

# REEFE RFA FLOATING DAM AERATION PUMP SERIES

## INSTRUCTION MANUAL & WARRANTY

Please take the time to read the instructions carefully before using this appliance. We recommend that you keep this instruction manual in a safe place for future reference.

This instruction manual covers RFA Series of Pumps and any similar models that we supply.

### **SPECIFICATIONS**

Specifications are approximate and subject to change without notice. Amps and wattage vary according to the operating load. Refer to the nameplate of the pump for the performance data. Image shown is an example only. Do not exceed the given specifications in the use of your pump, or use for purposes for which the pump is not designed. It is the users responsibility to ensure that the product is suitable for the intended application.

### **INTENDED USE**

This pump is to be installed in a suitable water reservoir of suitable depth for the purpose of providing a fountain and/or assisting with oxygenation of the water.

### **PERFORMANCE CURVE**

Refer to the nameplate of the pump then search our website [www.reefe.com.au](http://www.reefe.com.au) for the current tech data sheet.

**WARNING:** MANDATORY INSTALLATION CONDITION: THE PREMISES WHERE THE PUMP IS INSTALLED MUST BE PROTECTED BY A SAFETY SWITCH (RCD) – DO NOT INSTALL PUMPS WITHOUT THIS PROTECTION

**DANGER:** Keep the pump equipment protected from interference by children or pets! The appliance is not intended for use by children or infirm or incompetent persons.

**WARNING:** This pump is designed for water only. It must **NOT** be used for Hazardous or flammable liquids. It must NOT be used in locations classified as hazardous. It is not for use in aquaculture, or similar applications.

**LIMITATIONS:** This pump is suitable to pump fresh water only, with soft particles of a size as designated on the data sheet for that model. Refer to the nameplate of the pump then search our website [www.reefe.com.au](http://www.reefe.com.au) for the current tech data sheet. These pumps are not intended for pumping potable water, and have not been tested for pumping potable water. They are not intended for fire-fighting. The water temperature may be from + 5°C to the maximum as stated on the pumps nameplate.

**DANGER:** DO NOT install in bodies of water used for swimming or bathing.

**WARNING:** The pump cannot be used for salt water and flammable, corrosive, explosive or dangerous liquids, nor in hazardous areas. Ensure that the pump never runs without water.

## **INSTALLATION GUIDELINES**

1. **POWER OFF!!** Before installing or while handling, repairing, cleaning or servicing this pump, be certain the electrical power is disconnected from the pump at all times.
2. **SUITABLE APPLICATIONS:** This product is for the purpose of pumping FRESH CLEAN WATER in a dam or lake, and for NO OTHER USE. It is not intended nor designed to be used in highly critical installations (for example a situation where power failure or pump failure could lead to flooding, do NOT use this pump for those purposes). Performance data quoted is generally from test data and is approximate and does not take into account factors in the installation. It is the purchaser's and/or users responsibility to ensure that the product is fit for their purpose and of sufficient size & performance for their application.
3. **IMPORTANT INSTALLATION REQUIREMENT:** No electrical appliances last forever. Therefore ALL installations of pumps must be constructed to allow the owner to easily remove the pump for servicing, and to easily remove the pump for replacement, warranty replacement or upgrading. The installation must NOT be constructed in such a manner that specialized tools, or paid tradespersons, or external paid contractors, are required to be engaged in order to remove and/or replace and/or refit the pump. Warranty replacement does not normally include costs of removal and re-installation as we have no control over the method of installation.
4. **IMPORTANT RE ACCESS:** Ensure that the pump can be removed from the water without having to enter the water. Warranty is VOID if persons have to get into the water to remove or repair the pump and/or controller. DO use a rope to pull the pump out, DO NOT use the electrical cable.
5. **ELECTRICAL CIRCUIT & WIRING;**
  - a. Installation and electrical wiring must adhere to state and local codes and must be completed before using the pump. All Electrical wiring must be performed by a Licenced Electrician.
  - b. Pump must be connected to a circuit of suitable size for the power requirement of the pump, with a RCD (safety switch) having a rated residual operating current not exceeding 30mA – recommended type is a circuit breaker with integrated RCD.
  - c. Plugging into shared outlets or extension leads will cause low voltage supply to the motor, causing blown fuses, tripping of motor overload, or burnt out motor. The recommended method is to have the pump on its own separate circuit.
  - d. Surge Protection - We recommend that a surge protector is used to protect the electronics of the pump, as damage due to power surges is not covered by the Warranty
  - e. All electrical installations must be earthed in accordance with Electrical Regulations
  - f. The voltage of the power supply must match the voltage of the pump: 230 to 240 volt AC except for 3-Phase pumps which are 415Volts. We do not recommend generator power.
6. **WARRANTY VOIDED:** The following may cause severe damage to the pump and automatically voids the warranty:
  - a. Using an extension cable for power supply.
  - b. Cutting the earth pin off the plug or using an adapter fitting or double adapter.
  - c. Working on the pump while it is connected to the power supply.
  - d. Removing/opening the cable entry point, or the motor housing, unscrewing impellor, or otherwise removing impellor seal (except if this work is done by a qualified Pump Technician)
  - e. Pumping chemicals, corrosive liquids or flammable liquids.
  - f. Pumping hot liquids (Exceeding the temperature on the nameplate)
  - g. Lifting or moving the pump using the power cable.
  - h. Dry operation which will destroy the pump seals.
  - i. Installing the pump inside a tank (enclosed space) in such a manner as you cannot remove the pump without getting inside the tank – this is against best practice and no warranty cover applies in this case.
7. **PUMP NOT PUMPING**

