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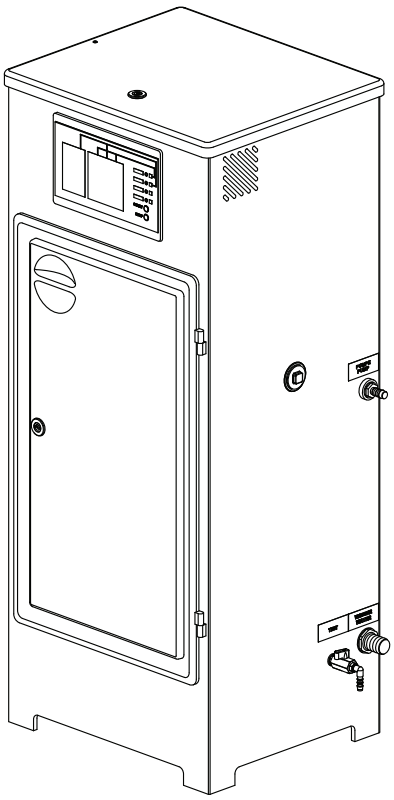


Original installation and operation manual

Emulsion splitting plant
BEKOSPLIT®

› BS12

03-041

Table of contents

1. Notes about the documentation

This documentation contains all the necessary steps for use of the product and the accessories.

1.1 Contact

Manufacturer	Customer service and tools
BEKO TECHNOLOGIES GmbH Im Taubental 7 | 41468 Neuss Phone: +49 2131 988-1000 info@beko-technologies.com www.beko-technologies.com	**BEKO** TECHNOLOGIES GmbH Im Taubental 7 | 41468 Neuss Phone: +49 2131 988-1000 service-eu@beko-technologies.com www.beko-technologies.com

INFORMATION	**Country-specific manufacturer representatives**
	You can contact the country-specific manufacturer's representative via the address listed in the address section on the rear cover or by using the contact form on the manufacturer's website.

1.2 Information about this installation and operation manual

INFORMATION	Copyright protection
	The contents of the installation and operation manual in the form of text, figures, illustrations, photographs, technical drawings, diagrams and other representations are protected by the copyright of the manufacturer. The distribution as well as the duplication of this document, the exploitation and the communication of its contents are prohibited unless expressly authorised.

Publication date	Revision	Version	Reason for change	Scope of change
12 January 2021	04	00	Corrected consumables, accessories and spare parts	Corrected part numbers
6 November 2025	05	00	Corrected maintenance work, safety instructions, spare parts	Corrections

The installation and operation manual, hereinafter referred to as the manual, must always be kept close to the product and be in a permanently legible condition.

The manual must be handed over along with the product if it is sold or passed on.

NOTE	Follow the instructions given in the manual
	This manual contains all the basic information required for safe operation of the product and must be read before any actions are performed. Otherwise personal and material hazards as well as malfunction and device failure are possible.

1.3 Other applicable documents

This manual describes all the necessary steps for installing and operating the product and accessories.

More detailed information can be obtained from the following documents:

- Authorisation/licensing procedure
- General approval of the building inspectorate
- Maintenance logbook

2. Safety

2.1 Use

2.1.1 Intended use

The **BEKOSPLIT®** emulsion splitting plant, hereafter also referred to as the “product” or “emulsion splitting plant,” is used to treat stable emulsions in compliance with all applicable laws and regulations.

Any use of this system other than the use described in this manual is hereby deemed to be non-intended and can cause a hazard for the safety of people and the environment.

The following must be noted for intended use:

- Read and follow the manual.
- Use the product and the accessories exclusively within the operating parameters and agreed terms of supply specified in section “Technical data”.
- Use the product and accessories exclusively with media that are free of caustic, aggressive, corrosive, toxic, flammable, oxidising and inorganic components.
  In cases of doubt an analysis must be carried out.
- Use the product and the accessories exclusively within a piping system designed in conformity with the operating parameters specified in section “Technical data”.
- Use the product and the accessories exclusively outside of areas exposed to mechanical loads and splash water.
- Only use the product and accessories outside potentially explosive atmospheres.
- Only use the product and accessories away from direct solar radiation and heat sources.
- Combine the product and accessories exclusively with the products and components named and recommended by the manufacturer in the manual.
- Adhere to the prescribed maintenance schedule.

Before using the product and the accessories, the operating company must make sure that all conditions and prerequisites for intended use are given.

The product and the accessories have been exclusively designed for stationary use in a commercial or industrial area. All of the assembly, installation, operation, maintenance, disassembly and disposal work described must be performed exclusively by qualified skilled technical personnel.

2.1.2 Reasonably foreseeable inappropriate use

Reasonably foreseeable inappropriate use is deemed to have occurred if the product or the accessories are used in any other way than that described in the section “Intended use”. Reasonably foreseeable inappropriate use includes the use of the product or the accessories in a manner not intended by the manufacturer or supplier but which may result from foreseeable human behaviour.

Reasonably foreseeable inappropriate use includes:

- The execution of any kind of modification, in particular constructive and process-technology related interventions.
- The suspension, bridging or non-application of existing or recommended safety equipment.
- Use for filtering wastewater other than compressor condensate (e.g., industrial wastewater).
- Disposal of waste oils.
- Using the product on water vessels, railway vehicles and motor vehicles.

This list is not exhaustive as not all possible inappropriate use can be foreseen in advance. If the operating company is aware of any inappropriate use of the product or accessories which are not listed here, the manufacturer must be informed immediately.

2.2 Responsibility of the operating company

Due to the approval obligation for emulsion splitting plants, it is the responsibility of the operating company to apply for such approval from the authorities responsible.

The enclosed document "Authorisation/licensing procedure" can be used for the application in Germany (see section “1.3 Other applicable documents” on page 6).

The responsible operating company must ensure the following to prevent accidents, incidents and adverse effects on the environment:

- Before all actions, check to ensure that the manual available does in fact belong to the product.
- The product and the accessories are used, serviced and repaired in accordance with the intended use.
- The product and accessories are only used with the recommended and fully operable safety equipment.

- All assembly, installation and maintenance work must be carried out exclusively by qualified skilled technical personnel.
- Personnel have the necessary personal protective equipment available and also use this equipment.
- Suitable technical safety measures are taken so that the permissible operating parameters are adhered to.
- Keep all safety symbols and the type plate on the product and accessories in a legible state. Replace damaged and illegible markings immediately.
- All locally applicable legal requirements and regulations regarding the protection of bodies of water, as well as the associated mandatory documentation obligations (e.g., results from turbidity test, retention periods), must be complied with.

2.3 Target group and personnel

This manual is intended for the personnel that is listed below and is involved with work on the product or the accessories.

INFORMATION	Personnel requirements
	• Minors are strictly prohibited from working with and on the product and its accessories. • The personnel may not execute any actions on the product or the accessories when they are under the influence of drugs, medications, alcohol or other substances that may impair their consciousness.

Operating personnel
Operating personnel are persons who are able to operate the product and the accessories safely on the basis of knowledge of the manual and instruction at the product and accessories. Operating personnel can recognise possible malfunctions and dangerous situations independently and arrange for corresponding measures.

Skilled technical personnel - transport and storage

Skilled technical personnel - transport and storage are people who, due to their training, professional experience and qualifications, have all the necessary skills to safely execute all actions in connection with the transport and storage of the product, to instruct, to recognise possible dangerous situations independently and to execute measures to avoid danger.

The skills required include, in particular, experience operating hoists, forklifts and lifting equipment and familiarity with locally applicable laws, standards and guidelines relating to transport and storage.

Skilled technical personnel - pressure equipment and systems

Skilled technical personnel specialising in pressure equipment and systems are people who, as a result of their training, professional experience, qualifications and further training, have all the requisite skills to safely perform all actions related to pressurised fluids and systems, to instruct, to independently identify potentially hazardous situations, and to implement appropriate measures to avert any danger.

The skills required include, in particular, experience using measuring equipment and control equipment, as well as familiarity with locally applicable laws, standards and regulations for pressurised systems.

Skilled technical personnel - electrical

Skilled technical personnel specialising in electrical engineering are people who, as a result of their training, professional experience, qualifications and further training, have all the requisite skills to safely perform all actions related to electricity, to instruct and to independently identify potentially hazardous situations and to take appropriate measures to avert any danger.

The skills required include, in particular, experience using electrical systems, measuring equipment and control equipment, as well as familiarity with locally applicable laws, standards and regulations regarding the use and handling of electrical equipment and systems.

Skilled technical personnel - product servicing

Skilled technical personnel - product servicing are people who have the skills and qualifications stated in all the skilled personnel definitions named above. Skilled technical personnel - product servicing must have documented proof of training and authorisation for all work on the product.

2.4 Explanation of the symbols used

The symbols used below indicate safety-relevant and important information which must be adhered to when handling the product and to ensure safe and optimum operation.

2.4.1 In the documentation

Symbol	Description / explanation
	General warning symbol (danger, warning, caution)
	Warning: pressurised system
	Warning: electric voltage
	Observe the installation and operation manual
	General mandatory requirement
	Wear safety footwear
	Use respiratory protection, IP rating FFP 3 (particle-filtering half mask)
	Use protective gloves (cut-proof and liquid-resistant)
	Wear safety goggles with side shields
	General information

2.4.2 On the product

Symbol	Description / explanation
	**General warning symbol (danger, warning, caution)** This symbol can be found on the type plate and on all the drives installed.
	**Warning: electric voltage** This symbol is located on the power supply unit.
	**Observe the installation and operation manual** This symbol is located on the type plate.
	**Beware of the automatic start-up of rotating metering unit parts** This symbol is located on the storage tank for the metering unit.
	**Condensate inlet - connection safety container** This symbol can be found on the pre-separation container.
	**Condensate drain – emulsion pump connection** This symbol can be found on the pre-separation container.
	**Maintenance information - emulsion pump** This symbol is located next to the emulsion pump.
	**Maintenance information - electric drives** This symbol is located on the electric drives.
	**General approval of the building inspectorate** This symbol is located on the front of the product.
	**Specification of direction of rotation** This symbol is located on the metering unit.

2.5 Safety instructions and warning notices

This section provides an overview of all the important safety aspects for personal protection as well as for the safe and problem-free operation of the product and accessories.

The following sections list the dangers posed by this product and the accessories even with intended use. To minimise the risk of personal injury and damage to property and to avoid dangerous situations, observe the safety instructions listed and adhere to the warning notices in the other sections of this manual.

Basic warning notices and the necessary qualifications of skilled technical personnel are always listed at the beginning of the section in the “Warning notices“ section.

Warning notices related to specific actions are printed directly before potentially hazardous procedures or sequences of actions.

Failure to observe safety instructions and warning notices can result not only in personal injury, but also in malfunctions, device failure and damage to property.

2.5.1 Basic safety instructions

- Before starting work, refer to the technical documentation for the entire system and observe the overall operating instructions.
- Carry out a risk assessment before starting work on site (last minute risk assessment).
- Use suitable personal protective equipment for all work.
- Set up a safety area around the working area during all installation, maintenance and repair work.
- Use existing system-specific protection procedures (e.g., LOTO procedure) in order to safely de-energise and isolate the system or system sections.

2.5.2 Safe operation

The following actions may result in serious injury or death:

- Startup and operation of the product and accessories outside the permissible limit values and operating parameters
- Unauthorised interference and unauthorised modifications of the product and accessories

To guarantee the safe operation of the product and accessories, observe the following:

- Observe the limits and operating parameters specified on the type plate and in the manual.
- Check whether the permissible operating parameters have been changed or restricted by the use of accessories.
- Observe the requirements regarding installation location and ambient conditions.
- Adhere to the maintenance intervals.

2.5.3 Sudden escape of pressurised fluids

The following situations may result in serious injury or death:

- Contact with fast or suddenly escaping fluids
- Bursting system parts
- Pressurised hose and pipe whipping as a result of disconnection

For the safe handling of pressurised systems, observe the following:

- Observe the following safety rules during all work:
  1. Shut down the system or system section.
  2. Secure the system or system section against restarting.
  3. Reduce the pressure in the system or all system sections to the ambient pressure, e.g., by slowly relieving the pressure through relief valves in a controlled manner.
  4. Lock out and tag out the system or system section so that it cannot be pressurised again.
- Check the pressurised system or system section for safety, contamination and possible damage.
- Before pressurisation, check all system connections for leak tightness and tighten if necessary.
- Make absolutely sure to charge the system or system section with pressure slowly.
- Avoid pressure blows and high differential pressures.
- Compensate any vibrations occurring in the pipe network by using vibration dampers.

2.5.4 Electric voltage

Contact with live components may result in serious personal injury or death.

To ensure the safe handling of electrically live components, observe the following:

- Only connect the product and the accessories to the power supply if they are undamaged.
- Comply with all locally applicable legal requirements and regulations during installation.
- Provide a circuit breaker in the power supply within easy reach of the product.
  → The circuit breaker disconnects all current-carrying conductors.
- Connect the protective conductor (earth connection) according to regulations.
- Only operate the product and accessories with the cover complete and closed or the electronics housing closed.
- Before starting work on the product:
  1. Disconnect
     → Disconnect the product from all poles and all sides
  2. Secure against restarting.
  3. Determine the absence of voltage at all poles.
     → With suitable and permissible measuring device (e.g. two-pole voltage tester)
  4. Earth and short circuit.

2.5.5 Transport and storage

Inappropriate transport or storage may result in personal injury or damage to property.

In order to ensure safety during the transport and storage of the product and accessories, observe the following:

- Use personal protective equipment during all work with packaging material.
- Handle packaging, the product and accessories carefully.
- Transport and handle the product and accessories according to the markings on the packaging.
- Use only suitable transportation, lifting and lashing equipment that is in good working condition and rated for the product's total weight.
- Always adhere to the permissible transport and storage parameters.
- Store the product and accessories only outside of areas exposed to direct sunlight, heat sources and splash water.

2.5.6 Installation

Inappropriate assembly or electrical installation of the product and accessories may result in personal injury and damage to property as well as impair operation.

- For safe assembly and electrical installation, observe the following:
- Assemble the product and all the parts, accessories and materials used free of mechanical stress.
- Check all plug-type connections for a correct fit.
- Avoid stumbling risks by routing cables and hoses accordingly.
- Avoid mechanical strain on the cables.
- Fix and fasten hoses in such a way that they cannot flap around.
- Install inlet and drain lines as fixed pipes.

2.5.7 Maintenance

Inappropriate completion of maintenance and repair work may result in serious personal injuries or death.

For safe maintenance and repairs, observe the following:

- Before starting work, depressurise the pressurised product and accessories and secure them against unintentional pressurisation.
- Before starting work, isolate the product and accessories from the power source and secure them against being switched back on again unintentionally.
- Only use materials approved for the respective application.
- Use only suitable tools that are in proper working order.
- Only use cleaned pipes and hoses that are free of dirt and corrosion.
- Never use abrasive or aggressive cleaning agents or solvents which could damage the outer coating (e.g. markings, type plate, corrosion protection, etc.).
- Never clean the device with hard or pointed implements.
- Use only the specified materials and media for cleaning.
- Observe statutory, local and in-house hygiene regulations.
- Pay attention to order and cleanliness during maintenance and repair work. Prevent contamination from entering the opened product or accessories. Put dismounted components and accessories aside in a safe place immediately after dismounting.
- After completing maintenance and repair work, remove all tools and cleaning agents used, as well as all parts that are no longer needed, from the work area.

- Only dispose of the product and accessories when cleaned and freed of any media residue.
- Dispose of all components, parts, operating and auxiliary materials as well as cleaning agents professionally and in accordance with all locally applicable legal requirements and regulations.
- Dispose of electrical and electronic components using a specialist disposal company or return them to the manufacturer.

2.5.8 Handling hazardous substances

Contact with condensate containing substances which endanger health and the environment can pose a health hazard, causing irritation and/or damage to the eyes, skin and mucous membranes. In addition, contaminated condensate must be prevented from entering the sewage system, bodies of water or the ground.

