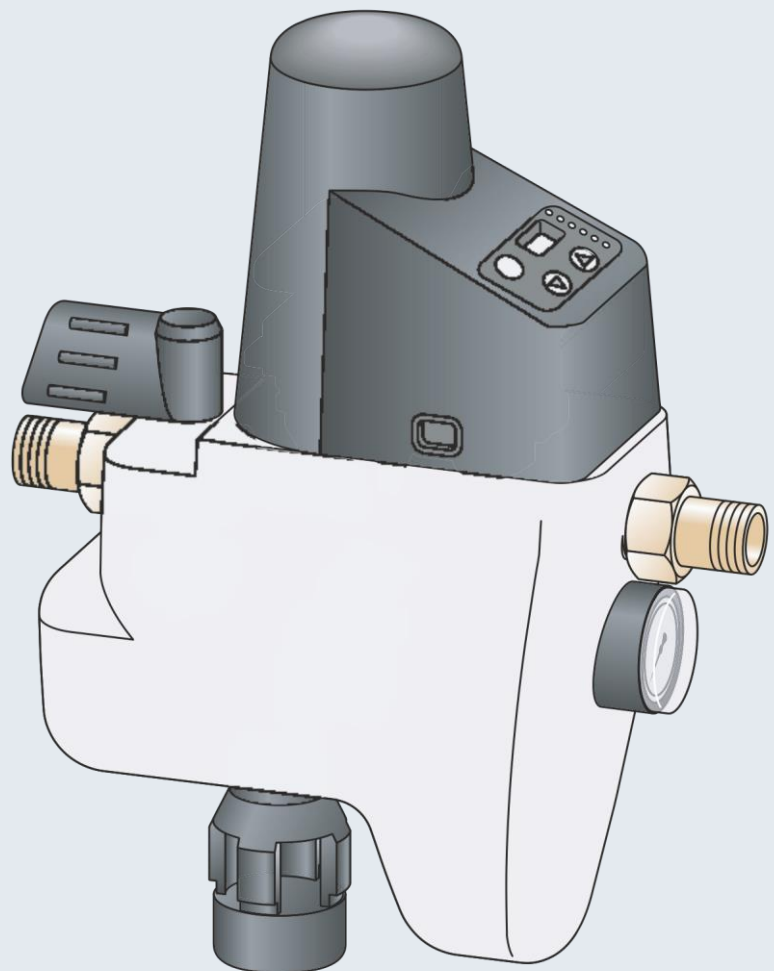


Fillcontrol Plus Compact

GB Operating manual

Original operating manual



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1 Notes on the operating manual

This operating manual is an important aid for ensuring the safe and reliable functioning of the device.

Reflex Winkelmann GmbH accepts no liability for any damage resulting from failure to observe the information in this operating manual. In addition to the requirements set out in this operating manual, national statutory regulations and provisions in the country of installation must also be complied with (concerning accident prevention, environment protection, safe and professional work practices, etc.).

This operating manual describes the device with basic equipment and interfaces for optional equipment with additional functions.

► **Notice!**

Every person installing this equipment or performing any other work at the equipment is required to carefully read this operating manual prior to commencing work and to comply with its instructions. The manual is to be provided to the product operator and must be stored near the product for access at any time.

2 Liability and guarantee

The device has been built according to the state of the art and recognised safety rules. Nevertheless, its use can pose a risk to life and limb of personnel or third persons as well as cause damage to the system or other property.

It is not permitted to make any modifications at the device, such as to the hydraulic system or the circuitry.

The manufacturer shall not be liable nor shall any warranty be honoured if the cause of any claim results from one or more of the following causes:

- Improper use of the device.
- Unprofessional commissioning, operation, service, maintenance, repair or installation of the device.
- Failure to observe the safety information in this operating manual.
- Operation of the device with defective or improperly installed safety/protective equipment.
- Failure to perform maintenance and inspection work according to schedule.
- Use of unapproved spare parts or accessories.

Prerequisite for any warranty claims is the professional installation and commissioning of the device.

► **Note!**

Arrange for Reflex Customer Service to carry out commissioning and annual maintenance, see chapter 11.1 "Reflex Customer Service" on page 9.

3 Safety

3.1 Explanation of symbols

3.1.1 Symbols and notes used

The following symbols and signal words are used in this operating manual.

DANGER

Danger of death and/or serious damage to health

- The sign, in combination with the signal word 'Danger', indicates imminent danger; failure to observe the safety information will result in death or severe (irreversible) injuries.

