PHT VS On.e

CONNECTED VARIABLE SPEED
POOL PUMP

USER MANUAL

NOTPHTVSONE-EN - 2026/02/20

ACIS
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44310 St Philbert de Grand Lieu

This document contains essential information for the safety of persons and property, as well as information on commissioning the pump. The user and installer must read the information contained in this document before installation and commissioning. This reference document must be kept.

MEANING OF SYMBOLS

	DANGER	Risk of electric shock.
	DANGER	Risk of injury to persons.
	ATTENTION	Risk of damage to the pump and the installation.

1. SAFETY INSTRUCTIONS AND WARNINGS

1.1. SAFETY INSTRUCTIONS

The list of recommendations below is not exhaustive, all handling of the pump must be done with maximum precaution.

- The pump must be installed in compliance with the standards in force in your country, in particular NFC15-100; we recommend that you call in a professional for installation.
- The pump has been designed for use in a closed pool filtration circuit, in clear water at temperatures between +5° and +50° C.
- Do not modify the pump; any modification of the pump will invalidate the warranty.
- The manufacturer declines all responsibility for damage caused by the use of externally manufactured parts or parts modified without its prior agreement.
- The safety and correct operation of the pump will be guaranteed if and only if all installation and commissioning instructions are followed.

- Always switch off the power supply of the pump before any maintenance work.
- The limit values shown in the technical table must never be exceeded under any circumstances.

- In the event of malfunction or damage, please contact your nearest manufacturer's representative or the manufacturer's Technical Support Department.

- Avoid touching the engine area, which is a hot surface.
- This appliance may be used by children aged 8 and over and by persons with reduced physical, sensory or mental capabilities, or lacking experience or knowledge, if they are properly supervised or if they have been given instructions on safe use of the appliance and have understood the risks involved. Children must not play with the device. Cleaning and maintenance by the user must not be carried out by unsupervised children.
- The pump must be supplied by a circuit fitted with a residual current device (RCD) with a rated operating differential current not exceeding 30 mA.
- Replacement of the power cable must be carried out by the manufacturer, their after sales department or a similarly qualified person.

1.2. WARNINGS

- **Never operate the pump without water.**
- For the pump to function properly, it must be installed horizontally.
- Performance is optimized with a pump placed below the pool level..
- For proper air circulation and to ensure effective cooling, the fan grille must be located more than 30 cm from a wall.
- The pump is designed for a maximum altitude of 2000m above sea level.
- The pump is not submersible.
- The pump must not be submerged under any circumstances, even partially. Any pump found to have been operated while submerged, even minimally, will be excluded from coverage under the warranty.

1.3. OPERATING PRECAUTIONS

- The pump must operate without noise or vibration.
- Periodically check for leaks.
- Always stop the pump before operating the valve of your filter on the hydraulic circuit of the pool.

DANGEROUS PRESSURE: ALWAYS KEEP AWAY FROM THE PUMP AND FILTER DURING START-UP

The circulation system operates under high pressure. When servicing a part of the circulation system (e.g., pump, filter, etc.), air can enter the system and become pressurized. Pressurized air can cause violent separation of the pump housing cover, filter cover, and filter valves, resulting in serious injury or death. The filter tank cover must be properly secured to prevent violent separation.

Stay away from any circulation system equipment when turning on or starting the pump.

2. GENERAL

2.1. DESCRIPTION

Energy-efficient pump with variable speed that can be programmed according to requirements.

Ergonomic: the pump includes a control panel with 5 buttons:

	VS On.e 1.1Kw
	• 3 buttons V1, V2, V3: adjustment of pre-set speeds (2000, 2400, and 2850 rpm), and adjustable from 35 to 100% or from 1000 to 2800 rpm • 1 « Stop » button • 1 « Auto » button
Features :	• Clock and speeds programmable on a daily or weekly basis from the On.e app • Priming function adjustable from the On.e app • Skimming function adjustable from the On.e app • Boost function adjustable from the On.e app
On.e technology integrated into the pump	• Integrated dry contact for controlling treatment accessories • Control and programming of filtration via the On.e mobile app
Included	• Fittings included (Ø50 / Ø63)

- Boot function:

