

Operating and technical staff

manual

Installation and Operating Instructions

SB Vacuum Cleaner Standard - INOX / 300189-DE/UK-A

German



DUO



DUO INOX



MONO



MONO INOX

Declaration of Conformity

Supplier: EHRLE GmbH
Address: Industriestraße 3
D – 89165 Dietenheim
Product: Self-service vacuum cleaner
Type: MONO and DUO versions
Technical data: 3/N/PE/AC/50 Hz/400 V

This product complies with the provisions of the relevant directives. Relevant EC Directives:

2004/108/EC
2006/42/EC

Harmonised standards applied:

DIN EN 55014-1: 2022-12
DIN EN 55014-2: 2022-10
DIN EN 60335-1: 2024-07
DIN EN 60335-2-69: 2015-07
DIN EN IEC 61000-3-2: 2023-10
DIN EN IEC 61000-3-3: 2023-02
DIN EN IEC 61000-3-11: April 2001
EN 61000-3-3: 2023-02

	DUO:	MONO
Sound power level LWA	67 dB(A)	65 dB(A)
Sound pressure level for equipment with sound attenuation	60.5 dB(A)	57.5 dB(A)

This product is labelled as follows:

Dietenheim, 1 August 2026

Development



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1 User instructions

1.1 General



General information

For comprehensive advice and information on self-service vacuum cleaners, please contact EHRLE's customer service team at any time.

By purchasing an SB vacuum cleaner, you are the owner of a quality product characterised by:

- Ease of use,
- Reliability,
- environmental friendliness.

This installation and operating manual forms part of the SB vacuum cleaner and must be kept at the place of operation and be available at all times.

The manual contains the following information for the SB vacuum cleaner

- Instructions for use
- Safety
- Product description
- Installation
- Commissioning
- Operation
- Decommissioning
- Maintenance
- Troubleshooting and fault rectification
- Spare parts
- Circuit diagrams

1.2 Functional System concept

The self-service vacuum cleaner is designed for:

- **Authorised maintenance staff from the plant operator** for maintenance work and plant adjustments, with access to the interior via lockable doors
 - Service access on the waste container side
 - Service access on the control cabinet side with an Ethernet port
- **Self-service operation by customers during opening hours**, with access restricted to the front only
 - Payment system
 - Control and display elements (push buttons, cleaning time display)
 - Air gun (optional)
 - Cleaning operation using the vacuum cleaner nozzle.

1.3 Terminology

In this manual, the terminology listed below is replaced, where possible, by the corresponding abbreviations as follows

- SB vacuum cleaner MONO/DUO Standard
SB
vacuum cleaner SB vacuum cleaner MONO/DUO
INOX
- Installation and
Operating instructions Manual

Where a clear factual reference is required in descriptive sections, the full terminology is used.

- SB Suction Unit MONO Standard
- SB Suction Unit DUO Standard
- SB Suction Unit MONO INOX
- SB Suction Unit DUO INOX.

1.4 Meaning of the highlights

The formatting used in this manual has the following meanings:

CAUTION

This highlighting is used in conjunction with specific hazard symbols when failure to observe or follow prescribed instructions, incorrect operation or misuse of the equipment may result in injury or fatal accidents.

CAUTION

This highlighting is used in conjunction with the CAUTION symbol when failure to observe or follow prescribed instructions, incorrect operation or misuse of the equipment may result in damage to parts, assemblies or components of the equipment.



This highlighting indicates additional information.

1.5 Meaning of the symbols

Symbol	Meaning
	CAUTION Follow the instructions! Failure to observe or follow the prescribed instructions, incorrect operation or misuse of the equipment may endanger the life and limb of persons.
	CAUTION Risk of fatal electric shock. Before commencing any installation, maintenance or adjustment work, switch off the system and disconnect it from the mains supply. Secure the system to prevent it from being switched on accidentally. Touching live parts can result in life-threatening injuries.
	CAUTION Danger when handling heavy loads No single person should lift or carry a load weighing more than 23 kg. Failure to do so may endanger people's health (e.g. strain on the spine, injuries caused by falling loads). For loads exceeding 23 kg, use suitable lifting equipment (e.g. pallet trucks).
	ATTENTION Follow the instructions for installation and maintenance work. Failure to observe or follow the prescribed instructions, incorrect operation or misuse of the system may result in damage to system parts, assemblies or components.
	General information General additional information.
	Recycling information General information on recycling.

Symbol	Meaning
	Information on disposal General information on the safe and environmentally sound disposal of materials and consumables.
	Information on hearing protection General information on hearing protection.
	Calls for immediate action.
	Result following an action.
	Bulleted list

1.6 Target audience

These installation and operating instructions contain information and instructions for:

- Qualified, trained and authorised specialist personnel for the installation and initial commissioning of the self-service vacuum cleaner.
- Electricians for the electrical installation and repair work in the event of electrical faults.
- Qualified, trained and authorised maintenance staff appointed by the plant operator for
 - monitoring daily operations and carrying out preparatory measures for self-service operation (opening hours)
 - Monitoring the payment system, including the collection of daily cash takings
 - Adjustment and maintenance work
 - Maintenance work.

1.7 Warranty and Liability

EHRLE self-service vacuum cleaners must only be operated for their intended purpose.

Intended use requires the following:

- The unit is designed for the extraction of dry debris from the interior of motor vehicles and, where applicable, the boot.
- Installation, maintenance and servicing must be carried out exclusively by qualified personnel who are authorised by the operator and have the appropriate qualifications and training
- Staff must have read, understood and complied with all the information and instructions in this operating manual in full.
- Installation, maintenance and adjustment work on the self-service vacuum cleaner must only be carried out by qualified, trained and authorised specialist personnel.
- The relevant qualified personnel can be commissioned directly via EHRLE Customer Service for installation and maintenance.
- The system must only be operated with fully functional safety and protective devices. In the event of malfunctions during operation, the system must be taken out of service immediately.
- Before each commissioning, a visual inspection must be carried out to check for damage to
 - system components, assemblies or parts
 - Electrical cables
 - suction hoses.
- In the event of malfunctions, faults or damage, the system must be switched off immediately and secured to prevent it from being switched on again.
- Modifications to the design of the system are not permitted.
- The system must only be operated in the configuration certified by the manufacturer. Operation with retrofitted assemblies,



- components or additional equipment is not permitted and may endanger the life and limb of persons or result in damage to the system.
- During repair and maintenance work, only original spare parts from the manufacturer and operating and consumable materials approved by the manufacturer may be used.

In the event of improper use or failure to observe these instructions, EHRLE shall not be liable for any claims for personal injury or property damage.

1.8 Environmental protection



Recycling information

The packaging materials are recyclable. Please do not dispose of the packaging in household waste; instead, ensure it is recycled.



Note on disposal

Old system parts, components and assemblies contain valuable recyclable materials which should be sent for recycling.

System components must not be disposed of together with unsorted household waste. The symbol showing a crossed-out bin on the system indicates this requirement.

Please therefore dispose of end-of-life system parts, components and parts properly via suitable collection schemes.

Dispose of used materials in a safe and environmentally sound manner. Observe local regulations when doing so.

Old system parts, components and assemblies contain valuable recyclable materials that should be sent for recycling.

2 Safety

2.1 General Safety instructions

Observe the relevant national accident prevention regulations laid down by the authorities.

Observe the relevant national regulations laid down by the authorities for the operation of the self-service vacuum cleaner.

The qualified personnel responsible for installation and maintenance must be able to assess the accident hazards associated with the self-service vacuum cleaner and be aware of the associated risks.

Maintenance staff must receive regular training on the hazard zones and the warning signs, symbols and instructions affixed to the self-service vacuum cleaner through safety briefings.

Do not use any aggressive or abrasive cleaning agents or cleaning solutions to clean the self-service vacuum cleaner.

Carry out prescribed adjustment, maintenance and inspection work in a timely manner (see Section 8, Maintenance).

Any safety-related defects must be rectified immediately. Observe all warning and information signs on the system and ensure they remain legible.

2.2 Duties of care of the plant operator

It is the system operator's duty of care to ensure that all safety regulations, instructions and information relating to the comprehensive operation of the system are observed and monitored by the operating and maintenance staff. The information contained in these installation and operating instructions and the accompanying documentation must be observed.

The plant operator must ensure:

- The system must only be operated when it is in perfect working order and in accordance with its intended use, whilst taking due account of safety and potential hazards and in compliance with this manual.
- Take the system out of operation immediately, or do not put it into operation under any circumstances, if damage or destruction is detected to the system, its mounting components or the power supply, or if safe operation cannot be guaranteed.
- In the event of damaged parts, faulty operation or other defects, cease operation immediately or do not put the system into operation. Rectify any damage, faulty operation or malfunction immediately; contact customer services if necessary.
- In order to carry out maintenance tasks comprehensively, maintenance staff must receive regular training and instruction in occupational safety and environmental protection.
- The operator must define the areas of responsibility, duties and supervision of the maintenance staff.
- The accident prevention regulations currently in force locally, the Operational Safety Ordinance (BetrSichV) and other safety-related rules and regulations, as well as the operating instructions, must be observed.
- In addition to this manual, the generally applicable and local regulations on accident prevention and environmental protection must be made available and observed.

2.3 Access for personnel to the system

The system doors for service access on the waste container side and service access on the control cabinet side with an Ethernet port are lockable.

During opening hours for customer use, the system doors must be kept locked.

Keep the keys in a place accessible only to authorised maintenance staff.

Ensure that only authorised, qualified and trained specialist personnel have access to the interior of the system.

2.4 Safety instructions for the ' ' customer operation

The self-service vacuum cleaner is designed for public customer use.

The design of the SB vacuum cleaner, based on the specified operating settings for cleaning with the vacuum cleaner nozzle and the compressed air function (optional equipment), ensures safe customer use when used as intended.

Do not use the vacuum nozzle to suck up explosive liquids, flammable gases or explosive dusts. These can form explosive vapours or mixtures when swirled up by the suction air.

The cabinet doors must be kept closed and locked with a key during customer operating hours. Keep the keys in a place accessible only to authorised personnel.

The self-service vacuum cleaner may be used by persons aged 14 and over, as well as by persons with reduced physical, sensory or mental capabilities or a lack of experience and knowledge, provided they are supervised or have been instructed in the use of the equipment and understand the resulting hazards. Children must not play with the appliance.

2.5 Safety instructions for maintenance staff

Before cleaning the interior of the self-service vacuum cleaner, take the machine out of operation and disconnect it from the mains supply. Secure the machine against accidental or unauthorised restarting (e.g. by switching off the main switch for the building's mains supply) and, if necessary, display a warning sign indicating that work is being carried out on the machine, etc.

Never operate the system without supervision.

Do not operate the system if any electrical cables are faulty.

The self-service vacuum cleaners must not be installed or operated in rooms where there is a risk of fire or explosion.

Maintenance staff have the following duties:

- Monitoring the operation of the system during opening hours whilst in self-service mode with regard to safety and functionality.
- Ensure that, during opening hours when the system is in self-service mode, the cabinet doors are closed and the door locks are secured. The keys must be kept in a place accessible only to authorised personnel.
- Carrying out maintenance work in accordance with regulations.

- Always keep the area around the equipment and the interior clean. Ensure that the floor and the interior are not soiled or smeared with oil, for example. Clean any soiled or smeared areas as necessary.
- All instructions, information and safety warnings in this manual must be observed.
- All warning signs, information and instruction signs affixed to the equipment must be observed and kept legible.
- Maintenance staff under the influence of alcohol or drugs are strictly prohibited from working on the equipment. If taking medication, a doctor must be consulted before working on the equipment. Medical instructions must be followed.

2.6 Accident prevention regulations

Observe the applicable national accident prevention regulations laid down by the relevant authorities.

2.7 Lifting and carrying ‘ ’ loads

The SB suction units weigh between 307 kg and 383 kg (313 kg to 384 kg including packaging). Components of the SB suction units may weigh more than 23 kg.

One person must not lift or carry more than 23 kg. For loads exceeding 23 kg, use suitable lifting equipment (e.g. forklift truck, pallet truck).

Observe the international standard ‘ISO 11228-1 Ergonomics – Manual handling of loads – Part 1: Lifting and carrying 05/2003’.

2.8 ’s periodic inspections

The periodic inspections are listed in Section 8 (Maintenance).

2.9 Manufacturer’s tests

Acceptance test of the self-service vacuum cleaner (test report is included in the scope of delivery).

2.10 Safety regulations for electrical connection

When working on live parts:

- Observe the DGUV V3 accident prevention regulations (formerly BGV A3) and local regulations,
- Use tools in accordance with DIN EN 60900.

2.11 Periodic Electrical Safety Inspection

This unit is intended for permanent installation. The electrical installation and connection must be carried out exclusively by a qualified electrician in accordance with the applicable electrical regulations.

Before initial commissioning, the effectiveness of the necessary protective measures and the correctness of the electrical connection must be checked.

The operator must have the system inspected at appropriate intervals by a qualified person in accordance with the requirements of DGUV Regulation 3 and the Industrial Safety Regulation.

The operator must determine the inspection interval on the basis of their risk assessment and taking into account the actual operating and environmental conditions.

Due to the increased wear and tear typical of self-service car wash and maintenance bays, caused by moisture, dirt, weather and intensive use, the manufacturer, EHRLE, recommends an annual electrical safety inspection, unless the risk assessment requires a shorter inspection interval.

2.12 Modifications to the design of the ' ' system

Modifications to the design of the self-service vacuum cleaner are not permitted.

Operating a system that has been structurally altered or modified constitutes improper use of the system. In the event of improper use, all liability and warranty claims are void (see Section 1.7, Warranty and Liability).

3 Product description



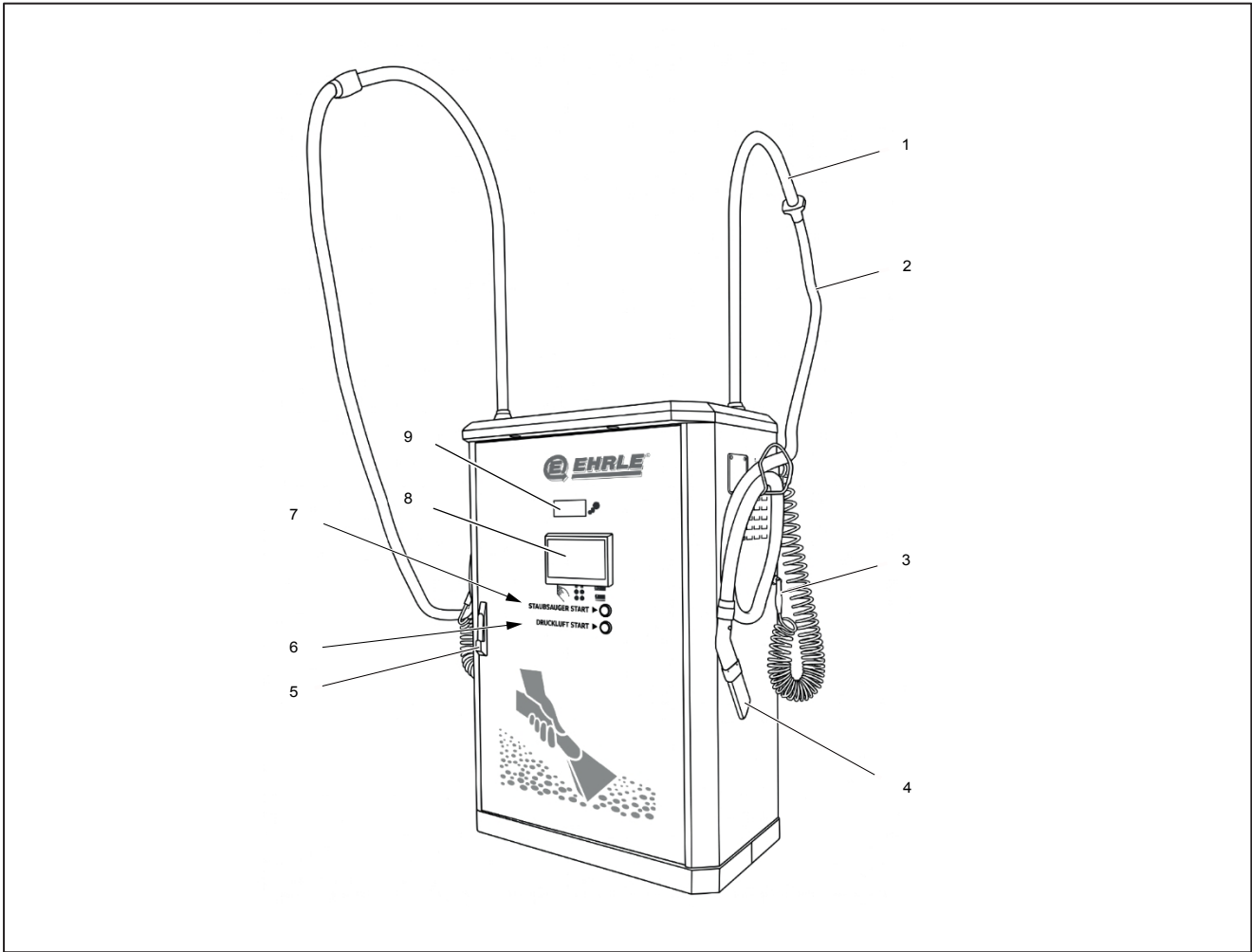
General information

The self-service vacuum cleaner can be optionally fitted with compressed air lines and a blow gun. This option is shown in the general view below.

