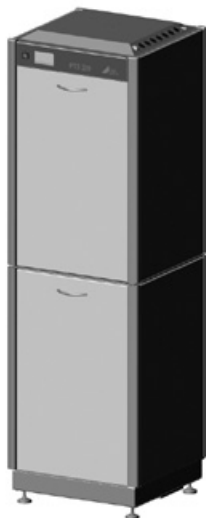


Power Tower Silence 200

EN



Installation and operating instructions



A949100002L02



1806V002

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Important information

1 About this document

These installation and operating instructions represent part of the unit.



If the instructions and information in these installation and operating instructions are not followed, Dürr Dental will not be able to offer any warranty or assume any liability for the safe operation and the safe functioning of the unit.

1.1 Warnings and symbols

Warnings

The warnings in this document are intended to draw your attention to possible risks of personal injury or material damage.

The following warning symbols are used:



General warning symbol



Warning – dangerous high voltage

The warnings are structured as follows:



SIGNAL WORD

Description of the type and source of danger

Here you will find a description of the possible consequences of ignoring the warning.

➤ Follow these measures to avoid the danger.

The signal word differentiates between four levels of danger:

– DANGER

Immediate danger of severe injury or death

– WARNING

Possible danger of severe injury or death

– CAUTION

Risk of minor injuries

– ATTENTION

Risk of extensive material/property damage

Other symbols

These symbols are used in the document and on or in the unit:



Note, e.g. specific instructions regarding efficient and cost-effective use of the unit.



Observe the operating instructions.



CE labelling



Manufacturer



Date of manufacture



Serial number



Order number



Dispose of correctly in accordance with EU Directive 2012/19/EU (WEEE).



Dispose of the packaging material in an environmentally responsible manner.



Wear protective gloves.



Wear protective goggles.



Three phase alternating current with neutral conductor



Switch off and de-energise the unit (e.g. unplug from mains).



Monitor ambient conditions



Unit can be used with Tyscor Pulse

1.2 Copyright information

All circuits, processes, names, software programs and units mentioned in this document are protected by copyright.

The Installation and Operating Instructions must not be copied or reprinted, neither in full nor in part, without written authorisation from Dürr Dental.

2 Safety

Dürr Dental has designed and constructed this unit so that when used properly and for the intended purpose it does not pose any danger to people or property. Nevertheless, residual risks can remain. You should therefore observe the following notes.

2.1 General safety information

- › Always comply with the specifications of all guidelines, laws, and other rules and regulations applicable at the site of operation for the operation of this unit.
- › Check the function and condition of the unit prior to every use.
- › Do not convert or modify the unit.
- › Comply with the specifications of the Installation and Operating Instructions.
- › The Installation and Operating Instructions must be accessible to all operators of the unit at all times.

2.2 Qualified personnel

Operation

Unit operating personnel must ensure safe and correct handling based on their training and knowledge.

- › Instruct or have every user instructed in handling the unit.

Installation and repairs

- › Installation, readjustments, alterations, upgrades and repairs must be carried out by Dürr Dental or by qualified personnel specifically approved and authorized by Dürr Dental.

2.3 Electrical safety

- › Comply with all the relevant electrical safety regulations when working on the unit.
- › Never touch the patient and unshielded plug connections on the device at the same time.
- › Replace any damaged cables or plugs immediately.

2.4 Only use original parts

- › Only use Dürr Dental parts or accessories and special accessories specifically approved by Dürr Dental.
- › Only use only original wear parts and replacement parts.

2.5 Transport

The original packaging provides optimum protection for the unit during transport.

If required, original packaging for the unit can be ordered from Dürr Dental.



Dürr Dental will not accept any responsibility or liability for damage occurring during transport due to the use of incorrect packaging, even where the unit is still under guarantee.

- › Only transport the unit in its original packaging.
- › Keep the packing materials out of the reach of children.

2.6 Disposal

Unit



The unit must be disposed of properly. Within the European Union, the unit must be disposed of in accordance with EU Directive 2012/19/EU (WEEE).

- › If you have any questions about the correct disposal of parts, please contact your dental trade supplier.



The unit may be contaminated. Instruct the company disposing of the waste to take the relevant safety precautions.

- › Decontaminate potentially contaminated parts before disposing of them.
- › Uncontaminated parts (e.g. electronics, plastic and metal parts etc.) should be disposed of in accordance with the local waste disposal regulations.
- › If you have any questions about the correct disposal of parts, please contact your dental trade supplier.



3 Overview

3.1 Scope of delivery

The following items are included in the scope of delivery (possible variations due to country-specific requirements and/or import regulations):

PTS 200/01

with cabinet 0949-54 0949-200/01

- VS 900 S (installed)
- Membrane drying unit
- DUO compressor unit
- Amalgam separator CA 4 for PTS

PTS 200/02

with cabinet 0949-54 0949-200/02

- VS 900 S (installed)
- Membrane drying unit
- DUO compressor unit
- DUO compressor unit for retrofitting
- Amalgam separator CA 4 for PTS

PTS 200/11

with cabinet 0949-53 0949-200/11

- VS 900 (installed)
- Membrane drying unit
- DUO compressor unit

PTS 200/12

with cabinet 0949-53 0949-200/12

- VS 900 (installed)
- Membrane drying unit
- DUO compressor unit
- DUO compressor unit for retrofitting
- Amalgam separator CA 4 for PTS

PTS 200/13

with cabinet 0949-55 0949-200/13

- V 1200 (installed)
- Membrane drying unit
- DUO compressor unit
- DUO compressor unit for retrofitting
- Amalgam separator CA 4 for PTS

PTS 200/31

with cabinet 0949-64 0949-200/31

- VS 900 S (installed)
- Membrane drying unit
- DUO compressor unit

PTS 200/32

with cabinet 0949-64 0949-200/32

- VS 900 S (installed)
- Membrane drying unit
- DUO compressor unit
- DUO compressor unit for retrofitting
- Amalgam separator CA 4 for PTS

PTS 200/42

with cabinet 0949-71 0949-200/42

- V 1200 S (installed)
- Membrane drying unit
- DUO compressor unit
- DUO compressor unit for retrofitting
- Amalgam separator CA 4 for PTS

PTS 200/35

with cabinet A949100072 A949200035

- V 1200 S (installed)
- Membrane drying unit
- DUO compressor unit
- DUO compressor unit for retrofitting

3.2 Optional accessories

The following optional items can be used with the device:

Pressure reducer. 6040-992-00

3.3 Consumables

The following materials are consumed during operation of the device and must be ordered separately:

Disposable amalgam container for

CA4 7805-033-00

Air intake filter 0832-982-00

Fine filter 1610-121-00

Sterile filter 1640-981-00

Sinter filter 1650-101-00

4 Technical data

Electrical data		0949-54	0949-64	0949-71	A949200035
Rated voltage	V		400 / 3N~		
Nominal current	A	8.3 (11.4)*	7.3 (10.4)*		11.6
Mains frequency	Hz			50	
Weight	kg	266 (301)*	256 (291)*		300

* Information on the retrofitted units

Electrical data		0949-53	0949-55
Rated voltage	V		400 / 3N~
Nominal current	A	7.3 (10.4)*	10.6
Mains frequency	Hz		50
Weight	kg	237 (265)*	270

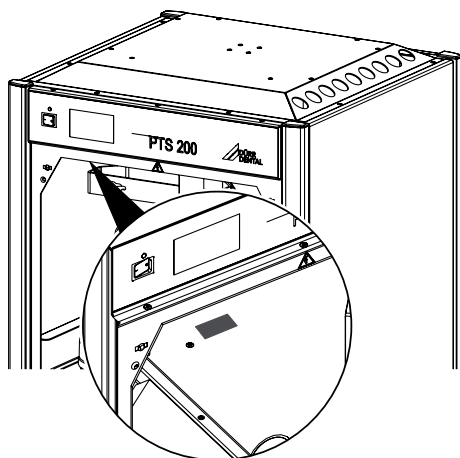
* Information on the retrofitted units

Electrical data		0949-51	0949-52	0949-57	0949-58	0949-62
Rated voltage	V			230 / 1~		
Nominal current	A	11.9	12.9	19.2	21.6	11.9
Mains frequency	Hz			50		
Weight	kg	222	236		301	226

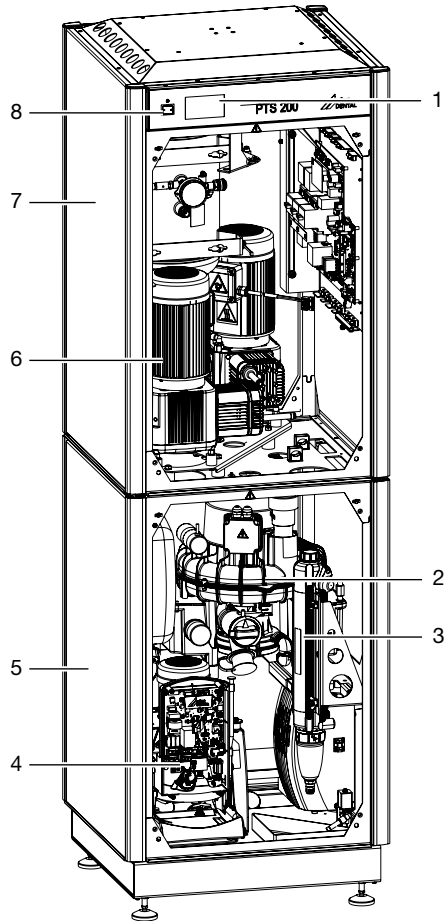


4.1 Type plate

The type plate is located under the cover.



5 Operation



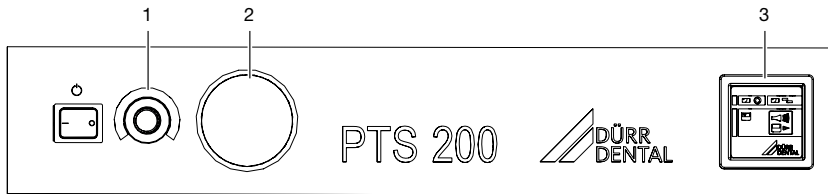
- | | | | |
|---|-------------------|---|-------------------|
| 1 | Advert | 5 | Suction module |
| 2 | Suction unit | 6 | Compressor unit |
| 3 | Drying unit | 7 | Pressure module |
| 4 | Amalgam separator | 8 | Main power switch |

5.1 Functional description

The insulated unit contains different individual components, controls and monitors them. Different parameters are displayed. Depending on type, the unit can be operated on a touch display.



5.2 Analogue display



1 Display of relative humidity

blue <30 %

pale pink >30 %

2 Pressure display

Start-up pressure 6.0 bar

Cut off pressure 7.5 bar

3 Amalgam separator display panel

5.3 Digital display and operation



1 Display of operating status, messages and operation

When the relative air humidity is displayed, the green range corresponds to approx. 0 - 30 %



Only qualified specialists or employees trained by Dürr Dental are permitted to install, connect and start using the unit.

6 Requirements



Further information can be found in our suction planning information leaflet. Order number 9000-617-03/..

The room chosen for installation must satisfy the following requirements:

- Closed, dry, well-ventilated room
- It should not be a room made for another purpose (e.g. boiler room or wet cell).
- Set up the unit on a clean, level and sufficiently stable surface (take the weight of the unit into account).
- Set up the units so that the type plate can be easily read and the unit is easily accessible for operation and maintenance.
- Leave sufficient distance from any wall (at least 20 cm).
- Refer to the requirements for environmental conditions in "4 Technical data".

6.1 Pipe materials

Only use vacuum-sealed HT-waste pipes manufactured from the following materials:

- Polypropylene (PP),
- Chlorinated polyvinyl chloride (PVC-C),
- Unplasticized polyvinyl chloride (PVC-U),
- Polyethylene (PE).

The following materials must not be used:

- Acrylonitrile-butadiene-styrene (ABS),
- Styrene copolymer blends (e.g. SAN + PVC).

6.2 Hose materials

For waste connections and suction lines only use the following hose types:

- Flexible spiral hoses made of PVC with integrated spiral or equivalent hoses
- Hoses that are resistant to dental disinfectants and chemicals



Plastic hoses will display signs of ageing over time. Therefore, they should be inspected regularly and replaced as necessary.

The following types of hoses must not be used:

- Rubber hoses
- Completely PVC hoses
- Hoses that are not sufficiently flexible

6.3 Installation and routing of hoses and pipes

- › Execute the on-site pipe installation in accordance with the applicable local regulations and standards.
- › Lay the hose installation of the drains to or from the unit at a sufficient incline.



If incorrectly laid, the hoses can become blocked with sedimentation.

6.4 Information about electrical connections

- › Ensure that the electrical connections to the mains power supply are established in accordance with current valid national and local regulations and standards governing the installation of low voltage units in medical facilities.
- › The connection to the mains supply must be a fixed connection that can only be released using a tool. Plug-in connections (power outlet/plug) are not permissible.
- › Install an all-pole disconnection unit (all-pole switch) in the electrical connection to the mains power supply. This must include the clearance and creepage distances defined in IEC61058-1 for a mains voltage peak of 4kV.



