



Hänel Installation Instructions WERAC safety light curtain directly in front of the access point (LV15095 and LVS)

Lean-Lift

Hänel Installation Instructions

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1. General instructions

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Caution

These Installation Instructions are intended for specially trained and authorised technicians employed by the Hänel factory or by Hänel representatives.

All safety instructions and general instructions provided in the Operating Manual "MANL-LL" and in the Installation Instructions "INST-LL-S" or "INST-LW" must be observed at all times!

In addition, the "Safety Rules & Requirements" provided in the Memorandum for Technical Field Service "SICHA" and the "Safety Rules" from the Training Auxiliary Personnel for Technical Field Service "SICHHK" must be observed!



Intended use

The Lean-Lift Safety Light Curtain LV15095 with detection range d=14-40mm (0.55-1.57") directly in front of the access point is a personal safety device to shut off a hazardous movement in accordance with product standard DIN EN 15095:2008-02.

The Lean-Lift Safety Light Curtain LVS with detection range d=14mm (0.55") directly in front of the access point is a personal safety device to prevent an unexpected start-up for "Remote control with operator view of the access point" according to DRAWS\Remote.DWG.

Any other use shall be considered non-compliant use.



WERAC safety light curtain directly in front of the access point (LV15095 and LVS)

2. Installation Requirements

1. Before starting the installation, secure the extractor against descending or falling.



! DANGER

The extractor is a suspended load that can fall.

Therefore, whenever working inside the lift, you have to lower it to ground level.

If this is not possible, you have to secure them using the locking device. (See operating manual "MANL-LL", work inside the lift by authorised personnel - Securing the extractor).

2. Switch off the main switch (Q2) and secure it from being switched on again using a padlock.



! DANGER

Risk of electrocution!

SAFETY INSTRUCTIONS



The lift must be de-energised before work begins.

- Switch off main switch (Q2).
- Secure the main switch (Q2) from being switched on again.
- Verify that the lift has been de-energised.
- Cover or block off neighbouring live parts. (Switch off external voltage source for multi-unit network and lock it using tool WZ-67)

3. Before entering the inside of the lift, secure the actuator of the safety switch on the service door (S3) with a padlock.

SAFETY INSTRUCTIONS



Secure the actuator latch!

Before all work, secure the actuator latch of the service door from being switched on again using a padlock.

WERAC safety light curtain directly in front of the access point (LV15095 and LVS)

3. Installation instructions:

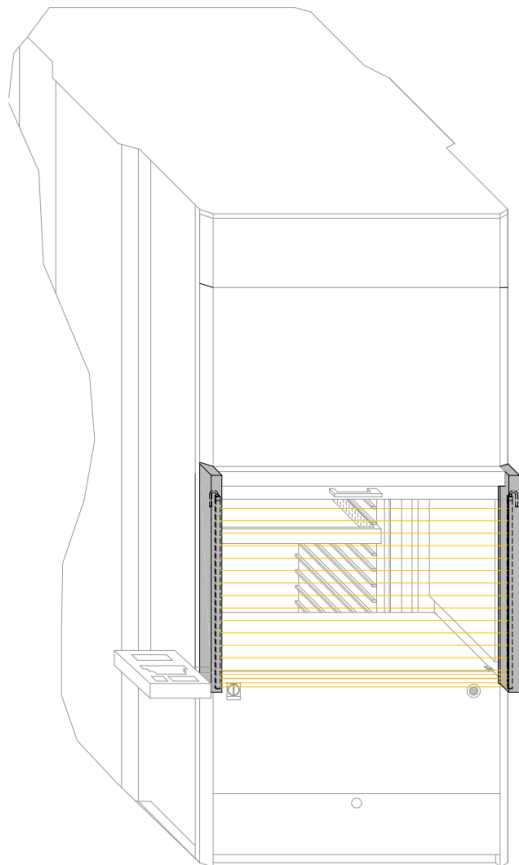


Fig. 1: Overview of Safety Light Curtain LV15095 directly in front of the access point with detection range $d=14-40\text{mm}$ (0.55-1.57").

