

AUTOMATIC WATER PUMP CONTROLLER RP-1500



DESCRIPTION

The RP-1500 provides automatic multifunction control for your water pump. The RP-1500 electronic controller automatically starts and stops single-phase electric water pumps whenever a tap or valve connected to the installation is opened or closed, respectively.

When the pump is activated, it will continue to run as long as any connected tap remains open, supplying the network with the required flow at the specified pressure.

Technical Data:

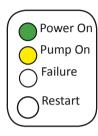
MODEL	NAME	VOLTAGE	POWER	FREQUENCY	Max. CURRENT	Starting Pressure	Max. PRESSURE	Max. Temp.	Protection grade	SUCTION- DISCHARGE
RP-1500	AWPC	115/220V	1.5KW	50/60Hz	8A	1.5bar	10bar	65℃	IPB	1" - 1"

INSTALLATION AND INSTRUCTION MANUAL

Warranty guide for automatic water pump controller



INDICATOR LIGHTS OPERATION

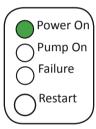


OPERATING

The individual operating steps of the system are displayed through indicator lights on a small panel at the front of the control box.

When the pressure controller is connected to the electrical power supply, two indicator lights will illuminate: Power On (green) and Pump On (yellow), indicating that the circuit is powered and the pump is in operation.

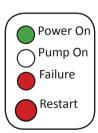
The pump will continue running for a period of time to establish the necessary pressure within the system.



STANDBY MODE

At this stage, the pump will shut off and switch to standby mode (green light on), remaining ready to respond to various monitoring and control signals from the system.

Whenever a tap or valve is opened at any point of use, the pressure controller will activate the pump within a few seconds. The pump will continue running as long as the outlet remains open or until the system pressure is restored. Once the outlet is closed, the pump will continue operating briefly to restore full pressure. The pressure controller will then shut off the pump and return to standby mode.



ERROR MODE

The pressure controller detects any irregular operating conditions, such as loss of water supply (due to loss of prime or an empty rainwater tank) or a blocked inlet line, and indicates the issue with a FAILURE light (red). When this occurs, the pump will shut off immediately.

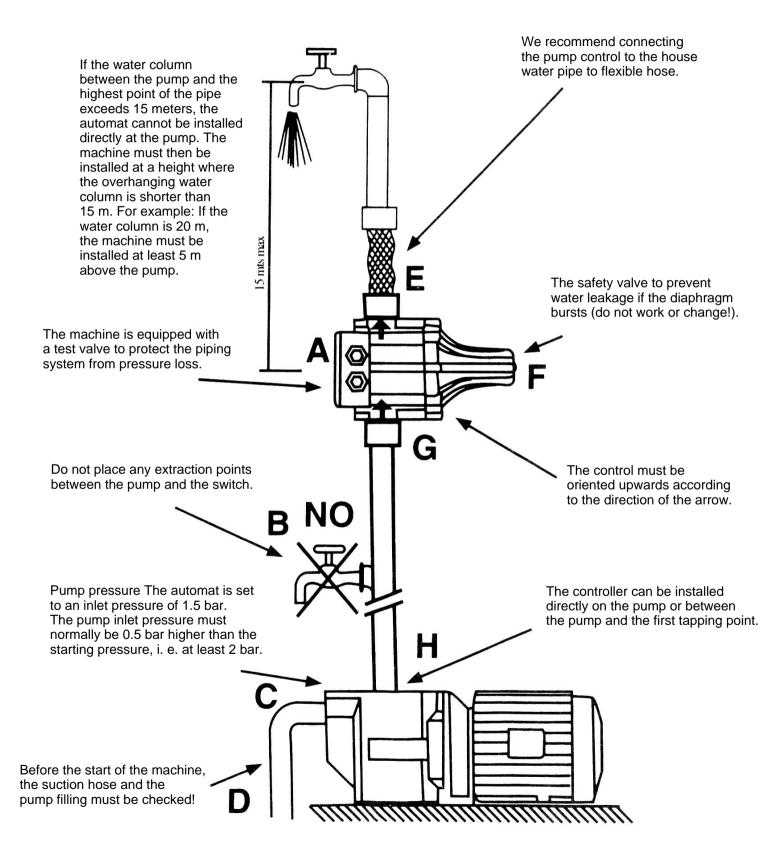
Once the issue is resolved, simply press the red RESTART button to restore normal operation. For other potential issues, refer to the troubleshooting section. In the event of a power outage, the pressure controller will automatically reset and restart when power is restored.

WARNING:

Do not use the Pressure Controller with home generator power, as it may cause premature failure. This type of use is not covered by the warranty. In such cases, please use a Pressure Switch instead.

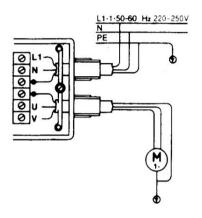


NOTES ON INSTALLATION

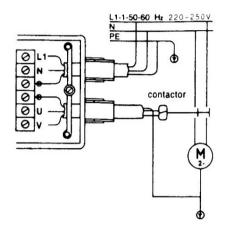




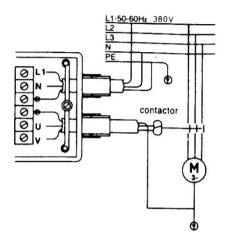
WIRING DIAGRAM FOR CONNECTING OF VARIOUS PUMP MOTORS



Wiring diagram for single phase 220V pumps up to 1.5 kW



Wiring diagram for single phase 220 V pumps over 1.5 kW control via 2-phase relay (contactor), relay selection according to pump performance.