3.1 System views

3.1.1 DUO self-service vacuum cleaner

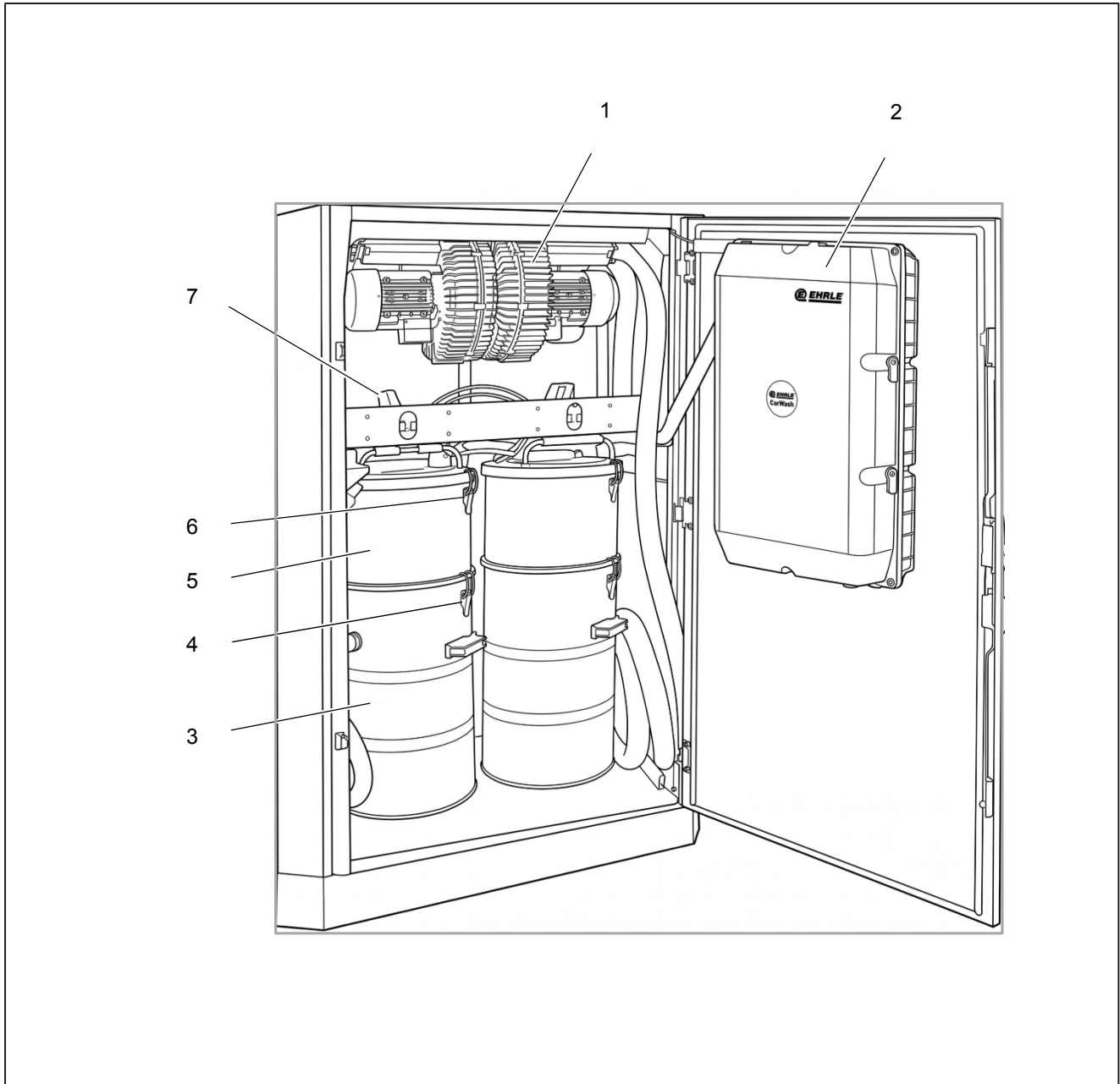
The illustrations below show a general example of the self-service vacuum cleaner. The compressed air hose with blow-off gun is an option



- | | | | |
|---|-------------------------|---|--|
| 1 | Gallows | 6 | Compressed air start button (compressed air system optional) |
| 2 | Suction hose | 7 | Vacuum cleaner start button |
| 3 | Air blow gun (optional) | 8 | Payment system |
| 4 | Suction nozzle | 9 | Maintenance time indicator |
| 5 | Door lock with key | | |

Fig. 3 - 1 Self-service suction unit, general view (general example)

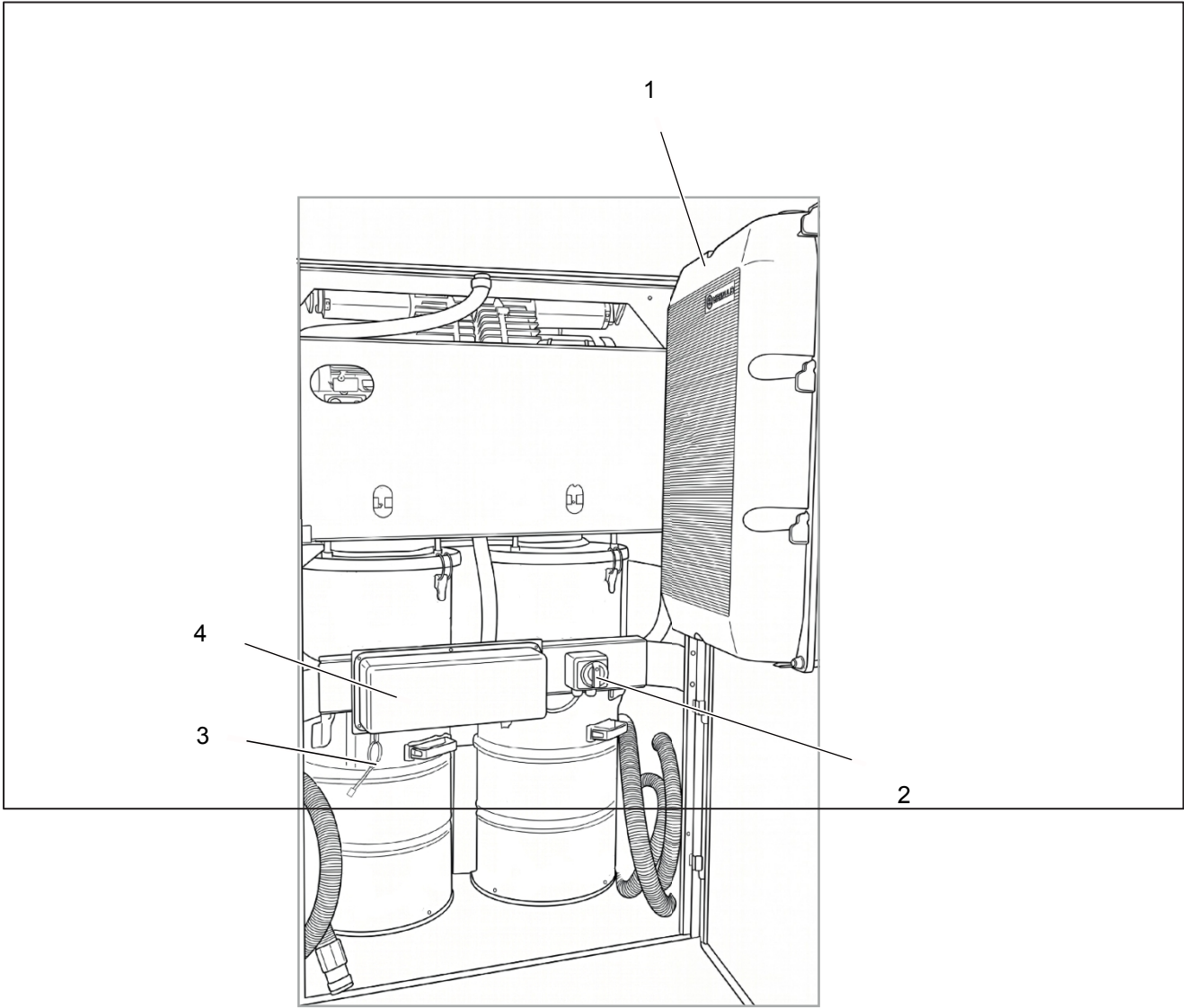
3.1.2 Internal view of service access , waste container side



- | | | | |
|---|--|---|------------------------------------|
| 1 | Side-channel compressor | 5 | Upper part of the dirt container |
| 2 | Payment system cover (rear) | 6 | Locking bracket (top of waste bin) |
| 3 | Collection bin with multi-cyclone unit | 7 | Handle for lifting device |
| 4 | Locking bracket (collection container) | | (in operating position) |

Fig. 3 - 2 Service access on the waste container side, inside the cabinet

**3.1.3 Internal view of service access Control cabinet
side with Ethernet port**



- | | | | |
|---|-----------------------------|---|------------------------|
| 1 | Payment system cover (rear) | 3 | Ethernet cable |
| 2 | Main on/off switch | 4 | Electrical control box |

Fig. 3 - 3 Service access on the control box side with Ethernet port, inside the cabinet

3.2 Type plates



General information

The self-service vacuum cleaner can be optionally fitted with compressed air lines and a blow gun.

For detailed advice and information on this option, please contact EHRLE Customer Service at any time.

3.2.1 Standard self-service vacuum cleaner

MONO

Typ: SB-Staubsauger
MONO 197020-XX-B



Spannung	3/400V/50Hz - 3x10A
Anschlussleistung	2,8kW/5,1A
Inhalt Schmutzbehälter	70l
Vakuum	160mbar
Saugleistung	3700l/min
Schallpegel	65dB(A)
Saugschlauchlänge	4,5m



Serial No.: 011011001 90479

EHRLE GmbH | Industriestraße 3 D-89165 Dietenheim
Tel.: 0 7303 / 1600-0 | Fax: 0 7303 / 1600-600

MONO with compressed air

Typ: SB-Staubsauger MONO
mit Druckluft 195020-XX-B



Spannung	3/400V/50Hz - 3x10A
Anschlussleistung	2,8kW/5,1A
Inhalt Schmutzbehälter	70l
Vakuum	160mbar
Saugleistung	3700l/min
Schallpegel	65dB(A)
Saugschlauchlänge	4,5m
Druckluftbedarf	240l/min - 5bar



Serial No.: 011011001 91389

EHRLE GmbH | Industriestraße 3 D-89165 Dietenheim
Tel.: 07303 / 1600-0 | Fax: 07303 / 1600-600

DUO

Typ: SB-Staubsauger
DUO 198020-XX-B



Spannung	3/400V/50Hz - 3x16A
Anschlussleistung	5,6kW/10,2A
Inhalt Schmutzbehälter	2x70l
Vakuum	2x160mbar
Saugleistung	2x3700l/min
Schallpegel	67dB(A)
Saugschlauchlänge	4,5m



Serial No.: 011011001 91314

EHRLE GmbH | Industriestraße 3 D-89165 Dietenheim
Tel.: 07303 / 1600-0 | Fax: 07303 / 1600-600

DUO with compressed air

Typ: SB-Staubsauger DUO
mit Druckluft 196020-XX-B



Spannung	3/400V/50Hz - 3x16A
Anschlussleistung	5,6kW/10,2A
Inhalt Schmutzbehälter	2x70l
Vakuum	2x160mbar
Saugleistung	2x3700l/min
Schallpegel	67dB(A)
Saugschlauchlänge	4,5m
Druckluftbedarf	480l/min - 5bar



Serial No.: 011011001 90414

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3.2.2 INOX self-service vacuum cleaner

MONO INOX

Typ: SB-Staubsauger MONO
INOX 197010-XX-B



Spannung	3/400V/50Hz - 3x10A
Anschlussleistung	2,8kW/5,1A
Inhalt Schmutzbehälter	70l
Vakuum	160mbar
Saugleistung	3700l/min
Schallpegel	65dB(A)
Saugschlauchlänge	4,5m



Serial No.: 011011001 89875

EHRLE GmbH | Industriestraße 3 D-89165 Dietenheim
Tel.: 0 7303 / 1600-0 | Fax: 0 7303 / 1600-600

MONO INOX with compressed air

Typ: SB-Staubsauger MONO
mit Druckluft 195020-XX-B



Spannung	3/400V/50Hz - 3x10A
Anschlussleistung	2,8kW/5,1A
Inhalt Schmutzbehälter	70l
Vakuum	160mbar
Saugleistung	3700l/min
Schallpegel	65dB(A)
Saugschlauchlänge	4,5m
Druckluftbedarf	240l/min - 5bar



Serial No.: 011011001 91389

EHRLE GmbH | Industriestraße 3 D-89165 Dietenheim
Tel.: 07303 / 1600-0 | Fax: 07303 / 1600-600

DUO INOX

Typ: SB-Staubsauger
DUO INOX 198010-XX-B



Spannung	3/400V/50Hz - 3x16A
Anschlussleistung	5,6kW/10,2A
Inhalt Schmutzbehälter	2x70l
Vakuum	2x160mbar
Saugleistung	2x3700l/min
Schallpegel	67dB(A)
Saugschlauchlänge	4,5m



Serial No.: 011011001 82829

EHRLE GmbH | Industriestraße 3 D-89165 Dietenheim
Tel.: 07303 / 1600-0 | Fax: 07303 / 1600-600

DUO INOX with compressed air

Typ: SB-Staubsauger MONO
INOX mit Druckluft 195010-XX-B



Spannung	3/400V/50Hz - 3x10A
Anschlussleistung	2,8kW/5,1A
Inhalt Schmutzbehälter	70l
Vakuum	160mbar
Saugleistung	3700l/min
Schallpegel	65dB(A)
Saugschlauchlänge	4,5m
Druckluftbedarf	240l/min - 5bar



Serial No.: 011011001 90416

EHRLE GmbH | Industriestraße 3 D-89165 Dietenheim
Tel.: 07303 / 1600-0 | Fax: 07303 / 1600-600

3.3 Serial number

The serial number on the type plate uniquely identifies the product and is required by Ehrle Customer Services.

Ser. No. _____

3.4 Technical data

3.4.1 MONO/DUO Standard self-suction unit

		Standard	
		MONO	DUO
System performance data			
Suction capacity	l/min	3700	2 x 3700
Vacuum	mbar	160	2 x 160
Dirt container capacity	l	70	2 x 70
Suction hose length	m	4.5	4.5
Sound level*	dB(A)	65	67
Required compressed air**	l/min	240	480
with blow gun option	bar	5	5
Electrical connection			
Mains voltage	V	400	400
Phase	~	3	3
Mains frequency	Hz	50	50
Connected load	kW	2.8	5.6
Current consumption (max.)	A	5.1	10.2
Mains fuse (slow-blow)	A	3 x 10	3 x 16
Protection class	-	IPX4	IPX4
Weight and dimensions			
Weight (including packaging and mounting bracket)	kg	307 (313)	383 (384)
Length (including packaging)	mm	1000 (1080)	1000 (1080)
Width (including packaging)	mm	1200 (1260)	1200 (1260)
Height (with packaging)	mm	3200 (3200)	3200 (3200)

Table 3-1 Technical data for MONO / DUO Standard self-suction units

3.4.2 MONO / DUO INOX self-priming pumps

		INOX	
		MONO	DUO
System performance data			
Suction capacity	l/min	3700	2 x 3700
Vacuum	mbar	160	2 x 160
Dirt container capacity	l	70	2 x 70
Suction hose length	m	4.5	4.5
Sound level*	dB(A)	65	67
Required compressed air**	l/min	240	480
with blow gun option	bar	5	5
Electrical connection			
Mains voltage	V	400	400
Phase	~	3	3
Mains frequency	Hz	50	50
Connected load	kW	2.8	5.6
Current consumption (max.)	A	5.1	10.2
Mains fuse (slow-blow)	A	3 x 10	3 x 16
Protection class	-	IPX4	IPX4
Weight and dimensions			
Weight (including packaging and mounting bracket)	kg	307 (313)	383 (384)
Length (including packaging)	mm	1000 (1080)	1000 (1080)
Width (including packaging)	mm	1200 (1260)	1200 (1260)
Height (with packaging)	mm	3200 (3200)	3200 (3200)

Table 3-2 Technical data for MONO/DUO INOX self-priming pumps

4 Installation



CAUTION

Ensure correct installation.

Before fitting the SB vacuum cleaner, staff must

- have read the relevant manual and understood it sufficiently to ensure that the unit is installed correctly
- be qualified, trained and briefed.

Failure to do so may endanger the life and limb of persons.



CAUTION

Danger when lifting and carrying heavy loads.

The SB suction units weigh between 307 kg and 383 kg (313 kg to 384 kg including packaging). Components of the SB suction units may weigh more than 23 kg.

A person must not lift or carry more than one load weighing 23 kg.

Failure to do so may endanger people's health (e.g. strain on the spine, injuries caused by falling loads).

For loads exceeding 23 kg, use suitable lifting equipment (e.g. pallet trucks).



General information

For detailed advice and information on installing the self-service suction units, please contact EHRLE Customer Service at any time.

Where required, suitably qualified specialist staff can be commissioned via EHRLE Customer Service to carry out a wide variety of installation work.

4.1 Selecting the location for the ' '



CAUTION

Select a suitable and approved operating location for the self-service vacuum cleaner.

Local regulations regarding the installation and operation of the SB vacuum cleaner must be observed.

The SB vacuum cleaner must not be installed or operated in rooms or areas at risk of fire or explosion.

When selecting the operating location, take the permissible environmental conditions into account (see Technical Data, Section 3.4).

Preferred operating locations are petrol stations and car washes. Select a safe operating location for the self-service vacuum cleaner.

Do not install the self-service vacuum unit in hazardous areas, such as

- at fuel tank manholes (including those connected to the petrol separator)
- in the immediate vicinity of vehicles being refuelled
- areas where fine dust or corrosive gases are present
- areas at risk of explosion or fire.

Fig. 4-1 to Fig. 4-3 show the foundation plans and the required clearance for a car parking space.

The foundation must

- be a horizontal and level surface
- be designed to withstand the load from the weight of the self-service vacuum cleaner.

The site must be provided with a mains power supply.

The electrical connection (building mains connection) must be designed to ensure trouble-free operation (see also Section 3.4, Technical Data).

Fig. 4-1 shows the base area with the fixing points and the cable entry for the power supply cable.

4.2 Mounting at the operating site



CAUTION

Danger due to heavy load.

No persons must be present in the danger zone or beneath the raised load.

Proceed with caution when lifting, moving and setting down the SB suction unit. A falling load poses a risk to life and limb.

When lifting, moving and setting down the SB vacuum cleaner at the operating site, use only hoisting equipment and load-handling devices with sufficient load-bearing capacity (see the type plate for the weight of the SB vacuum cleaner).

Position the SB suction unit securely at the prepared operating site.

When subsequently moving the SB vacuum cleaner once it has been set down on the foundation, ensure that the power supply cable routed into the interior cannot be damaged by the edges of the base plate.

Anchor the SB suction unit at the fixing points (see Fig. 4-1, 'Fixing contact surface') using wall plugs and screws. Depending on the nature of the foundation, special wall plugs may need to be used.

