Original instruction manual

Negative pressure unit smart dec

S 50, S 200, S 300

S 50

S 200

S 300

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1 Product and manufacturer

1.1 Product

This operating manual describes the following product:

Negative pressure unit smart dec.

Types: S 50, S 200, S 300

1.2 Manufacturer

Name and address	deconta GmbH Im Geer 20 46419 Isselburg
Phone	02874/9156-0
Fax	02874/9156-11
E-mail	info@deconta.com
Internet	www.deconta.com

1.3 Change index

Date	Version	Change	Responsible
13.03.2023	4	complete revision	Thomas Boland

2 About these instruction manual

For proper and safe use of the machine, follow the descriptions and recommended actions in these operating instructions.

Keep this manual for future reference until the machine has been disposed of.

2.1 Purpose

These operating instructions contain information on the safe, trouble-free and economical use of the machine.

This information is intended for persons who perform tasks with or in connection with the machine.

The following table gives an overview of persons and tasks.

Person	Task
Operator	<< Machine-specific >>
Occupational safety specialist	• Carry out a risk assessment • Create operating instructions • Instruct people
Maintenance staff	Maintenance of the mechanics
Electrician (EFK)	Installation and maintenance of electrical equipment
Freight forwarder	Off-site transport of the machine
Conveyor	Internal transport of the machine
Disposer	Dispose of the machine in a legally compliant, proper and professional manner.

2.2 Availability

The operator shall make these operating instructions or extracts thereof available to persons who perform tasks with or in connection with the machine.

The operator keeps these operating instructions or extracts thereof within easy reach in the immediate vicinity of the machine.

When handing over the machine to another person, the operator passes these operating instructions on to that person.

2.3 Warnings

These operating instructions contain warnings of residual dangers.

The classification of the warnings is based on the severity of the damage that can occur if the warnings are disregarded and recommended actions are not followed.

2.3.1 Signal words and signal colours

Warnings are introduced with one of the following signal words and marked with a corresponding signal colour.

Signal word	Meaning	Signal colour
DANGER	Consequence for non-compliance: Death or most serious injuries.	⚠ GEFAHR
WARNING	Consequence for non-compliance: Death or most severe injuries possible.	⚠ WARNUNG
CAUTION	Consequence for non-compliance: Severe or minor injuries possible.	⚠ VORSICHT
NOTE	Consequence for non-compliance: Property damage or environmental damage possible.	HINWEIS
SAFE ACTIVITY	Implement the following action guide.	-

2.3.2 Structure

Warnings are structured according to the SAFE method:

S	Signal word (DANGER; WARNING, CAUTION or NOTE)
A	Nature and source of the hazard Description of the hazard and the cause of the hazard
F	Follow Description of the possible consequences for humans, animals and the environment that may occur as a result of the hazard.
E	Escape Recommendations for action on how to avoid hazards

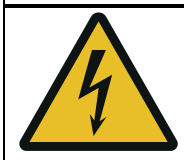
2.4 Symbols

The following symbols are used in these operating instructions.

2.4.1 Warning sign

The warning sign is a safety sign that warns of a risk or danger.

The following table gives an overview of warning signs used and their meaning.

Symbol	Meaning	Symbol	Meaning
	Warning of electrical voltage		General warning sign

2.4.2 Commandment sign

The command sign is a safety sign that prescribes a certain behaviour.

The following table gives an overview of the commandment signs used and their meaning.

Symbol	Meaning	Symbol	Meaning
	Wear safety shoes		Use protective clothing

3 Description of the machine

This section contains information for understanding the machine.

3.1 General description

General description of the product

The machine (the Negative pressure unit) was designed and built by deconta GmbH, Im Geer 20, 46419 Isselburg.

Negative pressure unit for filtering asbestos-contaminated room air via a 2-stage filter unit. The built-in HEPA filter complies with the requirements of EN 1822 class H 13 or H 14.

Procedure for carrying out the risk assessment for machinery

- Language of the risk assessment: German
- Risk assessment: EN ISO 12100 Safety of machinery - General principles for design - Risk assessment and risk reduction, three-step iterative process for risk reduction in conjunction with Machinery Directive 2006/42/EC, Annex I, first general principle.
- Risk assessment: DIN ISO/TR 14121-2 Safety of machinery - Risk assessment - Part 2: Practical guide and examples of procedures, 6.3 Risk graph; Determination of the required performance level (PLr): EN ISO 13849-1 Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design; Determination of SIL (Safety Integrity Level): EN 62061 Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems.

3.2 Scope of delivery

The delivery scope of the machine includes the following items:

- Negative pressure unit smart dec
- These operating instructions
- Intake adapter
- Sealing plug

3.3 Return delivery after termination of a lease

For the protection of our customers and in terms of dangerous goods transport regulations, we must insist on the following return delivery conditions:

- As listed above
- Thoroughly cleaned (ready for use)
- Free from any adhesive residues
- Without residual fibre binding
- Without filter
- Without damage

3.4 Operating modes

3.4.1 Available operating modes

Type of use

The machine is intended exclusively for use in the following types of use.

Use for other types of use is not in accordance with the intended use.

User groups

- Commercial users

User environment

- outdoors
- on roofed areas
- in rooms closed on all sides

Operating modes

Operating modes for use:

- Automatic mode (SRE connect version only)
- Manual operation

3.5 Interfaces

This section contains information about interfaces.

The following interfaces are available on the machine:

- Human product: Control panel, touch screen
- Product power supply: Electrical power supply 110 V / 230 V
- Product offcuts: Connection spigot for clean air
- Product material feed: Connecting piece for contaminated air
- Product building: feet or castors

3.6 Nameplate

The type plate contains information for identifying the machine.

3.6.1 Content

The following illustration shows an example nameplate.

3.6.2 Version

Aluminium plate, riveted

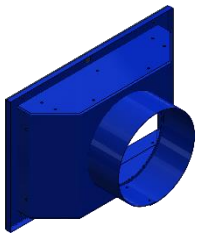
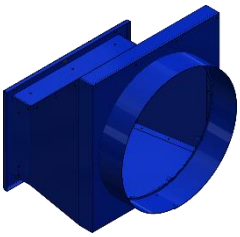
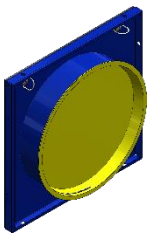
3.6.3 Position

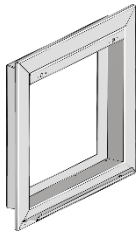
Near the control panel on the discharge side.

3.7 Accessories

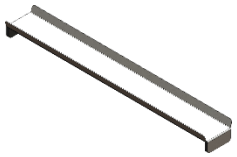
The following accessories are optionally available for the machine:

3.7.1 Negative pressure unit smart dec S 50

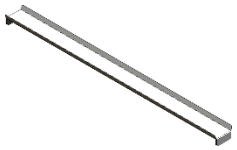
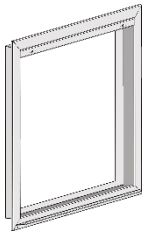
Designation	Item no.	Figure
Discharge flange NW 150	BO19047	
Discharge flange NW 300	BO19054	
Intake flange NW 300	BO21371	

Designation	Item no.	Figure
Adhesive frame	BO23153	

3.7.2 Negative pressure unit smart dec S 200

Designation	Item no.	Figure
Stacker device (single piece)	BO21546	
Adhesive frame	BO23147	

3.7.3 Negative pressure unit smart dec S 300

Designation	Item no.	Figure
Stacker device (single piece)	BO21545	
Adhesive frame	BO23030	

4 Technical data

4.1 Dimensions

	Length x width x height (mm)
S 50	575 x 390 x 400
S 200	780 x 410 x 810
S 300	880 x 720 x 810

4.2 Weights

	Weight incl. filter (kg)
S 50	21,5
S 200	45,0
S 300	66,0

4.3 Performance data

All data on air performance and volumetric flows taking into account a measurement tolerance of ±15% referred to the measuring range end value, determined in a multi-point measurement procedure with a calibrated impeller anemometer.

4.3.1 Negative pressure unit smart dec S 50

	110 V	230 V
Air output free-blowing max.	1500 m³/h	1700 m³/h
Air performance with deconta H13 or H14 filter, max.	1000 m³/h	1100 m³/h
Air performance with deconta H13 or H14 filter, pre-filter, max.	700 m³/h	900 m³/h
Power connection	100 - 120 V	230 V
Power consumption	2,4 A	1,2 A
Engine power	0.17 kW	0.21 kW
Power cable type	H07RN-F 3G1.5	
Protection class	I	
Protection class	IP 54	
Filter system	2-stage	
Pre-filter	EU 4	
HEPA filter	according to EN 1822 class H13 or H14	

4.3.2 Negative pressure unit smart dec S 200

	110 V	230 V
Air output free-blowing max.	2700 m³/h	3000 m³/h
Air performance with deconta H13 or H14 filter, max.	2500 m³/h	2500 m³/h
Air performance with deconta H13 or H14 filter, pre- and intermediate filter, max.	2250 m³/h	2300 m³/h
Power connection	100 - 120 V	230 V
Power consumption	4,6 A	2,6 A
Engine power	0.375 kW	0.385 kW
Power cable type	H07RN-F 3G1.5	
Protection class	I	
Protection class	IP 54	
Filter system	2-stage	
Pre-filter	EU 4	
HEPA filter	according to EN 1822 class H13 or H14	

4.3.3 Negative pressure unit green dec S 300

	110 V	230 V
Air output free-blowing max.	5000 m³/h	6000 m³/h
Air performance with deconta H13 or H14 filter, max.	4500 m³/h	4600 m³/h
Air performance with deconta H13 or H14 filter, pre- and intermediate filter, max.	4000 m³/h	4200 m³/h
Power connection	100 - 120 V	230 V
Power consumption	2x 4.6 A	4,0 A
Engine power	2x 0.375 kW	0.78 kW
Power cable type	H07RN-F 3G1.5	
Protection class	I	
Protection class	IP 54	
Filter system	2-stage	
Pre-filter	EU 4	
HEPA filter	according to EN 1822 class H13 or H14	

4.4 Performance data special versions

The S 200 and S 300 units of the smart dec series can be equipped with double filtration (2x HEPA filters in series) by means of an extended housing version.

When using double filtration, the maximum volume flow and the unit dimensions change.

The modified technical data can be found in the following tables.

4.4.1 Negative pressure unit smart dec S 200

Air output free-blowing, max.	3000 m³/h
Air output with filter, max.	2000 m³/h
Length with extended housing version	1070 mm
Weight with filter	68 kg

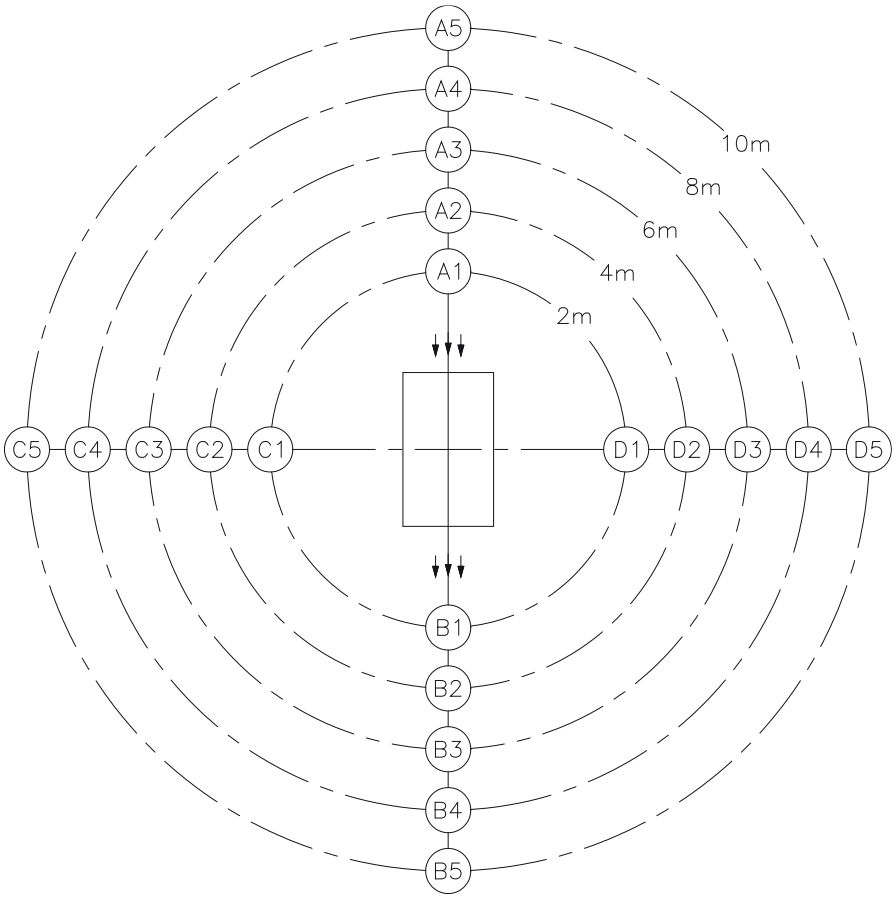
4.4.2 Negative pressure unit smart dec S 300

Air output free-blowing, max.	6000 m³/h
Air output with filter, max.	3600 m³/h
Length with extended housing version	1185 mm
Weight with filter	94 kg

4.5 Environmental conditions

Ambient temperature	0 °C to +45 °C
Relative humidity	70 % non-condensing

4.6 Noise emission



Status:

Engine power 100%, outdoor area, values in dB (A)

Device	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1 D1	C2 D2	C3 D3	C4 D4	C5 D5
S 50	59	57	56	55	54	66	62	60	58	56	60	58	56	54	52
S 200	62	60	59	57	52	72	66	63	59	57	65	61	58	57	55
S 300	64	61	58	57	56	71	65	62	59	57	62	58	55	54	53

By attaching a silencer, the sound level can be reduced, taking into account power losses.

4.7 Filter description / classification

Integrated in the unit is a 2-stage filter combination

In detail:

Pre- and intermediate filters	**Pre-filter**
Grade according to DIN 24185 / EN 779	G4 / EU4
Frame	Cardboard frame, 47 mm wide
Filter medium	Synthetic
Separation efficiency (Am)	90 %
Nominal volume flow:	5400m³/h/m²
Nominal face velocity at nominal volume	1.5 m/s
Initial pressure difference	42 Pa
Recommended final pressure difference	250 Pa
Temperature / Humidity	100°C/100% RF (relative humidity)
Filter dimensions (in mm): S 50 S 200 S 300	 305 x 305 x 47 305 x 610 x 47 610 x 610 x47

HEPA filter

Frame	Plastic or aluminium
Filter medium	Micro glass fibre paper
Casting compound	Polyurethane
Seal	Polyurethane
Filter class	H13 or H 14 according to EN 1822
Temperature / Humidity	70°C/100% RF (relative humidity)
Filter dimensions (in mm): S 50 S 200 S 300	 284 x 284 x 150 305 x 610 x 292 610 x 610 x 292
Handle protection	on both sides

5 Security

This section contains information on the protection of humans, domestic and farm animals and the environment.

