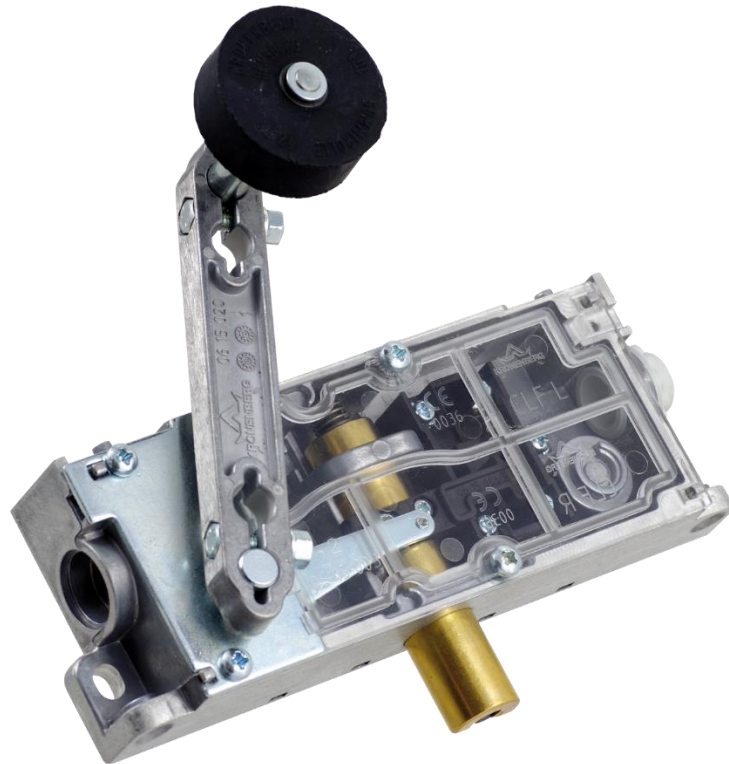


Door Interlock CL(F) Operating Instructions



Manufacturer

Hans & Jos. Kronenberg GmbH
D-51427 Bergisch Gladbach

Contact

Hans & Jos. Kronenberg GmbH
Kurt-Schumacher-Straße 1
D-51427 Bergisch Gladbach

T: +49 2204 / 207 -0

E: info@kronenberg-gmbh.de

W: kronenberg-gmbh.de

Document Information

Titel: kro-ba-cl(f)-en-2021, Stand: 26.04.2021

Legal Notices

© Hans & Jos. Kronenberg GmbH

All rights reserved.

All photos are property of Hans & Jos. Kronenberg GmbH.

This documentation may not be copied,
modified or translated into any other language in whole or in part.

Especially when using electronic systems, Hans & Jos. Kronenberg GmbH
have to agree to processing, duplication or storage of this documentation.

Contents

1	General information	4
2.	Device dimensions	5
3.	Mounting	6
3.1.	Operating direction.....	6
3.2.	Customary positions	6
3.3	Assembly	6
3.4	X-dimension between door interlock (exit side of the bolt) and latch plate (door edge).....	7
3.6	Emergency releases	8
4.	Electrical connections	10
4.1	Dismantling of the cover.....	10
4.2	Connecting and wiring.....	10
5.	Settings	11
6.	Maintenance	11
7.	Disassembly and disposal.....	11
8.	Technical data.....	12

1 General information

The conditions, notices and drawings contained in the EU type approval certificates EU-DL-811 and EU-DL-812 are part of the operating instructions. Therein are specified amongst others:

- description of functions
- installation conditions
- dimensions and variants

The operating instructions must always be kept in a legible condition and accessible.

Target group

All operations described in these operating instructions may only be carried out by trained personnel who are authorized by the operator of the installation. Only install and put the device into operation if you have read and understood the operating instructions and if you are familiar with the applicable regulations of occupational safety and accident prevention.

Intended use

The door interlock described here was developed to take over safety-relevant functions as part of a complete installation or machine. It is within the responsibility of the manufacturer of an installation or a machine to ensure the correct overall function. The door interlock may only be used in accordance with these operating instructions and in the versions described in the corresponding test certificates.

