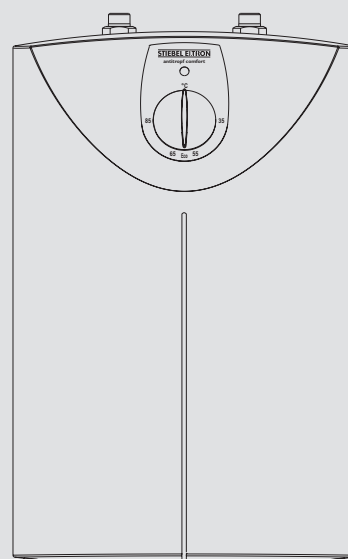


OPERATION AND INSTALLATION

Open vented (non-pressurised) small water heater

» SNU 5 SLi



STIEBEL ELTRON

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OPERATION

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GUARANTEE

ENVIRONMENT AND RECYCLING

SPECIAL INFORMATION OPERATION

- The appliance may be used by children aged 3 and older and persons with reduced physical, sensory or mental capabilities or a lack of experience and know-how, provided that they are supervised or they have been instructed on how to use the appliance safely and have understood the resulting risks. Children aged 3 to 8 years are only allowed to operate the tap connected to the appliance. Children must never play with the appliance. Children must never clean the appliance or perform user maintenance unless they are supervised.
- When permanently connected to the power supply using a dedicated junction box, the appliance must be able to be isolated from the mains power supply by an isolator that disconnects all poles with at least 3 mm contact separation.
- The power cable may only be replaced (for example if damaged) by a qualified contractor authorised by the manufacturer, using an original spare part.
- Never connect the appliance via a time switch.
- Secure the appliance as described in chapter "Installation / Installation".
- The appliance must only be installed with an open (non-pressurised) tap.
- Never subject the appliance to water pressure.
- The tap outlet has a vent function. Scale build-up can block the outlet and subject the appliance to pressure.
- Never seal the tap outlet.
- Only use special aerators for non-pressurised water heaters.
- Never extend the tap outlet with a hose
- Drain the appliance as described in chapter "Installation / Maintenance / Draining the appliance".

1. General information

The chapters "Special Information" and "Operation" are intended for both the user and qualified contractors.

The chapter "Installation" is intended for qualified contractors.



Note

Read these instructions carefully before using the appliance and retain them for future reference.
Pass on the instructions to a new user if required.

1.1 Safety instructions

1.1.1 Layout of safety instructions



KEYWORD Type of risk

Here, possible consequences are listed that may result from failure to observe the safety instructions.

► Steps to prevent the risk are listed.

1.1.2 Symbols, type of risk

Symbol	Type of risk
	Injury
	Electrocution
	Burns (burns, scalding)

1.1.3 Keywords

KEYWORD	Meaning
DANGER	Failure to observe this information will result in serious injury or death.
WARNING	Failure to observe this information may result in serious injury or death.
CAUTION	Failure to observe this information may result in non-serious or minor injury.

1.2 Other symbols in this documentation



Note

General information is identified by the adjacent symbol.
► Read these texts carefully.

Symbol	Meaning
	Material losses (appliance damage, consequential losses and environmental pollution)
	Appliance disposal

- This symbol indicates that you have to do something. The action you need to take is described step by step.

1.3 Units of measurement



Note

All measurements are given in mm unless stated otherwise.

2. Safety

2.1 Intended use

This open vented (non-pressurised) appliance is designed for heating domestic hot water. The appliance can supply one draw-off point.

This appliance is intended for domestic use. It can be used safely by untrained persons. The appliance can also be used in a non-domestic environment, e.g. in a small business, as long as it is used in the same way.

Any other use beyond that described shall be deemed inappropriate. Observation of these instructions and of instructions for any accessories used is also part of the correct use of this appliance.

2.2 General safety instructions



WARNING Burns

There is a risk of scalding at outlet temperatures in excess of 43 °C.



WARNING Injury

The temperature selector should only be removed by a qualified contractor.



WARNING Injury

The appliance may be used by children aged 3 and older and persons with reduced physical, sensory or mental capabilities or a lack of experience and know-how, provided that they are supervised or they have been instructed on how to use the appliance safely and have understood the resulting risks. Children aged 3 to 8 years are only allowed to operate the tap connected to the appliance. Children must never play with the appliance. Children must never clean the appliance or perform user maintenance unless they are supervised.