The disconnection unit (switch) must be easily accessible without danger.

- › Observe the current consumption of the devices that are to be connected.

Electrical fusing

LS switch 16 A, characteristic B, C and D in accordance with 60898.

6.5 Information about connecting cables

The diameter of the connections depends on the current consumption, length of line and the ambient temperature of the unit. Information concerning the current consumption can be found in the Technical Data supplied with the particular unit to be connected.

The following table lists the minimum diameters of the connections in relation to the current consumption:

Current consumption of unit [A]	Cross-section [mm ²]
> 10 and < 16	1.5
> 16 and < 25	2.5
> 25 and < 32	4
> 32 and < 40	6
> 40 and < 50	10
> 50 and < 63	16

Mains supply cable

Installation type	Line layout (minimum requirements)
Fixed installation	– Plastic sheathed cable (e.g. type NYM-J)
Flexible	– PVC flexible line (e.g. H05 VV-F) or – Rubber connection (e.g. H05 RN-F or H05 RR-F)

Display panel

Installation type	Line layout (minimum requirements)
Fixed installation	– CAT5.e network cable
Flexible	– ISDN standard cable with connectors or – Network patch cable

Control cable

24 V protective low voltage for:

- Hose manifold
- Place selection valve
- Spittoon valve

Installation type	Line layout (minimum requirements)
Fixed installation	– Shielded sheathed cable (e.g. (N)YM (St)-J)
Flexible	– PVC data cable with shielded cable sheathing, as used for telecommunications and IT processing systems (e.g. type LiYCY) or – Lightweight PVC control cable with shielded cable sheathing

7 Installation

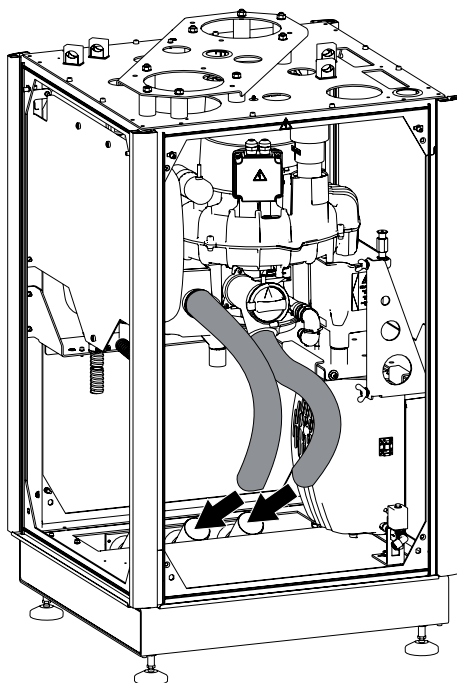
7.1 Combining devices safely

Take care when connecting units together or to parts of other systems as there is always an element of risk (e.g. due to leakage currents).

- Only connect units when there can be no question of danger to operator or to patient.
- Only connect units when it is safe to do so and when there is no risk of damage or harm to the surroundings.
- If it is not 100% clear from the unit data sheet that such connections can be safely made or if you are in any doubt, always get a suitably qualified person (e.g. the manufacturer) to verify that the setup is safe.

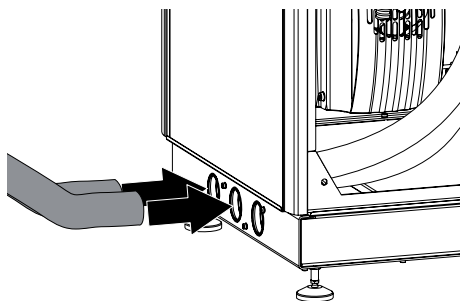
7.2 Set up and connect the suction module

- Erect the suction module.
- Connect the exhaust air and secretion hose.

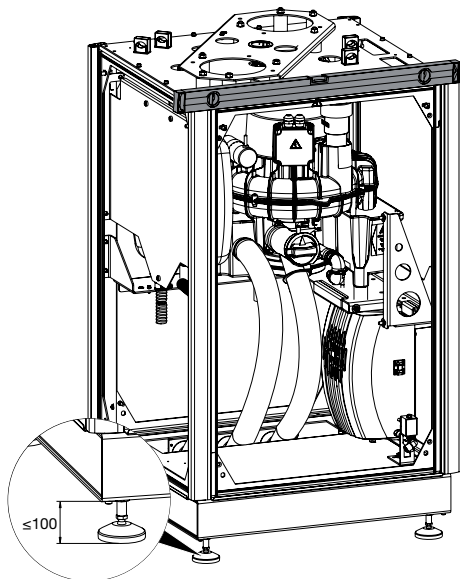


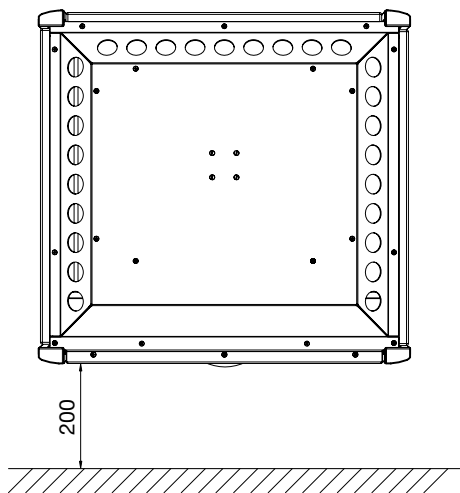
- Remove the transport protection.
- Attach the cover at the rear.

- Connect the exhaust air and secretion hose to the floor connection.



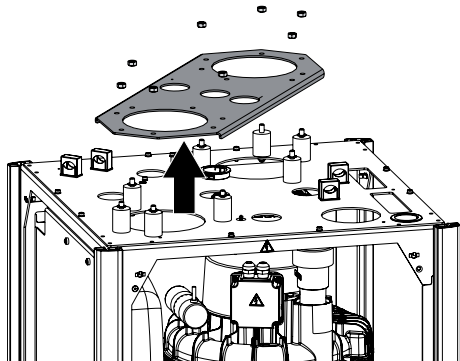
- Place the unit in the correct position and align. Observe planning template 9000-619-09.



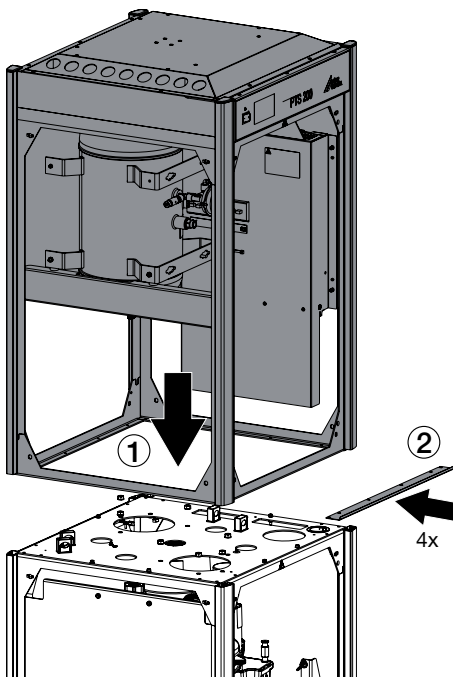


7.3 Install the compressed air module

- › Remove the mounting plate.



- › Position the compressed air module on the suction module.



7.4 Install the compressor units



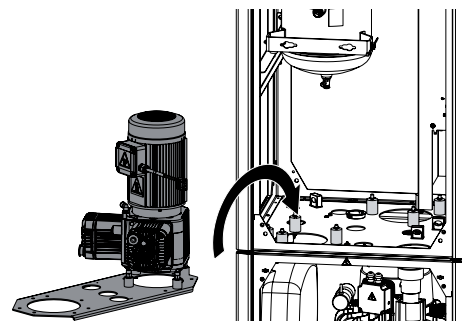
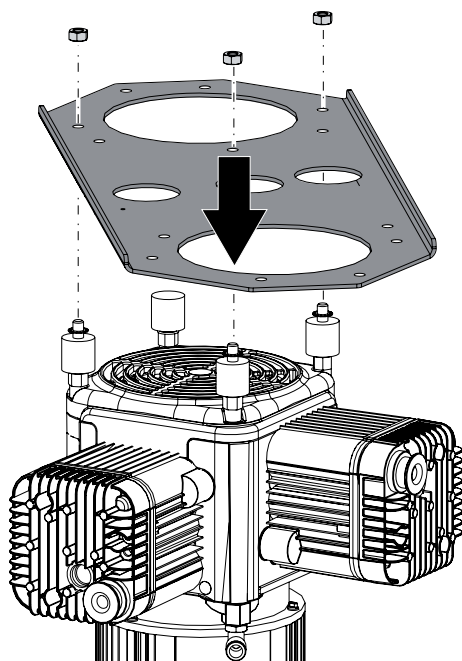
CAUTION

Functional disorder in case of incorrect installation

Unit does not start up.

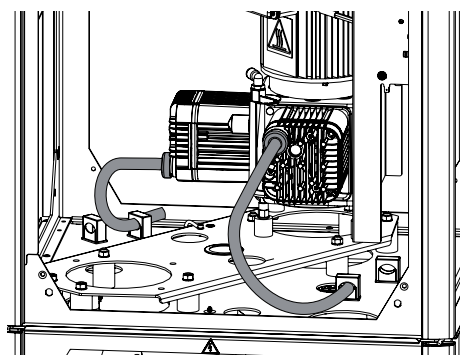
- › For retrofitting a compressor unit, re-connect the compressor unit from star connection to delta connection.

- Mount the compressor unit on the retaining plate and then mount it in the unit.

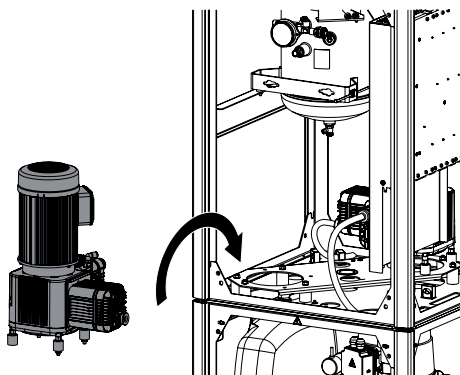


- Fix the grounding cable.

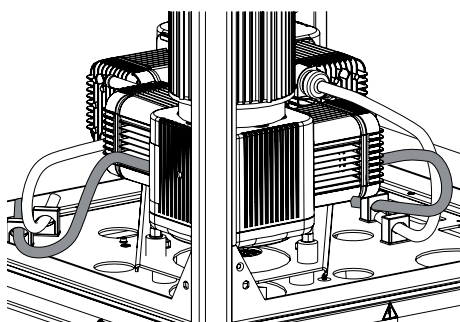
- Push on and secure the noise insulation on the suction manifold of the compressor unit.



- Position the second compressor unit.

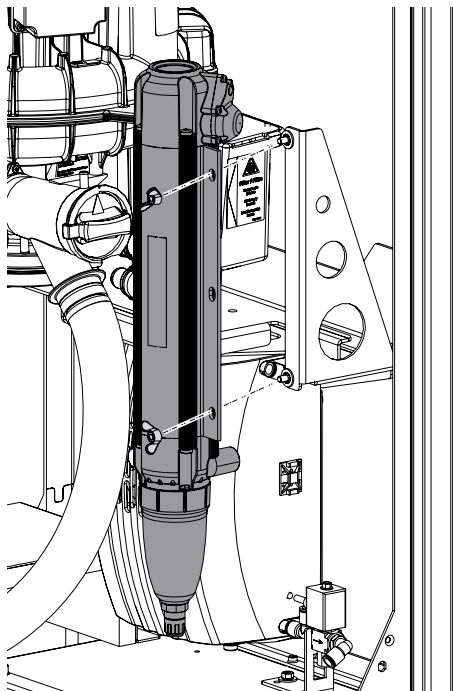


- Push on and secure the noise insulation on the suction manifold of the compressor unit.

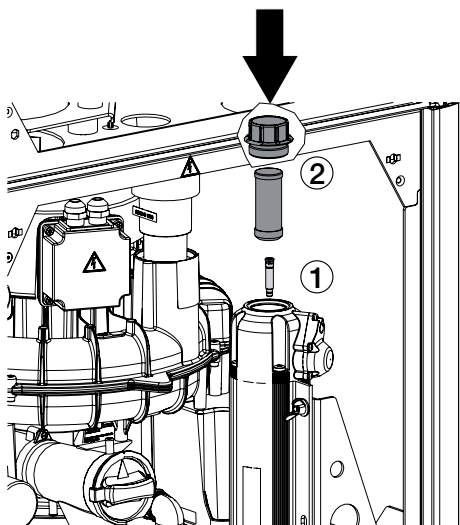


7.5 Install the drying unit

- › Install the drying unit.

