

Operating manual

ALP-Passenger lifts



Translation based on the original German version!

Document no. 109000002

Every operator, before he places the device in service, must read the operating manual!

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Assignment of these operating instructions

These assembly and operating instructions ...

Document no.:	109000002
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... applies to:

Type:	PH / PHI 1400-EU
	PH / PHI 1300-EU
	PH / PHI 1200-EU
	PH / PHI 1100-EU
	PH / PHI 900-EU
	PH / PHI 760-EU
	PHC / PHCI 1200-EU
	PHC / PHCI 1100-EU
	PHC / PHCI 940-EU
	PHC / PHCI 800-EU
	PHC / PHCI 650 EU

1 Introduction	6
2 Description	7
3 Transport	8
3.1 Forklift transport.....	9
4 Stable set up	10
4.1 Extension arm use.....	13
4.2 Halfen anchoring systems.....	13
5 Start up	14
6 Handling	15
7 Operating the lift	17
7.1 Two-handed operation.....	18
7.2 Foot operation.....	18
7.3 Operation from the switch box.....	19
8 Unauthorized use	20
9 Emergency lowering	21
10 Additional lowering	22
11 Working on electrical facilities	23
12 Lift models	24
12.1 Battery/Batteries in the case.....	25
12.2 Batteries in the chassis frame.....	25
13 Supervision of the safety facilities / Regulations requiring compliance	26
14 Maintenance and inspection	28
14.1 Excerpt from the TRADE ASSOCIATION Policy BGG 945 Point 5.4.....	29
14.2 Excerpt from the TRADE ASSOCIATION Policy BGG 945 Point 5.3.....	29
15 Conduct in the Event of Disruption	30
16 Replacement Parts	31
17 Technical Data	32
18 Special equipment and accessories	34
18.1 Additional operation from below.....	34
18.2 Passenger / Load switching (Photo 26).....	34

19 Safety regulations.....	35
20 Index.....	36

1 Introduction

The “Guidelines 2006/42/EG” and the EN280-2001 provide the basis for the set-up and handling of this working platform. Since the constructive design of the working platform is executed on the basis of EN280, reference is additionally made in the following Operating Instructions to the corresponding passages.

2 Description

The ALP Passenger Lift with electro-hydraulic drive is a mobile, hand-controlled working platform that is permitted to be utilized in buildings, in open spaces and exclusively on level surfaces. The max. resulting noise pressure level of the working platforms is < 70 dB(A). For the individual models, the following maximum loads apply:

Lift Model	Approve load capacity [kg]	= 1 Person [kg]	+ Payload [kg]	max. permissible side force [kg]
PH/PHI 1400-EU	115	á 80	35	20
PH/PHI 1300-EU	135	á 80	55	20
PH/PHI 1200-EU	140	á 80	60	20
PH/PHI 1100-EU	140	á 80	60	20
PH/PHI 900-EU	140	á 80	60	20
PH/PHI 760-EU	140	á 80	60	20
PHC/PHCI 1200-EU	135	á 80	55	20
PHC/PHCI 1100-EU	140	á 80	60	20
PHC/PHCI 940-EU	140	á 80	60	20
PHC/PHCI 800-EU	140	á 80	60	20
PHC/PHCI 650-EU	140	á 80	60	20

The models PHI and PHCI correspond in their design with models PH and PHC.

With additional ballast weights, the support mass was kept as low as possible in order to also ensure the ability to work within restricted space. Removal or displacement of the ballast weights is strictly forbidden! Alterations may only be conducted by a person authorized by the manufacturer.

Depending on the extension, the working platforms are also approved for external use.

However, use in wind strengths greater than 6 according to the Beaufort Scale is not permissible.

3 Transport

The ALP Passenger Lift can be transported in vehicles or on trailers, in both a lying or standing position. When transporting in a lying position, the Rail Guard (Photo 1) must always be fully secured into position. Otherwise the rails fall apart from one another; additionally, the Tank Ventilation Valve (Photo 2) must always be closed to prevent the hydraulic oil from seeping out.



Photo 1

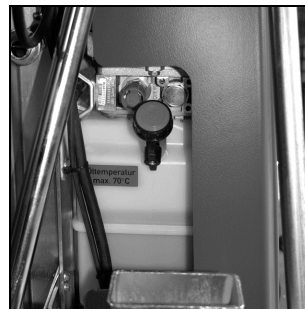


Photo 2

Lift Model PHCI can only be transported in a standing position.

Lift Model PH 1400/PHI 1400 must always be handled by 2 persons.

The PH/PHC working platforms are unloaded with the assistance of the standard equipment telescopic tilting device from the vehicle or trailer (also applies for loading), (Photo 3 & 4); The PHCI model should be loaded and unloaded using a loading ramp.

We recommend also using a loading ramp for the models, PH 1200/1300/1400 and PHI.



Photo 3



Photo 4

This is followed by transport to the worksite. The transport support is used for passing through doors (Standard = 2 m) for the PH and PHI models (Photo 5). For PHI models, we recommend at least two persons for tipping onto the transport support.

When the device is put in place, the foot brakes on both mobile wheels must be activated (Photo 6) in order to prevent unintentional rolling of the device. This applies in particular for positioning on areas with slopes.



