

PT 4500 S / PT 6500 S / PT 15000 S / PT 23000 S

EN

ORIGINAL INSTRUCTIONS
AIR CONDITIONER



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Follow the manual

Information marked with this symbol indicates that the instructions must be observed.



Wear safety glasses

Information marked with this symbol indicates that you should wear eye protection.



Wear a protective mask

Information marked with this symbol indicates that you should wear a protective mask.



Wear protective gloves

Information marked with this symbol indicates that you should wear protective gloves.



Wear foot protection

Information marked with this symbol indicates that you should wear safety boots.

Notes regarding the instructions

Symbols



Warning of electrical voltage

This symbol indicates dangers to the life and health of persons due to electrical voltage.



Danger

This symbol indicates dangers to the life and health of persons due to suspended loads.



Warning

This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.



Caution

This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note

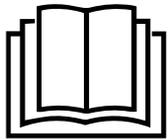
This signal word indicates important information (e.g. material damage), but does not indicate hazards.



Info

Information marked with this symbol helps you to carry out your tasks quickly and safely.

You can download the current version of the instructions via the following link:



PT 4500 S



<https://hub.trotec.com/?id=43855>

PT 6500 S



<https://hub.trotec.com/?id=40996>

PT 15000 S



<https://hub.trotec.com/?id=42206>

PT 23000 S



<https://hub.trotec.com/?id=45165>

Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use.



Warning

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in aggressive atmosphere.
- Only put up the device in an upright, stable position on firm ground.
- Never drink the water / glycol mixture! Dispose of the water / glycol mixture properly!
- Never fill the tank directly from a water line. Use a suitable vessel or other means.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- Never insert any objects or limbs into the device.
- Do not cover the device during operation.
- Do not sit on the device.
- This appliance is not a toy. Keep away from children and animals. Do not leave the device unattended during operation.
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!
- The mains connection must correspond to the specifications in the Technical annex.
- Insert the mains plug into a properly fused mains socket.

- Observe the technical data when selecting extensions to the power cable. Completely unroll the extension cable. Avoid electrical overload.
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket. Hold onto the mains plug while doing so.
- Switch the device off and disconnect the power cable from the mains socket when the device is not in use.
- When positioning the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical annex.
- Make sure that the air inlet and outlet are not obstructed.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Make sure that the suction side is kept free of dirt and loose objects.
- Discharge the collected condensate before transport and storage. Do not drink it. Health hazard!
- Only transport the device in an upright position.

Intended use

Only use the device for cooling, ventilating and dehumidifying indoor air whilst adhering to the technical data.

Foreseeable misuse

- Do not place the device on wet or flooded ground.
- Do not place any objects, e.g. clothing, on the device.
- Do not use the device out of doors.
- Do not make any unauthorised modifications, alterations or structural changes to the device.
- Any use other than the intended use is regarded as a reasonably foreseeable misuse.

Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when working with electric devices in damp areas.
- have read and understood the instructions, especially the Safety chapter.

Maintenance tasks which require the housing to be opened must only be carried out by specialist companies for cooling and air-conditioning or by Trotec.

Electrically skilled person

Electrically skilled personnel must be able to read and understand electric circuit diagrams, to put electrical systems into service and to maintain them, to wire control cabinets, to ensure the functionality of electrical components and to identify possible hazards from electrical and electronic systems.

Personal protective equipment



Wear safety glasses

For start-up, maintenance and troubleshooting always wear suitable safety glasses.



Wear a protective mask

For cleaning and maintenance tasks wear an appropriate protective mask.



Wear protective gloves

For start-up, maintenance and troubleshooting always wear suitable protective gloves.



Wear foot protection

For transportation, start-up, maintenance and troubleshooting always wear suitable foot protection.

Residual risks



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!
Do not touch the mains plug with wet or damp hands. Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Warning

The device is not a toy and does not belong in the hands of children.



Warning

Risk of suffocation!
Do not leave the packaging lying around. Children may use it as a dangerous toy.



Warning

Risk of death due to suspended loads!
Make sure that nobody is situated in the immediate proximity.



Danger

Keep the water / glycol mixture away from your eyes at all times! Should the water / glycol mixture contact your eyes, immediately rinse them with clear water!



Danger

Never drink the water / glycol mixture! Glycol is unfit for human consumption and harmful to health!

Note

To avoid damages to the device, only transport and operate the device in an upright position! It must neither be tilted nor laid down!

Note

Do not operate the device without an inserted air filter! Without the air filter, the inside of the device will be heavily contaminated. This could reduce the performance and result in damage to the device.

Behaviour in the event of an emergency

1. Switch the device off.
2. In an emergency, disconnect the device from the mains feed-in: Hold onto the mains plug while pulling the power cable out of the mains socket.
3. Do not reconnect a defective device to the mains.

Information about the device

Device description

The devices PT 4500 S, PT 6500 S, PT 15000 S and PT 23000 S are chiefly used for cooling room air. Moreover, the devices also provide the opportunity of air circulation without cooling effect. The devices are operated via the control panel (1) at the respective device.

The devices are air conditioners with split cooling circuits. The refrigerant circuit of the basic device (2) is self-contained. For the dissipation of warmth it is emitted via one or two heat exchangers to a second cooling circuit. A second circuit transports warmed water / glycol mixture to the external heat exchanger (6) to cool it down again.

The air conditioners PT 4500 S and PT 6500 S can be used with one heat exchanger. The PT 15000 S requires two heat exchangers. The PT 23000 S operates with three heat exchangers.

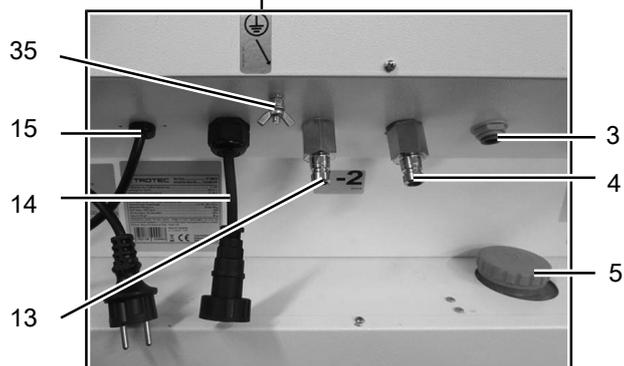
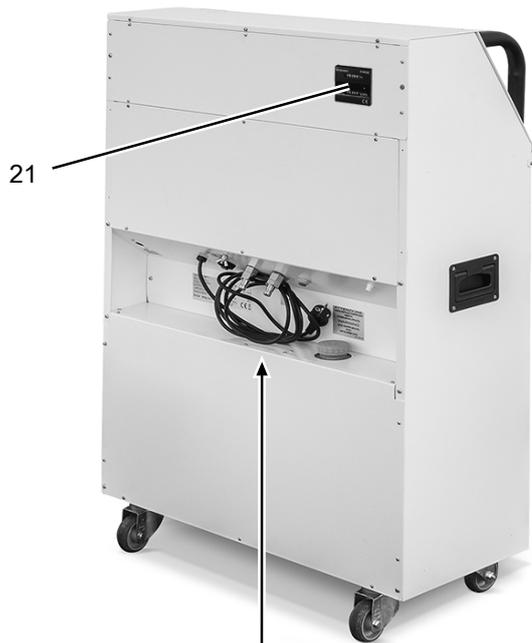
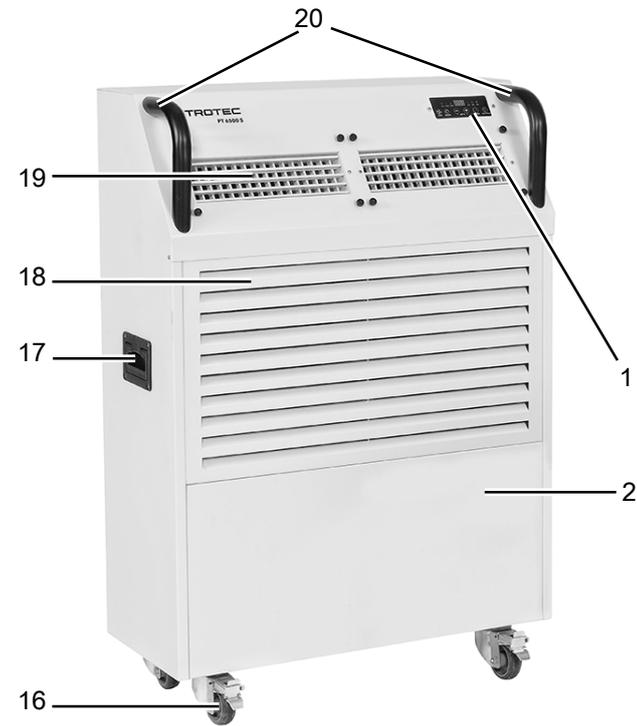
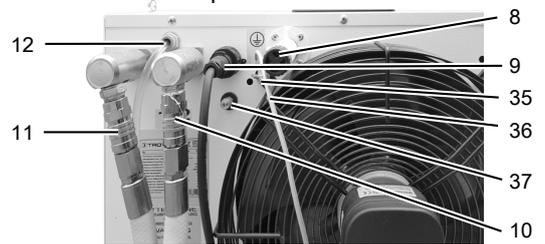
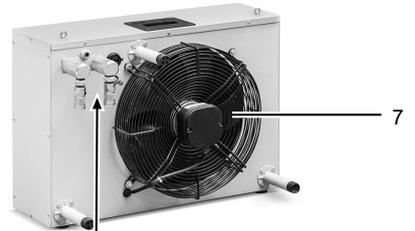
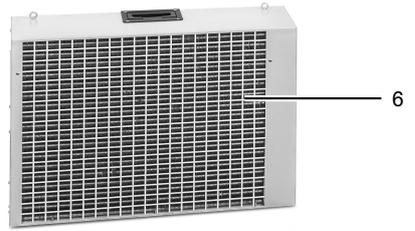
The devices cool the room air by withdrawing warmth. The refrigerant cools down the air coming from the room and in doing so absorbs the heat. The thusly cooled air is introduced to the room, where the device is positioned, via the fan.

Accumulating condensate is discharged via a separate hose (3, 11) to the external heat exchanger in order to be drained or to evaporate there.

The "operating hours counter" option is already integrated in the control. As standard the PT 15000 S and PT 23000 S come with an installed energy meter. For PT 4500 S and PT 6500 S you can optionally order a dual counter.

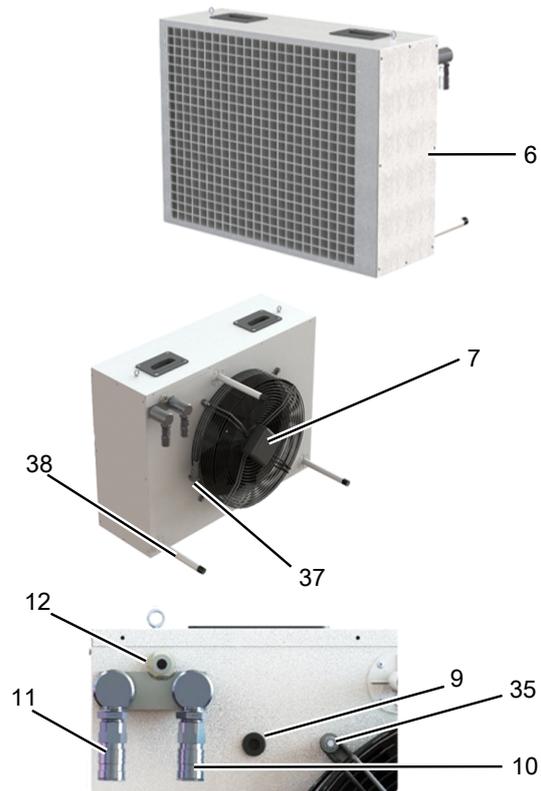
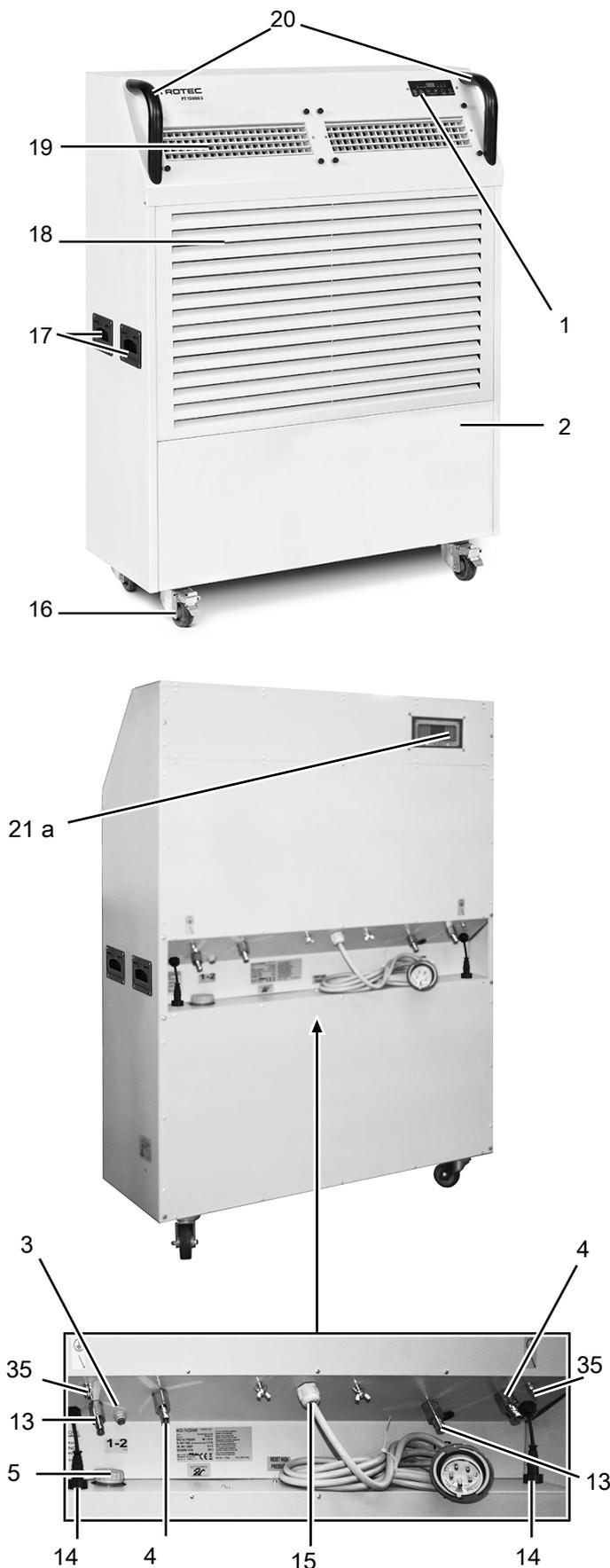
Device depiction

PT 4500 S / PT 6500 S



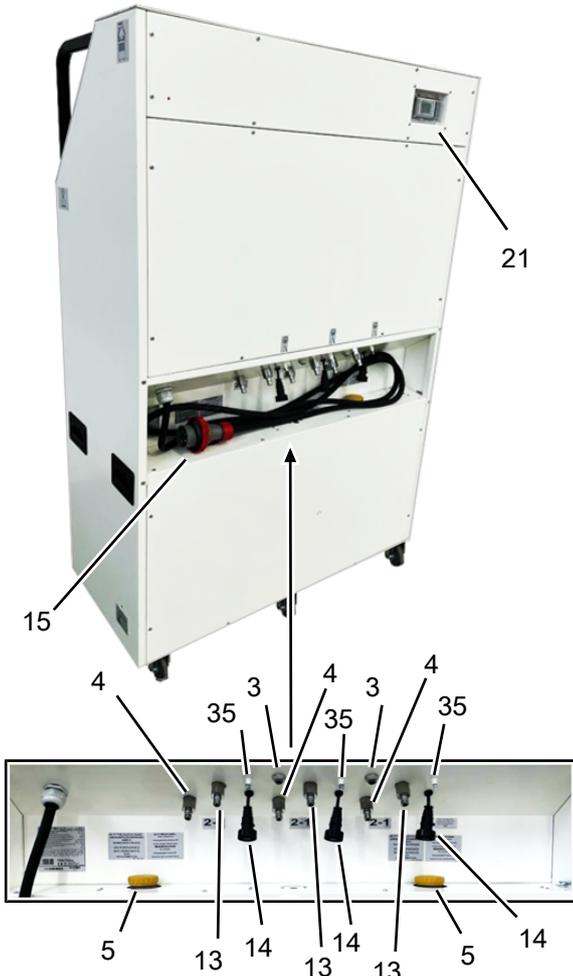
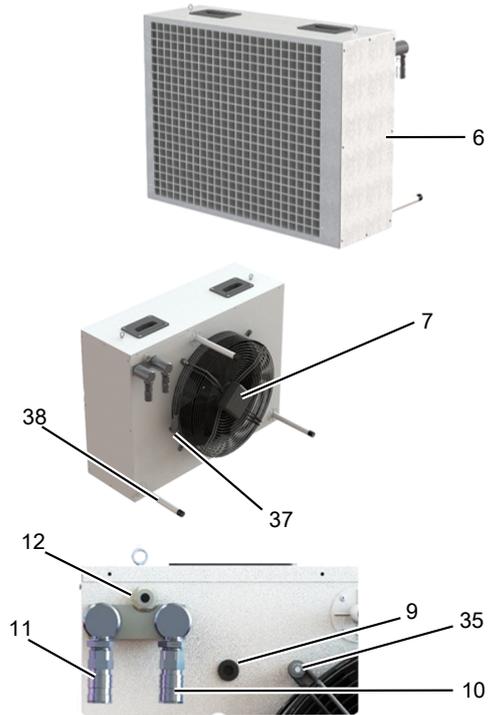
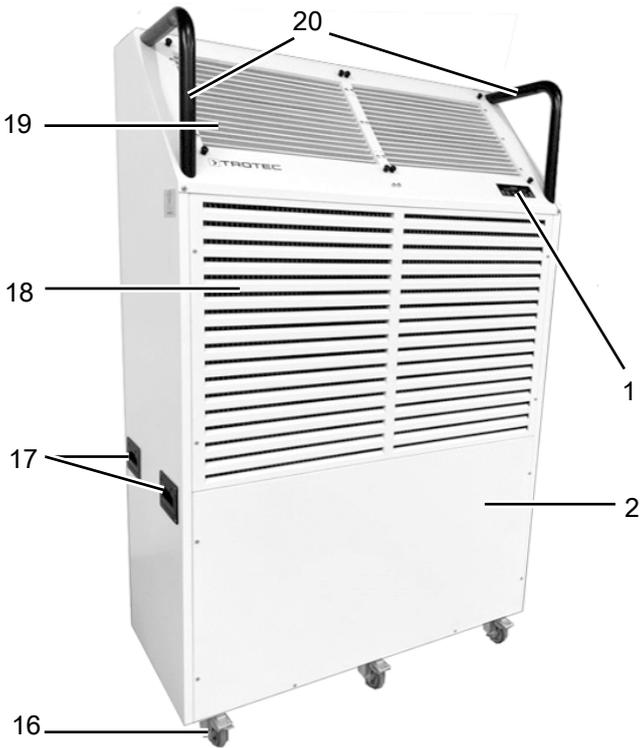
No.	Operating element
1	Control panel with integrated operating hours counter
2	Basic device
3	Condensation hose connection
4	Line to the external heat exchanger
5	Compensation tank with screw-on lid for water circuit
6	External heat exchanger
7	Fan
8	Spacer
9	Mains connection external heat exchanger
10	Connection for the line to the basic device
11	Connection for the line from the basic device
12	Condensation hose connection
13	Line from the external heat exchanger
14	Mains connection to external heat exchanger
15	Mains connection with power plug
16	Wheel with parking brake
17	Carrying handle
18	Air inlet with air filter
19	Louvre and air outlet
20	Transport handles
21	Dual counter for operating hours and energy consumption (MID-compliant) optional
35	Earthing connection
36	Protective earth conductor
37	Vent valve for water circuit

PT 15000 S



No.	Operating element
1	Control panel with integrated operating hours counter
2	Basic device
3	Condensation hose connection
4	Line to the external heat exchanger
5	Compensation tank with screw-on lid for water circuit
6	External heat exchanger
7	Fan
9	Mains connection external heat exchanger
10	Connection for the line to the basic device
11	Connection for the line from the basic device
12	Condensation hose connection
13	Line from the external heat exchanger
14	Mains connection to external heat exchanger
15	Mains connection with power plug
16	Wheel with parking brake
17	Carrying handle
18	Air inlet with air filter
19	Louvre and air outlet
20	Transport handles
21 a	Energy meter (MID-compliant)
35	Earthing connection
37	Vent valve for water circuit
38	Adjustable spacer for device protection

PT 23000 S



No.	Operating element
1	Control panel with integrated operating hours counter
2	Basic device
3	Condensation hose connection
4	Line to the external heat exchanger
5	Compensation tank with screw-on lid for water circuit
6	External heat exchanger
7	Fan
9	Mains connection external heat exchanger
10	Connection for the line to the basic device
11	Connection for the line from the basic device
12	Condensation hose connection
13	Line from the external heat exchanger
14	Mains connection to external heat exchanger
15	Mains connection with power plug
16	Wheel with parking brake
17	Carrying handle
18	Air inlet with air filter
19	Louvre and air outlet
20	Transport handles
21 a	Energy meter (MID-compliant)
35	Earthing connection
37	Vent valve for water circuit
38	Adjustable spacer for device protection

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

To make the device easier to transport, it is fitted with wheels.