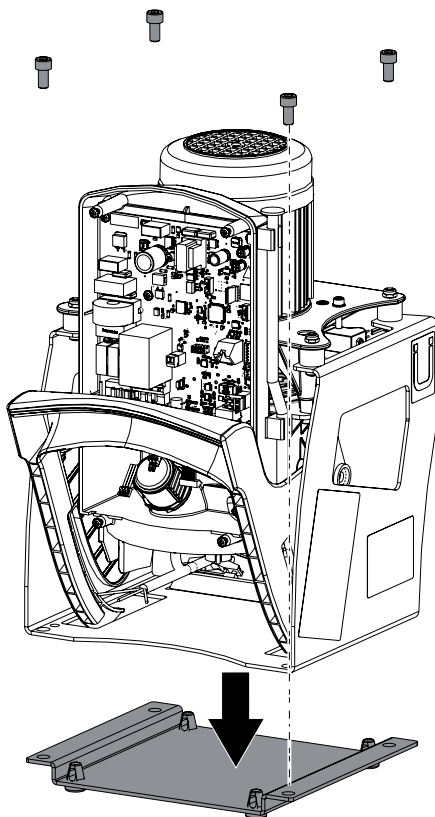


- › Insert nozzle, see installation instructions 9000-610-49/01. Insert the filter and close the drying unit with the cover.

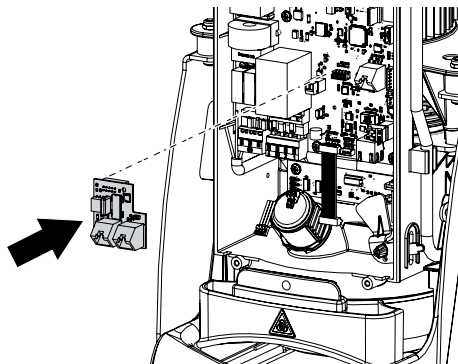


7.6 Install the amalgam separator (optional)

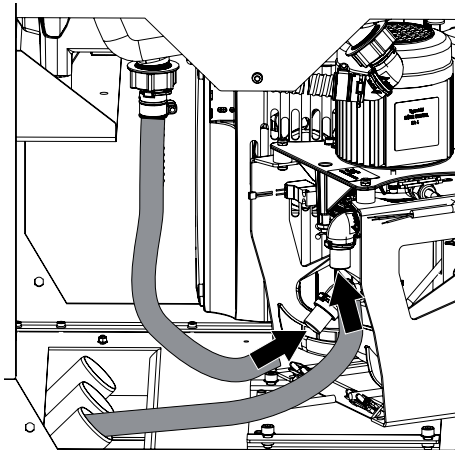
- › Remove the amalgam collecting vessel.
- › Mount the elevating plate.



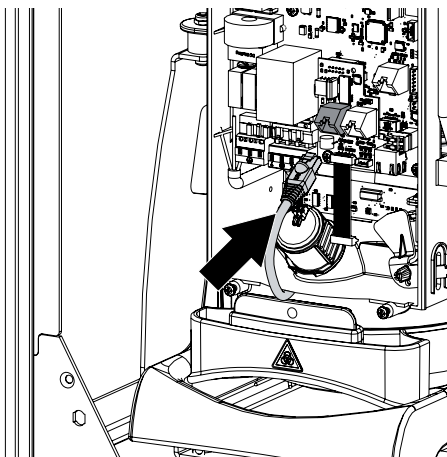
- › Remove the electronic hood.
- › Plug two spacers and then BUS adapters into slot X9 of the electronic circuit board.



- › Attach the wastewater connection of the pressure compensation containers at the inlet of the amalgam separator and the wastewater hose on the amalgam separator outlet.



- › Screw the protective conductor cable outgoing from the amalgam separator tightly to the suction machine console.
- › Position the amalgam separator correctly in the PTS 200.
- › Plug the mains cable into the mains socket on the BUS adapter.

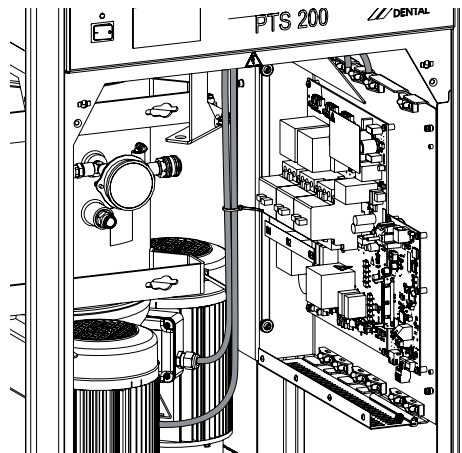


- › Before start-up, check the mains voltage against the voltage indicated on the type plate (see also "4 Technical data").
- › Ensure that the electrical connections to the mains power supply are established in accordance with current valid national and local regulations and standards governing the installation of low voltage units in medical facilities.
- › The connection to the mains supply must be a fixed connection that can only be released using a tool. Plug-in connections (power outlet/plug) are not permissible.
- › Install an all-pole disconnection unit (all-pole switch) in the electrical connection to the mains power supply. This must include the clearance and creepage distances defined in IEC61058-1 for a mains voltage peak of 4kV.



The disconnection unit (switch) must be easily accessible without danger.

- › Observe the current consumption of the devices that are to be connected.
- › Route the prepared cable in the unit and connect to the control board.



- › Mount the cover on the control box.
- › Mount the cover in the unit via the floor connections and side panels.

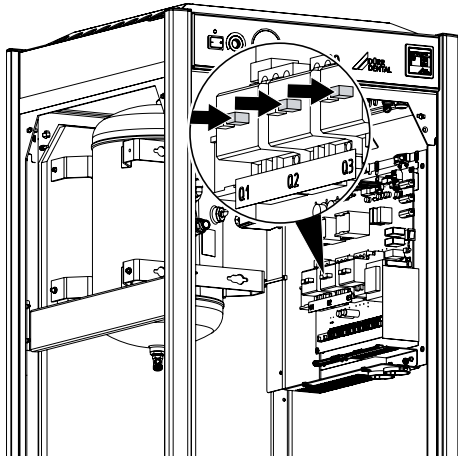
7.7 Connecting the unit

- › Make sure that none of the electrical cables leading to the unit are under any mechanical tension.

8 Commissioning

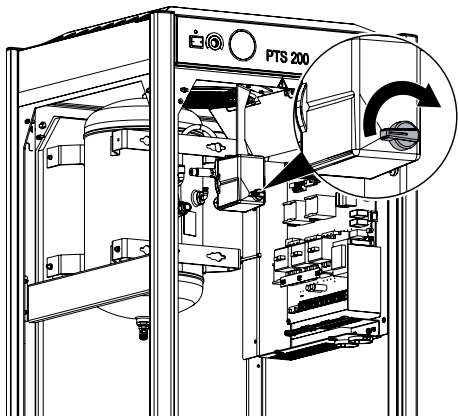
i Perform an electrical safety check prior to commissioning.

- › Main fuses "On"
- › Press the black starting switches on the motor protection switches.



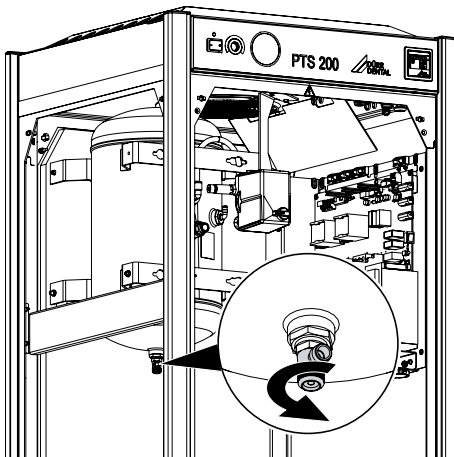
i Only for units with analogue display

- › Adjust the pressure switch to setting "I Auto".



- › Switch on the main power switch.
Compressor will start and switches off at approx. 0.75 MPa.

- › Open the condensate drain valve and drain the condensate.



- › Switch on the suction machine by removing the suction hose from the hose manifold or by activating the rinsing of the spittoon (spittoon valve, "wet suction system").
- › Carry out a functional inspection and check the connections for leaks.
- › For alternating current suction machines, check the direction of rotation.

i The VS suction machines continue after running for approx. 30 seconds. In case of simultaneous start signals for the suction machine and the compressor units, the compressor units start up with a time delay to the suction machine.

- › Switch off the suction machine by removing the suction hose from the hose manifold or by deactivating the rinsing of the spittoon.

i An adequate ventilation by fans in the unit is only possible when all covers are attached.

- › Place all covers on the unit.

8.1 Monitoring the device with Tyscor Pulse

The following units can be monitored with Tyscor Pulse:

Power Tower Silence 200/42 surgery supply	0949-200/42
Power Tower Silence 200 surgery supply	A094920035

Network configuration

Various options are available for network configuration:

- Automatic configuration via DHCP (recommended).
- Automatic configuration via Auto-IP for direct connection of unit and computer.
- Manual configuration.
- › Configure the network settings of the unit using the software or, if available, the touch screen.
- › Check the firewall and release the ports, if applicable.



Further information on Tyscor Pulse can be found in the software help and in the Tyscor Pulse manual, order number 0949100001.

Network protocols and ports

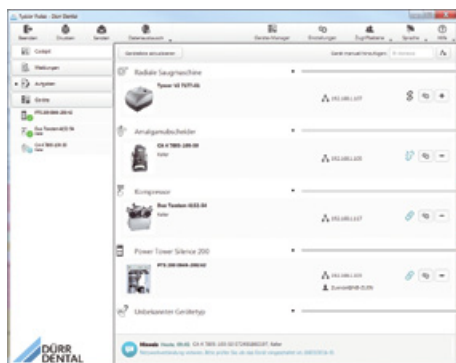
Port	Purpose	Service
45123 UDP, 45124 UDP	Unit recognition and configuration	
1900 UDP	Service indicator	SSDP / UPnP
502 TCP	Unit data	
514 ¹⁾ UDP	Event protocol data	Syslog
22 TCP, 23 TCP	Diagnosis	Telnet, SSH
123 UDP	Time	NTP

¹⁾ The port can vary depending on the configuration.


The following requirements must be met in order to monitor the unit with the software on the computer:

- Unit connected to the network
- Latest Tyscor Pulse software installed on computer

Add device



Requirements:

- Unit switched on and connected to the network
- Administrator or service technician access level selected in the software
- › Working in the menu bar, click on  **Device Manager**.

The list of units appears. A symbol displays the connection status to the software:




The device is present in the network and connected to the software.




The device is present in the network but not connected to the software.

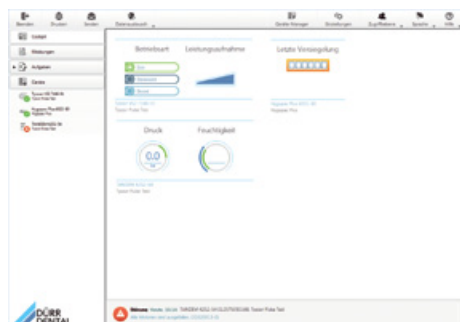


The network connection between the software and the device is interrupted, e.g. the device is switched off.

The new unit that is not yet connected, is displayed with the connection status .

- › Select the unit and click on .
- The unit appears in the side bar.

Adding the device in the cockpit



- › Click on the Start button with the left mouse key; on some devices you will need to keep it pressed.

All devices that are connected to the software can be added to the cockpit. When the unit is first connected to the software, the unit is automatically added to the cockpit.

Requirements:

- Administrator or Service Technician access level selected.
- › Click on the device in the device list with the left mouse button and keep the mouse button pressed.
- › With the mouse key pressed, drag the unit onto the cockpit.
- › Release the mouse key.

The block with the current characteristic data and the name of the device appear in the cockpit.

- › To change the position of the device block, click on the block and, with the mouse key pressed, drag it to the required location.

Manually starting the device



Manually starting the device for testing.

Requirements:

- Service technician access level selected.
- › Select the device in the device list.



9 Operation


9.1 Unit with display

The software interface consists of the menu bar and the contents area.



- 1 Menu bar
- 2 Contents area

You can scroll with scroll bars if there are several selection options.

 The views and rights depend on the selected operator rights (user or service technician).

Symbols

The messages for a device are marked with the following symbols. The symbols also show the status of a device.

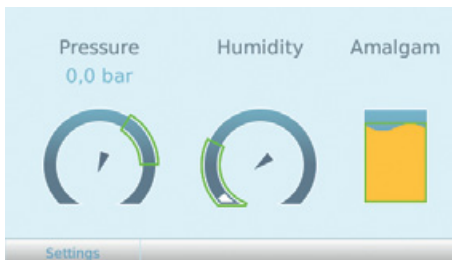
 Malfunction

 Notice

 Note

 Information

Disposable amalgam container filled to 95 %



We recommend changing the amalgam collector vessel when it reaches 95% full.

Disposable amalgam container filled to 100 %



- The disposable amalgam container must be changed.



Wear protective gloves.



Use a face mask.



Wear protective goggles.

- Only when the amalgam collecting container has been replaced is the amalgam separator again ready for operation.