Photo 5



Photo 6

3.1 Forklift transport

All PH/PHI/PHC/PHCI - models are compatible for transport with a forklift as a standard equipment feature. The following must be observed in this regard:

- The lift prongs may only have a maximum width of 140 mm, minimum width of 80 mm, and a maximum height of 60 mm.
- The prongs must be set so that the chassis frame is taken up over the forklift bags (Adjust the external width to the chassis frame).
- Loading of the working platform must be done slowly; carefully insert the prongs from the motor side into the chassis frame up to the mechanical limit stop (Photo 7).
- Secure the working platform with security straps prior to lifting and driving (Photo 8)!



ATTENTION!

The variations of the forklift extend significantly!



Photo 7



Photo 8

4 Stabile set up

- 1) This working platform is to be set up in accordance with the Operating Instructions in such way that there are no squeezing or pinching points between the lift platform and parts of the surrounding area, and such that with proper operation the activities to be conducted on the loading facilities or in the event of a load can be carried out without impairment.
- 2) The permissible ground load is to be observed in the proper set up and start-up of this working platform.



WARNING!

The permissible ground load may not be exceeded.

- 3) Working platforms set up or extending into the traffic space of vehicles are to be safeguarded against the traffic hazards in an appropriate manner.

The extension arms must be attached at the worksite. For this, the following is possible:

- a) Standard Arrangement: Use only with uniform extension arm length (Photo 9).

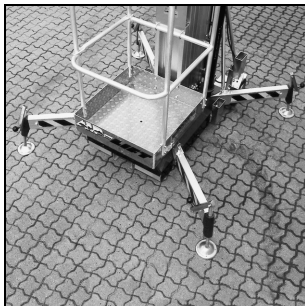


Photo 9

Permissible for external and internal use!

For internal and external use, there are fundamentally varying extension arm lengths for each respective working platform. If operation of the working platform for internal and external use (with wind load) is permissible, the Operator must first ascertain what extension arm length is needed for the assignment type (**ABSOLUTELY REQUIRED!**). This can be gathered from the following chart or the Inspection Book which is to accompany the device at all times. "Mixing" the extension arms is impermissible for such assignment types!

Lift Model	Extension Arm Length INTERNAL [mm]	Extension Arm Length EXTERNAL [mm]
PH 1400-EU	1210	2305
PH 1300-EU	1140	2150
PH 1200-EU	1140	2115
PH 1100-EU	900	1760
PH 900-EU	715	1500
PH 760-EU	635	1210
PHC 1200-EU	1050	2115
PHC 1100-EU	850	1880
PHC 940-EU	715	1550
PHC 800-EU	635	1300
PHC 650-EU	535	1050
PHI 1400-EU	1050	2115
PHI 1300-EU	900	1835
PHI 1200-EU	915	1835
PHI 1100-EU	715	1500
PHI 900-EU	535	1300
PHI 760-EU	535	1050
PHCI 1200-EU	765	1835
PHCI 1100-EU	635	1575
PHCI 940-EU	535	1300
PHCI 800-EU	535	1050
PHCI 650-EU	535	1050

Stabile set up

- b) For wall work: Utilization with varying extension arm length (Photo 10).

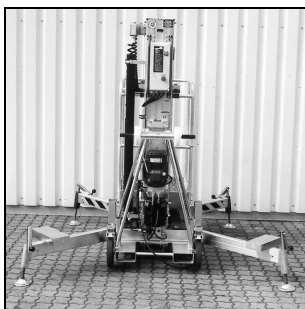


Photo 10

Only permissible for external use!

Only the assignment type depicted is permissible for use with varying extension arm lengths (two “long” extension arms with additional counterweights on the aggregate side and two “short” extension arms on the cage side)!

The wall height must exceed the platform working height!
In this extension arm setting, one counterweight must be attached to each of the two rear extension arms with precisely defined space intervals (see chart), since the standing stability is not otherwise guaranteed.

Lift Model	Extension Arm Length Aggregate side [mm]	Extension Arm Length Cage side [mm]	Conterweight per extension arm [kg]
PH 1400-EU	2305	1210	90
PH 1300-EU	2150	1140	80
PH 1200-EU	2115	1140	80
PH 1100-EU	1760	900	65
PH 900-EU	1500	715	50
PH 760-EU	1210	635	30
PHC 1200-EU	2115	1050	95
PHC 1100-EU	1880	850	80
PHC 940-EU	1500	715	60
PHC 800-EU	1300	635	45
PHC 650-EU	1050	535	25
PHI 1400-EU	2115	1050	80
PHI 1300-EU	1835	900	95
PHI 1200-EU	1835	900	90
PHI 1100-EU	1500	715	80
PHI 900-EU	1300	535	70
PHI 760-EU	1050	535	30
PHCI 1200-EU	1835	765	90
PHCI 1100-EU	1575	635	100
PHCI 940-EU	1300	535	80
PHCI 800-EU	1050	535	50
PHCI 650-EU	1050	535	20

4.1 Extension arm use

Slide and secure the 4 extension arms into the corresponding fittings; lock the bolts into place (Photo 11). In the EU-1 design (without special options such as e.g. Passenger/Load Switching), the 4 illuminated displays in the switch box lid indicate when all extension arms are retracted. Operation is however only permissible when the extension arm is vertical and has been correctly fixed into place through the spindling support plate, applying a water level to the rear rail of the working platform (Photo 12). It is recommended that this work step should be carried out by 2 people. Ensure that the undercarriage of the working platform is raised approximately 2 cm from the ground with all wheels/guide rollers.

The working platform is vertical when both air bubbles are between the markings provided on the water level attached to the rear of the lifting apparatus (mast).

