

VICTORIA PLUS SILENT MANUAL



SWIMMING POOL PUMPS



ASTRALPOOL 

VICTORIA PLUS SILENT

IMPORTANT

This manual contains basic information on the safety measures to be adopted during installation and start-up. The fitter and the user must therefore read the instructions before installation and start-up.

The manual can be downloaded as a PDF file from the website: www.astralpool.com

1. GENERAL SAFETY INSTRUCTIONS

These symbols (  ) indicate the possibility of danger where the corresponding instructions are not followed.



DANGER. Risk of electrocution.

Failure to abide by these instructions may lead to the risk of electrocution.



DANGER.

Failure to abide by these instructions may lead to the risk of injury to people or damage to property.



WARNING.

Failure to abide by these instructions may lead to the risk of damage to the pump or the installation.

2. GENERAL SAFETY REGULATIONS

GENERAL



- The units described in this Manual are specially designed for the pre-filtering and recirculation of water in swimming pools.

- They are designed to work with clean water at temperatures that do not exceed 35 °C.



- Install them in line with the specific instructions for each installation.

- Respect current regulations regarding accident prevention.

- All modifications to the pump require prior authorization from the manufacturer. Original spare parts and accessories authorized by the manufacturer ensure greater safety. The pump manufacturer is exempt from all liability regarding any damage caused by unauthorized spare parts or accessories.



- When working on each unit or others connected to them, disconnect the unit from the power supply and the start-up devices, as the electrical parts of the pump are live during operation.

- All assembly and maintenance work must be carried out by qualified, authorized personnel who have carefully read the installation and service instructions.



- To guarantee safety when operating the machine, you must comply with the installation and service instructions.

- In the event of defective operation or faults, contact your supplier or nearest dealer.

WARNINGS DURING INSTALLATION AND ASSEMBLY WORK



- In cases of junction box connections only: when connecting the electrical wiring to the motor, check the layout inside the connection box and make sure there are no pieces of wiring inside after it has been closed and that the earthing conductor is correctly connected. Connect the motor in line with the wiring diagram attached to the machine.

- In cases of junction box connections only: make sure that the electrical wiring connections to the terminal box are well mounted and screwed tightly to the connection terminals.

- The unit should be connected to an alternating current supply (see data on the pump's plate) with an earth connection, protected by a residual current device (RCD) with a rated residual operating current that does not exceed 30 mA.

- Ensure the seal of the motor's junction box is properly fitted to prevent water getting in. Likewise, position and tighten the gland inside the cable duct of the junction box.



- Make sure that water is unable to enter the motor or the live electrical parts.

- Where the intended use is not as indicated, additional technical adaptations and regulations may apply.

WARNINGS DURING START-UP



- Before starting the machine, check the calibration of the electric protection devices on the motor and that the protection against electrical and mechanical contacts is correctly positioned and secure.

NOTE

The pool should not be used while the pump unit is running.

Do not use the pump if anyone is in contact with water.

WARNINGS DURING ASSEMBLY AND MAINTENANCE WORK



- Follow local installation regulations when assembling and installing the pumps.

- Make sure that water is unable to enter the motor or the live electrical parts.



- Avoid contact at all times - even accidentally - with moving parts while the unit is running and/or before it comes to a complete standstill.



- Wait for the unit to come to a halt before handling it.



- Before any electrical or mechanical maintenance operation, disconnect the unit from the power supply and block the start-up devices.



- Follow the steps below before handling the unit:

1. Disconnect the unit from the mains.
2. Block all start-up devices.
3. Check that there is no voltage in the circuits, even in the auxiliary circuits and additional features.
4. Wait for the impeller to come to a complete standstill.



The above list is a guideline only as there may be other requirements in addition to local laws for safety reasons.



- For regular control:

- Check that the mechanical parts are tightly secured and check the condition of the screws supporting the machine.
- Check that the power conductors and isolating parts are in their correct position, are secure and in a good state of repair.
- Check the temperature of the machine and the electric motor. In the event of a fault, stop the machine immediately and contact the nearest Technical Assistance Service.
- Check for machine vibrations. In the event of a fault, stop the machine immediately and contact the nearest Technical Assistance Service.



