

# Operation & Installation Manual

## WARRANTY CARD



### EASY AIR BASIC 2 GT

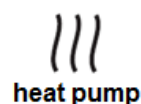
#### Air-To-Water Heat Pump



In operating mode the heat pump generates domestic hot water at a maximum temperature of 50°C

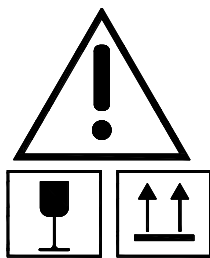
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OPERATION MANUAL AND WARRANTY CARD  
"Galmef Sp. z o.o." Sp.K.



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The pump installation and start-up can be carried out only by manufacturer's service team or a fitter duly authorized after attending a manufacturer's training. Otherwise the warranty covering the device will not be granted.

Please read and understand this operation manual. Failure to follow the instructions provided in this manual can result in voiding the warranty or in permanent damage to the device.

This equipment is not intended for use by persons (including children) with limited physical, sensual or mental abilities and persons inexperienced or not knowing the equipment. It is allowed only when it is carried out under supervision or by following the equipment operating instructions provided by persons responsible for their safety.

The device should be installed by following good construction practices and in accordance with locally valid regulations and standards. The device is intended for indoor installation.

## 1. Use and operation

The EASY AIR BASIC 2 GT heat pump is an air-to-water heat pump making it possible to provide domestic hot water maximum for a 6-person family. The maximum temperature of the domestic hot water generated by the heat pump is 50°C. However, for energy-saving reasons it is recommended not to set the temperature of domestic hot water above 45 °C, as it will result in raising the costs of using the heat pump and will cause premature wear of the heat pump unit components.



Water temperature exceeding 50°C can cause serious burns. Special attention should be paid to avoid burns in children, the disabled or elderly people.

## 2. Device description

The Easy Air Basic 2 GT heat pump contains one heat generator and an electric heater used to collect heat in the accumulator tank and heat it to a preset temperature. The pump incorporates a coil providing an opportunity to connect an external heat source, e.g. a central heating boiler. The heat pump receives heat from the air surrounding it and uses it to heat up the water in the accumulator tank. The heat pump can be also connected to air ducts, but their diameter cannot be lower than 160 mm and their overall length cannot exceed 10 m. During operation the heat pump absorbs moisture from the room air and therefore the condensate generation is a normal phenomenon; the condensate drain pipe is located under the device and it should be directed to the sewage system.

### 3. Proper operation

The heat pump is designed for absorbing energy from the air in the room, or from the area the ducts are connected to, and it transfers the energy to the domestic hot water accumulator tank.

### 4. Improper operation

It is prohibited to:



- use fat-containing air;
- use the device to heat other liquids than domestic hot water.

Install the device:

- outdoors;
- in rooms exposed to freezing;
- in rooms exposed to dust, gases or flammable vapors;

Operate the device:

- with its accumulator tank empty;
- with its coil unfilled;
- at a temperature below +7°C.

### 5. Operating principle

- Using as a heat pump

During normal use the pump heats 200 liters of water collected in a accumulator tank up to 45 °C within the following periods.

Air temperature	Cold water temperature	Heating time
+ 20°C	15°C	4.5 h
+ 10°C	15°C	5.5 h
+ 7°C	15°C	6.0 h

- Coil

Each heat pump is equipped with one coil used to connect additional heat sources.

## 6. Heat pump specifications

TYPE	EasyAir Basic 2GT
Catalog number	09-353100
Pump operation range	+7 +35°C
Domestic hot water temperature	50°C
Accumulator tank volume	200 L
Refrigerant	R 134 a / 700 g
Dimensions: height x diameter	1500 x 670
Weight	125 kg
Power supply voltage	230V
Connection fittings	1" Internal Thread
Condensate connection	12 mm
Rated power consumption	600 W
Working pressure	6 bar
Average thermal power of the heat pump	1.92 kW
Electric heater power	2 kW
Electrical protection	B16
Air flow rate	300 m³/h
Compressor	Embraco/Aspera

## 7. Maintenance:

- a) check the connection between the plug, socket and earthing wire on a regular basis;
- b) in colder regions (below 0°) while the system is to be shut off for a longer period, drain the water to protect the internal tank against freezing and avoid damage to the heater;
- c) to provide proper device operation it is recommended to clean the internal tank and heater on a regular basis;
- d) check the magnesium anode every year. If it is worn, replace it. For additional information contact the supplier or a service centre;
- e) if water parameters at outlet are sufficient, it is recommended to set a lower temperature to reduce heat emission, prevent lime scale build-up and to save energy;
- f) clean the air filter every month, while the evaporator should be cleaned once a year;
- g) before you shut off the device for a longer period disconnect the power supply, drain water from the tank and pipes and close all valves. Check all internal components on a regular basis.

## 8. Checking and moving the device

After the device delivery, check its packaging for any damage. If any damage is found, notify the carrier of this fact immediately.

When carrying the device, take into account the following tips:

1. Fragile, handle with special care.  
Hold the device upright to avoid damage to the compressor.
2. Before you carry the device check whether the route to the installation site is free from any obstacles.
3. The device should be carried in its original packaging.
4. When lifting the device always use protectors to avoid damage to tapes and ensure the device weight is properly balanced.