4.2 Halfen anchoring systems

In PH/PHI -1100/1200/1300/1400, connect the braces with the extension arms (Photo13).

In this assembly, the 4 extension arms must first be anchored into the corresponding fittings. (Lock the bolts into place). Afterwards pull the braces apart and bolt together with the extension arms. This is done with slight correction of the individual extension arm settings. Then secure with the middle bolt. All bolts must additionally be secured with the spring pin provided.



WARNING!

For external use, all 4 extension arms must be braced.



WARNING!

For internal use, at least the two extension arms on the aggregate side must be braced.



Photo 11



Photo 12

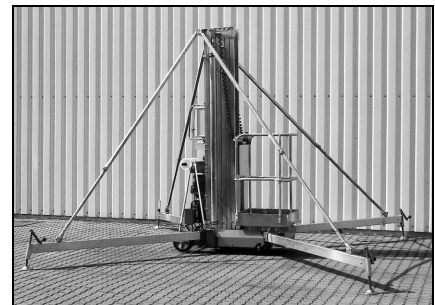


Photo 13

5 Start up



ATTENTION!

Before start-up, unbolt the carriage * and open the Tank Ventilation Valve!

The Rail Guard is pulled out, turned toward the rear and sunk into the last rail (excluded PHC-HI). The Tank Ventilation Valve must be opened during operation; otherwise the hydraulic system will be damaged (pump, seals). Ensure that the working platform receives sufficient electricity. **Attention!** Excessively long electrical lines or too many consumers can lead to disruptions and/or to defects in working platform. After connection to the electricity supply, set the key switch on the Switch Box Function. Make the electrical connection with the supply network using a residual current circuit breaker or small size current distributor.

*Unbolting not necessary with PHCI

6 Handling

Utilize the ALP Passenger Lift only on even surfaces with a firm underground, and never overload. Never push the device when it is extended. Elevating of the passenger & payload takes place via an electro-hydraulic drive. Important! Before work starts with the ALP Passenger Lift, the Operator must become acquainted with the device and be precisely briefed.

From 2014 production year onwards, the ALP personnel lifts PH/PHI/PHC/PHCI/PHCHI ...EU are fitted with an **anchorage point** (clunk - click) **for the personal safety equipment of the user**. This equipment is not absolutely necessary for the operation of the lift, but it is recommended!

! ATTENTION!

If however, safety regulations have been issued by the employer for the use of personal safety equipment when using the ALP personnel lifts, the following applies:

The use of the personnel lifts **is permitted only** when the user in the lift cage is attached to the anchorage point provided by means of a safety harness (full body) with an adjustable safety cable. The anchorage point is located on the bars on the cage side (see Photo 13.1).



Photo 13.1

! ATTENTION!

This anchorage point may only be used to fasten approved “personal safety equipment”. The anchorage point is not designed to cope with a possible fall from the working platform.

! WARNING!

The safety cable of the “personal safety equipment” must be short enough to ensure that the operator cannot get beyond the safety rail of the lift cage. Please pay attention the current regulations and information of the relevant professional association in this connection.

Handling

With the working platforms PH/PHI 1200, PHC/PHCI 1200, the option of cave height adjustment is available. The lift cage can manually be brought into two prescribed positions with these working platforms. To do this, the fastening bolt secured with a spring pin must be detached. After this, the position of the cage can be altered. The fastening bolt must be reinserted in the new position and secured with the spring pin. Only after proper securing can the working platform be extended, since the insertion of the fastening bolt is monitored by the Limit Switch. In the “High Position”, the lift cage is only permitted to be entered by the extractable ladder in the chassis frame (Photo 14 to 16). The Operator must ensure that all folding elements of the ladder are securely clicked into place during “High Position” operation.



Photo 14

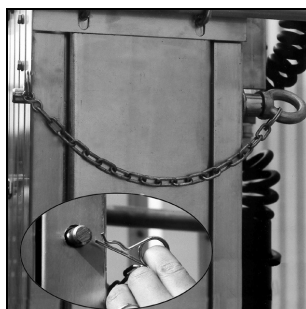


Photo 15



Photo 16

7 Operating the lift

! ATTENTION!

If safety instructions or regulations have been issued by the employer for the use of personal safety equipment when operating ALP personnel lifts, the anchorage eye (see Para 6 Operation) is to be used.

The illuminated displays in the switch box indicate when all 4 extension arms are retracted (excluded PHC-HI).

Display by means of 4 control lamps:

Control lamps go out when the extension arms are retracted; Photo 19

Display by means of a single control lamp:

Control lamp lights up when the extension arms are retracted; Photo 17c

After alignment and fixing by means of the spindling support plate, the working platform is ready to operate (also see point 4).

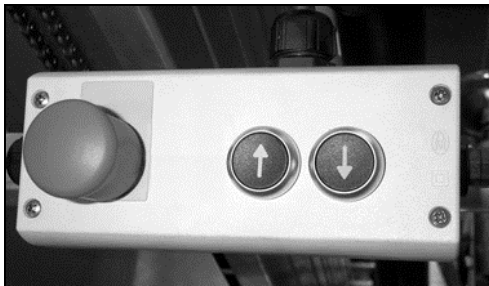


Photo 17 a

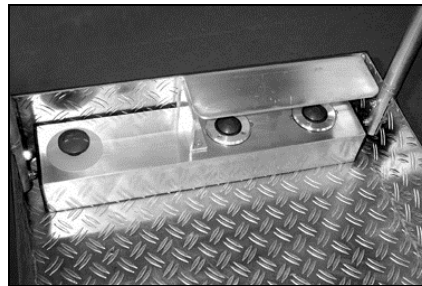


Photo 17 b



Photo 17 c

Unlock the EMERGENCY SHUT-OFF switching button in the lift cage and turn the key switch in the switch box to function 1 or 2 and remove the key (Photo 18a, b and 19).

