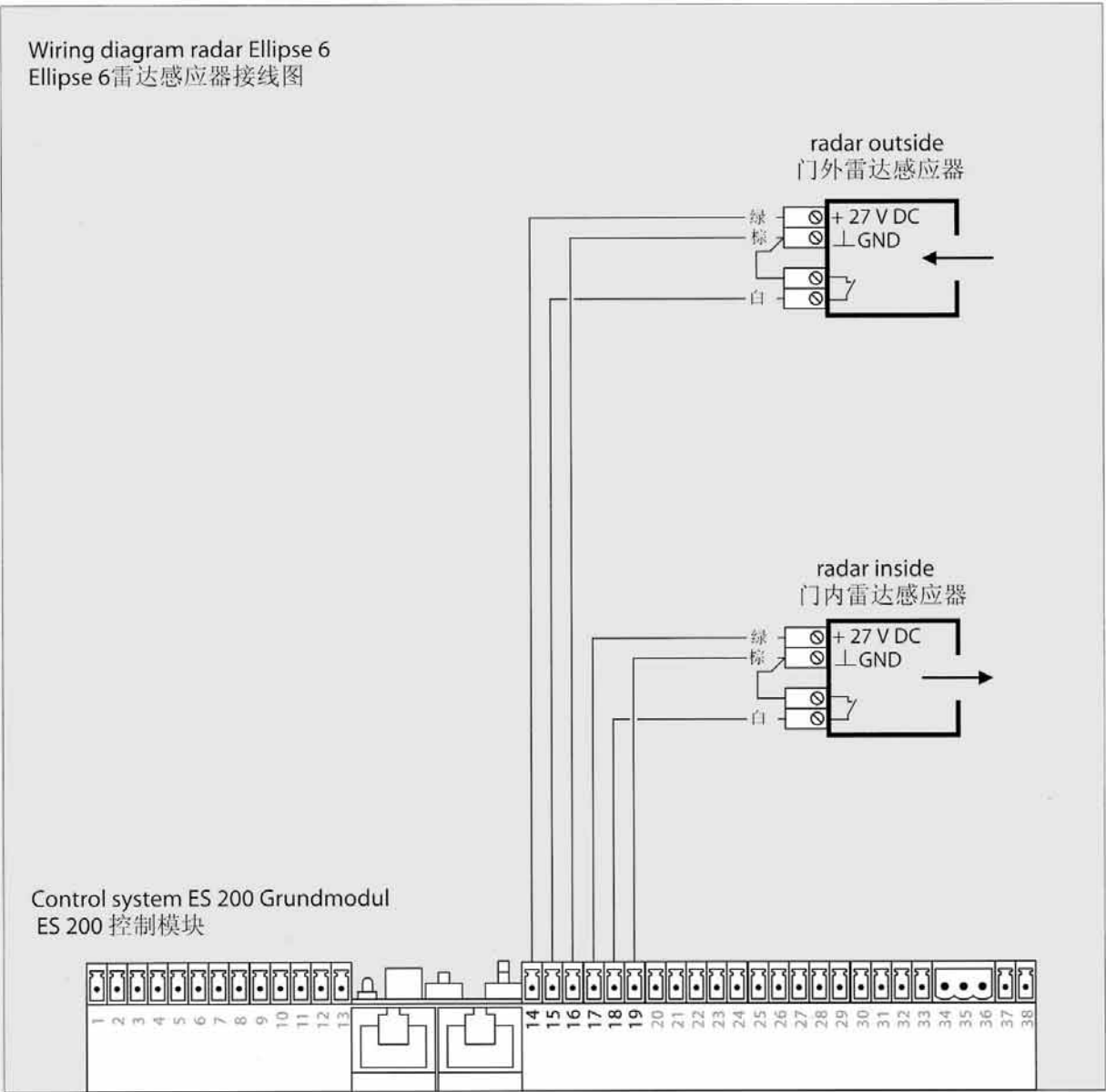
Dauerauf  
Teiloffen  
Ausgang  
Automatic  
AUS

Permanent open  
partial opening  
exit only  
automatic  
OFF

长期开启  
局部开启  
单向开启  
自动  
关闭



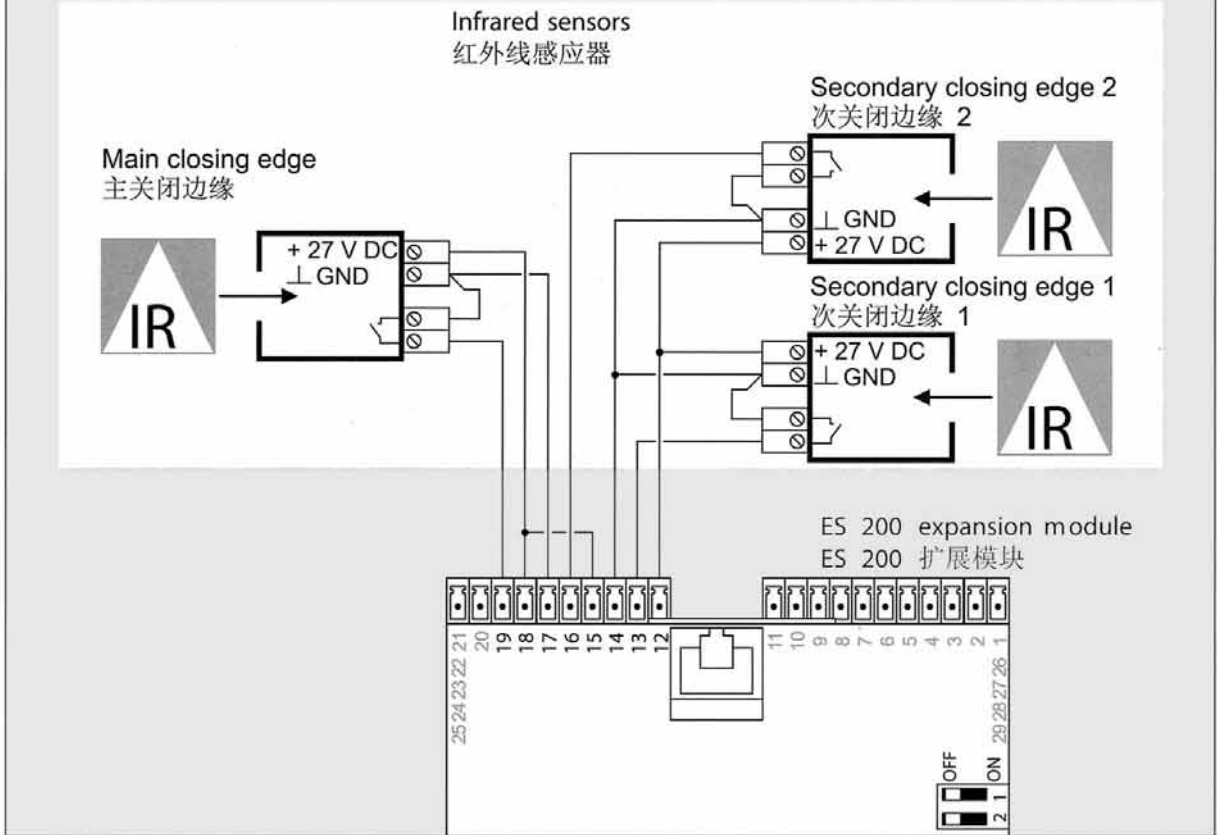
Wiring diagram radar Ellipse 6  
Ellipse 6 雷达感应器接线图



