

Operating Manual



IPML-xx-xx-xx

Hot and cold water pumps

CAUTION! Before use, read the operating manual.

For safety reasons, only persons familiar with the operating manual may operate the pump.

Table of contents

	Warning information.....	3
	Precautions.....	4
	Use.....	6
	Installation.....	7
	Pipeline connection.....	8
	Technical specifications.....	10
	Performance specifications.....	10
	Material table.....	11
	Electrical installation.....	12
	Connection.....	12
	Commissioning, operation.....	12
	Storage and transport:.....	13
	Operation.....	13
	Maintenance.....	14
	Possible problems and remedies.....	15
	Disposal of end-of-life products.....	16
	Let's protect our environment together!.....	16
	Disposal considerations.....	16
	Disposal of end-of-life products.....	16
	EU/EC declaration of conformity module A.....	17
	Deutsch Bedienungsanleitung.....	37-53
	KARTA GWARANCYJNA.....	54



Every use of the device other than the intended use is a foreseeable incorrect use.



This manual only includes instructions concerning installation, operating parameters, routine maintenance, troubleshooting, safety, etc. For your own safety, please carefully read the manual before installing and operating the device. Keep the manual for future reference.

Warning information

Warning!



The “danger” symbol is used for warnings where failure to comply may cause a risk to health or safety due to the electrical system. Before carrying out any work marked with this symbol, the pump power supply cable must be disconnected from the electrical mains.

Warning!



The “danger” symbol is used for warnings where failure to comply may cause a risk to health or safety.



Failure to comply with the rules included in this manual may cause a risk of explosion or combustion.

Caution!



This symbol is used for warnings where failure to comply may cause a risk of damage to the device or a danger to health or safety.



Before installing and using the product, carefully read this installation and operating manual to avoid unnecessary damage and/or loss.

Caution!



The operating manual is an essential part of the sale and purchase agreement. Failure by the user to comply with the operating manual will be considered a violation of the agreement and will void all and any claims resulting from potential device failure caused by using the device contrary to the recommendations for use.

The manufacturer shall not be liable for any malfunctioning of the device if it has been connected incorrectly, damaged, modified and/or used for purposes other than the recommended use or contrary to the instructions contained in this manual. The manufacturer shall also not be liable for any possible errors in the user manual made during printing or copying. The manufacturer reserves the right to make any modifications to the product that it deems necessary and useful and that do not affect its essential characteristics.

DAMBAT shall not be liable for damage to the equipment, to property or for personal injury resulting from failure to comply with the instructions contained in this manual, including the incorrect sizing of the equipment, installation not compliant with the manual, applicable standards or national regulations, improper maintenance of the equipment or the entire system.

This equipment is not intended for use by persons (including children), whose physical, sensory or mental capabilities or lack of experience or knowledge prevents them from using the equipment safely without supervision or instruction.



Precautions

This manual is intended for the users to enable them to correctly operate IPML pumps. The information included in this manual may be changed without prior notice.

To ensure the correct and safe use of IPML pumps and avoid potential damage to the pump or situations hazardous to users, carefully read the following instructions before installing and operating the device.

Warning!



- Before starting any installation work, carefully read the equipment installation and operating manual. The equipment must be installed and operated according to local regulations and must be consistent with this manual.



- Failure to comply with the instructions marked with warning signs may cause bodily injury, pump damage and other material losses for which the manufacturer shall not be liable in any way, including liability for damages.
- Installers, maintenance personnel and users must observe local safety regulations.
- The user must confirm that the product is installed and maintained by personnel with suitable knowledge and professional experience regarding the construction and operation of heating systems.
- The pump must not be installed in a damp environment or in places where it could be exposed to water splashes.
- A ball valve should be placed on each side of the pump to facilitate maintenance.



- During installation and maintenance, shut off the power supply to the pump.



