

Operating Instructions

ATMOS C 451 / C 361

English



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Table of contents

1	Introduction	4
1.1	Notes on operating instructions	4
1.2	Explanation of pictures and symbols	5
1.3	Intended purpose	7
1.3.1	ATMOS C 451	7
1.3.2	ATMOS C 361	8
1.4	Function	9
1.5	Intended users	9
1.6	Scope of delivery	10
1.7	Transport and storage	14
2	Notes for your safety	15
2.1	General safety instructions	15
2.2	Danger for users, patients, and third parties	15
2.3	Avoiding damage to the device	17
3	Setting up and starting up	18
3.1	Device overview	18
4	Operation	19
4.1	Initial start-up	19
4.2	Preparing the device	19
4.3	Assembly of the DDS secretion canister	19
4.4	Using the DDS splash protection	19
4.5	Attaching and removing the DDS secretion canister lid	19
4.6	Inserting and removing the DDS bacterial and viral filter / oversuction stop	20
4.7	Attaching, closing, and opening the DDS secretion canister handle	20
4.8	Attaching and removing the DDS secretion canister	20
4.9	DDS secretion canister hose holder	20
4.10	Inserting the DDS hose adapter	21
4.11	Connecting the suction hose	21
4.12	On/off switch	21
4.13	Adjusting the vacuum	21
4.14	Suctioning	21
4.15	Checking the DDS bacterial and viral filter / oversuction stop	22
5	Options	23
5.1	Securing the device	24
5.2	Walking with the system trolley	24
5.3	DDS switchover station	24
5.3.1	ATMOS C 451	25
5.3.2	ATMOS C 361	25
5.4	Tray for the system trolley base	25
5.5	Potential equalisation	26
5.6	Use of disposable suction systems (ATMOS, Serres®, Medi-Vac®, Receptal®)	26

6	Reprocessing	27
6.1	Safety instructions for reprocessing.....	27
6.1.1	General safety instructions	27
6.1.2	Danger for users, patients, and third parties.....	27
6.1.3	Avoiding damage to the device.....	27
6.2	Preparing surfaces.....	28
6.2.1	Overview	28
6.2.2	Selecting process chemicals.....	28
6.2.3	Pre-cleaning.....	29
6.2.4	Wipe disinfection	29
6.3	Reprocessing the accessories.....	29
6.3.1	Overview	29
6.3.2	Selecting process chemicals.....	30
6.3.3	Secretion canister system	30
7	Maintenance and service	32
7.1	Periodic tests	32
7.2	Function check	32
7.3	Sending in the device	32
7.4	Reprocessing by the manufacturer	32
7.5	Changing the fuse.....	33
8	Troubleshooting	34
9	Accessories	35
10	Consumables	37
11	Disposal	38
11.1	Expected service life	38
12	Technical data	39
12.1	ATMOS C 451	39
12.2	ATMOS C 361	40
13	Notes on EMC	43

1 Introduction

1.1 Notes on operating instructions



These operating instructions contain important information on how to operate your product safely, correctly, and effectively.

These operating instructions are designed for training and instructing operating personnel in the use of the system, and they are also intended for use as a reference manual. This document may be reprinted, either in part or in whole, only with written permission from ATMOS.

These operating instructions must always be kept available near the product.



Care, periodic tests, regular cleaning, and proper use are essential. They ensure the operational safety and usability of the product.

Maintenance, repairs, and periodic tests may be carried out only by persons who have the appropriate technical knowledge and are familiar with the product. The person in question must possess the necessary test devices and original spare parts required to carry out these measures.



Read chapter 'Notes for your safety' on page 15 before using the product for the first time. This will help you to avoid potentially dangerous situations.

The products ATMOS C 451 and ATMOS C 361 bear CE marking CE 0124 according to the EU Council Directive 93/42/EEC concerning medical devices and meet the basic requirements of Annex I to this directive.

The product complies with all applicable requirements of Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment ('RoHS').

The Declarations of Conformity and our General Terms and Conditions can be viewed on our website at www.atmosmed.com.

The quality management system at ATMOS has been certified according to the international standard EN ISO 13485.








These operating instructions are valid for the following devices:

- | | |
|---|------------|
| • ATMOS C 451 | 340.0300.0 |
| • ATMOS C 451 mobile with 2 x 1.5 l canisters – fully assembled | 340.0376.0 |
| • ATMOS C 451 mobile with 2 x 1.5 l canisters – for self-assembly | 340.0335.0 |
| • ATMOS C 451 mobile with 2 x 3 l canisters – fully assembled | 340.0377.0 |
| • ATMOS C 451 mobile with 2 x 3 l canisters – for self-assembly | 340.0334.0 |
| • ATMOS C 451 mobile with 2 x 5 l canisters – fully assembled | 340.0378.0 |
| • ATMOS C 451 mobile with 2 x 5 l canisters – for self-assembly | 340.0333.0 |
| • ATMOS C 451 with user package 1.5 l | 340.0339.0 |
| • ATMOS C 451 with user package 3 l | 340.0338.0 |

• ATMOS C 451 portable with standard rail	340.0357.0
• ATMOS C 451 mobile with standard rail – for self-assembly	340.0358.0
• ATMOS C 451 mobile with standard rail – fully assembled	340.0375.0
• ATMOS C 451 VE	340.0355.0
• ATMOS C 361	340.0001.0
• ATMOS C 361 portable with 1 x 1.5 l canister	340.0351.0
• ATMOS C 361 portable with 1 x 3 l canister	340.0350.0
• ATMOS C 361 portable with standard rail	340.0363.0
• ATMOS C 361 mobile with 1 x 1.5 l canister	340.0360.0
• ATMOS C 361 mobile with 1 x 3 l canister	340.0361.0
• ATMOS C 361 mobile with standard rail	340.0362.0






















1.2 Explanation of pictures and symbols










In the operating instructions

 DANGER
Warning of a danger that will result in immediate fatal or serious injury. Observe the necessary measures.
 WARNING
Warning of a danger that can cause fatal or serious injury. Observe the necessary measures.
 CAUTION
Warning of a danger that can cause minor injury. Observe the necessary measures.
NOTICE
Notice of a danger that can damage the product or other objects. Observe the necessary measures.
 Warning of a danger that can cause fatal or serious injury.
 Notice of potential material damage.
 Useful information on the handling of the device.
1. Action. Proceed step by step.
» Result of an action.
 Move/plug in this direction.

On device and type plate

	Follow operating instructions (blue)
	Consult operating instructions
	Warning; pay special attention

	This device complies with the relevant requirements of EU directives.
	This device complies with the relevant requirements of EU directives.
	Eurasian conformity
	Foot switch
	Manufacturer
	Date of manufacture Country of manufacture
	Reference number
	Unique Device Identifier of a medical device
	Medical device
	Serial number
IPX1	Protection against the ingress of harmful moisture (dripping water)
	Type BF applied part
	Professional disposal
	For single use only (symbol located on consumables)
	Non-sterile
	Autoclavable
	Connection for suction hose / patient
	No natural rubber latex
	Potential equalisation
	Protection class II device
	Fuse
	Alternating current

	Device on
	Device off (standby for optional foot switch)
	This side up
	Fragile, handle with care
	Keep dry
	Keep away from sunlight
	Temperature limit
	Humidity limitation
	Atmospheric pressure limitation

UDI application identifier

(01)	UDI-DI: Identification of the manufacturer and the device
(10)	Batch code
(11)	Date of manufacture
(13)	Packing date
(17)	Expiry date
(21)	Serial number
(30)	Quantity in pieces

1.3 Intended purpose

1.3.1 ATMOS C 451

Product name: ATMOS C 451

Main functions: Suction of secretions, blood, serous fluids, rinsing fluids, and for the temporary collection of these fluids.

Medical indications / application: For all applications where suction is needed, such as in general surgical procedures (e.g., suction of wound cavities, abscesses), suction of the nasopharyngeal cavity, in endoscopy for suction of secretion or rinsing fluids, and in neurosurgery.