Language selection

- › Press on  *language*

The context menu with the list of possible languages opens. The current language is marked.

- › Select language and confirm with **OK**.

Select information

- › Press on  *Information*.

Result:


The display shows the following information.

- Item number (REF)
- Network configuration (IP address)
- Firmware version installed on the device
- Software version on the unit


Select user authorisations

The software is equipped with two user authorisations:


	Rights
Operator	<ul style="list-style-type: none"> – Query unit information. – Change language.
Service technician	<ul style="list-style-type: none"> – Query unit information. – Change language. – Perform maintenance. – Perform maintenance actions. – Change unit parameters.

- › Press  user authorisations.
- › Select **User** or **Technician wählen** and confirm with **OK**.



Select maintenance

- › Press  **Maintenance**.
The display indicates when the next maintenance is due.
- › Carry out all maintenance work.
- › Press **Maintenance performed**
Counter is reset
- › Confirm with **OK**.



Select maintenance actions

- › Press  **maintenance actions**.
The display indicates units for which maintenance action can be started.
- › Select the required maintenance action and confirm with **OK**.



Set compressor start-up pressure

- › Press **settings > unit parameters > compressor start-up pressure**.
- › With  or 
Set required value and confirm with **OK**.

Compressor cut off pressure

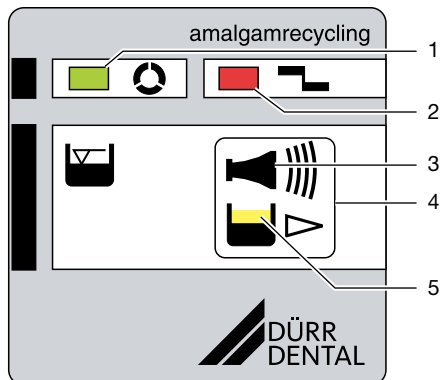
- › Press **settings > unit parameters > compressor cut off pressure**.
- › With  or 
Set required value and confirm with **OK**.

Suction unit afterrunning time

- › Press **settings > unit parameters > suction machine afterrunning time**.
- › With  or 
Set required value and confirm with **OK**.

9.2 Unit with analogue display

Display/handling






- 1 GREEN LED
- 2 RED display
- 3 Audible signal/melody
- 4 Reset/service key
- 5 YELLOW LED


Ready for operation

-  GREEN LED illuminates




Disposable amalgam container filled to 95 %

-  Yellow LED lights up
-  GREEN LED lights up
-  Audible signal melody sounds

- At a fill level of 95%, the signal melody can be switched off by pressing the reset button. The unit is then ready for operation again.
- The yellow LED lights up as a reminder that the amalgam collector vessel is due to be changed. The level display is repeated every time the unit is switched on at the main power switch.

 We recommend changing the amalgam collector vessel when it reaches 95% full.

Disposable amalgam container filled to 100 %

-  Yellow LED lights up
-  Red display flashes
-  Audible signal melody sounds

- At a fill level of 100% the signal melody can no longer be switched off by pressing the reset button.
- The disposable amalgam container must be changed.



Wear protective gloves.



Use a face mask.



Wear protective goggles.

- Only when the amalgam collecting container has been replaced is the amalgam separator again ready for operation.

Disposable amalgam container not inserted



Red display flashes



Audible signal

- Press the reset button briefly to switch off the audible signal.
- Switch off the device.
- Insert the collecting container.
- Switch on the unit.
- Green LED lights up – "Ready for operation"



If this error message occurs when the disposable amalgam container is correctly inserted this indicates that there is a technical defect – inform your Service Technician.

Motor fault



Red display and



green LED flash alternately



Audible signal



Occurs during the start-up of the amalgam separator.

- Press the reset button briefly to switch off the audible signal.
- If the reset button is pressed for longer than 2 seconds the unit can be restarted.



If this problem happens again on the same day, the amalgam separator will no longer be operational - notify the service technician.

Brake monitoring



Red display and



green LED flash alternately



Occurs upon braking action of amalgam separator.

- The amalgam separator is still operational.



If this problem occurs on several consecutive days, the braking must be checked by a service technician.

Emergency start sensor in overfill position



Yellow LED flashes



GREEN LED lights up

- The yellow LED extinguishes when the emergency start sensor is free again.



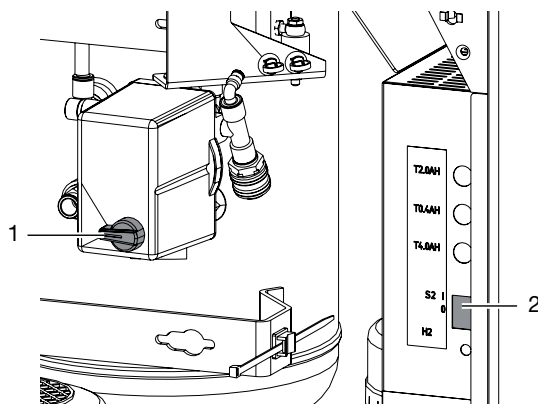
If the yellow LED flashes for a prolonged period, check whether any foam is present in the disposable amalgam container.



10 Tips for operators and service technicians



Any repairs exceeding routine maintenance may only be carried out by qualified personnel or our service.

