OPERATING INSTRUCTIONS
Version 1

Vacuum lifting device
AERO PORO
(with vacuum blower SV300/3)
Machine No.

General drawing to illustrate the device structure. Dimensions of beams and suction plates as well as their number can vary and can be found in the offer / order.

Load bearing capacity: max/SWL/WLL kg at 200 mbar (20% vacuum)

The load bearing capacity is reduced by 15 kg / 10 mbar (1%) when reaching the final vacuum (AE-PORO 300-1L)
The load bearing capacity is reduced by 30 kg / 10 mbar (1%) when reaching the final vacuum (AE-PORO 600-2L)
The load bearing capacity is reduced by 45 kg / 10 mbar (1%) when reaching the final vacuum (AE-PORO 900-3L)

Read carefully prior to start up!

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Unit configuration / Description

Suitable for the **horizontal** transport of materials, such as wooden panels with a maximum weight of - kg.

Goods to be transported:	panels with an air-permeable surface
Mode of transportation:	horizontal transport

Designed for the interior (+5 to 40°C).

Main beam length:	- mm
Dead weight:	approx: - kg

The vacuum supply is guaranteed by a vacuum blower type VAL SV300/3,
Suction volume: 150 m^3/h, max. Vacuum 30%, Voltage: 400V, 50 Hz, Power: 2,2 kW,

Optionale Konfiguration / Optionen
Optional Configuration / Accessoires

Bezeichnung/ Designation	Beschreibung / Description	Symbol
-FG	Einlegeplatte insert plate	
-CH	Kettenzuganbindung Chain hoist connection	
HV-KSTB	Haltetasche für Kransteuerbirne Holding bag for crane control panel	
KBT 5000/5x1	Kabeltrommel 5,0 m Cable drum 5,0 m	
KBT 1000/5x1	Kabeltrommel 10,0 m Cable drum 10,0 m	
SK	Sonderkonstruktion / Special construction	
Outdoor	Gerät ist für die Benutzung im Außenbereich geeignet / The device is suitable for outdoor use	

AERO 600 / 2L		
Vacuum level		Load bearing capacity
-200 mbar	20%	max. 600 kg
-190 mbar	19%	max. 570 kg
-180 mbar	18%	max. 540 kg
-170 mbar	17%	max. 510 kg
-160 mbar	16%	max. 480 kg
-150 mbar	15%	max. 450 kg
-140 mbar	14%	max. 420 kg
-130 mbar	13%	max. 390 kg
-120 mbar	12%	max. 360 kg
-110 mbar	11%	max. 330 kg
-100 mbar	10%	max. 300 kg
-90 mbar	9%	max. 270 kg
-80 mbar	8%	max. 240 kg
-70 mbar	7%	max. 210 kg
-60 mbar	6%	max. 180 kg
-50 mbar	5%	max. 150 kg
-40 mbar	4%	max. 120 kg
-30 mbar	3%	max. 90 kg
-20 mbar	2%	max. 60 kg
-10 mbar	1%	max. 30 kg

AERO 300 / 1L		
Vacuum level		Load bearing capacity
-200 mbar	20%	max. 300 kg
-190 mbar	19%	max. 285 kg
-180 mbar	18%	max. 270 kg
-170 mbar	17%	max. 255 kg
-160 mbar	16%	max. 240 kg
-150 mbar	15%	max. 225 kg
-140 mbar	14%	max. 210 kg
-130 mbar	13%	max. 195 kg
-120 mbar	12%	max. 180 kg
-110 mbar	11%	max. 165 kg
-100 mbar	10%	max. 150 kg
-90 mbar	9%	max. 135 kg
-80 mbar	8%	max. 120 kg
-70 mbar	7%	max. 105 kg
-60 mbar	6%	max. 90 kg
-50 mbar	5%	max. 75 kg
-40 mbar	4%	max. 60 kg
-30 mbar	3%	max. 45 kg
-20 mbar	2%	max. 30 kg
-10 mbar	1%	max. 15 kg

AERO 900 / 3L		
Vacuum level		Load bearing capacity
-200 mbar	20%	max. 900 kg
-190 mbar	19%	max. 855 kg
-180 mbar	18%	max. 810 kg
-170 mbar	17%	max. 765 kg
-160 mbar	16%	max. 720 kg
-150 mbar	15%	max. 675 kg
-140 mbar	14%	max. 630 kg
-130 mbar	13%	max. 585 kg
-120 mbar	12%	max. 540 kg
-110 mbar	11%	max. 495 kg
-100 mbar	10%	max. 450 kg
-90 mbar	9%	max. 405 kg
-80 mbar	8%	max. 360 kg
-70 mbar	7%	max. 315 kg
-60 mbar	6%	max. 270 kg
-50 mbar	5%	max. 225 kg
-40 mbar	4%	max. 180 kg
-30 mbar	3%	max. 135 kg
-20 mbar	2%	max. 90 kg
-10 mbar	1%	max. 45 kg

Table Contents

Dear Customer,

In order to prevent property damage or personal injury, it is necessary to **observe the instructions and guidelines** covered in this instruction manual and to make sure that your unit is **regularly serviced**. Moreover, this information must be read, understood and observed in all aspects by all personnel who are entrusted with working with this vacuum lifting device.

The complete instruction manual must be kept **in close proximity to the device at all times**.
AERO-LIFT Vakuumtechnik GmbH assumes no liability for any damages and disruptions resulting from failure to comply with this instruction manual!

We reserve the right to implement technical changes that are aimed at improving the vacuum lifting device.

If you should experience any difficulties, however, do not hesitate to contact us. We will make an effort to promptly assist you. Our address:

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1 Hardware configuration

see hardware configuration on cover page

2 List of abbreviations

abbreviation	term	explanation
UVV	respective accident prevention	maintenance service for accident prevention
AL	AERO-LIFT	

3 Safety Instructions

3.1 Target Group

These operating instructions have been written for persons who, due to their professional training, professional experience and recent professional activity, have sufficient expertise to handle the vacuum lifting device safely and correctly and who can read and understand the operating instructions.

3.2 Functional Range and Intended Application

This vacuum lifting device is intended exclusively for transporting the goods specified under "Hardware configuration". The maximum load bearing capacity and the specified vacuum in relation to the load bearing capacity must be considered. The vacuum lifting device is technically constructed and equipped with the functions as shown in our offer and as specified in your order!

The vacuum lifting device is NOT suitable for use in closed rooms, where particular risks (e.g., danger of explosion) exist.

Every other use is regarded as improper use. AERO-LIFT assumes no liability for any damage resulting from such use. The operator of the vacuum lifting device bears
the risk alone.

NOTICE

The "suction/release" function is carried out by pressing the push button.

3.3 Explanation Safety Instructions

Structure Warning Label:

(1) SIGNAL WORD	
 (5)	(2) Signal word classifies the danger (3) Information text: type and source of danger + possible consequences ✓ (4) Measures to be taken or prohibitions to be imposed

(5) Pictogram: illustrates the danger

Categorization of Warning Labels:

DANGER!	
	DANGER indicates a hazardous situation, which, if not avoided, will result in death or serious injury.

WARNING!	
	WARNING indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

CAUTION!	
	CAUTION indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE	
	NOTICE is used to address practices not related to physical injury.

3.4 Explanation Icons

Warning signs:

	General Warning		Warning: Crushing
	Warning: Electricity/high voltage		Warning: Overhead load
	Warning: Crushing of hands		Warning: Falling objects
	Warning: Hot surface		

Mandatory signs:

	Disconnect main plug from electrical outlet		Wear safety footwear
	Wear ear protections		Wear protective gloves

Pictograms:

	Vacuum level too low: Device **not** ready for operation		Device ready for operation
	Read instruction manual/booklet before operation.		Do not stay underneath hanging load.
	Manual slide valve to the left (keep safety lock pressed) for release		Manual slide valve to the right for suction

	Button for release Both buttons must be pressed simultaneously!		Button for suction
	Button for release and suction Both buttons must be pressed simultaneously!		The load is not allowed to be lifted above the height of 1,8 m
	Do not lift more than the load bearing capacity written on the type plate. Closed stopcocks reduce the load bearing capacity of the lifting device.		Manual slide valve red/green for individually lockable suction plates (optional) Red = blocked suction plate Green = not blocked suction plate

3.5 Operator obligations and liability

The operator/user is obligated to:

- Use the vacuum lifting device only in a good state of repair.
- Immediately report any changes occurring in the vacuum lifting device that adversely affect safety to AERO-LIFT in writing.
- Check the vacuum lifting device regularly for apparent damage and deficiencies and report any occurring changes, including operating performance, immediately in writing!
- Adhere to maintenance cycles.
- Immediately eliminate or have eliminated any faults that may influence safety.

3.6 General Safety Instructions

- The vacuum lifting device may **only** be operated by qualified personnel as well as serviced and maintained only by authorized persons.
- **Every person,** who works with this device, must read and understand the operating instructions.
- The vacuum lifting device is designed exclusively for the area indicated under "Functional Range and Intended Application".
- It is necessary to refrain from any action or behavior that adversely affects the safety of the device or jeopardizes one's own security or that of other persons or machinery and systems.
- Self-made modifications and changes that adversely affect the security of the vacuum lifting device are not permitted. AERO-LIFT assumes no responsibility for the resulting damages. **Use only original AERO-LIFT spare parts.**

  AERO-LIFT assumes no responsibility when components from other manufacturers are used.
- Safety equipment may not be dismantled or deactivated under any circumstances.
- In case of sudden vacuum outage, the load must be lowered immediately or secured against falling.
- Operating the vacuum lifting device is subject to the local safety and accident prevention regulations.

DANGER!

Electric voltage!
It is prohibited to open the housings while they are under voltage. Can cause injuries resulting in death, burns and damage to the unit.

✓ Regular visual inspection for external damage of the electrical cables and the housing/cover.

DANGER!

Falling objects!

Due to a power failure, incorrect pick-up, premature release, picking up a load that is too heavy or due to a collision during transport, the load can break off from the vacuum lifting device, fall down and cause serious injuries or even death.

- ✓ Stand clear of suspended loads! Do not climb on suspended loads.
- ✓ Persons are not allowed to stay in the transport area.
- ✓ If the red warning lamp on the warning device lights up, or if the siren sounds the load must be set down **immediately**!
- ✓ Do not place loose objects on loads to be lifted.

WARNING!

Moving parts!

Persons can be injured by moving parts of the vacuum lifting device. Persons can be pushed, caught and injured by the lifting device in the process area.

- ✓ Do not stay within the transport area.
- ✓ The operator must supervise the operating procedure.

WARNING!

Hot parts – risk of burns!

Persons can burn themselves on the vacuum pump, as it becomes hot after prolonged operation.

- ✓ Clean air supply/filter regularly

NOTICE

If existing, use the hose fixing to adjust the hoses in a semicircle towards the suction plates. The hose shall run straightly and firmly towards the hose suspensions, see Basic settings marked by AERO-LIFT.

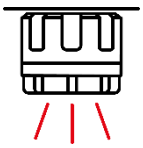
3.7 Foreseeable misapplications

The machine is not for the following applications:

- Handling of components or variations other than those approved by the manufacturer.
- Exceeding the maximum load capacity.
- Shutting off suction plates that go below the load capacity.
- Non-centered load handling.
- Slanted approach to the transport material when picking it up.
- Storage of the suction feet with the bottom side facing downwards.
- Use in closed rooms with special hazards (e.g. explosion hazard).
- Operation by untrained personnel.

Do not lift the load with the vacuum lifting device:

If the device is turned off.



If the siren sounds.

4 Technical Specifications

Load bearing capacity: see cover page

4.1 Temperature limits for suction plate seals

Depending on the material characteristics of the suction plate seals, there are different temperature limits for the objects to be handled:

Material of suction plate seal:	Temperature limits:
Perbunan black	-20°C to + 80°C
Perbunan grey	-20°C to + 80°C
Perbunan white	-20°C to + 80°C
Silicone transparent or red	-30°C to + 180°C
Cellular rubber HO / foam rubber	-10°C to + 70°C

The indicated temperatures relate to an unlimited contact time with the piece to be handled.

4.2 Vacuum generator (side channel compressor / blower)

Type:	AL SV300/3
Motor capacity:	2.2 kW
Volume flow:	max. 150m^3/h
max. final vacuum:	- 300 mbar
Operating voltage:	400 V, 50 Hz
Compressed air consumption:	No compressed air is used.
Sound level:	< 80 dB (A)

4.3 Electrical voltage for vacuum pump

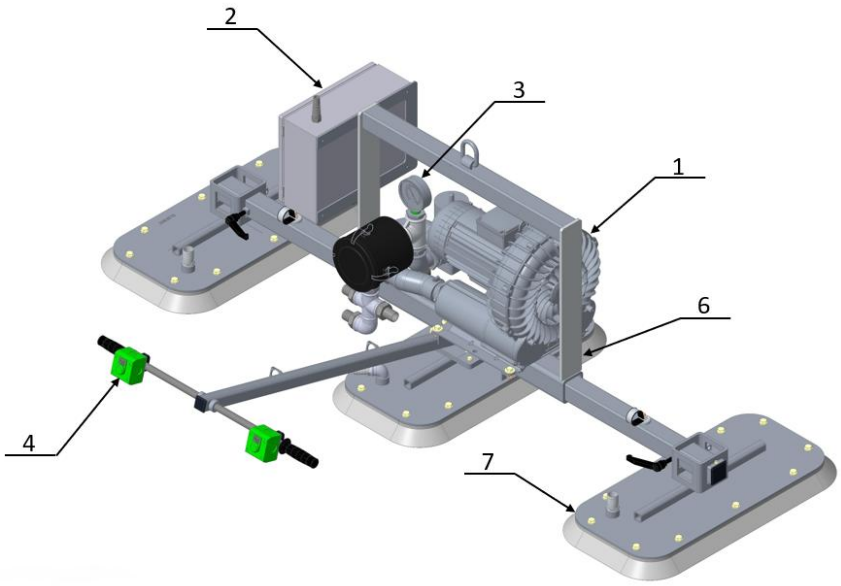
3ph+PE Alternating current:	400 V, 50 Hz (L1, L2, L3, PE)

4.4 Control voltage for warning system

Direct current:	400 V, 50 Hz
Direct current:	9 Volt

5 Designation and Explanation of Individual Components:

No.:	Designation:	Function:
1	Vacuum generator:	Building the vacuum
2	Warning system:	Electronic monitoring of transport readiness (the wiring diagram can be found in the annex)
3	Vacuum gauge:	Mechanical monitoring of the vacuum
4	Control valve:	For the function “suction – release”
5	Vacuum hose:	Connection between pump and suction plates.
6	Main frame:	The main frame is used to hold the vacuum generator, the suction plate holder and the warning device. The hanging loop for the crane hook is installed in the middle.
7	Suction plate:	Sealing the vacuum from the transported goods. Depending on the type and weight of the transported goods, the suction plate and its number are determined.