For vacuum extraction

Specification of the main function:	Drainage and temporary collection of body fluids. An electric suction pump is used to generate negative pressure. An additional secretion canister must be attached to allow temporary collection of the drained body fluids.
User profile:	Doctors, medical staff without restrictions.
Patient group:	Patients of all ages with and without restrictions.
Application organ:	Natural orifices and openings resulting from a surgical intervention (entire body; human and animal).
Application time:	For short-term use on the patient (< 30 days).
Area of application:	The application site is the clinical, outpatient, private practice, and veterinary field. The device may be used only by persons who have received the relevant training and instruction.
Contraindications:	Not suitable for: <ul style="list-style-type: none"> • Drainage operations in the low-vacuum range (e.g., thoracic or wound drainage) • Use outside the medical areas • Suction of flammable, corrosive, or explosive substances • Suction in potentially explosive atmospheres • Suction of surgical smoke in conjunction with HF, electrical, or laser surgery
The product is:	active
Sterility:	Non-sterile product
Disposable product / Reprocessing:	The device and part of the accessories are reusable. For information on reprocessing, cleaning, and disinfection, please see the operating instructions.

1.3.2 ATMOS C 361

Product name:	ATMOS C 361
Main functions:	Suction of secretions, blood, serous fluids, rinsing fluids, and for the temporary collection of these fluids.
Medical indications / application:	For all applications where suction is needed, such as in general surgical procedures (e.g., suction of wound cavities, abscesses), suction of the nasopharyngeal cavity, in endoscopy for suction of secretion or rinsing fluids, and in neurosurgery.
Specification of the main function:	Drainage and temporary collection of body fluids. An electric suction pump is used to generate negative pressure. An additional secretion canister must be attached to allow temporary collection of the drained body fluids.
User profile:	Doctors, medical staff without restrictions.
Patient group:	Patients of all ages with and without restrictions.

Application organ:	Natural orifices and openings resulting from a surgical intervention (entire body; human and animal).
Application time:	For short-term use on the patient (< 30 days).
Area of application:	The application site is the clinical, outpatient, private practice, and veterinary field. The device may be used only by persons who have received the relevant training and instruction.
Contraindications:	Not suitable for: <ul style="list-style-type: none"> • Drainage operations in the low-vacuum range (e.g., thoracic or wound drainage) • Use outside the medical areas • Suction of flammable, corrosive, or explosive substances • Suction in potentially explosive atmospheres • Suction of surgical smoke in conjunction with HF, electrical, or laser surgery
The product is:	active
Sterility:	Non-sterile product
Disposable product / Reprocessing:	The device and part of the accessories are reusable. For information on reprocessing, cleaning, and disinfection, please see the operating instructions.

1.4 Function

- The ATMOS C 451 / C 361 is a mains-operated surgical suction device, the core of which is a high-performance, maintenance-free diaphragm pump. It generates vacuum in the suction hose and secretion canister system, which assists in suctioning and collecting secretions. Via a vacuum regulator with vacuum gauge, the final vacuum and thus the desired suction capacity can be precisely adjusted.
- Secretion canisters of different sizes are available for secretion collection. The reusable secretion canisters can be attached to the ATMOS C 451 / C 361 via the Direct Docking System. The user can connect the suction hose directly. A hydrophobic DDS bacterial and viral filter located in the canister lid prevents bacteria, viruses, and liquids from entering the device. This filter protects the device against oversuction. The intake located in the hose connection prevents foaming in the secretion canister and therefore ensures a longer filter life.
- A system trolley and a trolley with standard rail with extensive accessories are available for mobile use.

1.5 Intended users

May be used only by trained professionals in supervised and medical operation.

1.6 Scope of delivery

Name

REF 340.0300.0
ATMOS C 451

Basic device

Power supply cable 5 m

008.0818.0

Operating Instructions

Name

REF

REF 340.0376.0/REF 340.0335.0

ATMOS C 451 mobile with 2 x 1.5 l canisters

1x ATMOS C 451

340.0300.0

2x DDS secretion canister, plastic, 1.5 l, autoclavable

340.0050.0

2x DDS-canister lid with gaskets, autoclavable

340.0053.0

2x DDS-canister handle, blue, autoclavable

340.0326.0

2x DDS-splash protection, silicone, autoclavable

340.0056.0

1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm), autoclavable

340.0057.0

1x hose bracket, stainless steel

320.0611.0

1x standard rail adapter

340.0331.0

1x system trolley ATMOS C 451 with DDS-switchover station

340.0171.0

10x hydrophobic DDS bacterial and viral filter

340.0054.0

1x suction hose (silicone), Ø 6 mm, L = 2 m

000.0361.0

Name

REF

REF 340.0377.0/REF 340.0334.0

ATMOS C 451 mobile with 2 x 3 l canisters

1x ATMOS C 451

340.0300.0

2x DDS-secretion canister, plastic, 3 l, autoclavable

340.0051.0

2x DDS-canister lid with gaskets, autoclavable

340.0053.0

2x DDS-canister handle, blue, autoclavable

340.0326.0

2x DDS-splash protection, silicone, autoclavable

340.0056.0

1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm), autoclavable

340.0057.0

1x hose bracket, stainless steel

320.0611.0

1x standard rail adapter

340.0331.0

1x system trolley ATMOS C 451 with DDS-switchover station

340.0171.0

10x hydrophobic DDS bacterial and viral filter

340.0054.0

1x suction hose (silicone), Ø 6 mm, L = 2 m

000.0361.0

Name

REF

REF 340.0378.0/REF 340.0333.0

ATMOS C 451 mobile with 2 x 5 l canisters

1x ATMOS C 451	340.0300.0
2x DDS-secretion canister, plastic, 5 l, autoclavable	340.0052.0
2x DDS-canister lid with gaskets, autoclavable	340.0053.0
2x DDS-canister handle, blue, autoclavable	340.0326.0
2x DDS-splash protection, silicone, autoclavable	340.0056.0
1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm), autoclavable	340.0057.0
1x hose bracket, stainless steel	320.0611.0
1x standard rail adapter	340.0331.0
1x system trolley ATMOS C 451 with DDS-switchover station	340.0171.0
10x hydrophobic DDS bacterial and viral filter	340.0054.0
1x suction hose (silicone), Ø 6 mm, L = 2 m	000.0361.0

Name

REF

REF 340.0339.0

ATMOS C 451 with user package 1.5 l

1x ATMOS C 451	340.0300.0
1x DDS-secretion canister, plastic, 1.5 l, autoclavable	340.0050.0
1x DDS-canister lid with gaskets, autoclavable	340.0053.0
1x DDS-canister handle, blue, autoclavable	340.0326.0
1x DDS-splash protection, silicone, autoclavable	340.0056.0
1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm), autoclavable	340.0057.0
1x hose holder, autoclavable	340.0066.0
10x hydrophobic DDS bacterial and viral filter	340.0054.0
1x suction hose (silicone), Ø 6 mm, L = 2 m	000.0361.0

Name

REF

REF 340.0338.0 ATMOS C 451 with user package 3 l

1x ATMOS C 451	340.0300.0
1x DDS-secretion canister, plastic, 3 l, autoclavable	340.0051.0
1x DDS-canister lid with gaskets, autoclavable	340.0053.0
1x DDS-canister handle, blue, autoclavable	340.0326.0
1x DDS-splash protection, silicone, autoclavable	340.0056.0
1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm), autoclavable	340.0057.0
1x hose holder, autoclavable	340.0066.0
10x hydrophobic DDS bacterial and viral filter	340.0054.0
1x suction hose (silicone), Ø 6 mm, L = 2 m	000.0361.0

Name

REF

REF 340.0357.0 ATMOS C 451 portable with standard rail

1x ATMOS C 451	340.0300.0
1x standard rail adapter	340.0330.0
1x suction hose (silicone), Ø 6 mm, L = 2 m	000.0361.0

Name	REF
REF 340.0358.0/REF 340.0375.0	
ATMOS C 451 mobile with standard rail	
1x ATMOS C 451	340.0300.0
1x system trolley ATMOS C 451	340.0171.0
1x standard rail set for system trolley	340.0081.0
1x hose for the connection of the device and canister system	340.0083.0
1x hose bracket, stainless steel	320.0611.0
1x standard rail adapter	340.0331.0
1x suction hose (silicone), Ø 6 mm, L = 2 m	000.0361.0

Name	REF
REF 340.0355.0 ATMOS C 451 VE	
1x ATMOS C 451	340.0300.0
1x trolley with standard rail ATMOS C 451 / C 361	320.0070.1
1x foot control for ATMOS C 451	443.0310.1
1x DDS-secretion canister, plastic, 1.5 l, autoclavable	340.0050.0
1x DDS-canister lid with gaskets, autoclavable	340.0053.0
1x DDS-canister handle, grey, autoclavable	340.0055.0
1x DDS-splash protection, silicone, autoclavable	340.0056.0
1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm), autoclavable	340.0057.0
1x DDS-hose holder	340.0066.0
10x hydrophobic DDS bacterial and viral filter	340.0054.0
1x suction hose, silicone, Ø 6 mm, L = 2 m	000.0361.0