## 9. Schematic diagrams of the heat pump

General view



Heat pump components



Fig. 1 Heat pump view

### 9.1. General dimensions

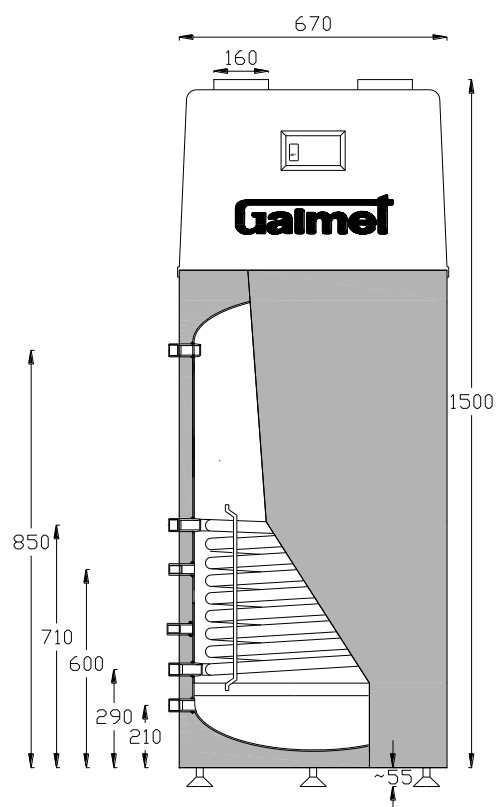
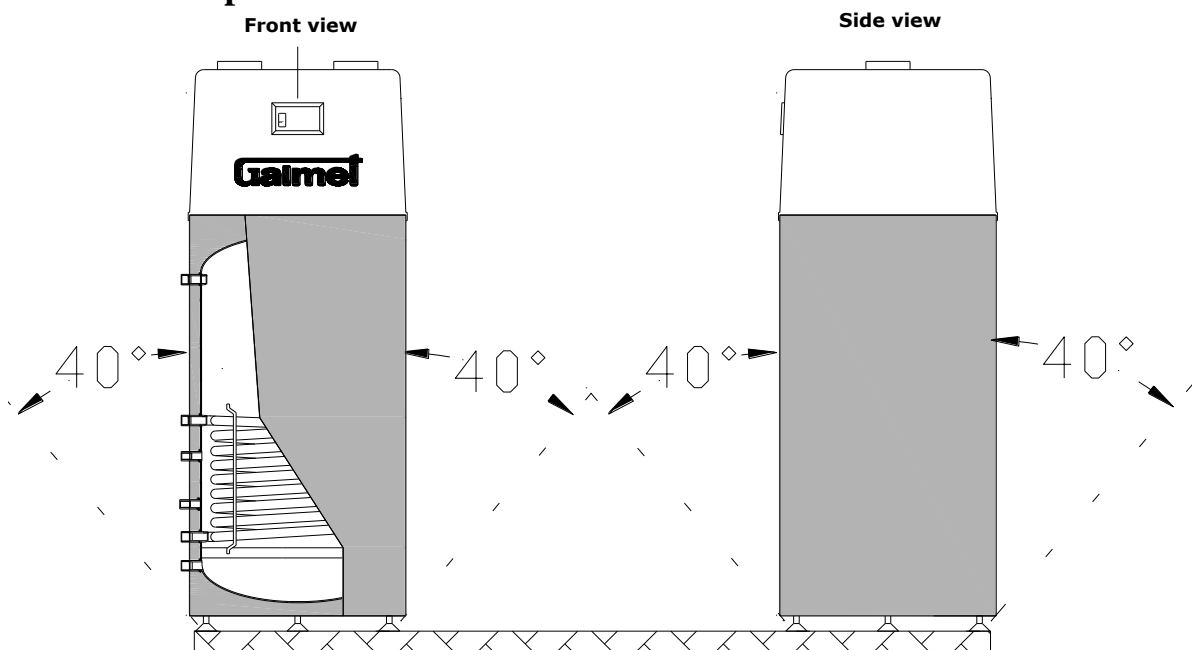


Fig. 2 Heat pump dimensions

## 9.2. Transport method



**It is not allowed to carry the device in a horizontal position. A deviation from vertical position of up to 40 degrees is allowed, as shown in this figure above.**