Beschreibung und Klemmendefinition	D Description and terminal connections	GB 接线柱描述 (中文)
<p>14 → + 27 V DC 15 ← 16 → GND 17 → + 27 V DC 18 ← 19 → GND</p>	<p>control system radar outside</p>	<p>控制系统 门外雷达感应器</p>
<p>棕 白 → + 27 V DC ↓ GND 绿</p>	<p>Radars Bridge</p>	<p>雷达感应器 跨接</p>

Wiring diagram closing edge protection  
关闭边缘保护接线图

no setting at the PDA required  
勿需用PDA进行设置



Beschreibung und  
Klemmendefinition

**D** Description and  
terminal connections

**GB** 接线柱描述

Steuerung

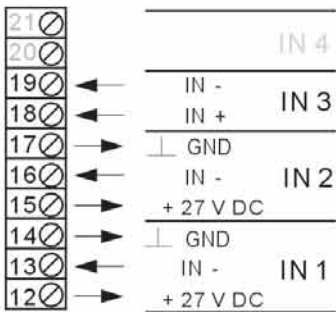
Control system

控制系统

Digitale Eingänge

Digitale input

数字输入



DCW Adresse 48

DCW Adress 48

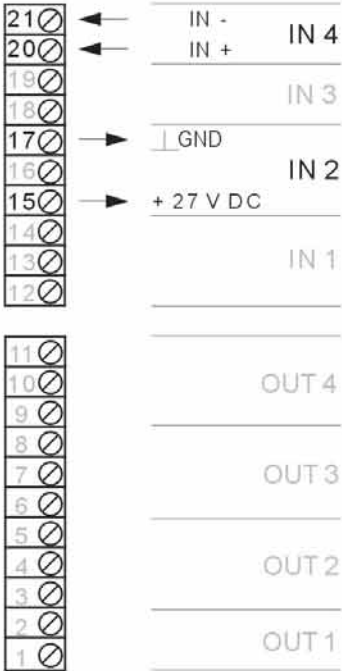
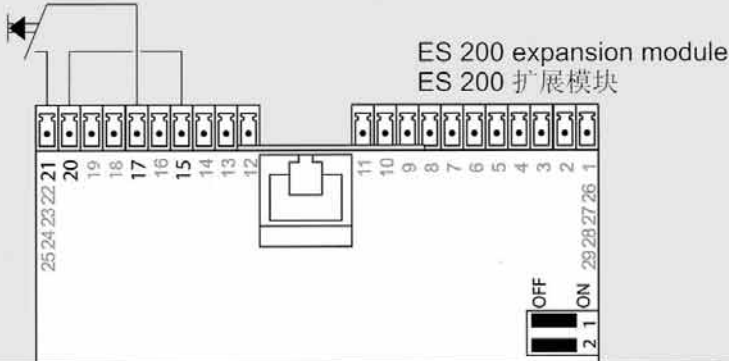
DCW 地址48



Wiring diagram panic closing  
紧急关闭接线图

function setting by PDA  
用PDA进行功能设置

Emergency switch  
紧急开关



Beschreibung und  
Klemmendefinition

D Discription and  
terminal connections

GB 接线柱描述

中文

Digitale Eingänge

Digital input

数字输入

Digitale Ausgänge

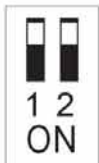
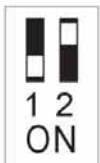
Digital output

数字输出

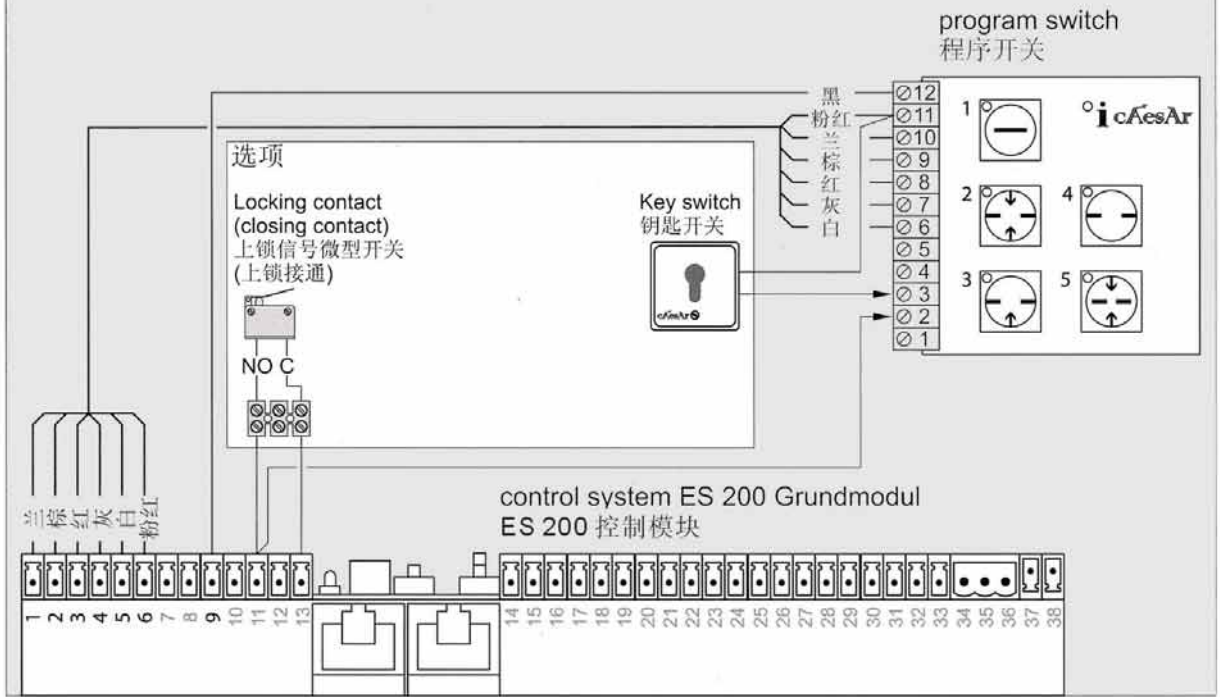
DCW Adresse 49 oder Adresse 48

DCW Adress 49 or 48

DCW地址:49或地址:48



Wiring diagram Programswitch EPS-S  
EPS-S 程序开关接线图



Beschreibung und Klemmendefinition

(D) Description and terminal connections

(GB) 接线柱描述

(中文)

