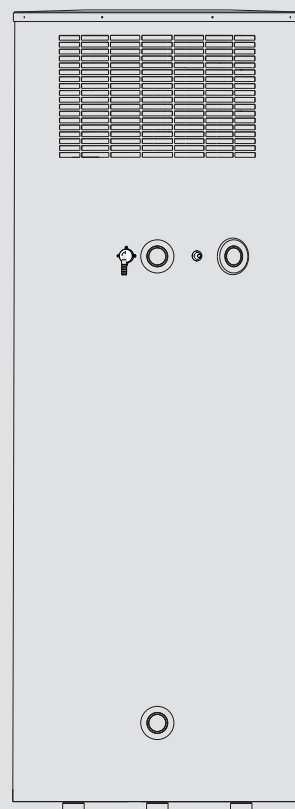


OPERATION AND INSTALLATION

DHW HEAT PUMP

- » WWK 300 A
- » WWK 300 AP
- » WWK 300 AH
- » WWK 300 AHP



STIEBEL ELTRON

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Symbols used in these instructions

Observe the following safety instructions:



Please note: Warning about possible dangers.



Note: Important information and tips.



Note: Carefully read these operating and installation instructions and keep them safe. Should the equipment change hands, pass these instructions to the subsequent owner. Pass them to the trained contractors for servicing purposes.

Positioning, installation and commissioning must be carried out by trained personnel working in accordance with these **operating and installation instructions**.

Where children or persons with limited physical, sensory or mental capabilities are to be allowed to control this equipment ensure that this will only happen under supervision or after appropriate instructions by a person responsible for their safety. Children should be supervised to ensure that they do not play with the equipment.



1. Operating instructions for users and contractors

1.1 Operation and control

The Stiebel Eltron domestic hot water heat pump WWK 300 A/AP/AH/AHP (DHW) is a DHW generator that operates automatically and has a capacity of approx. 300 l. The water temperature is permanently set to 60 °C.

The device is installed, connected and handed over ready for use by a qualified contractor. Nevertheless, you should familiarise yourself with the most important technical features of your heat pump.

1.2 Device description

The device extracts heat from the ambient air.

This energy is used to heat the water inside the cylinder. Where the device is installed inside a room, this is cooled down through the heat extraction by approx. 1 to 3 °C. The device also extracts moisture from the ambient air that creates condensate, which must be drained off. For this purpose, a condensate drain is integrated into the unit.

Special features of the WWK 300 AH and WWK 300 AHP

An electric booster heater is integrated for heating approx. 100 litres of water in the upper sector of the DHW cylinder.

1.3 Correct operation

The DHW heat pump is designed for extracting heat from the ambient air and the utilisation of that energy for heating domestic hot water. The DHW heat pump can be installed in the open as well as in enclosed spaces.

1.4 Incorrect operation

The following are not permitted:

- The utilisation of greasy extract air.
- The heating of liquids other than domestic hot water.
- The installation of the equipment:
 - a) in rooms where the temperature is below the freezing point.
 - b) in rooms where the device is at risk from explosions as a result of dust, gases or vapours.
- Operation of the device with an empty cylinder.

1.5 Function description

Heat pump operation

This is the standard operating mode, to which the limits of scope of the heat pump apply (see: Specification). To heat up the cylinder capacity of approx. 300 litres of water in accordance with EN 255 part 3 to 60 °C, the WWK 300 A requires:

$\tau_{\text{Heat-up}}$	ϑ_{Room}	F_{rel}	$\vartheta_{\text{Cold water}}$	COP (t) WWK 300 A/AP
10.1 h	15 °C	70 %	15 °C	3.19/3.3
5 h	42 °C	70 %	15 °C	5.61

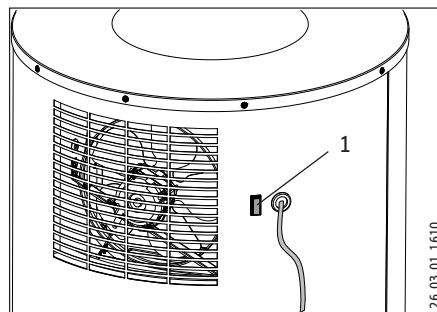
! If the heat pump is switched OFF and ON again, for instance after a power failure, the compressor will only re-start (after approx. 3 minutes), when the pressure inside the refrigerant circuit has normalised again.

Electric booster heater (only for the WWK 300 AH and WWK 300 AHP)

If there is a higher DHW demand or the WWK was switched OFF because you require hot water quickly, you can accelerate the heat-up process by means of the electric booster heater. For reasons of saving energy, the electric booster heater will only heat up approx. 100 litres of water in the upper section of the cylinder.

The control thermostat of the electric booster heater is preset to 60 °C and will be restarted when the DHW temperature falls below 45 °C. This safeguards not only that primarily the heat pump provides hot water, but also that you enjoy a high level of DHW convenience when large amounts of hot water are drawn.

The red ON indicator illuminates when the electric booster heater is switched on.



1 Red indicator

1.6 Operation with active defrost feature

WWK 300 A and WWK 300 AH

Subject to the relative humidity and the DHW temperature, the evaporator begins to build up hoar frost at an ambient temperature of below 6 °C.

If the evaporator is covered in hoar frost, the frost monitor N2 (see wiring diagram Fig. 7 and 9) switches the fan OFF, whilst the compressor continues to run, and the changeover valve V2 routes the hot gas directly to the evaporator. For this, the condenser is shut off by changeover valve V1 (see Fig. 5). When the temperature at the evaporator fins rises above 3 °C, the fan is started again, and DHW heating continues.

The DHW heat pump can be operated at ambient temperatures as low as 0 °C. The evaporator is defrosted according to demand in the temperature range 0 °C to +6 °C. This extends the heat-up time.

Ambient temperature

! The heat pump must not be installed in areas where ambient temperatures frequently exceed 42 °C or areas where temperatures frequently drop below 0 °C

1.7 Operation with passive defrost feature

WWK 300 AP and WWK 300 AHP

The limit of application of the WWK AP / AHP (without hot gas defrost feature) is set to 6 °C.

However, with this limit of application, the evaporator may build up hoar frost subject to air temperature and relative humidity, particularly when the DHW temperature is low. The compressor will be switched OFF as soon as the evaporation temperature lies below -7 °C for any length of time. When the temperature at the evaporator fins rises above 3 °C, the compressor are started again, and the DHW heating continues.

Ambient temperature


! The heat pump must not be installed in areas where ambient temperatures frequently exceed 42 °C or areas where temperatures frequently drop below 6 °C.

! Always operate the unit with a full water tank, otherwise high pressures will develop in the refrigeration system, causing it to shut down. A manual reset will be necessary afterwards to restart the unit.

1.8 Maintenance and cleaning

The device is generally maintenance free, with the exception of cleaning the condensate drain.

A damp cloth is sufficient for cleaning all plastic parts. Never use scouring or solvent-based cleaning agents.

 **Please note: Maintenance work, e.g. checking the electrical safety, must only be carried out by a qualified contractor.**

- Check the condensate drain at least monthly at the bottom outlet and at the top condensate pan drain (visual check, see Fig. 3 and Fig. 4, pos. 15). Remove contaminants and blockages immediately.
- For the WWK 300 AH and WWK 300 AHP, it is recommended that the electric booster heater be descaled from time to time. This will result in prolonged life for the electric booster.
- Your local contractor, who is familiar with the local water quality, should identify for you the timing of the next service.
- Ask your local contractor to regularly check the safety assembly and the electric booster heater.
- The device is subject to mains water pressure. The expansion water drips from the safety valve during heat-up. Inform your local contractor of water drips from the system after the heat-up process has ended.
- To protect the steel cylinder against corrosion, the interior is coated with a special enamel and is furthermore equipped with a protective anode. Ask your local contractor to check the protective anode regularly.