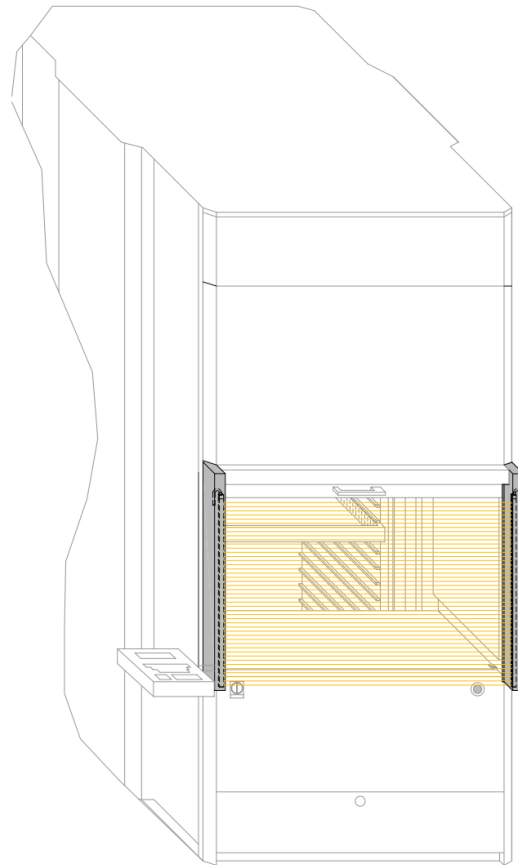


Fig. 2: Overview of Safety Light Curtain LVS directly in front of the access point with detection range $d=14\text{mm}$ (0.55")

WERAC safety light curtain directly in front of the access point (LV15095 and LVS)

3. Installation instructions: (continued)

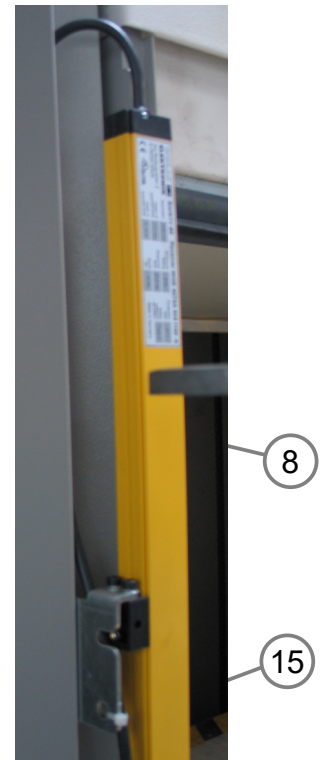
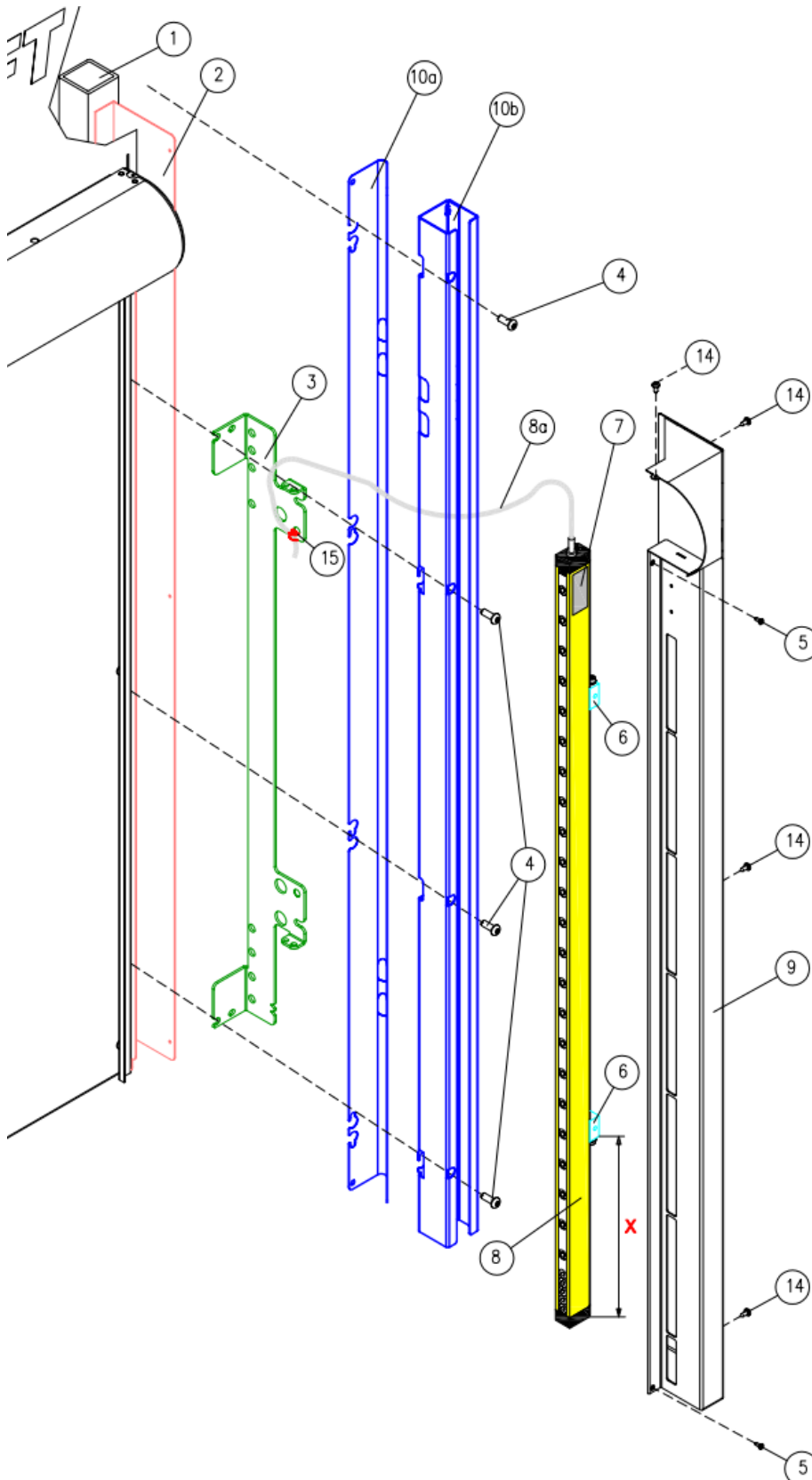


