



Hänel Installation Instructions Antiglare lighting

Lean-Lift Multi-Space

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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 corresponding Operating Manual "MANL-LL" or "MANL-MS" and in the corresponding Installation Instructions "INST-LL-S" or "INST-LW" or "INST-MS" for the Lean-Lift or Multi-Space must be followed 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 of Auxiliary Personnel for Technical Field Service "SICHHK" must be observed!



Intended use

These Installation Instructions describe only the installation of the lighting inside or in front of the access point of for a Lean-Lift or Multi-Space.

Furthermore, these Installation Instructions contain notes for the spare part order (replacement of LED lamps of different types).

Any other use shall be considered non-compliant use.



2. Installation Requirements

1. Before starting the installation, secure the extractor, or cross-member with extractor, against descending or falling.



DANGER

The extractor or cross-member with 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 or operating manual "MANL-MS", Work inside the lift by authorised personnel - Securing the cross-member with 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.

3. Lighting in front of the access point

3.1 Installation instructions: LED lamp in front of the access point

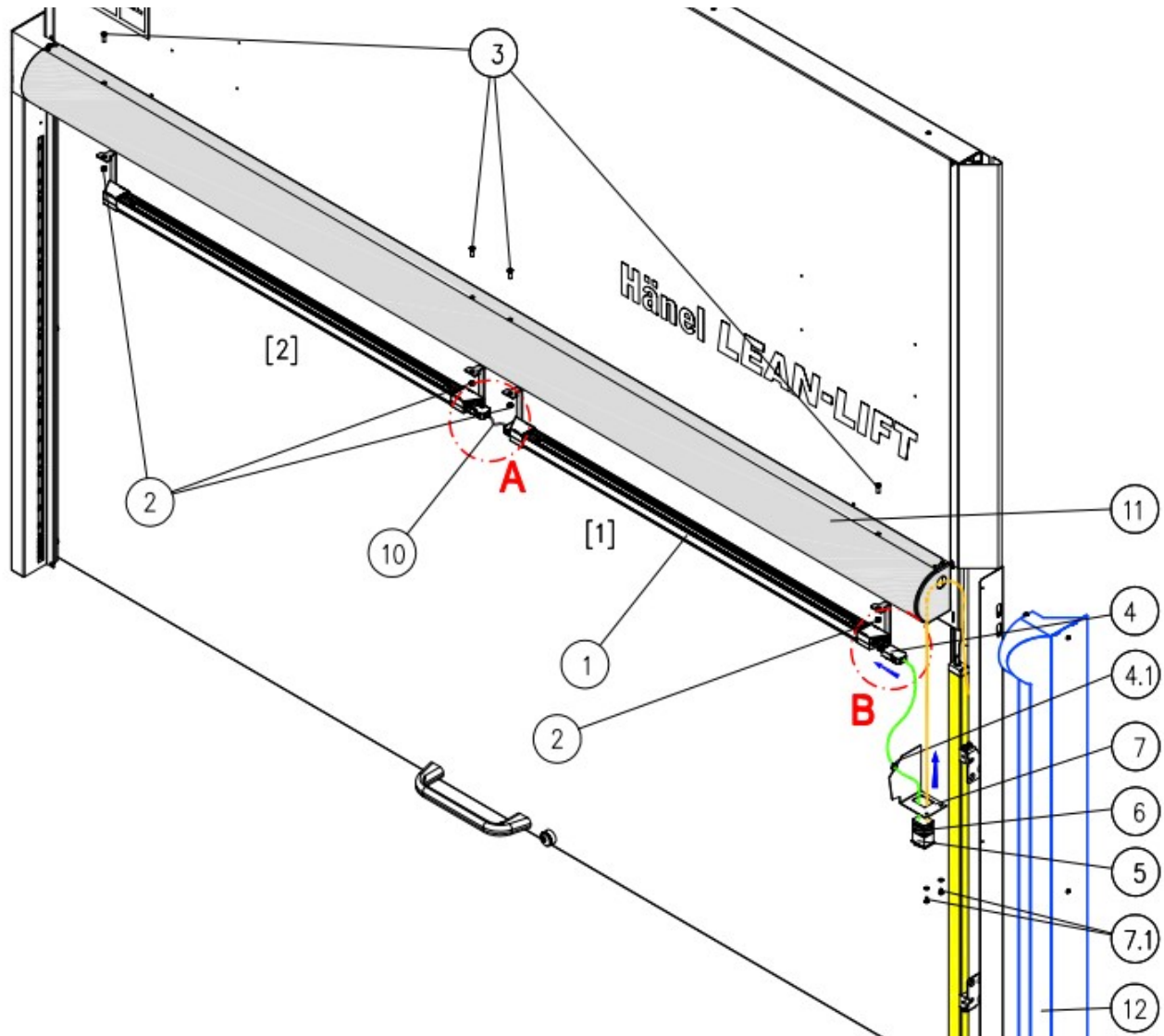


Fig. 1: Installing the LED lighting in front of the access point

Item	Description	Item	Description
1	LED lamp (lamp [1], lamp [2])	7	Switch cover plate
2	Nut ISO 4032 - M5 (2x for each lamp))	7.1	Sheet-metal screw ISO 7049 St 3.9x9.5 (2x) + Contact washer 4 galvanised (2x)
3	Countersunk screw ISO 7046 - M5x16 galvanised (2x for each lamp)	10	Connecting cable lamp [1] - lamp [2]
4	Connection plug	11	Lighting panel (2x for Type width > 3260)
