

Device for control and protection of the electric pump

GB ORIGINAL OPERATING INSTRUCTIONS

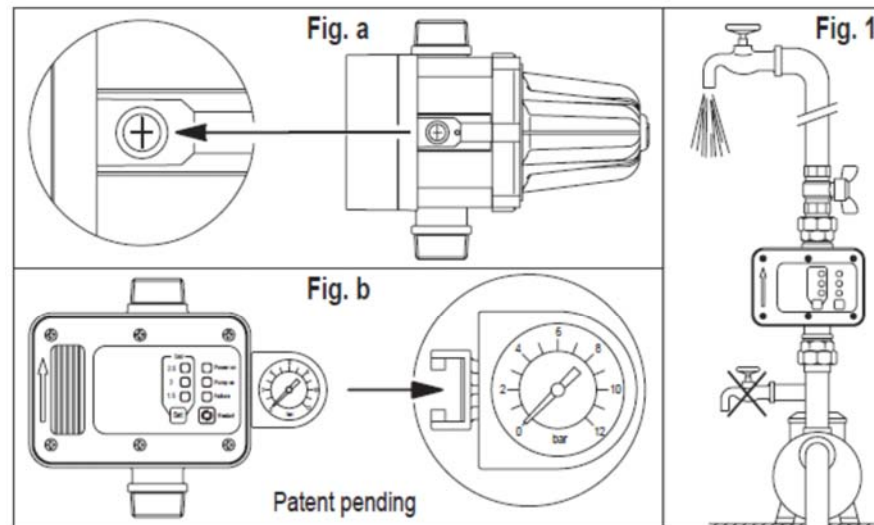
Carefully read and observe all the regulations contained in this instruction manual. The installer and final user must scrupulously observe the laws and standards, also in compliance with relative local regulations. The Manufacturer declines any liability in case of damage caused by incorrect use, or use in conditions differing from those indicated on the nameplate and in these instructions.

Features and advantages

- Starts and stops the pump depending on opening and closing of the taps.
- Stops the pump in case of a water shortage and protects it against dry running.
- Allows to set three restart values of the pump (1.5 - 2 - 2.5).
- Is equipped with automatic restart in case of failure and anti-jamming function.
- Maintenance free.
- Is available with incorporated manometer.
- On request it can also be supplied with wired electric cables.

Application of the optional manometer

Attention! Do not loosen the screw indicated by the arrow in figure a. The screw must be removed only in case you want to apply the special manometer, supplied on request, indicated by the arrow in Figure b.



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Technical Data

Single-phase mains voltage	230 Vac	Protection degree	IP 65
Acceptable voltage fluctuation	± 10%	Maximum running pressure	max 12 bar (1.2 MPa)
Frequency	50 - 60 Hz	Maximum running temperature	max 65 °C
Current	max 16 (8) A	Minimum flow	~ 1 l/min
Power	1,5 kW (2 HP)	Male connectors	1"

Certified by TÜV SÜD: Certificate no. B 12 11 73297 007

Control panel

Green LED lit up	<input type="checkbox"/>	Power on	Device energised
Yellow LED lit up	<input type="checkbox"/>	Pump on	Pump running
Red LED blinking	<input type="checkbox"/>	Failure	Water shortage
Button	<input type="button" value="↻"/>	Restart	Reset after failure

Installation and start up

Before installing the device carefully check the technical features and make sure they comply with those of the pump and the system.

The device can be installed directly on the pump or between the pump and the first tap with the flow direction arrow facing upwards. None of the users can be installed between the pump and the device (Figure 1).

If the pressure generated by the pump exceeds 12 bar, apply a reducer between the pump and the device.

Make all the electrical connections, check that the pump is correctly primed, open a tap and energize.

The green Power on LED will light up on the control panel and the pump will start (yellow Pump on LED lit up) and keep running for several seconds to start up the system.

If this time is insufficient, the device will stop the pump (red Failure LED blinking).

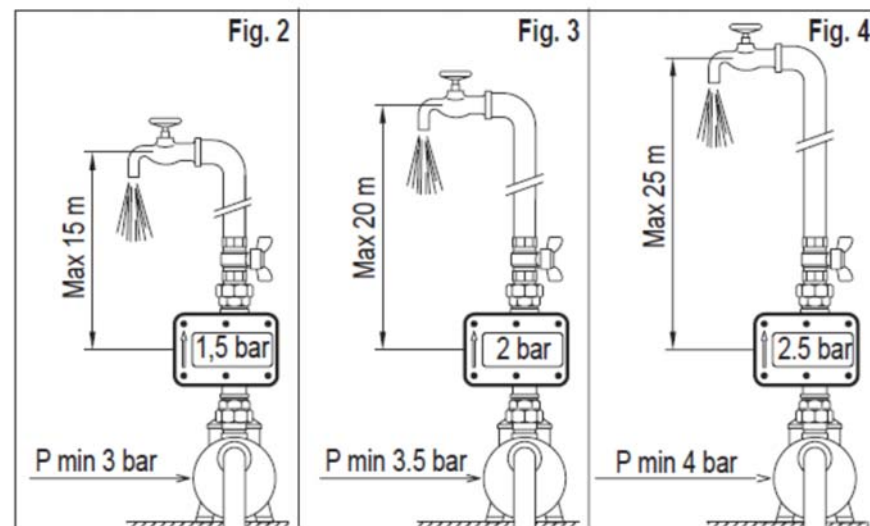
Keep the Restart button pushed in until the red Failure LED turns off and the water comes out of the opened tap.