-Due to the complex nature of the cases described, the installation, user and maintenance instructions contained in this manual do not seek to examine all possible and imaginable cases of service and maintenance. Should you require additional instructions or have specific problems, please do not hesitate to contact the nearest Technical Assistance Service.

The electrical installation should be done by someone qualified in working with electrical equipment. This unit is not designed for those with a physical, sensory or mental handicap or people lacking in experience, unless done under supervision or with instructions of use from a person in charge of safety.

Do not permit children nor adults to sit or lean on the unit. Children should be supervised to ensure that they do not play with the unit.

This appliance can be used by children aged from 8 years and above and persons with a reduced physical, sensory, or mental handicap or lack of experience and expertise if they are supervised or have been given instructions on the safe use of the appliance and understand the hazards involved.

Cleaning and user maintenance must not be done by children without supervision.

3. INSTALLATION AND ASSEMBLY

GENERAL



- Our pumps may only be assembled and installed in pools or ponds that are compliant with standard HD 384.7.702. Should you have any doubts, please consult your dealer.

- The installation should follow standard IEC 60364-7-702 for swimming pools.

- The pump can be installed in zones 1 or 2.



- Fit the pump horizontally in order to accommodate the pre-filter. The pumps are fitted with a pre-filter with a basket inside to collect any large particles, as they may damage the hydraulic parts inside the pump.

- All pumps are fitted with a stand with holes in it to anchor it to the ground (Fig. 1).

PIPING



- To connect the piping, glue the pipes and the connectors, supplied together with the pump; the fitting connections to the suction and return ports on the pump are threaded and include seals to prevent water loss (Fig. 2).

- Fit the return pipes completely perpendicular and centered in relation to the port to be connected to prevent the pump and the pipe from being subjected to external stress, which apart from making fitting difficult, could break them (Fig. 2).

- Fit the suction piping on a slight 2% slope towards the pump to avoid the formation of air pockets (Fig. 2).

- To ensure the pump works correctly, prime the pump pre-filter until water rises up through the suction pipe (Fig. 3).

LOCATION



- Fit the pump below the water level in the pool to improve pump performance.

- If a self-priming pump is to be fitted above the water level, the pressure differential to the pump suction pipe should not be higher than 0.02 MPa (2 mH₂O). Ensure that the suction pipe is as short as possible as a longer pipe would increase suction time and the installation's load losses.



- Make sure that the pump is safe from possible flooding and receives dry ventilation.

ELECTRICAL INSTALLATION



- It is essential that you use a multiple disconnection device with a space of at least 3 mm between surfaces to disconnect the unit from the electrical current.

- Use a rigid cable to connect the pump to the mains. If you use a flexible cable to connect it to the mains, it must have cable lugs to connect it to the terminals of the pump's motor.
- The unit should be connected to an alternating current supply (see data on the pump's plate) with an earth connection, protected by a residual current device (RCD) with a rated residual operating current that does not exceed 30 mA.
- Adjust the value of the ground fault circuit interrupter in line with pump intensity.
- Before connecting the motor, check the type of fuse required.
- Check the layout and connection of the earthing cable in the unit.
- Respect the electrical installation and connection instructions. Failure to do so may lead to the pump's manufacturer declining all liability and rendering the warranty null and void.
- The installation may be subject to special regulations.
- Unsuitable mains connections involve the risk of electrocution.

For pumps with a single-phase motor:

- Thermal protection is incorporated.
- Use a motor guard with magneto-thermal protection.
- The adjustment data for the thermal relay is to be used as a guideline, as the motor is already fitted with protection.
- For 230 V, use a H07 RN-F3 type connection sleeve with a cable section that adapts to the power of the motor and to the length of the cable.

For pumps with a three-phase motor:

- Use a motor guard with magneto-thermal protection.
- Protect the pump against overloads with a cut-off switch for the motor.
- Adjust the thermal value according to the thermal protection table. For the connection Δ (3 x 230 V network), use the protection with the highest indicated value. For the connection Y (3 x 400 V network), use the protection with the lowest indicated value.
- Connect the lowest voltage at Δ and the highest at Y for voltage intervals other than 230/400 V; 400/690 V.
- For AC, use a H07 RN-F3 type connection sleeve with a cable section that adapts to the power of the motor and the length of the cable.
- The mains cable may only be connected by skilled, authorised personnel.