- The central heating system should not be topped up with unsoftened water to avoid the build-up of calcium (lime) in the pipeline. Severe calcium build-up may block the device's impeller.



- It is not permitted to start the pump "dry", without the heating medium.



- If the pump is dismantled from the pipeline, drain the heating medium from the system or close the ball valves isolating the pump before dismantling the pump to avoid being burned by the heating medium. If the heating medium is not drained from the system, it may flow out when the pump is dismantled. Make sure to avoid bodily injury due to scalding or the flooding of other devices.



- Remember that the heating medium may have a high temperature and pressure.

Precautions



- In the summer or when the ambient temperature is high, make sure the area where the pump is installed has suitable ventilation. This will help prevent the condensation of moisture, which could cause an electrical fault.

- In the winter, if the central heating system with the pump is not in service, and the ambient temperature is lower than 0°C, drain the water from the heating system. Remember that freezing water can cause the pump body to burst.

- Keep the product in a dry, cool and well-ventilated place, at room temperature.

- If the pump remains out of service for a long time, close the ball valves isolating the pump and shut off the electrical power supply.



- If the pump remains out of service for a long time, close the ball valves isolating the pump and shut off the electrical power supply.



The plug of the pump must be connected to a socket with effective earthing. The green-and-yellow core of the connection cable is the earthing core. The manufacturer and warrantor shall be released from any liability for damage to persons or property resulting from the absence of suitable earthing.



- The power supply system for the pump should be equipped with a differential current circuit breaker with ΔI_n rated activation current not exceeding 30 mA. The manufacturer and guarantor shall be released from any liability for damage to persons or property resulting from the pump being connected to mains without a proper circuit breaker.



- If the electrical cable supplying the pump is damaged, contact the authorised after-sales service centre to have it replaced together with the switch.



- If the pump is too hot (hotter than normal), immediately disconnect the pump from the power supply, close the shutoff valves and contact the after-sales service centre.



- If the pump fault cannot be rectified as described in the manual, immediately disconnect the pump from the power supply, close the valves isolating the pump and immediately contact the local vendor or after-sales service centre.



- The product should be placed out of reach of children, and suitable measures should be taken to isolate the product and make sure children cannot touch it.



Use

The pump is intended for a broad range of applications connected with water supply and fluid transfer. It can be used for applications such as supplying and boosting water pressure in tall buildings, pipeline pressure boosting systems, HVAC and heating systems, cold and hot water circulation, supplying water to boilers, industrial circulation systems, etc. It can be used only to pump clean water, without any fibres or solids, and hot water should be soft (free from soluble calcium or magnesium compounds or containing a smaller amount of such compounds).



The pumps referred to in this manual are intended to generate flow in water systems with a constant or variable flow rate in which the medium temperature is within the range of 0°C to 100°C and for which the pressure in the system does not exceed 1.0 MPa. The maximum ambient temperature at the place of installation of the pump cannot exceed 40°C, and the relative humidity at the place of installation must be lower than 90%.



The water pumped by the pump must be free from mechanical impurities. The pump is intended for pumping water without grinding solids. Pumping water that contains mechanical impurities will lead to rapid wear of the pump and, consequently, to failure. In such a situation, all repairs will be performed against payment.



The pump is not suitable for pumping corrosive, flammable, destructive or explosive substances (e.g., petrol, nitro, petroleum), foodstuffs and salty water. Malfunctions caused by using the pump to pump such liquids will not be subject to repair under the warranty.



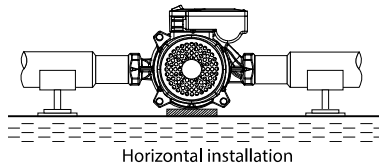
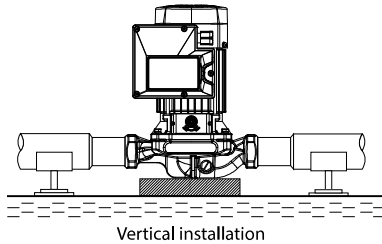
The pump is not suitable for pumping corrosive, flammable, destructive or explosive substances (e.g., petrol, nitro, petroleum), foodstuffs and salty water. Malfunctions caused by using the pump to pump such liquids will not be subject to repair under the warranty.



