

Sliding door drive mechanism

SLA

Operating instructions

Original



Com. no. Pos. Construction year

Operator

Operating place

0639-990/22j
2010.07

KABA®

TABLE OF CONTENTS

1	GENERAL REMARKS	4
1.1	Target group.....	4
1.2	Where to keep these instructions	4
1.3	Adresses.....	4
2	SAFETY	5
2.1	Appropriate use	5
2.2	Safety notices	5
2.3	Safety regulations.....	5
2.3.1	Principles.....	5
2.3.2	Service.....	6
2.3.3	Safety devices	6
2.3.4	Malfunctions	6
2.3.5	Accessories/Spare parts.....	6
2.3.6	Sliding wings and fixed side panels.....	6
2.3.7	Foreign wing systems.....	6
3	COMMISSIONING	7
3.1	Sequences.....	7
3.2	Adhesive labels.....	8
3.2.1	Rating plate	8
3.2.2	Service sticker	9
3.2.3	Logo sticker	9
3.3	Final checking.....	9
4	CONTROL.....	10
4.1	Terminals/Power plugs.....	10
4.2	Connections/Entries.....	10
4.3	Operating- and signalling elements	10
5	FUCTIONS (SOFTWARE).....	11
5.1	Main functions.....	11
5.1.1	General.....	11
5.1.2	Operating modes	12
5.1.3	Reset	12
5.2	Auxiliary functions.....	13
5.2.1	Operational characteristics in the event of a mains failure without emergency battery BATPA.....	13
5.2.2	Operational characteristics in the event of a mains failure with emer- gency battery BATPA.....	14
5.2.3	Automatic locking	15
5.2.4	Manual locking.....	16
5.2.5	Mecanical emergency opening MENO.....	16
5.3	Paratmeter settings.....	17
5.3.1	Settin-up procedure in special conditions.....	17
5.4	Settings.....	18
5.4.1	Presettings with DIP-Switch	18
5.4.2	Settings with adjusting trimmers.....	18
5.4.3	LED.....	19
5.4.4	Priorities.....	19

6	CONTROL.....	20
6.1	Key-operated program switch.....	20
6.2	D-BEDIX (option).....	21
6.2.1	Keys.....	21
6.2.2	Symbols.....	21
6.2.3	Operating modes.....	22
6.2.4	Display of the door position.....	22
6.2.5	Menu level.....	23
6.2.6	Priority of the parameters.....	23
6.2.7	Parameter setting only by authorized persons.....	23
6.2.8	Setting examples.....	24
6.2.9	Error display.....	25
6.3	KOMBI-D-BEDIX (option).....	26
6.4	Locking/Manual unlocking (option).....	27
7	SERVICE.....	28
7.1	Service for pedestrian doors.....	29
7.2	Toothed belt ZARI.....	30
8	TROUBLESHOOTING.....	31
8.1	With key program switch.....	31
8.2	On control unit STERE.....	31
8.3	Malfunction.....	32
8.4	Error display with D-BEDIX / KOMBI-D-BEDIX.....	34
8.4.1	Software and processor errors.....	34
8.4.2	Power supply errors.....	34
8.4.3	Overvoltage errors.....	34
8.4.4	Hardware errors.....	35
8.4.5	Accessories errors.....	35
8.4.6	Mounting and setting errors.....	36
8.4.7	Specific BAT-NOT errors.....	36
8.4.8	Operative messages (informative).....	36
9	SHUT-DOWN.....	37
10	DISPOSAL OF THE INSTALLATION.....	38
11	SPARE PARTS.....	39
11.1	Drive technique.....	39
11.2	Profile system PSX.....	40
11.3	Profile system PSA.....	40
11.4	Profile system PSW.....	41
12	OPTIONS.....	42
12.1	Emergency battery BATPA.....	42
12.2	Mechanical emergency opening MENO.....	43
12.3	Locking of running carriage LAVERI + LAVERI-FS.....	45
13	APPENDIX.....	46
	Wiring diagram.....	E4-0141-029

1 GENERAL REMARKS

The following documents are associated with this installation:

- | | | |
|---------------------------------|--------------------|-----------------------|
| • Operating instructions | 0639-990/22 | onto the installation |
| • Operator manual | 0639-991/02 | by the operator |
| • Control booklet | 0639-991/12 | onto the installation |

The present instructions contains all instructions for commissioning, operation, service (maintenance/checking) as well as troubleshooting and are the basis which guarantees a faultless and safe operation of the installation.

They must be completely read and understood before starting the work.

1.1 Target group

All the work described in the present instructions must only be carried out by competent specialists!

Competent specialists are persons who, based on their professional training and experience, have sufficient knowledge in the field of powered windows, doors and gates. They are sufficiently familiar with the relevant federal regulations for work protection and accident prevention, with the guidelines and generally recognized rules applicable for this field of technology which enables them to evaluate if powered windows, doors and gates can be safely operated.

Only the trained experts of the manufacturer or the supplier are counted among these persons.

1.2 Where to keep these instructions

The present instructions have to be kept close to the installation, together with the control booklet!

1.3 Adresses

Distribution agent/
After-sales service



Manufacturer

Kaba Gilgen AG
Freiburgstrasse 34
CH-3150 Schwarzenburg
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Fax +41 31 734 43 79
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2 SAFETY

2.1 Appropriate use

The door drive mechanism SLA has been exclusively designed for operating sliding wings. Any other use beyond these application limits is deemed inappropriate and inadmissible!

In the event of an inappropriate use of this system, the safety of the user may be jeopardized. The manufacturer declines all responsibility for any resulting damages or injuries.

2.2 Safety notices

The present instructions uses the following symbols and notes in order to point out certain residual dangers:



Warning:
Involving danger to life and limb.



Attention:
A situation where material could be damaged or the function impaired.



Note:
Hints which facilitate the work.

2.3 Safety regulations

2.3.1 Principles

- The installation has been calculated, designed and manufactured on the basis of the latest state-of-the-art technology and the generally recognized safety-relevant rules and regulations. It may only be operated if it is in perfect condition, taking into account the specifications of the present manual. Any use beyond the defined application limits is inadmissible!
- The installation is to be operated and maintained in such condition that the safety is guaranteed at all times. An integral part of this condition is the appropriate use, the compliance with the operating conditions prescribed by the manufacturer, as well as the regular service (maintenance/checking).
- In order not to create any dangerous squeezing and shearing points, no structural modification must be made within the door surroundings, without prior authorization from Kaba Gilgen. Furthermore, it is important that no objects (such as furniture, pallets, etc.) be placed in the vicinity of the door.
- Protection of the main and secondary closing edge according to **DIN 18650** (see Risk assessment for an automatic sliding door P 01.02.01).

2.3.2 Service

In order to guarantee the safety of the users at all times, the installation must be checked with regard to its safe condition before the first commissioning and during normal operation, **at least once a year**, by a competent specialist. The correct maintenance/checking must be confirmed by entering the date and signature into the control booklet.

2.3.3 Safety devices

It is inadmissible to bypass, shunt or disable the safety devices. Any defective safety devices may not be disconnected in order to be able to continue the operation of the installation.

2.3.4 Malfunctions

If any malfunctions occur which might be detrimental to the safety of the users, the installation must be immediately taken out of operation. It may only be taken back into operation after the malfunction has been repaired and all danger eliminated.

2.3.5 Accessories/Spare parts

A safe and reliable function of the installation can only be guaranteed if it is operated with the original Kaba Gilgen accessories/spare parts. Kaba Gilgen declines all responsibility for damages resulting from unauthorized modifications of the installation or from the use of foreign accessories/spare parts.

2.3.6 Sliding wings and fixed side panels

Transparents sliding wings and fixed side panels (or their surfaces) must be clearly recognizable, e.g. by means of a permanent marking or dyed materials.

2.3.7 Foreign wing systems

- If the installation is designed with foreign door wings, side panels and protection wings, make sure that the applicable local guidelines are fulfilled in order to avoid any squeezing and cutting points (see Risk assessment for an automatic sliding door P 01.02.01).
- The application limits must be observed (see Description 0639-990/02).
- The door wings and their fillings must be manufactured according to the applicable standards (e.g. DIN 18650).
- In its assembled state, the installation must answer all the safety requirements specified by the machinery directive.
- The installation's conformity with the machinery directive must be confirmed.

3 COMMISSIONING

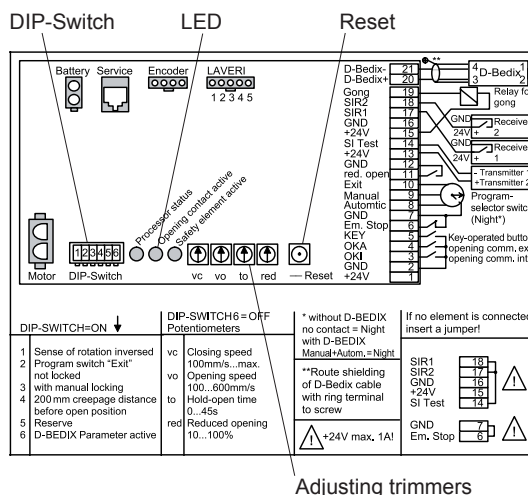


Warning:
 Prior to commissioning, make sure that the door installation has not been subject to any modifications which might cause dangerous situations:

- Check the door surroundings for any structural changes.
- Make sure that no objects (such as furniture, pallets, etc.) have been placed close to the door.

3.1 Sequences

1. Check if all the drive elements and options have been cabled (see connection diagram in the appendix).
2. Checking/setting of the DIP switches:
 See chapter „Settings“.
3. Switch on power supply system.
4. Select the operating mode AUTOMATIC: the setting-up run.






Note:
 The door must close first. When it opens first: Check right position of belt coupling(s) or change sense of rotation of the gear motor.
 The setting-up procedure is only carried out in the mains-powered mode, whereas no setting-up is possible in the emergency battery mode because of the restricted battery power. The control unit STERE is automatically switched off.
 If the sliding wing weight exceeds 20 kg, all the setting values remain memorized after a mains failure (no learning run upon start-up).

5. Adjust all the radars and presence detectors according to the respective instructions.
6. Set the desired parameters.
7. Check the function.

3.2 Adhesive labels

3.2.1 Rating plate

1. If necessary: Fill in any missing data on the rating plate, using a water-resistant felt tip pen.
2. Detach the rating plate from the A4 format sticker sheet 0635-525 and attach it on the degreased surface inside the drive unit covering.

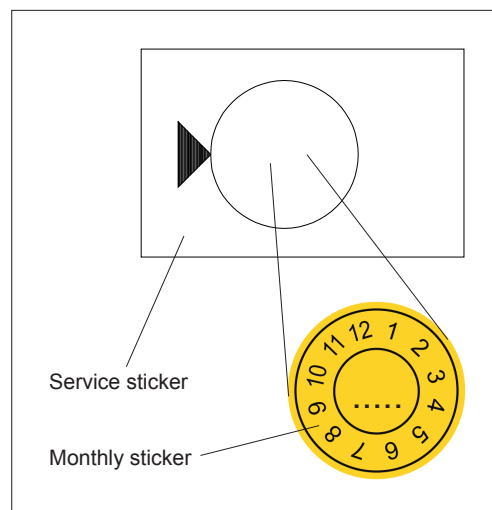
 Kaba Gilgen AG, CH-3150 Schwarzenburg	Typ: SLA	115/230 VAC						 
	Dat: 2.....	120 W; 2 A/1 A	Closing force max. 150 N					
	No.:		Only for dry rooms					
Coding according to DIN 18650								
1	2	3	4	5	6	7	8	
2	3	2	2	2	

Num.	Parameter	Code
1	<u>Drive type</u> Swing door drive mechanism Sliding door drive mechanism Swing and slide door drive mechanism Folding door drive mechanism Revolving door drive mechanism	1 2 3 4 5
2	<u>Durability of the drive mechanism</u> 200'000 test cycles, with 1'200/day 500'000 test cycles, with 2'400/day 1'000'000 test cycles, with 4'000/day	1 2 3
3	<u>Construction method of the door wing</u> Swing door Sliding door Swing and slide door Folding door Revolving door	1 2 3 4 5
4	<u>Suitability for fire-rated application</u> Not adequate Suitable as a smoke control door Suitable as a fire-rated door	0 1 2
5*	<u>Safety devices on the drive mechanism</u> Limitation of the force Connection for external safety systems Low-level energy	1 2 3
6	<u>Particular requirement for the drive mechanism</u> None In rescue ways with pivot fittings In rescue ways without pivot fittings Self-closing fire-rated doors with pivot fittings Self-closing fire-rated doors without pivot fittings	0 1 2 3 4
7*	<u>Safety on the door wing</u> None Sufficiently dimensioned safety distances Protection against squeezing, shearing and pulling-in Built-in pivot fittings Presence sensor	0 1 2 3 4
8	<u>Ambient temperature</u> No specification -15.....+50 °C -15.....+75 °C according to specifications of the manufacturer	1 2 3 4

* This numeral can consist of several codes (e.g. 2/4).