WARNING

Serious damage to health

- The sign, in combination with the signal word 'Warning', indicates imminent danger; failure to observe the safety information can result in death or severe (irreversible) injuries.

CAUTION

Damage to health

- The sign, in combination with the signal word 'Caution', indicates danger; failure to observe the safety information can result in minor (reversible) injuries.

ATTENTION

Damage to property

- The sign, in combination with the signal word 'Attention', indicates a situation where damage to the product itself or objects within its vicinity can occur.



Note!

This symbol, in combination with the signal word 'Note', indicates useful tips and recommendations for efficient handling of the product.

3.2 Personnel requirements

Assembly, commissioning and maintenance as well as connection of the electrical components may only be carried out by knowledgeable and appropriately qualified electricians.

3.3 Personal protective equipment



Use the prescribed personal protective equipment as required (e.g. ear protection, eye protection, safety shoes, helmet, protective clothing, protective gloves) when working on the system.

Information on personal protective equipment requirements is set out in the relevant national regulations of the respective country of operation.

3.4 Intended use

The device is a make-up station for heating and cooling water systems with diaphragm expansion vessels. It is intended to maintain the water pressure and to add water within a system circuit. Operation can only take place in system circuits with static pressurisation that are sealed against corrosion using the following water types:

- Non-corrosive
- Chemically non-aggressive
- Non-toxic

The ingress of atmospheric oxygen by permeation into the entire heating and cooling water system, make-up water and similar must be reliably minimized during operation.

3.5 Inadmissible operating conditions

The device is not suitable for the following applications:

- Mobile system operation.
- Outdoor operation.
- For use with mineral oils.
- For use with flammable media.
- For use with distilled water.



Note!

It is not permitted to make any modifications to the hydraulic system or the circuitry.

3.6 Residual risks

This device has been manufactured to the current state of the art. However, some residual risk cannot be excluded.



CAUTION

Risk of burns on hot surfaces

Hot surfaces in heating systems can cause burns to the skin.

- Wear protective gloves.
- Please place appropriate warning signs in the vicinity of the device.



CAUTION

Risk of injury due to pressurised liquid

If installation, removal or maintenance work is not carried out correctly, there is a risk of burns and other injuries at the connection points, if pressurised hot water or hot steam suddenly escapes.

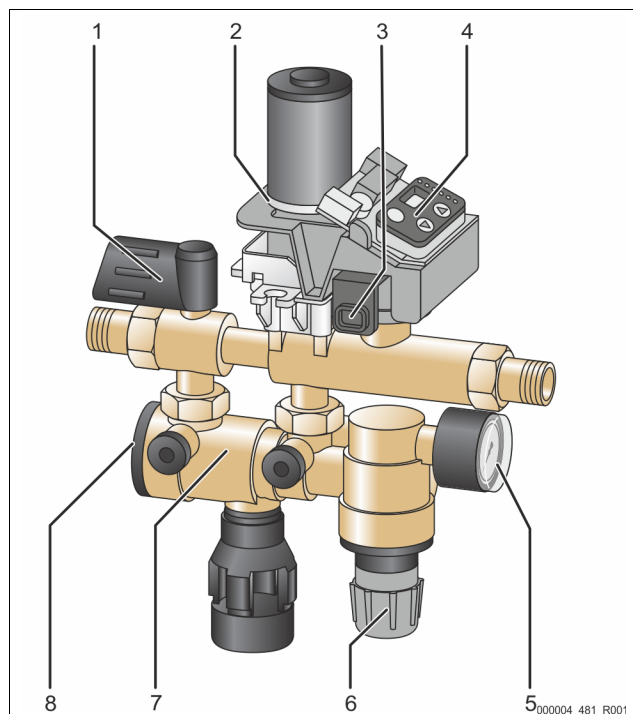
- Ensure proper installation, removal or maintenance work.
- Ensure that the system is de-pressurised before performing installation, removal or maintenance work at the connection points.

4 Description of the device

4.1 Description

The device enables controlled and safe filling and make-up of heating and cooling water systems with fresh mains water as required by DIN EN 1717. The built-in "BA" system isolator (to DIN EN 12729) prevents the return-flow of system water from heating or cooling water circuits into the mains water system. This device is approved for connection between the mains water system and heating or cooling water circuits in accordance with DIN EN 12828.

