

# **SANY-PUMP**

Programmable electronic circulator for heating system and domestic water supply

# **Manual**

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### **Cautions**

- Read and understand this user manual before installation and operation of the product.
- SANY-PUMP is an electrical device. It cannot be used by children and/ or people with physical, sensory and mental disabilities.
   Also people without experience cannot use the pump; except under close supervision.
- The warning sign marks notes whose non-observance will endanger your health or the functioning of the device.
- Cleaning and user maintenance shall not be made by children and/or by inexperienced people, without supervision.
- Make sure that the pump is correctly screwed and firmly connected to the pipe. Run the installation only after verifying the absence of impurities inside the pipes. Impurities must be removed before performing.
- The pump should be installed in dry and ventilated area, away from water splashing, to avoid short circuit.
- For easy maintenance, shut-off valves should be installed in both suction and discharge lines.
- Carefully examine the entirety of SANY-PUMP, both before and after installation. Do not operate a damaged or malfunctioning device.
- Carefully check the power cord, the plug and the electronic components.
- Periodically inspect the pump and check its entirety.
- It is strictly forbidden to start the pump without pumping liquid.
- Press "Start/Stop" button, as pilot run to check if the starting is normal.
   (The full implementation must take place within 6 seconds).
- Allow all system and pump components to cool, before you handle them. Do not touch it when the temperature is higher than 60 ° C.
- The network and relative outlets must be fitted with an efficient earthing connection following the laws in force on the matter of electrical systems.
- Regularly check the insulation resistor and the circuit breaker.
- At low temperatures, we recommend to remove the liquid inside the pipelines to avoid cracking.
- If the supply cord or the plug are damaged, please ask a qualified centre to replace them.
- If the temperature of the pump is greater than the value of nameplate, remove the power, disconnect the pump through the valves on the pipeline, and please contact your local dealer or service.
- If you are unable to find a solution to a potential problem, please
   contact your local support centre.

### Introduction

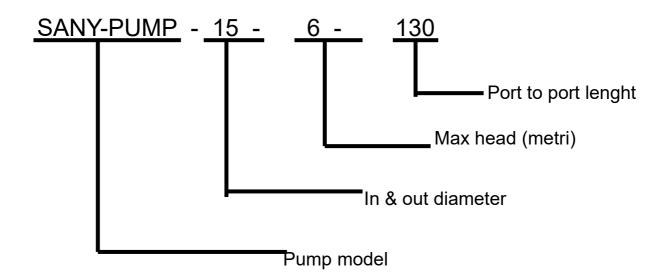
1. SANY-PUMP circulators (also known as: programmable electronic pumps), are used for hot water circulating in heating circuits and in domestic water supply.

They guarantee a better cooling thanks to the motor stator (that is totally shielded), and thanks to the rotating parts (that are completely water immersed).

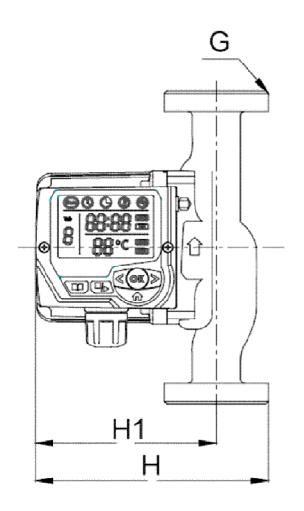
The stator is guarded by a protective cover.

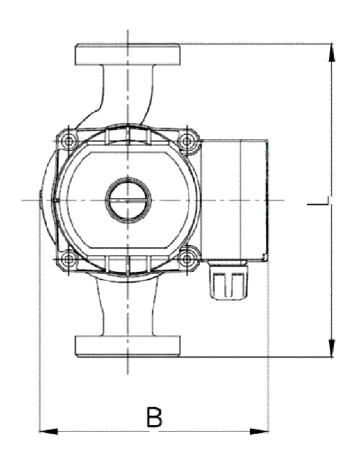
- 2. The special rolling-element bearings reduce the operating noise: they are water-cooled and made of ceramic material.
- 3. These pumps can work all day long at a constant temperature between 2 °C and 75 °C.
- 4. The motor is composed of high heat resistant materials.