1.9 Troubleshooting by the user

No hot water

Should you fail to obtain hot water at any time, you can take the following steps to remedy that situation.

No electrical power


Check the fuse/circuit breaker in your fuse box. If it has blown/tripped, replace/reset the fuse/MCB. If it should blow/trigger repeatedly, notify your local contractor.

Still no hot water, even though power is available

Check, whether the air inlet/outlet is blocked.

The thermostitch trips out or the high limit safety pressure limiter switches the compressor OFF if the compressor is overloaded due to excessive ambient temperature or excessive air temperature (>42 °C), or because of a fault in the refrigerant circuit. Ask your local contractor to remove the fault.

After a short cooldown phase, the thermostitch will restart the compressor automatically.

 **The high limit safety pressure limiter must only be reset by your contractor after he has removed the cause of the relevant fault.**

Other issues

Safety valve of the cold water supply line drips

This may occur during the heat-up phase and is completely normal.

The condensate drain drips

This always happens when the surface temperature of the evaporator is lower than the ambient dew point temperature.

For all other faults, consult your contractor.



2. Installation instructions for contractors

2.1 Regulations and standards

- The installation (water and electrical work) and commissioning, as well as the maintenance of this equipment, must only be carried out by an authorised qualified contractor in accordance with these instructions.
- Perfect function and safe operation can only be assured when using original accessories and spare parts intended for this equipment.
- DIN VDE 0100 / DIN VDE 0701
- Regulations of your local electricity supply utility.
- DIN 1988 / DIN 4109
- Regulations of your local water supply utility.

The following standards were taken into account:

AS 4234, AS 3498, AS 4020, AS 1056.1
 AS/NZS 2712, AS/NZS 3350.2.40/30/30.2
 IEC 60335-1-2-40, IEC 61000-3-2; 1995
 IEC 61000-3-3, IEC 55014-1 IEC 55014-2
 EMC Directive 89/336/EEC
 EN 255 T3

Also observe the following:

- The equipment type plate
- The specification
- Water installation
 - Observe the AS/NZS 3500. [local regulations].
 - **Material of the cold water line:**
Steel, copper or plastic pipe systems.
 - **Material of the hot water line:**
Copper or plastic pipe systems.

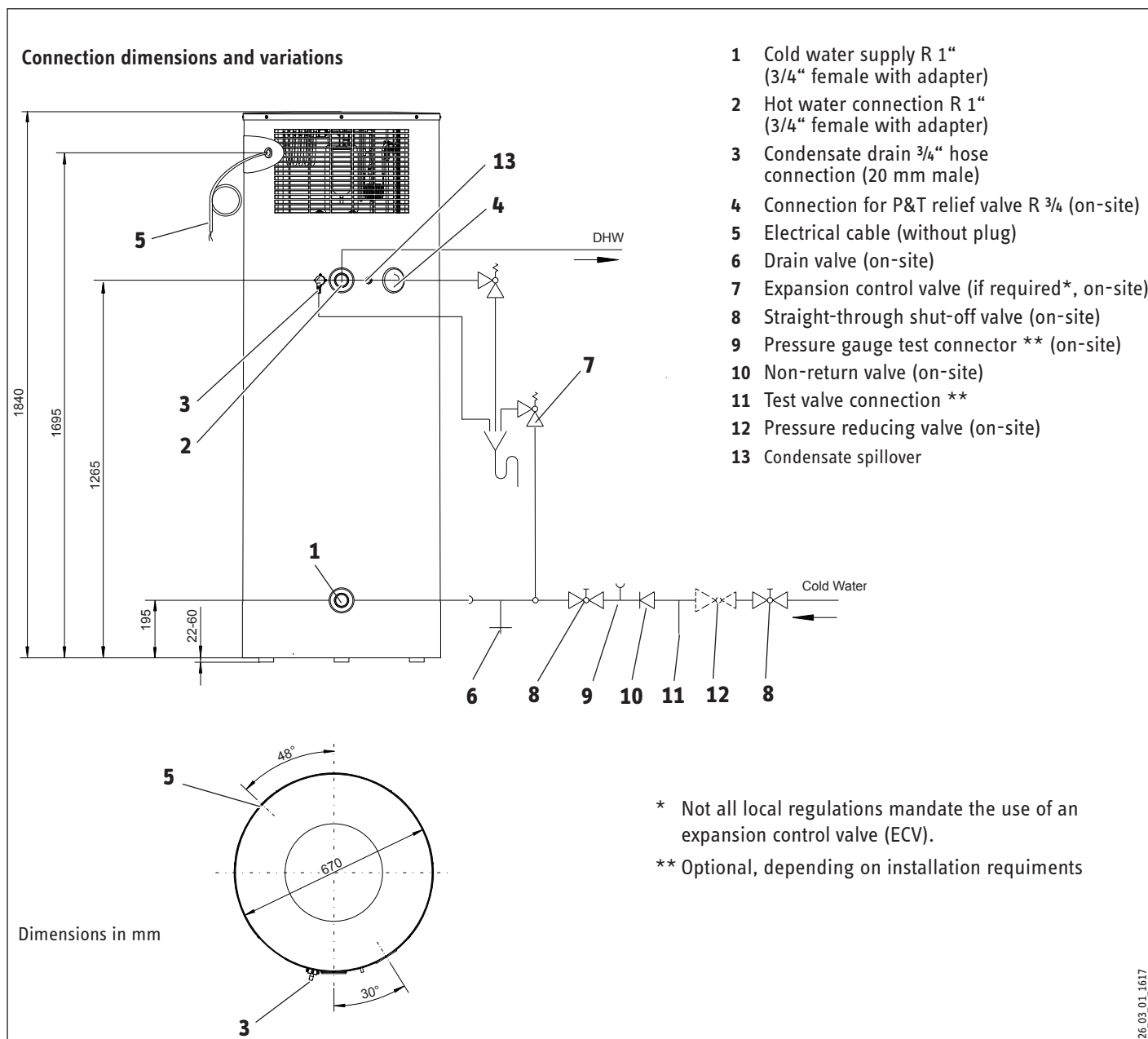


Fig. 1

2.2 Installation

Transport

To protect the equipment against damage, it must be transported vertically inside its dedicated packaging. Where space is restricted, you may also briefly move the equipment tipped backwards at an angle.

Positioning

- Position the device in the installation location.



Note: Ensure that the casing panel in the lower area of the device is not damaged during positioning.

- Remove packing straps and polystyrene mouldings.
- Level the device by adjusting the equipment feet.
- After leveling the device fix the nut of the rubber feet to provide a maximum of structural safety.

External installation

The location where the WWK is to be installed must meet the following conditions:

- Load-bearing floor (wet weight of the WWK approx. 430 kg).
- Never operate the WWK in rooms at a risk from explosion due to dust, gases or vapours.
- It is preferred that the location of the unit is not near a bedroom or a neighbour's bedroom. Ideally a unit may be mounted near a kitchen or laundry. Opposite a neighbour's garage is always preferred.
- The water heater should be located as close as possible to the most frequently used hot water tap connection.
- Ensure that the data plate is clearly visible.
- Ensure that the ambient temperature lies within the application limits for heat pump operation.

Internal installation

The room where the WWK is to be installed must meet the following conditions:

- Load-bearing floor (wet weight of the WWK approx. 430 kg).
- Never operate the WWK in rooms at a risk from explosion due to dust, gases or vapours.
- Include in your considerations the

utilisation of waste heat, for example from a boiler, tumble drier or refrigerator/freezer.

- The available floor area in the installation room must be at least 6 m². Never install this equipment in rooms with a volume of less than 13 m³.
- Never restrict the clearances of the WWK through walls and ceilings further than illustrated in Fig. 2.
- The room temperature must never fall below 0 °C, as the ambient temperature will be reduced by approx. 1-3 °C through the heat pump operation. The initial temperature is reached again approx. ½ h after the heat pump has been switched OFF.