The pump cannot be used to pump water containing oils and hydrocarbons. Operating the pump in such water will lead to damage to the rubber components, e.g., cable or seals, resulting in pump leakage and motor failure. In such a situation, all pump repairs will be performed against payment.

Installation

-  Before starting any installation work, always shut off the power supply to the pump. Make sure the power supply cannot be switched on by accident.
-  The pump can be connected after completing all installation work on the pipeline with the pump. It should be noted that welding work or soldering work inside the pipeline may produce mechanical impurities. Before installing the pump, flush the pipeline on which the pump is to be installed.
-  The pump should be installed in such a way that its shaft is arranged as horizontally as possible. It is also permitted to install the pump with the motor shaft in the vertical position with the motor at the top.



-  It is not permitted to install the pump with the shaft arranged vertically if the motor is at the bottom. This will cause premature failure of the pump. In such a situation, all repairs will be performed against payment.

 **The arrow cast on the body shows the direction of water flow.** 

The user can move the junction box in any way relative to the outlet body of the pump by turning the motor on the pump shaft. To do so, unscrew the four bolts used to tighten the pump body to the motor.

This can be done if the pump has not yet been installed on the pipeline or after shutting off power and the water supply if the pump is already installed. The box should be installed in a place where it will be safe from outside water. Damage to the device caused by the junction box being flooded with outside water is not subject to in-warranty repair.

Although the pump can pump water vertically downwards, the manufacturer recommends installing the pump in such a way that it pumps water vertically upwards or horizontally.



Installation



CAUTION! Hot surface! Slight or moderate bodily injury.



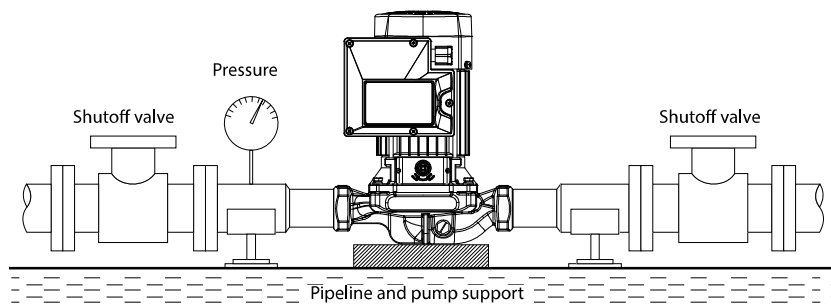
If the pump is to be installed in a place in which it is accessible and is going to be used to transfer hot liquids, make sure no one can have accidental contact with heat exchange surfaces. Install the pump in a well-ventilated place.

Pipeline connection

Shut-off valves should be installed on both sides of the pump to avoid the need to drain the system to clean or maintain the pump.

Install a pressure gauge between the pump outlet and the shutoff valve; the operating range of the pump should be close to the rated height H (see the rating plate), or the noise generated by the pump will increase.

See the drawing below



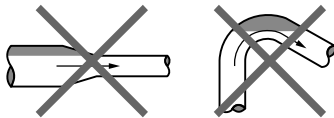
When installing the pipeline, make sure the pump body is not exposed to external forces from the pipeline system.



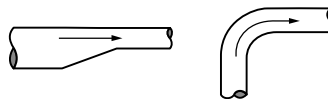
Choose the correct size for the inlet and outlet pipes and make sure to consider the inlet pressure.

When installing the pipeline, avoid air traps, particularly on the inlet side. See the drawing below.