Fig. 4: Bending radius and cable strain relief clamp

Fig. 3: Safety light curtain LV15095 installation (safety light curtain LVS installation is identical)

WERAC safety light curtain directly in front of the access point (LV15095 and LVS)

3. Installation instructions: (continued)

Item	Description
1	Rectangular tube
2	Type width ≤ 3260: Right sliding door guide (1x) Left sliding door guide (1x) Type width > 3260: Light curtain side panel (2x)
3	Mounting bracket (2x) / (4x)*
4	Cross recessed pan head machine screw ISO7380 - M6x16 (6x) (8x only for access openings ≥ 1180 mm)
5	Countersunk (flat) head tapping screw (4x) ISO7050 - St-2.9x9.5-C-H galvanised
6	WERAC bracket (4x) / (8x)*
7	Light curtain type plate

Item	Description
8	Transmitter array (WERAC: Safety40) (1x) Receiver array (WERAC: Safety40) (1x)
8a	Safety light curtain cable
9	Right light curtain housing (1x) Left light curtain housing (1x)
10a	Sliding door weight guide plate standard (2x) (only if sliding door is present)
10b	Sliding door weight guide plate for self-closing sliding door (2x)
14	Flat-head tapping screw (8x) ISO14585-ST3.5x9.5-C galvanised
15	Cable tie 4.5x160mm

* For larger access opening with:
LV15095: > 5+31 beams or LVS: > 115 beams

Step	Task	Notes / illustration
1	Fasten the sliding door guide or light curtain side panel (<i>item 2</i>), mounting bracket (<i>item 3</i>) and guide plate (<i>item 10a or 10b</i>) on the rectangular tube (<i>item 1</i>) using a screw (<i>item 4</i>).	See Fig. 3
2	Repeat step 1 on the left side of the access point.	
3	Preassemble 2x or 4x Werac brackets each (<i>item 6</i>) to the transmitter and receiver array (<i>item 8</i>), then fasten them to each mounting bracket (<i>item 3</i>) using a screw and washer (<i>item 6.2</i>). Fasten the transmitter and receiver array (<i>item 8</i>) in place using the threaded pin (<i>item 6.1</i>). Observe setting dimension X while doing so. Ensure that the transmitter and receiver array (<i>item 8</i>) have the same orientation—the cable outlets on both arrays must be on the top end. The light curtain type plate (<i>item 7</i>) must be legible from the front.	Note Ensure that the sliding door is operating properly. If necessary, adjust the guide plate (<i>item 10a or 10b</i>). See Fig. 1, Fig. 2, Fig. 3, Fig. 5 and Fig. 6 Refer also to the end user guide "SAFETY 40 Accident prevention light barriers" from WERAC Electronics. Observe setting dimension X, see Fig. 3 and Fig. 5