5.1 Intended use

The machine is intended exclusively for the following use:

Intended use

The Negative pressure unit is used to filter non-condensing room air contaminated with asbestos fibres, in the temperature range up to +45 °C, with exhaust air discharge to the outside.
During asbestos removal work inside closed rooms, it is important to exclude the possibility of asbestos fibres leaving the removal area and thus posing a danger to people and the environment. For these reasons, abatement areas (also called black areas) are separated from the asbestos-free areas and kept in dynamic negative pressure by means of Negative pressure units.
An integrated filter system creates the precondition that the asbestos fibre concentration in the exhaust air is not exceeded. The exhaust air is discharged into the open air.
The unit is not suitable for filtering flammable gases or dusts.

The user must comply with the operating parameters specified in the operating instructions. The unit may only be used in accordance with its intended purpose. Any other use beyond this is not in accordance with the intended use. The user is liable for any resulting damage or injury of any kind.

Authorised persons

The following persons are authorised to handle the product:

- Specialist staff
  - Task: Maintenance and servicing
  - Qualification: trained specialist personnel (locksmith, industrial mechanic, electrician) with knowledge and experience in handling the machine.
- Operating personnel
  - Task: Operation
  - Qualification: training, information through operating instructions

Any other use is not in accordance with the intended use.

Range of application

The machine is intended for use in the following applications:

Range of application

- Refurbishments

5.2 Misapplication

Use of the machine for the following purposes is not permitted:

Reasonably foreseeable misuse

- Any application other than that described in the operating instructions
- Any use of the machine other than that described under "Intended use" without the written consent of the manufacturer.
- Operation outside the technical limits of use
- Unauthorised modifications or conversions as well as manipulation
- Use, installation, operation, maintenance or repair in a manner other than described
- Carrying out work by unqualified personnel
- Use of unsuitable or incompatible materials, operating or auxiliary materials or accessories.
- Non-compliance with safety and operating instructions, occupational health and safety or accident prevention regulations or relevant statutory regulations.
- Failure to promptly rectify faults that may affect safety
- Use of other than original spare parts or accessories that are not equivalent in quality and function.
- Operating the machine in a technically unsound condition, not being aware of safety and hazards and not observing all instructions in the documentation.

5.3 Tasks and qualifications of the staff

Person	Task	Required qualification
Operator	<< Machine-specific >>	Instruction, training
Occupational safety specialist	• Carry out a risk assessment • Create operating instructions • Instruct people	Completed training as an occupational safety specialist with timely experience with machines
Electrician	Installation and maintenance of electrical equipment	Person with appropriate training, suitable education, timely experience and knowledge of the relevant regulations, enabling him/her to recognise risks and avoid hazards that may be caused by electricity.
Freight forwarder	Off-site transport of the machine	Person with suitable training, education, timely experience and knowledge of relevant regulations that enables them to safely transport machinery off-site.
Conveyor	Internal transport of the machine	Person with appropriate training, education, timely experience and knowledge of the relevant regulations that enables them to safely transport machinery within the company.
Disposer	Dispose of machine	Qualified waste management company for legally compliant, proper and professional disposal of the machine

5.4 Notes on occupational health and safety

The operator of the machine is responsible for the implementation of the occupational health and safety obligations. The health and safety regulations of the country in which the machine is used apply.

The duties include, but are not limited to, the following:

- Make these operating instructions or extracts available to persons who carry out tasks with or in connection with the machine.
- Make the applicable documents available to these persons
- Instruction of the persons with regard to the intended use and misuse
- Instruction of persons with regard to protective devices and supplementary protective devices
- Instruction of persons with regard to residual risks

This list is not exhaustive and does not claim to be complete.

6 Transport

This section contains information on transporting the machine outside and inside the factory.

Transport is the change of location of the machine by manual or technical means.

6.1 Loss of warranty claims

The manufacturer's warranty will expire in the following cases:

- In the event of modifications to the machine that have not been agreed with the manufacturer
- If the transport is not carried out properly

6.2 Off-site transport

6.2.1 Transport space

Off-site transport takes place in the public space. In this case, the machine is transported from one place of use to another.

6.2.2 Legislation

Off-site transport of the machine shall be in accordance with the legislation of the country in which the machine is transported off-site.

6.2.3 Qualification of the staff

Persons transporting the machine outside the company must meet the following requirements:

Person	Required qualification
Freight forwarder	Completed training in transport and experience in off-site transport of machinery
Logistician	Completed training and experience in the internal transport of machines

6.2.4 Warning of residual risks

Crushing hazard: Wear safety shoes to protect against running over limbs.

6.2.5 Means of transport

For safe off-site transport, a means of transport is required that meets the following requirements:

- The load capacity must be dimensioned in such a way that the mass of the machine can be safely accommodated.
- The size of the transport surface must be such that the machine can be safely placed on the transport surface without falling off.

Falling of the machine possible due to unintentional change of position when loading and unloading onto / from a means of transport.

6.3 Internal transport

6.3.1 Transport space

In the case of in-plant transport, the machine is transported on the company premises from one installation site to another installation site.

6.3.2 Legislation

The internal transport of the machine is carried out in accordance with the legislation of the country in which the machine is transported outside the company.

6.3.3 Warning of residual risks

Crushing hazard: Wear safety shoes to protect against running over limbs.

6.3.4 Means of transport

For safe internal transport, a means of transport is required that meets the following requirements:

- The load capacity must be dimensioned in such a way that the mass of the machine can be safely accommodated.
- The size of the transport surface must be such that the machine can be safely placed on the transport surface without falling off.

Falling of the machine possible due to unintentional change of position when loading and unloading onto / from a means of transport.

7 Assembly

This section contains information on the safe assembly of the machine.

The Negative pressure unit is delivered from the factory ready for operation and is intended for immediate commissioning.

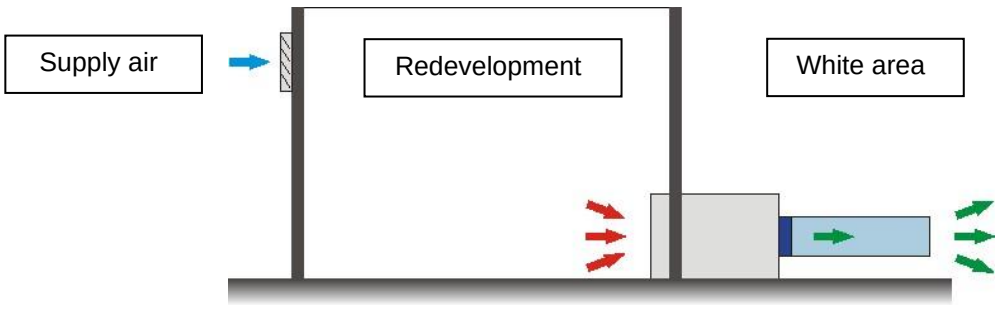
If there is visible damage, **do not** operate the unit. Contact deconta GmbH immediately.

HINWEIS

Please note: In principle, the Negative pressure unit can also be operated directly in the black area (overpressure technology prevents contaminated ambient air from entering the enclosure).

However, since the units are contaminated from the outside and therefore require extensive cleaning after the remediation is completed, use in the black area should be avoided at all costs.

- Integrate the unit into the partition wall between the white and renovation areas.
- Insert approx. 100 mm into the renovation area
- Seal unit with partition wall
- Route the exhaust air hose outside
- Ensure sufficient supply air in the renovation area



⚠ GEFAHR

Never use the unit without correctly installed filters approved for the respective requirement. Avoid blowing out unfiltered air.

8 Operation

This section contains information for the safe use of the machine.

8.1 Qualification of the staff

Persons using the machine must meet the following requirements:

Person	Required qualification
Operator	Instruction, training by the manufacturer

8.2 Warning of residual risks

Touching the cores of a damaged mains connection cable.

Touching machine parts that have become live due to faulty conditions.

Damage due to unsuitable mains voltage.

⚠ VORSICHT

The unit may be damaged if it is connected to an unsuitable mains voltage.

Check whether the voltage indicated on the type plate corresponds to the local mains voltage.

The following materials must not be filtered:

⚠ WARNUNG

- hot materials (smouldering cigarettes, hot ashes, etc.)
- flammable, explosive, aggressive materials and dusts

8.3 Number of persons

One person is needed to use the machine.

8.4 Tools needed

No tools are needed to use the machine.

8.5 Required tools

No tools are needed to use the machine.

8.6 Negative pressure units with control SE

For power regulation, the Negative pressure unit is supplied with a manual stepless control.

- Establish power connection
- Operate controller

8.6.1 Room vacuum maintenance

- Set the desired negative pressure at the supply air opening or at the stepless regulator.

⇒ Negative pressure too high: Open the supply air opening or turn down the unit.

⇒ Negative pressure too low: Close the supply air opening or adjust the unit upwards.

8.7 Negative pressure units with control SRE connect

IoT (Internet of Things) => Units with SRE connect control can be remotely controlled and monitored with any internet-enabled PC, mobile phone or tablet.

For power regulation, the Negative pressure unit is supplied with a control via a touch display to measure and regulate the negative pressure and / or the volume flow.

The negative pressure is measured between the black area and a reference point to be defined (adjacent rooms) and kept at the setpoint by continuous speed control of the electric fan.

The volume flow is measured in the unit and kept at the setpoint by continuous speed control of the electric fan.

Manual control is also possible.

A filter sensor monitors the particle concentration in the exhaust air and triggers a visual and acoustic alarm if a value of approx. 100 particles per litre is permanently exceeded.

A necessary filter change is indicated on the display.

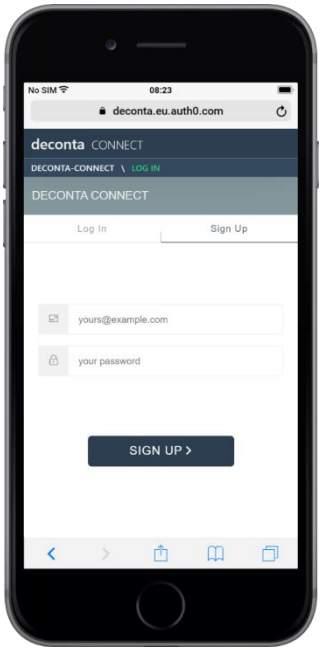
The connect functions are supported as standard in the following countries:

Albania, Algeria, Armenia, Aruba, Australia, Austria, Azerbaijan, Bangladesh, Belarus, Belgium, Bolivia, Bonaire, Bulgaria, Cambodia, China, Croatia, Curacao, Cyprus, Czech Republic, Denmark, El Salvador, Estonia, Faroe Islands, Finland, France, French Guyana, Georgia, Germany, Ghana, Gibraltar, Greece, Guadeloupe, Guyana, Honduras, Hong Kong, Hungary, Iceland, Indonesia, Ireland, Israel, Italy, Japan, Jersey, Kazakhstan, Kuwait, Kyrgyzstan, Laos, Latvia, Liechtenstein, Lithuania, Luxembourg, Macau, Macedonia, Malaysia, Malta, Martinique, Moldova, Mongolia, Montenegro, Nepal, Netherlands, Netherlands Antilles, New Zealand, Nigeria, Norway, Pakistan, Palestine, Panama, Papua New Guinea, Philippines, Poland, Portugal, Puerto Rico, Qatar, Romania, Russia, Saint Eustatius and Saba, Saint Martin (French part), Saint-Barthélemy, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Suriname, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Thailand, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Kingdom, United States, Uzbekistan, Vietnam, Virgin Islands, U.S., Zambia

All other countries not listed on request

8.7.1 Create user account

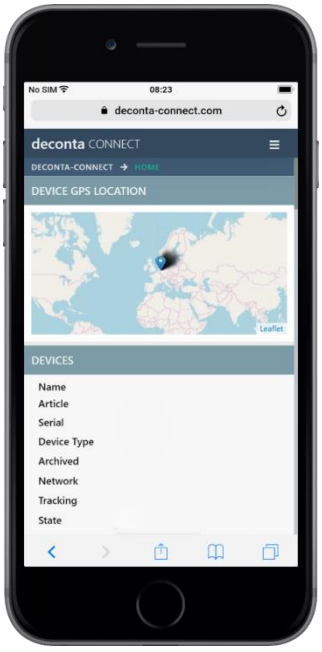
Open the page www.deconta-connect.com in your internet browser.



Tap on the "Sign Up" tab. Enter an email address and your desired password.

The password must be at least 8 characters long and meet 3 of the following 4 criteria:

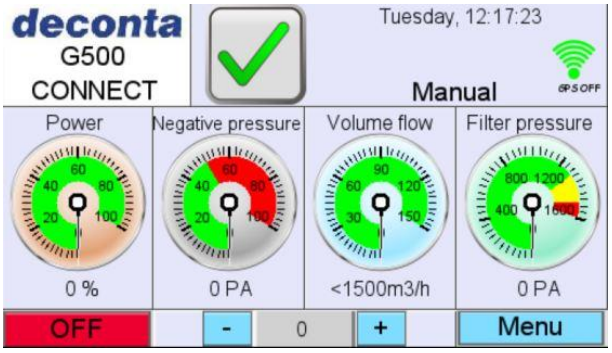
- at least 1 number
- at least 1 capital letter
- at least 1 lower case letter
- at least 1 special character.



You will see this page after successful registration.

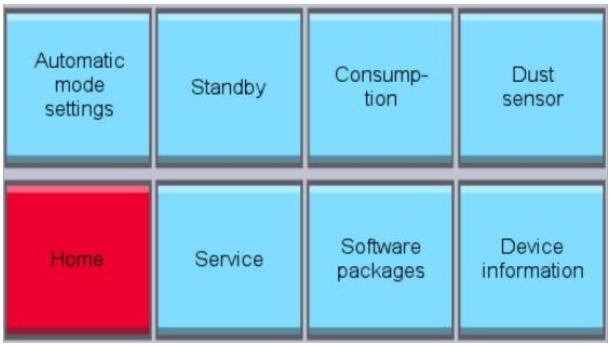
Any number of devices can now be assigned to the user account.

8.7.2 Add the machine to the user account

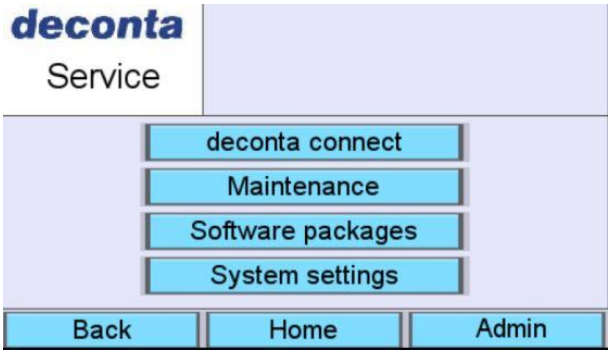


Switch on the unit.