General safety instructions

The safety notes of the operating instructions as well as country-specific installation, safety and accident prevention instructions must be observed.

For further technical information please refer to our catalogues resp. our homepage kronenberg-gmbh.de.

Warning of misuse

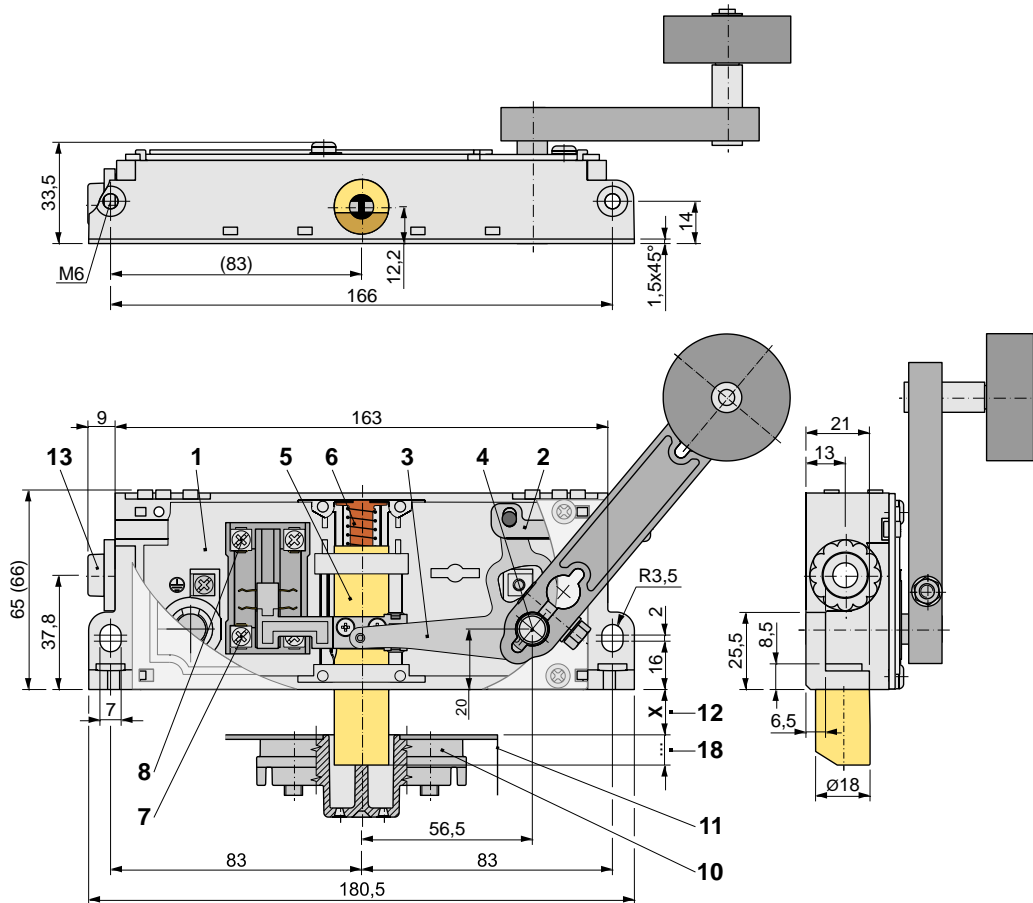
In case of improper, unintended use or manipulation dangers to persons or damages at parts of the machines or installations can not be excluded.

Disclaimer

We will not be liable for damages and malfunctions caused by assembly faults or by non-observance of these operating instructions. Any further liability of the manufacturer is excluded for defects resulting from the use of spare parts or accessories which are not approved by the manufacturer.

Any unauthorized repairs, modifications and alterations are not permitted for safety reasons, exclude any liability of the manufacturer for any resulting damages and lead to the loss of the approval.