To make the device easier to transport, it is fitted with a carry handle.



Wear foot protection

For transportation, start-up, maintenance and troubleshooting always wear suitable foot protection.

Always utilize the help of another person to transport the device. Do not try to transport the device without the help of another person. To lift the device, use a forklift or an elevating truck as appropriate.

Before transporting the device, observe the following:

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Drain the remaining condensate from the device.
- Do not use the power cable to drag the device.
- Disconnect the connection to the external unit.
- Release the brakes at the castors.
- Only wheel the device on firm and level surfaces.

While transporting the device, observe the following:

- Only transport the device in an upright position.
- Only hold the basic device by the transport handles when wheeling the device.
- Use the carrying handles to carry the basic device. Always utilize the help of another person to carry the device.

After transporting the device, proceed as follows:

- Set up the device in an upright position after transport.
- Apply and lock the brakes at the wheels again.

Transportation by crane – crane lugs (optional)



Danger

Suspended loads!

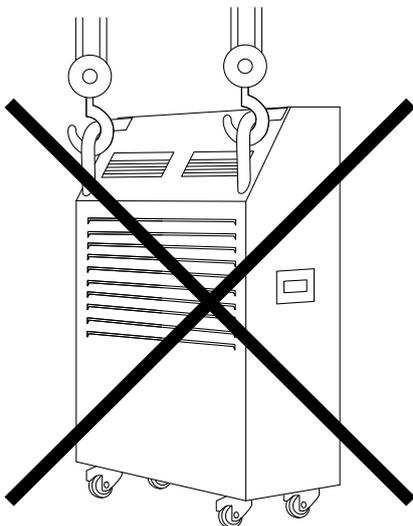
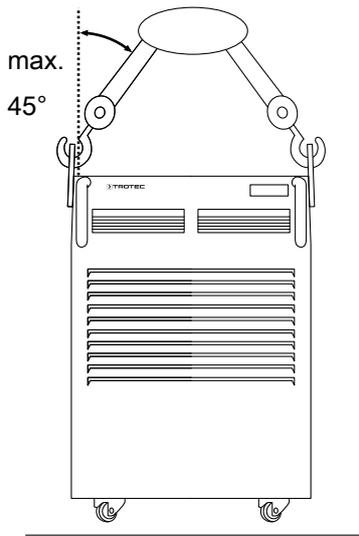
Risk of death due to falling loads.

- Proceed with the utmost care when lifting loads and putting them down.
- Only use the crane lugs specified in the instructions (see chapter Available accessories).
- Regularly check the crane lugs for wear.
- Ensure the unobstructed view of the load during your work.
- Never stand underneath suspended loads or in their immediate vicinity.
- Keep other persons away from the danger area. Make use of suitable barriers or assign supervisors.
- When setting the load down, avoid touching close-by objects and a resulting inclined position.
- Always lift the loads vertically off the ground. Any inclination is prohibited due to the associated risk of accidents.
- Never exceed the permissible load-carrying capacity of the employed lifting equipment.



Wear foot protection

For transportation, start-up, maintenance and troubleshooting always wear suitable foot protection.



Storage

Before storing the device, proceed as follows:

- Drain the remaining condensate from the device.
- Empty the tank and dispose of the water / glycol mixture properly.
- Hold onto the mains plug while pulling the power cable out of the mains socket.

When the device is not being used, observe the following storage conditions:

- Store the device in a dry location and protected from frost and heat.
- Store the device in an upright position where it is protected from dust and direct sunlight.
- If required, use a cover to protect the device from invasive dust.
- Place no further devices or objects on top of the device to prevent it from being damaged.

Assembly and start-up

Scope of delivery

PT 4500 S

- 1 x Device
- 1 x External heat exchanger
- 1 x 10 m connection set
- 1 x manual

PT 6500 S

- 1 x Device
- 1 x External heat exchanger
- 1 x 10 m connection set
- 1 x manual

PT 15000 S

- 1 x Device
- 2 x External heat exchanger
- 2 x 10 m connection set
- 1 x manual

PT 23000 S

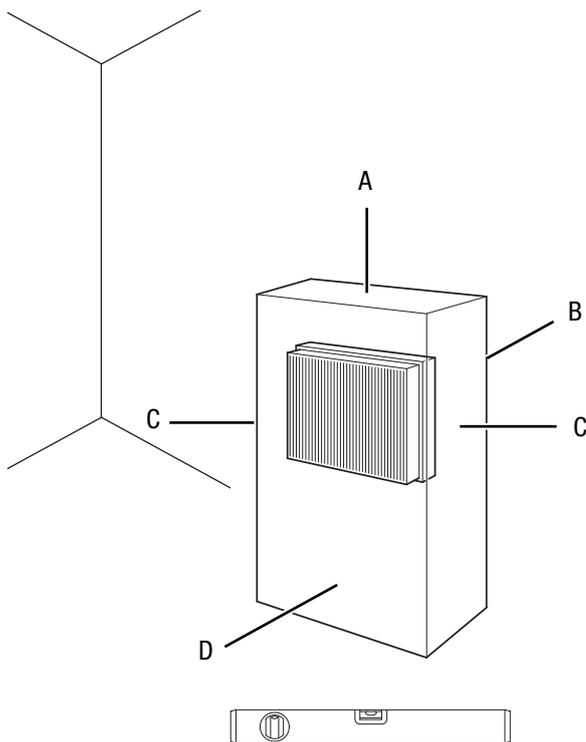
- 1 x Device
- 3 x External heat exchanger
- 3 x 10 m connection set
- 1 x manual

Unpacking the device

1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

Start-up

When positioning the device, observe the minimum distance from walls or other objects as described in the Technical data chapter.



Installation of the external heat exchanger

Please note, that to the front the external heat exchanger requires a minimum distance of 3 m to the wall or other objects. Towards the rear a spacer (8) fitted to the external heat exchanger of the device ensures a sufficient spacing.

Connecting basic device and external heat exchanger



Wear safety glasses

For start-up, maintenance and troubleshooting always wear suitable safety glasses.



Wear protective gloves

For start-up, maintenance and troubleshooting always wear suitable protective gloves.



Wear foot protection

For transportation, start-up, maintenance and troubleshooting always wear suitable foot protection.



Warning of electrical voltage

Earth the air conditioner properly. Electrical work on the air conditioner must only be carried out by a qualified electrician. Incorrect earthing can lead to electric shocks. Connect the earth connections (35) of the external heat exchanger(s) to the basic device. Use proper protective earth conductors. Never connect protective earth conductors to gas pipes, water pipes, lightning arresters or the earthing conductor of communication systems.

- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Only put up the device in an upright, stable position on firm ground.
- Do not create tripping hazards when laying the power cable or other electric cables, especially when positioning the device in the middle of the room. Use cable bridges.
- Make sure that extension cables are completely unrolled.
- Keep air inlets and outlets as well as the exhaust air hose connection free.
- Make sure that no curtains or other objects interfere with the air flow.

PT 4500 S / PT 6500 S

1. Connect the condensation hose to the designated connections (3, 12) at the basic device and at the external heat exchanger.
2. Connect the power cable of the external heat exchanger (9) to the mains connection (14) at the basic device.
3. Connect the hose lines between basic device and external heat exchanger.

The scope of delivery includes a 10 m connection line.
With further connection sets (see chapter Available accessories) it may be extended to a length of up to 30 m.

Note

The hoses are already filled with a water / glycol mixture. Therefore, a little liquid exits during coupling. This loss is compensated for with the liquid from the compensation tank (5).

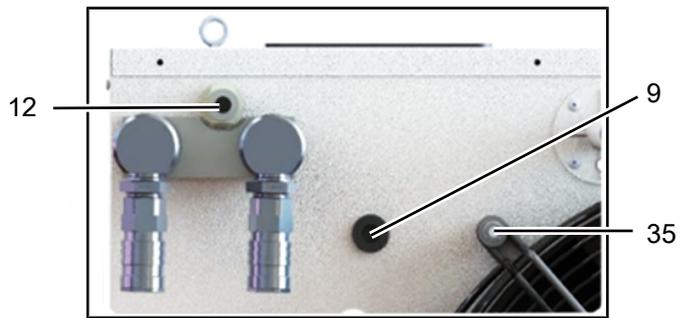
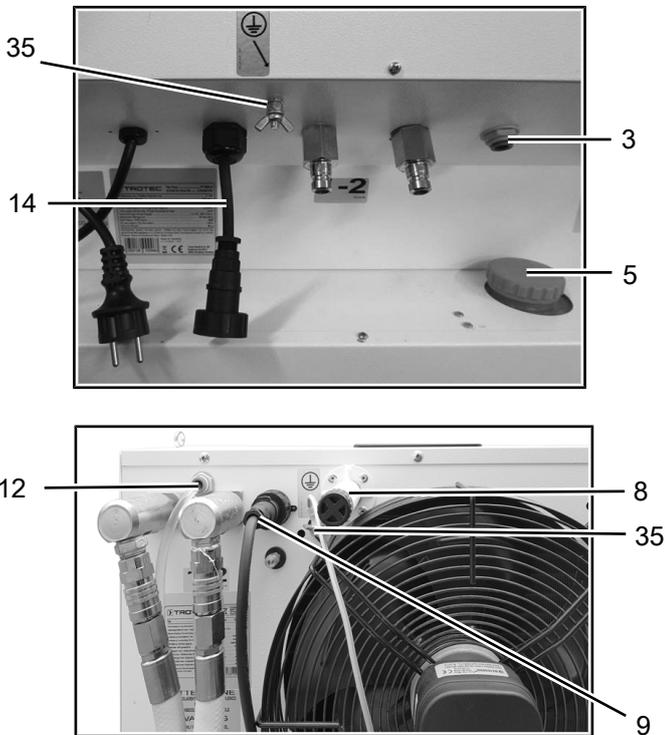
PT 15000 S / PT 23000 S

1. Connect the condensation hose to the designated connections (3, 12) at the basic device and at the external heat exchanger.
2. Connect the power cable of the external heat exchanger (9) to the mains connection (14) at the basic device. When using the PT 15000 S, always connect both external heat exchangers. When using the PT 23000 S, always connect all three external heat exchangers.
3. Connect the hose lines between the basic device and the external heat exchangers.

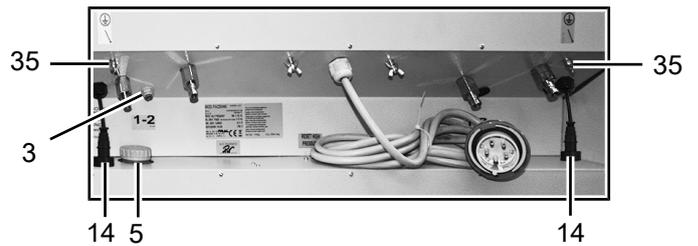
The scope of delivery includes a 10 m connection line.
With further connection sets (see chapter Available accessories) it may be extended to a length of up to 30 m.

Note

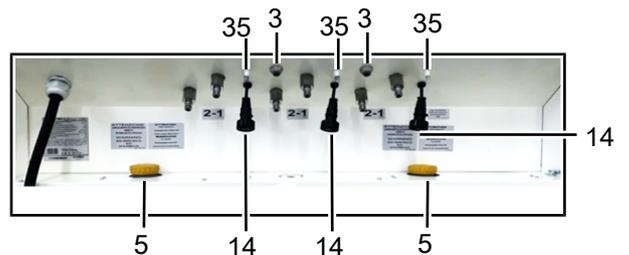
The hoses are already filled with a water / glycol mixture. Therefore, a little liquid exits during coupling. This loss is compensated for with the liquid from the compensation tank (5).



View of the PT 15000 S:



View of the PT 23000 S:

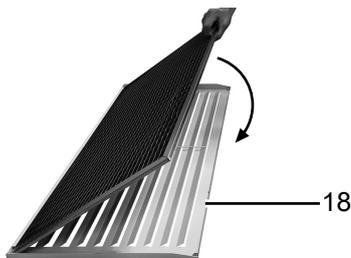


Inserting the air filter

Note

Do not operate the device without an inserted air filter! Without the air filter, the inside of the device will be heavily contaminated. This could reduce the performance and result in damage to the device.

- Make sure that the air filter is installed before switching the device on.



Measures to be taken before start-up

1. Check air inlet (18) and outlet (19) for foreign objects and remove these, if necessary.
2. Check the air filter for dirt and clean it, if required (see chapter Maintenance).
3. Ensure that the basic device (12) and the external heat exchanger (6) are properly connected to each other.
4. Check whether there is sufficient water in the tank (5). Also check the glycol content (using an antifreeze tester).

Note

Only use monopropylene glycol and do not mix different types of glycol. The maximum glycol concentration amounts to 30 % (see technical data).

Installing the optional dual counter (PT 4500 S / PT 6500 S)

An optional dual counter can be connected to the device PT 4500 S or PT 6500 S. Please proceed as follows to install the optional dual counter:

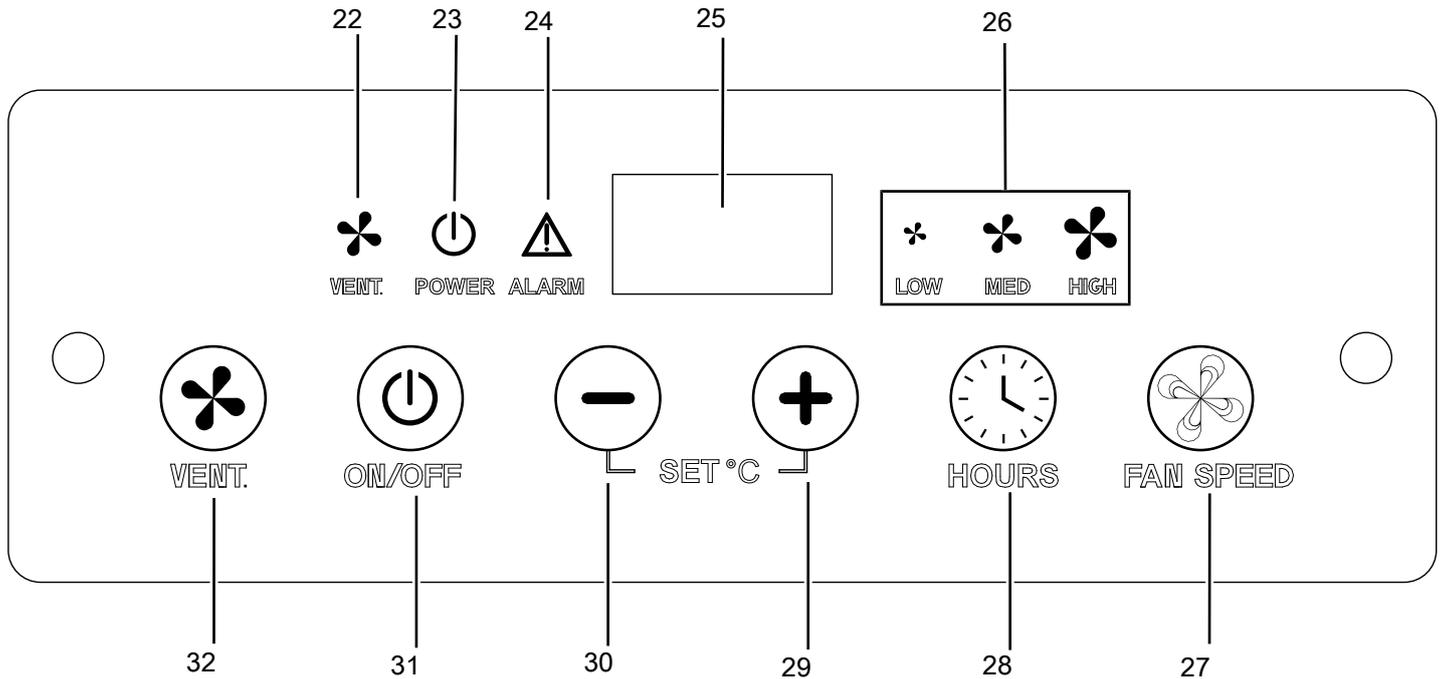
Note

The optional dual counter may only be installed by a qualified electrician!

- The previously described steps for the start-up of the device PT 4500 S or PT 6500 S have been carried out.
1. Switch the device off.
 2. Hold onto the mains plug while pulling the power cable out of the mains socket.
 3. Remove the cover of the control cabinet at the device.
 4. Use the circuit diagram in chapter Technical data to identify terminal 2 and terminal 3.
 5. Remove the red jumper between terminal 2 and terminal 3.
 6. Connect the *L-in* input at the dual counter to terminal 2.
 7. Connect the *L-out* output at the dual counter to terminal 3.
 8. Connect the *N* output at the dual counter to the blue *N* terminal in the control cabinet.
 9. Position the dual counter correctly at the rear of the device (21).
 10. Reattach the cover of the control cabinet to the device.
 11. The device may now be reconnected as described in chapter Start-up.

Operation

Control panel PT 4500 S / PT 6500 S / PT 15000 S / PT 23000 S



No.	Designation	Function
22	VENT. indication	Is illuminated when ventilation mode is activated.
23	POWER indication	Is illuminated in green when mains voltage is applied to the device. Flashes green when the compressor is not running.
24	ALARM indication	Is illuminated in red if an error has occurred at the device, see chapter Errors and faults.
25	Display	Indicates the current ambient temperature. Displays <i>dEFr</i> when the device operates in defrost mode (automatic defrosting). Indicates an error message in case of a fault (see chapter Errors and faults).
26	FAN SPEED indication	Indicates the selected fan stage. (The device PT 4500 S is equipped with 2 fan stages.)
27	FAN SPEED button	To select the fan speed.
28	HOURS button	To activate or deactivate the operating hours display. The operating hours will be indicated on the display (23).
29	SET + button	To increase or reduce the target temperature for cooling.
30	SET - button	
31	ON/OFF button	Switches the device on or off.
32	VENT. button	To activate or deactivate ventilation mode.

Switching the device on

1. Insert the mains plug (15) into a properly fused mains socket.
2. Press the *ON/OFF* button (31) to switch the device on.
 - ⇒ The device starts with the previously selected setting.
 - ⇒ The display indicates the current ambient temperature.
3. Use the buttons *SET +* (29) and *SET -* (30) to select the desired target temperature.
4. Select the desired fan speed by use of the *FAN SPEED* button (27).
5. Press the *HOURS* button (28) to display the operating hours.
 - ⇒ The operating hours will be indicated on the display (25).

Setting the operating mode

The following operating modes are available:

- *cooling*: The room air is circulated by the device and cooled at the same time.
- *ventilation*: The room air is circulated by the device.

The device will start up in cooling mode approx. 3.5 min after switch-on.

- You can select ventilation mode (without cooling) by means of the *VENT.* button (32).
 - The *VENT.* indication (22) will be illuminated when ventilation mode is activated.

Automatic defrost

At low ambient temperatures, ice may form at the evaporator during dehumidification.

The device then carries out an automatic defrost by means of the hot gas feed. Here, a hot cooling agent is led into the iced evaporator for its surfaces to defrost.

The duration of the defrost process can vary. The hot gas automatic defrost system integrated in the device automatically switches on the defrost cycle at regular intervals.

Do not switch the device off during automatic defrost. Do not remove the mains plug from the mains socket.

After automatic defrosting the device keeps running for approx. 90 s for the purpose of air circulation – regardless of the ambient temperature and the desired room temperature. Afterwards the device resumes operation with the set values.

Shutdown



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Switch off the device.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- If necessary, remove the condensation drain hose and any residual fluid from it.
- Clean the device according to the Maintenance chapter.
- Store the device according to the Transport and storage chapter.

Available accessories

Designation	Article number
Connection set, 10 m	1.210.000.133
Connection set, 5 m	1.210.000.134
Spot cooling attachment PT 4500 S	1.210.000.149
Spot cooling attachment PT 6500 S	1.210.000.151
Spot cooling attachment PT 15000 S	1.210.000.153
Spot cooling attachment PT 23000 S	1.210.000.154
PT 4500 S / PT 6500 S air transport hose Tronect SP-T, l = 7.6 m, diameter 203 mm	6.100.001.200
PT 15000 S / PT 23000 S air transport hose Tronect SP-T, l = 7.6 m, diameter 305 mm	6.100.001.205
PlanoPT connection feedthrough underneath doors	1.210.000.101
DualHex coupling	1.210.000.104
Crane lugs for PT 4500 S / PT 6500 S	1.210.000.105
Crane lugs for PT 15000 S / PT 23000 S	1.210.000.106
Weather protection cover PT 4500 S	1.210.000.160
Weather protection cover PT 6500 S	1.210.000.161
Weather protection cover PT 15000 S	1.210.000.162
Weather protection cover PT 23000 S	1.210.000.163

Errors and faults

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.



Wear safety glasses

For start-up, maintenance and troubleshooting always wear suitable safety glasses.



Wear protective gloves

For start-up, maintenance and troubleshooting always wear suitable protective gloves.



Wear foot protection

For transportation, start-up, maintenance and troubleshooting always wear suitable foot protection.

The device does not start:

- Check the power connection.
- Check the on-site fusing.
- Observe the operating temperature according to the chapter Technical annex.
- Check whether the *POWER* (23) indication is illuminated. If not, check the power connection and the plug. The fuses inside the plug and / or on the mainboard might be defective.
In case of defective fuses also check the points listed under the error message *HIPS*.
- Wait for 10 minutes before restarting the device. If the device is not starting, have the electricians checked by a specialist company or by Trotec.

