

Bedienungs- und Montageanleitung zu  
**Einschraubheizkörpern der Typenreihe „SH“**

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Stran 32



**AE**  
Austria Email

## INSTALLATION AND SAFETY INSTRUCTIONS

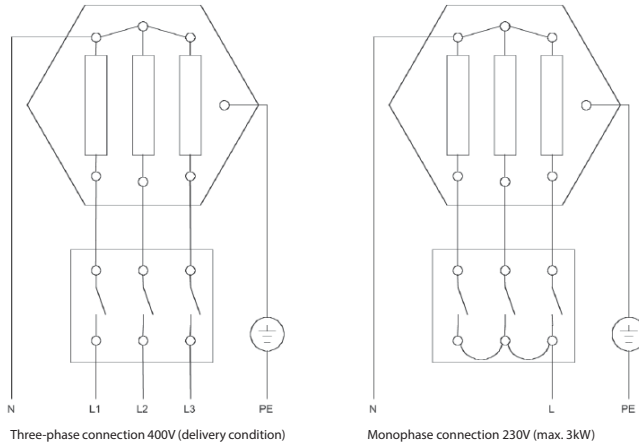
1. The SH series of immersion heaters are designed exclusively for the auxiliary heating of water in closed or open containers. A built-in electric heater with flange of the R series should be used as the main heater.
2. During operation, the heating element and sensor tube must be sufficiently immersed from all sides in water. The thermally induced water flow may not be impeded.
3. The SH must be installed in horizontal positions only, the length of the 6/4" fitting may not exceed 75mm. An area in front of the fitting equal to the installation length + 50mm is to be kept clear for mounting, etc.
4. The unheated zone of the immersion heater amounts to 100 mm from the sealing surface.
5. The heating element is to be disconnected from the power supply prior to any work on the appliance.
6. The ambient temperature at the casing may not exceed 80°C.

Type	Item-Id	Rated power kW	Input supply Voltage V	Installation depth from seal	Min. Vol. of container
SH-1,5	A907 21	1,5	230	320	80 l
SH-2,0	A907 22	2,0	3 - 400 reconnectable 230	320	80 l
SH-2,5	A907 23	2,5	3 - 400 reconnectable 230	390	80 l
SH-3,0	A907 24	3,0	3 - 400 reconnectable 230	390	80 l
SH-3,8	A907 25	3,8	3 - 400	430	80 l
SH-4,5	A907 26	4,5	3 - 400	470	90 l
SH-6,0	A907 27	6,0	3 - 400	620	100 l
SH-7,5	A907 28	7,5	3 - 400	720	200 l
SH-9,0	A907 29	9,0	3 - 400	780	240 l

## INSTALLATION

In addition to the effective norms and regulations, the connection requirements of the local power station and water supply company are to be observed. The electrical connection may only be established by a licensed electrician.

1. Prior to installation, ensure that the heating rods do not touch one another. If necessary, adjust them by hand.
2. Remove the protective cap.
3. Install the immersion heater with the supplied flat gasket into the planar fitting and/or seal with hemp, PTFE or similar. Use a SW60 open-jawed wrench for this. Installation using pliers or the like is not permitted.
4. The connection cable must be inserted through the accompanying screwed cable gland into the connection space of the immersion heater. The connection cable must be of a sufficient rating.
5. Establish the electrical connection (according to circuit diagram), ensure the connection voltage is correct. The entire wiring must be checked according to the circuit diagram before initial operation of the appliance.
6. The immersion heater with a rated power of 2 kW upwards are by default y-connected three-phase systems of 3 - 400 Volts, designed for direct control. The neutral point may not be connected to ground. The 1.5 kW heating element is wired for monophase 230V. For power ratings up to 3 kW (see table: mains voltage), a mono-phase connection with direct control for 230 Volts is possible, whereby the heating element must be connected according to figure 2. The provided terminal screw at the neutral point is intended for this purpose. This may only be performed by a licensed electrician. The bridges are to be established at the terminal screws of the regulator using 1.5mm<sup>2</sup> copper.
7. To be able to rotate the protective cap to the desired position, remove the cover and tighten it again after rotation. The housing seals must not be displaced or damaged. Only the original screws with washers may be used. A leakage due to improper installation does not represent a warranty situation.