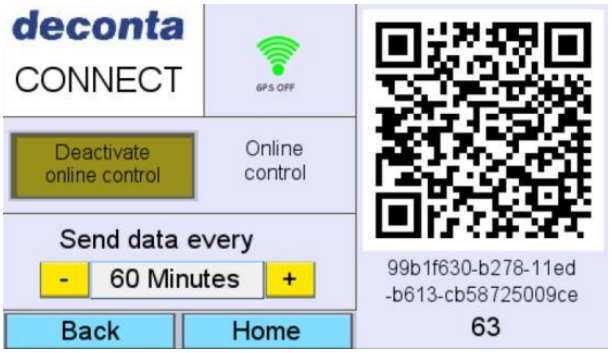
Tap the "Menu" button.



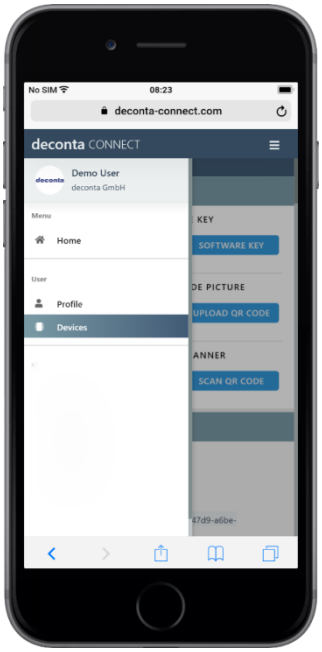
Tap the "Service" button



Tap the "deconta connect" button.

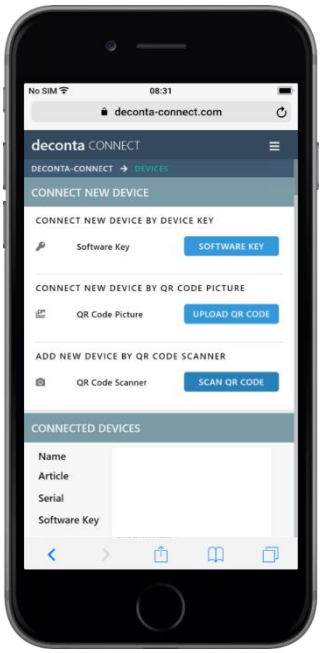


The page with a QR code and a key underneath is displayed.

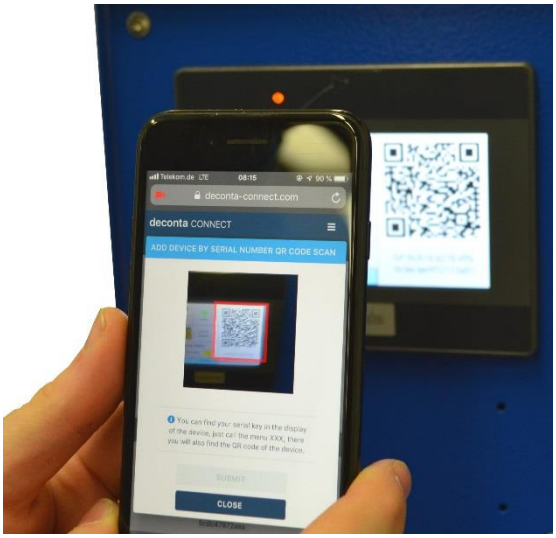


Log in to the connect page with your email address and password.

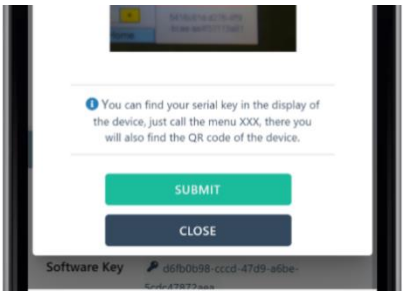
Tap on the menu icon and then on "Devices".



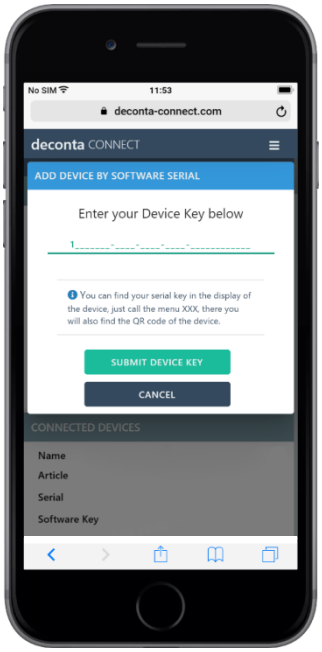
Tap on the button "SCAN QR CODE (our recommendation) or alternatively on the button "SOFTWARE KEY".



Scan the QR code that appears in the display of the unit.



If the QR code is recognised, the "SUBMIT" button changes to green. To add, tap this button, the device is now registered in your user account.



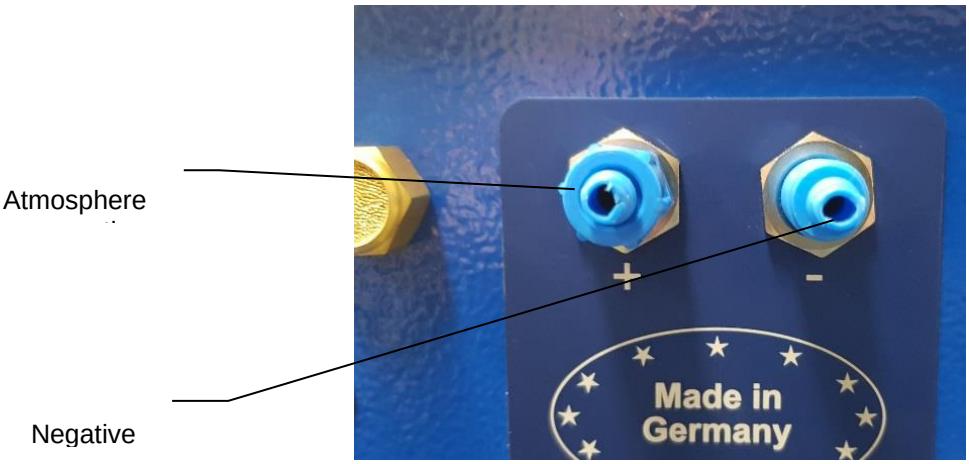
Alternative registration via the "SOFTWARE KEY" button

Enter the key that is displayed below the QR code on the device in the field provided and then tap the green button "SUBMIT DEVICE KEY", the device is now registered in your user account.

8.7.3 Preparation

Determine the measuring point in the black area and connect it with PE hose 8 x 1 to the vacuum connection "-".

Determine the measuring point in the white area (adjacent rooms) and connect it to the atmosphere "+" connection with PE hose 8 x 1.

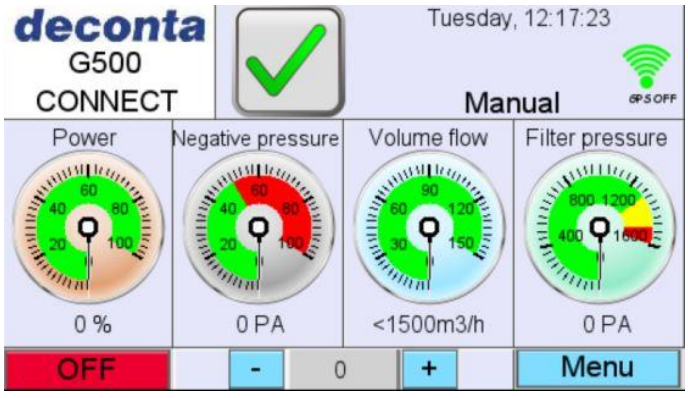


The control can be used in 2 different operating modes.

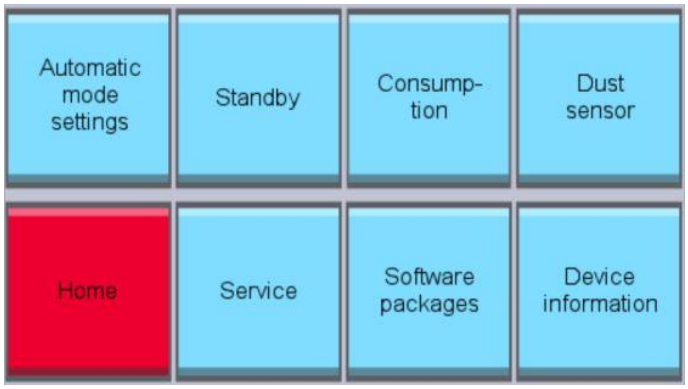
8.7.4 Manual operation

In manual mode, the "-" and "+" keys are used to set the fan power.

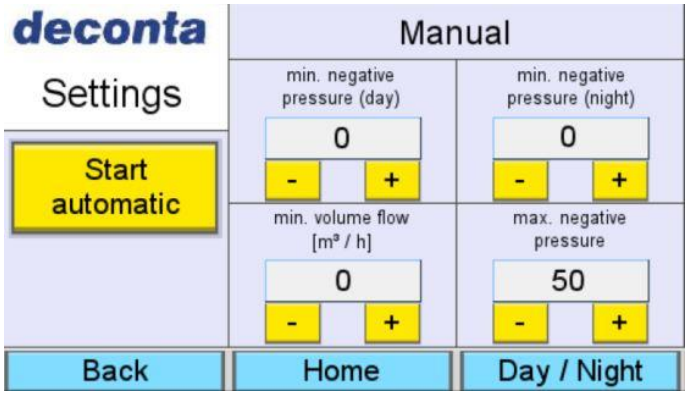
The display shows the power value in % (Power), the measured negative pressure in Pa, the volume flow in m³/h and the filter pressure in Pa.



8.7.5 Automatic operation



To make the settings and to switch automatic mode on or off, press the "Menu" button. In the following menu, press the button "Automatic mode settings".



The following parameters can be set:

- Minimum negative pressure in day mode (min. negative pressure day)
- Minimum negative pressure in night mode (min. negative pressure night)
- Minimum volume flow in m³/h (min. volume flow)
- Maximum negative pressure (max. negative pressure)

Automatic operation is started by tapping the "Start automatic" button.

By comparing the entered setpoint with the permanently measured current actual value, the speed of the fan is automatically adjusted, i.e. the fan automatically "goes up" or "goes down".

8.7.6 Day / Night Settings (Day / Night)

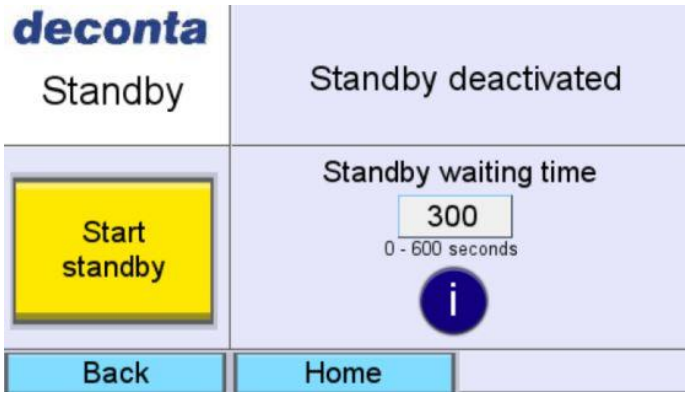
By selecting time ranges, you can set here on which days and at which time the value set in automatic mode for the minimum negative pressure in night mode (min. negative pressure night) is activated.

8.7.7 Standby mode

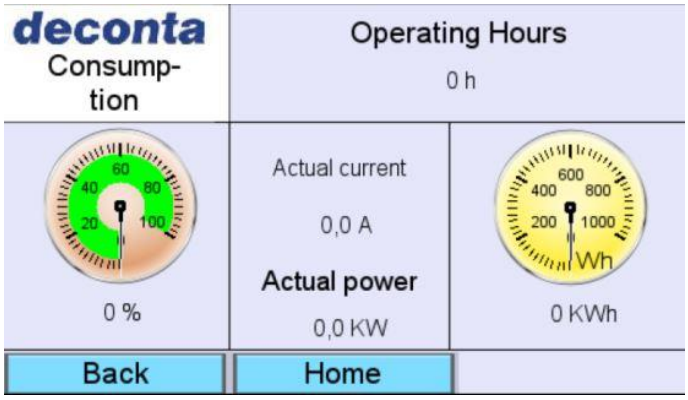
A Negative pressure unit with SRE connect control can be operated as a standby unit. If this function is activated, the unit switches on automatically if the pressure falls below a previously defined negative pressure (e.g. if the actual Negative pressure unit fails).

The standby mode is switched on in the menu by tapping the "Standby" button.

In the Standby waiting time field, a delay of 0-600 seconds for switching on can be entered.



8.7.8 Consumption



Left: the current power of the unit is shown here in %.

Top centre: Display of the current power consumption (Actual current) in A

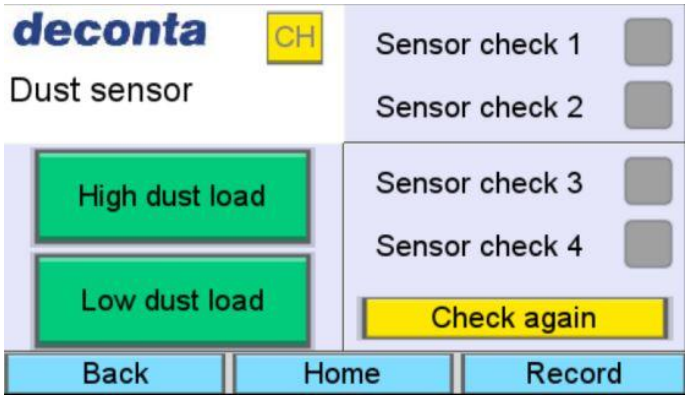
Centre bottom: Display of the current power (Actual power) in kW

Right: display of Wh and below that the total consumption in KWh

8.7.9 Dust Sensor

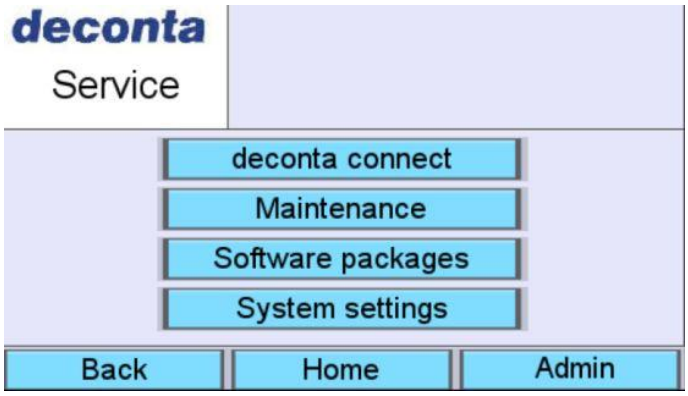
A filter sensor monitors the particle concentration in the exhaust air.

The functions and the status of the filter sensors are shown in the display.



The measured values of the filter sensors can be displayed graphically via the "Record" button.