The device works with reduced or no cooling capacity:

- Check whether *cooling* mode is selected.
- Check the air filter(s) for dirt. If necessary, clean or replace the air filter(s).
- Check the minimum distance to walls or other objects. Position the device a little more in the room's centre if required.
- Check whether any windows and/or doors of the room are open. If so, close them.
- Check the temperature setting at the device. Reduce the set temperature if it is higher than the room temperature.
- Also check the points listed under the error message *HIPS*.

The device is loud or vibrates:

- Check whether the device is set up in a stable and upright position.

Condensate is leaking from the basic device:

- Check the device for leaks.

The compressor does not start:

- Check whether the overheating protection of the compressor has tripped. Disconnect the device from the mains and let it cool down for approx. 10 minutes before reconnecting it.
- The compressor may start up with a delay of 3 minutes, as it is provided with an internal protection against direct restart.

The device gets very warm, is loud or is losing performance:

- Check the air inlets and air filters for dirt. Remove external dirt.
- From the outside, check the device for dirt (see chapter Maintenance). If the inside of the device is dirty, have it cleaned by a specialist company for cooling and air-conditioning or by Trotec.
- Air may have accumulated in the water-glycol circuit of the external unit that is higher positioned. Actuate the air vent valve (37) on the external unit to completely bleed the circuit.

Note

Wait for at least 3 minutes after maintenance and repair work. Only then switch the device back on.

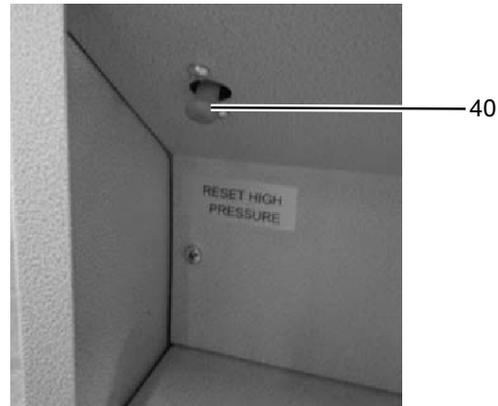
The device still does not operate correctly after these checks:

Please contact the customer service. If necessary, bring the device to a specialist company for cooling and air-conditioning or to Trotec for repair.

Error codes

Error messages

When the Alarm LED lights up, the following error messages might be displayed:

Message	Cause	Troubleshooting
PunP	<ul style="list-style-type: none"> The internal pump alarm is activated. 	<ul style="list-style-type: none"> Empty the pump container (e.g. by means of a suction pump), then check whether the pump operates properly again. The alarm stops as soon as the water has been completely drained from the pump container.
LOPS	<ul style="list-style-type: none"> The air filter might be contaminated. 	<ul style="list-style-type: none"> Check the air filter for dirt. If required, clean the air filter (see chapter Maintenance). When the fault has been eliminated, disconnect the mains plug and plug it back in after 5 s to reset the alarm.
	<ul style="list-style-type: none"> There might be a leak in the internal refrigerant circuit. 	<ul style="list-style-type: none"> Have the device checked by a specialist company for cooling and air-conditioning. When the fault has been eliminated, disconnect the mains plug and plug it back in after 5 s to reset the alarm.
HIPS	<ul style="list-style-type: none"> Plug connections at the external cooling circuit do not fit properly. The pump of the external cooling circuit is not operating properly. The fan of the external heat exchanger does not operate. The device might not be operating due to excessive ambient temperatures. There is insufficient water in the cooling circuit between the basic device and the external unit. 	<ul style="list-style-type: none"> Check the plug connections at the external heat exchanger. Check the internal brass filter of the pump for dirt and clean it if necessary (see "Water filter" in exploded assembly drawings). Check the pump. If necessary, have the pump checked by a specialist company for cooling and air-conditioning. Check the fan. If necessary, have the fan checked by a specialist company for cooling and air-conditioning. Check the outside temperature (temperatures above 35 °C can be critical). After the inspection press the RESET button (40). Disconnect the mains plug and plug it back in after 5 s to reset the alarm. <div data-bbox="839 1240 1337 1646" data-label="Image">  </div> <ul style="list-style-type: none"> Check whether there is sufficient water in the tank (5). <p>Note: After eliminating the HIPS fault, vent the external heat exchanger at the vent valve for the water circuit (37).</p>
PHAS (PT 15000 S and PT 23000 S)	<ul style="list-style-type: none"> The wrong rotating field is set. 	<ul style="list-style-type: none"> Exchange both phases in the mains plug.

Maintenance

Maintenance intervals

Maintenance and care interval	before every start-up	as needed	at least every 2 weeks	at least every 4 weeks	at least every 6 months	at least annually
Check air inlet and outlet for dirt and foreign objects and clean if necessary	X			X		
Clean the exterior		X				X
Visually check the inside of the device for dirt		X				X
Check the air filter for dirt and foreign objects and clean or replace if necessary	X		X			
Replace the air filter		X				
Check for damage	X					
Check the attachment screws		X				X
Test run						X

Maintenance and care log

Device type:

Device number:

Maintenance and care interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Check air inlets and outlets for dirt and foreign objects and clean if necessary																
Check the air filter for dirt and foreign objects and clean or replace if necessary																
Clean the exterior																
Visually check the inside of the device for dirt																
Replace the air filter																
Check the attachment screws																
Test run																

1. Date: Signature:	2. Date: Signature:	3. Date: Signature:	4. Date: Signature:
5. Date: Signature:	6. Date: Signature:	7. Date: Signature:	8. Date: Signature:
9. Date: Signature:	10. Date: Signature:	11. Date: Signature:	12. Date: Signature:
13. Date: Signature:	14. Date: Signature:	15. Date: Signature:	16. Date: Signature:

Activities required before starting maintenance



Wear safety glasses

For start-up, maintenance and troubleshooting always wear suitable safety glasses.



Wear a protective mask

For cleaning and maintenance tasks wear an appropriate protective mask.



Wear protective gloves

For start-up, maintenance and troubleshooting always wear suitable protective gloves.



Wear foot protection

For transportation, start-up, maintenance and troubleshooting always wear suitable foot protection.



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning of electrical voltage

Tasks which require the device to be opened must only be carried out by authorised specialist companies or by Trotec.

Refrigerant circuit

- The refrigerant circuit of the basic device is a maintenance-free, hermetically sealed system and may only be maintained or repaired by specialist companies for cooling and air-conditioning or by Trotec.

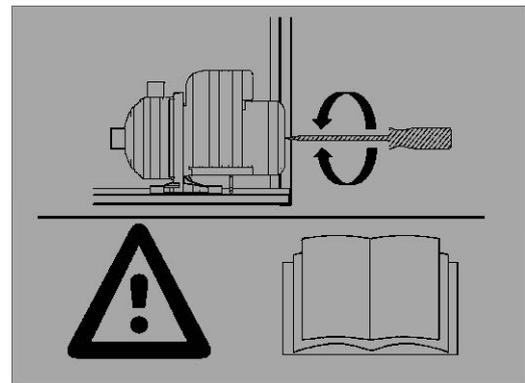
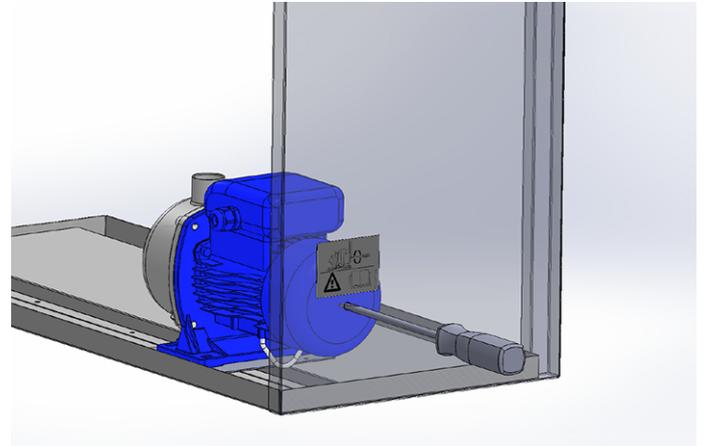
Cleaning the housing

Clean the housing with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Checking the pump for free rotation

This task shall be performed when the air conditioner has not been in use for over a month.

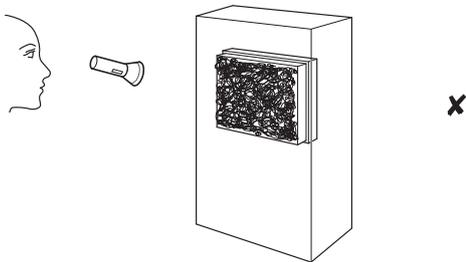
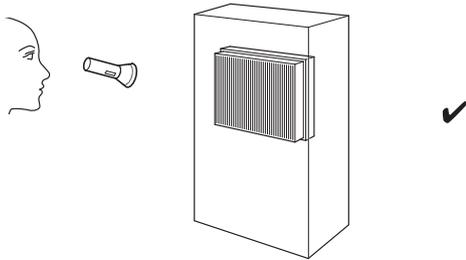
1. Use a screwdriver to check the pump for unobstructed movement.



If the pump is jammed, please contact an authorised specialist company or Trotec.

Visual inspection of the inside of the device for dirt

1. Remove the air filter.
2. Use a torch to illuminate the openings of the device.
3. Check the inside of the device for dirt.
4. If you see a thick layer of dust, have the inside of the device cleaned by a specialist company for cooling and air-conditioning or by Trotec.
5. Put the air filter back in.



Cleaning the air filter

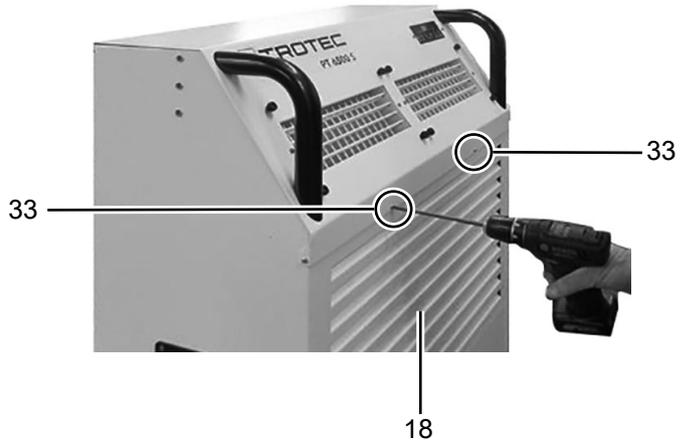
The air filter has to be cleaned as soon as it is dirty. This is brought to light e.g. by a reduced capacity (see chapter Errors and faults).



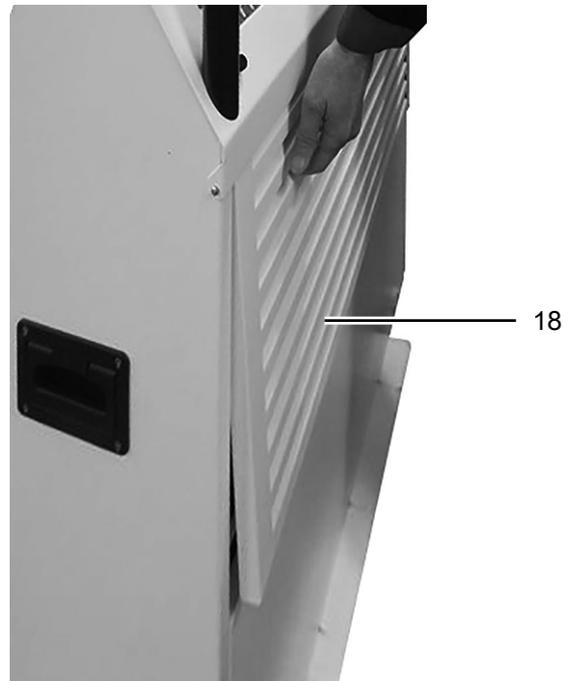
Warning

Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed or rounded. Before reinserting the air filter, make sure that it is undamaged and dry!

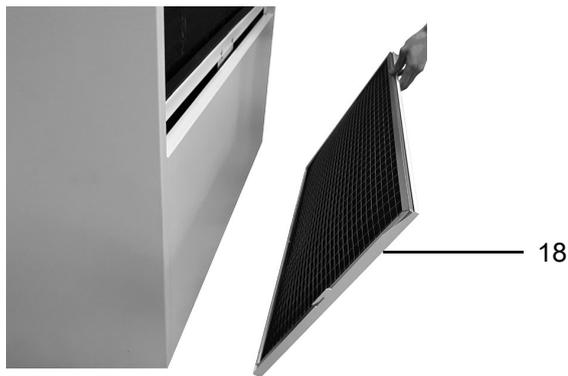
1. Loosen the two attachment screws (33) at the air inlet cover (18).



2. Slightly lift the air inlet cover (18).



- Remove the air inlet cover (18) with the air filter (34).



Activities required after maintenance

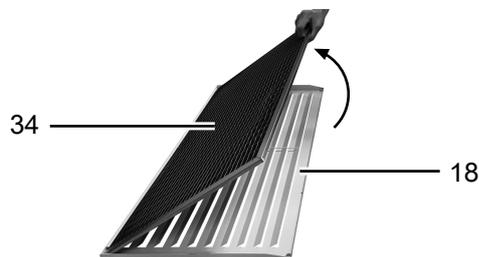
If you want to continue using the device:

- Leave the device to rest for 12 to 24 hours, so the refrigerant can accumulate within the compressor. Wait 12 to 24 hours before switching the device back on! Acting contrary might lead to compressor damage and a malfunctioning device. If so, any warranty claims will be voided.
- Reconnect the device to the mains.

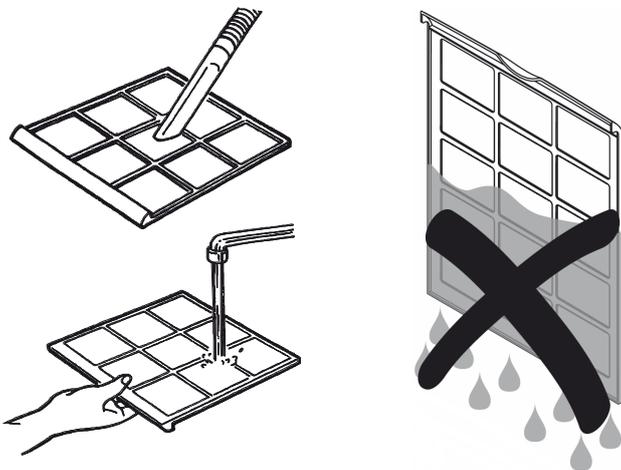
If you do not intend to use the device for a considerable time:

- Store the device according to the Transport and storage chapter.

- Remove the air filter (34) from the air inlet cover (18).



- Clean the filter using a slightly damp, soft, lint-free cloth. If the filter is heavily contaminated, clean it with warm water mixed with a neutral cleaning agent.

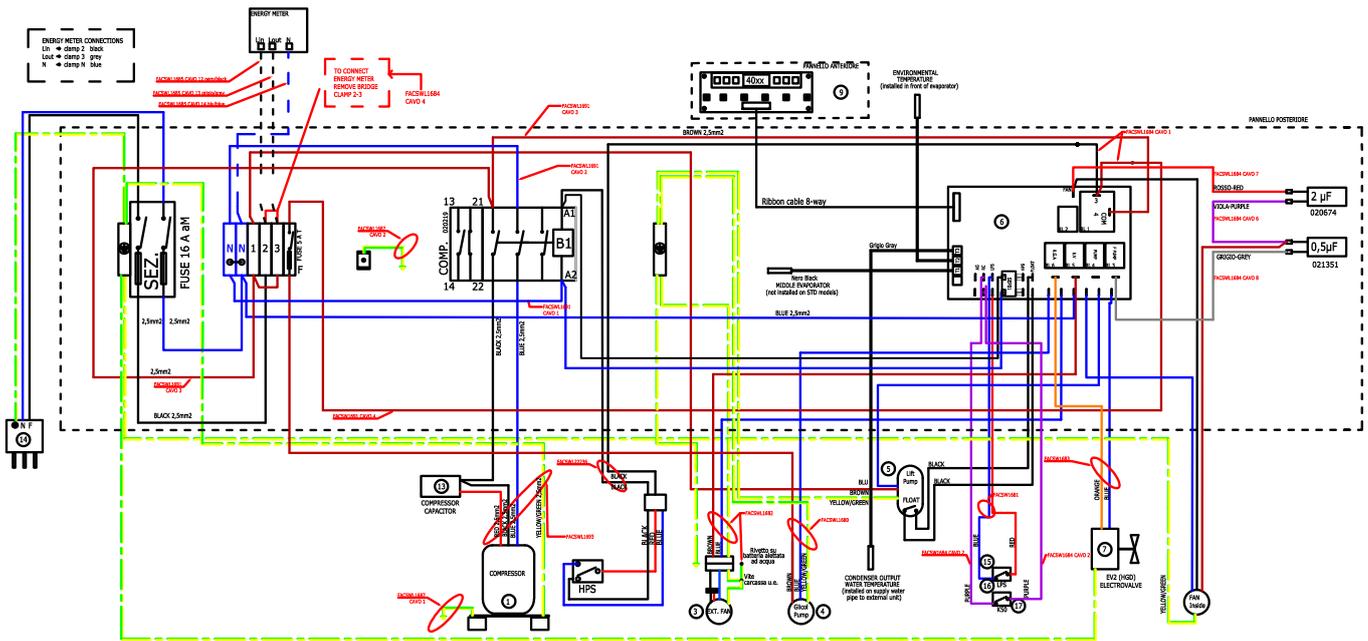


- Allow the filter to dry completely. Do not insert a wet filter into the device!
- Reinsert the air filter into the device.

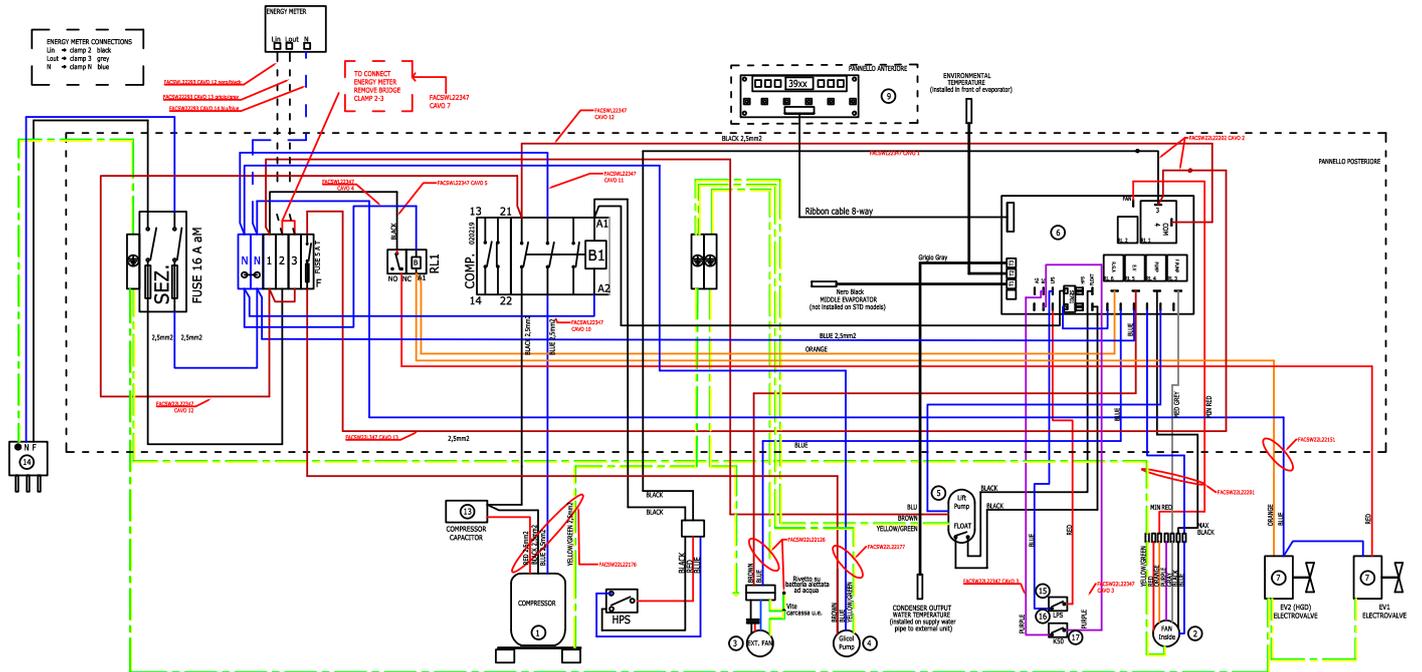
Technical annex
Technical data

Model	PT 4500 S	PT 6500 S	PT 15000 S	PT 23000 S
Cooling capacity (at 25 °C)	4.5 kW / 15400 BTU/h	6.6 kW / 22500 BTU/h	15 kW / 51000 BTU/h	27.6 kW / 94238 BTU/h
Max. cooling capacity	5.5 kW / 18800 BTU/h	7.1 kW / 24226 BTU/h	15 kW / 51000 BTU/h	27.6 kW / 100384 BTU/h
Operating temperature / ambient temperature	7 °C to 38 °C	7 °C to 38 °C	7 °C to 38 °C	7 °C to 38 °C
Electric connection	230 V / 1 / 50 Hz	230 V / 1 / 50 Hz	400 V / 3 N / 50 Hz	400 V / 3 N / 50 Hz
Power input	2000 W (26 °C and 55 % RH indoors, 30 °C outdoors)	2650 W (26 °C and 55 % RH indoors, 30 °C outdoors)	5700 W (25 °C and 60 % RH indoors, 30 °C outdoors)	9530 W (25 °C and 60 % RH indoors, 30 °C outdoors)
Nominal current basic device	8.7 A	13 A	9.5 A	22.8 A
Type of protection external unit	IP66	IP66	IP44	IP44
Air flow rate basic device (stage 1 / 2 / 3):	550 m ³ /h / 800 m ³ /h	1150 m ³ /h / 1400 m ³ /h / 1500 m ³ /h	2000 m ³ /h / 2400 m ³ /h / 2600 m ³ /h	2500 m ³ /h / 2700 m ³ /h / 3200 m ³ /h
Air flow rate external heat exchanger	2100 m ³ /h	2100 m ³ /h	3700 m ³ /h	3700 m ³ /h
Refrigerant basic device Cooling medium	R-410A mixture water / 30 % glycol	R-410A mixture water / 30 % glycol	R-410A mixture water / 30 % glycol	R-410A mixture water / 30 % glycol
Amount of refrigerant basic device Required quantity of cooling medium	760 g approx. 10.5 l water / glycol mixture (glycol content max. 30 %)	900 g approx. 10.5 l water / glycol mixture (glycol content max. 30 %)	1650 g approx. 18 l water / glycol mixture (glycol content max. 30 %)	2300 g approx. 26.4 l water / glycol mixture (glycol content max. 30 %)
GWP factor / CO ₂ equivalent	2088 / 1.59 t	2088 / 1.88 t	2088 / 3.45 t	2088 / 4.8 t
Weight basic device Weight external heat exchanger	93 kg 22 kg	114 kg 22 kg	206 kg 34 kg	260 kg 34 kg
Dimensions basic device (length x width x height) Dimensions external heat exchanger (length x width x height)	363 x 697 x 997 mm 320 x 460 x 650 x mm	360 x 815 x 1200 mm 320 x 460 x 650 mm	460 x 1050 x 1570 mm 460 x 835 x 650 mm	520 x 1170 x 1840 mm 460 x 835 x 650 mm
Maximum distance between basic device and external heat exchanger	30 m	30 m	30 m	30 m
Minimum distance of external heat exchanger to walls (front)	3 m	3 m	3 m	3 m
Minimum distance of basic device to walls or other objects	A: top: 30 cm B: rear: 30 cm C: side: 30 cm D: front: 200 cm	A: top: 30 cm B: rear: 30 cm C: side: 30 cm D: front: 250 cm	A: top: 30 cm B: rear: 30 cm C: side: 30 cm D: front: 300 cm	A: top: 30 cm B: rear: 30 cm C: side: 30 cm D: front: 400 cm
Sound pressure level at a distance of 3 m (stage 1, basic device)	47 dB(A)	59 dB(A)	65 dB(A)	59 dB(A)