Where children or persons with limited physical, sensory or mental abilities are allowed to use this appliance, we recommend a permanent temperature limit. A qualified contractor can set this limit.



Material losses

The user should protect the appliance and its tap against frost.



Material losses

Never subject the appliance to water pressure. The tap outlet has a vent function. Scale build-up can block the outlet and subject the appliance to pressure.

- Never seal the tap outlet.
- Only use special aerators for non-pressurised water heaters.
- Never extend the tap outlet with a hose.



Material losses

Connecting the appliance via a time switch will cause an unintentional reset of the high limit safety cut-out.

- Never connect the appliance to the power supply via a time switch.

2.3 Test symbols

See type plate on the appliance.

3. Appliance description

The open vented (non-pressurised) appliance constantly maintains the water content at the pre-selected temperature. The appliance may only be installed with taps for open vented (non-pressurised) water heaters (see chapter "Installation / Appliance description / Accessories").

thermostop function

The thermostop function (thermal separation) prevents the tap becoming hot in standby mode.

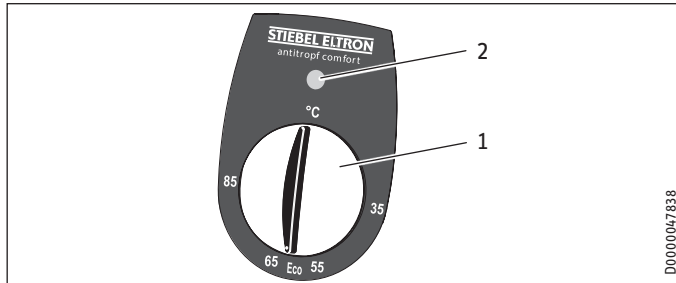
Anti-drip function

The anti-drip function prevents expansion water from escaping from the tap during heating. When water is heated, gas bubbles are formed. The amount of gas bubbles depends on the water quality. At temperatures > 75 °C the rising gas bubbles can cause residual water to drip from the tap outlet.

Subject to design, some taps have a tendency to drip for a short while after being closed. This dripping is caused by residual water escaping from the tap outlet and is not linked to expansion water.

3.1 Operation

You can set any required DHW outlet temperature at the temperature selector. The heat-up indicator illuminates during the heat-up process.



- 1 Temperature selector
- 2 Heat-up indicator

Depending on the system, the actual temperatures may vary from the set value.

- °C = Cold. On this setting, the appliance is protected from frost. The tap and the water line are not protected.
- Eco = Recommended energy saving setting (approx. 60 °C), minor scaling
- 85/65 = Due to local approval requirements for the United Kingdom market, a permanent temperature limitation up to a maximum of 65°C is required. This maximum setting is not allowed to be exceeded.



Note

A qualified contractor can set a temperature limit on the appliance (see chapter "Installation / Settings / Setting the temperature limit").

4. Cleaning, care and maintenance

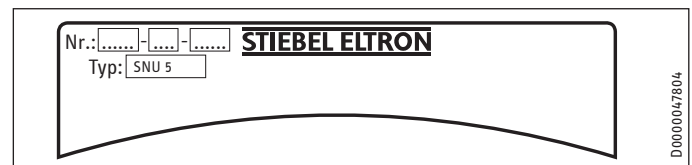
- Never use abrasive or corrosive cleaning agents. A damp cloth is sufficient for cleaning the appliance.
- Check the tap regularly. You can remove limescale deposits at the outlet using commercially available descaling agents.

Almost every type of water will deposit lime at high temperatures. This settles inside the appliance and affects both the performance and service life. The heating elements should therefore be descaled if necessary. A qualified contractor who is aware of the local water quality will tell you when the appliance should next be descaled.

5. Troubleshooting

Problem	Cause	Remedy
The appliance does not supply hot water.	The temperature selector is set to "°C".	Switch the appliance ON by turning the temperature selector.
	No power at the appliance.	Check the plug / fuses in the fuse box.
Water can only be drawn at a reduced rate.	The aerator in the tap is scaled up.	Descale / replace the aerator.
Loud boiling noises inside the appliance.	The appliance is scaled up.	Have the appliance descaled by a qualified contractor.
Water drips from the tap outlet during the heat-up process.	Frequent minimal draw-off amounts (< 0.4 l/min).	Change your draw-off pattern (> 0.4 l/min).