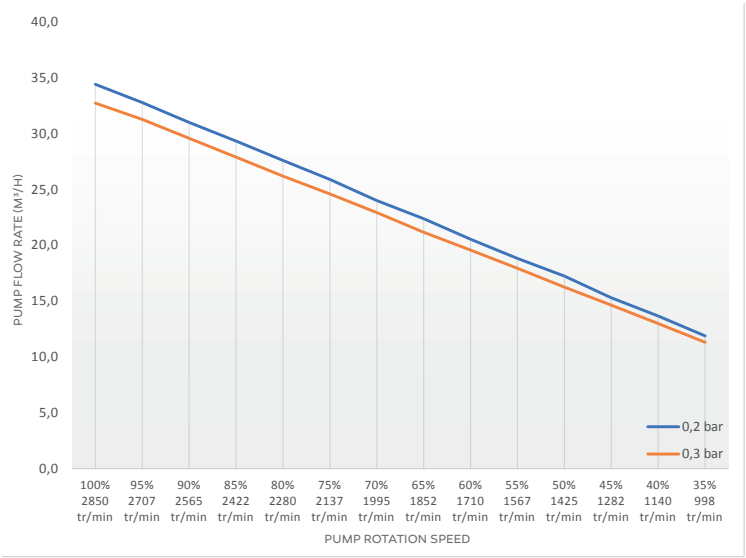
Characteristics	VS On.e 1.1Kw
Time	0 to 30 minutes
Speed	35% (1000 tr/min) / 100% (2850 tr/min)

2.2. TECHNICAL SPECIFICATIONS

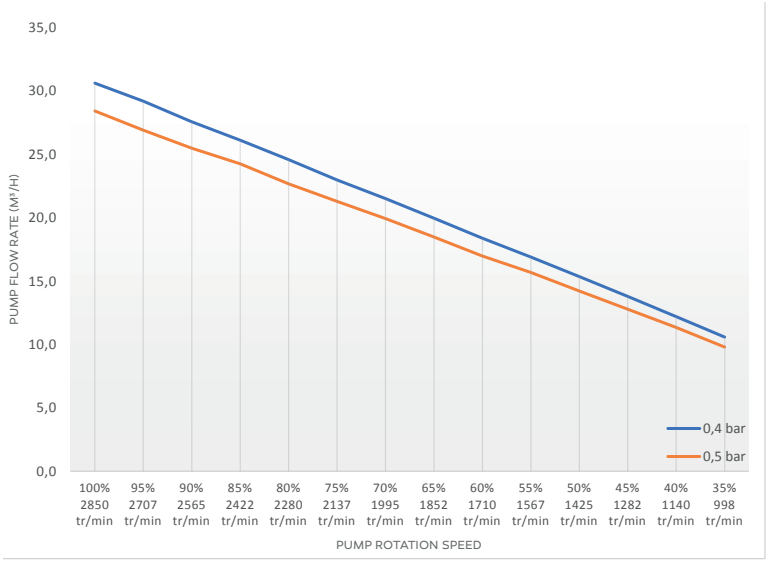
Characteristics	
Supply voltage	230 VAC
Frequency	50Hz
P1max (motor only)	1100 W
P1max (in circulation)	900 W
Imax (in circulation)	4,5A
Number of programmable speeds	3 (V1 / V2 / V3)
Speed range	35% (1000 tr/min) < 100% (2860 tr/min)
Dry servo contact	230V AC Max / P1max 2Kw
Ambient air operating temperature range	from 0°C to 50°C
Permissible liquid temperature range	from 5°C to 50°C
Power cable and servo contact	5G1mm2 / 2,5 mL
Seawater compatibility	JUp to 35 g/L
Maximum flow (0,6 Bar) @Vmax	26 m3/h
Maximum flow (0,8 Bar) @Vmax	22 m3/h
Maximum flow (1 Bar) @ Vmax	15 m3/h
Maximum flow @Vmax	37 m3/h
Maximum Head	17 m
Insulation class	F
Service type	S1
Protecting rating	IP55
Weight	10 kg

HYDRAULIC PERFORMANCE:

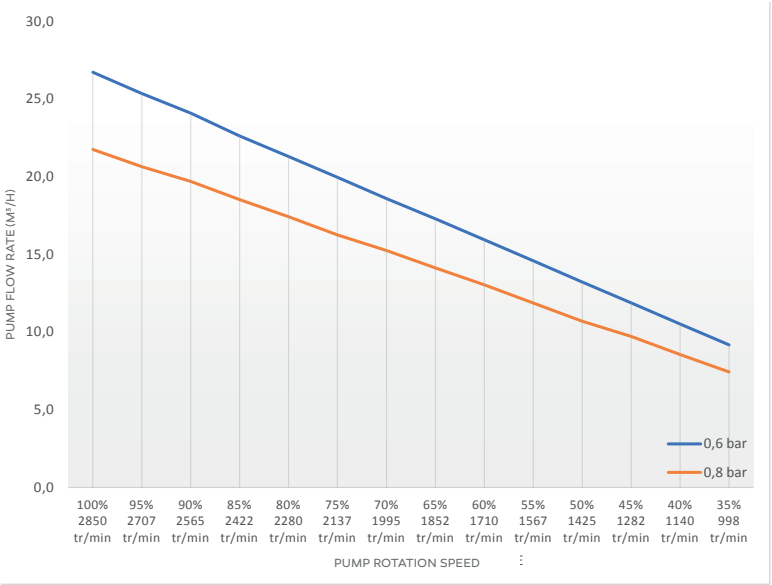
Pump flow rate with an installation pressure of 0,2 / 0,3 bar @Vmax



