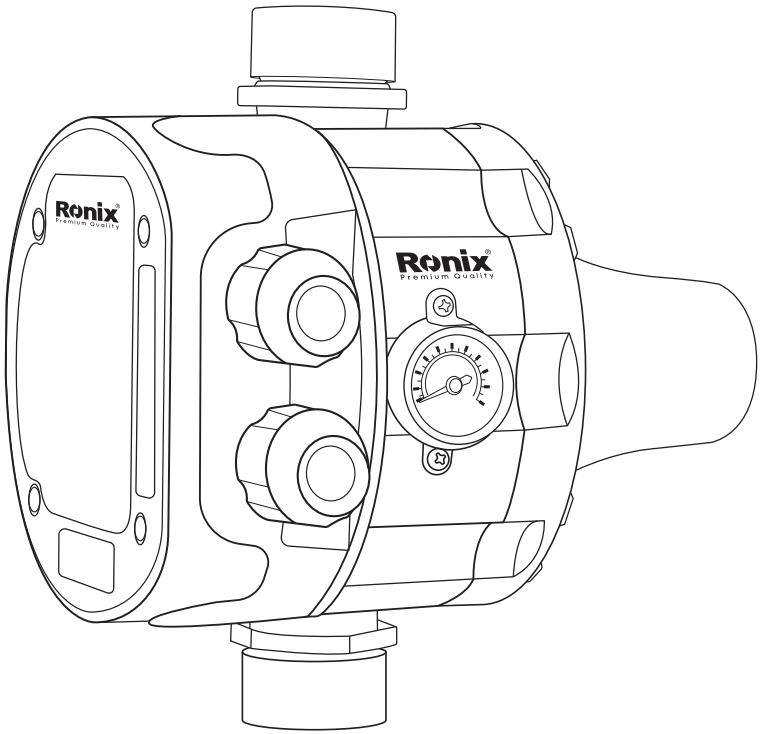
Ronix®
Premium Quality

PRESSURE CONTROL

RH-4047



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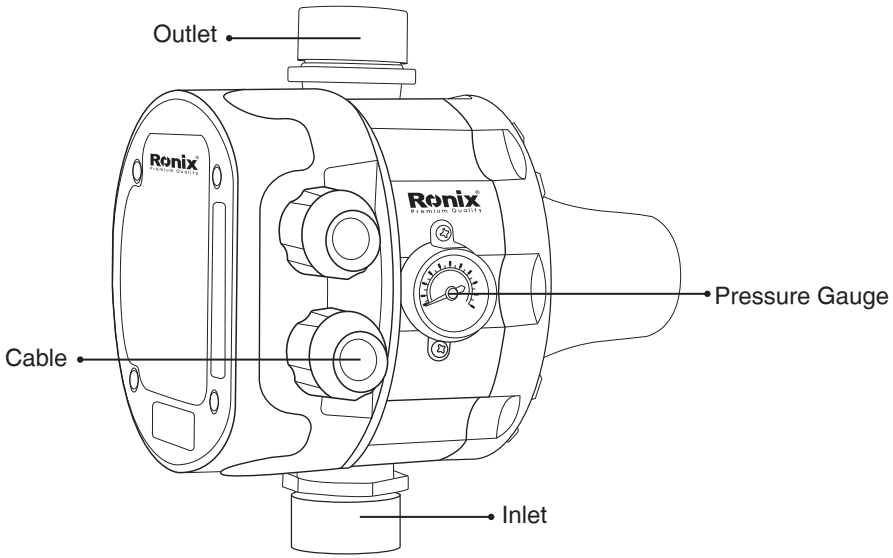
SPECIFICATION

Model	**RH-4047**
Voltage	220-240V
Frequency	50Hz
Current	10A
Power	1.1KW
Starting Pressure	1.2Bar or 1.5Bar or 2.2Bar
Max Pressure	10Bar
Max Working Temperatuer	55 °C
Body Material	ABS + Nylon
Dimension	145×152×186mm
Cord Length	1Meter
Weight	1.29Kg

PART LIST



OPERATION

This digital controller starts and stops pump through MCU according to water flow and pressure. Completely replace the traditional pump control systems, which composed of pressure tank, pressure switch, water shortage protection set, check valve etc. compared with traditional electronic pressure control, this controller has the following obvious features and advantages:

Three modes:

Pressure mode:

Pump motor through MCU receive pressure data and flow signal to control pump start and stop.

And implement relative protection and failure display function Time mode Pump motor through MUC receive flow signal to control pump start and

stop. Start again according to set time, and implement relative protection and failure display function.
Flow mode:
Pump motor through MCU receive flow signal to control pump start and stop. And implement relative protection and failure display function.

INSTALLATION (Fig.1)

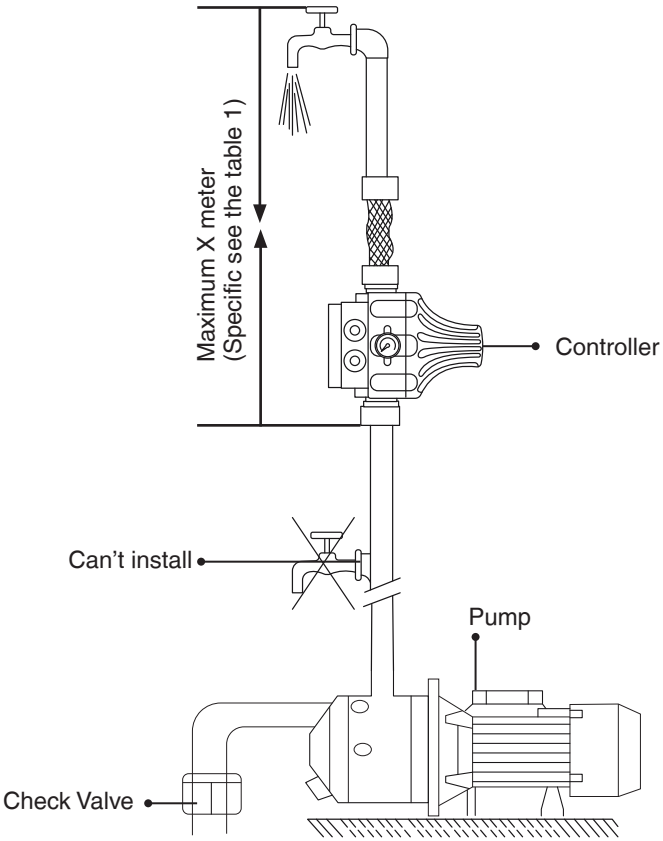


Fig.1

1- installation and maintenance the controller must be operated by

professionals who proficient in this manual.

2- this product only can be used in the clean water; the user should check the water of pipe system before installation. if the water containing the iron oxide, the pressure control will be failure after using a time.

3- this controller should be installing on the pump which meet the requirements.

The user should install a check valve in the inlet of the pump, test the pump have no problems.

4- The controller can be installed directly in front of the first outlet and the direction of water flow should be in accordance with the direction of arrow shown in the controller. User should use the tube connect the outlet of controller and other pipeline.

5- Don't leave the other foreign object inside the controller to avoid the controller failure.

6- The controller must be perpendicular to the horizon after installation, and the distance between the highest position of the tap and the vertical distance of the controller outlet can't be more than X meter. (The detail data refer to the Fig.2).

Table1:

Starting pressure (BAR)	The distance between the highest position of the faucet and the controller cannot be greater than L≤X*10(M)	Minimum suggest value of pump head Y≥L+8(M)
1.2	12	20
1.5	15	23
2.2	22	30

Fig.2

FUNCTION INSTRUCTION

NO.	MODE	DESCRIPTION
1	Pump On Failure	1- Pump works when “pump on” light on. 2- Pump stop working when “pump on” light off. 3- Pump failure when “failure” light twinkle.
2	Pressure Time Flow	Control three modes: Pressure mode when “pressure” light on. Time mode when “time” light on. Flow mode when “flow” light on.
3	Model Model	Press it each time, then the three mode lights are turned on in turn.
4	Restart Restart	Can reset pump at any time.
5	Timer Timer	Press it each time, then the three-time lights are turned on in turn.
6	0.5H 6H 24H	The time stand for how long time it will restart after stopping working.

4- Debugging and operation instruction

1 setting working mode

press “model” button, choose “pressure” “time” or “flow”, then mode light on. Pressure mode is manly used for no tower water supply. The function is same as normal electronic pressure control, you can set the starting pressure. The pressure gauge on the side shows the system pressure. Starting pressure can be adjusted on the head body of controller. Generally, it rotates 180 degrees, and the starting pressure change 0.1 bar. The adjustable range is 2.5-1.2 bar, and the default is 1.5bar. this mode is factory setting.

Install see Fig 3

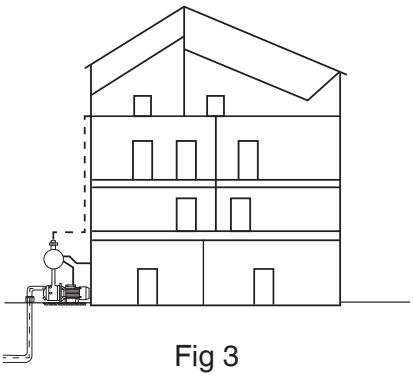


Fig 3

2- “Time” mode mainly used for mainly used for water replenishment of water tower, it avoids the user to start or stop the pump by themselves frequently. The user can set up how long to start again after filling up the water according to the amount of water consumed each day. The set time can choose at 6/0.5h/24h, which means half an hour/6 hours/24 hours. When water is in urgently need, it can reset by pressing the reset button to restart. If the self-priming pump cannot discharge water in 12s, you can long press the “Reset”, then pump will keep running. Install see Fig 4.

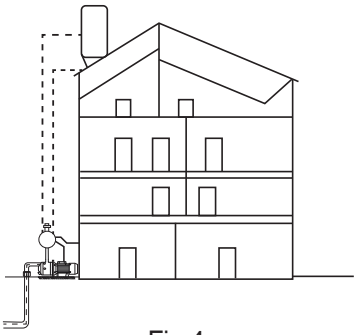


Fig 4

3- “Flow” mode mainly used for water tower pressurization.
When the user’s water consumption reaches a certain value, the pump will be started and the pipeline will be pressurized. The advantage is that when the water consumption of the pipeline is lower, and it is no need to turn on the water pump, avoiding suddenly start the pump at night, like the toilet water supply at night. Install see Fig5.

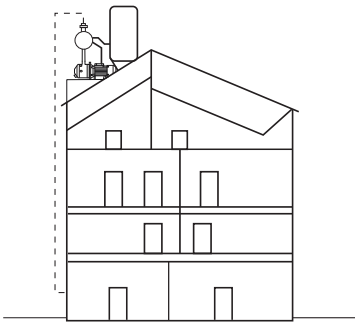


Fig 5

4- Under the pressure model, if the current pressure value less than the starting pressure value, and no water flow signal within 12S, it is determined to be water shortage and appear relevant indicators. The electric pump will run by itself for 10 seconds every 15 minutes, start normally working with water entering, if there is still without flow, no pressure, and then start shut down protection again. Then run 10s after another 15 minutes, and keep circulating. Pump will normally operate when detected water pressure.

5- Frequently start within 3 minutes (no flow signal within 3 minutes, pressure signal repeated) more than 18 time, and failure light means leakage protection. Leakage protection does not affect the pump's normal operation, will not be forced pump shout down.
6- The pump can be restarted by pressing the "Reset" button at any time.

COMMON OPERATION TROUBLE

Failure	Related reasons to controller	No related reasons to control-ler
Pump cannot start	1- Controller failure, 2- reset button failure	1- Rated Voltage low than 180v; 2- pump failure; 3- cable in wrong connection.
Pump cannot stop	1- Controller failure 2- Check valve failure 3- water contains iron and iron oxide	Pipe leakage
Pump works intermittently	1- Controller failure 2- Pressure range too small	Pipe leakage
Signal light twinkle	1- Controller failure 2- Pump's pipe broke	1- Water shortage 2- Pump failure 3- pump's inlet leakage 4- Pump head Pressure low than (starting pressure +0.8bar)×10

⚠ warning

1- The controller itself have no repair parts provide to the user, it must be maintenance e by the relevant professionals and the control box can be, provided by standby application.
2- Connecting the controller power and. pump must be. Use the three-core round cable. In order to Keep security, the earth wire must be connected in correct way!

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