BINDER
Best conditions for your success

Operating Manual

Translation of the original operating manual

Environmental Walk-in Chambers WIC (E1)

For Stability Testing and Storage

Model	Model version	Art. No.
WIC 1	WIC1230V	9800-0011
WIC 2	WIC2230V	9800-0012
WIC 3	WIC3230V	9800-0013

BINDER GmbH

- Address: Post office box 102, 78502 Tuttlingen, Germany
- Phone: +49 7462 2005 0
- Internet: www.binder-world.com
- Service Hotline: +49 7462 2005 555
- Service Fax: +49 7462 2005 93 555

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Dear customer,

For the correct operation of the chambers, it is important that you read this operating manual completely and carefully and observe all instructions as indicated. Failure to read, understand and follow the instructions may result in personal injury. It can also lead to damage to the chamber and/or poor equipment performance.

1. Safety

1.1 Personnel Qualification

The chamber must only be installed, tested, and started up by personnel qualified for assembly, startup, and operation of the chamber. Qualified personnel are persons whose professional education, knowledge, experience and knowledge of relevant standards allow them to assess, carry out, and identify any potential hazards in the work assigned to them. They must have been trained and instructed, and be authorized, to work on the chamber.

The chamber should only be operated by laboratory personnel especially trained for this purpose and familiar with all precautionary measures required for working in a laboratory. Observe the national regulations on minimum age of laboratory personnel.

1.2 Operating manual

This operating manual is part of the components of delivery. Always keep it handy for reference in the vicinity of the chamber. If selling the unit, hand over the operating manual to the purchaser.

To avoid injuries and damage observe the safety instructions of the operating manual. Failure to follow instructions and safety precautions can lead to significant risks.

DANGER

Dangers due to failure to observe the instructions and safety precautions.
Serious injuries and chamber damage. Risk of death.

- Observe the safety instructions in this Operating Manual.
- Follow the operating procedures in this Operating Manual.
- Carefully read the complete operating instructions of the chamber prior to installing and using the chamber.
- Keep the operating manual for future reference

Make sure that all persons who use the chamber and its associated work equipment have read and understood the Operating Manual.

This Operating Manual is supplemented and updated as needed. Always use the most recent version of the Operating Manual. When in doubt, call the BINDER Service Hotline for information on the up-to-dateness and validity of this Operating Manual.

Zur Montage des Gerätes beachten Sie die Anweisungen in der WIC Montageanleitung Art.Nr. 7001-0433, die dem Gerät beiliegt.

1.3 Legal considerations

This operating manual is for informational purposes only. It contains information for correct and safe installing, start-up, operation, decommissioning, cleaning and maintenance of the product. Note: the contents and the product described are subject to change without notice.Zur Montage des Gerätes beachten Sie die Anweisungen in der WIC Montageanleitung Art. Nr. 7001-0433, die dem Gerät beiliegt.

Understanding and observing the instructions in this operating manual are prerequisites for hazard-free use and safety during operation and maintenance. Images are to provide basic understanding. They may deviate from the actual version of the chamber. The actual scope of delivery can, due to optional or special design, or due to recent technical changes, deviate from the information and illustrations in these instructions this operating manual. In no event shall BINDER be held liable for any damages, direct or incidental arising out of or related to the use of this manual.

This operating manual cannot cover all conceivable applications. If you would like additional information, or if special problems arise that are not sufficiently addressed in this manual, please ask your dealer or contact us directly, e.g. by phone at the number located on page one of this manual

Furthermore, we emphasize that the contents of this operating manual are not part of an earlier or existing agreement, description, or legal relationship, nor do they modify such a relationship. All obligations on the part of BINDER derive from the respective purchase contract, which also contains the entire and exclusively valid statement of warranty administration and the general terms and conditions, as well as the legal regulations valid at the time the contract is concluded. The statements in this manual neither augment nor restrict the contractual warranty provisions.

1.3.1 Intellectual property

This operating manual is protected by copyright. Any unauthorized copying or disclosure to third parties is strictly prohibited. We reserve the right to take legal action and, if necessary, to assert claims for damages in the event of infringement.

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1.4 Structure of the safety instructions

In this operating manual, the following safety definitions and symbols indicate dangerous situations following the harmonization of ISO 3864-2 and ANSI Z535.6.

1.4.1 Signal word panel

Depending on the probability of serious consequences, potential dangers are identified with a signal word, the corresponding safety color, and if appropriate, the safety alert symbol.

DANGER
Indicates an imminently hazardous situation that, if not avoided, will result in death or serious (irreversible) injury.

WARNING
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious (irreversible) injury.

CAUTION
Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor (reversible) injury.

NOTICE
Indicates a potentially hazardous situation which, if not avoided, may result in damage to the product and/or its functions or of a property in its proximity.

1.4.2 Safety alert symbol

Use of the safety alert symbol indicates a **risk of injury**.

Observe all measures that are marked with the safety alert symbol in order to avoid death or injury.

1.4.3 Pictograms

Warning signs			
Electrical hazard	Explosive atmosphere	Stability hazard	Lifting hazard
Risk of suffocation due to lack of oxygen	High humidity	Pollution Hazard	Risk of corrosion and / or chemical burns
Harmful substances	Biohazard		
Mandatory action signs			
Mandatory regulation	Read operating instructions	Disconnect the power plug	Lift with several persons
Lift with mechanical assistance	Environment protection	Wear protective gloves	Wear safety goggles

Prohibition signs			
Do NOT touch	Do NOT spray with water		

	Information to be observed in order to ensure optimum function of the product.

1.4.4 Word message panel structure

Type / cause of hazard.
Possible consequences.
∅ Instruction how to avoid the hazard: prohibition
➢ Instruction how to avoid the hazard: mandatory action.

Observe all other notes and information not necessarily emphasized in the same way, in order to avoid disruptions that could result in direct or indirect injury or property damage.

	Keep safety labels complete and legible.

Replace safety labels that are no longer legible. Contact BINDER Service for these replacements.

1.5 Type plate

The environmental walk-in chamber WIC is an assembly consisting of the chamber with fittings and the conditioner. The type plate of the WIC overall assembly is located on the right next to the door below the cover of the controller and main power switch.

Figure 1: Location of the WIC type plate

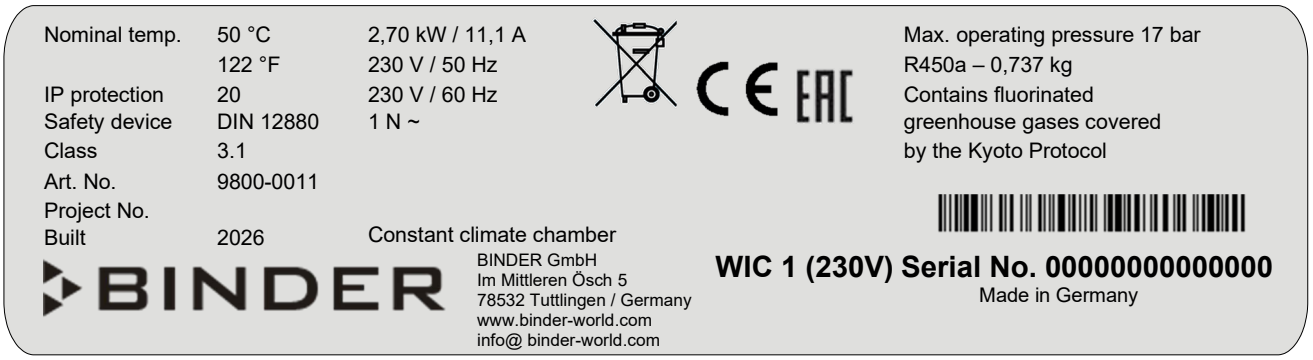


Figure 2: WIC type plate (example WIC 1)

Indications of the WIC type plate (example)

Indication		Information
BINDER		Manufacturer: BINDER GmbH
WIC 1 (230V)		Model designation
Constant climate chamber		Device name
Serial No.	00000000000000	Serial no. of the chamber
Built	2026	Year of construction
Nominal temperature	50 °C / 122 °F	Nominal temperature
IP protection	20	IP type of protection acc. to standard EN 60529
Temp. safety device	DIN 12880	Temperature safety device acc. to standard DIN 12880:2007
Class	1	Class of temperature safety device
Art. No.	9800-0011	Art. no. of the chamber
2,70 kW		Nominal power
11,1 A		Nominal current
230 V / 50 Hz		Nominal voltage range +/-10% at the indicated power frequency
230 V / 60 Hz		
1 N ~		Current type
Max. operating pressure 17 bar		Max operating pressure in the refrigerating system
R450a - 0,737 kg		Refrigerant type and filling weight
Contains fluorinated greenhouse gases covered by the Kyoto Protocol		

Symbols on the WIC type plate

Symbol	Information
CE	CE conformity marking
	Electrical and electronic equipment manufactured / placed on the market in the EU after 13 August 2005 and be disposed of in separate collection according to Directive 2012/19/EU on waste electrical and electronic equipment (WEEE).
EAC	The chamber is certified according to Customs Union Technical Regulation (CU TR) for the Eurasian Economic Union (Russia, Belarus, Armenia, Kazakhstan Kyrgyz-stan).

1.6 UKCA Label

The sticker with UKCA Authorised Representative details is located next to the WIC type plate.

Figure 3: UKCA label

Symbol on sticker

Symbol	Information
UK CA	UKCA Conformity Marking

1.7 General safety instructions on installing and operating the chambers

With regard to operating the chambers and to the installation location, please observe the local and national regulations relevant for your country (for Germany: DGUV guidelines 213-850 on safe working in laboratories, issued by the employers' liability insurance association).

BINDER GmbH is only responsible for the safety features of the chamber provided skilled electricians or qualified personnel authorized by BINDER perform all maintenance and repair, and if components relating to chamber safety are replaced in the event of failure with original spare parts.

To operate the chamber, use only original BINDER accessories or accessories from third-party suppliers authorized by BINDER. The user is responsible for any risk caused by using unauthorized accessories.

NOTICE

Danger of overheating due to lack of ventilation.

Damage to the chamber.

∅ Do NOT install the chamber in unventilated recesses.

➢ Ensure sufficient ventilation for dispersal of the heat.

➢ Observe the prescribed minimum distances when installing the chamber (chap. 3.3)

Do not install or operate the chamber in hazardous locations.

DANGER

Danger of explosion due to combustible dusts or explosive mixtures in the vicinity of the chamber.

Serious injury or death from burns and / or explosion pressure.

∅ Do NOT operate the chamber in potentially explosive areas.

➢ KEEP combustible dust or air-solvent mixtures AWAY from the chamber.

The chamber does not dispose of any measures of explosion protection.

DANGER

Danger of explosion due to introduction of flammable or explosive substances in the chamber.

Serious injury or death from burns and / or explosion pressure.

∅ Do NOT introduce any substance into the chamber which is combustible or explosive at working temperature.

∅ Do NOT introduce any combustible dust or air-solvent mixture in the inner chamber.

Any solvent contained in the loading material must not be explosive or inflammable. I.e., irrespective of the solvent concentration in the steam room, NO explosive mixture with air must form. The temperature inside the chamber must lie below the flash point or below the sublimation point of the loading material. Familiarize yourself with the physical and chemical properties of the loading material, as well as the contained moisture constituent and its behavior with the addition of heat energy and humidity.

Familiarize yourself with any potential health risks caused by the loading material, the contained moisture constituent or by reaction products that may arise during the temperature process. Take adequate measures to exclude such risks prior to putting the chamber into operation.

	DANGER **Electrical hazard by water entering the chamber.** **Deadly electric shock.** ∅ The chamber must NOT become wet during operation, cleaning, or maintenance. ∅ Do NOT install the chamber in damp areas or in puddles. ➢ Set up the chamber in a way that it is splash-proof.

The WIC Chamber is not a workplace. Staying is only permitted for loading and unloading!

Maximum length of stay with the door closed:

- 1 person 20 minutes
- 2 people 10 minutes
- More than two people staying with the door closed is NOT allowed.

We recommend to keep the door always completely open when people are inside. The lockable door can be opened from the inside at any time, even when locked.

	DANGER **Risk of suffocation when the door is locked.** **Death due to suffocation.** ➢ Ensure that people are only in the chamber for loading and unloading. ➢ Observe the maximum permitted length of stay and the maximum number of people with the door closed. ➢ Ventilate the chamber after people have been in the chamber with the door closed.

1.8 Intended use

	Following the instructions in this operating manual and conducting regular maintenance work (chap. 10) are part of the intended use.

Any use of the chambers that does not comply with the requirements specified in this Operating Manual shall be considered improper use.

Other applications than those described in this chapter are not approved.

Use

The environmental walk-in chambers WIC are suitable for temperature and climate tests/stability tests of non-hazardous goods as well as for storage under constant climatic conditions.

Any solvent must not be explosive and flammable. A mixture of any component of the loading material with air must NOT be explosive. The operating temperature must lie below the flash point or below the sublimation point of the loading material. Any component of the loading material must NOT be able to release toxic gases.

The loading material shall not contain any corrosive ingredients that may damage the machine components made of stainless steel, aluminum, and copper. Such ingredients include in particular acids and halides. Any corrosive damage caused by such ingredients is excluded from liability by BINDER GmbH.

The chamber does not dispose of any measures of explosion protection.

	DANGER **Explosion or implosion hazard and danger of poisoning through the introduction of unsuitable loading material.** **Poisoning. Serious injury or death from burns and / or explosion pressure.** ∅ Do NOT introduce any substance combustible or explosive at working temperature into the chamber, in particular no energy sources such as batteries or lithium-ion batteries. ∅ NO explosive dust or air-solvent mixture in the inner chamber. ∅ Do NOT introduce any substance which could lead to release of toxic gases.

Contamination of the chamber by toxic, infectious or radioactive substances must be prevented

	WARNING **Danger of intoxication and infection through contamination of the chamber with toxic, infectious or radioactive substances.** **Damages to health.** ➢ Protect the interior of the chamber from contamination by toxic, infectious or radioactive substances. ➢ Take suitable protective measures when introducing and removing toxic, infectious or radioactive material

In case of foreseeable use of the chamber there is no risk for the user through the integration of the chamber into systems or by special environmental or operating conditions in the sense of EN 61010-1:2010. For this, the intended use of the chamber and all its connections must be observed.

Medical devices

The chambers are not classified as medical devices as defined by Regulation (EU) No 2017/745.

Personnel Requirements

Only trained personnel with knowledge of the Operating Manual can set up and install the chamber, start it up, operate, clean, and take it out of operation. Service and repairs call for further technical requirements (e.g. electrical know-how), as well as knowledge of the service manual.

Permissible floor load

Surface load: 50.000 N/m^2 / *1.000 lbs/sq. ft.*

Wheel load (rubber wheel): 1000 N/4cm^2 / *224 lbs on a .62 sq. inch*

Wheel load (steel wheel): Not passable!

Installation site requirements

The requirements described in the operating manual for installation site and ambient conditions (chap. 3.3) must be met.

☞	WARNING: If customer should use a BINDER chamber running in non-supervised continuous operation, we strongly recommend in case of inclusion of irrecoverable specimen or samples to split such specimen or samples and store them in at least two chambers, if this is feasible.

1.9 Foreseeable Misuse

Other applications than those described in chap. 1.8 are not approved.

This expressly includes the following misuses (the list is not exhaustive), which pose risks despite the inherently safe construction and existing technical safety equipment:

- Non-compliance with installation manual
- Non-observance of Operating Manual
- Non-observance of information and warnings on the chamber (e.g. control unit messages, safety identifiers, warning signals)
- Installation, startup, operation, maintenance and repair by untrained, insufficiently qualified, or unauthorized personnel
- Missed or delayed maintenance and testing
- Non-observance of traces of wear and tear
- Insertion of materials excluded or not permitted by this Operating Manual.
- Non-compliance with the admissible parameters for processing the respective material.
- Installation, testing, service or repair in the presence of solvents
- Installation of replacement parts and use of accessories and operating resources not specified and authorized by the manufacturer
- Installation, startup, operation, maintenance or repair of the chamber in absence of operating instructions
- Bypassing or changing protective systems, operation of the chamber without the designated protective systems
- Non-observance of messages regarding cleaning and disinfection of the chamber.
- Spilling water or cleaning agent on the chamber, water penetrating into the chamber during operation, cleaning or maintenance.
- Cleaning activity while the chamber is turned on.
- Operation of the chamber with a damaged housing or damaged power cord
- Continued operation of the chamber during an obvious malfunction
- Insertion of objects, particularly metallic objects, in louvers or other openings or slots on the chamber
- Human error (e.g. insufficient experience, qualification, stress, exhaustion, laziness)
- More than two people in the chamber with the door closed
- Staying longer in the chamber with the door closed than permitted (see information in the operating instructions)

To prevent these and other risks from incorrect operation, the operator shall issue operating instructions. Standard operating procedures (SOPs) are recommended.