3.2.2 Service sticker

1. Attach the service sticker outside on the drive unit covering, at a place that is easily visible for the customer.
2. Stick the monthly sticker onto the service sticker, turning the monthly sticker until the checking date matches the arrow.
3. Using a water-proof felt tip pen, enter the year of the next checkup on the monthly sticker.



3.2.3 Logo sticker

1. Attach the logo sticker onto the side cover (if provided) or onto the drive unit covering.



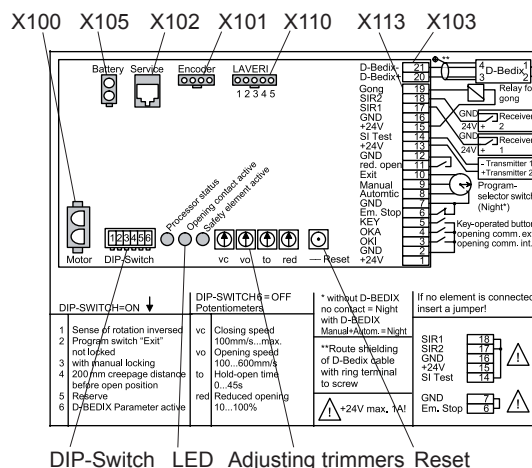
3.3 Final checking

- Opening elements (field size and response characteristics)
- Safety elements (setting and function)
- Function of the locking (option)
Check the locking play (1...2 mm per sliding wing)
- Check the emergency battery (option)
- Check the function of the remaining options
- Are there any unusual operating noises?
- Compliance with the safety distances at the pinch and shear points (see Risk assessment for an automatic sliding door P 01.02.01)?
- Adhesive labels filled in?

4 CONTROL

4.1 Terminals/Power plugs

- X100 Gear motor GEMO
- X101 Encoder
- X102 only for internal use
- X103 D-BEDIX
- X105 Emergency battery BATPA
- X110 Running carriage locking LAVERI
- X113 Connections/Entries



4.2 Connections/Entries

Control	
AUTOMATIC MANUAL EXIT	Connection for provided program switch (when no access is active = NIGHT). Can also be connected to other switch types.
RED. OPEN.	Switch for commande „reduced opening“ (N.O. contact)
OKI	Opening contact inside (N.O. contact)
OKA	Opening contact outside (N.O. contact)
Key	Key command (N.O. contact)
Security	
Emergency stop	Not Stop results in an immediate stop of the installation (N.O. contact)
SIR1 SIR2 SI Test	Connection possibilities: Max. two tested light barriers or two tested safety elements
Signalling	
Gong	Connection for Gong „Open Collector“
Supply	
24 VDC	Connection possibility for external consumer loads (e.g. sensors). Max. power 1 A.

4.3 Operating- and signalling elements

DIP-Switch

The DIP-Switch features 6 switches which were factory-set to OFF (see chapter „Settings“).

Adjusting Trimmer

There are 4 adjusting trimmers integrated in the control unit. According to the functionality they are factory-preset (see chapter “Settings”).

LED

Initial states of the control unit can be read by means of 3 provided LED's (see chapter „Settings“).

Reset

The reset push-button allows to set off a learning run (see chapter „Troubleshooting“).

5 FUCTIONS (SOFTWARE)

5.1 Main functions

5.1.1 General

- The operating mode NIGHT is automatically active if no program switch is connected to the control unit or if all contacts are open.
- In order to avoid that a change of the operating mode sets off an immediate door action, 1 second will be retarded (de-bounced).
- In cases where a key-operated selector switch (or a timer) is connected in combination with a D-BEDIX, the key-operated selector switch has top priority. In this condition any change of the operating mode made through the D-BEDIX is memorized and will be implemented upon revocation (release) or removal of the key-operated selector switch. For switching over to the operating mode NIGHT (by means of the key-operated selector switch or the timer), the terminal inputs 8 + 9 need to be connected among each other and the respective element must be connected.

5.1.2 Operating modes

NIGHT



- Door is closed and locked.
- Door can be opened by a key command.
- OKI and HSK (light barriers) act as secondary switching element.
- If HSK (light barriers) is set permanently, after 30 seconds it is closed at creepage speed.
- If DIP3 ON is set it will not be pushed to enable a manual unlocking.
- Hold-open time is 5 seconds (not adjustable).
- The delayed switchover to the operating mode NIGHT can be activated by means of parameter Tv_n. Function: If the program selector switch is changed to the operating mode NIGHT from any random operating mode, the internal radar will still remain active during the programmed time Tv_n (EXIT).

EXIT



- Door functions in one-way traffic.
- According to settings of DIP2, the locking will lock after having reached the CLOSED position.
- Door can be opened by key or OKI
- OKA and HSK act as secondary switching elements.

AUTOMATIC



- Door is not locked.
- Door can be opened with key, OKI or OKA.
- All opening elements and HSK act as secondary switching elements.

MANUAL



- Door opens and remains unlocked without mains power.
- With reduced opening, the door will open completely.

(OPEN)



- Operating mode OPEN is not kept as a proper operating mode on terminals.
- Operating mode OPEN can be realised via operating mode MANUAL. If a reduced OPEN position should be kept with a rubber cable, a key can be used.
- Programmable by means of D-BEDIX.

5.1.3 Reset

A reset causes a stop and unlocks the door, afterwards the drive unit activates a new setting-up procedure.

- A reset can be activated by reset push button on key program switch or on control unit. Alternatively, to activate reset function, push simultaneously (min 1 second) operating modes MANUAL and EXIT.
- A reset can be activated by the D-BEDIX.

5.2 Auxiliary functions

5.2.1 Operational characteristics in the event of a mains failure without emergency battery BATPA

Without mechanical emergency opening MENO

- During standstill, the door remains blocked.
- When moving, the door slows down to full stop.
- If the door was unlocked or open, at that time, the sliding wings can be moved by hand.
- If the door was locked, it is necessary to actuate the manual unlocking mechanism before the sliding wings can be moved (see chapter „Manual unlocking“).
- As soon as the mains power supply has been restored, the drive unit resumes its normal operation (after carrying out a slow-speed opening or closing run).

With mechanical emergency opening MENO

- In CLOSED position, the door opens until OPEN position.
- In OPEN position, the door remains blocked.
- When moving, the door slows down to full stop. Afterwards the rubber cable causes an undamped opening.
- As soon as the mains power supply has been restored, the drive unit resumes its normal operation (after carrying out a slow-speed opening or closing run).

5.2.2 Operational characteristics in the event of a mains failure with emergency battery BATPA

Without mechanical emergency opening MENO

With emergency battery the door continues to function normally during 15...30 minutes after a power fail. Acceleration and final speed of sliding wings are lower than with power from network. Emergency battery is whether controlled nor tested. In case of power failure the emergency battery automatically supplies the control unit.

Charged emergency battery in operating mode:

NIGHT	Door is closed and locked Control unit switches off, wake-up over key
all the others	Door keeps on functioning normally

Discharged emergency battery in operating mode:

NIGHT	Door is closed and locked Control unit switches off, wake-up over key
EXIT (DIP2 = ON)	Door is opened
or	
EXIT locked	Door is closed and locked
AUTOMAT	Door is opened
MANUAL	Door is opened

With mechanical emergency opening MENO

On power fail the drive unit must open due to the escape way functionality. The control unit only switches off when the emergency battery is discharged. Consequently, when switching on operating mode NIGHT, the door can be closed the longest possible.

Reaction after power fail in operating mode:

NACHT	Door is closed and locked Control unit switches off, wake-up over key
EXIT (DIP2 = ON)	Door is opened
or	
EXIT locked	Door is opened
AUTOMAT	Door is opened
MANUAL	Door is opened

5.2.3 Automatic locking

LAVERI

The locking is bistable, e.g. the locking latch is held independently in the locked and unlocked position. The locking state is not confirmed. Correct locking is not checked!

Behaviour in the event of a mains and battery failure:

Door position		LAVERI
closed	locked	remains locked
open	unlocked	remains unlocked
moving	unlocked	remains unlocked
closed	locked manually unlocked manually opened	is automatically locked upon manual closing

LAVERI-FS

The locking mechanism is mono-stable, i.e. the locking hook is electrically maintained only in one position, while it automatically drops into the other position in the event of a mains failure. Whether the locking mechanism is locked or unlocked without mains power is determined by the way in which the locking hook has been installed.

In function of the desired locking function, the Fail Safe or Fail Secure method must be selected by means of the DIP Switch on the locking PCB.

Behaviour in the event of a mains and battery failure:

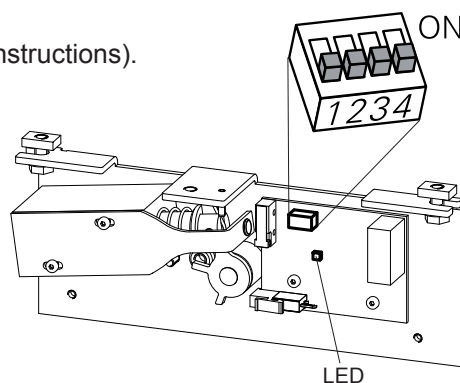
Door position		Fail Safe	Fail Secure
closed	locked	unlocked Door remains closed.	remains locked Door remains closed.
open	unlocked	unlocked Door remains open.	locked After being manually closed, the door is locked.
moving	unlocked	unlocked Door slows down to a full stop.	locked Door slows down to a full stop. After being manually closed, the door is locked.

Setting of the DIP switches on LAVERI-FS:
see also wiring diagram (enclosed to the present instructions).

1	2	3	4	S103
OFF	ON	OFF	OFF	Fail Safe without unlocking
ON	ON	OFF	OFF	Fail Safe with unlocking
OFF	OFF	ON	ON	Fail Secure with unlocking

Display of the Error-LED on LAVERI-FS:

OFF everything OK
ON incorrect setting of the DIP-Switch
flashing please check the voltage



5.2.4 Manual locking

A manual locking is considered to be e.g. a locking installed in the wing profile whose locking bolt towards the floor. In setting the DIP switch 3 to ON, the drive mechanism is informed about the manual locking.

Standard sequence with a manual locking

- Select operating mode NIGHT, door closes, lock manual locking.
- Door is set on operating mode NIGHT, unlock manual locking, slide the door wing open, after termination of the hold-open time NIGHT the door closes automatically, optionally lock again or select operating mode AUTOMAT.

Press function after closing

If DIP-Switch 3 is set to ON, no pressing in the operating mode NIGHT (in order to enable a manual sliding the door wing open).

Special functions

- If an opening command is activated for a locked manual locking, the control unit recognises this and stops the door.
- When switching from operating mode NIGHT to another one, a slow and short opening detects whether manual locking has really been unlocked.
- When switching from operating mode NIGHT to another one or after activating the key push-button, the wing stops 140 mm before reaching the open position (to avoid forgotten stuck keys to break off).
- After a Key command in the operating mode NIGHT, the sliding wings cover the first 65 mm at slow speed (= in order to check if the door is unlocked). If the manual locking is locked, an error is displayed.



Note:

By means of the manual locking mechanism, the travel distance (per wing) can be limited to 65 mm. If a Key command is given, the door waits in this position until the Key command is de-energized, upon which the door is closed (pharmacy locking method). No error is displayed.

5.2.5 Mechanical emergency opening MENO

When using a rubber cable for the emergency opening, the DIP-Switch 5 must be set to ON.

The rubber cable is tested in the setting-up procedure, after the door has reached the CLOSED position. The door is unlocked. If a correctly set rubber cable is available, the door will open. If the door is opened approx. 10 cm in max. 10 seconds, the movement is motor stopped and closed again.

If the rubber cable is too slack or incorrectly adjusted, an error will be displayed. For installations with D-BEDIX and an emergency battery the door will continue to function normally (while the error will still be displayed). For installations without D-BEDIX, the wings will move to the Open position. Switching over to the operating mode NIGHT, however, is still possible.

When in use, the rubber cable is not tested.

5.3 Paratmeter settings

For the setting procedure the following parameters are learned:

Travel distance

When pushing against the close stop piece, first the CLOSED position is reliably recognised. Afterwards the open stop piece is searched out in creeping speed.