Fig. 3 Heat pump transport method

## 10. Connection diagram for heat pump air duct

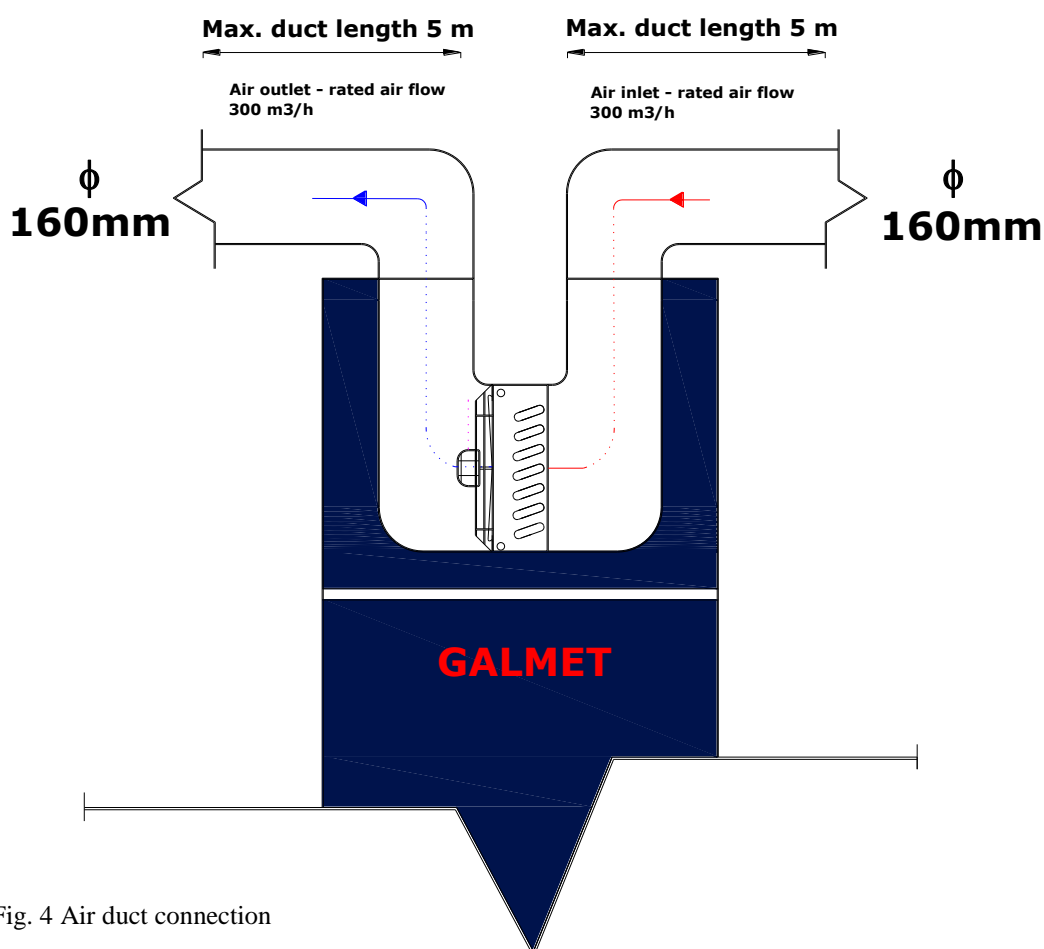


Fig. 4 Air duct connection

## 10.1. Installing the heat pump indoors

The heat pump must be installed in a way allowing a service technician to maintain the compressor unit and should provide access to at least to one wall of the device. A minimum distance from the wall should be 40 cm. A minimum floor area needed to install the heat pump is 2 x 2 m (4 square meters), while the room height should exceed 2.2 m. When installing the device without ducts carrying the air to the outside of the building provide a minimum room ventilation at a level of 350 m<sup>3</sup>/h.

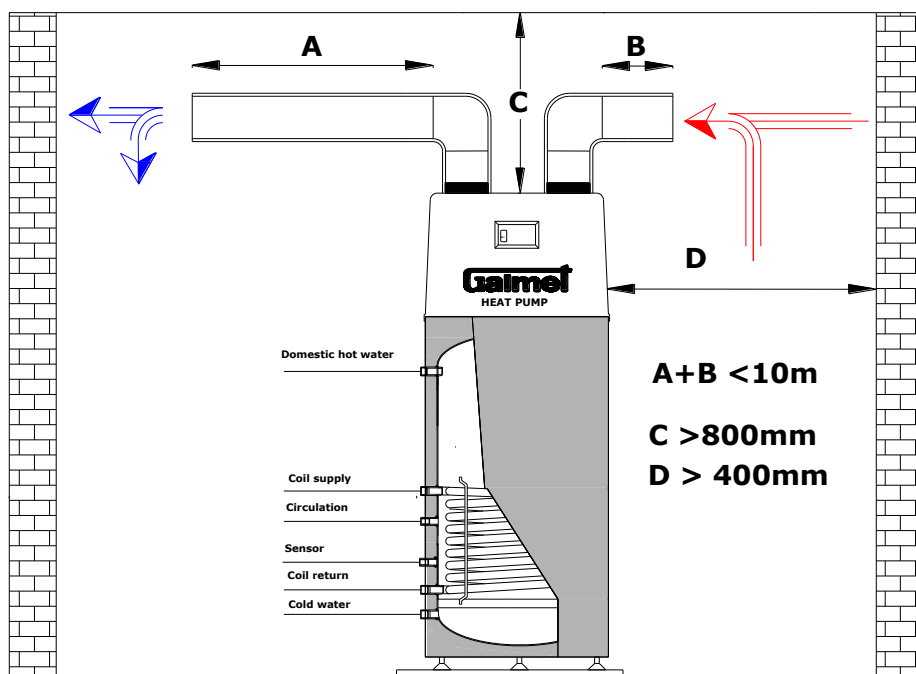


Fig. 5 Heat pump installation

## 10.2. Heat pump positioning inside the boiler room

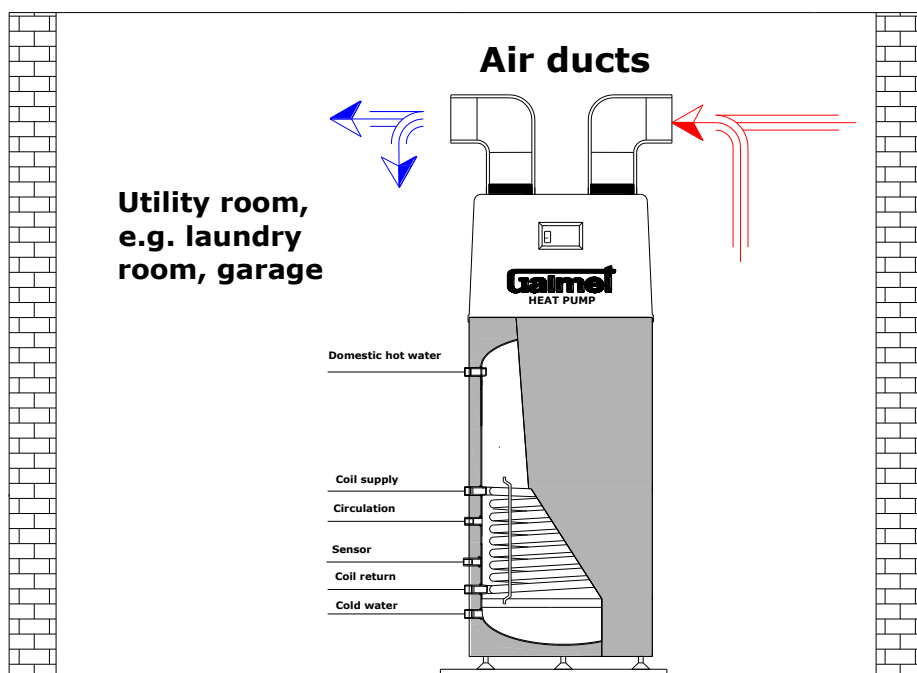


Fig. 6 Heat pump positioning inside the boiler room

The minimum length between the suction duct and cold air outlet should be 1.5 m !!