Name	REF
REF 340.0001.0 ATMOS C 361	
1x basic device	
1x power supply cable 5 m	008.0818.0
1x operating instructions	

Name	REF
REF 340.0351.0 ATMOS C 361 portable (1 x 1.5 l canister)	
1x ATMOS C 361	340.0001.0
1x DDS-secretion canister, plastic, 1.5 l	340.0050.0
1x DDS-canister lid with gaskets	340.0053.0
1x DDS-canister handle, grey	340.0055.0
1x DDS-splash protection, silicone	340.0056.0
1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm)	340.0057.0
1x suction hose, silicone, Ø 6 mm, L = 2 m, 1 pc.	000.0361.0
1x hydrophobic DDS bacterial and viral filter, 10 pcs.	340.0054.0
1x DDS-hose holder	340.0066.0

Name

REF 340.0350.0 ATMOS C 361 portable (1 x 3 l canister)

1x ATMOS C 361	340.0001.0
1x DDS-secretion canister, plastic, 3 l	340.0051.0
1x DDS-canister lid with gaskets	340.0053.0
1x DDS-canister handle, grey	340.0055.0
1x DDS-splash protection, silicone	340.0056.0
1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm)	340.0057.0
1x suction hose, silicone, Ø 6 mm, L = 2 m, 1 pc.	000.0361.0
1x hydrophobic DDS bacterial and viral filter, 10 pcs.	340.0054.0
1x DDS-hose holder	340.0066.0

Name

REF 340.0363.0 ATMOS C 361 portable with standard rail

1x ATMOS C 361	340.0001.0
1x DDS-standard rail adapter with vacuum connection	340.0059.0
1x suction hose, silicone, Ø 6 mm, L = 2 m, 1 pc.	000.0361.0
1x hydrophobic bacterial and viral filter, Ø 8 mm	444.0628.0

Name

REF 340.0360.0

ATMOS C 361 mobile (1 x 1.5 l canister)

1x ATMOS C 361	340.0001.0
1x DDS-secretion canister, plastic, 1.5 l	340.0050.0
1x DDS-canister lid with gaskets	340.0053.0
1x DDS-canister handle, grey	340.0055.0
1x DDS-splash protection, silicone	340.0056.0
1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm)	340.0057.0
1x suction hose, silicone, Ø 6 mm, L = 2 m, 1 pc.	000.0361.0
1x hydrophobic DDS bacterial and viral filter, 10 pcs.	340.0054.0
1x DDS-hose holder	340.0066.0
1x trolley with standard rail ATMOS C 451 / C 361	320.0070.1

Name

REF 340.0361.0

ATMOS C 361 mobile (1 x 3 l canister)

1x ATMOS C 361	340.0001.0
1x DDS-secretion canister, plastic, 3 l	340.0051.0
1x DDS-canister lid with gaskets	340.0053.0
1x DDS-canister handle, grey	340.0055.0
1x DDS-splash protection, silicone	340.0056.0
1x DDS-hose adapter set (Ø 6 mm + Ø 10 mm)	340.0057.0
1x suction hose, silicone, Ø 6 mm, L = 2 m, 1 pc.	000.0361.0
1x hydrophobic DDS bacterial and viral filter, 10 pcs.	340.0054.0
1x DDS-hose holder	340.0066.0
1x trolley with standard rail ATMOS C 451 / C 361	320.0070.1

Name

REF 340.0362.0

ATMOS C 361 mobile with standard rail

1x ATMOS C 361	340.0001.0
1x DDS-standard rail adapter with vacuum connection	340.0059.0
1x trolley with standard rail ATMOS C 451 / C 361	320.0070.1
1x suction hose, silicone, Ø 6 mm, L = 2 m, 1 pc.	000.0361.0
1x hydrophobic bacterial and viral filter, Ø 8 mm	444.0628.0
1x hose for the connection of the device and canister system	444.0118.0

1.7 Transport and storage

Transport the product only in a shipping box that is padded and offers sufficient protection.

If you notice transport damage:

1. Document and report the transport damage.
2. Send the device to ATMOS; see chapter '7.3 Sending in the device' on page 32.

Environmental conditions for transport and storage: see chapter '12 Technical data' on page 39

Storage:

- ☞ After transporting the device at temperatures below 0 °C, keep it at room temperature for at least six hours before initial start-up. If the device has not been acclimatised, it may not be operated as the electronic components can become damaged.

2 Notes for your safety

2.1 General safety instructions

Report all serious incidents that have occurred in connection with this product to the manufacturer and your national competent authority.

Only a fully functional product meets the safety requirements of users, patients, and third parties. Therefore, observe the following instructions on your product:

Please read and pay attention to the safety instructions prior to using the product.

2.2 Danger for users, patients, and third parties

WARNING

Choking hazard for children due to accessories!

Children can strangle themselves or choke on small parts.

- Keep children away from hoses and connection cables.
- Keep children away from swallowable small parts. Examples of swallowable small parts are the fingertip and sealing ring.

CAUTION

Explosion and fire hazard!

Burns and injuries are possible.

- Never suction any explosive, flammable, or corrosive gases or liquids. Please observe the product's intended purpose in chapter 'Intended purpose' on page 7.
- Never operate the product in potentially explosive areas or areas that are oxygenated.
- Use only original accessories and original spare parts from ATMOS. This applies to the power supply cable in particular.

WARNING

Avoid misuse.

Your patient can be severely injured.

- The product may be used only by medically trained persons who have been instructed in the handling of the medical suction system.
- The product may be used only by qualified personnel in supervised operation.
- Select the vacuum according to the patient and the application.
- Observe the valid guidelines.
- Always set up the device in such a way that the operating elements are in clear view and within easy reach of the operator. The device must be placed on a stable, level surface.

⚠ WARNING

Ensure that the device is always functional and ready for use.


Your patient could suffocate.

- Before connecting the device, check whether the required mains voltage on the device matches the mains voltage of the mains power supply.
- Position the device in an easily accessible location and keep access free.
- Make sure that the power supply cable is working. Replace defective accessories immediately.
- Always carry out a function check each time before using the device.
- ATMOS recommends always having another suction device ready at hand. That way you can also perform suctioning if a device should fail.

⚠ WARNING

Risk of infection due to pathogens on the product!

Deadly diseases can be transmitted.

- Always wear disposable gloves if you might come into contact with secretion.
- Always wear disposable gloves when using the product.
- Never use components that are marked with  more than once. These components are intended for single use only.
- Use sterile-packed parts only if the packaging is undamaged.
- Never operate the device without a bacterial and viral filter.
- A suction catheter, suction attachment, or medical suction instrument must always be connected to the suction hose. The suction hose must never come into direct contact with the suction area.
- Clean and disinfect the product after every use.
- Clean and disinfect the product according to the operating instructions.
- The product must not be used following oversuction.

⚠ WARNING

Tripping hazard due to cables.

Injuries and fractures are possible.

- Lay the power supply cable properly.

⚠ WARNING

Electric shock due to unsuitable power connection, incorrect handling of the product, or damaged product components.

Burns, cardiac arrhythmias, and even fatal injury are possible.

- Do not operate the device if it has been dropped. In this case, clean and disinfect the device and send it to ATMOS for repair.
- Always check the device and power supply cable for damage before every use. Do not operate the device if you notice any damage. In this case, clean and disinfect the device and send it to ATMOS for repair.
- Disconnect the device from the mains power supply prior to cleaning or disinfection.
- You can disconnect the device from the mains power supply only by pulling out the power plug.
- Position the device in such a way that you can easily disconnect it from the mains power supply at any time.
- Never connect the device to a mains power supply without a protective conductor.
- Never touch the power supply cable with wet hands.
- Use the power supply cable only in a dry environment. The surroundings must be non-conductive.
- Ensure that no liquid penetrates the device. If liquid has entered the device, stop operating the device immediately; it must no longer be used. In this case, clean and disinfect the device and send it to ATMOS for repair.
- Use the power supply cable only according to the operating instructions.
- Use only proper mains connections and extension cords.
- Never touch the device's interfaces and the patient at the same time!
- Use only original accessories and original spare parts from ATMOS. This applies to the power supply cable in particular.
- Observe the specifications regarding periodic tests in chapter '7.1 Periodic tests' on page 32.
- Assembly, new settings, alterations, extensions, and repairs may be carried out only by authorised persons.
- Do not modify the device without the manufacturer's permission.

