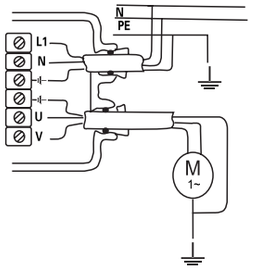
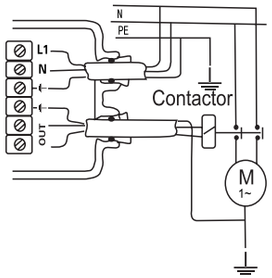
WIRING DIAGRAMS FOR CONNECTION TO DIFFERENT PUMPS



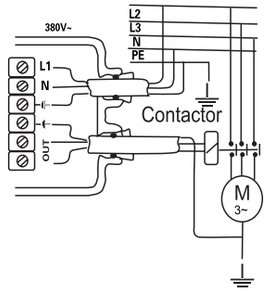
Wiring diagram for connection to a single phase 220-240V pump up to 1.5kW.

This is how the controller is currently wired.



Wiring diagram for connection to a single phase 220-240V pump over 1.5kW through a contactor.

CONTACTOR SPECIFICATIONS:
Minimum contacts capacity of 4kW or 5.5HP approx 230V

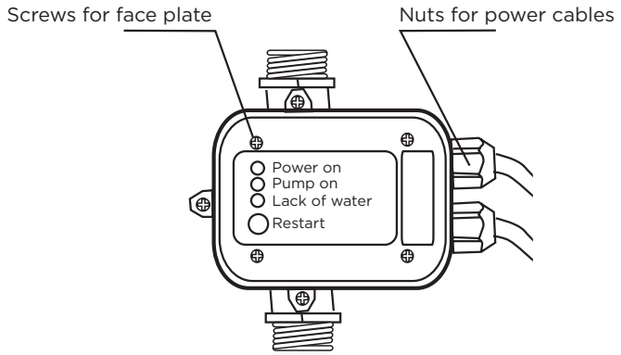


Wiring diagram for connection to a three phase 380V motor pump through a contactor.

CONTACTOR SPECIFICATIONS:
Minimum contacts capacity of 4kW or 5.5HP approx 230V

⚠ **Any changes to the controller wiring must be performed by qualified personnel**

WATERPROOFING



If any wiring modifications are made, ensure the four screws on the face plate and the nuts for the power cables are fastened securely to prevent water entering the controller and damaging the electrical components.

WATERBOY

PUMPS BY BROMIC PLUMBING & GAS

BROMIC WATERBOY™ PRESSURE CONTROLLER SERIES 2

INSTRUCTION AND SERVICE MANUAL

PRODUCT NO. 7575381

SPECIFICATIONS			
Input Voltage:	220-240V	Frequency:	50/60Hz
Max working pressure:	1MPa (10bar)	Max Amps:	10A
Max working temperature:	60°C	IP Rating:	IP65
Connection:	R1”	Start Pressure:	0.22MPa (2.2bar)

BROMIC Pty Ltd
10 Phiney Place, Ingleburn, NSW 2565 Australia
AU 1300 276 642 NZ 0508 276 642 E plumbing@bromicgroup.com W bromicplumbing.com