Circuit diagram PT 4500 S



Circuit diagram PT 6500 S



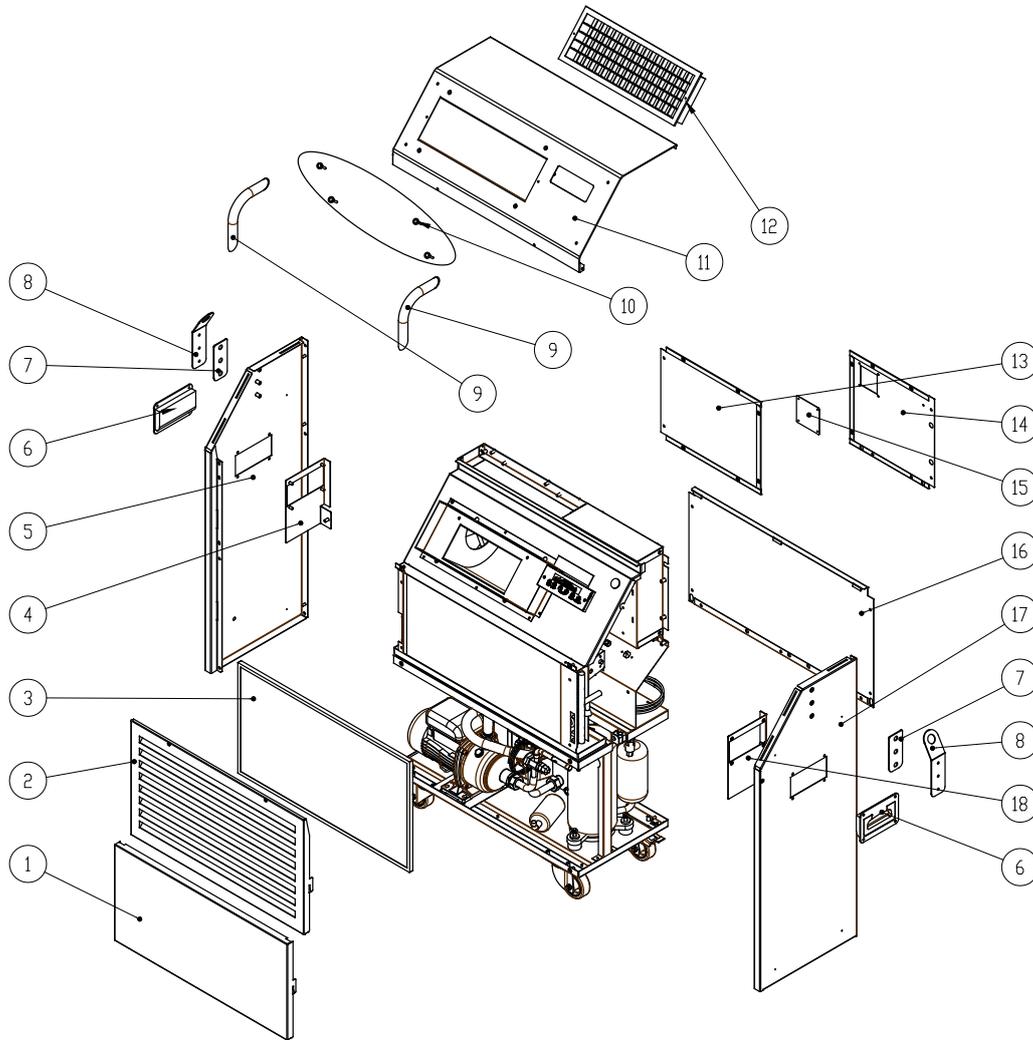
Overview and lists of spare parts



Info

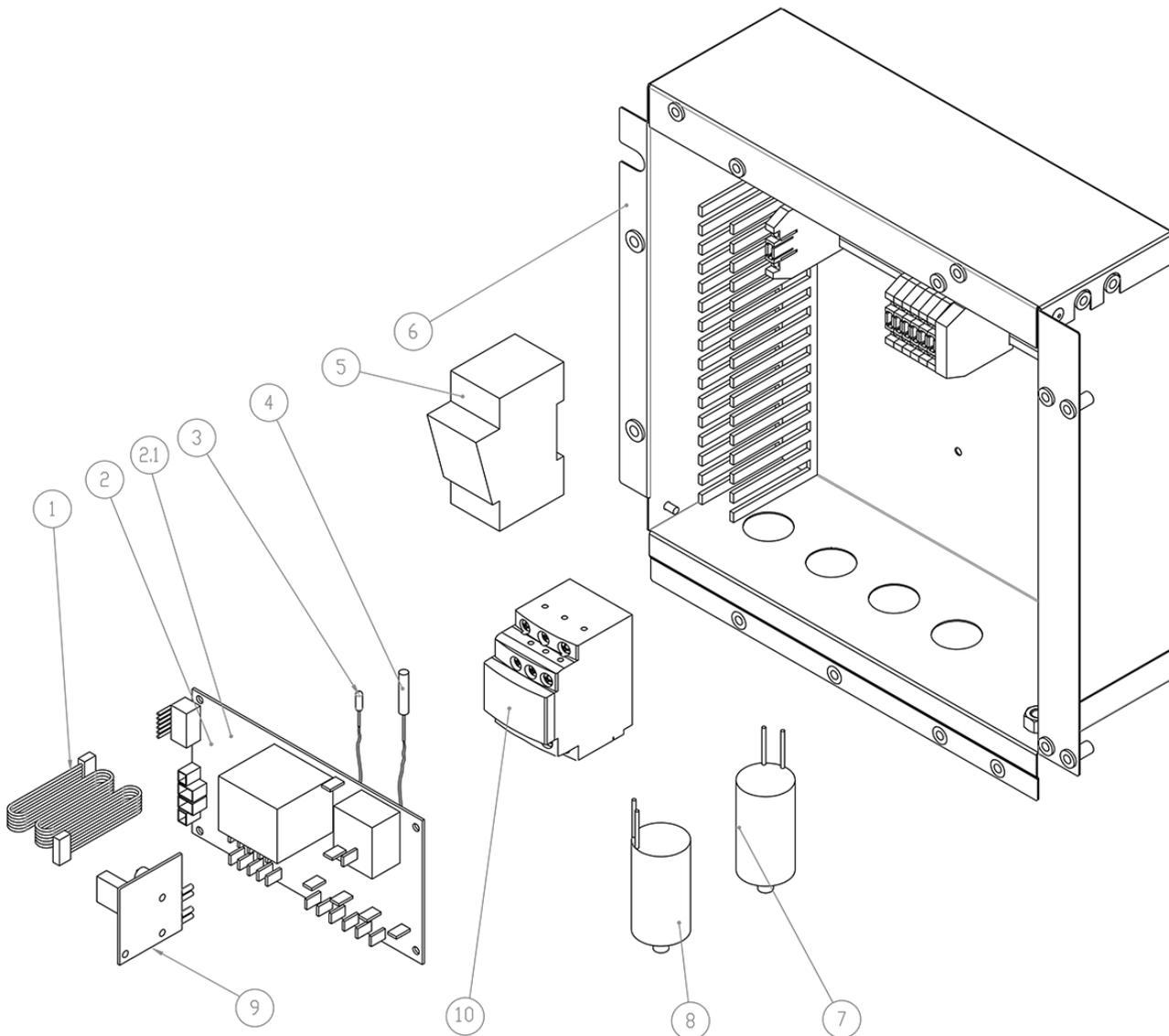
The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.

PT 4500 S – Part 1:



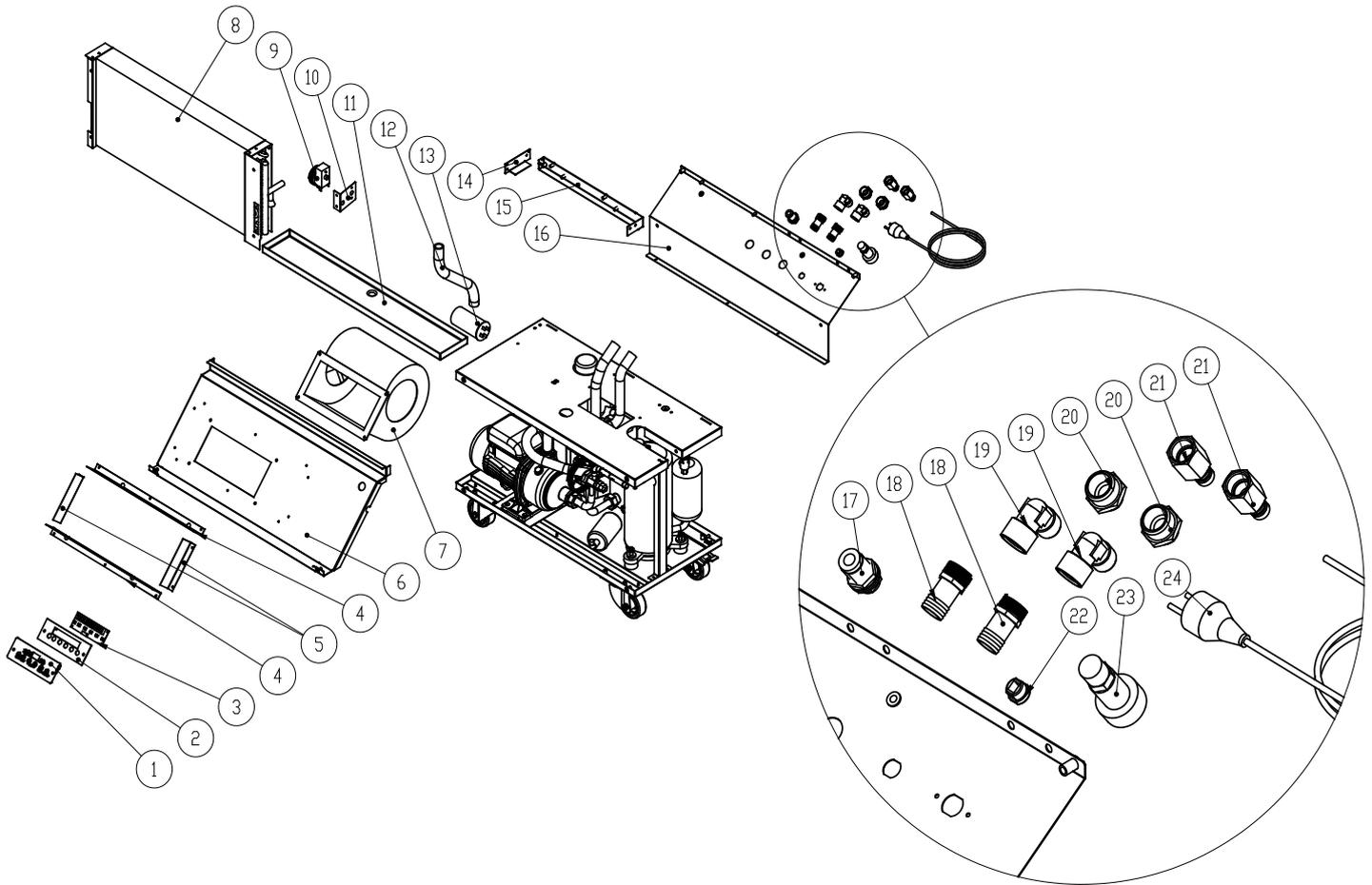
No.	Spare part	No.	Spare part	No.	Spare part
1	FRONT METAL COVER OF COMPRESSOR VANE RAL9010 BUCC.	7	EYEBOLT SUPPORT (OPTIONAL)	13	REAR METAL COVER OF MOTORFAN VANE RAL9010 BUCC.
2	FRONT SUCTION GRILLE RAL9010 BUCC.	8	EYEBOLT (OPTIONAL)	14	REAR ELECTRIC PANEL METAL COVER RAL9010 BUCC.
3	AIR FILTER	9	TUBULAR HANDLES RAL9005	15	ELECTRIC VANE CAP RAL9010 BUCC.
4	RIGHT HANDLE SUPPORT	10	KIT FIXING SCREWS FOR PIPE	16	REAR METAL COVER OF COMPRESSOR VANE RAL9010 BUCC.
5	RIGHT SIDE PANEL RAL9010 BUCC.	11	FRONT COVER RAL9010 BUCC.	17	LEFT SIDE PANEL RAL9010 BUCC.
6	PLASTIC HANDLE	12	ALUMINIUM SUPPLY GRILLE RAL9010 BUCC.	18	LEFT HANDLE SUPPORT

PT 4500 S – Part 2:



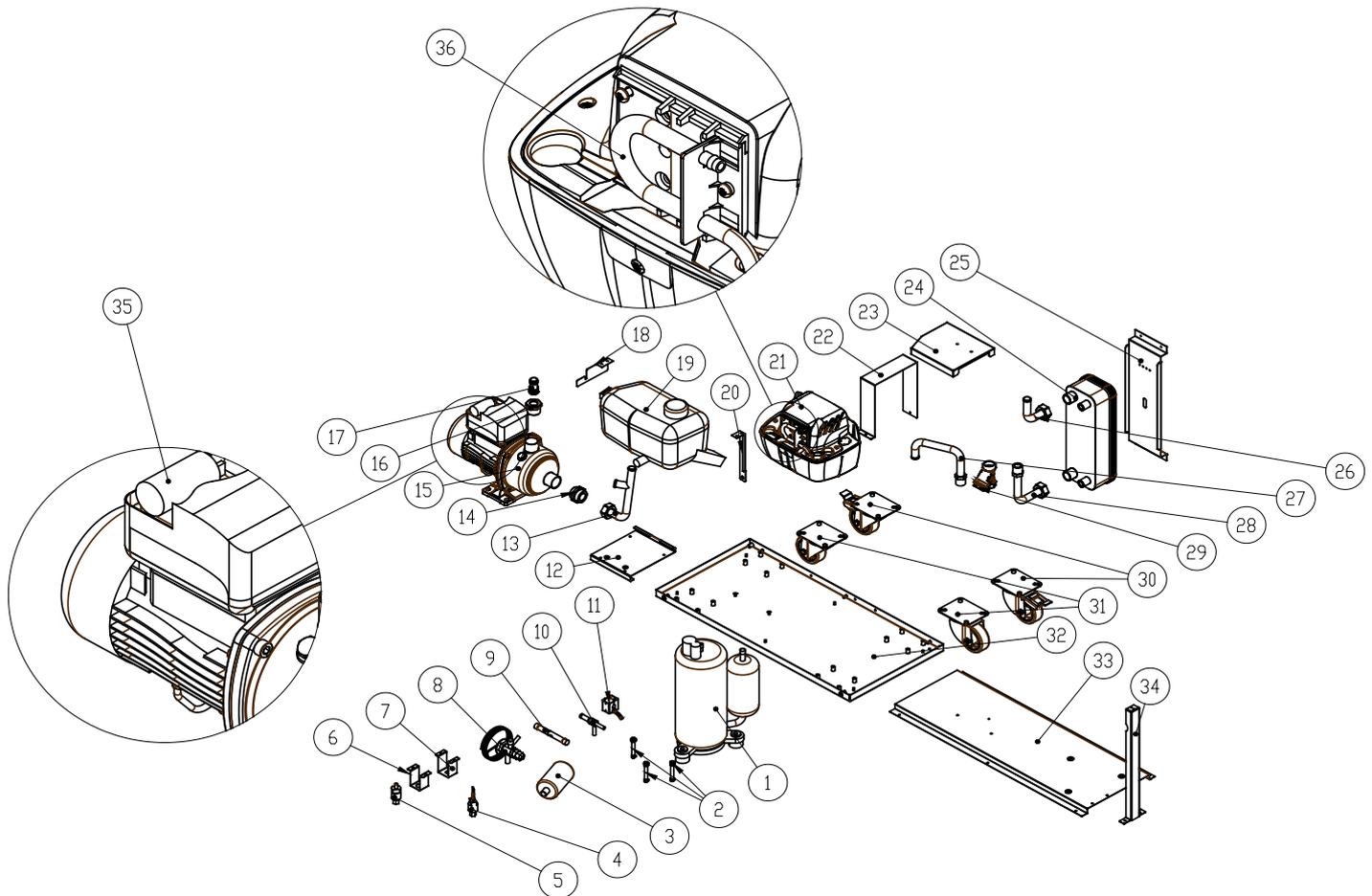
No.	Spare part	No.	Spare part	No.	Spare part
1	WIRING CONNECTION OF THE DISPLAY	4	AMBIENT TEMPERATURE PROBE	8	STARTING CAPACITOR 0,5 µF 450 VAC
2	CONTROL PCB (up to S.N. 1140007079)	5	FUSE HOLDERS + FUSES 16A	9	PCB FOR NEW HPS LOGIC (from S.N. 1140007080)
2.1	CONTROL PCB (from S.N. 1140007080)	6	ELECTRICAL VANE	10	CONTACTORS
3	WATER OUTLET PROBE	7	RUNNING CAPACITOR 2 uF		

PT 4500 S – Part 3:



No.	Spare part	No.	Spare part	No.	Spare part
1	DISPLAY LABEL	9	THERMOSTAT WITH KNOB	17	CONNECTOR FOR CONDENSED WATER DRAINAGE
2	DISPLAY SUPPORT	10	DEFROST THERMOSTAT SUPPORT	18	RUBBER HOLDER
3	DISPLAY DIGIT FOR NEW PCB WITHOUT CUT BUTTONS	11	CONDENSATE TRAY	19	FITTING M-F 1/2
4	LOW DELIVERY DUCT	12	DRAINPIPE	20	CYLINDRICAL EXTENSION 1/2 X 1/2
5	DELIVERY SIDE DUCT	13	COMPRESSOR CAPACITOR	21	WATER CONNECTOR MALE
6	FAN COMPARTMENT	14	FAN COMPARTMENT SIDE SUPPORT	22	GLAND
7	FAN	15	ELECTRIC VANE SIDE STRUCTURAL SUPPORT	23	FLYING SOCKET CONNECTOR (FEMALE)
8	EVAPORATOR COIL WITH REFRIGERANT DISTRIBUTOR	16	REAR PANEL CONNECTOR HOLDER RAL9010 BUCC.	24	SHUKO PLUG