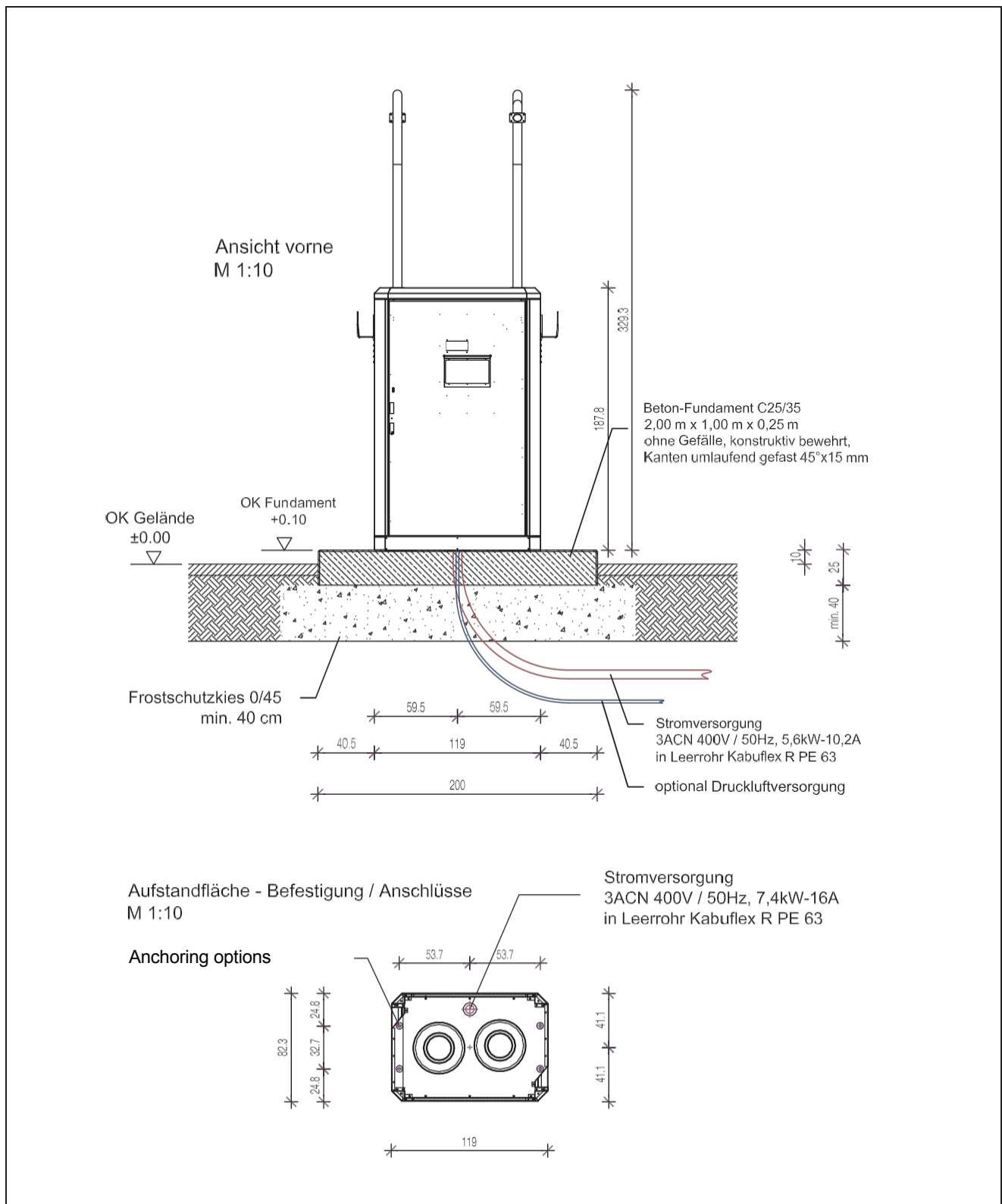


Fig. 4 - 1 Dimensions for foundation, SB suction unit – front view (general example)

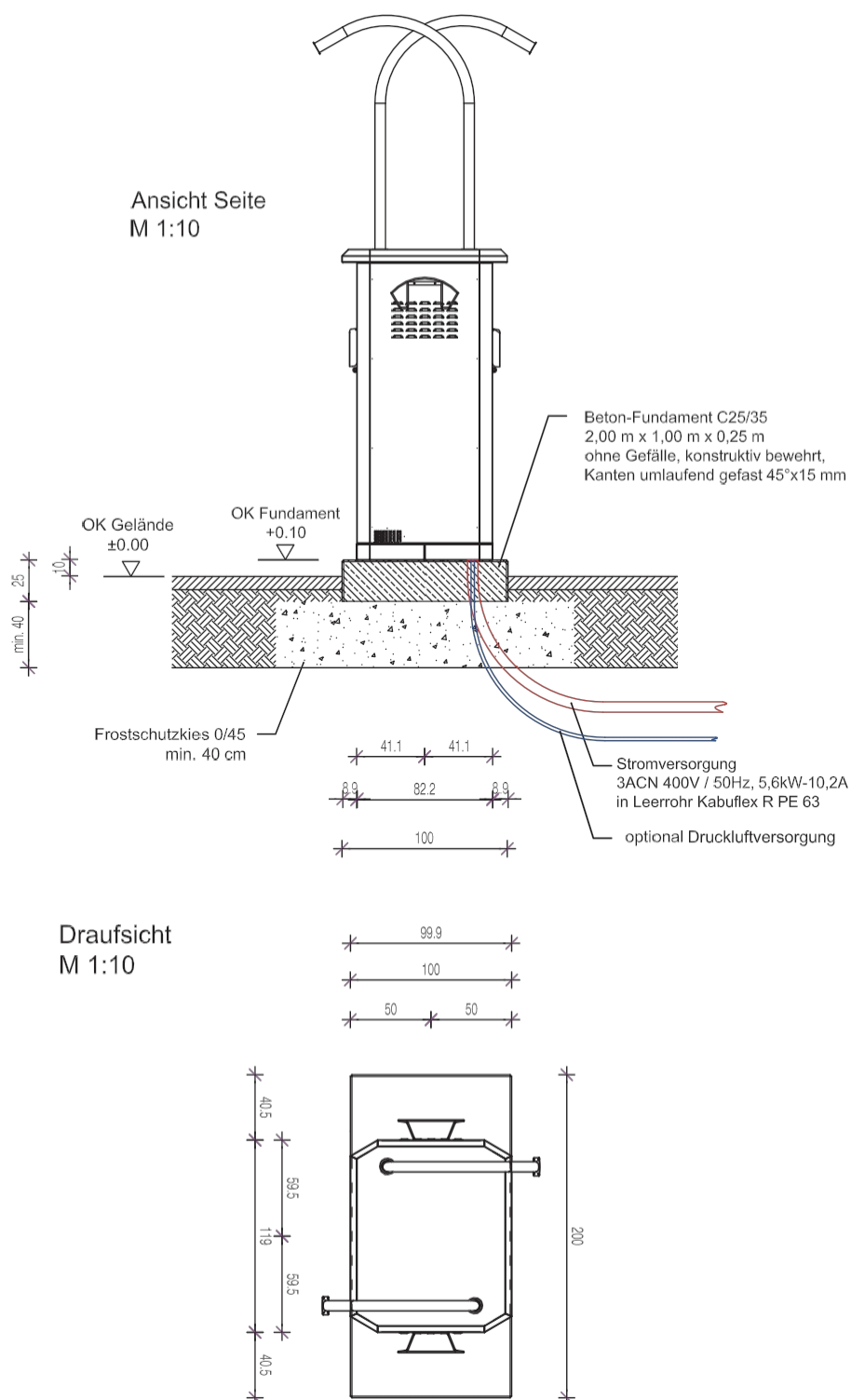


Fig. 4 - 2 Dimensions for foundation, SB suction unit – side view (general example)

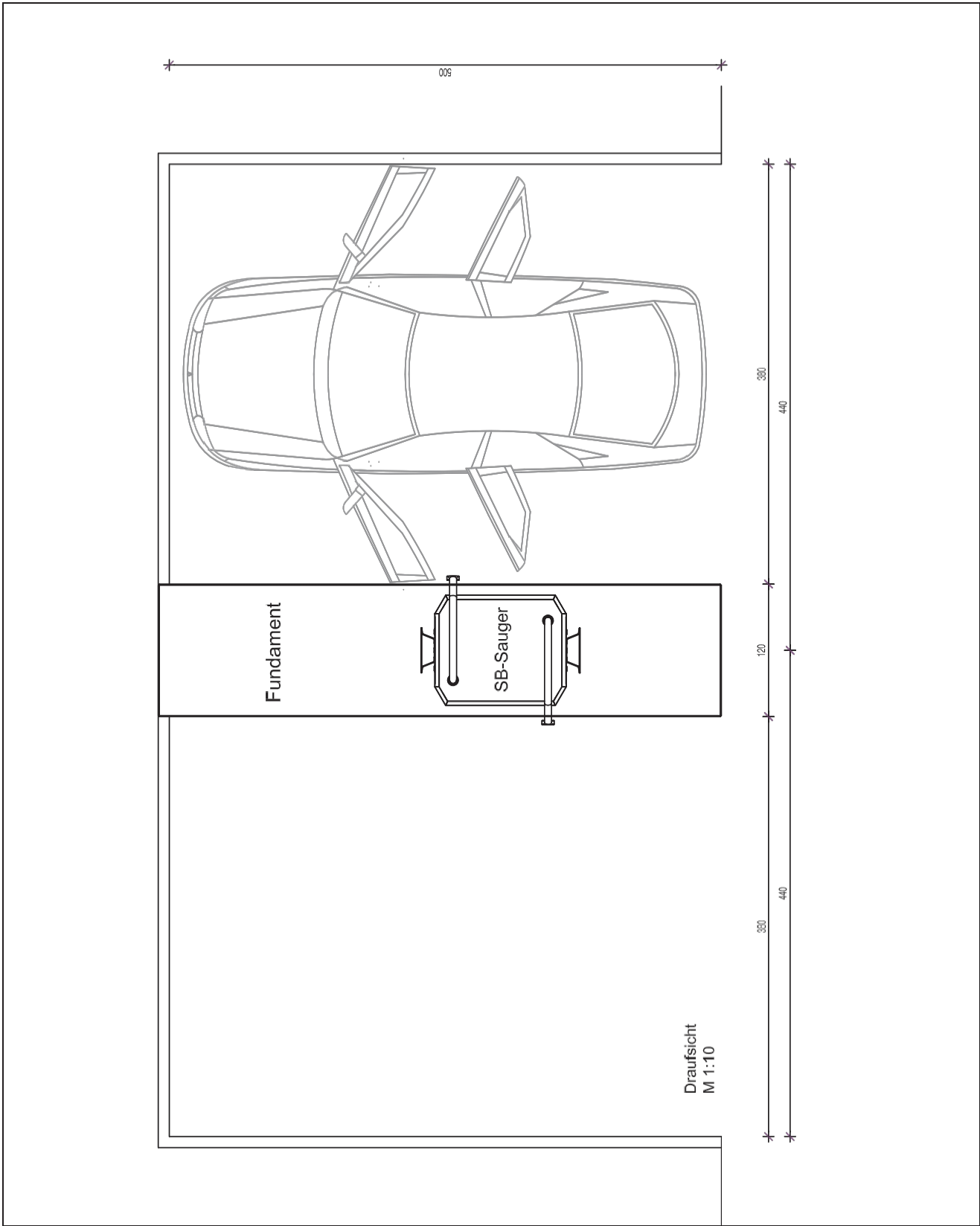


Fig. 4 - 3 Dimensions for the clear space required for a car parking space (general example)

4.3 Installation of the electrical connection



CAUTION

Ensure that the electrical connection is installed correctly.

Installation work on the electrical connection of the self-service vacuum cleaner must only be carried out by qualified and trained electricians.

The IEC regulations on the laying of electrical cables must be observed.

Only connect the self-service vacuum cleaner to power sources that are earthed in accordance with safety regulations.

Incorrect installation of the electrical connection may endanger the life and limb of persons.



CAUTION

Risk of electric shock.

The power supply from the building's mains connection must not be connected until all electrical installation work has been completed.

Failure to do so may endanger the life and limb of persons.

Have the electrical connection carried out by qualified and trained electricians. Ensure compliance with the provisions of IEC 60364-1.

The mains connection (building connection) for powering the self-contained vacuum cleaner must be designed for trouble-free, continuous operation (see Section 3.4, Technical Data).

The electrical mains connection from the building must correspond to the electrical ratings specified on the system's type plate (see also Section 3.2, Type Plates).

The following components of the building's power supply must be installed in an easily accessible location:

- On/off switch for the building's power supply or
- fuses or circuit breakers for the building's power supply.

Carry out the installation of the electrical connections in accordance with the system-specific circuit diagram (see Section 11).

For the operation of the self-service vacuum cleaner, the mains connection must be suitably fused on site.

5 Initial commissioning



CAUTION

Carry out initial commissioning correctly after installation.

The initial commissioning procedures must only be carried out by qualified, trained and authorised specialist personnel.

A prerequisite for initial commissioning is that the site operator has fully and correctly set up the entire operating environment for car care using the self-service vacuum cleaner in accordance with the manufacturer's specifications (power supply infrastructure, cleaning bays, access routes, etc.).

A prerequisite for initial commissioning is

- ▶ Setting up the web-based user interface for maintenance staff (see Section 5.1).
- ▶ Configuring system settings via the web-based user interface for maintenance staff (see Section 5.2)

5.1 Setting up the web-based user interface for maintenance staff



CAUTION

Only set up the web-based user interface when the cleaning programme is not active.

Ensure that a cleaning programme cannot be activated unintentionally.

Otherwise, the self-service vacuum cleaner may be damaged.

To set up the web-based user interface for system settings by maintenance staff, proceed as follows:

- To access the Ethernet cable connection, open the cabinet door for service access on the control cabinet side with the Ethernet port (see Fig. 3-3). An Ethernet cable is routed out at the bottom left of the control cabinet.
- Connect a laptop (or PC) to the Ethernet socket using an Ethernet cable.

To access settings via the programmable logic controller (Siemens) of the SB vacuum cleaner, the network card (e.g.

of the laptop) must be configured to a static IP address. The address must fall within the range specified by Siemens (e.g. 192.168.99.50).

To configure this, proceed as follows.

In the Control Panel window, select the Network and Sharing Centre menu.

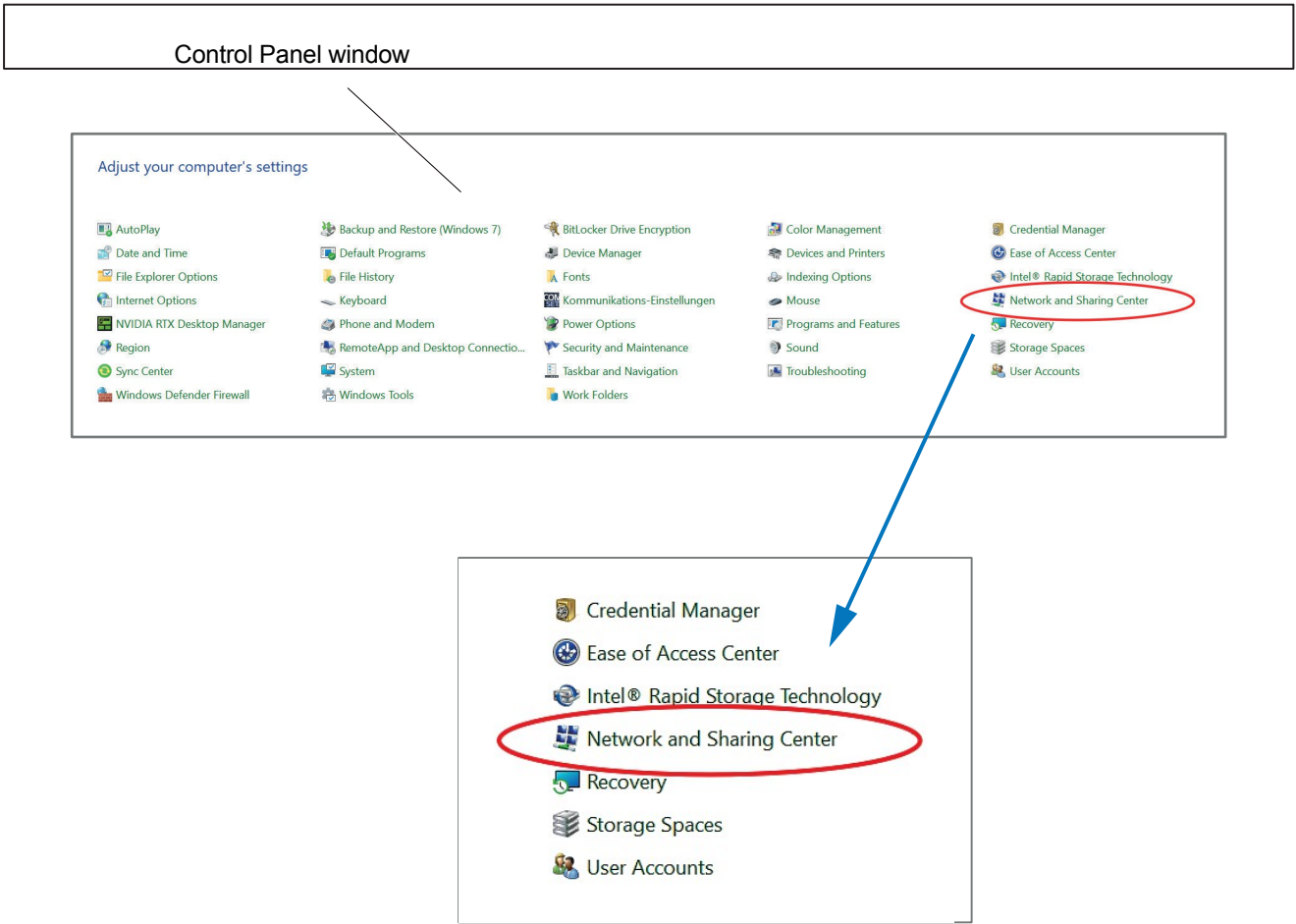


Fig. 5 - 1 Control Panel window, select the 'Network and Sharing Centre' menu item

In the Network and Sharing Centre window, select the Change Adapter Settings submenu.

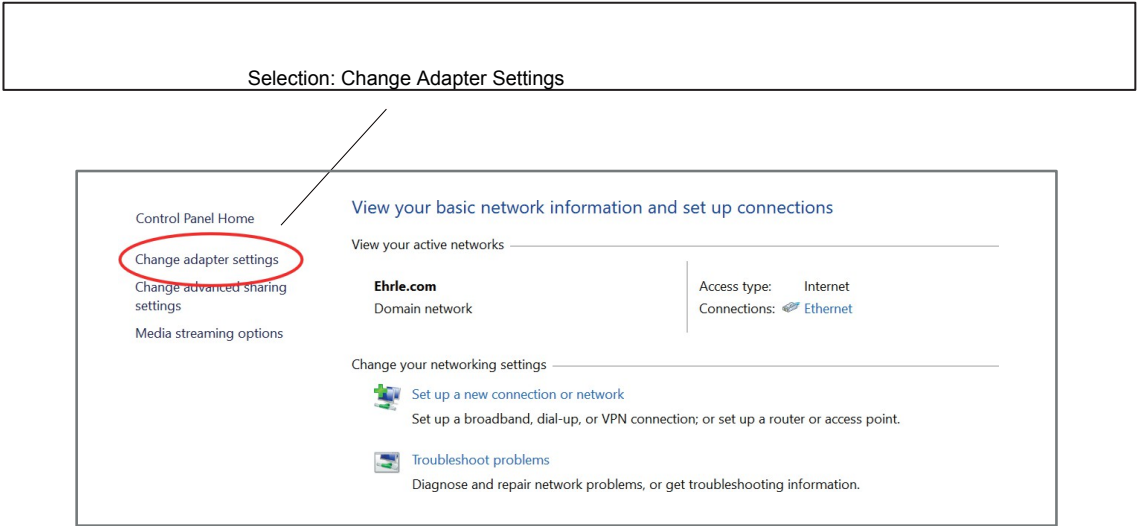


Fig. 5 - 2 Network and Sharing Centre window

Right-click on the Ethernet adapter icon; several menu options will appear – select the ‘Properties’ menu.