4.2 Overview



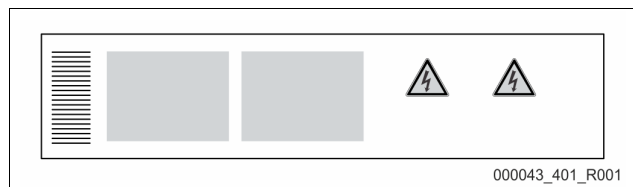
1	Shut-off	5	Pressure gauge
2	Motor ball valve	6	Pressure reducer
3	Pressure sensor	7	System isolator
4	Controller, operator panel	8	System isolator lock

The device consists of a shut-off valve, a system isolator, a dirt trap, a pressure sensor, a motorised ball valve, a pressure reducer with a control pressure gauge and a controller. The pressure reducer has a setting range between 0.5 and 5 bar. The housing is fashioned from hot-pressed brass. The interior components and the drain funnel are made from high-quality synthetic and elastomer (EPDM).

4.3 Identification

4.3.1 Nameplate

The nameplate provides information about the manufacturer, the year of manufacture, the manufacturing number and the technical data.



Information on the type plate	Meaning
Type	Device name
Serial No.	Serial number
min. / max. allowable pressure P	Minimum/maximum permissible pressure
max. continuous operating temperature	Maximum temperature for continuous operation

Information on the type plate	Meaning
min. / max. allowable temperature / flow temperature TS	Minimum / maximum permissible temperature / TS flow temperature
Year built	Year of manufacture
min. operating pressure set up on shop floor	Factory set minimum operating pressure
at site	Set minimum operating pressure
max. pressure safety valve factory - a line	Factory set actuating pressure of the safety valve
at site	Set actuating pressure of the safety valve

4.4 Scope of delivery

The scope of delivery is described in the shipping document and the content is shown on the packing.

Basic equipment for the make-up valve:

- The device
- Operating manual
- Power supply
- Threaded connection joint
- Pressure gauge

4.5 Optional equipment and accessories

The following optional equipment and accessories are available for this device:

- "FQIRA+" contact water meter.
- Softening with Reflex "Fillsoft".
- Reflex "FE" pressure sensor

Note!

Separate operating instructions are supplied with accessories.

5 Technical data

Permissible ambient temperature	> 0 – 45 °C
Degree of protection	IP 54
Noise level	55 dB
Electric output	350 W
Power supply	230 V/ 50 Hz (2m connecting cable with power adapter and plug)
Fusing	4 A
Weight	3.0 kg
Height	304 mm
Width	240 mm
Depth	91 mm
Inlet connection	RP ½"
Outlet connection	RP ½"
Make-up output	≤ 500 l/h
Max. supply pressure	10 bar
Min. inlet pressure	P ₀ + 1.3 bar
Max. delivery pressure	≤ 1.5 bar
Permissible gauge operating pressure	10 bar
Permissible operating temperature	70 °C
Flow medium	Potable water
Permissible min. operating pressure P ₀	1 - 4.5 bar (1.5 bar factory-set)
Outlet pressure (pressure reducer)	0.5 - 5 bar (3.0 bar factory-set)

Floating output (changeover contact) for group alarm, max. contact load 230 V 2 A

6 Installation

⚠ DANGER

Risk of serious injury or death due to electric shock.

If live parts are touched, there is risk of life-threatening injuries.

- Ensure that the system is voltage-free before installing the device.
- Ensure that the system is secured and cannot be reactivated by other persons.
- Ensure that installation work for the electric connection of the device is carried out by an electrician, and in compliance with electrical engineering regulations.

⚠ CAUTION

Risk of injury due to pressurised liquid

If installation, removal or maintenance work is not carried out correctly, there is a risk of burns and other injuries at the connection points, if pressurised hot water or hot steam suddenly escapes.

- Ensure proper installation, removal or maintenance work.
- Ensure that the system is de-pressurised before performing installation, removal or maintenance work at the connection points.

⚠ CAUTION

Risk of burns on hot surfaces

Hot surfaces in heating systems can cause burns to the skin.

- Wear protective gloves.
- Please place appropriate warning signs in the vicinity of the device.

⚠ CAUTION

Risk of injury due to falls or bumps

Bruising from falls or bumps on system components during installation.

- Wear personal protective equipment (helmet, protective clothing, gloves, safety boots).

► Note!

Confirm that installation and start-up have been carried out correctly using the installation, start-up and maintenance certificate. This action is a prerequisite for the making of warranty claims.

- Have the Reflex Customer Service carry out commissioning and the annual maintenance.