Pump flow rate with an installation pressure of 0,4 / 0,5 bar @Vmax



Pump flow rate with an installation pressure of 0,6/0,8 bar @Vmax



	Pump flow rate (m³/h)					
Rotation speed (%)	**0,2 bar**	**0,3 bar**	**0,4 bar**	**0,5 bar**	**0,6 bar**	**0,8 bar**
100% 2850 tr/min	34,4	32,8	30,6	28,4	26,7	21,8
95% 2707 tr/min	32,8	31,3	29,2	26,9	25,4	20,7
90% 2565 tr/min	31,0	29,6	27,6	25,5	24,1	19,7
85% 2422 tr/min	29,3	27,9	26,1	24,3	22,6	18,5
80% 2280 tr/min	27,6	26,2	24,6	22,7	21,3	17,4
75% 2137 tr/min	25,9	24,6	23,0	21,3	20,0	16,3
70% 1995 tr/min	24,0	22,9	21,5	20,0	18,6	15,3
65% 1852 tr/min	22,4	21,2	20,0	18,5	17,3	14,1
60% 1710 tr/min	20,5	19,6	18,4	17,0	16,0	13,0
55% 1567 tr/min	18,8	18,0	16,9	15,7	14,6	11,9
50% 1425 tr/min	17,3	16,3	15,4	14,2	13,2	10,7
45% 1282 tr/min	15,3	14,7	13,8	12,8	11,9	9,7
40% 1140 tr/min	13,7	13,0	12,2	11,4	10,5	8,6
35% 998 tr/min	11,9	11,3	10,6	9,8	9,2	7,4

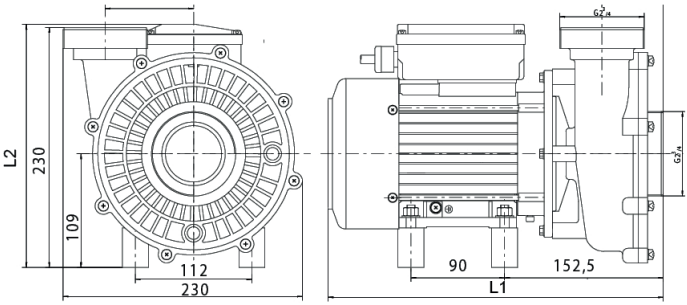
ELECTRICAL PERFORMANCE:

VERSION VS ON.E 1.1KW

	Speed @35% (1000 tr/min)		Speed @65% (1860 tr/min)		Speed @100% (2860 tr/min)	
System operating pressure @Vmax (100%)	Flow rate *	Power consumption *	Flow rate *	Power consumption*	Flow rate *	Power consumption *
0,6 Bar	9 m3/h	65 W	17 m3/h	270 W	27 m3/h	964 W
0,8 Bar	7 m3/h	62 W	14 m3/h	262 W	22 m3/h	938 W
1 Bar	5 m3/h	50 W	10 m3/h	250 W	15 m3/h	852 W

* Values correspond to those measured under real life conditions on a test bench. Slight variations of around 5% are possible.

2.3. DIMENSIONS

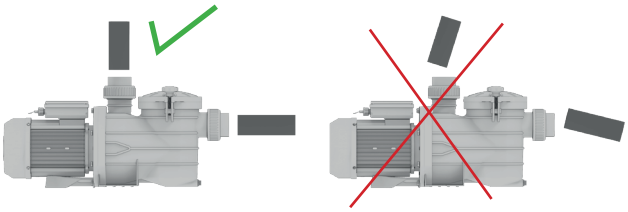


Model	L1 (mm)	Packaging L x H x P (mm)
PHT VS On.e 1.1KW	322	365x240x270

3. COMMISSIONING

3.1. HYDRAULIC SYSTEM

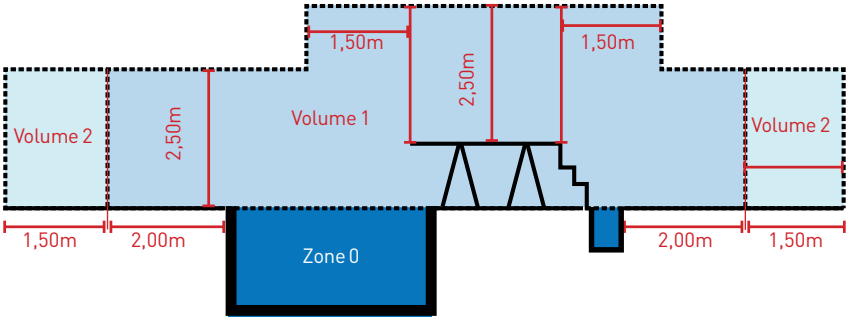
- Connect the pump to the pool's hydraulic circuit using the supplied fittings.
- To connect the pipes to the pump, the unions are supplied with O-rings, which must be used and compressed when tightened to guarantee watertightness.
- Pipes must be glued to the fittings supplied.
- The diameter of the piping on the suction side of the pump must be the same as or greater than that of the return pipe.
- The discharge pipe must be installed perpendicular and perfectly centered in relation to the outlets to be connected, so as to prevent the pump and pipe from being subjected to external forces which, regardless of the installation operations, could cause them to break.
- A vertical pipe section (approximately 60 cm) is recommended to facilitate pump priming.
- Slight inclination of the suction pipes (2%) prevents the formation of air pockets.