1.10 Residual Risks

The unavoidable design features of a chamber, as well as its proper field of application, can also pose risks, even during correct operation. These residual risks include hazards which, despite the inherently safe design, existing technical protective equipment, safety precautions and supplementary protective measures, cannot be ruled out.

Messages on the chamber and in the Operating Manual warn of residual risks. The consequences of these residual risks and the measures required to prevent them are listed in the Operating Manual. Moreover, the operator must take measures to minimize hazards from unavoidable residual risks. This includes, in particular, issuing operating instructions.

The following list summarizes the hazards against which this Operating Manual and the Service Manual warn, and specifies protective measures at the appropriate spots:

Unpacking, Transport, Installation

- Slipping or tipping of the device parts or fittings
- Setup of the chamber in unauthorized areas
- Installation of a damaged chamber
- Installation of a chamber with damaged power cord
- Inappropriate site of installation
- Missing protective conductor connection

Normal operation

- Assembly errors
- Emission of non-ionizing radiation from electrical operating resources
- Contact with live parts in normal state

Cleaning and Decontamination

- Penetration of water into the chamber
- Inappropriate cleaning and decontamination agents
- Enclosure of persons in the interior

Malfunction and Damage

- Continued operation of the chamber during an obvious malfunction or outage of the heating, cooling or humidification system
- Contact with live parts during error status
- Operation of a unit with damaged power cord

Maintenance

- Maintenance work on live parts.
- Execution of maintenance work by untrained/insufficiently qualified personnel
- Electrical safety analysis during annual maintenance not performed

Trouble-shooting and Repairs

- Non-observance of warning messages in the Service Manual
- Trouble-shooting of live parts without specified safety measures
- Absence of a plausibility check to rule out erroneous inscription of electrical components
- Performance of repair work by untrained/insufficiently qualified personnel
- Inappropriate repairs which do not meet the quality standard specified by BINDER
- Use of replacement parts other than BINDER original replacement parts
- Electrical safety analysis not performed after repairs

1.11 Operating instructions

Depending on the application and location of the chamber, the operator of the chamber must provide the relevant information for safe operation of the chamber in a set of operating instructions.

	Keep these operating instructions with the chamber at all times in a place where they are clearly visible. They must be comprehensible and written in the language of the employees.

1.12 Measures to prevent accidents

The operator of the chamber must observe the local and national regulations (for Germany: the rule “Operation of work equipment. Operation of refrigeration systems, heat pumps and refrigeration equipment”, GUV-R 500 chap. 2.35) and take precautions to prevent accidents.

The manufacturer took the following measures to prevent ignition and explosions:

- **Indications on the type plate**

  See chap. 1.5.

- **Operating manual**

  An operating manual and installation manual are provided for each chamber.

- **Overtemperature monitoring**

  The chamber has an internal temperature display that can be read from the outside.

  The door frame heater is controlled via a separate controller (maximum setpoint temperature 55 °C). It is equipped with a temperature limiter (temperature fuse via overtemperature protection).

  Two additional temperature fuses are installed in the conditioner.

- **Overcurrent protection**

  The lamp in the interior has IP66 protection.

  Overcurrent protection (FI) and circuit breakers are located in the junction box.

- **Safety, measuring and control device**

  The safety, measuring and control device is easily accessible.

- **Electrostatic charge**

  The panels, ventilation ducts, fittings, internal parts and shelves are earthed.

  Heating cable of the door frame heater: Protection class 2, double insulation

- **Non-ionizing radiation**

  Non-ionizing radiation is not intentionally produced, but released only for technical reasons by electrical equipment (e.g. electric motors, power cables, solenoids). The machine has no permanent magnets. If persons with active implants (e.g. pacemakers, defibrillators) keep a safe distance (distance of field source to implant) of 30 cm, an influence of these implants can be excluded with high probability.

- **Protection against touchable surfaces**

  Tested according to EN ISO 13732-1:2008.

- **Protection against entrapment in the interior**

  The lockable door can be opened from the inside at any time, even when locked.

- **Floors**

  See operating manual chap. 3.3 for correct installation.

- **Cleaning**

  See operating manual chap. 9.

1.13 Reporting Cybersecurity Vulnerabilities

If you identify a potential cybersecurity vulnerability in this product, please report it to our central point of contact:

psirt@binder-world.com

2. Description of the device

The Environmental Walk-in Chambers WIC are an excellent choice for stability testing in Pharma, Food & Beverage, Cosmetics, Material Testing and many other fields of application as well as for storage under constant climate conditions. Furthermore, constant climatic conditions for other applications such as e.g. sample conditioning for material testing of paper, textiles, plastics, building materials, etc. can be precisely simulated over long periods of time.

The Environmental Walk-in Chambers offer a wide range of features and benefits to perfectly meet requirements in stability testing. In Pharma, our Walk-in Chambers cover long-term and accelerated stability test conditions as specified in the ICH Q1A (R2) for new drug substances and drug products.

Perfect test conditions are maintained in a wide range of temperature from 41 °F to 122 °F (5 °C to 50 °C) and relative humidity of 20% to 90% r.h.

Our walk-in chambers are designed and produced in Germany, and the temperature and environmental conditioners are made by Parameter Generation and Control in Black Mountain, NC USA.

The Environmental Walk-in Chambers WIC are available in in three different sizes:

	Volume	Floor area (plus ramp)
WIC 1	12,5 m^3	5,5 m^2
WIC 2	18,5 m^3	8,2 m^2
WIC 3	24,5 m^3	10,8 m^2

The environmental walk-in chamber WIC is an assembly consisting of the chamber with fittings and the conditioner.

Chamber

The chamber allows a stable and uniform environment through duct work for proper distribution of air and highly insulated room panels. High-quality materials ensure longevity and corrosion resistancy.

The white chamber elements are made of galvanized sheet steel, polyester coated, with an insulation of 100 mm / *4 inch* PU foam with an U value of only 0.21 W/sqmK.

The floor overlay is chrome-nickel steel, pattern-rolled 5WL, sheet metal thickness 0,7 mm, material no. 14301 on 15 mm multiplex board, quality class EN 636-2 and supports a surface load of 50.000 N/m^2 / *1,000 lbs/sq. ft*, slip resistance class R12 (DIN 51130), passable for rubber wheels (wheel load 1000 N/4cm^2 / *224 lbs on a 0.62 square inch*).

The modular design of the chamber allows for quick installation (2 hours with 2 persons). With WIC 2 and WIC 3, the door may be placed either on the longer or shorter side. The door is equipped with a viewing window, triple insulated, fixed glass. The door lever is lockable. Even when locked, the door can be opened from the inside at any time..

The chamber is equipped with LED lighting with motion detector. Exterior service accessibility allows for maintenance with the least possible disruption to the climate conditioning.

Conditioner

The conditioner is located at the back of the chamber. This means that the technology is hidden from the front view. Mounting of the conditioner on the front is optionally possible. The conditioner offers Extremely precise temperature and humidity control, as well as industry-leading chamber uniformity. It is operated with tap water. It is easy to use using the SmartPad.

The conditioner uses an environmentally friendly refrigerant with a GWP value of 547. It is also characterized by low-noise operation and tidy connection lines.

Interior fittings/options

Optionally, an interior with stainless steel heavy-duty shelves is available. Shelf height: 2.007 mm / *8'7"*

Furthermore, a robust stainless steel trolley ramp for safe and convenient access is optionally available.

2.1 Device overview

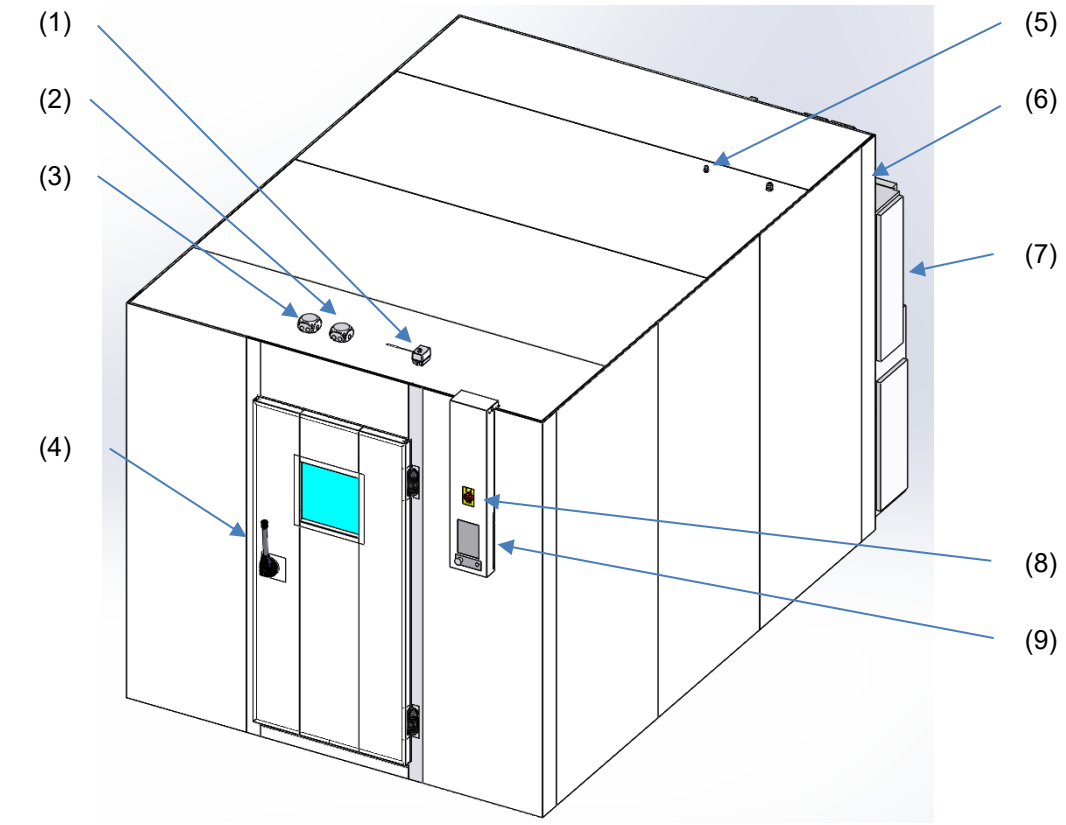
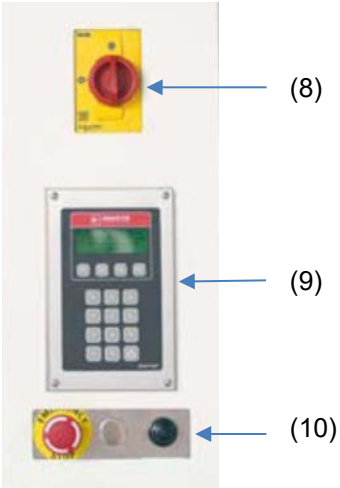


Figure 4: General view (WIC 2, door on short side)

(1) Temperature limiter
(2) Distribution box 230V
(3) Distribution box 24V
(4) Lockable door handle
(5) Central grounding connection
(6) Junction box
(7) Conditioner
(8) Main power switch / Emergency Off (EMO) switch
(9) Controller (SmartPad)
(10) Emergency Stop switch



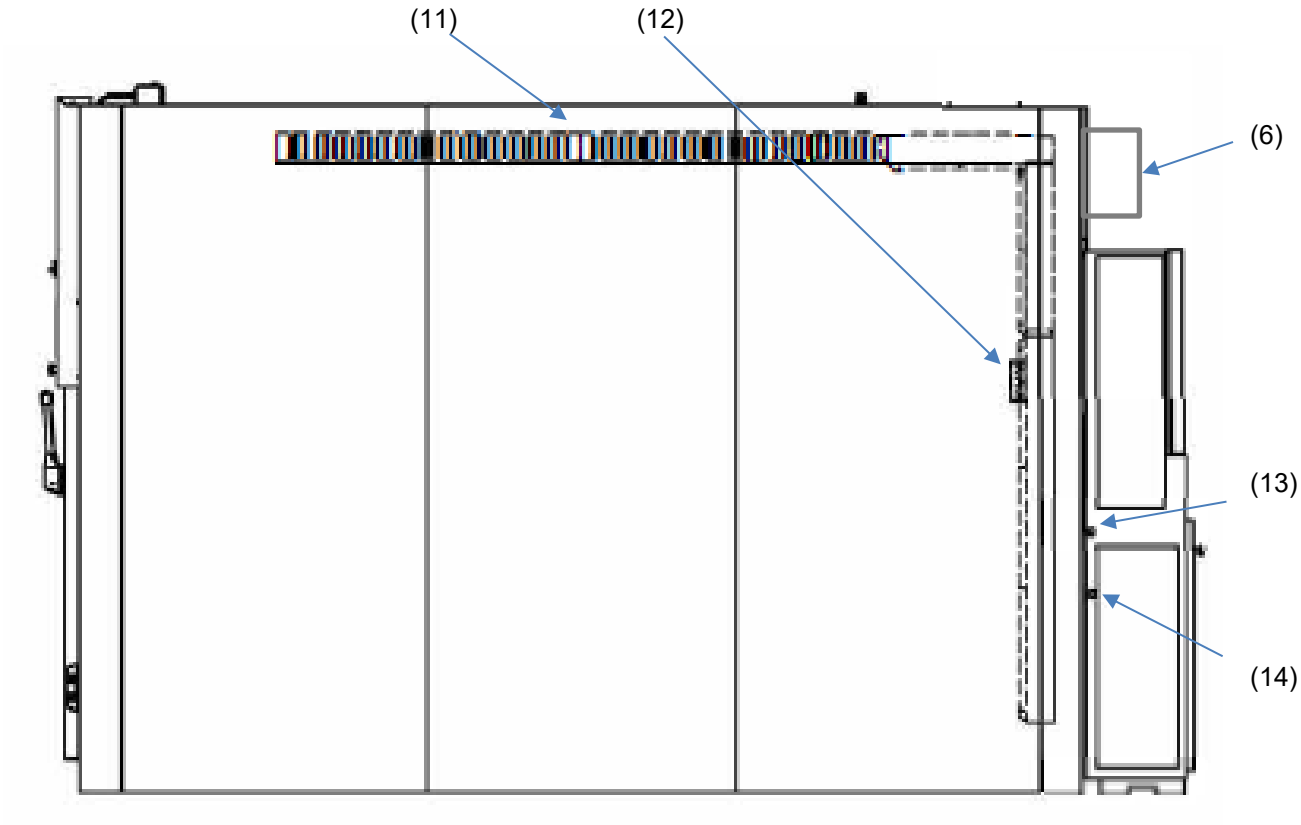


Figure 5: Right side and interior elements (WIC 2, door on short side)