### 10.3. Heat pump air supply from the outside and air discharge into another room

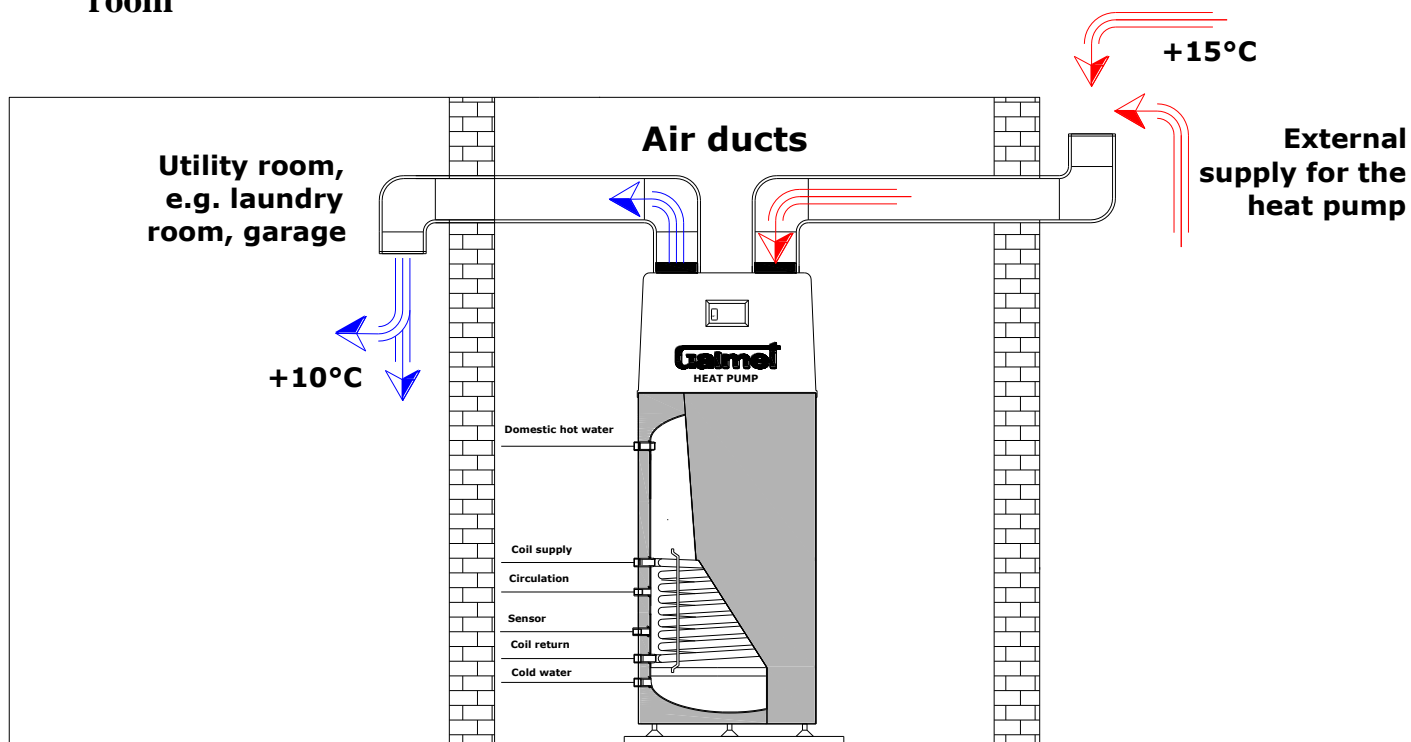


Fig. 7 Air supply duct outdoors and air discharge into another room

### 10.4. Air pump supply from the boiler room and air discharge outdoors

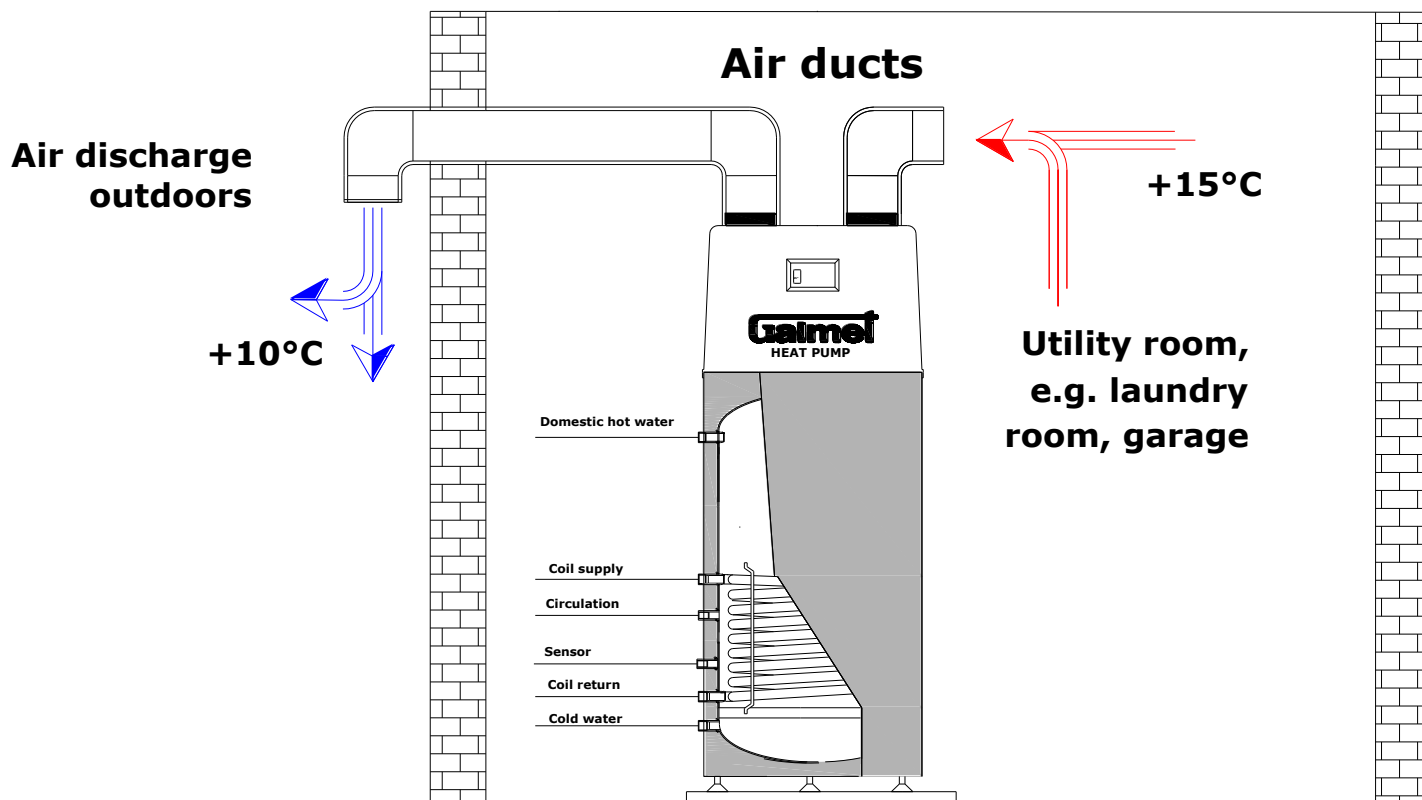


Fig. 8 Air supply from the boiler room and discharge into another room

## 10.5. Supplying and discharging air from the heat pump outdoors

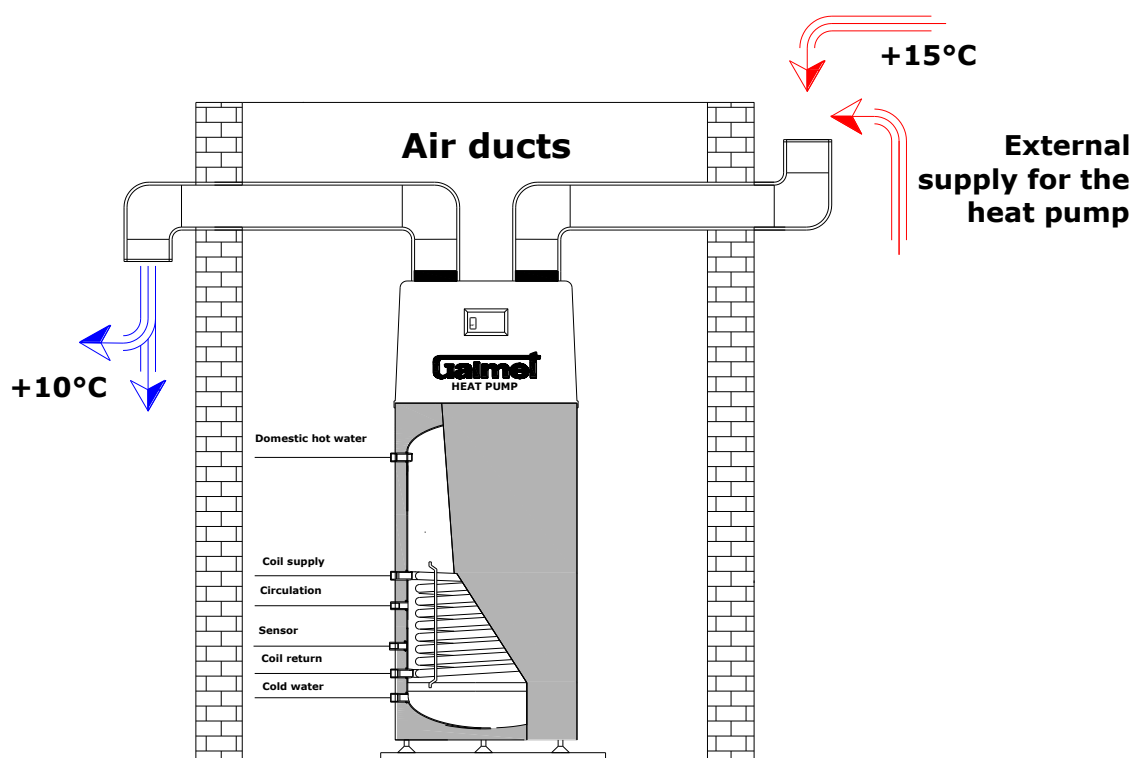


Fig. 9 Air supply and discharge outdoors

## 11. Description of heat pump connections

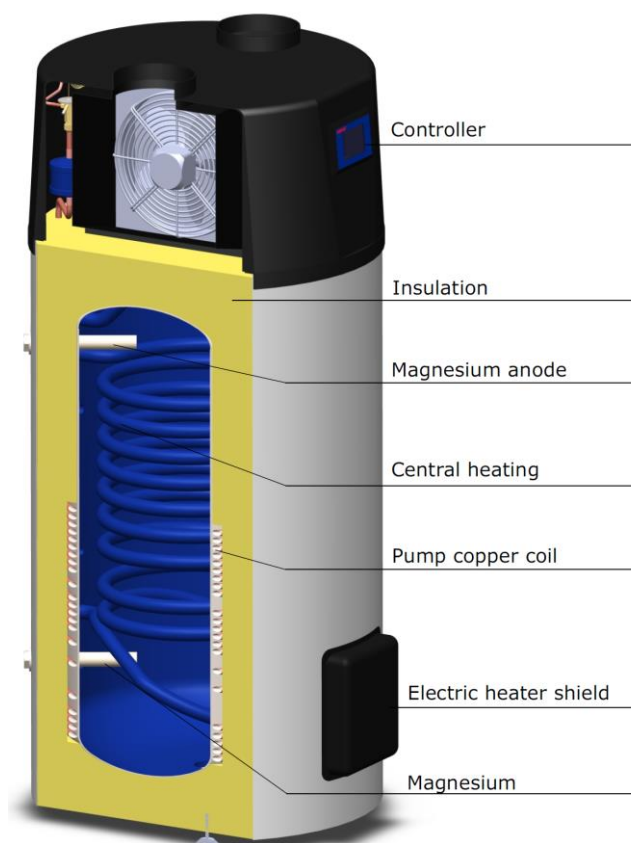


Fig. 10 Dimensions of connection fitting layout

## 12. Schematic diagram of the heat pump hydraulic system

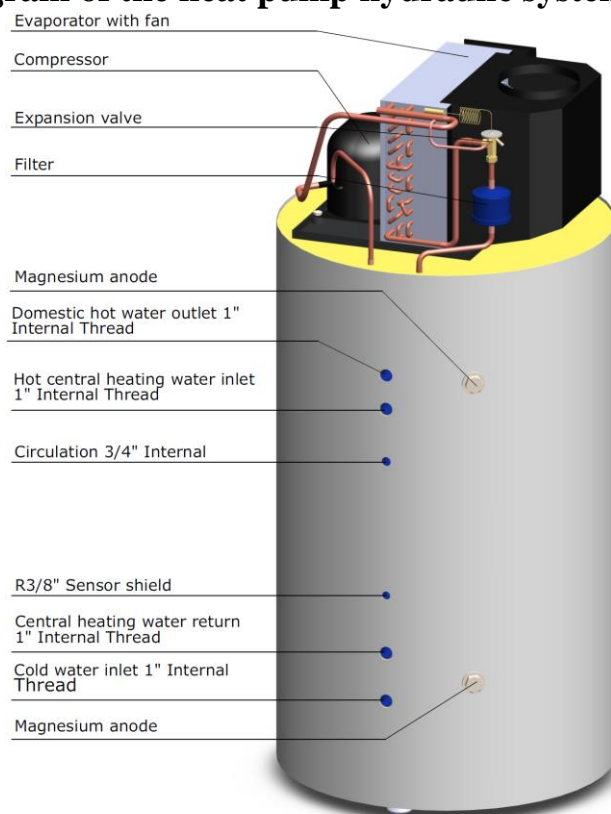


Fig. 11 Schematic diagram of the heat pump hydraulic system