2.3 Avoiding damage to the device

NOTICE

Storage and operation in an unsuitable environment.

The product can become damaged.

- Please observe the environmental conditions for transport, storage, and operation.
- After transporting the device at low temperatures, keep it at room temperature for at least six hours before initial start-up. If the device is not acclimatised, it may not be used as the diaphragms of the pump can become damaged.

3 Setting up and starting up

☞ Always place the device on a firm and level surface.

3.1 Device overview

Front view ATMOS C 451



- ❶ DDS secretion canister lid
- ❷ DDS secretion canister
- ❸ Vacuum gauge
- ❹ On/off switch
- ❺ Vacuum regulator

Vacuum connection: Direct Docking System



☞ The vacuum connection between the pump and secretion canister is established immediately when the DDS secretion canister is attached.

Connector panel on the bottom of the device



Connecting the power supply cable:

- ☞ Use only power supply cables with angled IEC connectors!
- Check that the mains voltage and mains frequency specified on the device correspond to the values of the mains power supply.



Connecting the foot switch (option only with ATMOS C 451):

- Slide the knurled nut onto the hose of the foot switch.
- Insert the hose of the foot switch onto the connecting nipple.
- Tighten the knurled nut



Vacuum connection on bottom for system trolley / foot controller (only ATMOS C 451)

- To connect, press the coupler firmly into the jack until it locks into place (serves to establish a vacuum connection for the foot controller or the secretion canisters attached to the system trolley).
- To remove, press the metal release button on the side and pull the hose out of the jack.

4 Operation

4.1 Initial start-up

- ☞ Observe the safety instructions prior to initial start-up!
- ☞ After transporting the device at low temperatures, it should be kept at room temperature for at least six hours before initial start-up; otherwise, the device must not be operated.

4.2 Preparing the device

- Check that the voltage and frequency information specified on the device corresponds to the values of the mains power supply and then connect the device to the mains.
- » The device is now ready for use.

4.3 Assembly of the DDS secretion canister



- ❶ DDS secretion canister handle
- ❷ Hydrophobic DDS bacterial and viral filter
- ❸ DDS hose adapter
- ❹ DDS canister lid
- ❺ DDS splash protection
- ❻ DDS secretion canister

4.4 Using the DDS splash protection



1. **Push** the splash protection onto the connection piece on the DDS canister lid.
- ☞ The splash protection protects the DDS bacterial and viral filter against premature moistening by liquids and/or foam generation.

4.5 Attaching and removing the DDS secretion canister lid

1. **Place** the DDS secretion canister on a firm surface and set the DDS secretion canister lid horizontally on it (the lid cannot be turned incorrectly).
2. Gently **press** the DDS secretion canister lid with both hands onto the DDS secretion canister as far as it will go.
3. To **open** the DDS canister lid, hold it on the reinforcement bars of the mounting fixture and then pull the DDS canister lid up and off by reaching into the opening for the filter.

4.6 Inserting and removing the DDS bacterial and viral filter / oversuction stop



The DDS bacterial and viral filter / oversuction stop is intended for single use only.

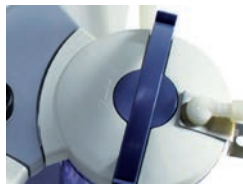
- ☞ Before each use, check that the DDS bacterial and viral filter / oversuction stop is dry and clean. Replace the DDS bacterial and viral filter with a new DDS bacterial and viral filter if it is discoloured or contaminated or if oversuction has occurred.
- Push the DDS bacterial and viral filter onto the DDS secretion canister handle.

4.7 Attaching, closing, and opening the DDS secretion canister handle



1. To **attach** the DDS secretion canister handle, insert it into the grooves of the canister lid (with the locking latches open).
2. To **close** the DDS secretion canister handle, clip the locking latches under the canister rim. Then press the clips towards the secretion canister until they click into place.
3. To **open**, pull the clips outwards and remove the locking latches from under the canister rim.

4.8 Attaching and removing the DDS secretion canister



1. To attach the DDS secretion canister, allow it to slide vertically downwards into the mounting fixture.
2. To remove the DDS secretion canister, lift it vertically upwards.

4.9 DDS secretion canister hose holder



1. If using a DDS secretion canister hose holder, attach it between the canister lid and the hose adapter.

4.10 Inserting the DDS hose adapter



1. Insert the DDS hose adapter (Ø 6 or 10 mm) into the 'Patient' opening on the DDS canister lid.
 2. Turn it slightly and press it down.
- ☞ The adapter can be removed again by turning it slightly.

4.11 Connecting the suction hose



- ☞ Connect the suction hose to the already inserted hose adapter.

4.12 On/off switch



- Press the 'I' symbol to switch on the device.
- Press the 'O' symbol to switch off the device.
- In position 'O', the device is ready for optional foot switch operation (see options).

4.13 Adjusting the vacuum



- Close the suction hose and set the desired vacuum by turning the vacuum regulator according to the direction of the arrow.
- ☞ Please do not use brute force!
 - Test the system for leaks if the desired vacuum is not achieved.

4.14 Suctioning

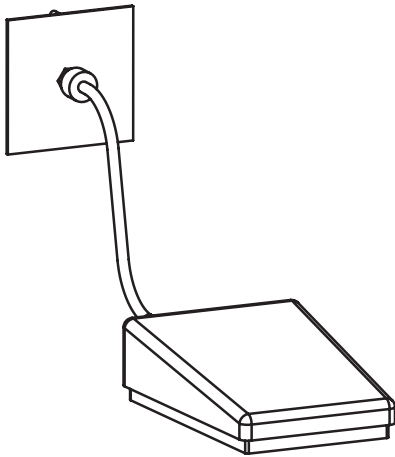
1. Please ensure that the following parts have been reprocessed before treating a new patient:
 - Suction hose including suction attachment or suction instrument
 - Secretion canister including secretion canister lid and double hose connector
 - Vacuum hose
2. Prior to each use, check whether the DDS bacterial and viral filter was inserted during cleaning or disinfection.

3. Replace the DDS bacterial and viral filter with a new DDS bacterial and viral filter if it is discoloured or contaminated or if oversuction has occurred.
 4. Switch on the device.
 5. Close the suction hose and set the desired vacuum.
 6. Connect the suction catheter, suction attachment, or suction instrument.
- ☞ Observe the liquid level in the secretion canister while suctioning. The DDS bacterial and viral filter prevents liquid from being sucked into the pump. Nevertheless, the canister should be emptied or replaced when it is 2/3 full (including foam crown).
 - ☞ If liquid has been sucked into the pump despite an installed DDS bacterial and viral filter, the device must not be operated again until it has been checked by an authorised service partner.

4.15 Checking the DDS bacterial and viral filter / oversuction stop

- The DDS bacterial and viral filter / oversuction stop is intended for single use only.
- ☞ Before each use, check that the DDS bacterial and viral filter / oversuction stop is dry and clean. Replace the DDS bacterial and viral filter with a new one if it is discoloured or contaminated, or if oversuction has occurred.
- ☞ Replace the DDS bacterial and viral filter every time you clean or disinfect the DDS canister system.
- ☞ Never operate the device without an installed DDS bacterial and viral filter / oversuction stop.

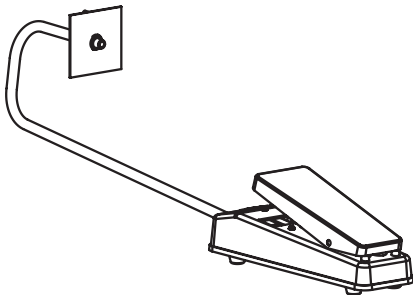
5 Options



Foot switch (only ATMOS C 451) REF 443.0755.0

Pneumatically explosion-proof switch for switching the device on and off.

1. Connect the foot switch.
2. Set the main switch on the device to 'O' (off).
3. Pressing the foot switch turns the device on.
4. When you press the foot switch again, the device is switched off.



Foot control (only ATMOS C 451) REF 443.0770.0

Foot controller for regulating the vacuum.

1. Connect the foot controller on the bottom of the device as described in chapter '3 Setting up and starting up' on page 18.
2. To increase the vacuum, press the pedal down.
 - When you lift off your foot, the controller locks in that position.



System trolley

- For mobile use, a system trolley is available that can be used with two ATMOS secretion canister systems on the DDS switchover station or with disposable systems.
- Always position the system trolley on a flat, stable surface during operation.