4. START-UP INSTRUCTIONS

PRIOR TO START-UP



- Measurements prior to first start-up:

1. Remove the pre-filter cap by unscrewing the nut holding it in place (Fig. 5).
2. Fill the pump with water through the pre-filter until it rises up through the suction pipe.
3. Should the basket be removed during these operations, do not forget to replace it to prevent large particles from entering the pump that could block it.
4. Check that the mains voltage and frequency correspond with those indicated on the pump's rating plate.

- Fit the pre-filter cap and screw on tightly, without forgetting to fit the seal in its housing (Fig. 5).

- The pumps must not be run without the pre-filter having first been filled with water. Where this is not the case, the mechanical gasket may be damaged, leading to a loss of water.



- Check that the motor rotates in the correct direction by means of the fan located at the back of the motor that can be seen through the view hole on the fan cover (Fig. 6).

START-UP



- Open all the valves and connect the motor.

- Activate the self-priming mode and wait a reasonable time for this to be completed.

5. MAINTENANCE

Depending on the level of water cleanliness, the following should be done every 100 operating hours:



- Clean the pre-filter basket regularly to avoid drops in pressure. To prevent the basket from breaking, do not hit it during the cleaning process.

- Should the pump stop, check that the consumption in amperes of the motor that is running is equal to or below that indicated on the manufacturer's rating plate. If this information is not available, contact the nearest Technical Assistance Service.



- Empty the pump if it is to remain at a standstill for a certain length of time, especially in cold countries where there is a risk of freezing.

- Remove the purge cap to empty the pump.

- Every time the pre-filter is opened, clean the seal and its housing of any impurities to ensure airtightness when the cap is closed (Fig. 5).

- Pump components that, due to their normal use, suffer wear and/or tear must be regularly replaced to ensure good pump performance. The following table lists the fungible and / or consumable components of the pump and the period of time in which they must have been replaced.

DESCRIPTION OF THE COMPONENT	TIME BETWEEN REPLACEMENTS
Condenser	10,000 h
Bearings	10,000 h
Mechanical seal	10,000 h
O-rings and other sealing components ⁽¹⁾	10,000 h

⁽¹⁾ The opening and closing of the pump for the replacement of any of the inner spare parts does not guarantee the subsequent sealing. For this reason, it is recommended that the O-rings and sealing components are replaced whenever the mechanical seal and / or bearings are changed.

The estimated working life of the above parts has been established according to normal product use and installation conditions.

Follow the instructions in the installation manual to maintain the working life of the pump.

6. REMOVAL



- The motor unit can be removed from the pump body without having to disconnect the pump's suction and return pipes.

- To remove the motor unit from the pump body, remove the screws that join them together.

7. TROUBLESHOOTING

1. The pump is not primed
2. The pump only releases a small flow of water
3. The pump makes a noise
4. The pump will not start
5. The motor is making a noise but will not start
6. The motor has stopped

1	2	3	4	5	6	CAUSES	SOLUTIONS
●	●					Air entering the suction pipe	Check the condition of connections and seals on the suction pipe
●						Filter cap badly sealed	Clean the filter cap and check the condition of the rubber seal
●	●					Motor turning in wrong direction	Invert 2 power phases
●	●	●				Wrong voltage	Check the voltage on the rating plate and that of the mains
	●					Pre-filter blocked	Clean the filter
	●					Load loss in the installation	Prevent parts from causing load loss wherever possible
		●				Pump incorrectly secured	Secure the pump correctly
				●		Motor blocked	Remove the motor and contact the technical service
					●	Increased temperature in the terminal box due to electric arc	Check the junction box connections
					●	The thermal protection trips	Connect the cables correctly to the junction boxes
					●	Incorrect junction box connections	Tighten the cable correctly to the junction box / Adapt the size of the cable connection to the junction box