8.7.10 Service



deconta connect

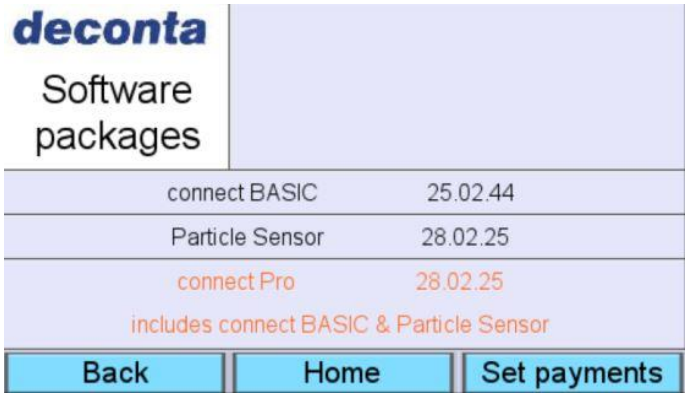
Assigning a device to a connect account, see 8.7.1.

Maintenance

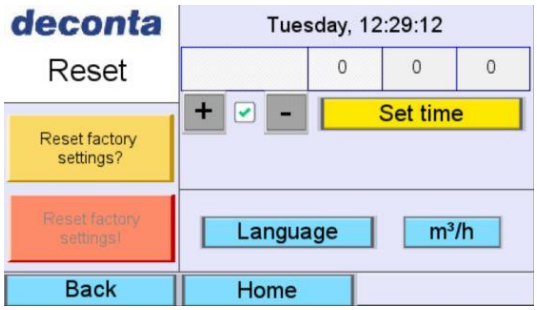
Settings in this menu can only be made by qualified deconta service partners.

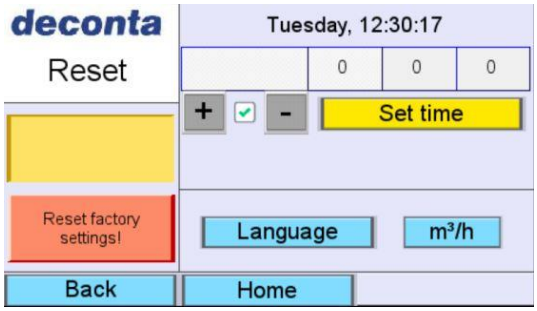
Software packages

Display of the booked options and the expiry date of the licences.



System settings





Setting the day of the week and time. These values are shown on the unit display and are required for the Day / Night settings.

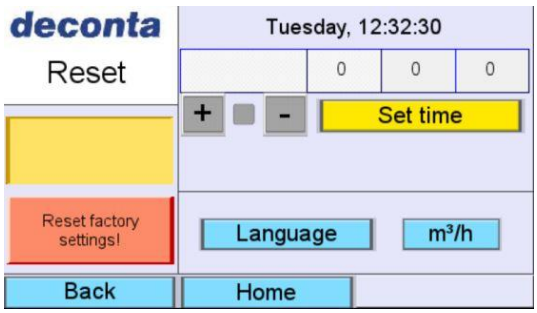
Data sent to the connect user account is displayed there in the set time zone (by default UTC ±0 = coordinated world time).

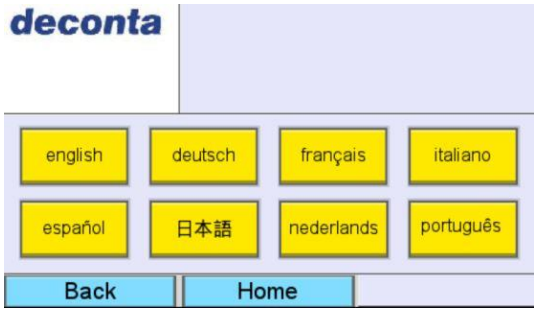
By tapping the yellow button "Reset factory settings? (reset to factory settings?) the red button "Reset factory settings!" is activated.

HINWEIS

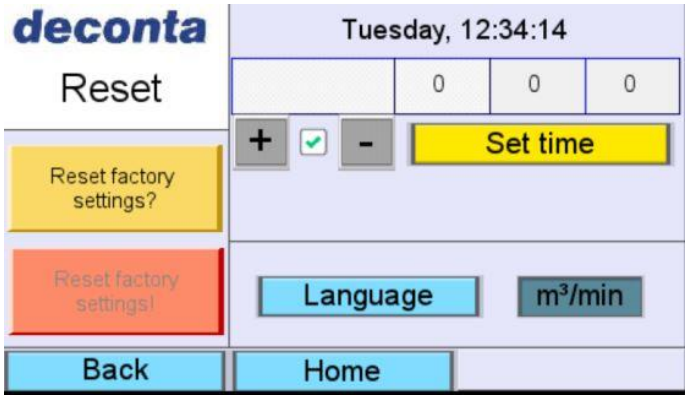
Tapping this red button resets all settings to factory defaults!

Setting the language. Tapping the "Language" button takes you to the menu for setting the display language. Selectable languages: English, German, French, Italian, Spanish, Japanese, Dutch and Portuguese.



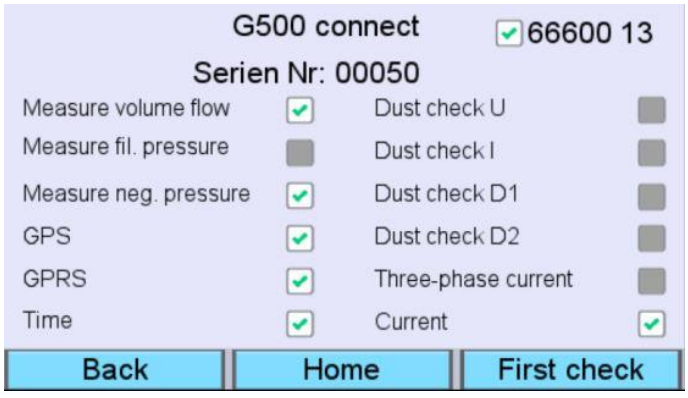


By tapping the button m³\h the unit can be changed to m³/min.



8.7.11 Device information

Display of unit information.



8.7.12 Alarms

Alarms are displayed visually via a flashing symbol on the main screen, at the same time an acoustic signal sounds. There are 3 different displays:

- Green tick: no alarm message is present

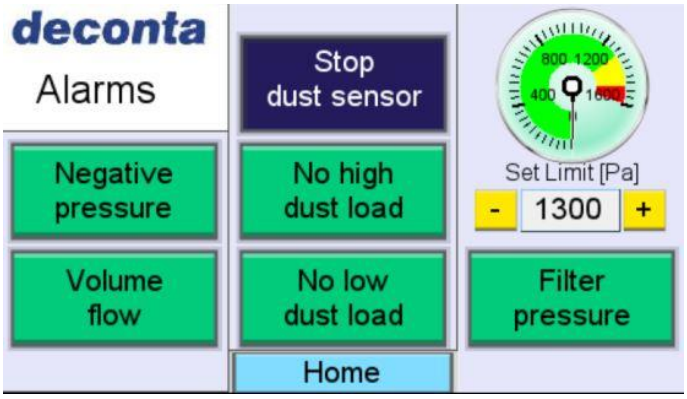
- Yellow bell: There was an alarm, but it no longer exists and has not yet been acknowledged.

- Red bell: there is an acute alarm message

A submenu with more detailed information on alarms can be called up by tapping the button with the green tick, the yellow bell or the red bell.

Alarms are displayed with a red button.

After the fault has been eliminated, the alarm must be acknowledged by tapping the respective button, the colour changes to green.



Negative pressure:

- the setpoint for the minimum negative pressure could not be reached.

Volume flow:

- the setpoint for the minimum volume flow could not be reached.

High dust load:

- Message filter sensor in case of many particles within a short period of time

Low dust load:

- Message filter sensor in case of few particles over a longer period of time

Filter pressure:

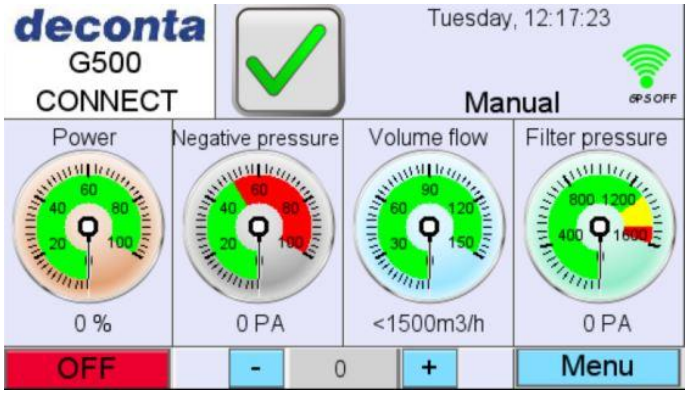
the alarm value for the filter pressure can be adjusted continuously with the "-" and "+" keys (yellow range in the display = filter must be replaced soon). The red range is fixed at the factory.

Stop dust sensor / Start dust sensor:

- Switching the dust sensors on / off.

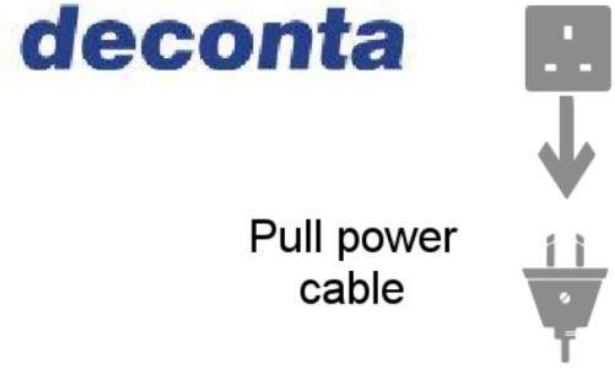
HINWEIS **When the sensors are switched off, the particle concentration in the exhaust air is not monitored!**

8.7.13 Switch off the unit



To switch off the unit, tap the red "OFF" button.

The unit switches off and the mains plug can be pulled out.



9 Maintenance

This section contains information for the safe maintenance of the machine.

Maintenance includes all technical and organisational measures during the life cycle of the machine to ensure the safe, economical and functional condition of the machine and to prevent environmental damage.

9.1 Loss of warranty claims

The manufacturer's warranty is void in the following cases:

- In the event of changes to the machine that have not been agreed with the manufacturer
- If maintenance is not carried out properly

9.2 Maintenance

Maintenance work, including changing / removing the filters, may only be carried out by authorised persons wearing suitable protective clothing.

For all repair and maintenance work, the unit must be completely disconnected from the power supply.

We expressly refer to possible additional regional and national regulations when maintaining the appliance technology.

The ventilation systems (dust extractors, industrial hoovers and devices used for ventilation or vacuum maintenance) must be maintained as required, but at least once a year, repaired if necessary and inspected by an equipment expert. The test result must be presented on request.

Units with SRE connect control should be checked and calibrated once a year by deconta service.

9.3 Warning of residual risks

Contaminated filters may only be changed in compliance with all relevant safety precautions.
Change filters only when the unit is switched off. Only use approved filters.

Do not use residual fibre binders on the unit.

Pull out the mains plug before opening the housing

9.3.1 Personal protective equipment required

Maintenance work, including changing / removing the filters, may only be carried out by authorised persons wearing suitable protective clothing.

9.4 Filter change information

The frequency of the filter change depends on the degree of contamination of the filters. With increasing filter occupancy (soiling of the filters), the air performance decreases.

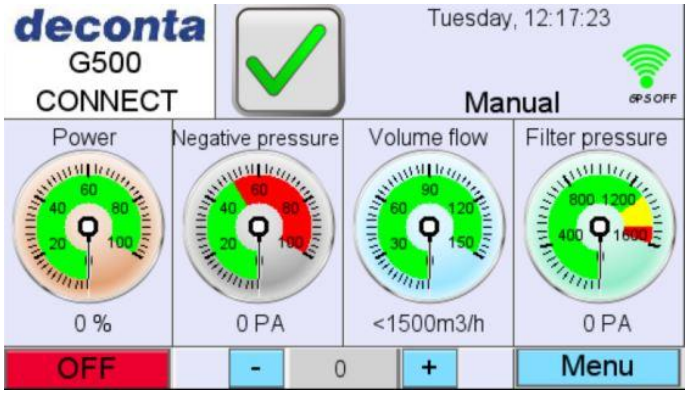
For filter monitoring during operation, a pressure gauge is fitted on units with SE control, on units with SRE connect control the filter monitoring is shown in the display.

9.4.1 Control SE

The following table shows the display values for a recommended filter change. If the display reaches this value, please replace the pre-filter first. If the display value drops by 100 Pascal or more, the unit can continue to be operated. If the value drops by less than 100 Pascal, the HEPA filter must be replaced.

Device	Recommended filter change at	
	110 V	230 V
S 50	approx. 700 Pascal	approx. 800 Pascal
S 200		approx. 750 Pascal
S 300		approx. 850 Pascal

9.4.2 Control SRE connect



For filter monitoring, the filter pressure is shown in the display of the control unit. If the display reaches the red area, please replace the pre-filter first. If the display value drops by 100 Pascal or more, the unit can continue to be operated. If the value drops by less than 100 Pascal, the HEPA filter must be replaced.

9.5 Filter change

GEFAHR

Contaminated filters may only be changed in compliance with all relevant safety precautions.
Change filters only when the unit is switched off. Only use approved filters.

HINWEIS

Do not use residual fibre binders on the unit.

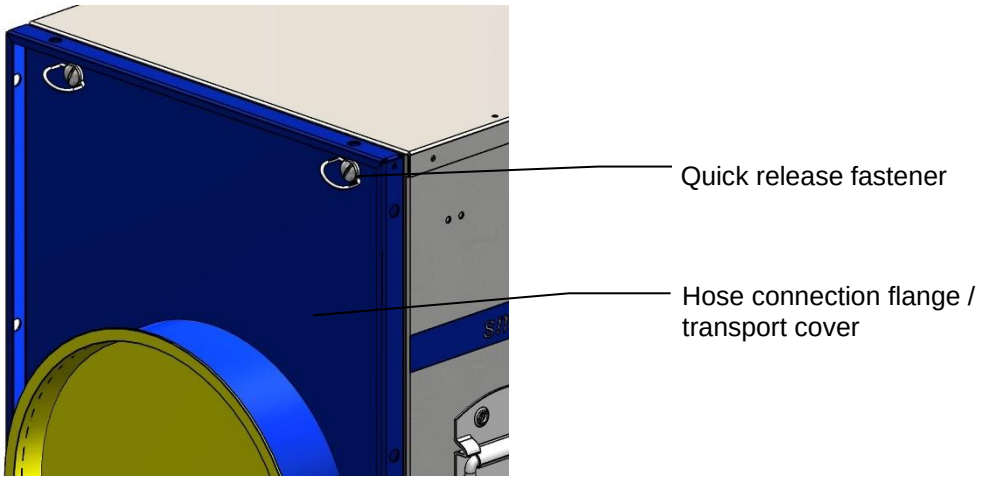
Pull out the mains plug before opening the housing

Maintenance work, including changing / removing the filters, may only be carried out by authorised persons wearing suitable protective clothing.