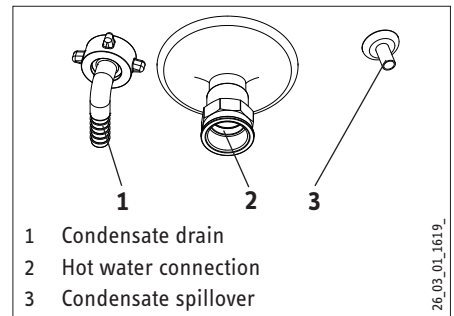
When installing the heat pump in a boiler room, ensure that the boiler operation will not be impaired.

2.3 Water connection

- Remove the protective caps from the connectors.
- With a sharp knife, cut a hole into the protective caps and invert over the pipe to be connected.
- Connect the pipe and refit the protective caps.



Please note: To protect against the risk of corrosion, make the connection as flat packing seal. The use of hemp on connections is not acceptable.



Insulate the DHW line in accordance with local regulations.

Accurately maintain the order of fittings on the cold water side (see Fig. 1).

Flush the line prior to installation.

Install a drain valve at the lowest point of the cold water supply inlet for future maintenance of the tank.

Install a 700 kPa pressure and temperature relief valve (PTRV) (Fig. 1, pos. 4).

Observe the requirements for expansion control valve (ECV) (Fig. 1, pos. 7). In such case, use a 550 kPa valve.

A pressure reduction valve (PRV) must be fitted (Fig. 1, pos. 12) and adjusted to a maximum of 500 kPa. If the ECV is required, set PRV to a maximum of 420 kPa.

Please observe the following:

- Supply and drain pipe sizes should be equal to safety valve sizes.
- Size the drain so that water can drain off, even if the safety valve has been fully opened.
- The drain outlet must not be able to be closed and must always remain open to atmosphere.

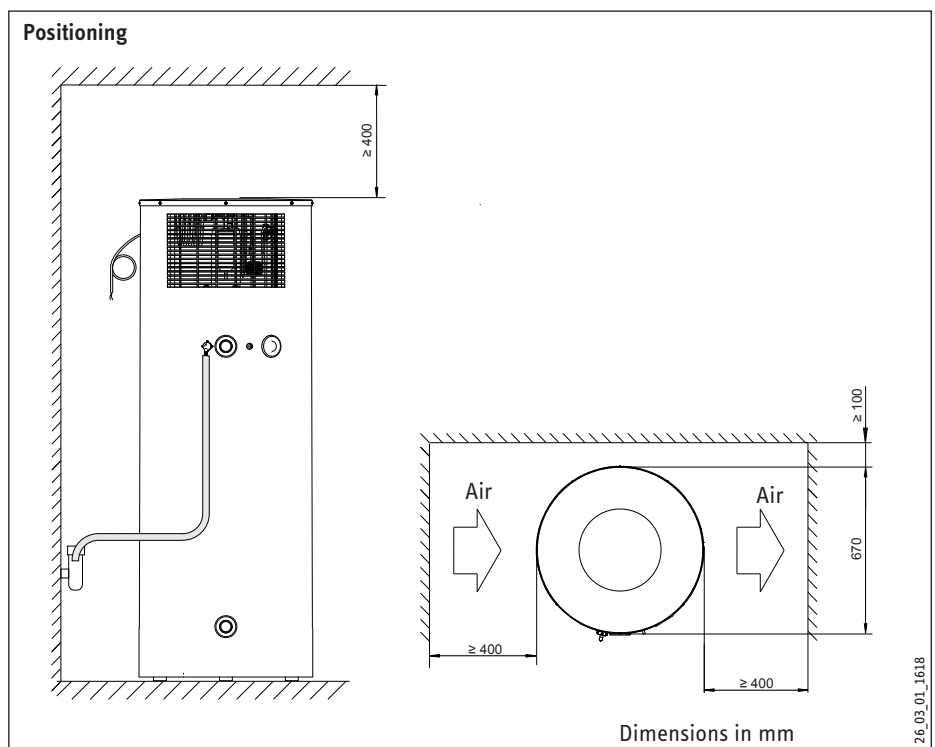


Fig. 2

Condensate drain

The device is designed so that, if it is installed externally, the condensate through a suitable drain hose can freely drain away. However, the condensate can also (in case of internal installation or local regulations) be routed away, to a garden bed, a drain in the floor or a wall drain.



Note: Never kink the hose, to ensure the condensate drains perfectly.

If required install a condensate pump.

2.4 Power supply

Only qualified electricians must carry out the installation in accordance with these instructions.



Please note: Before any work, isolate the equipment from the power supply at the control panel.

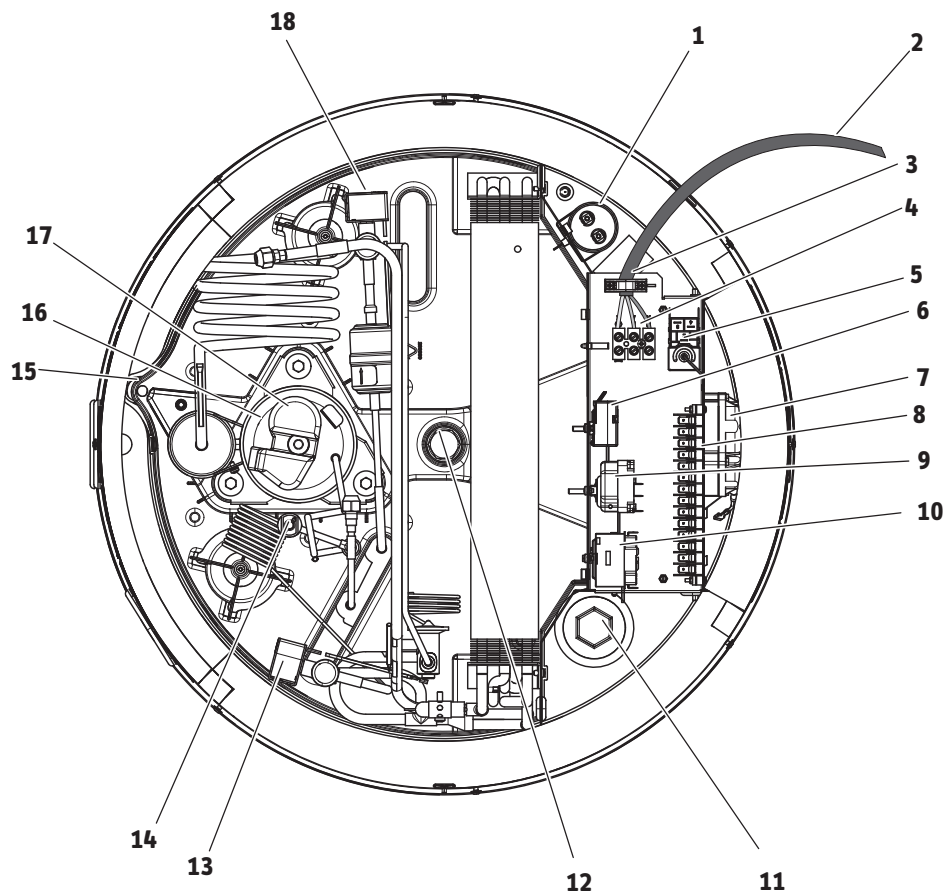
Observe VDE 0100 [or local regulations] and the regulations of your local power supply utility.

The appliance is intended to be permanently connected to fixed wiring. For the connection to the power supply the fitted supply cord has to be used. (Fig. 3 and 4, pos. 2)

The DHW heat pump must be able to be separated from the mains power supply by an additional isolator, which disconnects all poles with at least 3 mm contact separation. For this purpose, use contactors, mains isolators, fuses, etc. on site.

Terminals are located inside the control panel and become accessible by removing the equipment lid and the cover of the wiring chamber).