Steuerung

Control system

控制系统

1	AUS
2	Automatic
3	Ausgang
4	Dauerauf
5	Teiloffen
6	└┬ GND
7	
8	
9	└┬ + 27 V DC
10	
11	└┬┬ GND
12	Verriegelungskontakt (Schließ-)
13	Verriegelungskontakt (Schließ-)

OFF
Automatic
exit only
permanent open
partial opening

关闭
自动
单向开启
长期开启
局部开启

Programmschalter

Programm switch

程序开关

AUS
Automatic
Ausgang
Dauerauf
Teiloffen

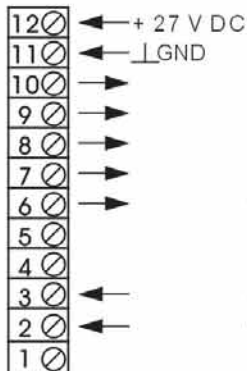
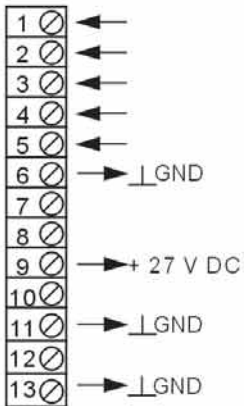
OFF
Automatic
exit only
permanent open
partial opening

关闭
自动
单向开启
长期开启
局部开启

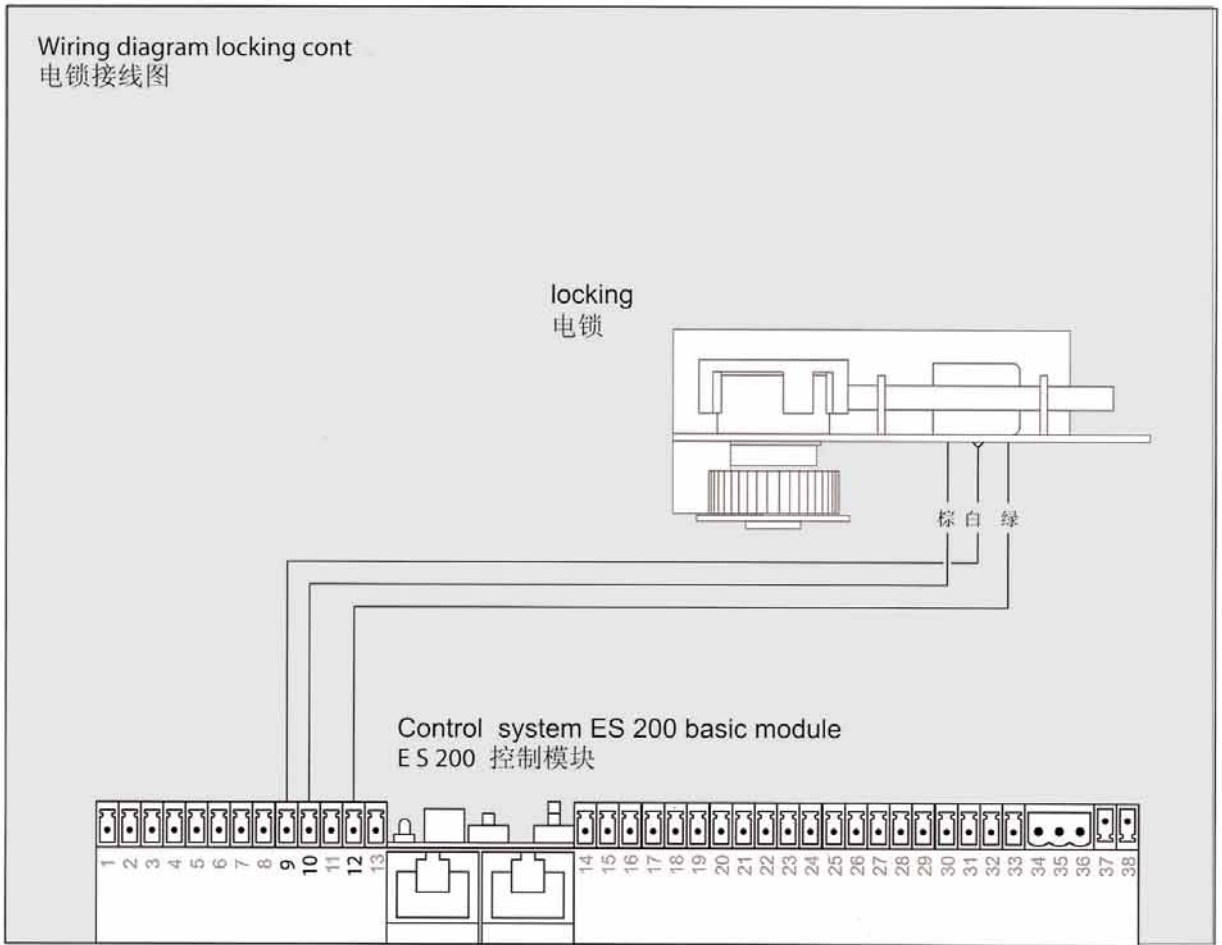
Schlüsselschalter / -taster
Verriegelungskontakt (Schließ-)

Key switch
locking connect (closing connect)

钥匙开关
上锁连接 (关闭连接)



Wiring diagram locking cont  
电锁接线图



Beschreibung und  
Klemmendefinition

(D)

Description and  
terminal connections

(GB)

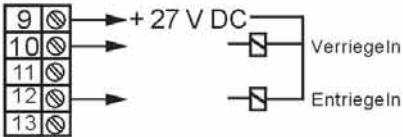
接线柱描述

(中文)

Steuerung

control system

控制系统



locking

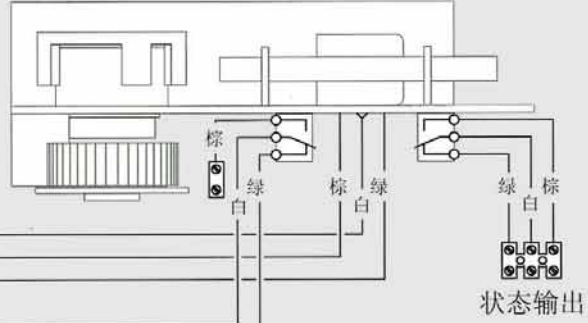
上锁

unlocking

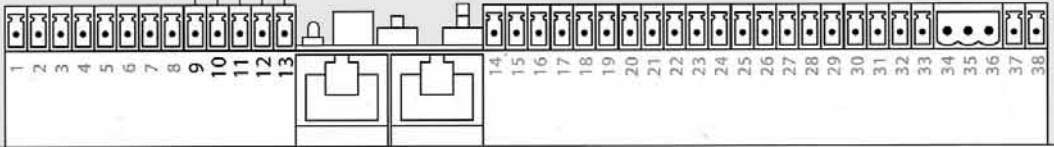
解锁

Wiring diagram locking contact  
电锁接线图 (带反馈信号)

locking  
电锁



Control system ES 200 modul de base  
ES 200 控制模块



Beschreibung und  
Klemmendefinition

(D)