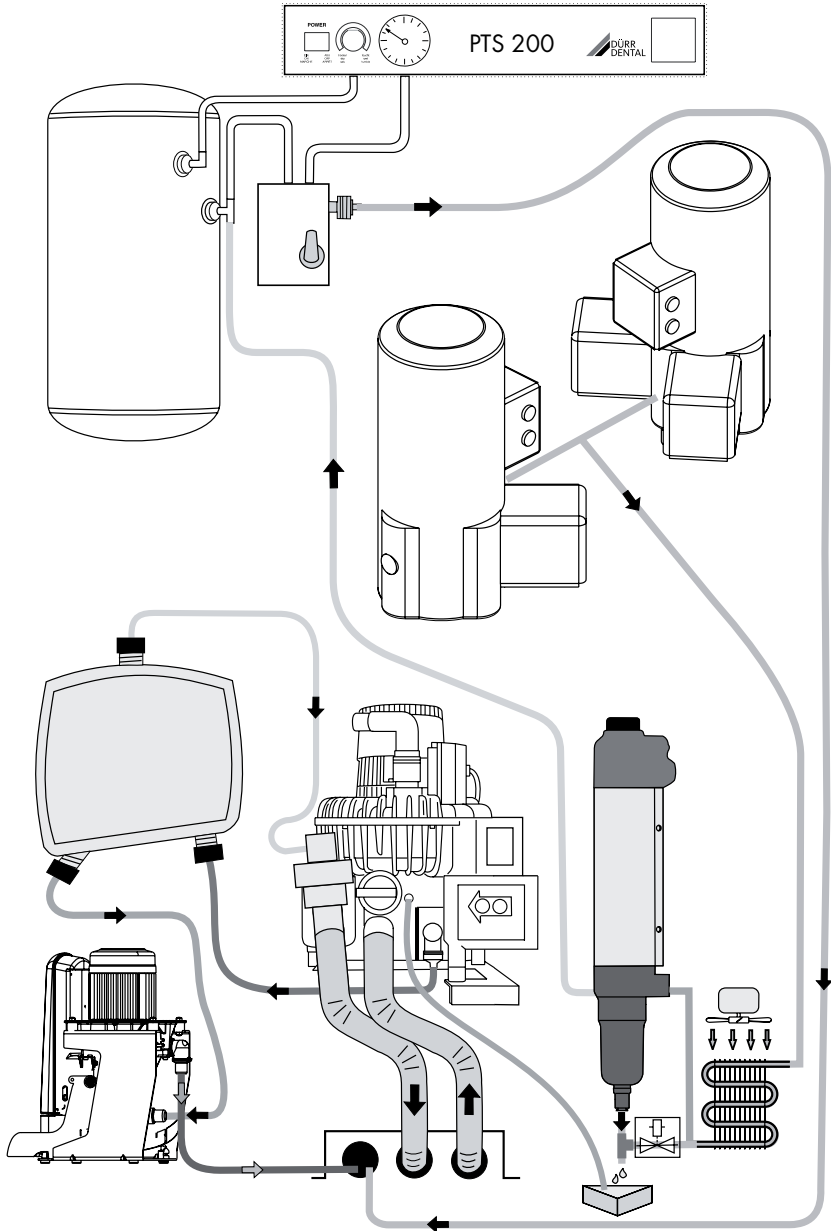


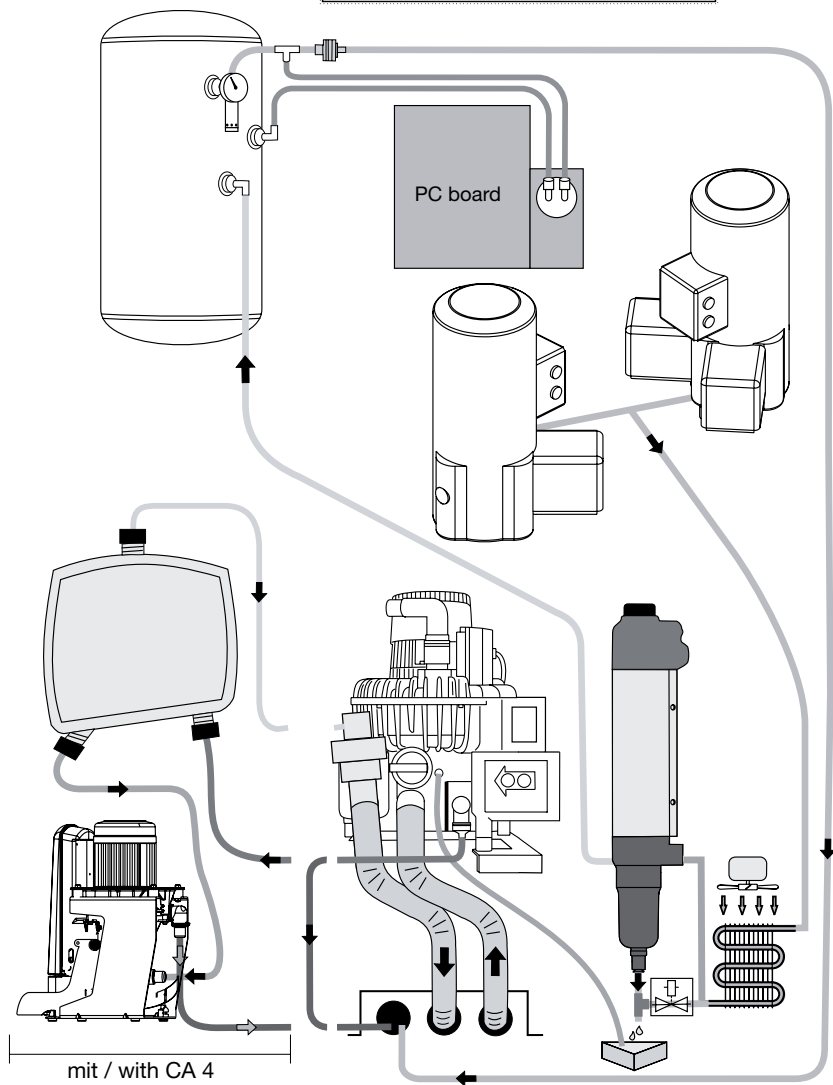
1 Pressure switch

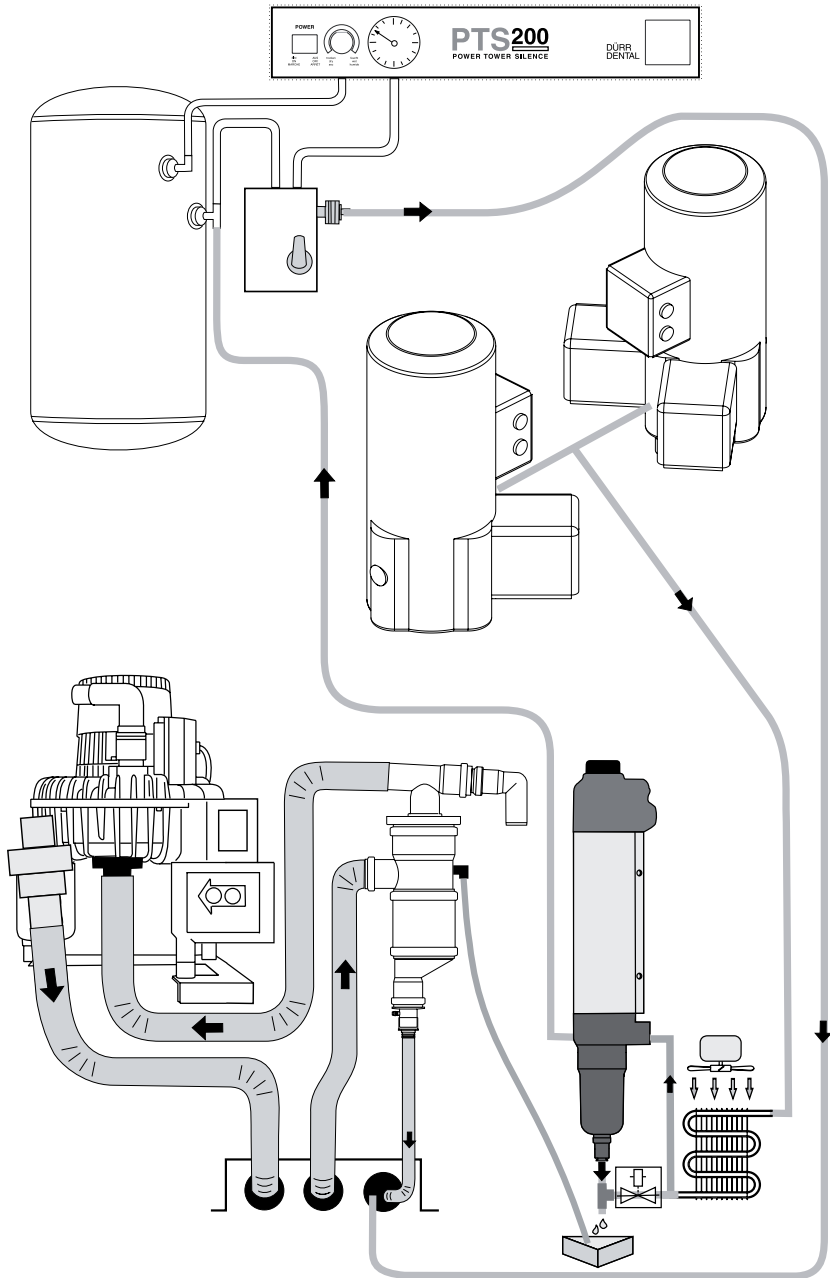
2 Switch S2

Fault	Probable cause	Solution
Compressed air is not conveyed	A compressor unit is defective	<ul style="list-style-type: none"> › Switch off the device at the main power switch. › Set switch S2 to "1". › Switch on the device at the main power switch. › Switch on the pressure switch.