ANCHOR DETAIL

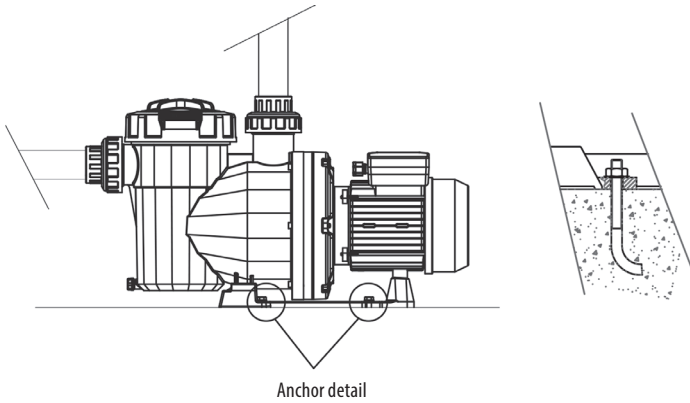
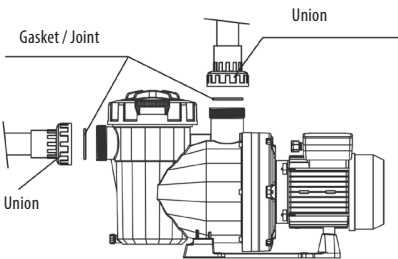


