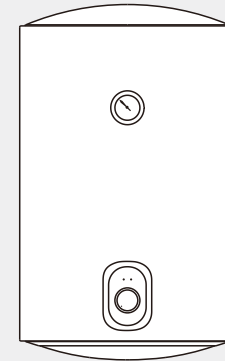


MODEL:

**RES-A30V-20G
RES-A50V-20G
RES-A80V-20G
RES-A100V-20G**

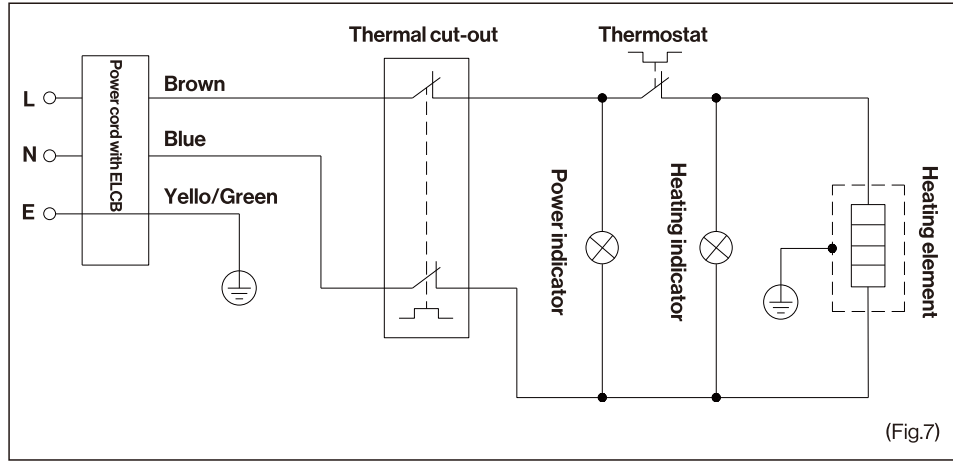


Electric Storage Water Heater

Instructions for use installation and connection

Rinnai

5. Wiring Diagram



Note:

- Parts illustrated in this use and care manual are indicative only, parts provided with the product may differ with illustrations.
- This product is intended for household use only.
- Specifications are subject to change without notice.

Attention:

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

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Thank you for choosing Rinnai electric storage water heater

- Please read the instructions carefully and keep them for reference before use.
- This water heater must be installed by a professional.
- For special users (such as children, the elderly, the disabled, etc.) should be used under the supervision of normal adults.

1. Introduction

1.1 Special Advise

- Before installing this water heater, check and confirm that the earthing on the supply socket is reliably grounded. Otherwise, the water heater shall not be installed and used.
- Do not use extension boards.
- Incorrect installation and use of the water heater may result in serious injuries and loss of property.

1.2 Performance Characteristics

- Completely automatic control : automatic addition of cold water, automatic heating.
- Four-fold safety protection: multiple safety protection devices, such as dry heating protection, extra-temperature, high hydraulic pressure protection, anti-rust protection, etc., Safe and reliable.
- Enameled inner container : manufactured by using advanced enameling technique. It is anti rust, corrosion-proof, incrustation-resistant, leak-proof, with long life.
- Heating element designed with low thermal load : safe and reliable, for longer life.
- Thick PUF for efficient thermal insulation and energy saving.
- Temperature controller : Accurate and reliable control of temperature.
- Adjustable range of water temperature from 30 to 75°C.
- Simple and easy to use.

1.3 Specifications

Parameter \ Model	RES-A30V-20G	RES-A50V-20G	RES-A80V-20G	RES-A100V-20G
Rated Capacity	30L	50L	80L	100L
Net Weight (anhydrous condition)	11.5kg	16kg	21kg	24.5kg
Rated Power	2000W			
Product Size (Ax Dx C mm)	350x579x385	390x726x425	460x752x495	460x892x495
Rated Voltage	220-240V~/50Hz			
Rated Water Pressure	0.75MPa			
Waterproofing Grade	IPX4			
Setting Temperature Range	30 to 75°C			

4. Maintenance

4.1 Maintenance

- Check the power supply plug and socket frequently to make sure that they have good, reliable contact and well grounded without overheating phenomenon.
- If the heater is not used for a long time, especially in the regions with low atmospheric temperature (lower than 0°C), the water inside the heater shall be drained away. This will prevent the damage to the heater due to water freezing in the inner container, (Refer **Cautions** in this manual for the method to drain away the water from the inner container).
- In order to ensure that the water heater operates efficiently for long time, it is recommended to clean the inner container and the deposits on the electrical heating components periodically.
- It is recommended to examine the anode protection materials every six months or so. If all the material has been consumed, please replace with the new material.