AERO PORO 900/3L-P

General drawing to illustrate the device structure. Dimensions of beams and suction plates as well as their number can vary and can be found in the offer / order.

6 Commissioning

The device is delivered as a complete unit with all wires and a sense of rotation reversing switch 16A and is ready for connection. Prior to startup, it is necessary to check the vacuum lifting device for completeness and possible transport damage. Any possible transport damage must be reported immediately in writing!

Prior to startup, a test run shall be carried out to check the correct sense of rotation of the three-phase AC motors. For this purpose, all vacuum pumps and side canal compacters are provided with an arrow on the fan blade lid indicating the sense of rotation. Make sure that the motor sense of rotation corresponds with the direction indicated by the arrow. If this is not the case, change the sense of rotation by means of the reversing switch.

6.1 Checking for leakage

At AERO-LIFT we implement a 100% quality and functional test of the delivered vacuum lifting devices. For safety reasons, check the device for any possible transport damages prior to startup. To this end, a leakage test is implemented in order to determine of possible device leakage.

Performance of the Leakage Testing:

Place the vacuum lifting device on a flat, dry and sealed workpiece (e.g. sheet metal). Now turn on the vacuum pump at the main switch. Then switch the valve to “suction”. The control vacuum gauge now shows you the exact negative pressure.

The vacuum gauge must display a vacuum of > - 200mbar (for pump type: SV300/3).

7 Operation

7.1 To switch on the vacuum lifting device

Switch on the vacuum lifting device using the main switch on the warning device.

CAUTION!

DANGER OF CRUSHING!

Moving crossbars and suction plates can cause hand injuries.

7.2 Lifting the load

Place the vacuum lifting device onto the load using the crane. Switch to “suction” using the buttons. The load is sucked in and can be lifted and transported with the crane **if the vacuum gauge indicates sufficient vacuum for the weight of the goods being transported**.

WARNING!

Falling loads!

Incorrectly picking up the load can result in the load tearing off the suction plates and causing injuries to people.

- ✓ The load is only allowed to be picked up at the center of gravity and in the middle.
- ✓ The load is not allowed to be lifted above a height of 1.8 m.
- ✓ It must always be ensured that the vacuum gauge shows sufficient vacuum.
- ✓ Pay attention to the permissible load capacity!

7.3 Transporting the load

The load can be transported to the desired location using the control of the lifting equipment.

DANGER!

Falling objects!

Danger of injury due to collision or contact. Risk of load breaking away from the suction plates. Persons can be injured by falling or moving parts during transport.

- ✓ Lower the load **immediately** if the red warning lamp lights up on the warning module or if the siren is actuated!
- ✓ While transporting the object with the aid of the crane, pay particular attention to ensure that the object never hits a wall or any other object.
- ✓ Only transport the load if the device is switched on.
- ✓ Never walk under a suspended load while being transported!

WARNING!

Moving parts!

Persons can be pushed, caught and injured by the lifting device within the process area.

- ✓ No persons or objects may be located/standing within the area of transport.

7.4 Lowering the load

Move the vacuum lifting device to the desired position using the crane and lower the load. After the load was placed on the desired position, switch the vacuum valve on "Release". The suction plates will now be ventilated and the load will be released immediately.

WARNING!

Falling objects!

Premature release before the load is fully supported can result in severe crushing and shearing injuries.

- ✓ When lowering the load, make sure that the load is resting securely after being set down and cannot overturn or slide.

7.5 Shutdown of Vacuum Lifting Device

To shutdown the device for a brief idle period, switch off the vacuum pump by means of the main switch. The vacuum lifting device can hang from the crane in such a way that the suction plates are freely suspended. If this is not possible or if the vacuum lifting device will not be used for a longer period of time, it should always be placed on trestles such that the suction plates are freely suspended and cannot be damaged.

CAUTION!

- ✓ Check the stability of the device before unhooking it from the load hook.
- ✓ Never place the device on the suction plates.

7.6 Warning and Safety System

Control vacuum gauge:
The vacuum lifting device has a control vacuum gauge, which is installed in a clearly visible manner on the manipulation handle. This vacuum gauge shows you if the vacuum lifting device is ready for transport. Loads may only be lifted and transported if the pointer shows the minimum vacuum for the required load bearing capacity.
(see also the load bearing capacity table on the device).

Warning System:

The warning device monitors the mains voltage. In the event of a power failure, the electronic horn sounds and the transported goods must be set down immediately. In addition, the motor protection switch and a main switch are built into the warning device.

DANGER!

Falling objects!
In case the warning module experiences a failure or an error, there is a danger of load falling when the vacuum pressure is too low. This can cause severe crushing and shearing injuries.

- ✓ The operational readiness of the warning module has to be **checked daily** immediately before use and **after extended periods of downtime**!
- ✓ If the vacuum is too low, (control vacuum gauge indicator is in the red range or the siren is actuated and the red warning lamp lights up), no loads may be lifted and transported. **Already picked up loads must be lowered immediately!**

How The Warning Module Works:

Warning system with acoustic signal
The warning system is provided with a metal casing with a door and key. The siren is located under the casing. The main switch is located at the door. In addition, the device is provided with a battery charger and battery. The battery is used as an additional power supply for the siren in case of a power failure.

DANGER!

Electric voltage!
It is prohibited to open the housing while it is under voltage. Can cause injuries resulting in death, burns and damage to the unit.

✓ Regular visual inspection of the electrical cables and the housing or cover for external damage before switching on the device!

NOTICE

The acoustic signal can be heard up to an ambient noise level of up to 70 dB (A).

7.7 Troubleshooting checklist

Problems:	Cause:	Solution:
Vacuum drops significantly.	Object is too permeable to air	Vacuum lifting device not suited for this load.
	Suction plates cannot sit on surface.	Change position of suction plates.
	Suction plate seal defective.	Replace seal.
	Control vacuum gauge defective.	Replace vacuum gauge.
	Vacuum hose defective.	Replace hose.
Vacuum does not reach - 200 mbar.	Vacuum generator defective.	Check the blower for wear and replace if necessary.
Vacuum loss during transport.	Vacuum hose defective.	Replace hose.
	Suction plate seal defective.	Replace seal.
	Load is not suitable or too heavy.	Set load down and check whether all suction plates are actuated.
Suction/release no longer works.	Reversing valve or button defective	Replace defective parts.

8 Maintenance and repair

8.1 Instructions

Disruptions that are caused by insufficient or improper maintenance of the device may result in high repair costs and an extended equipment failure. That's why regular maintenance is essential. According to the accident prevention guideline DGUV 109-017, it is necessary to have the vacuum lifting device undergo an annual inspection by an expert. The inspection date can be found on the inspection sticker on your vacuum lifting device. Please contact us as expert for the respective accident prevention (UVV) inspection.

Spare Parts:

- Only original AERO-LIFT parts may be installed.
- We recommend storing spare parts for the suction plates (seals).
- Only authorized personnel may replace spare parts.
- Only a specialist may carry out work on pneumatics and vacuum technology.

DANGER!

Electric voltage!
May cause injury resulting in death, burns and property damage.

- ✓ Before carrying out any service or cleaning work on the lifting device, in particular the warning device, switch off the main switch and disconnect the current supply.
- ✓ A qualified electrician may only carry out maintenance work on the electrical system.
- ✓ Regular visual inspection of the power lines for external damage.

8.2 Inspection and Maintenance Manual

Test period	Test scope	Test person	Maintenance instructions
Before the first commissioning	Visual and functional inspection	Cp[1]	Check for visible defects and malfunctions.
If required [3]	Visual and functional inspection of vacuum generator. Check for defective bearings, worn clutch, stuck rotor slides.	Cp[1]	If necessary, compare the switch of the red/green lamps with the vacuum gauge, the siren must sound at the same time as the switch to "red", or the display value of the control vacuum gauge must be < 60%. Check the maximum value fluctuations of the vacuum gauge. Rotor slider: see separate operating instructions
Daily	Visual and functional inspection (this includes e.g. deformations, cracks, fractures, wear), vacuum valve	Qp[2]	Suction/release function
Daily	Visual inspection and vacuum hose for damage	Qp[2]	Tighten hose clamps if necessary.
Daily	Suction plate, seal (cracks, fractures, wear)	Cp[1]	Replace if defective
Weekly to monthly[4] and if water is detected in the water separator!	Functional test of vacuum filter and pre-filter, also water separator	Cp[1]	Blow out the filter with compressed air or replace it depending on its condition. As soon as there is water in the water separator, remove it using the drain plug. Then retighten the screw and allow the vacuum pump to run for approx. 10 minutes.
Monthly	Visual inspections of energy chains and power lines	Cp[1]	
At least every six months	Function test corrosion protection	Qp[2]	
At least yearly More often if operation under damaging influences (e.g. heat)	Visual and functional inspection	Cp[1]	
Load lift Empty stroke	daily	Cp[1]	Piston mechanism Valve technology

Yearly	Inspection sticker	Cp[1]	Inspection in accordance with DGUV 109-017 Request AERO-LIFT expert
Testing according to - extraordinary events (e.g. accidents, changes to the machine, natural phenomena, long periods of non-use) - Repair	Depending on the type and extent of the damage, the event or the repair.	Cp[1]	

[1.] Competent person: has sufficient knowledge in the field of vacuum lifters due to his professional training and experience and is familiar with the relevant national occupational safety regulations, accident prevention regulations and generally recognized rules of technology (e.g. BG rules, DIN standards) to the extent that he can assess the safe working condition of vacuum lifters.

[2.] Qualified person: has the necessary specialist knowledge to test vacuum lifters due to their professional training, professional experience and recent professional activity.

[3.] See notes on inspection intervals in other applicable documents.

[4.] Inspection intervals depend on the degree of air pollution and the environment. If you work with wood, for example, the filters should be checked every week and cleaned if necessary.

8.3 Replacement of Seal on a suction plate

"Install the replacement seal that corresponds with your model of device!"

Procedures for suction plates with tightening straps

1. Loose the tightening strap at the suction plate my means of the screw and move it upwards.
2. Remove the old seal from the aluminum base plate.
3. Install new seal onto the base plate.
4. Install tightening strap and tighten the screw again.
5. After completing these services, always check the seal for leakage!
   (according to chapter "Checking for leakage")

Procedures for suction plates with screws fixed to the base plate

1. Unscrew the defective seal from the base plate.
2. Tighten new seal onto the base plate. If an additional seal is required, make sure to place it exactly into the respective groove before screwing.
3. After completing these services, always check the seal for leakage!
   (according to chapter "Checking for leakage")

Procedures for suction plates with C-track clamp or specific grooves

1. Remove the defective seal from the C-track.
2. Place new seal into the C-track. Make sure not to damage the seal.
3. Make sure that the back of the seal is in complete contact with the C-track bottom - Always check!
4. After completing these services, always check the seal for leakage!
   (according to chapter "Checking for leakage")

Procedures for suction plates with lock nuts

1. Loosen the hose clamp on the suction plate and pull off the vacuum hose.
2. Loosen both lock nuts and unscrew the M8x60 fastening screw (screw with spring).
3. Unscrew the connection nipple from the old seal and screw it back onto the new suction plate with sealant.
4. Connect the springs and lock nut to the screws on the holder with the suction plate.
5. When the screw is screwed approx. 8 mm into the thread of the suction plate, tighten the lock nut.
6. Place the hose on the connection nipple and secure it with the hose clamp.

NOTICE

After completing these services, **always** check the seal for leakage!
(See chapter "Checking for leaks").

9 Spare Parts List

Designation / Type:	Produkt No.:	Comment:	Picture
Warning system/no. on wiring diagram	~~4028371~~ ~~4028372~~	For spare parts number of electrical components see appendix: Circuit diagram	1A
Blower	2010254	SV300/3 See appendix: Instruction blower	1B
Suction plates completly	-	Suction plate replacement parts see table on next page	1C
Vacuum gauge Ø 100 mm	2020711		2A
Vacuum filter metal housing 1 ½" Filter insert for vakuumfilter ½" & ¾"	2020460 2020463		2B
Vacuum hose	2020159	Inner-Ø 32 mm	
Cable drum	2049005	OPTIONAL	
Crane holding bag	3080123	OPTIONAL	2C

We recommend using only original parts from AERO-LIFT, the configuration, quality and functional characteristics of which are guaranteed.

The following images may deviate from the original component in shape and color.