- The nameplate of and the markings on the device provide information about the manufacturer, the year of manufacture, the manufacturing number and technical data. Ensure that the temperature and pressure protection does neither exceed nor fall below the operating parameters.
- The device is shipped with a plug (power unit) and must be connected only to an earthed power outlet.

6.1 Installation conditions

6.1.1 Incoming inspection

Prior to shipping, this device was carefully inspected and packed. Damages during transport cannot be excluded.

Proceed as follows:

1. Upon receipt of the goods, check the shipment for
 - completeness and
 - possible transport damage.
2. Document any damage.
3. Contact the forwarding agent to register your complaint.

6.2 Preparatory work

- The installation location must be a frost-free and well-ventilated space protected from flooding.
- Ensure adequate distance of the device from the wall.
- The device must be accessible for maintenance, assembly and disassembly.

6.3 Execution

ATTENTION

Damage due to improper installation

Additional device stresses may arise due to the connection of pipes or system equipment.

- Ensure that pipes are connected from the device to the system without them being stressed or strained.
- If necessary, provide support structures for the pipes or equipment.

Install the device in the system circuit.

Proceed as follows:

1. Install the appropriate connection line from the mains water system to the device.
 - Prevent any possible stagnation within the water circuit.
2. Install the outlet line from the device to the system circuit.
 - Select an appropriately dimensioned outlet line for the device (length and diameter).
 - Take into account that the pressure loss in this line is < 0.3 bar in every operating mode.
3. Thoroughly purge the lines after installation.
 - You will thus prevent damages caused by contamination.
4. Ensure the correct flow direction of the device.
 - Note the marking indicating the flow direction at the device housing.
5. Install the device between the connection line from the mains water system and the outlet line to the system circuit.
 - Use the supplied connection threaded connection fitting.
6. Install the drain pipe with sufficient dimensions (length and diameter) at the device.
 - When connecting the funnel to the waste water system, ensure that you comply with the applicable DIN EN 12056 standard.

The device is installed.

► Note!

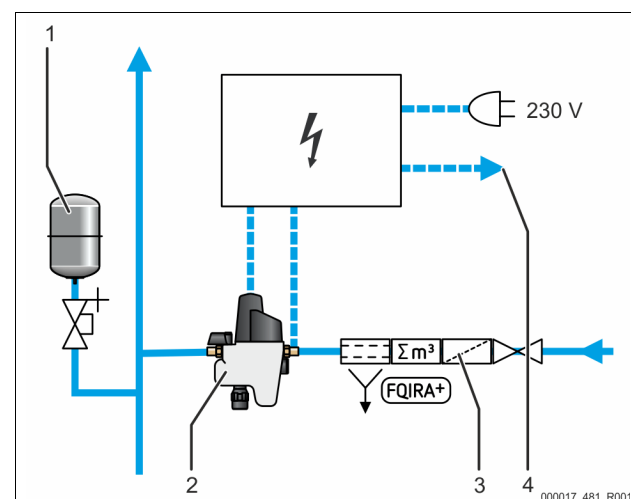
Use a drinking water in accordance with DIN EN 13443 and a water metering instrument.

- This will ensure continuous and trouble-free operation.

► Note!

When using a water treatment system, use an additional pressure sensor.

6.4 Wiring diagram



1	Diaphragm expansion vessel	3	Contact water meter
2	Fillcontrol make-up fitting	4	Group fault

6.5 Electrical connection

⚠ DANGER

Risk of serious injury or death due to electric shock.

If live parts are touched, there is risk of life-threatening injuries.

- Ensure that the system is voltage-free before installing the device.
- Ensure that the system is secured and cannot be reactivated by other persons.
- Ensure that installation work for the electric connection of the device is carried out by an electrician, and in compliance with electrical engineering regulations.

⚠ DANGER

Risk of serious injury or death due to electric shock

Some parts of the device's circuit board may still carry 230 V voltage even with the device physically isolated from the power supply.

- Before you remove the covers, completely isolate the device controller from the power supply.
- Verify that the main circuit board is voltage-free.