For the safe handling of contaminated condensate, observe the following:

- Use suitable personal protective equipment when handling condensate.
- Collect and dispose of any leaking or spilled condensate in accordance with locally applicable legal requirements and regulations.

2.5.9 Working on electronic components

Electrostatic discharge (ESD) can cause damage to electronic components, and malfunctions, device failures or material damage are possible.

- Take proper measures to prevent electrostatic discharge (e.g. earthing, potential equalisation, ESD-compatible dissipative work pads etc.).

2.5.10 Use of spare parts, accessories or materials

Use of incorrect spare parts, accessories, materials, auxiliary and operating materials, may result in death or serious injury. Malfunction, device failure or material damage may occur.

- Only use undamaged original parts, auxiliary and operating materials which are specified by the manufacturer to complete all work.
- Only use the materials approved for the respective application and suitable tools in proper working order.
- Only use cleaned pipes that are free of dirt and corrosion.
- Only use electric components and materials that comply with locally applicable legal requirements and regulations (standards, directives etc.) for electrical safety.

2.6 Warning notices

Warning notices warn against dangers when handling the product and accessories.
Observe the warning notices in order to avoid personal injury, damage to property and impaired operation.

Elements used in warnings:

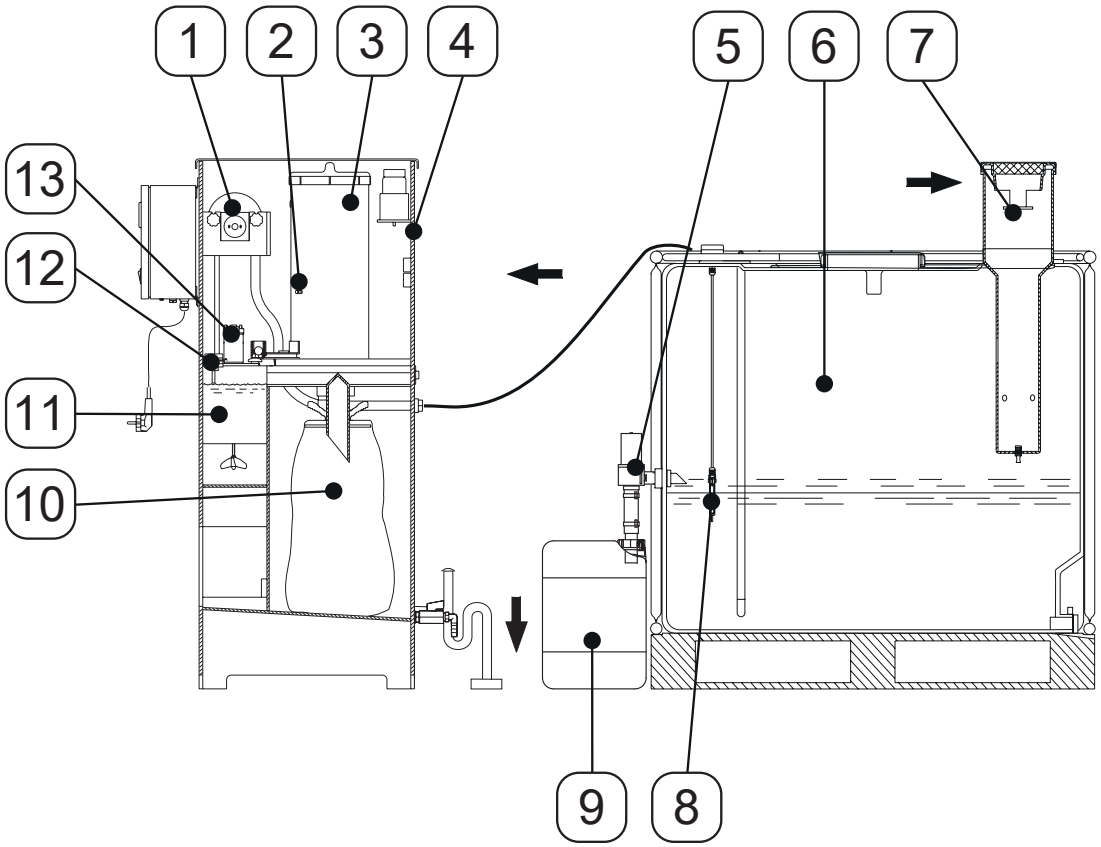
SIGNAL WORD	Type and source of danger
 Symbol	Possible consequences if the danger is ignored • Measures to prevent the danger

Signal words:

DANGER	**Imminent hazard** Consequences of non-compliance: Death or serious personal injury
WARNING	**Imminent hazard** Consequences of non-compliance: Death or serious personal injury are possible
CAUTION	**Potential hazard** Consequences of non-compliance: Personal injury is possible
NOTE	**Potential for damage to property** Consequences of non-compliance: Damage to property, malfunction and device failure are possible. No hazard to people or jeopardising of safe operation.

3. Product information

3.1 BEKOSPLIT® 12 product overview



Pos. no.	Description / explanation
[1]	Emulsion pump
[2]	Splitting agent sensor
[3]	Metering unit
[4]	Splitting unit
[5]	Oil drain valve
[6]	Pre-separation container
[7]	Pressure relief chamber
[8]	START-sensor
[9]	Oil collector
[10]	Filter bag
[11]	Reaction chamber
[12]	Filter monitoring sensor
[13]	Agitator

3.2 How it works

The condensate, consisting of water and water-insoluble organic contaminants (oils and solid contaminants), is conveyed through a pressure relief chamber **[7]** to the pre-separation container **[6]**. Any excess pressure is discharged to the pressure relief chamber **[7]** without causing any turbulence in the pre-separation container **[6]**.

The condensate calms in the pre-separation container **[6]** and free oil floats to the top. The floating oil forms a layer on the condensate and is discharged via the oil drain valve **[5]** to the oil collector **[9]**.

The capacitive START sensor **[8]** monitors the condensate level in the pre-separation container **[6]** and can distinguish between free oil and condensate. When a defined condensate level is reached, the START sensor **[8]** sends a signal to the splitting unit **[4]**, which results in the oil drain valve **[5]** being closed and the splitting process being started. If the condensate level falls below this defined value, the splitting process stops and the oil drain valve **[5]** is opened. This ensures that no condensate will get into the oil collector **[9]** and that no free oil will get into the splitting unit **[4]**.

After the START sensor signal is received **[8]**, the following steps are carried out in the splitting unit **[4]**:

- The agitator **[13]** starts.
- The emulsion pump **[1]** starts and pumps the condensate into the reaction chamber **[11]**.
- The metering unit **[3]** starts conveying a defined quantity of splitting agent into the reaction chamber **[11]** at predetermined intervals.

In the reaction chamber **[11]** the condensate is mixed evenly with the splitting agent. The oil and dirt components in the condensate are bound by the splitting agent and form macro flakes that can be easily filtered. The water–macro flake mixture flows through a drain channel into the filter bag **[10]**. The cleaned water which leaves the filter bag **[10]** can now be discharged to the wastewater sewer system. The macro flakes remain in the filter bag **[10]** as a semi-solid filter cake.

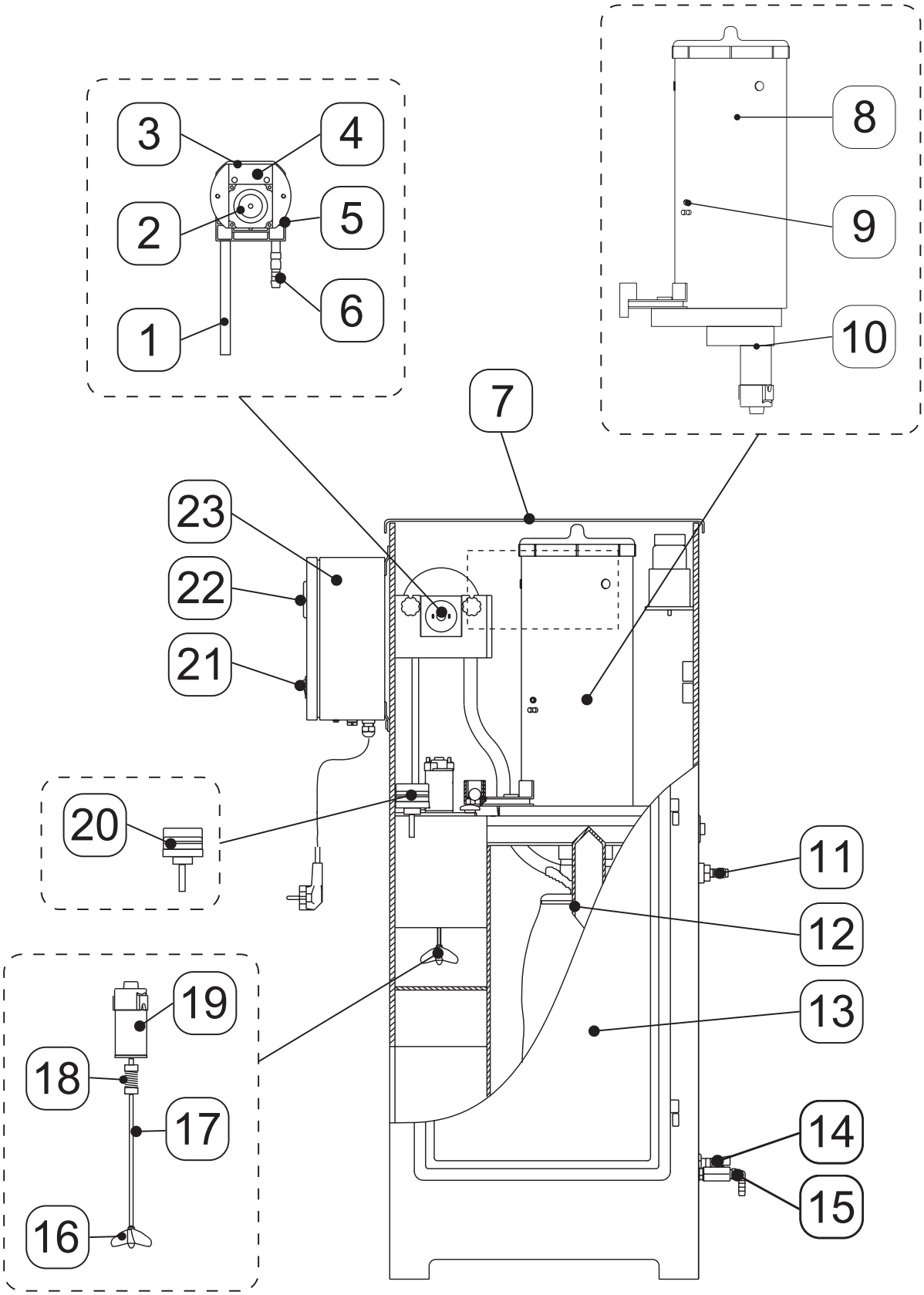
A further capacitive sensor **[12]** monitors the filling level of the reaction chamber **[11]** and the filter bag **[10]**.

When the filter bag **[10]** is full, the treated wastewater can no longer drain off through the filter bag **[10]**. The resulting increase in the drain channel and reaction chamber level **[11]** is detected by the sensor **[12]** and triggers a fault signal. This fault signal is displayed on the control panel and leads to the emulsion splitting plant coming to a standstill.

For external signal processing purposes, it is possible to tap all fault and maintenance signals as dry contact signals through signal relays.

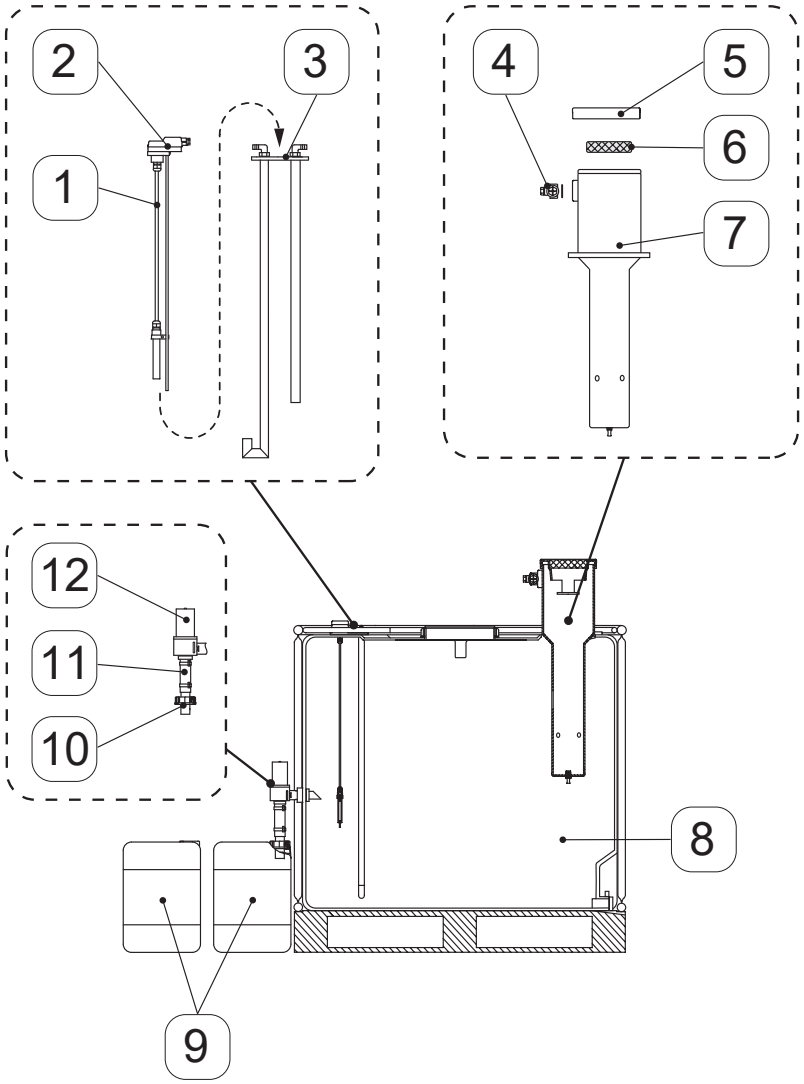
3.3 Parts and components

3.3.1 Splitting unit



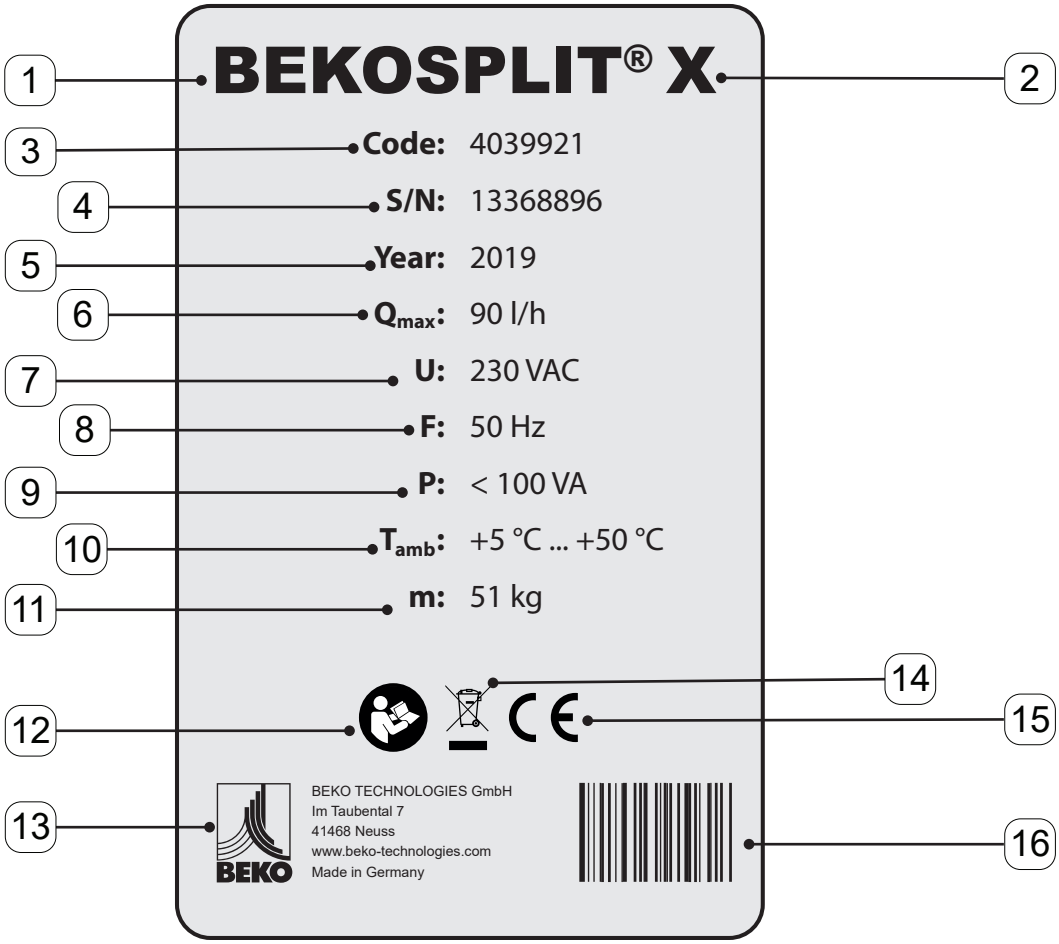
Pos. no.	Description / explanation
[1]	Inlet pipe
[2]	Gear motor for emulsion pump
[3]	Emulsion pump head
[4]	Emulsion pump
[5]	Emulsion pump hose (not visible)
[6]	Double grommet
[7]	Splitting unit cover
[8]	Metering unit
[9]	Splitting agent sensor
[10]	Gear motor for metering unit
[11]	Emulsion pump connection
[12]	Filter bag with inlet extension and strap
[13]	Door
[14]	Connection for draining the cleaned condensate (not visible)
[15]	Sample valve
[16]	Agitator blade
[17]	Agitator shaft
[18]	Agitator coupling
[19]	Agitator motor
[20]	Filter monitoring sensor
[21]	Main switch
[22]	Operating hours counter
[23]	Power supply unit