Door mass

With a short acceleration the mass of the slide wing(s) is measured. Out of it result the maximum speed, creepage distance and forces.

Recognition of mechanical emergency opening MENO

In CLOSED position the locking pressure is switched-off for a short time. If door moves towards the OPEN position, it can be gathered that there is a mechanical emergency opening MENO.

5.3.1 Settin-up procedure in special conditions

Obstacle

If the slide wings are impeded during the setting-up procedure, this position is recognised as travel stops. Therefore a new setting-up procedure will be necessary.

Workshop setting-up procedure (without sliding wing)

If the sliding wings weight is less than 20 kg, setting-up procedure data is not saved (except BAT-NOT). When switching back on, a reset is activated. This allows to install drive mechanism components and to carry out the operating test in the workshop.

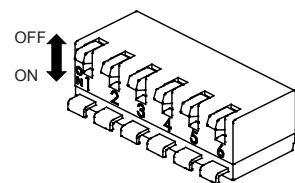
If the sliding wings weight is more than 20 kg, after a power failure, all setting parameters remain saved (on activating no learning run).

5.4 Settings

Operating modes NIGHT, EXIT, AUTOMAT, MANUAL are chosen by the external commanded key-operated program switch or the D-BEDIX.

5.4.1 Presettings with DIP-Switch

On delivery ex-works, all DIP switches are in OFF position.

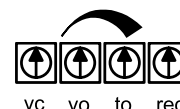


DIP	Setting	Function
1	OFF*	Sense of rotation GEMO = standard
	ON*	Sense of rotation GEMO = conversely
2	OFF	On EXIT will be locked
	ON	On EXIT will not be locked
3	OFF	without manual locking
	ON	with manual locking
4	OFF*	Creepage distances standard without reduced speed in front of Open position
	ON	Creepage distance when opening DIN 18650 with reduced speed 200 mm in front of Open position
5	OFF	no BAT-NOT
	ON	BAT-NOT controlled
6	OFF	Potentiometer settings active
	ON	D-BEDIX parameters active

* only effective after having carried out a reset.

5.4.2 Settings with adjusting trimmers

Requirement: DIP-Switch 6 = OFF



Adjusting trimmers (with linear setting range) have always the same factory-pre-settings. A change of the settings will only be effective at the next door movement.

Pot.	Factory-settings	Function
vc	Max.	<u>Closing speed</u> 100...600 mm/s The maximum value is limited by mass gauging (dynamic forces 1'400 N resp. creepage speed 400 N).
vo	Max.	<u>Opening speed</u> 100...600 mm/s The maximum value is not limited by mass gauging.
to	Min.	<u>Hold open time (day)</u> 0...45 s
red	Min.	<u>Reduced opening</u> 10...100 % of the opening range If the sliding wings are already in REDUCED-OPEN-Position during the switch over, they then move slowly towards the new position.

5.4.3 LED

LED	Function	Definition, Remarks
uC	error	Flashes in 1 second-time = normal operating state. Lights up = there is at least one mistake.
OKx	Opening signal	Lights up = at least one control element (OKA, OKI, Key) is active.
SI	Light barrier/ Emergency stop	Lights up = at least one safety element (SIR1, SIR2, Not-Stop) is active.

5.4.4 Priorities

1. Emergency stop

- Door stops immediately and is unlocked.
- If door is closed and locked, the locked position is maintained, the push pressure is cancelled.
- If a rubber cable is available and the door is not locked, sliding wings are opened by the rubber cable.

2. Reset

see chapter „parameter settings“.

3. Reduced opening

- In combination with an opening command (Key, OKI, OKA). The sliding wing(s) open until set reduced OPEN position.
- Reduced opening must the latest be set with the opening signal.
- Reduced position is motor held when recognising the rubber cable.

4. Main closing edge HSK (closing direction) incl. light barrier LS

- When interrupted, two light barriers invert the motion.
- By means of motor current monitoring and/or standstill recognition a reverse of motion can also be set off.
- From the obstacle position, the next closing move is made slowly.
- Light barriers/presence sensing devices are tested during the opening move. The test is repeated until success. Until then, the door remains open.

5. Secondary closing edge NSK (opening direction)

- By means of motor current monitoring and/or standstill recognition a stop is activated.
- A short disengaging move in closing direction is carried out provided there is no opening command or reverse. Otherwise the door is stopped for 1 second.
- Afterwards it is opened at creepage speed.

6. Key

- Unlocks and opens the door. Afterwards the hold-open time NIGHT is awaited until the door closes and locks.
- Key carries out a wake-up.

7. Opening contact inside OKI

- Door opens, awaits set hold-open time and closes.

8. Opening contact outside OKA

- Door opens, awaits set hold-open time and closes.

6 CONTROL






The door opening is performed automatically via radar or manually by means of a push-button. The door is automatically closed as soon as the programmed hold-open time has expired.

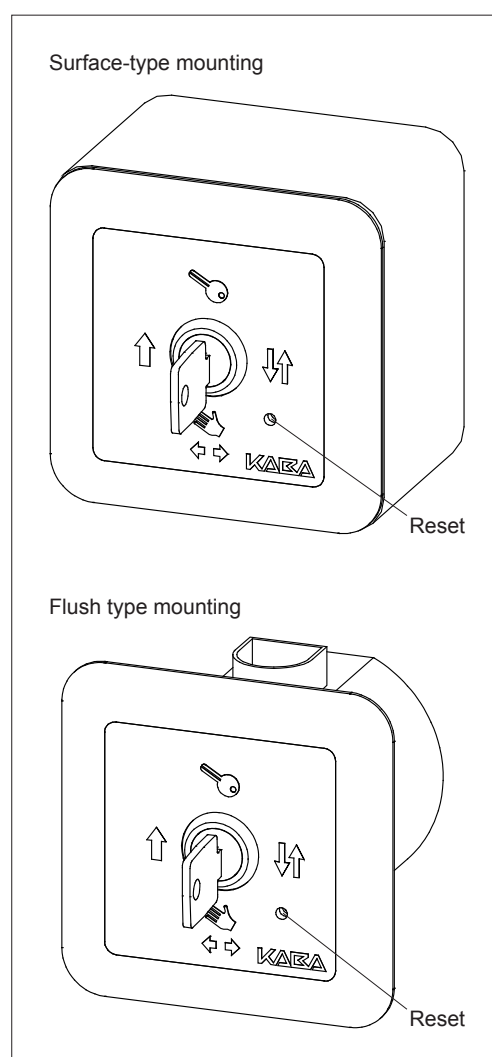
6.1 Key-operated program switch

The door command is carried out by a key-operated program switch. This is attended by a simple unnumbered key which is removable in any position.

Further, a reset button/key is installed on the key-operated program switch allowing to set off a setting-up procedure.

The following operating modes can be selected:

- 
NIGHT
 The installation is locked¹. As opening command, only the key-operated impulse switch (with Key function) is accepted.
- 
AUTOMATIC
 Automatic operation (summer or winter² opening width). The installation is not locked.
- 
MANUAL
 The installation opens. The sliding wings are released and can be shifted by hand.
- 
- 
EXIT
 One-way traffic from inside towards the outside (inside = drive unit side). The installation is locked¹ (shop closing switching mode).



¹ Provided that the locking mechanism (optional) is installed and DIP2 on OFF.

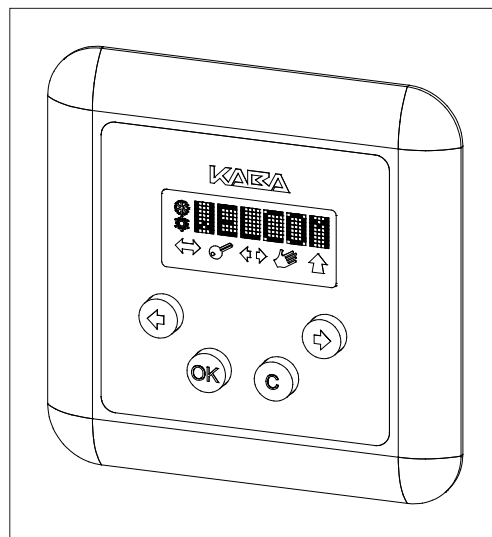
² For switching from summer to winter opening, an external switch can be connected to the control unit.

6.2 D-BEDIX (option)

The different operating modes can be directly enabled by means of the D-BEDIX. In addition, it provides easy programming of the most important door settings.

The operating modes, menu settings as well as possible errors are displayed in a clearly arranged synopsis.

Only one D-BEDIX can be connected per door installation.



6.2.1 Keys



- C-key (Cancel)
- Exit the menu
 - Invalidate entry



- OK-key
- Confirm the selection
 - Confirm the entry



- Arrow keys
- Navigate within the menus



- Short simultaneous actuation of both keys = access to the menu level

6.2.2 Symbols



- Opening width
- Winter = reduced opening width
 - Summer = complete opening width



- Operating mode symbols
- Show the possible operating modes (see chapter: operating modes)



- Selection frame (active and preselected operating mode)
- Shows what has been presently selected.








- Selection frame (active operating mode)
- Shows what has been presently selected but is still inhibited. A control element with higher priority (e.g. key-operated switch) determines the operating mode.



- Bar (preselected operating mode)
- Shows the preselected operating mode.

6.2.3 Operating modes


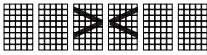
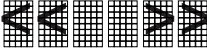
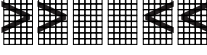
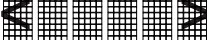
With the D-BEDIX, the following operating modes can be selected by means of the corresponding symbols:

- 
AUTOMATIC
 Automatic operation (summer or winter opening width). The installation is not locked.
- 
NIGHT
 The installation is locked*. As opening commands, only the key-operated impulse switch is accepted.
- 
OPEN
 The installation is opened and remains in the open position.
- 
MANUAL
 The installation stops. The sliding wings are released and can be shifted by hand.
- 
EXIT
 One-way traffic from inside towards the outside.
 The installation is locked* (shop closing switching mode).

* Provided that the locking mechanism (optional) is installed.

6.2.4 Display of the door position

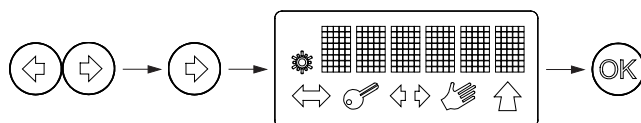
The following door positions are represented on the D-BEDIX display:

- 
 Closed and locked*
- 
 Closed
- 
 Opening
- 
 Closing
- 
 Open

* Provided that the locking mechanism (optional) is installed.

6.2.5 Menu level

Short and simultaneous actuation of both arrow keys (=access to the menu level).
Select the desired menu item by means of the arrow key.
Confirm by means of the OK key.



Display	Description	Setting range
	Winter (reduced opening width)	
	Summer (entire opening width)	
RESET?	New setting-up of the drive unit	
To ?	Hold-open time Day	0...45 s (Standard 1 s)
Tn ?	Hold-open time Night	0...45 s (Standard 5 s)
Tvn ?	Delay time for switching-over to Night	0...90 s
s ?	Reduced opening width (winter)	10...100 %
Vo ?	Opening speed	100...600* mm/s
Vc ?	Closing speed	100...400* mm/s
VERS ?	Software version	
CYCLE?	Number of opening cycles	
LOCK ?	Enable the keylock	
UNLOC?	Disable the keylock	
T LCD?	Background lighting	0...300 s



Note:

* Depending on the wing weight, the maximum values will be reduced by the system.

6.2.6 Priority of the parameters

DIP switch 6 must be switched to ON if you want to be able to change the parameters by means of the D-BEDIX (D-BEDIX fully functional). In this case the potentiometers will be disregarded.

If the DIP switch 6 is OFF, the potentiometer settings have prevalence. Even though the D-BEDIX allows a readout of the programmed values, their modification will not be possible (restricted functionality of the D-BEDIX).

The hold-open time NIGHT can only be set by using D-BEDIX. The position of DIP-Switch 6 is irrelevant.

If during the operation the DIP switch 6 is switched from ON to OFF, the potentiometer settings will be immediately activated.

If the D-BEDIX is removed while the DIP switch 6 is ON, the parameters remain unchanged.

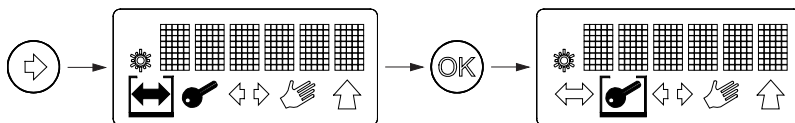
6.2.7 Parameter setting only by authorized persons

If you do not want the parameters to be changed by unauthorized persons, then DIP switch 6 must be set to OFF, in which case a modification of the parameters by means of the D-BEDIX is not possible.