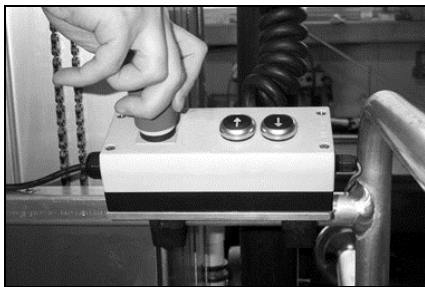


Photo 18 a



Photo 18 b

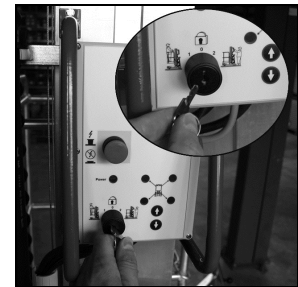


Photo 19

Operating the lift

7.1 Two-handed operation

Guided motion during operation only takes place with simultaneous activation of both Hand Switches with both hands. This prevents unintentional activation and contact with possible squeezing and pinching points. The working platform can be moved upwards or downwards using the push-buttons designated with arrows (Photo 20 a / b).

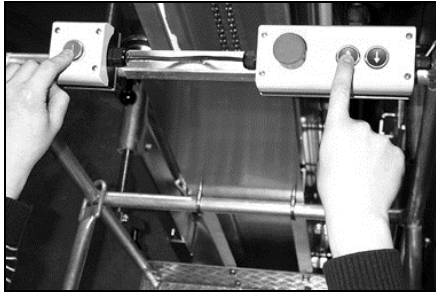


Photo 20 a

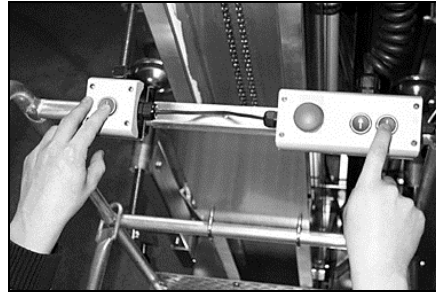


Photo 20 b

7.2 Foot operation

The control panel in the cage is on the side facing the mast system. This prevents contact with the mechanics. Additionally, the draw-in point for the chain has been safeguarded with an intrusion protection fixture. In spite of the difficulty in accessibility to the unprotected areas at the rear and side, the warnings on the rain covering and on the mast system absolutely must be observed (Photo 21a and 21b).

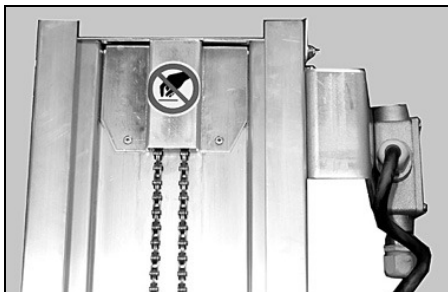


Photo 21 a



Photo 21 b

The working platform can be moved upwards or downwards using the logically (Upwards = Right; Down = Left) arranged Foot Switches (Photo 22a and 22b).



Photo 22 a

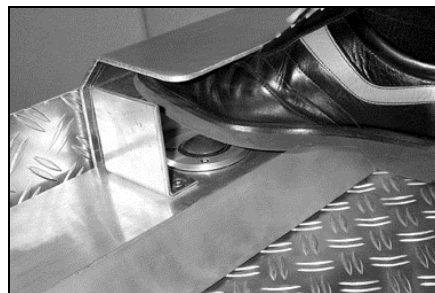


Photo 22 b

7.3 Operation from the switch box

In the event of an additional steering mechanism in the Switch Box, operation at the Switch Box by means of the lockable switch can be selected. For this it must be ensured that switching can only be conducted under control of the operator. For this, the key for the switch must be removed prior to operation after the desired operating position has been selected (also see Point 18).



WARNING!

Operation must be stopped in wind strengths exceeding 6 according to the Beaufort Scale!

The preset platform lowering speed can be obtained from the Inspection Book! It may not be manipulated in any way.

8 Unauthorized use

Upon leaving the working platform, the EMERGENCY SHUT-OFF switch in the Switch Box must be activated and the key removed in order to safeguard the working platform against unauthorized use.

9 Emergency lowering

Should the Operator be unable to actively control the operation of the working platform (e.g., unconsciousness or breakdown of the electrical or hydraulic systems), the Operator can be lowered by means of the EMERGENCY LOWERING VALVE on the hydraulic cylinder (Photo 23).

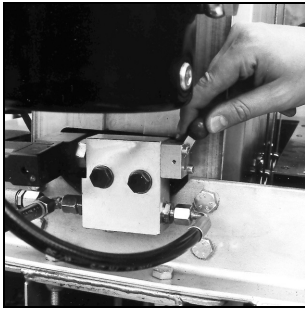


Photo 23

EMERGENCY LOWERING VALVE next to the tank!

10 Additional lowering

All EU-1 standard devices have an additional lowering possibility in the event of disruption of the electrical supply. The working platform can be lowered by the Operator in the cage via an automatically charging battery (in the Switch Box).

