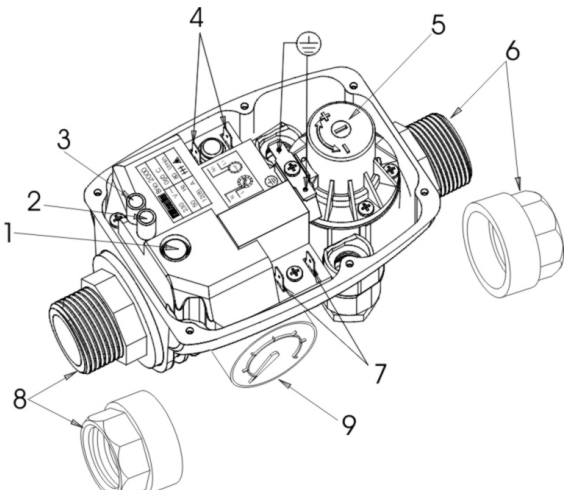
Brio 2000 M

Brio2000-M - Brio2000-MT

Owner's manual

INSTRUCTIONS FOR USE



FUNCTIONAL PARTS			
1.	RESET button	**6.**	1” male threaded connection outlet (By request, 1” female revolving nut)
2.	Dry stop indicator	**7.**	Line connection
3.	Voltage indicator	**8.**	1” male threaded connection inlet (By request, 1” female revolving nut)
4.	Motor connection	**9.**	Pressure gauge (Brio2000-M and 2000-MT versions only)
5.	Operating pressure setting screw		

1. FEATURES

Brio 2000 is designed to automatize the starting and stopping operations of an electric pump with regard to a drop in pressure (opening of the taps) and to the stopping of the flow through the system (closing of the taps), respectively. Brio 2000 stops the pump when senses the lack of water flow, preventing it from any damaging dry operation.
Furthermore, thanks to a timer, it starts the pump automatically to verify an eventual new water availability in the suction line – Brio2000-T and 2000-MT versions only.
It is advisable using Brio 2000 with water systems whose water is without sediments. In case it is not possible, it is necessary to install a filter before the inlet of the device.
The pressure gauge checks the starting pressure value and the pressure in the system.
Furthermore it verifies any possible presence of water leakages in the very system.

PLEASE READ THIS INSTRUCTION LEAFLET CAREFULLY THROUGH BEFORE INSTALLING AND OPERATING THE DEVICE.
ALL WIRING UP MUST BE CARRIED OUT BY SPECIALLY TRAINED PERSONNEL.

2. SAFETY REGULATIONS

⚠ **To avoid shocks and fire risks, read and follow closely the following instructions:**

- **Always unplug the device from the mains before carrying out any work on it.**
- **Be sure that the electric line connecting the device to the mains and the extension leads have a cross-section suitable for pump power and be sure that the electrical connections are far away from any water source.**
- **When Brio 2000 is used for swimming pools, ponds and fountains it is necessary to use an automatic RCD with IDn=30mA protection.**

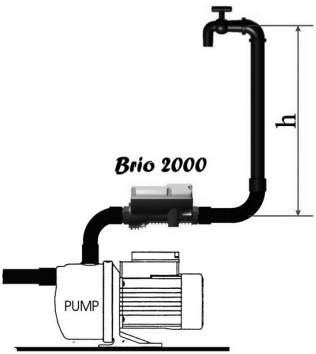
WARNING: when the pump stops the pipes are under pressure consequently we recommend opening a tap to discharge the system before carrying out any work.

3. OPERATING INSTRUCTIONS

The switch starts up the pump for 15 seconds once connected to the line. Any further pump starting occurs when the pre-set operating pressure value is reached, accordingly to the drop in pressure in the tubing when opening a tap. In the traditional water systems equipped with pressure switch and pressure tank, the pump stops when a certain pressure value is reached. Differently Brio 2000 has been projected to stop the pump depending on the reduction of the flow to minimum levels.
Once this circustance has been reached, Brio 2000 delays the real stop of the pump of a timing running from 7 to 15 seconds: the logic of this function is to reduce the starting operations of the pumps in case of minimum flow conditions.