V1.4 03/2025

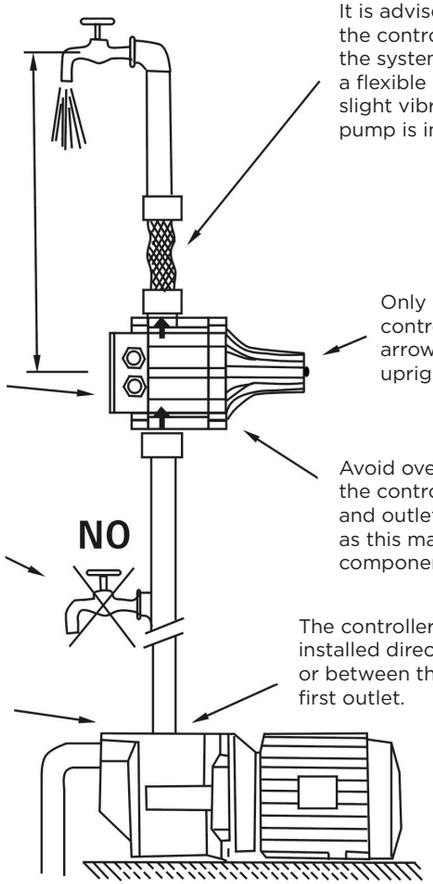
INSTALLATION INSTRUCTIONS

If the column of water between the pump and the highest outlet exceeds 22m, the controller cannot be directly installed on the pump, it has to be raised until the column of water between the unit and the highest tap does not exceed 22m. For example, if the outlet is 25m higher than the pump, the controller must be installed at least 3m higher than the pump.

The controller is equipped with a check valve to prevent the pipeline from losing pressure.

No outlets can be installed between the controller and the pump.

The controller has a start pressure of 2.2 bar. The pressure produced by the pump must be at least 0.8 bar higher than the start pressure. Before starting the controller, check that the pump has been primed.



It is advised to connect the controller outlet to the system by means of a flexible hose to allow slight vibration whilst the pump is in operation.

Only install the controller with the arrows pointed in an upright position.

Avoid overtightening the controller at the inlet and outlet connections, as this may damage components.

The controller can be installed directly on the pump or between the pump and the first outlet.

The controller must be supplied through a residual current device having a rated residual operating current not exceeding 30mA

Surge protection is recommended to prevent damage to the controller from power surges such as lightning strikes

Disconnect the controller from the power supply before carrying out any maintenance or changes to the installation

The controller is suitable for use with clean water only

A cover should be used to protect the controller from rain and other environmental conditions

Contact us for details or visit our Warranty Information webpage at https://www.bromicplumbing.com/resources-hub/warranty-information/

STARTING THE UNIT

When the unit is first connected to power, all LEDs light up and then the red LED goes out, indicating that the pump has started. The pump will then continue to operate until there is no longer flow (flow rate is less than 0.6L/min).

OPERATION

When the pressure drops below the start pressure, the controller will turn on the pump. The pump will build pressure and once the pressure is above the start pressure and there is no longer flow, the controller will turn off the pump.

DRY-RUN PROTECTION

When there is a lack of water, the controller can prevent damage to the pump that would otherwise be caused by dry-running.

When there is no water supply in the system, the controller will stop the pump automatically after 20s of running and the red LED will begin to flicker. The controller will then enter dry-run protection programming and follow the schedule below:

1. PUMP OFF for 10s
2. PUMP ON for 40s, PUMP OFF for 10s
3. PUMP ON for 40s, PUMP OFF

If the water supply has not returned, the controller will enter the next stage of dry-run programming, and the red LED will flicker slower. The controller will then turn on the pump every 24h and check for water until the water supply has returned.

To reset the controller at any stage, press the restart button.

TROUBLESHOOTING

Type of Defect	Potential Cause Related to the Controller Unit	Potential Cause Not Related to the Controller Unit
Pump does not turn off	• Flow detector is jammed in an elevated position • Issue with internal electrical components	• Presence of leaks greater than 0.6L/min • The pump does not provide sufficient pressure
Pump turns on and off intermittently	• Issue with internal electrical components	• Presence of leaks lower than 0.6L/min
Pump does not turn on	• Incorrect wiring (line/motor) • Issue with internal electrical components	• Supply voltage is incorrect • Faulty pump • Internal electrical components have been damaged due to external factors surge as a power surge or lightning strike

In the event of a suspected flow detector jam, disconnect it from the power source, isolate the controller from the water supply, and depressurize the system. Remove the controller from the system and clear any obstructions that may be hindering the flow detector's movement. This procedure must only be carried out by qualified personnel.