11 Working on electrical facilities

The ALP Passenger Lifts are not suitable for work on electrically conductive parts. (Unprotected electrical facilities). Take great care with wires, overhead lines, and floor extensions. Maintain a minimum distance of 5 meters with overhead lines.

12 Lift models

The following electrical drive types are available:

Model	Drive / Motor	Control	Feed cable	Protection Type
EU1	One-Phase-Alternating current electronic motor 230V/50Hz 1.5KW	12V/13V DC	Cabel 3x1,5	IP 55
EU2	Three-Phase-Rotary current electronic motor 400V/50Hz 1.5 KW	12V/13V DC		IP 55
EU3	Direct current electronic motor 24 V 2.5KW	24V DC		IP 42
EU4	Pneumatic Motor 63 l/sec. 2.5KW at 6.3 bar	pneumatic		
EU6	Direct current electronic motor 12V 2KW	12 V DC		IP 42

IMPORTANT! In the case of lifts with direct current drive and battery cases:

- Models EU-3/EU-6 are always equipped with a battery case.
- The position of the batteries is specified by the manufacturer and may not be altered under any circumstances whatsoever, since otherwise the standing stability is no longer guaranteed.
- With these models, the working platforms may not be tilted.
- With models EU-3 and EU-6 with battery case, it must be observed prior to operation that the battery case is lying on its original position (held in place by a fixing bracket on the chassis frame), since otherwise the standing stability is no longer guaranteed.
- **Minimum Extension Arm Length: 765 mm**
- A charging device is included in delivery with all models.
- When the working platform with direct current drive is not in operation, the EMERGENCY SHUT-OFF switch in the Switch Box must be activated and the key must be removed; otherwise the battery loses its charge.
- Before removing the battery, it must be observed that the “ – Pole” is disconnected first!
- In order to prevent flashovers to battery poles, the plastic covering over the batteries may not be removed for any reason (except for charging, photo 25).
- Charging the battery is only permissible in closed and well-ventilated spaces! The Charging Device Operating Instructions from the manufacturer included with the main device are to be observed without exception!

12.1 Battery/Batteries in the case

Before the battery case is opened, the plug connection must be disconnected. Then connect the charging device to the battery/batteries using the plug. The charging procedure must always take place with the battery case lid and plastic covering removed, since otherwise the escaping gas can lead to an explosion. (Photo 24 & 25). Open the caps of the battery in the charging procedure (not applicable with maintenance-free batteries). The battery case is to be removed from the chassis frame for tilted transport.



Photo 24



Photo 25

Before you start to load the battery you must take off the plastic cap.

12.2 Batteries in the chassis frame

Disconnect the plug connection and plug in the charging device. Tilting of the working platform is not permissible!

Batteries may never be allowed to completely lose their charge, since consequently:

- a) The life of the battery is dramatically shortened.
- b) The battery will no longer be accepted by the charging device.

13 Supervision of the safety facilities / **Regulations requiring compliance**

- Prior to start-up of the lift, all important workday inspections regarding the safe condition of the device must be conducted:
 - Loss of oil?
 - Loss of electrical fastenings/connections?
 - Worn hoses/cables?
 - Condition of the batteries (only with EU-3 and EU-6)
 - Condition of the battery for the additional electrical lowering?
 - Accident damages?
 - Illegible instructional signs?
 - Special safety precautions?
- Prior to start-up of the lift, attach all extension arms and level out ground unevenness with the spindles as needed (set up vertically) (see Photo 04).
- Only set up the device on surfaces of sufficient firmness, since otherwise the standing stability is no longer guaranteed.
- It is strictly forbidden to use the device as a crane!
- Never overload the ALP Passenger Lift.
- Do not stand underneath the load.
- Operation must be stopped in wind strengths exceeding 6 according to the Beaufort Scale.
- It is strictly forbidden to use ladders or other objects on or on top of the lift that serve to increase the range or the working height!
- Do not climb, sit or stand on the railing of the lift cage.
- The working platform (lift cage) may only be entered or left in its basic position (i.e., lift fully retracted).
- Do not move the lift in the extended state.
- Also refrain from ever placing the lift at tilted levels in the transport position (danger of rolling away).
- Before the lift is tilted, secure the mast with the Rail Guard (PH/PHC) and close the Tank Ventilation Valve.
- Take great care with wires, floor extensions and overhead lines (safe distance – at least 5 meters).
- The lift is not suitable for work on electrically charged parts.
- It is strictly forbidden to attach parts of any kind that increase the wind strength on the mobile working platform (e.g., writing boards)!

- Prevent collisions with fixed (structures, etc.) or mobile (vehicles, cranes, etc.) objects at all costs!



WARNING!

It is strictly forbidden to conduct alterations on the device which could influence the safety or which violate official safety regulations.

Even minor alterations that become necessary due to special working methods or conditions require the consent of the manufacturer.

14 Maintenance and inspection

- Before use examine the safety features for their functionality, particularly the chains for wear or damage!
- Keep the chains and guide rollers well lubricated!
- The chain pairs must always be under the same amount of tension. This can be seen in the chain suspension below in the rail section; the chain suspension must always stand straight; if necessary, the chains must be retightened and fixed!
- Ensure that the external cables are under light tension!
- Protect the lift from rain and other weather influences!
- Ensure that no water reaches the electrical controls or connections!
- Change the oil during annual inspection.
- Use a low viscosity oil for work in low temperatures.
- After approximately 20 operational hours, inspect all hydraulic connections for their leak tightness and tighten if necessary.
- With direct current drive, the battery poles must always be lightly lubricated (pole lubricant).
- Open the battery caps during the charging procedure (not applicable with maintenance-free batteries).
- Inspect the device for potentially hazardous alterations (corrosion, crack formation, wear, etc.).
- Observe the Annual Inspection of the lift by an authorized specialist. Wearable and safety parts are to be changed as needed.
- Only original parts may be used.