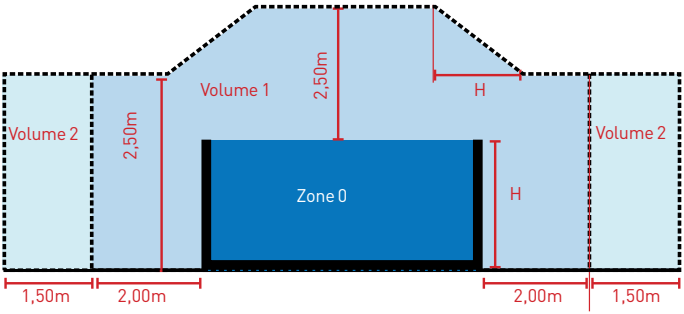
3.2. ELECTRICAL INSTALLATION

The pump must be installed in volume 2 in accordance with NFC 15-100 as shown in the diagrams below.

POOL SAFETY VOLUME FOR IN-GROUND POOLS:



SAFETY VOLUME FOR ABOVE-GROUND POOLS:

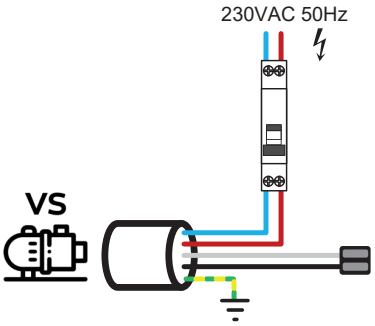


The pump must be connected to a bipolar magneto-thermal circuit breaker.

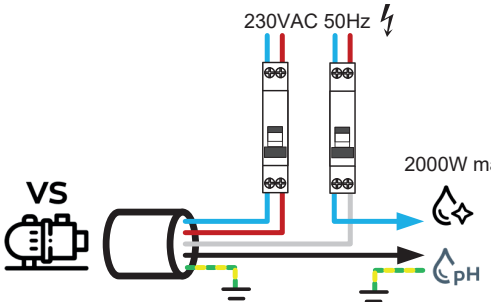
PUMP	CABLE TYPE	LENGTH (mL)	RECOMMENDED CIRCUIT BREAKER*
VS On.e 1.1 Kw	5G1mm2 – H07RN-F	2.5	4/6A

- 3 wires for power supply
- 2 wires for slave contact

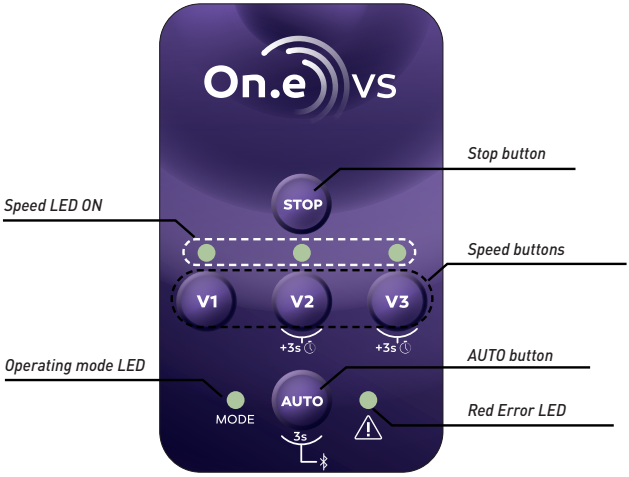
without water treatment warning



with water treatment warning



4. PUMP OPERATION

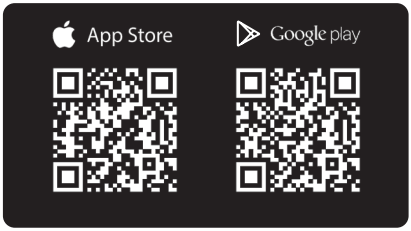


4.1. CONFIGURATION – USER MANUAL

4.1.1. PAIRING THE PUMP VIA BLUETOOTH

DOWNLOAD THE ON.E APP ON YOUR SMARTPHONE

The device can only be connecte to one smartphone application at a time. Make sure the filter pup is switched on.



