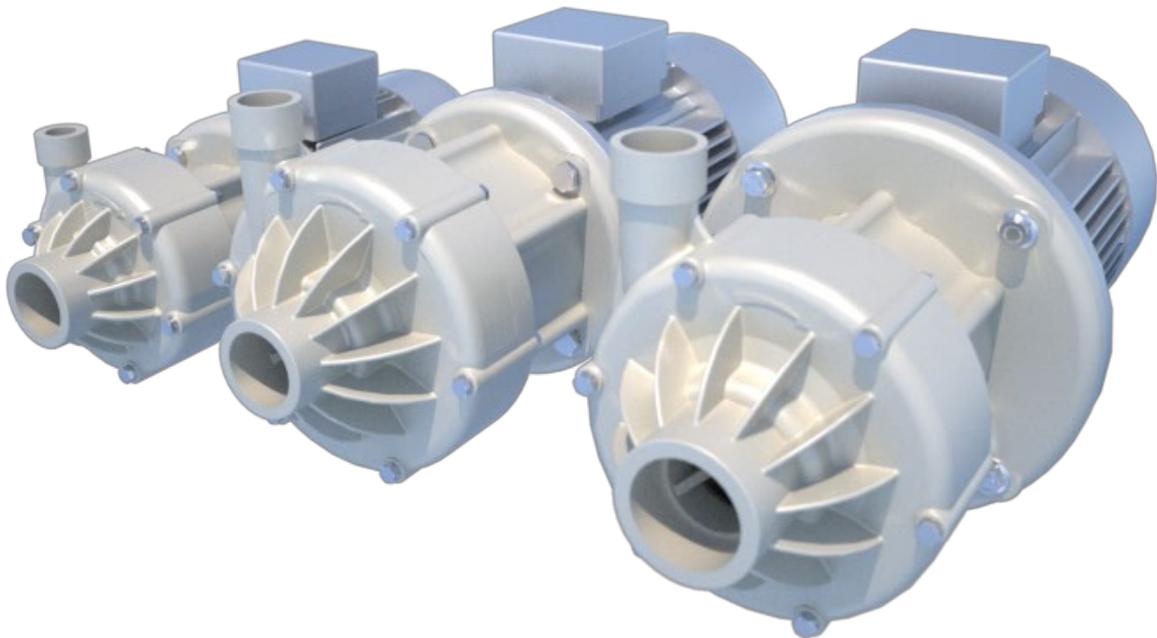


 oceanlife

*Ocean Motion Pumps*

QUICK REFERENCE



## Installation Instructions

### Caution during transportation

Please pay attention when carrying the product as it is covered by a plastic case.