14.1 Excerpt from the TRADE ASSOCIATION Policy BGG 945

Point 5.4

- 5.4 Regular Inspections in Accordance with Section 2.9.1 of Chapter 2.10 of the TRADE ASSOCIATION Regulation, "Operation of Work Equipment".
- 5.4.1 Following initial start-up, lift working platforms are to be inspected at intervals of no longer than one year by an Authorized Specialist. During operation, deviations in the safety level present at the initial start-up are possible. The Operator must undertake the required measures to ensure that this safety level remains. Deviations can be caused by wear, corrosion, violent effects, changing the surroundings, changing the mode of utilization. Also see Guideline 89/655/EWG of the Council of October 30th, 1989 governing Minimum Provisions for Safety & Health Protection in the Utilization of Work Equipment by Employees When Working (implemented in national law by the Operational Safety Ordinance – BetrSichV). In the recurrent inspection, defects discovered are to be eliminated in accordance with their safety -technical significance within a reasonable time period.
- Inspection following significant alterations or significant repairs on FHAB'n in the operation

14.2 Excerpt from the TRADE ASSOCIATION Policy BGG 945

Point 5.3

- 5.3 Extraordinary Inspections in Accordance with Section 2.9.2 of the Chapter 2.10 of the TRADE ASSOCIATION Regulation "Operation of Work Equipment" (BGR 500)
- Lift working platforms with more than 2m of hub height and lift working platforms designed for passengers to ride on the load lifting equipment or who are located under the load lifting equipment or the load itself are to be inspected by an Authorized Specialist following alterations in the construction and following significant repairs to load-bearing parts prior to restart-up. (Additional explanations on BGG 945 PT. 5.3 see the TRADE ASSOCIATION Policy BG 945).
- Only original parts may be installed.

15 Conduct in the Event of Disruption

Defect Search in Case of Disruption:

- Electrical network fuse OK?
- Spiral cable defective?
- Extension Arm Monitor Switch OK?
- Rail Guard loose?
- Tank Ventilation Valve open?
- Control fuse in the Switch Box OK? (only with 13 volt control voltage)
- Chains equally tense?



WARNING!

Work on the electrical and hydraulic systems may only be carried out by authorized trained specialist personnel.

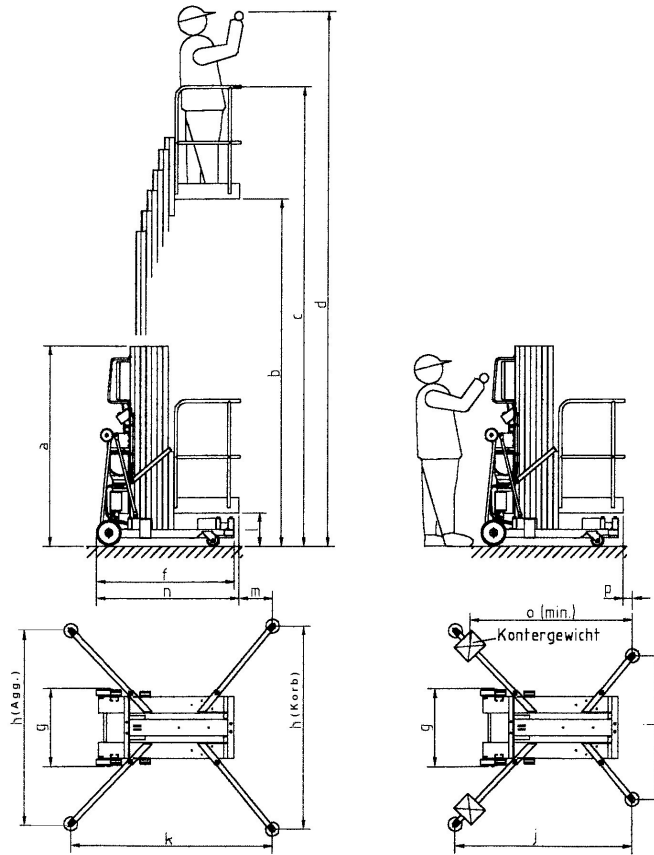
- a) See Inspection Book for hydraulic/electrical circuit diagrams with the corresponding Replacement Parts Bill of Materials
- b) Prior to conducting work to active parts, electrical systems and operational equipment must be put into and maintained in a voltage-free state for the duration of the work. This must be done under observance of the following safety regulations:
 - Disconnect
 - Secure against reactivation
 - Establish voltage-free state