Description and  
terminal connections

(GB)

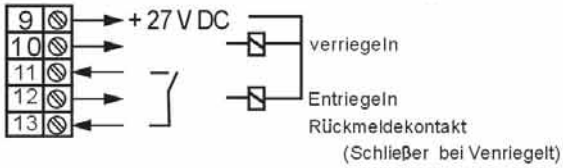
接线柱描述

(中文)

Steuerung

control system

控制系统



locking

上锁

unLocking

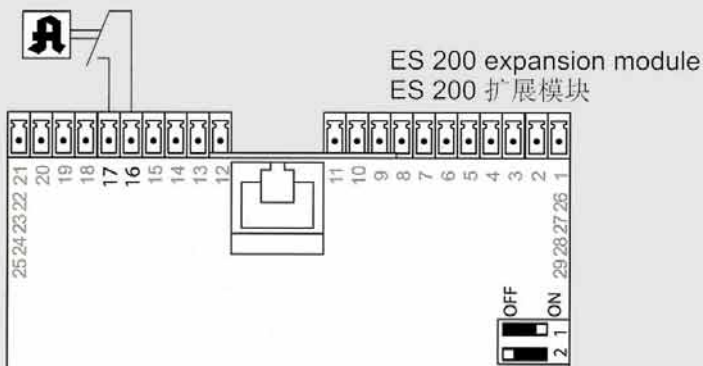
解锁



Wiring diagram pharmacy opening  
药房开启接线图

opening width setting by PDA  
用PDA设置开启宽度

Pharmacy switch  
药房开关



Beschreibung und  
Klemmendefinition

D

Description and  
terminal connections

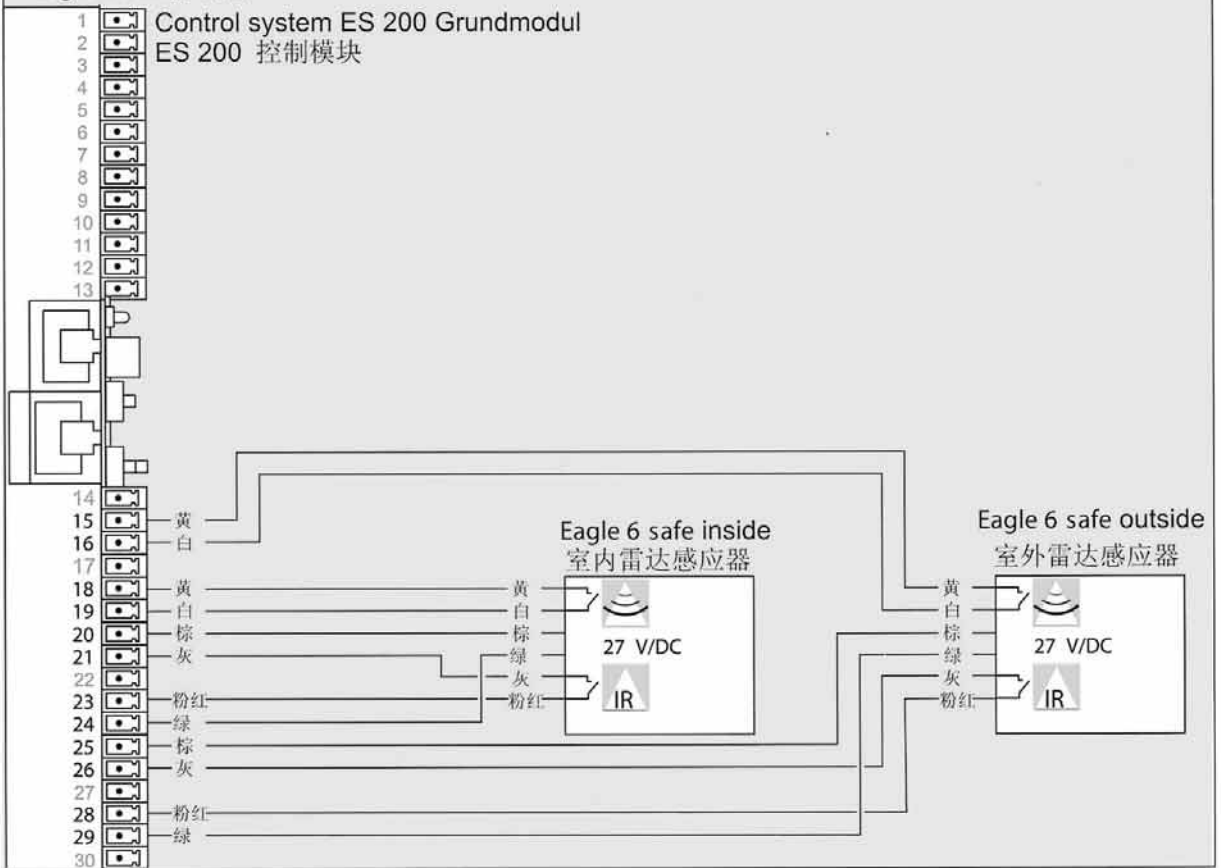
GB

接线柱描述

中文

21					
20		输入 4			
19		输入 3			
18					
17	→	⊥ GND			
16	←	IN - 输入 2			
15	→	+ 27 V DC			
14					
13		输入 1			
12					
11			Digitale Ausgänge		
10					
9					
8					
7		输出 3			
6					
5		输出 2			
4					
3		输出 1			
2					
1					
DCW 地址 49					