#### **Nomenclature**



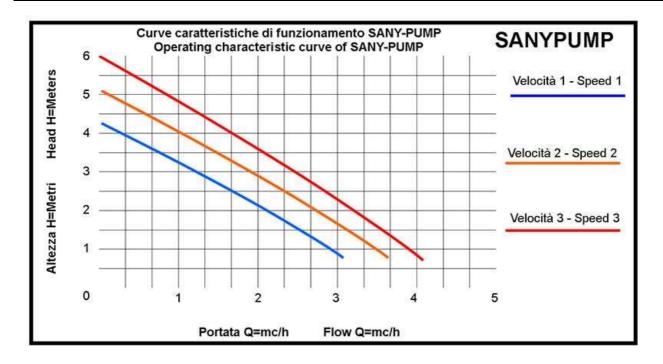
# **Data and Dimensions**





X-Power SanyPump Circulator Dimensional Data					
Туре	H (mm)	H1 (mm)	L (mm)	G	B (mm)
SANYPUMP 20-6-130	125	105	130	1"	125
SANYPUMP 25-6-130	160	135	130	1″1/2	125

#### **Curves**



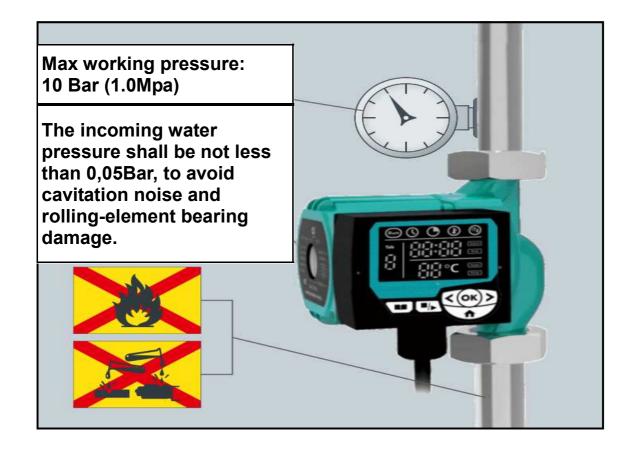
# **Pumping Liquids**

Clean, thin, non-aggressive and non-explosive liquids without solid particles.

Liquid temperature range: +2 °C to +75 °C.

The model in brass also accepts water with glycol to 10%.

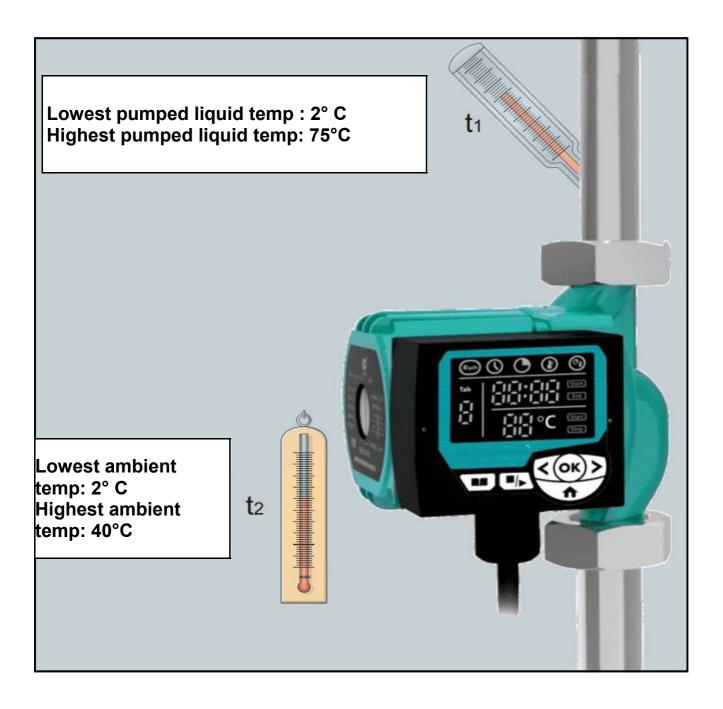
The pH value must be between 6.5 and 8.5.



# **Temperature**

The "system temperature" (t1) must always be higher than the "ambient temperature" (t2) to avoid excessive condensation on the pump housing.