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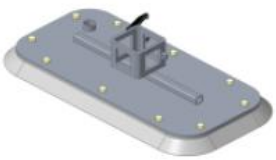
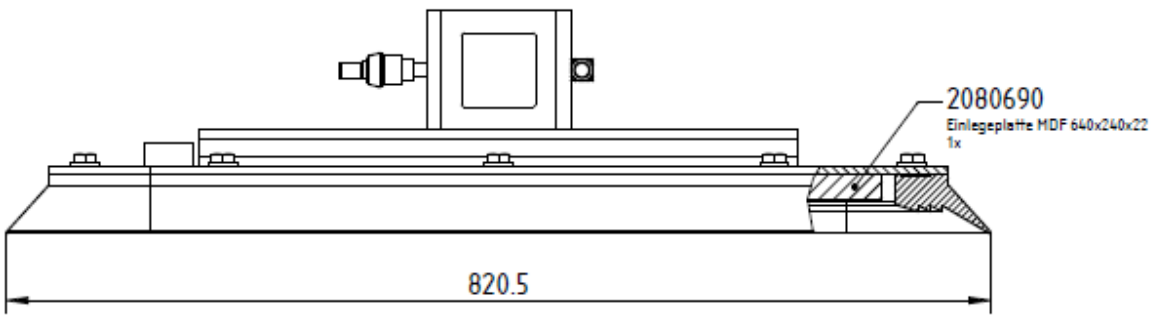
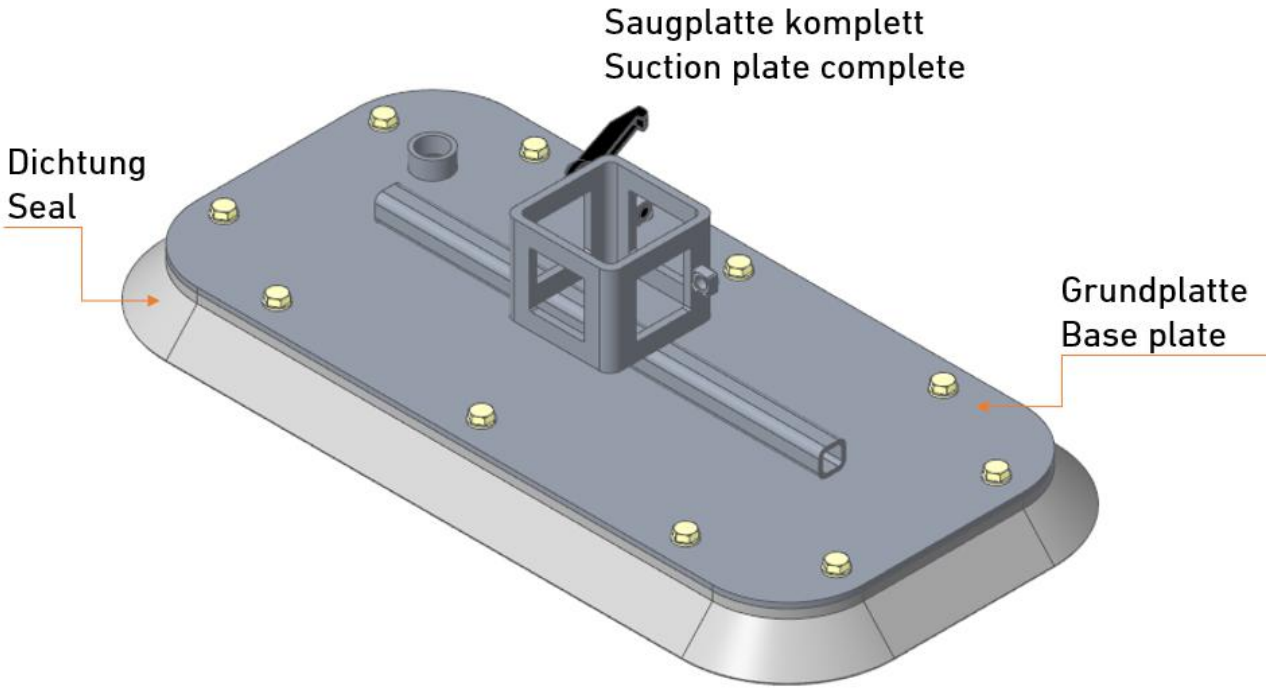
1			
2			

Bezeichnung Designation	Artikelnummer Item number	Bild Picture	Dichtung Seal	Grundplatte Base plate	Einlegeplatte MDF Insert plate
Saugplatte links Suction plate left 420x820	3027238		2031482	3025262	X
Saugplatte rechts Suction plate right 420x820	3027239		2031482	3025263	X
Saugplatte links Suction plate left 420x820	3027240		2031482	3025262	2080690
Saugplatte rechts Suction plate right 420x820	3027241		2031482	3025263	2080690
Saugplatte mittig Suction plate middle 420x820	3025191		2031482	3025220	X
Saugplatte mittig Suction plate middle 420x820	3025250		2031482	3025220	2080690




Saugplatte komplett
Suction plate complete
Dichtung
Seal
Grundplatte
Base plate

10 Warranty

The manufacturer is liable for all defects of the vacuum lifting device resulting from a **verifiable** manufacturing error. The warranty includes the rectification of the defect or the replacement of defective parts. Our terms of sales are applicable. **All defective original parts shall be sent to us free of carriage charges.**

The period of warranty is **one year (except from wear parts)** with respect to a normal one-shift operation. The period of warranty is reduced for all operations other than the normal one-shift operation.

The warranty period starts with the delivery of the vacuum lifting device.

We are not liable for rectification and replacements costs, which were caused without our explicit, written agreement.

11 EU - Declaration of Conformity

according to EU directives

- EC Machinery Directive 2006/42/EG, Annex II A of 17th May 2006
- Low Voltage Directive 2014/35/EU of 26th February 2014
- EMC Directive 2014/30/EU of 26th February 2014

We hereby declare that the design, construction and model of the machine stated below in the version provided by our company is in compliance
with the basic safety and health requirements of the machinery directive 2006/42/EG, Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU.

All unauthorized modifications of the machine render this declaration invalid!

Manufacturer/representative:	AERO-LIFT Vakuumtechnik GmbH Binsdorf Turmstraße 1 D - 72351 Geislingen (Germany)
Machine description:	
Machine/system type:	Vacuum Lifting Device
Model designation:	AERO PORO
Machine No.:	-
Year of construction:	-

Applied harmonized standards, in particular:

● EN ISO 12100: 2010	Safety of Machinery
● EN 61000-6-2: 2006-03	Electromagnetic Compatibility - Noise immunity
● EN 61000-6-4: 2011-09	Electromagnetic Compatibility - Noise emission
● EN 842: 2009-01	Visual Danger Signals
● EN 1005 – 2: 2009-05	Manual Handling of Machinery and Component Parts of Machinery
● EN 60 204 – 1: 2019-06	Electrical Equipment of Machines
● EN 13155	Cranes - Non-fixed Load Lifting Attachments

Applied technical standards and specifications:

● DGUV 109-017 (Section 2.8) (Occupational Safety Regulations)	Load lifting attachments used in lifting equipment

Representative technical documentation:
AERO-LIFT Vakuumtechnik GmbH, Turmstr. 1, 72351 Geislingen, Germany

Place/Date:
Geislingen-Binsdorf,

Signer:

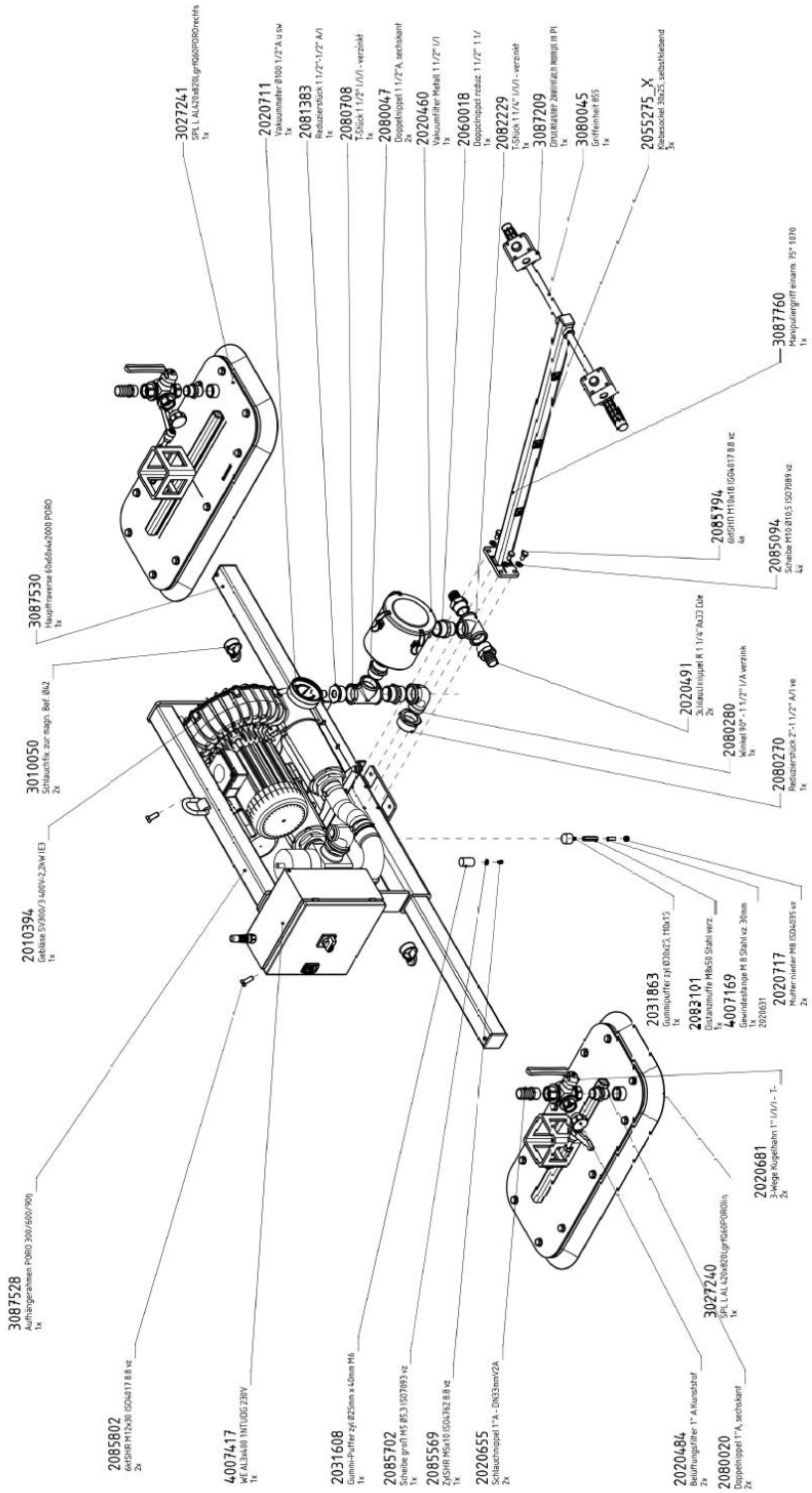
.....
Tobias Pauli Managing Director / CEO

☐ Original Declaration of Conformity
☒ Translation Declaration of Conformity

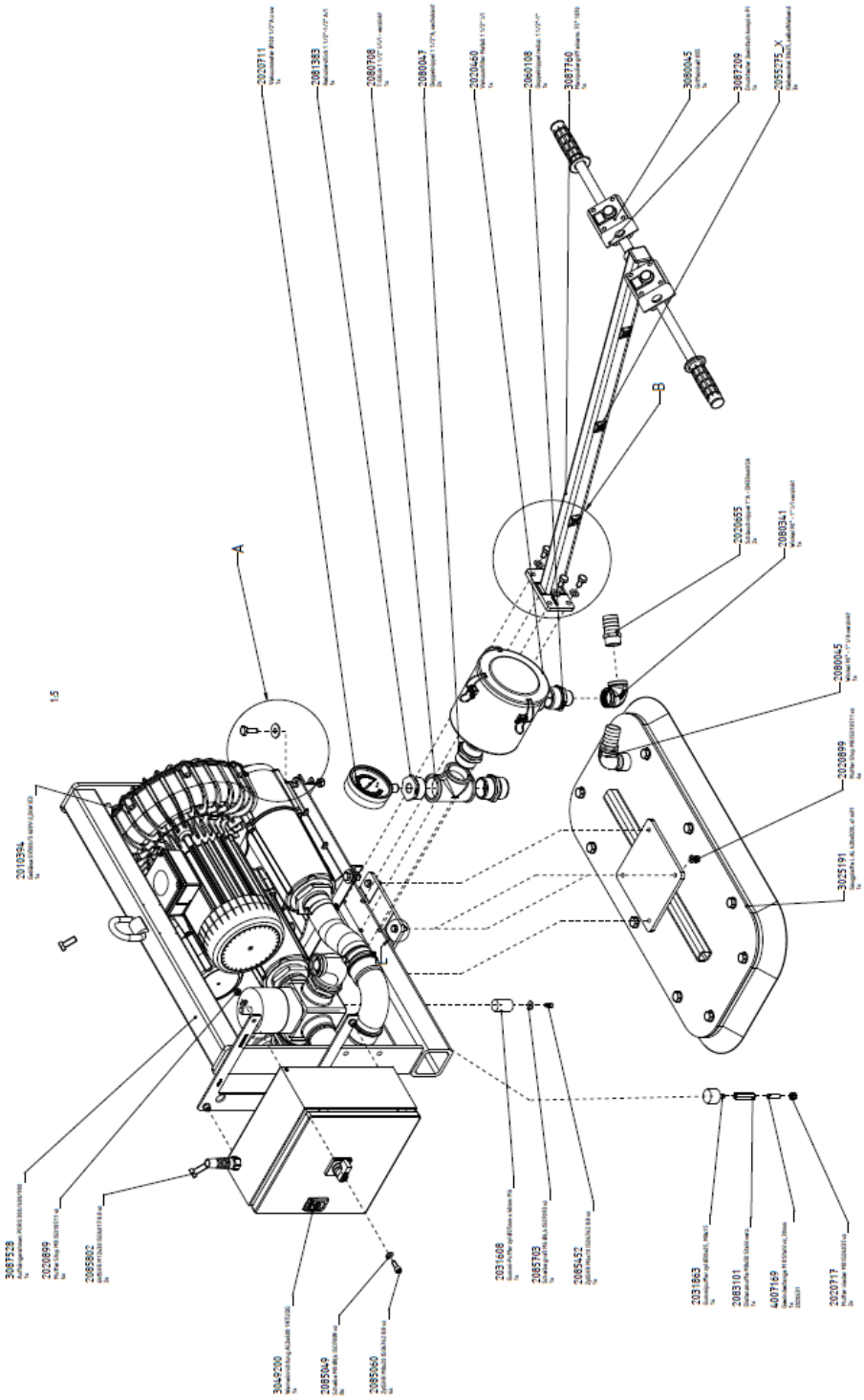
12 Annex

- Illustration for explanation only

AERO PORO 600/2L-P, Detail from technical drawing



AERO PORO 300/1L-P, Detail from technical drawing



General drawing to illustrate the device structure. Dimensions of beams and suction plates as well as their number can vary and can be found in the offer / order.