If the pump does not pump water, check the inlet is free from airlock or other obstructions. Check that any non-return valves are fitted with the arrow in the correct direction of flow, and are not jammed shut with glue or debris. For further help, refer to the TROUBLE-SHOOTING section.
8. **OVERLOAD PROTECTION** – most models have a built in thermal protection switch. The pump stops if an overload condition occurs. The motor restarts automatically after it has cooled down when the built in thermal protector resets itself. If this problem reoccurs - check as per Trouble Shooting
9. **IMPORTANT NOTES**
  - a. Do not switch the pump on and off frequently, as this will cause damage to the electronics and void warranty.
  - b. If the pump is idle for a long period of time or in very low temperature, it should be removed, washed clean and stored in a dry & safe place.
10. **COMMERCIAL &/OR INDUSTRIAL USE:** specific applications in commercial or industrial situations require specialist advice which may not be covered in this instruction manual. It is the installer & user's responsibility to obtain specialist advice and to ensure that the pump used is suitable for their application. Warranty is limited to replacement only, of pumps that are proved to have a manufacturing defect, when used in SUITABLE commercial or industrial applications. No warranty applies when used in unsuitable applications.

## **TROUBLESHOOTING CHECKLIST**

**CAUTION: SHUT OFF POWER TO THE PUMP BEFORE HANDLING**

**Check the following before requesting service or repair.**

**A call out fee normally applies for field services and additional labour cost may apply.**

### **PROBLEMS & POSSIBLE CAUSES & RESOLUTIONS**

#### **(A) Pump does not run;**

1. Check the water level – ensure pump has not run dry.
2. Circuit breaker or Safety Switch is off or the fuse has blown > Turn all Power OFF before attempting service - if it trips again after turning on, the pump might be burnt out – replacement is normally the most economical option.
3. Pump plug is not connected properly, or has been flooded or wet > Isolate power at main switch, remove plug and allow to dry. If the problem continues, contact a licenced electrician to fix the power outlet so as it is protected from the weather.
4. If all of the above are OK, then check pump for clogged impellor > clean the impeller
5. Thermal overload switch in the pump has activated > investigate why this has occurred before turning it back on, check that the pump is not clogged, check that the outlet pipework is not clogged.

#### **(B) Pump runs but does not deliver water;**

1. Impeller or volute openings are fully or partially clogged > clean the impeller
2. Pump is air-locked. Start and stop a couple of times. Also try rocking the float ring. If this is not successful, you might need to remove the pump to check for blockages.