(6) Junction box

(11) Lighting unit

(12) Control Sensor

(13) Freshwater inlet 1/2" female NPT

(14) Unit drain inlet 1/2" female NPT

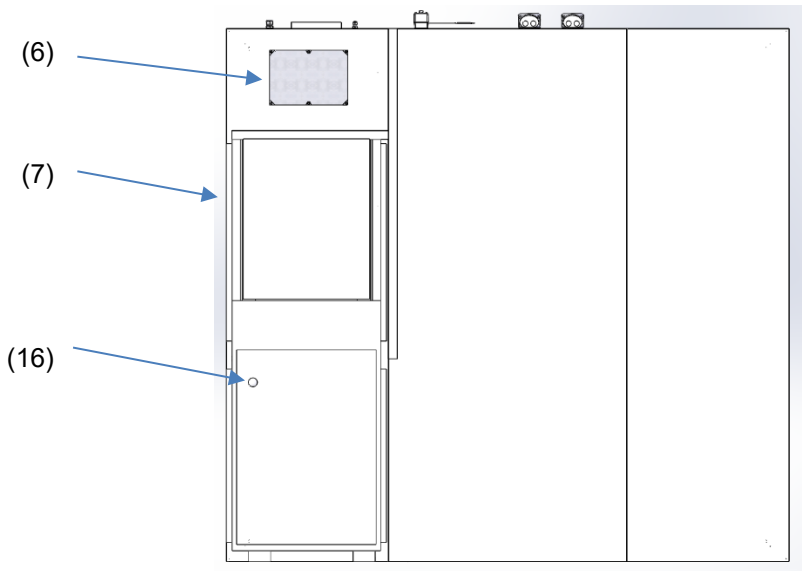


Figure 6: View of WIC from the rear

(6) Junction box

(7) Conditioner

(16) Emergency Stop switch on the conditioner

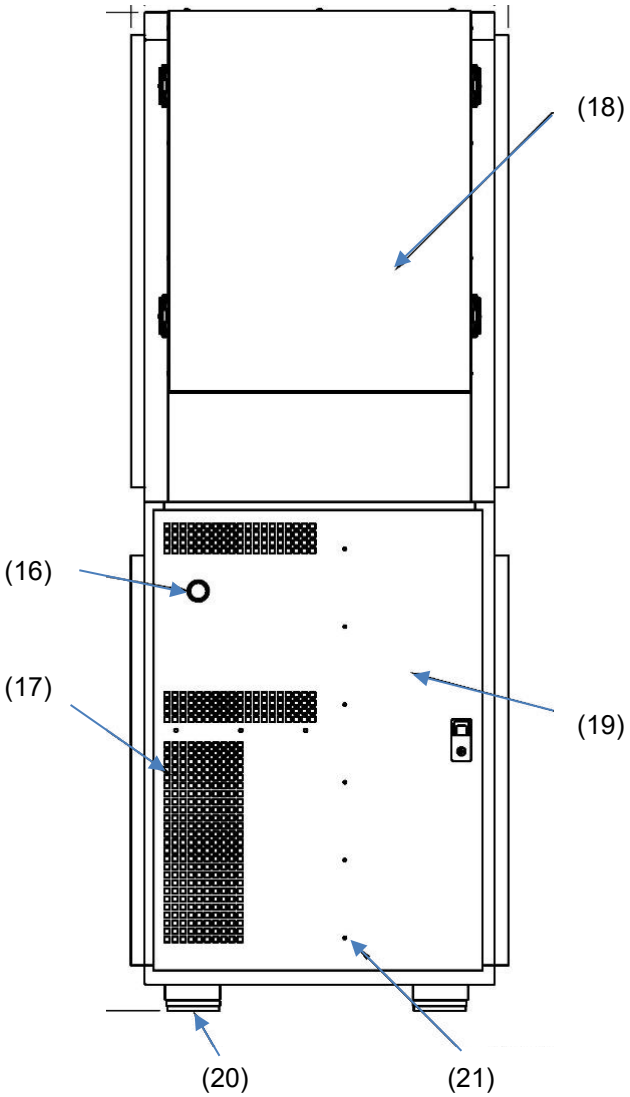


Figure 7: Conditioner overview

(16) Emergency Stop switch on the conditioner

(17) Condenser air outlet

(18) Process chamber access

(19) Electrical/mechanical access

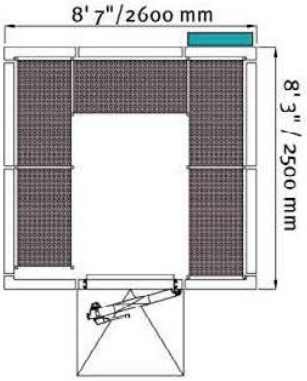
(20) Vibration pads

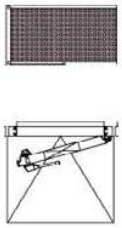
(21) Filter access

Figure 8: Emergency Stop switch (16) on the conditioner

2.2 Plan of optional fittings/shelves

WIC 1

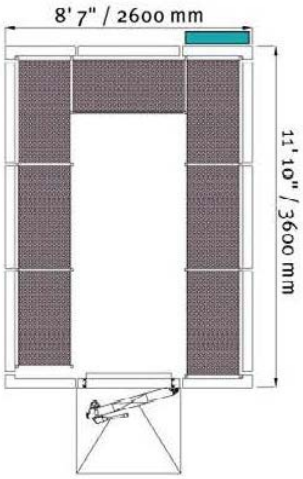




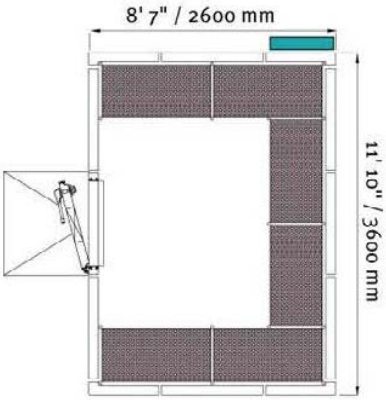
Shelf

Door and ramp

WIC 2

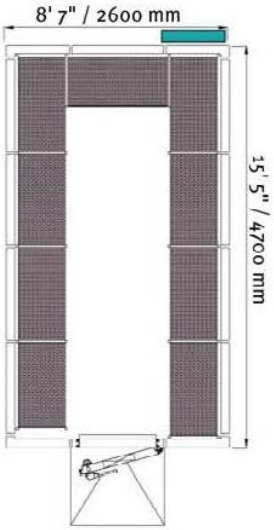


Door on short side

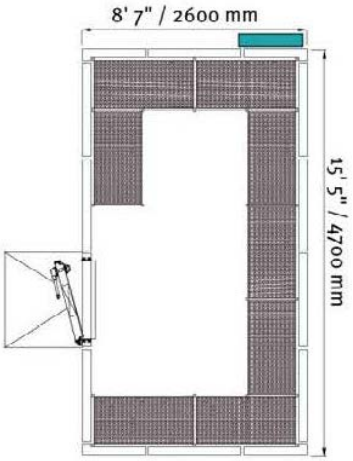


Door on long side

WIC 3



Door on short side



Door on long side

3. Completeness of delivery, transportation, storage, and installation

3.1 Unloading from the transport pallet, inspection, scope of delivery

	Please follow the installation instructions enclosed with the chamber.

All transport, installation, startup, and service should be performed solely by individuals who possess proper training and certification.

After unpacking, please check your delivery against the delivery note for completeness and any transport damage. Transport damage must be reported to the freight forwarder immediately.

Unpacking the conditioner. The conditioner has been securely packed inside a wooden crate for shipping. Inspect this crate for any signs of damage or mishandling. The crate is equipped with a liquid tilt indicator that will indicate whether the crate was ever tilted on its side or upside-down. The crate should never be tilted on its side or upside-down during shipping. If there are any signs of improper shipping/handling, please contact the shipping provider to file a claim. Also, please contact PGC to report the extent and nature of the shipping/handling damage.

Figure 9: Tilt indicator with information

Use caution when moving the conditioner, as it may be very heavy and could cause serious injury or death if mishandled. The lifting capacity of the hoisting equipment used should be no less than double the weight of the load being lifted.

Lifting brackets are provided and affixed to the top of the conditioner. These brackets can be removed once the conditioner has been placed in its final, installed position.

	CAUTION **Risk of injury and damage due to lifting heavy loads as well as due to slipping or tipping of the conditioner if lifted improperly.** **Injuries, damage to the conditioner.** ➢ Use the supplied lifting brackets on the top of the conditioner to lift. ➢ Lift the conditioner with 4 persons or with mechanical assistance.

If return shipment is necessary, please use the original packaging.

For disposal of the transport packing, see chap. 11.1.

WARNING: Do not drop or mishandle the conditioner. Dropping a conditioner will result in serious damage to the conditioner and any damage resulting from improper handling of the conditioner is not covered by the warranty. The lifting capacity of the hoisting equipment used should be no less than double the weight of the load being lifted.

WARNING: The machine is not certificated or designed for use in explosive atmospheres. The user is therefore strictly prohibited from using the machine in any explosive or potentially explosive atmospheres. Do not attempt to modify this machine for the purposes of use in any explosive environment.

Prior to unpacking the conditioner, it is suggested to have the crate moved into a position near the location where the conditioner will be operating. The conditioner will be sitting on top of a wooden pallet. A conditioner can be extremely heavy and complicated piece of machinery. A forklift or other hoisting device may be required to move the conditioner from the pallet to the location where it will be operating.

3.2 Storage

Intermediate storage of the chamber is possible in a closed and dry room. After operation, please observe the guidelines for temporary decommissioning (chap. 11.2).

Permissible ambient temperature during storage:

- Without prior draining of the conditioner: +3 °C to +60 °C.
- After emptying the conditioner: -10°C to +60°C.

At temperatures below +3°C, the water must be completely removed from the conditioner.

	NOTICE
	Risk of frost formation in the humidification system when storing the conditioner below +3 °C with filled humidification system. **Damage to the device.** ➢ Contact BINDER Service before storage below +3 °C.

Permissible ambient humidity: max. 70 % r.h., non-condensing.

After extensive operation at humidity levels > 70% r.h., condensation from excessive humidity can lead to corrosion during storage. In this case the chamber must first be dried.

	NOTICE
	Risk of corrosion on the housing due to condensation caused by excess humidity. **Damage to the device.** ➢ When taking the unit out of service, dry it for several days before switching it off: • Empty the conditioner (chap. 4.3.4). Leave the two covers on the water bath open. • Leave the WIC chamber to dry for at least 2 days with the door completely open

When after storage in a cold location you transfer the chamber to its warmer installation site, condensation may form. Before start-up, wait at least one hour until the chamber has attained ambient temperature and is completely dry.

In case of a prolonged temporal decommissioning: Leave the chamber door open.

3.3 Location of installation and ambient conditions

The environmental walk-in chambers WIC are intended for installation in buildings. The installation site must be well lit.

Place the unit in a well-ventilated, dry place on a level surface.

The installation location (flat, level and stable floor) must be able to support the weight of the unit: 0.75 kg/cm^3. Minimum ceiling height: 2.59 m.

	You will receive the mounting instructions, Art. no. 7001-0431, with the chamber. This contains detailed information on the installation site. Please proceed according to the mounting instructions.

The installation site must be dry and well ventilated. In order to ensure sufficient air circulation, a wall clearance of at least 500 mm must be maintained between the chamber and the masonry or to another chamber on the side with the air conditioner, and at least 100 mm on other sides.

Provide the following free areas around the conditioner:

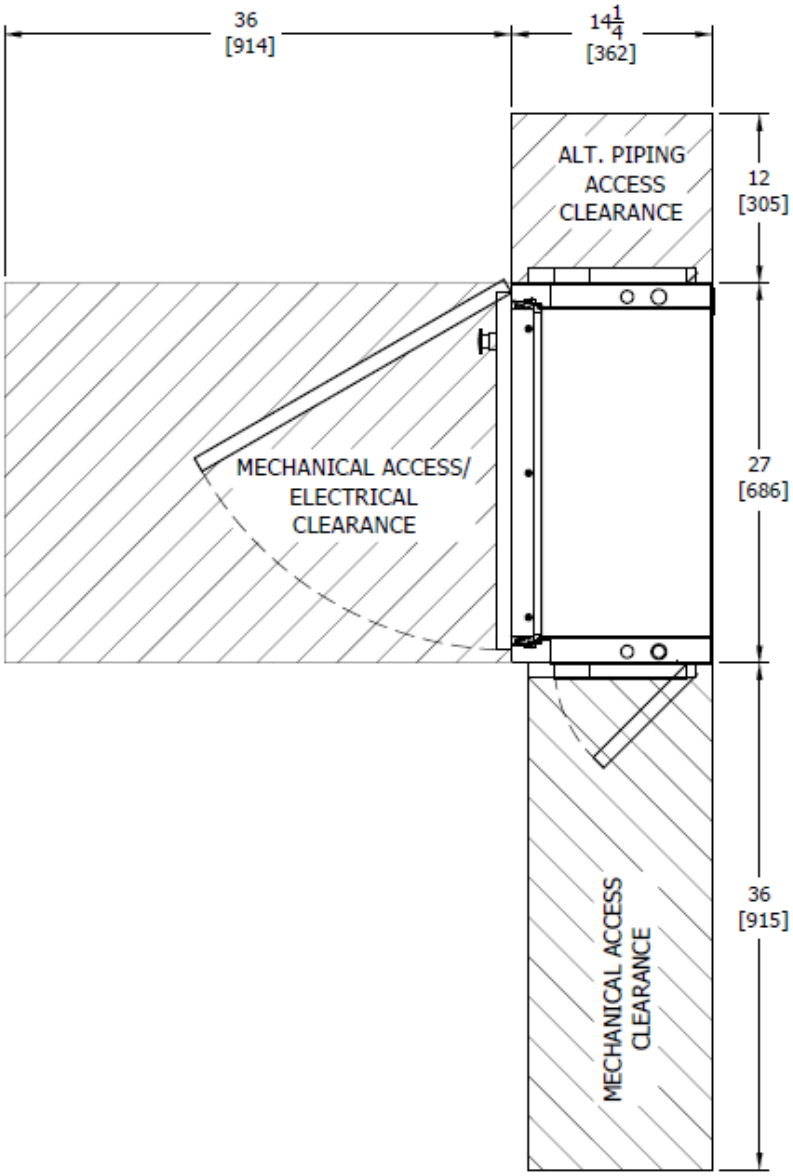


Figure 10: Required free space for access to the conditioner, dimensions in inch [mm]

	NOTICE
	Danger of overheating due to lack of ventilation. **Damage to the chamber.** ∅ Do NOT install the chamber in unventilated recesses. ➢ Ensure sufficient ventilation for dispersal of the heat. Observe the prescribed minimum distances when installing the chamber.

Do not install or operate the chamber in potentially explosive areas.

	DANGER
	Danger of explosion due to combustible dusts or explosive mixtures in the vicinity of the chamber. **Serious injury or death from burns and / or explosion pressure.** ∅ Do NOT operate the chamber in potentially explosive areas. ➢ KEEP explosive dust or air-solvent mixtures AWAY from the vicinity of the chamber.

The escaping condensation water is discharged in a hose on the conditioner. Make sure that the water that escapes is collected or discharged. The condensate hose must be laid in a falling position.

	DANGER
	Risk of electric shock due to contact of electrical cables or components with water. **Deadly electric shock.** ∅ DO NOT run electrical wiring under the conditioner.

Ambient conditions

- Permissible ambient temperature range during operation: +18 °C / *64.4 °F* to +32 °C / *89.6 °F*.

  At elevated ambient temperature values, fluctuations in temperature can occur.

	The ambient temperature should not be substantially higher than the indicated ambient temperature of +22 °C +/- 3 °C / *71.6 °F +/- 5.4 °F* to which the specified technical data relate. Deviations from the indicated data are possible for other ambient conditions.

	With each degree of ambient temperature >25 °C / *77 °F*, the refrigeration power decreases by 1.5 K.

- Permissible ambient humidity: 70 % r.h. max., non-condensing

  When operating the chamber at temperature set-points below ambient temperature, high ambient humidity may lead to condensation on the chamber.

- Installation height: max. 2000 m / *6562 ft.* above sea level.

Minimum distances

- Wall clearances: to the rear (behind the conditioner) 500 mm, side 100 mm.
- Wall clearance on the door side: 1.5 m
- Maintain a free distance of at least 1.5 m from the body above the device; 500 mm is sufficient during operation.

Ceiling load

- The chamber ceiling is not suitable for additional loads other than the chamber's own weight.
- If an inspection is necessary on site or for installation reasons, a static safety device and additional reinforcement must be provided.

Further installation requirements

- Fresh water (tap water or softened water, for water quality see chap. 4.3.1)

  The water is supplied via a water hose (chap. 4.3).

- Waste water connection

  The escaping condensation water is discharged in a hose on the conditioner. Make sure that the water that escapes is collected or discharged. The condensate hose must be laid in a falling position.

	To avoid any water damage, a floor drain must be provided at the location of the unit. The installation site must be selected in such a way that consequential damage due to splashing water is avoided.