1.Download the On.e smartphone application from Google Play or Apple Store and open it.

2.In the On.e app, select the + tab at the bottom of the page.

3.On the filter pump, hold down the AUTO button for at least 3 seconds.

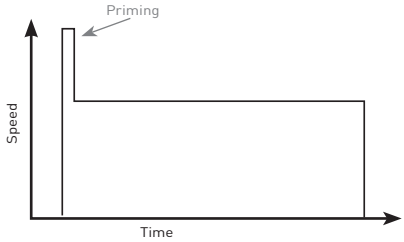
4.The LED will flash blue indicating that it is ready to be added to the On.e application within the next 3 minutes.

5.In the On.e application, click on the large On.e button to start the search.

6.Congratulations, the product will now work with your On.e smartphone application! As your device is now recognized by the application, it is no longer necessary to repeat this operation. The On.e application will automatically connect to the device the next time it is opened after selecting it. However, make sure that your smartphone is close enough to detect the On.e product.

4.2. MANUAL MODE

Note: The pump is preset with the priming function according to the "priming function" table. It will start at a given time and speed and then switch to the selected or programmed speed.



1.The pump is started by simply pressing one of the following buttons: Speed 1, Speed 2, Speed 3

2.The speeds are preconfigured according to the table below. You can change them at any time from the On.e app. For more details, please refer to the sections dedicated to app settings. The pump is stopped by pressing the Stop button.

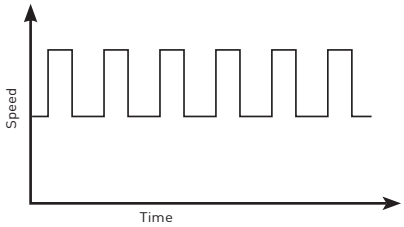
Speed	Value
Speed 1	2000 tr/min
Speed 2	2400 tr/min
Speed 3	2850 tr/min

4.3. AUTO MODE

In AUTO mode, pump operation is automated 24/7. The differentspeed ranges can be programmed from the On.e mobileapplication. They will be chosen according to the installation and the pool's hours of use.

Related operation :

- **BOOST mode activated** : it overlaps with the programmed time slots of AUTO mode.
- **Power outage** : if the power is turned off, when restarting, the pump resumes the speed programmed in the current AUTO range.



4.4. SWIM MODE

The purpose of this mode is to maintain the pump at V2 speed for 2 hours. This time cannot be changed and remains fixed. The pump will automatically return to the mode selected before the swim mode was triggered.

ACTIVATION

- Press and hold (3 seconds) the "V2" button..
- The «Mode» LED flashes white for the duration of this mode.

DEACTIVATION

- A short press on any button deactivates the sequence.

Use case example:

- Use of the pool with several swimmers
- Skimming the surface of the pool at moderate speed
- Slightly accelerate pool temperature rise with a heat pump

4.5. BOOST MODE

The purpose of this mode is to maintain the pump at V3 speed for 72 hours. This time cannot be changed and remains fixed.

After 72 hours, the pump automatically returns to active mode before activating Boost mode.

ACTIVATION

- Press and hold (3 seconds) the «V3» button.
- The «Mode» LED flashes white for the duration of this mode.

DEACTIVATION

- A short press on any button deactivates the sequence.

use case example:

- Heavy use of the pool with several swimmers
- Skimming the surface of the pool at moderate speed
- Slightly accelerate pool temperature rise with a heat pump

4.6. SKIMMING FUNCTION

This function is designed to maintain the pump at a given speed when it starts up. This mode can be set from 0 to 30 minutes. It is activated each time the pump starts up. The pump will automatically return to the previously selected speed after the set time has elapsed.

By default, this function is enabled on the pump.

EXAMPLES OF USE CASES:

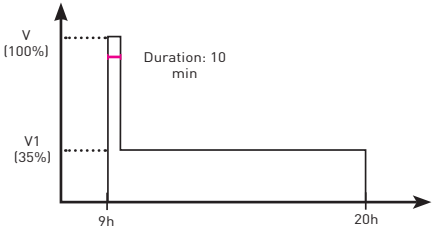
- Remove any residual air pockets from the piping
- Recoil the pump if necessary

The Priming function is configured in the On.e mobile app. This mode is designed to maintain the pump at a given speed, which can be set between 35 and 100% for the version, for a defined period of 0 to 30 minutes. This mode is activated each time the pump is started, regardless of the mode (Manual or Auto). The pump will automatically return to the previously selected speed after the set time has elapsed.

Parameter	Value Version 1.1kw
Speed	35% (1000 tr/min) à 100% (2850 tr/min)
Time	0 to 10 minutes
Default speed	100% (2850 tr/min)
Default time	5 minutes

Pump programmed for a range of 9 a.m. to 8 p.m.