16 Replacement Parts

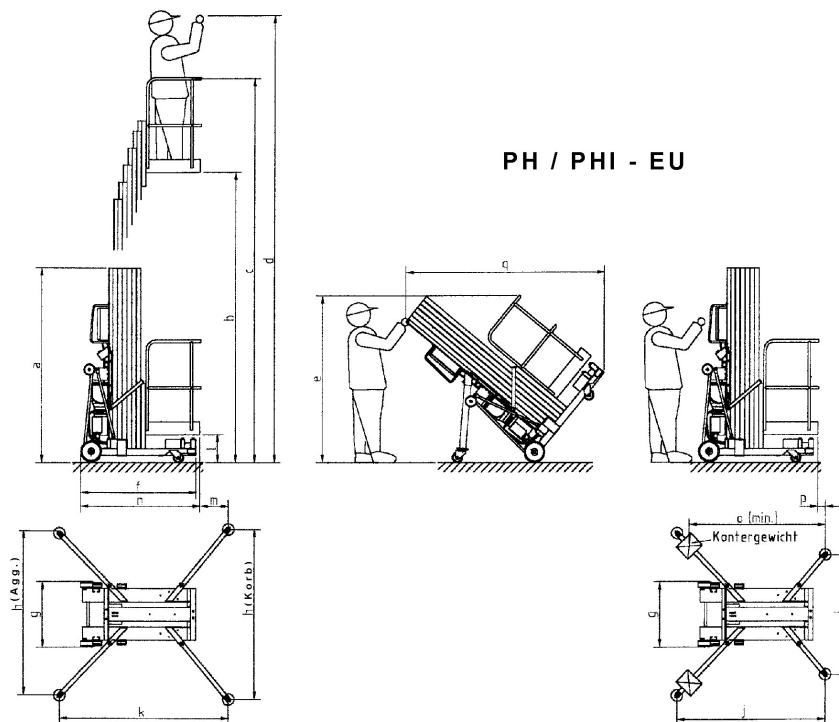
Only original replacement parts may be used, since otherwise no guarantee rights exist and the safety of the lift is no longer guaranteed. Alterations and conversions not conducted by us release us from all liability in the event of damages. Please contact us in the event of necessary repairs or replacement part orders.

17 Technical Data

PHC / PHCI - EU



PH / PHI - EU



Lift Model Intern. Use	Extension Arm INTERN.	a	b	c	d	e	f	g	h Cage	h Agg.	i	j	k	l	m	n	o	p	q
PH 1400	1210	2770	12034	13134	14034	1950	1380	770	2290	2180	/	/	2260	340	450	1440	/	/	2850
PH 1300	1140	2300	10774	11874	12774	1980	1380	770	2180	2080	/	/	2170	340	400	1440	/	/	2400
PH 1200	1140	2300	10094	11194	12094	1980	1280	770	2180	2080	/	/	2070	1392	360	1380	/	/	2350
PH 1100	900	2300	9034	10134	11034	1930	1280	770	1810	1730	/	/	1750	340	210	1380	/	/	2350
PH 900	715	2300	7294	8394	9294	1890	1280	770	1530	1470	/	/	1500	340	150	1320	/	/	2350
PH 760	635	2300	5554	6654	7554	1840	1280	770	1410	1350	/	/	1390	340	150	1260	/	/	2350
PHC 1200	1050	1980	9914	11014	11914	/	1380	770	2040	1950	/	/	2050	1392	340	1440	/	/	/
PHC 1100	850	1980	8854	9954	10854	/	1380	770	1740	1660	/	/	1780	340	210	1440	/	/	/
PHC 1050	850	1980	8494	9594	10494	/	1280	770	1740	1660	/	/	1680	1392	170	1380	/	/	/
PHC 940	715	1980	7434	8534	9434	/	1280	770	1530	1470	/	/	1500	340	90	1380	/	/	/
PHC 800	635	1980	6014	7114	8014	/	1280	770	1410	1350	/	/	1390	340	100	1320	/	/	/
PHC 650	535	1980	4594	5694	6594	/	1280	770	1250	1210	/	/	1260	340	90	1260	/	/	/
PHI 1400	1050	2770	12034	13134	14034	1950	1380	770	2040	1950	/	/	2050	340	340	1440	/	/	2850
PHI 1300	900	2300	10774	11874	12774	1980	1380	770	1810	1730	/	/	1850	340	250	1440	/	/	2400
PHI 1200	915	2300	10094	11194	12094	1980	1280	770	1810	1730	/	/	1750	1392	210	1380	/	/	2350
PHI 1100	715	2300	9034	10134	11034	1930	1280	770	1530	1470	/	/	1500	340	90	1380	/	/	2350
PHI 900	535	2300	7294	8394	9294	1890	1280	770	1250	1210	/	/	1260	340	30	1320	/	/	2350
PHI 760	535	2300	5554	6654	7554	1840	1280	770	1250	1210	/	/	1260	340	90	1260	/	/	2350
PHCI 1200	765	1980	9914	11014	11914	/	1380	770	1610	1540	/	/	1670	1392	160	1440	/	/	/
PHCI 1100	635	1980	8854	9954	10854	/	1380	770	1410	1350	/	/	1490	340	80	1440	/	/	/
PHCI 1050	715	1980	8494	9594	10494	/	1280	770	1530	1470	/	/	1500	1392	90	1380	/	/	/
PHCI 940	535	1980	7434	8534	9434	/	1280	770	1250	1210	/	/	1260	340	-30	1380	/	/	/
PHCI 800	535	1980	6014	7114	8014	/	1280	770	1250	1210	/	/	1260	340	30	1320	/	/	/
PHCI 650	535	1980	4594	5694	6594	/	1280	770	1250	1210	/	/	1260	340	90	1260	/	/	/