Trolley with standard rail

- Unlike the system trolley, the trolley with standard rail does not have a DDS switchover station. However, canisters can still be used directly on the device.
- The standard rail on the trolley offers the option of mounting ATMOS disposable suction systems, a large basket, or other accessories.
- Always position the trolley on a flat, stable surface during operation.

5.1 Securing the device



- ☞ Safe operation of the mobile suction device is ensured only when used with the corresponding special system trolley or trolley with standard rail.
- The suction device is placed on the system trolley in such a way that its feet engage in the holes of the trolley. The device can be secured to the trolley from below by means of a knurled screw.
- ☞ For safe operation as well as safe mobility, it is absolutely necessary to secure the device to the trolley.



- If necessary, tighten the lockable castors.

5.2 Walking with the system trolley



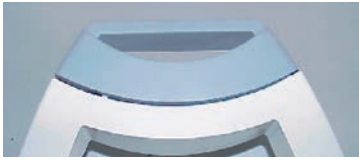
- Always push the device with the open fork of the trolley pointing in the direction you are moving.
- Push the device with one or both hands on the grip area.
- Make sure the cables and hoses are secure.
- ☞ Never leave the system trolley on an inclined surface!

5.3 DDS switchover station

- ☞ The maximum load of the station is 15 kg; higher loads may damage the device!

The DDS switchover station is used if two secretion canisters are required. The switchover lever serves to switch the vacuum to the secretion canister being used. When removing or attaching a secretion canister, switch the lever towards the second secretion canister.

5.3.1 ATMOS C 451



- The adapter with standard rail (REF 340.0331.0 / 340.0058.0) is required to use the bottom vacuum connection. This adapter seals the upper vacuum connection and allows you to hang accessories on the standard rail section now available.
- Mount the adapter with standard rail to the mounting fixture of the suction device as described in the enclosed assembly instructions.
- As with the device itself, the secretion canisters are inserted vertically from above into the DDS switchover station.



5.3.2 ATMOS C 361



- To use the DDS switchover station on the ATMOS C 361, you need the DDS standard rail adapter with vacuum connection (REF 340.0059.0).



- Use a hose to connect the DDS standard rail adapter with vacuum connection to the DDS switchover station. We recommend using a silicone hose (inner diameter 6 mm).

5.4 Tray for the system trolley base



- A tray (optionally available) can be placed on the base of the trolley and used for storage.

5.5 Potential equalisation



- Optionally, a potential equalisation connection can be mounted on the system trolley (in the mounting groove). Assembly is carried out according to the enclosed assembly instructions.

5.6 Use of disposable suction systems (ATMOS, Serres®, Medi-Vac®, Receptal®)

- ☞ Observe the operating instructions by the manufacturer of the corresponding canister system.
- ☞ Do not operate the device without a bacterial filter.



Disposable systems for tabletop devices:

Optionally, the suction device can also be used as a tabletop unit with disposable suction systems that can be attached to a standard rail.

Use the DDS standard rail adapter with vacuum connection (REF 340.0059.0) for the devices ATMOS C 451 / C 361.



Disposable systems for use with a system trolley:

If the suction device is installed on a system trolley, disposable systems can also be used. Again, these can also be hung on a standard rail.

You will need the standard rail set for mounting on the system trolley.

- For ATMOS C 451, close off the upper vacuum connection by means of the standard rail adapter (REF 340.0331.0 / 340.0058.0) in order to use the vacuum connection on the underside of the device.
- For ATMOS C 361, use the vacuum connection on the device for disposable systems by means of the DDS standard rail adapter with vacuum connection (REF 340.0059.0). The latter is also possible with the ATMOS C 451.



Disposable systems for use with a trolley with standard rail:

The trolley (REF 320.0070.1) comes equipped with a standard rail. A separate standard rail set is therefore not required. In addition, disposable systems can be used here in the same way as with the system trolley.

6 Reprocessing

6.1 Safety instructions for reprocessing

6.1.1 General safety instructions

We recommend that you always document all maintenance work and part replacements in writing.

It is the responsibility of the user to ensure that the required results of cleaning and disinfection are achieved. Generally, validation and routine monitoring of the procedure will be necessary.

Reprocessing may be carried out only by persons who have the necessary expertise. The person in question must have the necessary equipment to carry out these measures.

6.1.2 Danger for users, patients, and third parties

Risk of infection due to unsuitable accessories.

Deadly diseases can be transmitted.

- Always wear your own personal protective equipment. The protective equipment consists of protective gloves, protective clothing, goggles, and mouth and nose protection for all steps in which the product components are still contaminated.
- Use only aids that can be easily reprocessed or ones that are disposable products.

Risk of infection due to unsuitable reprocessing.

Deadly diseases can be transmitted.

- Make sure that all areas of the accessories can be easily reached.
- Use only suitable load carriers for mechanical reprocessing. This especially applies to accessories with hollow spaces and lumens that are hard to reach.
- Make sure that air bubbles do not form in the hollow spaces and lumens of accessories when placing them in processing solutions.

6.1.3 Avoiding damage to the device

Damage to the device due to cleaning with fixatives!

Stains cannot be removed permanently.

- Do not use aldehydes before and during cleaning.
- Do not expose the product to temperatures above 40 °C / 104 °F before and during cleaning.

Unsuitable aids.

The product can become damaged.

- Use only lint-free, soft cloths.
- Always use demineralised water for the final rinse.
- Follow the corresponding operating instructions of all accessories and devices used.

Unsuitable cleaning agents and disinfectants.

The product can become damaged.

- Do not use any process chemicals containing the following ingredients **on plastic parts**:
 - Chloramides or phenol derivatives
- Do not use any process chemicals containing the following ingredients **on stainless steel**:
 - Organic or inorganic bases
 - Alkaline solutions

Incorrect mechanical cleaning and disinfection.

Corrosion due to moisture.

- Remove the products immediately after the programme is finished.

6.2 Preparing surfaces

6.2.1 Overview

Surface	After each application	After each patient	Daily	Weekly	Every 14 days	Monthly	Pre-cleaning	Wipe cleaning	Wipe disinfection	Spray disinfection	Remarks
Housing	X						X		X		

6.2.2 Selecting process chemicals

Always observe the manufacturer's specifications for the process chemicals.

Agent (manufacturer)	Active ingredients in 100 g	Type	Housing
Disinfection			
Green&Clean SK (Metasys)	< 1 g dialkyldimethylammonium chloride, < 1 g alkyldimethylethylbenzylammonium chloride, < 1 g alkyldimethylbenzylammonium chloride	Foam Ready-to-use	X
Dismozon® plus (Bode Chemie)	95.8 g magnesium monoperoxyphthalate hexahydrate	Granulate	X
Kohrsolin® FF (Bode Chemie)	5 g glutaral, 3 g benzyl-C12-C18-alkyldimethylammonium chlorides, 3 g didecyldimethylammonium chloride	Liquid Concentrate	X
Kohrsolin® extra (Bode Chemie)	14.1 g (ethylenedioxy)dimethanol, 5 g glutaral, 8 g didecyldimethylammonium chloride	Liquid Concentrate	X
perform® (Schülke & Mayr)	45 g pentapotassium bis(peroxymonosulphate) bis(sulphate)	Powder	X
Mikrobac® forte (Bode Chemie)	19.9 g benzyl-C12-18-alkyldimethylammonium chloride, 5 g N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Liquid Concentrate	X

Agent (manufacturer)	Active ingredients in 100 g	Type	Housing
Bacillo® 30 Foam (Bode Chemie)	14 g ethanol, 10 g propan-2-ol, 6 g propan-1-ol, 0.5 g N-alkyl-aminopropylglycine	Foam Ready-to-use	x
Incidin® Active (Ecolab)	peracetic acid	Powder	x
mikrozid® sensitive wipes (Schülke & Mayr)	0.26 g alkyl(C12-16)dimethylbenzylammonium chloride, 0.26 g didecyldimethylammonium chloride, 0.26 g alkyl(C12-14)ethylbenzylammonium chloride	Wipes	x

6.2.3 Pre-cleaning

1. Disconnect the device from the mains power supply.
 2. Clean the surface evenly with a suitable cloth and clean water. Pay particular attention to hard-to-reach areas.
- » No more soiling is visible.