Pump programmed for a range of 9 a.m. to 8 p.m. with priming function activated for a duration of 10 minutes at 100% speed.

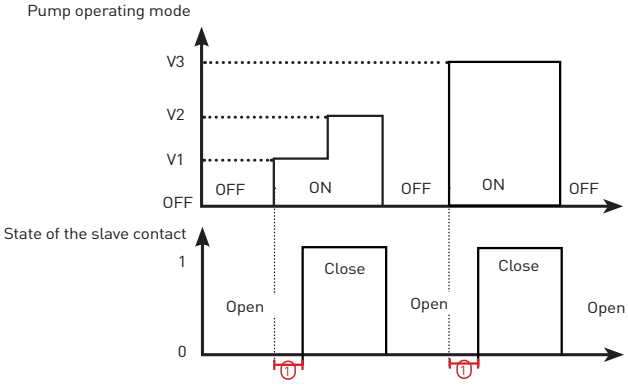


The servo function is adjusted directly from the On.e application.

The pump is equipped with a relay controlling a dry contact, allowing any type of water treatment equipment to be controlled (e.g., pH regulation, chlorine, electrolyzer, etc.).

This contact closes each time the pump is started, regardless of the selected speed. It is compatible with all 230 VAC equipment up to 2 kW.

To connect this contact, refer to §3.2. It is also possible to delay its activation when the pump starts up in order to ensure sufficient water flow before the treatment devices are started..



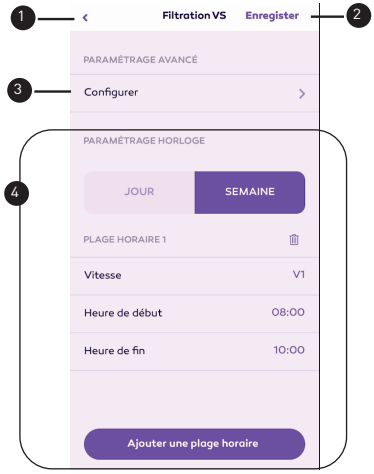
0 : contact open

1 : contact closed

(1) : trigger delay

4.7. SETTING THE PARAMETERS

4.7.1.SPEED ADJUSTMENT



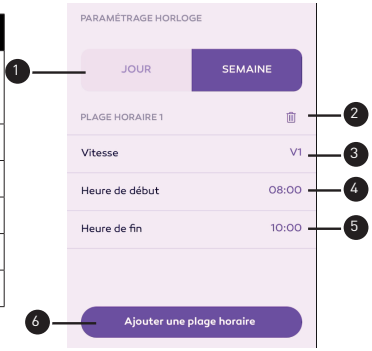
- V1: Speed generally used for normal, economical filtration.
- V2: Speed generally used for swimming.
- MAX: Speed generally used for backwashing the filter (when using a sand filter).

N°	DESCRIPTION
1	Return to the main screen of the On.e app
2	Save changes for them to be applied by the device
3	Access advanced settings
4	Clock settings

4.7.2.CLOCK SETTINGS

The clock settings define the pump speed according to a daily or weekly schedule, divided into 30-minute intervals. This is applied when AUTO mode is selected.

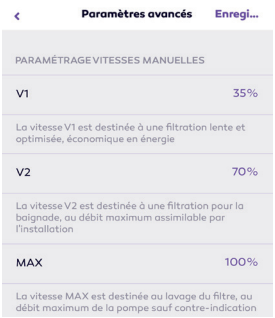
N°	DESCRIPTION
1	Selecting the clock type: **Day :** allows you to set a different clock for each day of the week **Week :** allows you to se the same clock for each day of the week
2	Delete time slot
3	Operating speed
4	Adjust the start time of the filtration pump for the time slot
5	Adjust the stop time of the filtration pump for the time slot
6	Add a filtration pup operating time slot



4.7.3.ADVANCED SPEED SETTINGS

Speeds 1, 2, and 3 are programmable in %. Click on "Configure."

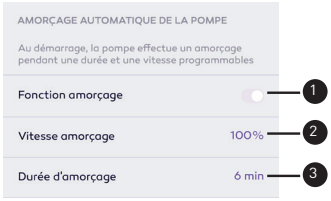
Each speed is programmable from 35% to 100% in increments of 5%.



- Vmin: 35% = 1000 tr/min
- Vmax: 100% = 2800 tr/min

4.8. BOOT CONFIGURATION

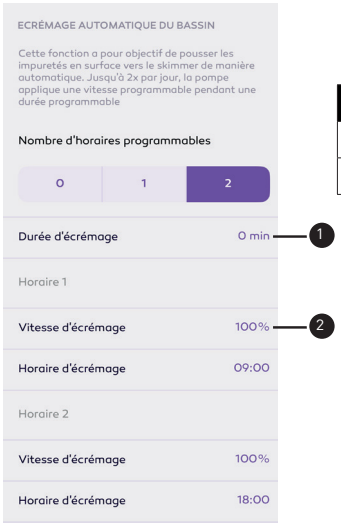
The priming function can be adjusted in the advanced filtration settings.