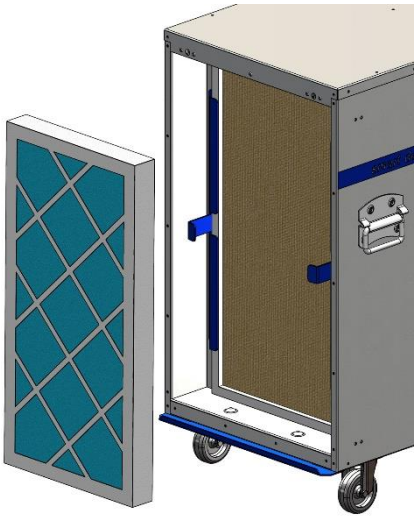
9.5.1 Procedure using the example of the S 200

- Release the quick-release fastener and remove the hose connection flange / transport cover.

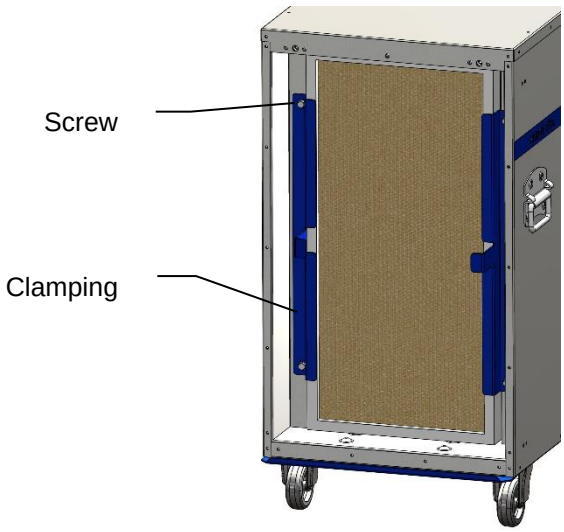
HINWEIS **Danger of fingers being crushed when mounting / dismounting connecting flanges**



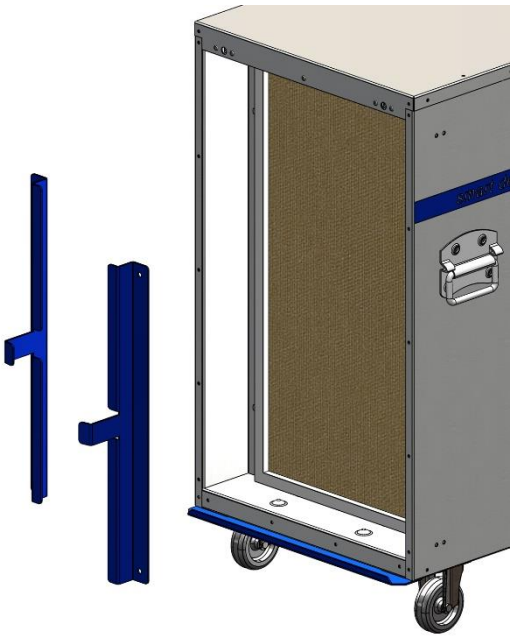
- Remove the pre-filter and dispose of it in accordance with the regulations.



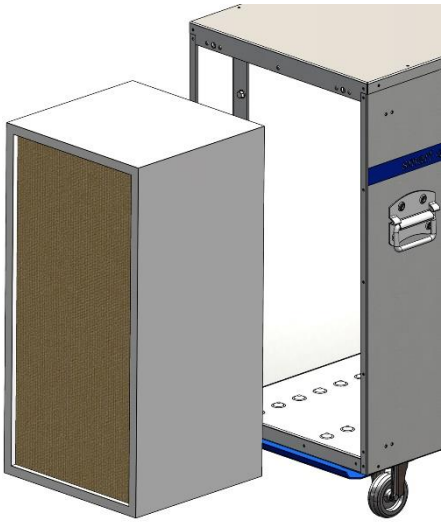
- Unscrew the screws of the clamping profiles



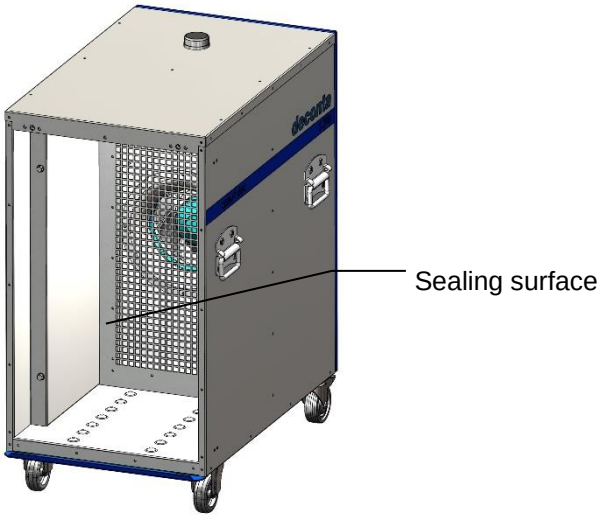
- Remove clamping profiles



- Remove the HEPA filter and dispose of it in accordance with the regulations.



- Check and clean the sealing surface on the unit



- Clean the inside of the housing and insert a new main filter in the **centre.**
- Insert clamping profiles and screws (tighten screws evenly)
- Insert prefilter
- Mount the hose connection flange

HINWEIS

The units have only been tested with original deconta HEPA filters H13 and original deconta HEPA filters H14. To ensure machine safety, only original deconta filters should be used. If this is not observed, machine safety cannot be guaranteed. This can result in the unintentional and uncontrolled release of hazardous substances into the environment due to filter overload (leakage, filter rupture, ...).

9.6 Troubleshooting and fault clearance

This section contains information on safe troubleshooting of the machine.

9.6.1 Possible malfunctions and tips for rectifying malfunctions

The following table gives an overview of malfunctions and measures to remedy them.

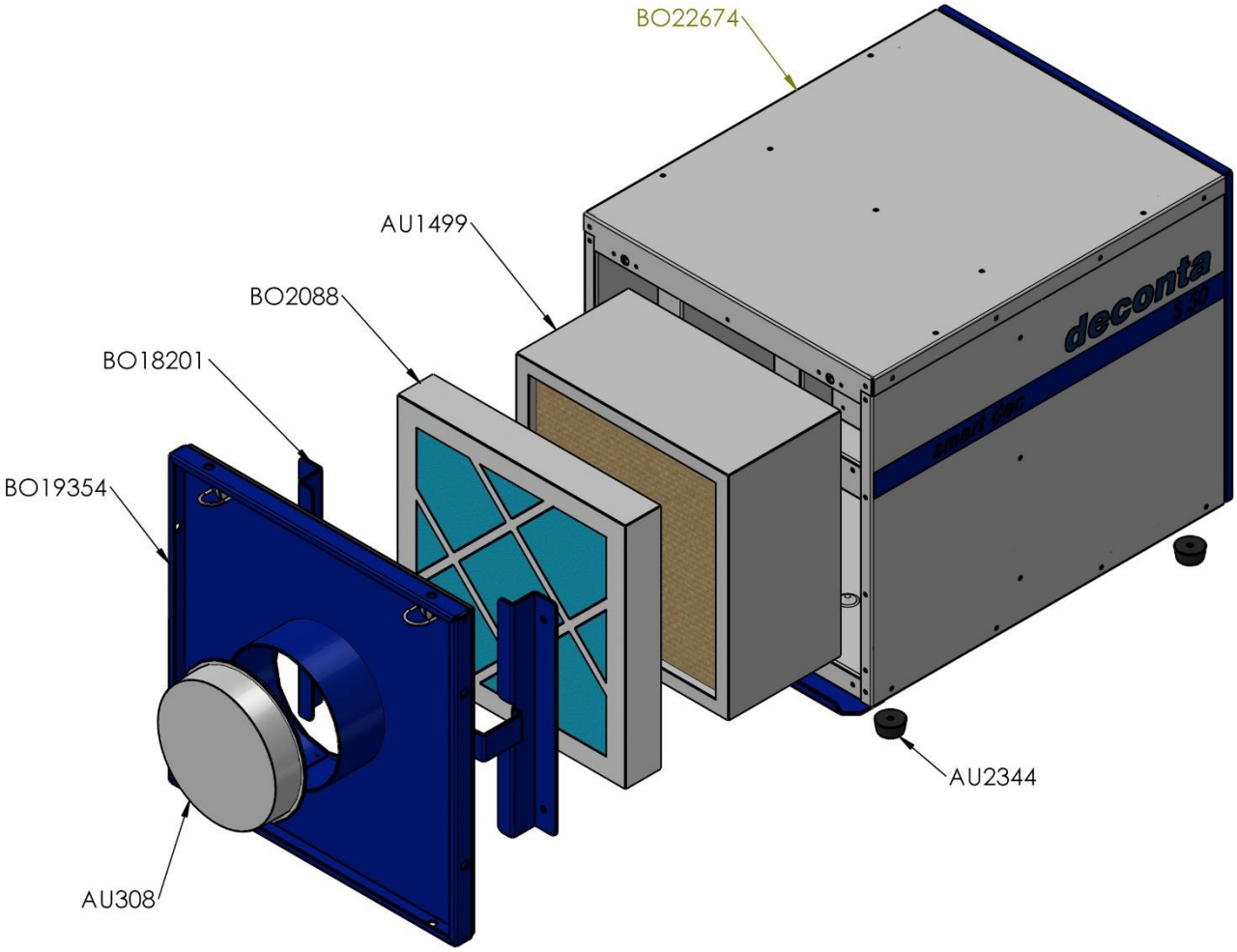
Malfunction	Possible cause	Measure
Negative pressure too low	Pre-filter or main filter dirty	Change filter as described under 9.5 described
Unit does not work	Power source not in order	Have the power source inspected and repaired by a qualified electrician
Unit does not work	Components on the vacuum holding device defective	Have the unit repaired by deconta or a workshop authorised by deconta.

10 Spare parts

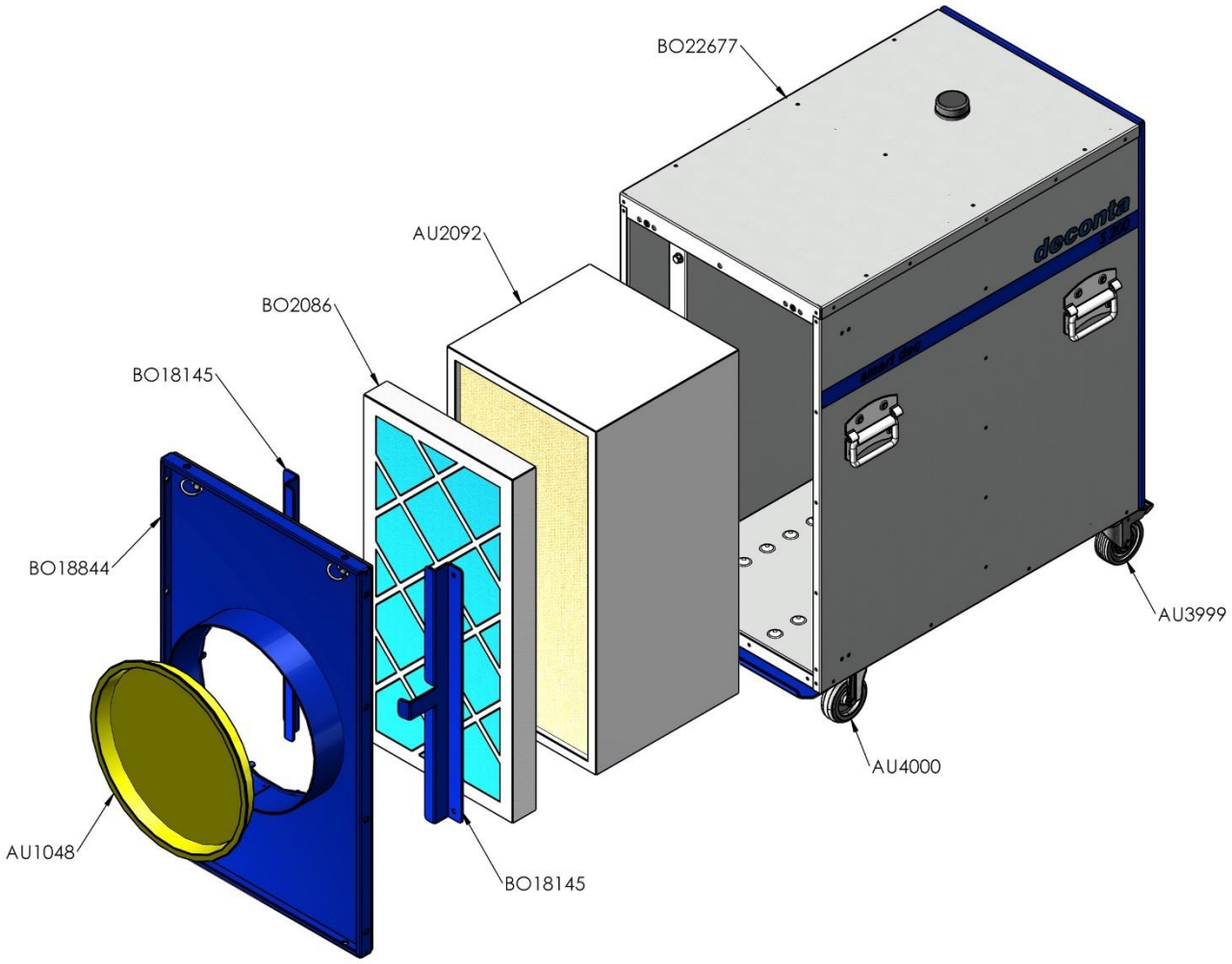
For safe, trouble-free and economical use of the machine, original spare parts should be used.

If this is not possible, the alternative spare parts should correspond to the characteristics of the original spare parts in order to ensure the safe, trouble-free and economical use of the machine.