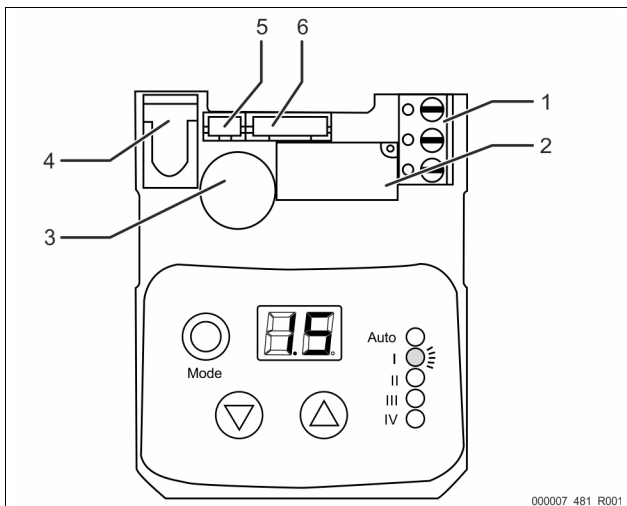
The power supply of the device is prepared by the factory:

- Power unit for wall socket.
- Plug for jack socket.

The electric wiring must be carried out by an electrician in accordance with all applicable national and local regulations.

A socket with a power supply of 230 volts for the connection must be provided by the customer.

6.5.1 Terminal diagram



No.	Designation	Assignment (from left to right)
1	Potential-free alarm signalling contact for forwarding of alarms to a building control system / Terminal 3-pole	<ul style="list-style-type: none"> • Connecting bridge (in normal operation, bridge between 1+2, in fault between 2+3) • Root • Changeover switch to reverse the function of the switches 1+2
2	Pressure sensor - PH connector 3 pole	<ul style="list-style-type: none"> • Pressure sensor supply • Pressure sensor earth • Pressure sensor signal
3	Motor, Micro switch, Battery - PH connector 6-pole	<ul style="list-style-type: none"> • Battery + pole • Battery earth • Motor earth • Motor supply • Micro switch • Micro switch
4	Signal transmitter	
5	Pressure sensor - PH connector 3 pole	<ul style="list-style-type: none"> • Pressure sensor supply • Pressure sensor earth • Pressure sensor signal

No.	Designation	Assignment (from left to right)
6	Plug terminal of the integrated motorised ball valve	

7 Commissioning

Note!

Confirm that installation and start-up have been carried out correctly using the installation and commissioning certificate. This action is a prerequisite for the making of warranty claims.

- Have the Reflex Customer Service carry out commissioning and the annual maintenance.

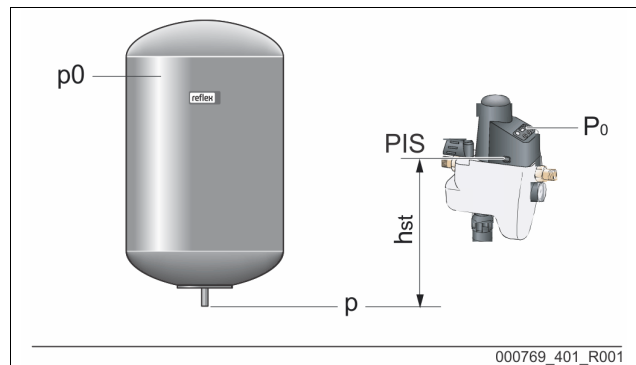
7.1 Requirements for initial commissioning

- The device is installed.
- The connections to the system circuit and the mains water system are made
- All shut-off devices to the system circuit and the mains water system are provided.
- The electrical connection has been created according to applicable national and local regulations.
- The pipelines to the device are purged and free of dirt and welding residue.
- The connection of the drain funnel to the waste water system is made according to the applicable DIN EN 12056 standard.
- The provided pressure gauge is installed at the pressure reducer.

7.2 Determining the P_0 minimum operating pressure for the controller

The " P_0 " minimum working pressure for the device is used in system circuits with a diaphragm expansion vessel.

Calculate the " P_0 " minimum working pressure for the device:



- The device is installed at the same level ($h_{st} = 0$) as the diaphragm expansion vessel:
 $P_0 = p_0$
- The device is installed at a lower level than the diaphragm expansion vessel:
 $P_0 = p_0 + h_{st} / 10$
- The device is installed at a higher level than the diaphragm expansion vessel:
 $P_0 = p_0 - h_{st} / 10$

P_0 Minimum working pressure in bar
 p_0 Initial pressure, diaphragm expansion vessel, in bar
 h_{st} Static elevation in m

Note!