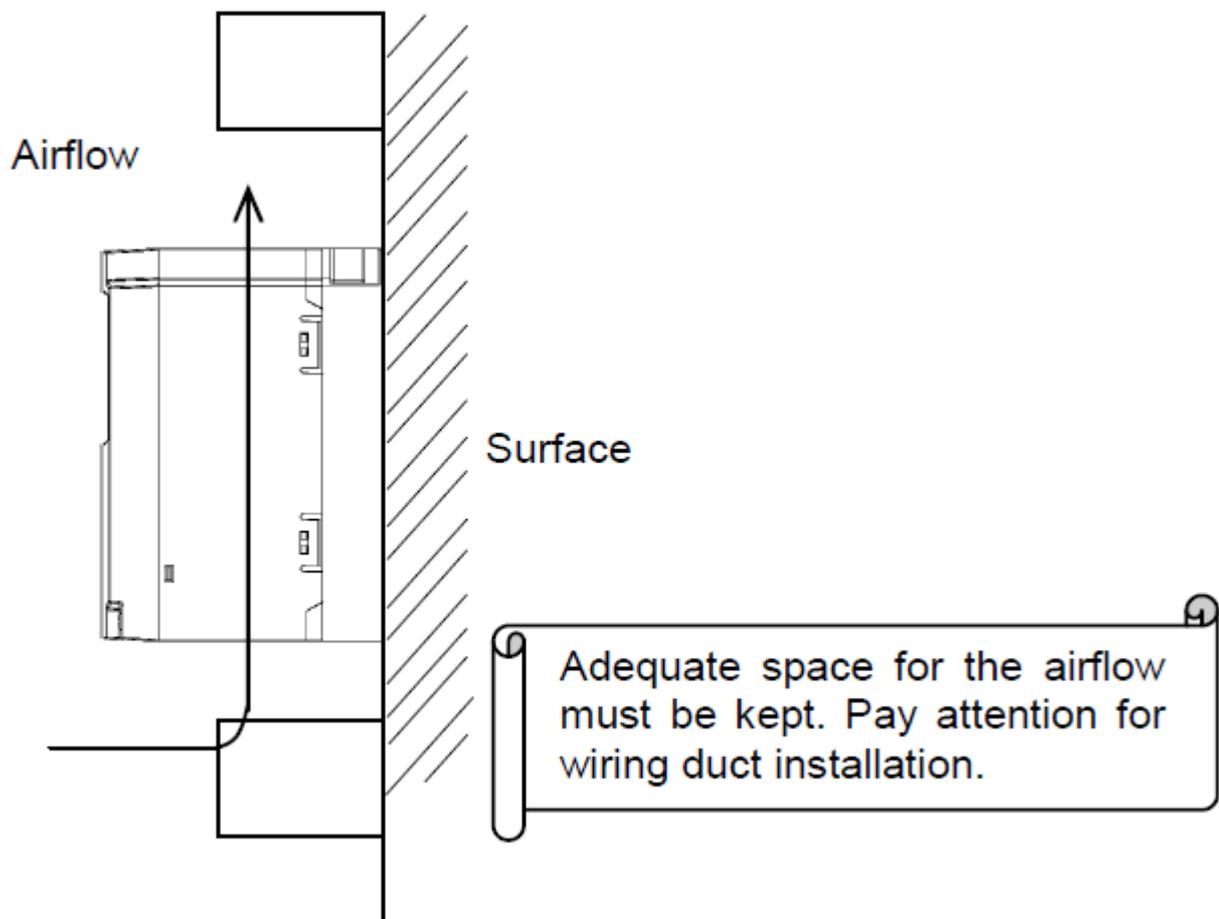
Especially, do not put pressure onto the front cover and terminal cover. Otherwise there is a risk of damaging the product.

Please do not use products that are damaged, and/or lacking components.

### Ensure Adequate Ventilation

To summarize the caution messages – you will need to find a solid, non-flammable, vertical surface that is in a relatively clean and **dry** environment.

In order to ensure enough room for air circulation around the inverter to aid in cooling, it is recommended to maintain the specified clearance and the inverter specified in the below diagram.



### Caution for ambient temperature

Verify ambient temperature at installation site is within the standard specification range (-10~50°C). Measure ambient temperature 5cm from the bottom center of inverter main body and confirm that it is within the allowable temperature range.

Using the inverter at higher temperature than allowable temperature may result in shortening of lifetime of inverter (especially of electrolytic capacitors). A derating curve is shown on QRG (Please refer to full manual.)

Do not install the inverter in such places as high temperature, high humidity, or prone to condensation. Use the inverter within the allowable humidity range (20~90%RH) described in standard specifications. Especially, please use it in place where no condensation occurs. If condensation occurs and beading is generated inside the inverter, electronic parts are short-circuited each other to cause a failure. Also, please avoid installing it in direct sunlight.

#### Caution for installation environment

Please avoid installing the inverter in such places where dust, corrosive gas, explosive gas, flammable gas, mist of grinding fluid, or salt pollution, etc. exists. Invasion of dust, dirt etc. into the inverter may cause a failure. So, when you use it in dusty place by necessity, please devise a countermeasure such as putting it into a closed type chassis.