Please refer to the temperature instructions on the product label.



### Installation

For a correct installation of SANY-PUMP, the motor shaft must be kept in horizontal position.

This is the best way, for the pumped liquid to cool engine.

Please check that the direction of the flow, always coincides with the diecasted arrow on the circulator.

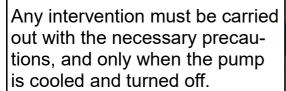


# Warning!

Assembly, disassembly and scheduled or unscheduled maintenance, must be performed only under competent staff directives.

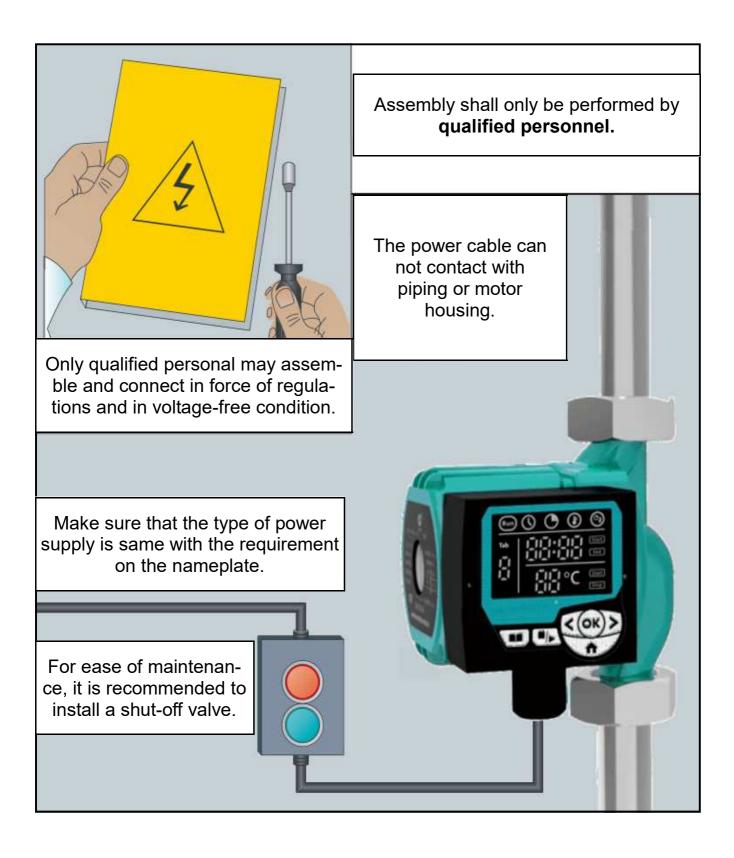


Before any operation on SANY-PUMP, make sure to turn off the electric power and to close the valves.



Do not touch the pump when it is running.

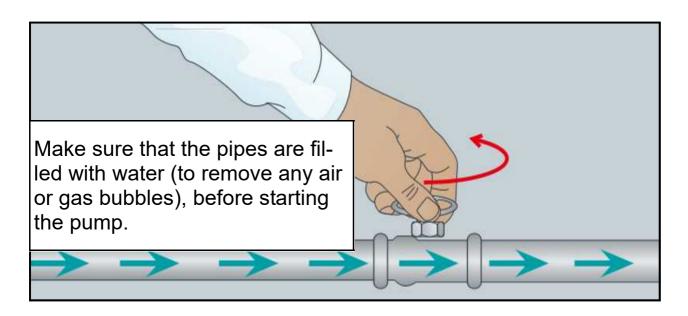




# Filling and bleeding

We recommend the installation of an automatic air valve, to ensure a correct operation of the recirculation system.

If the pump works in domestic areas, we recommend to open all the faucets to make sure the bleeding.



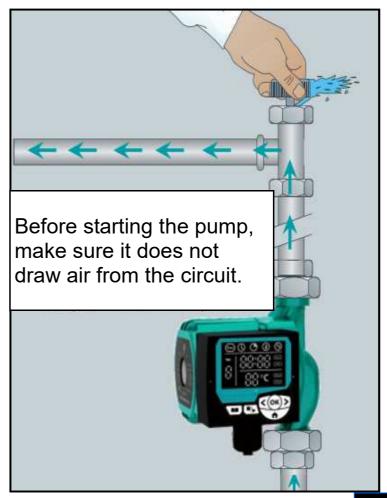


### Warning!

Create a vent:

The gas within the pump must be exhausted to ensure a good running.