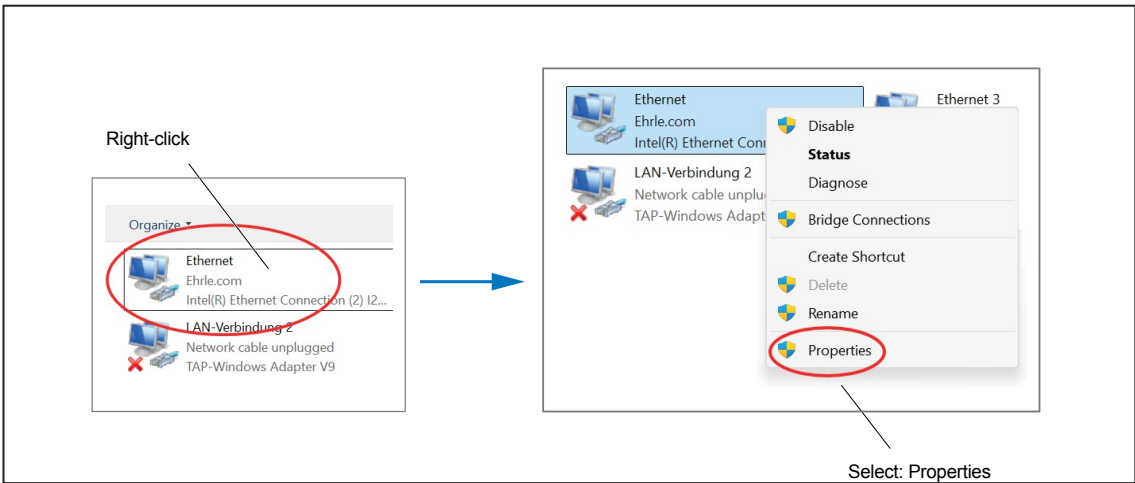


Fig. 5 - 3 Adapter window with the menu items

In the Ethernet Properties window, select the Properties button.

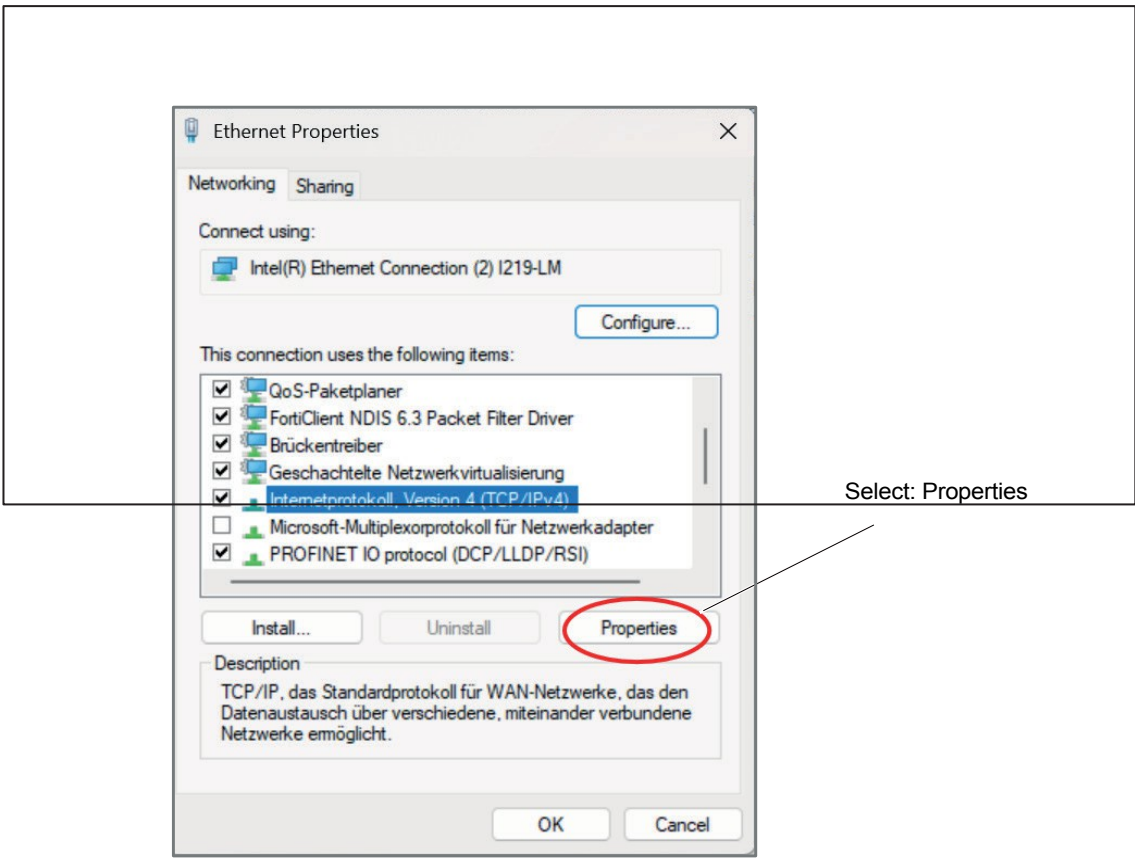


Fig. 5 - 4 Ethernet Properties window

Set the IP address in the Internet Protocol Properties window.

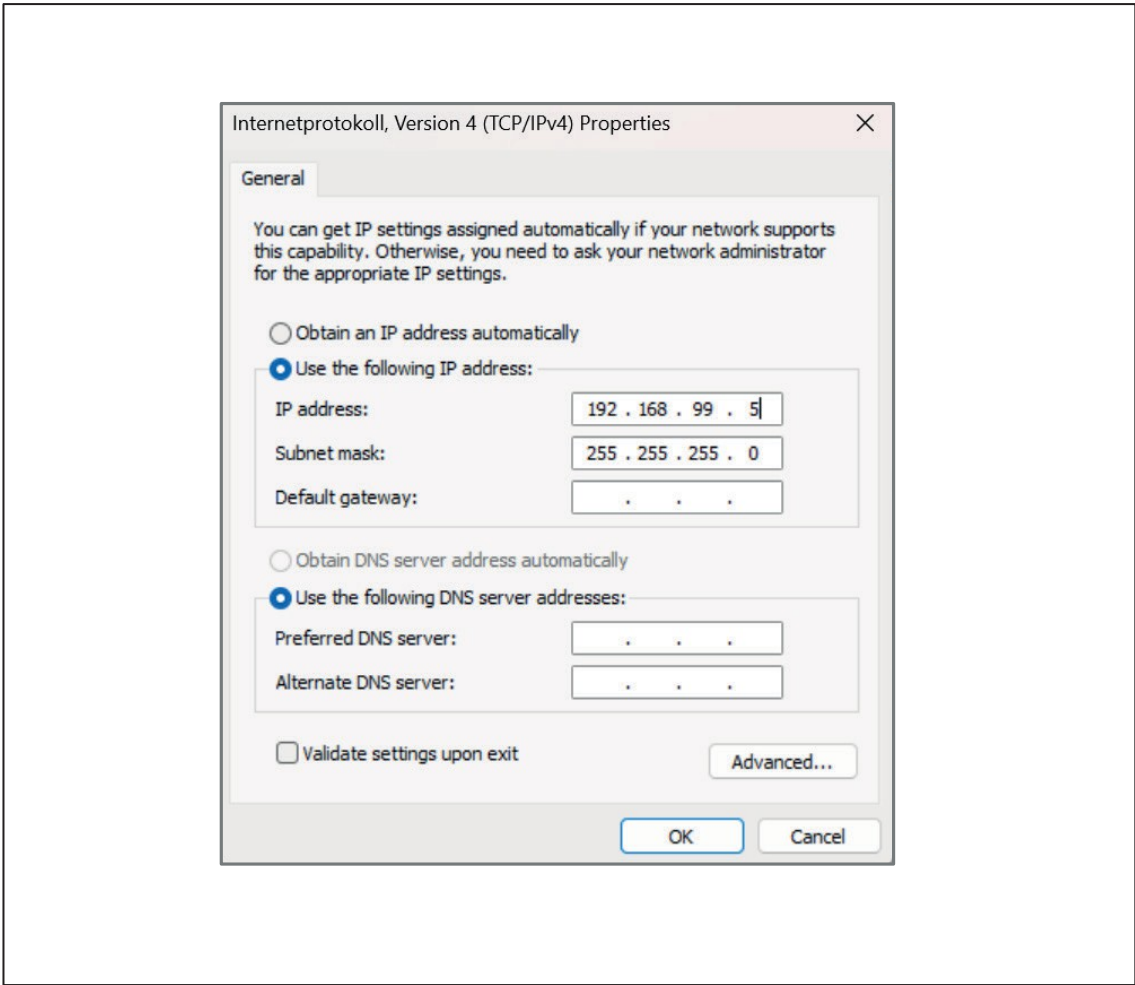


Fig. 5 - 5 Internet Protocol Properties window for configuring the IP address

General information



For information on how maintenance staff can access the user interface for system settings, see Section 5.2.

5.2 Web-based user interface for system settings
by maintenance staff



CAUTION
Settings via the web-based user interface may only be carried out when the cleaning programme is not active.
Ensure that the self-service vacuum cleaner cannot be accidentally activated via the programme button.
Otherwise, the self-service vacuum cleaner may be accidentally damaged.

5.2.1 Home page with authentication

Open the web server in a browser of your choice using the following link: <https://192.168.99.31/~EhrleWeb/index.html>

The web server's home page for authentication will open. A dialogue box for logging in with a username and password will appear:

Username: Username:
Ehrle1234!

The login details for authentication are always the same and cannot be changed.



Fig. 5–6 Authentication homepage

5.2.2 Control Panel Menu selection

After logging in, the Control Panel appears with the following optional menus:

- Economics (see section 5.2.3)
- Settings (see Section 5.2.4)
- Software (see Section 5.2.5)



Fig. 5-7 Control Panel menus

5.2.3 Economics menu

The 'Economics' menu window is used to display detailed sales figures.

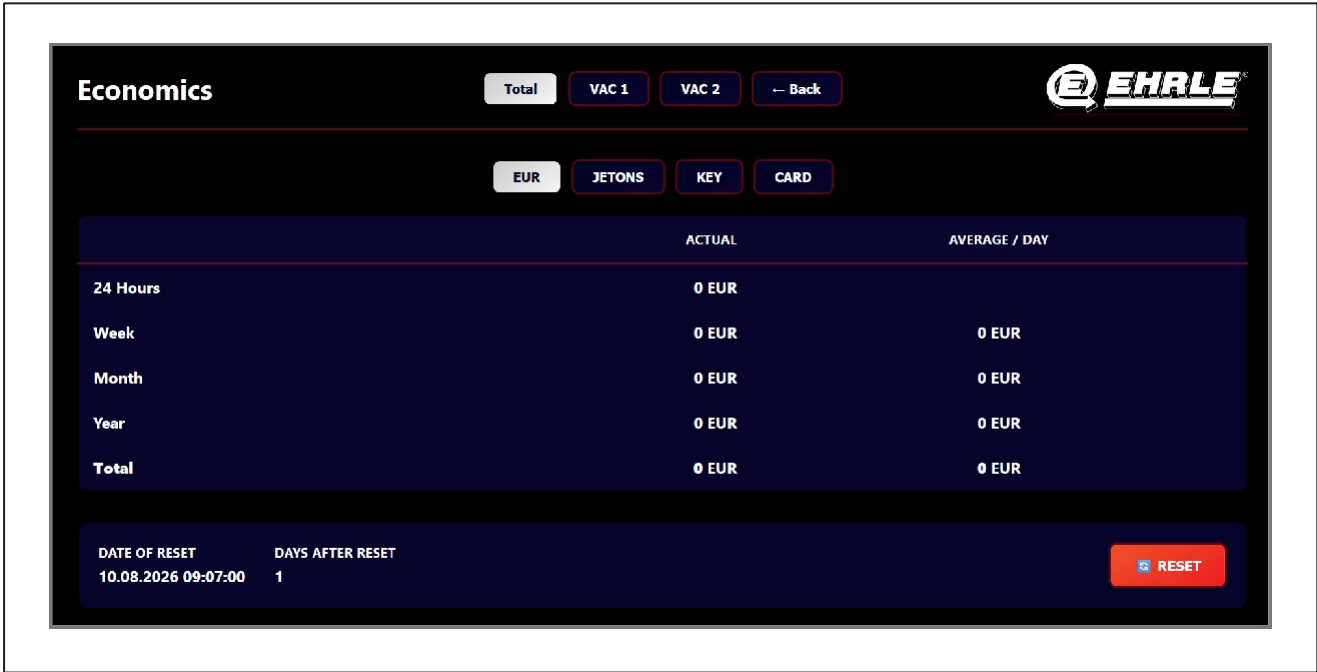


Fig. 5–8 Economics menu

The following can be accessed via the control panel buttons:

- Total: Total turnover
- Bay 1: Turnover at cleaning station 1 (VAC1)
- Bay 2: Turnover at cleaning station 2 (VAC2)
- EUR: Cash turnover
- Tokens: Token turnover
- KEY: CarWash Key turnover
- CARD: Credit card turnover

5.2.4 Settings menu

The Settings menu is used for the system's operational settings and comprises the following submenus:

- OPH: Setting opening hours and tariff discounts at specified times (see section 5.2.4.1)
- CREDIT: Setting the operating time per tariff unit (see section 5.2.4.2)

5.2.4.1 Operation Hours submenu (OPH)

The OPH submenu is used to set operating hours and time zones with discounted prices (Happy Hour).

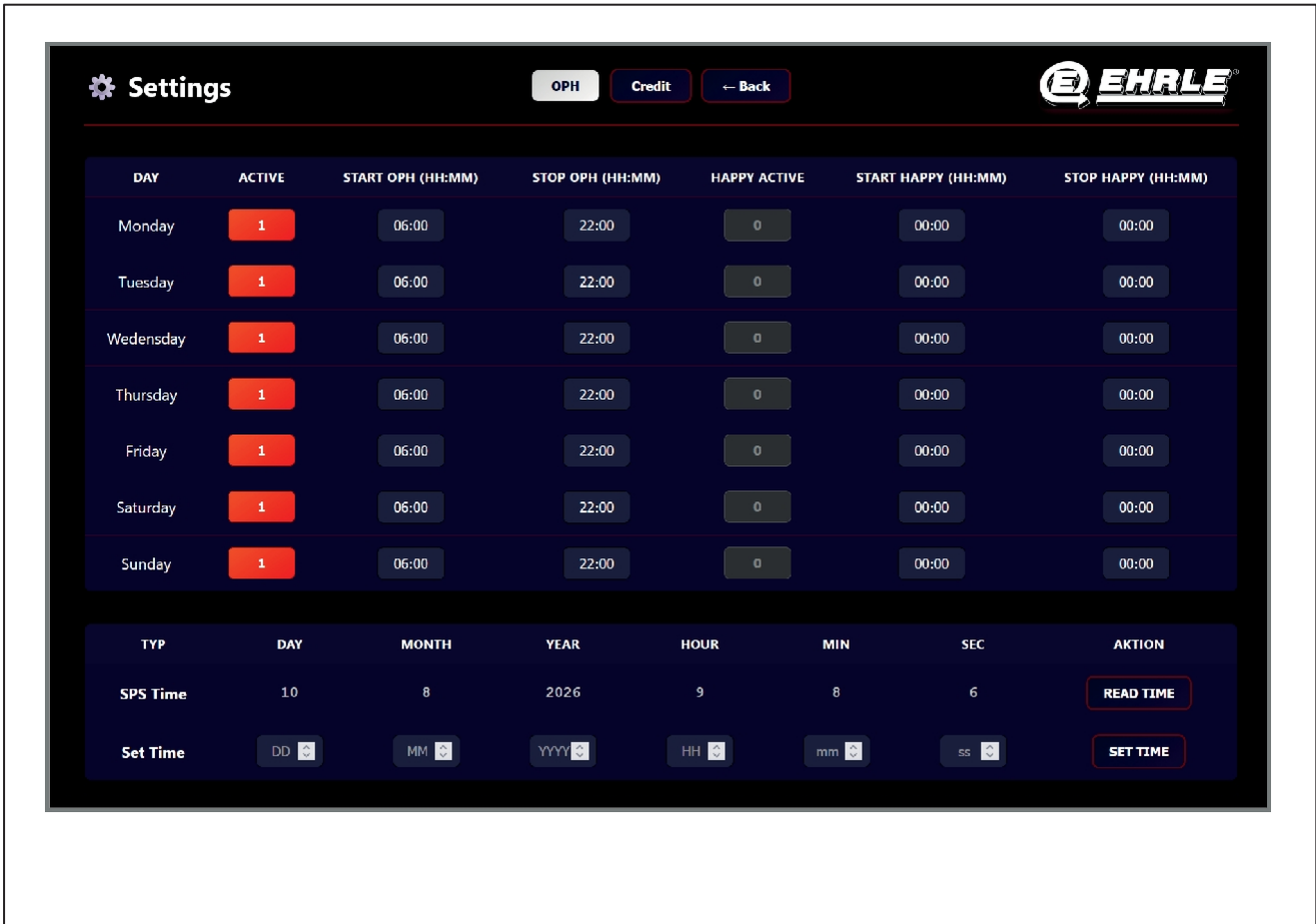


Fig. 5–9 Settings window, OPH submenu

5.2.4.2 Settings submenu : CREDIT

The Credit submenu allows you to set the activation time for the cleaning programme.