11 Connection media plan

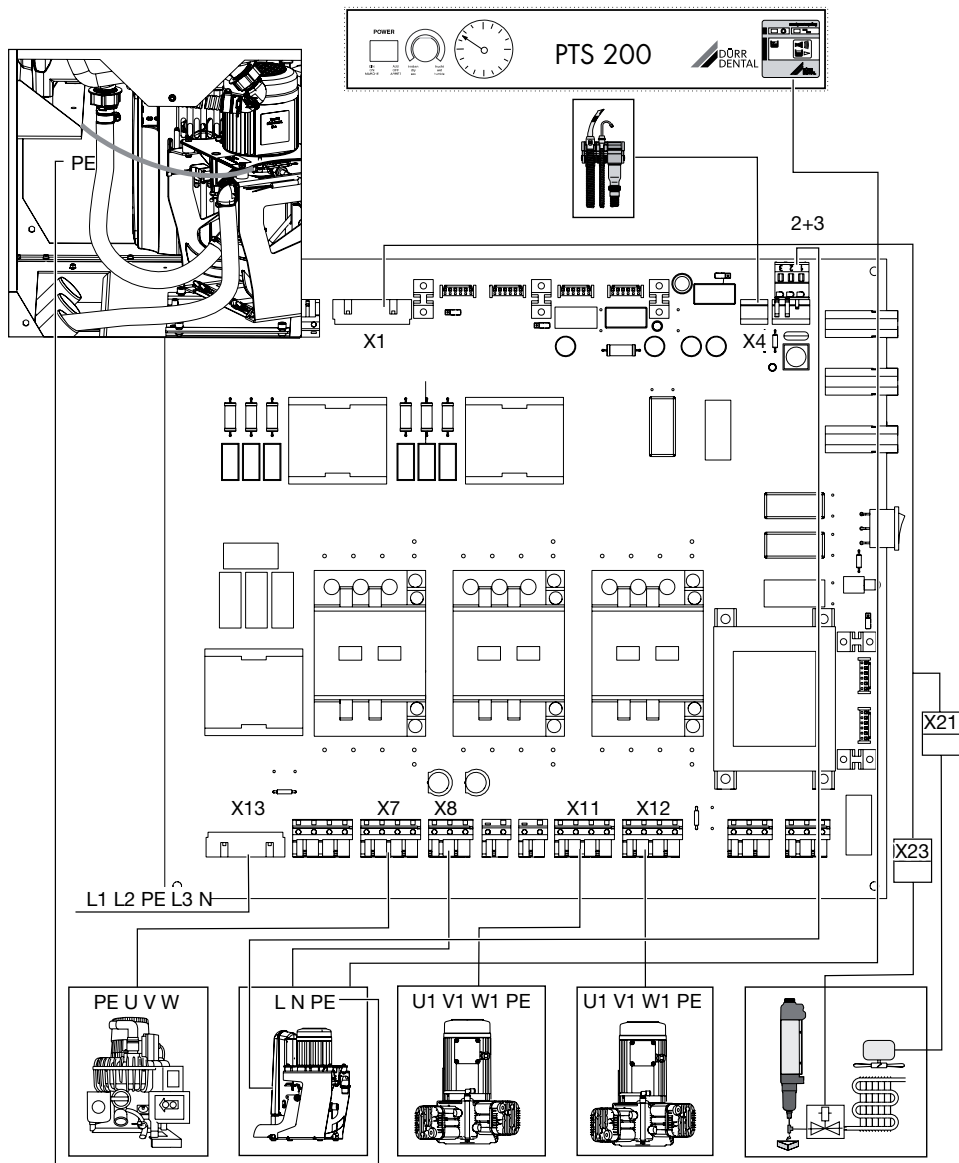




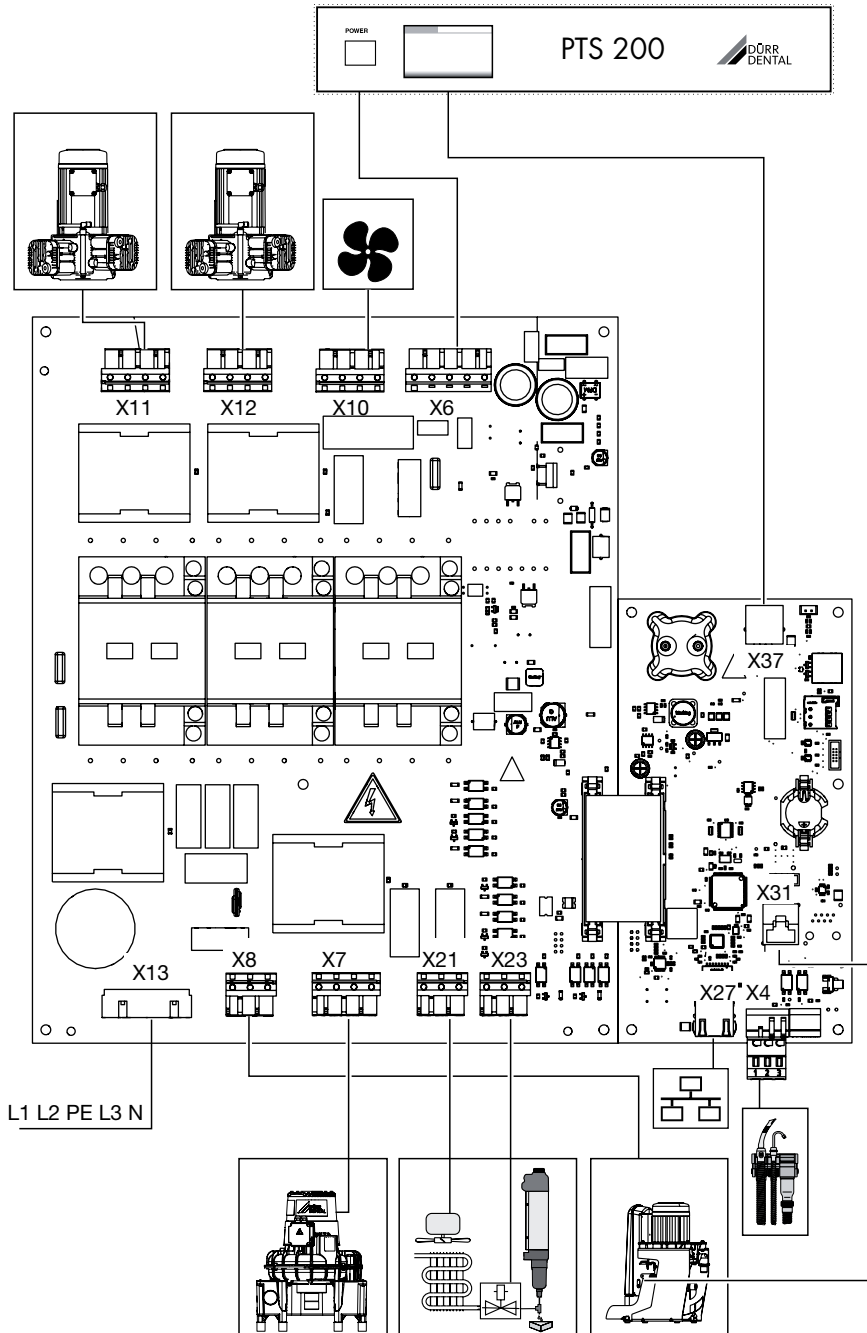


12 Electrical connection plan

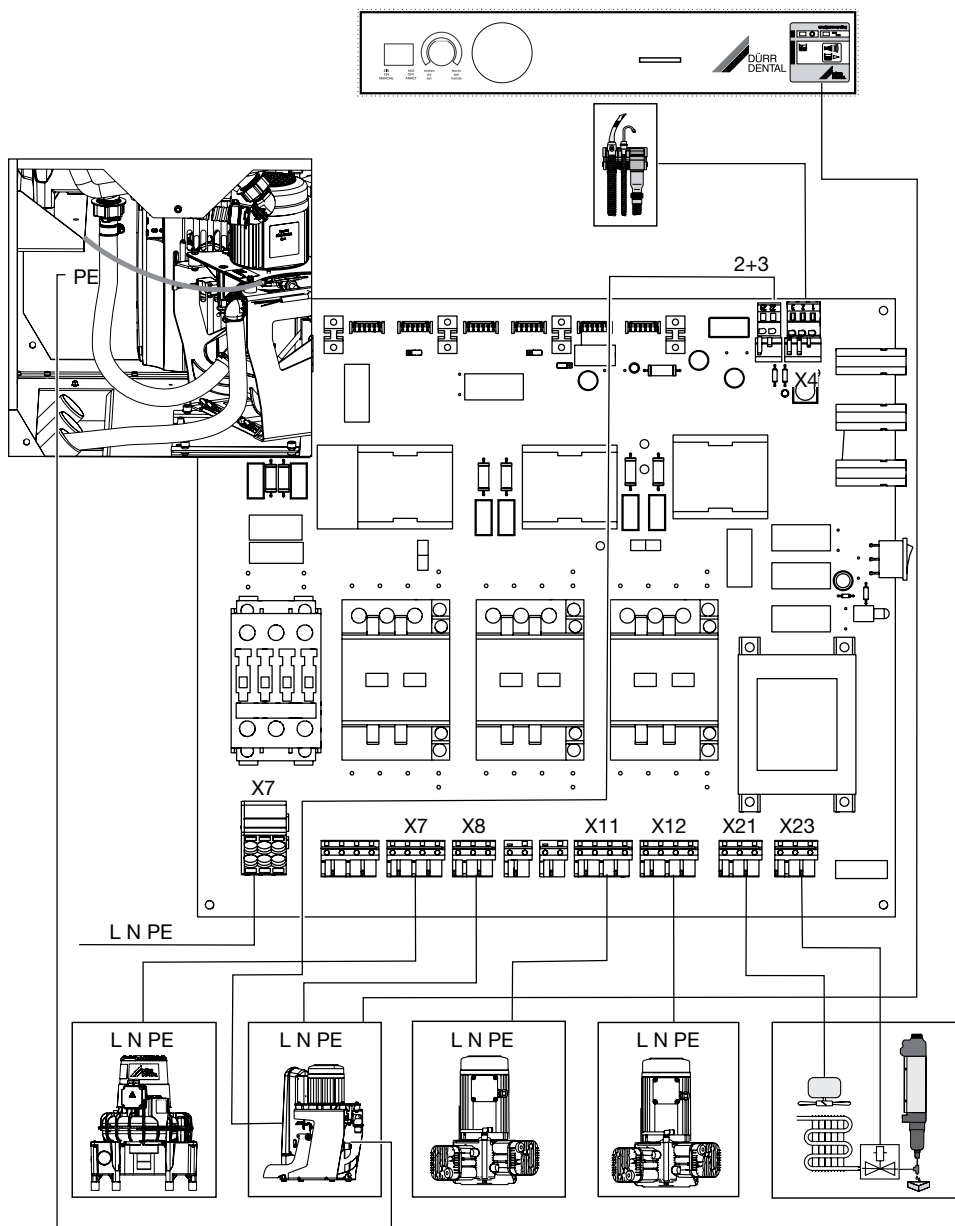
12.1 Version 400 V, 3N~



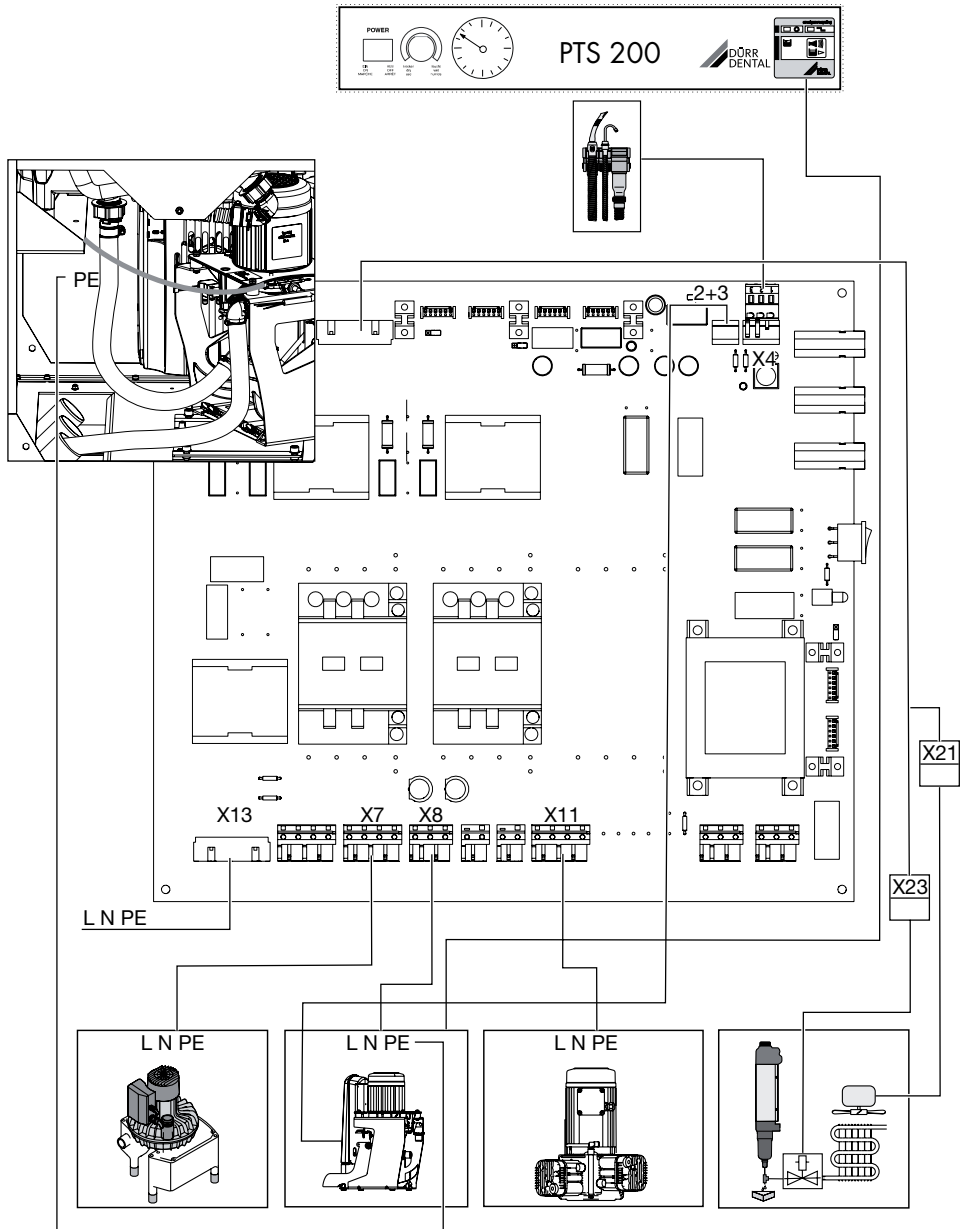
12.2 Version 400 V, 3N~ with display



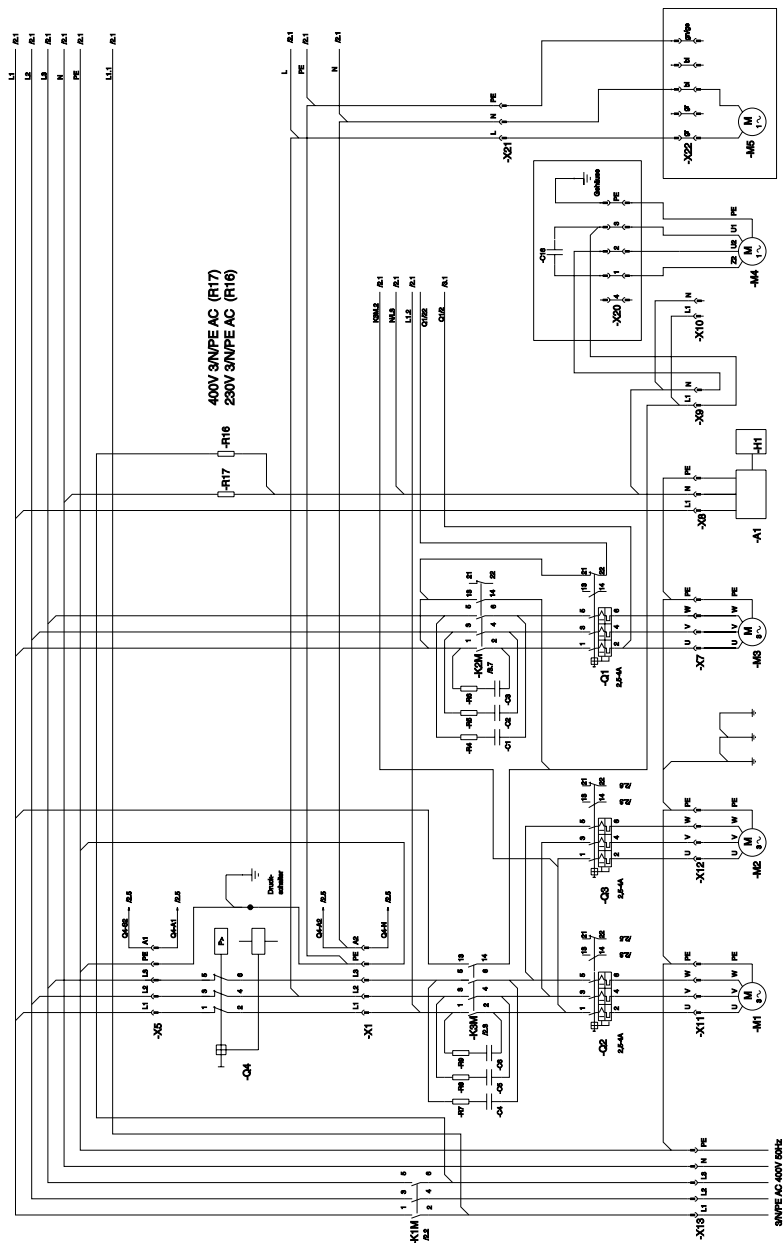
12.3 Version 230 V, 1~, 2 units



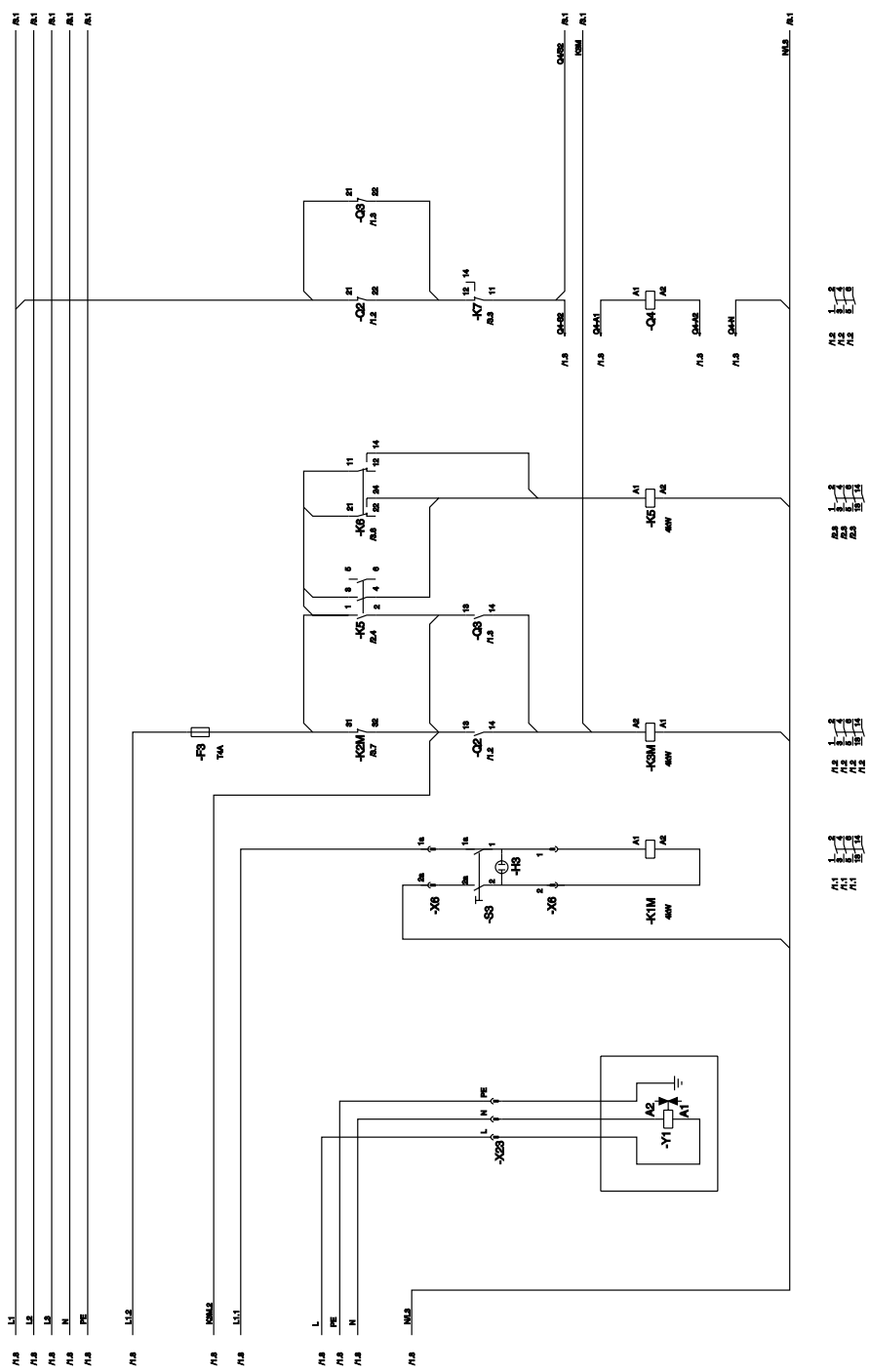
12.4 Version 230 V, 1~

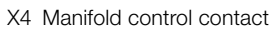


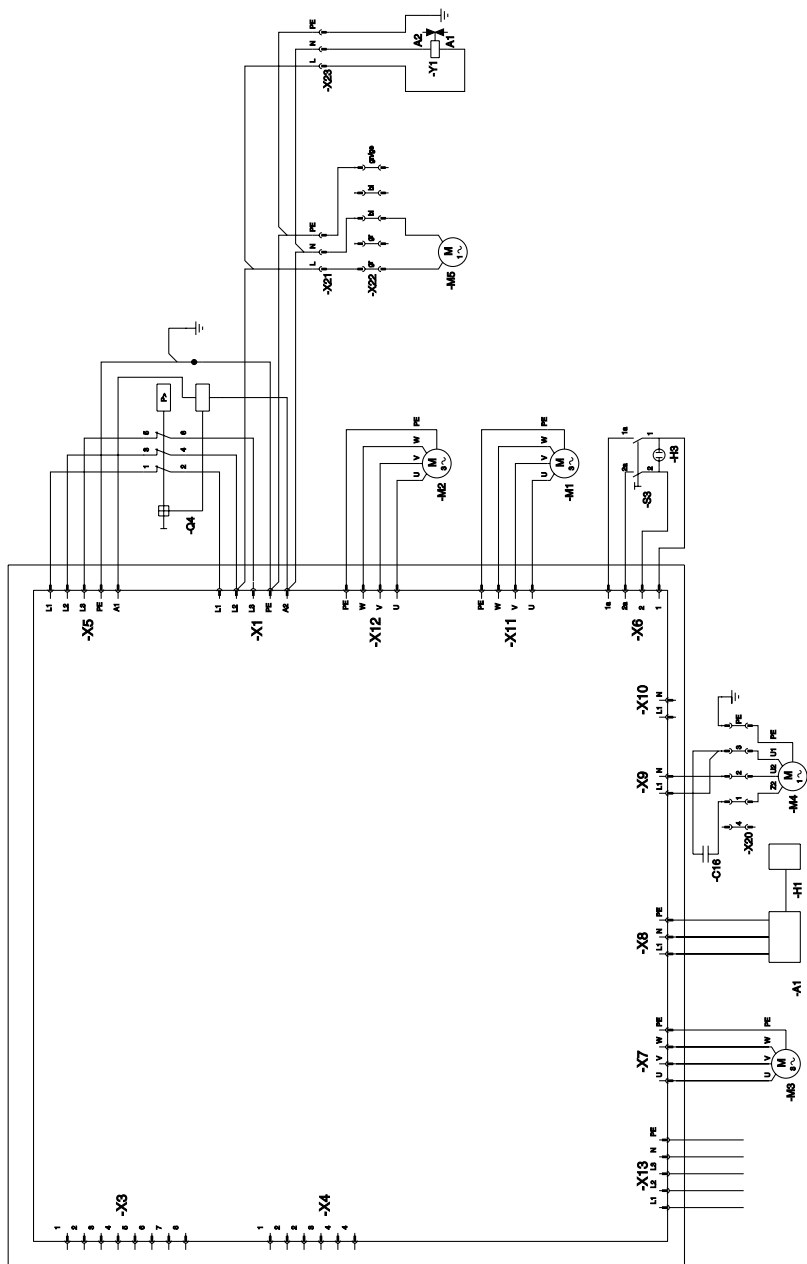
13.1 Version 400 V, 3N~, part 1-4



X13 Mains connection 3/N/PE AC 400 V







PCB 0947-505-50

A1 Amalgam separator

M3 Suction unit

S3 Main power switch

H1 Display panel

M4 Fan

X3 Top display

M1 Compressor unit

M5 Drying unit fan

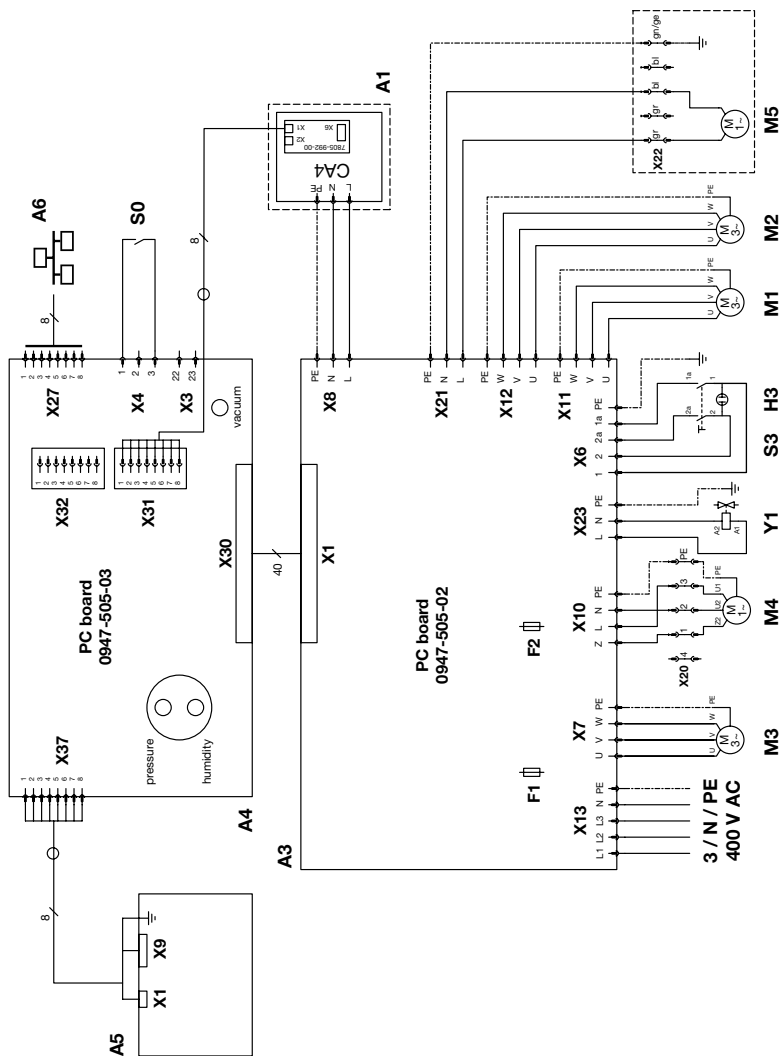
X4 24 VAC manifold control contact

M2 Compressor unit

Q4 Pressure switch

X13 Mains connection 3/N/PE AC 400 V

13.2 Version 400 V, 3N~ with display



A1 Amalgam separator CA4