WRONG



CORRECT



Technical specifications

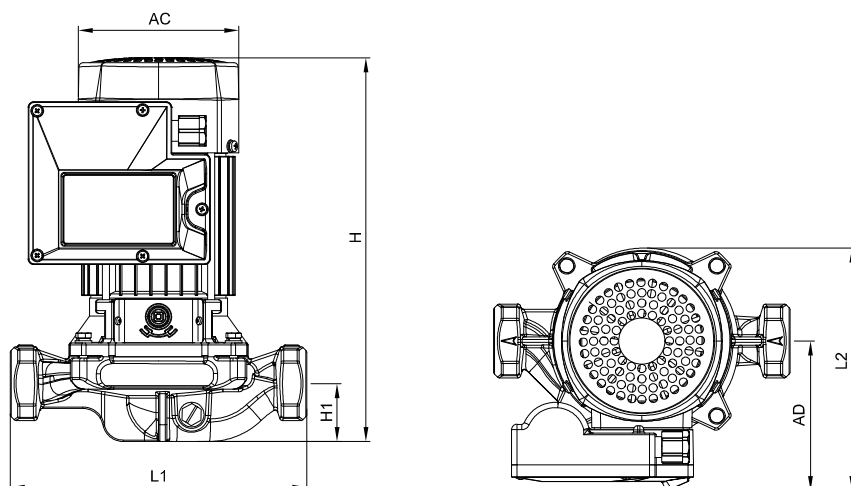
Model	Inlet/outlet connection	Optimum flow rate	Optimum head	Q max.	H max.	Voltage	Power consumption	
	mm	m ³ /h	h	m ³ /h	m	V	A	kW
IPML25-14-0.37	25/25 [1" / 1"]	2	14	4.5	16	230	1,7	0,37
IPML25-20-0.55	25/25 [1" / 1"]	3	20	6.5	23	230	3,6	0,55
IPML25-26-0.75	25/25 [1" / 1"]	3	26	7.5	29	230	5,1	0,75
IPML32-20-0.55	32/32 [1¼" / 1¼"]	3	20	7.5	23	230	3,6	0,55
IPML32-18-0.75	32/32 [1¼" / 1¼"]	6	18	8.5	29	230	5,1	0,75
IPML40-15-0.55	40/40 [1½" / 1½"]	4	15	14	16.5	230	3,6	0,55
IPML40-18-0.75	40/40 [1½" / 1½"]	6	18	16	20	230	5,1	0,75
IPML40-17-1.1	1½"/PN6	10	17	17.5	23	230	7	1,1
IPML40-17-1.1(400 V)	1½"/PN6	10	17	17.5	23	400	2	1,1
IPML50-15-0.75	2"/PN6	10	15	18.5	20	230	5,1	0,75
IPML50-17-1.1	2"/PN6	11	17	20	23	230	7	1,1
IPML50-17-1.1(400 V)	2"/PN6	11	17	20	23	400	2,7	1,1

Model	L1	L2	H1	H	AC	DC	connection ports	weight	packaging dimensions
IPML25-14-0.37	215	175	42	280	116	107	1"	7,9	320 × 255 × 220
IPML25-20-0.55	255	199	44	335	136	121	1"	13	405 × 310 × 265
IPML32-20-0.55	255	199	44	335	136	121	1½"	13	405 × 310 × 265
IPML40-15-0.55	315	199	70	405	136	121	1½"	20,4	460 × 305 × 255
IPML 25-26-0.75	275	199	55	345	136	121	1"	14,4	405 × 310 × 264
IPML 32-18-0.75	275	199	55	345	136	121	1½"	14,4	405 × 310 × 265
IPML 40-18-0.75	315	199	70	405	136	121	1½"	21,3	460 × 305 × 255
IPML 50-15-0.75	315	199	70	405	136	121	2"/PN6	20,5	460 × 305 × 255
IPML40-17-1.1 (400V)	315	199	70	405	136	121	1½"/PN6	23.6	460 × 305 × 255
IPML40-17-1.1	315	199	70	405	136	121	1.5"/PN6	23.6	460 × 305 × 255
IPML50-17-1.1	315	199	70	405	136	121	2"/PN6	22.8	460 × 305 × 255
IPML50-17-1.1(400V)	315	199	70	405	136	121	2"/PN6	22.8	460 × 305 × 255