If you cannot remedy the fault, notify your qualified contractor. To facilitate and speed up your request, provide the number from the type plate (000000-0000-000000).



INSTALLATION

6. Safety

Only a qualified contractor should carry out installation, commissioning, maintenance and repair of the appliance.

6.1 General safety instructions

We guarantee trouble-free function and operational reliability only if original accessories and spare parts intended for the appliance are used.

6.2 Instructions, standards and regulations



Note

Observe all applicable national and regional regulations and instructions.

7. Appliance description

The open vented (non-pressurised) appliance is only suitable for undersink installation. The appliance is intended to heat cold potable water and supply it to a single draw-off point.

7.1 Standard delivery

Delivered with the appliance are the following:

- Wall mounting bracket

7.2 Accessories

7.2.1 Required accessories

The following taps are available as accessories for open vented operation:

Mixer taps

- WST, WUT

Sensor tap

- WSN

7.2.2 Further accessories

- Strainer for the "cold water inlet" connection

8. Preparations

- Flush the water line thoroughly.

Water installation

A safety valve is not required.

Taps/valves

Sealed unvented taps are not permitted.

- Install an open vented tap.

8.1 Installation site



Material losses

Install the appliance in a room free from the risk of frost.



Material losses

Mount the appliance on the wall. The wall must have a sufficient load-bearing capacity.



Note

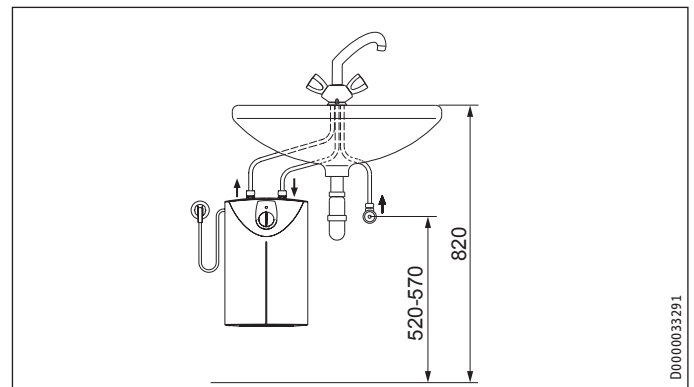
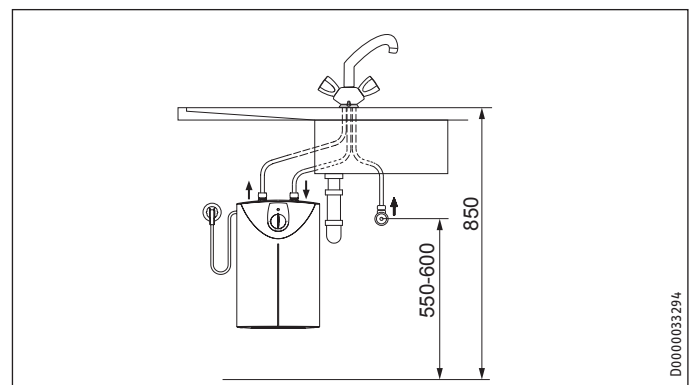
The appliance is only suitable for undersink installation. The water connections of the appliance point upwards.



Note

Ensure that the appliance is freely accessible for maintenance work.

Always install the appliance vertically and near the draw-off point.



9. Installation

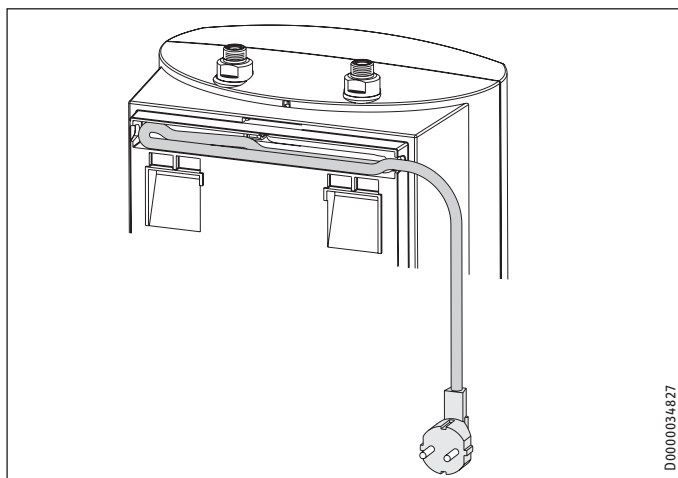
9.1 Appliance installation

- ▶ Mark out the drill holes using the installation template (see middle part of these instructions).
- ▶ Drill the holes and insert suitable rawl plugs.
- ▶ Secure the wall mounting bracket using suitable screws.
- ▶ Hang the appliance on the wall mounting bracket.