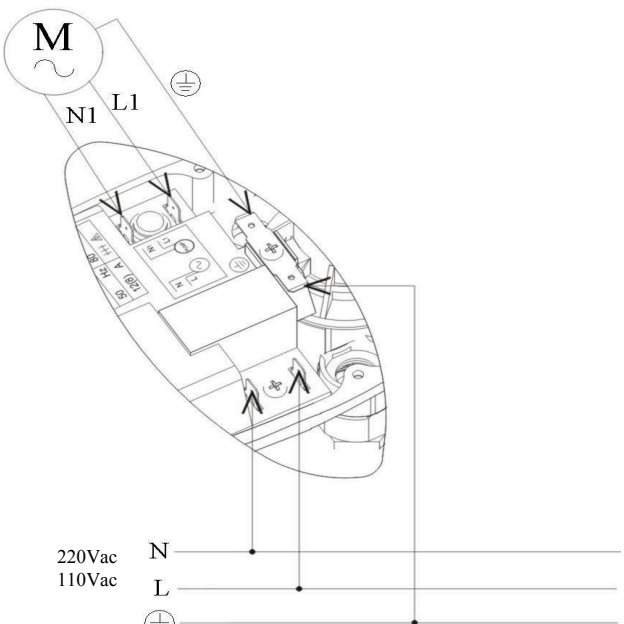
4. INSTALLATION

1. Install Brio 2000 anywhere between the pump and the first service outlet so that the arrows moulded on the case and on the outlet connection are pointing to the same direction as the fluid flowing through the pipe. Check perfect water tightness of all water connections. If you are using a pump with a pressure higher than 10 bar, install a pressure reducer on the Brio 2000's inlet.
2. For the electrical connection of the version supplied without electric leads, follow the wiring diagram on the printed circuit board cover, or on the drawing following. Furthermore, in case of use of a pump with power higher than ½ Hp and the ambient temperature is higher than 25° C it is necessary to wire Brio 2000 with cables with a thermic resistance not inferior to 99°C. Use only suitable wire nippers to wire the Fastons. If the leads are included, simply connect the pump's power plug to the Brio 2000 socket and its own power plug to a current outlet.
3. Operating pressure is pre-set at 1.5 bar which is the optimum value for the majority of applications. Minimum operating pressure can be adjusted as needed by turning the screw situated on the inside flange marked with + and -.



ATTENTION: the check valve installed in the pump outlet and in the Brio 2000 inlet can cause some anomalies during the normal working of Brio 2000. Therefore it's advisable avoiding its installation between the pump and Brio 2000.

4. **Attention:**
   To modify the operating pressure adjustment it is necessary to take the cover away. Skilful people only must handle that operation, taking care of the electric-shock risks.
   Such pressure adjustment modifies the starting pressure limit of the pump. The exit pressure of device never increases. The pressure difference between the operating pressure value – set on the device – and the maximum pressure of the pumps must be higher than 0,6 bar.
   When it is necessary to modify the adjustment:
   1_When the higher top is situated at more than 15 mt higher of the device (max water column: 30 mt).
   2_For the applications of the pump in load, that is when the loading pressure is added up to the pressure of the pump, max. 10 bar.


M
N1
L1
220Vac
110Vac
N
L

WARNING: TO ENSURE CORRECT WORKING OF THE BRIO 2000, MAXIMUM PUMP PRESSURE MUST BE AT LEAST 0,6 BAR HIGHER THAN BRIO 2000 OPERATING PRESSURE.

5. STARTING BRIO 2000

WARNING: whenever the level of the priming water is lower than the level of the water where the pump is placed, a suction line equipped with an antibackflow foot valve is absolutely essential. This valve allows the line to be filled when it is first used and prevents it from being emptied when the pump stops.

1. Before turning on, fill up the suction pipe and pump with water and then start the pump by connecting the Brio 2000 power plug to a current outlet; when the pump stops open the tap situated higher up.
2. Installation is correct if the flow from the tap is regular and if the pump works continuously. If there is no water you can try to make the pump work without interruption - for a period of time longer than the device's working time - by keeping the RESET button depressed. If the problem persists, disconnect the Brio 2000 and repeat the procedure from point 1.

6. DRY STOP

The red FAILURE LED lits up with motor off to indicate a dry stop. To start the system again press the RESET button after having checked the presence of water in the suction pipe.

6b. AUTOMATIC RESET - Brio2000-T and 2000-MT versions only

Further to a stop for dry running Brio2000-T and 2000-MT start to carry out some brief regular start-testing at regular pre-set intervals of time (every 60 or 30 minutes depending on the model) until a new water availability in the suction line is found or up to the pre-set maximum number of testing has been reached (from 2 up to 4 testing depending on the model).
Once such a limit has been reached, to re-start the system it is necessary to push the RESET button manually once the presence of water in the suction line has been ascertained.