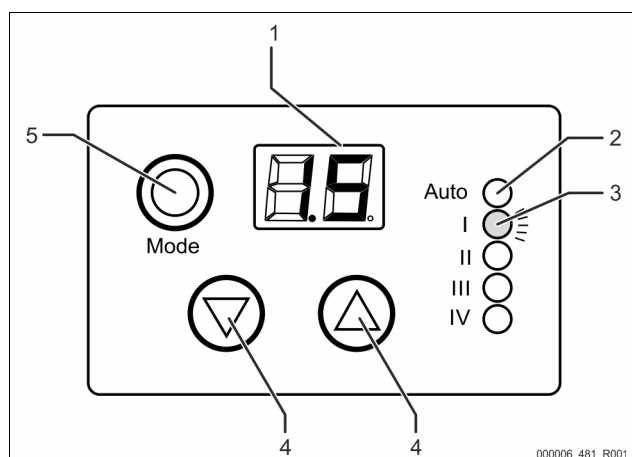
Calculate the filling pressure for the make-up with mains water into the system circuit as follows:
Filling pressure $\geq P_0 + 0.3$ bar

Note!

During planning, take into account that the working range of the device must be between the "PA" initial pressure and the "PE" final pressure in the pressurisation working range.

7.2.1 Entering the minimum operating pressure in the controller

Enter the value for "P0" minimum operating pressure into the controller.



1	Display	4	Arrow keys
2	"Auto" LED	5	Mode key
3	Status LEDs (I-IV)		

- Remove the black plastic cover of the device.
 - Press the catches on both sides of the plastic cover and pull the cover upward.
- Insert the plug into the jack socket.
- Fit the plastic cover.
 - The catches on both sides of the plastic cover must latch.
- Plug in the power supply.
 - After approximately 4 seconds, the system pressure is shown on the display.
 - The "Auto" LED (2) flashes green as a visual signal.
- Press the Mode key (5) for 4 seconds.
 - The "I" LED (3) flashes in 0.5 second rhythm as a visual signal.
 - The factory-set default value for the "P0" minimum operating pressure is displayed.
- Press the arrow keys (4) to set the required "P0" minimum operating pressure.
- Then press again the Mode key (5) to confirm your input of the "P0" minimum operating pressure.

The "P0" minimum pressure is entered.

- **Note!**
- If necessary, press the Mode key (5) to activate the automatic make-up for 3 seconds.
 - Upon activation, the "Auto" LED will illuminate in continuous green.

7.2.2 Adjust the pressure reducer

The pressure reducer is factory-set to a default value of 3.0 bar.

You must use the pressure reducer to set the setting pressure for the device.

- Minimum setting pressure: Minimum operating pressure $p_0 + 0.5$ bar
- Maximum setting pressure: Actuating pressure of the safety relief valve from the facility system $p_{SV} - 0.5$ bar.

Set the pressure reducer as follows:

- Remove the insulation of the device.
- Ensure that the inlet pressure is higher by at least 1.3 bar than the desired "p0" minimum operating pressure.
- Unlock the pressure setting knob by pulling it downward.
- Set the required pressure.
 - You increase the outlet pressure by turning the pressure setting knob clockwise. Turning the knob counter-clockwise reduces the pressure setting.
- Install an inspection pressure gauge.
- Directly read the selected setting at the inspection pressure gauge, see chapter 4.2 "Overview" on page 4.
- After you have set the required pressure, push the pressure setting knob to re-lock it.
- Remove the inspection pressure gauge.

The setting process is completed.

7.2.3 Filling the system with water

Fill the system circuit with fresh mains water.

Proceed as follows:

- At the controller operator panel, press and hold the Down key and, at the same time, press the Up key three times within two seconds.
 - The "III" LED (filling time) illuminates and the filling process is started.
- Press the "Mode" key twice and the filling of the system circuit is stopped.

The "Auto" LED illuminates green and the filling process of the facility system is completed.

The set filling pressure is maintained during filling of the system circuit (run time and cycle monitoring is switched off during this time).

- **Note!**
- You can start filling the system only when the set pressure is lower than P_0 !

- **Note!**
- The filling of the system circuit is automatically ended after two hours.

- **Note!**
- The system circuit returns a fault message if the filling time of two hours is exceeded.

- **Note!**
- For the fault message, see chapter 8.3 "Fault messages" on page 8.

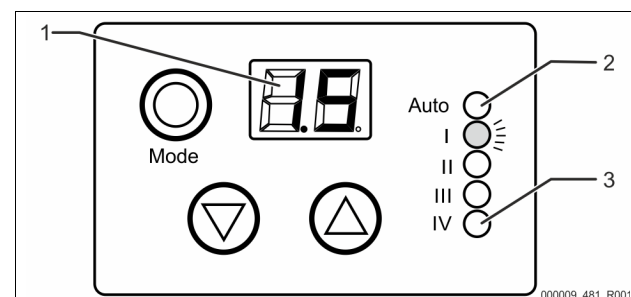
7.2.4 Cleaning the dirt trap

Use fresh water to clean the dirt trap after you have filled the facility system, see chapter 9 "Maintenance" on page 8.