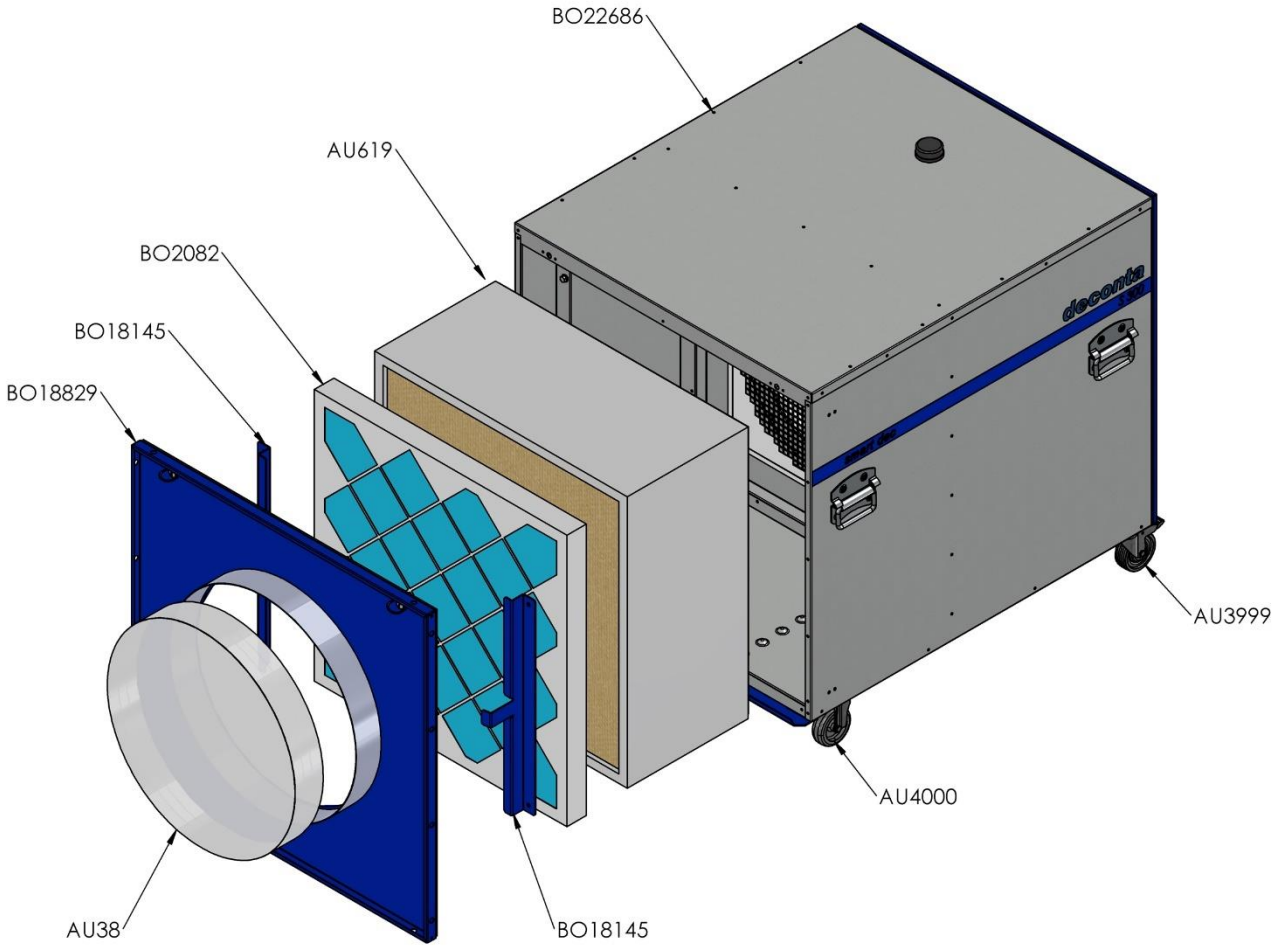
10.1 Negative pressure unit smart dec S 50



10.2 Negative pressure unit smart dec S 200

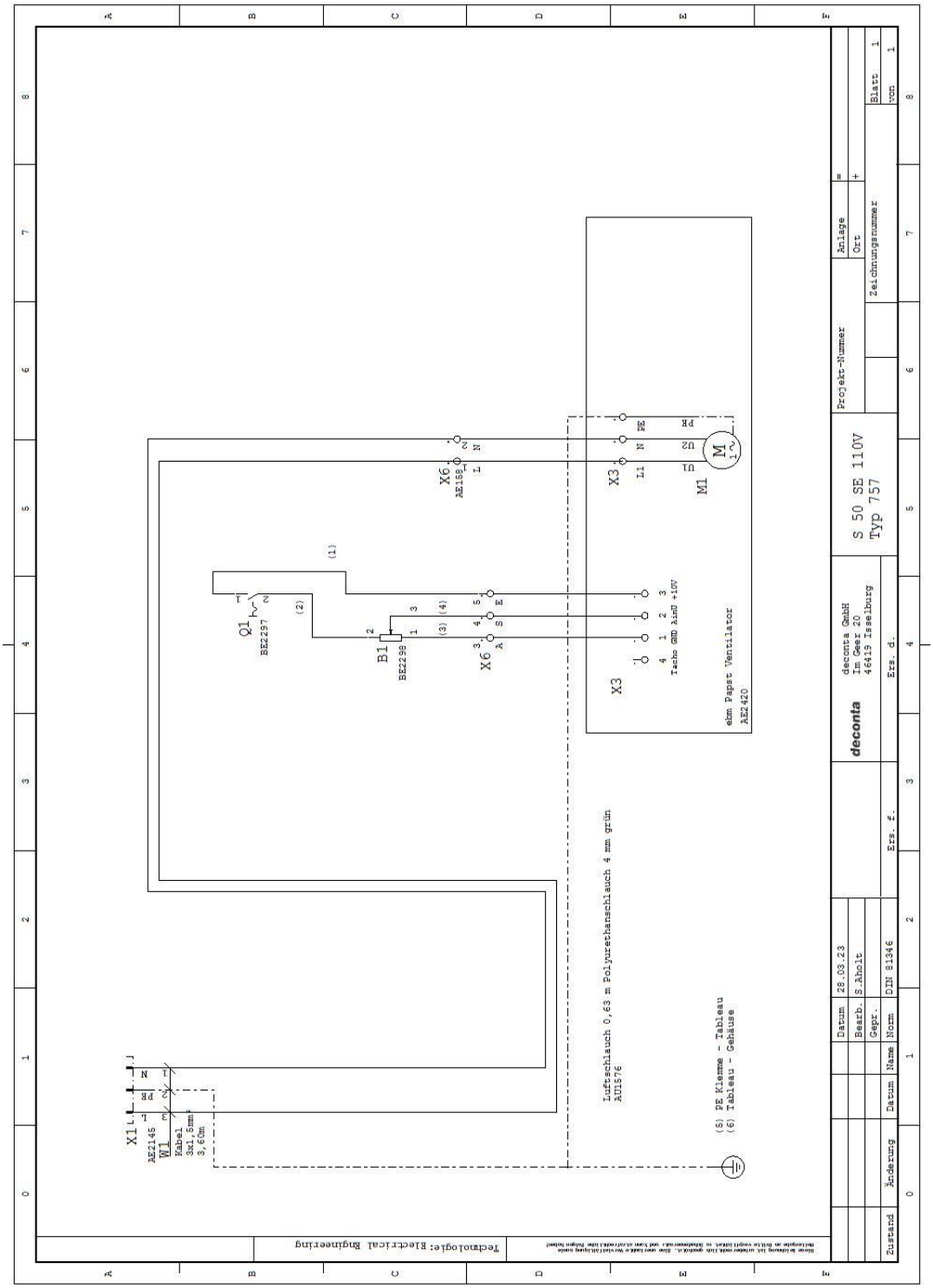


10.3 Negative pressure unit smart dec S 300

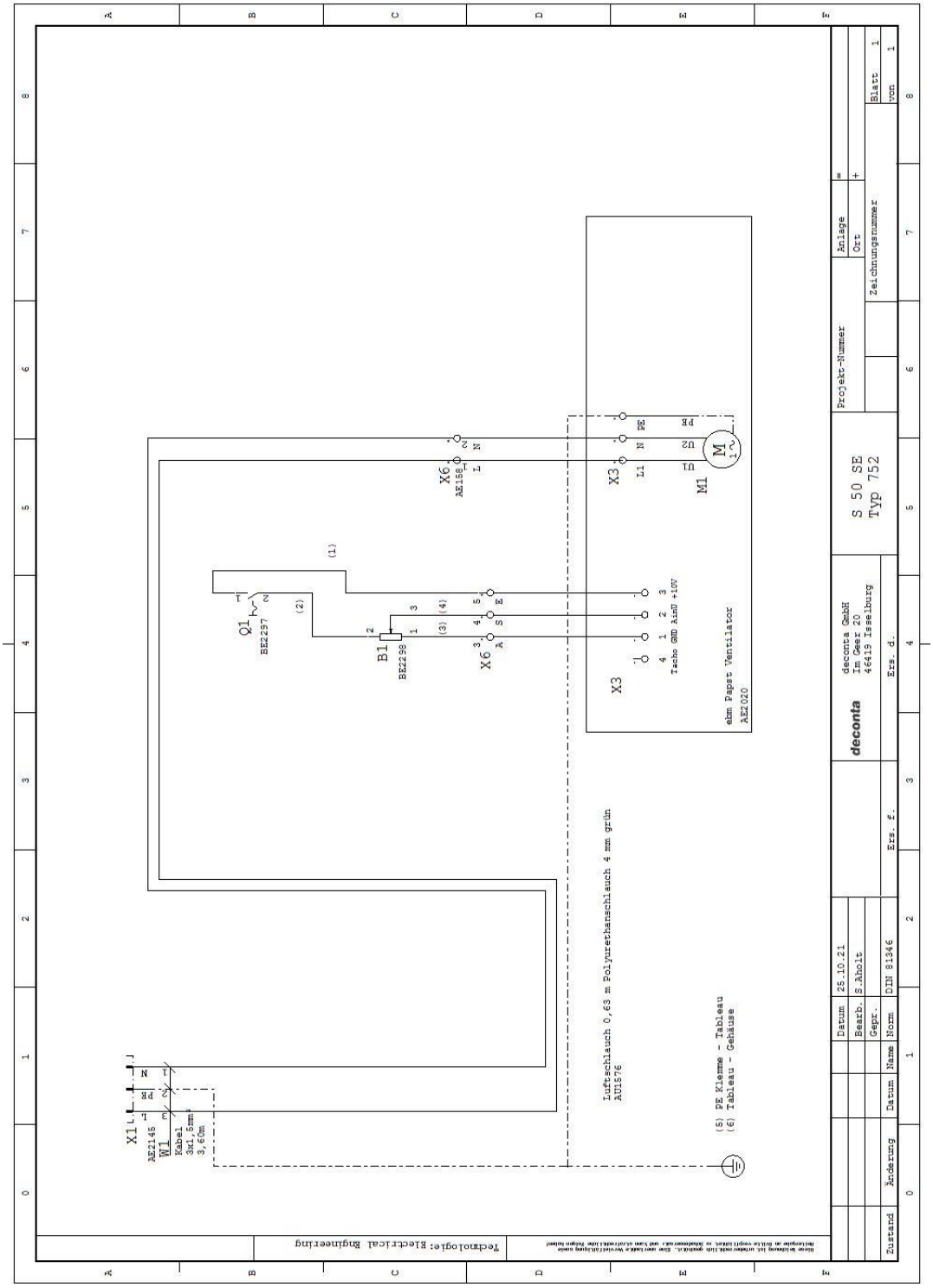


11 Circuit diagrams

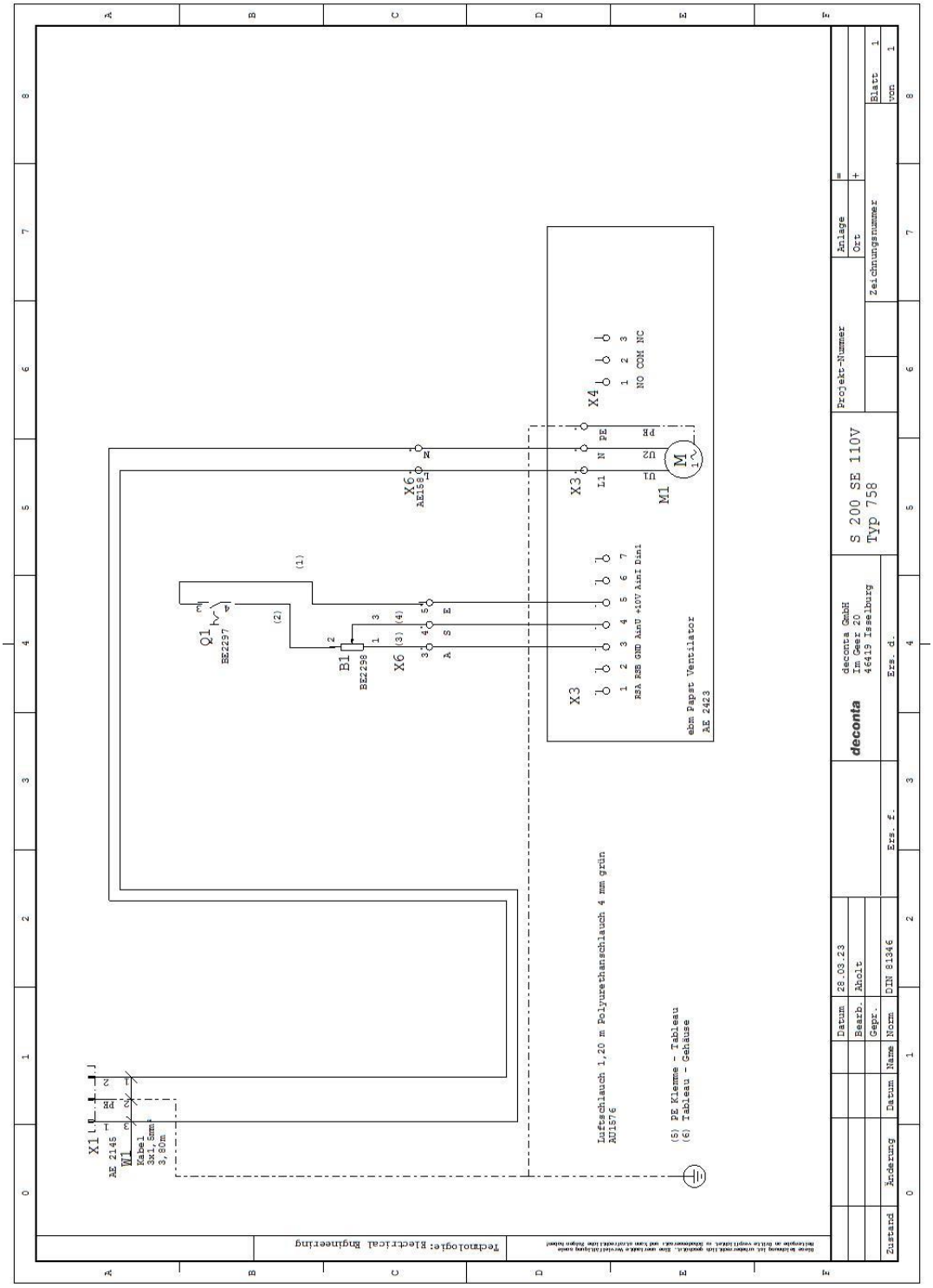
11.1 Negative pressure unit smart dec S 50 SE, 110 volt version