### IMPORTANT: DO NOT FORGET TO CONNECT THE GROUND!

The container must be fitted with water inlet and outflow tubes made from metal and other touchable metal parts of the container which come into contact with water must be permanently and reliably connected to ground. An all-pole disconnecting switch with 3 mm contact gaps must be fitted in the power supply feed. Automatic circuit breakers are also acceptable as isolating switch mechanisms.

## WATER CONNECTION

The installation, connection and user instructions for the water heater (boiler) are to be followed at all costs. In the case of a pressurized connection, a certified membrane safety valve or a membrane safety valve combination is required. In the case of an unpressurized connection, a return valve, a stop valve as well as service fittings for unpressurized connections are required. The possibility of dry heating is to be avoided at all costs.

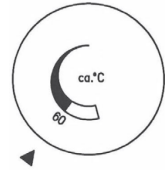
## INITIAL OPERATION

The container must be filled with water before the electricity is turned on. The first-time heating of the appliance must be monitored. During the heating process, the expanded water produced in the interior boiler must drip from the safety valve in the case of a pressurized connection and from the overflow mixing faucet in the case of an unpressurized connection. The automatic cutout function of the thermostat must be checked.

When repair becomes necessary, only use original replacement parts!

## CONSIDERATIONS FOR USE

- Depending on the lime content of the water and the operating conditions, it may be necessary to free the heating elements from boiler scale at regular intervals. It is recommendable to install softening equipment or a temperature reduction, as described in the following. Please note that damage to the heating element caused by calcification does not represent a warranty situation for damages or consequential damages.
- The container water temperature can be continuously adjusted using the temperature selector to match your warm water requirements. The maximum temperature setting is ca. 75°C. The minimum temperature setting is ca. 9°C and thus also serves as protection against freezing. The differential gap amounts to ca. 10°C. So, when set to 75°C, the temperature will sink to ca. 65°C, before the heating element is switched on again. To prevent overly rapid calcification of the heating element, we recommend setting the temperature to below 60°C. This roughly matches the position of the temperature control shown in the figure below.
- Should a failure occur during use, you may inform the Austria Email customer service, or after appropriate consultation, call a licensed electrician. Please do not attempt to repair a fault yourself. For professionals, it usually just takes a few moments and your immersion heater is working again.



## WARRANTY

### Warranty period

The warranty period is prescribed by law for all household appliances. An appliance that is designed for the household but is used commercially has a warranty of 6 months. The warranty period begins with the acceptance of the appliance.

### Terms of warranty

The warranty takes effect with the acceptance of the appliance and the settling of the invoice. Always retain the warranty certificate that was filled out by the vendor, the invoice, the delivery note or other proof of purchase.

### Warranty requirements

Effective warranty requires that the heating element was installed according to the installation and operating instructions by qualified personnel authorized by Austria Email and that it was properly operated. The appliance may not have been purchased second-hand.

### Warranty claims

If warranty claims are to be demanded, the nearest customer service location or authorized dealer of Austria Email must be notified. Austria Email reserves the right to decide whether a faulty part shall be replaced or repaired, or whether a faulty appliance shall be exchanged with an equivalent, faultless appliance. Moreover, Austria Email reserves the right to demand that the customer send in the rejected parts or the appliance. Austria Email must confirm a case of warranty. For this purpose, the individual case must be transmitted to Austria Email.