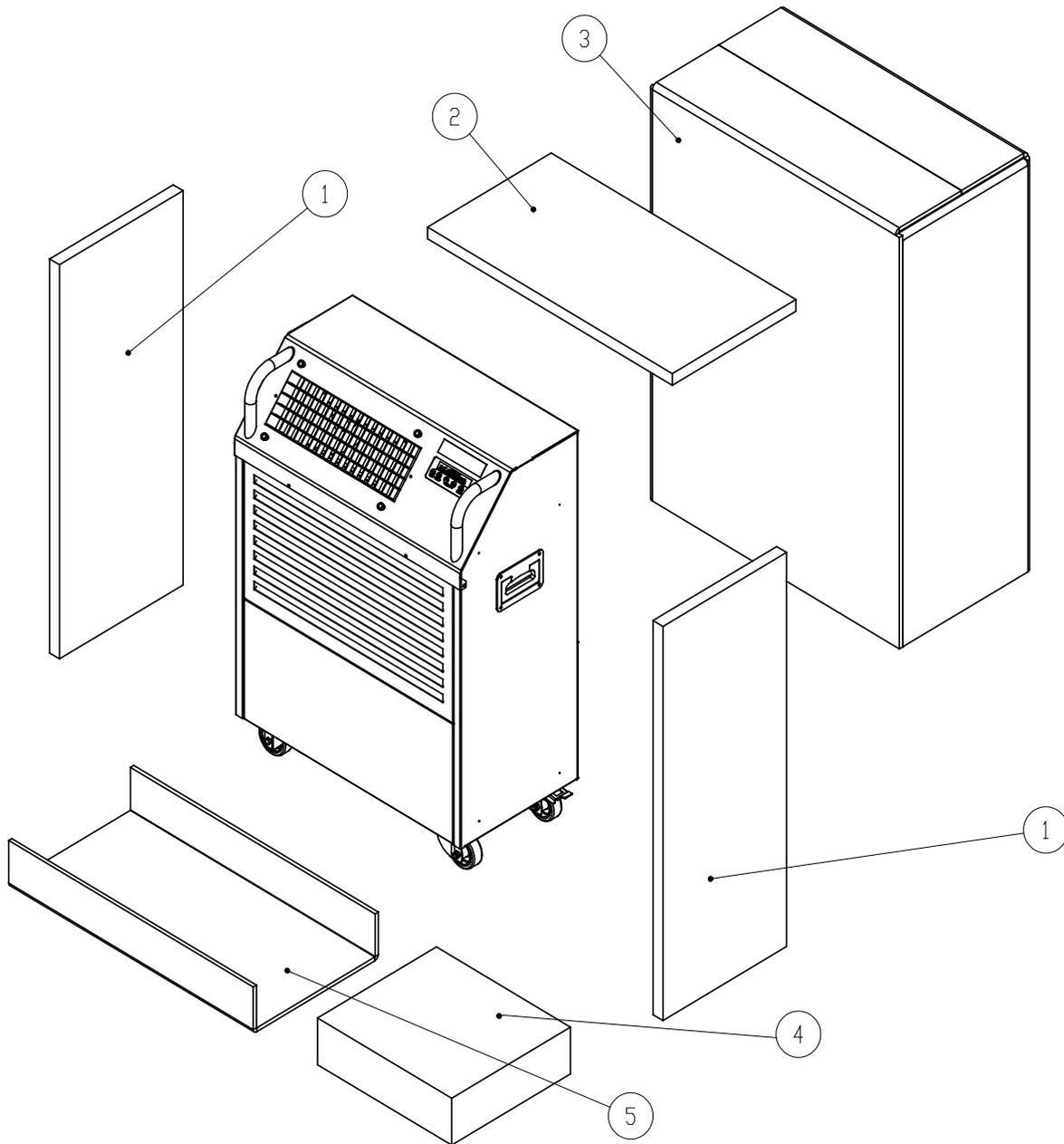
PT 4500 S – Part 4:



No.	Spare part	No.	Spare part	No.	Spare part
1	COMPRESSOR *	13	PUMP ASPIRATION WATER PIPE	25	SUPPORT PLATE CONDENSER
2	COMPRESSOR FIXING PIN	14	NIPPLE 1''	26	PLATE CONDENSER WATER OUTLET TUBE
3	DEHYDRATOR FILTER	15	CIRCULATING PUMP	27	PUMP DELIVERY WATER TUBE
4	LOW PRESSURE SWITCH	16	REDUCTION M-F 1''- 1/2''	28	PLATE CONDENSER INLET WATER PIPE
5	HIGH PRESSURE SWITCH (MANUAL RESET) R410A	17	RUBBER HOLDER	29	1' WATER FILTER
6	LOWER OMEGA FOR PRESSOSTAT	18	RESERVOIR BRACKET KIT	30	PIVOTING WHEEL Ø80 WITH BRAKE
7	UPPER OMEGA FOR PRESSOSTAT	19	WATER RESERVOIR	31	PIVOTING WHEEL Ø80
8	THERMOSTATIC VALVE	20	RESERVOIR BRACKET KIT	32	BOTTOM RAL9010 BUCC.
9	CHECK VALVE	21	CONDENSED WATER PUMP WITH TANK +09 -16	33	BOTTOM OMEGA
10	SOLENOID VALVE	22	CONDENSED WATER PUMP BAND	34	STRUCTURAL UPRIGHT
11	COIL OF SOLENOID VALVE	23	CONDENSED WATER PUMP METAL TOP	35	CIRCULATING PUMP CAPACITOR 16 µF
12	PUMP SUPPORT FOR NEW PCB	24	PLATE CONDENSER R410A	36	SUBSTITUTION PIPE KIT FOR PERISTALTIC PUMP

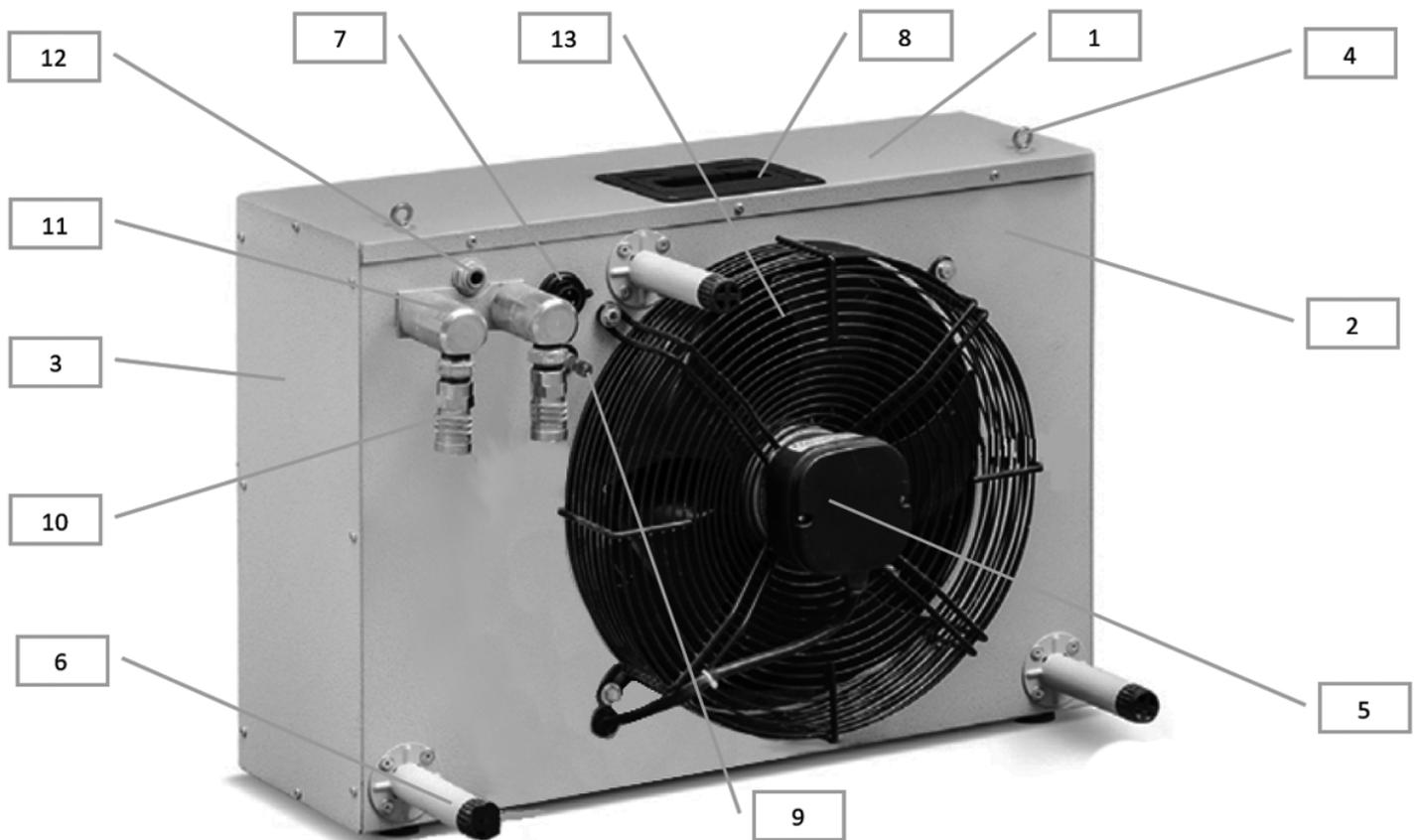
* COMPRESSOR + FILTER + COMPRESSOR CAPACITOR

PT 4500 S – Part 5:



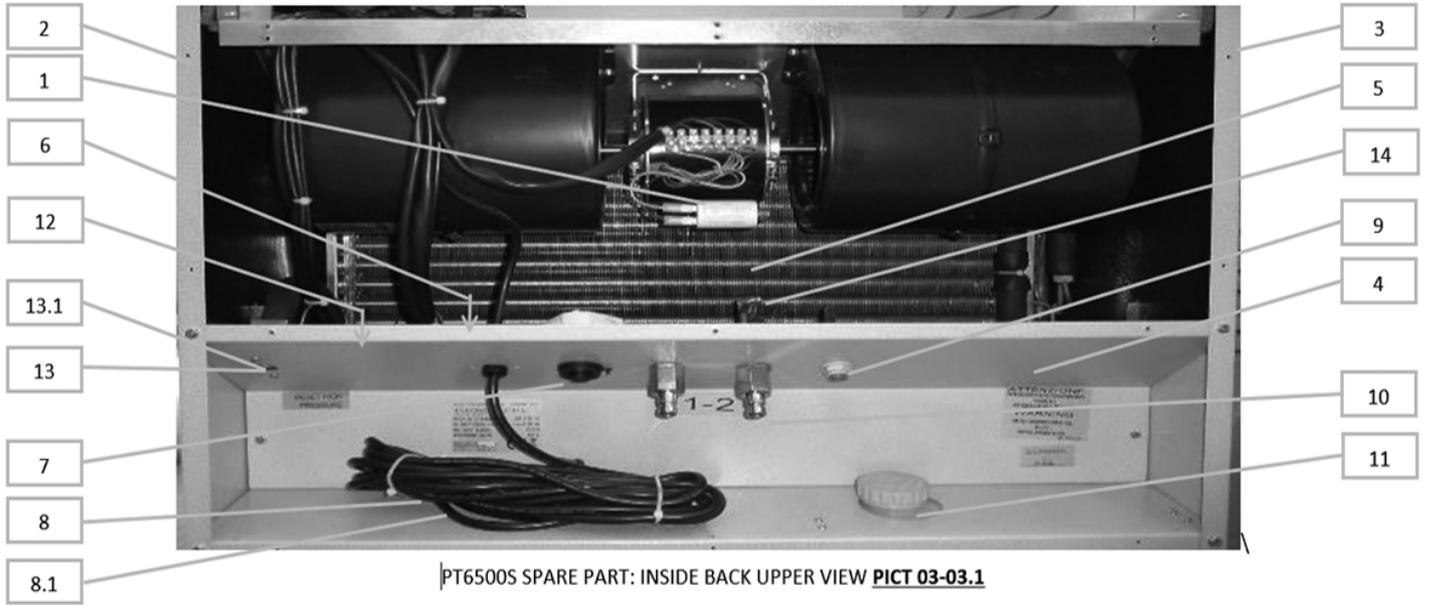
No.	Spare part	No.	Spare part	No.	Spare part
1	SIDE PSE	3	PACKING BOX	5	SOLE BOTTOM
2	SUPERIOR PSE	4	BOTTOM PSE		

PT 6500 S – PICT 01:



No.	Spare part	No.	Spare part
1	Metal Front grille Panel (Air outlet) RAL9010 BUCC.	8	Air drainage valve
2	Metal Back Panel (Air Inlet) RAL 9010 BUCC.	9	Water connector (female)
3	Side Panels (right and left) RAL 9010 BUCC.	10	Rotating Connector fitting
4	Suspending fitting 2 pcs	11	Condensed draining water connector
5	Motor Fan with grille	12	Condenser (coil)
6	Foot U.E. Facsw RAL9010 BUCC.	13	Outdoor unit propylene glycol
7	Plug 3 pin for panel		

PT 6500 S – PICT 03:

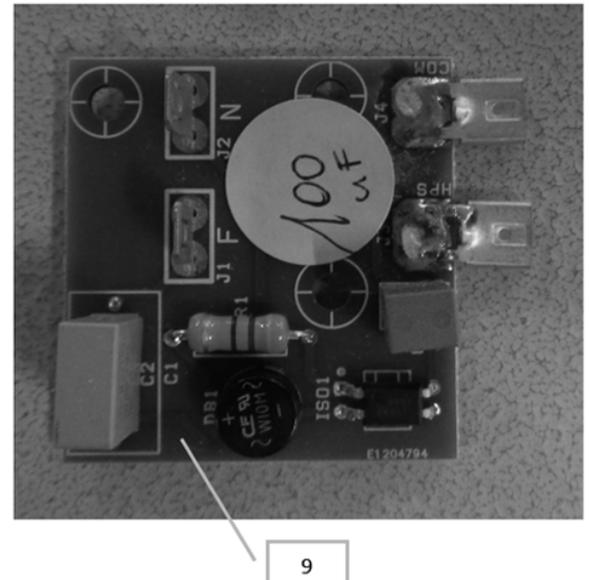


PT6500S SPARE PART: INSIDE BACK UPPER VIEW PICT 03-03.1



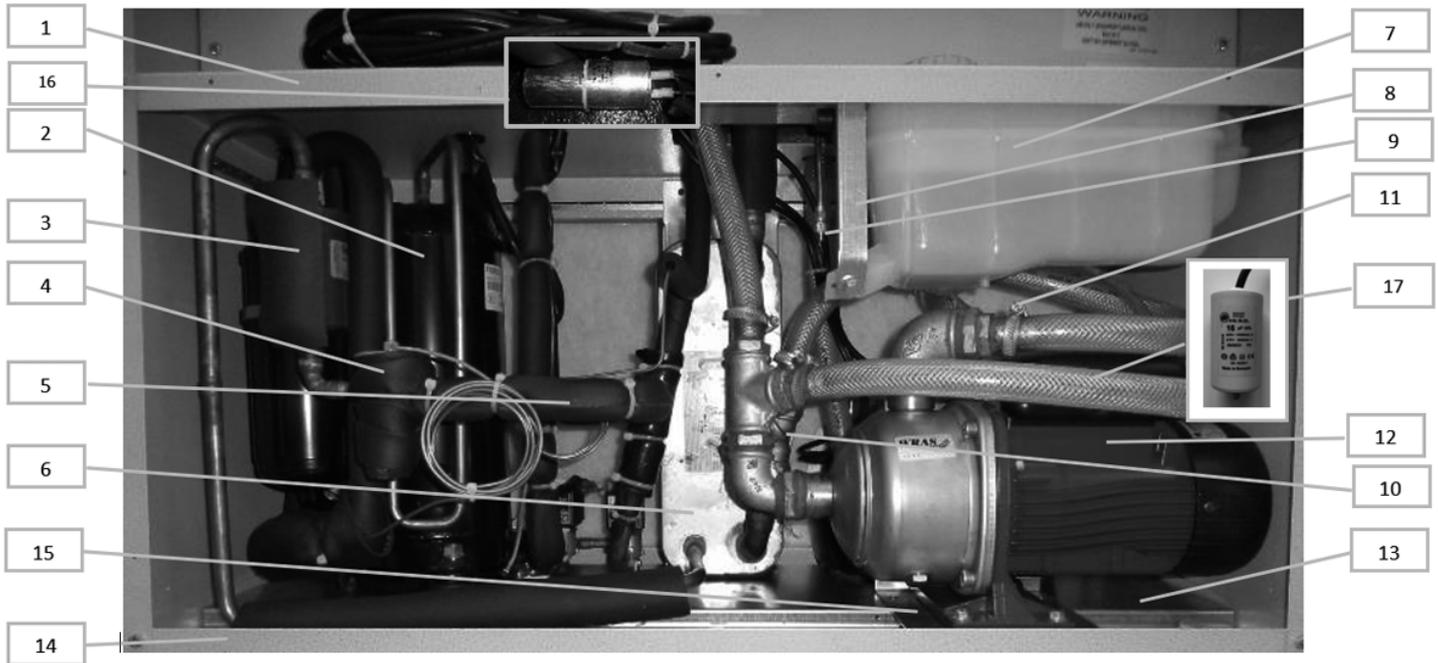
No.	Spare part	No.	Spare part
1	Complete Centrifugal motor fan of the Indoor Unit	10	Connector for condensed water drainage
2	Right (from the front sight) side panel RAL9010 BUCC.	11	Water male connector
3	Left (from the front sight) side Panel RAL9010 BUCC.	12	Cap of the Water reservoir
4	Rear panel connector holder RAL 9010 BUCC.	13	Low pressure switch (automatic reset) R407C – R410A
5	Evaporator coil with refrigerant distributor R410A	14	High pressure switch (manual reset) R407C
6	Condensed water tray (of the evaporator)	15	High pressure switch (manual reset) R410A
7	Special socket (female)	16	Air drainage small plastic pipe with metal belt
8	Power Supply Cable with UK PLUG	17	Flying socket connector (female)
9	Power Supply Cable with SCHUKO PLUG	18	Rear panel flying connector RAL9010 BUCC.

PT 6500 S – PICT 04:



No.	Spare part	No.	Spare part
1	Earth terminal board	7	Terminal board blue color
2	Main switch with fuses (16A)	8	CONTROL PCB (up to S.N. 1140006913)
3	Relay with support	9	CONTROL PCB (from S.N. 1140006914)
4	Terminal board grey color	10	PCB FOR NEW HPS LOGIC (from S.N. 1140006914)
5	Defrost Thermostat	11	CONTACTORS
6	Metal case of Electric panel		

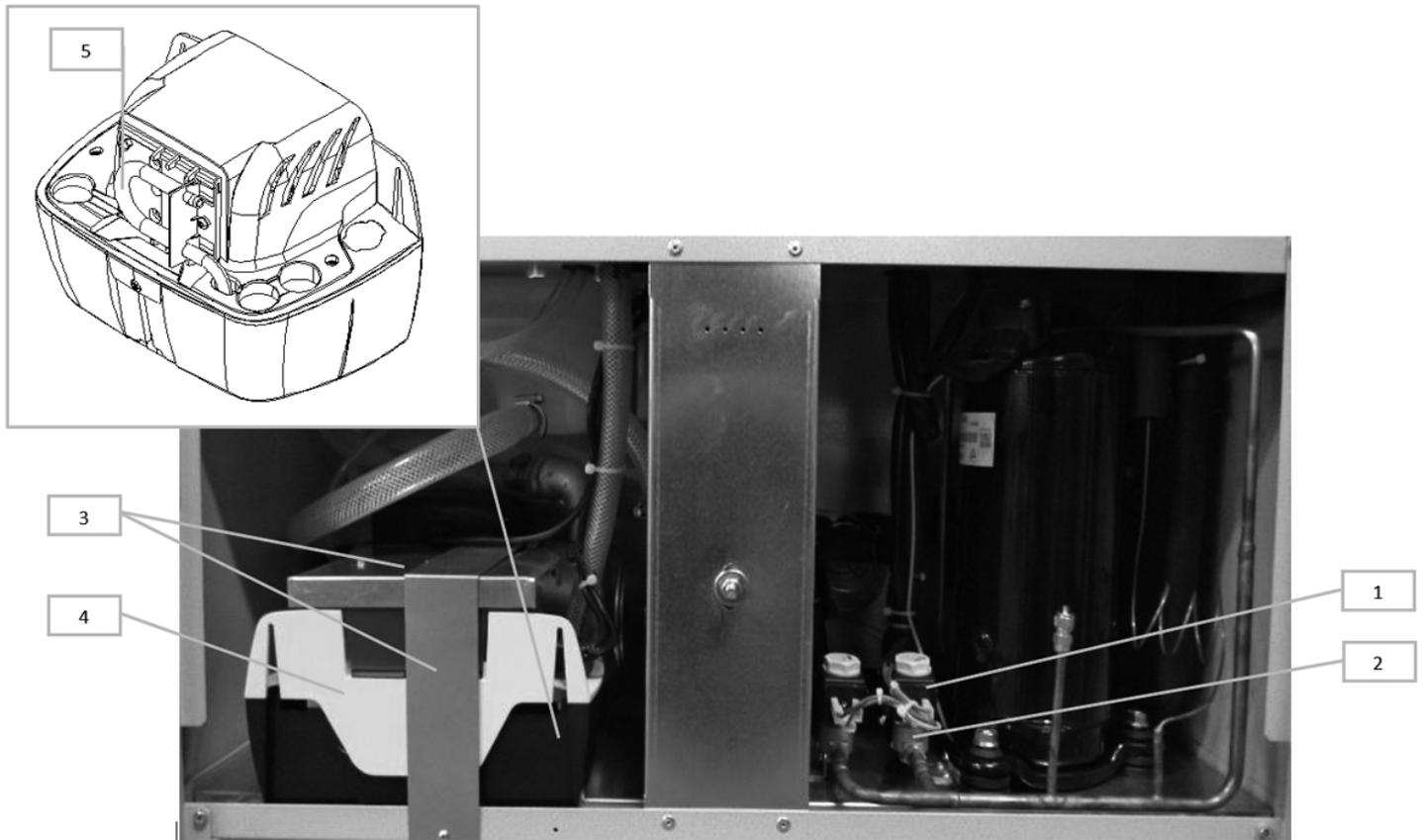
PT 6500 S – PICT 05:



