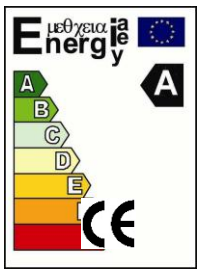
OPERATING MANUAL FOR ENERGY SAVING PUMP TO USE DOMESTIC HOT WATER CIRCULATION

E-IBO 15-14



EEI≤20

Precautions on use of PSI series pumps

1. Before installation, read the following manual carefully
2. Failure to observe the fragments marked with warning signs may cause bodily injury, pump damage and other property losses, for which the producer takes no lability, including but not limited to liability for damages.
3. The fitter, maintenance technician and user have to observe the local safety regulations.
4. The user must confirm that the installation and maintenance of the product are performed by personnel having adequate knowledge and professional experience connected with the structure and operation of heating systems.
5. Pumps cannot be installed in moist environment or in places which can be exposed to flooding with splattering water.
6. To make maintenance easier, place a ball valve on both sides of the pump.
7. During installation and maintenance, cut off the electric power supply from the pump.
8. The central heating circuit cannot be frequently refilled with non-softened water to avoid accumulation of scale in the pipeline. High accumulation of scale can block the rotor of the device.
9. The pump cannot be run without a heating medium.
10. If the pump is dismounted from the pipeline, either discharge the heating medium from the system or close the ball valves cutting the pump off before dismounting to avoid possible burning with the heating medium. Please remember that the heating medium can have high temperature and pressure.
11. In summer or when the ambient temperature is high, pay attention to proper ventilation in the room where the pump has been installed. It will help prevent condensation of humidity, which can cause an electric failure.
12. In winter, if the central heating system where the pump has been installed does not work and the ambient temperature is below 0 ° C, discharge water from the heating system. Please bear in mind that freezing water can burst the pump body.
13. If the pump does not operate for a long time, close the ball valves cutting off the pump and cut off electric power supply.
14. If the electric wire powering the pump is damaged, refer to an authorised servicing team to replace it along with its switch.
15. If the pump motor heats up excessively (more than usually), immediately disconnect the pump from its power source, close the cut off valves and contact a servicing team.

16. If a pump failure cannot be removed according to the manual, immediately disconnect the pump from its power supply, close the cut off valves and immediately contact the local manufacturer or the servicing centre.
17. The product must be placed in a place far away from children and measures to isolate the product must be taken to avoid children touching it.
18. The product must be connected to the electric mains equipped with efficient electric earthing. The yellow-green core of the connection cable is earthing.
19. The product must be connected to mains equipped with a residual current circuit breaker with tripping current ΔI_n not exceeding 30 mA.
20. The product must be placed in a dry, well-ventilated and cool place and stored at room temperature.
21. This equipment is not intended for use by persons (including children) with reduced motor, sensory or mental capacities, or persons without experience or not familiarised with the equipment, unless it is performed under supervision or according to the instruction regarding operation provided by persons responsible for their safety. Attention should be paid so that children do not play with the equipment.

WARNING!!!
Before proceeding to install the device, carefully read the instructions for installation and operation of the device. The installation and use of the device must conform to the local regulations and this manual.

WARNING!!!
People (including children) with limited physical, sensory or mental capacity or people without experience or knowledge in equipment must use the pump under supervision and guidance of the people who can take responsibility for their safety.

1. SYMBOLS USED IN THE MANUAL

WARNING: Failure to observe instructions marked in this way will most probably cause bodily injury!

UWAGA Failure to observe instructions marked in this way can cause equipment damage! Nota

Remarks or instructions facilitating operation and providing safety of use.

2. INSPECTION

2.1. The series of E-IBO pumps are designed for continuous operation in water circulation.
The E-IBO series circulation pump serves best in the following systems:
• for the circulation of domestic hot water
• in small heating systems

2.2. in ventilation and air conditioning
Benefits of installation of E-IBO pumps.

- Easy of installation and launch.
- High comfort of use
- Low noise level of the pump and the entire system
- Low power consumption
- Compared to the traditional circulation pump, power consumption of the PSI series pump is very low and can reach even 5W, depending on the system.

3. CONDITIONS OF USE

3.1. Permissible ambient temperature from 0 ° C to + 40 ° C.

3.2. Maximum permissible relative humidity (RH) 95%

3.3. Permissible heating medium temperature +2℃～95℃. To prevent condensation of steam on the control panel and the stator, the temperature of the heating medium circulating running through the pump must always be higher than the ambient temperature.