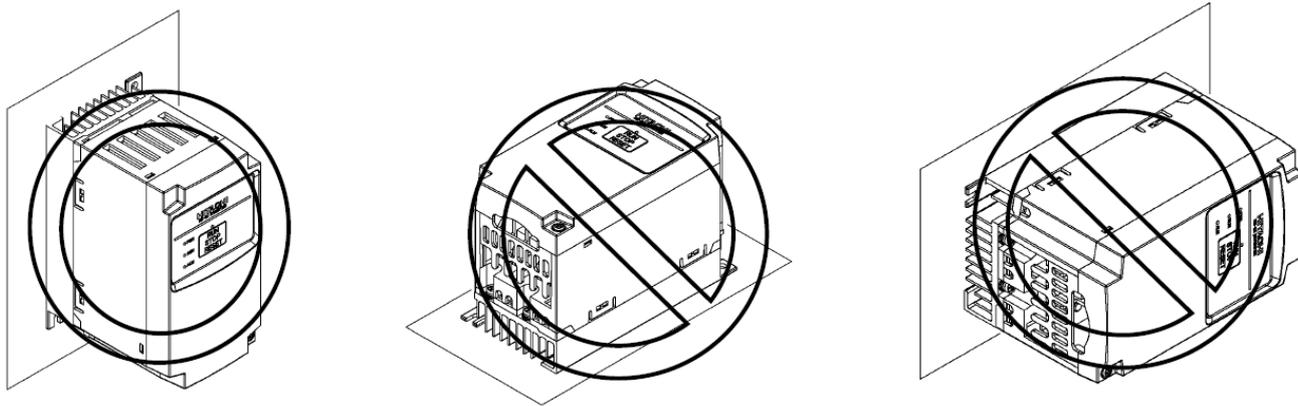
 <b>CAUTION</b>
-Reduction of the carrier frequency or using bigger kW model is required if depends on the load or ambient.
 <b>WARNING</b>
- Do not open the front cover during operation.

#### Cautions for installation direction

Surface of the installation must be no vibration, and should be capable of holding the weight of the product. And the product must be fixed to the surface with proper screws in a vertical direction. Be sure to screw using all the screw holes for the installation.

(002L/SB,004L/SB,007LB : 2 positions, 007SB,015L/SB,022L/SB : 4 positions)

There is a risk of performance failure, and/or breakdown when the product is not installed vertical direction.



#### Note about noise

The unit is programmed to automatically adjust the carrier frequency of the output depending on the temperature of the heatsink. If the temperature is too high, the noise of the motor may be bigger.

## Operating Instructions



### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

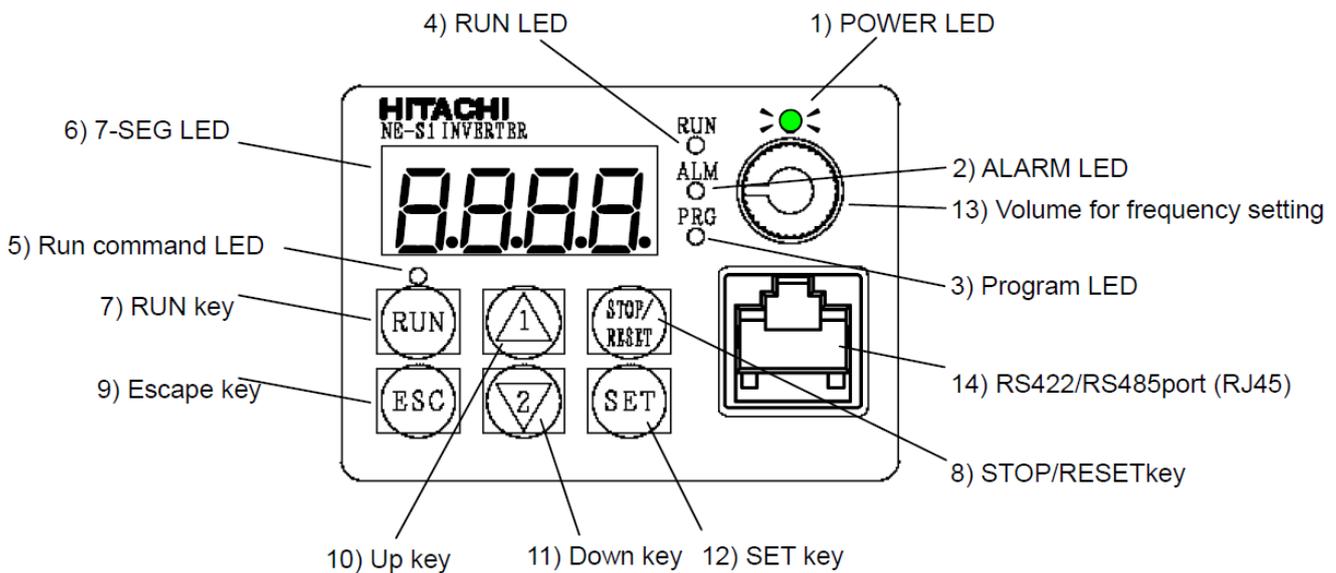
- Only appropriately trained persons who are familiar with and understand the contents of this manual and all other pertinent product documentation and who have received safety training to recognize and avoid hazards involved are authorized to work on and with this drive system. Installation, adjustment, repair and maintenance must be performed by qualified personnel.
- The system integrator is responsible for compliance with all local and national electrical code requirements as well as all other applicable regulations with respect to grounding of all equipment.
- Many components of the product, including the printed circuit boards, operate with mains voltage. Do not touch. Use only electrically insulated tools.
- Do not touch unshielded components or terminals with voltage present.
- Motors can generate voltage when the shaft is rotated. Prior to performing any type of work on the drive system, block the motor shaft to prevent rotation.
- AC voltage can couple voltage to unused conductors in the motor cable. Insulate both ends of unused conductors of the motor cable.
- Do not short across the DC bus terminals or the DC bus capacitors or the braking resistor terminals.
- Before performing work on the drive system:
  - Disconnect all power, including external control power that may be present.
  - Place a "Do Not Turn On" label on all power switches.
  - Lock all power switches in the open position.
  - Wait 15 minutes to allow the DC bus capacitors to discharge. The DC bus LED is not an indicator of the absence of DC bus voltage that can exceed 800 Vdc.
  - Measure the voltage on the DC bus between the DC bus terminals using a properly rated voltmeter to verify that the voltage is < 42 Vdc.
  - If the DC bus capacitors do not discharge properly, contact your local Schneider Electric representative.
- Install and close all covers before applying voltage.