6.2.4 Wipe disinfection

1. Always observe the manufacturer's specifications for the process chemicals.

6.3 Reprocessing the accessories

6.3.1 Overview

Accessory / Instrument / Endoscope	Disposable product	Max. reprocessing cycles	After each application	After each patient	Daily	Weekly	Every 14 days	Monthly	Pre-treating	Pre-cleaning	Manual cleaning and disinfection	Mechanical cleaning and disinfection	Sterilising
• DDS secretion canister		60	x						x	x		x	x
• DDS canister lid ²		x	x						x	x		x	x
☞ DDS secretion canister handle		60											
☞ DDS splash protection													
☞ DDS hose adapter													
• Hydrophobic DDS bacterial and viral filter ¹	x ³												
Hoses													
• Suction hose		60	x						x	x		x	x

¹Replace the DDS bacterial and viral filter if it is discoloured, soiled, or if oversuction has occurred; see chapter '4.15 Checking the DDS bacterial and viral filter / oversuction stop' on page 22.

²If an accessory shows any visible damage, please replace it.

³Replace the DDS bacterial and viral filter at every cleaning or when disinfecting the DDS canister system.

6.3.2 Selecting process chemicals

Always observe the manufacturer's specifications for the process chemicals.

Agent (manufacturer)	Active ingredients in 100 g	Type	Secretion canister	Hoses
Cleaning agents – Mechanical reprocessing				
neodisher® MediClean forte (Dr. Weigert)	< 5 % nonionic and anionic surfactants, enzymes	Liquid concentrate		x
neodisher® AN (Dr. Weigert)	< 5 % nonionic surfactants, > 30 % phosphates, enzymes	Powder	x	
Neutraliser				
neodisher® Z (Dr. Weigert)	Preservative (2-octyl-2H-isothiazol-3-on)	Liquid Concentrate	x	

6.3.3 Secretion canister system

Characteristics

The accessories have the following hard-to-reach areas:

- DDS hose adapter (lumens)
- Canister lid (hollow spaces)

Take particular care when reprocessing hard-to-reach areas.

Pre-treating at the site of use <ul style="list-style-type: none"> • Flushing: 60 s • Rinsing: 60 s 	<ul style="list-style-type: none"> • Empty the secretion canister. • Clean the accessories under cold, running water. • Thoroughly rinse the hollow spaces and lumens of the accessories with running water. No more residue is visible.
Collecting and transporting	Mark any damaged accessories. Place the accessories in a secretion canister. Transport the secretion canister to the reprocessing site.
Dismantling	<ul style="list-style-type: none"> • See chapter '6 Reprocessing' on page 27 • Dispose of disposable products
Pre-cleaning <ul style="list-style-type: none"> • Flushing: 1x / 30s • Rinsing: 60 s Brush: Round brush Size: 7 mm, Material: Nylon Brush: Round brush Size: 11 mm, Material: Nylon Brush: Round brush Size: 15 mm, Material: Nylon Brush: Square Size: 40 x 10 mm, Material: Nylon, features: With angled head	Make the following hollow spaces accessible: <ul style="list-style-type: none"> • Double socket nipple • Canister lid Make the following lumens accessible: <ul style="list-style-type: none"> • Double socket nipple Clean the accessories evenly with a suitable brush under running water. Thoroughly rinse out the hollow spaces and lumens of the accessories with running water.

<p>Mechanical cleaning and disinfection Pre-wash: 1 min Clean: 5 min, 50 °C / 122 °F Neutralise: 2 min Intermediate rinse: 1 min Disinfect: 5 min, 93 °C / 199 °F Dry: 12 min, 110 °C / 230 °F</p>	<p>Secure the accessories on a suitable load carrier.</p> <ul style="list-style-type: none"> • Clean and disinfect using a suitable programme: <ul style="list-style-type: none"> – Pre-rinse with cold water – Cleaning with a cleaning agent – Neutralise with a neutralising agent – Intermediate rinse with softened, cold water – Disinfection with demineralised water – Drying • Washer-disinfector: according to EN ISO 15883-1 • Programme: Miele Vario TD
<p>Checking and maintaining</p>	<ul style="list-style-type: none"> • Check whether reprocessing was successful using a suitable light magnifier. • If reprocessing was unsuccessful, reprocess the accessories again. • Dispose of damaged accessories or have them repaired.
<p>Assembly</p>	<p>Not necessary.</p>
<p>Function check</p>	<p>Not necessary.</p>
<p>Packaging</p>	<ul style="list-style-type: none"> • Label the accessories. • Pack the accessories using a packaging system according to DIN EN ISO 11607.
<p>Sterilisation Pre-fractionated vacuum: 3x Temperature: 134 °C / 273 °F Time: 5 min Dry: 10 min</p>	<ul style="list-style-type: none"> • Sterilise the accessories using a suitable procedure: Steam sterilisation / autoclaving Steriliser: according to EN 285
<p>Storage</p>	<p>Observe the environmental conditions; see chapter '12 Technical data' on page 39.</p>

7 Maintenance and service

Maintenance, repairs, and periodic tests may be carried out only by persons who have the appropriate technical knowledge and are familiar with the product. The person in question must possess the necessary test devices and original spare parts required to carry out these measures.

ATMOS recommends: Work should be carried out by an authorised ATMOS service partner. This ensures that repairs and tests are carried out professionally, original spare parts are used, and warranty claims are maintained. Maintenance, repairs, and periodic tests must **not** be performed while the product is being used on a patient.

7.1 Periodic tests

- Perform a repeat test of the electrical safety according to IEC 62353 at least every 24 months.
- In this context, ATMOS recommends arranging for an inspection in accordance with the manufacturer's specifications.

7.2 Function check

- Prior to every use, perform a visual inspection of the device, hoses, secretion canisters, and connection cables.
- Replace any damaged parts immediately.

7.3 Sending in the device

1. Remove all consumables and dispose of them properly.
2. Clean and disinfect the product and accessories in accordance with the operating instructions.
3. Enclose any used accessories with the product.
4. Fill in form QD 434 'Delivery complaint / return shipment' and the corresponding **Decontamination certificate**.
- ☞ This form is enclosed with each delivery and can be found at www.atmosmed.com.
5. The product must be well padded and packed in suitable packaging.
6. Place the form QD 434 'Delivery complaint / return shipment' and the corresponding **Decontamination certificate** in an envelope.
7. Affix the envelope to the outside of the package.
8. Send the product in to ATMOS or your dealer.

7.4 Reprocessing by the manufacturer

If you pass on the device to a new owner, it must be reprocessed professionally. The device may be passed on only in a hygienically and technically safe condition. Observe country-specific regulations.

In Germany, only ATMOS or authorised professionals may reprocess the device for distribution.

7.5 Changing the fuse



1. Remove the power supply cable.
2. Press the spring clips on both sides of the fuse holder with a screwdriver and pull out the fuse holder.
3. Replace the fuse and reinsert the holder until both spring clips engage again.
4. Then reconnect the power supply cable.



8 Troubleshooting

The product has been subjected to a thorough quality control in the factory. If a fault should occur despite this care, you may be able to resolve it yourself.

Error symptom	Possible cause	Remedy
Device does not start	<ul style="list-style-type: none"> • Power plug fits poorly • No mains voltage • Defective fuse 	<ul style="list-style-type: none"> • Check connection at wall socket • Check main fuse • Exchange the fuse
Insufficient flow	<ul style="list-style-type: none"> • Leakage in the suction hose lines or in the secretion canister lid 	<ul style="list-style-type: none"> • Check the secretion canister lid and hose lines for secure fit
No suction capacity	<ul style="list-style-type: none"> • Hydrophobic DDS bacterial and viral filter is blocked (vacuum gauge indicates vacuum) • Secretion or blood was sucked in and the valve plates of the aggregate are stuck together 	<ul style="list-style-type: none"> • Change the hydrophobic DDS bacterial and viral filter and possibly check the fluid level in the DDS secretion canister; empty the secretion canister if necessary ☞ In this case, the device must be sent in for repair