Wiring diagram Eagle 6 safe  
Eagle 6 safe 接线图



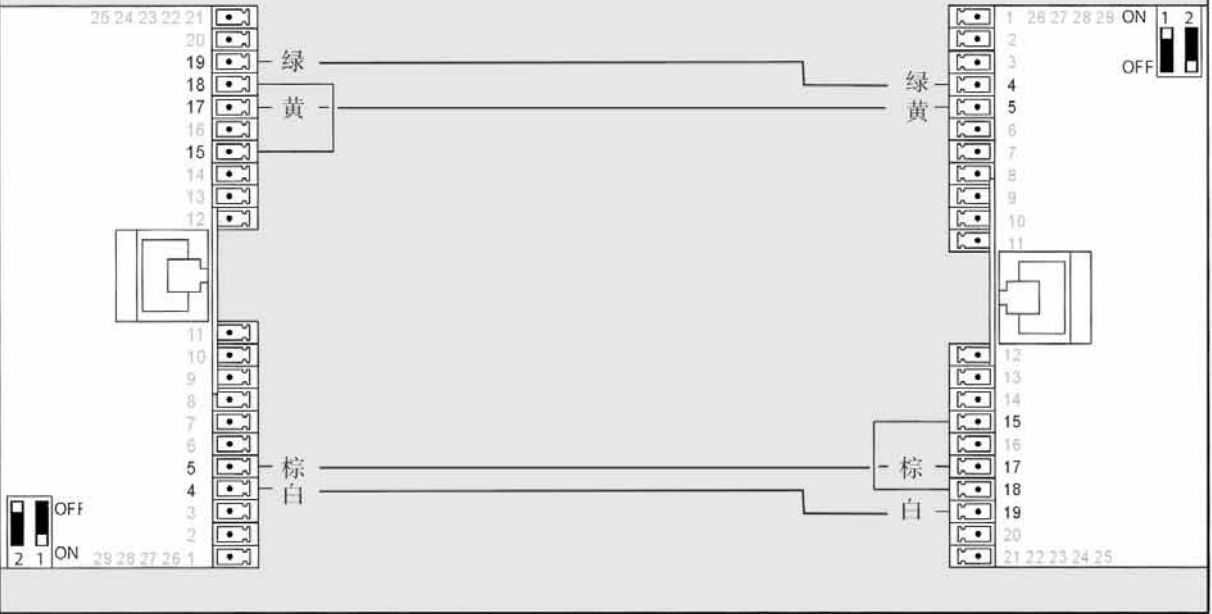
	Beschreibung und Klemmendefinition Steuerung	(D) Description and terminal connections control system	(GB) 接线柱描述 控制系统	(中文)
14	←	Radar Außenmelder	radar outside	室外雷达感应器
15	←			
16	→ GND			
17	←	Radar Innenmelder	radar inside	室内雷达感应器
18	←			
19	→ GND			
20	→ +27 VDC			
21	← LE2 (NPN)	Infrarot präsenzsensor Innen	Infrared presence sensor inside	室内红外感应器
22	←			
23	→ LS2 (GND)			
24	→ GND			
25	→ +27 V DC			
26	← LE1 (NPN)	Infrarot präsenzsensor Außen	Infrared presence sensor outside	室外红外感应器
27	←			
28	→ LS1 (GND)			
29	→ GND			
30	←			
31	←			

Wiring diagram lock  
锁联动接线图

no setting at the PDA required  
勿需用PDA 进行设置

DOOR A ES 200 expansion module  
DOOR A ES 200 扩展模块

DOOR B ES 200 expansion module  
DOOR A ES 200 扩展模块



Beschreibung und  
Klemmendefinition  
TürA und B: Steuerung

(D)

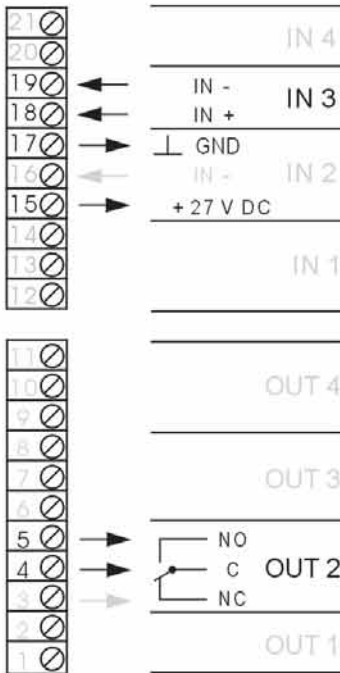
Description and  
terminal connections

(GB)

接线柱描述

(中文)

