ECOLAB BW3 Advanced/Professional Booster Installation Guide

Contents

ECOLAB BW3 Advanced/Professional Booster

General information

For safety reasons it is important to read all of the enclosed information (Installation guide, Service manual, Spare parts, Operating instructions) before mounting this equipment.. In addition, the legislation in force at the time of purchase must always be considered in connection with the installa-tion and mounting of this equipment, no matter the contents of this manual. If there are matters of dispute please contact your dealer. This equipment is produced and tested by specially qualified personnel, following approved instructions to ensure our high level of product qual-ity. After the product is finished and tested it is manually inspected with the ultimate test carried out just before the product is released for shipping. To obtain our high level of quality and long life we use stainless steel parts. These parts, in defiance of our manual inspections may still have some sharp edges, which can present a cut hazard. Therefore it is advised always to use protective gloves and show caution when installing the equipment.

Preparation Wall / Floor

If the wall is made of bricks or concrete, the enclosed screws and rawl plugs are usable, otherwise you have to make sure that the carrying
capacity of the wall is sufficient.

Note: The pipeline must be rinsed through before the system is connected. See service manual.

Note: Remove cover before the system is mounted on the wall.

Note: The weight of the unit are listed in the Service manual under the section “Specifications”

Placing/application

- Do not use the machine outdoors.
- The main station must be placed in frost-free rooms only.
- Free space around the main station: min 1500 mm.
- Max. ambient temp. 40°C.

- Nonvibrating surface.

Water supply

	BW3	BW4	BW7
Water volume	100 l/min.	135 l/min	265 l/min
Pressure	0,2 – 0,8 MPa (2 – 8 bar)	0,2 – 0,8 MPa (2 – 8 bar)	0,2 – 0,8 MPa (2 – 8 bar)
Max. temperature	70oC	70oC	70oC

	BF3	BF4	BF8
Water volume	100 l/min.	135 l/min	265 l/min
Pressure	0,2 – 0,8 MPa (2 – 8 bar)	0,2 – 0,8 MPa (2 – 8 bar)	0,2 – 0,8 MPa (2 – 8 bar)
Max. temperature	70oC	70oC	70oC

The supply line must be sized so that it can supply the minimum indicated pres-sure and water volume when connected to this equipment. When dimensioning the water supply, it is recommended to increase the available volume with 15-20 % compared to the minimum requirements listed in the table.

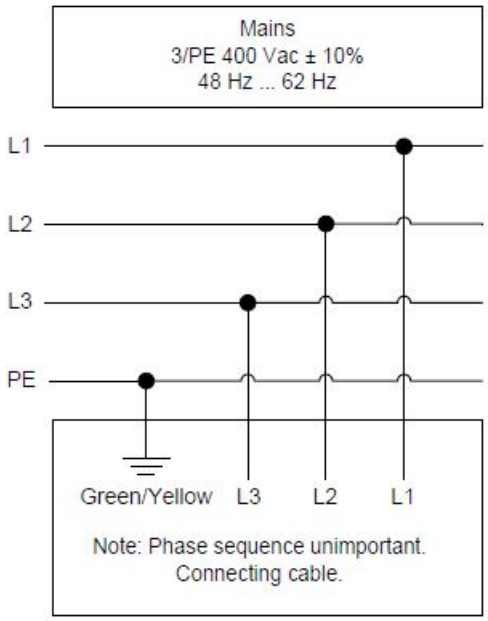
Note: It is recommended to mount a mixing system on the water connection immediately before the outlet which is used. Recomented water hardness 14-18 dH°. The equipment will operate with water hardness exciding this level however, de scaling of pump system, injectors and like must be
expected depending on use pattern and water quality. Furthermore, wear of the mechanical parts will increase as well. If not supplied, filter should be mounted.

Power supply

Connection instruction is mounted on the cables.
The phase order is subordinated.