Note

Surplus cable can be stored in the cable compartment.



9.2 Water connection



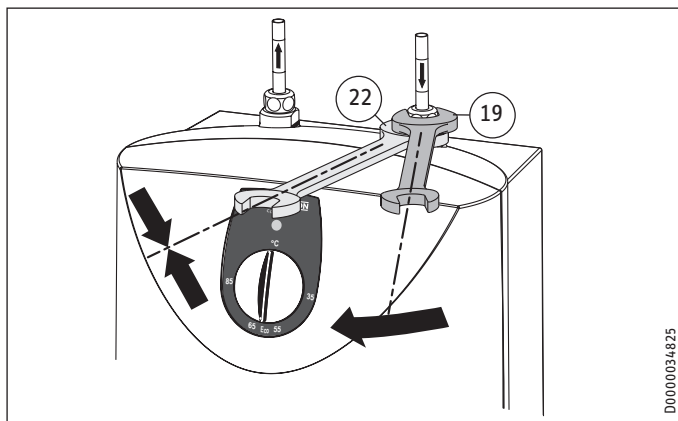
Material losses

Carry out all water connection and installation work in accordance with regulations.



Material losses

Counterhold with a suitable spanner when tightening fittings.



Material losses

The appliance may develop a leak and cease functioning.

- ▶ Never subject the appliance to water pressure.
- ▶ Never interchange the water connections.
- ▶ Set the flow rate (see tap instructions). Observe the maximum permissible flow rate with a fully opened tap (see chapter "Installation / Specification / Data table").

Match up the colour coding on the tap water connections and the appliance:

- R.h. side blue = "Cold water inlet"
- L.h. side red = "DHW outlet"

- ▶ Secure the water connections from the tap to the appliance.



Note

Ensure that the water connections are not kinked during installation. Prevent any tensioning during installation.

9.3 Power supply



WARNING Electrocutation

Carry out all electrical connection and installation work in accordance with relevant regulations.



WARNING Electrocutation

When permanently connected to the power supply using a dedicated junction box, the appliance must be able to be isolated from the mains power supply by an isolator that disconnects all poles with at least 3 mm contact separation.



WARNING Electrocutation

Ensure that the appliance is earthed.



Material losses

The voltage specified on the type plate must match the mains voltage.

- ▶ Observe the type plate.

The following electrical connections are permissible:

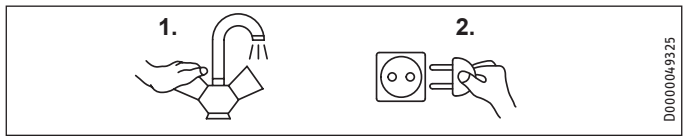
	SNU 5 SLi
Connection to a freely accessible standard socket with matching plug	X
Permanent connection to an appliance junction box with earth conductor	X

10. Commissioning



WARNING Electrocution
Commissioning may only be carried out by a qualified contractor in accordance with safety regulations.

10.1 Initial start-up



- ▶ Either open the DHW valve of the tap or set the mono lever mixer tap to "hot" until the water that flows out is free of air bubbles.
- ▶ Insert the plug into the standard socket or set the fuse/MCB in the fuse box.
- ▶ Select a temperature.
- ▶ Check the entire hydraulic installation for tightness.



Note
The high limit safety cut-out will respond if you fail to follow the correct sequence (first water, then power). Proceed as follows:

- ▶ Disconnect the appliance from the power supply.
- ▶ Fill the appliance with water.
- ▶ Connect the appliance to the power supply.