## 13. Connections

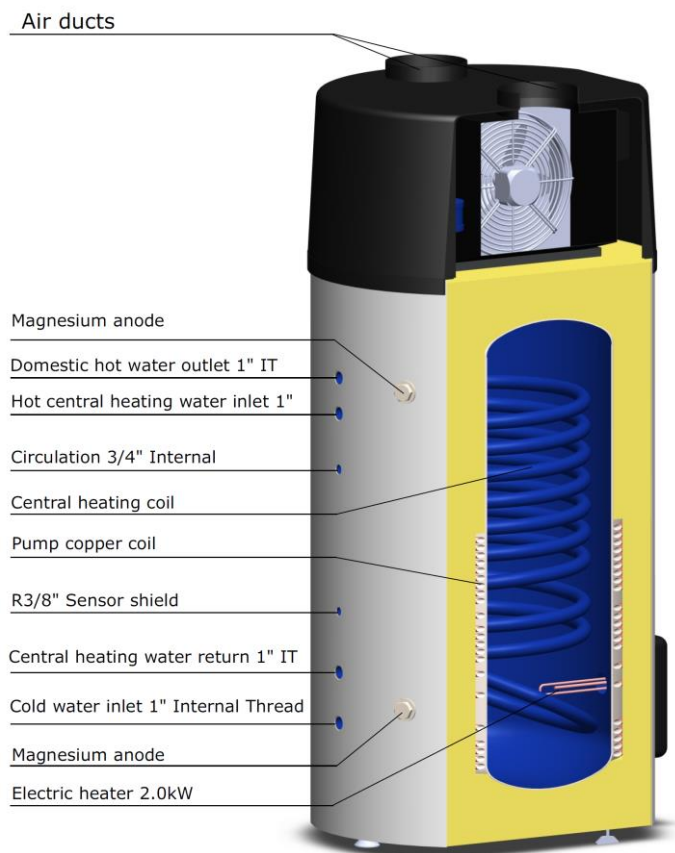


Fig. 12 Heat pump connections

## 14. Schematic diagram of the device hydraulic system

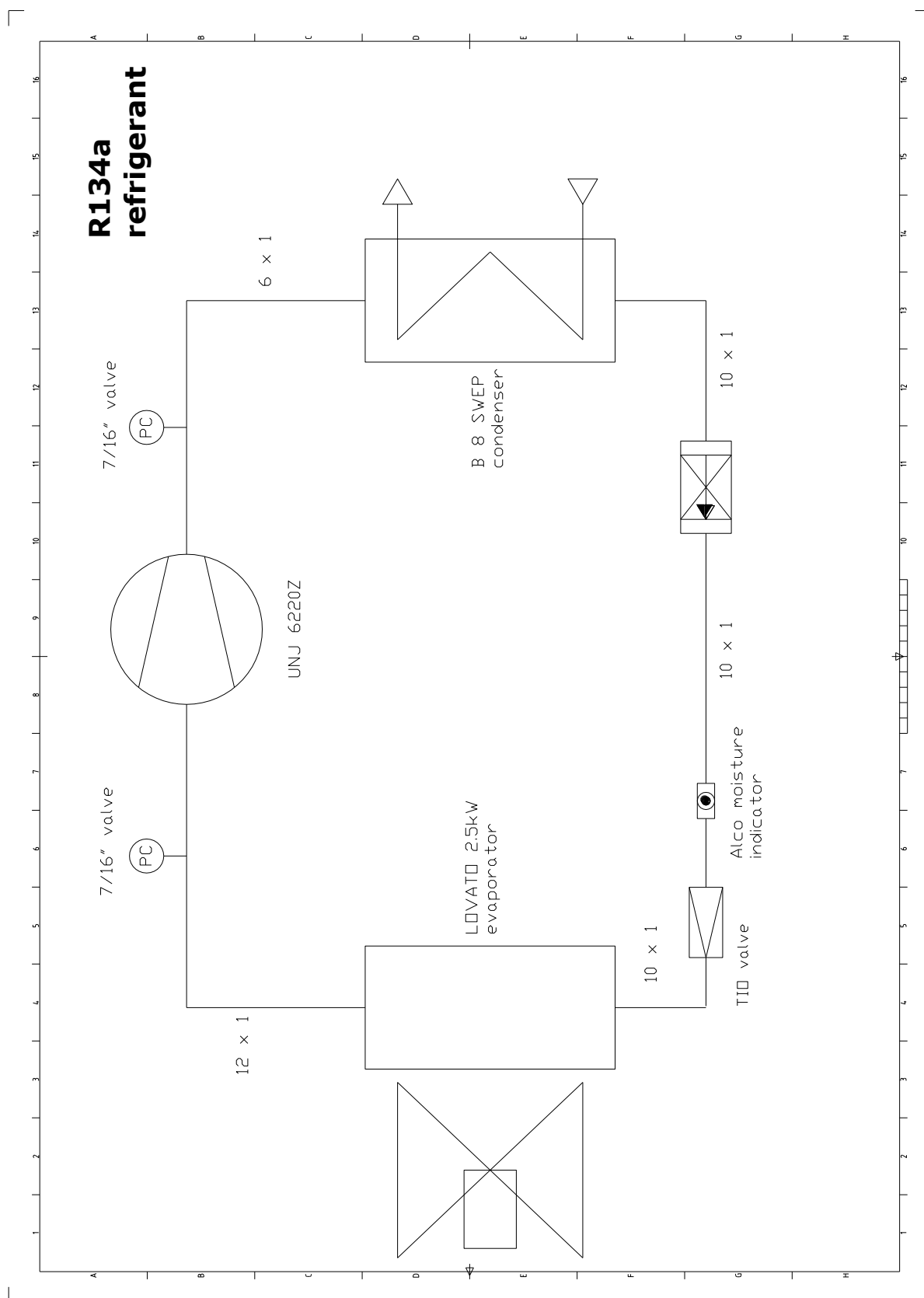


Fig. 13 Schematic diagram of the heat pump

## 15. Schematic diagram of the device electrical wiring

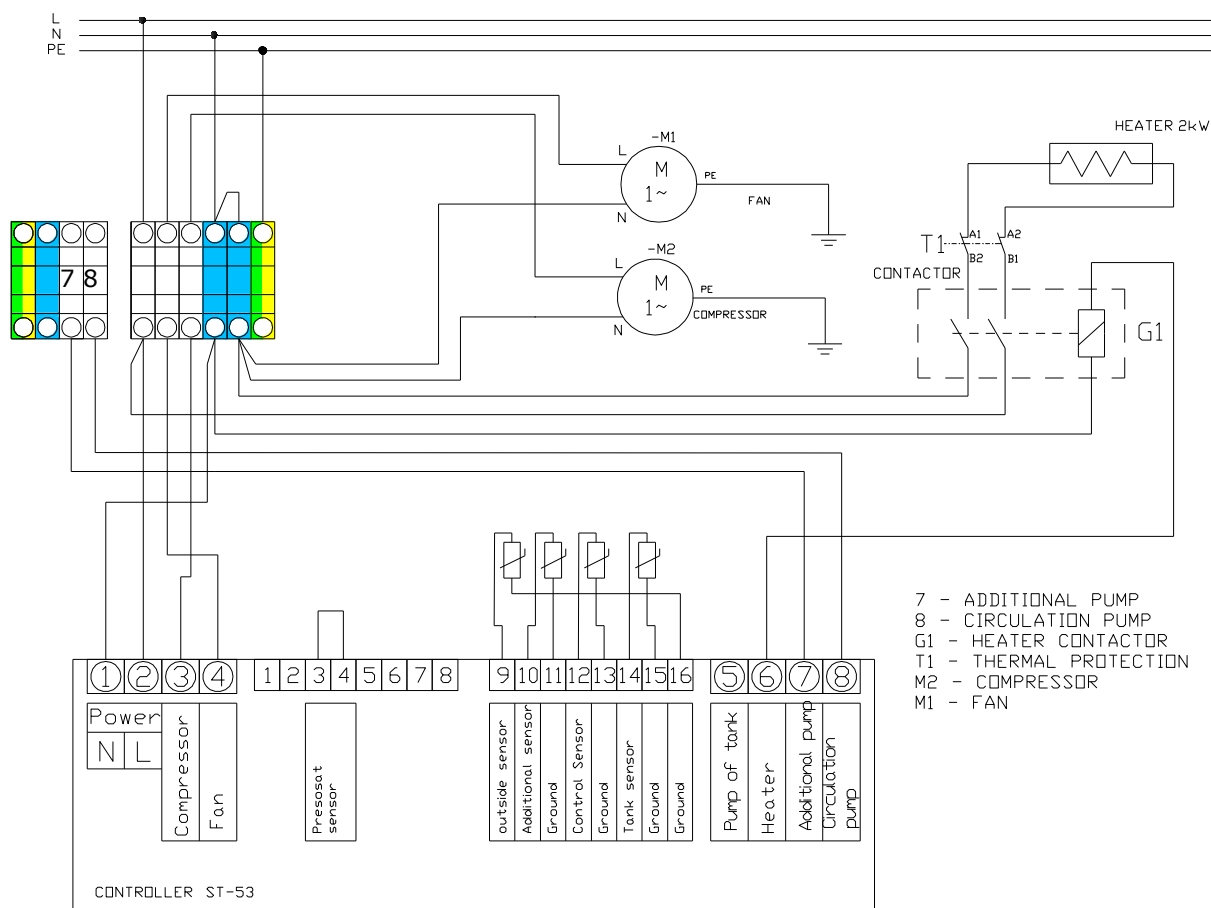


Fig. 14 Schematic diagram of the heat pump electrical wiring

Electrical wiring connections should be carried out by a qualified electrician with valid license. This fact should be recorded in the catalog and warranty card provided on the last page of this manual.

The heat pump should be provided with a current-differential and overcurrent protections (fuses); the rate of overcurrent protections depending on the device electrical power is presented in the table below.