- Blower SV 300/3

Gebläse SV 300

BETRIEBSANLEITUNG

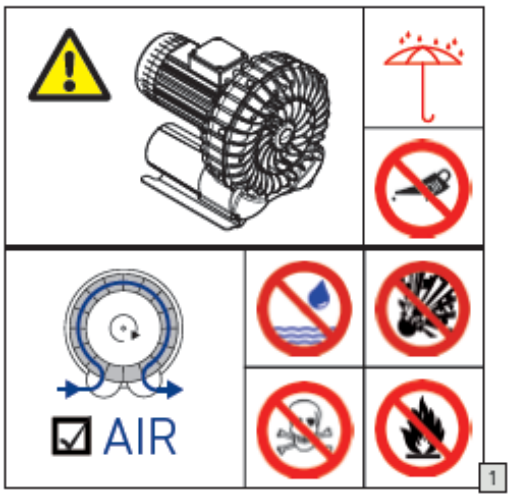
Blower SV 300

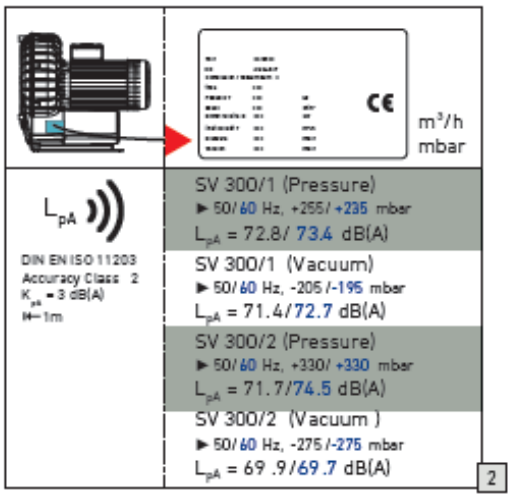
OPERATING INSTRUCTIONS

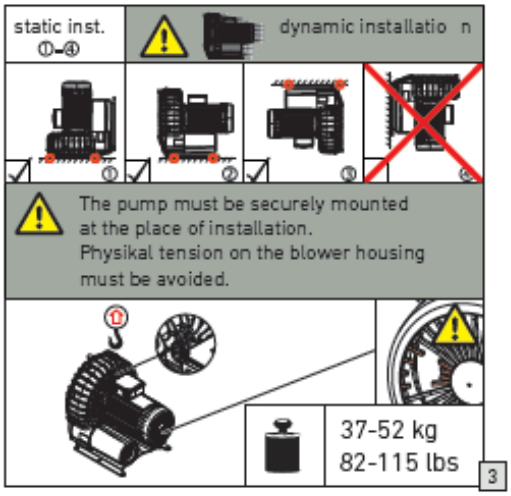
AERO® LIFT

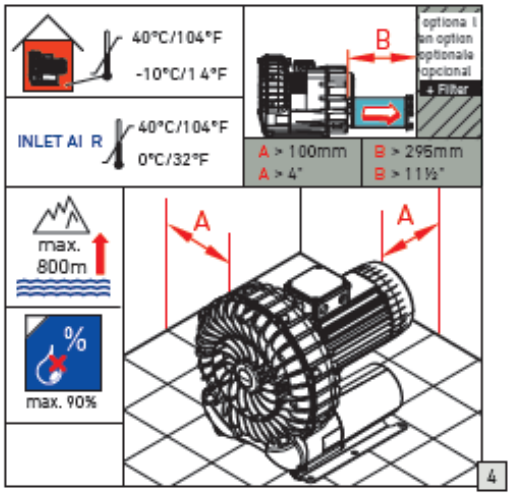
moving limits

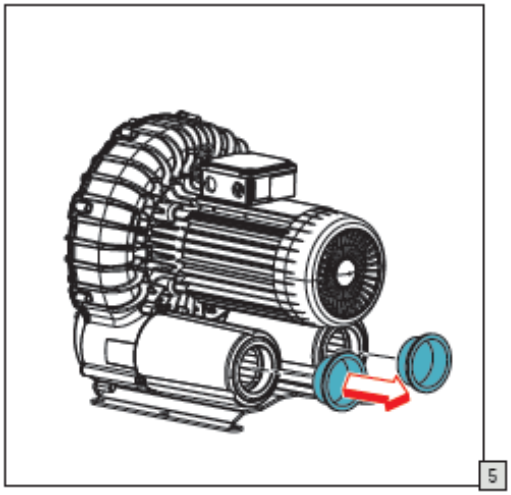
Mehr Informationen unter www.aero-lift.de

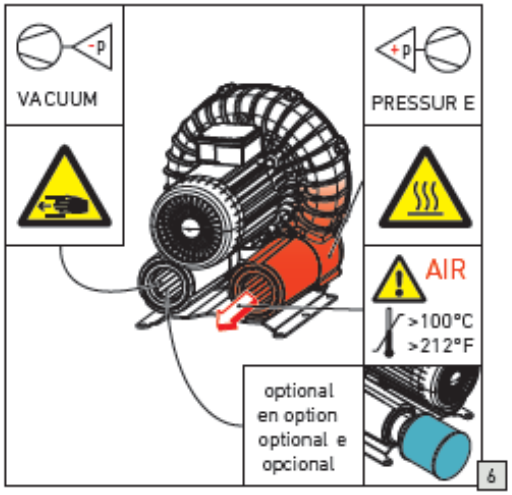

AIR
1

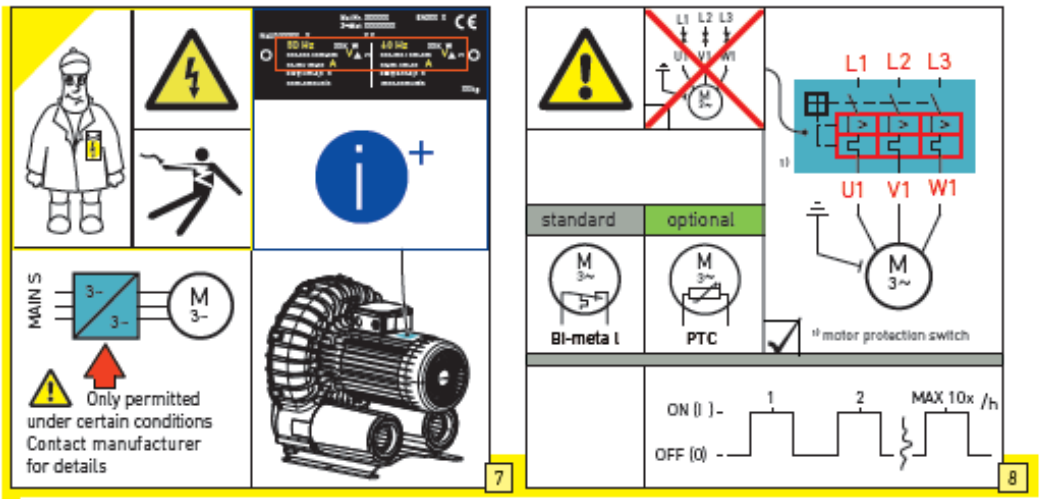

CE
m³/h
mbar
L pA
DIN EN ISO 11203
Accuracy Class 2
K pA = 3 dB(A)
1m
SV 300/1 (Pressure)
50/60 Hz, +255/+235 mbar
L pA = 72.8/ 73.4 dB(A)
SV 300/1 (Vacuum)
50/60 Hz, -205/-195 mbar
L pA = 71.4/72.7 dB(A)
SV 300/2 (Pressure)
50/60 Hz, +330/+330 mbar
L pA = 71.7/74.5 dB(A)
SV 300/2 (Vacuum)
50/60 Hz, -275/-275 mbar
L pA = 69 .9/69.7 dB(A)
2

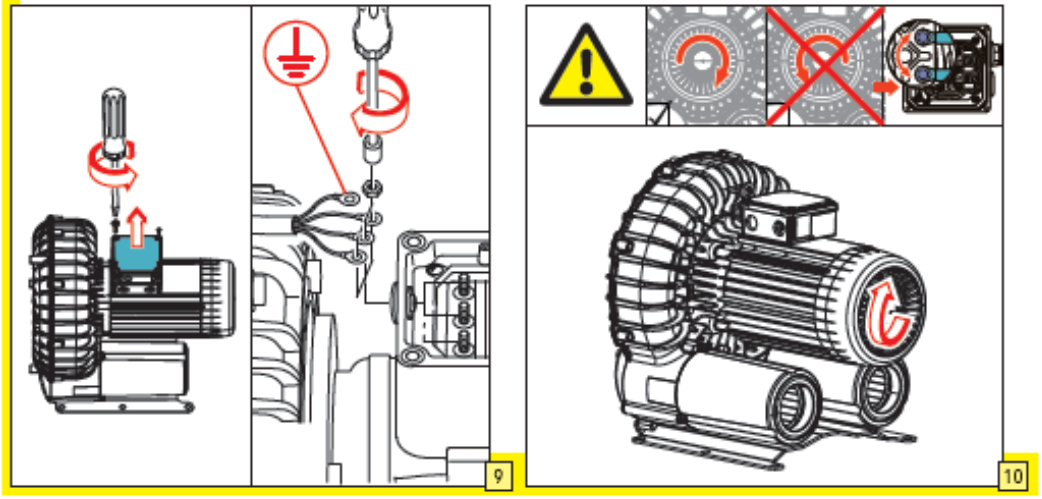

static inst.
①–④
dynamic installatio n
The pump must be securely mounted
at the place of installation.
Physikal tension on the blower housing
must be avoided.
37-52 kg
82-115 lbs
3

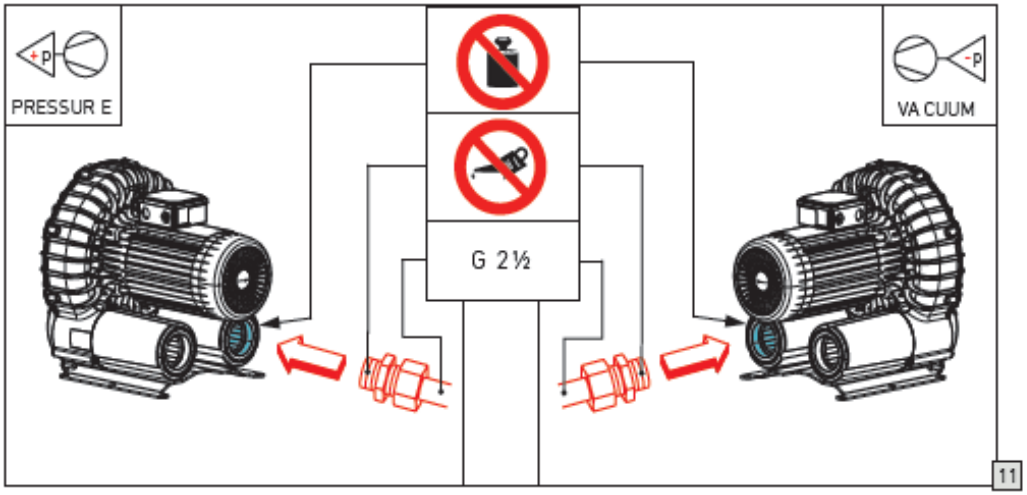

40°C/104°F
-10°C/14°F
INLET AI R
40°C/104°F
0°C/32°F
B
optiona l
en option
optionale
opcional
+ Filter
A > 100mm
A > 4"
B > 295mm
B > 11½"
max.
800m
%
max. 90%
A
A
4