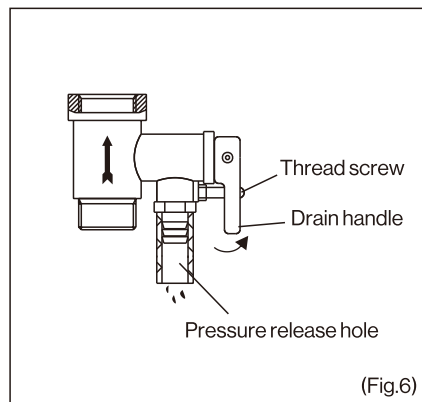
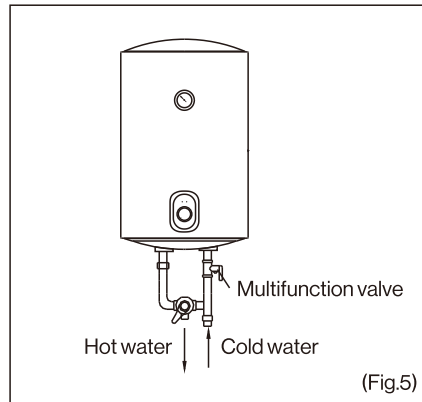
4.2 Failures and Treatment

Failures	Reasons	Treatment
The heating indicator light is off.	Failures of the temperature controller.	Contact the customer care center.
Water not flowing out of the hot water outlet.	1. The water supply is cut off. 2. The hydraulic pressure is too low. 3. The inlet valve of water supply is not open.	1. Wait for restoration of water supply. 2. Use the heater when the hydraulic pressure is appropriate. 3. Open the inlet valve of water supply.
The water temperature is too high.	Failure of the temperature control system.	Contact the customer care center.
Water leakage.	Problem of the seal at pipe joints.	Contact the customer care center.

3. Methods of Installation

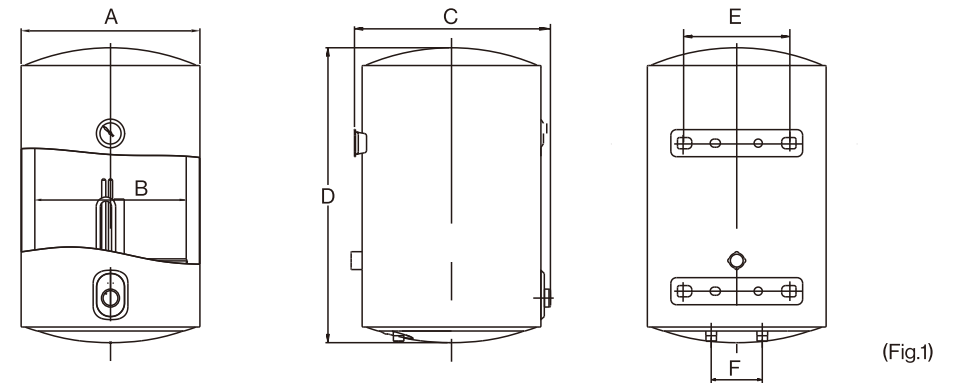
3.5 Cautions

- The supply socket must be earthed reliably. The rated current of the socket shall not be lower than 4.3A/6.5A. The socket and plug shall be kept dry to prevent electrical leakage.
- The installation height of the supply socket shall not be lower than 1.8m.
- The wall on which the water heater is installed shall be able to bear the load more than two times of the heater filled fully with water without distortion and cracks. Otherwise, other strengthening measures shall be adopted.
- The multifunction valve attached with the heater must be installed at the cold water inlet (see Fig.5).
- When using the heater for the first time (or the first use after maintenance), the heater cannot be switched on until it has been filled fully with water. When filling the water, at least one of the outlet valves at the outlet of the heater must be opened to exhaust the air. This valve can be closed after the heater has been filled fully with water.
- During heating, there may be drops of water dripping from the pressure release hole of the multifunction valve. This is a normal phenomenon. If there is a large amount of water leak, please contact service center for repair. This pressure release hole shall, under no circumstances, be blocked; otherwise, the heater may be damaged, even resulting in accidents.
- The drainage pipe connected to the pressure release hole must be kept sloping downwards.
- Since the water temperature inside the heater can reach up to 75°C, the hot water must not be exposed to human bodies when it is initially used. Adjust the water temperature to a suitable temperature to avoid scalding.
- Unscrew the thread screw on the multifunction safety valve, and lift the drain handle upwards (See Fig.6) to drain the water from the inner tank.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or related qualified person in order to avoid a hazard.
- This appliance is not intended for use by persons (including children) with reduce physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been give supervision or instruction concerning use of the appliance by a person responsible for their safety.



2. Product Information

2.1 Product Dimensions



Capacity Dimension	30L	50L	80L	100L
A	Φ 350	Φ 390	Φ 460	Φ 460
B	Φ 300	Φ 340	Φ 410	Φ 410
C	385	425	495	495
D	579	726	752	892
E	205	205	205	205
F	100	100	100	100

2.2 Packing List

Name	Unit (pcs)
Electric Water Heater	1
Manual Instruction	1
Safety Valve	1
Water Drain Pipe	1
Expansion Tube	2

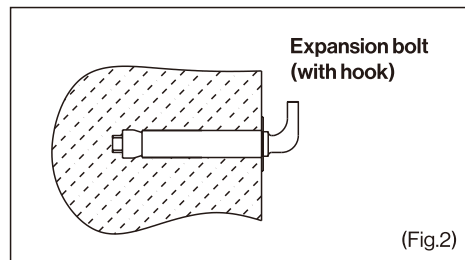
3. Methods of Installation

3.1 Installation

Note : Please ensure to use the accessories provided along with the product to install this water heater. The heater cannot be hung on the support until it has been confirmed to be firm and reliable. Otherwise, the heater may drop off from the wall, resulting in damage of the heater, even serious accidents. When determining the location of the bolt holes, it shall be ensured that there is a clearance not less than 0.2m on the right side of the heater. This may be required during maintenance of the heater.