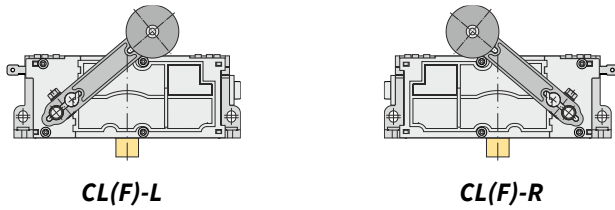
2. Device dimensions



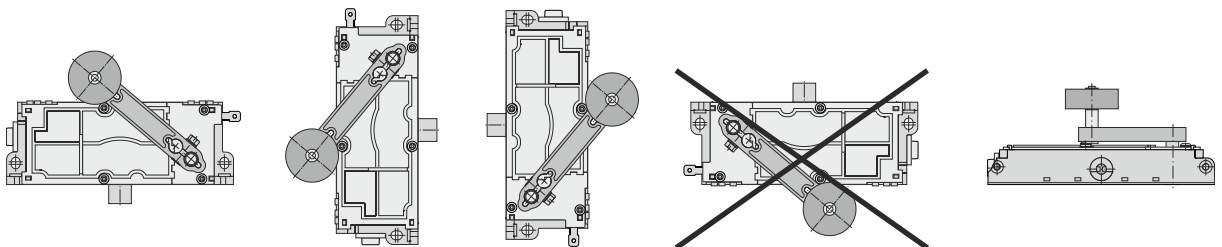
- 1 housing
- 2 pull rod
- 3 bolt lever
- 4 bolt lever axis with triangle
- 5 latch bolt
- 6 return spring
- 7 switch for locking mechanism
- 8 auxiliary switch
- 10 latch plate
- 11 door leaf
- 12 X-dimension acc. to customer specification
- 13 cable entry
- 18 immersion depth