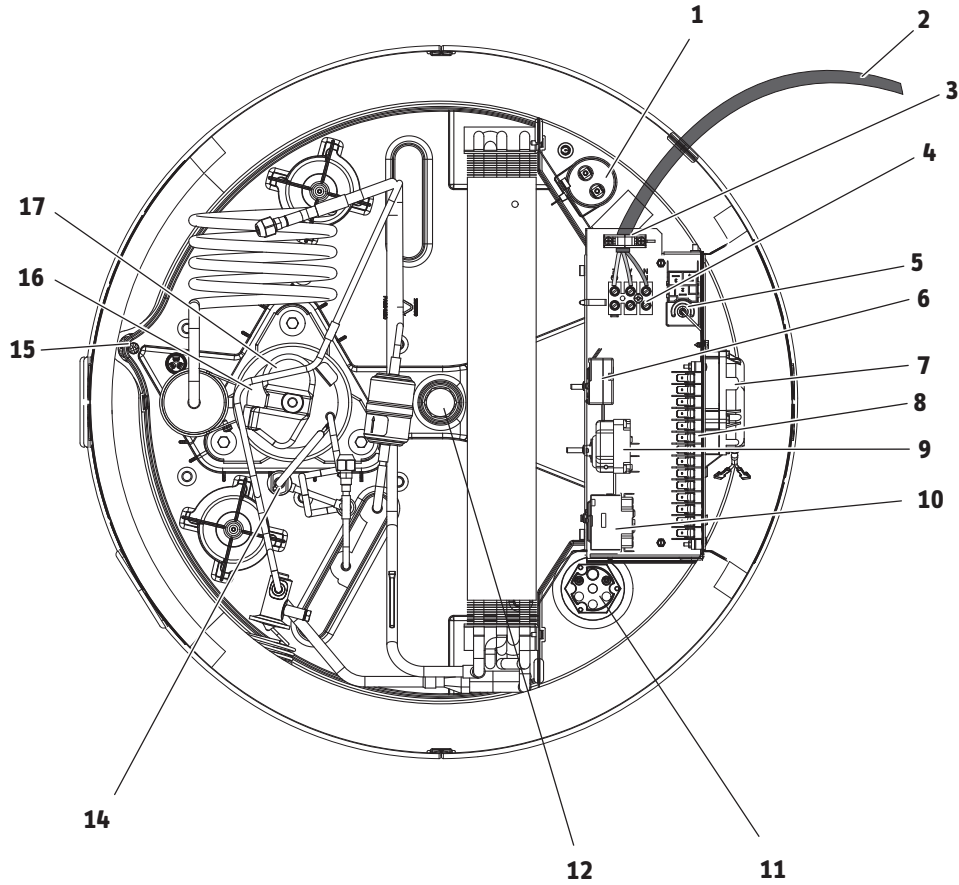
WWK 300 A/WWK 300 AH:



- | | |
|---|--|
| 1 Capacitor | 10 High limit safety cut-out Electric booster heater (only for the WWK 300 AH) |
| 2 Electrical cable | 11 Electric booster heater (only for the WWK 300 AH) |
| 3 Strain relief | 12 Protective anode |
| 4 Power terminals | 13 Solenoid valve V1 |
| 5 Frost monitor | 14 Safety high pressure limit |
| 6 Heat pump control thermostat | 15 Condensate pan drain |
| 7 Ventilator | 16 Compressor |
| 8 Heat pump terminal | 17 Compressor motor protection (Klixon) |
| 9 Control thermostat, electric booster heater, not shown, points at place (only for the WWK 300 AH) | 18 Solenoid valve V2 |

Fig. 3

WWK 300 AP/WWK 300 AHP:



- | | |
|--|---|
| <ul style="list-style-type: none"> 1 Capacitor 2 Electrical cable 3 Strain relief 4 Power terminals 5 Frost monitor 6 Heat pump control thermostat 7 Ventilator 8 Heat pump terminal 9 Control thermostat, electric booster heater, not shown, points at place (only for the WWK 300 AHP) | <ul style="list-style-type: none"> 10 High limit safety cut-out Electric booster heater (only for the WWK 300 AHP) 11 Electric booster heater (only for the WWK 300 AHP) 12 Protective anode 14 Safety high pressure limit 15 Condensate pan drain 16 Compressor 17 Compressor motor protection (Klixon) |
|--|---|

Fig. 4

26.03.01.1402

2.5 Commissioning

Only approved contractors may commission this equipment and instruct the owner in its use.

Commissioning

- Fill, vent and thoroughly flush the device.
- Check the safety assembly. Inform the user that water may drip from the safety valve whilst the water is being heated up.
- Switch ON the power supply

Note:


- Never operate the equipment outside the temperature range 0 °C to + 42 °C. At temperatures below - 10 °C (e.g. transport/storage), the safety temperature cut-out may respond. Press the reset button after the temperature is much higher than -10 °C (Fig. 3 and 4, pos. 10).

2.6 Safety equipment and maintenance

Only qualified contractors must carry out the installation in accordance with these instructions.

On the equipment

In case of a fault, the safety equipment of the WWK 300 interrupts the relevant power circuit.

 **Please note: Before any work on the equipment, disconnect all poles from the mains.**

High limit safety cut-out (STB) electric booster heater

Equipment with electric booster heater is stopped if the DHW temperature exceeds 95 °C.

When the source of the fault has been removed, reset the high limit safety cut-out by pressing the reset button (Fig. 3 and 4, pos. 10).

The heat pump top cover should be opened for access to this device as shown in Fig. 3 and Fig. 4.

Safety high pressure limiter (SDBK)

The safety high pressure limiter shuts down the compressor, if the pressure inside the refrigerant circuit exceeds the permissible maximum value. The safety high pressure limiter may also respond, if the appliance is operated above its permissible limit (>42 °C air temperature) or the control thermostat of the heat pump fails to respond. Reset the high pressure limit safety cut-out by pressing the reset button (Fig. 3 and 4, pos. 14), after the cause of the fault has been removed.

Protective motor thermoswitch

The protective motor switch will shut down the compressor, if it is overloaded because of excessive thermal load. Remove the relevant fault. After a short cool-down phase, the protective motor switch restarts the compressor automatically.

Protective anode

An anode for the protection of the DHW cylinder is inserted centrally from the top into the DHW cylinder of the appliance (Fig. 3 and 4, pos. 12). The anode fitted at the factory (anode rod) is approximately 1.26 m long.

Replace the anode with a new one if the installed one has been consumed. When

installing the anode, ensure that the metallic conductor connection is correctly made. It's recommended for first anode inspection to happen one year after installation.

Consult with your water specialist, or contractor, for the optimum timing for inspections thereafter. Should it be impossible to insert a rod anode, you may have a sectional anode installed instead. In areas where total dissolved solids (TDS) in the water is outside the range 40-400 mg/l, the magnesium alloy anode supplied, M2, must be replaced. Use a high potential, M1, anode if TDS < 40 or an aluminium A5 alloy anode if TDS > 400, before installing the unit.

Cleaning the evaporator

Maintaining the full output of the WWK 300 requires an occasional professional cleaning of the evaporator. Clean the evaporator only with water and a brush. Never use acidic or alkaline cleaning solutions.



WARNING Injury risk

The evaporator has many sharp-edged fins. When cleaning the evaporator, proceed with caution and wear protective clothing, in particular safety gloves.

Further information regarding the equipment:

- **Descaling (only if a booster heater is installed)**
 - Close the shut-off valve in the cold water supply to the tank.
 - Draw water from the tank to relieve the pressure inside the appliance.
 - Unscrew the booster heater flange. To undo the flanged immersion heater, you require a 1½" pipe wrench. The pipe wrench must be hollow so it can be guided over the connecting cables.
 - Immerse scaled sections of the heater rod into a descaling liquid (for example citric acid), until the limescale has dissolved from the heater rod.
 - Flush the descaling liquid off and allow the immersion heater to dry.