6.2.8 Setting examples

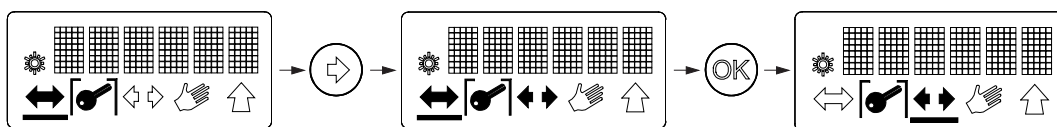
Changing the operating mode

Select the desired symbol by means of the arrow key (symbol starts flashing).
 Confirm with the OK key (frame/bar switch over).



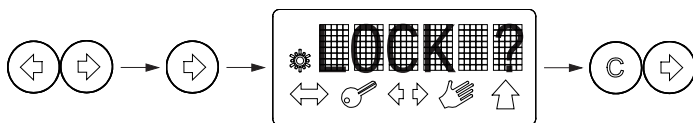
Preselecting the operating mode

An overriding switch is active and determines the operating mode (only the selection frame is visible, the bar underlines the preselected operating mode). Now you can select the operating mode you want to be active upon cancellation of the overriding switch:
 Select the desired symbol by means of the arrow key (symbol starts flashing).
 Confirm with the OK key (bar switches over).



Enabling the keylock

Short simultaneous actuation of both arrow keys (= access to the menu level).
 By means of the arrow key, select LOCK.
 Confirm with the C-key and the right-hand arrow key.



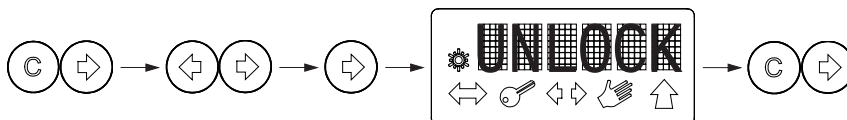
Temporarily disabling the keylock (60 s)

Short simultaneous actuation of the C-key and the right-hand arrow key.



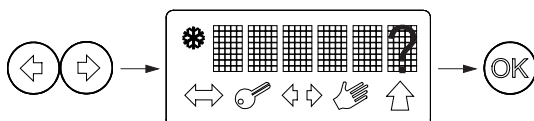
Disabling the keylock

Short simultaneous actuation of the C-key and the right-hand arrow key.
 Short simultaneous actuation of the arrow keys (= access to the menu level).
 By means of the arrow key, select UNLOCK.
 Confirm with the C-key and the right-hand arrow key.



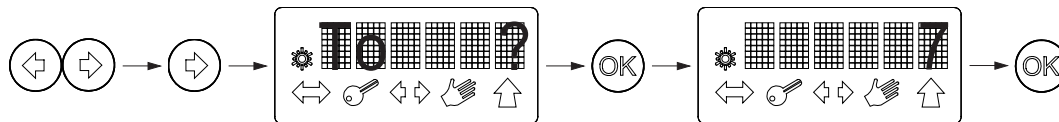
Summer opening / winter opening

Short simultaneous actuation of the arrow keys (= access to the menu level).
 Confirm the change by means of the OK key.



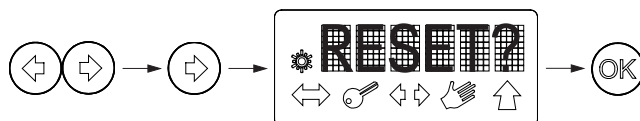
Parameters (hold-open timeday)

Short simultaneous actuation of the arrow keys (= access to the menu level).
 By means of the arrow key, select To.
 Confirm with the OK key.
 By means of the arrow key, change the value.
 Confirm with the OK key.



Reset

Short simultaneous actuation of the arrow keys (= access to the menu level).
 By means of the arrow key, select Reset.
 Confirm with the OK key.

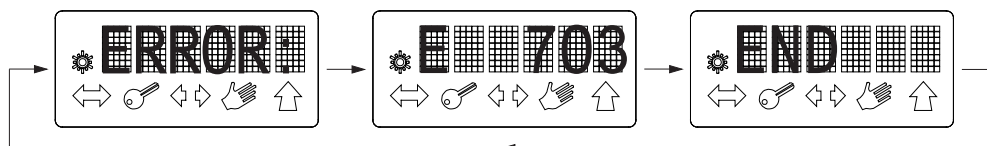


Display-Reset D-BEDIX

Keep the C key depressed during 3 seconds.
 D-BEDIX is restarted (however, the setting-up procedure of the door is not repeated).

6.2.9 Error display

As soon as an error occurs, the mention ERROR appears on the display, followed by the number of the presently active error (e.g. E 703).
 Provided that no additional error is pending, END is displayed (error list: see chapter Troubleshooting).
 This sequence will be repeated until the error has been eliminated.

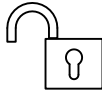


6.3 KOMBI-D-BEDIX (option)

In addition to the functions of the D-BEDIX, the KOMBI-D-BEDIX contains a key-operated switch (round or profile cylinder) with the following function:

Lockout of the KOMBI-D-BEDIX against unauthorized use.

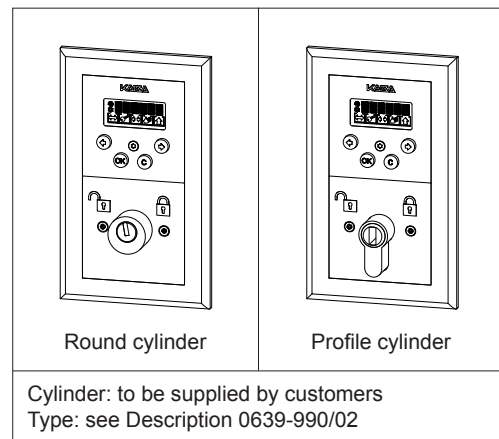
Free



Locked



If this lockout is enabled, all the keys are shortly lit (as a confirmation of the lockout).



6.4 Locking/Manual unlocking (option)

In the event of an emergency or of a mains failure, the closed door can be opened by pulling the red manual unlocking resp. remote manual unlocking while at the same time pushing the sliding wings to the open position.

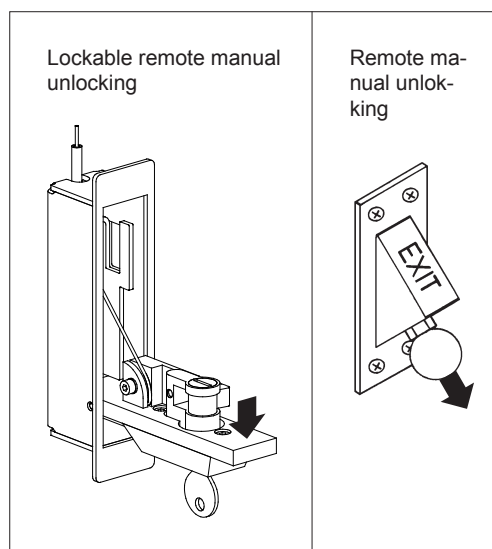
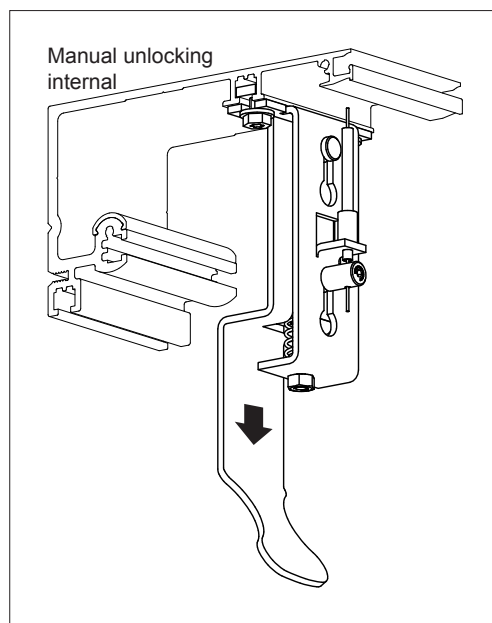
If the door leads to a room without a second access, a lockable remote manual unlocking is mounted on the outside of the door.



Warning:
The manual unlocking mechanisms must be easily visible and accessible at all times.



Note:
Cylinder types: see application sheet P 20.05.15.



Manual unlocking function in operating mode NIGHT:

Pull HERI	Mains supply available	Without mains supply With option BATPA	Without mains supply Without option BATPA
< 5 s	mechanical unlocking, key-command (door opens)	mechanical unlocking	mechanical unlocking
> 5 s	mechanical unlocking, key-command (door opens)	mechanical unlocking, key-command after wake-up (door opens)	mechanical unlocking

7 SERVICE

A regular service (maintenance/checking) is absolutely indispensable in order to guarantee a safe operation and long lifetime of the installation. The service must be carried out by a qualified person, **at least once a year**, according to the following checklist.

This checkup work basically refers to visual and functional checking destined to evaluate the integrity, the condition and the efficiency of the components and safety devices (checking of the different elements as far as these are included in the installation).



Warning:

To avoid jeopardizing the safety of persons, any defective safety elements may not be disconnected in order to continue the operation of the installation!



Attention:

In order to guarantee the availability of the installation, any elements showing signs of wear must be replaced as a preventive measure!



Note:

- Every maintenance service which has been carried out shall be entered into the control booklet!
- The following service description refers to the basic components. The options are described in detail in chapter „Options“.

7.1 Service for pedestrian doors



Warning:

Electrocution hazard! Before working on any live elements, pull out the mains plug as well as any existing plug of the emergency battery respectively switch off the main installation switch!

Basis: QS-CL P.05.05.113.4
Maintenance for pedestrian doors

	Check	Clean	Grease	Adjust
Installation				
General condition	x			
Free door movement (manually)	x			x
Door guides/guideway rails	x	x		x
Door sealing joints	x	x		x
Side panels/protection wings	x	x		
Coverings/hinge-type covers	x	x		
Check tight fitting of the screws and nuts	x			
Clean the installation ²	x	x		

Drive mechanism

Drive mechanism	x	x		x
Holding power in CLOSED position	x			
Transmission elements such as: toothed belt, flat belt, cables, rods or chains	x	x		x
Carrying rollers/counter-pressure rollers, running carriages	x	x		x
Carrier rails	x	x	x	
Open/Closed positions	x			x

Control

Electrical connections	x			
Control functions	x			x
Program switch (BEDIS, BEDiX, etc.) check all the positions	x			
Emergency battery	x			
Emergency opening (pull out both power plugs of the ANTE's) ¹	x			

Control elements

All the existing control elements such as: sensor, radar, key-operated switch, contact carpet, etc.	x	x		x
--	---	---	--	---

Safety elements

Reversing/stopping mechanism	x	x		x
Door locking/manual unlocking mechanism	x	x	x	x
Mechanical emergency opening	x			x
Monitoring switch	x	x		x
Light barrier/Presence detector	x	x		
Existing additional safety elements	x	x		x
Minimum escape way width ¹	x			x

Miscellaneous

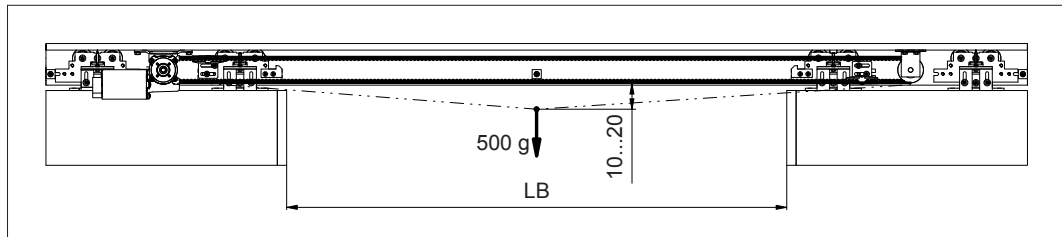
Stickers/rating plates	x	x		
------------------------	---	---	--	--

¹ Only for redundant drive mechanisms

² KABA Gilgen cleans all the elements of the installation provided this is necessary for the function of the installation. A general cleaning of the installation is not planned.