Prevent splashing water on the motor case, to avoid the electric fault.

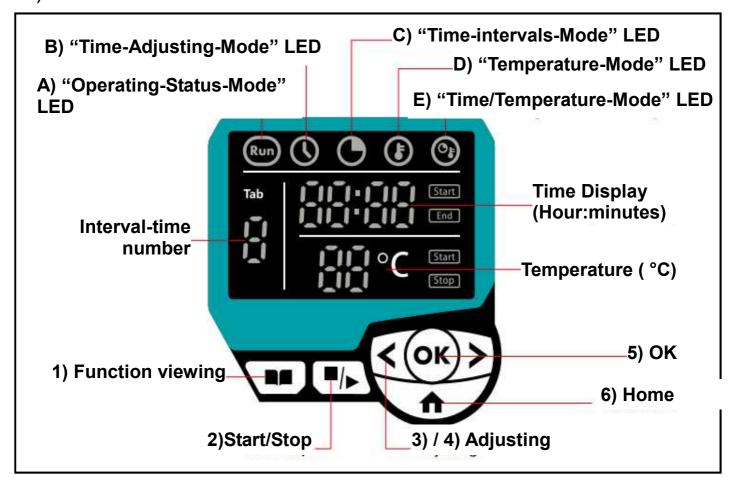


## Main functions and adjustment

#### 1. Interface:

The assistant panel of SANY-PUMP is designed to give an intuitive and simple interface. The circulator has six buttons:

- 1) **Function viewing** : It allows to view the set mode.
- 2) **Start/stop** /►: It allows manual ON/OFF switching.
- 3) Adjusting <: It allows adjusting the parameters.
- 4) Adjusting >: It allows adjusting the parameters.
- 5) **OK**: It allows the confirmation of the set parameters.
- 6 )Home **1**: It allows to skim all the functions.



#### 2. SANY-PUMP Manual Power On

Press the "Home Button" (6) and make sure that the "Time Adjusting"(B) indicator lights up. Then press the "Start/Stop Button" (2) and turn on the pump. When the pump is working, the "Operating Status" led (A) lights up.

Please note: It's impossible to program the circulator while it is running. Turn off the power supply, to setup the pump.

#### 3. Time Setting (C)

Press the "Home Button" (6) to reach "Time-intervals Mode" (C). Then press "OK" (5) until the Led, that indicates the hour, begins to flash. Set up the desired time, through the Adjustment Buttons (3 and 4). Then key "OK" (5) to confirm the setting.

Make sure that "Start" and "End" LEDs (in the upper quadrant) are both turned on.

#### 4. Time-intervals Mode Setting (C)

You can set up ten (10) different time-intervals.

Reach the "Time Interval Mode" (C) and choose one of the numbers ranging from 0 to 9.

As soon as the Time-Led-Indicator begins to flash, select the interval you want to set up (throught the Adjustment Buttons 3 and 4).

Set up both parameters: Start and End. Then press "OK" (5) to confirm the setting.

Choose a new interval and perform the same actions.

Press "Home Button" (6) to return to the main menu.

Make sure that the "Start" and the "End" Leds are both turned on.

#### 5. Temperature Mode Setting (D)

Enter in "Temperature Mode" (D) and press "OK" (5) until when the led that indicates the degrees (°C), begins to flash.

Program both "Start" and Stop", via the Adjustment Keys (3 and 4).

Always confirm your setup with the "OK Button" (5).

#### 6.Time/Temperature Mode Setting (E)

Enter in "Time/Temperature Mode" (E). Press "OK" (5) and follow the same adjustment procedure explained in points 4. and 5.

Press "OK" (5) to confirm the setting. After confirming, make sure that the "Start/End" (upper quadrant) and "Start/Stop" (lower quadrant) indicators are illuminated.

Please note: It is possible to set up 10 different time-intervals and temperatures.