● Draining the cylinder:

- Close the shut-off valve in the cold water supply.
- Fully open the hot taps at all draw-off points.
- The cylinder is drained via the cold water inlet line. Open the drain valve (fig. 1, pos. 6). If no drain valve was installed, undo the fitting on the cold water supply of the appliance. Residual water remains in the lower part of the cylinder.



Note: Hot water can be expelled during draining.

On the system

Safety valve (on-site)

This valve opens when the water pressure exceeds the preset value of 0.6 MPa (6 bar) thereby relieving the pressure. It is adjusted so that no water will be expelled when heating is switched OFF. Should it continue to drip excessively, either the valve seat has become contaminated, the water pressure is too high or the pressure reducing valve has become faulty.

Pressure reducing valve (on-site provision)

Check the valve for perfect function. Replace it, if required.

Regular valve maintenance

Safety requires that valves are regularly checked for perfect function. For this, regularly vent the safety valve until a full stream of water flows from it. Close the safety valve after checking.

How quickly limescale builds up depends on the local water quality.

As your local contractor is familiar with your local water quality, let him determine the timing of this check.



WARNING

If the hot water unit is not used for two or more weeks, an amount of highly flammable hydrogen gas may accumulate in the water tank. To dissipate this gas safely, it is recommended that a hot tap be turned on for several minutes or until discharge of gas ceases. Use a sink, basin or bath outlet, but not a dishwasher, clothes washer or other appliance. During this procedure, there must be no smoking, open flame or any electrical appliance operating nearby. If hydrogen is discharged through the tap, it will probably make an unusual sound as with air escaping.

Operation with active defrost feature WWK 300 A and WWK 300 AH

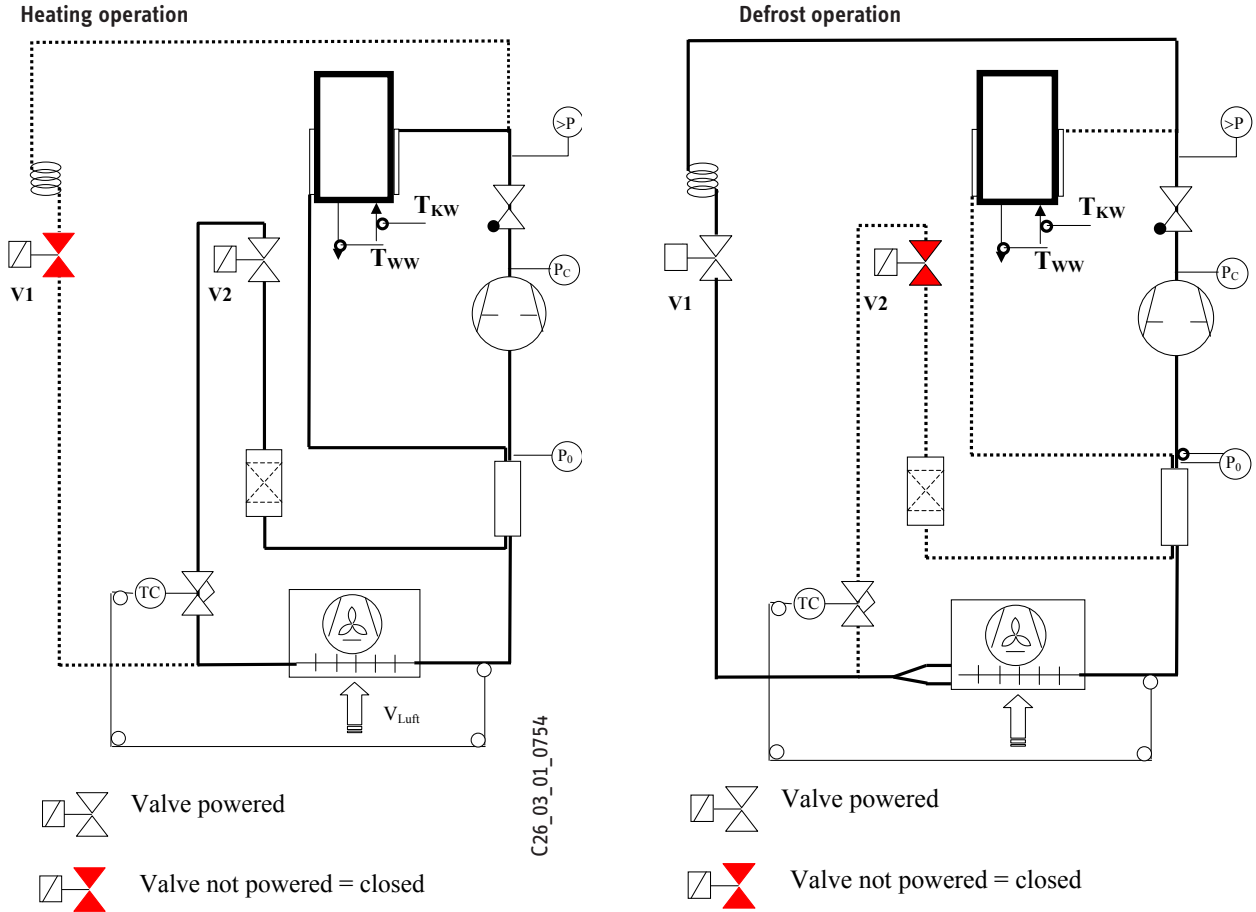


Fig. 5

Refrigerant circuit layout with passive defrost feature WWK 300 AP and WWK 300 AHP