### Exceptions

The following do not entitle the customer to a warranty claim:

- color differences
- normal wear and tear
- broken glass and plastic parts such deviations from the norm that only insignificantly reduce the value or the operability
- transport damages due to extraneous causes
- mechanical damages, damages caused by frost and damages caused by one-time exceeding of the operating pressure stated on the rating plate

- damages caused by dry operation
- damages caused by calcification
- damages due to chemical or electrochemical influences
- damages due to incorrect voltage, lightning stroke, voltage surges
- damages caused by the intrusion of foreign objects or electromechanical influences
- corrosion damage due to aggressive, non-potable water
- damages caused by delayed renewal of the protective anode of the hot water tank
- In the case of third-party interventions not expressly ordered by Austria Email, the warranty shall become null and void even if this intervention is by a licensed electrician.
- Austria Email shall not accept repair and replacement part costs from third parties.
- The provision of warranty services does not renew or prolong the warranty period.
- Claims going beyond the warranty, in particular claims for damages and consequential damages, are excluded to the extent to which this is lawfully permitted.
- The general terms and conditions of Austria Email shall remain applicable in their entirety to the extent to which they are not altered by these terms of warranty. Services performed outside the scope of the terms of warranty shall be charged.

### Warranty exclusions

Claims going beyond or claims different from those mentioned above for the warranty are excluded. Austria Email shall not be liable for business interruptions, loss of profit, loss of data and information.

### Costs

In cases where a repair becomes necessary, please provide the warranty certificate and proof of purchase; transport costs and responsibility are for your account. During the warranty period, Austria Email shall bear the material costs that arise from the repair of the appliance by an authorized workshop. If repair is performed at your home, the costs for the journey time and for the vehicle shall be invoiced to you after the end of the first year of the warranty period.

## WARRANTY - AUSTRIA

Warranty is made according to the legal provisions of the Republic of Austria and the EU.

1. The prerequisite for honoring of warranty terms on the part of the manufacturer (hereinafter referred to as Manufacturer) is presentation of a paid invoice for the purchase of the appliance in question, whereby the identity of the appliance including model and fabrication number must be indicated on the invoice and presented by the claim applicant. The General Terms and Conditions, Terms and Conditions of Sale and Delivery of the manufacturer shall apply exclusively.
2. The assembly, installation, wiring and startup of the appliance in question must, to the extent that this is prescribed legally or in the installation and operation guide, have been performed by an authorized electrical technician or installer who has followed all the required regulations. The hot water tank (excluding outer jacket or plastic cover) must be protected from exposure to direct sunlight to prevent discoloration of the polyurethane foam and possible cracking of plastic parts.
3. The area in which the appliance is operated must be kept from freezing. The unit must be installed in a location where it can be easily accessed for maintenance, repair and possible replacement. The costs for any necessary changes to the structural conditions (e.g. doors and passages too narrow) are not governed by the guarantee and warranty declaration and therefore shall be rejected on the side of manufacturer. When erecting, installing and operating the water heater in unusual locations (e.g. attics, interior rooms with water-sensitive floors, closets, etc.), provision must be made for possible water leakage and means provided for catching the water with a corresponding drain to avoid secondary damage in the context of product liability.
4. Warranty claims will not be honored for:
  - inappropriate transport, normal wear and tear, intentional or negligent damage, use of force of any kind or

description, mechanical damage or damage caused by frost or also by exceeding the operating pressure stated on the rating plate, even if only once, use of connection fittings that do not comply with the standard, use of defective tank connection fittings and unsuitable and defective service fittings. Breaking of glass and plastic components, possible colour differences, damage due to improper use, in particular non-observance of the mounting and operating instructions (Operating and Mounting Instructions), damage by external influence, connecting to incorrect voltage, corrosion damage as a consequence of aggressive waters (water not suitable for drinking) in accordance with the national regulations (e.g. Austrian ordinance on drinking water, TWV – Fed. Law Gazette II No. 304/2001), deviations between the actual drinking water temperature at the tank fitting and the specified hot water temperature of up to 10K (hysteresis of the controller and possible cooling due to pipelines), Continued use, despite the occurrence of a defect, unauthorised modifications to the device, installation of additional components that were not tested together with the device, improperly carried out repairs, Insufficient water conductivity (min. 150 µs/cm) operational wear of the magnesium anode (wearing part), natural formation of boiler scale, lack of water, fire, flood, lightning, overvoltage, power failure or other types of force majeure. Use of non-original and company-external components such as e.g. heating elements, reactive anode, thermostat, thermometer, ribbed tube heat exchanger, etc., Parts installed in an uninsulated condition with respect to the storage tank, ingress of foreign particles or electrochemical influences (e.g. mixed installations), failure to observe the design documents, unpunctual and undocumented renewal of the installed protective anode, no or improper cleaning and operation, as well as any deviations from the standard that reduce the value or functionality of the device only slightly. Fundamental compliance with all regulations in ÖNORM B 2531, DIN 1988 (EN 806), DIN 1717, VDI 2035 or the corresponding national regulations and laws must be ensured.