- Electric power supply 230V at 50/60 Hz, 16 A

To completely separate the chamber from the power supply, set the Main power switch / Emergency off (8) to position “0”. Install the chamber in a way that the main power switch is easily accessible and can be easily pulled in case of danger.

For the user there is no risk of temporary overvoltages in the sense of EN 61010-1:2010.

Avoid any conductive dust in the ambiance according to the chamber layout complying with pollution degree 2 (IEC 61010-1).

4. Installation and connections

4.1 Installation of the chamber

The installation of the chamber is described in a separate installation manual.

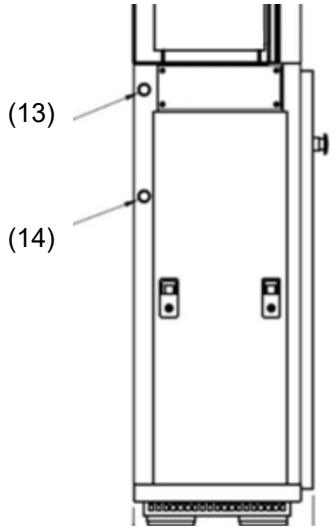
	To install the chamber, proceed according to the instructions in the WIC installation manual, art. no. 7001–0433, which are enclosed with the device.

4.2 Installing the conditioner

Installing the conditioner and the air baffles is also described in the installation manual.

	Connect the conditioner to the assembled chamber and install the air baffles according to the instructions in the WIC installation manual Art. No. 7001–0433, which is enclosed with the unit.

4.3 Water supply



(13) Freshwater inlet 1/2" female NPT

(14) Waste water connection for condensate drain inlet 1/2" female NPT

Figure 11: Positions of the water connections on the left side of the conditioner

4.3.1 Suitable water quality

	BINDER GmbH is NOT responsible for the water quality at the user's site. Any problems and malfunctions that might arise following use of water of deviating quality are excluded from liability by BINDER GmbH. The warranty becomes void in the event of use of water of deviating quality.

4.3.1.1 Chambers up to serial number 20260000013417

- Tap water
- No DI water
- Clean water without dirt particles

Any impurities in the water will be deposited in the spray saturator

Water conductivity of 200k and not greater than 1 Mega ohm is acceptable. Chlorine at more than 4 ppm can cause degradation in metal especially stainless steel

Frequent flushing and cleaning of the spray saturator will typically remove these deposits. However, the frequency of service required is directly proportional to the concentration of impurities in the water provided.

4.3.1.2 Chambers from serial number 20260000013418

- Deionized water from a water treatment installation already existing at the customer's site. Conductivity from 1 µS /cm up to a maximum of 20 µS/cm. (Water, which is in equilibrium with the CO_2 in the air, and has a conductivity below 1 µS/cm (ultrapure water), may cause acid corrosion due to its low pH).
- Water treated by the optional water treatment system BINDER Pure Aqua Service (disposable system). The lifetime depends on water quality and the amount of treated water used. The measuring equipment to assess the water quality is reusable.

	For detailed information on operating the water treatment system BINDER Pure Aqua Service and its function, please refer to the operating manual supplied with BINDER Pure Aqua Service.

4.3.2 Freshwater connection

Connect a clean water source to the connection (13) on the side of the conditioner. The connection has a ½" female NPT fitting.

Water is supplied via a water hose, water pressure 1 bar. A higher inlet pressure of up to 1 bar max. is possible, but leads to increased water consumption.

a low water level safety switch disables the operation of the conditioner if the water level falls below a safe operating level

4.3.3 Wastewater connection

The waste water connection must be laid in a downward direction (or the end must be below the connection).

	Introducing a source of moisture into the interior can lead to increased waste water production.

The waste water connection (14) is a 1⁄2" NPT female thread connection. The condensate drain must be connected to a vented drain with siphon equipped with an anti-lift air gap of two pipe diameters or 2 inches, whichever is greater, at the last drain connection.

The wastewater connection is equipped with a water shut-off valve (15) 1⁄2" NPT ball valve with 1⁄4 turn. This drain should remain closed during operation. During regular maintenance, the tray must be emptied and cleaned.

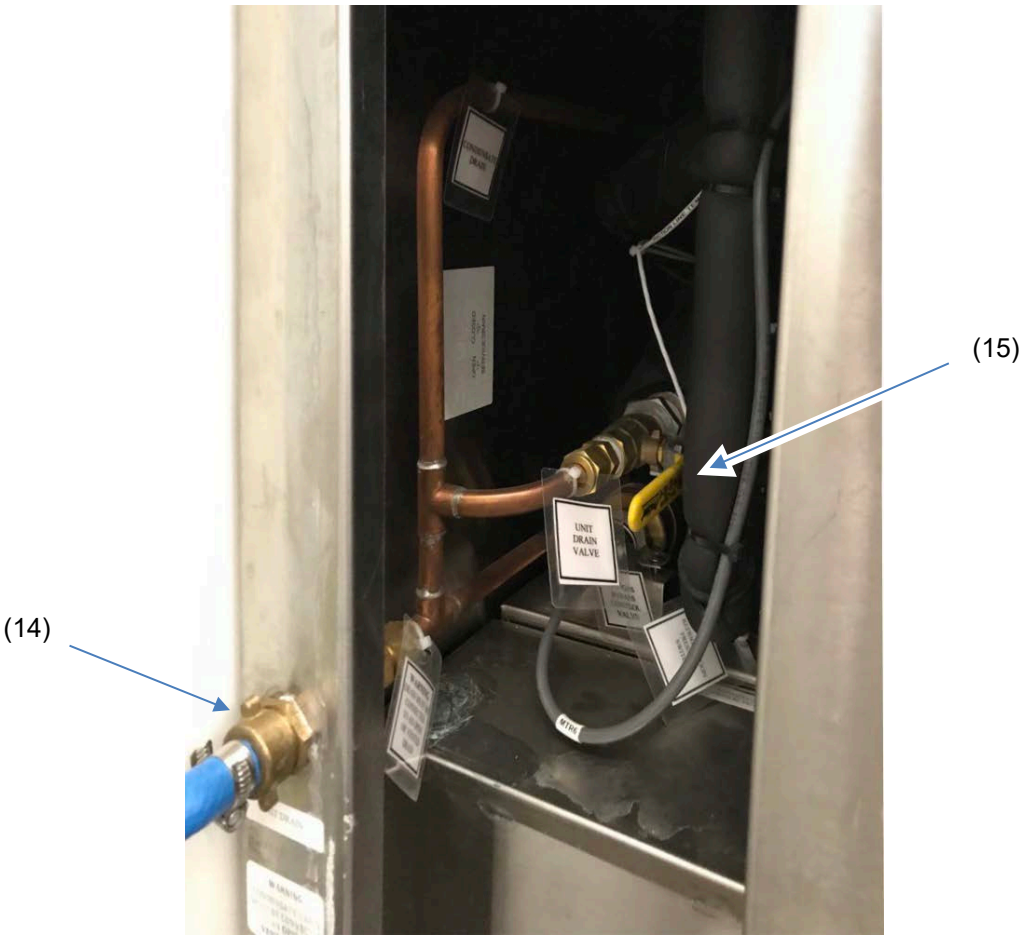
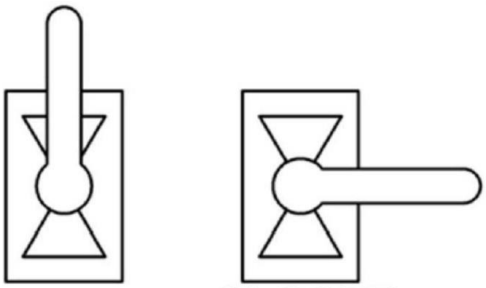


Figure 12: Positions of the drain connection (14) and drain valve (15)



Open Closed

Figure 13: Lever positions of drain valve (15) for waste water connection (14)

4.3.4 Draining the conditioner

If the conditioner is to be taken out of service for an extended period of time, it should be drained first.

Close the fresh water supply and open the shut-off valve of the waste water valve (14) (position “1”)

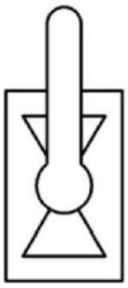


Figure 14: Position of the water isolation valve (15) for draining

4.4 Installation of the temperature and humidity sensor

4.4.1 Assembly of the sensor unit

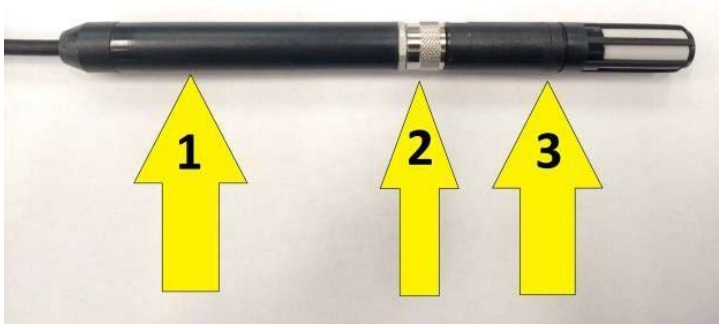


Figure 15: Sensor unit with connected cable

Arrow 1: Plug with cable

Arrow 2: Connecting piece (threaded collar)

Arrow 3: Transmitter/sensor

The plug with cable is attached to the sensor via a connecting piece with threaded collar.

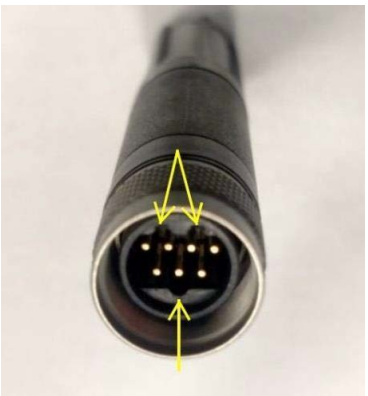
The connection piece with threaded collar is already connected to the plug with cable.

The sensor can only be connected to the connector in the correct position.

Make sure you have the right orientation: The recesses on the sensor must be arranged as shown in the adjacent figure: two at the top, one at the bottom (arrows).

Insert the sensor carefully into the connector **without twisting.**

After plugging in the sensor, turn the connector to secure the connection.



4.4.2 Installation of the sensor unit in the chamber

The sensor unit is fed through the wall or ceiling into the interior of the chamber and mounted.

Make sure that the sensor is placed in a horizontal position and that the cable allows a drip loop

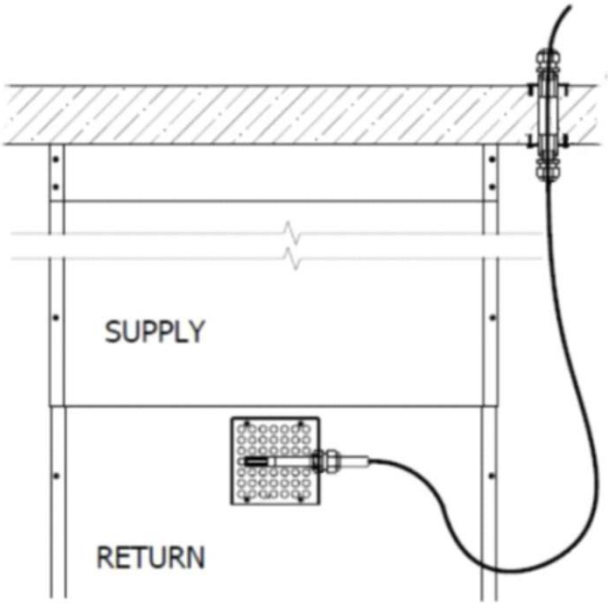


Figure 16: Installing the temperature/humidity sensor (example view)

4.5 Electrical connection

	In general, all work on the electrical system must be carried out by qualified electricians in accordance with the applicable regulations and standards. The commissioned specialist company is responsible for proper execution, proper function and safety.

The following steps are required:

- Connecting the chamber door heater to the junction box.

  Please proceed as described in the installation manual Art. No. 7001-0433.
- Connecting the chamber light to the junction box.

  Please proceed as described in the installation manual Art. No. 7001-0433.
- Connection of the conditioner to the junction box.

  Please proceed as described in the installation manual Art. No. 7001-0433.
- Connection of the junction box to the customer's power supply. No connection cable is supplied for this purpose; a cable to the junction box must be supplied.

  This connection is described below and in the installation manual Art. No. 7001-0433.

Electrical connections present risk of shock hazard that may result in severe injury or death. All electrical work should be performed solely by individuals who possess proper training and certification.

	DANGER
	Danger of electric shock. **Deadly electric shock.** ➢ Ensure that all work is carried out only by qualified electricians or qualified personnel authorized by BINDER.

4.5.1 Connection of the junction box to the customer's power supply

No connection cable is supplied for this purpose; a cable to the junction box must be supplied.

Voltage +/-10% at the indicated power frequency	Current type	Chamber fuse
230 V at 50 Hz 230 V at 60 Hz	1N~	16 A

Terminal blocks / connectors

Residual current circuit breaker / miniature circuit breaker

Door heater controller (default)

Figure 17: View into the junction box

Connect the mains connection cable with the conductors L, N, PE to the three free places on the terminal strip -X1.

The customer's connection must also have a protective earth conductor. Make sure that the connection from the protective earth conductor of the installation site to the protective earth conductor of the unit corresponds to the state of the art. In addition, provide an additional protective conductor for the primary grounding of the chamber.

DANGER

Electrical hazard due to missing protective conductor connection.

Deadly electric shock.

- Make sure that the chamber's power plug and the power socket match and securely connect the electrical protective conductors of the chamber and the house installation.
- Connect an additional protective conductor for the primary grounding of the chamber.

- Check the power supply voltage before connection and initial commissioning. Compare the values with the data on the type plate of the environmental walk-in chamber WIC (chap. 1.5).

	NOTICE
	Danger of incorrect power supply voltage due to improper connection. **Damage to the chamber.** ➢ Check the power supply voltage before connection and start-up. Compare the power supply voltage with the data indicated on the type plate.

- When connecting, please observe the regulations specified by the local electricity supply company as well as the local or national electrical regulations (VDE directives for Germany).
- Observe a sufficient current protection according to the number of devices that you want to operate. We recommend the use of a residual current circuit breaker in the building. We use a combined fault current/miniature circuit breaker for the entire chamber. Caution: Since the chamber has its own residual current circuit breaker, any existing residual current circuit breaker provided by the customer must be selective.
- Pollution degree (acc. to IEC 61010-1): 2
- Installation category (acc. to IEC 61010-1): II

See also electrical data (chap. 12.4).

☞	The Main power switch / Emergency off (8) on the front of the environmental walk-in chamber WIC is used for complete disconnection from the power supply system. Attention: Voltage from the supply line is still present in the connection box on terminal X1.

☞	If electrical equipment is to be used in the interior of the chamber, ensure that it is grounded.

5. Commissioning

5.1 Water connections

Before switching on the conditioner, make sure that there is water in the tub. If there is no water in the tub, damage to the water pump and other components may occur.

Close the water shut-off valve (15) to prevent water from draining from the tub

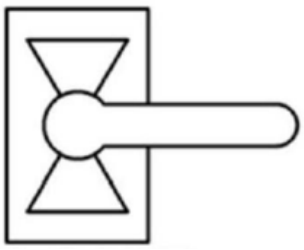


Figure 18: Position of the water shut-off valve (15)

Open the customer's fresh water supply to fill the tub with water.

The tub is equipped with a float valve that automatically shuts off the water flow to the fresh water when the correct water level in the tub is reached.

Leave the customer's fresh water supply open so that the float valve can fill more water into the tub when the water level in the tub drops and damage to the conditioner is prevented.

5.2 Start

After all necessary connections for the conditioner have been made and the tub has been filled with water, the conditioner can be started.

5.2.1 Quick start

The conditioner has been shipped in standby mode and pre-programmed at the factory. Once the conditioner is powered up, the SmartPad screen will light up and display a message indicating that the conditioner is in standby mode.

Pressing the standby button (the button in the lower right corner of the keypad, arrow) will turn on the conditioner and start executing the factory-programmed parameters.

Figure 19: SmartPad

5.2.1 SmartPad display

The SmartPad screen shows the actual measurements of a combination of values, depending on the mode of operation of the conditioner. This is called the process variable display

5.3 Enter setpoints for temperature and humidity

	Control ranges
Temperature	5 °C up to 50 °C / *41 °F to 122 °*
Humidity	20 % r.h. up to 90 % r.h.

