



water solutions



EN

Safety warnings



## 1. GENERAL SAFETY STANDARDS

- This appliance is not to be used by children aged under 8 years and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless if they have been given supervision or instruction concerning use of the appliance in a safe way and they understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Installation operations must be carried out by skilled technical staff capable of understanding the contents of the manual.
- This electric pump is a fixed appliance intended to be used while fastened to a support or while secured in a specific location. This appliance is not intended to be held in the hand during normal use.
- Do not approach the pump when in operation and do not touch the liquid in which it is submerged.
- Before performing any procedure (handling, inspection, installation, etc.) the power supply has to be always disconnected and wait for the surface of the pump to cool to ambient temperature (at least 30 min.).
- Do not place your hands or objects near and/or insert them in the pump's intake or outlet; pay particular attention with GR models equipped with a rotating shredder knife.
- Always handle the electric pump while wearing individual protection devices in conformity with the law.
- Do not allow the free end of the electric cable to come into contact with liquids of any kind.
- Never handle or lift the pump by the power supply or float switch cables.
- Do not swallow or inhale any component of the pump.

## 2. WARNING

- Before starting the pump, check that the plug is firmly connected to the socket or the electric connection has been made correctly.
- The electric system must have a ground connection in good working order.
- Do not use the pump for lifting flammable or explosive liquids (excluding –EX models);
- Do not use the pump for purposes other than those for which it was designed and manufactured since the manufacturer does not accept liability for injury or damage caused by the pump if used in contravention of the instructions herein, or in the event of non-compliance with the maintenance and safety recommendations.
- Do not install the pump in enclosed environments with gases present and an explosion hazard (excluding –EX models).
- Do not modify the pump or any of its parts (connections, holes, finishes, etc.) for any reason.
- Before connecting the electricity supply, ensure that the pump has been installed correctly and retire to a safe distance.
- Do not obstruct the fluid intake and outlet lines.
- In the event of damage to the pump, stop it at once.
- If repairs are necessary, contact Zenit or an author-

ised Support Centre only and request the exclusive use of original spare parts.

- Failure to comply with this requirement may put users at risk and lead to loss of warranty rights.
- If the pump is used in swimming pools or tanks, people and animals must not enter or come into contact with the liquid until the pump has been removed.
- The user must comply with the relevant safety regulations in the country of use, as well as common-sense safety precautions, and ensure that regular cleaning and maintenance operations are carried out correctly.
- The installer is responsible for ensuring that the ambient conditions of use are suitable, to ensure health and safety.
- The customer is responsible for the staff authorised to use the pump.

## 3. SAFETY STANDARDS TO APPLY FOR INSTALLATION AND MAINTENANCE OPERATIONS

To carry out completely safe maintenance, always comply with the following standards:

- Stop the electric pump and close the discharge and suction gates, if present;
- Ensure the electric pump is disconnected from the electrical mains. To disconnect the electric pump from the mains disconnect the phase conductors and then the yellow-green ground conductor;
- If installation is submerged, remove the electric pump from the tank;
- Wait for the surface of the electric pump to reach room temperature (at least 30 minutes);
- Replace faulty or worn components. Always consult the manufacturer before any repairs or maintenance.
- NEVER work alone during any maintenance.
- In the event work is carried out on the electric pump in closed environments such as vats, wells, septic tanks, tanks or cisterns, do not underestimate the risks generated by possible harmful fumes. ENCOURAGE the circulation of air in the wells before starting work;
- People lowered into wells must be attached to a safety rope and be able to get out quickly in the event of an emergency

## 4. INDIVIDUAL PROTECTION DEVICES (IPD) TO USE

Handle the electric pump while wearing individual protection devices in conformity with the law; Use is compulsory of protective gloves, safety footwear, protective goggles with the sides closed and leather aprons.

Before handling the already installed product, wash it with plenty of running water and/or detergents.

## 5. RESIDUAL RISKS

The risks which cannot be eliminated by the safety measures adopted by the manufacturer are caused by incorrect use of the pump or failure on the part of the user to comply with the safety regulations described in this manual. In particular, the user must ensure that people and/or animals do not come into contact with the liquid while the pump is in operation.

## 6. PROPER AND IMPROPER USE

Do not use the electric pump to carry out operations not

expressly indicated in the use and maintenance manual. These electric pumps are not suitable to carry liquids for food-grade use and cannot be used in tanks or other places in which contact of the machine with people or animals is expected and/or anticipated.

Models with ATEX certification are also suitable for installation in atmospheres containing group II A and/or B gas (typically hydrocarbon gas) or atmospheres containing combustible powder mixes.

## 7. HANDLING AND TRANSPORT

**NEVER use the power supply cable or the ball cock cable to lift and handle the pump. Use the special lifting handle.**

## 8. INSTALLATION

Before installation, carefully read and apply the safety warnings in this use and maintenance manual for the electric pump.

During installation operations, always ensure the electric pump is not connected to the electrical system.

Before operating the electric pump, for the three-phase models, verify the correct rotation direction of the impeller by following the instructions in the installation manual. In the event of installation of the EXPLOSION-PROOF electric pumps, all the operations must be carried out in a safe place, in the absence of a potentially explosive atmosphere.

## 9. ELECTRICAL CONNECTIONS

All the procedures involved in connecting the unit to the electrical mains must be carried out by skilled, legally qualified staff.

The electric power supply cable must be fastened to avoid twisting, tearing and/or compression.

## 10. NOISE LEVEL

The electric pump has a noise level of less than 70 dB(A) when submerged, with a level of less than 80 dB(A) in air.

## 11. STORAGE

During storage, the electric pump must be kept in a suitable place, out of the reach of children or those with diminished responsibility, suitably secured against falling and protected from damp, dust, vibrations and extreme temperatures (below -5°C and above +40°C).

Turn the impeller by hand occasionally (at least every month) through the outlet or intake, to prevent the mechanical seals from sticking together.

## 12. DISPOSAL: information to users

**Information to users under art. 14 of the 2012/19/EU Directive of the European Parliament and Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)**



The crossed bin symbol on the equipment, or its packaging, indicates that the product must be collected separately from other waste at the end of its useful life and not with mixed urban waste.

Appropriate waste sorting for the subsequent recycling,

treatment and disposal in an environmentally sound way of the disused equipment avoids negative effects on the environment or human health and favours the re-use or recycling of the equipment's materials.

**Electric pumps for domestic applications: single-phase models with power P2 less than or equal to 3kW**

Please contact your municipality, or local authority, for all information regarding the waste sorting systems available in the area. The retailer is obliged to collect the old equipment free-of-charge when the customer buys a new equivalent equipment. This is to encourage correct recycling/disposal.

**Electric pumps for professional applications (three-phase models and single-phase models with P2 power greater than 3kW)**

The waste sorting of this equipment at the end of its life is organised and managed by the producer. The user who wants to dispose of this equipment can contact the producer and follow the adopted system to allow the waste sorting of equipment at the end of life or select an independently authorised supply chain to manage the waste.





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