

SUND

The solar pool pump



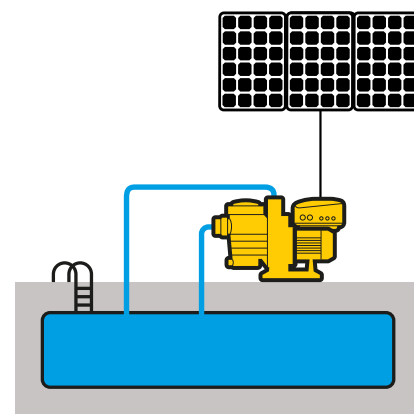
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SUND is the LAP range of solar pumps for the circulation and filtering of pool water.

It guarantees:

- Energy saving thanks to photovoltaic energy supply and variable-speed operation.
- Quick return on investment.
- Lengthening of system life and greater system reliability.
- Quick and simplified installation thanks to the electronics integrated into the motor and smartphone control.
- Extremely low noise operation.
- Installation in humid and dusty environments thanks to IP55 (NEMA 4) protection rating.



High-performance **hydraulic part** with rapid extraction inlet pre-filter.

Carbon-ceramic mechanical seal.

Pump body, impeller and diffuser in reinforced technopolymer.

Transparent polycarbonate filter cover.

Inlet and outlet connections to attach for PVC tubes with an external diameter of 50 mm.

Guaranteed operation with sea salt water.



SUND is powered by solar panels or, if necessary, by mains supply.

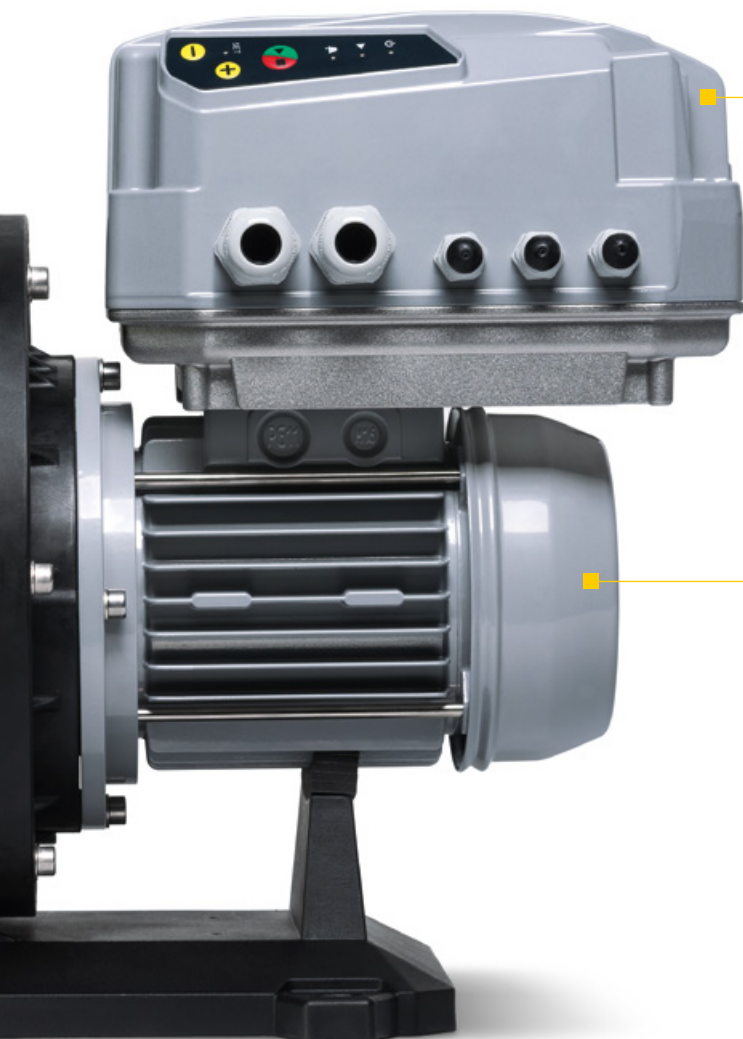
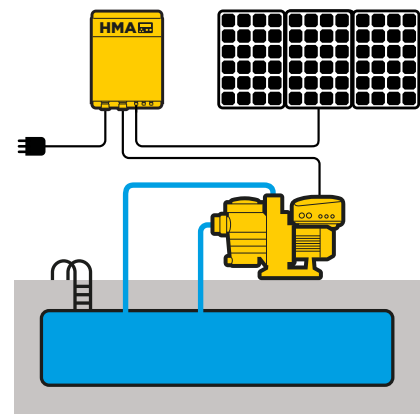
In this way, the pump's operation is guaranteed at any time of day.