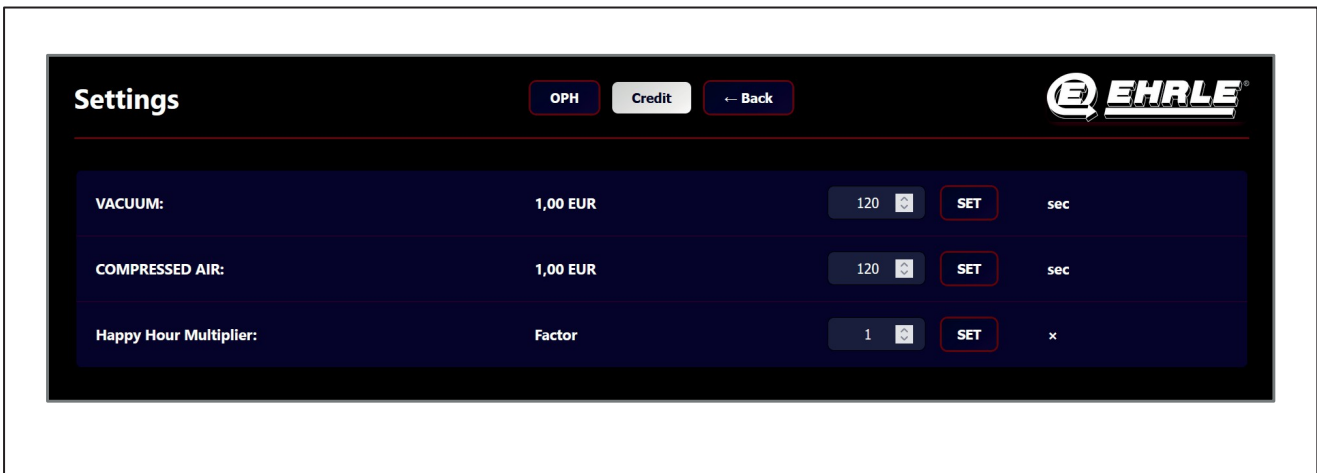


Fig. 5–10 Settings window, CREDIT submenu

5.2.5 Software menu

The 'Software' menu displays the current software version.



Fig. 5–11 Software sub-menu window

5.3 First-time power-up after the installation

Proceed as described in Section 6 for initial commissioning following installation.

6 Operation

6.1 Control/display units of the SB- vacuum cleaner

The illustration shows a general example of the control and display units for an SB vacuum cleaner. This unit is fitted with the compressed air option.



- | | | | |
|---|--|---|--|
| 1 | Suction hose | 4 | Vacuum cleaner start button |
| 2 | Maintenance time indicator | 5 | Compressed air start button (optional feature) |
| 3 | Payment system (key reader, coin validator, Key, debit/credit card, banknote reader) | 6 | Compressed air hose with blow-off gun (optional equipment) |

Fig. 6 - 1 Control and display units of the self-service vacuum cleaner with compressed air kit, front view

6.2 User guide for the comprehensive car care with the self-service vacuum cleaner

The self-explanatory symbols on the self-service vacuum cleaner ensure simple and user-friendly operation.

The

- the multi-cyclone function for powerful dirt removal
- compressed air function (optional feature) for general cleaning and hard-to-reach areas such as air vents and narrow gaps.

The table lists the two cleaning programmes and describes their possible applications.

Programme	Symbol	Maintenance function
Self-service vacuum cleaner		Vacuuming without a filter or dust bag, but entirely mechanically, based on the principle of a tornado. Specially designed rotating suction nozzles with side by-pass openings to prevent the nozzle from being sucked into the vehicle interior.
Air blower (optional extra)		Excellent for cleaning the vehicle interior, cockpit and ventilation systems. Effortless removal of dust and dirt particles from hard-to-reach areas. The nozzle tube is made of stainless steel and is rounded at the nozzle end, so that the interior cannot be damaged.

The general procedure for cleaning with the self-service vacuum cleaner:

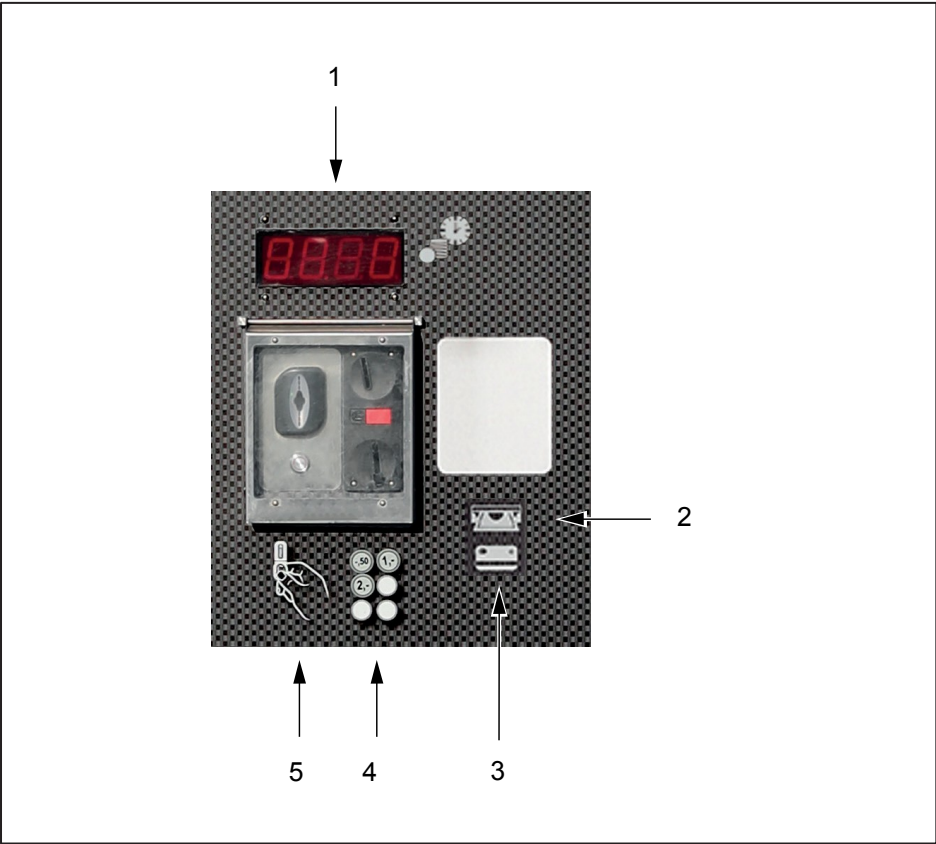
- Pay the cleaning fee via the payment system; see section 6.2.1
- Use the vacuum cleaner nozzle on the suction hose; see section 6.2.2
- Use the air blower, see section 6.2.3.

6.2.1 Pay the cleaning fee via the payment system

The payment terminal comprises the following components:

- Display unit with a 4-digit display (1, Fig. 6 - 2)
 - shows the value for the amount entered
 - the remaining balance is displayed once the maintenance programme has started
- Payment system (2 to 5, Fig. 6–2) with
 - key reader
 - coin validator for inserting coins
 - Credit card terminal or optional banknote reader

The amount paid is shown on the display unit.



- | | | | |
|---|-------------------------------|---|-----------------------|
| 1 | Balance display (money) | 4 | Coin validator |
| 2 | Banknote reader (optional) | 5 | Key reader (optional) |
| 3 | Credit card reader (optional) | | |

Fig. 6 - 2 View of the payment systems with display showing remaining balance

6.2.2 Using the maintenance tools



CAUTION

Use the maintenance tools only for their intended purpose, i.e. cleaning inside a motor vehicle.

The care tools

- Vacuum cleaner nozzle
- Air blower

Use only for cleaning the interior of the car and, where applicable, the boot.
Improper use may endanger the life and limb of persons.



CAUTION

Use the care tools only for their intended purpose.

The maintenance tools must not be directed at yourself, other people or animals.

Do not use the care tools for cleaning or surface treatment of clothing, equipment, assemblies or other objects.

Do not use the vacuum cleaner nozzle to suck up

- water, damp dirt or mud
- smouldering or burning objects (e.g. cigarettes)
- explosive, highly flammable, toxic or hazardous substances (e.g. chemicals, toxic dusts)
- flammable gases, solvents or hot ash
- glass shards, nails or metal fragments

Never point the blow gun in such a way that the compressed air is blown through liquids or small particles, thereby endangering other people.

Do not point the blow gun at flammable substances, liquids or particles.

Do not use the maintenance tools to clean electrical sockets or other electrical components. Do not insert the air gun into electrical sockets to clean the interior.

Improper use may result in damage to property or personal injury.

The following maintenance tools are available for the self-service vacuum cleaner with optional compressed air function (see Fig. 6-1):

- Suction hose with vacuum cleaner nozzle
- Air gun

For self-service vacuum cleaners with the optional blow gun, the following can be selected using the programme selection buttons:

- Vacuum cleaner (Vacuum cleaner start)
- Air gun (compressed air start)

Select the desired cleaning programme using the programme selection button. The button for the selected programme will light up.

Remove the care tool for the selected programme

- from the holder
- Position the care tool at the desired location.

Only use the self-service vacuum cleaner to suck up dry dust or dirt particles.

When paying by card or cash (coins), the vacuum cleaner will continue to operate until the credit balance is used up.

When the key is in use, removing it will immediately interrupt operation.

Once maintenance work has been completed, attach the maintenance tool to its designated mounting point.

7 Decommissioning

7.1 Temporary Decommissioning

To take the unit out of service temporarily for maintenance work or for several days, proceed as follows:

- ▶ Open the door to the service access panel on the control cabinet side with the Ethernet port.
- ▶ For systems with compressed air equipment, shut off the compressed air supply to the system.
- ▶ De-energise the system using the main switch (2, Fig. 3 - 3).
- ▶ Lock both doors and keep the keys in a safe place.
- ▶ If necessary, disconnect the power supply to the system from the infrastructure (e.g. building connection) via the main switch or circuit breaker.

7.2 Decommissioning by qualified personnel for an extended period

For decommissioning and storage for a period of more than 6 months

- Take the system out of service in accordance with Section 7.1
- Empty the waste container completely and clean it if necessary (see Section 8.4).
- If necessary, remove the system cabinet from its operating location and store it in a frost-free place
- If necessary, cover the unit cabinet with a protective tarpaulin

8 Maintenance



CAUTION

Carry out maintenance work correctly.

Maintenance of the system must only be carried out by qualified, trained and authorised specialist personnel.

Before carrying out any maintenance, take the system out of operation and ensure it is de-energised (e.g. switch off the circuit breaker at the building connection).

8.1 General Information

Maintenance work must be carried out professionally and regularly and serves to:

- Ensuring operational safety
- Achieving a long service life
- Maintenance of performance.

8.2 EHRLE Maintenance and Inspection Contract

When selling the plant, EHRLE offers a maintenance contract or, specifically, a safety inspection agreement. The maintenance contract covers:

- Maintenance and repair work
- Safety inspection agreement.

8.3 Maintenance work

Components that show signs of excessive wear, or whose design life has been exceeded or will be exceeded before the next maintenance, must be replaced as a precautionary measure.

The table below lists the maintenance tasks for the self-service vacuum cleaner.

Interval	Component	Action	Authorised personnel
Daily	Coin cash box	Emptying	Maintenance staff
Weekly	Collection bins from the waste bins.	Empty and clean if necessary (see section 8.4)	Maintenance staff
	Suction nozzle attachment from the suction hose	Visual inspection for dirt, wear and blockages.	Maintenance staff
		Remove dirt and blockages.	Maintenance staff
		Replace the faulty suction nozzle attachment.	Maintenance staff
	Electrical cables	Visually inspect all cables inside the cabinet for damage.	Maintenance staff
		Have damaged cables replaced immediately by an authorised service centre or a qualified electrician.	Customer service/qualified electrician
	Coin validator	Visual inspection for dirt and foreign objects.	Maintenance staff
		Clean if necessary or remove any foreign objects.	Maintenance staff
	Function of the self-service vacuum cleaner and air pressure function (optional)	Functional test to check for faults or loss of performance due to air leakage (caused by damaged seals, etc.). Ensure safe operation.	Maintenance staff
		Have any malfunctions or breakdowns rectified by qualified personnel.	Customer service
Monthly	Suction hoses outside/inside the cabinet.	Visual inspection for damage, wear or leaking connections.	Maintenance staff
		If any hose connections are damaged, worn or leaking, replace the relevant hoses.	Maintenance staff or customer service
	Door locks	Re-lubricate with Teflon spray if necessary.	Maintenance staff
	Door seals	Visual inspection for dirt, damage and wear.	Maintenance staff
		Clean if necessary or replace damaged seals.	Maintenance staff or, if necessary, customer service

Table 8 - 1 List of maintenance tasks

Interval	Component	Action	Authorised personnel
6 months	Inside and outside of the equipment cabinet	Visual inspection for dirt, damage or wear on components or assemblies.	Maintenance staff
		If necessary, clean any soiled components, assemblies or soiled areas using mild cleaning agents.	Maintenance staff
		Replace any damaged, worn or worn-out components or assemblies.	Maintenance staff or, where necessary, customer service
	Fixing screws on the system cabinet and cabinet components.	Visual inspection for corrosion or damage; check that they are securely fastened and retighten fixing screws if necessary; replace damaged screw connections.	Maintenance staff
	Lifting device for the waste containers.	Visual inspection for damage or wear. Check that it is working properly.	Maintenance staff
		Replace damaged components	Maintenance staff or, where necessary, customer service
	Lid and container seals on the waste container	Visual inspection for cracks, wear and tear, and ensure they are securely fitted (loss of performance due to air leakage)	Maintenance staff
		Replace faulty seals or components.	Maintenance staff or, where necessary, customer service
	Electric motor of the side-channel compressor.	Unusual noises and vibrations may indicate early signs of bearing damage in the electric motor.	Qualified personnel or customer service
		Replace the side-channel compressor if necessary.	Qualified personnel or customer service
annually (based on a risk assessment, shorter intervals may be required)	Electrical safety inspection.	Electrical safety inspection in accordance with DGUV Regulation 3 (see also section 2.11)	Qualified person

**Installation and Operating
Instructions for the SB Suction Unit
Standard / Stainless Steel**

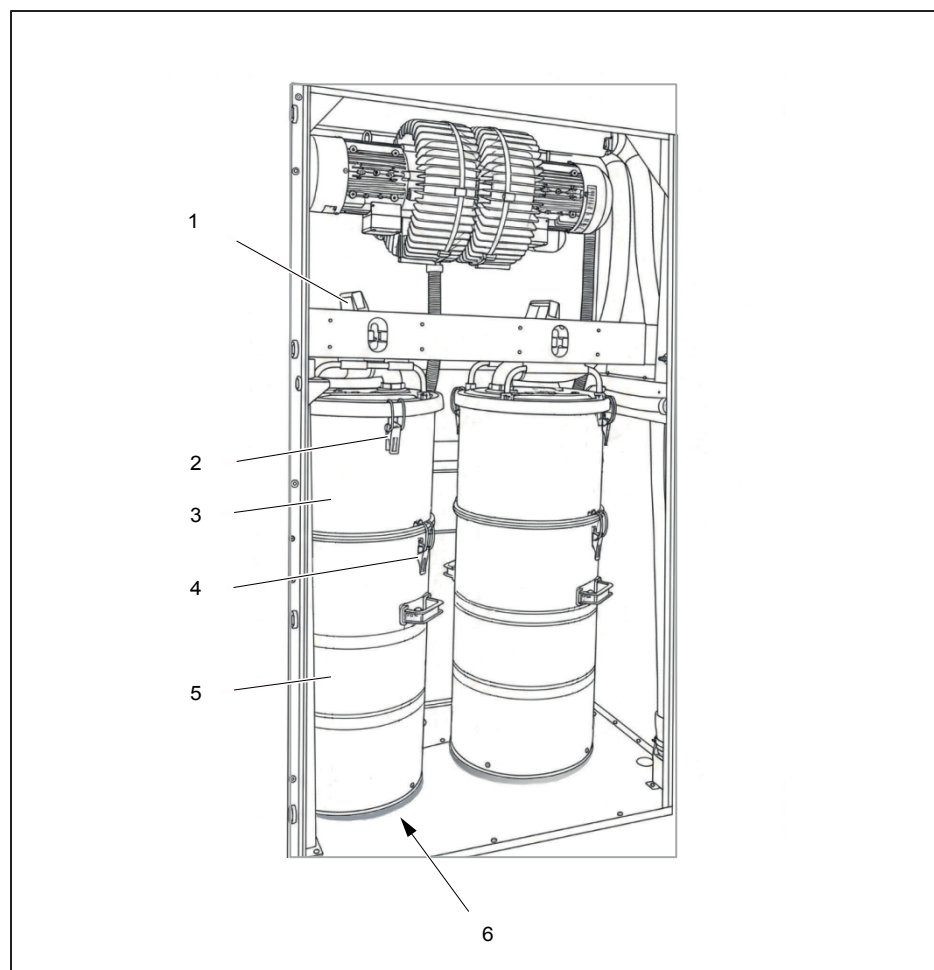


Interval	Component	Action	Authorised personnel
Optional equipment: blow-off gun			
6 months	Air hoses, hose connections	Visual inspection for damage (cracks, kinks) and wear.	Maintenance staff
		Check the compressed air hoses and connections for leaks.	Maintenance staff
		Replace damaged air hoses.	Qualified personnel or customer service
	Air blow gun	Check that it is working and ensure it is airtight.	Maintenance staff
		Replace any defective blow gun.	Maintenance staff

Table 8-1 List of maintenance tasks

8.4 Emptying the dirt container ()

Fig. 8-1 shows the dirt containers in the operating position.

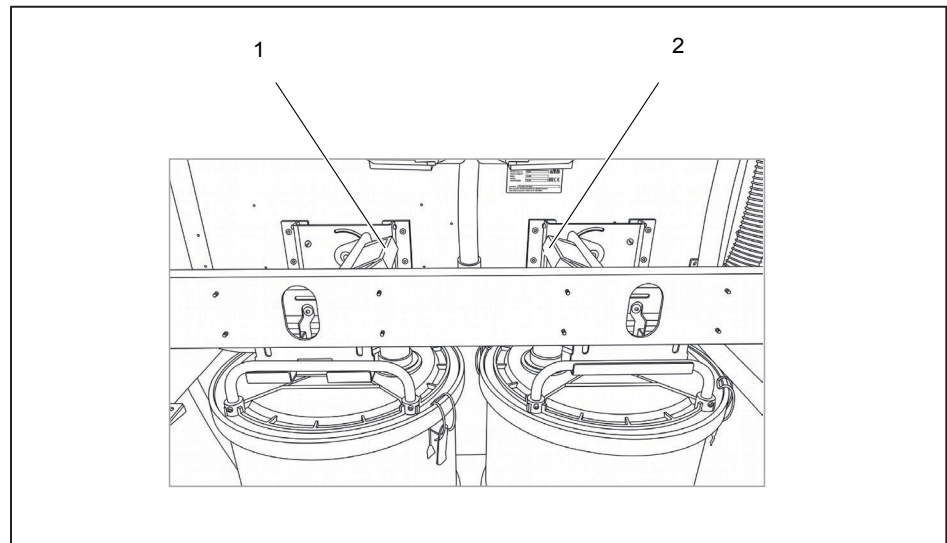


- | | | | |
|---|--|---|--|
| 1 | Handle Lifting device | 4 | Locking bracket (collection container) |
| 2 | Locking bracket (container upper part) | 5 | collection container |
| 3 | Upper part of container | 6 | Ground clearance in operating position |

Fig. 8 - 1 Waste container in operating position, service access on the waste container side

To empty the waste container, proceed as follows:

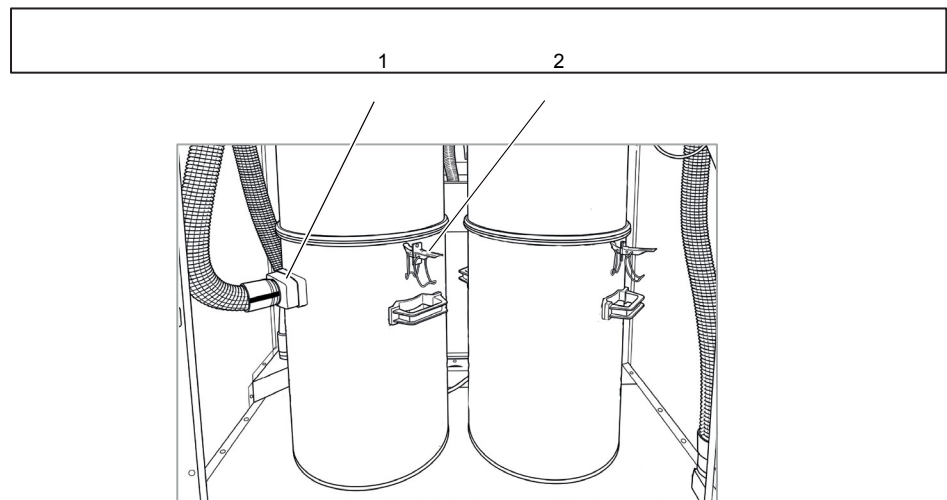
- Push the lifting mechanism handles (1 and 2, Fig. 8 - 2) inwards to lower the waste container onto the cabinet floor.
- The handles of the lifting mechanism for the left and right containers are shown in the maintenance position in Fig. 8 - 2.