8 Operation

8.1 Operating modes

8.1.1 Automatic mode



In Automatic mode, the controller monitors the make-up process.

- "Auto" LED (2) illuminates green. The display (1) displays the actual pressure.
- If the pressure drops below the target value, the system adds fresh water from the drinking water system.
- The make-up process is shut down when the second target value is exceeded.
- During the make-up, the "Auto" LED (2) illuminates green and the "IV" LED (3) flashes red as a visual signal.

- **Note!**
- The device monitors the run time of the make-up and the make-up cycles. If the value is exceeded, the device locks the make-up and activates a corresponding fault message.

8.1.2 Emergency locking function

The emergency locking function is triggered in the event of a power failure. The device is shut down.

- The motor ball valve is closed via the integrated battery.
- After the locking process is completed, the electronic system is no longer supplied by the battery.
 - No further actions can be executed.

8.2 Factory settings in the Service menu

Display 1 LED "II"	Make-up cycles	3 cycles
Display 2 LED "III"	Filling time (initial filling)	2 hours
Display 3 LED "IV"	Max. make-up time	10 min
Display 4	Acoustic signal	ON
Display 5	Closing point of the hysteresis	0.3 bar
Display 6	Opening point of the hysteresis	0.1 bar

8.3 Fault messages

ER Code	Fault type	Fault cause	Troubleshooting
E1 "Auto" flashes red	<ul style="list-style-type: none"> Make-up time exceeded Make-up cycles exceeded 	Make-up runs for more than 10 minutes	<ul style="list-style-type: none"> Search and repair the leak in the network Check the settings of the pressure reducers Acknowledge the fault (Press "Mode" for 3 seconds) If a water treatment system is used, you must install an external "reflex FE" pressure sensor
		The maximally 2 NSP cycles within one hour have been exceeded.	<ul style="list-style-type: none"> Search and repair the leak in the network Check the settings of the pressure reducers
E2 "Auto" flashes red	<ul style="list-style-type: none"> System filling run time exceeded 	The system has been filled for more than 2 hours.	<ul style="list-style-type: none"> Check the settings of the pressure reducers Search and repair the leak in the network Acknowledge the fault (Press "Mode" for 3 seconds)
E3 "Auto" flashes red	<ul style="list-style-type: none"> No correct pressure signal The motor does not reach the Zero position Internal system fault (ROM) Internal system fault (EE) 		<ul style="list-style-type: none"> Reflex Customer Service
E4 "Auto" flashes red	<ul style="list-style-type: none"> Battery empty 	The battery is discharged.	<ul style="list-style-type: none"> Replace the battery Acknowledge the fault (Press "Mode" for 3 seconds)

Example for a fault message: Exceeding the make-up time

During the make-up with water from the drinking water system, the set system filling pressure has not been reached before expiry of the make-up time.

- The "Auto" LED flashes red as a visual signal.
- The ER code "E1" is output to the control.
 - The system emits an acoustic warning.

Proceed as follows:

- Look for the fault.
- Rectify the fault.
- Press the Mode key for at least 3 seconds.
 - The fault message is acknowledged.

9 Maintenance

CAUTION

Risk of burns

Escaping hot medium can cause burns.

- Maintain a sufficient distance from the escaping medium.
- Wear suitable personal protective equipment (safety gloves and goggles).

DANGER

Risk of serious injury or death due to electric shock.

If live parts are touched, there is risk of life-threatening injuries.

- Ensure that the system is voltage-free before installing the device.
- Ensure that the system is secured and cannot be reactivated by other persons.
- Ensure that installation work for the electric connection of the device is carried out by an electrician, and in compliance with electrical engineering regulations.

CAUTION

Risk of injury due to pressurised liquid

If installation, removal or maintenance work is not carried out correctly, there is a risk of burns and other injuries at the connection points, if pressurised hot water or hot steam suddenly escapes.

- Ensure proper installation, removal or maintenance work.
- Ensure that the system is de-pressurised before performing installation, removal or maintenance work at the connection points.

The device is to be maintained annually.

- The maintenance intervals depend on the local operational conditions.



Note!

Arrange for maintenance tasks must be carried out only by specialist personnel or Reflex Customer Service.