7.2 Toothed belt ZARI

1. Check the tension of the toothed belt (by means of 500 g): Measure 10...20 mm.



2. If required correct the tension: with displace the guide unit.

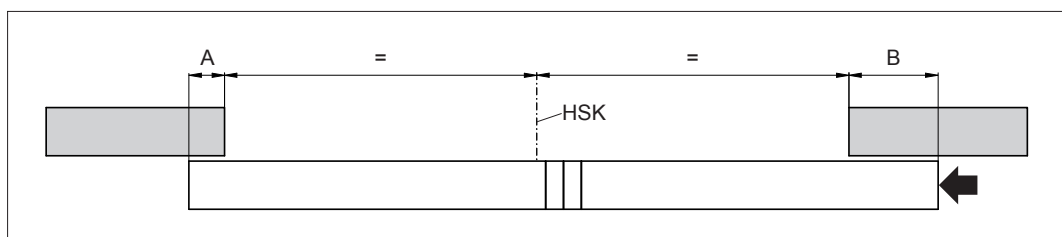
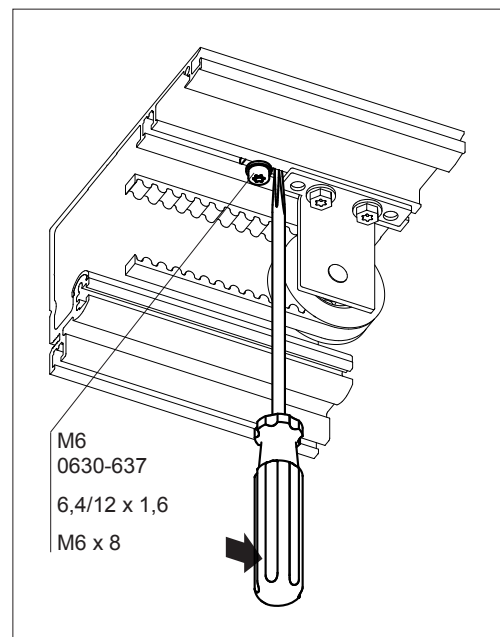


Attention:
Proceed carefully when tightening the toothed belt. An obliquely mounted guide unit respectively an insufficient or an excessive tension of the toothed belt increases its wear and causes a noisy operation.

3. Setting the door center:
Slightly loosen both belt connection pieces on the running carriage, shift the sliding wings together until the distances A and B are equal, then retighten the belt connection pieces.



Attention:
Checking the OPEN stop pieces: In the OPEN position, the sliding doors must touch both stop pieces.



8 TROUBLESHOOTING



Warning:

Electrocution hazard! Before working on any live elements, pull out the mains plug as well as any existing plug of the emergency battery respectively switch off the main installation switch!

If a malfunction occurs which might be detrimental to the safety of the users, and which cannot be eliminated without delay, the operator must be informed and if required the installation shall be taken out of operation. The installation must be repaired as soon as possible.



Note:

Every troubleshooting procedure which is carried out must be entered into the control booklet!

A reset activates a new setting-up procedure which is carried out only in the operating mode AUTOMAT.



Note:

The setting-up procedure is only carried out in the mains-powered mode, whereas no setting-up is possible in the emergency battery-powered mode because of the restricted battery power. The control unit STERE is automatically switched off.

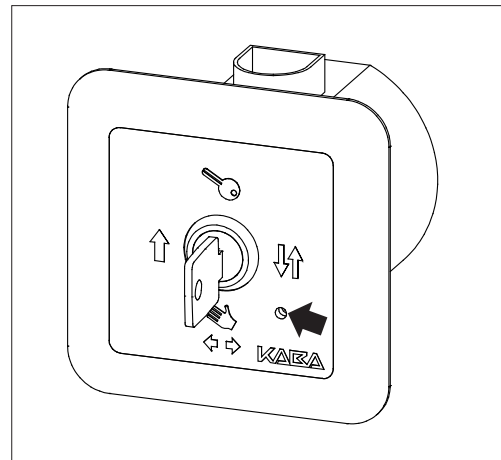
8.1 With key program switch

Press reset push-button during at least 1 second with a tool (e.g. paper clip).



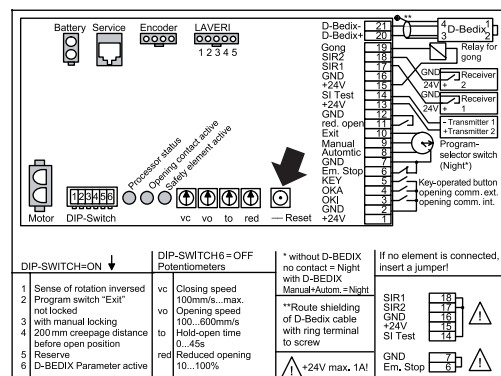
Note:

Alternatively, to activate the reset function, push simultaneously (min 1 second) operating modes MANUAL and EXIT.



8.2 On control unit STERE

Press reset push-button during at least 1 second.



8.3 Malfunction

An alleged error may by all means also be due to „correct“ causes. For this reason the list shown hereafter has been established, which contains the probable or already encountered irregular functioning, their possible causes as well as the corrective action (error elimination) to be taken.

Irregular functioning	Possible causes/corrective action
LED „Processor status“ on the STERE is illuminated/is not flashing.	<ul style="list-style-type: none"> • Control of mains power supply. • Control the fine-wire fuse in STERE.
Door fails to move/to open.	<ul style="list-style-type: none"> • Mains failure and/or emergency battery discharged. • Sliding wing is mechanically blocked. • Operating mode MANUAL or NIGHT. • Control element defective (LED OKx is not illuminating when element is actuated). • Locking is not released. • Manual locking is still engaged. • EMERGENCY STOP jumper on STERE not inserted (LED SI is illuminating). • EMERGENCY STOP triggered (LED SI is illuminating).
Door fails to close or is not fully closed.	<ul style="list-style-type: none"> • Operating mode MANUAL or OPEN. • Closing procedure obstructed. • Light barrier defective, cut or incorrectly connected (LED SI is illuminating). • Manual unlocking actuated. • EMERGENCY STOP triggered (LED SI is illuminating). • Light barrier jumper on STERE has not been inserted (LED SI is illuminating). • Presence detector is continuously triggered (LED SI is illuminating). • Radar is continuously triggered. Remove object, re-adjust radar (LED OKx is illuminating). • Key command on locking (LED OKx is illuminating). • Pay attention to the reciprocal interaction of the presence sensors. • The programmed hold-open time is too long. • During the closing procedure, the door has repeatedly detected an obstacle (it is kept waiting one minute in the open position). • Check emergency opening element.
Door opens or closes too slowly.	<ul style="list-style-type: none"> • Opening respectively closing speed has not been correctly programmed. • Emergency battery operation.
Door opens at slow speed or at slow speed on the last 200 mm.	<ul style="list-style-type: none"> • Obstacle detection has been triggered. • DIP-Switch 4 on ON. • After resetting of DIP-Switch 4 on OFF: no Reset carried out
Insufficient opening width.	<ul style="list-style-type: none"> • Reduced opening activ. • Obstruction of door: remove obstacle
Hold-open time too long or too short.	<ul style="list-style-type: none"> • Hold-open time has not been correctly programmed.
Door only carries out short movements.	<ul style="list-style-type: none"> • Obstacle detection has been triggered. • The radar/presence detector is activated by the door movement (LED OKx is illuminated). • Spurious triggering of the radar/presence detector (LED OKx is illuminated). • Excessive weight of sliding wing. • GEMO defective.
Lateral door movement in the closed position.	<ul style="list-style-type: none"> • Defective door sealing gaskets or ribbed out. • Sliding wings have not been correctly adjusted. • Damaged fixpoint guide shoe or bottom guide rail. • In the CLOSED position the limit stops do not touch each other.

Irregular functioning	Possible causes/corrective action
Upon closing, the door motion is continuously reversed.	<ul style="list-style-type: none"> • The radar/presence detector is triggered (reflection of metallic objects, „sees“ the sliding wing, vibrations of the covering), (LED OKx is illuminated). • Excessive friction (obstacle detection). • Path obstructed by an object (obstacle detection). • Loss of position due to a skipped belt. Check the belt tension. Reduce the speed parameters. • Check rubber cable of MENO.
The door stops during the opening motion and is closed again or opens only at slow speed.	<ul style="list-style-type: none"> • Excessive friction. • Path obstructed by an object (obstacle detection).
Door moves sometimes into the OPEN or CLOSED stop piece.	<ul style="list-style-type: none"> • Loss of position due to a skipped belt. Check the belt tension. Reduce the speed parameters. • Check travel stops, carry out Reset.
First movement after switching-on moves the door into the stop piece.	<ul style="list-style-type: none"> • The control unit has already been used for another installation. Carry out Reset.
During setting-up, the Closed position is not completely reached.	<ul style="list-style-type: none"> • Excessive friction. • Door sealing gaskets ripped out. • Sliding wings are not parallel. • Rubber cable of MENO is too much stretched.
After a Reset: no door movement.	<ul style="list-style-type: none"> • Wait at least 1 minute. • Switch the control unit off and back on. • Operating mode NIGHT and MANUAL is selected. Select operating mode AUTOMAT. • Emergency Stop is active: deactivate it (LED SI is illuminated). • Check mains power supply (check LED uC).
During setting-up, the door starts by opening.	<ul style="list-style-type: none"> • Belt connection piece has not been correctly mounted. • Incorrect adjustment of the sense of rotation GEMO.
The door is readjusted every time it is switched on.	<ul style="list-style-type: none"> • The weight of the sliding wing is smaller than 20 kg. • Check the belt connection piece. • Make sure that the toothed belt's tension is correct.
Locking mechanism does not lock/unlock.	<ul style="list-style-type: none"> • Insufficient play of the locking latch. • Check the connections. • For single-winged installations: no stop-piece in closed position has been installed. • Manual unlocking is uptight. • Locking mechanism is damaged.
Radar fails to open the door. Radar is not triggered.	<ul style="list-style-type: none"> • Program position on NIGHT or EXIT. • Incorrect setting of the radar's detection range (LED OKx illuminated). • Transverse traffic optimization has been activated for the radar (LED OKx illuminated). • Excessive reduction of the radar's sensitivity (programmed for outdoor application), (LED OKx illuminated). • Defective radar (LED OKx illuminated).
The radar/presence detector is permanently triggered.	<ul style="list-style-type: none"> • Reset the radar/presence detector (manually teach-in the background). • Close the covering and repeat the teaching process for the radar/presence detector. • Check the radar/presence detector settings. • Reflecting objects. • Moving objects close to the sensor (plants, air currents, leaves...).
Door makes noise.	<ul style="list-style-type: none"> • Polluted door guide rails. • Friction of the sliding wings on top or at the bottom. • Defective drive elements.

8.4 Error display with D-BEDIX / KOMBI-D-BEDIX

The control unit recognizes various error situations and conditions and displays them on the D-BEDIX / KOMBI-D-BEDIX panel by means of a error-no.

The error lists shown hereafter illustrate the error that is displayed, the cause that has triggered the error and how it can be eliminated.

The only errors that are individually listed and explained are the ones against which the fitter/service technician can take specific action.