Earth Leakage Circuit Breaker (ELCB)
When using an earth leakage circuit breaker (ELCB) also known as a residual current device (RCD) or a residual current circuit breaker (RCCB) in a system that incorporates a variable speed drive connected to 3 phase 400 V. The trip level of the ELCB has to be 300 mA. (30 mA used in house hold will malfunction due to earth leakage)

Service Switch
The unit must always be connected to the main supply through a separate service switch.
NB! Installation must always be in accordence with local legistration.



	BW3	BW4	BW7
Voltage:	3/PE 400 Vac ±10%	3/PE 400 Vac ±10%	3/PE 400 Vac ±10%
Frequenz:	50/60 Hz 48 -0%…62 +0%	50/60 Hz 48 -0%…62 +0%	50/60 Hz 48 -0%…62 +0%
Motor load:	4 kW	5.5 kW	10 kW
Nominal current:	10.6 A	14.2 A	27 A
Fuse:	16 A	20 A	35 A
L1, L2, L3, PE	2.5 mm2	2.5 mm2	6 mm2

	BF3	BF4	BF8
Voltage:	3/PE 400 Vac ±10%	3/PE 400 Vac ±10%	3/PE 400 Vac ±10%
Frequenz:	50/60 Hz 48 -0%…62 +0%	50/60 Hz 48 -0%…62 +0%	50/60 Hz 48 -0%…62 +0%
Motor load:	4 kW	5.5 kW	11 kW
Nominal current:	10.6 A	14.2 A	27 A
Fuse:	16 A	20 A	35 A
L1, L2, L3, PE	2.5 mm2	2.5 mm2	6 mm2

Piping

The pipe system should be made of stainless steel pipes. The pipe joints should be made in a way that makes separation possible in case of e.g. repairs, movement or similar.
All thread according to ISO 228
The dimensions stated below are only intended as a guide.
Calculations on a new pipe installation should always be based on pressure loss tables for pipes and fittings.

Pipe connections	BW3	BW4	BW7
Recommended pipe dimensions	5/4″ RG	5/4″ RG	2″ RG*
Pipe dimensions unit	5/4″ RG	5/4″ RG	5/4″ RG

Pipe connections	BF3	BF4	BF8
Recommended pipe dimensions	5/4″ RG	5/4″ RG	2″ RG*
Pipe dimensions unit	5/4″ RG	5/4″ RG	5/4″ RG

To ensure an always sufficient water flow and a minimum pressure loss, we recommend using a 2″ pipe connection.
Always take into consideration, when planning and carrying out a new installation, that the pipe connection of the unit is 5/4″.
Note: A 5/4” – 2″ closing valve should be mounted on the water supply im-mediately before the Booster and dirt filter if any.

Assembly

Dimensions see fig.1 – fig.9
Professional
Dimensions see fig. 1
It is recommended to mount the main station at an appropriate height (ap-prox. 1 m above the floor) on a brick or concrete wall, according to mount-ing instructions in fig. 2.
Mount the wall bracket.
For brick or concrete wall please use the screws and rawlplugs enclosed. Now hang the main station on the wall bracket.
Secure the main station to the wall bracket using the enclosed screws.

Advanced:
It is recommended to mount the main station at an appropriate height (ap-prox. 1 m above the floor from the bottom of the wall bracket) on a brick or concrete wall, according to mounting instructions in fig. 4.

Mount the wall bracket.
Mount the main station with suitable securing. For brick or concrete wall please use the screws and rawlplugs enclosed. To make mounting easier we recommend marking the wall according to fig. 4. The main station must be lifted until the auxiliary point on the right side is in line with the marking on the wall. Now hang the main station on the wall bracket. Fasten or tighten the main station to the wall bracket using the enclosed screws.

Documents / Resources

ECOLAB BW3 Advanced/Professional Booster [pdf] Installation Guide
BW3, Advanced Professional Booster, BW3 Advanced Professional Booster