When the tap is closed the pump will stop after a few seconds (yellow Pump on LED turns off).

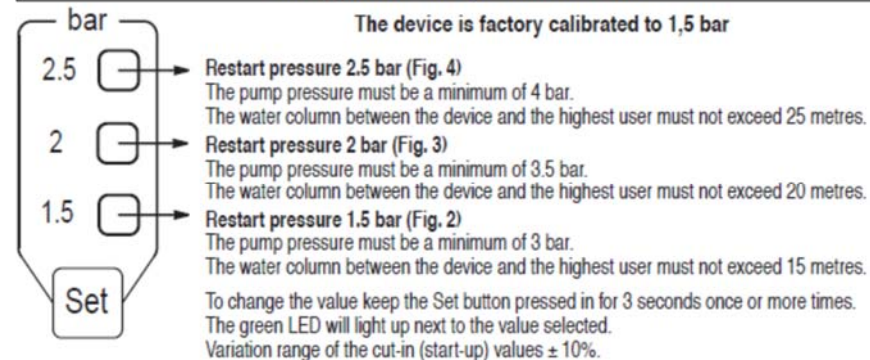
From now on the device will turn the pump on and off depending on the opening and closing of the tap.

If there is a water shortage the device will stop the pump and protect against dry running (red Failure LED blinking).

Once the cause of the failure has been resolved press the Restart button to restore the operation.



Setting the restart pressure values



The pump stops if the pressure generated by the same fails to reach the values indicated above.
The pump starts but without restarting if the height of the water column exceeds the values indicated above.

Automatic restart and anti-jamming function

In case of stopping due to an water shortage, the device will automatically make 10 double attempts to rearm over the 24 hours following the failure, each lasting approximately 5 seconds to allow the pump and the system to reload if possible.

After the last failed rearming attempt, the device will remain permanently in alarm (red Failure LED blinking) pending manual rearming by pressing the "Restart" button.

The user can always try to rearm the device at any time by pressing the Restart button.

If **for any reason** the pump remains idle for 24 consecutive hours, the device will carry out a start up of the pump motor for about 5 seconds (**anti-jamming function**).

In case of a temporary blackout, the device will automatically rearm once the electricity returns.

Electrical wiring

The electrical wiring must be carried out by qualified personnel in compliance with local regulations. Observe all the safety standards and make sure the device is connected to an earthing system. Install a multiple-pole switch upstream from the device with a minimum aperture of the contacts equal to 3 mm. Follow all the indications on the electrical diagrams (figures 5-6-7).

Voltage	Motor	Power kW	Electrical diagram
Single-phase	230 Vac	Not more than 1.5	See Figure 5
Single-phase	230 Vac	Over 1.5	See Figure 6
Three-phase	400 Vac	—	See Figure 7

Malfunctioning

The pump fails to start
The pump starts but fails to restart
The pump works intermittently
The pump fails to stop
The pump jams

Check the electrical wiring
The water column is too high
System loss less than the minimum flow
System loss greater than the minimum flow
Suction difficulties/Actual pump prevalence insufficient.

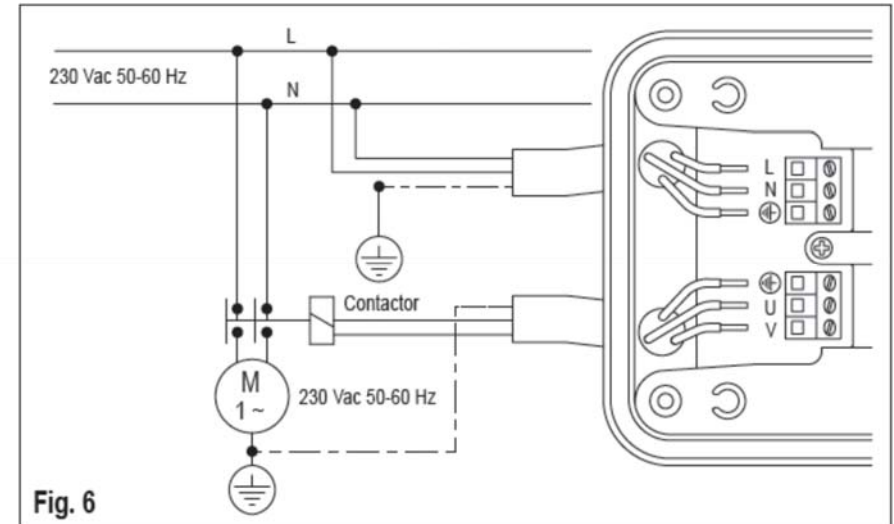


Fig. 6

DECLARATION OF CONFORMITY EU

We, DAB Pumps S.p.A. - Via M.Polo, 14 - Mestrino (PD) - Italy, declare under our exclusive responsibility that the products bearing the trade marks DAB PUMPS to which this declaration relates are in conformity with the following directives and by the following standards: Low Voltage Directive 2014/35/EU; Electromagnetic Compatibility Directive 2014/30/EU and to the following harmonised regulatory technical standards: EN60730-1:2011, EN 60730-2-6:2008, EN 55014-1:2006/A2:2011, EN 55014-2:1997/A2:2008, EN61000-3-3:2013, Annex IV to the LVD 2014/35/EU

Mestrino, 13/07/2016

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