4.1	Cable bushing	12	Light curtain housing
5	Light switch	[1]	Lamp 1
6	Terminal block	[2]	Lamp 2

3. Lighting in front of the access point (continued)

3.1 Installation instructions: LED lamp in front of the access point (continued)

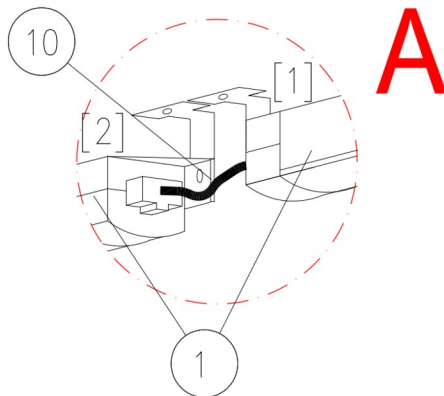


Fig. 2: Detail A from Fig. 1

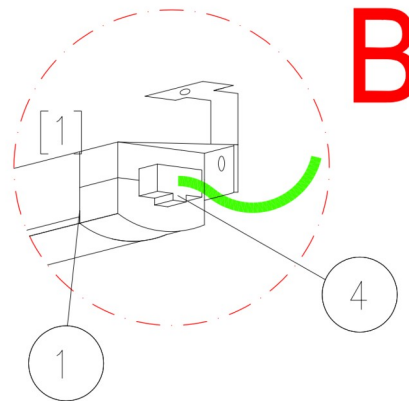


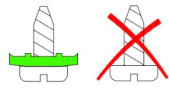
Fig. 3: Detail B from Fig. 1

Steps 1 - 8 are omitted for new delivery (pre-assembled in standard version)

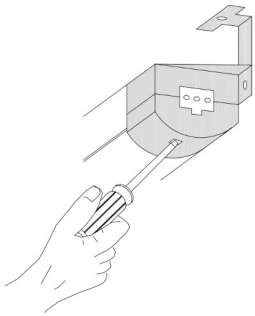
Step	Task	Notes / illustration
1	Fasten lamps (item 1) to lighting panel (item 3) using 2 screws (item 2) and nuts (item 11) for each.	See Fig. 1
2	Plug the connecting cable lamp [1] - lamp [2] (item 10) into lamp [1] and lamp [2].	See Fig. 2 only for Type width ≥ 2060
3	Plug the connection plug (item 4) into the lamp [1] (item 1).	See Fig. 3
4	Guide the power cable and lamp interconnect cable through the switch notch in the switch cover plate (item 7).	See Fig. 1  Note: For an access opening size ≥ 1330 mm (4' 4.76") and access point at standard height, the light switch is located in the housing of the light curtain for ergonomic reasons. (For connection, see also lighting circuit diagram and terminal plan X3)
5	Connect the current-carrying lines from the wiring cabinet to the terminal block for protection against direct contact (item 6) (connections 1 and 4) using cable lugs. Connect the switched lines of the lamps to the terminal block for protection against direct contact (item 6) (connections 2 and 5) using cable lugs.	See Fig. 1 (See also lighting circuit diagram and terminal plan)
6	Attach the terminal block (item 6) to the connections of the light switch (item 5).	See Fig. 1
7	Insert the light switch, with the 0 position on the right, into the switch notch from the outside.	See Fig. 1