门A/B: 控制系统



Digitale Eingänge

Digital input

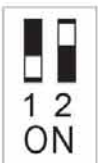
数字输入

Digitale Ausgänge

Digital output

数字输出

DCW Adresse 49

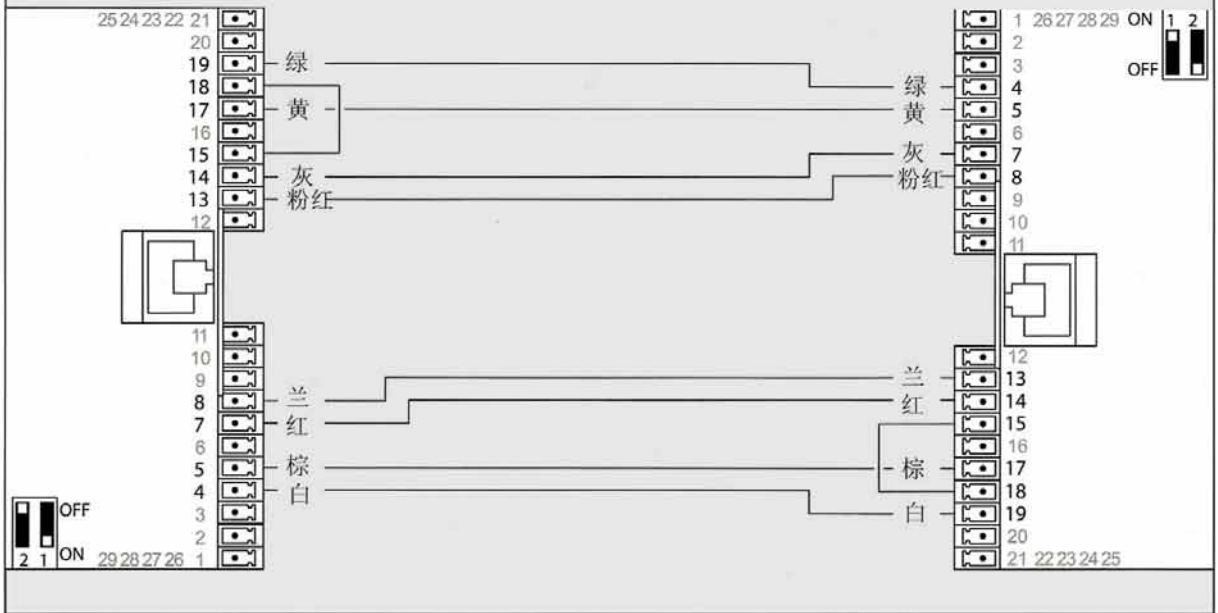


Wiring diagram lock with impulse contact  
脉冲联动接线图

no setting at the PDA required  
勿需用PDA进行设置

DOORA ES 200 expansion module  
DOORA ES 200 扩展模块

DOORB ES 200 expansion module  
DOORB ES 200 扩展模块

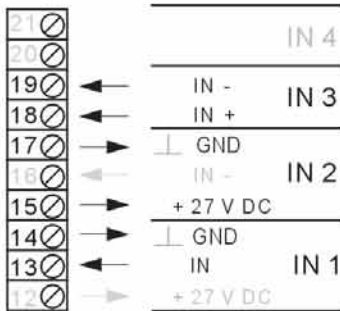


Beschreibung und Klemmendefinition  
Tür A und B: Steuerung

Description and terminal connections

接线柱描述 中文

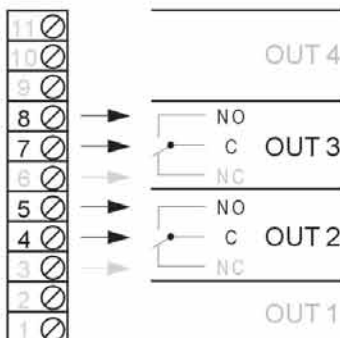
门A和门B:控制系统



Digitale Eingänge

Digital input

数字输入

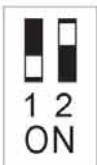


Digitale Ausgänge

Digital output

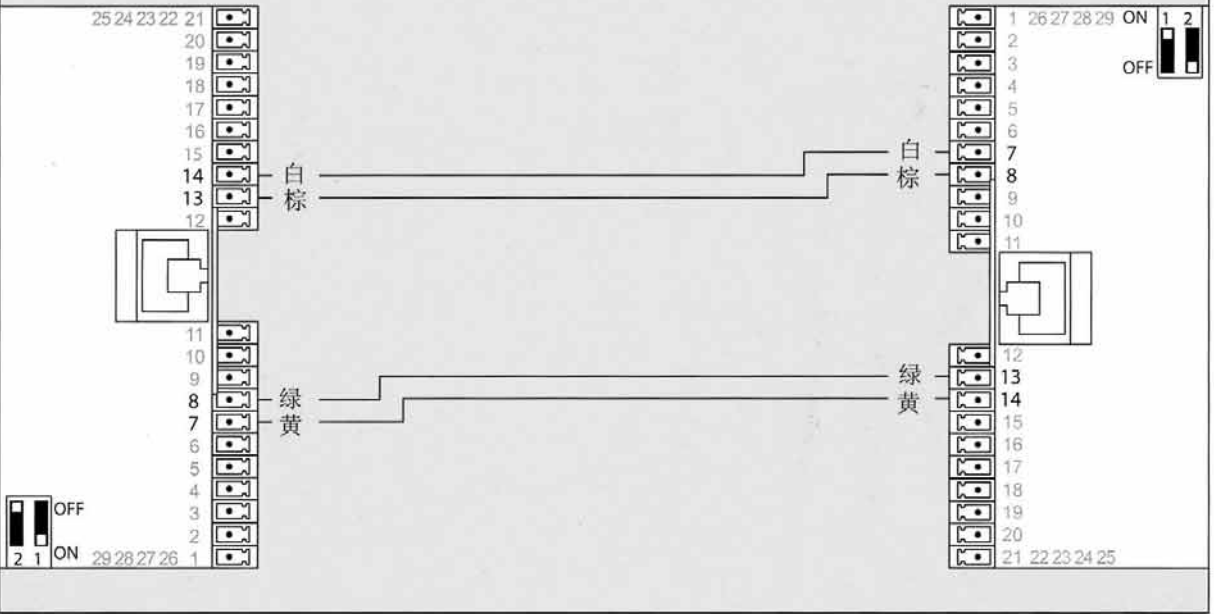
数字输出

DCW Adresse 49



DOOR A ES 200 expansion module  
DOOR A ES 200 扩展模块

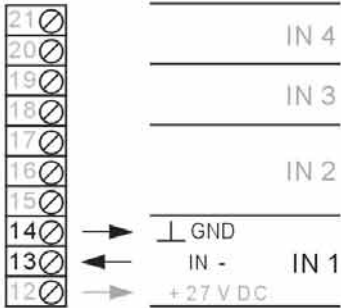
DOOR B ES 200 expansion module  
DOOR B ES 200 扩展模块