3.4. The permissible maximum pressure in the system is 1.0 MPa (10 bar)

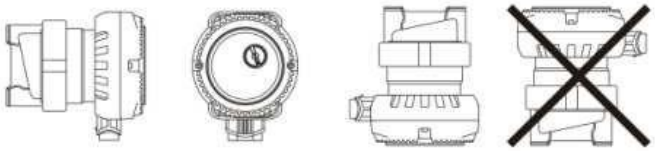
3.5. Protection rating IP 44

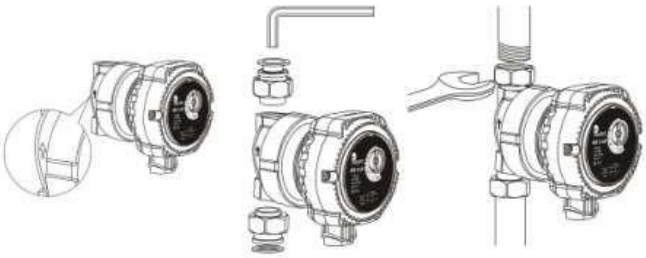
3.6. Pump input signal

To avoid damaging pump bearings by cavitation, the following minimum pressure must be maintained not less then 2m H_2O column.

4. INSTALLATION

4.1. In installation, please pay attention to the flow direction of the heating medium. An arrow on the pump body shows the flow direction forced by the pump. That direction must be compliant with the circulation of the medium in the system.





4.2. The pump should be installed in such a way that the pump shaft is horizontal.

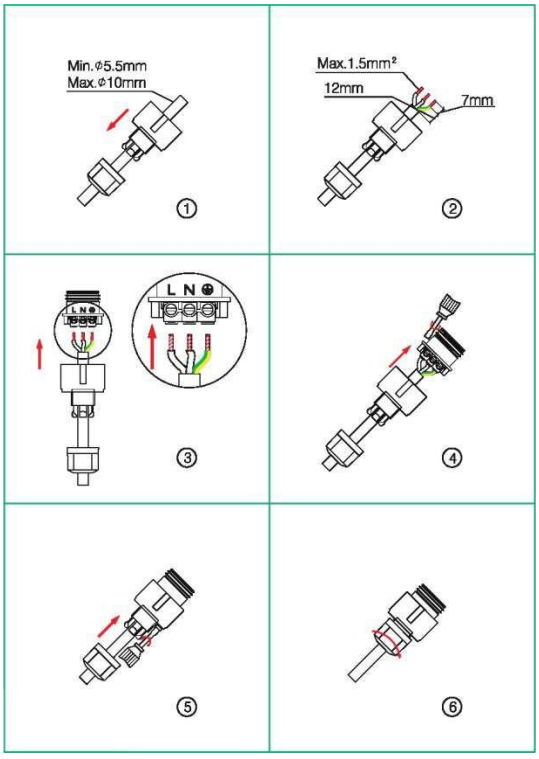
5. ELECTRIC CONNECTION:

The electric connection and protection must follow the local regulations.

The electric pump must be connected to an earthing conductor. ⏚

power supply breaker. The minimum slit between the pins of the breaker must be 3 mm.

- E-IBO series circulation pump does not require any external motor guards.
- Check if the power supply voltage and frequency are compliant with the parameters specified on the rating plate.
- Use the special plug supplied with the pump to connect the power supply cable.
- If the control signal on the control panel illuminates, the power supply is switched on.



6. CONTROL PANEL

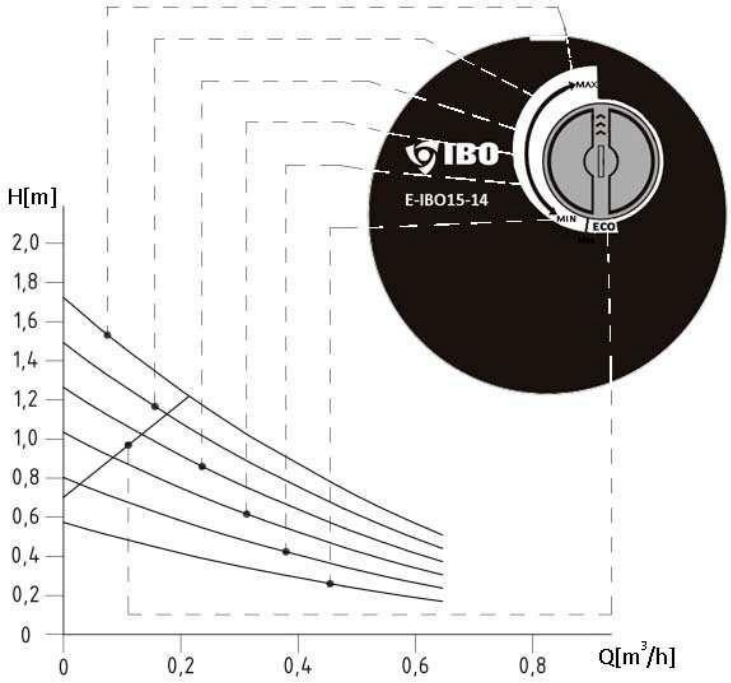
6.1. Control panel elements

Function description:	
1.	A knob that sets the intensity of the flow (the color of the diode green)
2.	Gear setting indicator
3.	Diode indicating operating mode
4.	Economy mode automatically adjusts the speed in Depending on the type of system (orange color)

6.2. Operating mode

Before starting the pump, make sure that the system is filled with water and the pressure at the pump inlet has reached the minimum inlet pressure as required (see chapter 3).

