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GENERAL SAFETY WARNINGS

Warnings for the safety of users and third parties.

Pay particular attention to the signs and their symbols



DANGER
Risk of electrical discharge

Warning the nonobservance of instructions may lead to risk of electrical discharge.



DANGER

The nonobservance of instructions may cause damage to users and/or third parties.



WARNING

The nonobservance of the instructions may cause damage to the motor pump.

CAUTION: *before assembling, carefully read the contents of this manual. The nonobservance of the instructions will result in the annulment of the warranty.*

Chapter 1 – General information

The automatic pumping stations of the series VACUSYSTEM are supplied assembled, ready for use and complete with the components indicated in the following chart.

| Models | VS 200- | VS 200 S- | VS 500 TWIN- |
|-----------------------------|-------------------------|--|---|
| | P 300 M P460 M | P 300 M P 300 T P 460 M P 460 M | P 300 M P 300 T P 460 M P 460 T |
| Tank capacity | 175l | 175l | 550l |
| Pump | Quantity | 1 | 2 |
| | Model | PRIOX | PRIOX |
| Delivery Pipe | ø 2" | ø 2" | ø 2" (2 pz.) |
| Connection curve | ø 2" | ø 2" | ø 2" (2 pz.) |
| Check Valve | - | - | - |
| Plug | with thermal protection | with thermal protection (only single-phase pumps) | - |
| Waste pipe | - | yes | yes (2 pieces) |
| Float | supplied with the pumps | separated by 10 m of cable H07 RN-F | separated by 10 m of cable H07 RN-F (2 pieces) |
| Electric switchboard | - | only three-phase pumps | yes |

Upon delivery check that the pumping station has not suffered damage during transportation. In case of claims, immediately inform the retailer within eight days of purchase.

Chap.2 –Limits of use

The automatic pumping stations VACUSYSTEM is built for the raising and disposal of:

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| <p>VS 200</p> <p>VS 200 S</p> <p>VS 500 TWIN</p> | <p>draining water with solid suspended particles of maximum dimension 40 mm, infiltration, rain and dirty water in general. Temperature of the pumped liquid 40 °C.</p> |
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Chap. 3 - ASSEMBLY

Figs. 1 show assembly diagrams normally used



DANGER
Risk of electrical discharge

All the assembly operations must be carried out with the group in question disconnected from the power supply grid

The automatic raising stations VACUSYSTEM can be installed both indoor (basements, garage, etc.), fasten the collecting tank to an even floor; and outdoor (underground or buried in concrete should these withstand the passage of vehicles).

The raising stations VS 200, VS 200 S and VS 500 TWIN are delivered off-the-shelf with watertight covers. The removal of such covers is possible in case of periodic inspections or maintenance operations on the pumps.

Figs. 2-3 show overall dimensions of the automatic raising stations

Chap.4 – HYDRAULIC CONNECTION

The hoisting stations VACUSYSTEM are delivered pre-assembled and ready for use. It is necessary to perform only the hydraulic couplings with the connection to the sewerage and discharge of water into the tank.

VS 200
VS 200 S
VS 500 TWIN

connect the pipeline (2") passing from the tank through the connection pipe to the drainage system. The assembly of a ball check valve and of a shutter on the delivery pipeline out of the tank is recommended. For the entrance into the raising station of used water, the system is equipped with 2 passages (VS 200, VS 200 S) or 3 passages (VS 500 TWIN). One of these passages can be used as breather pipe. Also in this case all the pipelines must be sealed so as to ensure watertight conditions.

Chap.5 – ELECTRIC CONNECTION

VACUSYSTEM raising stations are delivered according to the models or provided with plug or control and protection switchboards, in which case it is necessary to perform the electric connections to the switchboard and the network.



WARNING

Check that the voltage and frequency indicated on the data plate correspond to those of the available power grid



DANGER
Risk of electrical discharge

Check that the power supply is provided with an efficient ground installation which conforms with the regulations in force.



WARNING

The power supply system must be equipped with a differential circuit breaker with the degree of sensitivity required for the type of installation

VS 200
VS 200 S (single-phase)

connect the power supply cable of the pump (equipped with plug and thermal protection and switch for manual/automatic operation) coming out of the tank of the side bulkhead to the power supply. If the tank is laid underground or buried in concrete, the power supply cable of the pump should run in opportune channels. If the tank is watertight (equipped with specific cover) it is necessary that the passage hole of the electric cable is also sealed, so as to avoid the emission of undesirable odors. For the grounding and the thermal protection of the pumps, refer to the specific handbook for the pump.

VS 200 S (three-phase) connect the power supply cable of the pump to the terminal board of the electric switchboard and connect it to the grid. Equally the float cable coming out from the tank must be connected to the special switchboard clamps. Also in this case the run of the cables should opportunely be protected and the holes sealed.

VS 500 TWIN (single-phase) connect the power supply cables of the pumps to the terminal board of the respective switchboards and connect them to the grid. Also the float cable coming out from the tank must be connected to the special switchboard clamps. In addition the run of the cables should opportunely be protected and the holes sealed. The control board of this series of stations as well as reversing the starting of the pumps at the end of every cycle, enable an external optical and/or acoustic signal, through an emergency float. To this purpose the tank is equipped with an additional threaded dead hole.

CHAP. 6 – OPERATION

VS 200
VS 200 S (single-phase)

the operation of the station is automated by the float, through which the start and shutoff levels of the pump are regulated. For the heights of the levels refer to the indications given in the attached handbook of the pump. Intermediary regulations are obtained by varying the length of the free line of the float cable.

VS 200 S (three-phase)

the optimal levels of start and shut-off of the pump are obtained by varying the length of the free line of the float.

VS 500 TWIN

for double-pump stations the cascade connection and disconnection is obtained by positioning the floats so that the free lines have different lengths. Check and set the cascade operation upon first starting.

Cap. 7 - MAINTENANCE



DANGER
Risk of electrical discharge

Before performing any cleaning operations, shut down the motor pump voltage.

For all interventions on the pumps refer to the corresponding handbooks contained in the package.

VS 200
VS 200 S
VS 500 TWIN

These models instead require periodic cleaning interventions (in general annually). After having unscrewed the cover of the station, extract the pumps using the handle by sliding it along the guiding pipes. Clear the tank of deposits by paying particular attention to the areas where the floats operate. Reinsert the pump by again sliding it along the guiding pipes and then carefully close the watertight tank.