Beschreibung und  
Klemmendefinition  
Tür A und B: Steuerung

Description and  
terminal connections

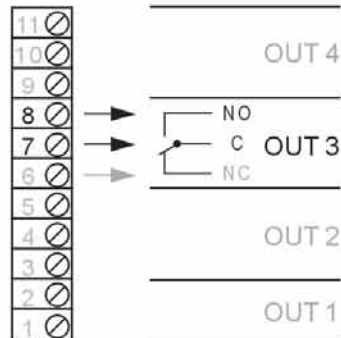
接线柱描述  
门A和门B:控制系统



Digitale Eingänge

Digital input

数字输入



Digitale Ausgänge

Digital output

数字输出

DCW Adresse 49

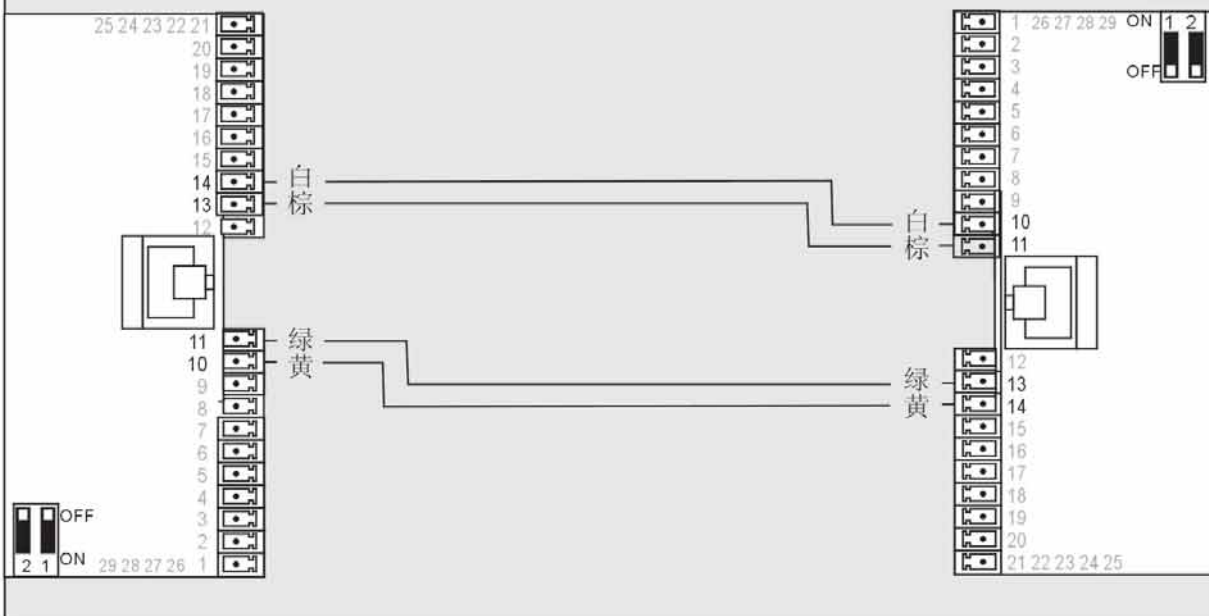


Wiring diagram synchronous operation  
同步接线图

no setting at the PDA required  
勿需用PDA进行设置

DOORA ES 200 expansion module  
DOORA ES 200 扩展模块

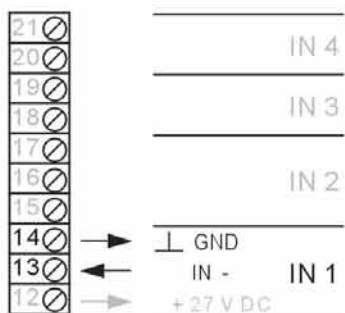
DOORB ES 200 expansion module  
DOORB ES 200 扩展模块



Beschreibung und Klemmendefinition  
Tür A und B: Steuerung

(D) Description and terminal connections

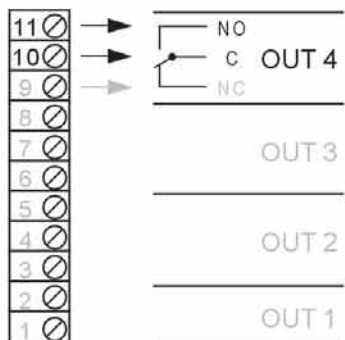
(GB) 接线柱描述 (中文) 门A和门B:控制系统



Digitale Eingänge

Digital input

数字输入

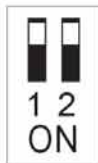


Digitale Ausgänge

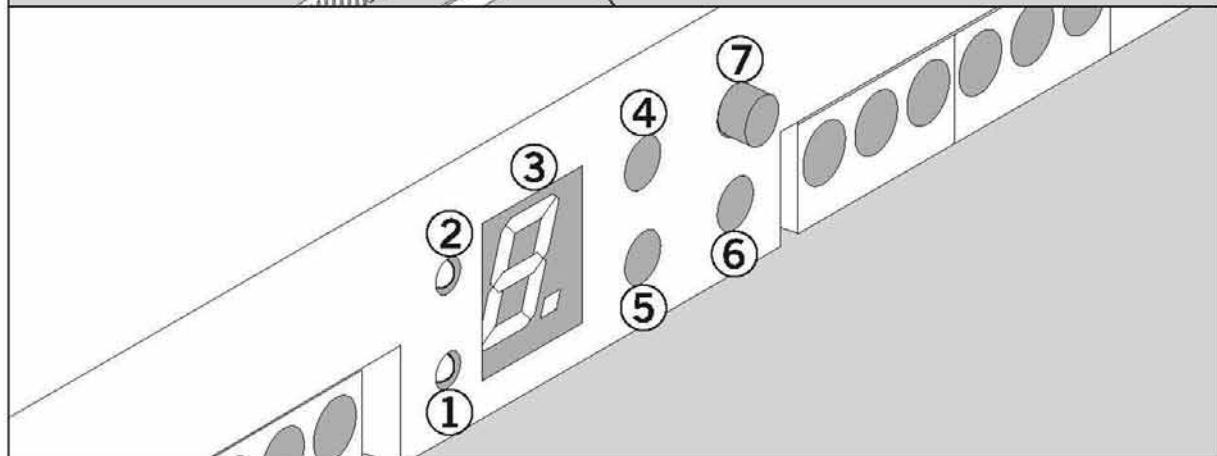
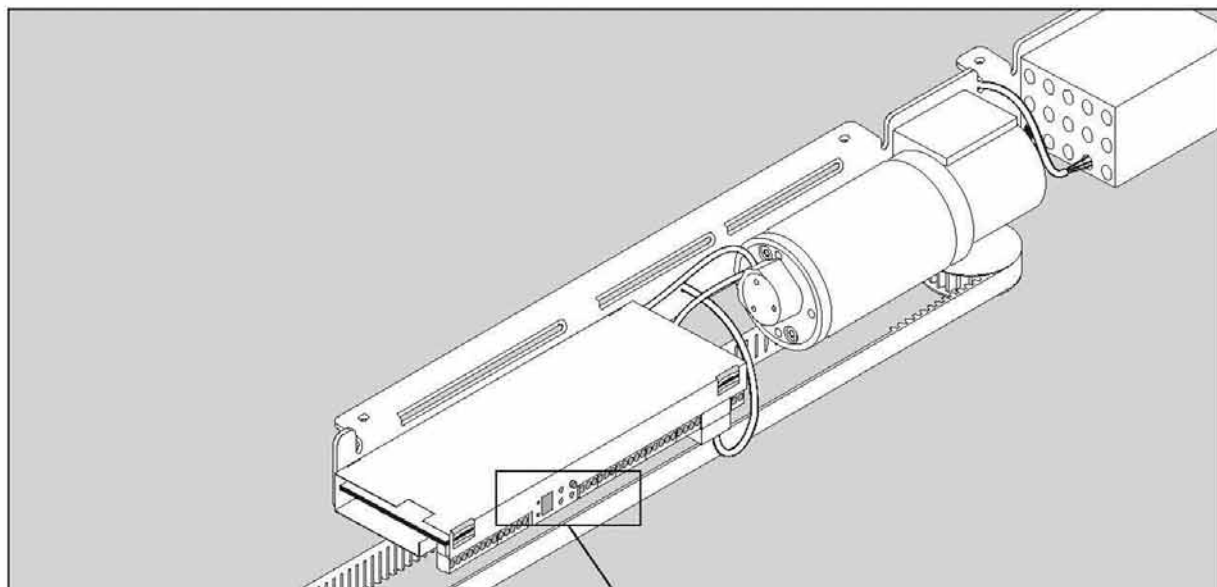
Digital output

数字输出

DCW Adresse 48







- |                     |  |
|---------------------|--|
| ① LED 1             | Status information of safety sensor 1 (e.g. light barrier)                       |
| ② LED 2             | Status information of safety sensor 2 (e.g. light barrier)                       |
| ③ 7-segment-display | Display unit for indicating numbers and symbols                                  |
| ④ +                 | <b>UP pushbutton for</b><br>increasing the parameter or value indicated          |
| ⑤ -                 | <b>DOWN pushbutton for</b><br>decreasing the parameter or value indicated        |
| ⑥ SEL.              | SELECT <b>Pushbutton for MENU control</b>  |
| ⑦ SERV.             | Service <b>Pushbutton for performing the functions of the service pushbutton</b> |

## Description of menu structur

### Display when in operation

Basic display setting when the operator is functioning correctly



Basic display setting when the operator is malfunctioning



### Parameter Display

Menu for selecting the parameter to be checked or changed

### Value Display

Readout of the value previously selected via the parameter display.