Protection Type	Heat Pump Type
B16	EasyAir Basic 2GT



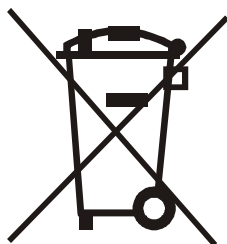
The device should be connected to the mains with its power cord.  
The wall socket should be earthed (fitted with a PE terminal).  
If any malfunction of the device occurs, shut off the system, disconnect it from the power supply source and contact a service centre.

## **WARNING!!!!!!**

**If the power cord is damaged, it should be replaced immediately with a special cord or a set available from the manufacturer or at a specialty repair shop.**

### **Recycling**

The symbol presented below signifies that it is prohibited to dispose of worn electrical and electronic devices together with other waste. These products should be delivered to assigned waste collection points for waste processing. A proper recycling of electrical and electronic devices helps to protect the natural environment and prevents negative impact on human health.



## 16. Troubleshooting guide

Trouble	Cause	Solution
The outlet water is cold. The display is off.	Improper connection between the plug and socket; outlet water temperature setting too low; outlet water temperature controller failure ; printed circuit board (PCB) track damaged.	Reinsert the plug; increase the outlet water temperature; contact a technical service.
No hot water at outlet.	Running water supply has been cut off; water pressure too low; the water inlet valve is closed.	After providing water supply all will return to normal condition ; operate at a higher pressure; open the valve at water inlet.
Water leakage.	Pipe connections are not sealed/tightened properly.	Check and seal the connection.