Fig. 1

CORRECT



INCORRECT

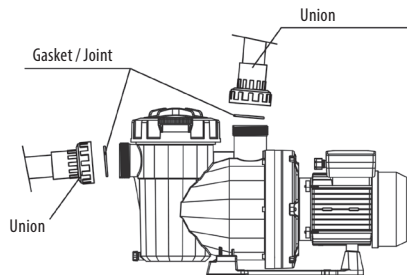


Fig. 2

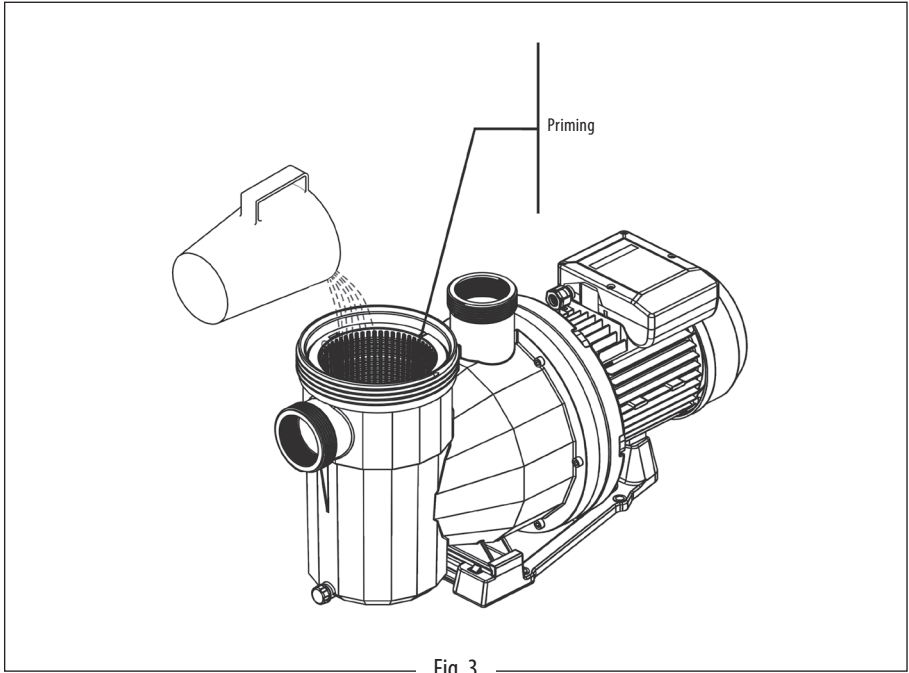


Fig. 3

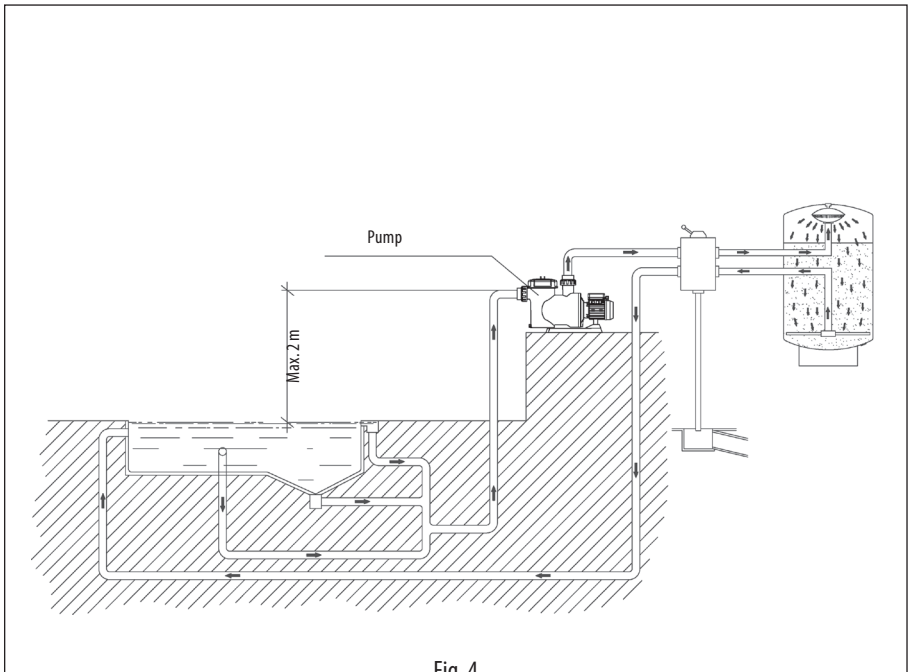
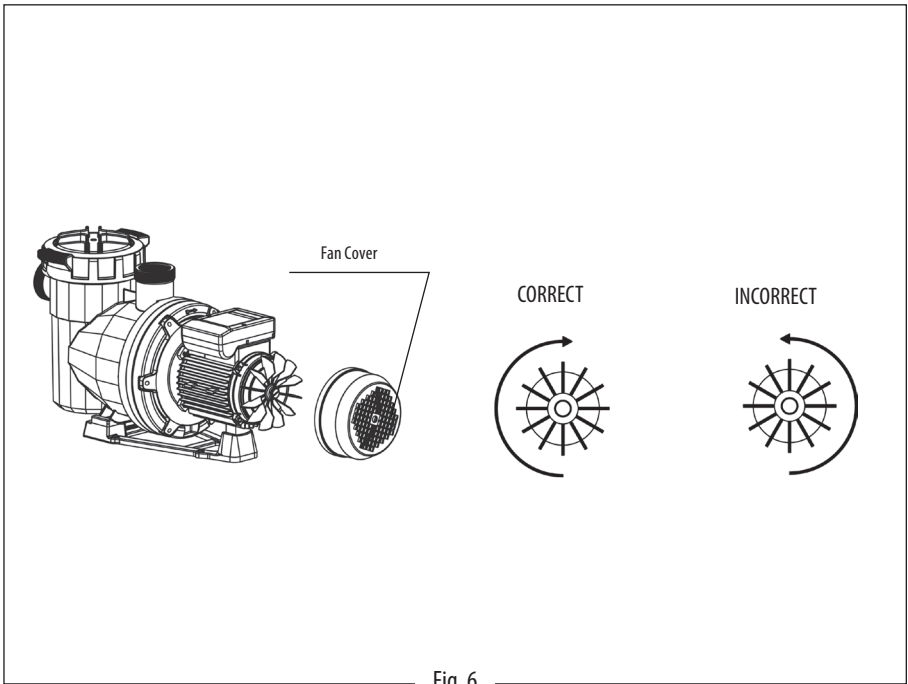
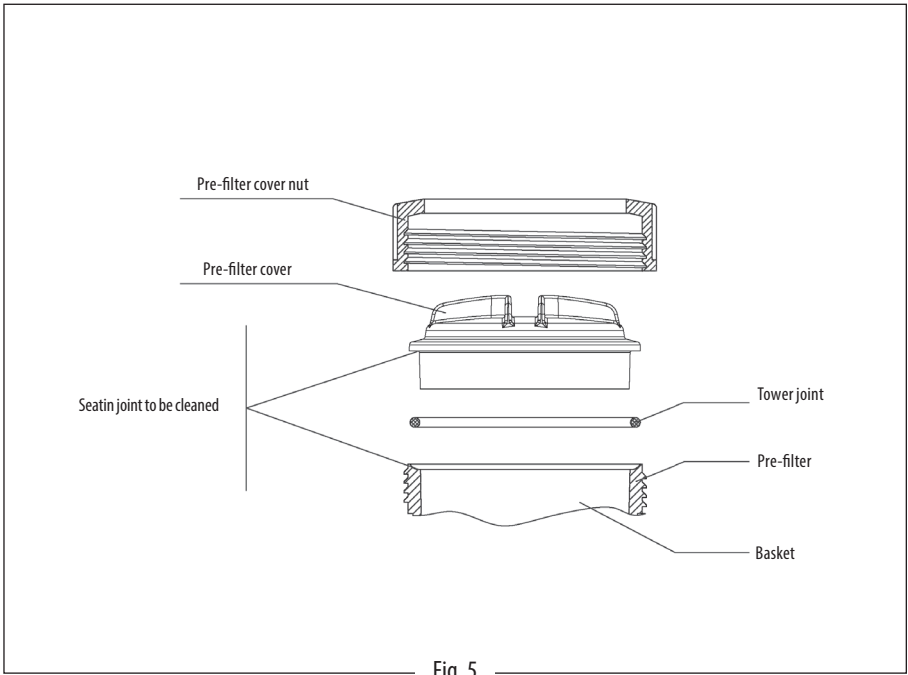
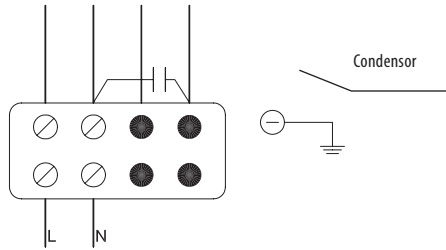