7. OPERATING MODE SELECTION DEPENDING ON THE PUMP SETTINGS AND ITS OPERATING CHARACTERISTICS

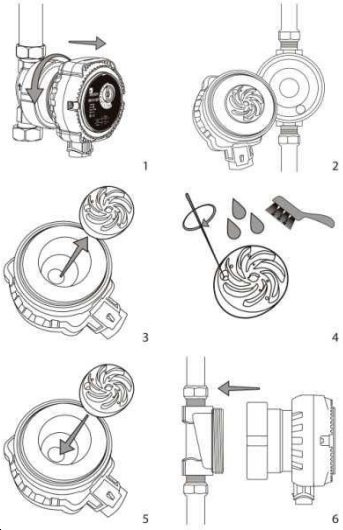


8. TECHNICAL DATA AND INSTALLATION DIMENSIONS

Technical data

Zasilanie elektryczne	1×230V +6%/-10%, 50Hz, PE
Zabezpieczenie silnika	There is no need for additional motor protection
Stopień ochrony	IP 44
Klasa izolacji	H
Maksymalna wilgotność względna otoczenia	≤ 95%
Maksymalne ciśnienie w układzie CO	1 MPa
Minimalne ciśnienie napływu na ssaniu	2 m H_2O
Ciśnienie akustyczne pracującej pompy	43 dB (A)
Dopuszczalna temperatura otoczenia	0～+40℃
Maksymalna temp. czynnika grzewczego	TF95
Zakres temperatur pompowanej cieczy	2～+95℃
Króćce	½”
Rozstaw króćców	85 mm

9. TROUBLESHOOTING



ing:

Before any maintenance or repair activities, make sure that the power supply is cut off and cannot be turned on by accident.

9.1. Periodic cleaning of the rotor

Due to the possibility of mineral salts accumulating in the pipes contained in the water (stone), and the possibility of their temporary detachment, it is possible to block the impeller of the pump. In this situation necessary is cleaning the body in which the rotor works. Next to the figure is presented a way of dealing with this situation.

Issue:	Possible cause:	Solution:
The pump fails to launch	Tripped installation fuse	Check the cause, replace the fuse
	Overcurrent circuit breaker switched off	Start the breaker
	Pump damaged	Replace the pump
	Voltage too low	Check if the main voltage is compliant with the supplier's specification
	Pump rotor blocked	Unlock the rotor
Loud system operation	Air in the installation	Vent the installation
	Flow too high	Decrease the inflow pressure at the pump inlet
Loud pump operation	Air in the pump	Vent it
	Inflow pressure too low - cavitation	Increase the inflow pressure at the inlet to the pump

10. UTILISATION

The used product is subject to disposal as wastes only in selective waste collection systems organised by the Network of Communal Electric and Electronic Waste Collection Centres. The customer is entitled to return the used equipment to the network of the electric equipment distributor, at least for free and directly, if the returned device is of proper type and fulfils the same function as a newly purchased device. It is prohibited to dispose of electric equipment together with other household wastes.

EC DECLARATION OF CONFORMITY (Moduł A):

1. Circulating pumps CPI 15-15
2. PHU Dambat, Gawartowa Wola 38, 05-085 KAMPINOS, POLAND, e-mail: biuro@dambat.pl
3. This declaration of conformity is issued under the sole responsibility of the manufacturer.
4. Pumps form point 1.
5. Under the Act of 30 August 2002 on the conformity system (Journal of Laws of 2004, No. 204 item 2087) we declare with full responsibility that pumps included in the point 1. to which this declaration refers to are consistent with the following guidelines of the Council on legal regulations unification in member states of EC:

- Directive LVD Nr. 2014/35/UE
- Directive EMC Nr. 2014/30/UE
- Directive MD Nr. 2006/42/EC
- Directive ErP Nr. 2009/125/EC. EC commission regulation No 622/2012 art.1 pt. 2, letter a. circulating pumps

6. Applied standards:
EN ISO 12100:2010, EN 809:1998+A1:2009+AC:2010, EN 60204-l:2006+Al:2009+AC:2010, EN 60335-l:2012+AC:2014, EN 62233：2008+AC:2008, EN 60335-2-41:2003+Al：2004+A2:2010, EN 60335-2-51:2003+Al：2003+A1:2008+A2:2012, EN 60034-l：2010+AC:2010, EN 55014-1:2006+A1：2009+A2:2011, EN 55014-2：1997+A1：2001+A2：2008, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 16297-1:2012, EN 16297-2:2012.

Gawartowa Wola 23.11.2016
Adam Jastrzębski