- 1 Handle for lifting device (waste container 1)
- 3 Handle for lifting device (waste container 1)

Fig. 8 - 2 Handles of the lifting device in the maintenance position

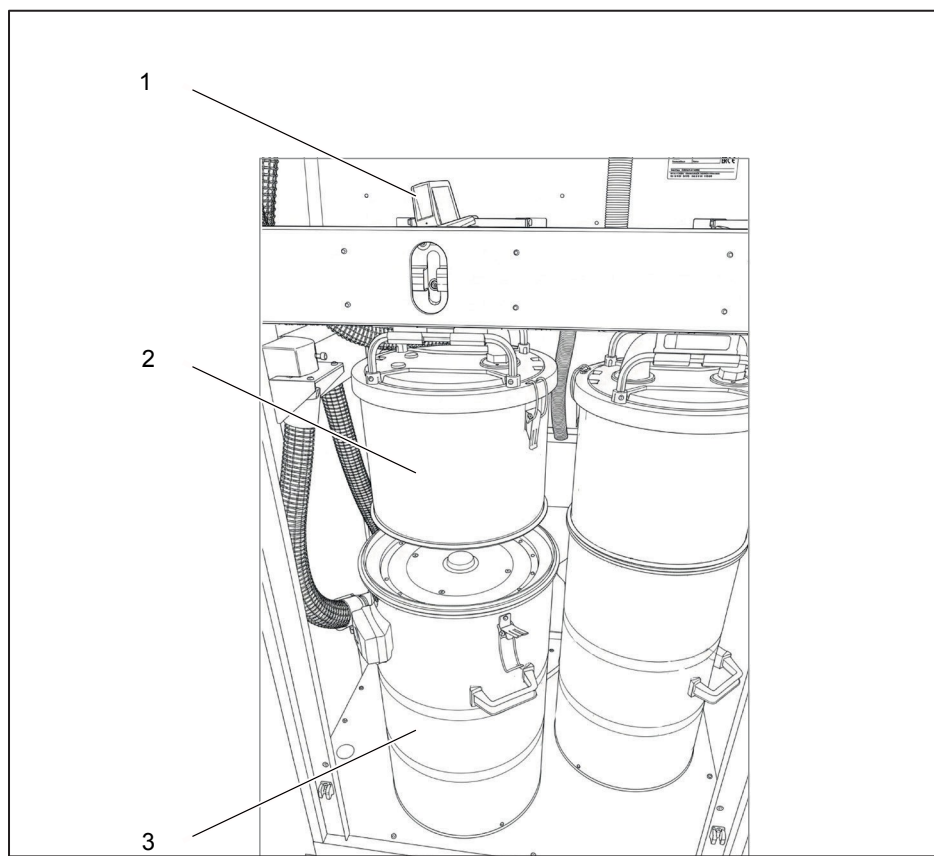
- Remove the suction hose from the suction hose connection (1, Fig. 8 - 3).
- Open both locking clips on the collection tank.



- 1 Suction hose connection (collection container)
- 2 Locking clip (collection tank)

Fig. 8 - 3 Dirt container lowered onto the base of the cabinet

- Push the handle of the lifting mechanism (1, Fig. 8 - 4) outwards to lift the upper part of the waste container.
- The collection container (3, Fig. 8 - 4) is now accessible. It can be removed from the cabinet for emptying and cleaning.



- 1 Handle for lifting device
- 2 Upper part of the dirt container
- 3 Collection bin with multi-cyclone unit

Fig. 8—4 Dirt container in operating position, service access on the dirt container side

To fit the dirt container, follow the removal procedure in reverse order.

9 Troubleshooting and rectification



CAUTION

Carry out fault finding and rectification in a professional manner.

Troubleshooting on the system must only be carried out by qualified, trained and authorised specialist personnel.

Before carrying out fault finding and rectification inside the cabinet, take the system out of operation and ensure it is de-energised (e.g. switch off the circuit breaker at the building connection).

9.1 Troubleshooting table

The table below lists possible causes of faults to assist with fault-finding and rectification.

To rectify faults, clean any contaminated parts (e.g. filters). Replace defective parts.

Fault	Possible cause	Remedy	Authorised personnel
System cannot be switched on	The main on/off switch is off.	Switch on the main switch.	Maintenance staff
	The circuit breaker for the building's power supply has tripped.	Reset the circuit breaker.	Maintenance staff
	The circuit breaker trips again after being reset.	If the building's power supply is OK, the system is faulty; disconnect the system from the building's circuit breaker to de-energise it and notify customer services.	Customer service
	Check whether the mains connection cable is faulty.	Replace the faulty mains connection cable.	Customer service / qualified electrician
	System control unit or components are faulty.	Replace faulty components.	Customer service

Table 9 - 1 Troubleshooting table

Fault	Possible cause	Remedy	Authorised personnel
Reduced suction power	Vacuum cleaner nozzle is dirty or blocked.	Clean the vacuum cleaner nozzle or clear the blockage	Maintenance staff
	Suction hoses are blocked or obstructed by foreign objects.	Clear the blockage or remove the foreign object.	Maintenance staff
	Air leakage due to faulty or worn seals	Replace faulty seals.	Maintenance staff or customer service if necessary
	Air leakage due to leaky hose connections.	Replace hoses with leaky connections	Maintenance staff or customer service if necessary
Significant loss of suction power	Loss of performance in the side-channel compressor	Check the side-channel compressor and replace if necessary	Customer service
Lighting	Lighting failure	Replace the light fitting.	Qualified personnel or, if necessary, customer service

Table 9-1 Troubleshooting table

9.2 Replacement of components and parts

Replace the defective parts or components.

When replacing parts, use only spare parts recommended by the manufacturer.

10 Spare Parts Logistics

10.1 self-service suction unit – assembly overview

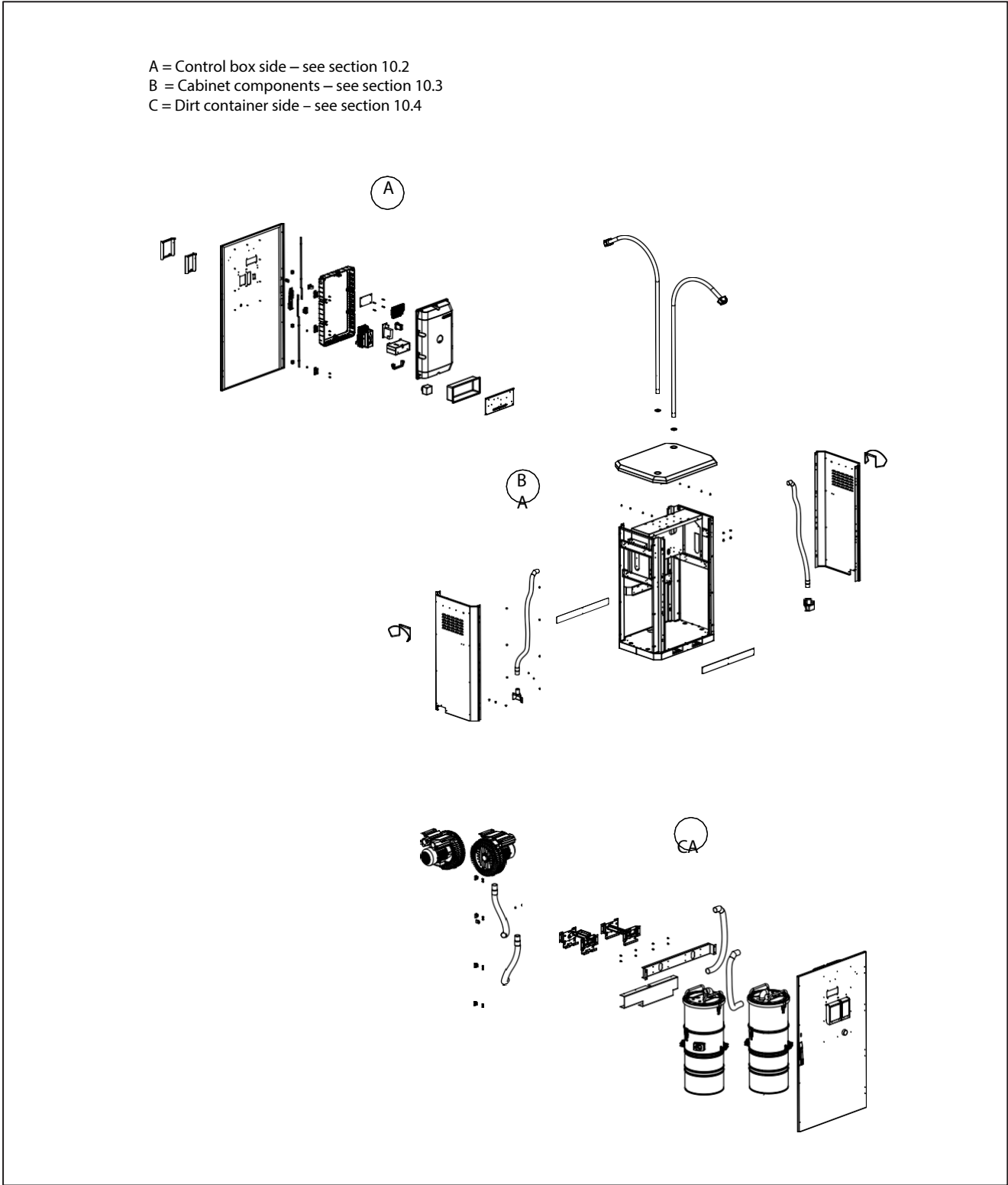


Fig. 10 - 1 SB suction unit, overview of system components

10.2 components – control box side

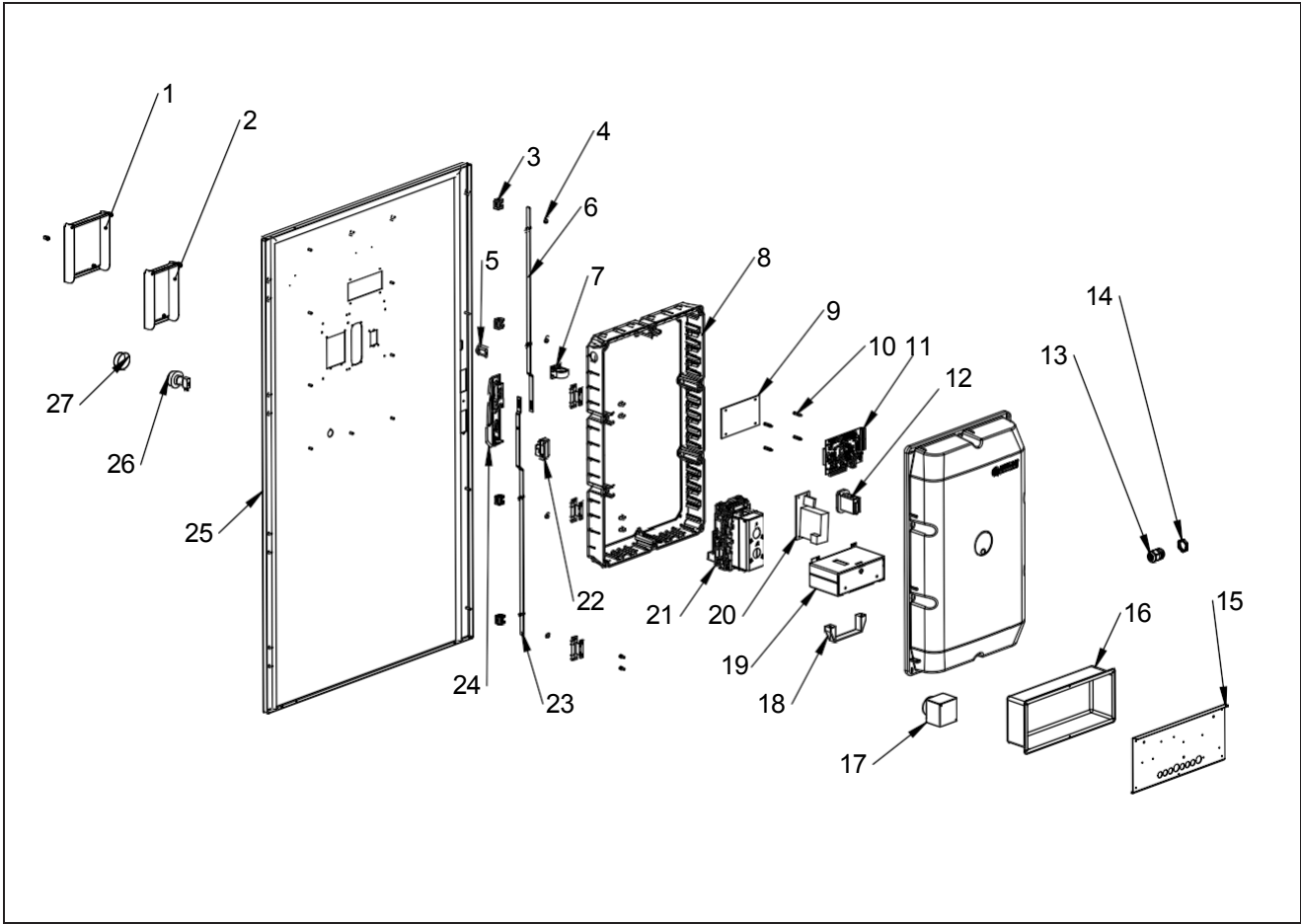


Fig. 10 - 2 Components on the control box side, exploded view

POS No.	Item number	Drawing number	Designation 1	Description 1 EN	Quantity
1	534248	-1	Splashguard unit, stainless steel, from 01/24"	Splashguard cover, 01/24	1
2	534249	-1	Splashguard unit, INOX, from 01/24"	Splashguard cover for safety terminal, LCE terminal 01/24	1
3	4004	STB-099-239-001	Rod guide	Metal-Bar Lock	8
4	386307	-1	Hexagon nut with flange and locking teeth	Hexagonal flanged nut, serrated	16
5	395403	STB-099-142-001	Padlock shackle, 1.4301 stainless steel	padlock, stainless steel, as per drawing RAH-03-010	2
6	583503	STB-099-611-001	Flat bar, top	Barrier above	2

Table 10 - 1 Parts list for SB suction unit, control box side

POS No.	Item number	Drawing number	Description 1	Description 1 EN	Quantity
7	593605000 00000	STB-099-293-001	Cable hose bracket Ø29 mm	cable hose bracket Ø29 mm	4
8	300543	STB-099-556-001	Control box with open bottom, drilled	Control box with open bottom drilled	2
9	57360	STB-099-118-002	Plexiglas cut-to-size 180 x 105 mm, red	Plexiglas cut-to-size 180 x 105 mm, red, for	2
10	253902	STB-099-114-001	Spacer M4 x 25.0 mm SW7	plate M4x25.0mm SW7 brass for control	8
11	350960	STB-099-520-001	CWE6 4-digit control and display board	Control and display board CWE6, 4-digit	2
12	601188	-1	Eurokey Next key reader	Key Reader Next Worldkey	2
13	5340	STB-099-300-001	PERFECT M32x1.5 4x8" cable gland	PERFECT wire joint M32*1.5 4x8	2
14	5349	STB-099-304-001	Lock nut for cable gland M32	Wire joint nut M32x1.5, grey	2
15	x	Sa-003-014-003	Flanged part 1.4301		1
16	5787	STB-099-023-001	Electrical control box 430x190x100	Electrical box 430x190x100	1
17	204610	-1	25 A all-pole main switch, surface-mounted	Main switch 25 A, all-pole	1
18	2290	STB-099-005-001	Micropowder dosing unit handle 150 mm	Micropowder dosing handle 150 mm	2
19	595902	Sa-000-008-002	Unit, housing and insert, stainless steel	Unit, housing and insert, INOX	2
20	400100	STB-099-161-001	EMP800.13 V6 CC-TALK electronic coin validator	Electronic coin acceptor EMP800.13 V6 CC-TALK	2
21	531626	-1	Banknote reader NV9 CC-Talk 104-USB	Note reader NV9 CC-Talk 104-USB	2
22	403701	-1	Profile half-cylinder, same-locking	Lock cylinder	2
23	583504	STB-099-610-001	Flat bar at the bottom	Barrier down	2
24	39971	STB-099-238-001	Swivel handle with push button 2400-u4	Handle with push button	2
25	802083	Sa-000-028-001	Control panel door for SB vacuum cleaner, stainless steel, foam-lined		2
26	516104	STB-099-112-001	Illuminated push-button, white, incl. LED, double, 12 V DC	White push-button, including double LED, 12 V DC	2
27	51612	-1	Illuminated push-button cover, crystal clear	Push-button cover	2