3. Mounting

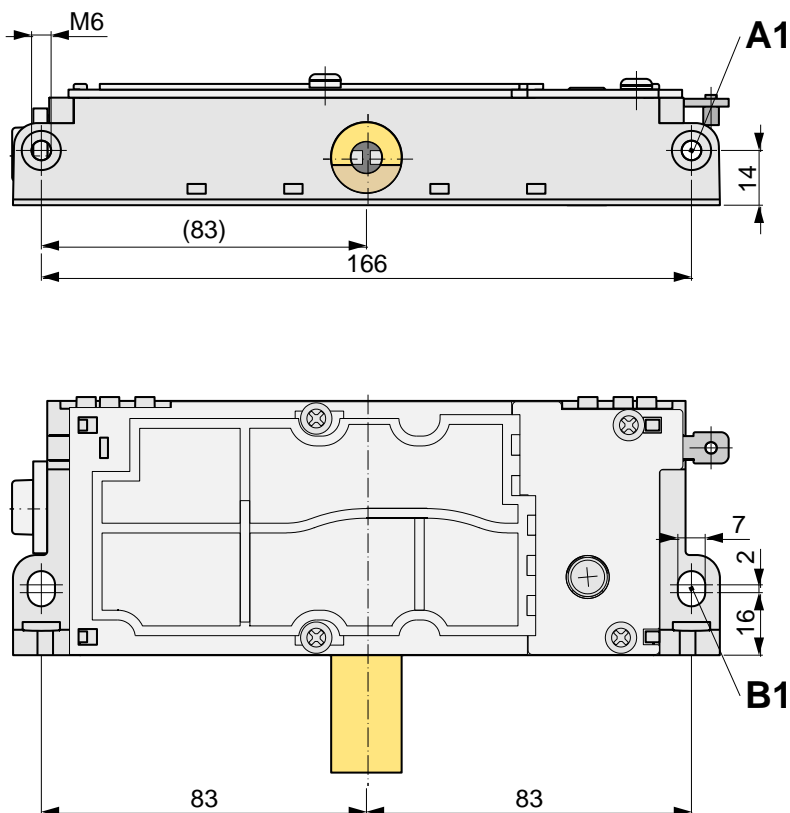
3.1. Operating direction



3.2. Customary positions



3.3. Assembly

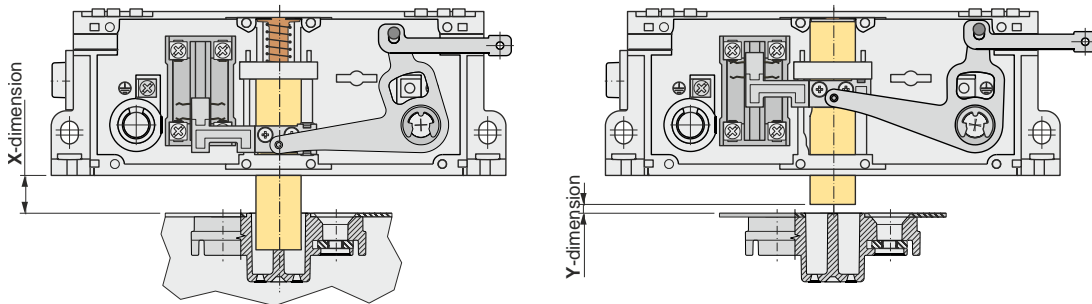


For fastening the CL(F) either the tapped holes M6 (A1) with counter-sunk screws M6 x 12 *) or the oblong holes 7 x 9 mm (B1) with flat headed screws M6 x 16 *) are used.

*) The screw length has to be adapted to the conditions on site

3.4 X-dimension between door interlock (exit side of the bolt) and latch plate (door edge)

*X-dimension = dimension between door interlock (exit site of the bolt) and latch plate (door edge)
Please specify X-dimension in case of order, has to be provided by the customer
The function is ensured within a tolerance range between -2.5 mm to +3.5 mm.
The closing ability has to be ensured in any case.
Where appropriate, a bevel of the door edge is necessary.*

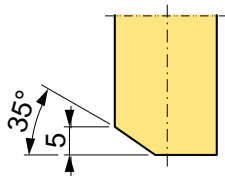


*Y-dimension = dimension between completely drawn in latch bolt and upper edge latch plate
nominal dimension Y=3.5 mm and nominal dimension X ≥ 5 mm*

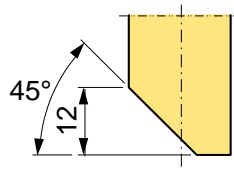
3.5 Version of the latch bolt

Kind of the latch bolt bevel

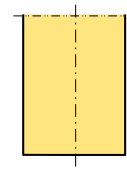
(u) / (o) / (i) / (a)
standard at CLF
from X ≥ 5 mm