5. A justified claim must be reported to the closest customer service location of the manufacturer. The latter reserves the right to replace or repair a defective part or to decide whether a defective appliance shall be replaced with a working one of equal value. The manufacturer furthermore expressly reserves the right to require that the purchaser return the appliance in question. The time of a repair or a replacement is determined by the production.
6. Repairs made under warranty are to be performed only by persons authorized by the manufacturer. Replaced parts become the property of the manufacturer. If any repairs to the water heater become necessary as part of necessary service work, these are charged at the cost of repair and prorated material cost.
7. Any work performed without our express order, even this is done by an authorized installer, will void the warranty. Assumption of the costs for repairs performed by third parties presumes that the manufacturer was requested to eliminate the defect and did not or did not in timely fashion meet his obligation for replacement or repair.
8. The warranty period will not be renewed or extended as a result of a guarantee and warranty claim, service or maintenance work.
9. Transport damage will only be inspected and if appropriate recognized if it has been reported in writing to the manufacturer no later than the weekday following delivery.
10. Claims exceeding the terms of the warranty, in particular those for damage and consequential damages, are precluded insofar as these are legally permissible. Pro rata work times for repairs as well as the costs for restoring the equipment to its original condition must be paid in full by the purchaser. The guarantee provided extends according to this guarantee declaration only to the repair or replacement of the appliance. The provisions of the Terms of Sales and Delivery of the manufacturer remain, insofar as they are not altered by these guarantee conditions, fully in effect.
11. There is a charge for services provided outside of the context of these guarantee conditions.
12. In order for a warranty claim to be honored by the manufacturer, the appliance must be paid for in full to the manufacturer and the claimant must have met all his obligations to his vendor in full.

13. The enamelled internal boiler for water heaters is warranted for the specified period from the delivery date provided all warranty terms described under Points 1 to 12 are observed with in full. If the warranty terms have not been met, the legal warranty requirements of the respective country from which the appliance was shipped shall prevail.
14. Claim satisfaction according to prevailing Austrian Product Liability Law:  
Claims for compensation under the title of product liability are only justified if all prescribed measures and necessities for fault-free and approved operation of the appliance have been met. This includes among other things the prescribed and documented anode replacement, connection to proper operating voltage, prevention of damage due to improper use, etc. From these conditions it can be concluded that if all requirements are met (norms, installation and operation guide, general guidelines, etc.), the device or product fault resulting in the secondary damages would not have occurred. Furthermore it is mandatory that for processing of the claim the necessary documentation such as the part number and manufacturing number of the water heater, the seller's invoice and that of the executing license holder as well as a description of the malfunction for a laboratory study of the appliance in question (absolutely required, since a specialist will study the appliance and analyze the cause of failure) be provided. To prevent misidentification of the water heater during transport, it must be marked with a highly visible and legible marking (preferably including address and signature of the end customer). Corresponding pictorial documentation indicating the extent of the damage, the installation (cold water line, hot water outlet, heating outgoing and return, safety fixtures, expansion tank if present) as well as the defect location on the water heater is also required. Furthermore the manufacturer reserves the express right to require that the purchaser provide all the documents and equipment and equipment parts necessary for clarification. The prerequisite for performing services under the title of product liability is that it is the claimant's obligation to prove that the damage was caused by the manufacturer's product. Damage compensation according to the Austrian Product Liability Law is subject to a 500 Euro deductible. Until the entire matter is clarified and the circumstances as well as determination of the causal factors are established, the manufacturer is held faultless. Non-observance of the operating and installation guide and/or the relevant norms is considered negligent and will result in a liability disclaimer within the scope of compensation for damages.

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