- This water heater shall be installed on a solid wall. If the strength of the wall cannot bear the load equal to two times of the total weight of the heater filled fully with water, it is then necessary to install a special support.

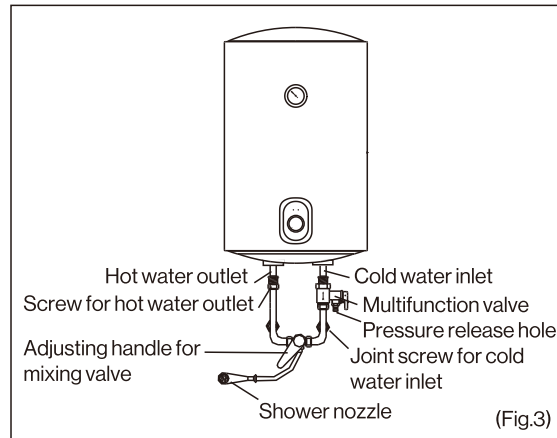
- After selecting a proper location, determine the positions of the two holes used for expansion bolts with hook. Make two holes in the wall with the corresponding depth and size matching the expansion bolts attached with the heater, insert the bolt, turn the hook upwards, tighten the nuts to fix firmly, and then hang the water heater on it (see Fig.2).



- Install the supply socket in the wall. The supply socket should be 3 pin. Supply socket must conform to national standard. The height of the socket to the ground shall not be less than 1.8m.
- If the bathroom is too small, the heater can be installed at another place. However, in order to reduce the pipeline heat losses, the installation position of the heater shall be as near as possible to the bathroom.

3.2 Connection of Pipelines

- The dimension of multifunction valve and the inlet /outlet pipe is ½ BSP.
- Connection of multifunction valve : install the multifunction valve with the heater on the inlet of the water heater.
- In order to avoid leakage when connecting the pipelines, the rubber seal gaskets provided with the heater must be added at the end of the threads (see Fig.3). Ensure leak proof joints.

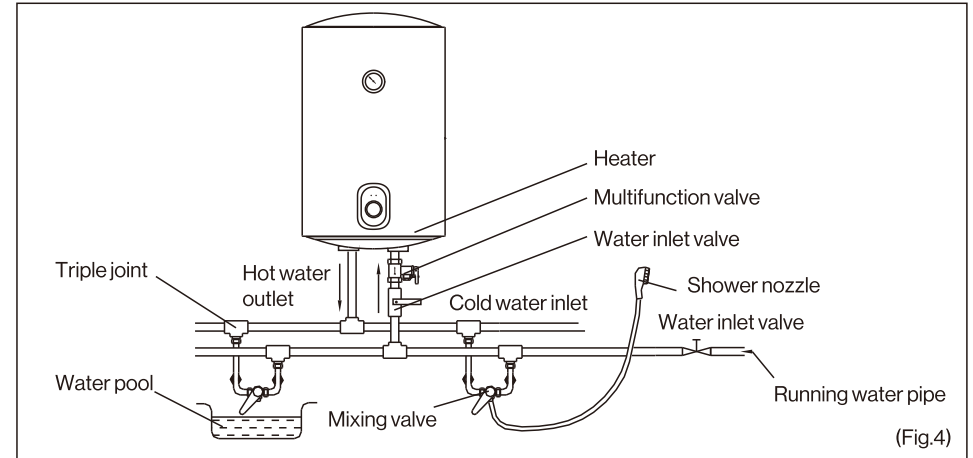


TYPICAL SINGLE OUTLET CONNECTION

3. Methods of Installation

3.3 Multi-outlet Connection

- If the users want to install a multi-way supply system, refer to the method shown in Fig.4 for connection of the pipelines.



3.4 Methods of Use

- First, open any one of the outlet valves at the outlet of the water heater, then, open the inlet valve. The water heater gets filled with water. When water flows out of the outlet pipe it implies that the heater has been filled full with water, and the outlet valve can be closed.
 - Note :** During normal operation, the inlet valve shall be always kept open.
 - The POWER indicator will light up, adjust the temperature controller suitably the HEATING indicator will light up.
 - The heater will automatically control the temperature. When the water temperature inside the heater has reached the set temperature, it will switch off automatically, when the water temperature falls below the set point the heater will be turned on automatically to restore the heating. When the heater is switched
 - off automatically, the heating indicator will switch off.
- Temperature setting : the water heater provides flexible range of temperature settings. The temperature adjusting knob switches water heating temperature from 30 to 75°C.