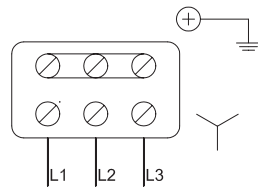
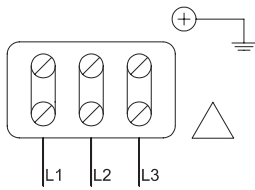
Fig. 4



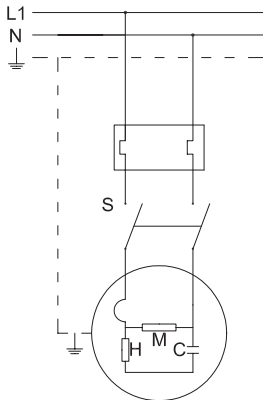
SINGLE PHASE MOTORS



THREE PHASE MOTORS



SINGLE PHASE



THREE PHASE

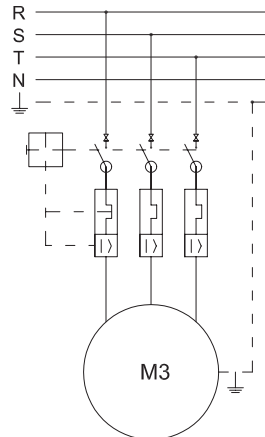


Fig. 6

GUARANTEE CERTIFICATE

1. GENERAL TERMS

- 1.1. In accordance with this provisions, the seller guarantees that the Astral Product corresponding to this guarantee ("The Product") doesn't have any default in conformity at this time of delivery.
- 1.2. The guarantee term for the product is three (3) years and will be calculate from the date of delivery to the purchaser .
- 1.3. In the event of any default in conformity of the product and the purchaser notifies the seller of such default during the guarantee period, the seller is obliged to repair o replace the Product at its own cost in the place that he consider convenient, unless it is impossible or disproportionate.
- 1.4. When it is not possible to repair or replace , the purchaser may request a proportional reduction in the price, or, if the default in conformity is sufficient significant , the termination of the contract.
- 1.5. The parts replaced or repaired under this guarantee will not extend the guarantee term of the Product, although will have their own guarantee.
- 1.6. In order for this guarantee to come into effect, the purchaser must prove the date of acquisition and delivery of the Product.
- 1.7. If after six months from the delivery of the Product to the purchaser , a default of the conformity of the product is notified, the purchaser must prove the origin and existence of said defect.
- 1.8. This Guarantee Certificate does not limit or prejudice the rights corresponding to the consumers by virtue of national compulsory standards.