10.1.1 Appliance handover

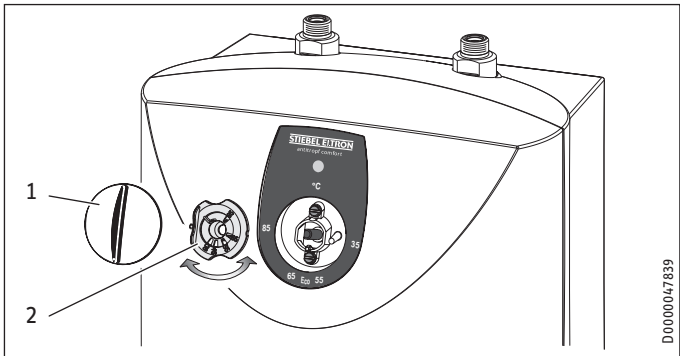
- ▶ Explain the functions of the appliance to the user. Show the user how to operate the appliance.
- ▶ Make the user aware of potential dangers, especially the risk of scalding.
- ▶ Hand over these instructions and, if applicable, the instructions for any accessories.

10.2 Recommissioning

See chapter "Installation / Commissioning / Initial start-up".

11. Settings

11.1 Setting the temperature limit



- 1 Temperature selector
- 2 Limiting ring

Placing the limiting ring behind the temperature selector allows you to limit the setting range of the temperature selector to a specific maximum temperature. Due to local approval requirements for the United Kingdom market, a permanent temperature limitation up to a maximum of 65°C is required. This maximum setting is not allowed to be exceeded.

- ▶ Turn the temperature selector to zero (fully anti-clockwise to "°C").
- ▶ Pull off the temperature selector and the limiting ring.
- ▶ Push the limiting ring with the required maximum setting onto the controller shaft.
- ▶ Install the temperature selector set to zero (°C).

12. Shutdown

- ▶ Isolate the appliance from the power supply by removing the plug or by tripping the MCB in the fuse box.
- ▶ Drain the appliance (see chapter "Installation / Maintenance / Draining the appliance").

13. Troubleshooting

Problem	Cause	Remedy
The appliance does not supply hot water.	The high limit safety cut-out has responded.	Remedy the cause of the fault. If necessary, replace the temperature controller. Allow the appliance to cool down. If you have isolated the appliance from the power supply, the high limit safety cut-out will be reset automatically.
	The strainer is contaminated.	Clean / replace the strainer in the "cold water inlet" connection.
Loud boiling noises inside the appliance.	The appliance is scaled up.	Descale the appliance.
The tap drips for a while after it has been closed.	The residual water is not held in the tap outlet.	Replace the aerator in the tap outlet or the tap.
The tap drips when the appliance is heating up.	An unsuitable tap is being used, e.g. a WAT anti-drip tap.	Replace the tap (see chapter "Installation / Appliance description / Accessories").
	The anti-drip function is faulty.	Replace the appliance.

14. Service



WARNING Electrocutation
Before any work on the appliance, disconnect all poles of the appliance from the power supply.

- Dismantle the appliance for maintenance work.

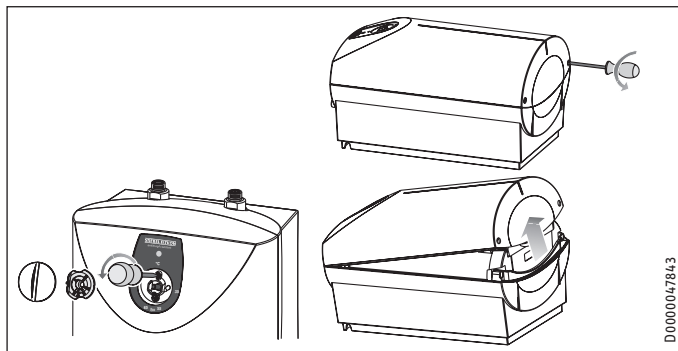
14.1 Draining the appliance



WARNING Burns
Hot water may escape during the draining process.

- Drain the appliance via its connectors.

14.2 Opening the appliance



- Pull off the temperature selector and the limiting ring.
- Remove the screws from underneath the temperature selector.
- Open the appliance cover by lowering the bolt screws inwards and pivot the cover upwards, then remove it.