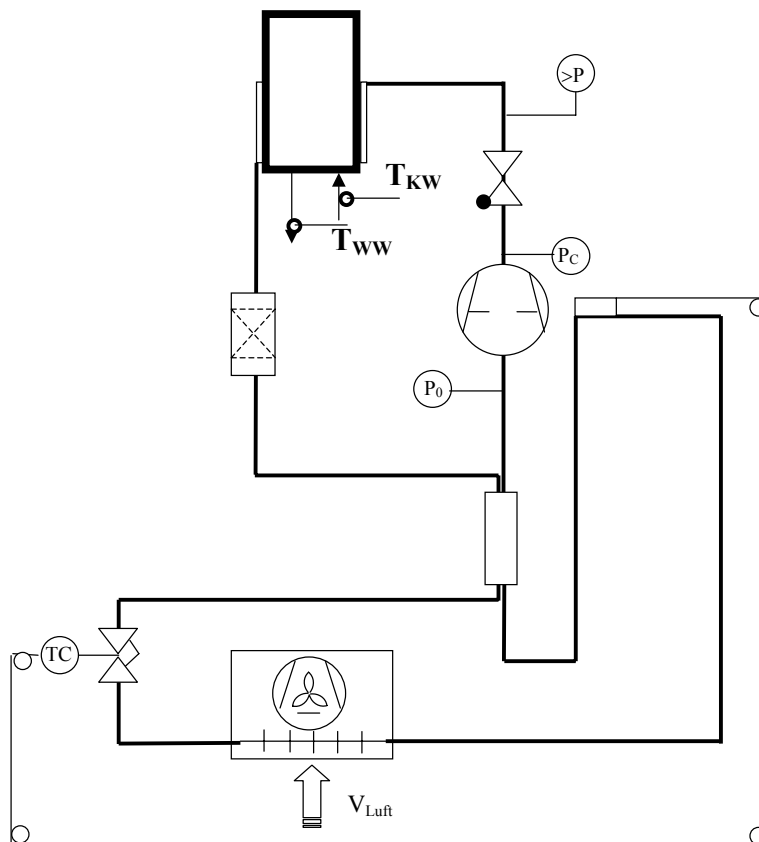
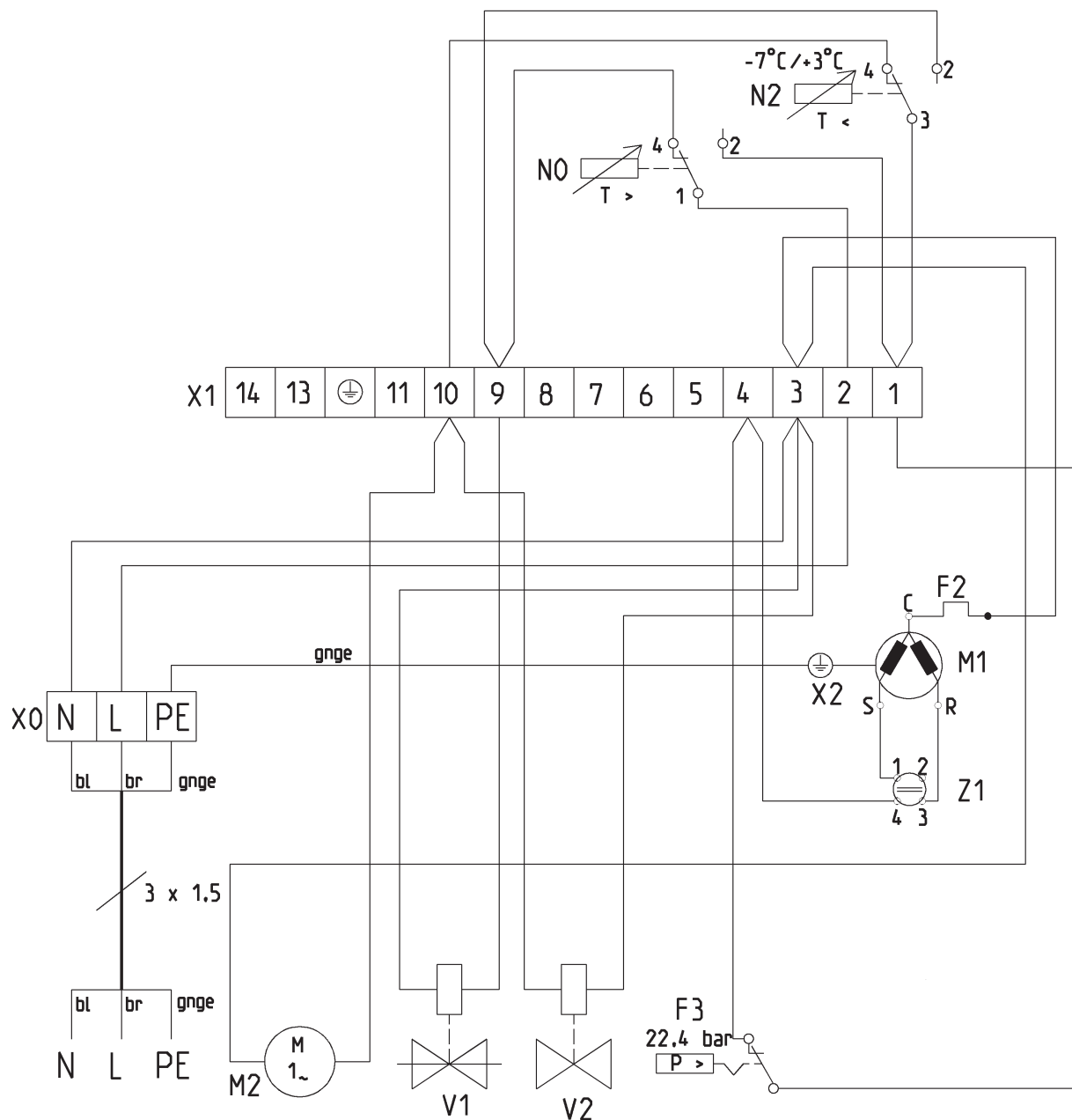


Fig. 6

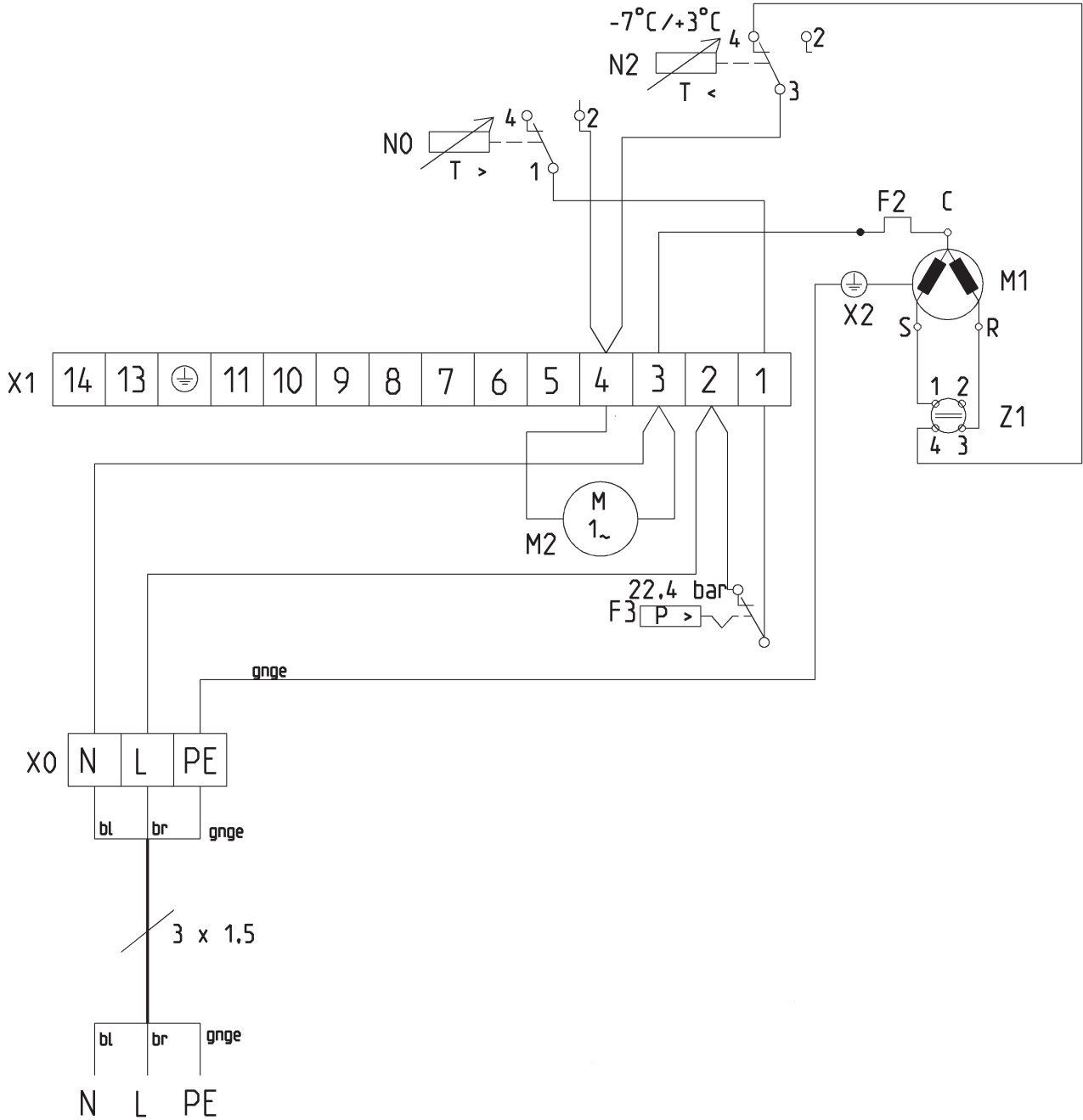
Wiring diagram WWK 300 A



- F2 Compressor motor protection (Klixon)
- F3 High limit safety cut-out
- M1 Compressor
- M2 Fan
- N0 Heat pump control thermostat
- N2 Frost monitor
- V1 Solenoid valve
- V2 Solenoid valve
- X0 Power terminals
- X1 Heat pump terminals
- X2 Anode terminal earth
- Z1 Capacitor