8.4.1 Software and processor errors

No.	Description	Corrective action	Mode NIGHT Closure possible
10...19	System error: Emergency stop (door stands still).	Replace the control unit.	yes

8.4.2 Power supply errors

No.	Description	Corrective action	Mode NIGHT Closure possible
30	Mains failure. Is only displayed if BATPA is connected.	Check mains voltage, check BATPA.	yes
31	30 V external short-circuit/failure or second STERE defective.		yes
32	Power pack defective.		yes
37	BATPA completely discharged after a mains failure. STERE connector pulled out.		yes
39	24 V terminal power supply short circuit/overload.	Check the elements that are connected to the terminals.	yes

8.4.3 Overvoltage errors

No.	Description	Corrective action	Mode NIGHT Closure possible
33	Overvoltage on 30 VDC.	Reduce the speed of the sliding wing.	yes
34	Excessive temperature in the event of overvoltage limitation.	Reduce the speed of the sliding wings. Increase the hold-open time.	yes

8.4.4 Hardware errors

No.	Description	Corrective action	Mode NIGHT Closure possible
41	Too many failures on encode cable.	Check GEMO (encoder and motor connector).	yes
42	Sliding wings may be blocked. Encoder unplugged.	Check the sliding wings, check GEMO (encoder and motor connector). Check the manual locking.	no
43...46	Short-circuit or interrupt in the motor circuit.		no
60...61	An excessive current might destroy the STERE.	Check the locking. Check the mechanical settings. Replace any defective elements.	yes
62...63	Motor current relay opened as a result of excessive current. This error eliminates itself after 1 minute.		no
64	Motor current relay opened because of excessive current 5 times in succession.		no

8.4.5 Accessories errors

No.	Description	Corrective action	Mode NIGHT Closure possible
105	Light barrier error on STERE.	Check light barrier and jumper (if required insert the latter).	yes
618	Manual locking.	Select NIGHT operating mode. Disengage the manual locking. Select AUTOMATIC operating mode. Is only detected if DIP3 has been activated.	yes
900	D-BEDIX error.	Check the connection between the control and D-BEDIX. Connect the screening. Make sure that there are no naked conductors in the cable.	yes
901	D-BEDIX communication error.		yes

8.4.6 Mounting and setting errors

No.	Description	Corrective action	Mode NIGHT Closure possible
1000	Reset has been triggered (purely informative message).	-	-
1001	<ul style="list-style-type: none"> • Minimum opening width has not been reached during setting-up. • No mass measurement. • No Reset carried out after DIP1 changing. 	Remove the obstacle, check/restore the free running movement of the sliding wings, check the locking, carry out a Reset.	no
1002	Reset not possible in battery-operated mode.	Plug in the mains connector.	no
1007	A sliding wing weight of <20 kg was measured.	Check the sliding wing and the toothed belt coupling.	yes

8.4.7 Specific BAT-NOT errors

No.	Description	Corrective action	Mode NIGHT Closure possible
1601	Test opening with emergency opening rubber cable not successful during the setting-up procedure.	Check the emergency opening rubber cable, check respectively make sure that the sliding wings can be easily moved. Without D-BEDIX the door remains open.	yes
1602	Excessive tension of emergency opening rubber cable (operation).	Reduce the tension.	yes
1603	Excessive tension of emergency opening rubber cable (setting-up).	Reduce the tension. Fatal error (door remains open).	yes

8.4.8 Operative messages (informative)

No.	Description	Corrective action	Mode NIGHT Closure possible
2000	More than 5 successive obstructions.	Remove the obstacle.	yes

9 SHUT-DOWN

No particular measures need to be taken for de-commissioning the installation.

If the sliding door installation will not be used during at least 1 month, it is re-commended to pull out the mains plug (and, if provided, the battery plug).



Attention:

For this purpose, the door must be in the operating mode NIGHT, in order to avoid a discharge of the emergency battery (option).

If an installation with emergency battery is planned to be taken out of operation for a period exceeding 1 year, the mains cable of installations containing an emergency battery must be plugged in once a year for at least 24 hours in order to allow the batterie to be recharged.

For taking the installation back into operation, all you have to do is to plug in the mains cable/the battery connector and select the operating mode on the key-operated program switch.

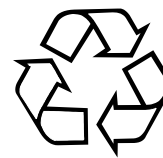


Attention:

If the installation is re-commissioned at low temperatures, it must be switched on 1...2 hours prior to the actual setting-up procedure (so that the operating temperature can be reached).

10 DISPOSAL OF THE INSTALLATION

An ecologically acceptable disposal of the installation is ensured if the different materials are separated and recycled. No particular measures are required for the protection of the environment. However, the relevant legal prescriptions applicable for the installation site have to be complied with!



11 SPARE PARTS

11.1 Drive technique

Article No.	Designation	Abbreviation
0639-100	Gear motor	GEMO
0635-104	Guide unit	ULE
4527-210	Toothed belt HTD-8M-10	ZARI
0639-101	Running carriage Set (complete)	LAUWA
0630-628	Carrying roller	LAUROX
0639-313	Counter-presser sleeve	
0639-131	Control unit (complete) 230 V	STERE
0639-131/15	Control unit (complete) 115 V	STERE
0630-944/01	Mains cable 4 m (without plug)	NETKA
0639-322	Side cover set	SEIDE
0639-115	Basic set SLA	
0639-120	Locking of running carriage	LAVERI
0350-343/00	PCB	
0635-218	HERI monitoring	
0639-140	Locking of running carriage Fail Safe	LAVERI-FS
0639-141	Unlocking set LAVERI Fail Safe	
0639-142	Modification set LAVERI Fail Secure	
0639-386	PCB programmed	
0639-123	Emergency battery (complete)	BATPA
6170-200	1 battery 1,2 Ah/12 V (2 pieces are necessary per BATPA)	
0639-110	Mechanical emergency opening (complete)	MENO
4495-014	Rubber cable Ø8,3 mm x 100 m, orange	
0639-128	Assembly-Set for horizontal covering profile B	
0723-170	Key-operated program switch (surface type)	
0635-142	Program selector key (with cable)	D-BEDIX
0635-143	Feller-Kit D-BEDIX	
0635-148/02	KOMBI-D-BEDIX Profile cylinder „Lock“	
0635-148/04	KOMBI-D-BEDIX Kaba cylinder „Lock“	
0635-144/02	Switch Kit incl. front plate EDIZIO Profile cylinder „Lock“	
0635-144/04	Switch Kit incl. front plate EDIZIO Kaba cylinder „Lock“	
6442-971	Fastening plate double EDIZIOdue	
6442-972	Covering frame double EDIZIOdue white	
0723-165/02	Front plate EDIZIO Profile cylinder „Lock“	
0723-165/04	Front plate EDIZIO Kaba cylinder „Lock“	

11.2 Profile system PSX

Sealing gasket on main closing edge

0621-512 Center rubber sealing

Sealing gasket on secondary closing edge (sliding wing/connection profile)

0621-520 Vertical sealing outside

Bottom brush sliding wing

0640-923 Brush (height = 15 mm, width = 3,5 mm)

Fix-point guide shoe

0621-157/01 Fix-point guide shoe 32 mm complete left

0621-157/02 Fix-point guide shoe 32 mm complete right

0621-158/01 Fix-point guide shoe 81,5 mm complete left

0621-158/02 Fix-point guide shoe 81,5 mm complete right

0621-404 Glider

Continuous bottom guide rail

Sliding wing

0621-189 Fixing set for blade

0621-440 Blade machined

0621-404 Glider

Bottom guide rail

0621-191 Fixing set for bottom guide rail

0621-439/.. Bottom guide rail machined

11.3 Profile system PSA

Sealing gasket on main closing edge

0623-500 Center rubber sealing

Sealing gasket on secondary closing edge (sliding wing/connection profile)

0623-501 Vertical sealing outside

0623-510 Covering profile for light barriers

0623-511 Covering profile for screws

Bottom brush sliding wing

0645-114 Brush (height = 17 mm, width = 2,6 mm)

Fix-point guide shoe

0623-123/01 Fix-point guide shoe 32 mm complete left

0623-123/02 Fix-point guide shoe 32 mm complete right

0623-124/01 Fix-point guide shoe 49 mm complete left

0623-124/02 Fix-point guide shoe 49 mm complete right

0623-125/01 Fix-point guide shoe 72 mm complete left

0623-125/02 Fix-point guide shoe 72 mm complete right

0621-404 Glider

Continuous bottom guide rail

Sliding wing

0623-121/90 Packing unit accessories blade

0623-403 Blade machined

0621-404 Glider

Bottom guide rail

0621-191 Fixing set for bottom guide rail

0621-439/.. Bottom guide rail machined

11.4 Profile system PSW

Sealing gasket on main closing edge		Article No. Wicona*
-	Sealing of the joint	4310218
Sealing gasket on secondary closing edge (sliding wing/connection profile)		
-	Vertical sealing outside	4310247
-	Brush (height = 9 mm)	4310243
Bottom brush sliding wing		
0640-923	Brush (height = 15 mm, width = 3,5 mm)	4310217
Fix-point guide shoe		
0621-241/01	Fix-point guide shoe PSW complete left	-
0621-241/02	Fix-point guide shoe PSW complete right	-
0621-404	Glider	4340018
Continuous bottom guide rail		
Sliding wing		
0621-404	Glider	4340018
Bottom guide rail		
0621-191	Fixing set for bottom guide rail	-
0621-643/..	Bottom guide rail machined	-

***Sources of supply:**

Wicona
Hydrobuilding Systems AG
CH-5506 Mägenwil
Tel. +41 62 887 41 10
Fax +41 62 887 41 30

Wicona
Hydrobuilding Systems GmbH
D-89077 Ulm/Donau
Tel. +49 731 39 84-0
Fax. +49 731 39 84-241

12 OPTIONS

12.1 Emergency battery BATPA

- The emergency battery is supplied in charged condition.
- If it is regularly used, its lifetime is approximately 5 years.
- The emergency battery can be recharged approximately 1'200 times (depending on the respective depth of the discharge).
- If an individual battery needs to be replaced, it is important to check previously if the new battery has a minimum voltage of 12,4 VDC (not under load). Should this requirement not be fulfilled, it must be recharged before being used.



Attention:
Batteries of different brands (manufacturers) must never be used together!

Recharging

1. Disconnect the connection cable from the batteries.
2. Recharge the batteries individually during approximately 12 hours:
Charging voltage 14,7 VDC
Charging current max. 0,36 A
3. Reconnect the connection cable and mark the charging date.

Storage hints

- Never store the emergency battery in discharged condition (recharge it as soon as possible).
- Before storing the emergency disconnect all the consumers.
- Never expose it to a heat source.
- Never expose it to direct insolation.
- Store the battery in vertical position, on a horizontal base.
- Check the voltage at regular intervals.
- Use nothing but a dry rag for cleaning the battery.



Attention:
If the storage temperatures are below freezing point, the battery must be handled with great care, as the synthetic material of the battery housing hardens and thus more sensitive to damaging.

- Store in a cool and dry place.
- Ambient temperature between -35 °C and +50 °C.
- The storage temperature has an influence on the spontaneous discharge of the emergency battery:

Storage temperature	Storage intervals
below 20 °C	every 9 months
20...30 °C	every 6 months
30...40 °C	every 3 months
above 40 °C	reduction of the lifetime

12.2 Mechanical emergency opening MENO

Requirements



Attention:

First check if all the settings have been made according to the instructions. Make sure that all the moving elements are dirt-free (this influences the static friction).

Settings:

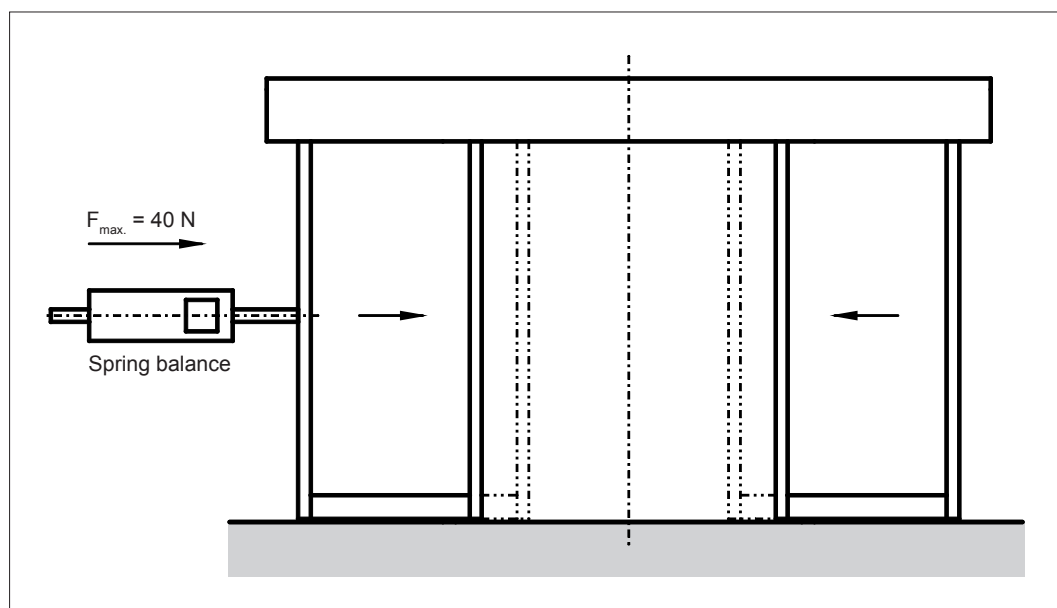
- Prestress toothed driving belt
- Parallelity of GEMO and ULE with regard to the carrier profile
- Mounting of the counter-pressure roller
- Adjustments of the wings

Check the cleanliness:

- Rollers
- Carrier profile
- Floor guideway

Measuring the static friction (without rubber cable):

Move the wings to the open or half-open position. Using a spring balance, push them slowly and continuously towards the CLOSED position until the wings start moving. The maximum applied force corresponds to the static friction. The static friction must not exceed 40 N.



Setting the emergency opening rubber cable



Attention:

Avoid an excessive tightening of the rubber cable which would cause the sliding wings to bump into each other when opened without mains power!