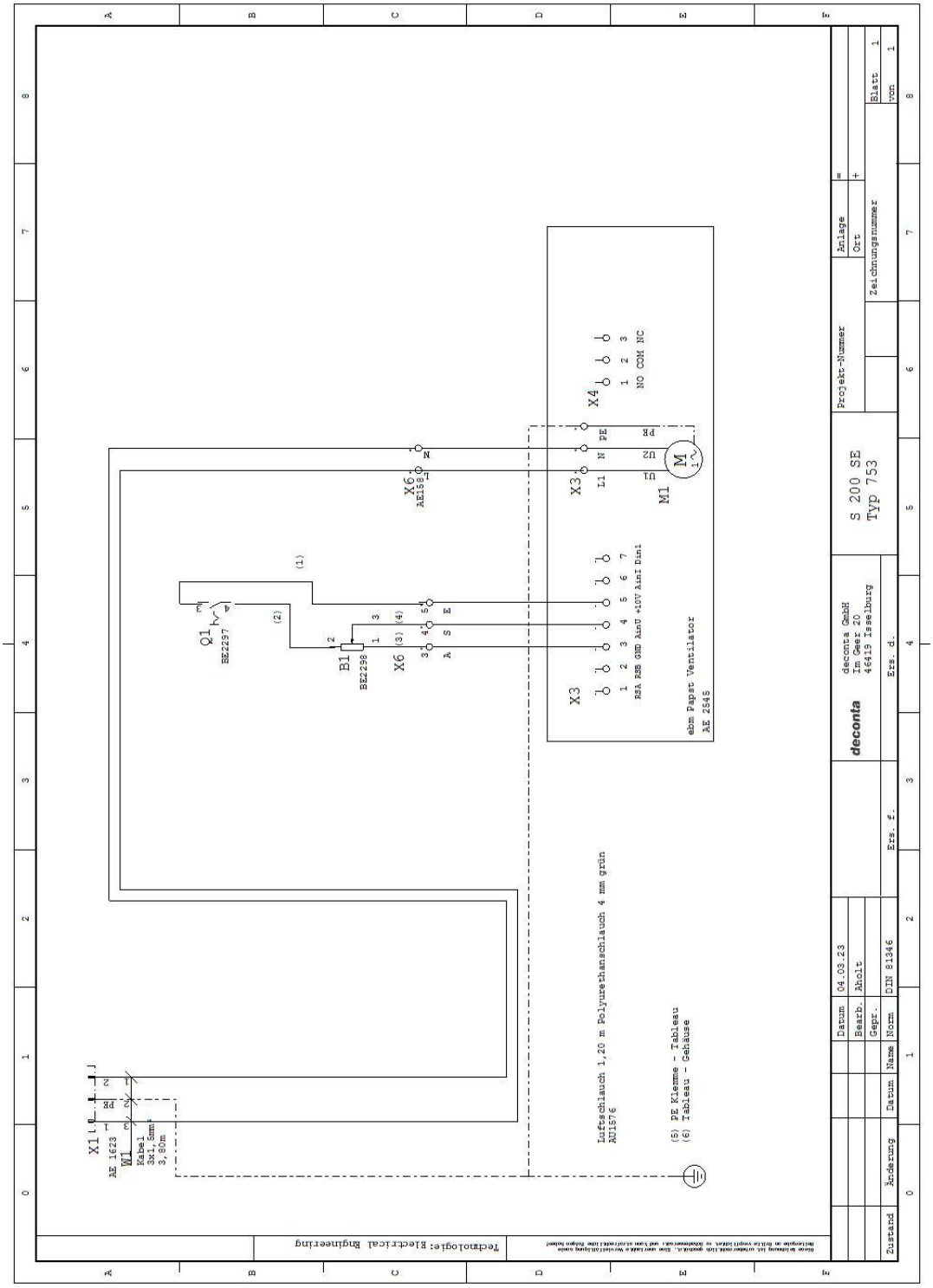
11.2 Negative pressure unit smart dec S 50 SE, 230 volt version



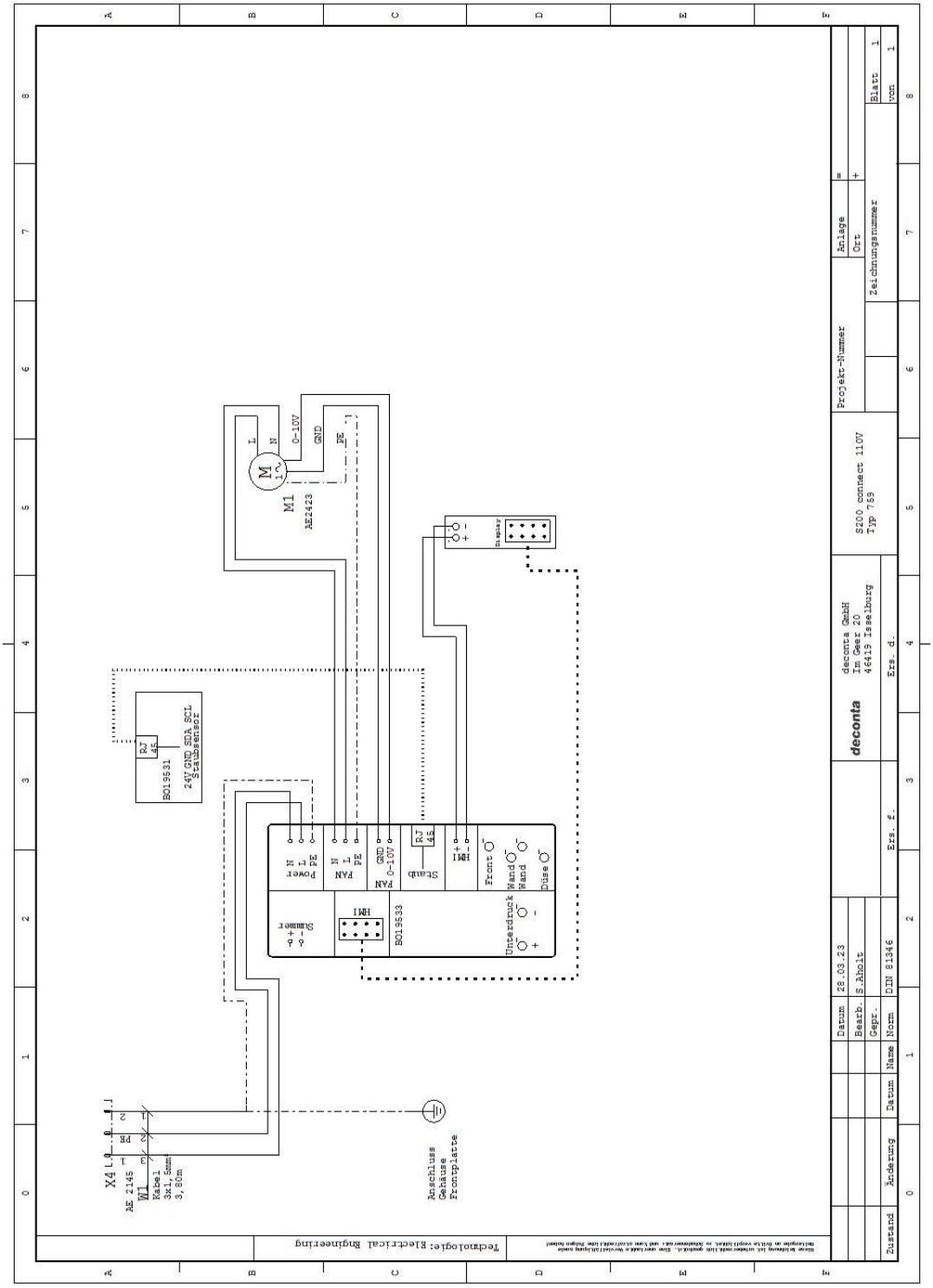
11.3 Negative pressure unit smart dec S 200 SE, version 110 Volt



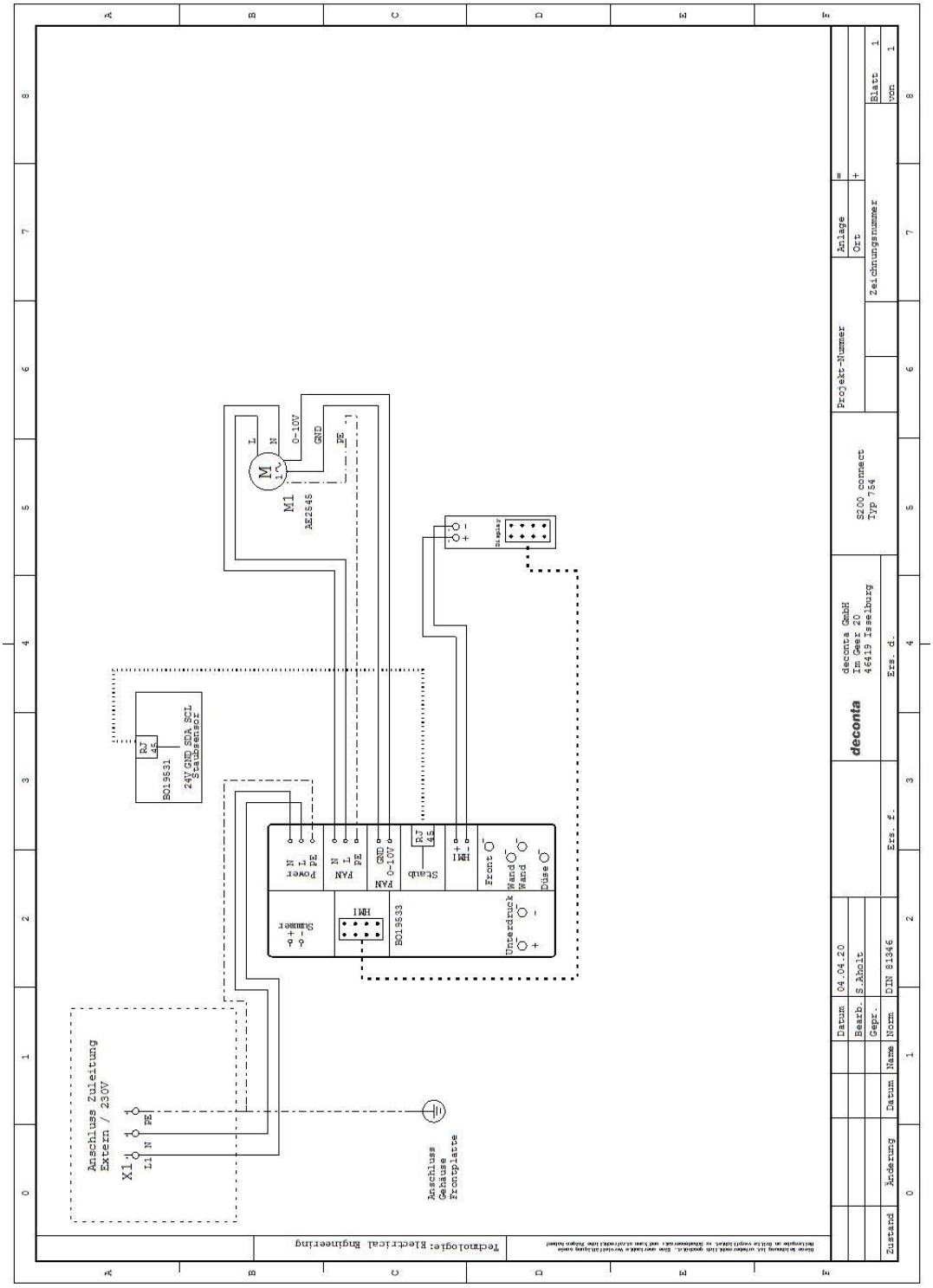
11.4 Negative pressure unit smart dec S 200 SE, 230 volt version



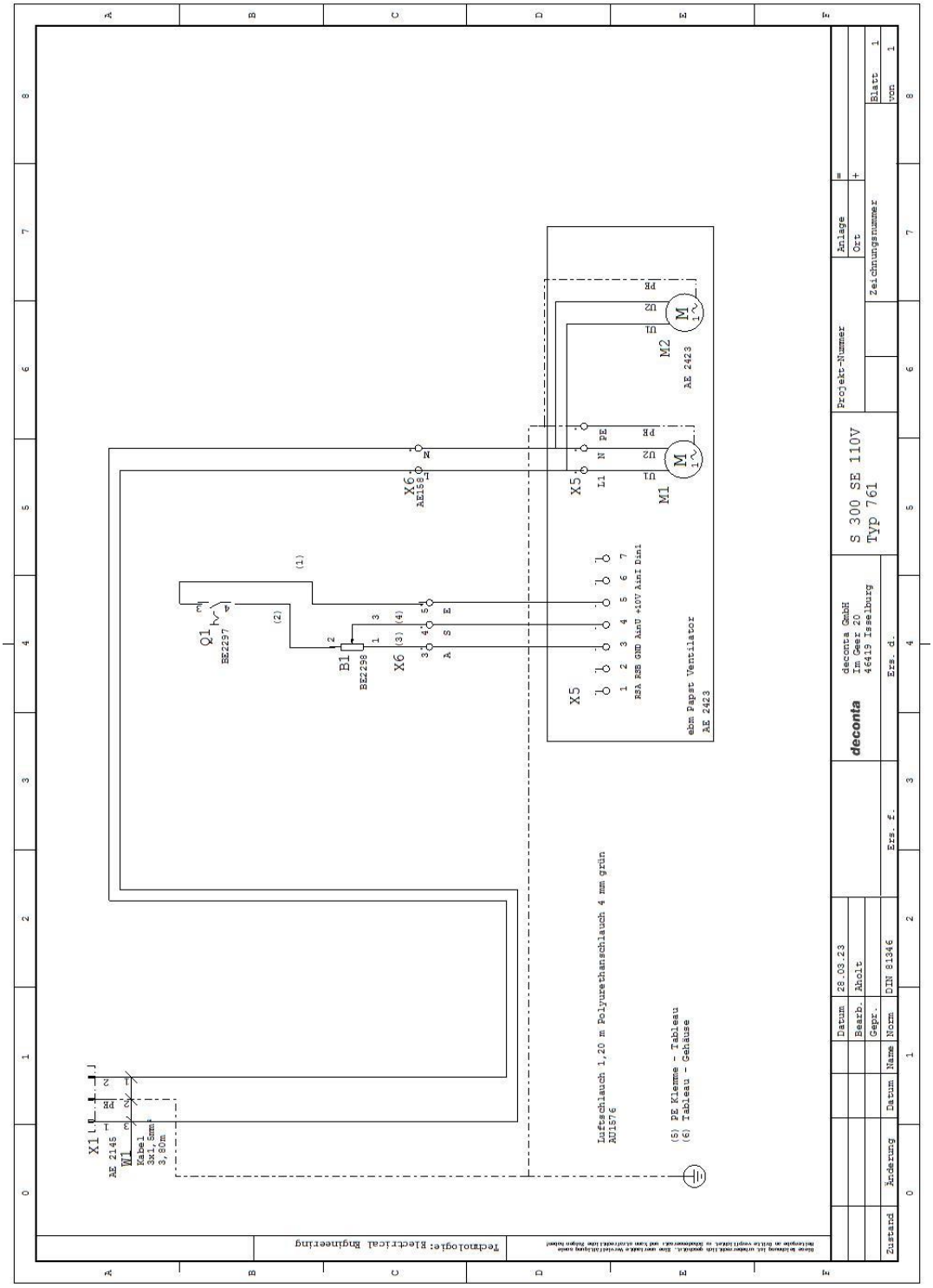
11.5 Negative pressure unit smart dec S 200 SRE connect, 110 volt version