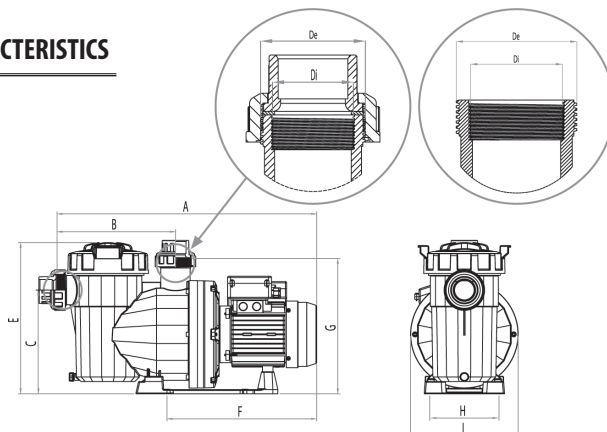
2. INDIVIDUAL TERMS

- 2.1. This Guarantee covers the following AstralPool products and product ranges: "Victoria Plus Silent".
- 2.2. This Guarantee Certificate will be applicable exclusively in countries of the European Union.
- 2.3. In order for this guarantee to be effective the purchaser must strictly follow the manufacturer's instructions included in the documentation accompanying the Product, if said documentation is applicable depending on the range and model of the Product.
- 2.4. When a schedule is given to replace, maintain or clean certain parts or components of the Product, the guarantee will only be valid if this schedule has been followed correctly.

3. LIMITATIONS

- 3.1. This guarantee will apply exclusively to sales made to consumers. A "consumer", is understood to be the person who acquires the Product for purposes not connected with his professional activity.
- 3.2. No guarantee is given for the normal wear through using the product. With regard to parts, components and/or expendable equipment such as mechanical seals, bearings and water tightness, the documentation accompanying the product will be applicable, as the case may be.
- 3.3. The guarantee does not cover accessory elements of the product "Victoria Plus Silent" not explicitly included on it, such as panel board, converter, protection devices, etc.
- 3.4. The guarantee covers Product's failures originated only and exclusively by materials defect and/or performance works. The guarantee doesn't cover cases such us the Product: (I) has been object of an incorrect handling; (II) has been installed, repaired, maintained or manipulated for an non-authorized person or (III) has been repaired or maintained with non original spares. It's out of the present guarantee the slight damages originated by accidental tears or inadequate as:
 - Pump working without water
 - Incorrect dosification of chemical products on the swimming pool
 - Water damage originate in external elements to the pumping conditions.
 - Inadequate ventilation
 - Use in different applications of swimming pool water filtration.
- 3.5. The guarantee does not cover cases of incorrect installation or start-up unless said installation or start-up is included in the sales contract of the Product and has performed by the seller or under his responsibility. This cases are covered by the installer or the seller who installed the product.

TECHNICAL CHARACTERISTICS



CODE	MOTOR			H max. (m)	NOISE dB	DIMENSIONS (mm)										PVC PIPE D.			
	HP	P1 Kw	VOLTAGE (V)			A	B	C	De	Di	E	F	G	H	I				
65557	1/2	0,58	230	C.71	13	61	581	281	246	ACME D.75	2" GAS	359	322	321	164	254	50		
65558		0,55	230 - 400				581	281	246	ACME D.75	2" GAS	359	322	321	164	254			
65560	3/4	0,65	230		14		581	281	246	ACME D.75	2" GAS	359	322	321	164	254			
65561		0,82	230 - 400				581	281	246	ACME D.75	2" GAS	359	322	321	164	254			
65562	1	0,98	230		17		581	281	246	ACME D.75	2" GAS	359	322	321	164	254			
65563		1,02	230 - 400				581	281	246	ACME D.75	2" GAS	359	322	321	164	254			
65564	1 1/2	1,46	230	C.80	18	66	615	281	246	ACME D.75	2" GAS	359	356	321	164	254	63		
65565		1,4	230 - 400				615	281	246	ACME D.75	2" GAS	359	356	321	164	254			
65566	2	1,85	230		18		615	281	246	ACME D.75	2" GAS	359	356	321	164	254			
65567		1,91	230 - 400				615	281	246	ACME D.75	2" GAS	359	356	321	164	254			
65569	3	2,56	230		C.90		22,5	646	281	246	ACME D.75	2" GAS	359	387	321	164		254	75
65570		2,4	230 - 400		C.80			615	281	246	ACME D.75	2" GAS	359	356	321	164		254	