Failure to follow these instructions will result in death or serious injury.

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Oceanlife for any consequences arising out of the use of this product.

Information below is designed to use single drive connected to single motor with a motor cable length less than 50 meters (164 ft). Check your cables before connecting the drive with motor (length, power, shielded or unshielded).

## Starting The Pump



*External control panel (present only on pumps with electronic driver)*

To start the pump, connect the plug and press **RUN** button (for pumps with electronic driver).

To adjust the pump power, act on 13 rotating it. Power can be adjusted from 0 Hz (0 rpm) up to 50 Hz (3000 rpm).

Some additional noise can occur due to air presence when you start the pump for the first time or after maintenance.

Start and stop the pump for two or three times to let air escape from the pump volute. After some time all air will be expelled from the volute and initial noise will be reduced.

Power consumption and water flow depends from the downstream plumbing.

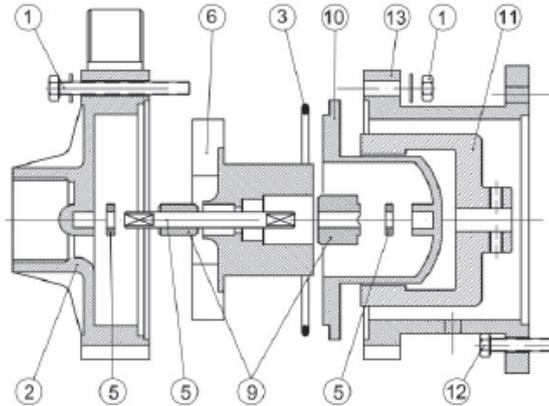
⚡ For pumps with electronic driver, it's mandatory to have a good earth connection.

❤ By default setting, maximum speed is set to 50Hz (for pumps with electronic driver). Maximum pump speed must not exceed 60 Hz. Risk of damage to the pump and motor.

💧 Following disassembly instructions, maintenance should be done at regular intervals to prevent sediments or calcium precipitations to block or damage the pump.

## Disassembly Instructions

SECTION AND PARTS LIST/SEZIONE E LISTA PARTI



POS.	1	2	3	5	6	9	10	11	12	13
PART DESCR.	SET SCREWS	PUMP HEAD	O - RING	SHAFT + RING	IMPELLER-INTERNAL MAGNET	BEARING	REAR CASING	EXT. MAGNET	SET SCREWS	BRACKET
MAT.	AISI304	PP	EPDM VITON	Al2O3	PP	PTFEC	PP	C40 NaFeb	AISI304	PP

- Stop the pump with **STOP** button (for pumps with electronic driver) and disconnect the plug
- Unscrew the screws ⑫
- Pull out the Pump. Warning: The external magnet ⑪ will resist against your action.
- Empty the pump from water, if present
- Unscrew the screws ①
- Remove the pump head ②
- Pull out the internal magnet/rotor ⑥
- Put aside the 2 ceramic rings ⑤ and the O-Ring ③

💡 To clean the internal part of the pump, a weak and diluted acid can be used. Only plastic parts can be cleaned with acid. Do not use it on metallic screws and other metallic parts if present.