No.	Spare part	No.	Spare part
1	First floor horizontal Panel RAL 9010 BUCC.	10	¾" water filter
2	Compressor R410A *	11	Iron clamp (4 pcs)
3	Refrigerant filter R407C - R410A	12	Circulating pump
4	Thermostatic Valve R410A	13	Metal support for compressor and pump
5	Check valve	14	Metal bottom RAL 9010 BUCC.
6	Plate Condenser R410A	15	Pump Support for new pump
7	Water reservoir	16	Capacitor of compressor R410A
8	Reservoir bracket	17	Circulating pump capacitor 16 µF
9	Shraeder valve		

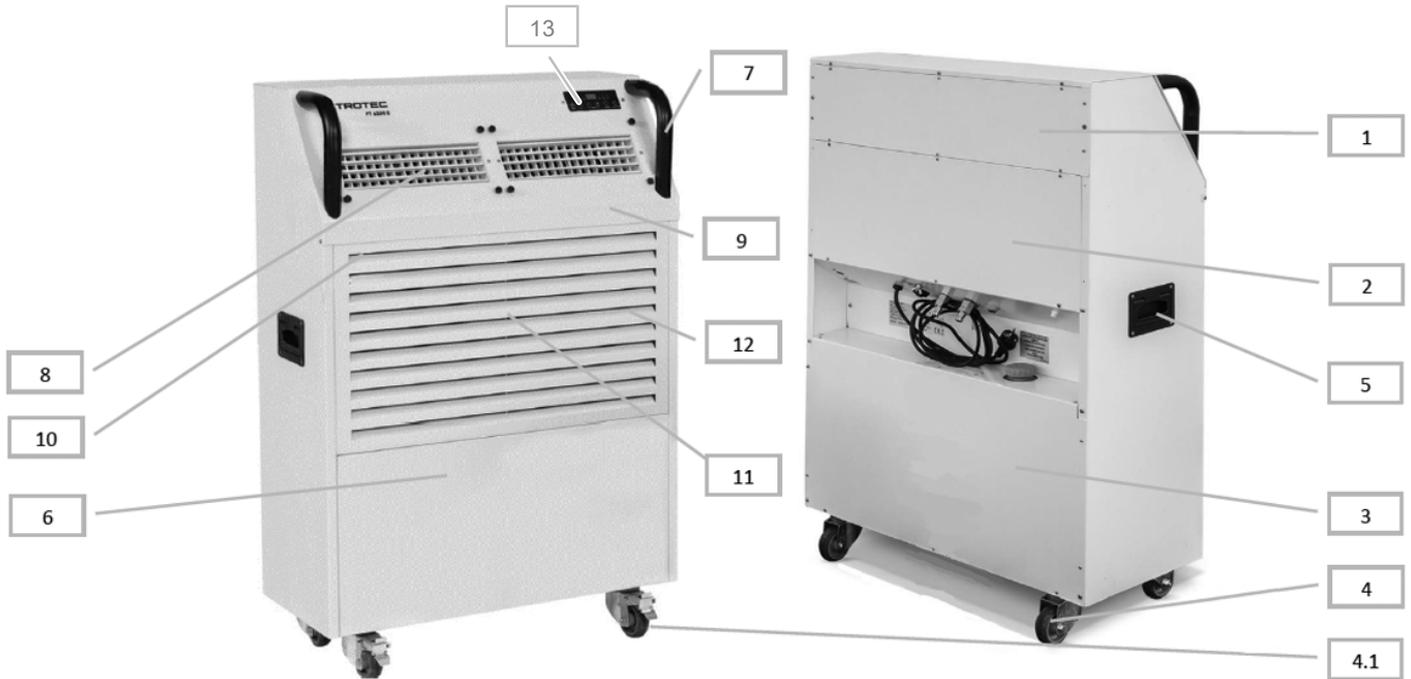
* In case of replacement of the compressor it is recommended to replace the refrigerant filter (Code ACS02.013)

PT 6500 S – PICT 06:



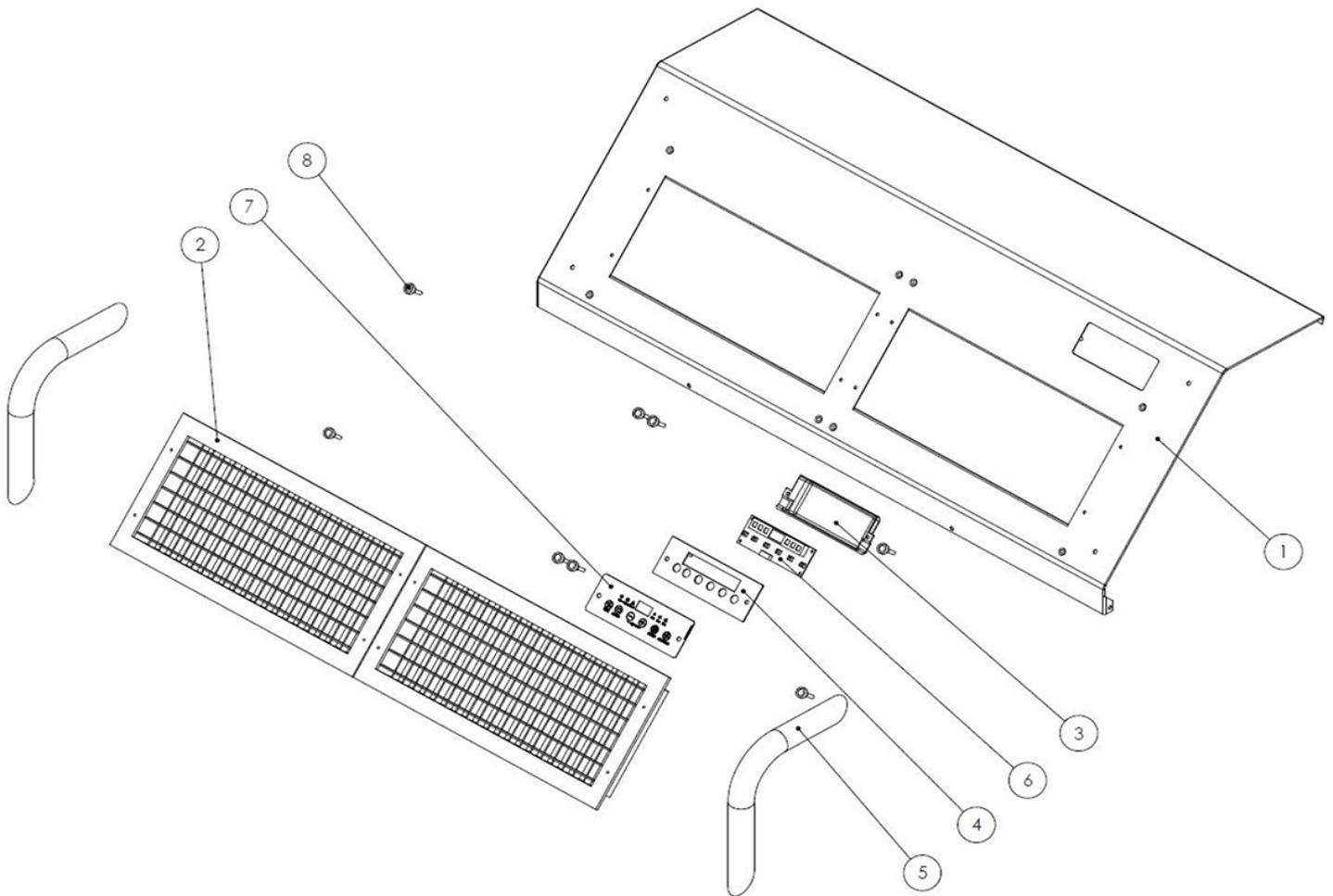
No.	Spare part	No.	Spare part
1	Coil of solenoid valve	4	Condensed water pump with tank
2	Body of solenoid valve	5	Substitution pipe kit for peristaltic pump
3	Condensed water pump metal top	6	

PT 6500 S – PICT 07:



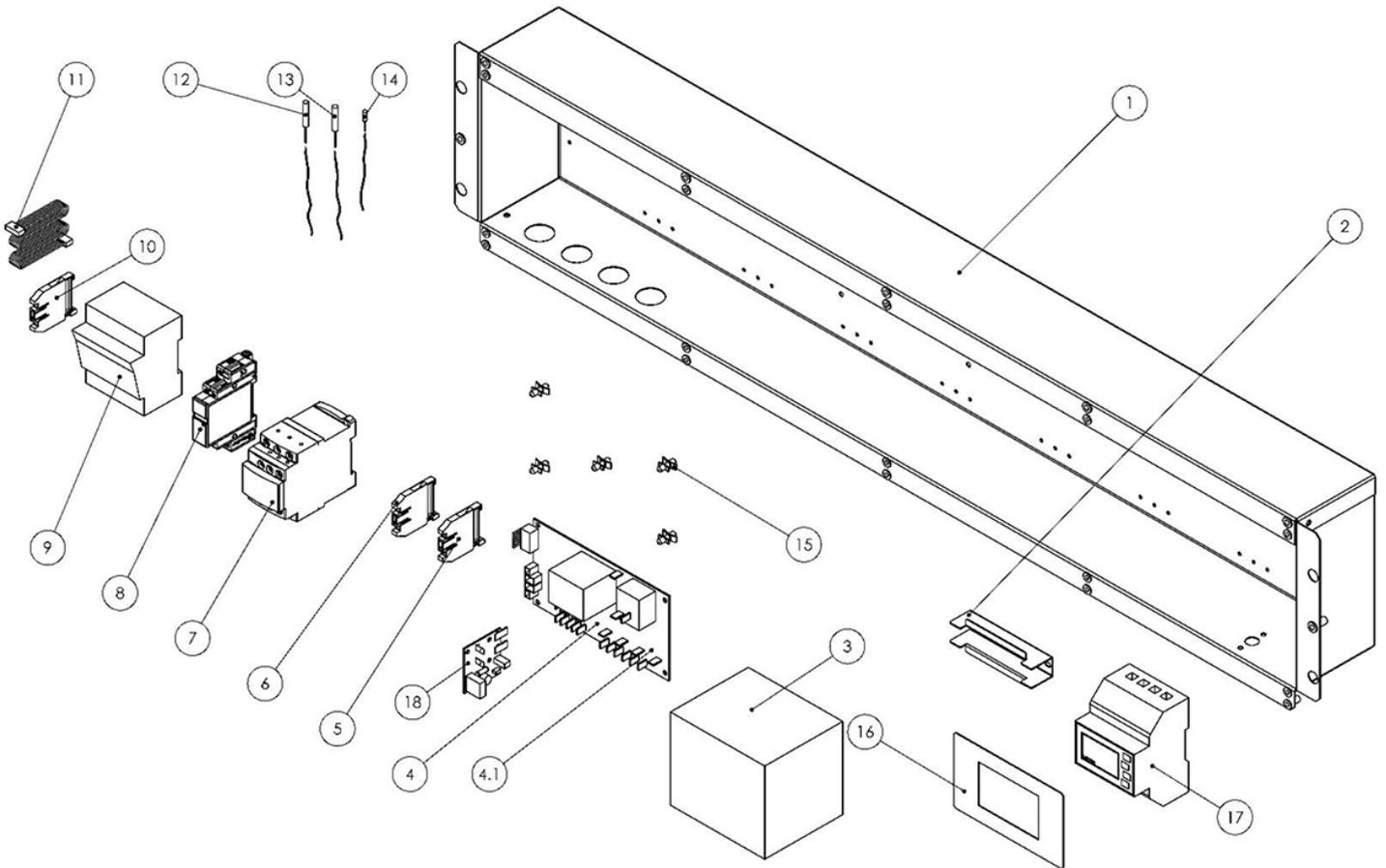
No.	Spare part	No.	Spare part
1	Electric panel metal cover RAL 9010 BUCC.	7	Slimline handle
2	Rear Metal cover of motorfan vane RAL 9010 BUCC.	8	Aluminium Supply grille
3	Rear Metal cover of compressor vane RAL 9010 BUCC.	9	Front Cover RAL9010 BUCC.
4	Pivoting wheel Ø 80	10	Front Cover RAL9010 BUCC.
5	Plastic handle	11	Front Suction Grille RAL 9010 BUCC.
6	Front metal cover of compressor vane RAL 9010 BUCC.	12	Air filter (inside the grille)
13	Display digit for new PCB		

PT 15000 S – Part 01:



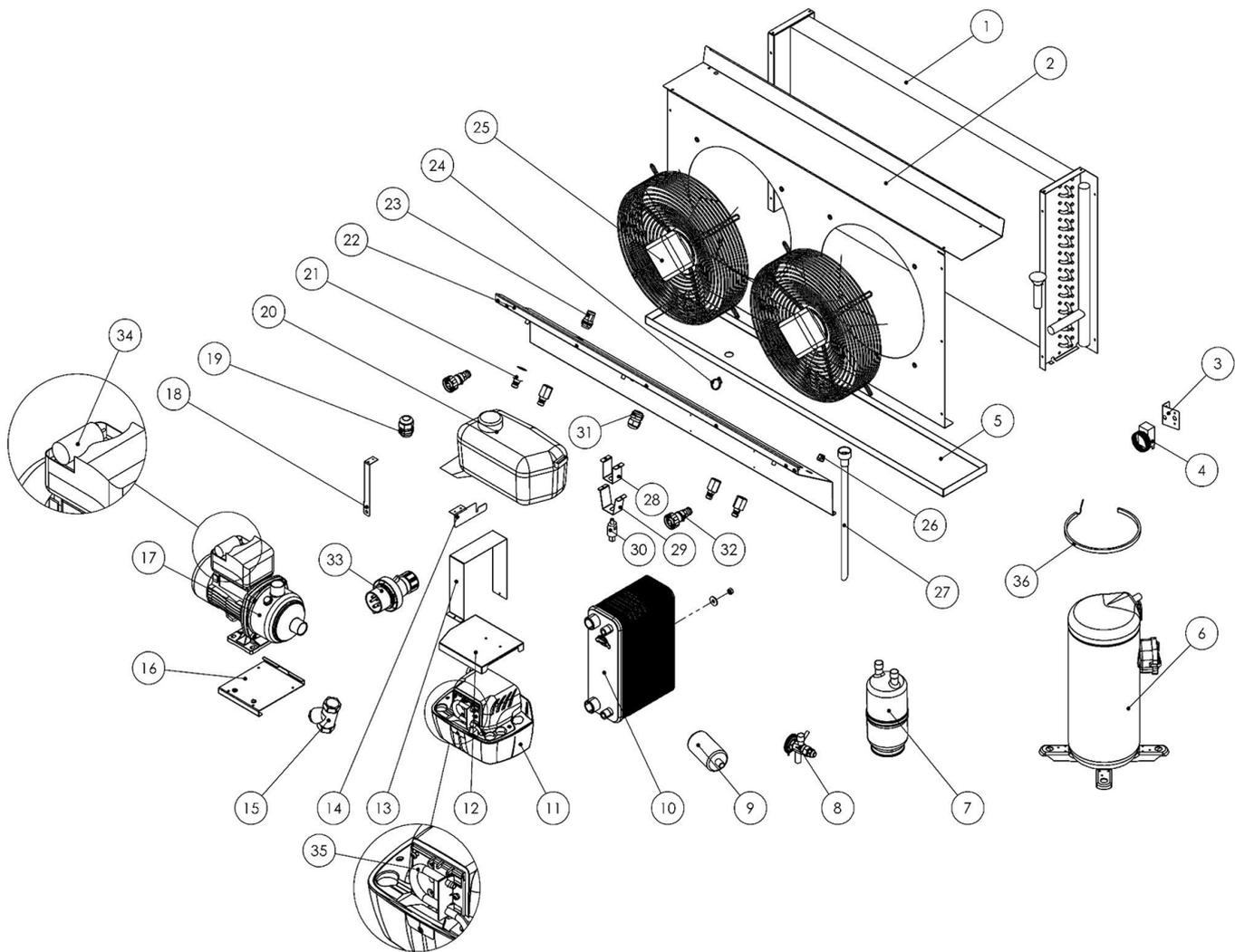
No.	Spare part	No.	Spare part
1	FRONT COVER RAL9010 BUCC.	5	TUBULAR HANDLES RAL9005
2	ALUMINIUM SUPPLY GRILLE RAL9010 BUCC.	6	DISPLAY DIGIT FOR NEW PCB WITHOUT CUT BUTTONS
3	DISPLAY PROTECTION	7	DISPLAY LABEL
4	DISPLAY SUPPORT	8	KIT FIXING SCREWS FOR PIPE

PT 15000 S – Part 02:



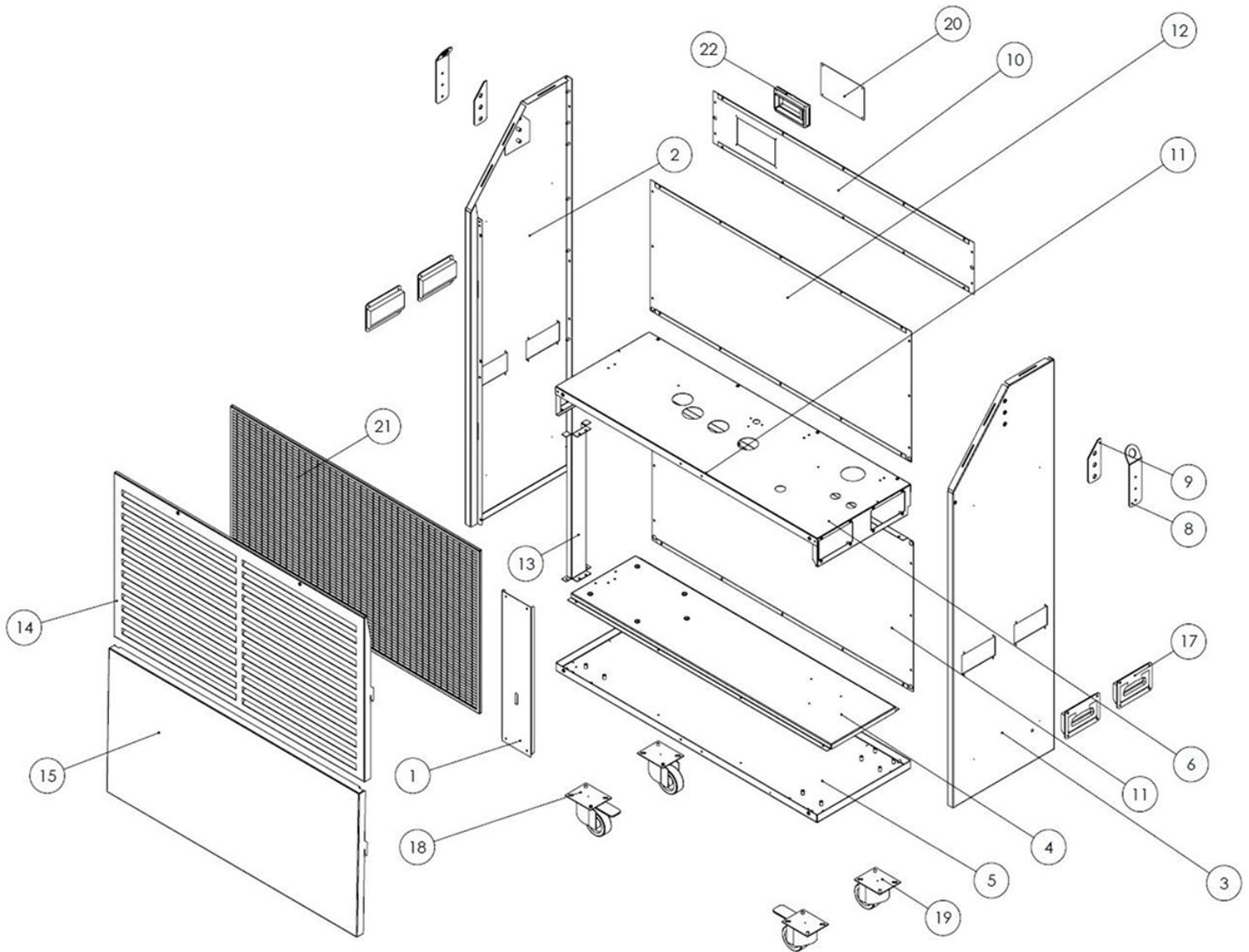
No.	Spare part	No.	Spare part	No.	Spare part
1	ELECTRICAL VANE	7	CONTACTORS	14	ENVIRONMENT PROBE STANDARD 2 m
2	ENERGY METER FIXING BAR	8	PHASE CONTROL	15	SPACER CARD KIT 20 PCS
3	ELECTRIC TRANSFORMER	9	GENERAL SWITCH	16	ENERGY METER MASK
4	CONTROL PCB (up to S.N. 1130021966)	10	EARTH TERMINAL BOARD	17	ENERGY METER
4.1	CONTROL PCB (from S N. 1130021967)	11	WIRING CONNECTION OF THE DISPLAY	18	PCB FOR NEW HPS LOGIC (from S N. 1130021967)
5	TERMINAL BOARD BLUE COLOR	12	BLACK TEMPERATURE PROBE T1 1.8 m		
6	TERMINAL BOARD GREY COLOR	13	GREY TEMPERATURE PROBE T2 1.8 m		