3.3.2 Pre-separation container



Pos. no.	Description / explanation
[1]	START sensor
[2]	START sensor circuit board
[3]	Bracket
[4]	Connection adapter
[5]	Cap
[6]	Aerosol filter mat
[7]	Pressure relief chamber
[8]	Pre-separation container
[9]	Oil collector
[10]	Inlet port with fitting
[11]	Hose
[12]	Oil drain valve

3.4 Type plate



Sample type plate

Pos. no.	Description / explanation
[1]	Product name
[2]	Size
[3]	Material number
[4]	Plant serial number
[5]	Year of manufacture
[6]	Maximum condensate flow rate
[7]	Operating voltage
[8]	Mains frequency
[9]	Power consumption
[10]	Ambient temperature
[11]	Weight
[12]	“Read and understand the installation and operation manual” instruction symbol
[13]	Manufacturer contact information
[14]	Marking for the disposal of electrical and electronic equipment
[15]	Approval mark
[16]	Bar code

3.5 Scope of supply

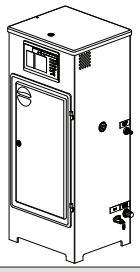
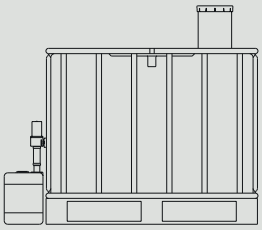
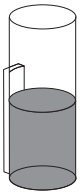
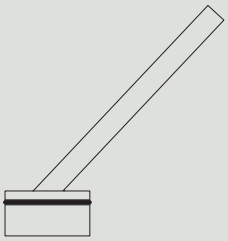
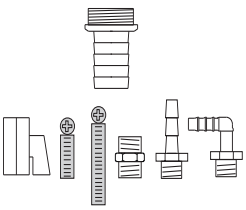
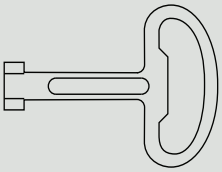
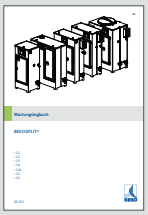
Illustration	Description / explanation
	Splitting unit
	Pre-separation container (600 l or 100 l) with connecting hose, two oil collectors, connection set for oil collectors
	Reference turbidity tube
	Channel closure
	Connection set
	Double bit key

Illustration	Description / explanation
	Cleaning brush
	Storage bucket for splitting agent with shovel
	Installation and operation manual
	Authorisation/licensing procedure (for Germany only)
	General approval of the building inspectorate (for Germany only)
	Maintenance logbook

4. Technical data

4.1 Operating parameters

4.1.1 Splitting unit

Parameter	BEKOSPLIT® 12
Media	Stable condensate emulsion, oil-contaminated
Max. system capacity (media: Stable condensate emulsion, oil-contaminated)	30 l/h 7.93 gal/h
Max. compressor output	25 m³/min 882.87 CFM
Min./max. operating temperature	+5 °C ... +50 °C +41 °F ... +122 °F
Min./max. condensate temperature	+5 °C ... +50 °C +41 °F ... +122 °F
Min./max. ambient temperature	+5 °C ... +50 °C +41 °F ... +122 °F
Filling volume - reaction chamber	10 l 2.64 gal
Filling volume - splitting agent container	8.5 l 2.25 gal
Filling volume - filter bag	25 l 6.60 gal
Wet weight - filter bag	25 kg ... 30 kg 55.12 lb ... 66.14 lb
Operating weight – splitting unit	82 kg 180.78 lb
Operating voltage	See type plate on the device
Output voltage power supply unit	24 VDC
Max. power consumption	<100 VA
Relay contact load	>5 VDC / >10 mA <35 VDC / <12 VAC / <5A / <150 VA/W
Pprotection rating of power supply unit	IP 54
Power supply unit fuse, without pump controller relay	1.0 A / T (slow-blow - 230 VAC) 1.0 A / T (slow-blow - 200 VAC) 2.5 A / T (slow-blow - 115 VAC)
Power supply unit fuse, with pump controller relay	3.15 A / T (slow-blow - 230 VAC) 6.30 A / T (slow-blow - 115 VAC)
Controller fuse	3.15 A / T (slow-blow)

4.1.2 Pre-separation container

Parameter	600 l	1000 l
Filling volume - pre-separation container	600 l 158.50 gal	1000 l 264.17 gal
Max. operating pressure at inlet	25 bar(g) 362.59 psi(g)	
Filling volume – oil collector	10 l 2.64 gal	20 l 5.28 gal
Min./max. operating temperature	+5 °C ... +50 °C +41 °F ... +122 °F	
Min./max. condensate temperature	+5 °C ... +50 °C +41 °F ... +122 °F	
Min./max. ambient temperature	+5 °C ... +50 °C +41 °F ... +122 °F	
Operating weight – pre-separation container	666 kg 1468.28 lb	1096 kg 2416.27 lb

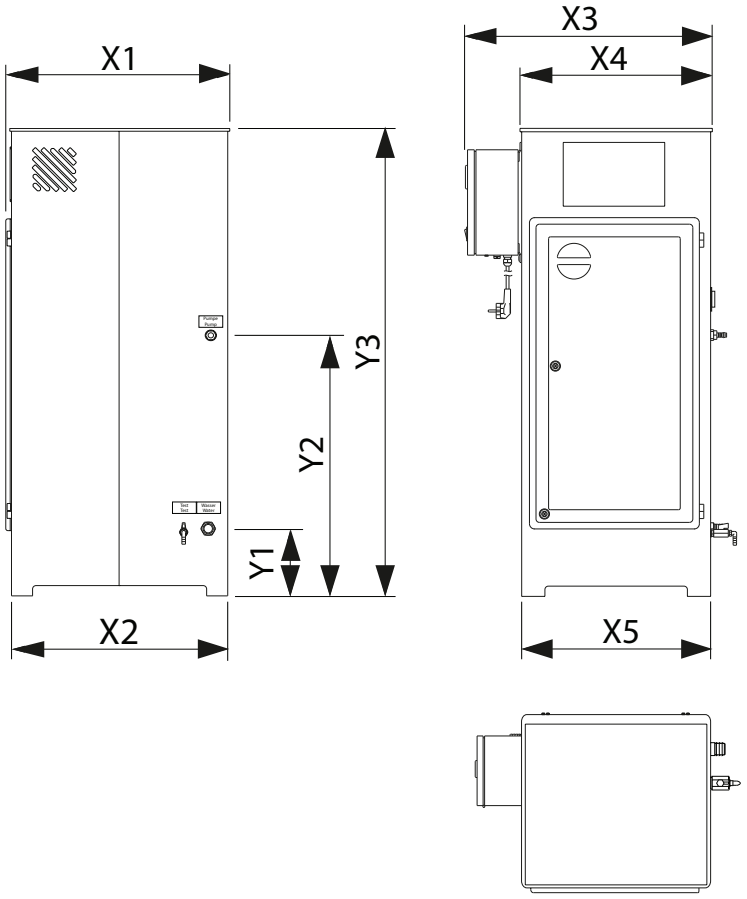
4.2 Storage and transport parameters

Splitting unit parameters	BEKOSPLIT® 12
Min./max. storage and transport temperature	+5 °C ... +50 °C +41 °F ... +122 °F
Empty weight – splitting unit	33 kg 72.75 lb

Pre-separation container parameters	600 l	1000 l
Empty weight – pre-separation container	56 kg 123.46 lb	76 kg 167.55 lb

4.3 Dimensions

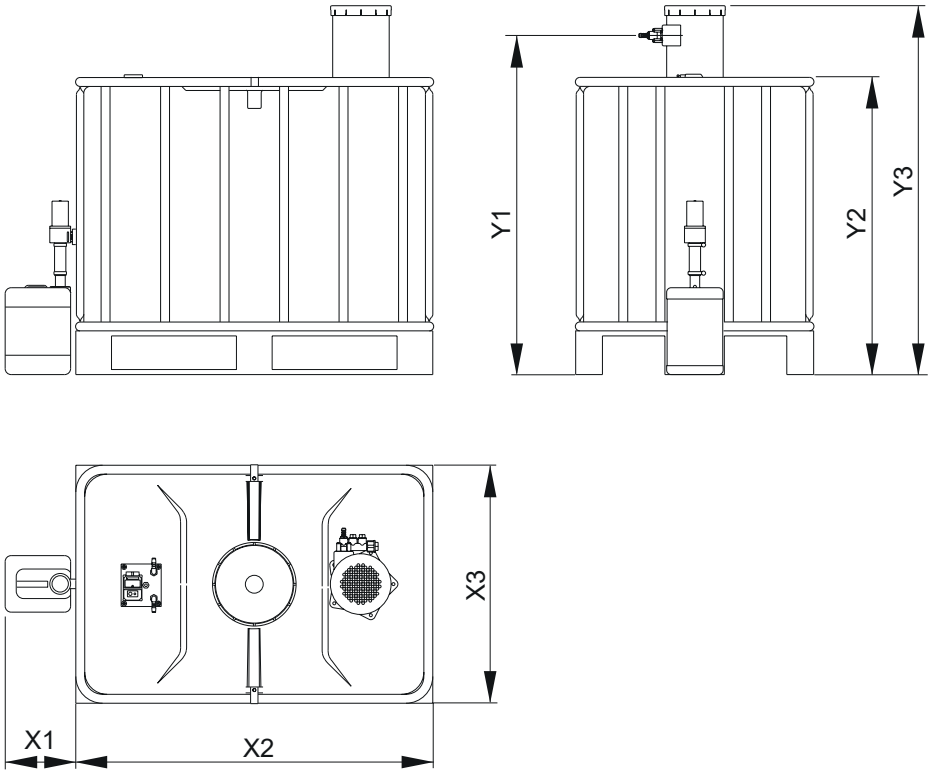
4.3.1 Splitting unit dimensions



Dimensions subject to tolerance in accordance with DIN ISO 2768-m

Pos. no.	BEKOSPLIT® 12
[X1]	424 mm / 16.693 in
[X2]	400 mm / 15.748 in
[X3]	600 mm / 23.622 in
[X4]	484 mm / 19.055 in
[X5]	470 mm / 15.504 in
[Y1]	172 mm / 6.772 in
[Y2]	618 mm / 24.331 in
[Y3]	1155 mm / 45.472 in

4.3.2 Pre-separation container dimensions

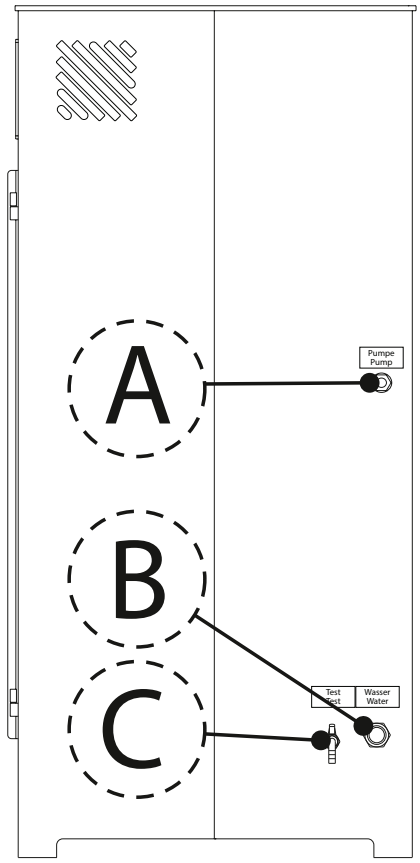


Dimensions subject to tolerance in accordance with DIN ISO 2768-m

Pos. no.	600 l	1000 l
[X1]	246 mm 9.685 in	310 mm 12.205 in
[X2]	1200 mm 47.244 in	1200 mm 47.244 in
[X3]	800 mm 31.496 in	1000 mm 39.370 in
[Y1]	1155 mm 45.472 in	1340 mm 52.756 in
[Y2]	1013 mm 39.882 in	1160 mm 45.669 in
[Y3]	1255 mm 49.409 in	1440 mm 56.693 in