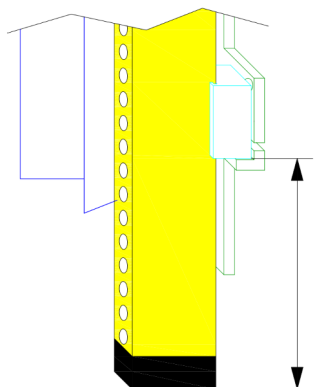


Note
Ensure that the sliding door is operating properly. If necessary, adjust the guide plate (*item 10a or 10b*).

See Fig. 1, Fig. 2, Fig. 3, Fig. 5 and Fig. 6
Refer also to the end user guide "SAFETY 40 Accident prevention light barriers" from WERAC Electronics.
Observe setting dimension **X**, see Fig. 3 and Fig. 5

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3. Installation instructions: (continued)



Dimension X (with tolerance specification)	Lean-Lift	
Access opening (mm)	880, 1180, 1480, 430, 895**	505, 580
Left	133 mm -2 mm (5.24 in -0.08 in)	133 mm -2 mm (5.24 in -0.08 in)
Right	203 mm -2 mm (7.99 in -0.08 in)	53 mm -2 mm (2.09 in -0.08 in)

** For a type width > 3260

Fig. 5: Detail of dimension X

Step	Task	Notes / illustration
4	Route the safety light curtain cable (item 8a). Guide the safety light curtain cable (item 8a) downward to the upper Werac bracket (item 6) while observing the minimum bend radius, and there fasten the safety light curtain cable (item 8a) along with any other cables (lighting for the access point, test button, etc.) to the mounting bracket (item 3) using one cable tie (item 15) (cable strain relief clamp). Route the safety light curtain cable (item 8a) along with any other cables further through the light curtain housing (item 9) down to the cover strip and, without bending it, from there to the outside corner of the cover strip (item 11).	See cable routing diagram "CABLELL1", "CABLELL2" or "CABLELL6" See Fig. 3, Fig. 4, Fig. 6, Fig. 7, Fig. 8 and Fig. 9 Note Under no circumstances is the safety light curtain cable (item 8a) to be crushed by the sliding door weights. Do not crease the connecting cables of the transmitter and receiver array (item 8).
5	Connect the transmitter and receiver array.	See circuit diagram "Safety component II"

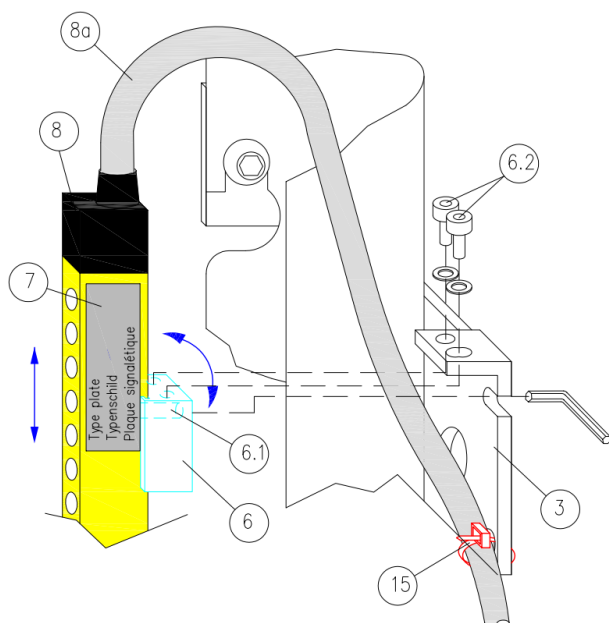


Fig. 6: Fastening the WERAC light curtain (LV15095 and LVS)