Use the connections provided for ball valves and a suitable pressure gauge to perform a function test of the device. Check the proper functioning of the device after the first year of operation.

Cleaning the system isolator with integrated dirt trap

Clean the "BA" system isolator. The system isolator must be cleaned regularly.

Proceed as follows:

1. Use the shut-off devices up- and downstream of the device to lock the system and drinking water lines.
2. Use the maintenance wrench (opening 27) to slowly unscrew the system isolator lock.
3. Remove the dirt trap.
 - Support body with strainer.
4. Remove the BA cartridge.
 - The BA cartridge projects due to the spring load tension in the system isolator.
5. Clean all components with clear running water.
 - Strainer
 - Support body
 - BA cartridge
6. Check the return-flow preventer in the system isolator for proper functioning.
7. Check the gaskets for integrity and cleanliness and replace, if necessary.
8. Insert the cleaned BA cartridge in the system isolator.
9. Insert the cleaned dirt trap in the system isolator.
10. Tighten the system isolator lock.
11. Slowly open the shut-off devices up- and downstream of the device.

The cleaning process is completed.

Checking the pressure reducer

Check the proper functioning of the pressure reducer.

- Inspect the device at regular intervals and in any event at least once per year.

Checking the maintenance battery

Check the maintenance battery.

- Inspect the battery at regular intervals and in any event at least once per year.
- Replace the battery (standard 9V PP3 battery) if it is discharged.

10 Disassembly**⚠ DANGER****Risk of serious injury or death due to electric shock.**

If live parts are touched, there is risk of life-threatening injuries.

- Ensure that the system is voltage-free before installing the device.
- Ensure that the system is secured and cannot be reactivated by other persons.
- Ensure that installation work for the electric connection of the device is carried out by an electrician, and in compliance with electrical engineering regulations.

⚠ DANGER**Risk of serious injury or death due to electric shock**

Some parts of the device's circuit board may still carry 230 V voltage even with the device physically isolated from the power supply.

- Before you remove the covers, completely isolate the device controller from the power supply.
- Verify that the main circuit board is voltage-free.

⚠ CAUTION**Risk of burns**

Escaping hot medium can cause burns.

- Maintain a sufficient distance from the escaping medium.
- Wear suitable personal protective equipment (safety gloves and goggles).

⚠ CAUTION**Risk of burns on hot surfaces**

Hot surfaces in heating systems can cause burns to the skin.

- Wait until hot surfaces have cooled down or wear protective safety gloves.
- The operating authority is required to place appropriate warning signs in the vicinity of the device.

⚠ CAUTION**Risk of injury due to pressurised liquid**

If installation or maintenance work is not carried out correctly, there is a risk of burns and other injuries at the connection points, if pressurised hot water or steam suddenly escapes.

- Ensure proper disassembly.
- Ensure that the system is de-pressurised before performing the disassembly.

Proceed as follows:

1. Prior to dismantling, block off all "water"-side connections to the device.
2. Disconnect the system from the power supply and secure it against unintended reactivation.
3. Disconnect the power cable of the device from the power supply.
4. Disconnect and remove all cables from the terminals of the device controller.
5. Undo all hose and pipe connections between the device and the system and remove them completely.
6. Drain all water from the device.
7. If necessary, physically remove the device from the system.

The device is removed.

11 Annex**11.1 Reflex Customer Service****Central customer service**

Central telephone number: +49 (0)2382 7069 - 0

Customer Service extension: +49 (0)2382 7069 - 9505

Fax: +49 (0)2382 7069 - 9523

E-mail: service@reflex.de

Technical Hotline

For questions about our products

Telephone number: +49 (0)2382 7069-9546

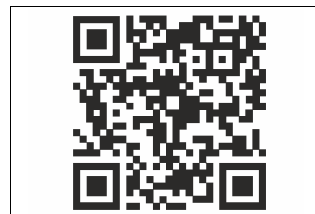
Monday to Friday 8:00 to 16:30

11.2 Conformity and standards

Device conformity declarations are available on the Reflex homepage.

www.reflex-winkelmann.com/konformitaetserklaerungen

Alternatively, scan the QR code:

**11.3 Guarantee**

The respective statutory guarantee regulations apply.

EN **Installation and commissioning certificate** - This device has been installed and commissioned in accordance with the instructions provided in the operating manual. The settings in the controller match the local conditions.



Typ / Type:	
P ₀	
P _{SV}	
Fabr. Nr. / Serial-No.	





A WINKELMANN
BUILDING+INDUSTRY BRAND



Thinking solutions.

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