Wiring diagram for three-phase 400 V pumps, also over 1.5 kW control via 3-phase relay (contactor), selection of relay according to pump capacity.

SAFETY FIRST

All electrical work must be carried out by a licensed electrician or a certified and trained professionals in compliance with relevant electrical regulations. An RCD safety switch must be incorporated into the electrical circuit. Additionally, we strongly recommend using a surge protector to safeguard against electrical surges, as damage caused by surges is not covered under warranty.

IMPORTANT NOTICE

DO NOT TAMPER WITH OR REMOVE THE ELECTRONIC BOARD FROM THE CONTROL BOX.

The wiring diagram provides the correct connection details. Incorrect wiring can permanently damage the electronic circuit, and such damage is not covered under warranty. For connections, a three-core cable with an earth wire must be used, with an outer diameter between 7.5mm and 8.5mm. When installed, the cable must be positioned lower than the cable glands connected to the power supply, as shown below. This ensures that moisture can safely drip off, preventing damage. Additionally, the four screws on the panel board and the two cable glands must be firmly fastened to prevent water from entering the control box and damaging the electronic components.



ELECTRICAL CONNECTIONS



WARNING:

READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

Connect the mains lead to a standard 230V (50Hz) electrical supply using an approved 13 amp BS 1363 plug or a suitably fused isolator switch. If the plug needs to be changed-either because it is not compatible with your socket or due to damage-it must be removed, and a replacement should be fitted according to the wiring instructions provided below. The old plug must be safely discarded, as inserting it into a power socket could create an electrical hazard.



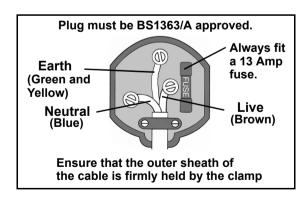
WARNING:

THE WIRES IN THE POWER CABLE OF THIS PRODUCT ARE COLOURED ACCORDING TO THE FOLLOWING CODE:

BLUE: NEUTRAL BROWN: LIVE YELLOW AND GREEN: EARTH

If the colours of the wires in the power cable do not match the markings on the plug:

- The BLUE wire must be connected to the terminal marked N or coloured black.
- The BROWN wire must be connected to the terminal marked L or coloured red.



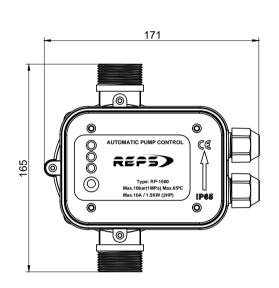
We strongly recommend that this machine be connected to the mains supply through a Residual Current Device (RCD). If you have any doubts regarding the electrical installation, please consult a qualified electrician.

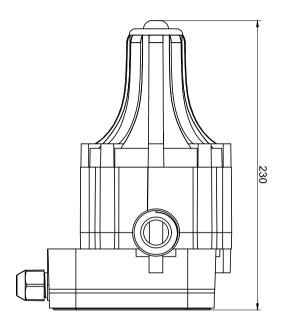
EXTENSION CABLES:

The maximum length of the extension cable should not exceed 25 meters, and the conductor size must be AT LEAST the same as the one used on the EPC800. Ensure that all connections are kept well clear of water.



DIMENSIONS





Dimensions in (mm)









TROUBLESHOOTING GUIDE

Problem	Check first and rectify accordingly	Check Second			
The Pump does not start	Incorrect Wiring, Circuit Breaker Tripped, Safety Switch Tripped, Power Cable Damaged, Plug not in Socket Properly, Pump Switch (if fitted) is Off, Pump has overheated, Voltage Fluctuation, Filter blocked, No water in tank, Loss of Prime, Blockage or Airlock in Pipework, for pumps with suction lift (drawing water from below-ground tank) ensure that pipework only rises to the pump, you must not have risen and fall as this will cause airlocks, check foot valve is not blocked or faulty.	1. The Suction screen (where fitted) on the inlet of The RP-1500 or the non-return valve may be blocked, remove the pressure controller and clean it out. If there is blockage we strongly recommend that a prefilter screen is fitted between the tank and the pump to prevent further problems. 2. Failing this there may be an electrical fault. This must be checked by an Authorized Service Agent.			
The Pump does not stop pumping	Leaking Toilet Cistern (put dry paper on the back surface of the toilet bowl to test if it is running down the back continuously) or leaks in pipework, check all pipework for leaks, for underground pipework look for muddy areas, grass growing extra-well, soil soft underfoot - Fault in the pump that it cannot build up pressure sufficiently, contact supplier of pump	There may be a fault with the Pressure Controller, this must be checked by an Authorized Service Agent.			
The Pump starts pumping when no taps are in use	Washing Machine in use or - Leaking Toilet Cistern (put dry paper on the back surface of the toilet bowl to test if it is running down the back continuously) or leaks in pipework, check all pipework for leaks, for underground pipework look for muddy areas, grass growing extra-well, soil soft underfoot?	Plastic Tank shavings or similar may be caught in the non-return valve in the bottom of the Pressure Controller. Try flushing it out by opening as many taps as possible all at once. If this does ot work, remove the Pressure Controller from the pump and inspect the non-return valve (it is just inside the bottom inlet) and if any obstruction is obvious, remove it using tweezers or long-nosed pliers or similiar. If it is not this, then the unit may be faulty and should be replaced.			

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