N°	DESCRIPTION
1	ON / OFF priming function
2	Manual adjustment of priming speed in %
3	Manual adjustment of priming duration from 0 to 30 min in 2-min increments

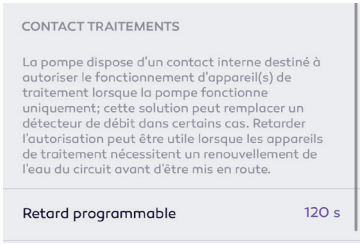
4.9. SKIMMING SETTINGS

The skimming function can be adjusted in the advanced filter settings..



N°	DESCRIPTION
1	Adjustment of skimming duration from 0 to 255 min in 15-min increments.
2	Adjustment of skimming duration in % from 35 to 100% in 5% increments.

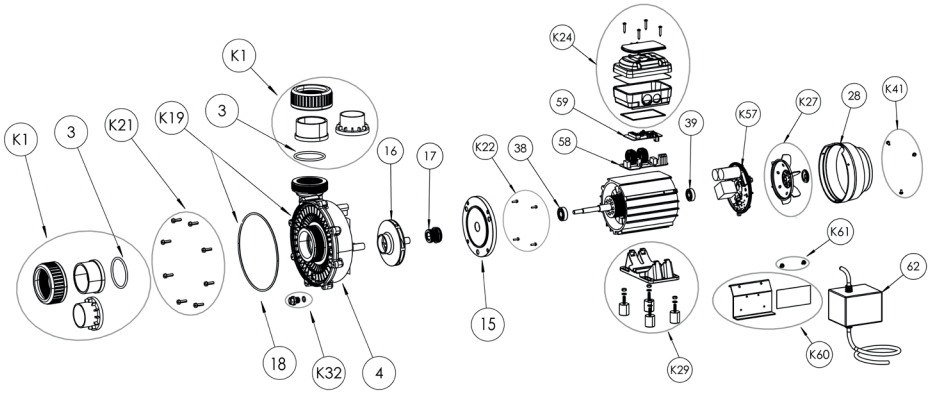
4.10. CONTROL SETTINGS (DRY CONTACT)



The servo function can be adjusted in the advanced filtration settings. The delay can be programmed from 0 to 240 seconds in increments of 30 seconds.

5. MAINTENANCE

ref : 601900VSONE | 601900VSONEBC :



LABEL	PART NUMBER	DESIGNATION
3	A-OR-62-4-5	O-RING Ø62X4,5
4	C-B701-01	PHT PUMP BODY
15	ECPM750-02	FRONT ENGINE FLANGE VS
16	C-TPH-20	PHT TURBINE / SOLUBLOC 20
17	C-GM-16	MECHANICAL SEAL
18	A-OR-164-4	O-RING Ø164X4 - PHT PUMP BODY / SOLUBLOC
28	ECPM750-19	VS MOTOR FAN COVER
38	ECPM750-05	VS 6202Z FRONT MOTOR BEARING
39	ECPM750-14	VS 6201Z REAR MOTOR BEARING
58	ECPM750-24	VS 1.1KW POWER BOARD
59	64108	VS ONE 1.1KW HMI BOARD
62	64109	5G1MM² H07RN-F LG 2M50 CABLE + EMC FILTER + PE
K1	KIT_A31010005	2'' 3/4 FEMALE NUT KIT
K19	KIT_C-B720-01	PHT PUMP FLANGE KIT
K21	KIT_A-GB818-85-18	SCREW KIT
K22	KIT_ECPM750-03	SCREW KIT + WASHERS
K24	KIT_ECPM750-21-ONE	ONE CONTROL BOX KIT
K27	KIT_ECPM750-18	VS 1.1KW MOTOR FAN KIT
K29	KIT_C-B730-01-27	PHT VS 1.1KW PUMP BASE KIT
K32	KIT_A-B526-18	DRAIN PLUG KIT (PLASTIC)
K41	KIT_ECPM750-20	M4X8 SCREW KIT
K57	ECPM750-11	REAR FLANGE PCB
K60	KIT_60482	BLACK ANODIZED ALUMINUM EMC FILTER PLATE KIT
K61	KIT_60473	M4X8 SCREW KIT