Lift Model Ext. Use	Extension Arm EXT.	a	b	c	d	e	f	g	h Cage	h Agg.	i	j	k	l	m	n	o	p	q
PH 1400	2305	2770	12034	13134	14034	1950	1380	770	3900	3700	2290	3000	3670	340	1130	1440	2595	450	2850
PH 1300	2150	2300	10774	11874	12774	1980	1380	770	3670	3480	2180	2850	3470	340	1030	1440	2445	400	2400
PH 1200	2115	2300	10094	11194	12094	1980	1280	770	3670	3480	2180	2750	3370	1392	990	1380	2345	360	2350
PH 1100	1760	2300	9034	10134	11034	1930	1280	770	3060	2910	1810	2310	2840	340	730	1380	1910	210	2350
PH 900	1500	2300	7294	8394	9294	1890	1280	770	2730	2600	1530	2050	2550	340	650	1320	1645	150	2350
PH 760	1210	2300	5554	6654	7554	1840	1280	770	2290	2180	1410	1800	2170	340	530	1260	1390	150	2350
PHC 1200	2115	1980	9914	11014	11914	/	1380	770	3670	3480	2040	2790	3470	1392	1030	1440	2385	340	/
PHC 1100	1880	1980	8854	9954	10854	/	1380	770	3240	3080	1740	2460	3100	340	850	1440	2065	210	/
PHC 1050	1835	1980	8494	9594	10494	/	1280	770	3240	3080	1740	2360	3000	1392	810	1380	1965	170	/
PHC 940	1550	1980	7434	8534	9434	/	1280	770	2730	2600	1530	2050	2550	340	590	1380	1645	90	/
PHC 800	1300	1980	6014	7114	8014	/	1280	770	2430	2310	1410	1860	2280	340	530	1320	1455	100	/
PHC 650	1050	1980	4594	5694	6594	/	1280	770	2040	1950	1250	1620	1950	340	420	1260	1215	90	/
PHI 1400	2115	2770	12034	13134	14034	1950	1380	770	3670	3480	2040	2790	3470	340	1030	1440	2385	340	2850
PHI 1300	1835	2300	10774	11874	12774	1980	1380	770	3240	3080	1810	2500	3100	340	850	1440	2095	250	2400
PHI 1200	1835	2300	10094	11194	12094	1980	1280	770	3240	3080	1810	2400	3000	1392	810	1380	1995	210	2350
PHI 1100	1500	2300	9034	10134	11034	1930	1280	770	2730	2600	1530	2050	2550	340	590	1380	1645	90	2350
PHI 900	1300	2300	7294	8394	9294	1890	1280	770	2430	2310	1250	1790	2280	340	530	1320	1390	30	2350
PHI 760	1050	2300	5554	6654	7554	1840	1280	770	2040	1950	1250	1620	1950	340	420	1260	1215	90	2350
PHCI 1200	1835	1980	9914	11014	11914	/	1380	770	3240	3080	1610	2410	3100	1392	850	1440	2010	160	/
PHCI 1100	1575	1980	8854	9954	10854	/	1380	770	2850	2700	1410	2150	2750	340	680	1440	1745	80	/
PHCI 1050	1575	1980	8494	9594	10494	/	1280	770	2850	2700	1530	2100	2650	1392	640	1380	1695	90	/
PHCI 940	1300	1980	7434	8534	9434	/	1280	770	2430	2310	1250	1790	2280	340	470	1380	1390	-30	/
PHCI 800	1050	1980	6014	7114	8014	/	1280	770	2040	1950	1250	1620	1950	340	370	1320	1215	30	/
PHCI 650	1050	1980	4594	5694	6594	/	1280	770	2040	1950	1250	1620	1950	340	420	1260	1215	90	/

We reserve the right to deviations in the dimensions!

18 Special equipment and accessories

18.1 Additional operation from below

For this it must be ensured that the switching can only be conducted under control of the Operator. Additionally, the key for the switch must be removed prior to operation after the desired operating position has been selected.

18.2 Passenger / Load switching (Photo 26)



Photo 26

This utilization is only permissible in interior spaces!

Here it must be ensured that the fastening bolt is inserted into the corresponding opening and is secured with the spring pin. Additionally, the load must be placed on the load fork in a slip-proof manner or it must be secured.

Also see under Point 06. Handling

The type of operation can be selected with the Key Switch on the Switch Box. Use the key of the EMERGENCY SHUT-OFF Key Switch.

19 Safety regulations

In operation of the ALP Passenger Lifts, Accident Prevention Regulations are to be observed (UVV BGG 945-1 Lift Working Platforms). The Safety Regulations of EN280 also apply. You can find an excerpt from these regulations in the Appendix.

20 Index

A

Accessories	34
Additional lowering	22

B

Battery	25
BGG 945.....	29

D

Description.....	7
------------------	---

E

electrical facilities	23
Emergency lowering	21
Event of disruption	30
Extension arm use	13

F

Foot operation.....	18
---------------------	----

H

Halfen anchoring systems.....	13
Handling	15

I

Inspection	28
Introduction.....	6

L

Lift models	24
-------------------	----

M

Maintenance.....	28
------------------	----

O

Operating the lift	17
Operation from below	34

P

Passenger / Load switching.....	34
---------------------------------	----

R

Regulations requiring compliance.....	26
Replacement Parts.....	31

S

Safety facilities	26
Safety regulations.....	35
Special equipment.....	34
Stabile set up.....	10
Start up.....	14
Switch box.....	19

T

Technical data	32
Transport.....	8
Two-handed operation.....	18

U

Unauthorized use	20
------------------------	----