For the control range of temperature and relative humidity, see the temperature / humidity diagram chap. 6).

At the bottom of the SmartPad screen, different options are displayed above the four function keys that make up the top row of the SmartPad keypad (F1, F2, F3 and F4). The function keys operate and change various settings and aspects of the SmartPad and the conditioner, depending on which display is being viewed.

Actual value display

The display for actual air temperature/relative humidity/water temperature is displayed first after starting the conditioner from standby mode. SP is above the F2 key.

Set-point display

Pressing the F2 key switches the SmartPad to the setpoint display. Here you can change the setpoints for air temperature and relative humidity (RH) or air temperature and water temperature. The SmartPad screen displays a flashing cursor next to the largest digit of the air temperature setpoint; to change this value, enter the desired indoor temperature setpoint without using decimals. To enter a value that is equal to or greater than 10 and has a zero in the decimal place, enter the first two digits and then zero in the SmartPad. For example, to enter 11°C as the set-point, type 1-1-0 into the SmartPad.

	The SmartPad keypad does not contain a decimal point key. To enter a value less than 10 with a decimal value greater than zero, first enter a “0” and then the desired number. Example: Entry of 8.3 °C in the form 0-8-3.

After all possible spaces in the field have been filled in, the cursor returns to the left of the largest digit in the field and at this point the set point has been entered into the SmartPad. To scroll down to the relative humidity or water temperature setpoint field, select the TAB option by pressing the F1 key. The cursor moves down to the left of the largest digit in the Relative Humidity (RH)/Water Temperature setpoint field. Enter the desired setpoint in the Relative Humidity (RH)/Water Temperature setpoint field in the same way as described for the air temperature setpoint. The conditioner will now run with the desired parameters.

	Pure temperature data (without humidity) is not defined, as the air conditioner cannot be operated without humidity control.

5.4 Performance during and after power failures

During a power failure, all controller functions are shut down.

After the power supply has been restored, operation continues with the set parameters. The last entered setpoint values are adjusted.

5.5 Locking the SmartPad terminal for set-point entry

This terminal can be locked. Locking the terminal enables any user to view the set point but does not allow changes to the set point. If this terminal is locked, the cursor will not be visible, and the TAB key will have no label or function.

Figure 20: SmartPad locked

F1	**TAB**	Position the cursor (when the screen is not locked out)
F2	**WATER**	View water control parameters (Only in RH Cascade and Slow Damper modes)
F3	**AUX**	View auxiliary RTD control parameters
F4	**ESC**	Back to the process variable screen

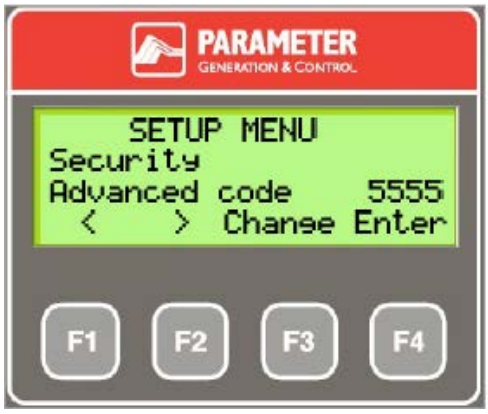
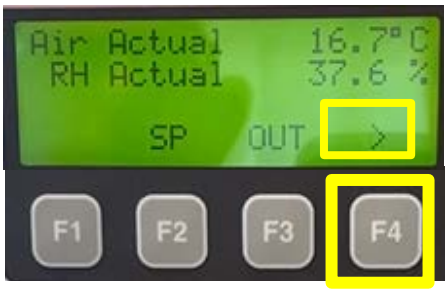


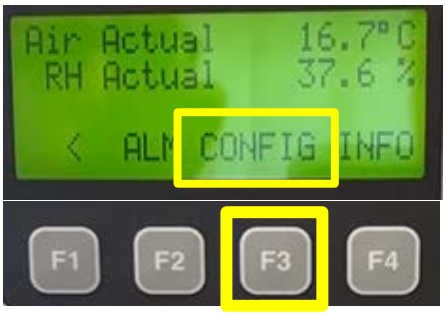
Figure 21: SmartPad Code

Submenu	Parameter	Value	Description
Security	Access Code	0000	Change the code that gains entry to the configuration menus.
	Advanced Code	5555	Change the code that gains entry to the advanced configuration menus
	SP lock	Unlocked locked	Lock set points. When locked is displayed in this field, the set points may not be changed via the SmartPad key pad.

Setting the screen lock (setpoint input blocked)



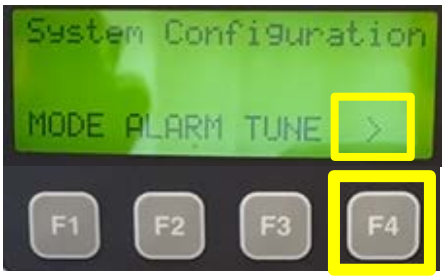
Select “ **>**“ with F4 key



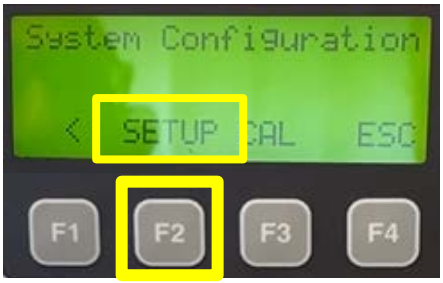
Select “Config” with F3 key

Enter access code 0000

4 x



Select “ **>** ” with F4 key



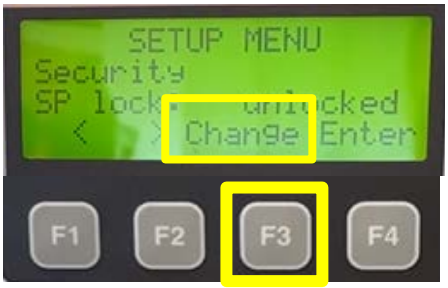
Select “Setup” with F2 key

Enter Code 5555

4 x

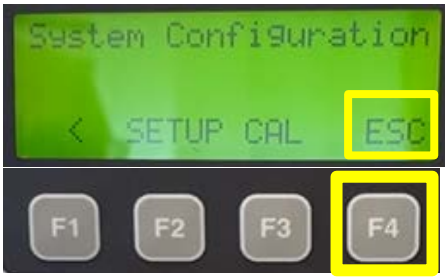
Select “ **>** ” with F2 key

Select “ **>** ” with F2 key



Select “Change” with F3 key

Select “Enter” with F4 key



Select “ESC” with F4 key

Figure 22: Locking the SmartPad – procedure

6. Humidification and dehumidification system

The possible working ranges of the humidity are specified in the temperature-humidity diagram.

	The temperature and humidity setpoints should be within the optimal range (highlighted area in the temperature-humidity diagram).

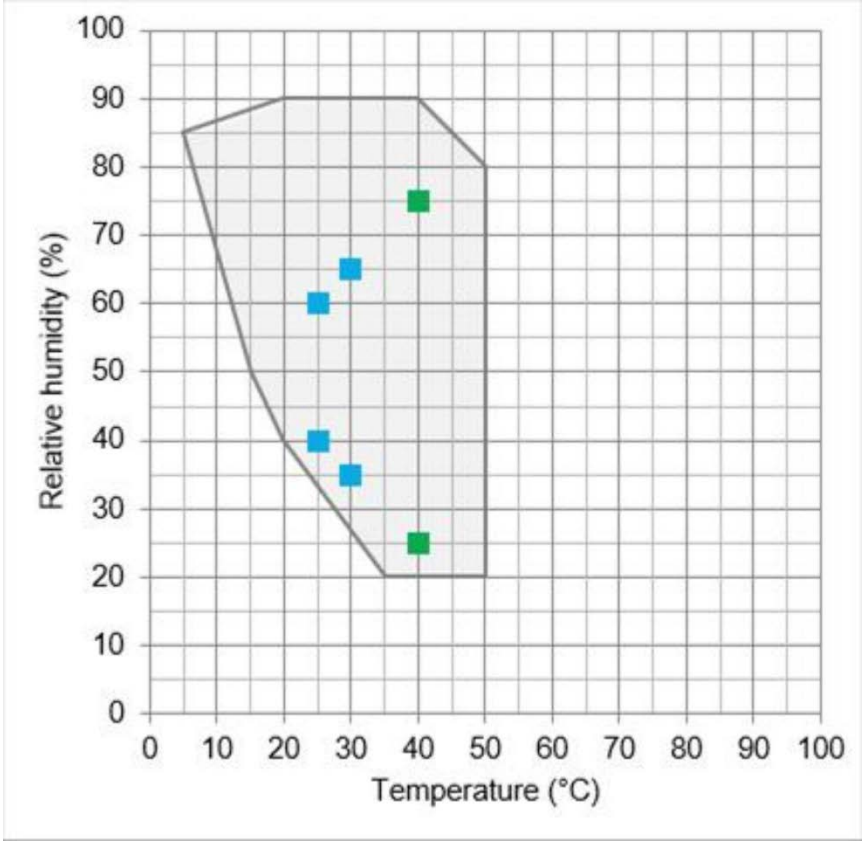


Figure 23: WIC temperature-humidity diagram

Marking: Control range of temperature and relative humidity, condensation-free range

- ICH long term stability testing
- Accelerated stability testing

	Heat emission of electrical devices connected inside the chamber may modify the temperature and humidity range.

If the setpoints for temperature or humidity are outside the optimum range, condensation can arise in the door area.

Dehumidification system

After activating the chamber, it humidifies and dehumidifies as required in order to achieve the set humidity setpoint within the controllable temperature/humidity range.

With decreasing temperature courses, cooling system operation may cause dehumidification of the loading material.

	After switching off the unit for a longer period of time, drain the conditioner (chap. 4.3.4).

7. Operation after power failure

If there is a power failure and the conditioner is shut down, it will restart in the same mode as before the power failure when the power returns.

If the SmartPad was in standby mode when power was lost, it will be in standby mode when power is restored. If the SmartPad was operating and controlling the conditioner, it will return to this operating mode.

8. Unit malfunctions

Warning: In the event of an unexpected or unusual vibration, cease use of this machine and activate the stop control. Contact maintenance and advise on the vibration details. Do not continue to use the machine until the vibration has been investigated and corrected by a designated and trained engineer.

	Some errors are cleared automatically, others require user intervention. Regardless of the error clearing mechanism, the user must press the standby button for the conditioner to resume operation.

The conditioner is equipped with a variety of unit protection devices. There are some protection de-vices that cause the conditioner to enter an ERROR state and stop operating.

When an error occurs, the SmartPad screen displays a message indicating that the conditioner has entered an error state, the source of the error, and that the error must be cleared before restarting the conditioner.

After eliminating the cause of the error, the conditioner can be restarted in the same operating mode and with the same parameters as before the error. Press the standby button to restart the conditioner after an error status has occurred.

8.1.1 Low tub water level

There is a water shortage float switch in the tub. If the water level falls below the water level for safe operation, the switch switches off the conditioner. The SmartPad user interface displays "LOW WATER FAULT SET". The float switch is automatically reset when the water level in the tank returns to a safe operating level. After the switch is reset, the SmartPad user interface will display “LOW WATER FAULT CLEAR” and the conditioner can be restarted by pressing the standby button on the SmartPad keypad.

8.1.2 Adjustable thermal protection for the interior of the chamber

The thermal protection can be adjusted via a dial on the outside of the conditioner. The purpose of this thermal protection is to protect the contents of the chamber from excessive temperature rise in the event of conditioner failure.

You can manually adjust the dial on the thermal protection to protect the product to be tested, normally 2 °C to 3 °C above the highest test temperature.

Too high a temperature will cause the thermal protection to open the circuit. As a result, the condition-er shuts down and the SmartPad user interface displays “TEMPERATURE FAULT SET”. The over-heating protection is automatically reset when the temperature in the test chamber falls below the shut-off temperature. After the thermal protection is reset, the SmartPad user interface will display "TEMPERATURE ERROR CLEAR" and the conditioner can be restarted by pressing the standby button on the SmartPad keypad.

Figure 24: Adjustment dial for thermal protection

8.1.3 Malfunctions

The conditioner is equipped with additional protective devices that deactivate the conditioner or parts of the conditioner. In some cases, an error message is displayed on the SmartPad. If such an error occurs, contact BINDER Service.

8.1.4 Emergency stop and emergency off

- Main power switch / Emergency off (8)

  This switch must be used in an emergency. It is used to completely disconnect the mains voltage.

- Emergency Stop switch (16) on the conditioner and emergency stop switch (10) on the controller

  Press one of these switches to switch off the conditioner except the control immediately. An emergency stop switch locks when it is pressed. Turn and pull the emergency stop switch to reset the switch, which will re-energize the conditioner.

  Theses switches do not completely disconnect the power supply to the conditioner! While the emergency stop switch (16) or (10) is pressed and in the locked position, the conditioner control continues to be supplied with power. Also the door frame heater and the chamber lighting remain on.

Switch off the environmental walk-in chamber WIC at the emergency off switch (8) and follow the lock-out/tagout procedures before carrying out maintenance work to avoid electric shocks.

	DANGER
	Incomplete disconnection from the power supply when using an emergency stop switch. **Deadly electric shock.** ➢ Use the main power switch Emergency off (8) to disconnect the WIC chamber from the power supply ➢ Turn off the conditioner at the main power switch and disconnect the power plug.

	See electrical diagrams for more information.

9. Cleaning and decontamination

Clean the chamber after each use in order to prevent potential corrosion damage by ingredients of the loading material.

Prior to renewed startup, allow the chamber to completely dry after all cleaning and decontamination measures.

DANGER

Electrical hazard by water entering the chamber.

Deadly electric shock.

∅ Do NOT spill water or cleaning agents over the inner and outer chamber surfaces.

∅ Do NOT put ANY cleaning aids (cloth or brush) into slots or openings on the chamber.

➢ Before cleaning, turn off the chamber at the main power switch and disconnect the power plug. Let the chamber cool down to ambient temperature.

➢ Completely dry the chamber before turning it on again.

9.1 Cleaning

- Disconnect the chamber from the power supply before cleaning. Switch off the unit at the main power switch / Emergency off (8) (lock if necessary).

☞	The interior of the chamber must be kept clean. Thoroughly remove any residues of test material.

Wipe the surfaces with a moistened towel. In addition, you can use the following cleaning agents:

Cleaning and care of organically coated surfaces

Professional and regular cleaning not only restores the aesthetic and prestigious appearance of stove-enamelled surfaces, it also ensures that their value is maintained because both dirt and aggressive deposits are removed.

The frequency of cleaning depends on the local environmental conditions and the resulting degree of soiling. Cleaning should be carried out from top to bottom, manually or with suitable cleaning equipment.

Use only pure water, if necessary with small additions of neutral cleaning agents - with the aid of soft, non-abrasive cloths, rags or industrial cotton wool. Strong rubbing is to be avoided. As a general rule, a preliminary test of the cleaner on an inconspicuous spot of the object to be cleaned is recommended in order to test the effect on the appearance of the surface.

The maximum contact time of these cleaning agents must not exceed one hour; after at least 24 hours, the entire cleaning process can be repeated if necessary.

The temperature of the cleaning agents must not exceed 25 °C. Immediately after each cleaning process, rinse with clean, cold water.

Unsuitable cleaning agents:

- highly alkaline cleaning agents (such as caustic potash, caustic soda, sodium hydroxide solution).
- highly acidic cleaning agents
- highly abrasive cleaning agents
- cleaning agents that dissolve the paint film

- Cleaning agent of unknown composition.
- Solvents containing esters, ketones, alcohols, aromatics, glycol ethers or halogenated hydrocarbons or similar.
- Steam jet cleaners + high-pressure cleaners

Joint sealants, adhesives

Joint sealants and other auxiliary materials such as adhesives, joint sealing compounds, adhesive and cover strips, etc. that come into contact with coated surfaces must be pH-neutral and free of substances that damage the paintwork. The effect of heat increases this chemical aggressiveness.