Item	Description
3	Mounting bracket (2x) / (4x)*
6	Werac bracket (4x) / (8x)*
6.1	Threaded pin DIN914 - M4x10 (4x) / (8x)* (scope of delivery from Werac)
6.2	Socket head cap screw ISO 4762 - M4x8 (8x) / (16x)* + Washer ISO 7089 - 4 (8x) / (16x)*
7	Type plate
8	Transmitter array (WERAC: Safety 40) (1x) Receiver array (WERAC: Safety 40) (1x)
8a	Safety light curtain cable
15	Cable ties

* For larger access opening with
LV15095: > 5+31 beams or
LVS: > 115 beams

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3. Installation instructions: (continued)

Step	Task	Notes / illustration
6	Align the transmitter and receiver array. Alternating between the transmitter and receiver arrays, determine the outermost boundaries of uninterrupted light contact, then adjust them to the centre position.	See Fig. 6 Refer also to the end user guide "SAFETY 40 Accident prevention light barriers" from WERAC Electronics.
7	Adjustment: WGN100-1 or WGN100-2: - Main switch Q2 or mains supply WZ-30 off - DIP S1-1 and DIP S1-2 to 1 - Main switch Q2 or mains supply WZ-30 on - Set the light curtain as described in Step 6 - DIP S1-1 to 0 - Wait 5 seconds (red LED on the controller flickers) - DIP S1-2 to 0 - Main switch Q2 or mains supply WZ-30 off - Main switch Q2 or mains supply WZ-30 on WGN110: - Main switch Q2 or mains supply WZ-30 off - DIP S1-1, DIP S1-2 and DIP S1-4 to 1 - Main switch Q2 or mains supply WZ-30 on - Set the light curtain as described in Step 6 - Close the sliding door (sliding door must remain closed for at least 1 second) - Mask the beams that are to be hidden on the transmitter array (<i>item 8</i>) (these are normally the lower 5 beams) - Open the sliding door all the way - Remove the adhesive strips from the transmitter array (<i>item 8</i>) - DIP S1-1 to 0 - Wait 5 seconds (red LED on the controller flickers) - Main switch Q2 or mains supply WZ-30 off - DIP S1-2 to 0 - Main switch Q2 or mains supply WZ-30 on - With the blanking function enabled, use the provided test bar to check whether the beams to be masked which have been taught in correspond to the beams you want to be masked.	Refer also to the end user guide "SAFETY 40 Accident prevention light barriers" from WERAC Electronics. Only for lifts with multiple access points and manual sliding door:  Note: With the blanking function enabled: defined light beams are not monitored (hidden) when the sliding door is closed. This function requires door position switches (S13/S14). Lifts without a second safety circuit: 1 NC contact / 1 NO contact Lifts with a second safety circuit: 1 NC contact / 2 NO contacts See Installation Instructions "NOTBE" Refer also to the end user guide "SAFETY 40 Accident prevention light barriers" from WERAC Electronics.
8	Fasten the light curtain housing (<i>item 9</i>) to the bottom front panel and sliding door panel using two screws (<i>item 5</i>). Fasten the light curtain housing (<i>item 9</i>) to the sliding door guide or light curtain side panel (<i>item 2</i>) using three screws (<i>item 14</i>) and to the lighting panel from above using one screw (<i>item 14</i>).	See Fig. 3

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3. Installation instructions: (continued)