#### **(D) Pump not pumping properly;**

1. Too low water level > Check the water levels > If the pump is sucking mud from the bottom, it will malfunction.
2. Pump installed further than recommended distance from the power supply outlet > Have the voltage checked by a licenced electrician > If the voltage is below the allowed standard, the supply cable will have to be upgraded, or the voltage adjusted by your electricity provider.

#### **(E) Pump runs but delivers only a small amount of water;**

1. Pump is air-locked > Start and stop several times – see (B)
2. Too low water level > Check if the pump is on the bottom and sucking in mud
3. Serious damage to the impeller > Inspect and have it repaired or replaced by a pump technician.
4. Pump impeller is partially clogged with particles, causing motor to run slow and overload > Disassemble pump and clean.

#### **(F) Fuse blows or circuit breaker trips when pump starts;**

1. Turn all power OFF before attempting service
2. Motor may be defective. If you have checked and ascertained that it is definitely the pump (by process of elimination) we recommend that the pump be replaced. It is not usually economical to repair a pump that is tripping the circuit breaker or safety switch.
3. Fuse size or circuit breaker may be too small > Recommended to be a dedicated circuit with Integral RCD > Have it checked by a licenced electrician.
4. Impeller or volute opening are fully or partially clogged > Disassemble pump and clean.

#### **(G) Motor runs for a short time, then stops;**

1. Pump impeller is partially clogged with particles, causing motor to run slow and overload > Disassemble pump and clean.
2. Motor stator may be overheating > Ensure there is water and float switch is not jammed in the up position.
3. Impeller or volute openings are fully or partially clogged > Clean the impeller
4. Inlet is in the mud > Reposition the pump, or turn it off until the reservoir fills up again.
5. Pump runs in reverse: Pump must rotate clockwise. For 3ph, if rotating in reverse, an electrician must rectify by changing 2 of the 3 phases.

### **DANGER!!!**

**IMPORTANT RE INSTALLATION:** Ensure that the pump can be removed from the installed location, without having to be in a dangerous position. NEVER install pumps such that persons need to put themselves into a dangerous position to remove/work on the pump. Warranty is VOID if persons have to be in a dangerous position to remove or repair the pump and/or controller. DO use a rope or chain to lift the pump out, DO NOT use the electrical cable.

## **SAFETY FIRST**

1. Make sure the pump is disconnected from power before entering the water or touching the pump.
2. Make sure all connections are tight.
3. Do not conduct electrical work unless you are a licenced Electrician.
4. Do not be in the water when the power is on
5. Pump MUST be connected to a circuit with an RCD (Safety Switch) that is tested and functioning correctly

## **INSTALLATION INSTRUCTIONS:**

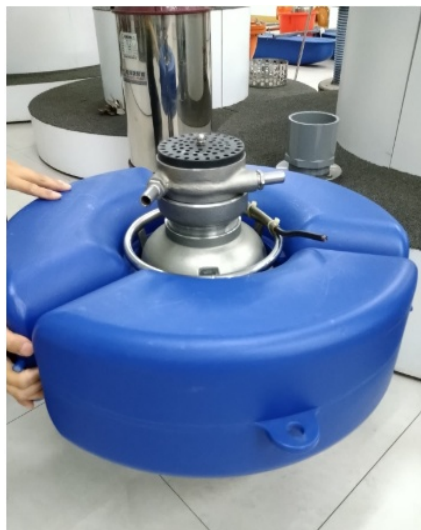


1. Place the float ring on the ground (or in the water), ensuring that the flat edge of the support lip is facing upwards (the underside of the lip is rounded)



2. Place the pump in the centre of the float ring, and ensure that the 3 brackets holding the support ring on the pump slot into the join between each float segment.

3. Attach suitable rope to the float ring through the loops provided, for the purpose of positioning the pump, and also to enable retrieval if ever necessary.