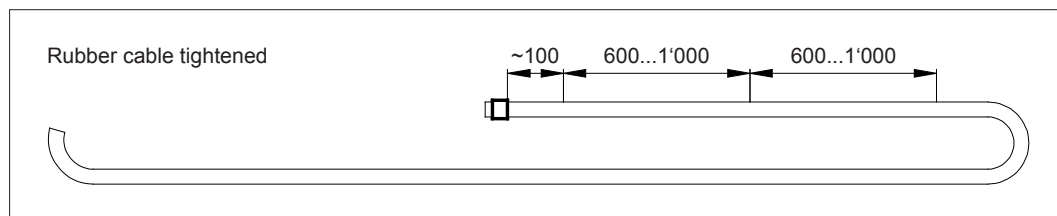
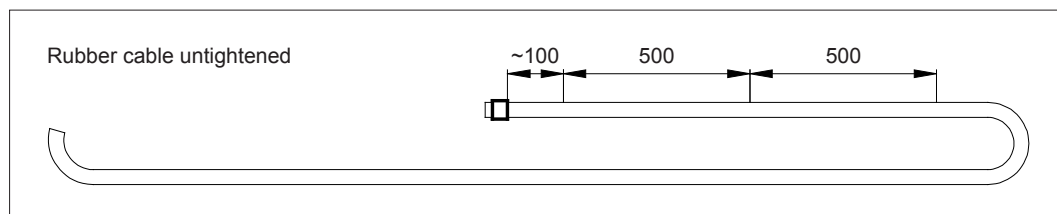
1. Manually close the sliding wing and block it.
2. Stretch the rubber cable until the spacing between the felt tip pen markings has increased to ~ 600 mm. Shift the loose knot until it is again located right next to the rubber cable fixing.
3. Remove the blocking of the sliding wing, then let the rubber cable pull it to the Open position. If require tighten the rubber cable.



Attention:

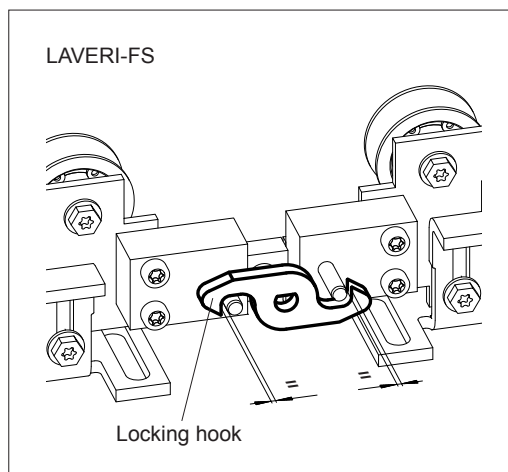
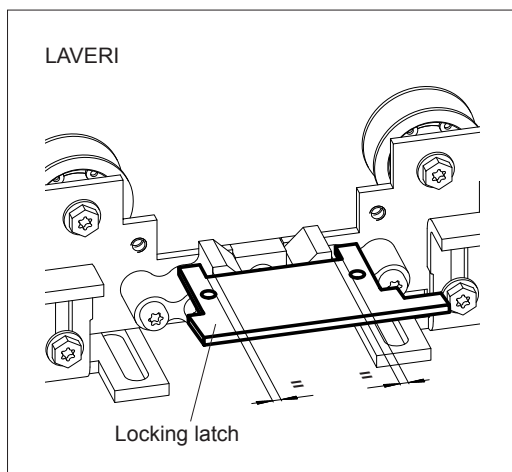
The maximum distance between the felt tip pen markings must **not exceed 1'000 mm** (which corresponds to a tension of 60 N).

4. Tighten the knot and cut off the rubber cable (max.distance between the cable end and the knot = 20 mm).



12.3 Locking of running carriage LAVERI + LAVERI-FS

1. Check if the locking of running carriage is safely engaged.
If necessary, check the locking play:
 - 1.1 Manually close the sliding wing.
 - 1.2 Center the locking latch resp. the locking hook.
 - 1.3 Screw down the locking of running carriage.



13 APPENDIX

The following documents are added as an appendix to this manual:

Wiring diagram E4-0141-029



Kaba Gilgen AG
 Door Automation
 Freiburgstrasse 34
 3150 Schwarzenburg

SLA Control unit:

- without D-BEDIX
- with D-BEDIX

Notes description

Diagram drawn: Gate is closed; mains off

⊕ If element is missing, put a jumper.

Motor protection by motor cut-out delay: Reset by means of switching off and switching back on the main installation switch

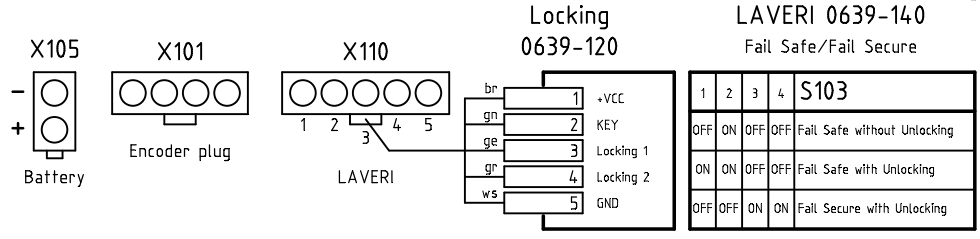
① If element is missing, put a resistor.

© Kaba Gilgen AG, 3150 Schwarzenburg

Stückliste		a	10'694/14.07.09 at	e	Gezeichnet	25.03.09 at	Ursprung:		WIRING DIAGRAM SLA Control unit without D-BEDIX SLA Control unit with D-BEDIX	Anlage:	
Ohne sep.	<input checked="" type="checkbox"/>	b	11'255/28.04.10 at	f	Geprüft		Ersatz für:				
Sep. gl. Nr.	<input type="checkbox"/>	c		g							
Sep. and. Nr.	<input type="checkbox"/>	d		h	Freigegeben						
										Blatt-Nr. 0	E4-0141-029b
										Anz.Blatt 3	

SLA Control unit without D-BEDIX

0639-131

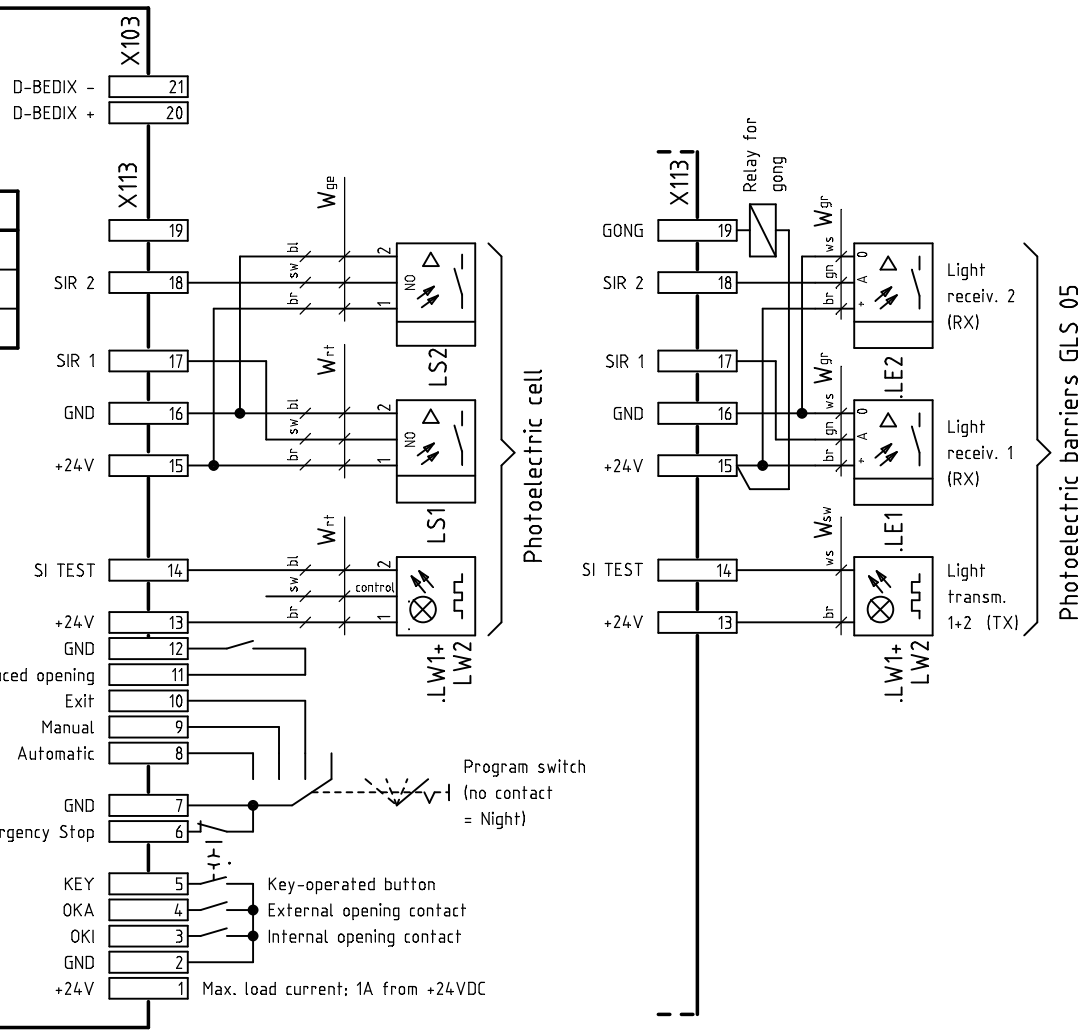
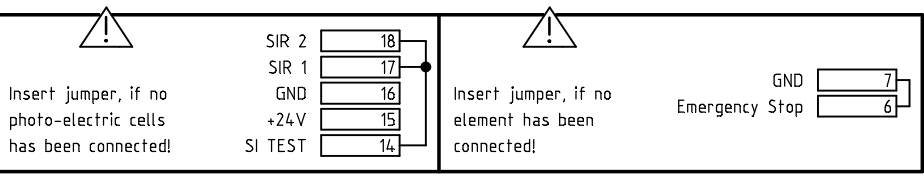
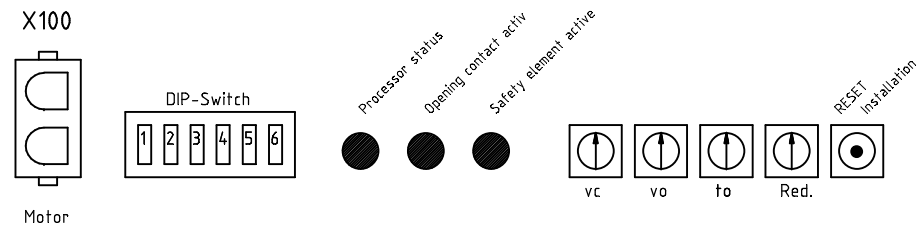


DIP-Switch (action in switch-position ON)

1	Inversed sense of rotation
2	Mode "Exit" not locked
3	Whit manual locking
4	200mm of creeping distance before open position
5	BAT-NOT
6	OFF = Potentiometer active ON = D-BEDIX Parameter active

Potentiometer

vc	Closing speed 100mm/s...max.
vo	Opening speed 100...600mm/s
to	Hold open time 0...4.5s
Red.	Reduced opening 10...100%



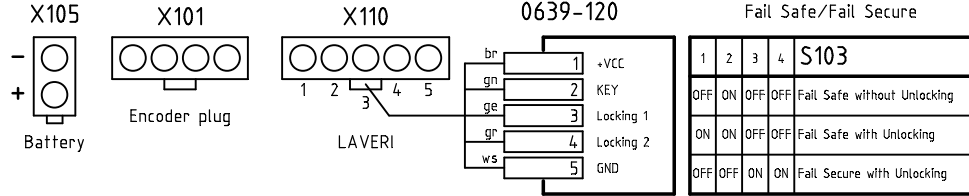
br / braun / brun / marrone / brown / marrón
 sw / schwarz / noir / nero / black / negro
 bl / blau / bleu / blu / blue / azul
 rt / rot / rouge / rosso / red / rojo
 ge / gelb / jaune / giallo / yellow / amarillo
 ws / weiss / blanc / blanco / white / bianco
 gn / grün / vert / verde / green / verde
 gr / grau / gris / grigio / grey / gris