It is also possible to meet demand peaks through mains power in order to avoid the over-dimensioning of the photovoltaic system.

When installed, the HMA accessory automatically manages the switch from one source of energy to the other based

on multiple logics that the user can select:

- radiation level
- time of day
- achievement of the daily flow requirement
- remote control via digital input.



■ **Integrated inverter** attached to the motor, exclusively in aluminium, and with independent ventilation to guarantee excellent thermal performance.

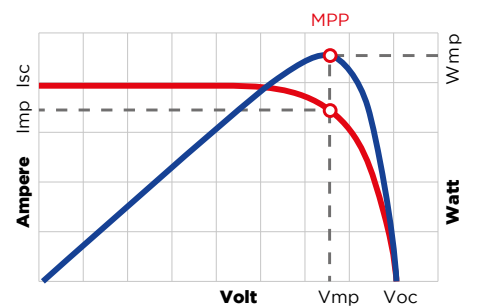
■ **Synchronous three-phase motor** with highly efficient permanent magnets.



MPPT: always the maximum power available

Based on the varying conditions of solar irradiation and temperature, MPPT (Maximum Power Point Tracking) maximises the electrical power drawn from the panels and therefore the amount of water pumped. The greater the solar irradiation the faster the pump's rotation speed, and consequently water flow increases.

When solar irradiation decreases (due to clouds or the different times of day), the pump reduces frequency and therefore the flow, but it continues to provide water until the irradiation falls below a minimum level necessary to ensure operation.





Built-in protections against:

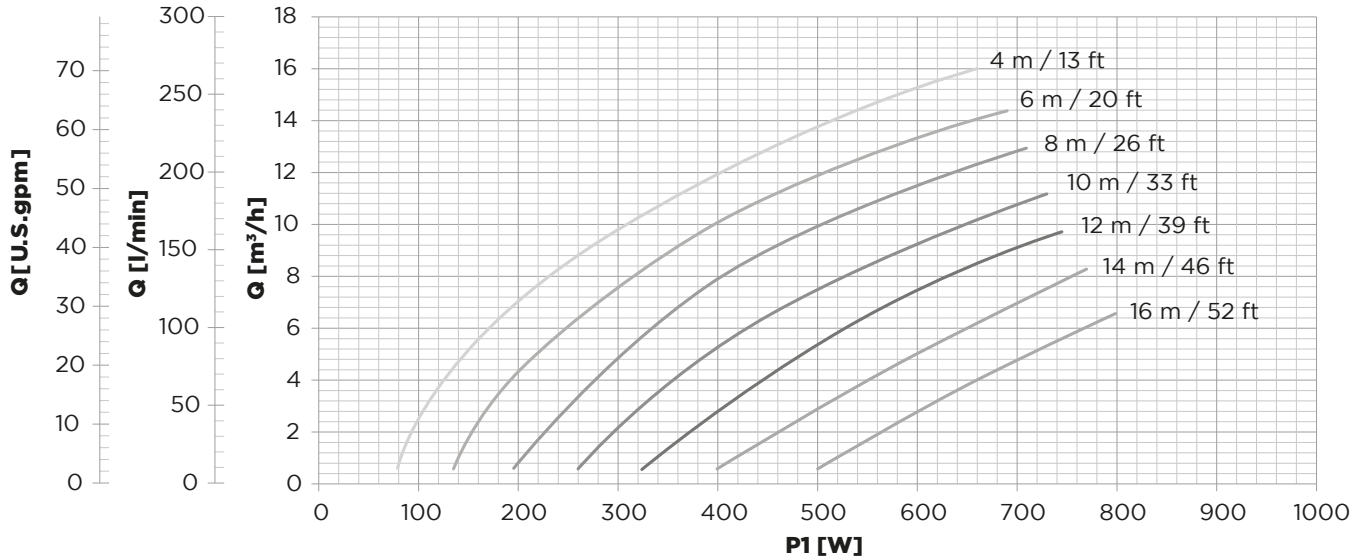
- Overvoltage and undervoltage.
- Overcurrent and no load.
- Dry running.
- Overtemperature.