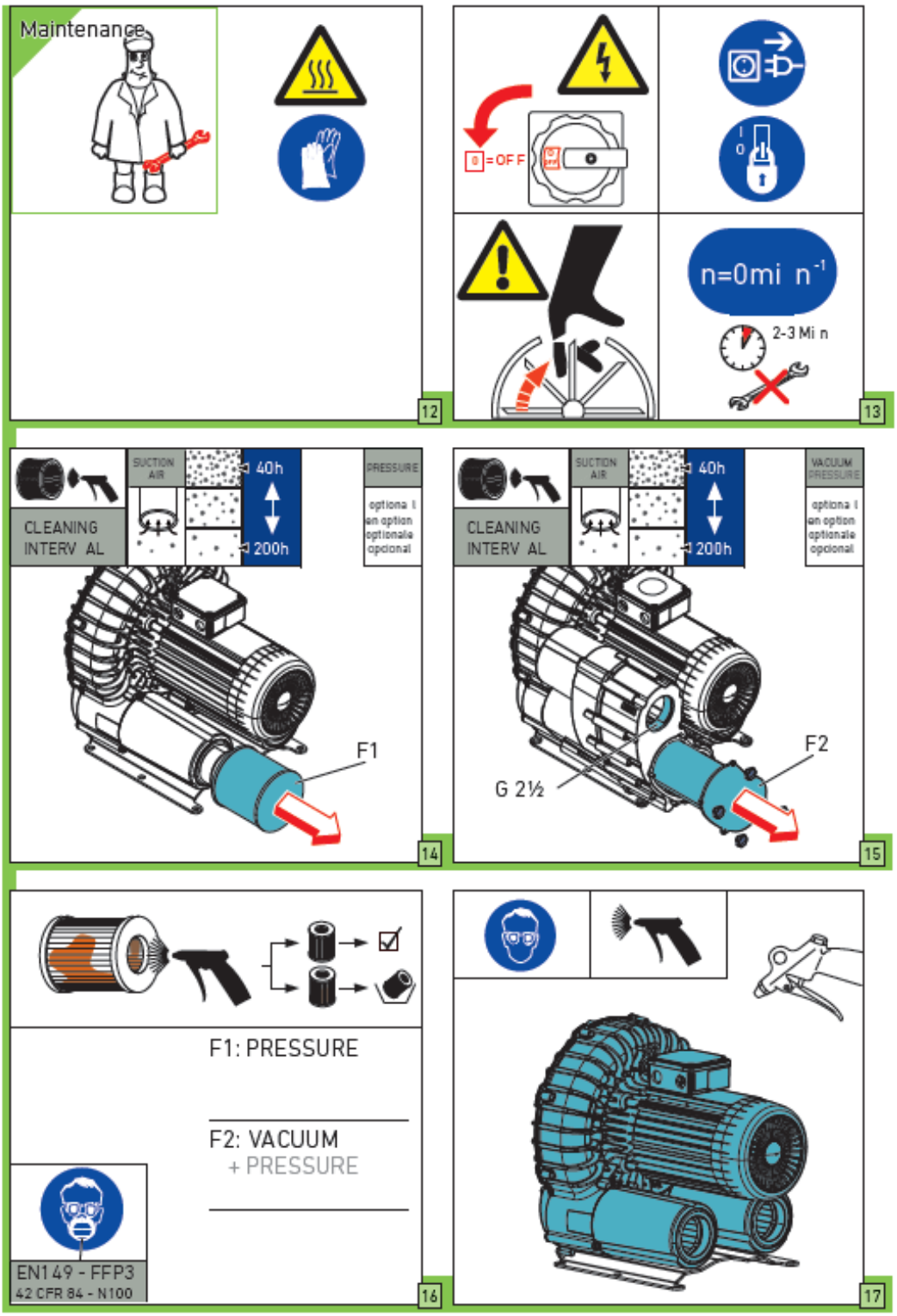

5


-p
VACUUM
+p
PRESSUR E
AIR
>100°C
>212°F
optional
en option
optional e
opcional
6


MAIN S
Only permitted
under certain conditions
Contact manufacturer
for details
7
L1 L2 L3
U1 V1 W1
standard
optional
Bi-meta l
PTC
motor protection switch
ON (I)
OFF (0)
1
2
MAX 10x /h
8


9
10

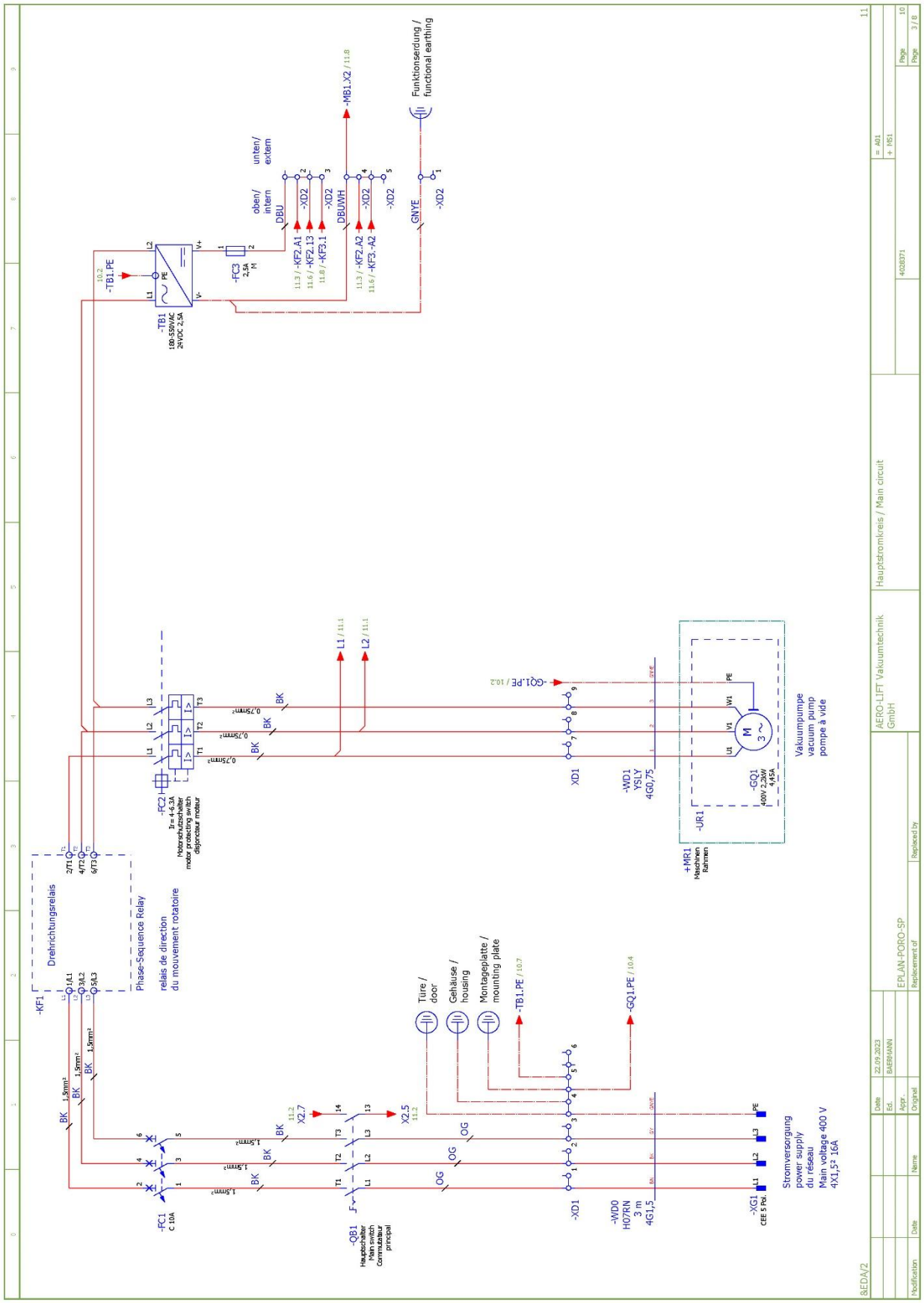

+P
PRESSUR E
-P
VA CUUM
G 2½
11

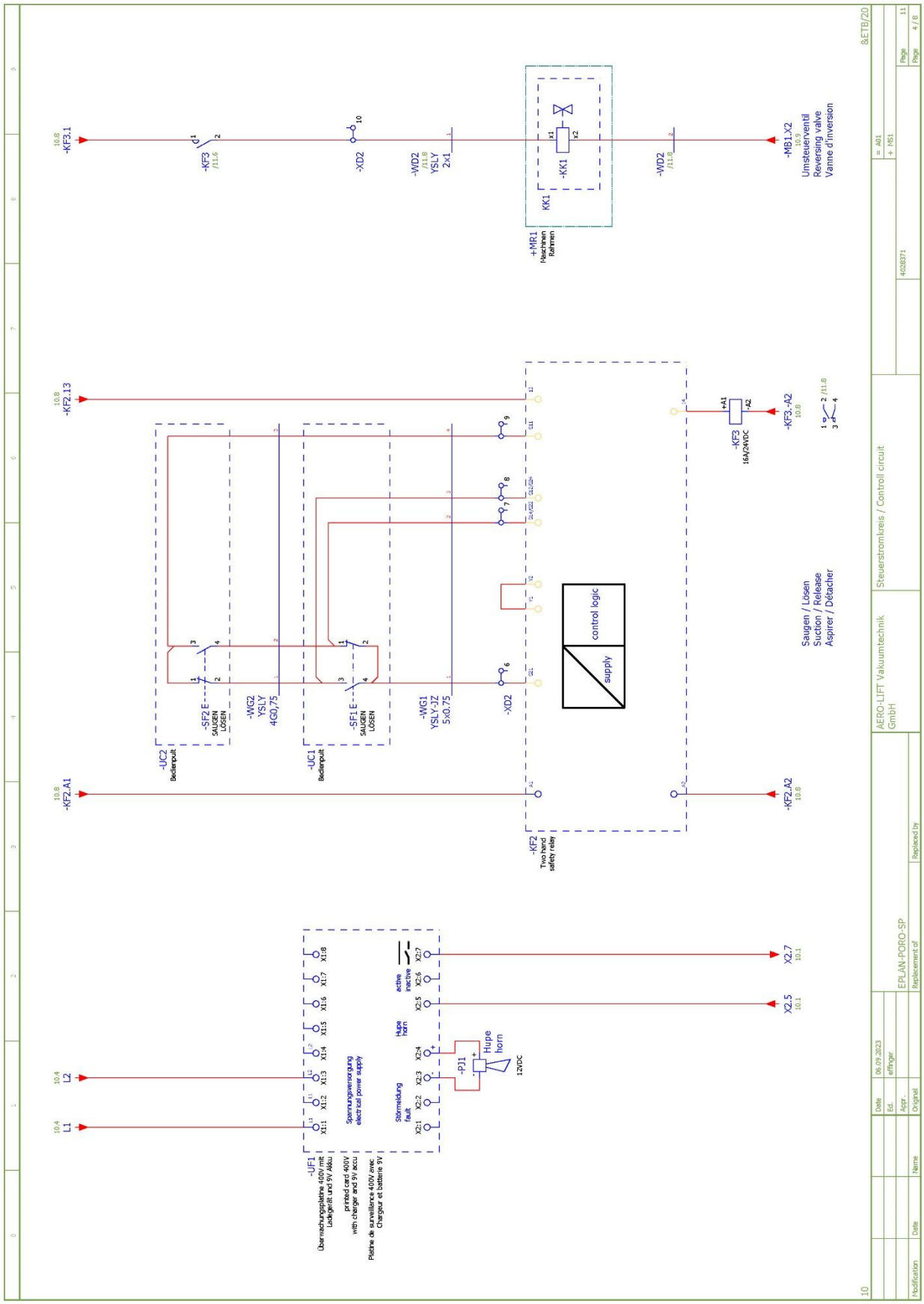

Maintenance
12
0=OFF
n=0mi n-1
2-3 Mi n
13
CLEANING INTERV AL
SUCTION AIR
40h
200h
PRESSURE
optiona l en option optionale opcional
F1
14
CLEANING INTERV AL
SUCTION AIR
40h
200h
VACUUM PRESSURE
optiona l en option optionale opcional
F2
G 2½
15
F1: PRESSURE
F2: VACUUM
+ PRESSURE
EN1 49 - FFP3
42 CFR 84 - N100
16
17