PT 15000 S – Part 03:



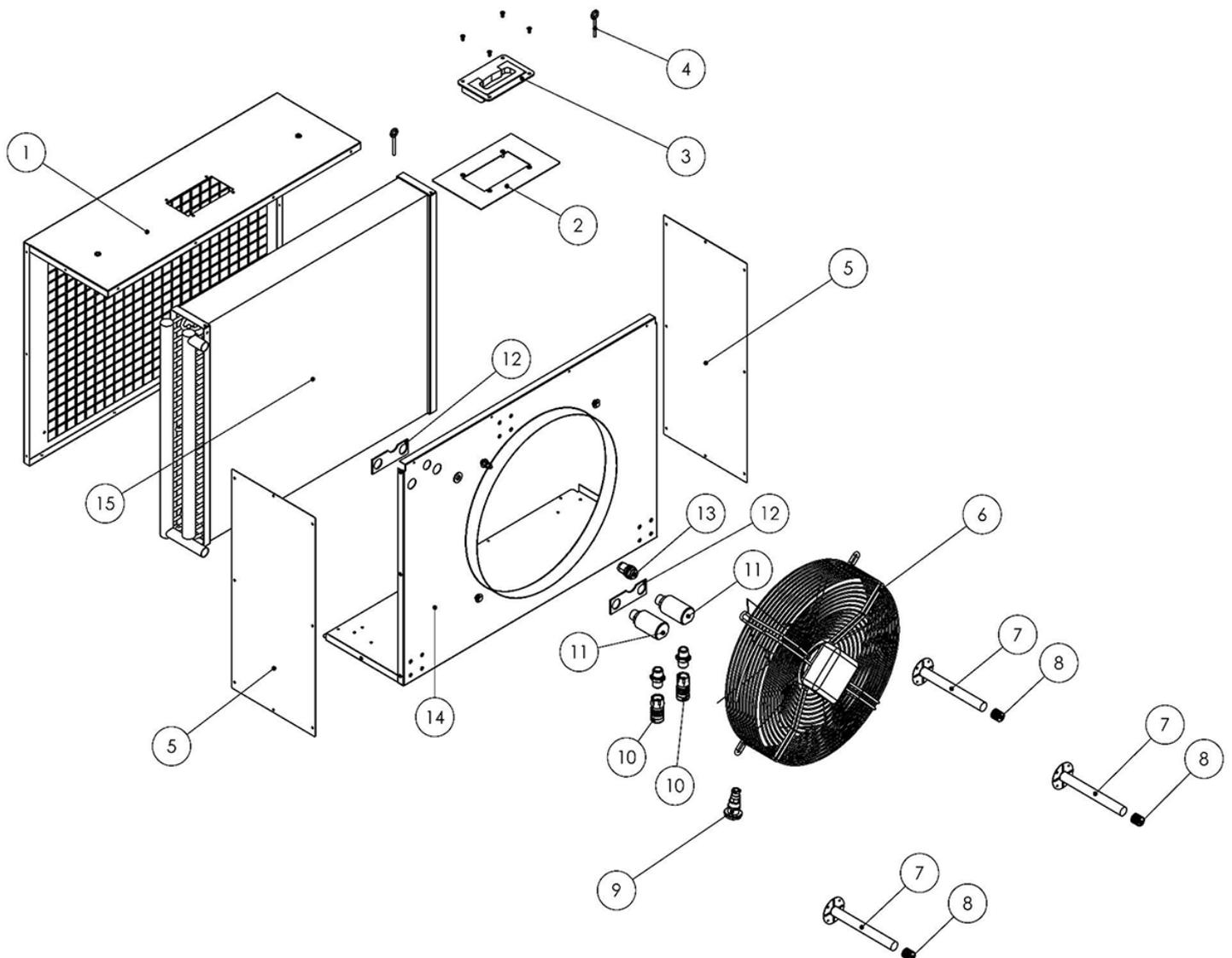
No.	Spare part	No.	Spare part	No.	Spare part
1	EVAPORATOR COIL WITH REFRIGERANT DISTRIBUTOR	13	CONDENSED WATER PUMP BAND	25	FAN
2	PLENUM FAN	14-1 8	RESERVOIR BRACKET KIT	26	CABLE STEP
3	DEFROST THERMOSTAT SUPPORT	15	1' WATER FILTER	27	DRAIN PIPE TRAY-PUMP
4	THERMOSTAT WITH KNOB	16	PUMP SUPPORT FOR NEW PCB	28-2 9	LOWER OMEGA FOR PRESSOSTAT
5	INOX TRAY	17	CIRCULATING PUMP	29-2 8	UPPER OMEGA FOR PRESSOSTAT
6	COMPRESSOR R410A	18-1 4	RESERVOIR BRACKET KIT	30	HIGH PRESSURE SWITCH (MANUAL RESET) R410A
7	LIQUID SEPARATOR	19	CABLE GLAND PG21	31	CABLE GLAND PG16
8	THERMOSTATIC VALVE R410A	20	WATER RESERVOIR	32	FLYING SOCKET CONNECTOR (FEMALE)
9	REFRIGERANT FILTER R407C - R410A	21	WATER CONNECTOR MALE	33	PLUGS WITH PHASE INVERTER
10	PLATE CONDENSER R410A	22	REAR PANEL CONNECTOR HOLDER RAL9010 BUCC.	34	CIRCULATING PUMP CAPACITOR 16 µF
11	CONDENSED WATER PUMP WITH TANK +09 -16	23	CONNECTOR FOR CONDENSED WATER DRAINAGE	35	SUBSTITUTION PIPE KIT FOR PERISTALTIC PUMP
12	CONDENSED WATER PUMP METAL TOP	24	IRON CLAMP (4 PCS)	36	COMPRESSOR CRANKCASE HEATER

PT 15000 S – Part 04:



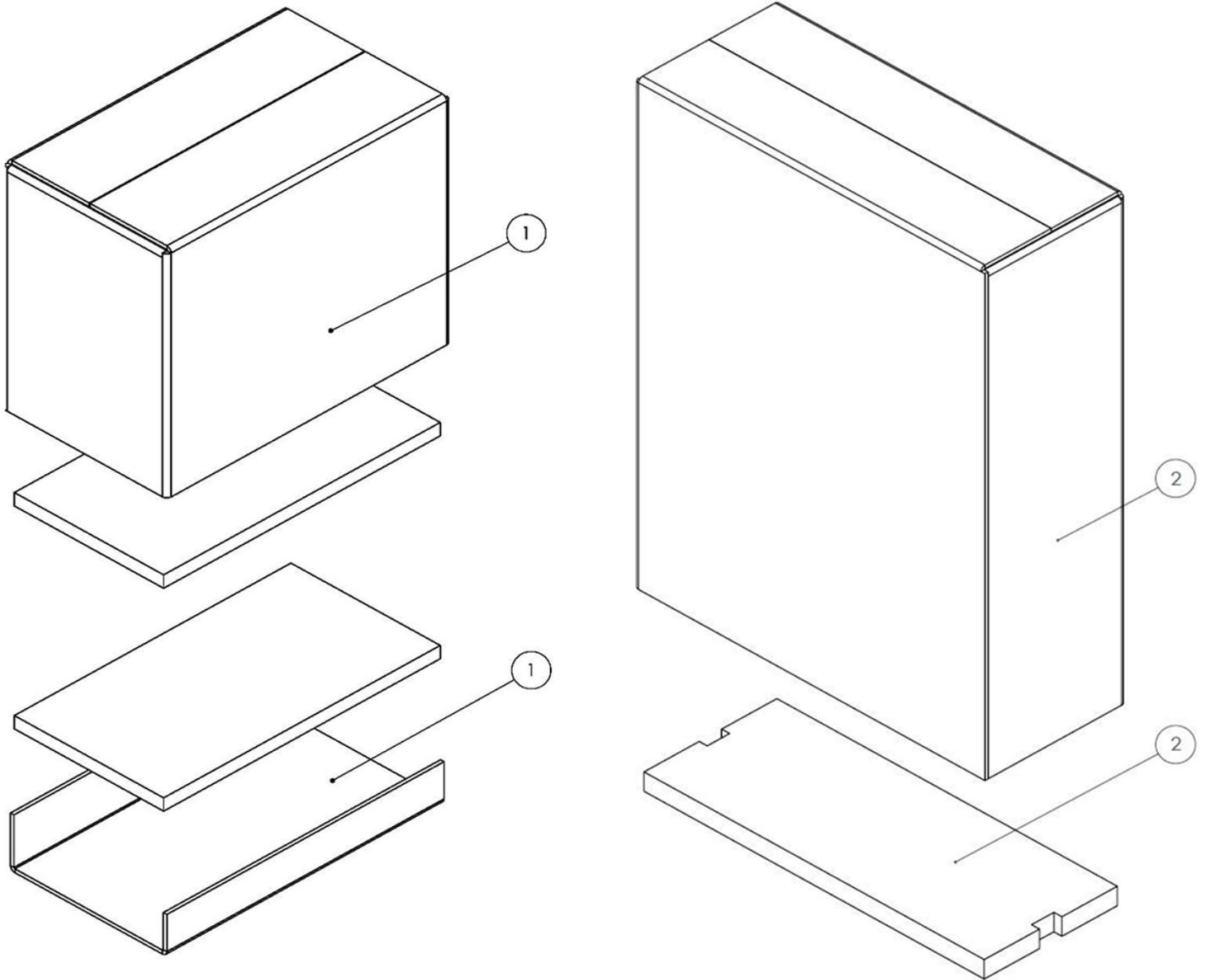
No.	Spare part	No.	Spare part
1	PLATE CONDENSER SUPPORT	12	REAR METAL COVER OF MOTORFAN VANE RAL9010 BUCC.
2	RIGHT SIDE PANEL RAL9010 BUCC.	13	LEG HOLD UP
3	LEFT SIDE PANEL RAL9010 BUCC.	14	FRONT SUCTION GRILLE RAL9010 BUCC.
4	METAL SUPPORT FOR COMPRESSOR AND PUMP	15	FRONT METAL COVER OF COMPRESSOR VANE RAL9010 BUCC.
5	METAL BOTTOM RAL9010 BUCC.	17	PLASTIC HANDLE
6	FIRST FLOOR HORIZONTAL PANEL RAL9010 BUCC.	18	PIVOTING WHEEL Ø80 WITH BRAKE
8	EYEBOLT (OPTIONAL)	19	PIVOTING WHEEL Ø80
9	EYEBOLT SUPPORT (OPTIONAL)	20	ELECTRIC VANE CAP RAL9010 BUCC.
10	REAR ELECTRIC PANEL METAL COVER RAL9010 BUCC.	21	AIR FILTER
11	REAR METAL COVER OF COMPRESSOR VANE RAL9010 BUCC.	22	ENERGY METER DOOR

PT 15000 S – Part 05:



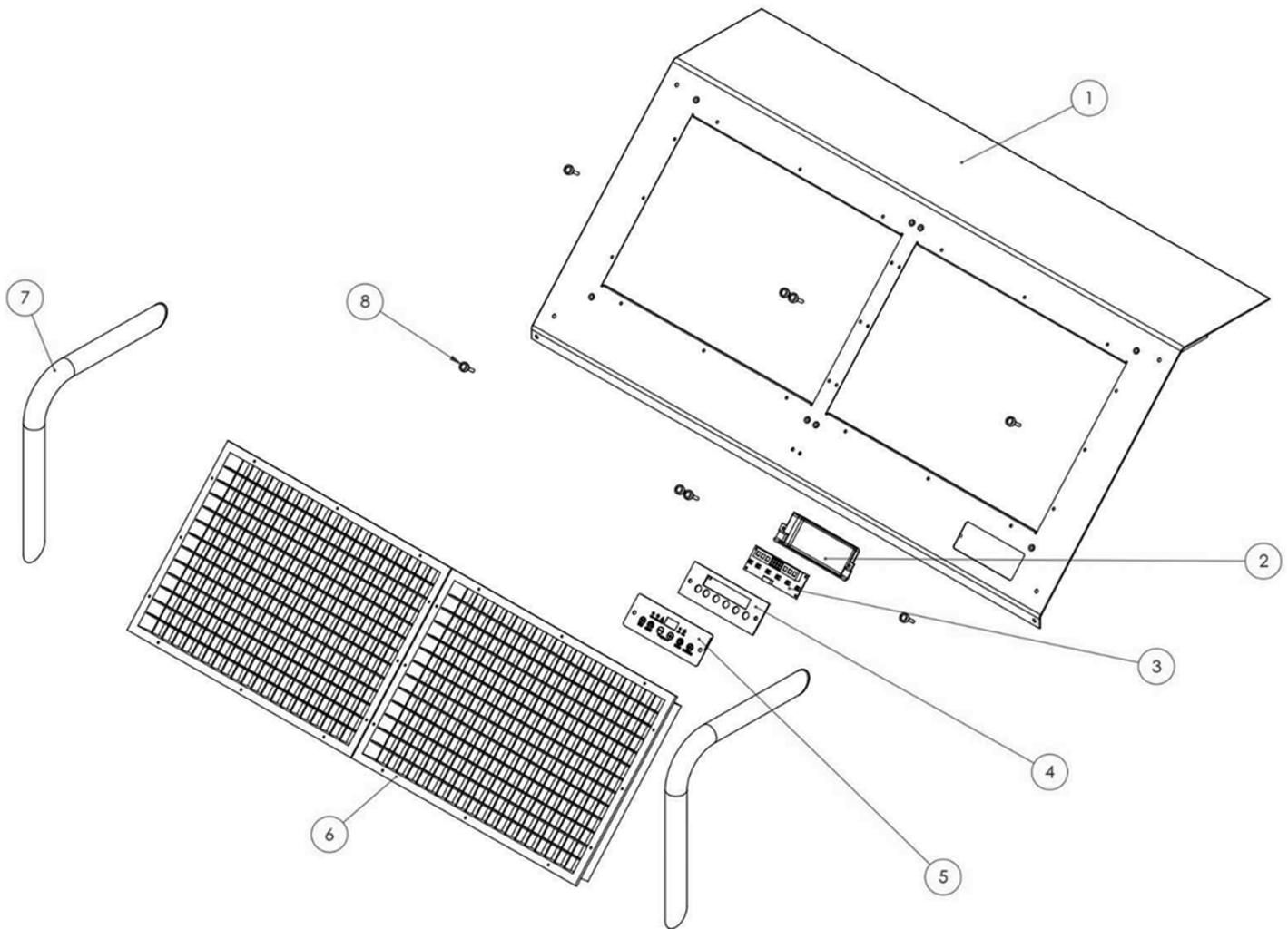
No.	Spare part	No.	Spare part	No.	Spare part
1	FRONTAL PANEL RAL9010 BUCC.	6	BLOWER FAN Ø 400	11	PIVOTING JOINT
2	SUPPORT HANDLE	7	SPACER 200mm E.U. MDB	12	SUPPORT FOR PIVOTING JOINT
3	PLASTIC HANDLE	8	SPACER REGULATOR CAP	13	CONNECTOR FOR CONDENSED WATER DRAINAGE
4	EYE SCREW M6X45	9	IP 68 PLUG CONNECTOR BULGIN 3 PIN (UE)	14	REAR PANEL U.E. MDB RAL9010 BUCC.
5	LATERAL PANEL RAL9010 BUCC.	10	WATER CONNECTOR FEMALE	15	WATER COOLER DOUBLE BLOCK 650X550

PT 15000 S – Part 06:



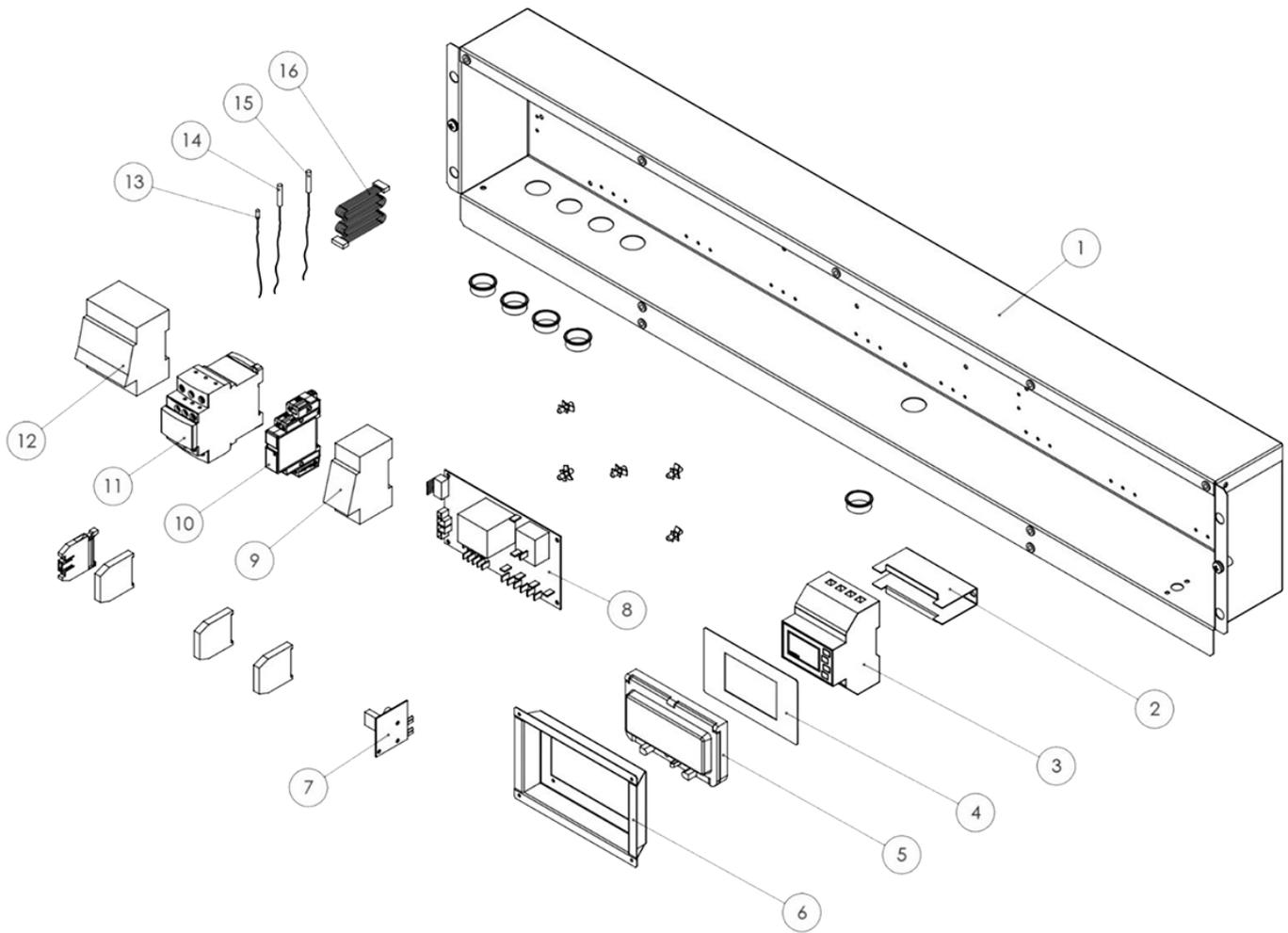
No.	Spare part	No.	Spare part
1	KIT IMBALLO U.E. MDB.	6	PACKING KIT E.U. MDB
2	KIT IMBALLO U.I.	7	PACKING KIT I.U.