7. WARRANTY

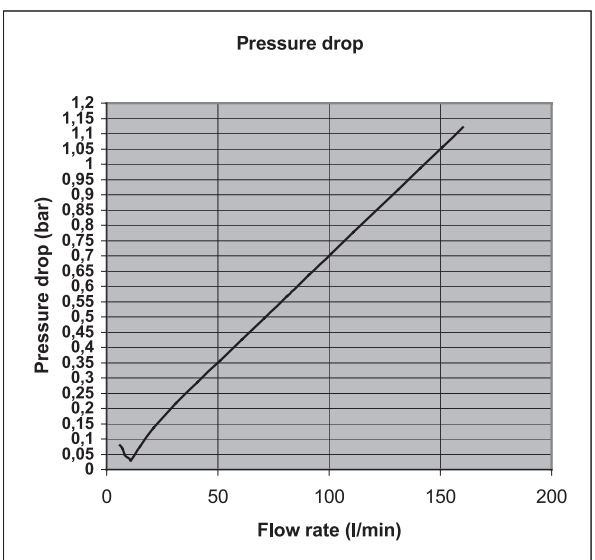
The warranty is valid for a period of months starting from the purchasing date. The warranty is acknowledged if the device shows no signs of tampering and if all the manufacturerís instructions were followed during the installing and operating phases

8. POSSIBLE PROBLEMS

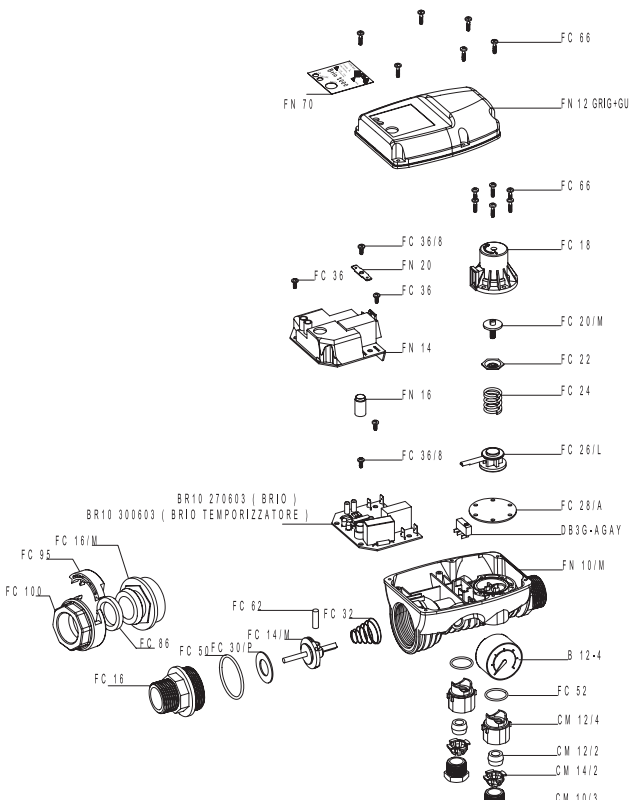
PROBLEM	POSSIBLE CAUSES	SOLUTION
The pump switches on and off continuously.	Leaks in the system.	Check all hydraulic connections.
Dry stop even if there is water in the suction pipe.	Operating pressure too high.	Turn screw 5 anticlockwise (-◠) direction. Press the RESET button and make sure the red light is off when the pump stops.
The pump do not start again.	1.Mains voltage failure. 2.The drop between the Brio 2000 and one of the tap is too great. 3.The pump is out of order. 4.Brio 2000 is malfunctioning.	1.Check the electrical connections. 2.Turn screw 5 in clockwise (◠+) to increase the operating pressure. 3.Consult an electrician. 4.Consult your dealer.
The pump does not stop.	1.There are big leaks in the system. 2.Brio 2000 is malfunctioning.	1.Check the system. 2. Consult your dealer.

9. TECHNICAL DATA

Power source: . . . . . 110-230 VAC ±10% 50/60Hz
Max. current: . . . . . 12 A
Operating pressure range: . . . . . 1÷3,5 bar / 14.5÷50,65 psi
Max. allowable pressure: . . . . . 10 bar / 145 psi
Max. liquid temperature: . . . . . 55°C/130° F
Connections: . . . . . 1" GAS male
Protection level: . . . . . IP 65
Type (Re. EN 60730-1): 1.B
Pressure gauge .. . . . . Ø 40mm 0:12 bar/0:170 psi 1/8" bspt



Brio2000-M
Brio2000-MT



		Auto-reset timer			
		30 min		60 min	
	Manometro *Pressure gauge*	2 tentativi *2 intervals*	4 tentativi *4 intervals*	2 tentativi *2 intervals*	4 tentativi *4 intervals*
Brio 2000					
Brio 2000-M	✓				
Brio 2000-T 30/2		✓			
Brio 2000-T 30/4			✓		
Brio 2000-T 60/2				✓	
Brio 2000-T 60/4					✓
Brio 2000-MT 30/2	✓	✓			
Brio 2000-MT 30/4	✓		✓		
Brio 2000-MT 60/2	✓			✓	
Brio 2000-MT 60/4	✓				✓