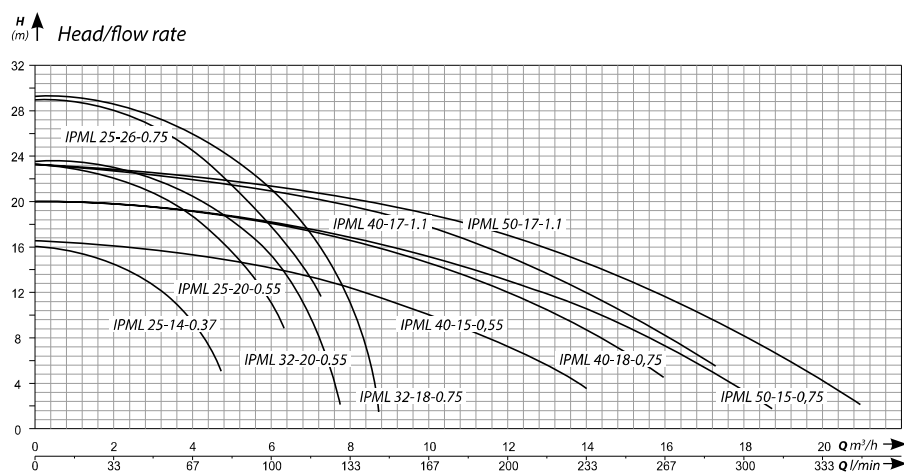


Technical specifications

Note: The L1 installation dimension will be 260 mm if the 2-inch threaded outlet is replaced with a flange.



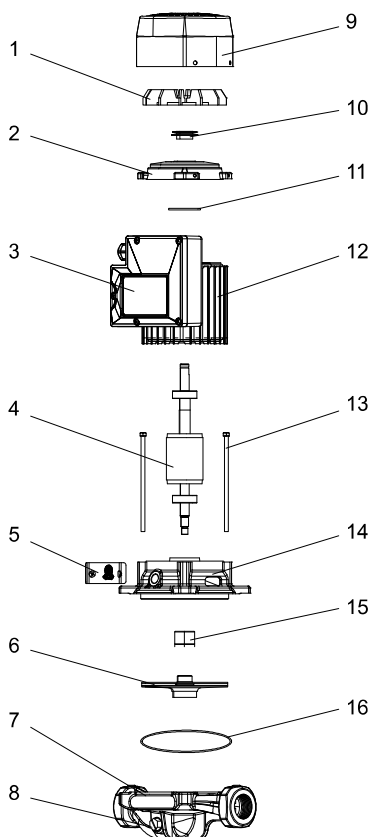
Performance specifications



Technical specifications

Material table

No.	Name	Material
1	Fan	Plastic
2	End cover	HT200
3	Junction box	ABS
4	Rotor	SSI304+45#
5	Shaft cover	SSI304
6	Impeller	SSI304
7	Pump body	HT200
8	Drain plug	Copper
9	Fan cover	Q235
10	Gasket	NBR
11	Corrugated washer	SSI201
12	Motor	Cu winding / Al housing
13	Bolt	SSI201
14	Coupling	HT200
15	Mechanical seal	Si/C
16	"O"-ring	EPDM



Electrical installation

Connection



The rated specifications of the electrical system supplying the pump should be consistent with the motor nameplate. The single-phase pump has a cable with a plug intended for connection to an earthed socket. The three-phase pump has a 4-core cable section with a green-and-yellow earthing conductor and three phase conductors.