Fig. 7

Wiring diagram WWK 300 AP



- F2 Compressor motor protection (Klixon)
- F3 High limit safety cut-out
- M1 Compressor
- M2 Fan
- N0 Heat pump control thermostat
- N2 Frost monitor
- X0 Power terminals
- X1 Heat pump terminals
- X2 Anode terminal earth
- Z1 Capacitor

Fig. 8

Wiring diagram WWK 300 AH

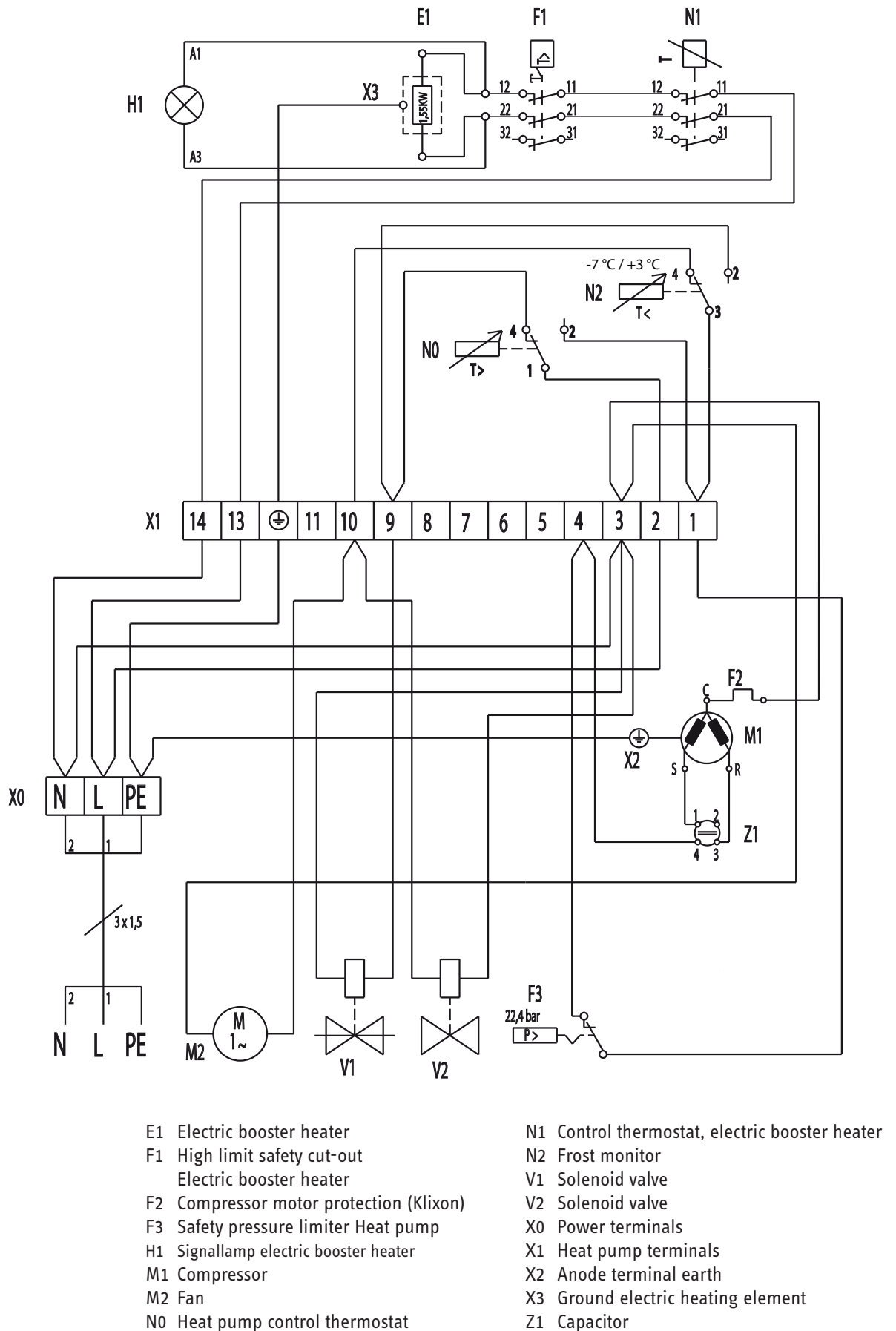
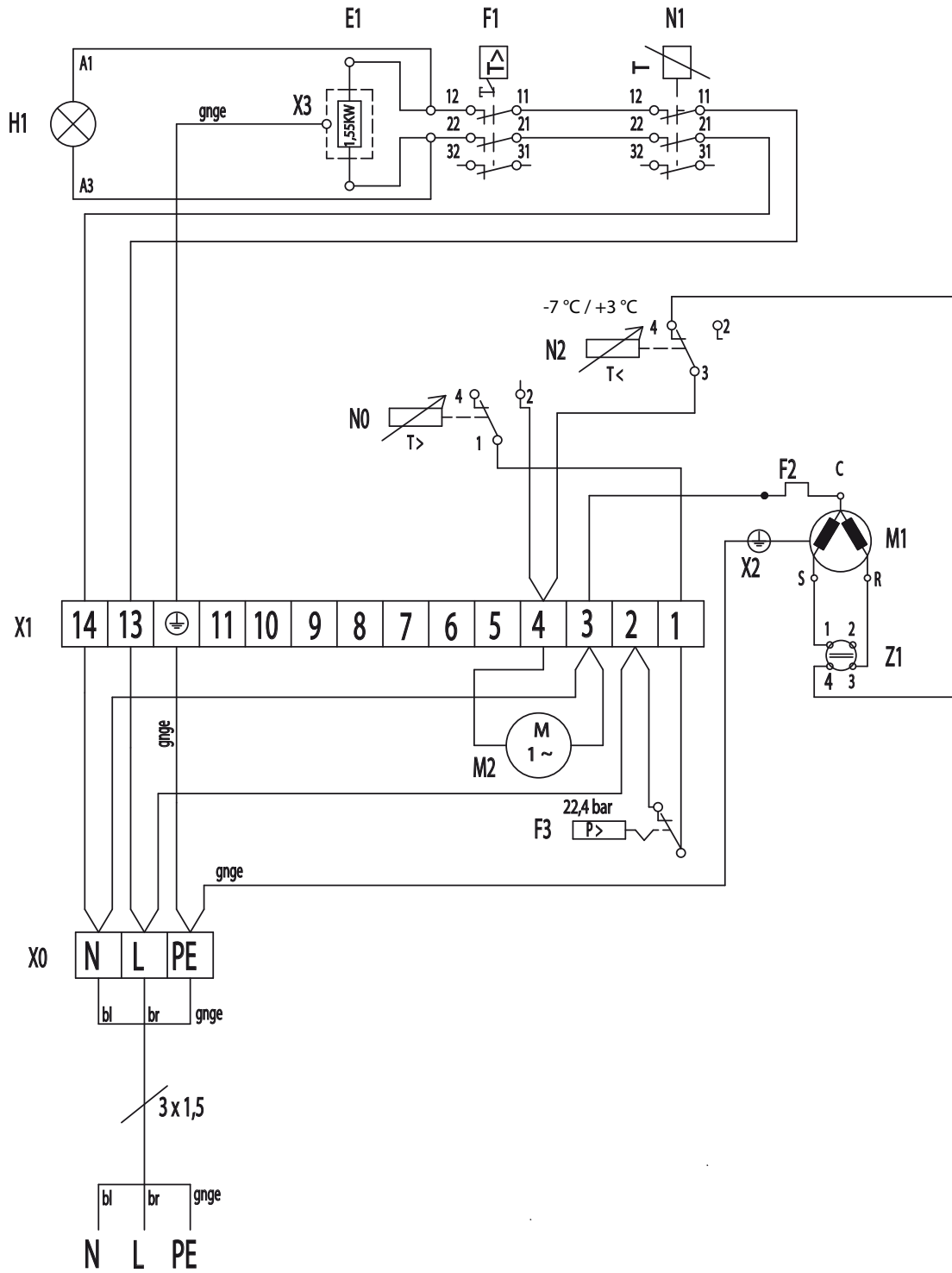