PT 23000 S – Part 1:



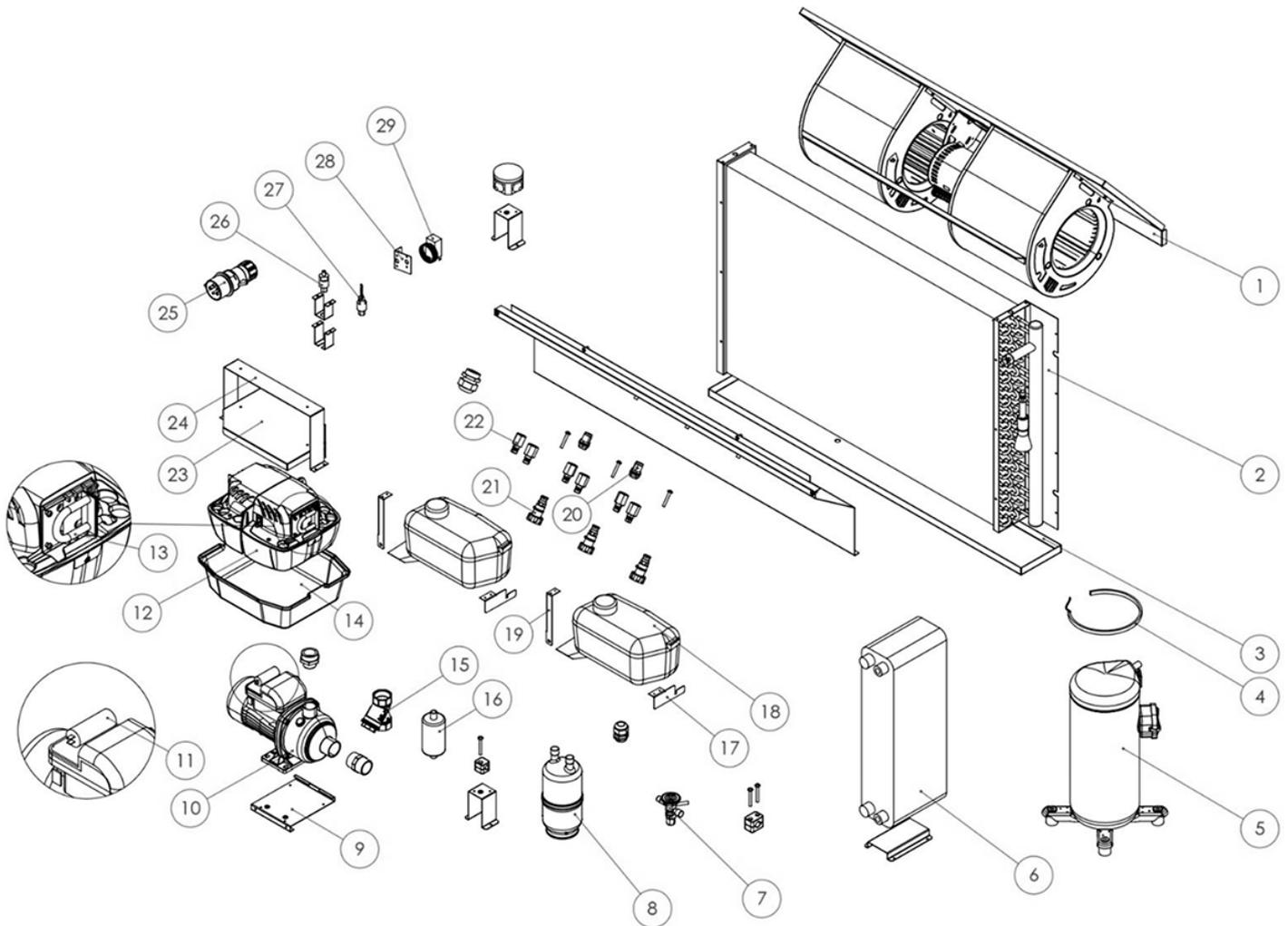
No.	Spare part	No.	Spare part
1	FRONT COVER RAL9010 BUCC.	5	DISPLAY LABEL
2	DISPLAY PROTECTION	6	ALUMINIUM SUPPLY GRILLE RAL9010 BUCC..
3	DISPLAY DIGIT FOR NEW PCB WITHOUT CUT BUTTONS	7	TUBULAR HANDLES RAL9005
4	DISPLAY SUPPORT	8	KIT FIXING SCREWS FOR PIPE

PT 23000 S – Part 2:



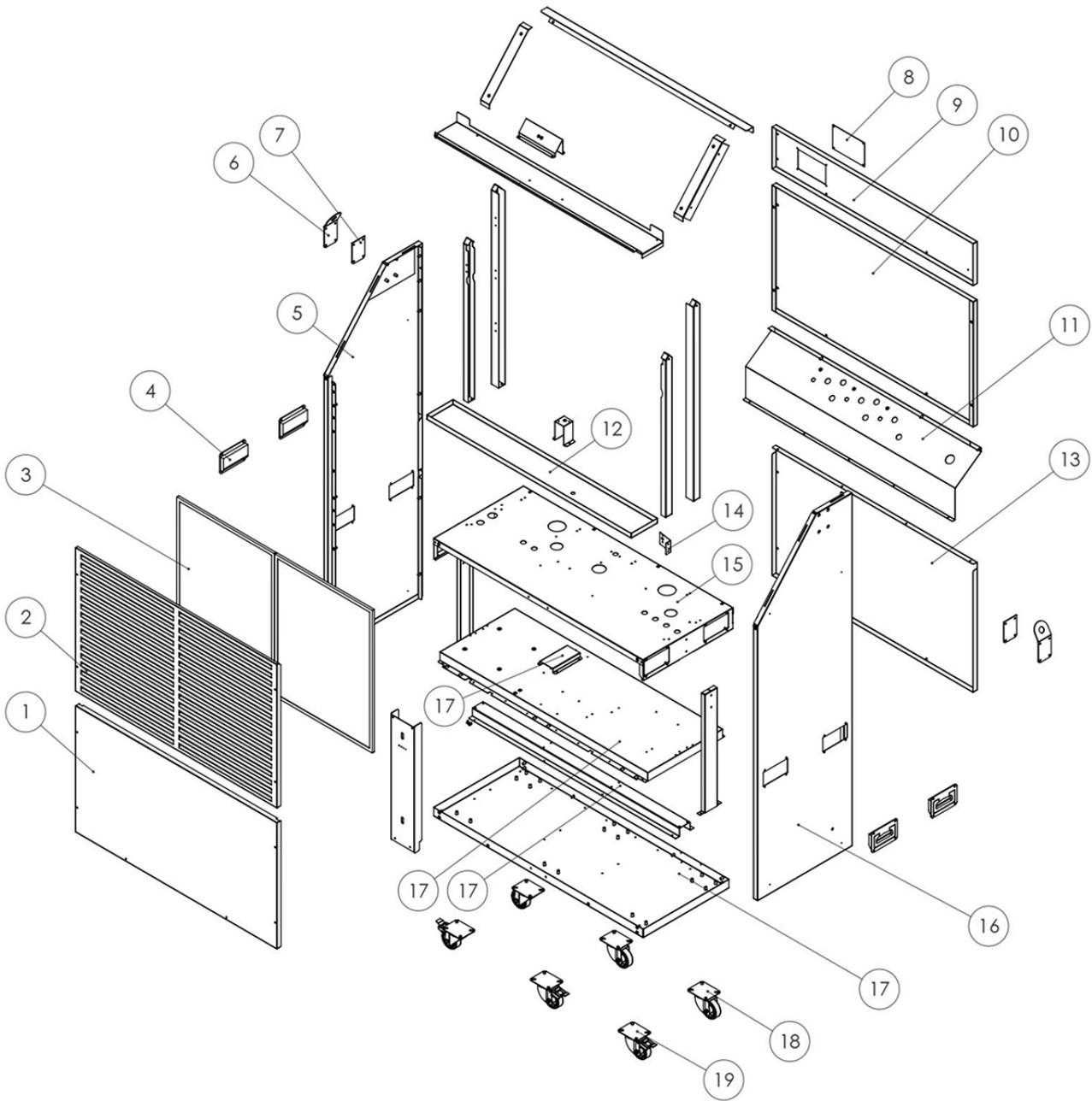
No.	Spare part	No.	Spare part
1	ELECTRICAL VANE	9	2-POLE SWITCH
2	ENERGY METER FIXING BAR	10	PHASE CONTROL
3	ENERGY METER	11	CONTACTORS
4	ENERGY METER MASK	12	GENERAL SWITCH
5	ENERGY METER DOOR	13	ENVIRONMENT PROBE STANDARD 2 m
6	ENERGY METER FRAME	14	GREY TEMPERATURE PROBE T2 1.8 m
7	PCB FOR NEW HPS LOGIC	15	BLACK TEMPERATURE PROBE T1 1.8 m
8	CONTROL PCB	16	WIRING CONNECTION OF THE DISPLAY

PT 23000 S – Part 3:



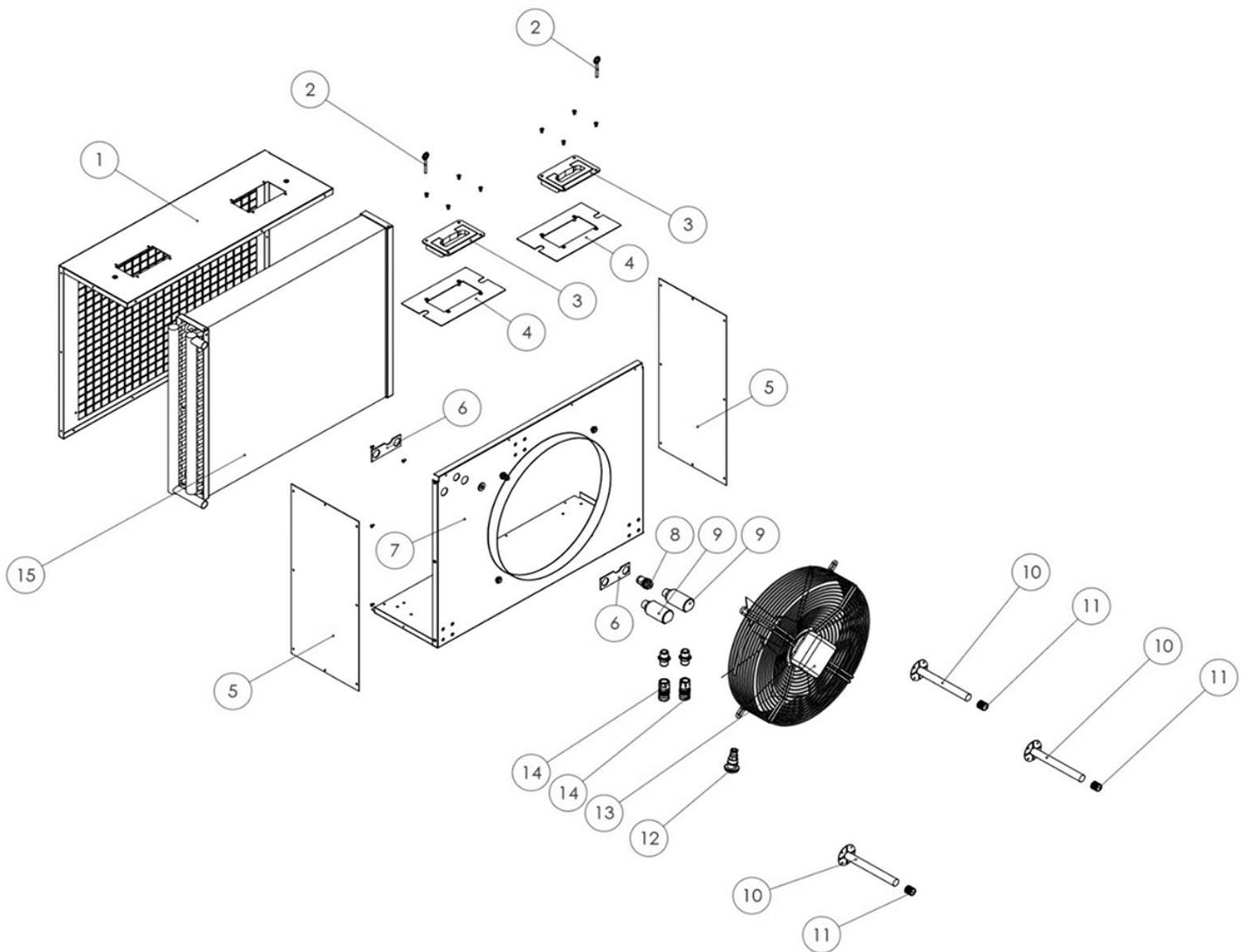
No.	Spare part	No.	Spare part	No.	Spare part
1	FAN	11	CIRCULATING PUMP CAPACITOR 16 µF	21	FLYING SOCKET CONNECTOR (FEMALE)
2	EVAPORATOR COIL WITH REFRIGERANT DISTRIBUTOR	12	CONDENSED WATER PUMP WITH TANK +09 -16	22	WATER CONNECTOR MALE
3	INOX TRAY	13	SUBSTITUTION PIPE KIT FOR PERISTALTIC PUMP	23-2 4	CONDENSED WATER PUMP METAL TOP
4	COMPRESSOR CRANKCASE HEATER	14	CONDENSATE PUMP TRAY	24-2 3	CONDENSED WATER PUMP BAND
5	COMPRESSOR R410A	15	1" ¼ WATER FILTER	25	PLUGS WITH PHASE INVERTER
6	PLATE CONDENSER R410A	16	REFRIGERANT FILTER R407C - R410A	26	HIGH PRESSURE SWITCH (MANUAL RESET) R410A
7	THERMOSTATIC VALVE R410A	17-1 9	RESERVOIR BRACKET KIT	27	LOW PRESSURE SWITCH R410A
8	LIQUID SEPARATOR	18	WATER RESERVOIR	28	DEFROST THERMOSTAT SUPPORT
9	PUMP SUPPORT FOR NEW PCB	19-1 7	RESERVOIR BRACKET KIT	29	THERMOSTAT DEFROST
10	CIRCULATING PUMP	20	CONNECTOR FOR CONDENSED WATER DRAINAGE		

PT 23000 S – Part 4:



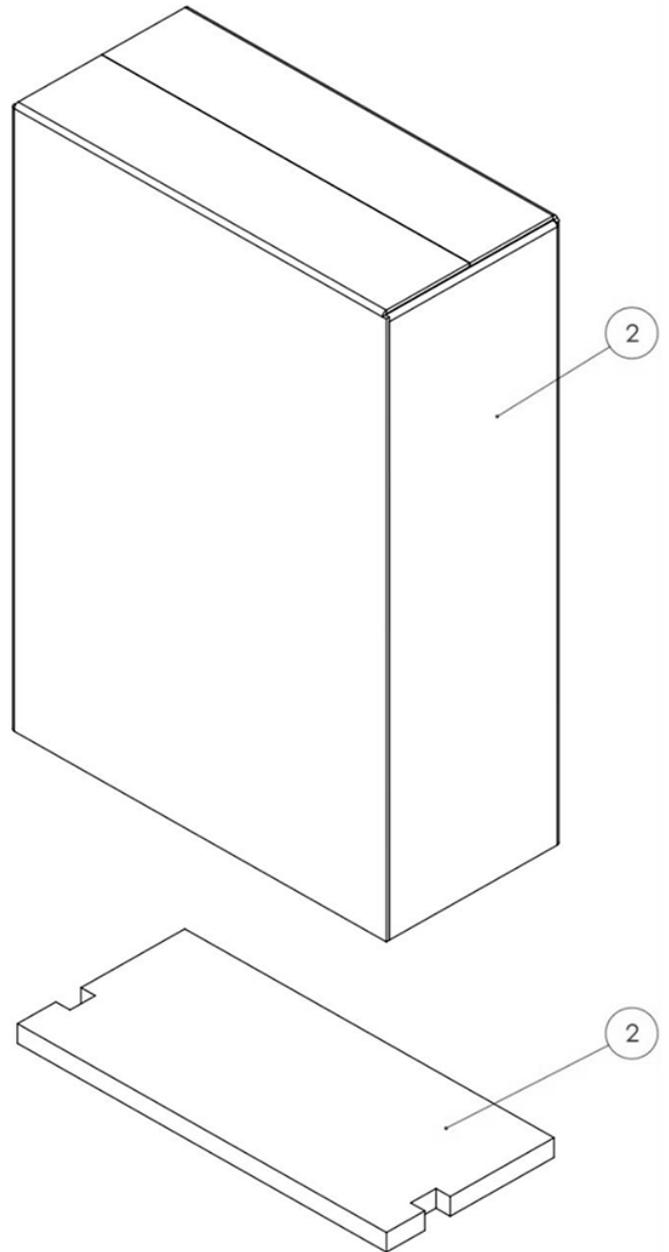
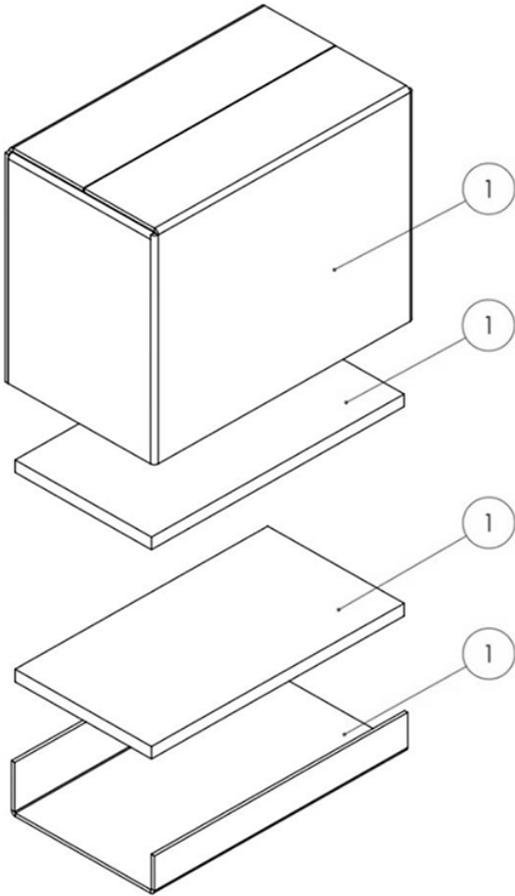
No.	Spare part	No.	Spare part	No.	Spare part
1	FRONT METAL COVER OF COMPRESSOR VANE RAL9010 BUCC.	8	ELECTRIC VANE CAP RAL9010 BUCC.	15	FIRST FLOOR HORIZONTAL PANEL RAL9010 BUCC.
2	FRONT SUCTION GRILLE RAL9010 BUCC.	9	REAR ELECTRIC PANEL METAL COVER RAL9010 BUCC.	16	LEFT SIDE PANEL RAL9010 BUCC.
3	AIR FILTER	10	REAR METAL COVER OF MOTORFAN VANE RAL9010 BUCC.	17	METAL BOTTOM KIT RAL9010 BUCC.
4	PLASTIC HANDLE	11	REAR PANEL CONNECTOR HOLDER RAL9010 BUCC.	18	PIVOTING WHEEL Ø80
5	RIGHT SIDE PANEL RAL9010 BUCC.	12	INOX TRAY	19	PIVOTING WHEEL Ø80 WITH BRAKE
6	EYEBOLT (OPTIONAL)	13	REAR METAL COVER OF COMPRESSOR VANE RAL9010 BUCC.		
7	EYEBOLT SUPPORT (OPTIONAL)	14	DEFROST THERMOSTAT SUPPORT		

PT 23000 S – Part 5:



No.	Spare part	No.	Spare part	No.	Spare part
1	FRONTAL PANEL RAL9010 BUCC.	6	SUPPORT FOR PIVOTING JOINT	11	SPACER REGULATOR CAP
2	EYE SCREW M6X45	7	REAR PANEL U.E. MDB RAL9010 BUCC.	12	IP 68 PLUG CONNECTOR BULGIN 3 PIN (UE)
3	PLASTIC HANDLE	8	CONNECTOR FOR CONDENSED WATER DRAINAGE	13	BLOWER FAN Ø 400
4	SUPPORT HANDLE	9	PIVOTING JOINT	14	WATER CONNECTOR FEMALE
5	LATERAL PANEL RAL9010 BUCC.	10	SPACER 200mm E.U. MDB	15	WATER COOLER DOUBLE BLOCK 650X550

PT 23000 S – Part 6:



No.	Spare part	No.	Spare part
1	KIT IMBALLO U.E. MDB	6	PACKING KIT E.U. MDB
2	KIT IMBALLO U.I.	7	PACKING KIT I.U..

Disposal

Always dispose of packing materials in an environmentally friendly manner and in accordance with the applicable local disposal regulations.



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. You can also find out about other return options that apply for many EU countries on the website <https://hub.trotec.com/?id=45090>. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.

Further information is provided on the nameplate.

Dispose of the refrigerant appropriately and according to the national regulations.

Only for United Kingdom

According to Waste Electrical and Electronic Equipment Regulations 2013 (2013/3113) devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

Declaration of conformity

Declaration of conformity in accordance with the EC Machinery Directive 2006/42/EC, Annex II, Part 1, Section A

We – Trotec GmbH – declare in sole responsibility that the product designated below was developed, constructed and produced in compliance with the requirements of the EC Machinery Directive in the version 2006/42/EC.

Product model / product: PT 4500 S, PT 6500 S, PT 15000 S, PT 23000 S

Product type: air conditioner

Year of manufacture as of: 2018 (PT 15000 S) 2019 (PT 4500 S / PT 6500 S) 2021 (PT 23000 S)

Relevant EU directives:

- 2011/65/EU: 01/07/2011
- 2014/30/EU: 29/03/2014

Applied harmonised standards:

- EN 378-2:2016
- EN 55014-2:1997
- EN 55014-2:1997/AC:1997
- EN 55014-2:1997/A1:2001
- EN 55014-2:1997/A2:2008
- EN 55014-1:2017
- EN 55014-1:2017/A11:2020
- EN 60335-1:2012
- EN 60335-1:2012/A11:2014
- EN 60335-1:2012/A13:2017
- EN 60335-1:2012/AC:2014
- EN 60335-1:2012/A15:2021
- EN 60335-2-40:2003
- EN 60335-2-40:2003/A1:2006
- EN 60335-2-40:2003/A2:2009
- EN 60335-2-40:2003/A11:2004
- EN 60335-2-40:2003/A12:2005
- EN 60335-2-40:2003/A13:2012
- EN 60335-2-40:2003+A11:2012+AC:2013
- EN 60335-2-40:2003/AC:2006
- EN 60335-2-40:2003/AC:2010
- EN IEC 63000:2018

Applied national standards and technical specifications:

- EN IEC 55014-2:2021

Manufacturer and name of the authorised representative of the technical documentation:

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Place and date of issue:
 Heinsberg, 14.06.2021



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