Connect the conductor in such a way that the direction of impeller rotation is consistent with the relevant arrow. If the impeller turns in the wrong direction, switch the positions of any two supply conductors in the junction box.



The pump must be connected to the electrical mains with an effective earthing. The manufacturer and warrantor shall be released from any liability for damage to persons or property resulting from the absence of suitable earthing.



CAUTION! The power supply system for the pump should be equipped with a differential current circuit breaker with an In-rated activation current not exceeding 30 mA. The manufacturer and warrantor shall be released from any liability for damage to persons or property resulting from connecting the pump to the mains without a proper circuit breaker.



Pumps should be protected against overloads using miniature circuit breakers set to the current specified on the rating plate of the device. Three-phase pumps must be protected against phase loss with a suitable switch. The pump can operate without



such switches/protection devices, but in the event of a failure caused by an overload, the repair will only be performed against payment.

Commissioning, operation

The pump can be started after the system is filled with water.



CAUTION! Make sure the system is free from leaks, i.e., make sure no water will drip on the pump from a leaky system. If the pump is flooded with outside water, it will be damaged. In such a situation, all repairs will be performed against payment. After it is started, the pump will bleed itself after a short period of operation. When the pump is bled, the noise level generated by its motor will decrease.



CAUTION! The pump cannot be used for bleeding the system! The system should be bled using a bleeding valve installed above the pump.



Reliable operation of the pump requires a minimal inflow pressure of the medium (water) at the pump inlet. The minimum inflow pressure depends on the temperature of the medium. The higher the temperature, the higher the pressure.

Heating medium temperature [°C]	Minimum inflow pressure at the inlet [bar] / [m]
< 75	0,4 bar / 4 m
90	0,7 bar / 4 m



If the ratio of ambient temperature to the medium temperature is correct, water vapour may condense in the junction box and motor stator. To prevent this, always make sure the medium temperature does not exceed the ambient temperature.



The minimum temperature of the medium is 0°C.
For an ambient temperature of up to 30°C, the maximum temperature of the heating medium is 100°C. For an ambient temperature of 40°C, the temperature of the medium cannot exceed 70°C. For an ambient temperature of 35°C, the maximum temperature of the medium is 90°C. Damage to the device caused by water vapour condensation will not be covered by the warranty.



The temperature of the pump surface cannot exceed 120°C.
Damage caused by the overheating of the device will not be covered by the warranty.

Storage and transport:



The pump should be kept in a dry area and protected from moisture. During transport, the pump should not be exposed to moisture and mechanical damage.



Maintenance



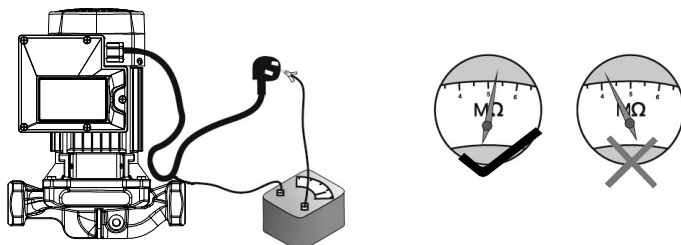
CAUTION! Before starting any maintenance work, always disconnect the pump from the mains power supply.



All work on the pump must be carried out after shutting off the power supply.

Regularly check the insulation resistance between the pump winding and the housing. When the temperature approximates the operating temperature, the insulation resistance must not be lower than 5 MΩ.

If it is lower, the pump should be replaced or sent to an authorised after-sales service centre of the manufacturer.



After 2000 hours of normal operation, the device should be sent to an after-sales service centre or subjected to maintenance by the user according to the steps outlined below:

- Check the wear parts, bearings, mechanical seal, impellers, O-rings, etc. Replace them early if they are damaged in any way.
- Perform a leak test: after dismantling and repairing or replacing various gaskets, the parts that transfer pressure as well as the entire pump should be subject to a pressure test using water (air) up to the maximum operating pressure. There should be no leaks or sweating for 3 minutes.