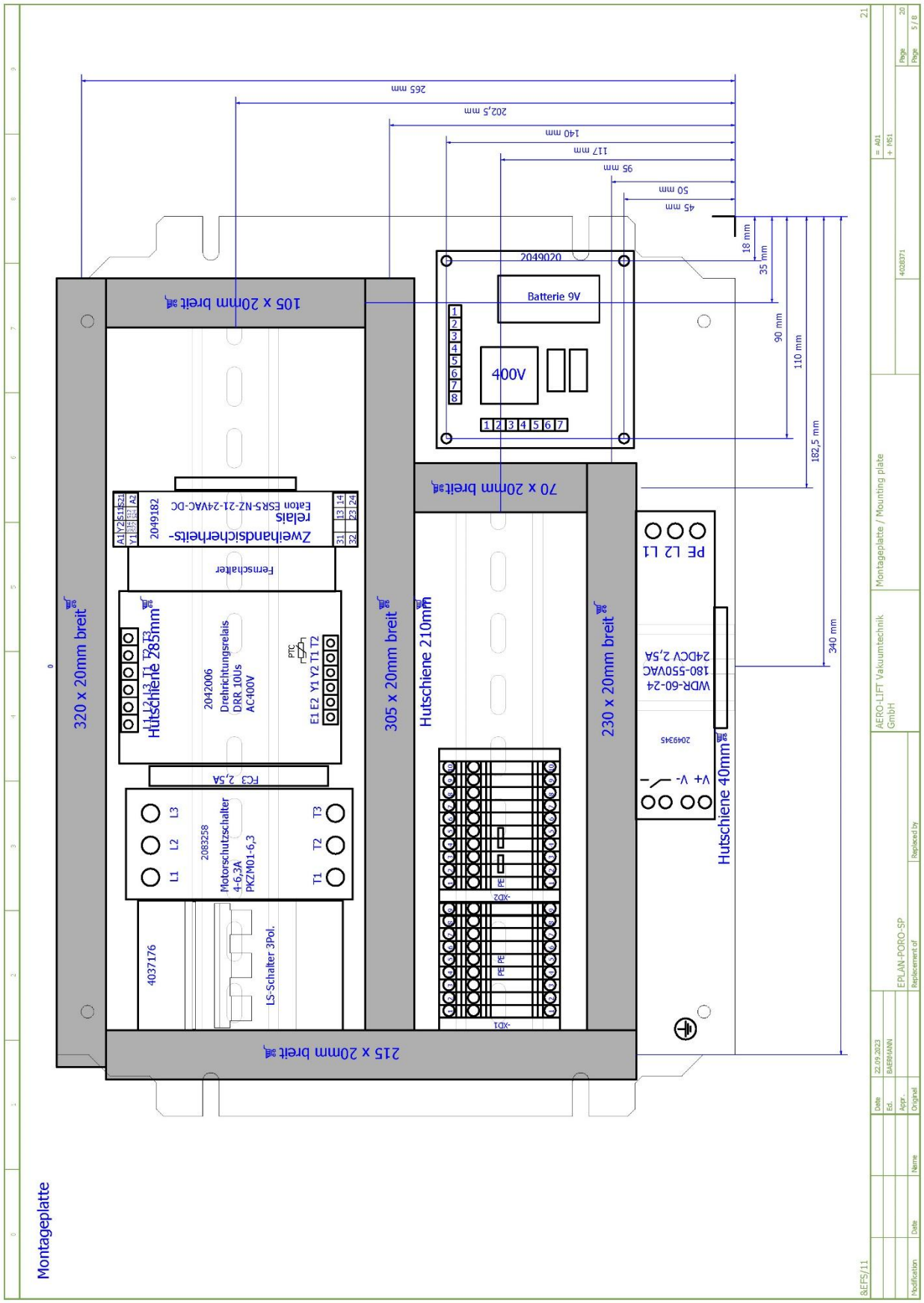
- Connecting diagram

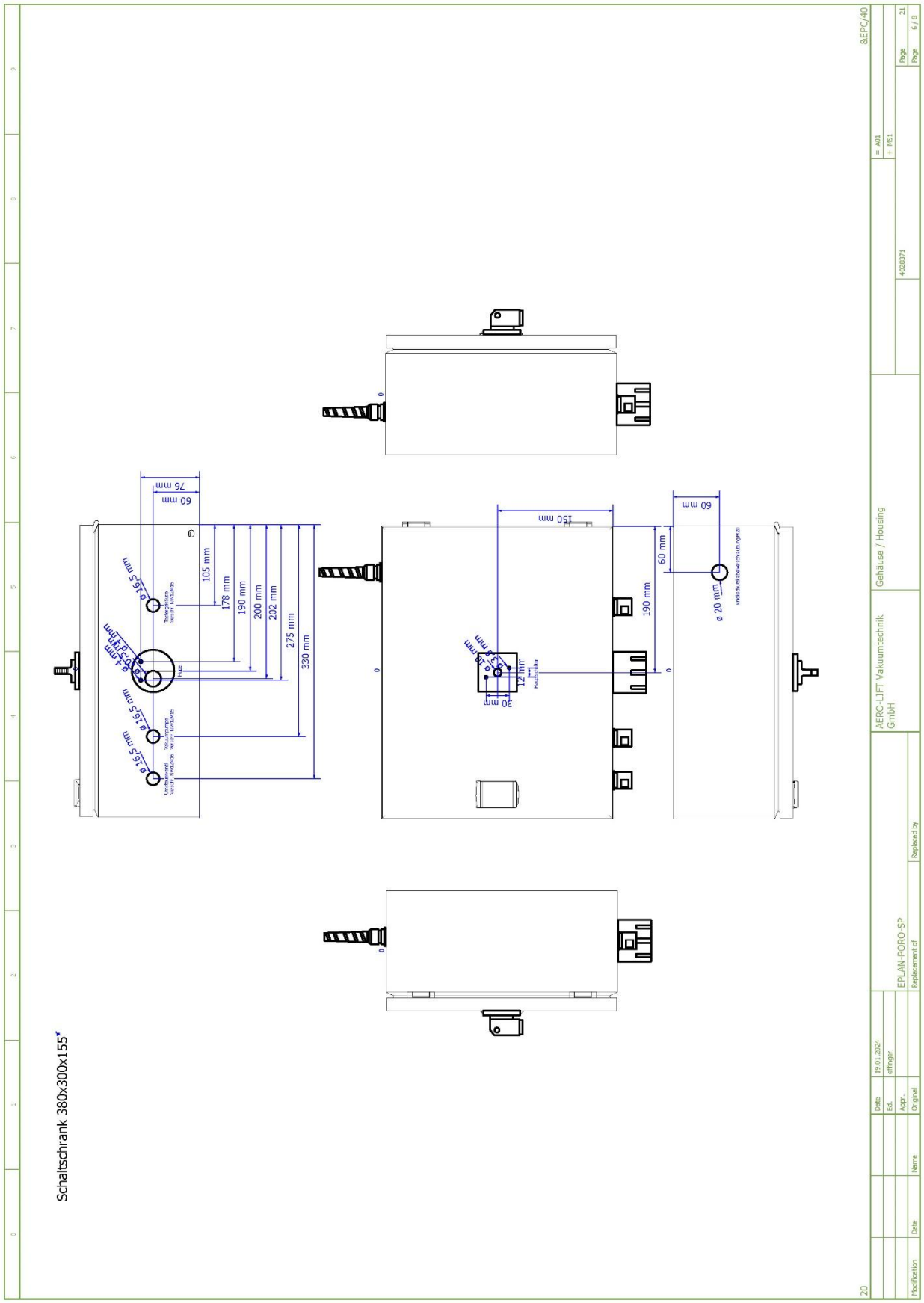
Plant information
Anlageninformationen

Usage: Verwendung:		Color Drahtfarbe:	Color code according IEC 60757	Wire cross section Querschnitt
Supply voltage / Betriebsspannung:	400V 50/60Hz	Black / Schwarz	BK	1,5/0,75mm²
Protective earth / Schutzleiter (PE):		Green-yellow / Grün-gelb	GNYE	Supply line cross-section / Zuleitungsquerschnitt
Control voltage / Steuerspannung (N):	230V 50/60Hz	Light blue / Hellblau	BU	0,75mm²
Control voltage / Steuerspannung (L):	230V 50/60Hz	Red / Rot	RD	0,75mm²
Control voltage / Steuerspannung (L+):	<=24VDC	Dark blue / Dunkelblau	(D)BU	0,75mm²
Control voltage / Steuerspannung (L-):	<=24VDC	Dark blue White / Dunkelblau-Weiss	(D)BUWH	0,75mm²
External voltage / Fremdspannung Pre main switch / vor dem Hauptschalter UPS circuit / USV Stromkreis		Orange / Orange	OG	1,5mm²
Technical documents / Techn. Unterlagen: Circuit diagram / Stromlaufplan BOM / Stückliste			Wiring / Verdrahtung: <=0,75mm² H05V-K > 0,75mm² H07V-K	The indicated cross-section is to be applied, if no further details are given in the plan. Der angegebe Querschnitt ist anzuwenden, sofern im Plan keine weitern Angaben gegeben sind.
Regulations / Vorschriften: In accordance with DIN EN 60204 / VDE 0113 In Anlehnung an EN 60204 / VDE 0113		These plans are drawn with the CAE system E-Plan. Changes should only be made with the CAE system using the original parameters. Diese Pläne sind mit dem CAE-System E-Plan gezeichnet. Änderungen sollten nur mit dem CAE-System unter Verwendung der Original Parameter durchgeführt werden.		


Funktionserdung / functional earthing
-MB1.X2 / 11.8
unten/ extern
oben/ intern
DBU
DBUWH
GNYE
-XD2
-TB1.PE
-TB1
100-550V AC 24VDC 2,5A
-FC3 2,5A M
-KF2.A1
-KF2.13
-KF3.1
-KF2.A2
-KF3.-A2
-GQ1.PE / 10.2
L1 / 11.1
L2 / 11.1
-FC2
Motorschutzschalter motor protecting switch disjoncteur moteur
-XD1
-WD1 YSLY 4G0,75
-UR1
+MR1 Maschinen Rahmen
-GQ1 400V 2,2kW 4,45A
Vakuumpumpe vacuum pump pompe à vide
Drehrichtungsrelais
Phase-Sequence Relay
relais de direction du mouvement rotatoire
-KF1
-FC1 C 10A
-QB1 Hauptschalter Main switch Commutateur principal
X2.7
X2.5
Türe / door
Gehäuse / housing
Montageplatte / mounting plate
-TB1.PE / 10.7
-GQ1.PE / 10.4
-WD0 H07RN 3 m 4G1,5
-XG1 CEE 5 Pol.
Stromversorgung power supply du réseau
Main voltage 400 V 4X1,5² 16A
AERO-LIFT Vakuumtechnik GmbH
Hauptstromkreis / Main circuit
EPLAN-PORO-SP
&EDA/2


-KF3.1
-KF3
-XD2
-WD2
-KK1
-MB1.X2
Umsteuerventil
Reversing valve
Vanne d'inversion
+MR1
Maschinen
Rahmen
-KF2.13
-KF2.A1
-KF2.A2
-KF2
Two hand
safety relay
-KF3
16A/24VDC
-KF3:.A2
-UC2
Bedienpult
-UC1
Bedienpult
-SF2.E
SAUGEN
LÖSEN
-SF1.E
SAUGEN
LÖSEN
-WG2
YSLY
4G0,75
-WG1
YSLY-JZ
5x0,75
control logic
supply
Saugen / Lösen
Suction / Release
Aspirer / Détacher
-UF1
Überwachungsplatine 400V mit
Ladegerät und 9V Akku
printed card 400V
with charger and 9V accu
Platine de surveillance 400V avec
Chargeur et batterie 9V
Spannungsversorgung
electrical power supply
Störmeldung
fault
active
inactive
Hupe
horn
-PJ1
12VDC
L2
L1
X2.7
X2.5
AERO-LIFT Vakuumtechnik
GmbH
Steuerstromkreis / Controll circuit
EPLAN-PORO-SP
Date
Ed.
Appr.
Original
Modification
Name
Replacement of
Replaced by
06.09.2023
effinger


265 mm
202,5 mm
140 mm
117 mm
95 mm
50 mm
45 mm
18 mm
35 mm
90 mm
110 mm
182,5 mm
340 mm
105 x 20mm breit
320 x 20mm breit
305 x 20mm breit
230 x 20mm breit
70 x 20mm breit
215 x 20mm breit
Hutschiene 285mm
Hutschiene 210mm
Hutschiene 40mm
2049020
Batterie 9V
400V
2049182
Zweihandsicherheits-relais
Eaton ESR5-NZ-21-24VAC-DC
Fernschalter
2042006
Drehrichtungsrelais
DRR_10Us
AC400V
FC3 2,5A
2083258
Motorschutzschalter
4-6,3A
PKZM01-6,3
4037176
LS-Schalter 3Pol.
PE L2 L1
WDR-60-24
180-550VAC
24DCV 2,5A
2049345
V+ V-
Montageplatte
Montageplatte / Mounting plate
AERO-LIFT Vakuumtechnik GmbH
EPLAN-PORO-SP
22.09.2023
BAERMANN


Schaltschrank 380x300x155
60 mm
76 mm
105 mm
178 mm
190 mm
200 mm
202 mm
275 mm
330 mm
150 mm
60 mm
190 mm
ø 20 mm
12 mm
30 mm
AERO-LIFT Vakuumtechnik GmbH
Gehäuse / Housing
EPLAN-PORO-SP

Parts list

Artikelstückliste

BMK Device tag	Artikelnummer Part number	Menge Quantity	Bezeichnung Description	Bemerkung Note
-AA1	2055614	1	380x300x155 KX E-box, with mounting plate	
-FC1	4037176	1	Circuit breaker 3pin C10A	Leitungsschutzschalter
-FC1	2055685	1	Clipfix NS35-5 End clamp	Leitungsschutzschalter
-FC2	2083258	1	Motor circuit breaker, 4 - 6.3 A	Vakuumpumpe
-FC3	2042037	2	Microfuse 5x20 - 2,5A MT	
-FC3	2055064	1	Fuse terminal block	
-KF1	2042006	1	DRR10, Phase-Sequence Relay, 3 AC 400 V	
-KF2	2049182	1	Safety two-hand relay, 24VDC/AC, 2-channel, 2 enabling paths	
-KF3	2082304	1	Impulse switch 24V DC. 1 NO contact + 1 NC contact 16A/250V AC	
-PJ1	2049022	1	Siren, electr. 12 V, 100 mA	Hupe
-QB1	2049439	1	Main switch 3pin 15 20A 5,5KW	Hauptschalter
-TB1	2049345	1	Power supply 180-550V - 24V, 2,5A	
-UB	4069364	1	Wiring duct 43x20; 215 mm	
-UB	4003436	1	Wiring duct 43x20; 230 mm	
-UB	4003452	1	Wiring duct 43x20; 320 mm	
-UB	4058777	1	Wiring duct 43x20; 305 mm	
-UB	4003391	1	Wiring duct 43x20; 70 mm	
-UB	4069363	1	Wiring duct 43x20; 105 mm	
-UF1	2049020	1	Circuit board for vacuum/mains monitoring 400V	Leiterplatte
-UF1	2042009	1	Battery 9V 220mAh	Leiterplatte
-UF1	2080608	4	Spacer circuit board	Leiterplatte
-UR	4003468	1	DIN rail NS 35; 40 mm	
-UR	4069365	1	DIN rail NS 35; 285 mm	
-UR	4069366	1	DIN rail NS 35; 210 mm	
-WD0	2049026	1	Rubber hose cable 4G1.5 with CEE plug	Zuleitung
-WD0	2080405	1	Plastic cable gland with kink protection M20x1.5	Zuleitung
-WD0	2080417	1	Locknut M20x1,5 plastic	Zuleitung
-WD1	4038292	1	Control cable 4G0,75 YSLY; 2000 mm	Vakuumpumpe
-WD1	2082961	1	Corrugated pipe fitting NW12 - M16	Vakuumpumpe
-WD1	2080416	1	Locknut M16x1,5 plastic	Vakuumpumpe
-WD2	4038296	1	Control cable 2G1 YSLY; 1500 mm	
-WD2	2082961	1	Corrugated pipe fitting NW12 - M16	
-WD2	2080416	1	Locknut M16x1,5 plastic	
-WG1	4038293	1	Control cable 5G0,75 YSLY; 2000 mm	
-WG1	2082961	2	Corrugated pipe fitting NW12 - M16	
-WG1	2080416	1	Locknut M16x1,5 plastic	
-WG2	4037139	1	Control cable 4G0,75 YSLY; 1000 mm	
-WG2	2082961	1	Corrugated pipe fitting NW12 - M16	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055684	1	End cover D-STS 2,5	
-XD1	2055685	3	Clipfix NS35-5 End clamp	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055682	1	Feed-through terminal PTS 2.5-TWIN-PE	
-XD1	2055682	1	Feed-through terminal PTS 2.5-TWIN-PE	
-XD1	2055682	1	Feed-through terminal PTS 2.5-TWIN-PE	
-XD2	2055682	1	Feed-through terminal PTS 2.5-TWIN-PE	
-XD2	2055684	1	End cover D-STS 2,5	
-XD2	2055685	1	Clipfix NS35-5 End clamp	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	