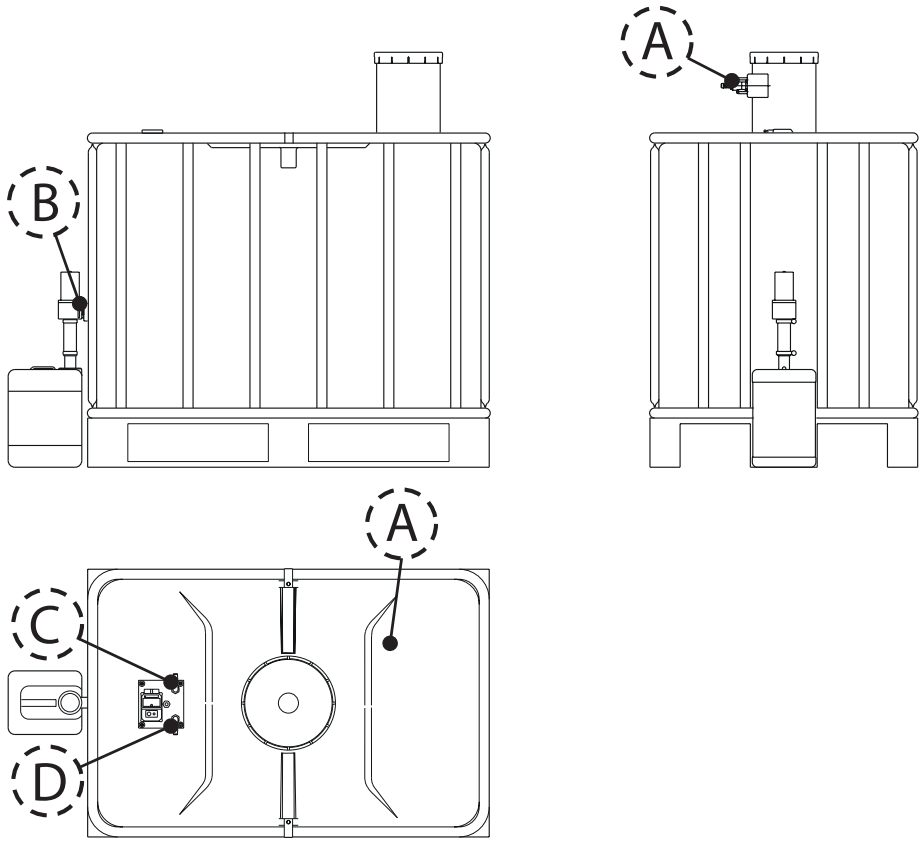
4.4 Connections

4.4.1 Splitting unit connections



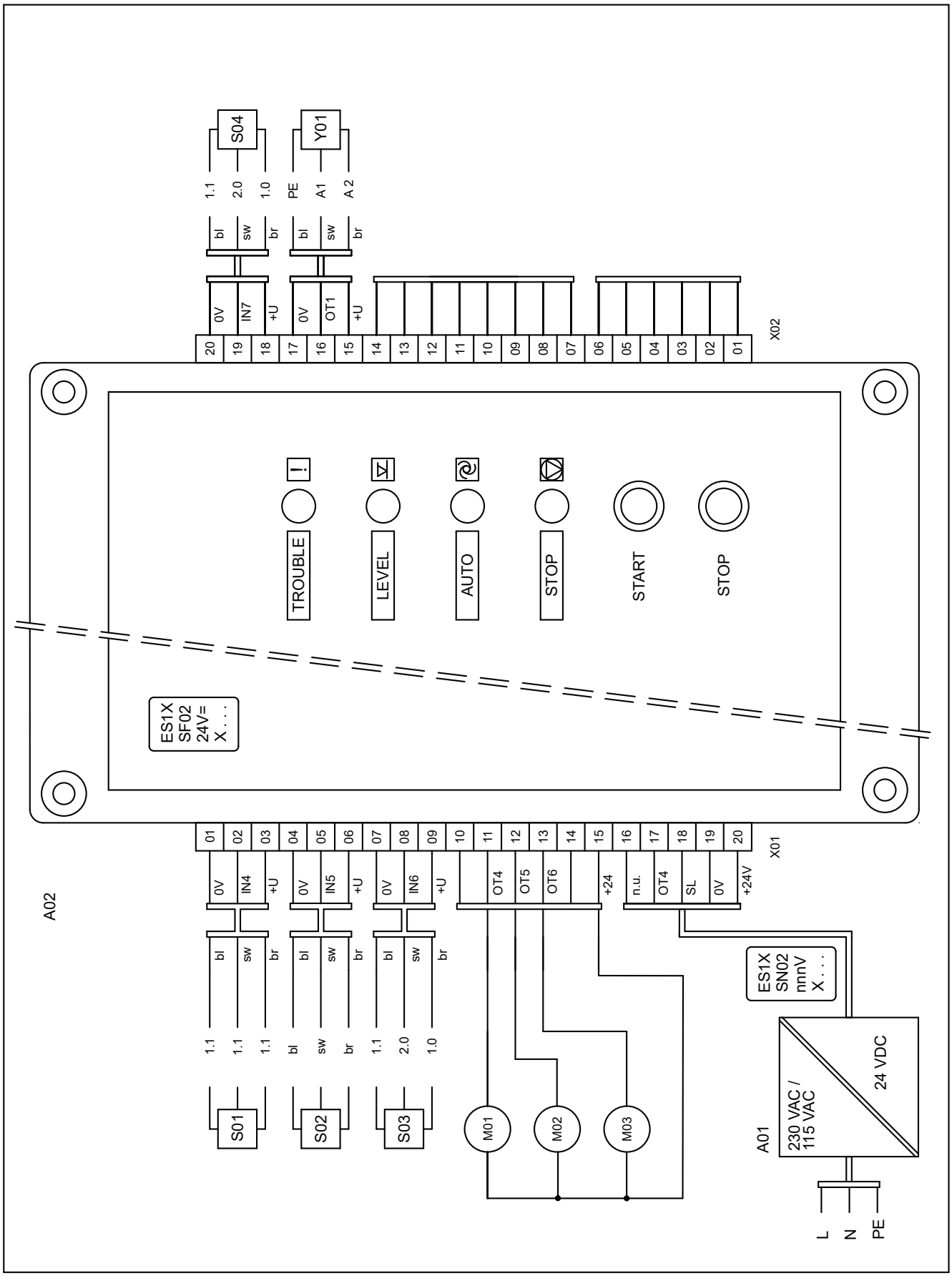
Pos. no.	BEKOSPLIT® 12
[A] - Emulsion pump connection (hose)	G1/2" (Ø = 13 mm / 0.5 in)
[B] - Connection for draining the purified condensate (hose)	G1" (Ø = 25 mm / 1 in)
[C] - Sampling valve fitting (hose)	G1/4" (Ø = 8 mm / 0.32 in)

4.4.2 Pre-separation container connections



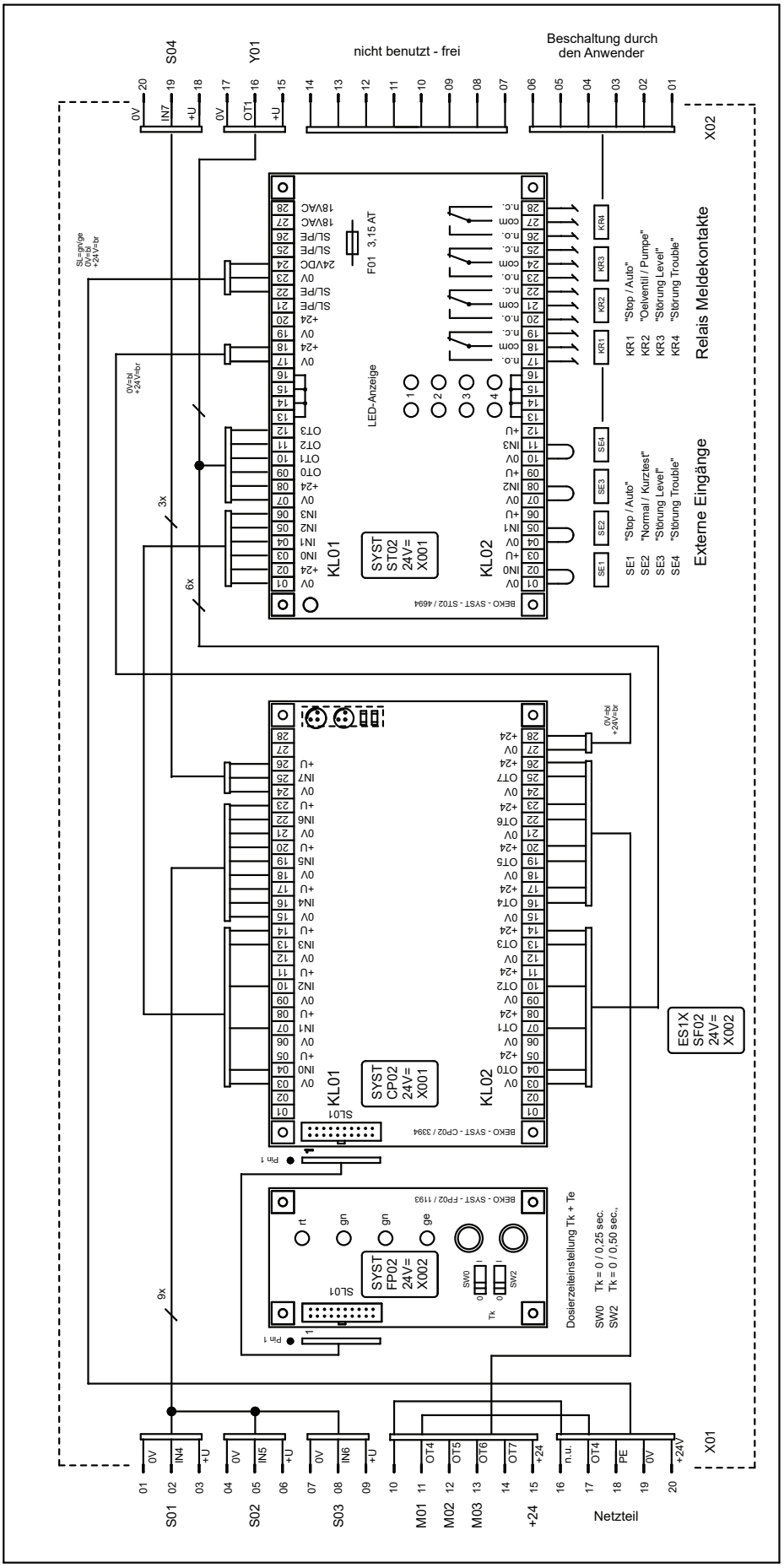
Pos. no.	Connection 600 l / 1000 l	Description / explanation
[A]	3 x G1/2" (13 mm / 0.5 in)	Condensate inlet (hose)
[B]	Ø = 32 mm / 1.26 in	Oil outlet
[C]	G1/2" (13 mm / 0.5 in)	Condensate inlet – safety container connection (hose)
[D]	G1/2" (13 mm / 0.5 in)	Condensate drain – emulsion pump connection (hose)

4.4.3 Pinout


S04
Y01
1.1
2.0
1.0
PE
A1
A2
bl
sw
br
0V
IN7
+U
OT1
20
19
18
17
16
15
14
13
12
11
10
09
08
07
06
05
04
03
02
01
X02
TROUBLE
LEVEL
AUTO
STOP
START
STOP
ES1X
SF02
24V=
X . . .
A02
IN4
IN5
IN6
OT4
OT5
OT6
+24
n.u.
SL
+24V
X01
S01
S02
S03
M01
M02
M03
ES1X
SN02
nnnV
X . . .
A01
230 VAC /
115 VAC
24 VDC
L
N
PE

Terminal / module	Designation / explanation
X01 / 01	S01 Level sensor filter bag
X01 / 02	
X01 / 03	
X01 / 04	S02 Storage tank splitting agent empty sensor
X01 / 05	
X01 / 06	
X01 / 07	S03 Auto filter bag sensor (LEVEL message)
X01 / 08	
X01 / 09	
X01 / 10	Unassigned
X01 / 11	M01 Emulsion pump motor (negative terminal)
X01 / 12	M02 Metering unit motor (negative terminal)
X01 / 13	M03 Agitator motor (negative terminal)
X01 / 14	Unassigned
X01 / 15	M01, M02, M03 (positive terminal) +24 VDC
X01 / 16	A01 Power supply / power supply unit
X01 / 17	
X01 / 18	
X01 / 19	
X01 / 20	
X02 / 01	External signal inputs and outputs, user-specific
X02 / 02	
X02 / 03	
X02 / 04	
X02 / 05	
X02 / 06	
X02 / 07	Unassigned
X02 / 08	Unassigned
X02 / 09	Unassigned
X02 / 10	Unassigned
X02 / 11	Unassigned
X02 / 12	Unassigned
X02 / 13	Unassigned
X02 / 14	Unassigned
X02 / 15	Y01 Oil valve solenoid coil
X02 / 16	
X02 / 17	
X02 / 18	S04 START sensor
X02 / 19	
X02 / 20	

4.4.4 Internal wiring



4.5 Installation conditions

Observe the following conditions when setting up and selecting the place of installation:

- The place of installation must meet the following conditions:
  - ➞ Indoors
  - ➞ Protected from mechanical loads
  - ➞ Protected from splash water
  - ➞ Protected from direct sunlight and areas exposed to heat sources
  - ➞ Protected from frost
  - ➞ Outside of hazardous locations
- The setup area must be level (gradient ≤10 mm/m (1/8 in/ft)) and smooth.
- The setup area's load capacity must be suitable for the maximum operating weight of the product (see section "4.1 Operating parameters" on page 27).
- The setup area must be sealed, or a suitable spill protection basin must be in place.
  - ➞ In the event of damage, no untreated condensate or oil may get into the sewer system or the soil.
  - ➞ All locally applicable legal requirements and regulations regarding the protection of bodies of water must be complied with.
- Bumper guards must be installed if the product is being set up in the vicinity of traffic routes.
- The cross-sectional area of the condensate collection line must be greater than G1" (diameter = 25 mm).
- Route the condensate collection line with a slight downward gradient (30 mm/m (1/3 in/ft)) to the pre-separation container's installation location.
- Route the condensate collection line in such a way that it is at least 300 mm (1 ft) higher than the condensate inlet on the pressure relief chamber.
- The manufacturer recommends installing a P-trap at the wastewater connection in order to prevent unpleasant odours.
- The manufacturer recommends installing a 3-way valve at the tapping point on the condensate collection line to divert the condensate inlet into a separate container during maintenance work.
- Provide a circuit breaker in the power supply within easy reach of the product. The circuit breaker disconnects all current-carrying conductors.

5. Transport and storage

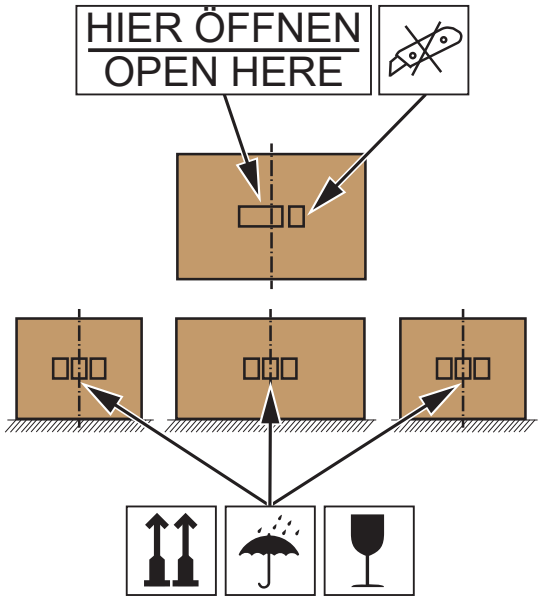
Personnel
Skilled technical personnel - transport and storage (see section “2.3 Target group and personnel” on page 9)

5.1 Warning notices

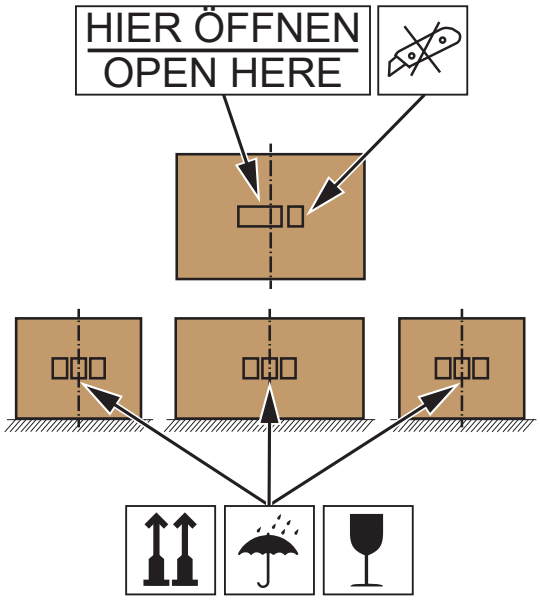
CAUTION	Inappropriate transport or storage
	Inappropriate transport or storage may result in personal injury.
	• Use personal protective equipment during all work with packaging material. • Handle packaging, the product and accessories carefully. • Use only proper transportation, lifting and lashing equipment that is in proper working order.

NOTE	Handling packaging material
	Improper disposal of packaging materials can cause environmental damage.
	• Dispose of the packaging material in accordance with the applicable legal requirements and provisions of the country and place of use.