4. Ensure that the pump is seated correctly into the float, and it is floating in the water satisfactorily.

5. When no person is in contact with the water, power the pump. Use the ropes to reposition the pump if necessary.

6. Always ensure sufficient depth of water.

If after checking all of the above, and the fault continues, CALL our WARRANTY DEPARTMENT on 1800 807 604 who will issue authorisation of repair or replacement for pumps that are still under warranty. We will require a copy of your purchase receipt and the below installation checklist, sent by Email, MMS or Fax.

Alternatively, you can return the pump to the place of purchase for a refund, if it is still in warranty.

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**WARRANTY RECORD – FILL IN AND RETAIN THIS WITH YOUR ORIGINAL PURCHASE RECEIPT**

PURCHASER NAME..... PHONE NO.....  
DATE OF PURCHASE ...../...../..... DEALER/STORE NAME.....  
DEALER SUBURB/TOWN.....PHONE NO.....  
MODEL NUMBER OF PUMP..... SERIAL NUMBER.....

**INSTALLATION CHECKLIST: MUST BE FILLED IN FOR WARRANTY TO APPLY**

Installer Name \_\_\_\_\_ Qualification: \_\_\_\_\_ (write Owner if applicable)  
Phone Number: \_\_\_\_\_ If installed by a Plumber or Electrician, Licence No: \_\_\_\_\_

Tick the boxes as the item is completed/correct, put n/a if not applicable;

- The Pump is being used for an appropriate purpose for which it is intended, according to the instructions
- The Power Circuit the Pump is connected to is RCD (Safety Switch) Protected
- If applicable: The pump is installed in accordance with National & Local Plumbing Regulations
- For Permanent Installations: The Electrical Supply cable is protected in an appropriate manner in accordance with the current standard of Electrical Safety Regulations AS/NZS 3000 – have it checked by a Licenced Electrician if unsure.
- If the pump is “hard wired”, there is an isolation switch included (this must only be done by a Licenced Electrician)
- If applicable: The Owner has been shown how to access & clean & re-set the pump
- Secured firmly to the shoreline
- Not installed in a body of water used for swimming in
- Out of reach of any human activities, and not in a body of water where humans enter
- Installed in area with least turbulence
- Has been installed so as to not be allowed to run out of water

Signed by the Installer: \_\_\_\_\_ Date Installed: \_\_\_\_/\_\_\_\_/\_\_\_\_

**WARNING: ELECTRICAL PRECAUTIONS**

Do not install pump if there is no RCD (Safety Switch) on the power circuit. Before servicing a pump, always shut off the power supply and then make sure you are not standing in water and that there is no risk of electrical shock. If the pump is direct-wired to the electrical circuit, contact your qualified licensed electrician to disconnect if required.