(u) / (o) / (i) / (a)
standard at CL
from X ≥ 7 mm

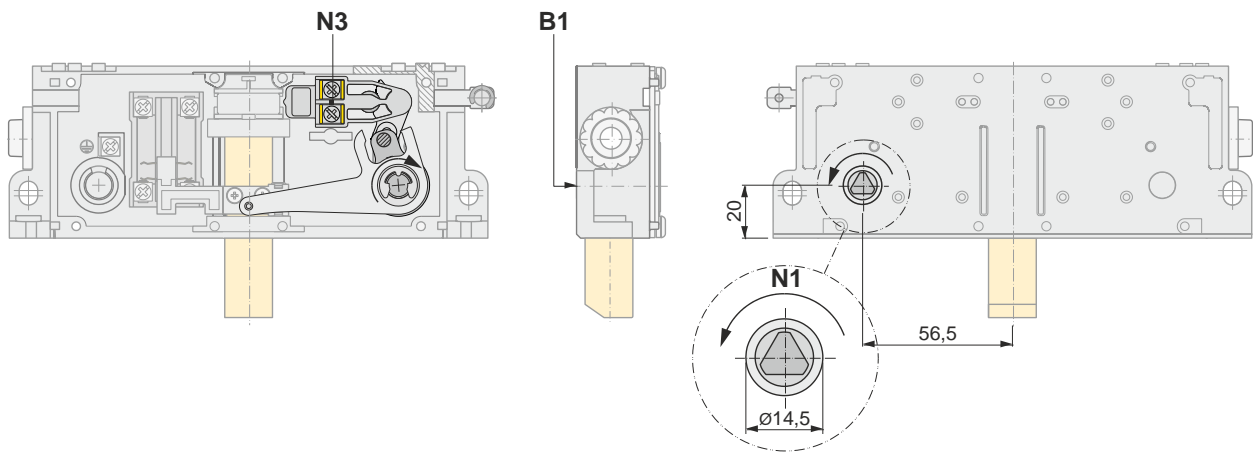


(ANS0)
on request at CL
from X ≥ 5 mm



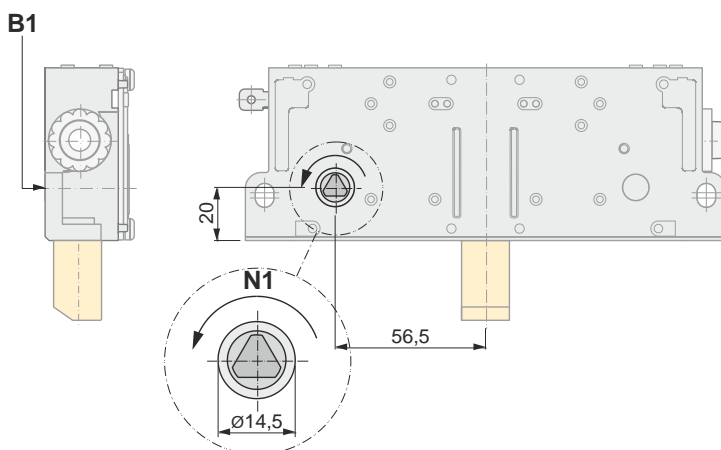
3.6 Emergency releases

without specification base side (standard)



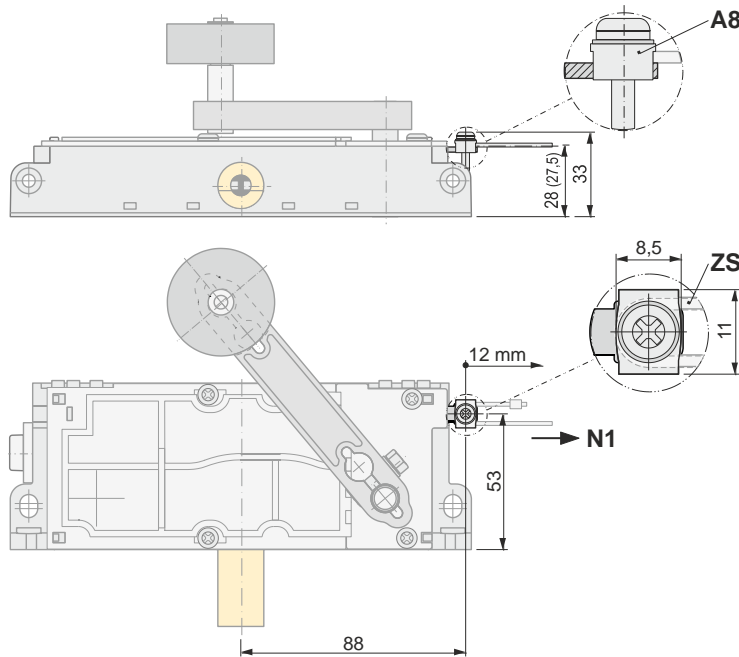
- B1** base side (always existing)
- N1** unlocking direction emergency release
- N3** connecting terminals for monitored emergency release

.2/01 emergency release indirect base side at the bolt lever axis
with integrated monitoring according to EN 81-21