#### 7. Function Viewing (1)

You can press the "Function Viewing Button" (1) to observe the setting details.

Press this button to check the setting data of the current mode when the system is running.

#### 8. Saving parameters

SANY-PUMP stores set up parameters.

The settings are not deleted in the absence of electricity. When the electrical current comes back, they will automatically reappear in your display.

#### 9. Pump running conditions

#### 1) Time Adjusting Mode (B):

The pump is running at any time.

#### 2) Time-intervals Mode (C):

The pump starts and stops during the time-interval you've set.

#### 3) Temperature Mode (D):

The pump runs when the water temperature, corresponds to the set temperature; Vice versa, it stops when the current temperature no longer corresponds to that you've set.

#### 4) Time/Temperature Mode (E):

The pump works only when both time and temperature settings correspond to the present ones; conversely, the pump does not works.

#### 10. Note

- 1) When the Operating-Status-Mode LED is off, the pump does not work. The circulator is in operating state when "Operating Status Mode" led is on. When the "Operating Status Mode" LED flashes, the pump is on but it is not working because the settings (time or temperature) do not coincide with those set.
- 2) The mode can only be switched when the pump is in "non-working" state.
- 3) For deleting a setting, log onto the affected mode and press "OK" (5).

The "Start" and "End" indicators will extinguish simultaneously, and the range will be canceled.

4) Please make sure that current time is correct, before setting the time range.

# **Problems Solving**

Problem	Possibile causes	Solution	
	Loose or broken wiring	Tighten connections, replace broken wiring	
Pump will not start	Blown fuse or open circuit breaker	Replace fuse or close circuit breaker	
Pump will not start	Broken capacitor	Replace capacitor	
	Fibers or foreign object lodged in impeller	Disassemble pump and clean	
	Foreign material pump	Disassemble pump and remove foreign object	
Pump vibrates and/or	Set flow too large	Switch to lower speed	
makes excessive noise	Gas within system	Vent the system up to that does not end the accumulation of air or gas	
Pump runs but does not	Air within the pump	Vent the system	
circulate the liquid	Dirty impeller	Clean the impeller	
Operating the lifesoving	Water in the electrical board	Pulire immediatamente tutte le tracce di acqua	
Operating the lifesaving	Shorted motor	Replace the circulator	
A setting cannot be deleted	Sany-Pump is running	Turn off Sany-Pump and change the pro- gramming	

#### **SANY-PUMP**

#### Warranty certificate

Thank you for purchasing this pump, designed and manufactured to exacting high standards, and to confer safety and high quality performance.

The legal guarantee starts from the date of purchase and does not cover damage caused by improper use and/or tampering not expressly indicated in this manual.

For warranty, fill out the following form.

Model	
Number	
Invoice numb. or receipt (staplehere the sales receipt)	
Date of purchase	
Place of purchase	
Problem	

# **UE - Correct Disposal Of The Product**



This symbol identifies important notes regarding the correct disposal of the device.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling, and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

For more information concerning the correct disposal of these products, please contact your

# C EDECLARATION OF CONFORMITY

Elettromek enterprise of Germanò Antonino Via C. Colombo - 98066 Patti, Messina, Italy

As attestation of the manufacturer,

#### DECLARES THAT

#### The following models:

**SANYPUMP20-4-130** 

**SANYPUMP25-4-130** 

**SANYPUMP20-5-130** 

**SANYPUMP25-5-130** 

**SANYPUMP20-6-130** 

**SANYPUMP25-6-130** 

#### They are conform to the Standard:

EN ISO 12100:2010, EN 809:1998+A1:2009+AC:2010,

EN 60204-1:2006+A1:2009+AC:2010,

EN 60335-1:2012+AC:2014, EN 62233:2008+AC:2008,

EN 60335-2-41:2003+A1:2004+A2:2010,

EN 60034-1:2010+AC:2010,

EN 55014-1:2006+A1:2009+A2:2011,

EN 55014-2:1997+A1:2001+A2:2008,

EN 61000-3-2:2014, EN 61000-3-3:2013

#### **Complying with EC Directives:**

2006/42/EC (Machinery) 2014/35/EU (Low Voltage) 2014/30/EU (Electromagnetic

Germanò Antonino