For pump assembly, repeat all the steps in opposite direction.

## Full Instructions

Full inverter instructions can be found here:

<http://oceanlife.it/downloads/instructions/NE-S1QuickReferenceGuide.pdf>



## **In case of blackout**

In case of blackout the pump stops and you have to click on run to make it run again.

If you need auto restart, you need to modify a parameter in the inverter. After that, every time the inverter will start automatically and the function is modified as follow:

Normal function:

Act on the (13) to run or stop the pump

If you need to turn off the pump in emergency, you can push the stop button. Note that to run the pump again, you will have to reset it unplugging and plugging again the unit.

## **Parameter modification**

Stop the pump.

Press ESC to view on the screen the parameter A001, press up key and go to parameter A002.

Press SET, the screen will show the parameter 02 (Run key on keypad or digital operator). Press down key to modify it to 01 (Control Terminal). Press SET.

Now the inverter will start automatically after the end of a blackout.

To reset to the original status, follow the same instructions and modify A002 parameter form 01 to 02.

Please do not modify any other parameter, the inverter may stop function and assistance will be needed.

Modify other parameters only if you fully understand the meaning of the parameters following the full inverter instructions.

## WARRANTY

This guarantee is additional and not substitute any other right enjoyed by the consumer / buyer of the product. This guarantee does not alter the rights resulting from the D. Lgs. 2 February 2002, n. 24 that it has implemented in Italy the European Directive 99/44/EC.

This warranty is valid in countries that implement the European Directive 99/44/EC. For other countries, refer to local laws. During the period of warranty, Oceanlife ensures free of charge repair and, therefore, without any charge to the customer for labor and material (except for any transport costs), for the product which presents a manufacturing defect. To obtain assistance under warranty, consumer should contact the Store where the product was bought, with a valid purchase document showing the date of purchase and the product model. The warranty does not cover defects due to misuse and uses different from those described on the instruction manual. This warranty does not cover defects caused by accidents (fire, short circuits, lightning, atmospheric phenomena, overvoltage or surges, inadequate or irregular power supply, etc.) or by facts attributable to third parties (tampering or damage during storage at the point of sale). The warranty does not cover damage caused by the customer due to unsuitable or neglect use. The warranty does not cover damage caused by transport or from breakages due to abnormal stress suffered during transports.

Excluded are also those parts (impellers, filters, etc.) damaged by the normal consumption (consumables) or normal wear. Oceanlife assumes no liability for any damages of any kind which may arise directly or indirectly to persons, things, animals from the device use. The guarantee can not be applied if the numbers appearing on the product have been modified, removed or rendered unreadable. This guarantee does not apply to products for industrial and professional use.

### Warnings:

Before using an Oceanlife Product, read the instructions.

DO NOT OPEN THE ELECTRICAL PANEL: maintenance must be provided only by authorized personnel. The warranty is irrevocably void if the product is tampered.

Any different use from these warnings and instructions will void the warranty. Before connecting the plug to the main power, be sure that voltage and frequency corresponds to those indicated on the product label and that the electrical socket is provided with earth connection and protected by RCD.

The main electrical system where the device is connected must be realized in accordance with applicable laws. Never touch electrical devices with wet hands or feet when they are plugged. In particular, unplug the device before doing any operation (maintenance, cleaning, etc. ..). Do not touch the power plug with wet hands. Do not unplug the power cord pulling it, but pull the plug to prevent damage to the plug and/or socket.

Do not let that the power cord to twist, crush, stretch or come into contact with sharp or hot surfaces. Do not use Oceanlife products if the power cord or other parts have been damaged. In such cases ask for technical assistance.

Do not place the unit near heat sources. The unit must be placed always on stable surfaces. Do not wrap the cord around the device and in no way when the device is connected to the electricity grid. Keep Oceanlife products out of reach of children or of not trained people. If the purchased product will remain unused for a period of time, it is recommended to unplug the device. To assure the device safety, use only original spare parts and original accessories that have been approved by the Oceanlife.

DO NOT use in places where there is danger of explosion. Do not leave it exposed to the elements. Do not use electrical extension cords not complying with existing laws and not approved by authorities, which could cause damage and fires. Before carrying out any maintenance operation, always turn off and unplug the device. In case of different socket, use only approved and certified plug adapters with earth connection and ensure a stable and safe connection.

In case of accidental fall, ask for help to an authorized support center as there may be internal damages limiting the safety.