CAUTION! If the maximum operating pressure is higher than 0,45 MPa, perform a test using water.

CAUTION! If the pump will not be used for a period longer than one day, make sure to disconnect it from the power supply.

Otherwise, if any leaks appear in the system, the pump may switch on automatically, flooding the house or the pump. All costs connected with the repair of damage caused by such incidents will be borne by the user.

CAUTION! If the pump is not used for a longer period or is exposed to a low temperature $\leq 0^{\circ}\text{C}$, all the water inside should be drained.

Clean the main parts and place them in a dry area.

All repairs caused by the pump being damaged by frost will only be performed against payment.

Possible problems and remedies



All work on the pump must be carried out after shutting off the power supply.

Problem	Possible causes	Solution
The pump does not work	No power supply	Check if the electrical plug of the pump is correctly inserted into the electrical outlet.
		Check all fuses at home that could have switched off the mains power supply.
		Check if there is no power outage in your area – the power may have been switched off by the power company across a larger area.
	Faulty pump	Contact the service centre.
	Incorrect input current parameters	Check the parameters of the supply current. If they are incorrect, contact the relevant electric utility company
	Impeller jammed by impurities	After disconnecting the pump from the power and water supply, disconnect the pump from the system Remove the impurities
The pump is loud during operation; there is noise in the system	Air in the system	Bleed the system, bleed the pump
	Low pressure on the suction side	Increase pressure on the suction side by adding the medium to the system
	Pump flow rate too high	Reduce pressure on the suction side of the device
The pump is working, but the system produces too little heat	Operating parameters of the pump too low	Increase pressure on the suction side of the device



CAUTION! If the pump fault cannot be rectified as described in the manual, immediately disconnect the pump from the power supply and close the valves isolating the pump. Repairs can be performed only by IBO after-sales service departments or specialists of dealers approved by IBO.



Disposal of end-of-life products

Let's protect our environment together!

Every user can contribute to environmental protection. This is neither difficult nor expensive. To do so, simply transfer the cardboard packaging for recycling and place the plastic bags in the container for plastic waste. Dispose of end-of-life devices at a suitable disposal point.

Disposal considerations

The packaging of this product is recyclable. Contact the local authorities for information about correct disposal.

Disposal of end-of-life products



This symbol indicates that it is prohibited to dispose of end-of-life devices together with other household waste.

For more information, please contact commune or city authorities and municipal waste collection points.

The end-of-life product must be disposed of as waste in separate waste collection organised by the System of Municipal Waste Electrical and Electrical Equipment Collection Points.

The consumer may return end-of-life equipment to the network of the electrical equipment distributor, at least for free and directly, as long as the returned equipment is of the correct type and has the same function as the newly purchased equipment.

Year of marking the device with the CE mark _____
(specified by the seller based on the nameplate)



EU/EC declaration of conformity | Module A

1. Pump types:

IPML

2. DAMBAT Jastrzębski S.K.A., Adamów 50, 05-825 Grodzisk Mazowiecki, POLSKA,
e-mail: biuro@dambat.pl

3. This declaration of conformity is issued under the sole responsibility of the manufacturer.

4. Pump types listed in section 1.

5. We declare with full responsibility that the pumps referred to in this declaration have been made according to the following Directives and references to harmonised standards included therein:

- MD No 2006/42/EC
- LVD No. 2014/35/EU
- EMC Directive No 2014/30/EU
- Ecodesign Directive No 2009/125/EC
- Commission Regulation (EU) No 547/2012 for water pumps

6. Applied standards:

EN 809:1998 + A1:2009
EN 60335-1:2012+AC:2014,
EN 60335-2-41:2003+A1:2004+A2:2010
EN 55014-1:2006+A1: 2009+A2:2011,
EN 61000-3-2:2014


Adam Jastrzębski
General Partner

2025-01-21
Grodzisk Mazowiecki