Fig. 9

Wiring diagram WWK 300 AHP



- | | | | |
|----|--|----|---|
| E1 | Electric booster heater | N0 | Heat pump control thermostat |
| F1 | High limit safety cut-out
Electric booster heater | N1 | Control thermostat, electric booster heater |
| F2 | Compressor motor protection (Klixon) | N2 | Frost monitor |
| F3 | Safety pressure limiter Heat pump | X0 | Power terminals |
| H1 | Signallamp electric booster heater | X1 | Heat pump terminals |
| M1 | Compressor | X2 | Anode terminal earth |
| M2 | Fan | X3 | Ground electric heating element |
| | | Z1 | Capacitor |

Fig. 10

2.7 Specification

		WWK 300 AP	WWK 300 AH	WWK 300 A	WWK 300 AHP
		227069	227070	222422	227071

Outputs to EN 14511

Heating output L15/F70/W55	kW	1.7	1.7	1.7	1.7
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Power consumptions to EN 14511

Power consumption - booster heater	kW		1.69		1.69
Power consumption L15/F70/W55	kW	0.5	0.5	0.5	0.5

Coefficients of performance to EN 14511

Coefficient of performance L15/F70/W55 (EN 14511)		3.5	3.4	3.4	3.5
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Sound data

Sound pressure level at 1 m distance in a free field	dB(A)	56	56	56	56
Sound power level (EN 12102)	dB(A)	64	64	64	64

Electrical

Fuses	A	C 10	C 10	C 10	C 10
Rated voltage	V	240	240	240	240
Phases		1/N/PE	1/N/PE	1/N/PE	1/N/PE
Frequency	Hz	50	50	50	50
Power consumption	kW	0.7	2.25	0.7	2.25
Max. power consumption	kW	0.7	2.25	0.7	2.25
Rated current	A	2.5	2.5	2.5	2.5

Versions

IP-Rating		IP24	IP24	IP24	IP24
Refrigerant		R134A	R134A	R134A	R134A

Dimensions

Height	mm	1903	1903	1903	1903
Diameter	mm	660	660	660	660
Height of unit when tilted	mm	1990	1990	1990	1990
Height when tilted incl. packaging	mm	2200	2200	2200	2200
Cylinder capacity	l	303	303	303	303

Weights

Weight (dry)	kg	125	130	125	130
Weight (wet)	kg	428	432	428	432

Connections

Condensate drain		G 3/4	G 3/4	G 3/4	G 3/4
Water connection		R 1" (R 3/4" female with adaptor)	R 1" (R 3/4" female with adaptor)	R 1" (R 3/4" female with adaptor)	R 1" (R 3/4" female with adaptor)

Values

Lower air temperature limit	°C	6	0	0	6
Upper air temperature limit	°C	42	42	42	42
Max. DHW temperature	°C	60	60	60	60
HP DHW temperature	°C	60	60	60	60
Air flow rate	m ³ /h	550	550	550	550
Refrigerant capacity	kg	0.9	0.9	0.9	0.9
Permissible operating pressure - DHW	kPa	700	700	700	700

Accessories

Type	Part Number	Description
PK 10	229286	Condensate pump

WARRANTY

For guarantees please refer to the respective terms and conditions of supply for your country.

The installation, electrical connection and first operation of this appliance should be carried out by a qualified installer.

The company does not accept liability for failure of any goods supplied which have not been installed and operated in accordance with the manufacturer's instructions.

WARRANTY - Australia only

Stiebel Eltron (Aust) Pty Ltd warrants the domestic range of heat pump water heaters (WWK300 and WWK300 A) to be free from defects in material and workmanship under normal use and service in accordance with the following terms:

1. Repair or if necessary replace the water heater, or
2. Replace any component which falls within the warranty period as specified below (subject to the conditions and exclusions thereafter referred to)
 - 5 years for the cylinder and condenser
 - 2 years for the sealed refrigeration system, including compressor, evaporator, valves and associated pipe work.
 - 1 year for all other componentry (electrical)

The above shall not apply to such water heaters or part thereof which, in our opinion, have been subject to any accident, alteration, abuse or misuse or have suffered any damage by flood, fire or act of God, or if any repairs have been made or attempted to be made by any person or persons not approved by us. The warranties shall not extend to any loss suffered by, or resulting from, the non-operation of the water heater or part thereof.

Major components (tank & refrigeration system) may carry additional warranty for units that are installed under some state and council rebate schemes applicable to solar and heat pump water heaters. In such cases, the installation must strictly comply with all conditions and requirements set forth in the scheme for which a rebate is claimed. Please contact us for more information.

We will not incur any obligation or liability whatsoever under the warranties for any damage or harm which may arise directly or indirectly as a result of the water heater being installed by other than registered qualified plumbers or being connected to a water or power supply not in accordance with the regulations of the relevant electric, water and health authorities.

The following items are specifically excluded from the normal terms of warranty.

1. Damage as the result of transportation, removal, or storage.
 2. Damage or faulty operation due to adverse water conditions and/or proper precautions not having been followed:
 - Inappropriate anode or replacement regime used
 - If water is highly conductive or of high mineral content with a TDS > 2500 mg/L
 - If the Langelier Saturation Index (LSI) of the water is outside the range $-1.0 < \text{LSI} < 0.8^*$
- * The LSI is a numeric value indicating whether water is scale forming or corrosive. It factors in pH, Total Alkalinity, Calcium Hardness and water temperature.
- If the unit is used with bores, dams or swimming pool water

3. Damage or faulty operation due to foreign matter in the water supply, incorrect installation (eg. air flow restricted) or faulty equipment used (eg. damaged valves).

Notwithstanding anything contained herein, the units shall continue to be subject to any implied warranty provided by the Trade Practices Act 1974 (as amended) if and to the extent, that said Act is applicable and prevents the exclusion, restriction or modification of that warranty.

This free service will apply, in principle, to metropolitan and other accessible areas. If the unit is located in a remote area an extra service charge may be applicable due to travel.

Service costs by others are not covered by the Warranty and are at the user's expense. In the event of any claim being made under the warranty, it is the original purchaser's responsibility to provide evidence of purchase and date of purchase.

A nominal service charge may be made should the appliance be found to be in normal working condition and the problem located elsewhere.

STIEBEL ELTRON (AUST) PTY LTD

Unit 4, 8 Rocklea Drive Port Melbourne, VIC, 3207

PH: 1800 153 351 - Fax: 03 9645 4366

ENVIRONMENT AND RECYCLING

Please help us to protect the environment by disposing of the packaging in accordance with the national regulations for waste processing.

KYOTO | R134a

This device is filled with refrigerant R134a.

Refrigerant R134a is a CFC greenhouse gas mentioned in the Kyoto protocol with a global greenhouse potential (GWP) = 1300.

Never release refrigerant R134a to atmosphere.

Deutschland

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* 0,09 €/min bei Anrufen aus dem deutschen Festnetz.
Maximal 0,42 €/min bei Anrufen aus Mobilfunknetzen.

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STIEBEL ELTRON



Irrtum und technische Änderungen vorbehalten | Subject to errors and technical changes! | Sous réserve d'erreurs et de modifications techniques! | Onder voorbehoud van vergissingen en technische wijzigingen! | Salvo error o modificación técnica! | Rätt till misstag och tekniska ändringar förbehålls! | Excepto erro ou alteração técnica | Zastrzeżone zmiany techniczne i ewentualne błędy | Омпы а technické změny jsou vyhrazeny! | A muszaki változtatások és tévedések jogát fenntartjuk! | Возможность неточностей и технических изменений не исключается. | Chyby a technické zmeny sú vyhradené! | Stand 06/10