5.2 Transport

Transport steps	
Illustration	Description / explanation
	• Only transport the product and accessories in their original packaging or packed using suitable shockproof material. • Transport and handle the product and accessories according to the markings on the packaging. • Secure the product and accessories in an upright position on a pallet so that they will not fall or shift during transportation. • Do not tilt the product or the accessories.

5.3 Storage

Storage steps	
Illustration	**Description / explanation**
	• Only store the product and accessories in their original and undamaged packaging. • Adhere to the storage conditions in section “4.2 Storage and transport parameters”. • The storage location is dry, frost-free and lockable. • Protect the product and accessories from external weather influences, direct sunlight and sources of heat. • Secure the product and accessories against toppling over and against vibrations at the storage location.

6. Installation

Personnel
Skilled technical personnel - pressure equipment and systems (see section “2.3 Target group and personnel”)

6.1 Warning notices

DANGER	Sudden escape of pressurised fluids
	There is a danger of death or serious personal injury resulting from contact with fast or suddenly escaping fluids or through bursting system parts.
	• Before starting work, depressurise the pressurised system and secure it against unintentional pressurisation. • Assemble all pipes and hoses free of mechanical stress.

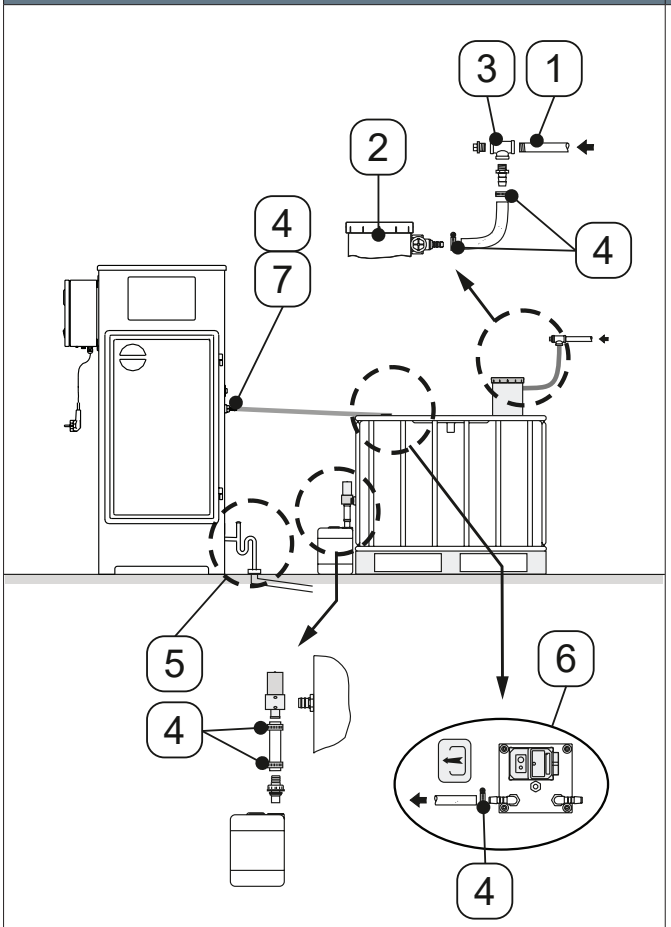
NOTE	Vibrations of adjacent devices or machines!
	Vibrations of adjacent devices or machines can lead to compression of the splitting agent in the storage tank, which can lead to faulty metering of the splitting agent. Metering can also fail completely, depending on the degree of compression.
	• Choose the installation location for the product in such a way that no vibrations from other devices or machines can be transmitted to the product. • Do not set up the product on a vibrating surface.

6.2 Assembly and installation work

For assembly and installation work to be carried out, the following prerequisites must be met, and the preparatory tasks must have been completed.

Prerequisites		
Tools	**Material**	**Protective equipment**
• Adjustable wrench • Screwdriver (PH2 cross-head)	• Sealing material (e.g. PTFE tape)	**Always to be worn:** 

Preparatory tasks	
1.	Select and set up the installation location according to the specifications in section “4.5 Installation conditions” on page 36.
2.	The condensate inlet line provided by the customer must be depressurised and locked and tagged out to prevent unintentional pressurisation.
3.	Have the necessary tools and materials ready.
4.	Do not install the product if it is not empty!
5.	Check the product for damage. Only use the product in an undamaged state.

Assembly and installation work	
Illustration	**Description**
	1. Install the shut-off valve at the discharge point **[3]** on the condensate collection line **[1]**. 2. Set up the pre-separation container below the discharge point **[3]** in such a way that the pressure relief chamber is positioned at an offset of 300 mm (1 ft) relative to the discharge point **[3]** and is not directly underneath it. 3. Use a hose (G1/2") to connect the discharge point **[3]** to the condensate inlet on the pressure relief chamber **[2]**. During routing make sure that the hose does not sag (pocket formation). 4. Set up the splitting unit next to the pre-separation container. The maximum distance between the pump connection **[7]** on the splitting unit and the condensate drain **[6]** on the pre-separation container must not exceed 2.5 m (8 ft). 5. Connect the pump connection **[7]** and condensate drain **[6]** with the enclosed G1/2" hose. 6. Connect the oil collector to the pre-separation container's oil outlet and screw it tight with the enclosed connection set so that there are no leaks. Make sure that the oil collector is upright on the setup area. 7. All hoses must be secured against becoming loose and slipping using hose clamps **[4]** or equivalent hose clips. 8. Connect the water outlet hose to the connection for the purified condensate drain **[5]** and route it to the wastewater connection with a constant downward gradient.

7. Electrical installation

Personnel
Skilled technical personnel - electrical engineering (see section “2.3 Target group and personnel” on page 9)

7.1 Warning notices

DANGER	Electric voltage
	Contact with electrically live components can result in death or serious injury.
	• Only carry out installation, maintenance and repair work on the product and accessories after they have been isolated from the power source and secured against being switched back on again unintentionally. • Comply with all locally applicable legal requirements and regulations during installation. • Connect the protective conductor (earth connection) according to regulations.

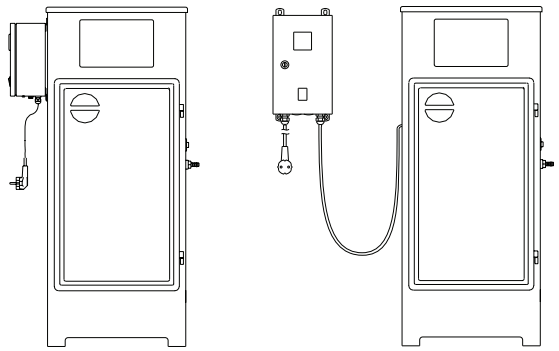
WARNING	Ingress of moisture or foreign bodies
	Removing components or opening the product may allow water or foreign bodies to enter the opened product. This can lead to accidents and personal injury.
	• Protect the product from splashing water or moisture. • Only open the product or remove components in a dry place. • Do not insert any foreign bodies into the openings of the product. • Keep all contact surfaces and openings free of dirt and moisture.

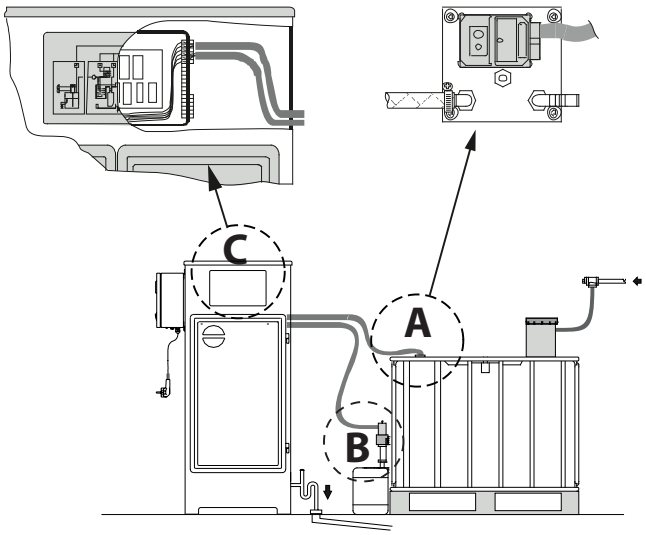
7.2 Connecting the components

For electrical installation work to be carried out, the following prerequisites must be fulfilled and the preparatory tasks must have been completed.

Prerequisites		
Tools	**Material**	**Protective equipment**
• Allent key (size 5) • Side cutters • Screwdriver (PH2 cross-head)	• Fixing material for cables • Cable ties	**Always to be worn:** 

Preparatory tasks	
1.	There is a type F socket that is easily accessible at the product's installation location.
2.	The fusing for the protective contact socket is adequately dimensioned for the corresponding power consumption.
3.	Assembly work has been completed.

Connection work	
Illustration	**Description**
	1. Remove the power supply unit from the product. 2. Mount the power supply unit vertically on the intended mounting points on the splitting unit's housing or positioned freely on a wall. The cable glands on the power supply unit must point downward. → Route the cable in such a way that it is free of any mechanical stress. → Prevent trip hazards by routing the cable appropriately.

Connection work	
Illustration	**Description**
	3. Uncoil the start sensor's **[A]** signal cable and feed it through the opening at the back of the splitting unit's housing. → Route the cable in such a way that it is free of any mechanical stress. → Prevent trip hazards by routing the cable appropriately. 4. Terminal numbers are printed on the signal cable's **[A]** connector. Connect the signal cable's **[A]** connector to the corresponding terminal on the control unit **[C]**. 5. Uncoil the cable [**B**] for the oil drain valve and feed it through the opening at the back of the splitting unit's housing. → Route the cable in such a way that it is free of any mechanical stress. → Prevent trip hazards by routing the cable appropriately. 6. Terminal numbers are printed on the cable's [**B**] connector. Connect the cable's [**B**] connector to the corresponding terminal on the control unit **[C]**. 7. If you will be using external signal processing, you can connect external signal connectors as indicated in the diagrams for internal wiring (refer to section "4.4.4 Internal wiring" on page 35) and the pinout diagram (refer to section "4.4.3 Pinout" on page 33). 8. Plug the protective contact plug into the protective contact socket.

8. Commissioning

Personnel
Skilled technical personnel - pressure equipment and systems and skilled technical personnel - electrical (see section “2.3 Target group and personnel” on page 9)

8.1 Warning notices

DANGER	Sudden escape of pressurised fluids
	There is a danger of death or serious personal injury resulting from contact with fast or suddenly escaping fluids or through bursting system parts.
	• Before pressurisation, check all system connections for leak tightness and tighten if necessary. • Slowly pressurise the system.

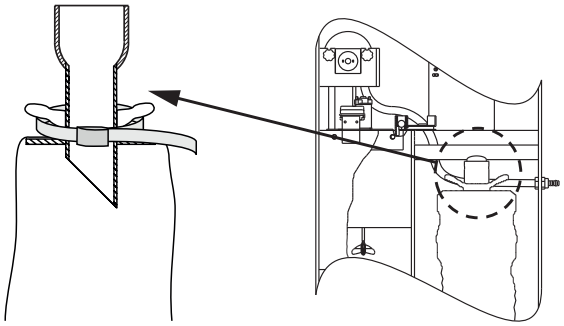
DANGER	Electric voltage
	Contact with electrically live components can result in death or serious injury.
	• Only operate the product and accessories with the cover complete and closed or the electronics housing closed.

8.2 Commissioning steps

For commissioning work to be carried out, the following prerequisites must be fulfilled and the preparatory tasks must have been completed.

Prerequisites		
Tools	**Material**	**Protective equipment**
• Double bit key	• Splitting agent • Clean tap water	**Always to be worn:**  **Depending on actions:** 

Preparatory tasks	
1.	Assembly work has been completed.
2.	Electrical installation work has been completed.

Commissioning steps	
Illustration	**Description**
	1. Use the double bit key to unlock and open the cover of the splitting unit. 2. Use the double bit key to unlock and open the door. 3. Insert the filter bag (refer to section “10.3.1 Checking the filling level of and changing the filter bag” on page 54).

CAUTION

Dust when working with splitting agent!

Inappropriate filling or emptying of the storage tank can cause an increased concentration of dust in the ambient air, which can lead to personal injury.

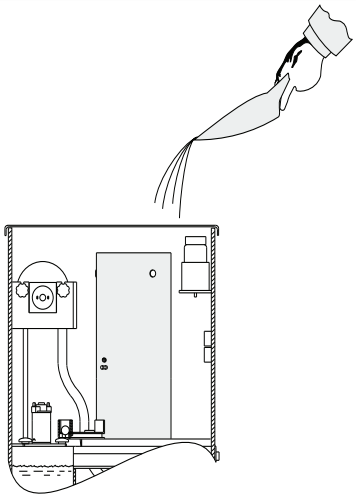
- Put on personal protective equipment before working with splitting agent.
- Carefully pour splitting agent into the storage tank and carefully remove it from the storage tank.
- Make sure to thoroughly ventilate the room while working with splitting agents.

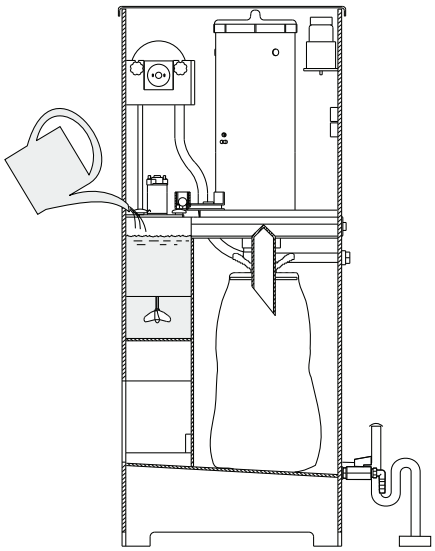
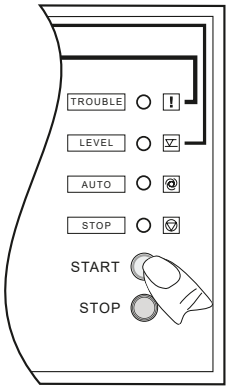
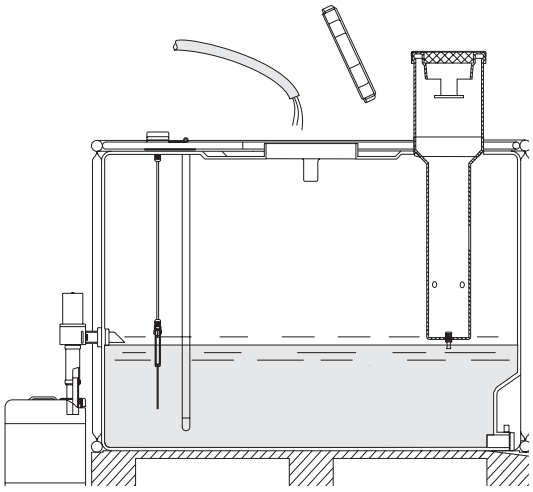
NOTE

Splitting agent separation during transport

Vibrations occurring while the splitting agent is being transported can cause the splitting agent to separate. This in turn can result in erroneous splitting agent metering or in a complete metering failure.

- Make sure to thoroughly mix the splitting agent before use.

	4. Carefully pour in the splitting agent with the enclosed shovel. Make sure to avoid producing unnecessary dust when doing so (refer to section “10.3.2 Checking the filling level of and replenishing the splitting agent” on page 57).

Commissioning steps	
Illustration	**Description**
	5. Remove the channel closure from the drain channel. 6. Fill the reaction chamber with clean tap water. Do not stop the water supply until water escapes through the filter bag. 7. Close the splitting unit's door and cover and lock them with the double bit key.
	8. Connect the power supply. To do this, set the main switch on the power supply unit to "I". 9. Press the START button on the control panel. The product is now in automatic mode.
	10. Fill the pre-separation container with clean tap water. 11. As soon as the agitator starts, stop the water supply. → The water level has reached the START value for the START sensor. 12. Open the condensate inlet on the condensate collection line. 13. The product is now ready for operation and can be filled with condensate.