Parts list

Artikelstückliste

BMK Device tag	Artikelnummer Part number	Menge Quantity	Bezeichnung Description	Bemerkung Note
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	

40

			Date	19.01.2024		AERO-LIFT Vakuumtechnik GmbH	Artikelstückliste/BOM	= A01
			Ed.	effinger				+ MS1
			Appr.		EPLAN-PORO-SP			4028371 Page 40.a
Modification	Date	Name	Original		Replacement of	Replaced by		Page 8 / 8

AERO-LIFT Vakuumtechnik GmbH
Turmstrasse 1, 72351 Geislingen
Tel: + 49 (0) 7428-94514-0
Fax: + 49 (0) 7428-94514-38

Schaltplan / Connecting diagram / schéma de circuits: Warneinrichtung / Warning appliance / signal d'avertissement: EPLAN-PORO-CH-SP

Artikelnummer / article No. / numéro d'article: **4028372**

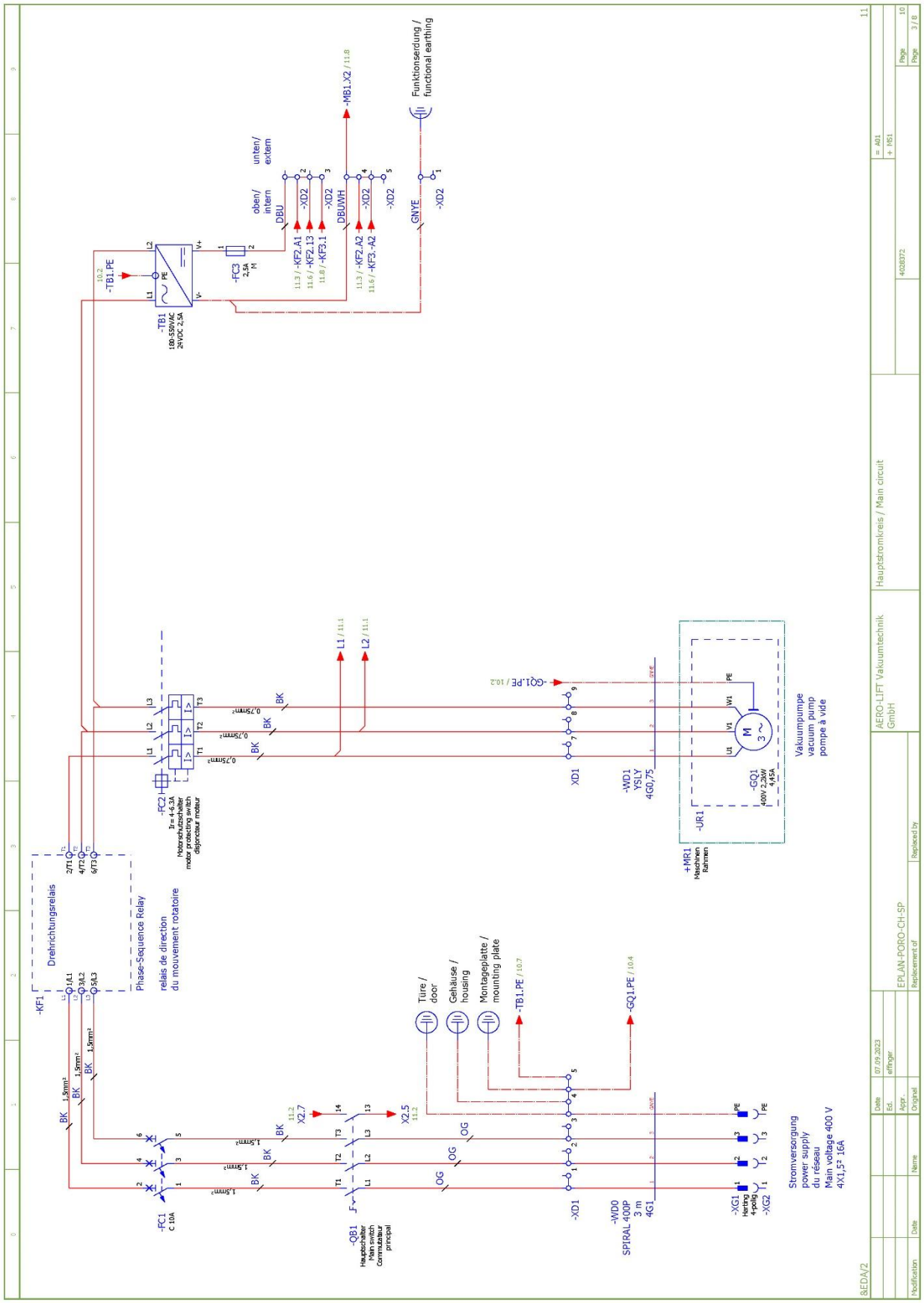
Created on	22.09.2023
Edit date	19.01.2024

&EDA/2

			Date	19.01.2024	EPLAN-PORO-CH-SP		AERO-LIFT Vakuumtechnik GmbH	Titelblatt/ Front page	= A01
			Ed.	effinger					+ MS1
			Appr.						4028372 Page 1
Modification	Date	Name	Original		Replacement of	Replaced by			Page 1 / 8

Plant information
Anlageninformationen

Usage: Verwendung:		Color Drahtfarbe:	Color code according IEC 60757	Wire cross section Querschnitt
Supply voltage / Betriebsspannung:	400V 50/60Hz	Black / Schwarz	BK	1,5/0,75mm²
Protective earth / Schutzleiter (PE):		Green-yellow / Grün-gelb	GNYE	Supply line cross-section / Zuleitungsquerschnitt
Control voltage / Steuerspannung (N):	230V 50/60Hz	Light blue / Hellblau	BU	0,75mm²
Control voltage / Steuerspannung (L):	230V 50/60Hz	Red / Rot	RD	0,75mm²
Control voltage / Steuerspannung (L+):	<=24VDC	Dark blue / Dunkelblau	(D)BU	0,75mm²
Control voltage / Steuerspannung (L-):	<=24VDC	Dark blue White / Dunkelblau-Weiss	(D)BUWH	0,75mm²
External voltage / Fremdspannung Pre main switch / vor dem Hauptschalter UPS circuit / USV Stromkreis		Orange / Orange	OG	1,5mm²
Technical documents / Techn. Unterlagen: Circuit diagram / Stromlaufplan BOM / Stückliste			Wiring / Verdrahtung: <=0,75mm² H05V-K > 0,75mm² H07V-K	The indicated cross-section is to be applied, if no further details are given in the plan. Der angegebe Querschnitt ist anzuwenden, sofern im Plan keine weitern Angaben gegeben sind.
Regulations / Vorschriften: In accordance with DIN EN 60204 / VDE 0113 In Anlehnung an EN 60204 / VDE 0113		These plans are drawn with the CAE system E-Plan. Changes should only be made with the CAE system using the original parameters. Diese Pläne sind mit dem CAE-System E-Plan gezeichnet. Änderungen sollten nur mit dem CAE-System unter Verwendung der Original Parameter durchgeführt werden.		


Funktionserdung / functional earthing
-MB1.X2 / 11.8
unten/ extern
oben/ intern
DBU
DBUWH
GNYE
-XD2
-TB1.PE
-TB1
180-550V AC 24VDC 2,5A
-FC3 2,5A M
-KF2.A1 / -KF2.13 / -KF3.1
-KF2.A2 / -KF3.-A2
Drehrichtungsrelais
Phase-Sequence Relay
relais de direction du mouvement rotatoire
-KF1
-FC2 Ir= 4-6,3A
Motorschutzschalter motor protecting switch disjoncteur moteur
L1 / 11.1
L2 / 11.1
-GQ1.PE / 10.2
XD1
-WD1 YSLY 4G0,75
-UR1
-GQ1 400V 2,2kW 4,45A
+MR1 Maschinen Rahmen
Vakuumpumpe vacuum pump pompe à vide
-FC1 C 10A
-QB1 Hauptschalter Main switch Commutateur principal
X2.7
X2.5
Türe / door
Gehäuse / housing
Montageplatte / mounting plate
-TB1.PE / 10.7
-GQ1.PE / 10.4
-WD0 SPIRAL 400P 3 m 4G1
-XD1
-XG1 Hering 4-polig
-XG2
Stromversorgung power supply du réseau Main voltage 400 V 4X1,5² 16A
AERO-LIFT Vakuumtechnik GmbH
Hauptstromkreis / Main circuit
EPLAN-PORO-CH-SP
Date 07.09.2023
Ed. effinger
Appr.
Original
Name
Date
Modification
Replacement of
Replaced by
4028372
= A01
+ MS1
Page 10
Page 3 / 8
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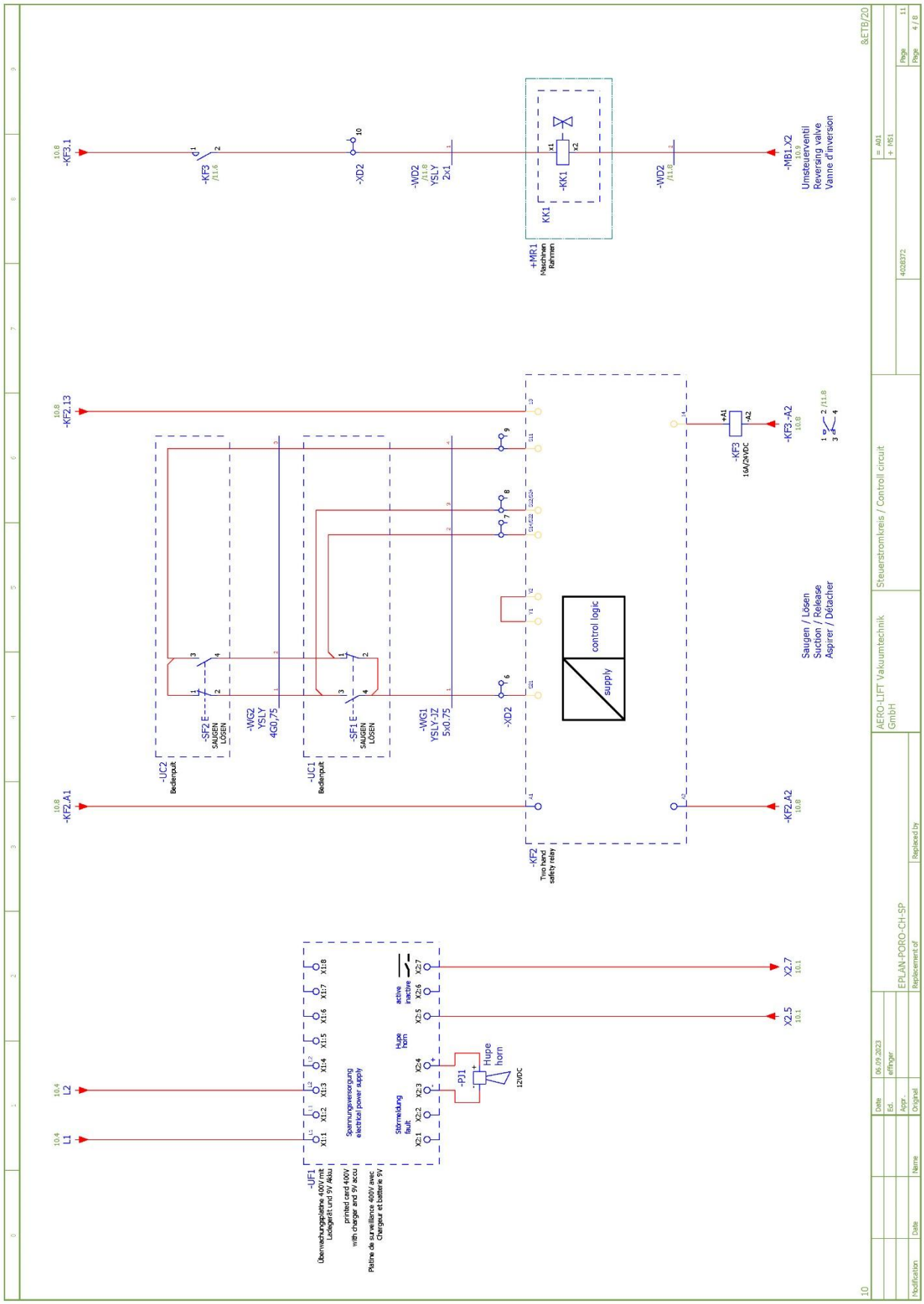
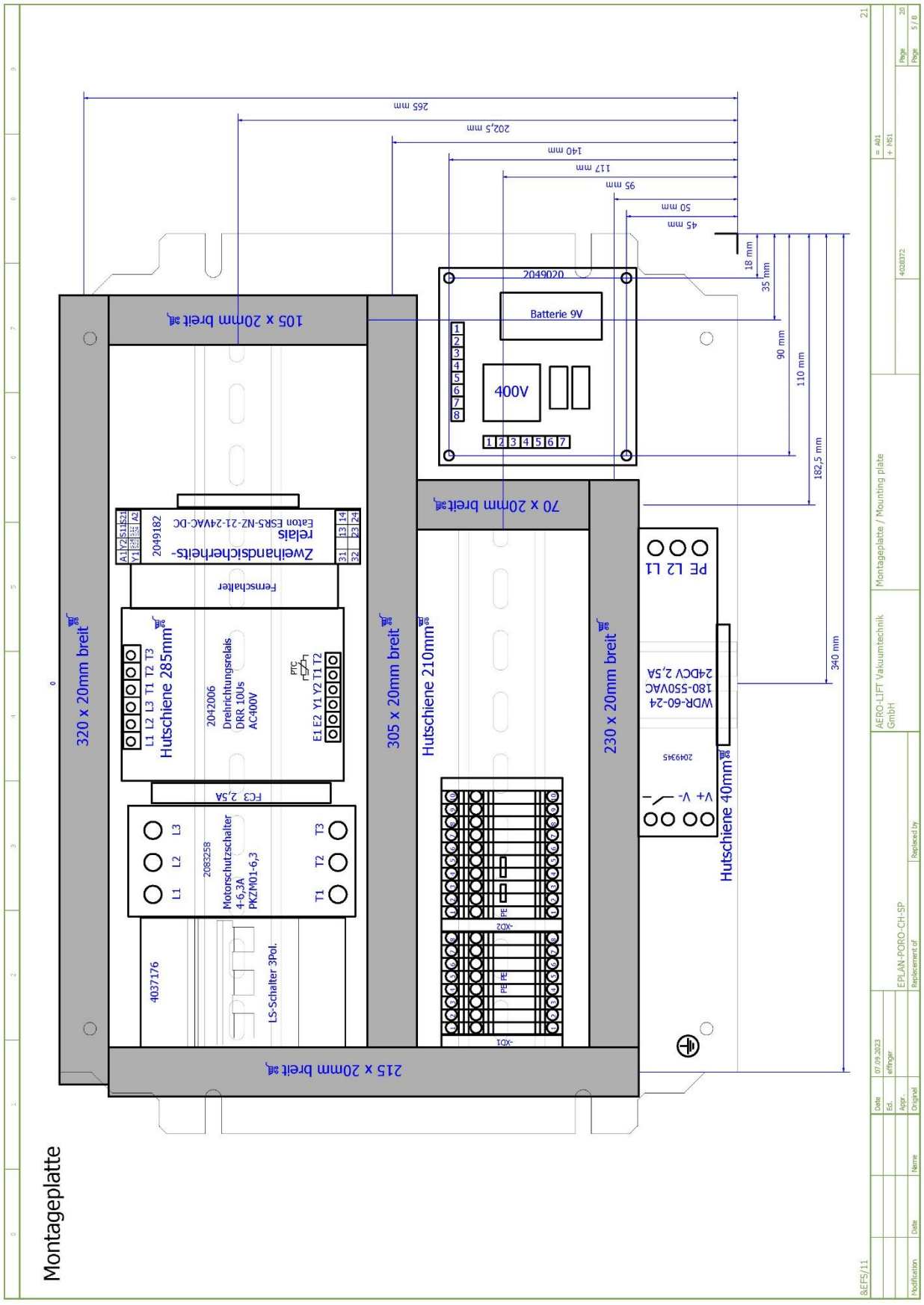
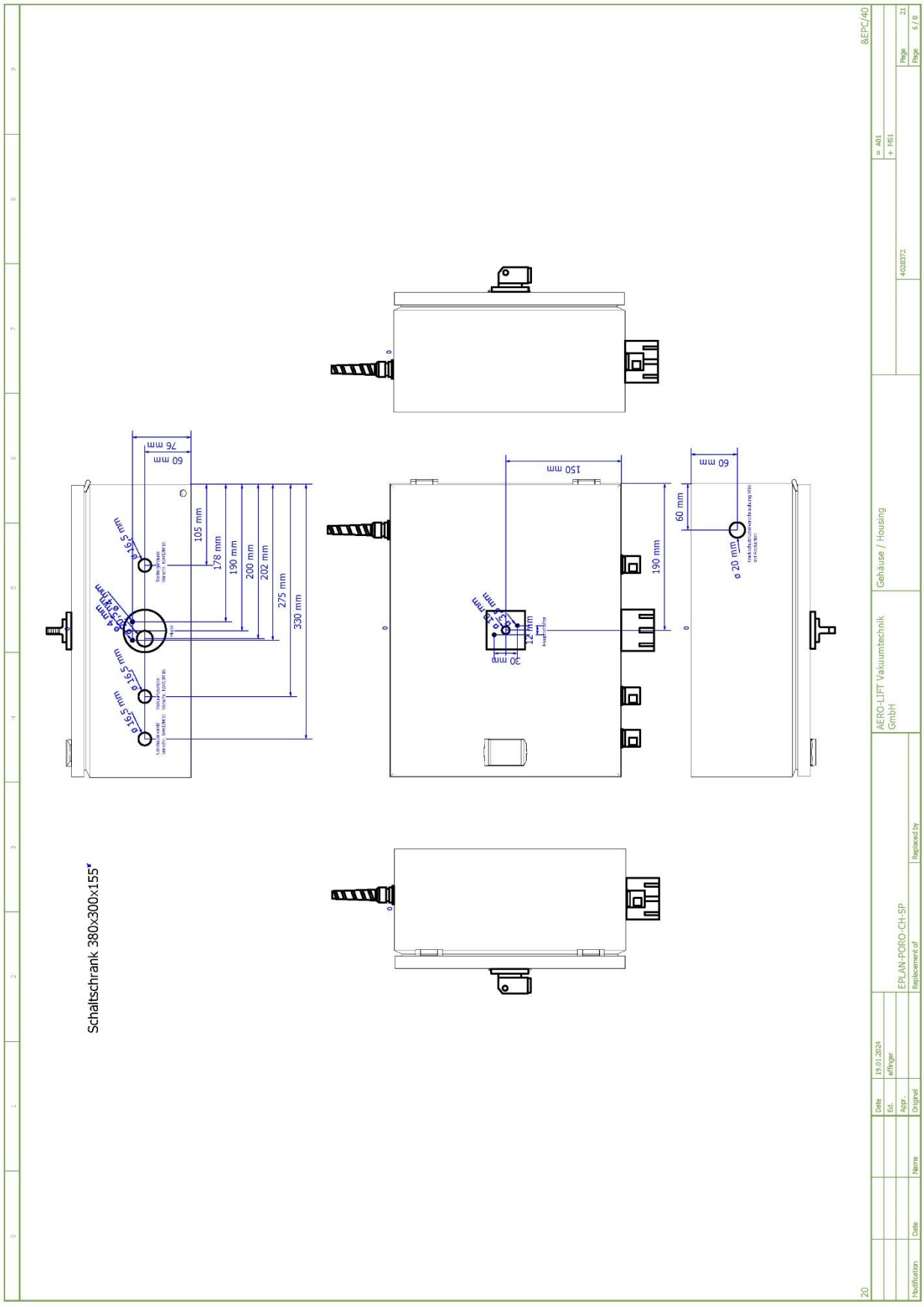