3. Lighting in front of the access point (continued)

3.1 Installation instructions: LED lamp in front of the access point (continued)

Step	Task	Notes / illustration
8	Insert the switch cover plate (<i>item 7</i>) into the lighting panel (<i>item 11</i>) and fasten it using two screws and contact washers (<i>item 7.1</i>).	See Fig. 1   CAUTION: The contact washers (<i>item 7.1</i>) have to be used to guarantee the complete function of the earth conductor system. CAUTION: Make sure the lamp interconnect cable is routed through the cable bushing (<i>item 4.1</i>) and does not get crushed.
9	Attach the lighting panel (<i>item 11</i>) to the sliding door panel.	See Installation Instructions "INST-LL-S" or "INST-LW"
10	Cable routing as described in Chapter 3.2	See Chapter 3.2 Type width > 3260: only one lighting panel (<i>item 11</i>) is equipped with a mains power supply cable. Connect lamp [2] and lamp [1] of both lighting panels (<i>item 7</i>) to each other using connecting cable. Route the connecting cable that is between both lighting panels (<i>item 11</i>) through the two holes at the front of the lighting panel (<i>item 11</i>).
11	Connect the lighting according to the circuit diagram and terminal plan.	(See also lighting circuit diagram and terminal plan X3)
12	Check correct function of lighting.	

Notes on removing the plugs

Step	Task	Notes / illustration
1	To remove the connection plugs (<i>item 4</i>) or the connecting cable between lamp [1] - lamp [2] (<i>item 10</i>) press down the locking mechanism in the black cover cap using a screwdriver and pull out the plug from the lamp (<i>item 1</i>)	

3. Lighting in front of the access point (continued)

3.2 Cable routing prior to "Lean-Lift / Multi-Space Design Upgrade 2025"

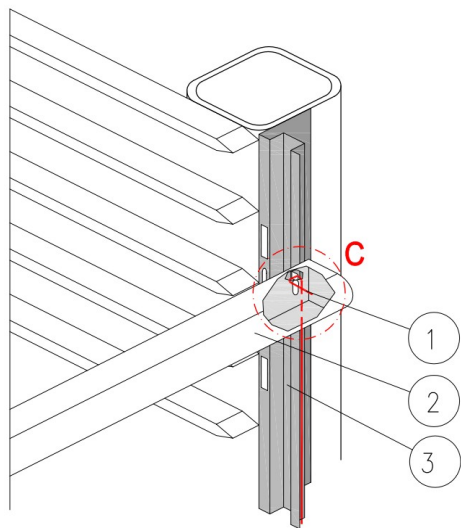


Fig. 4: Cable routing for lighting in front of the access point

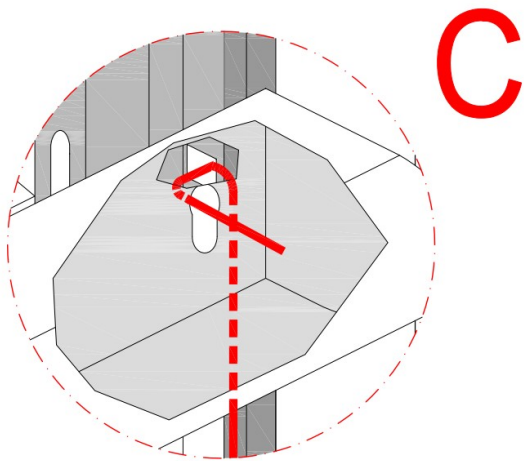


Fig. 5: Detail C from Fig. 5

Item	Description
1	Mains power cable
2	Lighting panel
3	Sliding door guide

Step	Task	Notes / illustration
1	Route the mains power supply cable (<i>item 1</i>) through the openings in the lighting panel (<i>item 2</i>) and sliding door guide (<i>item 3</i>) all the way to the sliding door guide (<i>item 3</i>).	See Fig. 4 and 5
2	Route the power cable (<i>item 1</i>) into the wiring cabinet or electrical tray according to the cable routing diagram.	See the "cableLL1" and "cableLL2" cable routing diagrams for Lean-Lift See the "cableMS1" cable routing diagram for Multi-Space