9. Operation

Personnel
Operating personnel (see section “2.3 Target group and personnel” on page 9)

9.1 Warning notices

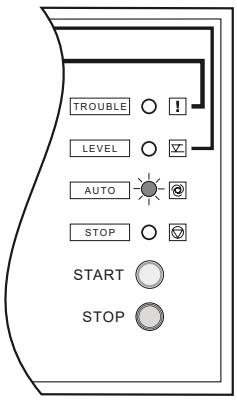
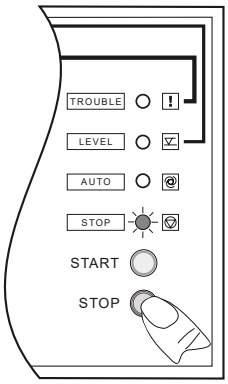
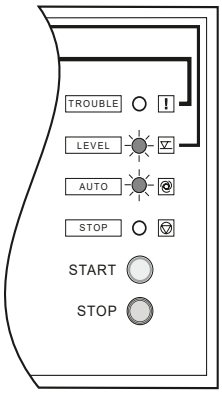
DANGER	Electric voltage
	Contact with electrically live components can result in death or serious injury.
	• Only operate the product and accessories with the cover complete and closed or the electronics housing closed.

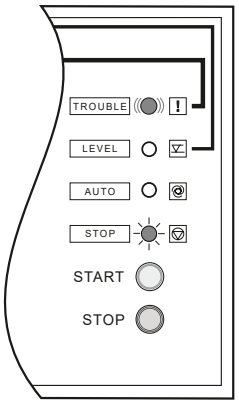
9.2 Operating states

For commissioning work to be carried out, the following prerequisites must be fulfilled and the preparatory tasks must have been completed.

Prerequisites		
Tools	**Material**	**Protective equipment**
• No tool necessary	• Splitting agent	**Always to be worn:** 

Preparatory tasks	
1.	Assembly work has been completed.
2.	Electrical installation work has been completed.
3.	Commissioning work has been completed.

Operating states	
Illustration	**Description**
	**AUTOMATIC Mode** The LED AUTO is lit permanently. → The product is ready for operation or in the middle of the treatment process.
	**STOP mode** The STOP LED is on with a solid light. → The product has been stopped. → AUTOMATIC mode has been stopped.
	**Warning signal - filling level** The LED AUTO and LED LEVEL are lit permanently → The product will continue running. → Check the filling level in the pre-separation container, since the START sensor is covered for longer than 1800 seconds. → After the fault has been eliminated the message goes out automatically.

Operating states	
Illustration	**Description**
	**Fault message - filling level** The LED STOP is lit permanently and the LED TROUBLE is flashing at the same time. → The product will be stopped and will remain stopped. → Check whether the filter bag is full and replace it if necessary (refer to section “10.3.1 Checking the filling level of and changing the filter bag” on page 54). → Check the splitting agent storage tank’s filling level and replenish it if necessary (refer to section “10.3.2 Checking the filling level of and replenishing the splitting agent” on page 57). → After the fault has been eliminated, press the STOP-button to acknowledge the message. → After the message has been acknowledged AUTOMATIC mode can be started again.

10. Maintenance

Personnel
Skilled technical personnel - product servicing (refer to section “2.3 Target group and personnel” on page 9)

10.1 Warning notices

DANGER	Sudden escape of pressurised fluids
	There is a danger of death or serious personal injury resulting from contact with fast or suddenly escaping fluids or through bursting system parts.
	• Before starting work, depressurise the pressurised system and secure it against unintentional pressurisation.

DANGER	Electric voltage
	Contact with electrically live components can result in death or serious injury.
	• Only carry out installation, maintenance and repair work on the product and accessories after they have been isolated from the power source and secured against being switched back on again unintentionally. • Comply with all locally applicable legal requirements and regulations during installation. • Connect the protective conductor (earth connection) according to regulations.

WARNING	Ingress of moisture or foreign bodies
	Removing components or opening the product may allow water or foreign bodies to enter the opened product. This can lead to accidents and personal injury.
	• Protect the product from splashing water or moisture. • Only open the product or remove components in a dry place. • Do not insert any foreign bodies into the openings of the product. • Keep all contact surfaces and openings free of dirt and moisture.

10.2 Maintenance schedule

NOTE	Carrying out maintenance work
	The following maintenance work must be carried out exclusively by the manufacturer's Service personnel or by service personnel trained by the manufacturer: • Service package 1 • Service package 2 • Electric drive maintenance • Emulsion pump maintenance
	• Contact the manufacturer's Service department for maintenance (refer to section "1.1 Contact" on page 5).

Maintenance	Interval
Filling level check - filter bag	Daily Change the filter bag if necessary (refer to section "10.3.1 Checking the filling level of and changing the filter bag" on page 54)
Filling level check - storage tank for the metering unit	Daily Replenish the splitting agent if necessary (refer to section "10.3.2 Checking the filling level of and replenishing the splitting agent" on page 57).
Filling level check - oil collector	Daily Change the oil collector if necessary (refer to section "10.3.3 Checking the filling level of and changing the oil collector" on page 59).
Turbidity test of the wastewater	Weekly
Visual inspection	Weekly
Weekly cleaning (all components in contact with macro flakes)	Weekly
Basic cleaning	At least every six months, depending on the degree of contamination
Replacing the emulsion pump hose	Every six months **INFORMATION**  **Replacing the emulsion pump hose** The additional manual with instructions on how to replace the emulsion pump hose is included with the emulsion pump hose set.
Leak test	Recommendation: At the end of all assembly work and maintenance work on the product

Maintenance	Interval
Changing the power supply unit's microfuses	If necessary
Changing the control unit's microfuse	If necessary
Service package 1 • Replace the emulsion pump hose • Replace the agitator motor • Replace the emulsion pump gear motor • Replace the filter set for the expansion chamber • Replace the seal sets on the oil drain valve • Replace the cleaning brush • Replace the straps	Annually (in years one to three)
Service package 2 • Replace the emulsion pump hose • Replace the agitator motor • Replace the emulsion pump • Replace the metering unit gear motor • Replace the filter set for the expansion chamber • Replace the seal sets on the oil drain valve • Replace the cleaning brush • Replace the straps	Every 4 years
Electric drive maintenance	As instructed in the specifications on the maintenance information label for electric drives (refer to section "2.4.2 On the product" on page 12)
Emulsion pump maintenance	As instructed in the specifications on the maintenance information label for the emulsion pump (refer to section "2.4.2 On the product" on page 12)

10.3 Maintenance work

For maintenance work to be carried out, the following prerequisites must be fulfilled and the respective preparatory tasks must have been completed.

10.3.1 Checking the filling level of and changing the filter bag

Prerequisites		
Tools	**Material**	**Protective equipment**
• Double bit key	• Filter bag • Drainer	**Always to be worn:** 

Preparatory tasks	
1.	Close the condensate feed and secure it against being opened again.
2.	Stop the product.
3.	Disconnect the power supply. To do this, set the main switch on the power supply unit to “0”.

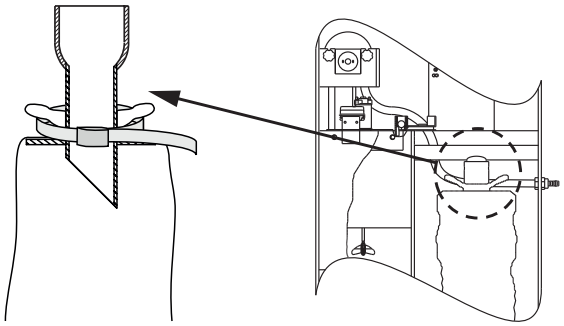
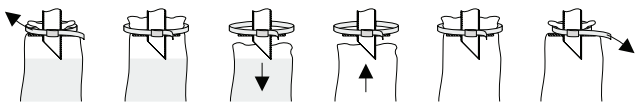
Illustration	Description
	1. Use the double bit key to unlock and open the door. 2. Check how full the filter bag is visually and by touching it. If the filter bag is full or almost full, change it as instructed below. 3. At the full filter’s branch, seal up the drain channel with the channel closure.
	4. Loosen and remove the filter bag’s strap. 5. Pull the full filter bag off the inlet extension and remove it. 6. Set the full filter bag onto a drainer and secure against falling over. 7. Completely unfold a new filter bag and place it around the inlet extension.

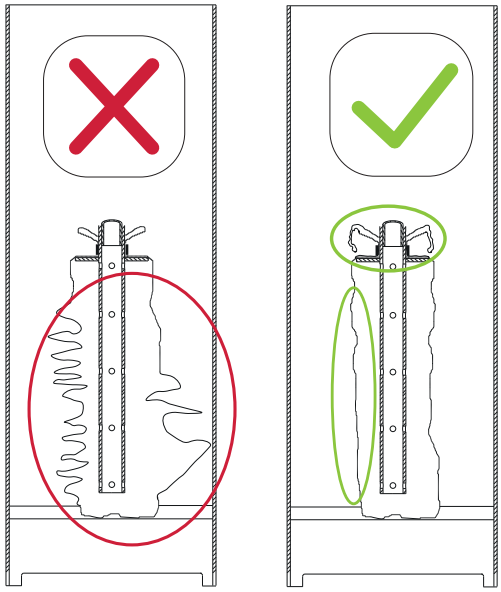
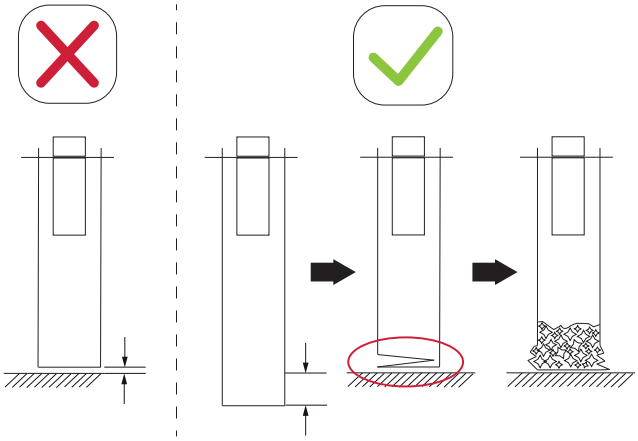
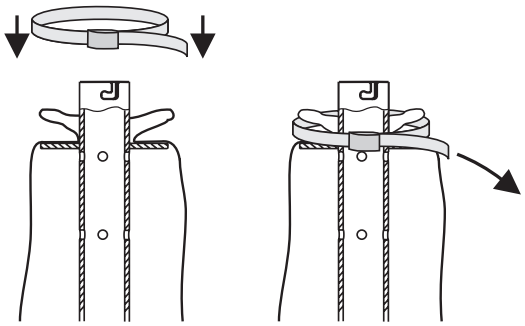
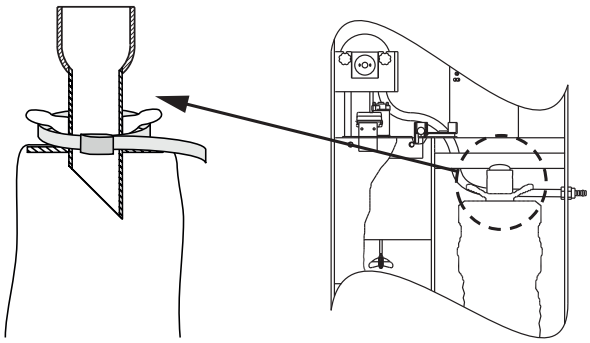
Illustration	Description
	**NOTE** **Securing the filter incorrectly** Projecting filter material can block the metering unit's drive shaft and cause a malfunction. Projecting material below the securing point can become deformed during operation and cause water to leak in the event of contact with the housing or door. • Smooth out the filter material between the securing point and the base in such a way that there are no wrinkles left. • Fold filter material projecting above the securing point and position it tightly against the inlet extension.
	8. Measure the filter material so that it corresponds to the length between the strap and the base without any wrinkling. Wrinkling can cause the filter bag to become deformed, which in turn will result in the filter bag touching the housing wall or the door when filled. → If there is any projecting filter material above the strap, fold it tightly against the inlet extension. 9. Measure the filter material in such a way that the filter will rest against the base of the housing when filled and that it will not pull on the strap. → Smooth out the filter material from the strap to the base and add another 10 cm of filter material at the bottom so that the filled filter will be able to rest on the base and will not come loose from the strap due to its weight when full.

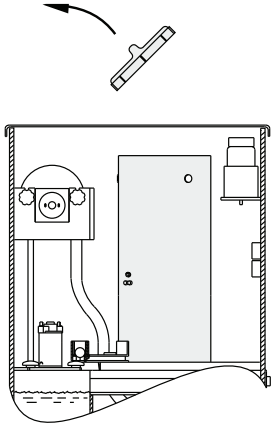
Illustration	Description
NOTE 	**Correct fit of the strap** The filter bag can become loose and filter cake can come out if the strap is not set in place correctly and pulled tight. If the strap is being pulled on, this can result in the drain channel being torn off. • Secure the strap across a single layer of filter material underneath the fold. • Measure the length of the filter material in such a way that there will not be any mechanical tensile forces acting on the strap when the filter bag is filled.
	10. Set the strap in place and pull tightly.
	11. Remove the channel closure. 12. Dispose of the full filter bag in accordance with the applicable regulations (refer to section “14.2 Disposal of operating materials” on page 76). 13. Close the door and lock it with the double bit key.

Final steps	
1.	Connect the power supply. To do this, set the main switch on the power supply unit to “I”.
2.	Start the product.
3.	Open the condensate feed.

10.3.2 Checking the filling level of and replenishing the splitting agent

Prerequisites		
Tools	**Material**	**Protective equipment**
• Double bit key	• Splitting agent	**Always to be worn:** 

Preparatory tasks	
1.	Close the condensate feed and secure it against being opened again.
2.	Stop the product.
3.	Disconnect the power supply. To do this, set the main switch on the power supply unit to “0”.

Illustration	Description
	1. Use the double bit key to unlock and open the cover of the splitting unit. 2. Remove the cover of the metering unit’s storage tank. 3. Visually check the splitting agent filling level and replenish it if necessary as instructed below.

CAUTION

Dust when working with splitting agent!

Inappropriate filling or emptying of the storage tank can cause an increased concentration of dust in the ambient air, which can lead to personal injury.

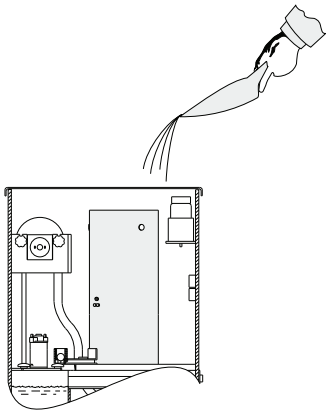
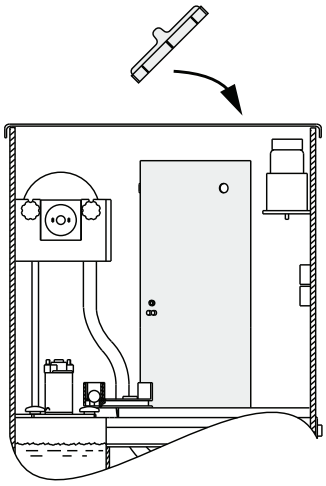
- Put on personal protective equipment before working with splitting agent.
- Carefully pour splitting agent into the storage tank and carefully remove it from the storage tank.
- Make sure to thoroughly ventilate the room while working with splitting agents.

NOTE

Splitting agent separation during transport

Vibrations occurring while the splitting agent is being transported can cause the splitting agent to separate. This in turn can result in erroneous splitting agent metering or in a complete metering failure.

- Make sure to thoroughly mix the splitting agent before use.