with BUS adapter

A3 Main PCB with power ele-
ment

A4 Control PCB

A5 Display

A6 PC power supply

M1+2 Compressor unit

M3 Suction unit

M4 Fan

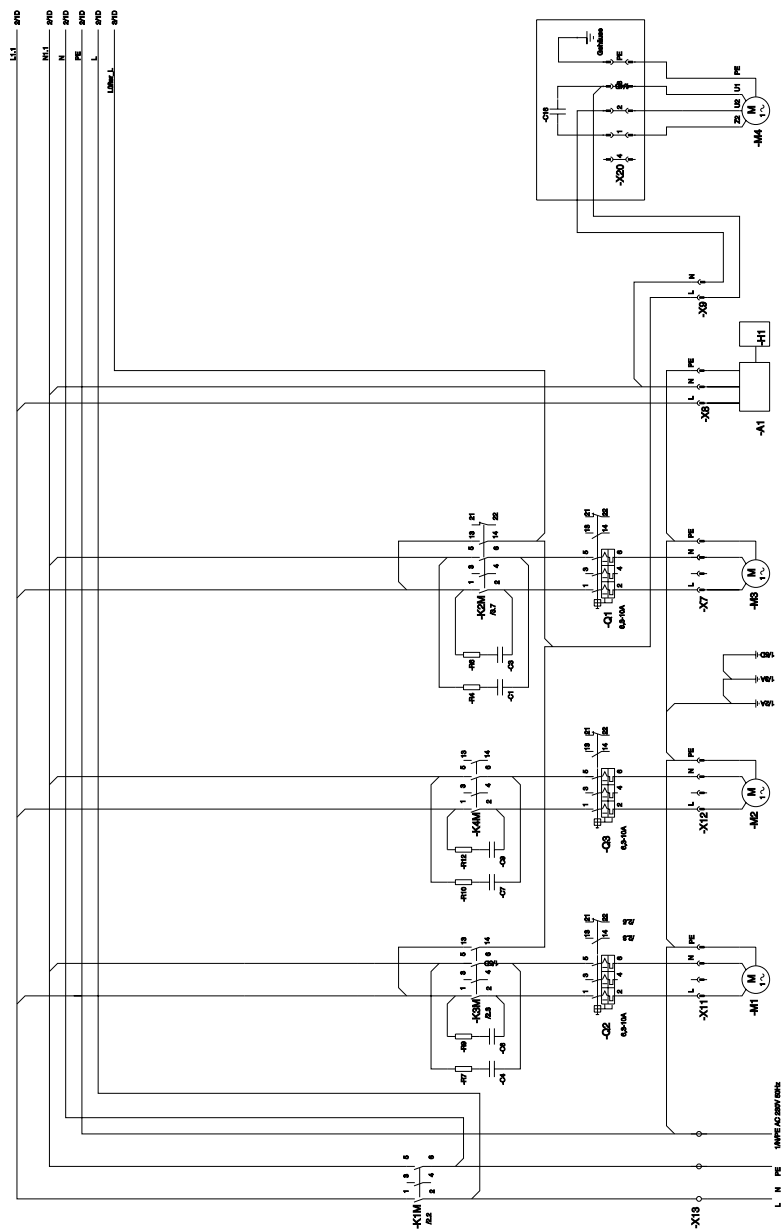
M5 Cooler

S0 Suction unit control contact

S3/H3 Main power switch

Y1 Relief valve

13.3 Version 230 V, 1~, 2 units art 1-4



A1 Amalgam separator

M3 Suction unit

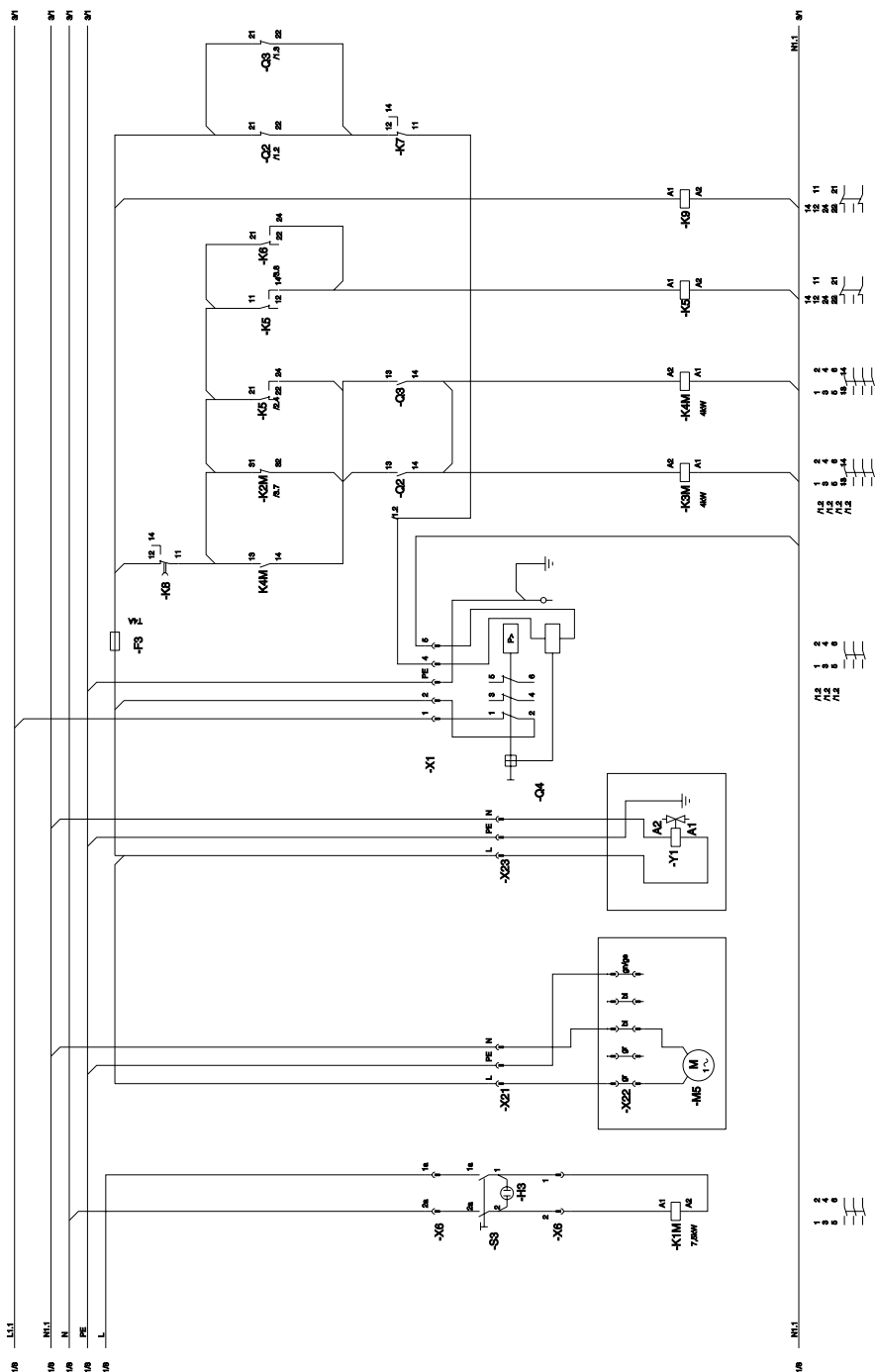
X13 Mains connection 1/N/PE AC
230 V

H1 Display panel

M4 Fan

M1 Compressor unit

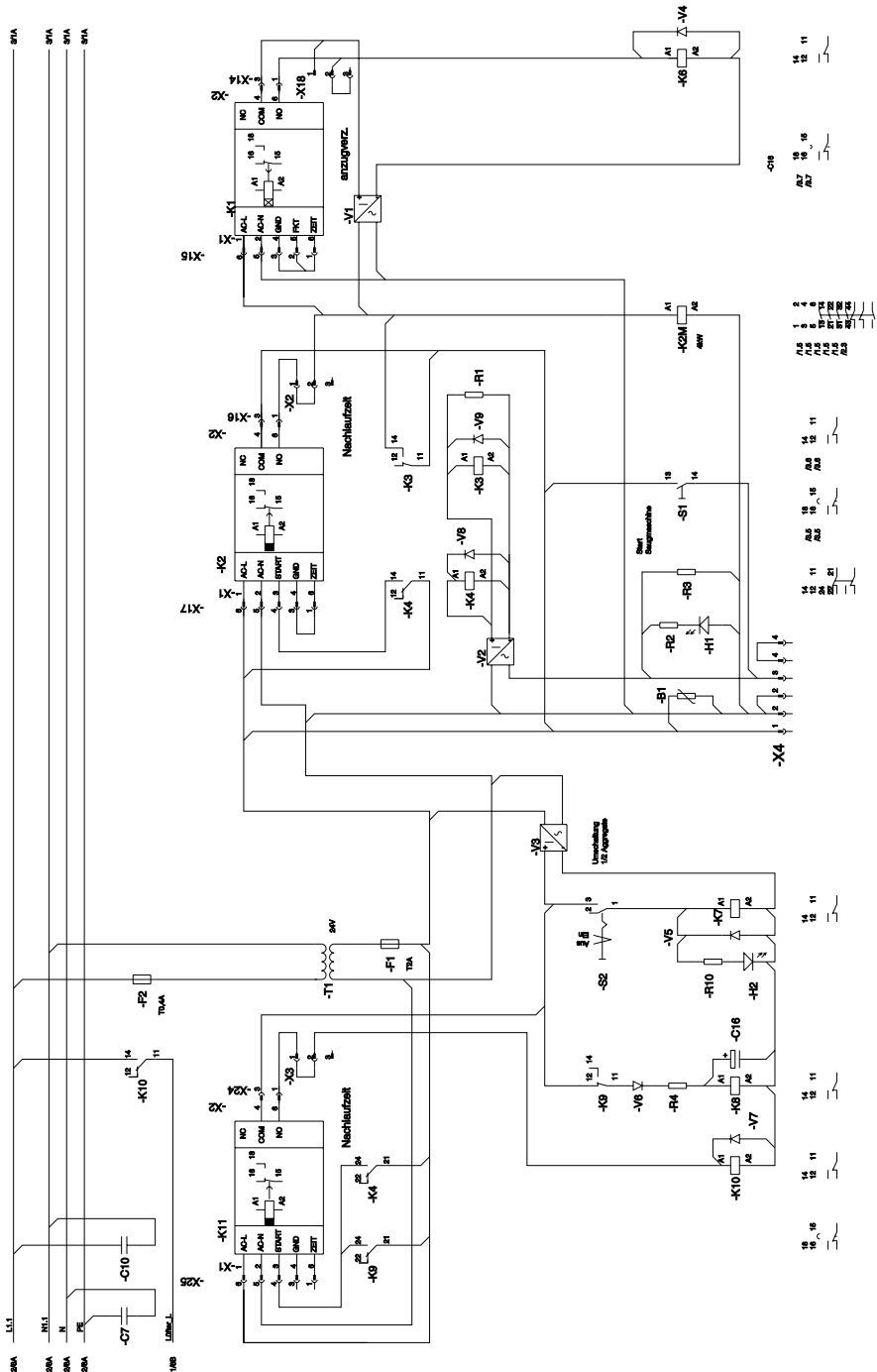
M5 Drying unit fan



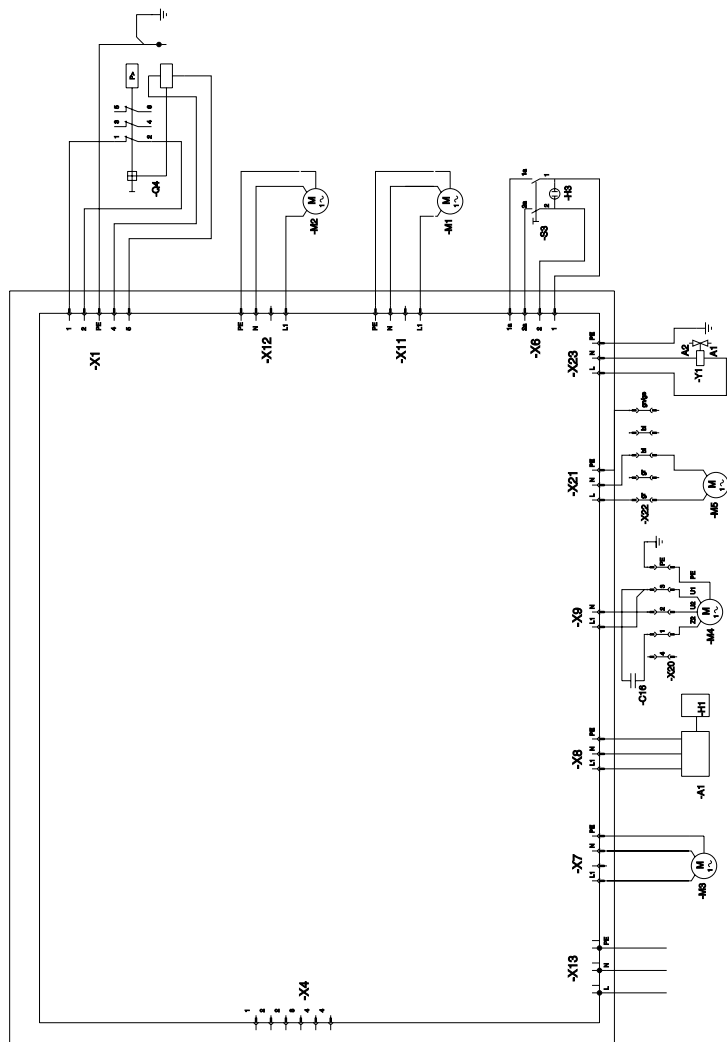
M5 Drying unit fan

Y1 Relief valve

Q4 Pressure switch



X4 24 V AC Ablagesteuerkontakt



PCB 0947-200/XX

A1 Amalgam separator

H1 Display panel

M1 Compressor unit

M2 Compressor unit

M3 Suction unit

M4 Fan

M5 Drying unit fan

Q4 Pressure switch

S3 Main power switch

X4 24 VAC manifold control contact

X13 Mains connection 1/N/PE AC
230 V

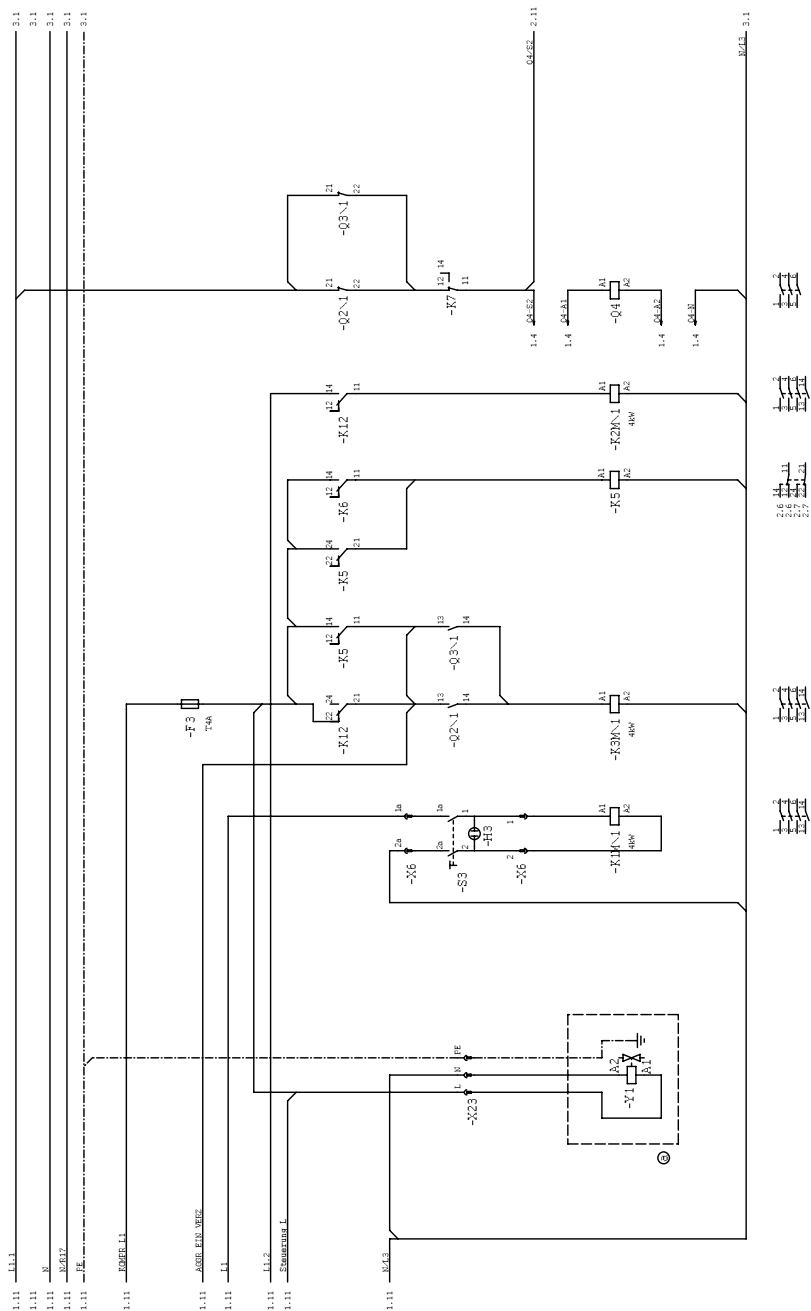