© Kaba Götting AG, 3150 Schwanzhornburg

SLA Control unit with D-BEDIX

0639-131

Locking 0639-120 LAVERI 0639-140 Fail Safe/Fail Secure

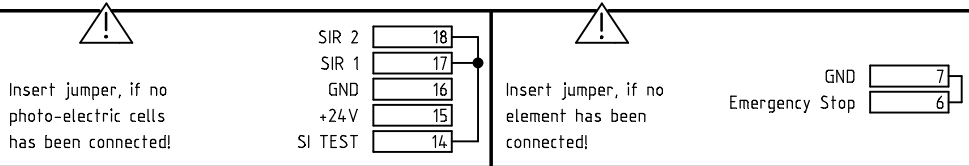
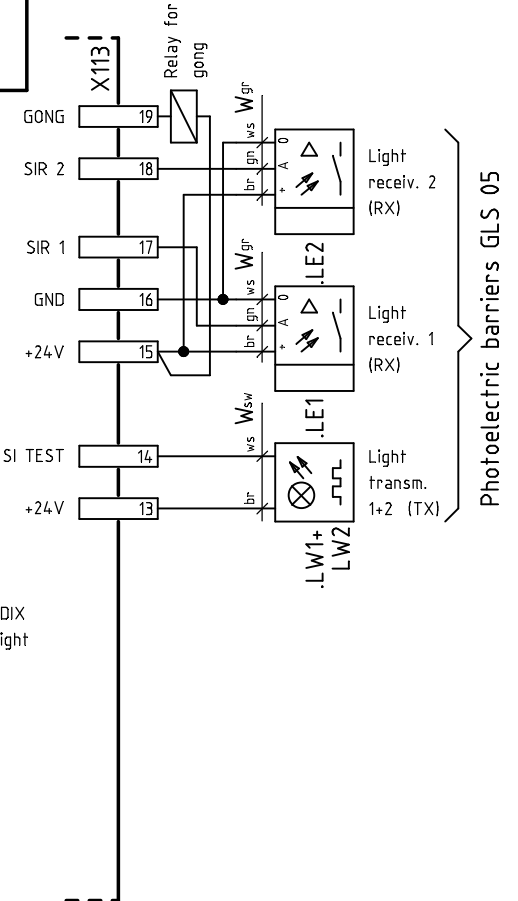
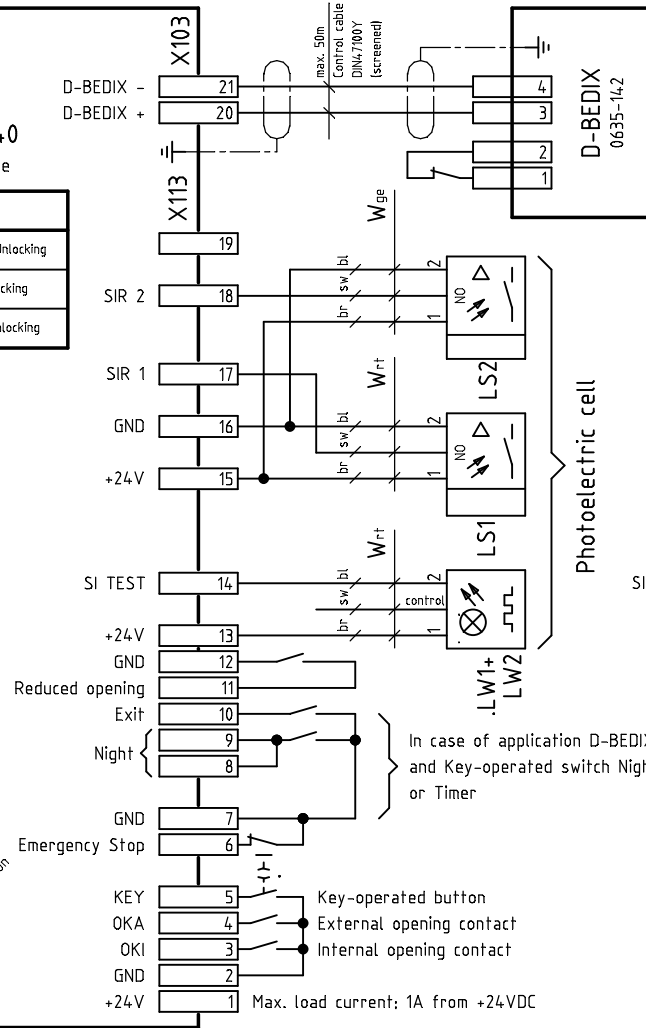
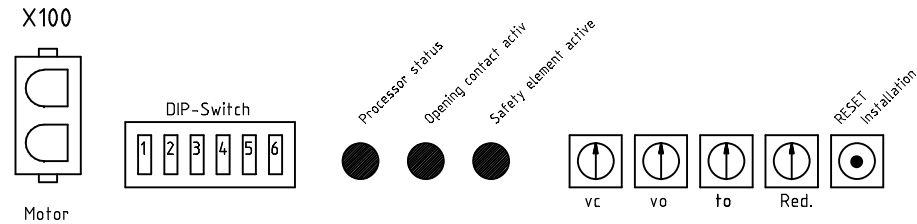


DIP-Switch (action in switch-position ON)

- | | |
|---|---|
| 1 | Inversed sense of rotation |
| 2 | Mode "Exit" not locked |
| 3 | Whit manual locking |
| 4 | 200mm of creeping distance before open position |
| 5 | BAT-NOT |
| 6 | OFF = Potentiometer active
ON = D-BEDIX Parameter active |

Potentiometer

- | | |
|------|---------------------------------|
| vc | Closing speed
100mm/s...max. |
| vo | Opening speed
100...600mm/s |
| to | Hold open time
0...4.5s |
| Red. | Reduced opening
10...100% |



br / braun / brun / marrone / brown / marrón
sw / schwarz / noir / nero / black / negro
bl / blau / bleu / blu / blue / azul
rt / rot / rouge / rosso / red / rojo
ge / gelb / jaune / giallo / yellow / amarillo
ws / weiss / blanc / bianco / white / blanco
gn / grün / vert / verde / green / verde
gr / grau / gris / grigio / grey / gris

Stückliste	a	10/694/14.07.09	al	e		Gezeichnet	25.03.09	al	Ursprung:
Ohne sep.	<input checked="" type="checkbox"/>	b	11/255/28.04.10	al	f	Geprüft			Ersatz für:
Sep. gl. Nr.	<input type="checkbox"/>	c			g	Freigegeben			
Sep. and. Nr.	<input type="checkbox"/>	d			h				



WIRING DIAGRAM
SLA Control unit
with D-BEDIX

Anlage:

Blatt-Nr. 2
Anz.Blatt 3

E4-0141-029b

31

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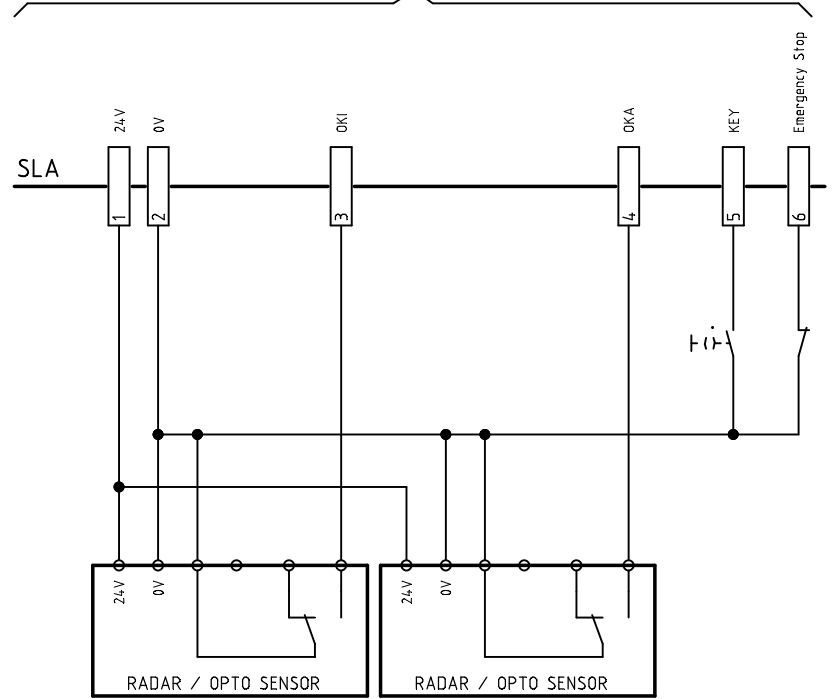
35

36

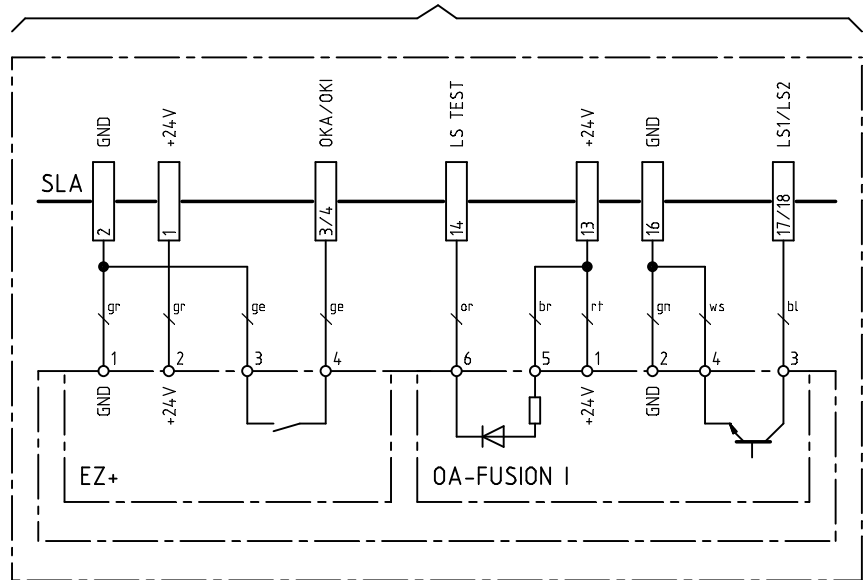
37

38

Operating elements



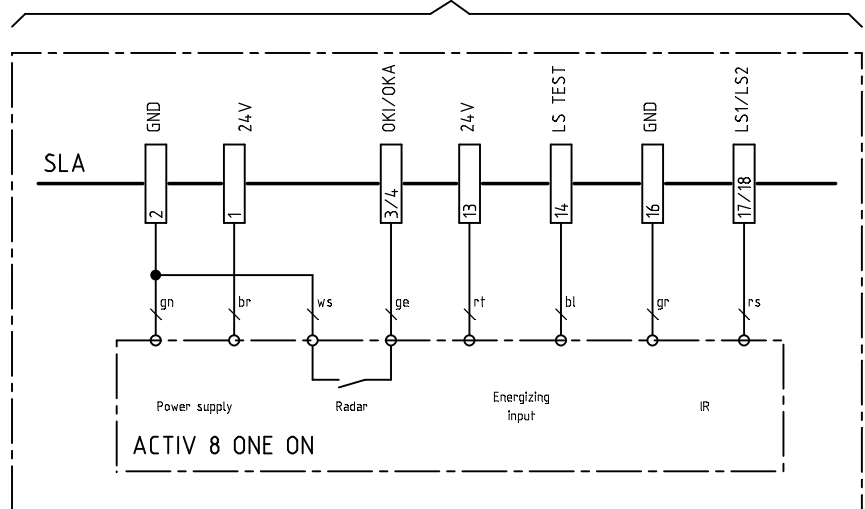
Combination element



OA FUSION I Dipswitch Setting

Output Setting	8	<input type="checkbox"/>	OFF
Test Input Setting	9	<input checked="" type="checkbox"/>	ON
Test Input Delay Time	10	<input type="checkbox"/>	OFF

Combination element



Color code legend:

- bl / blau / bleu / blu / blue / azul
- br / braun / brun / marrone / brown / marrón
- ge / gelb / jaune / giallo / yellow / amarillo
- gn / grün / vert / verde / green / verde
- gr / grau / gris / grigio / grey / gris
- or / orange / arancione / orange / naranja
- rf / rot / rouge / rosso / red / rojo
- rs / rosa / rose / rosa / pink / rosa
- ws / weiss / blanc / bianco / white / blanco

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Stückliste		a 10'694/14.07.09 at		e		Gezeichnet 25.03.09 at		Ursprung:	
Ohne sep. <input checked="" type="checkbox"/>		b 11'255/28.04.10 at		f		Geprüft		Ersatz für:	
Sep. gl. Nr.		c		g		Freigegeben			
Sep. and. Nr.		d		h					



WIRING DIAGRAM
 SLA-DRIVE UNIT with D-BEDIX
 SLA-DRIVE UNIT without D-BEDIX

Anlage:	Blatt-Nr. 3	E4-0141-029b
	Anz.Blatt 3	