9 Accessories

Accessories	REF
Foot switch	443.0755.0
Foot control for ATMOS C 451 (0...-91 kPa)	443.0310.1
Potential equalisation for system trolley	340.0082.0
Cable for potential equalisation	008.0596.0
System trolley ATMOS C 451 – for self-assembly	340.0070.0
System trolley ATMOS C 451, installed	340.0170.0
System trolley ATMOS C 451, DDS-switchover station – fully assembled	340.0171.0
System trolley ATMOS C 451, standard rail – fully assembled	340.0172.0
Trolley with standard rail ATMOS C 451 / C 361	320.0070.1
Standard rail set for system trolley	340.0081.0
Tray for system trolley	340.0084.0
Support for standard rail ATMOS C 451/ ATMOS C 361	340.0210.0
DDS-standard rail adapter with vacuum connection	340.0059.0
Standard rail adapter ATMOS C 451 / ATMOS C 361	340.0058.0
Quick connector for ATMOS C 451	000.0769.0
User package 1.5 l	340.0002.0
User package 3 l	340.0003.0
DDS-secretion canister, plastic, 1.5 l, autoclavable	340.0050.0
DDS-secretion canister, plastic, 3 l, autoclavable	340.0051.0
DDS-secretion canister, plastic, 5 l, autoclavable	340.0052.0
DDS-canister set 2 x 3 l, autoclavable	444.0901.0
DDS-canister set 2 x 5 l, autoclavable	444.0902.0
DDS-canister lid, complete set	340.0040.0
DDS-canister lid with gaskets, autoclavable	340.0053.0
DDS-canister handle, grey, autoclavable	340.0055.0
DDS-canister handle, blue, autoclavable	340.0326.0
DDS-splash protection, silicone, autoclavable	340.0056.0
DDS-hose adapter set (Ø 6 mm + Ø 10 mm), autoclavable	340.0057.0
DDS-hose holder, autoclavable	340.0066.0
DDS adapter for tissue collector	340.0062.0
DDS-switchover station	340.0080.0
Secretion canister 1.5 l (PC)	444.0100.0
Secretion canister 2.5 l (PC)	444.0099.0
ATMOS-External Canister 1 l	401.0100.0
ATMOS-External Canister 2 l	401.0200.0
ATMOS-External Canister 3 l	401.0300.0
Secretion canister lid	444.0650.0
Secretion canister lid incl. standard rail holder	444.0015.0
Socket nipple set	444.0640.0
Double socket nipple with overflow electrode	444.0012.0

Accessories	REF
Serres®-external canister 1 l	312.0465.0
Serres®-external canister 2 l	310.0402.0
Serres®-external canister 3 l	310.0403.0
Standard rail clamp Serres® complete	444.0484.0
Receptal®-external canister 1.5 l	310.0221.0
Receptal®-external canister 2 l	443.0256.0
Receptal®-external canister 3 l	444.0157.0
Receptal®-holder for standard rail, 1 x 2 l	444.0160.0
Receptal®-holder for standard rail, 1 x 3 l	444.0170.0
Receptal®-holder for standard rail, single	444.0150.0
Receptal®-holder for standard rail, double	444.0156.0
Standard rail support Receptal®	HM57525661
Receptal®-adapter for tissue collector	444.0148.0
Medi-Vac®-external canister 1 l	312.0473.0
Standard rail support Medi-Vac®	444.0451.0
Vacuum shift	HM57522049
Rail clamp for equipment mount, plastic	HM57522540
Rail clamp for equipment mount, metal	HM57522048
Safety canister 250 ml (without hydrophobic DDS bacterial and viral filter)	444.0646.0
Safety canister 250 ml (with hydrophobic DDS bacterial and viral filter)	444.0646.1
Hose bracket, for attaching to standard rail	444.0450.0
Hose bracket, stainless steel	320.0611.0
Support for carbon filter, not autoclavable	444.0660.0
Deposit tray, stainless steel	443.0790.0
Bowl, diameter 20 cm	HM57524538
Basket, dimensions 170 x 130 x 85 mm	HM57508012
Catheter holder for trolley, dimensions 150 x 100 x 480 mm	HM57508002
Catheter holder, dimensions 90 x 90 x 350 mm	HM57505157
Catheter tubular	HM57525150
Cover for catheter tubular	HM57525151

10 Consumables

Consumables	REF
Hydrophobic DDS bacterial and viral filter for ATMOS DDS secretion canister, pack of 10 pcs.	340.0054.0
Hydrophobic bacterial and viral filter, Ø 11 mm	443.0738.0
Hydrophobic bacterial and viral filter, Ø 8 mm	444.0628.0
Smoke evacuation filter	HM57524928
Suction hose, PVC, disposable product, Ø 6 mm, L = 1.30 m, 10 pcs.	006.0057.0
Suction hose, PVC, disposable product, Ø 8 mm, L = 2.10 m, 50 pcs.	006.0059.0
Suction hose, silicone, Ø 6 mm, L = 1.30 m, 1 pc.	000.0013.0
Suction hose, silicone, Ø 6 mm, L = 2 m, 1 pc.	000.0361.0
Suction hose, silicone, Ø 6 mm, 1 m (minimum 5 m)	006.0009.0
Suction hose, silicone, Ø 10 mm, L = 1.3 m, 1 pc.	318.1012.0
Suction hose, silicone, Ø 10 mm, L = 2 m, 1 pc.	000.0243.0
Suction hose, silicone, Ø 10 mm, 1 m (minimum 5 m)	006.0026.0
Tissue collector 300 ml, disposable	340.0061.0
Hose connector for reducing from Ø 10 mm to Ø 6 mm	000.0239.0
ATMOS-Suction Bag 1 l with Gelling Agent, 100 pcs.	401.0101.0
ATMOS-Suction Bag 1 l, 100 pcs.	401.0102.0
ATMOS-Suction Bag 2 l with Gelling Agent, 100 pcs.	401.0201.0
ATMOS-Suction Bag 2 l, 100 pcs.	401.0202.0
ATMOS-Suction Bag 3 l with Gelling Agent, 70 pcs.	401.0301.0
ATMOS-Suction Bag 3 l, 70 pcs.	401.0302.0
Serres®-suction bag 1 l, 36 pcs.	312.0466.0
Serres®-suction bag 1 l, gelling agent, 32 pcs.	312.0467.0
Serres®-suction bag 2 l, 24 pcs.	310.0410.0
Serres®-suction bag 2 l, gelling agent, 22 pcs.	310.0400.0
Serres®-suction bag 3 l, 24 pcs.	310.0411.0
Serres®-suction bag 3 l, gelling agent, 20 pcs.	310.0401.0
Serial tube 287 mm with angle blue	HM57522085
Vacuum serial tube silicone, 175 mm	HM57522084
Receptal®-suction bag 1.5 l, w/o filter, 50 pcs.	310.0222.1
Receptal®-suction bag 1.5 l, with filter, 50 pcs.	310.0222.2
Receptal®-suction bag 2 l, w/o filter, 50 pcs.	443.0257.0
Receptal®-suction bag 2 l, with filter, 50 pcs.	443.0257.2
Receptal®-suction bag 3 l, w/o filter, 50 pcs.	444.0153.0
Receptal®-suction bag 3 l, with filter, 50 pcs.	444.0154.0
Medi-Vac®-suction bag 1 l, 50 pcs.	312.0474.0
Spare parts	
Fuse 230 V, T 0.63, A/H	008.0634.0
Power supply cable 5 m	008.0818.0
Fixing screw for system trolley	000.0726.0
Clamp ring for fixing screw	000.0727.0

11 Disposal

Packaging

1. Please recycle the product packaging.

Secretion and blood

1. Please dispose of secretion, blood, and contaminated parts in line with country-specific regulations.

In the Federal Republic of Germany, the requirements of the 'Implementation Aid for Disposal of Waste from Healthcare Institutions' apply, a statement issued by the Federal / State Working Group on Waste.

Secretion canister system

Disposable products may not be reprocessed and may not be reused! Please dispose of disposable products properly.

The following notes apply only to reusable products.

1. Clean and disinfect the reusable products of the secretion canister system.
2. Recycle the disinfected reusable products.

ATMOSC 451 / C 361

Do not dispose of the product together with household waste.

The product does not contain any hazardous materials.

1. Clean and disinfect the product.
2. In Germany: Send the product back to ATMOS or your specialist dealer. They will dispose of the product properly.
3. In other countries: Dispose of the product properly and in accordance with country-specific laws and regulations.

In Germany, the product is excluded from the Electrical and Electronic Equipment Act (ElektroG) in accordance with the National Register for waste electric equipment because it can be contaminated. Do not dispose of the product in electronic waste.

The housing is fully recyclable. Observe country-specific laws and regulations.





11.1 Expected service life

When used according to the operating instructions, the device (ATMOS C 451 / C 361) has an expected service life of 8 years. Regular thorough cleaning and disinfection of the suction device and its applied parts as well as operation of the device in line with the operating instructions are assumed.