3. Lighting in front of the access point (continued)

3.3 Cable routing after "Lean-Lift / Multi-Space Design Upgrade 2025"

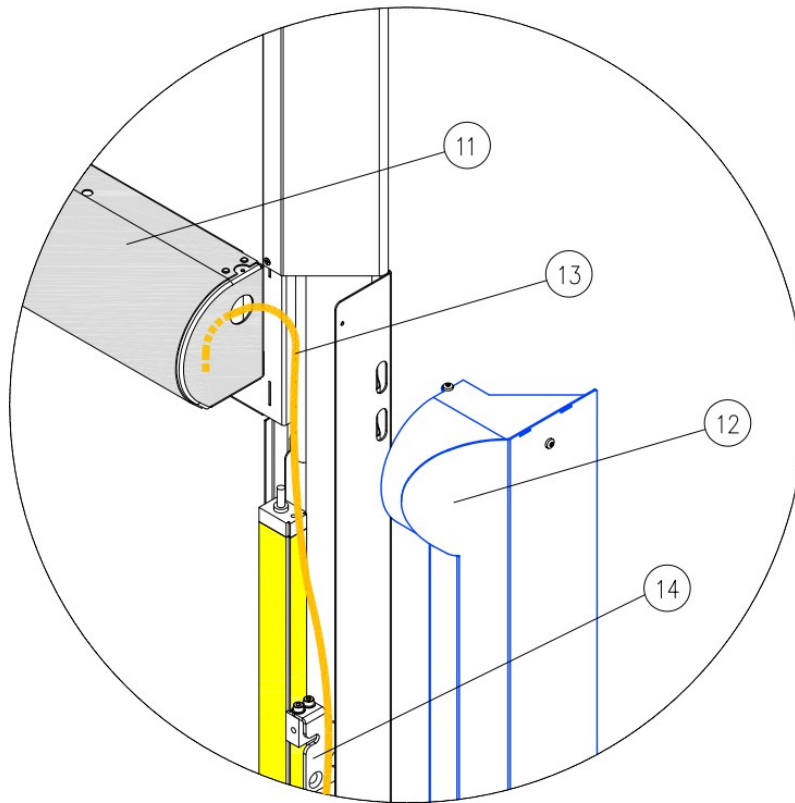


Fig. 6: Cable routing for lighting in front of the access point

Item	Description
11	Lighting panel
12	Light curtain housing
13	Mains power cable
14	Light curtain holding bracket

Step	Task	Notes / illustration
1	Route the mains power supply cable (item 13) through the side opening of the lighting panel (item 11) to the light curtain holding bracket (item 14) and fasten it there.	See Fig. 6 Note For routing and fastening within the light curtain housing (item 12) : see installation instructions "LICHTSCB-WERAC", "LICHTSCC-WERAC" or "LICHTSCD"
2	Route the power cable (item 13) into the wiring cabinet or electrical tray according to the cable routing diagram.	See the "cableLL1" and "cableLL2" cable routing diagrams for Lean-Lift See the "cableMS1" cable routing diagram for Multi-Space