EN



X13 Mains connection 1/N/PE AC
230 V

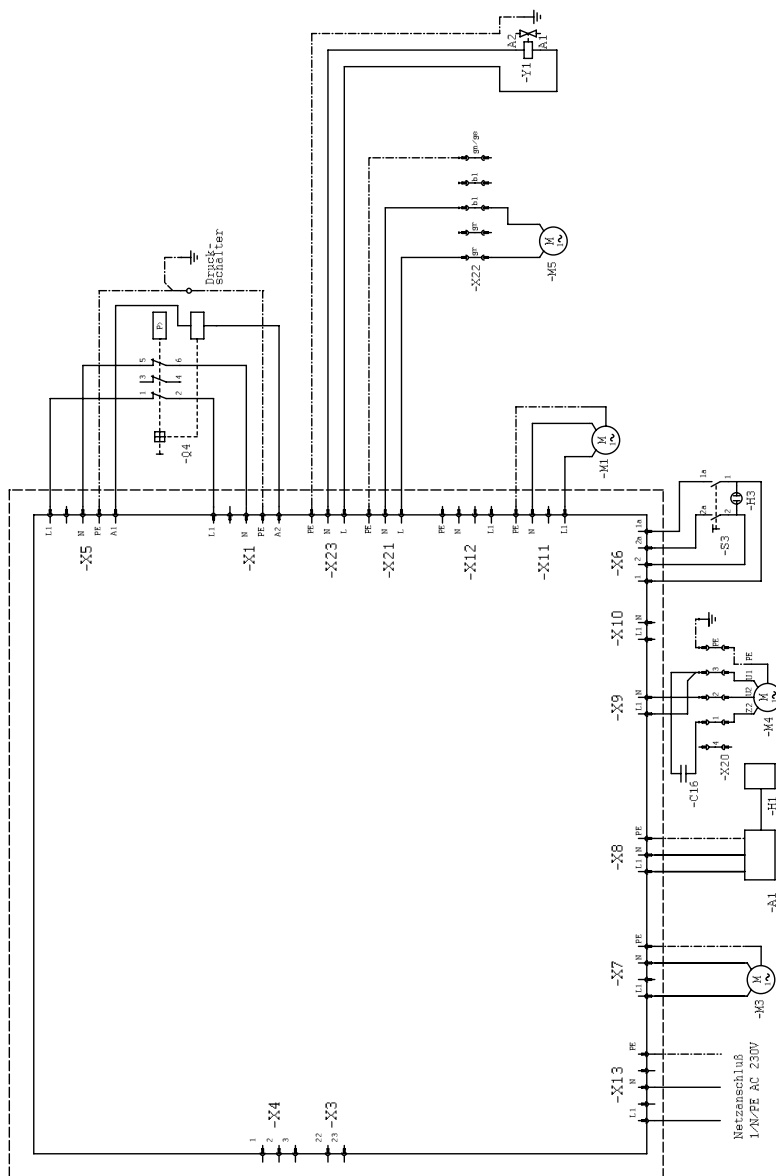
M4 Fan

M5 Drying unit fan





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PCB 0947-505/52

A1 Amalgam separator	M3 Suction unit	S3 Main power switch
H1 Display panel	M4 Fan	X4 24 VAC manifold control contact
M1 Compressor unit	M5 Drying unit fan	X13 Mains connection 1/N/PE AC 230 V
M2 Compressor unit	Q4 Pressure switch	Y1 Relief valve

14 Menu structure for unit with display

Level 1	Level 2	Level 3
Settings	Language	Deutsch
		English
		French
		Italian
	Information	Name
		IP address
		Firmware version
		Software version
	User authorisations	Operator
		Service technician
	Maintenance	Next maintenance
	Maintenance actions	Start compressors for container check
		Start CA 4 centrifuge motor
	Device parameters	Compressor start-up pressure
		Compressor cut off pressure
		Suction unit afterrunning time





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