**DO NOT ATTEMPT ELECTRICAL REPAIRS OF ANY SORT UNLESS YOU ARE A LICENSED ELECTRICIAN**

## **WARRANTY CONDITIONS**

1. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. If you are a consumer as defined by the Australian Consumer Law, you are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. If you (the purchaser) do not fall within the meaning of "consumer" in the Australian Consumer Law the provisions of the Australian Consumer Law may not apply. The following conditions form part of the instructions and do not over-ride your statutory rights.
2. This warranty covers failure due to manufacturing defects for Sump Pumps (including but not limited to the series listed below, according to our interpretation as to what is and is not covered) that are purchased and used in mainland Australia. We shall repair or replace faulty goods when we ascertain that the fault is due to manufacturing defects, within the period of time as advised by us for any particular item. If you require a refund, return the item to the original place of purchase.
3. Faults or losses or failure or damages are not covered by warranty where caused due to: Accidents, misuse, lack of maintenance, using with unsuitable substances, not following these instructions, damage caused by lightning strike/power surges/spikes/brownouts, operating the pump on power other than 230-240volts 50Hz mains power, or any other unforeseen or unexpected event or cause that is beyond our control.
4. Where fitted and where applicable: The complete Impeller set (including shaft), Pre-filter Sponge, Seals and O-rings are all wearing items and therefore are not covered for "normal wear and tear". They are covered by this warranty if they are faulty due to a manufacturing defect.
5. Warranty will be void if any tampering or removal of identification labels or electrical cables has occurred, or any non-genuine parts have been fitted, or repairs have been carried out by unqualified persons. No warranty applies for goods sold or used for HIRE or RENT or LEASE. No warranty applies, and no liability is accepted, if the pump is used in circumstances that we define as: HAZARDOUS SITUATIONS, MINE SITE, REMOTE AREA, INDUSTRIAL APPLICATION, or any other UNSUITABLE APPLICATION, all of these circumstances are defined by us at our sole discretion.
6. The Warranty excludes accidental or deliberate breakages, normal wear and tear, fading or breakdown due to the effect of exposure to sunlight or chemicals, corrosion due to chlorine in the water, or any other external factor that may affect the life of the product.
7. This product is guaranteed as fit for the purpose of pumping CLEAN WATER, STORM WATER and GREY WATER in normal domestic household use, and for NO OTHER USE. This pump is not intended for Potable Water, it has not been tested for Potable Water. Performance data quoted is generally from test data and is approximate and does not take into account factors in the installation such as loss of pressure and flow due to pipework & pipe-fittings & valves. It is the purchaser's responsibility to ensure that the product is fit for their purpose and of sufficient size & performance for their application.
8. IMPORTANT: No electrical appliances last forever. Therefore ALL installations of these pumps must be constructed to allow the owner to easily remove the pump for servicing, and to easily remove the pump for replacement, warranty replacement or upgrading. Warranty replacement does not include costs of removal and re-installation as we have no control over the method of installation.
9. Before installing or servicing disconnect from the power supply.
10. This pump is not to be used as your sole water supply. For critical applications where loss of water supply for pump failure could cause serious consequences, use a DUAL PUMP System so that you have a backup pump.
11. This pump must be installed in accordance with these instructions, and the Installation Checklist must be filled in and signed for warranty to apply. The Pump MUST NOT be installed in any manner that if it were to leak, or fail to work, that it would cause damage or loss to property or persons. It MUST be installed in a well-ventilated and drained area. All warranty is void if this condition is not heeded and no liability can be accepted in the case of damage or loss caused by failing to comply with this condition.
12. The Pump must be correctly earthed and connected to a circuit with an integral RCD (safety switch) in the circuit breaker, in accordance with the Electrical Regulations or Standards that are applicable.
13. In the case of a fault, refer to the Trouble Shooting Guide first. If these steps do not rectify the problem, then return the faulty appliance to the original place of purchase with proof of purchase for replacement or refund. Alternatively you can mail us at PO BOX 650 MORNINGSIDE QLD 4170 or send an email to [csv@ascento.com.au](mailto:csv@ascento.com.au) with a photo of the faulty item, copy of your purchase receipt, a copy of the installation checklist, a description of the problem, and your name and address and phone number - we will review your request and send you a replacement directly if we accept your warranty claim. Or call us on 1800 807 604 with the above information; however we will always require a copy of your purchase receipt and the installation checklist. Do not send the product to us unless we ask you to do so. Please note that guarantees and warranties only apply when the installation and use of the product is suitable according to our definition. Prior to processing or accepting any claim against us, of any type, we reserve the right to inspect either in person (with owners permission), or by use of a drone or any other method of our choice (with owners permission), or request photographs and/or video evidence, or request for the product to be returned to our premises for inspection. If the owner does not allow us these rights of inspection, we are unable to process any claim.
14. Pumps used in SUITABLE commercial or industrial applications are covered by a replacement warranty only, when proved to have a manufacturing defect that has caused the pump to fail. No warranty applies when used in unsuitable applications, which shall be defined by us, at our sole discretion.
15. If an exact replacement is not available, the closest equivalent product will be supplied at our discretion.
16. This warranty does not exclude any non-excludable rights according to Australian Law. However any condition that is made void by Australian Law does not void the remaining conditions, which shall stand unaltered.

<b>Brand</b>	<b>Pump Model / Series which includes Vertical Float versions</b>	<b>Warranty Period</b>
REEFE	RFA240 + RFA415	12 months

**Thank you for purchasing our product. We trust it gives you years of trouble-free pumping!**

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