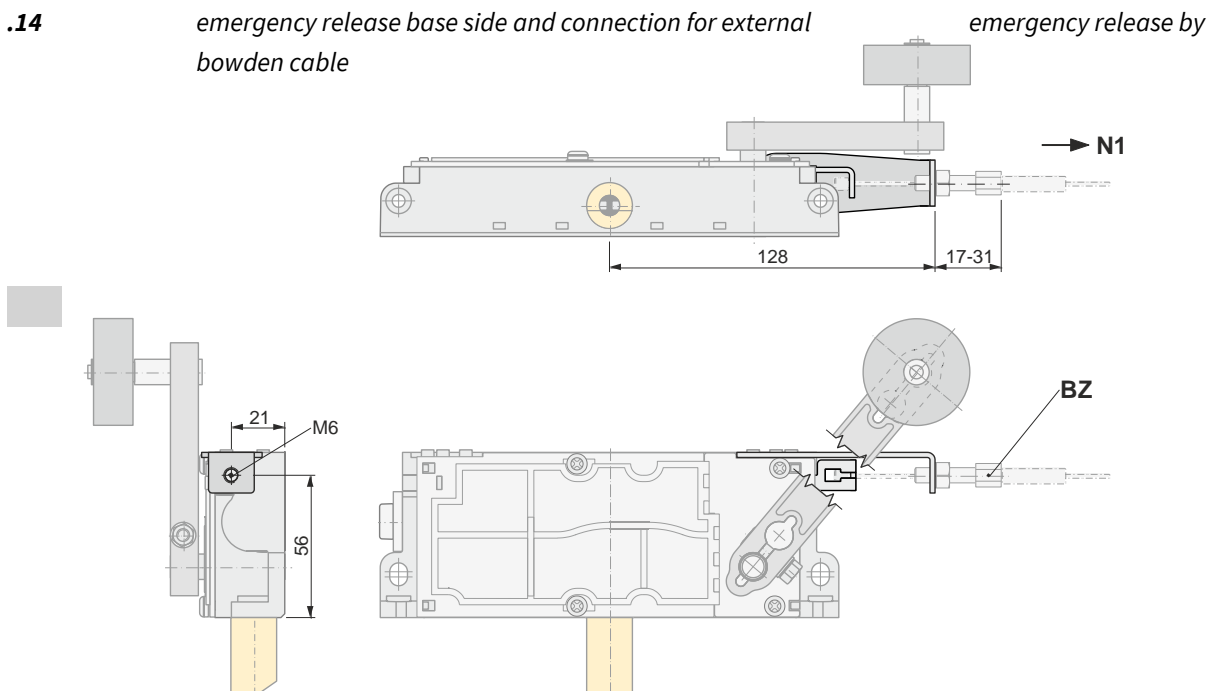
- B1** base side (always existing)
- N1** unlocking direction emergency release

- .5** *emergency release base side and connection for external emergency release by pull rope or manual operation*
.5 in combination with actuation .20 (screwed on roller lever)



- A8** *clamp strap*
N1 *unlocking direction emergency release*
ZS *pull rope ZS-... (accessories - please order separately)*

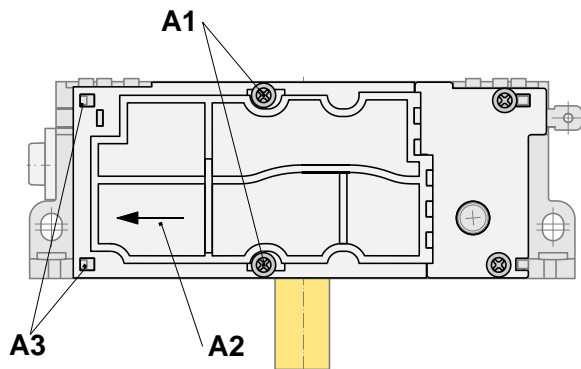
- .14** *emergency release base side and connection for external bowden cable*



- BZ** *bowden cable BZ-... (accessories - please order separately)*
N1 *unlocking direction emergency release*