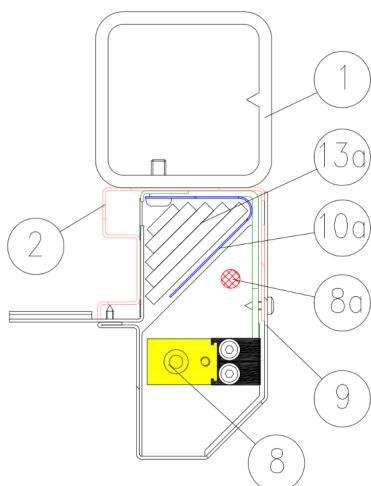


Fig. 7: Cable routing for light curtain housing

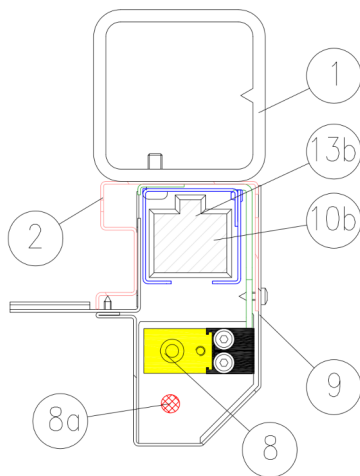


Fig. 8: Cable routing for light curtain housing

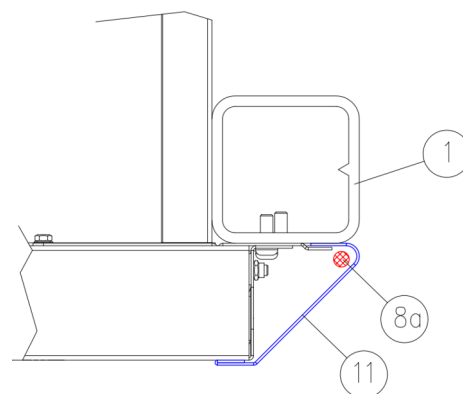


Fig. 9: Cable routing for cover strip

Item	Description
1	Rectangular tube
2	Type width ≤ 3260: Right sliding door guide (1x) Left sliding door guide (1x) Type width > 3260: Light curtain side panel (2x)
8	Transmitter array (WERAC: Safety40) (1x) Receiver array (WERAC: Safety40) (1x)
8a	Safety light curtain cable

Item	Description
9	Right light curtain housing (1x) Left light curtain housing (1x)
10a	Sliding door weight guide plate
10b	Sliding door weight guide plate (for self-closing sliding door)
11	Cover strip
13a	Standard sliding door weight (if present)
13b	Sliding door weight (for self-closing sliding door)

4. Checking the function before start-up

Step	Setting	Notes / illustration
1	After installing the safety light curtain, carry out a function check and ensure that the sliding door is operating properly. If a lens of the transmitter or receiver array (item 8) is covered by a separating bar of the light curtain housing (item 9), no lift run is possible. In this case, check setting dimension X (if necessary, use tolerance) and readjust the light curtain. For WGN 110: The light curtain must display "free" even when the sliding door is closed.	Check the protective field using the provided test bar. Refer also to the end user guide "SAFETY 40 Accident prevention light barriers" from WERAC Electronics. Observe setting dimension X, see Fig. 3 and Fig. 4 Green LED illuminated

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5. Removal

1. Before starting the removal, secure the extractor against descending or falling.



DANGER

The extractor is a suspended load that can fall.

Therefore, whenever working inside the lift, you have to lower it to ground level.

If this is not possible, you have to secure them using the locking device. (See operating manual "MANL-LL", work inside the lift by authorised personnel - Securing the extractor).

2. Switch off the main switch (Q2) and secure it from being switched on again using a padlock.



DANGER

Risk of electrocution!

SAFETY INSTRUCTIONS



The lift must be de-energised before work begins.

- Switch off main switch (Q2).
- Secure the main switch (Q2) from being switched on again.
- Verify that the lift has been de-energised.
- Cover or block off neighbouring live parts. (Switch off external voltage source for multi-unit network and lock it using tool WZ-67)

3. Before entering the inside of the lift, secure the actuator of the safety switch on the service door (S3) with a padlock.

SAFETY INSTRUCTIONS



Secure the actuator latch!

Before all work, secure the actuator latch of the service door from being switched on again using a padlock.

4. To remove the safety light curtains, correctly follow the reverse order of steps as that described previously in Chapter 3.

5. After removal, dispose of the structural components in an environmentally responsible manner (see installation instructions "INST-LL-S" or "INST-LW", Disposal instructions).



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6. Annex

Revision notes

Last issue dated:	2007-11-21
• Added LV15095	
	2008-04-29
• Changed item 6.1 and 6.2	
	2008-07-21
• WGN 110-0 added, item 4 changed	
	2011-05-25
• Mounting bracket changed, cable routing note	
	2011-10-19
• Separating bar added, dimension X changed, screws updated	
	2012-03-13
• Dimension X for various access openings, cable routing	
	2013-04-22
• Cable routing and cable ties	
	2014-04-17
• Type width > 3260 added	
	2015-07-28
• Larger access opening added	
	2019-02-07
• Adjustment: DIP S1-2 added	
	2020-02-14
• Updated access point design	
	2024-11-22
• Fig. 3 corrected	
	2025-01-29
• Sliding door weight guide plate for self-closing sliding door	

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