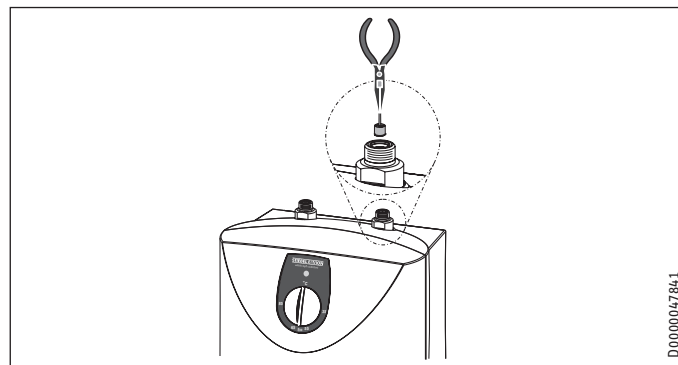
14.3 Descaling the appliance



Material losses
Never treat the cylinder surface with descaling agents.

- Remove the flanged immersion heater.
- Carefully tap the heating element to remove large limescale deposits.
- Immerse the heating element up to the flange plate in descaling agent.

14.4 Cleaning the strainer



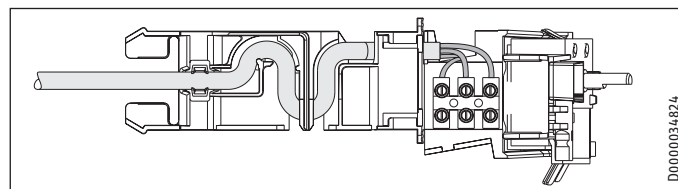
- Detach the "cold water inlet" connection.
- Using pliers, remove the strainer from the "cold water inlet" connection.
- Descale or replace the strainer.

14.5 Checking the earth conductor

- Pull off the temperature selector and the limiting ring.
- Check the earth conductor (in Germany, e.g. BGV A3) across a temperature controller fixing screw and the earth conductor contact of the power cable.

14.6 Replacing the power cable

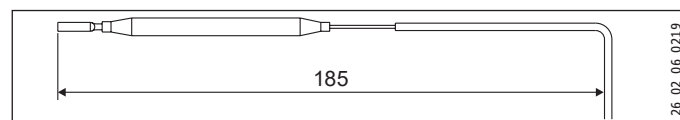
The power cable must only be replaced by a qualified contractor with an original spare part. Alternatively, the H05VV-F3x1.0 cable may be used.



- Route the power cable along the cable guide.

14.7 Positioning the temperature sensor in its protective pipe

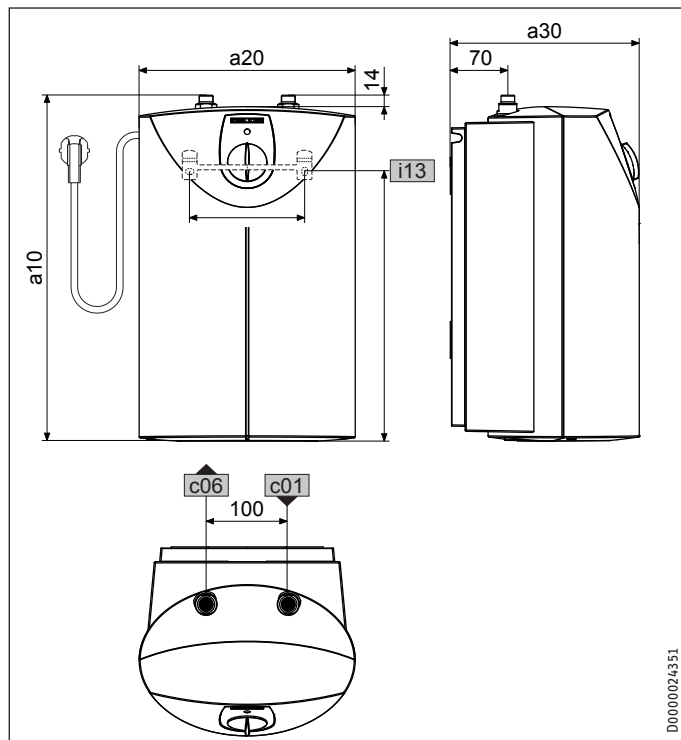
- When replacing the temperature controller, guide the temperature sensor into its protective pipe.
- Secure the temperature sensor in place below the earthed plug.