-KF3.1
-KF3
-XD2
-WD2
-KK1
-MB1.X2
Umsteuerventil
Reversing valve
Vanne d'inversion
+MR1
Maschinen Rahmen
-KF2.13
-KF3.-A2
-KF3
16A/24VDC
-UC2
Bedienpult
-UC1
Bedienpult
-SF2 E
SAUGEN
LÖSEN
-SF1 E
SAUGEN
LÖSEN
-WG2
YSLY
4G0,75
-WG1
YSLY-JZ
5x0,75
control logic
supply
Saugen / Lösen
Suction / Release
Aspirer / Détacher
-KF2.A1
-KF2.A2
-KF2
Two hand safety relay
L1
L2
-UF1
Überwachungsplatine 400V mit Ladegerät und 9V Akku
printed card 400V with charger and 9v accu
Platine de surveillance 400V avec Chargeur et batterie 9V
Spannungsversorgung
electrical power supply
Störmeldung
fault
Hupe
horn
-PJ1
12VDC
active
inactive
X2.7
X2.5
AERO-LIFT Vakuumtechnik GmbH
Steuerstromkreis / Controll circuit
EPLAN-PORO-CH-SP
Replacement of
Replaced by
Date
Ed.
Appr.
Original
Name
Modification
06.09.2023
effinger


Montageplatte
105 x 20mm breit
320 x 20mm breit
305 x 20mm breit
230 x 20mm breit
215 x 20mm breit
70 x 20mm breit
Hutschiene 285mm
Hutschiene 210mm
Hutschiene 40mm
2049020
Batterie 9V
400V
Zweihandsicherheits-relais
Eaton ESR5-NZ-21-24VAC-DC
2049182
Fernschalter
2042006
Drehrichtungsrelais
DRR 10Us
AC400V
FC3 2,5A
2083258
Motorschutzschalter
4-6,3A
PKZM01-6,3
4037176
LS-Schalter 3Pol.
WDR-60-24
180-550VAC
24DCV 2,5A
2049345
265 mm
202,5 mm
140 mm
117 mm
95 mm
50 mm
45 mm
18 mm
35 mm
90 mm
110 mm
182,5 mm
340 mm
AERO-LIFT Vakuumtechnik GmbH
Montageplatte / Mounting plate
EPLAN-PORO-CH-SP


Schaltschrank 380x300x155
105 mm
178 mm
190 mm
200 mm
202 mm
275 mm
330 mm
60 mm
76 mm
150 mm
190 mm
60 mm
ø 20 mm
12 mm
30 mm
AERO-LIFT Vakuumtechnik GmbH
Gehäuse / Housing
EPLAN-PORO-CH-SP

Parts list

Artikelstückliste

BMK Device tag	Artikelnummer Part number	Menge Quantity	Bezeichnung Description	Bemerkung Note
-AA1	2055614	1	380x300x155 KX E-box, with mounting plate	
-FC1	4037176	1	Circuit breaker 3pin C10A	Leitungsschutzschalter
-FC1	2055685	1	Clipfix NS35-5 End clamp	Leitungsschutzschalter
-FC2	2083258	1	Motor circuit breaker, 4 - 6.3 A	Vakuumpumpe
-FC3	2042037	2	Microfuse 5x20 - 2,5A MT	
-FC3	2055064	1	Fuse terminal block	
-KF1	2042006	1	DRR10, Phase-Sequence Relay, 3 AC 400 V	
-KF2	2049182	1	Safety two-hand relay, 24VDC/AC, 2-channel, 2 enabling paths	
-KF3	2082304	1	Impulse switch 24V DC. 1 NO contact + 1 NC contact 16A/250V AC	
-PJ1	2049022	1	Siren, electr. 12 V, 100 mA	Hupe
-QB1	2049439	1	Main switch 3pin 15 20A 5,5KW	Hauptschalter
-TB1	2049345	1	Power supply 180-550V - 24V, 2,5A	
-UB	4069364	1	Wiring duct 43x20; 215 mm	
-UB	4003436	1	Wiring duct 43x20; 230 mm	
-UB	4003452	1	Wiring duct 43x20; 320 mm	
-UB	4058777	1	Wiring duct 43x20; 305 mm	
-UB	4003391	1	Wiring duct 43x20; 70 mm	
-UB	4069363	1	Wiring duct 43x20; 105 mm	
-UF1	2049020	1	Circuit board for vacuum/mains monitoring 400V	Leiterplatte
-UF1	2042009	1	Battery 9V 220mAh	Leiterplatte
-UF1	2080608	4	Spacer circuit board	Leiterplatte
-UR	4003468	1	DIN rail NS 35; 40 mm	
-UR	4069365	1	DIN rail NS 35; 285 mm	
-UR	4069366	1	DIN rail NS 35; 210 mm	
-WD0	2049501	1	Spiral cable 400 P 4G1/1000-3000	Zuleitung
-WD0	2080404	1	Plastic cable gland with kink protection M16x1.5	Zuleitung
-WD0	2080416	1	Locknut M16x1,5 plastic	Zuleitung
-WD0	2080411	1	Reduction M20/16	Zuleitung
-WD1	4038292	1	Control cable 4G0,75 YSLY; 2000 mm	Vakuumpumpe
-WD1	2082961	1	Corrugated pipe fitting NW12 - M16	Vakuumpumpe
-WD1	2080416	1	Locknut M16x1,5 plastic	Vakuumpumpe
-WD2	4038296	1	Control cable 2G1 YSLY; 1500 mm	
-WD2	2082961	1	Corrugated pipe fitting NW12 - M16	
-WD2	2080416	1	Locknut M16x1,5 plastic	
-WG1	4038293	1	Control cable 5G0,75 YSLY; 2000 mm	
-WG1	2082961	2	Corrugated pipe fitting NW12 - M16	
-WG1	2080416	1	Locknut M16x1,5 plastic	
-WG2	4037139	1	Control cable 4G0,75 YSLY; 1000 mm	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055684	1	End cover D-ST5 2,5	
-XD1	2055685	3	Clipfix NS35-5 End clamp	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD1	2055682	1	Feed-through terminal PTS 2.5-TWIN-PE	
-XD1	2055682	1	Feed-through terminal PTS 2.5-TWIN-PE	
-XD2	2055682	1	Feed-through terminal PTS 2.5-TWIN-PE	
-XD2	2055684	1	End cover D-ST5 2,5	
-XD2	2055685	1	Clipfix NS35-5 End clamp	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	

Parts list

Artikelstückliste

BMK Device tag	Artikelnummer Part number	Menge Quantity	Bezeichnung Description	Bemerkung Note
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XD2	2055681	1	Feed-through terminal PTS 2.5-TWIN	
-XG1	2055110	1	S Housing for industrial connector 3A	
-XG1	2055112	1	S Contact insert for rectangular connector 3A	
-XG1	2080411	1	Reduction M20/16	
-XG1	2080407	1	Plastic cable gland M16x1.5	
-XG2	2055111	1	B Housing for industrial connector 3A	Gegenstecker Artikel
-XG2	2055113	1	B Contact insert for rectangular connector 3A	Gegenstecker Artikel
-XG2	2080411	1	Reduction M20/16	Gegenstecker Artikel
-XG2	2080407	1	Plastic cable gland M16x1.5	Gegenstecker Artikel
-XG2	4012407	1	Control cable 4G1.5 YSLY; 300 mm	Gegenstecker Artikel

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			Date	19.01.2024		AERO-LIFT Vakuumtechnik GmbH	Artikelstückliste/BOM		= A01
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Modification	Date	Name	Original		Replacement of	Replaced by			Page 8 / 8

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