4. Lighting in the access point

4.1 Installation instructions: LED lighting fixture in the access point

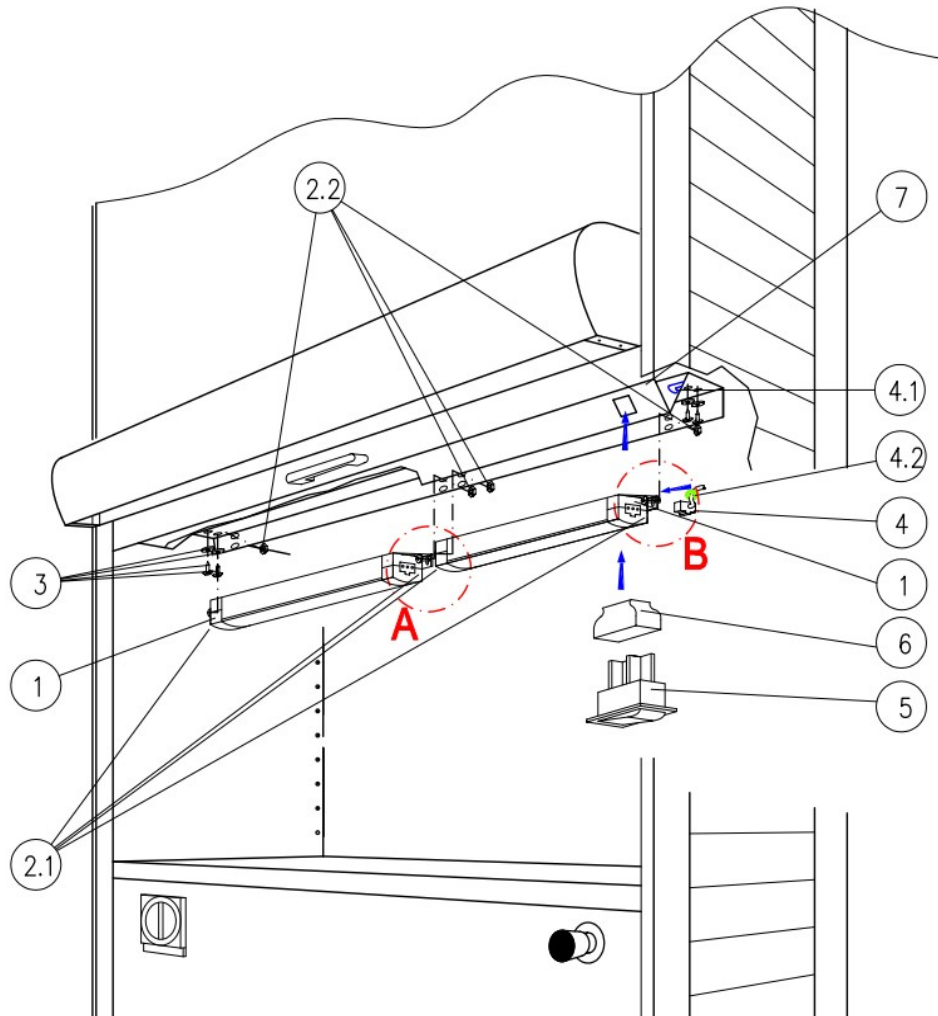


Fig. 7: Installing the LED lighting in the access point

Item	Description	Item	Description
1	LED lamp (lamp [1], lamp [2])	4.1	Cable bushing
2.1	Cross recessed pan head machine screw ISO 7045 - M5x10 - 4.8 galvanised (2x for each lamp)	4.2	Entry grommet with membrane PLIO DG16 PVC (1x)
2.2	Nut ISO 4032 - M5 (2x for each lamp)	5	Light switch
3	Sheet-metal screw ISO 7049 St 3.9x9.5 (4x for each lighting panel) + Contact washer 4 galvanised (4x for each lighting panel)	6	Terminal block
4	Connection plug	7	Lighting panel (2x for Type width > 3260)
		10	Connecting cable lamp [1] - lamp [2]
		[1]	Lamp 1
		[2]	Lamp 2

4. Lighting in the access point (continued)

4.1 Installation instructions: LED lighting fixture in the access point (continued)

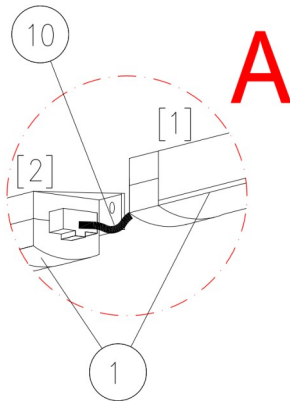


Fig. 8: Detail A from Fig. 6

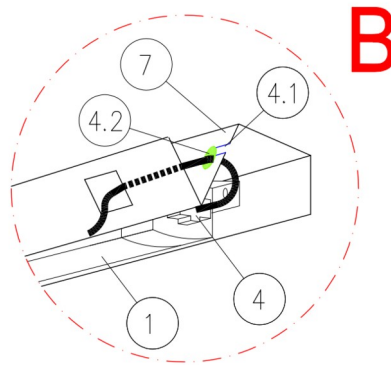


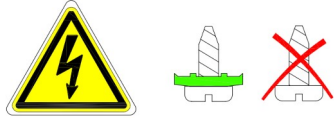
Fig. 9: Detail B from Fig. 6

Steps 1 - 7 are omitted for new delivery (pre-assembled in standard version)

Step	Task	Notes / illustration
1	Fasten lamps (<i>item 1</i>) to lighting panel (<i>item 7</i>) using 2 screws (<i>item 2.1</i>) and nuts (<i>item 2.2</i>) for each.	See Fig. 7
2	Plug the connecting cable lamp [1] - lamp [2] (<i>item 10</i>) into lamp [1] and lamp [2].	See Fig. 8 only for Type width ≥ 2060
3	Plug the connection plug (<i>item 4</i>) into the lamp [1] (<i>item 1</i>).	See Fig. 9
4	Guide the power cable and lamp interconnect cable through the switch notch in the lighting panel (<i>item 7</i>). Push the entry grommet with membrane (<i>item 4.2</i>) of the lamp interconnect cable into the cable bushing (<i>item 4.1</i>) of the lighting panel (<i>item 7</i>).	See Fig. 7 and 9  Note: For an access opening size ≥ 1330 mm (4' 4.76") and access point at standard height, the light switch is located in the housing of the light curtain for ergonomic reasons. (For connection, see also lighting circuit diagram and terminal plan X3)
5	Connect the current-carrying lines from the wiring cabinet to the terminal block for protection against direct contact (<i>item 6</i>) (connections 1 and 4) using cable lugs. Connect the switched lines of the lamps to the terminal block for protection against direct contact (<i>item 6</i>) (connections 2 and 5) using cable lugs.	See Fig. 7 (See also lighting circuit diagram and terminal plan)
6	Attach the terminal block (<i>item 6</i>) to the connections of the light switch (<i>item 5</i>).	See Fig. 7
7	Insert the light switch, with the 0 position facing down, all the way into the switch notch from the outside.	See Fig. 7