15. Specification

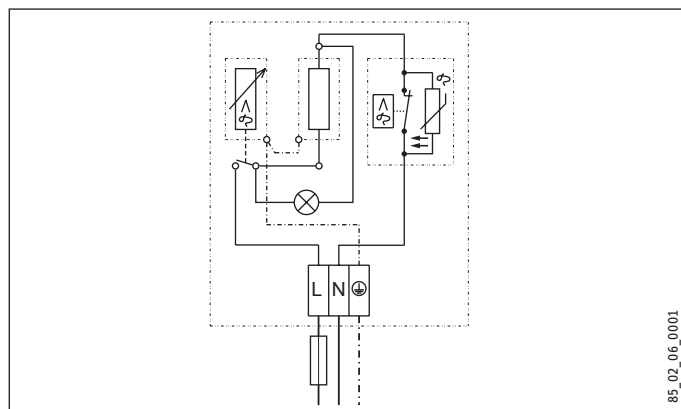
15.1 Dimensions and connections

SNU 5 SLi



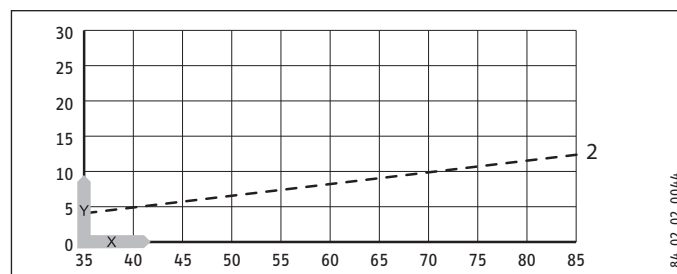
15.2 Wiring diagram

1/N/PE ~ 220 - 240 V



15.3 Heat-up diagram

The heat-up period depends on the degree of scaling and residual heat. For the heat-up time for a cold water supply at 10 °C and a maximum temperature setting, see the diagram.



x Temperature in °C
y Duration in min
2 2 kW appliance

15.4 Country-specific approvals and certifications

The test symbols can be seen on the type plate.

15.5 Extreme operating and fault conditions

In the case of faults, a peak temperature of up to 100 °C may briefly occur in the system.

15.6 Details on energy consumption

Product datasheet: Conventional water heaters to regulation (EU) no. 812/2013 and 814/2013 / (S.I. 2019 No. 539 / Schedule 2)

		SNU 5 SLi
		221121
Manufacturer		STIEBEL ELTRON
Load profile		XXS
Energy efficiency class		A
Energy conversion efficiency	%	38.00
Annual power consumption	kWh	487.00
Default temperature setting	°C	55
Sound power level	dB(A)	15
Option for exclusive operation during off-peak periods		
Daily power consumption	kWh	2251

15.7 Data table

		SNU 5 SLi
		221121
Hydraulic data		
Rated capacity	l	5
Mixed water volume at 40 °C	l	10
Electrical details		
Nominal voltage	V	230
Connected load from/to	kW	2
Nominal power	kW	2.0
Nominal current	A	8.7
Absicherung	A	10
Phases		1/N/PE
Frequency	Hz	50/60
Application limits		
Available temperature range	°C	35 - 65
Max. permissible pressure	MPa	0.00
Max. throughput	l/min	5
Energy data		
Standby power consumption over 24h at 38 °C	kWh	0.09
Standby energy consumption/24 h at 65 °C	kWh	0.20
Energy efficiency class		A
Versions		
IP-Rating		IP24 D
Undersink installation		X
Type of installation		Undersink
Type		open
Material, internal cylinder		PP
Thermal insulation material		EPS
Casing material		PS
Colour		white
Connections		
Power connection		Standard plug type F
Water connection		G 3/8 A
Dimensions		
Height	mm	420
Width	mm	263
Depth	mm	230
Length of connecting cable	mm	600
Weights		
Weight	kg	3.0

Guarantee

The guarantee conditions of our German companies do not apply to appliances acquired outside of Germany. In countries where our subsidiaries sell our products a guarantee can only be issued by those subsidiaries. Such guarantee is only granted if the subsidiary has issued its own terms of guarantee. No other guarantee will be granted.

We shall not provide any guarantee for appliances acquired in countries where we have no subsidiary to sell our products. This will not affect warranties issued by any importers.

Environment and recycling

We would ask you to help protect the environment. After use, dispose of the various materials in accordance with national regulations.

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