



PRESS PUMP CONTROLLER



Auto



Manual

Installation & Operating Manual

INDEX

1. SPECIFICATIONS	1
2. WARNINGS & SYMBOLS	2
3. INSTALLATION	3
4. OPERATION	3
5. TROUBLE SHOOTING	5
6. TERMS OF WARRANTY	6

Congratulations on selecting a Dayliff Press Pump Controller. They are manufactured to the highest standards and if installed and operated correctly will give many years of efficient and trouble free service. Careful reading of this Installation Manual is therefore important, though should there be any queries they should be referred to the equipment supplier.

1. SPECIFICATIONS



Auto



Manual

In-line electronic pump controllers for automatic operation of pressurised water supplies. Features include:-

- Starts pump on pressure (fixed at 1.5 Bar) and stops on low flow
- Dry run protection provided. Standard models require manual reset, automatic models restart when supply returns (positive suction)
- Incorporates a spring activated hydraulic accumulator to control pump cycling
- LED power on, pump run and run dry indicators

Max Motor size: 0.75kW (auto), 1.1kW/1ph(manual)

Max Current: 10A

Max Operating Pressure: 10 Bar

Connection: 1" M

Dimensions (L/W/H): 227/130/168mm

Protection: IP54(auto), IP65 (manual)

2. WARNINGS AND SYMBOLS



The water column between the controller and highest outlet must be below 15m.



No outlet should be installed between the pump and the unit.



The controller is preset by the manufacturer at a pressure of 1.5 bar. The pump pressure must be normally 0.8bar higher than the preset pressure. Before starting the unit check suction and ensure that the pump is primed.



The controller should not be used where there is risk of an explosion.



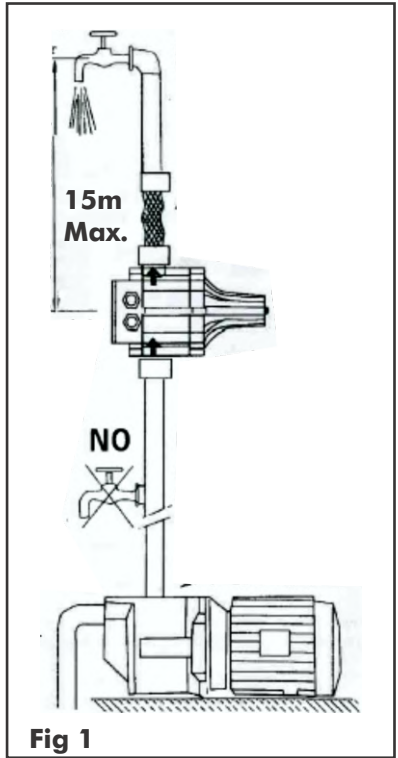
The controller should be installed and serviced by a qualified person who should ensure electrical connections comply with local regulations.



Before installing, ensure that the power supply is switched off.



The controller is designed for use with clean water. Where water may contain sediments it is advisable to install a pre filter.



3. INSTALLATION

- Take the controller out of the packaging and check the following;
 - 1.) Visible damage.
 - 2.) Ratings correspond with those required.
 - 3.) Cable bushings and screws are in place.
 - 4.) Inlets and outlets are clear and free of debris.
 - 5.) The check valve moves freely.
- It is advisable to connect the unit outlet to the system by means of flexible hose.
- The unit is equipped with a check valve to prevent the pipeline from losing pressure.
- Safety valve is installed to prevent water leakage in case of diaphragm breaks.
- The unit can be installed directly on the pump or between the pump and the first outlet.
- Do not disassemble the electronic board out of the control box.
- The wiring diagram inside the terminal block is provided to guide electrical connection. Wrong connection will destroy the electronic unit.

Wiring diagram

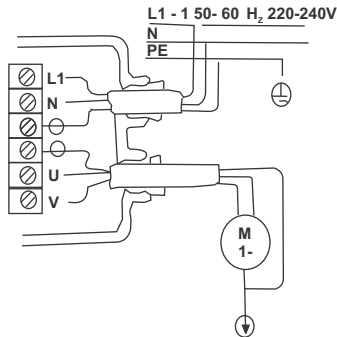


Fig 2

- Cable used for connection should be three-core with compulsory earthing, minimum outer diameter of 7.5mm and maximum of 8.5mm.
- The four screws on the panel board and the two nuts for fixing cable must be well fastened to avoid water entering into the control box and damaging the electronic circuit board.