4. Lighting in the access point (continued)

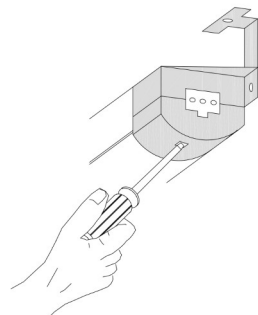
4.1 Installation instructions: LED lighting fixture in the access point (continued)

Step	Task	Notes / illustration
8	Lay the lighting panel (<i>item 7</i>) inside the access point and route the mains power supply cable in accordance with Chapter 4.2 all the way to the sliding door guide.	See Chapter 4.2 Type width > 3260: only one lighting panel (<i>item 7</i>) is equipped with a mains power supply cable.
9	Insert the lighting panel (<i>item 7</i>) into the top access point cover and fasten it using 4 screws and contact washers (<i>item 3</i>).	See Fig. 7 
10	Cable routing as described in Chapter 4.2	See Chapter 4.2 only for Type width > 3260: Connect the [2] lamp and the [1] lamp of both lighting panels (<i>item 7</i>) to each other using connecting cable.
11	Connect the lighting according to the circuit diagram and terminal plan.	(See also lighting circuit diagram and terminal plan X3)
12	Check correct function of lighting.	

CAUTION:

The contact washers (*item 3*) have to be used to guarantee the complete function of the earth conductor system.

Notes on removing the plugs

Step	Task	Notes / illustration
1	To remove the connection plugs (<i>item 4</i>) or the connecting cable between lamp [1] - lamp [2] (<i>item 10</i>) press down the locking mechanism in the black cover cap using a screwdriver and pull out the plug from the lamp (<i>item 1</i>)	

4. Lighting in the access point (continued)

4.2 Cable routing

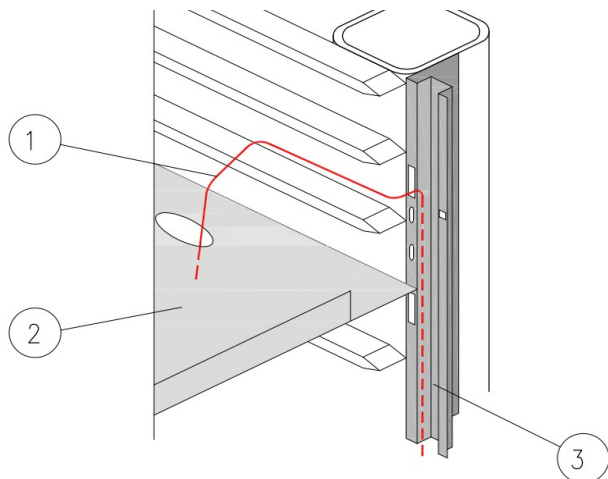


Fig. 10: Cable routing through the top access point cover

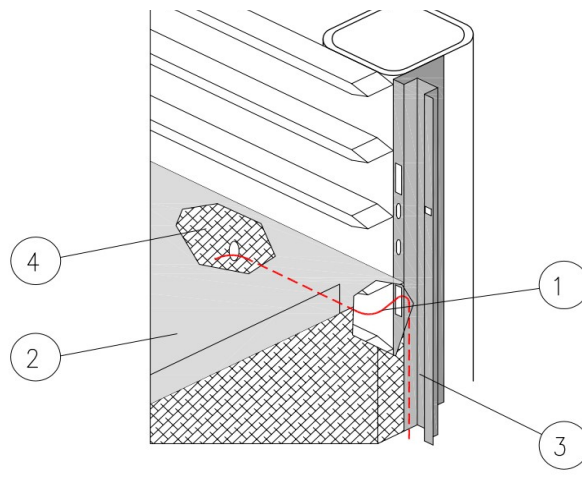


Fig. 11: Cable routing behind the right access point side panel

Item	Description	Item	Description
1	Mains power cable	3	Sliding door guide
2	Top access point cover	4	Right side panel