EMC compatibility for residential environment:

- Integrated PFC (P.F. 1) to meet EN61000-3-2
- Integrated input filter for Category C1 (EN61800-3), Class B (EN55011)

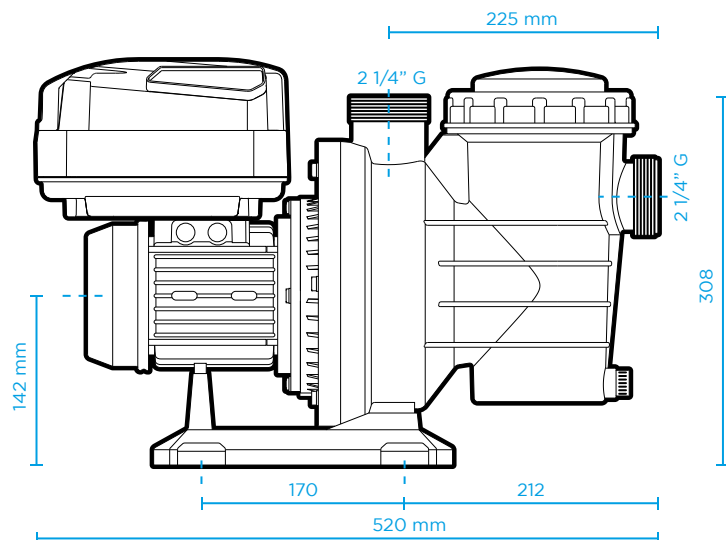
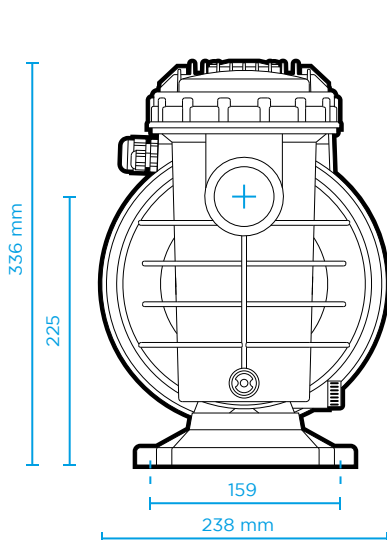
Technical specifications

Model	Vin DC VDC	Vin AC VAC	P1 max W	Net weight kg	Packing dimensions mm	Total weight kg
SUND 50	90 - 400	1 x 90 - 265	800	10,7	535x240x350(h)	11,4



General specifications

- Rated frequency: 48 - 62 Hz
- Max liquid temperature: 40°C (104°F)
- Max ambient temperature: 50°C (122°F)
- Max altitude at rated current: 1000 m
- Protection degree: IP55 (NEMA 4)
- Max current pressure: 3 bar
- Max aspiration height: 2.5 m
- Motor insulation: F
- Settable digital outputs N.O. or N.C.:
 1. Motor run signal
 2. Alarm signal
- Analog inputs (10 or 15 VDC):
 1. 4-20 mA
 2. 4-20 mA
 3. 0 - 10 VDC
 4. 0 - 10 VDC
- 4 digital inputs, configurable N.O. or N.C. for motor run/stop.
- RS485 MODBUS RTU, Bluetooth® SMART (4.0)





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