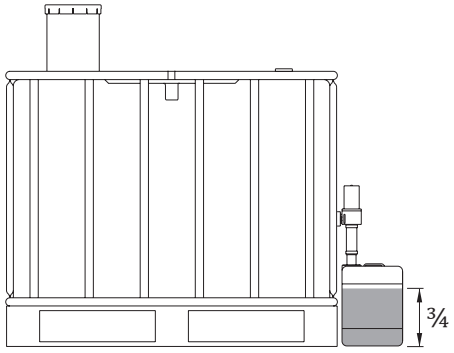
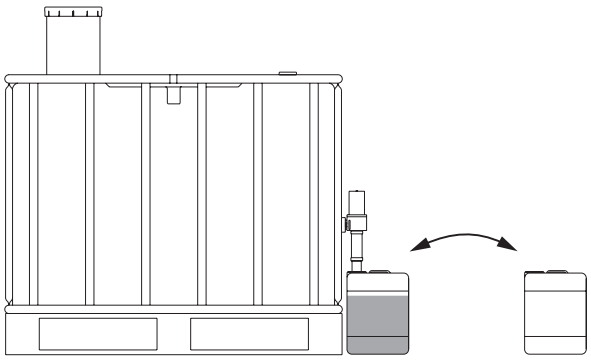
Illustration	Description
	4. Fill the splitting agent carefully using the shovel included.
	5. Place the cover on the storage tank and check that it is seated properly. 6. Close the cover of the splitting unit and lock it using the double bit key.

Final steps	
1.	Connect the power supply. To do this, set the main switch on the power supply unit to “I”.
2.	Start the product.
3.	Open the condensate feed.

10.3.3 Checking the filling level of and changing the oil collector

Prerequisites		
Tools	**Material**	**Protective equipment**
• Screwdriver (PH2 cross-head)	• Oil collector	**Always to be worn:** 

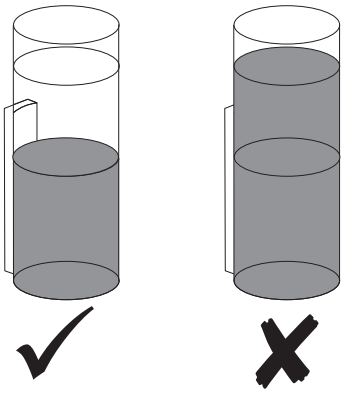
Preparatory tasks	
1.	Close the condensate feed and secure it against being opened again.

Illustration	Description
	1. Check the filling level of the oil collector. → If the oil collector is full by more than 3/4, change it as instructed below.
	2. Close the oil drain valve. 3. Open the bayonet mount on the oil collector. 4. Remove the full oil collector and place an empty oil collector under the oil drain valve. 5. Tightly screw the bayonet mount onto the empty oil collector. 6. Open the oil drain valve. 7. Seal the full oil collector and dispose of it in accordance with the applicable regulations (refer to section “14.2 Disposal of operating materials” on page 76).

Final steps	
1.	Open the condensate feed.

10.3.4 Turbidity test of the wastewater

Prerequisites		
Tools	**Material**	**Protective equipment**
• No tool necessary	• Reference turbidity tube	**Always to be worn:** 

Illustration	Description
	1. Fill the enclosed reference turbidity tube with a wastewater sample from the sampling valve. 2. Compare the sample with the reference turbidity on the lower half of the reference turbidity tube. **The sample is clearer than the reference turbidity:** → The product is working properly. **The sample is more heavily clouded than or exactly as clouded as the reference turbidity:** → Stop the product immediately and contact the manufacturer's Service department. 3. Document the result of the turbidity test in the maintenance logbook.

10.3.5 Visual inspection

During the visual inspection, check all components for mechanical damage and leaks. Replace damaged components immediately.

10.3.6 Cleaning

For cleaning work to be carried out, the following prerequisites must be fulfilled and the respective preparatory tasks must have been completed.

10.3.6.1 Warning notices

DANGER	**Electric voltage**
	Contact with electrically live components can result in death or serious injury.
	• Only carry out maintenance and repair work on the product when it has been isolated from the power source and locked and tagged out.

WARNING	**Ingress of moisture or foreign bodies**
	Removing components or opening the product may allow water or foreign bodies to enter the opened product. This can lead to accidents and personal injury.
	• Protect the product from splashing water or moisture. • Only open the product or remove components in a dry place. • Do not insert any foreign bodies into the openings of the product. • Keep all contact surfaces and openings free of dirt and moisture.

CAUTION	**Personal injury due to inappropriate use of cleaning media**
	Inappropriate use of cleaning media may result in minor injuries and damage to health.
	• Use personal protective equipment. • Use cleaning media in accordance with the manufacturer's instructions.

NOTE	**Damage due to inappropriate cleaning**
	Inappropriate cleaning can cause damage to components.
	• Only ever flush the product at normal (i.e. low) tap pressure. • Never clean the device with hard or pointed implements. • Do not clean using pressure washers or steam cleaners.

NOTE	**Observe local hygiene regulations**
	In addition to the cleaning instructions listed, any regionally applicable or company-specific hygiene regulations must be observed.

10.3.6.2 Weekly cleaning

Prerequisites		
Tools	**Material**	**Protective equipment**
• Double bit key • Cleaning brush	• Mild cleaning agent • Cotton or disposable cloth • Cloth for drying	**Always to be worn:** 

Preparatory tasks	
1.	Close the condensate feed and secure it against being opened again.
2.	Stop the product.
3.	Disconnect the power supply. To do this, set the main switch on the power supply unit to “0”.

Components	Description
Electric components	1. Spray mild cleaning agent onto a cotton cloth or disposable tissue until it is damp (not wet). 2. Rub the surfaces with the damp cloth. 3. Then dry using a dry cloth.
Reaction chamber, agitator, drain channel and sensor	1. Empty the reaction chamber. 2. Remove the filter bag (see section “10.3.1 Checking the filling level of and changing the filter bag” on page 54). 3. Rinse all the components with tap water. Remove stubborn residue carefully using the brush included. 4. Reinstall the filter bag (refer to section “10.3.1 Checking the filling level of and changing the filter bag” on page 54). 5. Fill the reaction chamber with tap water until tap water flows into the drain channel.

Final steps	
1.	Connect the power supply. To do this, set the main switch on the power supply unit to “I”.
2.	Start the product.
3.	Open the condensate feed.

10.3.6.3 Basic cleaning

Prerequisites		
Tools	**Material**	**Protective equipment**
• Double bit key • Cleaning brush	• Mild cleaning agent • Cotton or disposable cloth • Cloth for drying	**Always to be worn:** 

Preparatory tasks	
1.	Close the condensate feed and secure it against being opened again.
2.	Stop the product.
3.	Disconnect the power supply. To do this, set the main switch on the power supply unit to “0”.

Assembly unit/component	Description
Electric components	1. Spray mild cleaning agent onto a cotton cloth or disposable tissue until it is damp (not wet). 2. Rub the surfaces with the damp cloth. 3. Then dry using a dry cloth.
Reaction chamber, agitator, drain channel, sensor and clear water tub	1. Empty the reaction chamber. 2. Remove the filter bag (see section “10.3.1 Checking the filling level of and changing the filter bag” on page 54). 3. Rinse all the components with tap water. Remove stubborn residue carefully using the brush included. 4. Reinstall the filter bag (refer to section “10.3.1 Checking the filling level of and changing the filter bag” on page 54).

Assembly unit/component	Description
Pre-separation container	1. Empty the pre-separation container. 2. Remove the START sensor assembly unit. 3. Remove the pressure relief chamber. 4. Rinse all the components with tap water. Remove stubborn residue carefully using the brush included. 5. Reinstall the pressure relief chamber. 6. Reinstall the START sensor module.

Final steps	
1.	Put the product back into operation as instructed (refer to section “8.2 Commissioning steps” on page 45).
2.	Open the condensate feed.

10.3.7 Leak test

NOTE	Leak test during device operation
	The leak test on the product can only be carried out during operation.

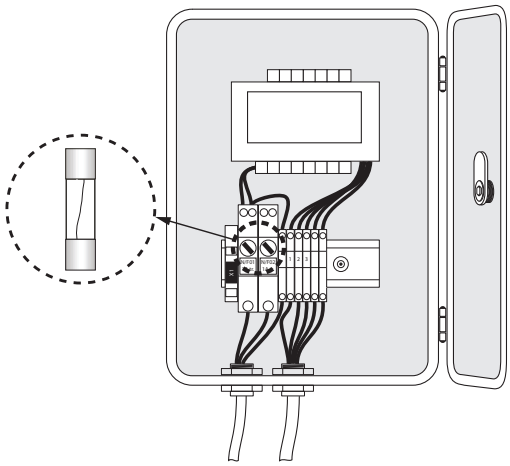
Subject all hose connections and other connections to a visual inspection for leaks. The following table contains possible sources of leaks and measures for elimination.

Leak source	Measure
Leaky hose	• Replace the hose.
Leaky hose connection	• Tighten the hose clamp. • Replace hardened hose and respective hose clamps.
Leaky screw connection	• Tighten the screw connection. • Apply sealant to the screw connection again.
Leaky shut-off valve	• Replace the shut-off valve.

10.3.8 Changing the power supply unit's microfuses

Prerequisites		
Tools	**Material**	**Protective equipment**
• SL10 slotted screwdriver	• Two microfuses (F01 / F02)	**Always to be worn:** 

Preparatory tasks	
1.	Close the condensate feed and secure it against being opened again.
2.	Stop the product.
3.	Disconnect the power supply. To do this, set the main switch on the power supply unit to "0".
4.	Pull the protective contact plug from the socket.

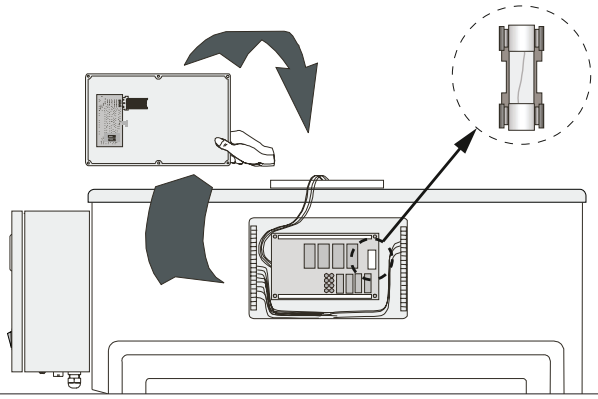
Illustration	Description
	1. Unlock the catch on the power supply unit cover using a slotted head screwdriver and open the cover. 2. Replace the two microfuses (F01 / F02) with two new microfuses (for the type, refer to section "4.1 Operating parameters" on page 27). 3. Close the cover of the power supply unit and lock the catch on the cover using a slotted head screwdriver.

Final steps	
1.	Plug the protective contact plug into the protective contact socket.
2.	Connect the power supply. To do this, set the main switch on the power supply unit to "I".
3.	Start the product.
4.	Open the condensate feed.

10.3.9 Changing the control unit's microfuse

Prerequisites		
Tools	**Material**	**Protective equipment**
• SL10 slotted screwdriver	• Microfuse	**Always to be worn:** 

Preparatory tasks	
1.	Close the condensate feed and secure it against being opened again.
2.	Stop the product.
3.	Disconnect the power supply. To do this, set the main switch on the power supply unit to "0".
4.	Pull the protective contact plug from the socket.

Illustration	Description
	1. Unscrew the four screws on the control unit's control panel. 2. Remove the control panel and set it safely aside. 3. Replace the microfuse with a new fuse (for the type, refer to section "4.1 Operating parameters" on page 27). 4. Set the housing cover on the control unit. 5. Screw in and tighten the four screws on the control unit's control panel.

Final steps	
1.	Plug the protective contact plug into the protective contact socket.
2.	Connect the power supply. To do this, set the main switch on the power supply unit to "I".
3.	Start the product.
4.	Open the condensate feed.

11. Wear parts, accessories and spare parts

11.1 Order information

The manufacturer's customer service department requires the following details for enquiries or orders:

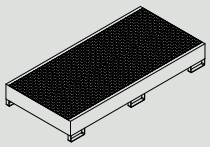
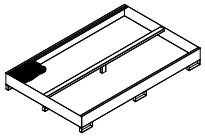
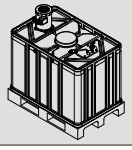
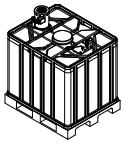
- Product name and size (see type plate)
- Serial number (see type plate)
- Part number and part name
- The number of parts you want

The contact data for the relevant manufacturer customer services are listed in section "1.1 Contact" on page 5.

11.2 Wear parts

Designation	Material number
Splitting agent FL 02 - 10 kg (22.05 lb)	4020598
Splitting agent FL 02 - 25 kg (55.12 lb)	4020596
Splitting agent FL 11 - 10 kg (22.05 lb)	4021427
Splitting agent FL 11 - 25 kg (55.12 lb)	4021430
Replacement filter kit - 5 pcs.	4012868
Replacement fleece filter kit - 5 pcs.	4012867

11.3 Accessories

Designation	Illustration	Material number
Drying rack for filter bags		2002628
Spill protection basin 607 l (160.35 gal) in conformity with StawaR (German Steel Tray Guideline), compatible with 600 l pre-separation container		4047648
Spill protection basin 1000 l (264.17 gal) in conformity with StawaR (German Steel Tray Guideline), compatible with 1000 l pre-separation container		4047649
Safety container 600 l (158.5 gal), compatible with 600 l pre-separation container		2002549
Safety container 1000 l (264.17 gal), compatible with 1000 l pre-separation container		2002550

11.4 Spare parts

11.4.1 Spare parts – splitting unit

Designation		Material number
230 VAC power supply unit, without pump controller relay		2000106
200 VAC power supply unit, without pump controller relay		4007032
115 VAC power supply unit, without pump controller relay		4025970
230 VAC power supply unit, with pump controller relay		4027051
115 VAC power supply unit, with pump controller relay		4032266
System control / control unit		4001814
Operating hours counter		2000011
Filter monitoring sensor		2000108
Splitting agent sensor		2000391
Emulsion pump		2800525
Gear motor for emulsion pump		2800484
Emulsion pump hose set		2800527
Metering unit, complete (without filling level sensor)		4008082
Gear motor for metering unit	Up to serial number 10.400.702	2800476
	Starting from serial number 10.400.703	4008380
Carbon brush kit for metering unit gear motor	Up to serial number 10.400.702	2000389
	Starting from serial number 10.400.703	4014400
Motor for agitator		2002625
Strap for filter bag; 2 pcs		2800495
Agitator shaft		2002626
Door unit, complete		2001938
Cover		2002305

Service package 1 • Emulsion pump hose; 2 units • Agitator motor • Gear motor for emulsion pump • Activated carbon mat • O-ring set • Brush • Strap tensioner		4040377
Service package 2 • Emulsion pump hose • Agitator • Emulsion pump • Gear motor for metering unit • Activated carbon mat • O-ring set • Brush • Strap tensioner	Up to serial number 10.400.702	4040378
	Starting from serial number 10.400.703	4040380

11.4.2 Spare parts – pre-separation container and safety container

Designation	Material number	
	600 l	1000 l
Pressure relief chamber without connection adapter	2800887	2800887
Filter set for pressure relief chamber	2800889	2800889
Adapter for pressure relief chamber	2001046	2001046
Oil drain valve, complete	2000101	2000101
Connection cable for oil drain valve	4006840	4006840
Oil collector set	2000379	2000400
Oil collector	2000380	4003931
Bracket, complete (without START sensor)	2000599	2000600
START sensor (calibrated for water, without cable)	2000012	2000012
Connection cable for START sensor	4005040	4005040
Submersible pump with float switch	2800517	2800517

12. Shutdown procedure

Personnel
Skilled technical personnel - product servicing (refer to section “2.3 Target group and personnel” on page 9)

The product must be removed from service during prolonged downtimes, such as in the following scenarios:

- Repairs to the product
- Prolonged overall compressed air system downtime due to planned work (e.g., conversion work, major repairs, decommissioning of overall compressed air system).