Fittings/shelves

- Commercially available cleaning agents without acid or halogenides.
- Alcohol solutions.
- We recommend neutral cleaning agent Art. no. 1002-0016.

NOTICE

Danger of corrosion by using unsuitable cleaners.

Damage to the chamber.

∅ Do NOT use acidic or chlorine cleaning detergents.

∅ Do NOT use the BINDER neutral cleaning agent on other kind of surfaces e.g., the zinc coated hinge parts or the rear chamber wall.

For surface protection, perform cleaning as quickly as possible.

After cleaning completely remove cleaning agents from the surfaces with a moistened towel. Let the chamber dry.

Soapsuds may contain chlorides and must therefore NOT be used for cleaning.

With every cleaning method, always use adequate personal safety controls.

Following cleaning, leave the chamber door open.

The neutral cleaning agent may cause health problems in contact with skin and if ingested. Follow the operating instructions and safety hints labeled on the bottle of the neutral cleaning agent.

Recommended precautions: To protect the eyes use sealed protective goggles. Wear gloves. Suitable protective gloves in full contact with media: butyl or nitrile rubber, penetration time >480 minutes.

CAUTION

Danger of chemical burns through contact with skin or ingestion of the neutral cleaning agent.

Skin and eye damage. Environmental damage.

∅ Do not ingest the neutral cleaning agent. Keep it away from food and beverages.

∅ Do NOT empty the neutral cleaning agent into drains.

➢ Wear protective gloves and goggles.

➢ Avoid skin contact with the neutral cleaning agent.

9.2 Decontamination / chemical disinfection

The operator must ensure that proper decontamination is performed in case a contamination of the chamber by hazardous substances has occurred.

Disconnect the chamber from the power supply prior to chemical decontamination. Switch off the unit at the main power switch / Emergency off (8) (lock if necessary).

Do not use decontamination agents that may cause a hazard due to reaction with components of the device or the loading material. If there is doubt regarding the suitability of cleaning products, please contact BINDER service.

You can use the following disinfectants:

Inner chamber	Standard commercial surface disinfectants free from acid or halides. Alcohol-based solutions. We recommend using the disinfectant spray Art. No. 1002-0022.

	For chemical disinfection, we recommend using the disinfectant spray Art. No. 1002-0022. Any corrosive damage that may arise following use of other disinfectants is excluded from liability by BINDER GmbH.

	With every decontamination / disinfection method, always use adequate personal safety controls.

In case of contamination of the interior by biologically or chemically hazardous material, there are two possible procedures depending on the type of contamination and loading material:

(1) Spray the inner chamber with an appropriate disinfectant.

Before start-up, the chamber must be absolutely dry and ventilated, as explosive gases may form during the decontamination process.

(2) If necessary, a technician can remove the air baffles to clean them or replace them if they are heavily soiled. The air baffles can be sterilized in a sterilizer or autoclave.

	In case of eye contact, the disinfectant spray may cause eye damage due to chemical burns. Follow the operating instructions and safety hints labeled on the bottle of the disinfectant spray.

Recommended precautions: To protect the eyes use sealed protective goggles.

	CAUTION
	Danger of chemical burns through eye contact with the disinfectant spray. **Eye damage. Environmental damage** ∅ Do NOT empty the disinfectant into drains. ➢ Wear protective goggles.

	After using the disinfectant spray, allow the chamber to dry thoroughly, and aerate it sufficiently.

10. Maintenance and service, troubleshooting, repair, testing

10.1 General information, personnel qualification

- **Maintenance**

  See chap. 10.2.

- **Troubleshooting**

  If errors cannot be identified with simple troubleshooting, further troubleshooting must be performed by BINDER Service or by BINDER qualified service partners or technicians, in accordance with the description in the Service Manual.

  For personnel requirements please refer to the Service Manual

- **Repair**

  Repair of the chamber can be performed by BINDER Service or by BINDER qualified service partners or technicians, in accordance with the description in the Service Manual.

  After maintenance, the chamber must be tested prior to resuming operation.

- **Electrical testing**

  To prevent the risk of electrical shock from the electrical equipment of the chamber, an annual repeat inspection as well as a test prior to initial startup and prior to resuming operation after maintenance or repair, are required. This test must meet the requirements of the competent public authorities. We recommend testing under EN 50678:2020 / EN 50699:2020 in accordance with the details in the Service Manual.

  For personnel requirements please refer to the Service Manual.

10.2 Maintenance intervals, service

DANGER

Electrical hazard during live maintenance work.

Deadly electric shock.

∅ The chamber must NOT become wet during operation or maintenance works.

➢ Disconnect the chamber before conducting maintenance work. Turn off the main power switch / Emergency off (8).

➢ Make sure that general maintenance work will be conducted by licensed electricians or experts authorized by BINDER.

Ensure regular maintenance work is performed at least once a year.

The warranty becomes void if maintenance work is conducted by non-authorized personnel.

We recommend taking out a maintenance agreement. Please consult BINDER Service:

BINDER Service hotline:	+49 (0) 7462 2005 555
BINDER fax hotline:	+49 (0) 7462 2005 93555
BINDER Internet website	http://www.binder-world.com
BINDER address	BINDER GmbH, post office box 102, 78502 Tuttlingen, Germany

International customers, please contact your local BINDER distributor.

10.3 Return of the conditioner and other components to BINDER GmbH

If you return a BINDER product to us for repair or any other reason, we will only accept the product upon presentation of an **authorization number** (RMA number) that has previously been issued to you. An authorization number will be issued after receiving your complaint either in writing or by telephone **prior** to your sending the BINDER product back to us. The authorization number will be issued following receipt of the information below:

- BINDER product type and serial number
- Date of purchase
- Name and address of the dealer from which you bought the BINDER product
- Exact description of the defect or fault
- Complete address, contact person and availability of that person
- Exact location of the BINDER product in your facility
- A contamination clearance certificate (chap. 15) must be faxed in advance

The authorization number must be applied to the packaging in such a way that it can be easily recognized or be recorded clearly in the delivery documents.

☞	For security reasons we cannot accept a chamber delivery if it does not carry an authorization number.

Return address:

BINDER GmbH
Abteilung Service

Gänsäcker 16
78502 Tuttlingen
Germany

11. Disposal

11.1 Disposal of the transport packing

Packing element	Material	Disposal
Straps to fix packing on pallet	Plastic	Plastic recycling
Wooden transport box (option)	Non-wood (compressed match-wood, IPPC standard)	Wood recycling
with metal screws	Metal	Metal recycling
Pallet	Solid wood (IPPC standard)	Wood recycling
with foamed plastic stuffing	PE foam	Plastic recycling
Transport box	Cardboard	Paper recycling
with metal clamps	Metal	Metal recycling
Top cover	Cardboard	Paper recycling
Edge protection	Styropor® or PE foam	Plastic recycling
Protection of doors and racks	PE foam	Plastic recycling
Bag for operating manual	PE foil	Plastic recycling
Insulating air cushion foil (packing of optional accessories)	PE foil	Plastic recycling

If recycling is not possible, all packing parts can also be disposed of with normal waste.

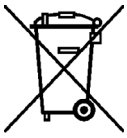
11.2 Decommissioning

- Turn off the chamber at the main power switch (1) and disconnect it from the power
- Drain the conditioner.
- Temporal decommissioning: See indications for appropriate storage, chap. 3.2.
- Final decommissioning: Dispose of the chamber as described in chap. 11.3 to 11.4.

11.3 Disposal of the chamber in the Federal Republic of Germany

According to Annex I of Directive 2012/19/EU of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE), BINDER devices are classified as “monitoring and control instruments” (category 9) only intended for professional use“. They must not be disposed of at public collecting points.

The chambers bear the symbol for the marking of electrical and electronic equipment manufactured / placed on the market in the EU after 13 August 2005 and be disposed of in separate collection according to Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) and German national law for electrical and electronic equipment (Elektro- und Elektronikgerätegesetz, ElektroG). WEEE marking: crossed-out wheeled bin with solid bar under. A significant part of the materials must be recycled in order to protect the environment.



At the end of the device’s service life, have the chamber disposed of according to the German national law for electrical and electronic equipment (Elektro- und Elektronikgerätegesetz, ElektroG from 20 October 2015, BGBl. I p. 1739) or contact BINDER service who will organize taking back and disposal of the chamber according to the German national law for electrical and electronic equipment (Elektro- und Elektronikgerätegesetz, ElektroG from 20 October 2015, BGBl. I p. 1739).

NOTICE

Danger of violation against existing law if not disposed of properly.

Failure to comply with applicable law.

∅ Do NOT dispose of BINDER devices at public collecting points.

➢ Have the device disposed of professionally at a recycling company which is certified according to the German national law for electrical and electronic equipment (Elektro- und Elektronikgerätegesetz, ElektroG from 20 October 2015, BGBl. I p. 1739).

or

➢ Instruct BINDER Service to dispose of the device. The general terms of payment and delivery of BINDER GmbH apply, which were valid at the time of purchasing the chamber.

Certified companies disassemble waste (used) BINDER equipment in primary substances for recycling according to Directive 2012/19/EU. The devices must be free from toxic, infectious or radioactive substances in order to eliminate any health hazards to the employees of the recycling companies.

Prior to handing the chamber over to a recycling company, it is the user’s responsibility that it is free from toxic, infectious or radioactive substances.

- Prior to disposal, clean all introduced or residual toxic substances from the chamber.
- Prior to disposal, disinfect the chamber from all sources of infection. Be aware that sources of infection may also be located outside the inner chamber.
- If you cannot safely remove all toxic substances and sources of infection from the chamber, dispose of it as special waste according to national law.
- Fill out the contamination clearance certificate (chap. 15) and enclose it with the chamber.

WARNING

Danger of intoxication and infection through contamination of the chamber with toxic, infectious or radioactive substances.

Damages to health.

∅ NEVER take a chamber contaminated with toxic substances or sources of infection for recycling according to Directive 2012/19/EU.

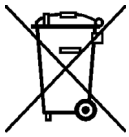
➢ Prior to disposal, remove all toxic substances and sources of infection from the chamber.

➢ A chamber from which all toxic substances or sources of infection cannot be safely removed must be considered as “special” waste according to national law. Dispose of it accordingly.

11.4 Disposal of the chamber in the member states of the EU except for the Federal Republic of Germany

According to Annex I of Directive 2012/19/EU of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE), BINDER devices are classified as “monitoring and control instruments” (category 9) only intended for professional use“. They must not be disposed of at public collecting points.

The chambers bear the symbol for the marking of electrical and electronic equipment manufactured / placed on the market in the EU after 13 August 2005 and be disposed of in separate collection according to the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE). WEEE marking: crossed-out wheeled bin with solid bar under.



At the end of the device’s service life, notify the distributor who sold you the device, who will take back and dispose of the chamber according to the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE).

NOTICE

Danger of violation against existing law if not disposed of properly.

Failure to comply with applicable law.

∅ Do NOT dispose of BINDER devices at public collecting points.

➢ Have the device disposed of professionally at a recycling company, which is certified according to conversion of the Directive 2012/19/EU into national law.

or

➢ Instruct the distributor who sold you the device to dispose of it. The agreements apply that were agreed with the distributor when purchasing the chamber (e.g. his general terms of payment and delivery).

➢ If your distributor is not able to take back and dispose of the chamber, please contact BINDER service.

Certified companies disassemble waste (used) BINDER equipment in primary substances for recycling according to Directive 2012/19/EU. The devices must be free from toxic, infectious or radioactive substances in order to eliminate any health hazards to the employees of the recycling companies.

Prior to handing the chamber over to a recycling company, it is the user’s responsibility that it is free from toxic, infectious or radioactive substances.

- Prior to disposal, clean all introduced or residual toxic substances from the chamber.
- Prior to disposal, disinfect the chamber from all sources of infection. Be aware that sources of infection may also be located outside the inner chamber.
- If you cannot safely remove all sources of infection and toxic substances from the chamber, dispose of it as special waste according to national law.
- Fill out the contamination clearance certificate (chap. 15) and enclose it with the chamber.

	WARNING **Danger of intoxication and infection through contamination of the chamber with toxic, infectious or radioactive substances.** **Damages to health.** ∅ NEVER take a chamber contaminated with toxic substances or sources of infection for recycling according to Directive 2012/19/EU. ➢ Prior to disposal, remove all toxic substances and sources of infection from the chamber. ➢ A chamber from which all toxic substances or sources of infection cannot be safely removed must be considered as “special” waste according to national law. Dispose of it accordingly.

12. Technical description

12.1 Factory calibration and adjustment

The chambers were calibrated and adjusted in the factory.

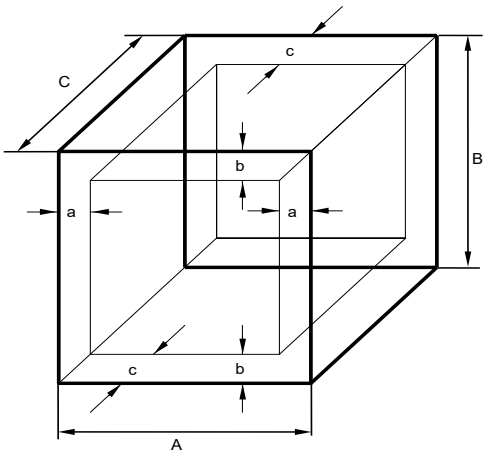
	Repeated calibrations of the temperature and humidity sensor are recommended in periods of 12 months.

12.2 Over current protection

The chambers are equipped with an internal fuse that can only be accessed with tools. If this fuse trips, notify a qualified electrician or BINDER Service.

12.3 Definition of usable volume

The usable volume illustrated below is calculated as follows:



A, B, C = internal dimensions (W, H, D)

a, b, c = distance to wall

a = 0.1*A
b = 0.1*B
c = 0.1*C

V_{USE} = (A - 2 * a) * (B - 2 * b) * (C - 2 * c)

Figure 25: Determination of the useable volume

The technical data refers to the defined usable volume.

	Do NOT place samples outside this usable volume. Do NOT divide the usable volume into separate parts with large area samples. Do NOT place samples too close to each other in order to permit circulation between them and thus obtain a homogenous distribution of temperature and humidity.

12.4 Technical Data

Unit size:			WIC 1	WIC2	WIC 3
Dimensions					
Wide chamber (narrow side)		mm	2600	2600	2600
Chamber height		mm	2470	2470	2470
Chamber length		mm	2500	3600	4700
Floor area (plus ramp)		m^2	5.5	8.2	10.8
Chamber volume		m^3	16.06	23.12	30.18
Space requirements of the chamber		m^2	6.50	9.36	12.22
Conditioner footprint		mm	362 x 586	362 x 586	362 x 586
			1'2" x 1'11"	*1'2" x 1'11"*	*1'2" x 1'11"*
Inspection window in the door, clear window dimension		mm	371 x 371	371 x 371	371 x 371
Clear door opening dimensions		mm	900 x 2000	900 x 2000	900 x 2000
Interior volume		m^3	12.5	18.5	24.5
Permissible floor load					
Surface load		N/m^2	50.000	50.000	50.000
		lbs/sq. ft.	*1.000*	*1.000*	*1.000*
Wheel load (rubber wheel)		$N/4cm^2$	1000	1000	1000
		lbs on a .62 sq. inch	*224*	*224*	*224*
Conditioner weight					
Weight		kg	147	147	147
		lbs.	*325*	*325*	*325*
Performance data					
Temperature range		°C / *°F*	5 to 50 *41 to 122*	5 to 50 *41 to 122*	5 to 50 *41 to 122*
Temperature fluctuation	at 25 °C / *77 °F* / 60% r.h.	+/- K	0.5	0.5	0.5
	at 40 °C / *104 °F* / 75% r.h.	+/- K	0.5	0.5	0.5
Temperature uniformity (variation)	at 25 °C / *77 °F* / 60% r.h.	+/- K	1.5	1.5	1.5
	at 40 °C / *104 °F* / 75% r.h.	+/- K	1.5	1.5	1.5
Humidity range		% r.h.	20 to 90	20 to 90	20 to 90
Humidity fluctuation	± % r.h.	+/- %r.h.	2.5	2.5	2.5
	± % r.h.	+/- %r.h.	2.5	2.5	2.5
Electrical data					
System of protection acc. to EN 60529		IP	20	20	20
Nominal voltage (+/-10%)	at 50 Hz power frequency	V	200-230	200-230	200-230
	at 60 Hz power frequency	V	200-230	200-230	200-230
Current type			1N~	1N~	1N~
Nominal power		kW	2,70	2,70	2,70
Installation category acc. to IEC 61010-1			II	II	II
Pollution degree acc. to IEC 61010-1			2	2	2
Environment-specific data					
Noise level (mean value)		dB (A)	69	69	69
Energy consumption	at 25 °C / *77 °F* / 60% r.h.	Wh/h	1400	1400	1400
	at 40 °C / *104 °F* / 75% r.h.	Wh/h	1400	1400	1400
Filling weight of refrigerant R450a (GWP 547)		kg	0.737	0.737	0.737

All technical data is specified for unloaded chambers with standard equipment at an ambient temperature of +22 °C +/- 3°C / *71.6 °F +/- 5.4 °F* and a power supply voltage fluctuation of +/-10%. The measurement of the performance data was carried out at 13 measuring points; peripheral measuring points with 8 cm distance to the walls. Technical data is determined based on BINDER Factory Standard Part 2:2015 and DIN 12880:2007.