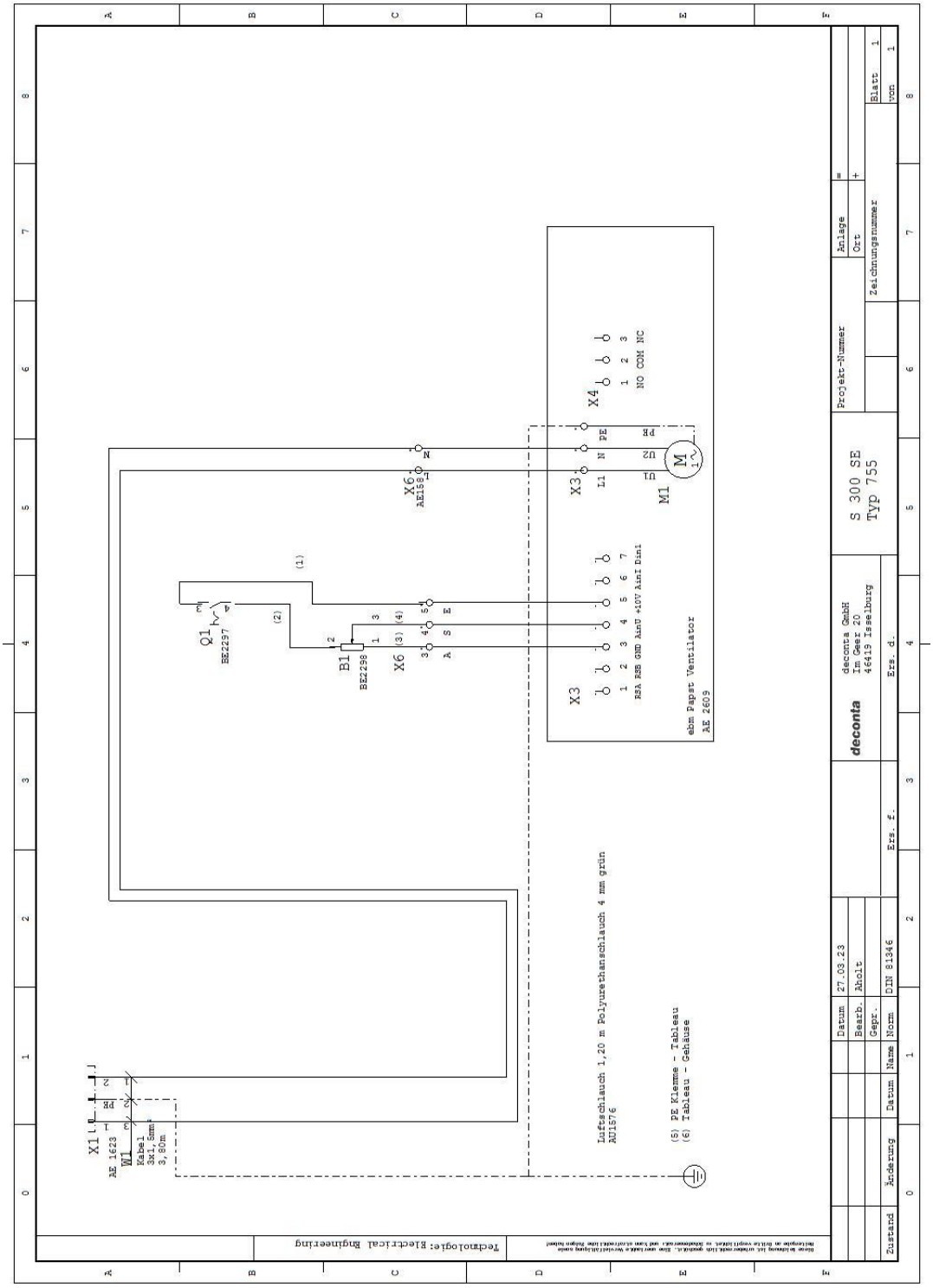
11.6 Negative pressure unit smart dec S 200 SRE connect, 230 volt version



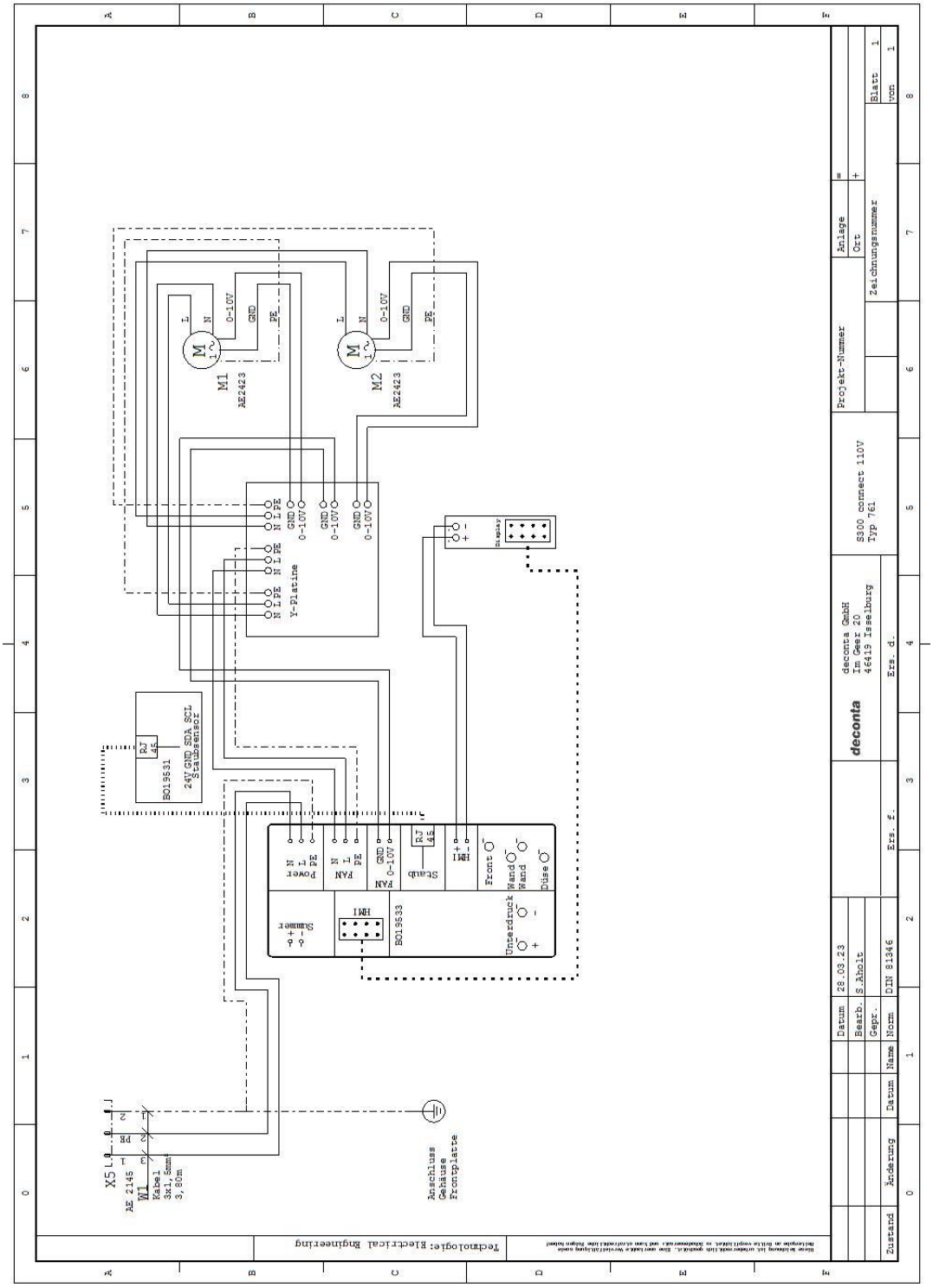
11.7 Negative pressure unit smart dec S 300 SE, version 110 Volt



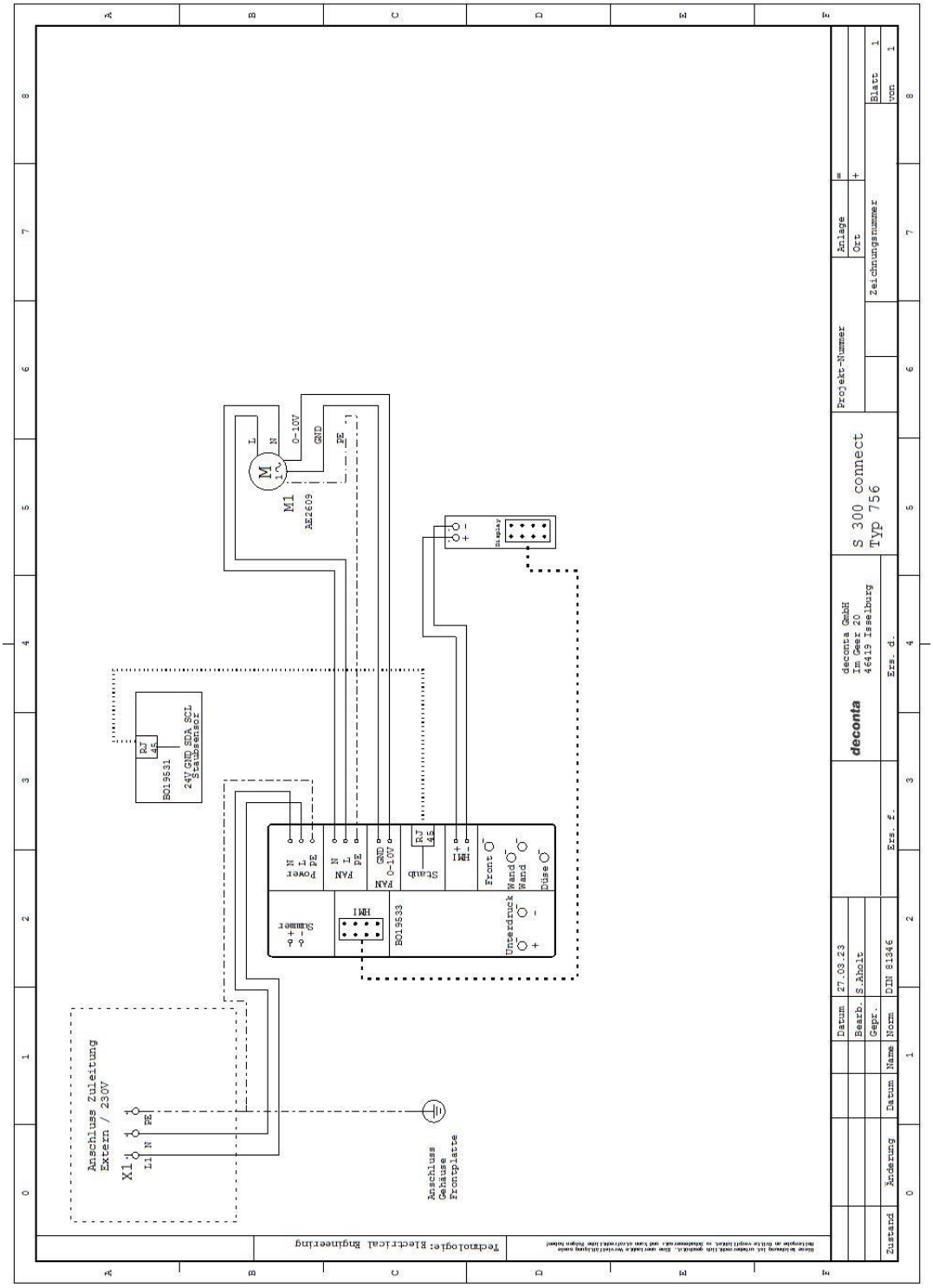
11.8 Negative pressure unit smart dec S 300 SE, 230 volt version



11.9 Negative pressure unit smart dec S 300 SRE connect, 110 volt version



11.10 Negative pressure unit smart dec S 300 SRE connect, 230 volt version



12 Storage

This section contains information on the safe storage of the machine.

The machine is stored in the following cases:

- After decommissioning for a longer period of non-use
- After a decommissioning for a site relocation

12.1 Environmental conditions

The machine can be stored under the following environmental conditions:

Ambient temperature	0 °C to +45 °C
Relative humidity	70 % non-condensing

12.2 Requirements

The following requirements must be met for storing the machine:

- Thoroughly cleaned (decontaminated)
- with mounted transport / closing lid

We expressly refer to possible additional regional and national regulations when storing the appliance technology.

13 Disposal

Disposal is the capturing, collecting, forming, selecting, processing, regenerating, destroying, recycling and selling of the materials to be disposed of that are built into the machine.

This section contains information on the proper and professional disposal of the machine.

13.1 Qualification of the staff

Persons disposing of the machine must meet the following requirements:

Person	Required qualification
Disposer	Qualified waste management company for legally compliant, proper and professional disposal of the machine

13.2 Legislation

Disposal of the machine shall be in accordance with the legislation of the country where the machine is disposed of.

Compliance with these legal regulations is basically the responsibility of the operator of the machine or the person in charge of disposal.

13.3 Waste

The waste generated by the machine must be disposed of in a legally compliant, proper and professional manner.

14 EC Declaration of Conformity

The manufacturer / distributor

deconta GmbH
Im Geer 20
46419 Isselburg

hereby declares that the following product

Product name:	smart dec
Type designation:	S 50, S 200, S 300
Serial number:	see type plate
Trade name:Negative	pressure unit smart dec
Year of manufacture:	see type plate
Description:	Negative pressure unit smart dec

complies with all relevant provisions of the applied legal regulations (hereinafter) - including their amendments in force at the time of the declaration. The sole responsibility for issuing this declaration of conformity lies with the manufacturer. This declaration relates only to the machine in the condition in which it was placed on the market; parts and/or interventions subsequently fitted by the end user are not taken into account.

The following legislation was applied:

Machinery Directive 2006/42/EC
EMC Directive 2014/30/EU
Radio Equipment Directive 2014/53/EU
RoHS Directive 2011/65/EU

The protection goals of the following additional legal regulations were met:

Low Voltage Directive 2014/35/EU

The following harmonised standards were applied:

EN 60204-1:2018	Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1:2016 (Modified))
EN 61000-6-2:2005	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments (IEC 61000-6-2:2005)
EN 62368-1:2014/AC:2015	Equipment for audio/video, information and communication technology - Part 1: Safety requirements (IEC 62368-1:2014 (Modified))
EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
EN ISO 13849-1:2015	Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2015)
EN ISO 13849-2:2012	Safety of machinery - Safety-related parts of control systems - Part 2: Validation (ISO 13849-2:2012)
EN ISO 13857:2019	Safety of machinery - Safety distances to prevent hazard zones from being reached by the upper and lower limbs (ISO 13857:2019)

Name and address of the person authorised to compile the technical file:

Boland, Thomas - deconta GmbH - Im Geer 20 - 46419 Isselburg

Place: Isselburg Date: 13.03.2023

Leiter Konstruktion / head of construction

Leiter Elektro / head of electro