12.1 Warning notices

DANGER	Sudden escape of pressurised fluids
	There is a danger of death or serious personal injury resulting from contact with fast or suddenly escaping fluids or through bursting system parts.
	• Before starting work, depressurise the pressurised system and secure it against unintentional pressurisation. • Assemble all pipes and hoses free of mechanical stress.

DANGER	Electric voltage
	Contact with electrically live components can result in death or serious injury.
	• Only carry out installation, maintenance and repair work on the product and accessories after they have been isolated from the power source and secured against being switched back on again unintentionally. • Comply with all locally applicable legal requirements and regulations during installation. • Connect the protective conductor (earth connection) according to regulations.

CAUTION	Dust when working with splitting agent!
	Inappropriate filling or emptying of the storage tank can cause an increased concentration of dust in the ambient air, which can lead to personal injury.
	• Put on personal protective equipment before working with splitting agent. • Carefully pour splitting agent into the storage tank and carefully remove it from the storage tank. • Make sure to thoroughly ventilate the room while working with splitting agents.

12.2 Shutdown steps

For decommissioning work to be carried out, the following prerequisites must be fulfilled and the preparatory tasks must have been completed.

Prerequisites		
Tools	**Material**	**Protective equipment**
• Adjustable wrench • Screwdriver (PH2 cross-head) • Side cutters	• No material necessary	**Always to be worn:**  **Depending on actions:** 

Shutdown steps	
1.	Close the condensate feed and secure it against being opened again.
2.	Stop the product.
3.	Disconnect the power supply. To do this, set the main switch on the power supply unit to “0”.
4.	Pull the protective contact plug from the socket.
5.	Empty the pre-separation container.
6.	Remove the START sensor and clean it.
7.	Disassemble the pressure relief chamber and clean it.
8.	Clean the pre-separation container.
9.	Install the pressure relief chamber and the START sensor.
10.	Replace the oil collector by an empty one and dispose of it according to regulations.
11.	Empty the connecting hose between the splitting unit and the pre-separation container and rinse it out with tap water.
12.	Empty the reaction chamber.
13.	Empty the storage tank of the metering unit and dispose of the splitting agent according to regulations or put it into storage.
14.	Remove the filter bag and dispose of it in accordance with the applicable regulations.
15.	Clean the reaction chamber, the agitator, the drain channel, the sensor and the clear water tub with tap water.
16.	Insert a new filter bag.
17.	Seal all of the product’s openings.

13. Disassembly

Personnel
Skilled technical personnel - product servicing (refer to section “2.3 Target group and personnel” on page 9)

13.1 Warning notices

DANGER	Sudden escape of pressurised fluids
	There is a danger of death or serious personal injury resulting from contact with fast or suddenly escaping fluids or through bursting system parts.
	• Before starting work, depressurise the pressurised system and secure it against unintentional pressurisation.

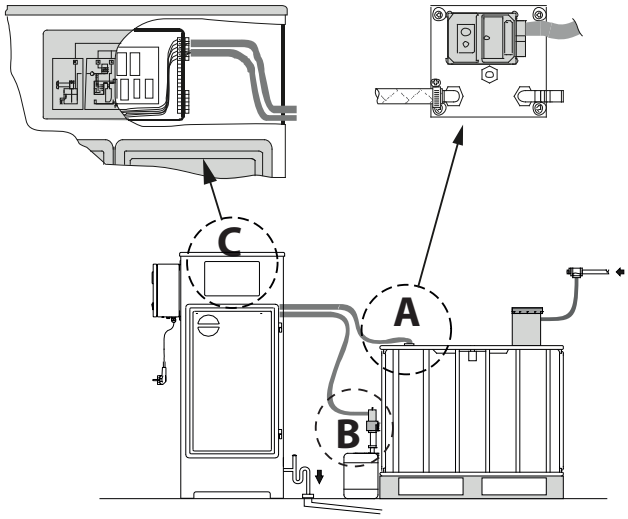
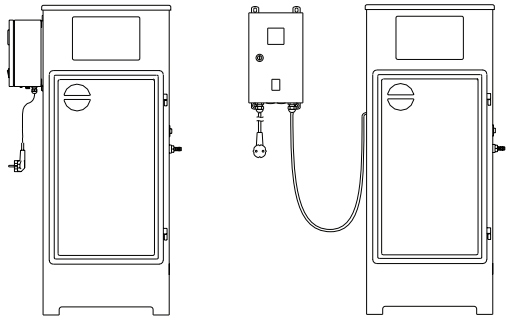
DANGER	Electric voltage
	Contact with electrically live components can result in death or serious injury, as well as malfunction, device failure or material damage.
	• Before starting work, isolate the product and accessories from the power source and secure them against being switched back on again unintentionally.

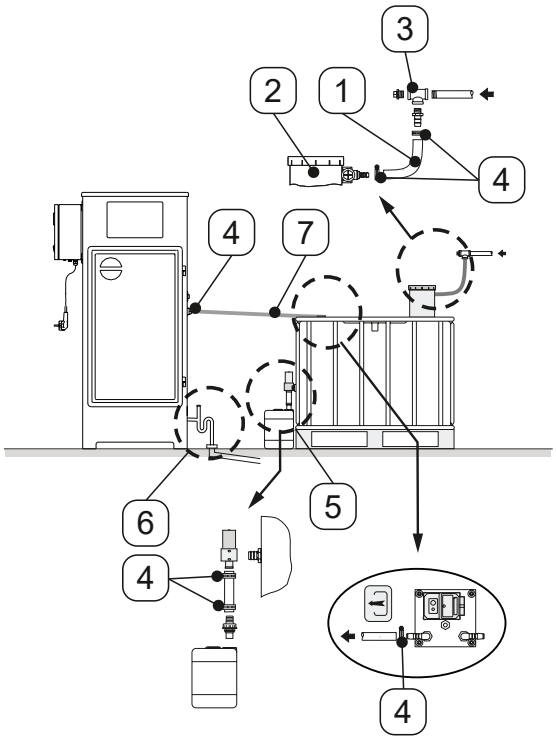
13.2 Disassembly steps

For disassembly work to be carried out, the following prerequisites must be fulfilled and the preparatory tasks must have been completed.

Prerequisites		
Tools	**Material**	**Protective equipment**
• Adjustable wrench • Screwdriver (PH2 cross-head) • Allen key Size 5 • Side cutters	• No material necessary	**Always to be worn:** 

Preparatory tasks	
1.	Close the condensate feed and secure it against being opened again.
2.	Shut down the product (refer to section “12. Shutdown procedure” on page 70).

Disassembly steps	
Illustration	**Description**
	1. Disconnect the type F plug from the type F socket and coil up the cable. 2. Disconnect the signal cable **[A]** for the START sensor from the control unit **[C]** terminals and coil it up. 3. Disconnect the cable **[A]** for the oil drain valve from the control unit **[C]** terminals and coil it up. 4. Disconnect the external signal connections and roll the cable up. 5. Disconnect the power cable **[A]** for the control unit from the control unit **[C]** terminals and coil it up.
	6. Unscrew the power supply unit from the wall or the housing and put it in the plant.

Disassembly steps	
Illustration	**Description**
	7. Undo all hose clamps **[4]**. 8. Remove the hose **[1]** between the discharge point **[3]** and the condensate inlet on the pressure relief chamber **[2]**. 9. Remove the hose **[7]** between the splitting unit and the pre-separation container. 10. Remove the water outlet hose **[6]** from the connection for draining the purified condensate. 11. Remove the oil collector from the oil outlet **[5]** on the pre-separation container. 12. Transport the pre-separation container away. 13. Place the splitting unit on a pallet and transport it away.

14. Disposal

At the end of their useful life the product and the accessories must be sent for disposal e.g. by a specialist company. Materials such as glass, plastics and some chemical compounds are mostly recoverable, reusable or recyclable.

14.1 Warning notices

NOTE	Improper disposal
	The improper disposal of parts, components, operating and auxiliary materials, and cleaning products can cause environmental damage.
	• Dispose of all components, parts, operating and auxiliary materials as well as cleaning agents professionally and in accordance with all locally applicable legal requirements and regulations. • Dispose of electrical and electronic components using a specialist disposal company or return them to the manufacturer. • In case of doubt, consult a local disposal company before disposal.

NOTE	Inappropriate storage
	The inappropriate storage of parts, components, operating and auxiliary materials, as well as cleaning media, can cause environmental damage.
	• Store all components, parts, operating and auxiliary materials as well as cleaning media properly and in accordance with all locally applicable legal requirements and regulations. • Store used filter cartridges in one spill protection basin only.

INFORMATION	Disposal of electrical and electronic equipment
	Electrical and electronic equipment (EEE) contains materials, components and substances which can be dangerous and harmful to human health and the environment if the waste from electrical and electronic equipment (WEEE) is not disposed of properly. Electrical and electronic equipment are marked by the crossed out rubbish bin. The crossed-out rubbish bin symbolises that electrical and electronic equipment must be collected separately and must not be disposed of together with unsorted household waste. For additional information regarding locally applicable legal requirements and regulations concerning recycling electrical and electronic products, contact your local disposal companies or the responsible municipal authority.

14.2 Disposal of operating materials

Operating material / auxiliary material	EU waste code
Filter cake and used filter bag	19 08 14
Waste oil - mineral	13 02 05
Waste oil - synthetic	13 02 06
Adsorption materials, filter materials, cleaning wipes and protective clothing - contaminated by oils or other hazardous substances	15 02 02
Adsorption materials, filter materials, cleaning wipes and protective clothing - with the exception of those classified by 15 02 02	15 02 03
Packaging - paper and cardboard	15 01 01
Packaging - plastic material	15 01 02
Splitting agent	Refer to the material safety data sheet for the splitting agent

14.3 Disposal of components

Ensure the following prerequisites are met before disposal:

Prerequisites	
1.	The product and the accessories have been shut down and disassembled.
2.	The product and the accessories have been cleaned and any fluid residue has been removed from them.

Components	EU waste code
Electric and electronic devices with the exception of those covered by 20 01 21, 20 01 23 and 20 01 35	20 01 36
Plastic material	20 01 39
Metals	20 01 40

15. Troubleshooting / FAQ

Error or fault pattern	Possible causes	Fix
The LED STOP is lit permanently and the LED TROUBLE is flashing at the same time.	Filter volume exhausted	• Acknowledge the fault signal by pressing the STOP-button on the control panel. • Replace the full filter bag with an empty one (refer to section “10.3.1 Checking the filling level of and changing the filter bag” on page 54). • Start the plant in AUTOMATIC mode by pressing the START button on the control panel.
	Storage tank for the metering unit is empty	• Acknowledge the fault signal by pressing the STOP-button on the control panel. • Splitting agent replenishment (refer to section “10.3.2 Checking the filling level of and replenishing the splitting agent” on page 57). • Start the plant in AUTOMATIC mode by pressing the START button on the control panel.
The LED AUTO and LED LEVEL are lit permanently.	START sensor in the pre-separation container is covered for more than 1800 seconds	• Check the condensate inlet, throttle if necessary. • Check the emulsion pump for leaks/to make sure it is working properly.
No LED lit on the control panel with the power supply unit switched on.	Problem with the connection between power supply unit and control unit	• Check plug-type contact of the cable at the control unit. • Check transmission of the connection cable, replace the cable if necessary.
	Fine wire fuse faulty	• Check the control unit’s microfuse and replace it if necessary (refer to section “10.3.9 Changing the control unit’s microfuse” on page 66). • Check the power supply unit’s microfuses and replace them if necessary (refer to section “10.3.8 Changing the power supply unit’s microfuses” on page 65).
Leaks	Leaky hose connection	• Tighten the hose clamps. • Replace hardened hose and respective hose clamps.
	Leaky hose	• Replace the hose.
	Leaky screw connection	• Tighten the screw connection. • Apply sealant to the screw connection again.
	Leaky shut-off valve	• Replace the shut-off valve.

16. Certificates and declarations of conformity

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www.beko-technologies.com

EU-Konformitätserklärung

Wir erklären hiermit, dass das nachfolgend bezeichnete Produkt den Anforderungen der einschlägigen Richtlinien und technischen Normen entspricht. Diese Erklärung bezieht sich nur auf das Produkt in dem Zustand, in dem das Produkt von uns in Verkehr gebracht wurde. Nicht vom Hersteller angebrachte Teile und/oder nachträglich vorgenommene Eingriffe bleiben unberücksichtigt.

Produktbezeichnung:	Emulsionsspaltanlage
Modelle:	BEKOSPLIT® 11, 12, 13, 14, 14S, 15, 16
Spannungsvarianten:	BEKOSPLIT 11: 100 VAC – 240 VAC ±10%, 50 – 60Hz BEKOSPLIT 12 – 16: 100 VAC, 110 VAC, 115 VAC, 200 VAC, 230 VAC ±10%, 50 – 60Hz
Produktbeschreibung und Funktion:	Anlage zur Aufbereitung emulsionshaltiger Kompressorenkondensate

Maschinen-Richtlinie 2006/42/EG

Angewandte harmonisierte Normen:	EN ISO 12100:2010 EN 60204-1:2018
Name des Dokumentationsbevollmächtigten:	Johannes Sinstedten Im Taubental 7 41468 Neuss Deutschland

Niederspannungs-Richtlinie 2014/35/EU

Angewandte harmonisierte Normen: EN 61010-1:2010/A1:2019/AC:2019-04

Die Geräte mit einer Betriebsspannung von 24 ... 48 VAC und 18 ... 72 VDC fallen nicht in den Anwendungsbereich der Niederspannungs-Richtlinie.

EMV-Richtlinie 2014/30/EU

Angewandte harmonisierte Normen: EN 61326 1:2013

ROHS II-Richtlinie 2011/65/EU

Die Vorschriften der Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten werden erfüllt.

Der Hersteller trägt die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung.

Unterzeichnet für und im Namen von:

Neuss, 07.03.2022

BEKO TECHNOLOGIES GMBH

i.V.

i.V. Christian Riedel
Leiter Qualitätsmanagement International

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EU-Declaration of Conformity

We hereby declare that the product named below complies with the stipulations of the relevant directives and technical standards. This declaration only refers to the product in the condition in which it has been placed into circulation by us. Parts which have not been installed by the manufacturer and/or modifications which have been implemented subsequently remain unconsidered.

Product designation:	Emulsion splitting plant
Types:	BEKOSPLIT® 11, 12, 13, 14, 14S, 15, 16
Supply voltage versions:	BEKOSPLIT® 11: 100 VAC – 240 VAC ±10%, 50 – 60Hz BEKOSPLIT® 12 – 16: 100 VAC, 110 VAC, 115 VAC, 200 VAC, 230 VAC ±10%, 50 – 60Hz
Product description and function:	Plant for treating compressor condensates containing emulsion

Machinery Directive 2006/42/EG

Applied harmonised standards:	EN ISO 12100:2010; EN 60204-1:2018
Name of the authorised Documentation Representative:	Johannes Sinstedten Im Taubental 7, 41468 Neuss, Germany

Low Voltage Directive 2014/35/EU

Applied harmonised standards: EN 61010-1:2010/A1:2019/AC:2019-04

The devices with a working voltage of 24 ... 48 VAC and 18 ... 72 VDC are not governed by the scope of the Low Voltage Directive.

EMC Directive 2014/30/EU

Applied harmonised standards: EN 61326 1:2013

ROHS II-Directive 2011/65/EU

The products meet the requirement laid down in European Directive 2011/65/EU concerning the restriction of the use of certain hazardous substances in electrical and electronic devices.

The manufacturer shall have sole responsibility for issuing this declaration of conformity.

Signed for and on behalf of:

Neuss, 07.03.2022

BEKO TECHNOLOGIES GMBH

i.V. Christian Riedel
Head of Quality Management International

17. Notes

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