4. Electrical connections

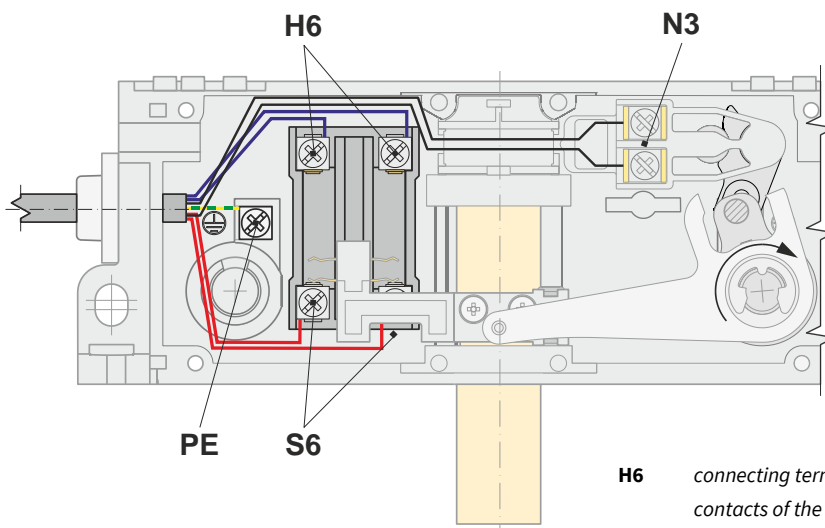
4.1 Dismantling of the cover



Unscrew cover screws (A1) min. 4 mm up to max. 7 mm.
Then move the cover (A2) in the direction of the cable entry to release the cover from the retaining hooks (A3).
The cover can now be removed.

After wiring the cover has to be mounted in reverse order.

4.2 Connecting and wiring



- H6** connecting terminals for auxiliary switch:
contacts of the auxiliary switch closed at unlocked door
- S6** connecting terminals for the switch of locking mechanism:
contacts of the switch for locking mechanism closed at locked door
- N3** connecting terminals for monitored emergency release
- PE** earthing connection

5. Settings

The door interlock has to be checked with respect to its safety function:

- check stroke of the latch bolt (X-dimension / Y-dimension)
- check complete drop down of the latch bolt - the contact for locking mechanism has to be actuated
- check central position of the latch bolt in the door drill hole respectively in the latch plate
- check free movement of the latch bolt
- check closing ability of the door (at latch bolt dropped off (CL) resp. in faulty closure position of the latch bolt (CLF)
- check the adjustment of the door switch (contact overtravel has to be ensured)
- check accessibility of the triangle of the emergency release
- at door interlocks with monitored emergency release: check activation of the safety circuit
- check interplay with the electromagnetic retiring cam fixed at the car wall
- check cable guide and electrical connections (proper insulation, observance of clearance and creepage distances (4 mm), proper grounding)

6. Maintenance

Normally no maintenance is necessary, because all parts are provided with high-quality lubricants.

In extreme operating conditions we suggest in regular inspection periods:

- the removal of rough contamination, if applicable clean door contacts
- to lubricate again, if the lubricants have become ineffective
- to check all preset settings (according to .4)
- to check that the fastening screws are tightly fastened
- to check that the screw at the roller lever is tightly fastened
- to retighten terminals for electrical cables

Damaged and defective devices have to be replaced.

7. Disassembly and disposal

The door lock is to be dismantled only in de-energized state and has to be disposed appropriately according to the national laws and regulations.

8. Technical data

norms		EN 81-20, EN 81-50, EN 81-21, EN 60947-5-1
certificates		type approval certificate: EU-DL 812 (CLF) and EU-DL 811 (CL)
switching capacity:		U _i = 250 V U _{imp} = 4 kV I _{th} = 10 A
	switch for locking mechanism	AC-15: U _e = 230 V I _e = 2 A DC-13: U _e = 200 V I _e = 1 A
	monitoring switch	AC-15: U _e = 230 V I _e = 2 A DC-13: U _e = 200 V I _e = 2 A
	auxiliary switch	AC-15: U _e = 230 V I _e = 2 A DC-13: U _e = 200 V I _e = 1 A
short-circuit capacity		T 10 A F 16 A
contact material		fine silver
actuation:		
	actuation torque (typical)	0.65 Nm at roller lever
	actuation force (typical)	17 N at the pull rod 8.5 N at the roller lever (at 35 mm stroke)
	max. force in non-operating state	4 N at the pull rod
connection		by screw terminal max. 1.5 mm ² cable entry M20x1.5 with clamping gland
level of protection		IP40
ambient air temperature		-10 °C up to +65 °C
weight		480 g to 740 g (according to version)

Notes:

Notes:



Hans & Jos. Kronenberg GmbH

Kurt-Schumacher-Str. 1 | D-51427 Bergisch Gladbach

T: +49 2204 / 207-0 | E: info@kronenberg-gmbh.de