All indications are average values, typical for chambers produced in series. We reserve the right to change technical specifications at any time.

	Bringing a source of humidity into the inner chamber will affect the minimum humidity specification.

The chamber ceiling is not suitable for additional loads other than the chamber's own weight.

Specification of shelf load capacities

Maximum field load: 1200 kg

Maximum shelf load with a length of 600–1300 mm: 150 kg with evenly distributed load

Maximum shelf load with a length of 1325-1550 mm: 120 kg with an evenly distributed load

In the case of corner structures, the shelf load of the load-bearing support is reduced by approx. 1/3.

12.5 Equipment and options (extract)

	To operate the chamber, use only original BINDER accessories or accessories / components from third-party suppliers authorized by BINDER. The user is responsible for any risk arising from using unauthorized accessories.

Regular equipment
High-performance, energy-efficient climate system
SmartPad for climate adjustment
Lockable door. Even when locked, the door can be opened from the inside at any time.
Lighting with motion sensor
WIC 2, WIC 3: Door can be mounted on the narrow or long side
Temperature limiter for the door heater

Options / accessories
Shelving system
Ramp

12.6 Accessories and spare parts (extract)

☞	BINDER GmbH is responsible for the safety features of the chamber only, provided skilled electricians or qualified personnel authorized by BINDER perform all maintenance and repair, and if components relating to chamber safety are replaced in the event of failure with original spare parts. The user is responsible for any risks arising from using unauthorized accessories/components.

Description	Art. no.
Lighting incl. lamp, light, motion sensor	5001-0054
Air Filter for conditioner	6014-0040
Spray Eliminator Filter for conditioner	6014-0041
Zinc Anode for conditioner	6006-0717
Ramp for all WIC models (230 V)	8012-2239
Shelf set for WIC 1 (230V)	8012-2240
Shelf set for WIC 2 (230V)	8012-2241
Shelf set for WIC 3 (230V)	8012-2242
Neutral cleaning agent 1 kg	1002-0016

For information on components not listed here, please contact BINDER Service.

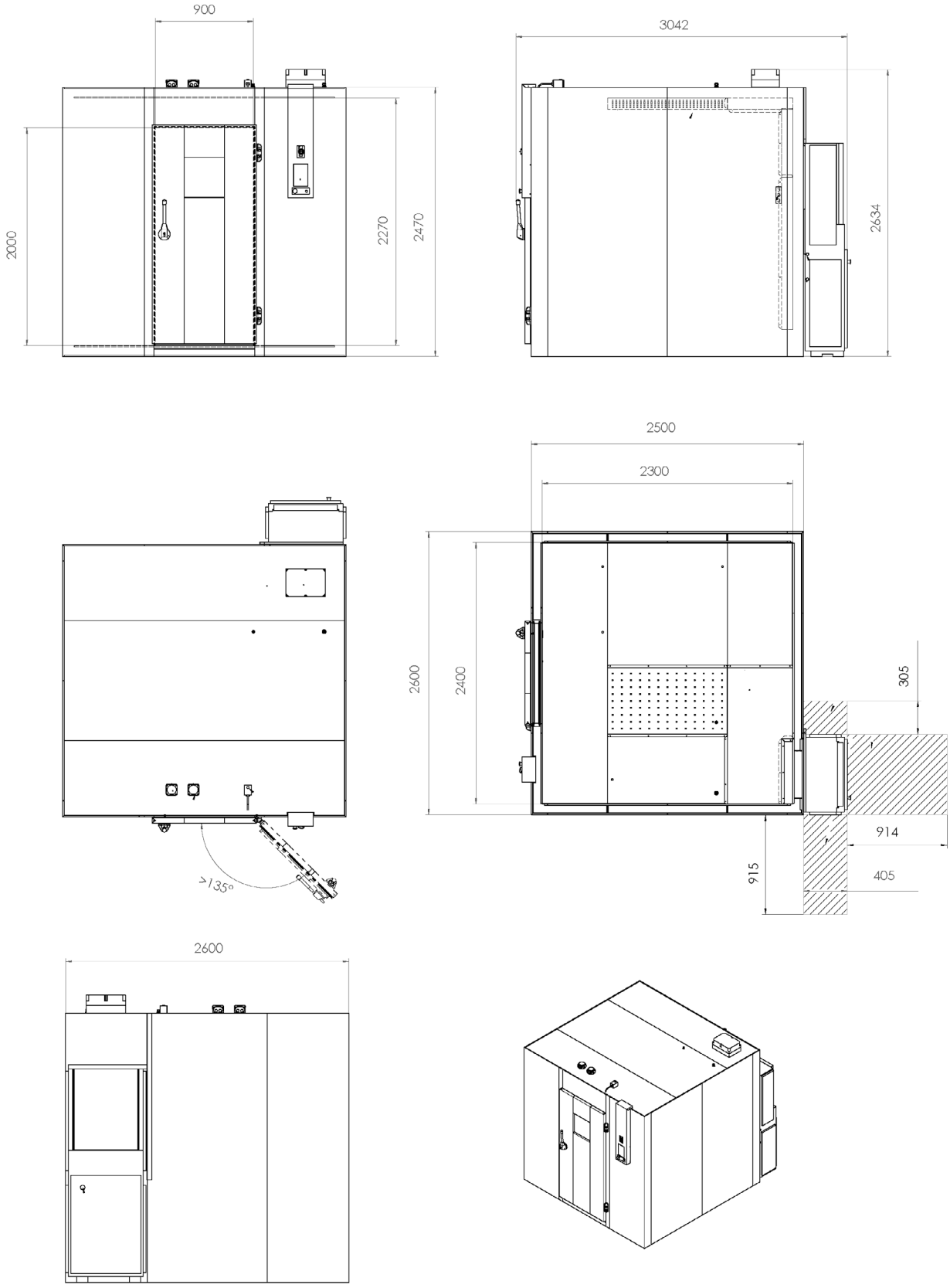
Validation service	Art. no.
Qualification folder IQ-OQ (printed version)	7007-0002
Qualification folder IQ-OQ (digital version)	7057-0002
Execution of IQ-OQ	DL40-0200

Calibration service	Art. no.
Spatial temperature measurement and humidity measurement including certificate (13 measuring points temperature, 1 measuring point humidity)	DL30-0113

Installation service	Art. no.
Mounting and installation, complete	DL10.080

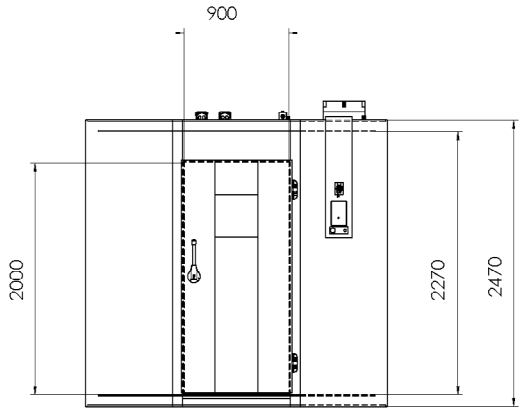
13. Dimensions

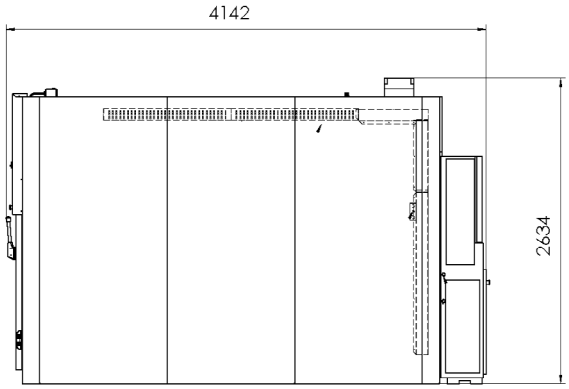
WIC 1 Dimensions

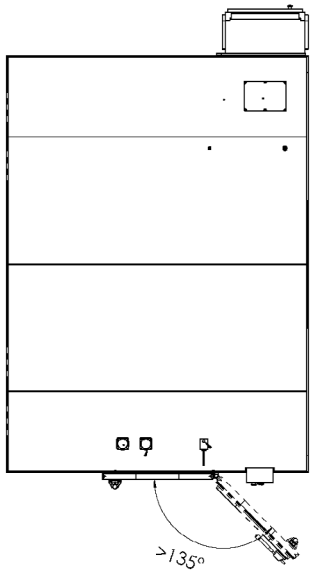


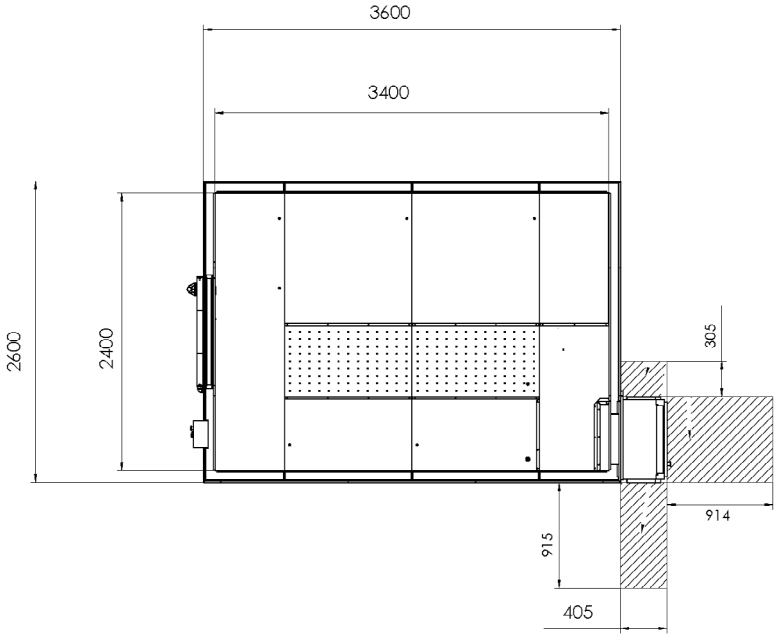
[Specifications in mm]

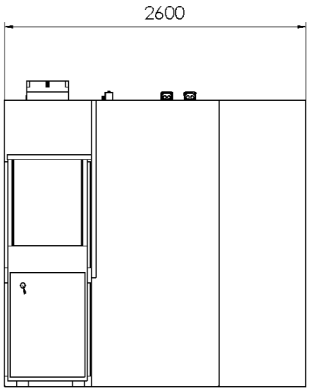
WIC 2 Dimensions

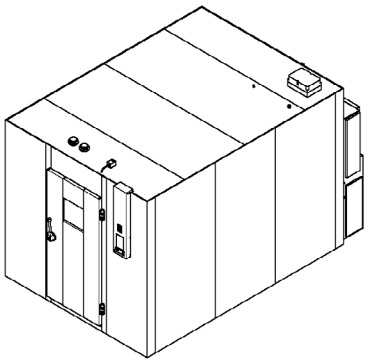






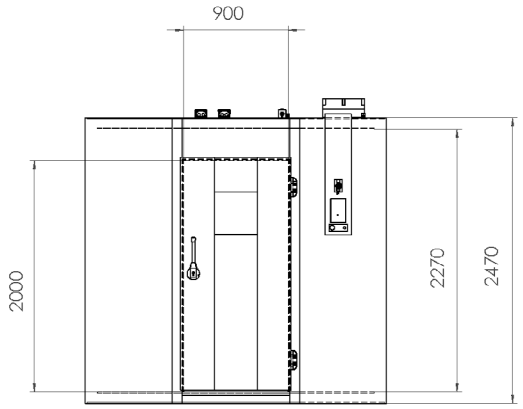


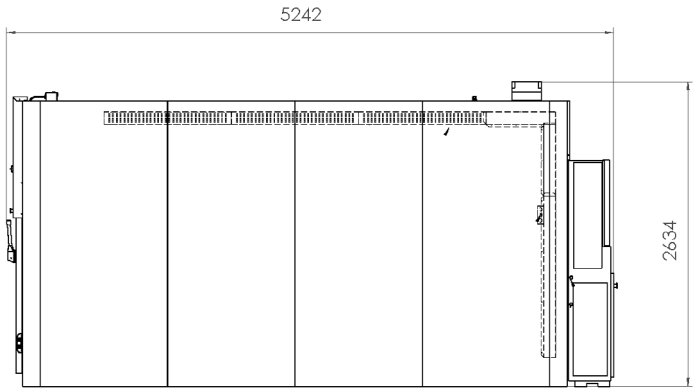


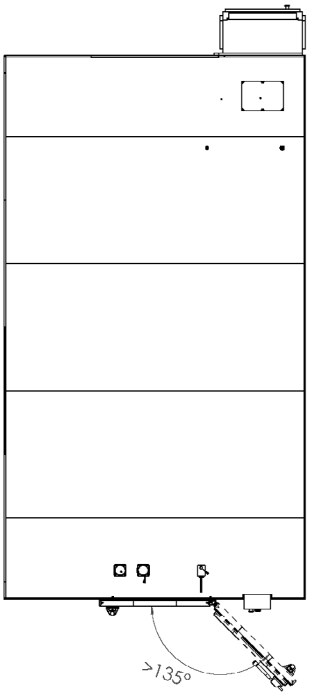


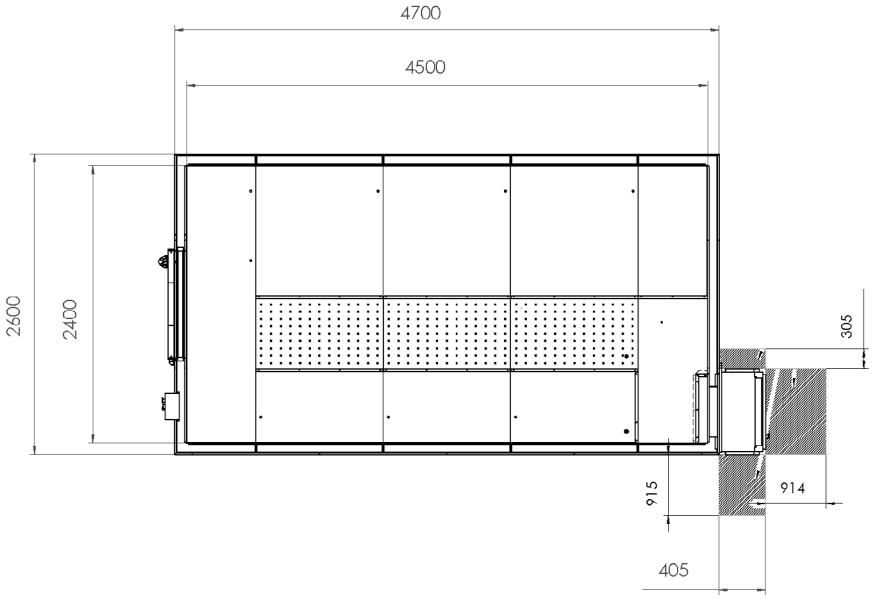
[Specifications in mm]