## 17. Device inspection card

Item	Gas pressure	Pressure in heating circuit	Servicing operations	Stamp and signature of fitter
First start-up				
Inspection after 12 months				
Inspection after 24 months				
Inspection after 36 months				

## 18. Declaration of Conformity



## **DECLARATION OF CONFORMITY**



***"Galmet Sp. z o.o." Sp. K.***  
(Company name)

**UL. RACIBORSKA 36  
48-100 GŁUBCZYCE**

*declares that the following product:*

***EasyAir Basic 2GT Air-To-Water Heat Pump***

this declaration applies to is compliant with the following Directives:

- *Pressure Equipment Directive (PED): 97/23/EC*
- *Low Voltage Directive (LVD): 2006/95/EC*
- *Electromagnetic Compatibility Directive (EMC): 2004/108/EC*

and standards:


- *PN-EN 50366:2004+A1:2006 Electromagnetic Field Measurement*
- *PN-EN 60335-2-40:2004+A12:2005+A11:2005+A1:2006+A2:2009  
PN-EN 60335-1:2004+A1:2005+A2:2008+A12:2008+A13:2009  
+A14:2010 Operation Safety*

Głubczyce, November 18<sup>th</sup>, 2010  
Place and date

WICEDYREKTOR  
D/S TECHNICZNYCH  
  
mgr inż. Michał Homoncik

Authorized person signature



  
heat pump



## 19. Notes

## 20. Warranty Terms and Conditions

1. The heat pump warranty is granted for a period of 24 months from its first start-up, however not longer than 27 months from the date of manufacture.
2. The warranty period for the enamel-coated tank is 48 months, however no longer than for the warranty period plus 12 months from the product date of manufacture.
3. During the warranty period any device defects resulting from the manufacturer's fault will be rectified free of charge within 14 working days from the date of reporting.
4. The method of rectification is at the manufacturer's discretion.
5. It is mandatory to replace the tank magnesium anode at least every 18 months (the anode should be inspected for wear every 12 months) - the replacement is not covered by the warranty (keep the purchase invoice and the record testifying its replacement). A regular magnesium anode replacement is required to maintain the tank warranty.
6. It is not allowed to install the heater without an operational safety valve (keep the safety valve purchase document and its warranty card). The safety valve should be installed directly upstream the heater at the cold water supply pipe. It is prohibited to install the heater in rooms where temperature can drop below 0°C.
7. The company or fitter carrying out: the installation, start-up, repair and maintenance inspections shall carry out all works in accordance with good construction practices and must be a specialty company.
8. During the warranty period the warrantor provides a free of charge repair or rectification of a physical defect of the contract subject, within the following periods:
  - a) 14 days from the date of making a claim, if the defect rectification does not require replacing structural components of the contract subject;
  - b) 30 days from the date of making a claim, if the defect rectification requires replacing structural components of the contract subject;
9. The warranty does not cover:
  - a) damage resulting from failure to use the device in compliance with generally accepted rules for such devices, failure to follow the intended use recommendations and instructions provided by the manufacturer;
  - b) damage caused by the user;
  - c) products, where unauthorized interference has been found, including modifications, repairs carried out on one's own, construction changes;
  - d) damage resulting from improper installation and assembly;
  - e) improper device operation resulting from incorrectly chosen installation parameters, controller settings, improper system venting, etc.
10. The device service covers the damage and defects resulting from the manufacturer's fault.
11. Assembly, electrical and hydraulic connections and device maintenance can only be carried out by an authorized fitter.

The manufacturer shall not be held responsible for any damage to the device resulting from its improper installation or failure to use the device following the instructions contained in this operation and installation manual.
12. The method of warranty repair is at the device manufacturer's discretion. Except from its own service center network, the warrantor allows for carrying out warranty repairs by other fitters authorized by him (to be consulted beforehand).
13. No operating manual or no warranty card stamped by the shop and the fitter results in voiding the warranty immediately. No entry documenting the first start-up date in the device inspection card of this manual results in voiding the warranty immediately.
14. When the Buyer makes it impossible to carry out a warranty repair twice, despite the warrantor's readiness to carry it out, it is considered that the Buyer gives up the warranty claim.

"Galmet Sp. z o.o." Sp. K., reserves the right to introduce changes in the specifications or models to improve devices without prior notice. The manufacturer shall not bear any costs resulting from the above mentioned changes.

# Warranty Card

Galmel

Item	Repair date	Repair description	Service signature	Owner's signature

Repair date	Repair date	Repair date	Repair date	Repair date
Scope of repair	Scope of repair	Scope of repair	Scope of repair	Scope of repair
Service stamp	Service stamp	Service stamp	Service stamp	Service stamp
Owner's name and address	Owner's name and address	Owner's name and address	Owner's name and address	Owner's name and address
Owner's signature	Owner's signature	Owner's signature	Owner's signature	Owner's signature

# Warranty card

**Galmef**



**GALMET Sp. z o.o. Sp. K.**  
PL 48-100 Głubczyce  
Raciborska 36

Date of assembly	
Stemp and signature of the fitter	

## NOTES:

The warranty is granted for the above-mentioned period, however not longer than for the warranty period plus 12 months from the date of manufacture.

\* if the magnesium anode is replaced regularly.

WARRANTY VOUCHER 1	WARRANTY VOUCHER 2	WARRANTY VOUCHER 3	WARRANTY VOUCHER 4	WARRANTY VOUCHER 5
<div><div>Galmef</div></div>	<div><div>Galmef</div></div>	<div><div>Galmef</div></div>	<div><div>Galmef</div></div>	<div><div>Galmef</div></div>
Type:	Type:	Type:	Type:	Type:
Serial no:	Serial no:	Serial no:	Serial no:	Serial no:
Date of sale:	Date of sale:	Date of sale:	Date of sale:	Date of sale:
Seller's stamp and signature:	Seller's stamp and signature:	Seller's stamp and signature:	Seller's stamp and signature:	Seller's stamp and signature: