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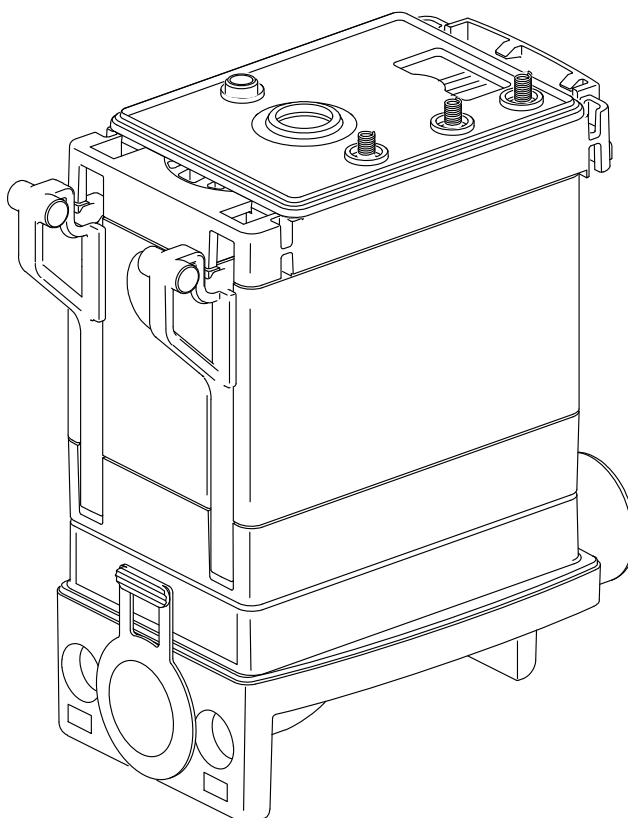
Instructions for installation and operation

Replacement unit

Service-Unit BEKOMAT®

33U/33U CO/33U F/33U CO F

(SUBM33U / SUBM33UCO / SUBM33UF / SUBM33UCOF)



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1 Pictograms and symbols



Observe the installation and operating instructions



Observe the installation and operating instructions (on the type plate)



General danger symbol (danger, warning, caution)



General danger symbol (danger, warning, caution) for supply voltage and supply voltage-carrying plant components

2 Safety instructions



Please check whether or not these instructions correspond to the device type.

Adhere to all advice given in these operating instructions. They include essential information which must be observed during the installation, operation and maintenance. Therefore it is imperative for the service technician and the responsible operator / technical staff to read these operating instructions prior to installation, start-up and maintenance.

The operating instructions must be accessible at any time at the place of application of the BEKOMAT® 33U/33U CO .

In addition to these operating instructions, local or national regulations must be complied with, if necessary.

Make sure that the BEKOMAT® 33U/33U CO is operated only within the permissible limit values indicated on the type plate. Any deviation involves a risk for persons and materials, and may result in malfunction and service failures.

If you have any queries regarding these installation- and operating instructions, please contact BEKO TECHNOLOGIES GMBH.



Danger!

Compressed air!

Risk of serious injury or death through contact with quickly or suddenly escaping compressed air or through bursting plant components or plant components which are not secured.

Measures:

- Do not exceed the maximum operating pressure (see type plate).
- **Only carry out service measures when the system is pressureless.**
- Use pressure-resistant installation material only.
- The feed pipe must be tubed firmly.
Discharge pipe: short, fixed pressure hose onto pressure-resistant pipe.
- Make sure that persons or objects cannot be hit by condensate or escaping compressed air.



Danger!

Supply voltage!

There is the risk of an electric shock involving injury or death when coming into contact with non-insulated components carrying supply voltage.

Measures:

- During electric installations, all regulations in force need to be adhered to (e.g. VDE 0100 / IEC 60364).
- **When the control unit is open, service and installation works must only be undertaken when the system is deactivated.**
- **The removed control unit has no IP degree of protection.**
- All types of electrical works must be carried out by authorised and qualified personnel only.

Further safety instructions:

- For installation and operation, the national regulations and safety codes in force must also be adhered to.
- Do not use the BEKOMAT® 33U/33U CO in hazardous areas.
- Regarding the inlet screw joints, excessive tightening forces must be avoided. This applies in particular to conical screw joints.
- The BEKOMAT® 33U/33U CO will only function when voltage is applied.
- Do not use the test button for permanent drainage.
- Use genuine spare parts only. This is imperative to ensure perfect functioning.

Additional advice:

- During installation, use the spanner flat at the feed pipe (wrench size SW28 + 34) as a back rest.
- The service unit must not be dismantled.



Caution!

Malfunction during operation!

Through incorrect installation and poor maintenance, malfunction may occur at the BEKOMAT® .

Condensate which is not discharged may cause damage to plants and in production processes.

Measures:

- Condensate drainage which is reliable in performance directly optimises the compressed-air quality.
- To prevent damage and breakdowns, it is imperative to observe the following:
 - Exact compliance with the specifications of use and with the performance parameters of the BEKOMAT®, in connection with the case of application (see "Proper use" section)
 - Exact compliance with the installation- and operation instructions in this manual
 - Regular maintenance and control of the BEKOMAT® in accordance with the instructions in this operating manual

Technical data

3 Technical data

min./max. operating pressure (see type plate)	0,8...16 bar (12...230 psi) or 1,2...16 bar (17...230 psi)
min./max. temperature (see type plate)	+1...+60 °C (+34...+140 °F) or +1...+70 °C (+34...+158 °F)
Condensate inflow	Inlet via condensate receiver tank
Condensate outflow	G ½ Ø 13 mm hose connector
Condensate	oil-contaminated + oil-free
Housing	aluminium + plastic, glass fibre-reinforced
Weight (empty)	0.78 kg (1.71 lbs)

4 Inspection and maintenance



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Note:

It is imperative to observe all hazard statements and warnings listed here.

Please also observe all regulations and notes regarding industrial safety and fire prevention at the place of installation.

As a matter of principle, only use suitable and appropriate tools and materials in a proper condition.

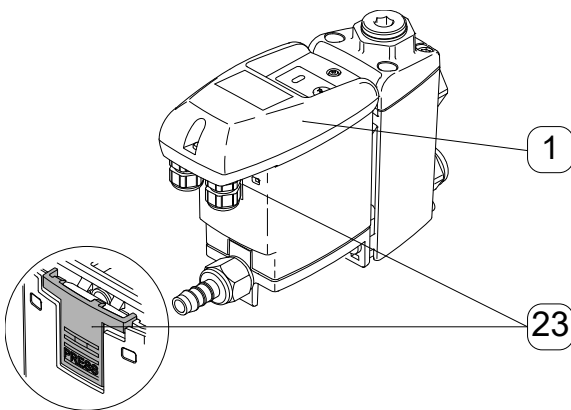
Do not use aggressive cleaners and improper devices such as high-pressure cleaners.

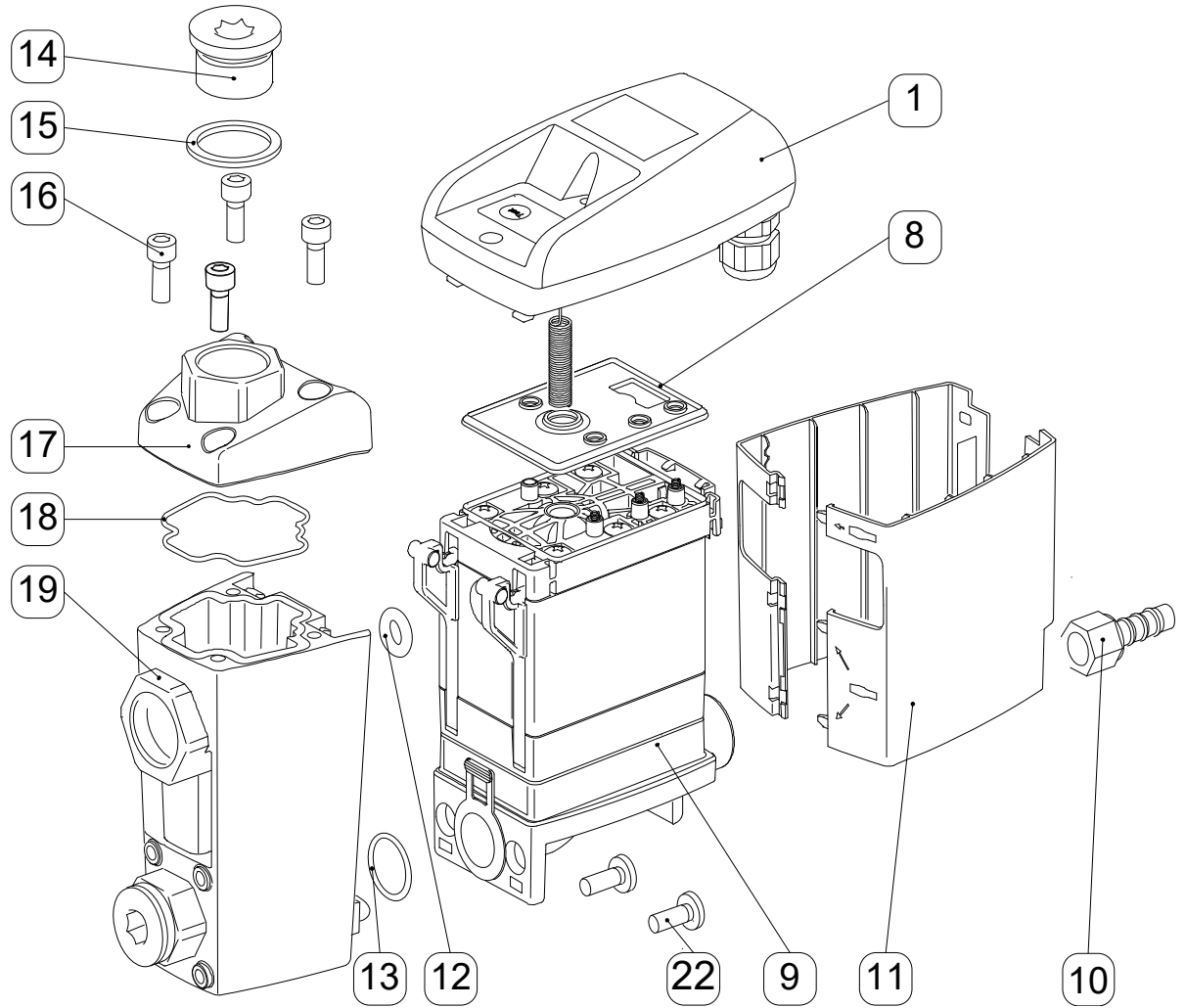
Please note that condensates may contain aggressive or harmful components. Therefore, skin contact should be avoided.

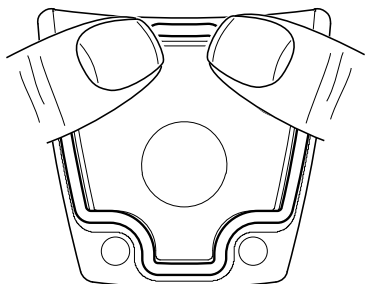
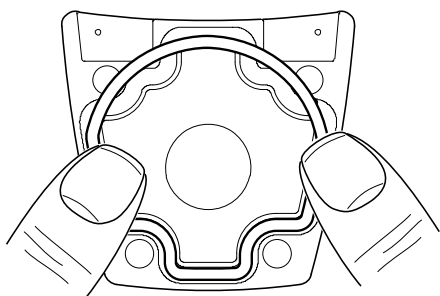
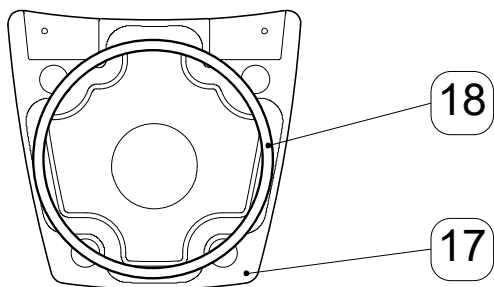
Condensate is subject to mandatory waste disposal. As such, it must be collected in suitable containers, and disposed of or processed properly.

Maintenance including the cleaning of the condensate receiver tank:

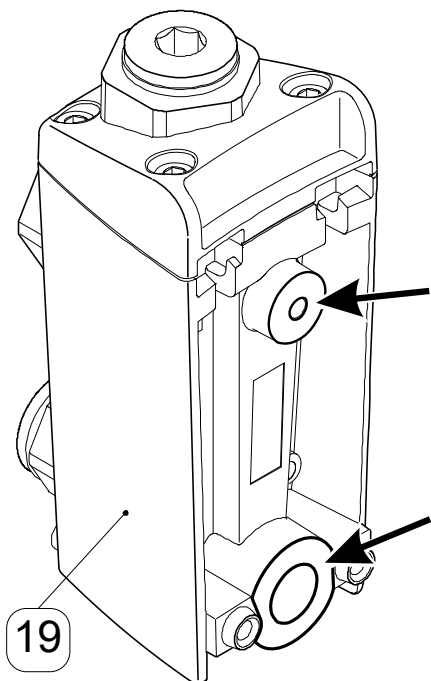
1. Prior to the replacement of the service unit, a reset needs to be carried out.
The control unit is released by actuating the arresting hook.
When removed, the TEST button below the LED must be pressed and held for at least five seconds.
2. Unfasten the BEKOMAT® from the outlet.
3. Detach the BEKOMAT® from the tubing at the inlet.
4. Unscrew both M6 cross recessed head screws (22) and remove the service unit (9) by slightly pulling and lifting it.
5. Remove the design shell (11) using a screwdriver.
6. Unscrew the four cover screws (16) and remove the cover (17).
7. Clean the condensate receiver tank (19).



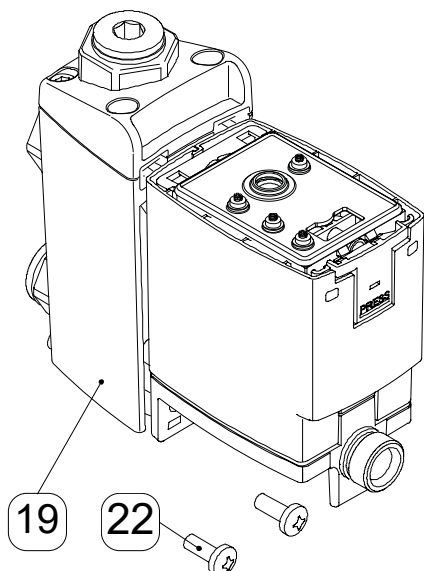
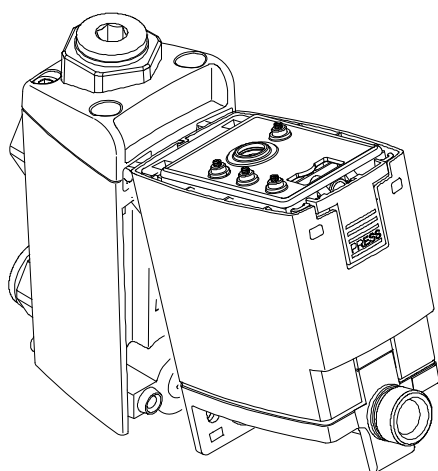
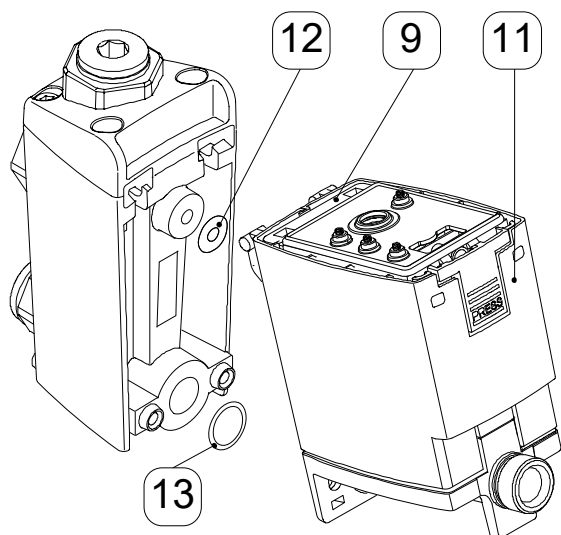




8. Insert new cover O-ring (18) (gasket kit) according to the diagram.
9. Clean the sealing surfaces of the cover.
10. Put on the cover (17) with the new O-ring and carefully tighten the four cover screws (16) crosswise (8 Nm).



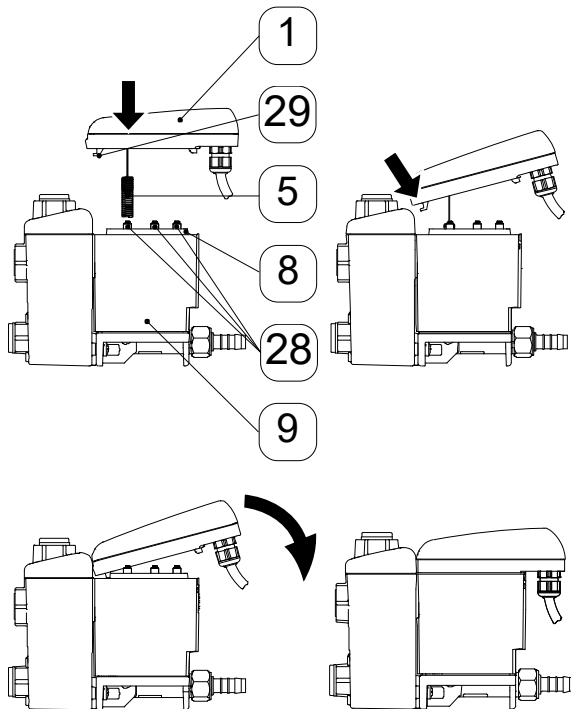
11. Clean the sealing surfaces (←) at the condensate receiver tank (19).



12. Check whether or not the service unit (9) goes with the control unit (1) (model designation and colour of the arresting hook).
13. Check the O-rings at the new service unit (12, 13).
14. Mount the design shell (11).
15. Mount the service unit along with the design shell at the condensate receiver tank (19) and tighten both erection bolts (22) (2,5 Nm).
16. Re-install the BEKOMAT® at the inlet tubing and outlet, in reverse order to disassembly.

Control unit with cord packing
(previous version)

Control unit without cord packing
(current version)



Prior to placing a previous version of the control unit with cord packing (24) in the lower part of the cover, the sealing mat (11) must be removed from the service unit.

Installation of the control unit on the BEKOMAT®:

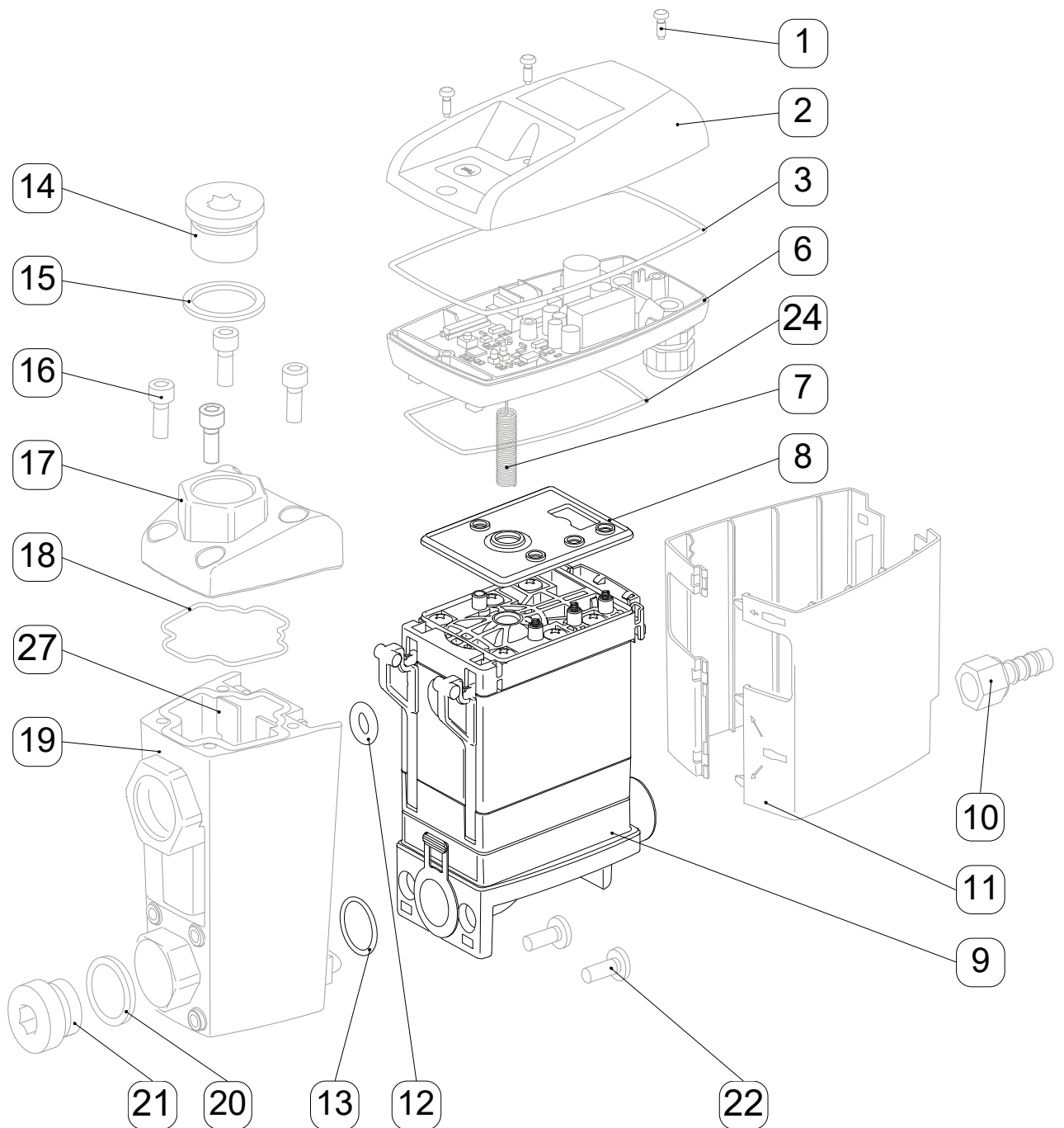
1. Check whether or not the service unit (9) goes with the control unit (1) (model designation and colour of the arresting hook).
2. Check whether or not the sealing mat (8) and the contact springs (28) are clean, dry, and free from impurities.
3. Introduce the sensor (5) into the service unit (9).
4. Hang the hook (29) of the control unit (1) in the service unit (9).
5. Press the control unit (1) against the service unit (5) and snap into place.

Start-up subsequent to maintenance measures:

Always carry out prior to the start-up:

- Leak test of the screwed connector of the condensate receiver tank and of the connection of this tank to the service unit
- Check of the electrical connections
- Check of the correct engagement of the control unit

5 Elements and components



- | | |
|---------------------------|---|
| 1 Screw 3.5 x 10 | 13 O-ring 18.5 x 2 |
| 2 Upper part of the cover | 14 Screw plug |
| 3 Gasket | 15 Flat gasket |
| 4 Printed circuit board | 16 hexagon socket head screw M6 x 16 |
| 5 Sensor | 17 Cover |
| 6 Lower part of the cover | 18 O-ring 48.9 x 2.62 |
| 7 Cable bushing | 19 Condensate receiver tank |
| 8 Sealing mat | 20 Flat gasket |
| 9 Service unit | 21 Screw plug |
| 10 Hose connector | 22 Cross recessed head screw M6 x 16 |
| 11 Design shell | 24 Cord packing (only previous version) |
| 12 O-ring 8 x 4 | 27 Deflector plate (only Vario) |

Recommended spare parts

6 Recommended spare parts

Available sets of spare parts	Contents	Order number
Service-Unit SUBM33U for BM33U or BM33UV or BM33 or BM33V	8, 9, 12, 13	4023633
Service-Unit SUBM33UF for BM33UF or BM33UVF or BM33F or BM33VF		4023634
Service-Unit SUBM33UCO for BM33UCO or BM33UVCO or BM33CO or BM33VCO	8, 9, 12, 13	4023635
Service-Unit SUBM33UCOF for BM33UCOF or BM33UVCOF or BM33COF or BM33VCOF		4023636
Gasket kit	3, 8, 12, 13, 18, (24)	4024397
Design shell	11	4010167

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Original instructions are in German.

Subject to technical modifications without notice / errors excepted.

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