Table 10-1 Parts list for SB suction unit, control box side

10.3 components – cabinet parts

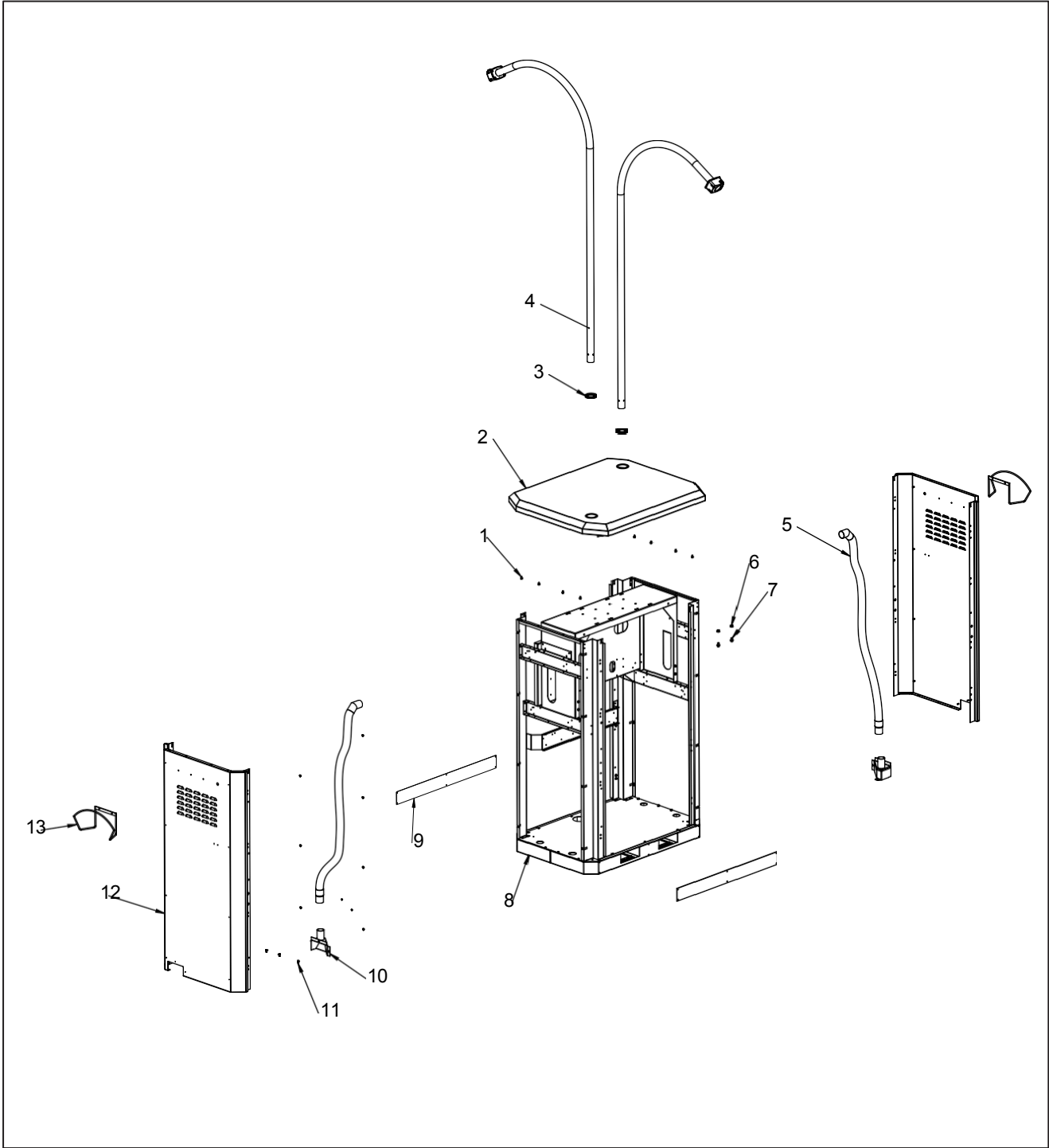


Fig. 10 - 3 Components: Cabinet parts, exploded view

POS No.	Item number	Drawing number	Description 1	Description 1 EN	Quantity
1	386207	-xxx	Hexagon head screw with flange and serrated teeth	Hexagon head screw with flange and serrations	16
2	800755	Sa-000-007-002	Welded assembly, roof vacuum cleaner, 1.4301, PB	welded assembly, roof vacuum cleaner, 1.4301, PC	1
3	528902	STB-099-649-001	Membrane grommet 59x69x80mm	Membrane grommet 59 x 69 x 80	2
4	300583	Sa-000-009-002	Suction pipe, stainless steel, assembled and packed	Stainless steel suction pipe, fitted and packed	2
5	284219	-1	Suction hose unit Ø51mm PVC black"	Suction hose unit Ø51mm PVC black	1
6	386309	-xxx	Hexagonal nut with flange and serrated edge	Hexagon flange nut, serrated	8
7	386223	-xxx	Hexagon head screw with flange and serrated teeth	Hexagon head screw with flange and serrations	8
8	800775	Sa-000-010-003	Base frame 1.4301	Base frame 1.4301	1
9	x	SW-002-002-002	Laser-cut part	laser sheet metal	2
10	800740	Sa-000-011-002	Welded part, exhaust duct, stainless steel, GSO	Welded part, exhaust duct, stainless steel, SAS	2
11	386211	-xxx	Hexagon head screw with flange and serrated teeth	Hexagon head screw with flange and serrations	6
12	800750	Sa-001-010-005	Edge part, suction cup sidewall, 1.0330, PB	edge part, sidewall, 1.0330, PC	2
13	593800	-1	Hose holder SB suction cup, stainless steel	Wall bracket, stainless steel, MTM	2

Table 10–2 Parts list for SB suction unit cabinet components

10.4 components – dirt container side

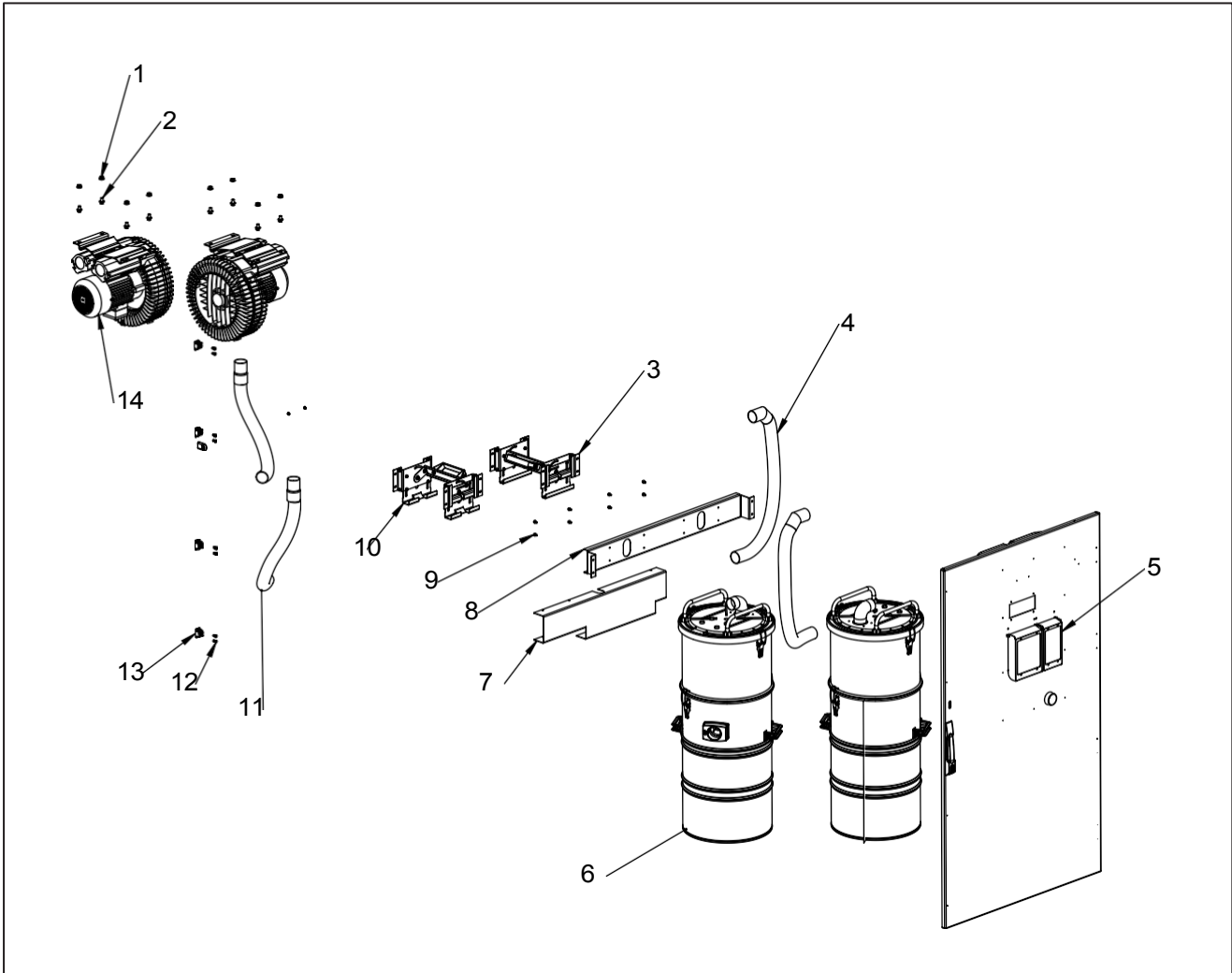


Fig. 10–4 Components on the waste container side, exploded view

POS No.	Item number	Drawing number	Description 1	Description 1 EN	Quantity
1	386309	-xxx	Hexagon nut with flange and serrated edge	Hexagon flange nut, serrated	8
2	386223	-xxx	Hexagon head screw with flange and serrated teeth	Hexagon head screw with flange and serrations	8
3	300551	-1	Lifting device Bay 1	Lifting device Bay 1	1
4	284218	-1	Suction hose unit, Ø51mm, PVC, black	Suction hose unit Ø51mm PVC black	1
5	534243	SWS-000-051-001	Universal splash guard assembly		1
6	570011	-1	Cyclon dirt container	Cyclon dirt container	2
7	x	Sa-003-035-001	Cable cover		1
8	x	Sa-003-027-002	Lifting equipment, Part 3		1
9	286212	-xxx	Hexagon head screw with flange and serrated teeth	Hexagon head screw with flange and serrations	8
10	300552	-1	Lifting device, bay 2	Lifting device Bay 2	1
11	284220	-1	Suction hose unit, Ø51mm, black PVC	Suction hose unit, Ø51mm, black PVC	1
12	x	-1	Screws	Screws	16
13	583402	STB-099-240-001	Latch holder 1121-18-02	Catch holder	8
14	569800	-1	Side-channel blower 2.2 kW ElmoRietschle	Side channel blower 3AC 400V 50Hz	2

Table 10–3 Parts list for SB vacuum cleaner – dirt container side

11 diagrams
11.1 SB vacuum cleaner



SB suction unit, circuit diagram (page 1 of 8)

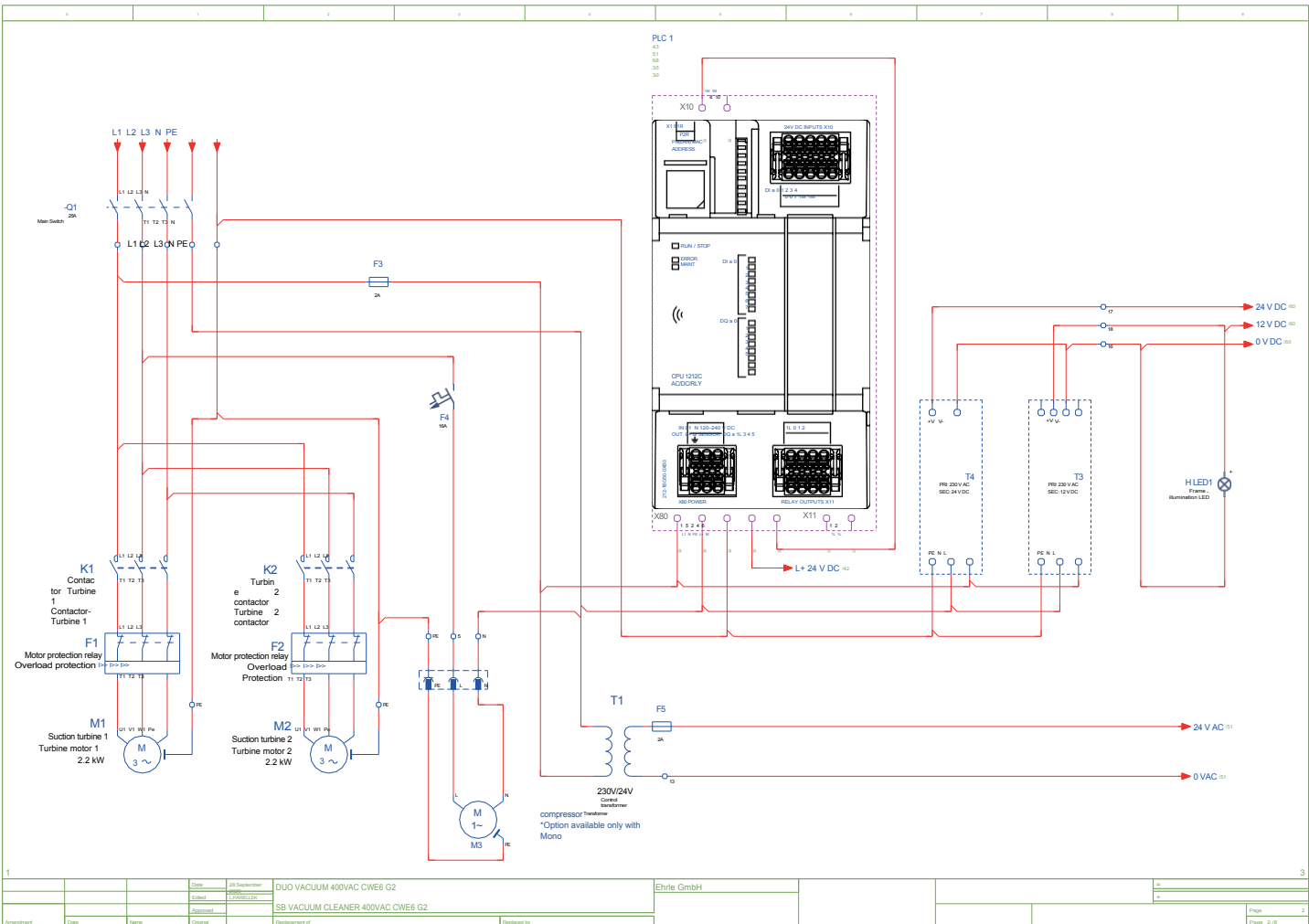


Fig. 11-2
8) SB Suction Unit, Circuit Diagram (Page 2 of 8)

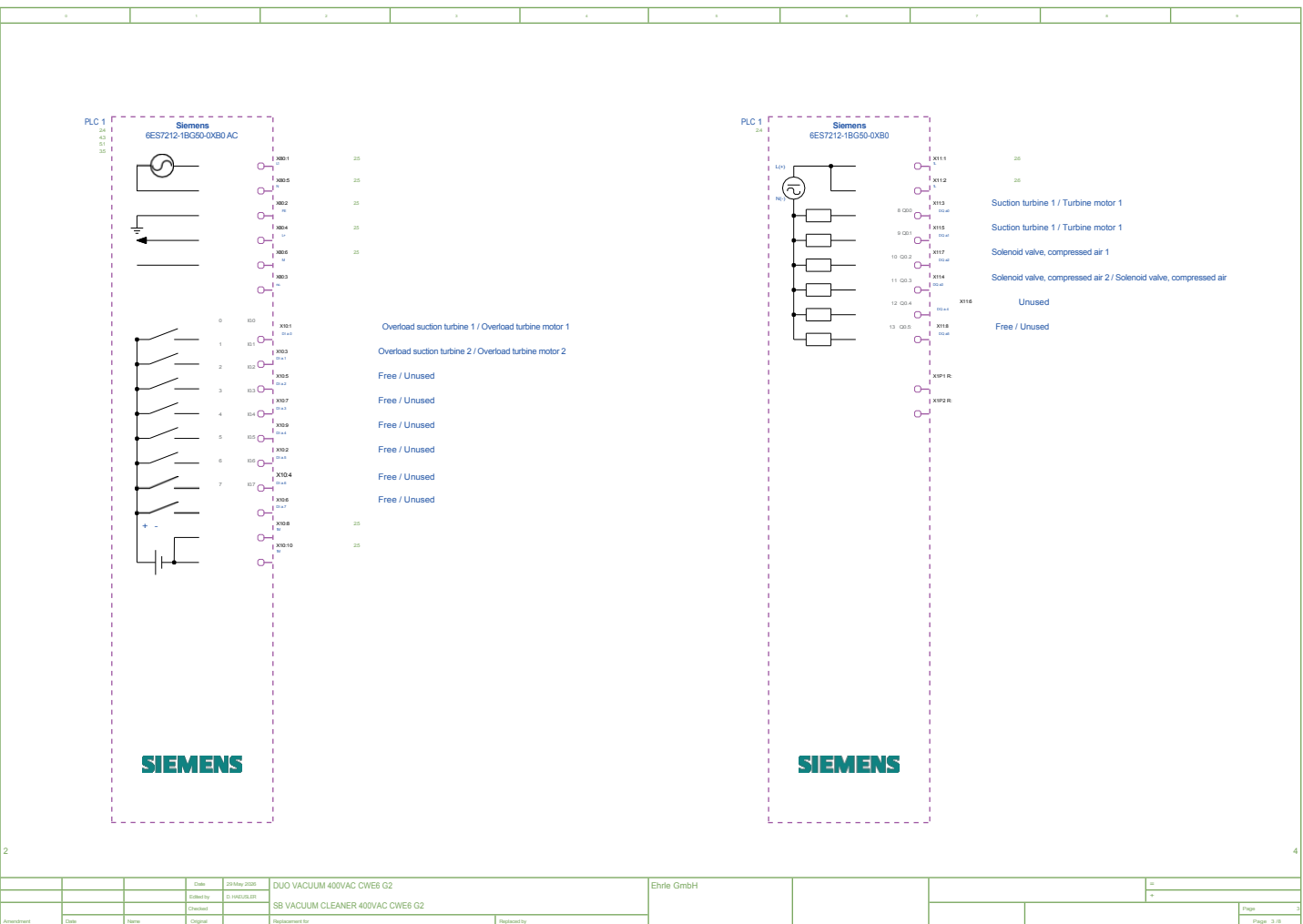


Fig. 11-3 SB Suction Unit, circuit diagram (page 3 of 8)