Step	Task	Notes / illustration
1	For version: - with high-speed door for type width ≤ 3260 - with network camera for all type widths Route the mains power supply cable (<i>item 1</i>) through the opening in the top access point cover (<i>item 2</i>) and opening in the sliding door guide (<i>item 2</i>) all the way to the sliding door guide (<i>item 2</i>). For version: - without high-speed door for type width ≤ 3260 (without network camera) - with high-speed door for type width > 3260 (without network camera) Route the mains power supply cable (<i>item 1</i>) through the opening in the right side panel (<i>item 4</i>) and opening in the sliding door guide (<i>item 2</i>) all the way to the sliding door guide (<i>item 2</i>).	See Fig. 10 See Fig. 11 Note Remove cover cap from the corresponding opening of the right side panel (<i>item 4</i>).
2	With network camera and LED lighting: With network cameras, there are two lighting panels within the access point, one front and one rear. Use the connection cable "Front lighting panel - rear lighting panel" for this purpose.	Route the "Front lighting panel - rear lighting panel" connecting cable to the right in the lighting panel. Use 6 adhesive bases with cable ties for the cable fastener. Note For lifts with type depth = 635 and high-speed door, there is only one lighting panel.
3	Route the power cable (<i>item 1</i>) into the wiring cabinet or electrical tray according to the cable routing diagram.	See the "cableLL1" and "cableLL2" cable routing diagrams for Lean-Lift See the "cableMS1" cable routing diagram for Multi-Space

5. Dimensioning the mains supply (only for spare part orders)

5.1 Checking the voltage source (power pack T15)

Important note



When replacing LED lamps of PowerLine series 1021 with system lamps of series 1037, you must pay attention to the increased power consumption related to the system. **After** the lamps are replaced, therefore, the layout of power pack T15 must always be checked based on the power consumption and, if necessary, a more powerful mains power supply unit must be installed. For new deliveries, power pack T15 is correctly dimensioned at the factory.

Step	Task	Notes / illustration
1	Replacing the desired LED lamps	See Chapter 3 or 4
2	Switch on the carousel and all LED lamps.	 Note Make sure that no LED lamps are dimmed.
3	Use a DC-voltage clamp-on ammeter to measure the total power consumption of the LED lamps.	Use tool "WKZ-3156". Perform a measurement at the single-wire connection which is connected to the "V+" connecting point of power pack T15.
4	Compare the measured total power consumption with the rated current of the installed power pack T15. The next steps are described in the following table.	 Note The rated current of the installed power pack T15 is specified on the component or can be taken from the table "Overview of power packs T15".

Measured total power consumption ≤ rated current T15	Measured total power consumption > rated current T15		
No change to the mains power supply unit T15 is required	Measured total power consumption > 5.2 A	Measured total power consumption > 2.5 A	Measured total power consumption > 1.3 A
		 DANGER Risk of electrocution! Observe safety instructions (see Chapter 2: Installation requirements)	
	Additional mains power supply unit T15/2 required → Request corresponding circuit diagrams in the factory	Replacement of the mains power supply unit T15 from "T6-01-2" to "T6-06" and of the circuit breaker F18 from single-pole 4 A, D-type to two-pole 4 A, D-type; Note the 2-phase connection! See Fig. 11	Replacement of the "T6-01-1" mains power supply unit T15 with "T6-01-2" and of the circuit breaker F18 from single-pole 2 A, D-type to single-pole 4 A, D-type

Overview of power packs T15

Mains power supply unit type	Spare part number	Power [W]	Rated current [A]
6EP3331-6SB00-0AY0 (6EP1331-1SH03)	T6-01-1	30	1,3
6EP3332-6SB00-0AY0 (6EP1332-1SH43)	T6-01-2	60	2,5
6EP1333-3AB0 (6EP1333-3BA10)	T6-06	120	5,2