12 Technical data

12.1 ATMOS C 451

Input voltage	230 V~ ± 10 %, 50/60 Hz
Current consumption	0.6 / 0.75 A (230 V~)
Power consumption	138 / 173 VA
Fuses	T 800 mA/H (for 230 V~, 50/60 Hz)
Aggregate suction capacity	45 l/min +3/-5 l/min
Max. vacuum at sea level	-91 kPa (-910 mbar or 682.5 mmHg)*@ sea level
Vacuum display	-1...0 bar ± 16 mbar (class 1.6) Ø 63 mm
Secondary air regulation	Mechanical control valve
Secretion canister	Table-top device: <ul style="list-style-type: none"> • reusable 1.5 l / 3 l • disposable 1 l / 2 l Device on trolley with standard rail: <ul style="list-style-type: none"> • reusable 1.5 l / 3 l / 4 l • disposable 1 l / 2 l / 3 l Device on system trolley: <ul style="list-style-type: none"> • reusable 1.5 l / 3 l / 4 l / 5 l • disposable 1 l / 2 l / 3 l
Hose connections	Ø 6 mm or Ø 10 mm
Operating time	> 12 h continuous operation without interruption, within 24 h
Heat dissipation	max. 173 J/s
Noise level	≤ 48 dB(A) @ 1 m (ISO 7779) at max. vacuum
Environmental conditions: Transport/storage	
Temperature range	-30...+50 °C
Air humidity without condensation	5...90 %
Air pressure	700...1060 hPa
Environmental conditions: Operation	
Temperature range	+5...+35 °C
Air humidity without condensation	20...80 %
Air pressure	700...1060 hPa
Overvoltage category	I
Dimensions without secretion canister (H x W x D)	330 x 240 x 360 mm (without trolley with standard rail / without system trolley) 915 x 405 x 455 mm (with trolley with standard rail) 1015 x 370 x 450 mm (with system trolley)
Weight without secretion canister	approx. 6.0 kg (without trolley with standard rail / without system trolley) approx. 11.1 kg (with trolley with standard rail) approx. 14.5 kg (with system trolley)

Periodic tests	Repeat test of the electrical safety every 24 months. Recommended: Inspection according to the manufacturer's specifications.
Protection class against electric shock (acc. to EN 60601-1)	II
Classification of applied parts	Type BF applied parts 
Degree of protection	IPX1
CE marking	
Reference number (REF)	340.0300.0 ATMOS C 451 340.0333.0 ATMOS C 451 mobile (2 x 5 l canister) 340.0334.0 ATMOS C 451 mobile (2 x 3 l canister) 340.0335.0 ATMOS C 451 mobile (2 x 1.5 l canister) 340.0338.0 ATMOS C 451 portable (1 x 3 l canister) 340.0339.0 ATMOS C 451 portable (1 x 1.5 l canister) 340.0355.0 ATMOS C 451 VE 340.0357.0 ATMOS C 451 portable with standard rail 340.0358.0 ATMOS C 451 mobile with standard rail 340.0375.0 ATMOS C 451 mobile with standard rail, installed 340.0376.0 ATMOS C 451 mobile (2 x 1.5 l canister), installed 340.0377.0 ATMOS C 451 mobile (2 x 3 l canister), installed 340.0378.0 ATMOS C 451 mobile (2 x 5 l canister), installed

*Important: Note on MPBetreibV only for devices that are listed there accordingly!



Hydrophobic DDS bacterial and viral filter

Protection against bacteria (BFE)	Filtration efficiency: 99.89667 %*
Protection against viruses (VFE)	Filtration efficiency: 99.0 %*
Filter class	H13 (High-Efficiency Particulate Air/Arrestance)*

*External test report (test laboratory)

12.2 ATMOS C 361

Input voltage	230 V~ ± 10 %, 50/60 Hz
Current consumption	max. 0.45 A (230 V~)
Power consumption	138 VA
Fuses	T 630 mA/H (for 230 V~, 50/60 Hz)
Aggregate suction capacity	36 l/min ± 4 l/min
Max. vacuum at sea level	-91 kPa (-910 mbar or 682.5 mmHg)*@ sea level
Vacuum display	-1...0 bar ± 16 mbar (class 1.6) Ø 63 mm

Secondary air regulation	Mechanical control valve
Secretion canister	Table-top device: <ul style="list-style-type: none"> • reusable 1.5 l / 3 l • disposable 1 l / 2 l Device on trolley with standard rail: <ul style="list-style-type: none"> • reusable 1.5 l / 3 l / 4 l • disposable 1 l / 2 l / 3 l Device on system trolley: <ul style="list-style-type: none"> • reusable 1.5 l / 3 l / 4 l / 5 l • disposable 1 l / 2 l / 3 l
Hose connections	Ø 6 mm or Ø 10 mm
Mode of operation	Continuous operation
Operating time	> 8 h continuous operation without interruption, within 24 h
Heat dissipation	Max. 173 J/s
Noise level	≤ 50 dB(A) @ 1 m (ISO 7779)
Environmental conditions: Transport/storage	
Temperature range	-30...+50 °C
Air humidity without condensation	5...90 %
Air pressure	700...1060 hPa
Environmental conditions: Operation	
Temperature range	+5...+35 °C
Air humidity without condensation	20...80 %
Air pressure	700...1060 hPa
Overvoltage category	I
Dimensions without secretion canister (H x W x D)	330 x 240 x 285 mm (without trolley with standard rail / without system trolley) 915 x 405 x 455 mm (with trolley with standard rail) 1015 x 370 x 450 mm (with system trolley)
Weight without secretion canister	approx. 5.9 kg (without trolley with standard rail / without system trolley) approx. 11.0 kg (with trolley with standard rail) approx. 14.4 kg (with system trolley)
Periodic tests	Repeat test of the electrical safety every 24 months. Recommended: Inspection according to the manufacturer's specifications.
Protection class against electric shock (acc. to EN 60601-1)	II
Classification of applied parts	Type BF applied parts 
Degree of protection	IPX1
CE marking	

Reference number (REF)	340.0001.0	ATMOS C 361
	340.0350.0	ATMOS C 361 portable (1 x 3 l canister)
	340.0351.0	ATMOS C 361 portable (1 x 1.5 l canister)
	340.0360.0	ATMOS C 361 mobile (1 x 1.5 l canister)
	340.0361.0	ATMOS C 361 mobile (1 x 3 l canister)
	340.0362.0	ATMOS C 361 mobile with standard rail
	340.0363.0	ATMOS C 361 portable with standard rail

*Important: Note on MPBetreibV only for devices that are listed there accordingly!

Hydrophobic DDS bacterial and viral filter

Protection against bacteria (BFE)	Filtration efficiency: 99.89667 %*
Protection against viruses (VFE)	Filtration efficiency: 99.0 %*
Filter class	H13 (High-Efficiency Particulate Air/Arrestance)*

*External test report (test laboratory)

13 Notes on EMC

- ☞ Medical electrical equipment is subject to special precautions with regard to EMC and must be installed according to the following EMC notes.

Guidance and manufacturer's declaration – ambient conditions

The ATMOS C 451 / C 361 is suitable for operation in the following environments:

- In professional healthcare facilities such as medical practices, hospitals/clinics, first-aid facilities, and operating theatres/rooms.
It is not suitable for use in the vicinity of HF surgical devices and in settings outside of an HF-shielded room of a magnetic resonance imaging system.
- Special environments such as factory or military facilities and medical areas near HF surgical devices, short-wave therapy equipment, or within an HF-shielded room of a magnetic resonance imaging system.

The customer or user of the ATMOS C 451 / C 361 must ensure that the device is used in a prescribed environment.

Guidance and manufacturer's declaration – key features

- ☞ Please note the Technical Data in these instructions. The essential features are fully usable even in the presence of electromagnetic disturbances.

Guidance and manufacturer's declaration – electrical components

The ATMOS C 451 / C 361 has the following electrical components:

Type	REF	Max. cable length
Power supply cable	008.0818.0	5 m

Guidance and manufacturer's declaration – warnings

⚠ WARNING

The use of electrical components and accessories other than those specified or provided by the manufacturer may cause increased electromagnetic interference or reduced immunity to electromagnetic interference and result in faulty operation of the device.

⚠ WARNING

Portable RF communications equipment (e.g., radios, antenna cables) should be used no closer than 30 cm* to any parts of the ATMOS C 451 / C 361, including cables, specified by the manufacturer. Otherwise, this may lead to a reduction in the device's performance.

- ☞ *The distance may be reduced at higher immunity test levels.

⚠ WARNING

Avoid placing the device on top of or next to another device. This could result in faulty operation. If such placement cannot be avoided, the proper functioning of the device must be monitored regularly. If possible, please switch off any nearby devices that are not in use.



MedizinTechnik

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