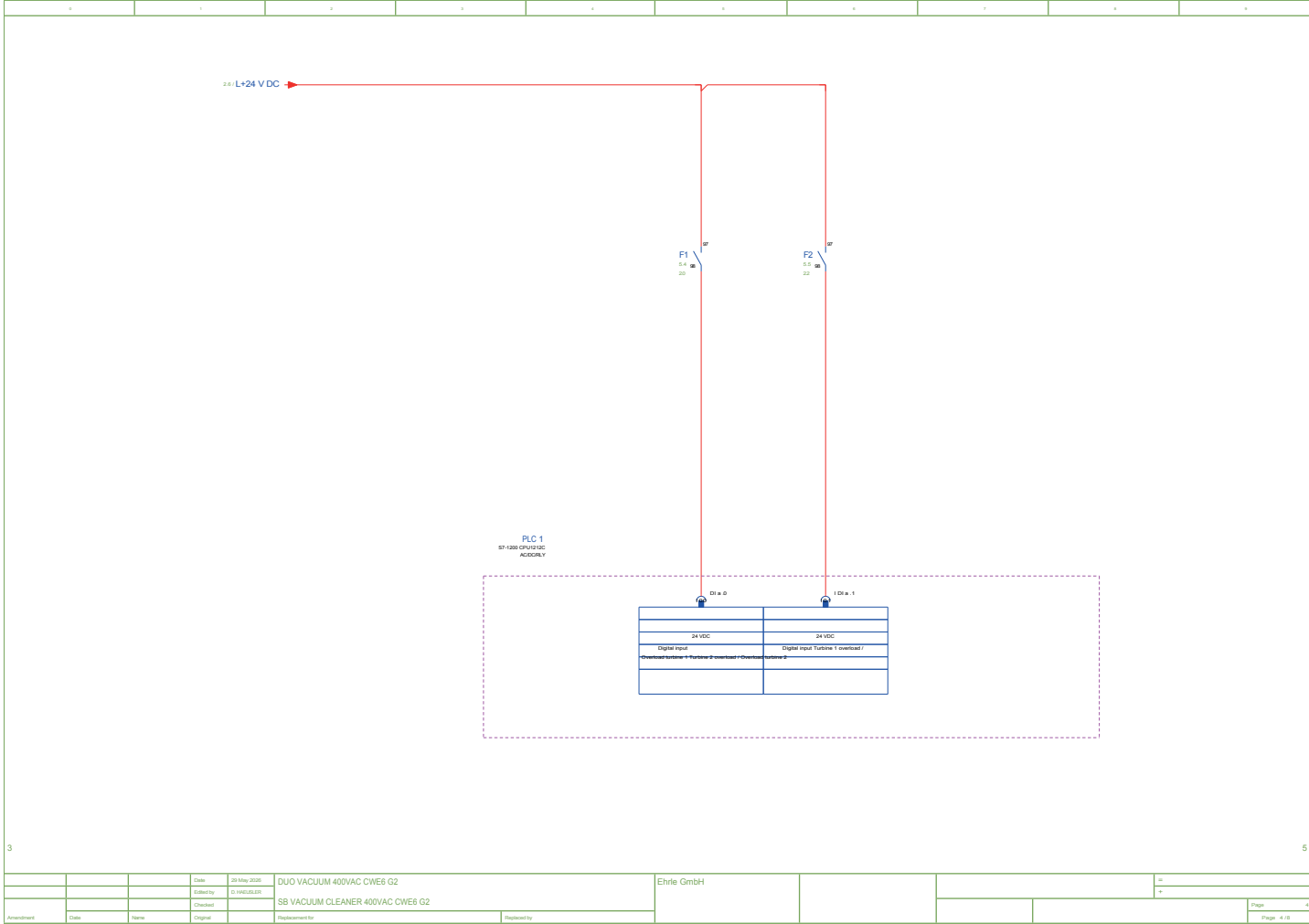


Fig. 11-4 SB Suction Unit, circuit diagram (page 4 of 8)

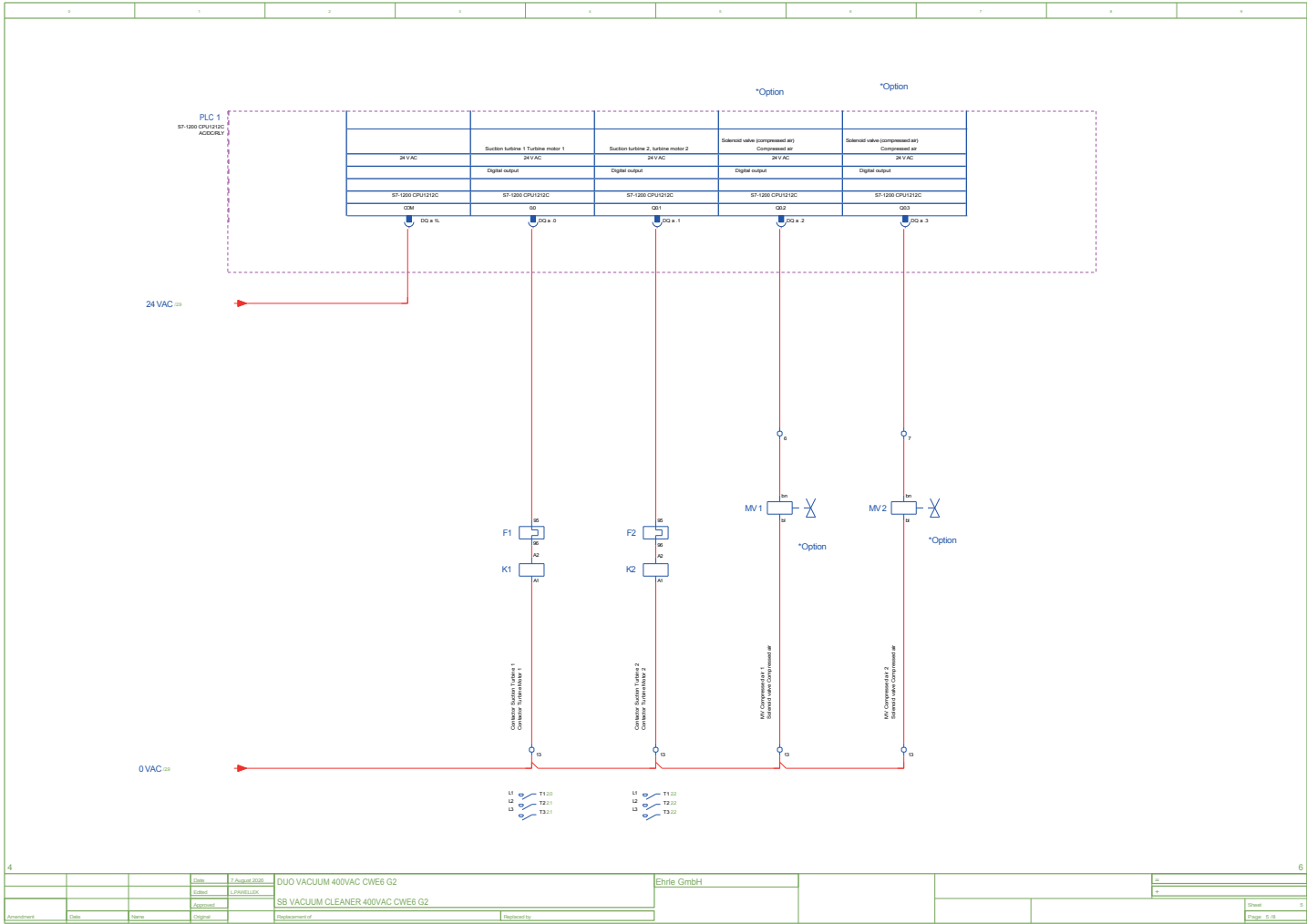


Fig. 11–5 SB Suction Unit, circuit diagram (page 5 of 8)

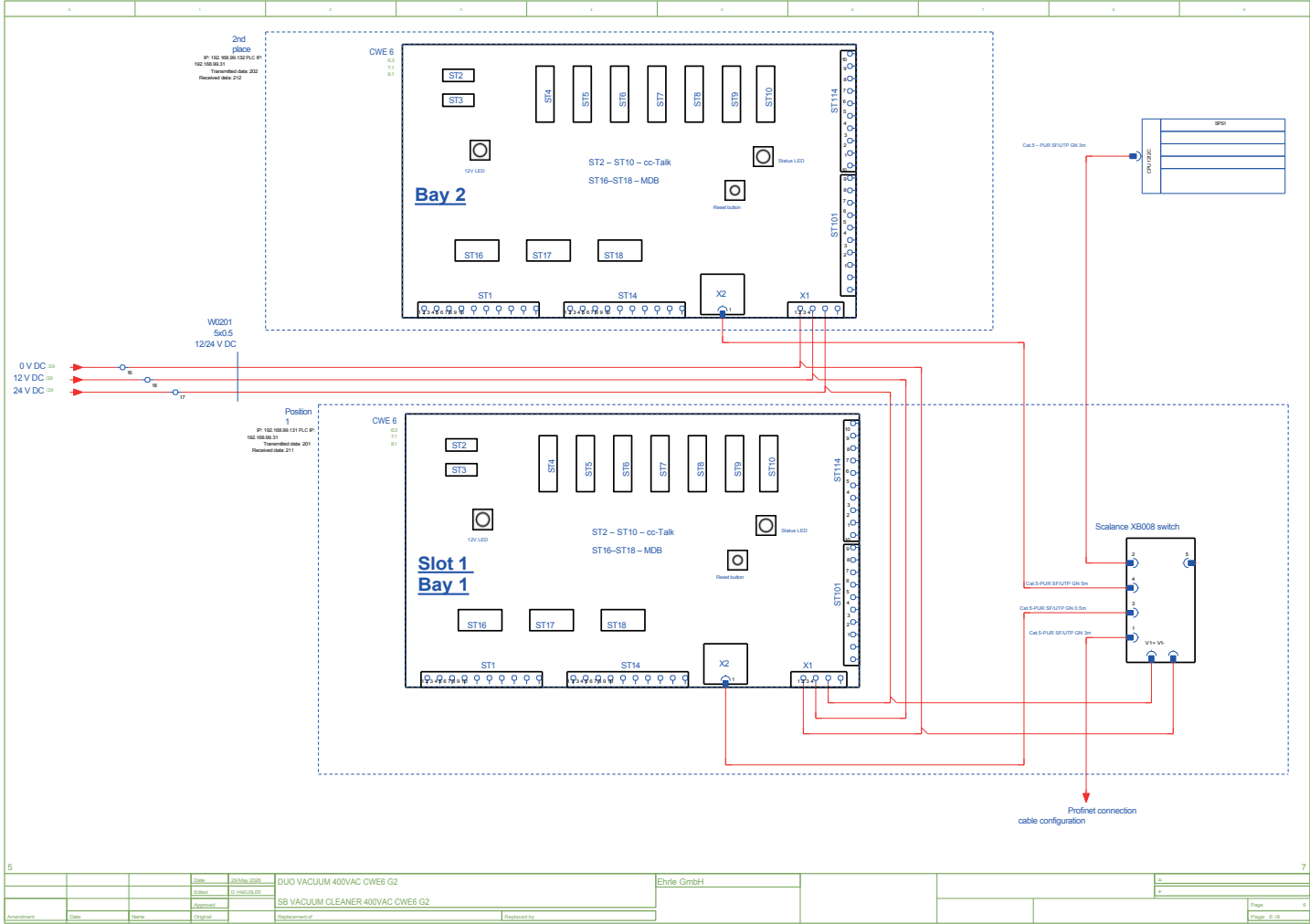


Fig. 11-6
SB Suction Unit, circuit diagram (page 6 of 8)

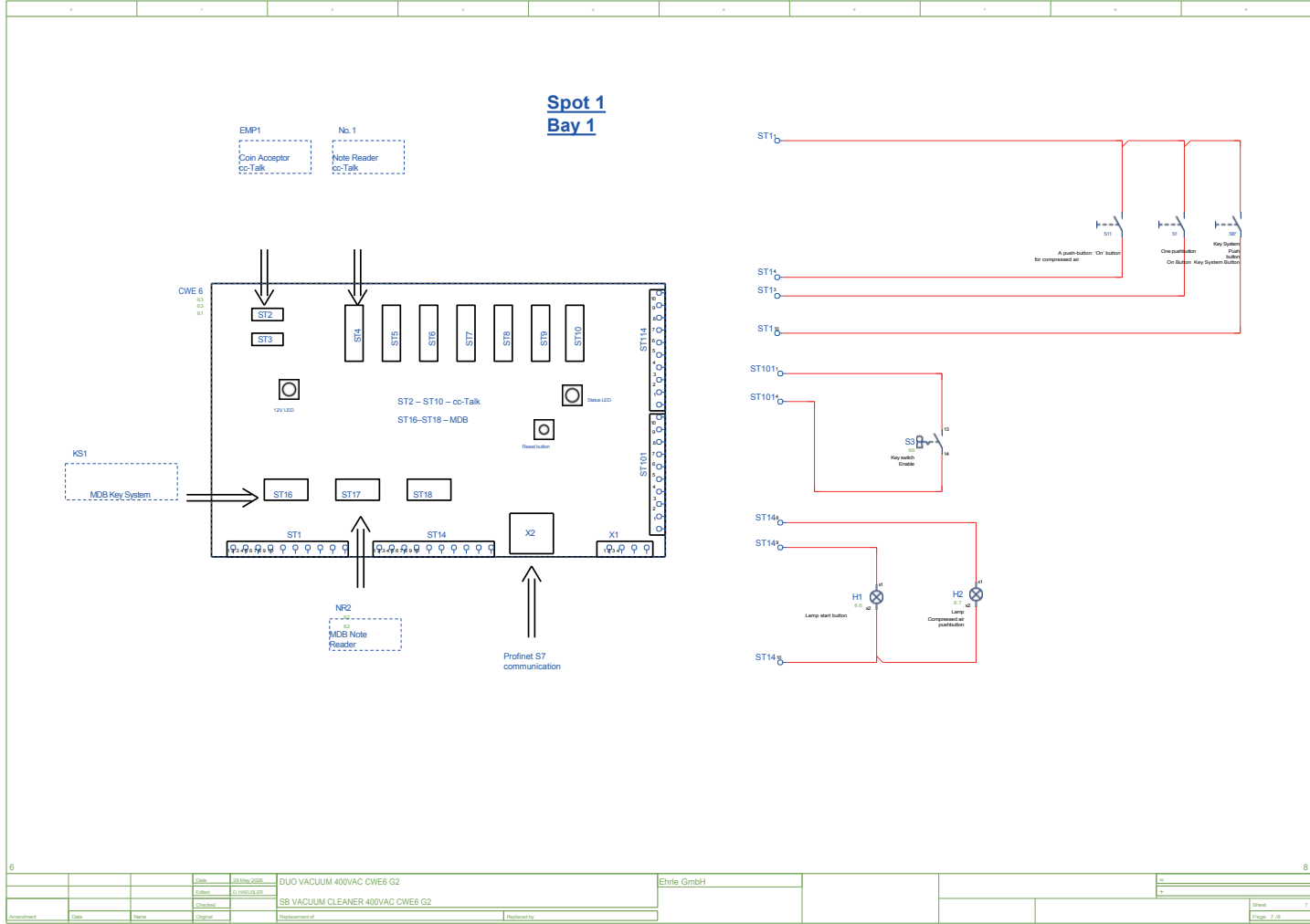


Fig. 11-7
8) SB Suction Unit, circuit diagram (page 7 of 8)

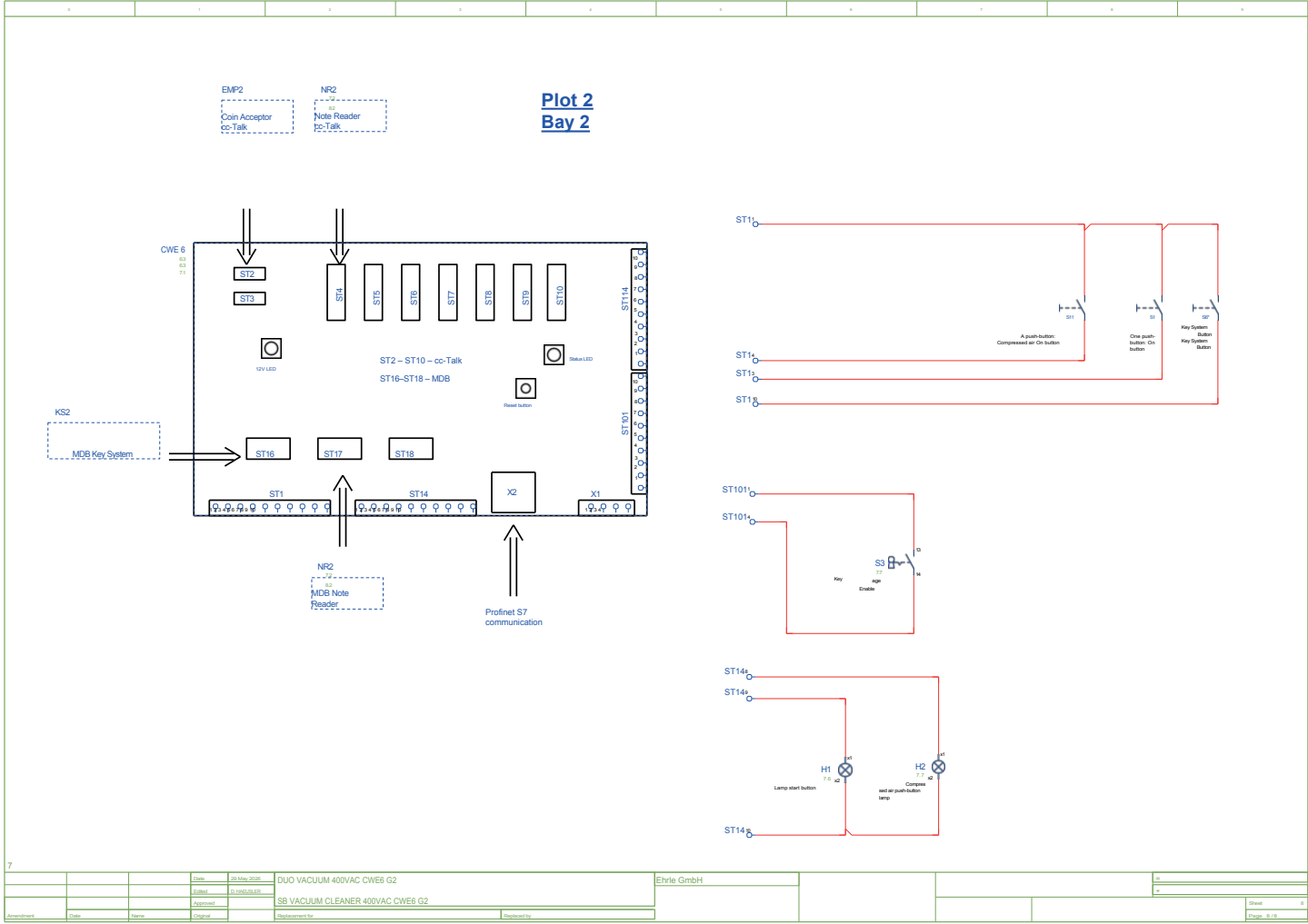


Fig. 11–8 SB Suction Unit, circuit diagram (page 8 of 8)



12 Notes

12 Notes



Evidence for customer service

System type	Manufacturer's No.:	Commissioned on:
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Test carried out on:

Findings:

Signature

Test carried out on:

Findings:

Signature

Test carried out on:

Findings:

Signature

Test carried out on:

Findings:

Signature

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