5. Dimensioning the mains supply (only for spare part orders) (continued)

5.1 Checking the voltage source (power pack T15) (continued)

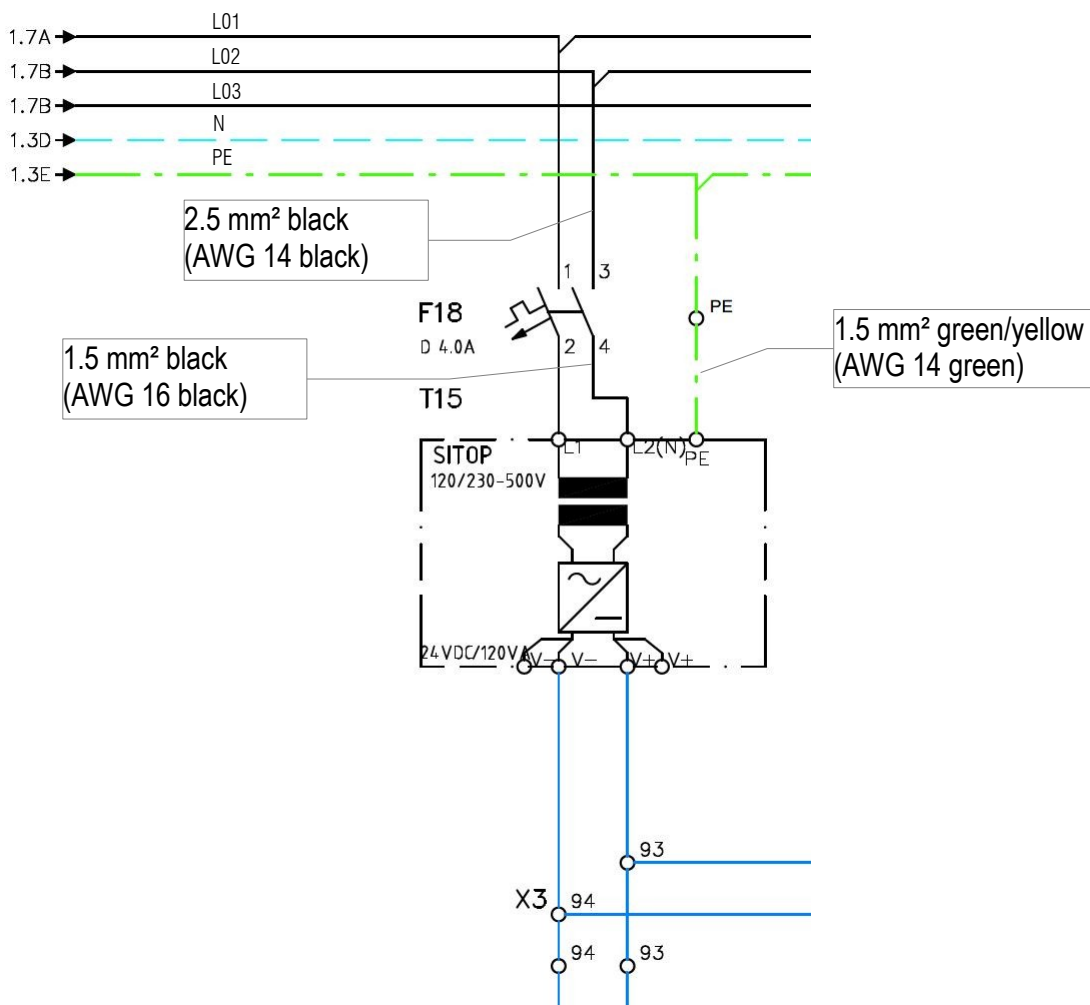


Fig. 12: 2-phase connection of mains power supply unit T15

6. Removing antiglare lighting

1. Before starting the removal, secure the extractor, or cross-member with extractor, against descending or falling.



! DANGER

The extractor or cross-member with 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 or operating manual "MANL-MS", Work inside the lift by authorised personnel - Securing the cross-member with 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 antiglare lighting in an orderly manner, follow the reverse order of steps as that described previously in Chapters 3 and 4.
5. After removal, dispose of the structural components in an environmentally responsible manner (see Installation Instructions "INST-LL-S" or "INST-LW" or "INST-MS", Disposal instructions).



7. Annex

Revision notes

- | | |
|--|------------|
| Last issue dated: | 2006-11-02 |
| • Added intended use and disposal | |
| | 2007-08-27 |
| • Chapter 3: Item 7.1 St2.9 after St3.5 | |
| | 2007-10-04 |
| • Screws revised | |
| | 2008-05-08 |
| • Added cable routing | |
| | 2010-06-17 |
| • Added LED lighting | |
| | 2011-08-26 |
| • Fastening fluorescent lamps updated | |
| | 2012-03-13 |
| • Note on camera lighting with LED added | |
| | 2012-11-12 |
| • Contact washers added, without dimming module | |
| | 2015-02-03 |
| • Contact washer added, Type width > 3260 note added | |
| | 2016-06-13 |
| • Note added about network camera, high-speed door and type depth = 635 | |
| | 17-09-13 |
| • Fluorescent lamps removed, LED lamp series 1037 added, Chapter 5 added | |
| | 2021-04-20 |
| • Cable grommet for lighting in the access point added | |
| | 2021-10-19 |
| • Note about cover cap in side panel added | |
| | 2021-12-16 |
| • Note on removing the plugs added | |
| | 2023-09-27 |
| • Updated access point design | |

Hänel

Büro- und Lagersysteme

Postfach 11 61
D-74173 Bad Friedrichshall
Phone: +49 7136/27725
Fax: +49 7136/27741
<http://www.hanel.de>

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