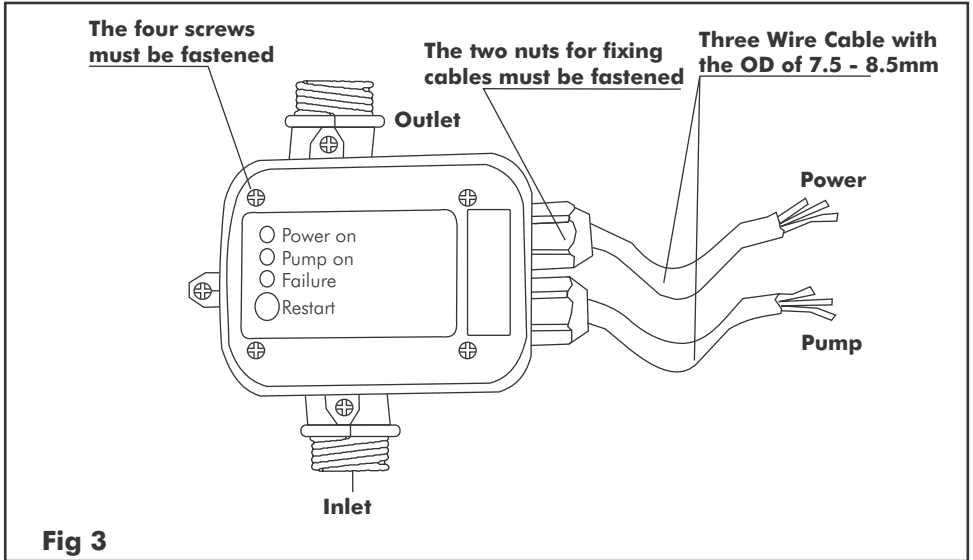


It is imperative to install the unit with the arrows in the upward position.



If you are using a pump with pressure higher than 10 bar, install a pressure reducer on the inlet.

4. OPERATION



- When the unit is connected to power, the green LED 'Power on' lights up and the yellow LED 'On' (pump in operation) indicates that the pump is running.
- The pump continues to operate enabling the system to prime the pipes and to achieve the required pressure. If this fails, the red LED 'Failure' lights up. In this event, press the 'Restart' button and wait, with a tap opened until the red LED goes off. Upon releasing the button and closing the tap, the unit stops the pump at maximum pressure.
- The unit is programmed to perform all the pump control operations automatically.
- When operational error occurs e.g lack of water, obstruction of the suction pipe etc, the unit recognizes the error and the red LED 'Failure' lights up; at the same time a stop signal is sent to the pump to prevent damage caused by its working in the absence of water.
- Upon rectification of the error, the system is restarted by pressing the 'Restart' button for manual units.
- Auto units automatically restart when supply resumes.

5. TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Pump does not start	Faulty P.C.B	Replace P.C.B
	Power failure	Check power source and rectify
	Inverted electric cables	Connect cables correctly
Pump does not stop	Faulty pump	Replace or repair the pump
	Faulty P.C.B	Replace P.C.B
	Blocked flow detector	Unblock the detector
	Reset button is broken	Replace the reset button
Pump works intermittently	Low pump pressure	Use the correct pump
	Leakage in delivery line	Replace/repair the delivery line
	Faulty P.C.B	Replace P.C.B
Pump is jammed	Pump does not provide sufficient pressure	Use the correct pump
	Leakage in delivery line	Replace/repair the delivery line
	Faulty P.C.B	Replace P.C.B
	Pump pressure is lower than restarting pressure	Choose a higher pressure pump
Pump is jammed	Lack of water in the delivery line	Check if there is water in the tank or delivery line
	Suction blocked	Unblock the suction line

6. TERMS OF WARRANTY

i) General Liability

- In lieu of any warranty, condition or liability implied by law, the liability of Dayliff in respect of any defect or failure of equipment supplied **is limited to making good by replacement or repair** (at the Company's discretion) defects which under proper use appear therein and arise solely from faulty design, materials or workmanship within a specified period. This period commences **immediately after the equipment has been delivered to the customer** and at its termination all liability ceases. Also the warranty period will be assessed **on the basis of the date that the Company is informed of the failure.**
- **The warranty applies solely to equipment supplied and no claim for consequential damages**, however arising, will be entertained. Also the warranty specifically excluded defects caused by fair wear and tear, the effects of careless handling, lack of maintenance, faulty installation, incompetence on part of the equipment user, Acts of God or any other cause beyond the Company's reasonable control. Also, any repair or attempt at repair carried out by any other party **invalidates all warranties.**

ii) Standard Warranty

If equipment failure occurs in the normal course of service having been competently installed and when operating within its specified duty limits warranty will be provided as follows:-

- **Up to 1 year - The item will be replaced or repaired at no charge.**
- **Over 1 year, less than two years - The item will be replaced or repaired at a cost to the customer of 50% of the Davis & Shirliff market price.**

The warranty on equipment supplied or installed by others is conditional upon the defective unit **being promptly returned free to the product supplier** and collected thereafter when repaired. No element of site repair is included in the warranty and any site attendance costs will be payable in full at standard chargeout rates. Also proof of purchase including the purchase invoice must be provided for a warranty claim to be considered.

DAYLIFF is a brand of **Davis & Shirliff**

for enquiries contact

Davis & Shirliff, Ltd.

P.O. Box 41762 - 00100, Nairobi, Kenya

Tel: 6968000/ 0711 079 000

or visit

www.davisandshirliff.com

for details of the nearest branch or stockist