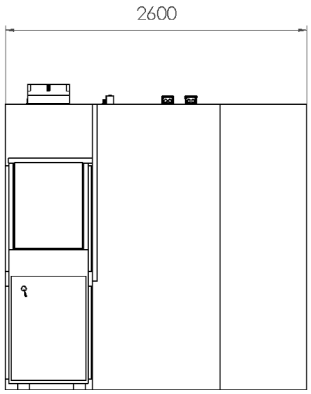
WIC 3 Dimensions

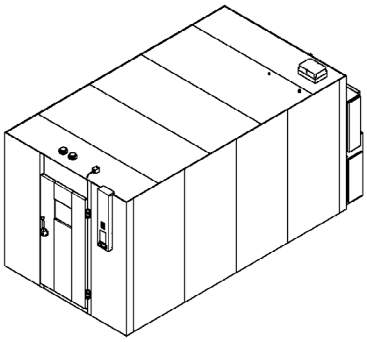












[Specifications in mm]

14. Certificates and declarations of conformity

14.1 EU Declaration of Conformity

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EU-Konformitätserklärung / EU Declaration of Conformity / Déclaration de conformité UE / Declaración de conformidad UE / Dichiarazione di conformità UE / Декларация соответствия EU

Hersteller / Manufacturer / Fabricant / Fabricante / Fabbricante / Производитель	BINDER GmbH
Anschrift / Address / Adresse / Dirección / Indirizzo / Адрес	Im Mittleren Ösch 5, 78532 Tuttlingen, Germany
Produkt / Product / Produit / Producto / Prodotto / Продукт	Walk-in-Chamber
Typenbezeichnung / Type / Type / Tipo / Tipo / Тип	WIC 1, WIC 2, WIC 3
Art. No. / Art. no. / Réf. / Art. Nº / Art. n. / № арт.	9800-0011, 9800-0012, 9800-0013

Die oben beschriebenen Maschinen sind konform mit folgenden EG/EU-Richtlinien (gemäß Veröffentlichung im Amtsblatt der europäischen Kommission):

The machines described above are in conformity with the following EC/EU Directives (as published in the Official Journal of the European Union):

Les machines décrites ci-dessus sont conformes aux directives CE/UE suivantes (selon leur publication dans le Journal officiel de l'Union européenne):

La máquina descrita arriba cumple con las siguientes directivas de la CE/UE (publicados en el Diario oficial de la Unión Europea):

Le macchine sopra descritte sono conforme alle seguenti direttive CE/UE (secondo la pubblicazione nella Gazzetta ufficiale della Commissione europea):

Машина,указанная выше, полностью соответствует следующим регламентам EC/EU (опубликованным в Официальном журнале Европейского Содружества):

- **2006/42/EC**
  Maschinenrichtlinie 2006/42/EG / Machinery directive 2006/42/EC / Directive Machines 2006/42/EC / Directiva 2006/42/CE (Máquinas) / Direttiva macchine 2006/42/CE / Директива о машинах 2006/42/EC
- **2014/30/EU**
  EMV-Richtlinie 2014/30/EU / EMC Directive 2014/30/EU / Directive CEM 2014/30/UE / Directiva CEM 2014/30/UE / Direttiva EMC 2014/30/UE / Директива ЭМС 2014/30/EU
- **2011/65/EU, (EU) 2015/863**
  RoHS-Richtlinien 2011/65/EU und (EU) 2015/863 / RoHS Directives 2011/65/EU and (EU) 2015/863 / Directives RoHS 2011/65/UE et (UE) 2015/863 / Directivas RoHS 2011/65/UE y (UE) 2015/863 / Direttive RoHS 2011/65/UE et (UE) 2015/863 / Директивы RoHS 2011/65/EU и (EU) 2015/863

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BINDER GmbH
Im Mittleren Ösch 5
78502 Tuttlingen
Deutschland

Tel: +49 (0) 74 62 / 20 05 - 0
Fax: +49 (0) 74 62 / 20 05 - 100
info@binder-world.com
www.binder-world.com

Geschäftsführung:
Dipl.-Ing. Peter M. Binder
Amtsgericht Stuttgart, HRB 727150
Sitz der Gesellschaft: Tuttlingen
Ust.-ID.-Nr.: DE815021304

Kreissparkasse Tuttlingen
IBAN: DE05 6435 0070 0000 0022 66
SWIFT: SOLA DE S1TUT
Deutsche Bank Tuttlingen
IBAN: DE56 6537 0075 0213 8709 00
SWIFT: DEUT DE SS653

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Die oben beschriebenen Maschinen entsprechen aufgrund ihrer Konzipierung und Bauart sowie in der von uns in Verkehr gebrachten Ausführung den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der genannten EG/EU-Richtlinien.

The machines described above are conform to the mentioned EC/EU directives in regard to the relevant safety and health demands due to their conception and style of construction as well as to the version put onto market by us.

Les machines décrites ci-dessus correspondent aux demandes de sécurité et de santé des directives citées de la CE/UE due à leur conception et construction et dans la réalisation mise sur le marché par nous.

Las máquinas descritas arriba se corresponden con los requisitos básicos pertinentes de seguridad y salud de las citadas directivas de la CE/UE debido a su concepción y fabricación, así como a la realización llevada a cabo por nosotros.

Le macchine sopra descritte sono conforme ai requisiti essenziali di sanità e sicurezza pertinenti delle summenzionate direttive CE/UE in termini di progettazione, tipo di costruzione ed esecuzione messa da noi in circolazione.

Машины описано выше, соответствует указанным директивам EC/EU в отношении требований соответствующей безопасности и здоровья по концепции и конструкции так же как и версия, применяемая нами на рынке.

Die oben beschriebenen Maschinen tragen entsprechend die Kennzeichnung CE.

The machines described above, corresponding to this, bear the CE-mark.

Les machines décrits ci-dessus, en correspondance, portent l'indication CE.

Las maquinas descritas arriba, en conformidad, llevan la indicación CE.

Le macchine sopra descritte sono contrassegnate dal marchio CE.

Машины описано выше, в соответствии с изложенным выше маркированы знаком CE.

Die oben beschriebenen Maschinen sind konform mit folgenden harmonisierten Normen:

The machines described above are in conformity with the following harmonized standards:

Les machines décrits ci-dessus sont conformes aux normes harmonisées suivantes :

Las maquinas descritas arriba cumplen con las siguientes normas:

Le macchine sopra descritte sono conforme alle seguenti normative armonizzate:

Машины описано выше, полностью соответствуют следующим стандартам:

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BINDER GmbH
Im MittlerenÖsch 5
78502 Tuttlingen
Deutschland

Tel: +49 (0) 74 62 / 20 05 - 0
Fax: +49 (0) 74 62 / 20 05 - 100
info@binder-world.com
www.binder-world.com

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Kreissparkasse Tuttlingen
IBAN: DE05 6435 0070 0000 0022 66
SWIFT: SOLA DE S1TUT
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IBAN: DE56 6537 0075 0213 8709 00
SWIFT: DEUT DE SS653

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Sicherheit / Safety / Sécurité / Seguridad / Sicurezza / Нормативы по безопасности
• **EN ISO 12100:2010 + Corr. 1:2011** • **EN ISO 13732-1:2008** • **EN 60204-1:2018**
EMV / EMC / CEM / CEM / EMC / ЭМС
• **EN 61326-1:2013**
RoHS
• **EN IEC 63000:2018**

78532 Tuttlingen, 08.11.2022
BINDER GmbH

P. Wimmer
Vice President
Vice President
Vice président
Vicepresidente
Vicepresidente
Вице-президент

J. Bollaender
Leiter F & E und Dokumentationsbevollmächtigter
Director R & D and documentation representative
Chef de service R&D et autorisé de documentation
Responsable I & D y representante de documentación
Direttore R & D e responsabile della documentazione
Глава департамента R&D представитель документации

BINDER GmbH
Im MittlerenÖsch 5
78502 Tuttlingen
Deutschland

Tel: +49 (0) 74 62 / 20 05 - 0
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SWIFT: DEUT DE SS653

14.2 UKCA Declaration of Conformity

BINDER
Best conditions for your success

UK CA

UKCA Declaration of Conformity

Name and address of manufacturer	BINDER GmbH Im Mittleren Ösch 5, 78532 Tuttlingen, Germany
Name and address of UK Authorised Representative	Comply Express Ltd Unit C2, Coalport House, Stafford Park 1, Telford TF3 3BD
Object of the Declaration	Walk-in-Chamber
Type Designation	WIC 1, WIC 2, WIC 3
BINDER Art. No.	9800-0011, 9800-0012, 9800-0013

The Objects of the Declaration described above are in conformity with the relevant UK Regulations and UK Guidelines:

- **Supply of Machinery (Safety) Regulations 2008**
  Statutory Instruments 2008 No. 1597 – Health and safety
- **Electromagnetic Compatibility Regulations 2016**
  Statutory Instruments 2016 No. 1091 – Electromagnetic Compatibility
- **The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012**
  Statutory Instruments 2012 No. 3032 – Environmental Protection

References of standards and/or technical specifications applied for this Declaration of Conformity, or parts thereof:

S.I. 2008 No. 1597:	EN ISO 12100:2010 EN ISO 13732-1:2008 EN 60204-1:2018
S.I. 2016 No. 1091:	EN 61326-1:2013
S.I. 2012 No. 3032:	EN IEC 63000:2018

This Declaration is issued under the sole responsibility of the manufacturer.

Tuttlingen	08.11.2022			
Place	Date	P. Wimmer Vice President	J. Bollaender Director R & D	BINDER GmbH

BINDER GmbH
Im Mittleren Ösch 5
78502 Tuttlingen
Deutschland

Tel: +49 (0) 74 62 / 20 05 - 0
Fax: +49 (0) 74 62 / 20 05 - 100
info@binder-world.com
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15. Contamination clearance certificate

Declaration regarding safety and health

Erklärung zur Sicherheit und gesundheitlichen Unbedenklichkeit

The German Ordinance on Hazardous Substances (GefStofV), and the regulations regarding safety at the workplace, require that this form be filled out for all products that are returned to us, so that the safety and the health of our employees can be guaranteed

Die Sicherheit und Gesundheit unserer Mitarbeiter, die Gefahrstoffverordnung GefStofV und die Vorschriften zur Sicherheit am Arbeitsplatz machen es erforderlich, dass dieses Formblatt für alle Produkte, die an uns zurückgeschickt werden, ausgefüllt wird.

	Note: A repair is not possible without a completely filled out form. Ohne Vorliegen des vollständig ausgefüllten Formblattes ist eine Reparatur nicht möglich.

- A completely filled out form must be transmitted via Fax (+49 (0) 7462 2005 93555) or by letter in advance, so that this information is available before the equipment/component part arrives. A second copy of this form must accompany the equipment/component part. In addition, the carrier should be notified.

  Eine vollständig ausgefüllte Kopie dieses Formblattes soll per Fax unter Nr. +49 (0) 7462 2005 93555 oder Brief vorab an uns gesandt werden, so dass die Information vorliegt, bevor das Gerät/Bauteil eintrifft. Eine weitere Kopie soll dem Gerät/Bauteil beigefügt sein. Ggf. ist die Spedition zu informieren.

- Incomplete information or non-conformity with this procedure will inevitably lead to substantial delays in processing. Please understand the reason for this measure, which lies outside our area of influence, and will help us to speed up this procedure.

  Unvollständige Angaben oder Nichteinhalten dieses Ablaufs führen zwangsläufig zu beträchtlichen Verzögerungen in der Abwicklung. Bitte haben Sie Verständnis für Maßnahmen, die außerhalb unserer Einflussmöglichkeiten liegen und helfen Sie mit, den Ablauf zu beschleunigen.

- **Please print and fill out this form completely**

  Bitte unbedingt vollständig ausfüllen!

1.	**Unit/ component part / type** / Gerät / Bauteil / Typ:
2.	**Serial No. /** Serien-Nr.:
3.	**Details about utilized substances / biological substances** / Einzelheiten über die eingesetzten Substanzen/biologische Materialien:
3.1	**Designations** / Bezeichnungen: a) _____ b) _____ c) _____
3.2	**Safety measures required for handling these substances** / Vorsichtsmaßnahmen beim Umgang mit diesen Stoffen: a) _____ b) _____ c) _____

3.3 Measures to be taken in case of skin contact or release into the atmosphere / Maßnahmen bei Personenkontakt oder Freisetzung:

a) _____

b) _____

c) _____

d) _____

3.4 Other important information that must be taken into account / Weitere zu beachtende und wichtige Informationen:

a) _____

b) _____

c) _____

4. Declaration on the risk of these substances (please checkmark the applicable items) / Erklärung zur Gefährlichkeit der Stoffe (bitte Zutreffendes ankreuzen) :

❑ **4.1 For non toxic, non radioactive, biologically harmless materials** / für nicht giftige, nicht radioaktive, biologisch ungefährliche Stoffe:

We hereby guarantee that the above-mentioned unit / component part… / Wir versichern, dass o.g. Gerät/Bauteil...

- ❑ Has not been exposed to or contains any toxic or otherwise hazardous substances / weder giftige noch sonstige gefährliche Stoffe enthält oder solche anhaften.
- ❑ That eventually generated reaction products are non-toxic and also do not represent a hazard / auch evtl. entstandene Reaktionsprodukte weder giftig sind noch sonst eine Gefährdung darstellen.
- ❑ Eventual residues of hazardous substances have been removed / evtl. Rückstände von Gefahrstoffen entfernt wurden.

❑ **4.2 For toxic, radioactive, biologically harmful or hazardous substances, or any other hazard ous materials** / für giftige, radioaktive, biologisch bedenkliche bzw. gefährliche Stoffe oder anderweitig gefährliche Stoffe.

We hereby guarantee that … / Wir versichern, dass …

- ❑ The hazardous substances, which have come into contact with the above-mentioned equipment / component part, have been completely listed under item 3.1 and that all information in this regard is complete / die gefährlichen Stoffe, die mit dem o.g. Gerät/Bauteil in Kontakt kamen, in 3.1 aufgelistet sind und alle Angaben vollständig sind.
- ❑ That the unit /component part has not been in contact with radioactivity / das Gerät/Bauteil nicht mit Radioaktivität in Berührung kam

5. Kind of transport / transporter / Transportweg/Spediteur:

Transport by (means and name of transport company, etc.) Versendung durch (Name Spediteur o.ä.)

_____

Date of dispatch to BINDER GmbH / Tag der Absendung an BINDER GmbH:

_____

We hereby declare that the following measures have been taken / Wir erklären, dass folgende Maßnahmen getroffen wurden:

- ❑ Hazardous substances were removed from the unit including component parts, so that no hazard exists for any person in the handling or repair of these items / das Gerät/Bauteil wurde von Gefahrstoffen befreit, so dass bei Handhabung/Reparaturen für die betreffenden Person keinerlei Gefährdung besteht
- ❑ The unit was securely packaged and properly identified / das Gerät wurde sicher verpackt und vollständig gekennzeichnet.
- ❑ Information about the hazardousness of the shipment (if required) has been provided to the transporter / der Spediteur wurde (falls vorgeschrieben) über die Gefährlichkeit der Sendung informiert.

We hereby commit ourselves and guarantee that we will indemnify BINDER GmbH for all damages that are a consequence of incomplete or incorrect information provided by us, and that we will exempt BINDER GmbH from eventual damage claims by third parties./ Wir versichern, dass wir gegenüber BINDER für jeden Schaden, der durch unvollständige und unrichtige Angaben entsteht, haften und BINDER gegen eventuell entstehende Schadenansprüche Dritter freistellen.

We are aware that, in accordance with Article 823 of the German Civil Code (BGB), we are directly liable with regard to third parties, in this instance especially the employees of BINDER GmbH, who have been entrusted with the handling / repair of the unit / component. / Es ist uns bekannt, dass wir gegenüber Dritten – hier insbesondere mit der Handhabung/Reparatur des Geräts/des Bauteils betraute Mitarbeiter der Firma BINDER - gemäß §823 BGB direkt haften

Name: _____

Position/ Title: _____

Date / Datum: _____

Signature / Unterschrift: _____

Company stamp / Firmenstempel:

Equipment that is returned to the factory for repair must be accompanied by a completely filled out contamination clearance certificate. For service and maintenance on site, such a contamination clearance certificate must be submitted to the service technician before the start of any work. No repair or maintenance of the equipment is possible, without a properly filled out contamination clearance certificate.