5.1. TROUBLESHOOTING

5.1.1.HYDRAULIC & ELECTRICAL COMPONENTS

Fault	PROBABLE CAUSES	SOLUTIONS
The pump does not prime	Air intake on the suction pipe	Check the condition of the connections and seals on the suction piping
Low pump flow rate	Air intake on the suction pipe	Check the condition of the connections and seals on the suction piping
	Pressure drops in the suction line	Avoid: long pipes, numerous bends, raising the pump above the water level, pipes that are too small.
The motor stops	Motor overheating	Check that the fan grille is clear (distance between wall and fan at least 30 cm).
		Check the voltage. Check the current.
Noise / Vibration	Cavitation	Clamp one or more discharge valves to increase the operating pressure of the system.
	Foreign objects (sand, etc.)	Disassembly, cleaning, reassembly

5.1.2.ON.E APPLICATION

I can't connect the On.e product to the On.e app::

PROBABLE CAUSES	ADVICE AND SOLUTIONS
Bluetooth® is not enabled on your smartphone.	Turn on Bluetooth® connectivity on your smartphone, usually accessible from the notifications panel.
Il y a trop d'appareils Bluetooth® aux environs.	Move away from other Bluetooth® devices, or try again later. **Once** the area is less congested with Bluetooth® devices, the connection will be possible again.
The **On.e** product is too far away from the smartphone.	Move closer to or relocate the box to a more accessible area within the smartphone's range. Depending on the weather (e.g., humidity in the air), the radio range may fluctuate slightly.
The **On.e** product is mounted against a product that emits radio interference in the Bluetooth® radio band.	Shift the boxes apart from each other.
Another smartphone is already connected to the **On.e** product.	Close the application on the connected smartphone.

6. ENVIRONMENTAL PROTECTION

Environmental protection is essential. Our company is strongly committed to this cause. Our products are designed and manufactured using high-quality materials and components that are environmentally friendly, reusable, and recyclable. Environmental protection is essential. Our company is strongly committed to this cause.

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The product complies with the following directives::

- Low Voltage Directive 2014-35-EU (Electrical Safety)
- EMC Directive 2014-30-EU (Electromagnetic Compatibility)
- Directive 2011-65-EU (Use of Hazardous Substances)
- RED Directive 2014-53-EU (Radio Equipment)
- WEEE Directive 2012-19-EU (Waste Electrical and Electronic Equipment)

7. IDENTIFICATION AND COMPLIANCE

7.1. IDENTIFICATION

Product manufacturer name:

ACIS France

15 rue des marais

44310 Saint Philbert de Grand Lieu

Téléphone : 02 40 59 95 35

Reference	Designation	Energy class
601900VSONE	PHT VS ONE 1.1KW PUMP	B
601900VSONEBC		

7.2. COMPLIANCE

CE We certify that the ACIS Variable Speed pumps, also know as VS On.e, comply with the following standards relating to filtration systems for private swimming pools for family use.

- NF EN 60335-1: Household and similar electrical appliances - safety
- NF EN 61000-6-3 : Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments
- NF EN 61000-6-1 : Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial, and light-industrial environments
- NF EN IEC 60335-2-41: Household and similar electrical appliances - Safety - Part 2-41: Particular requirements for pumps

8. WARRANTIES

ACIS, responsible for marketing the pump (PHT VS On.e / MKQ VS On.e), certifies that this product has been designed and manufactured in accordance with European directives and is free from material and manufacturing defects. A 2-year legal warranty from the seller applies from the date of purchase:

- against lack of conformity in accordance with the provisions of the Consumer Code,
- against hidden defects in accordance with the provisions of the Civil Code.

Under Articles L. 217-4 et seq. of the Consumer Code, buyers have the right to obtain from the seller the repair or replacement free of charge of products (subject to the cost conditions provided for in Article L. 217-9) that have a lack of conformity, by reporting this defect within two years of the date of purchase.

This legal warranty from the seller covers parts and labor returned to the workshop, provided that it does not fall within the scope of the warranty exclusions.

Pursuant to Articles 1641 et seq. of the Civil Code, if there was a hidden defect when the product was purchased, the buyer has the right to return the product and obtain a refund from the seller within two years of discovering the defect.

WARRANTY EXCLUSIONS

- The warranty does not apply if the installation does not comply in every respect with the instructions in this manual.
- Transferring ownership of an already installed device voids the warranty. This exclusion must be brought to the attention of the new owner and will be deemed to have been accepted by them in the event of an incident.
- The pump must not be submerged under any circumstances, even partially. Any pump found to have been operated while submerged, even minimally, will be excluded from any warranty coverage.
- The warranty does not cover the following::
  - Any adaptation or modification intended to improve the product's initial performance, as described in this manual, without the prior written consent of ACIS.
  - Transport costs and transport risks.
  - Pumps that have been submerged, in whole or in part, regardless of the circumstances.
- Damage resulting from:
  - Misuse, inappropriate use of the device that does not comply with the installation instructions in this manual;
  - Modifications made by unauthorized personnel or by the user themselves;

PHT VS On.e

CONNECTED VARIABLE SPEED
POOL PUMP

USER MANUAL

vipool