### Meaning of display codes

<b>E.</b>	Error display
<b>P.</b>	Program mode country specification
<b>r.</b>	Locking in Program switch settings
<b>L.</b>	Locking mode
<b>R.</b>	Back up battery operation
<b>o.</b>	Night-bank-hold open time
<b>d.</b>	Hold open time
<b>b.</b>	Motor type
<b>Q.</b>	Opening speed
<b>C.</b>	Closing speed
<b>S.</b>	Parameterisation block

### Display codes

0 - F
0 - 3
0 - 3
0 - 5
0 - 3
0 - F
0 - F
0, 1
GR 63 x 55: 0 - d GR 63 x 25: 0 - d
0 - 8
0, 1

parameter \ definition	0	1	2	3	4	5	6	7	8	9	A	b	c	d	E	F
<b>P.</b>	X	X	X	X												
<b>r.</b>	X	X	X	X												
<b>L.</b>	X	X	X	X	X	X										
<b>A.</b>	X	X	X	X												
<b>o.</b>	X	X	X	X	X	X	X	X	X	X						X
<b>d.</b>	X	X	X	X	X	X	X	X	X	X						X
<b>b.</b>	X	X														
<b>Q.</b> GR 63 x 55	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>Q.</b> GR 63 x 25	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>C.</b>	X	X	X	X	X	X	X	X	X							
<b>S.</b>	X	X														
<b>E.</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

### Modifying the parameters of the system using the pushbuttons "+", "-", and "select"

At first the following sequence must be observed when setting the parameters.

1. **P.** check and switch if necessary
2. **A.** check and switch if necessary
3. **r.** check and switch if necessary
4. **L.** check and switch if necessary

Interconnection <b>P.</b> :	0	1	2	3
<b>A.</b>	0 to 3			
<b>r.</b>	0 to 3	0, 1	0, 1	0, 1
<b>L.</b>	0 to 5	0 to 5	0 to 5	0 to 5

## Meaning of display codes

### **P.** Country program mode

- Program mode Standard
- Program mode Australia
- Program mode CO 48 disconnect
- Program mode CO 48 connect

### **r.** Locking in program switch setting:

- setting "OFF"
- setting "OFF" and "EXIT ONLY"
- setting "OFF" and "AUTOMATIC/PARTIAL OPENING"
- setting allways if the door is CLOSED

### **L.** Interlock type:

- No interlock
- Bistable interlock
- Bistable interlock with status signalling contact (NO)
- Monostable interlock (fail safe)
- Combi lock
- Rod lock (DCW)

### **A.** Battery mode

- no Battery
- Emergency closing
- Emergency opening
- Battery Emergency mode

### **o.** Night bank Hold open time

- 0sec
- 1sec
- 2sec
- 5sec
- 8sec
- 10sec
- 15sec
- 20sec
- 25sec
- 30sec
- Adjustment via PDA

### **S.** Parameterisation block

- Parameterisation block activated
- Parameterisation block de-activated

### **d.** Hold open time

- 0sec
- 1sec
- 2sec
- 5sec
- 8sec
- 10sec
- 15sec
- 20sec
- 25sec
- 30sec
- Adjustment via PDA

### **b.** Motor type

- Motor "63x25"/100<sup>er</sup> Inkr.-Scheibe
- Motor "63x55"/100<sup>er</sup> Inkr.-Scheibe

### **0.** Opening speed:

#### Motor 63x25

- 10 cm / sec
- 15 cm / sec
- 20 cm / sec
- 25 cm / sec
- 30 cm / sec
- 35 cm / sec
- 40 cm / sec
- 45 cm / sec
- 50 cm / sec
- 55 cm / sec
- 60 cm / sec
- 65 cm / sec
- 70 cm / sec
- 75 cm / sec

#### Motor 63x55

- 10 cm / sec
- 15 cm / sec
- 20 cm / sec
- 25 cm / sec
- 30 cm / sec
- 35 cm / sec
- 40 cm / sec
- 45 cm / sec
- 50 cm / sec
- 55 cm / sec
- 60 cm / sec
- 65 cm / sec
- 70 cm / sec
- 75 cm / sec

### **C.** Closing speed

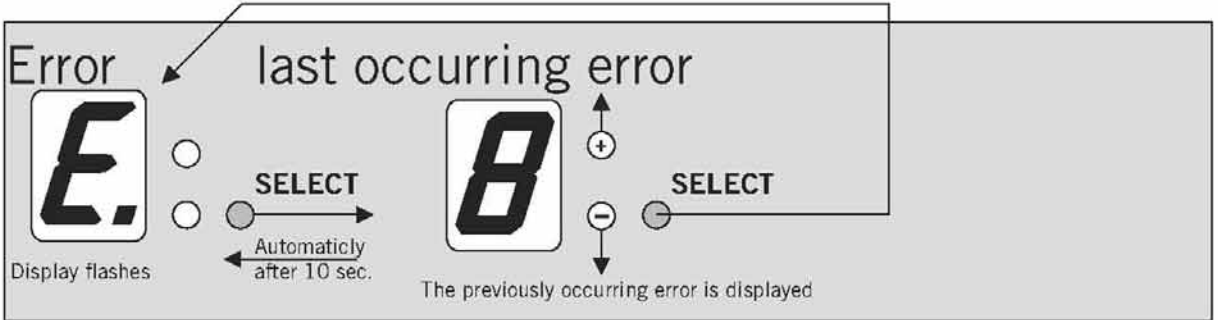
- 10 cm / sec
- 15 cm / sec
- 20 cm / sec
- 25 cm / sec
- 30 cm / sec
- 35 cm / sec
- 40 cm / sec
- 45 cm / sec
- 50 cm / sec

### **E.** Error display

See next page

### Query of error messages

Only the current error can be acknowledged  
(The errors must be rectified irrespective of acknowledgement)  
Up to 10 errors can be stored (irrespective of type)



### Meaning of display codes

<b>0</b>	No error in memory
<b>1</b>	Obstruction
<b>2</b>	Lock
<b>3</b>	Program switch
<b>4</b>	Light barrier
<b>5</b>	Incremental encoder
<b>6</b>	Back up accumulator
<b>7</b>	System
<b>8</b>	EMERGENCY STOP operated
<b>9</b>	Learning cycle parameter error
<b>A</b>	Motor fault
<b>C</b>	Force test
<b>d</b>	Overcurrent at motor
<b>F</b>	DCW
<b>L</b>	Relay test fault