

Hydromodul

| 1 D | 1 Explanation of symbols, Documentation validity2 | | | |
|--------|--|--|--|--|
| | 1.1 | 1.1 Used symbols2 | | |
| | 1.1 | Documentation validity2 | | |
| 2 | lr | nportant information2 | | |
| | 2.1 | Function2 | | |
| | 2. | 1.1 Installation3 | | |
| | 2. | 1.2 Use as intended3 | | |
| | | 1.3 Danger to life or health due to changes in e product or its surroundings3 | | |
| | 2. | 1.4 Fire-fighting equipment3 | | |
| 3 | N | lodels3 | | |
| 4 | Р | arameters4 | | |
| | 4.1 | Performance parameters4 | | |
| 5 | lr | nternal scheme5 | | |
| | 5.1 | Components6 | | |
| 6 | lr | stallation location7 | | |

| | 6.1 | Hyd | romodul7 | , |
|----|-----------------------|-----------|---|---|
| | 6.1 | 1.1 | Electrical preparation8 | 3 |
| | 6.2 | Indo | or room unit8 | 3 |
| 7 | P | aran | neters setting8 | ; |
| 8 | 0 | pera | tion8 | 5 |
| | 8.1 maint | | ulation pump operation and ce8 | 3 |
| | 8. ⁻ 13 | 1.1 60 | Circulation pump Grundfos UPM3 15-70 8 | |
| | 8. | 1.2 | Circulation pump malfunction9 |) |
| | 8.2 syste | | cking the pressure of the heating 9 |) |
| | 8.3 | Safe | ty valve check9 |) |
| | 8.4 | Disc | onnect from the mains9 |) |
| | 8.5 | Clea | ning9 |) |
| 9 | W | larra | nty10 |) |
| 10 |) S | ervio | ce10 |) |



1 Explanation of symbols, Documentation validity

1.1 Used symbols

Important information not including either hazards posed to persons or material values are highlighted in blue with the symbol *i*. They are separated from text by commas above and below it.



Warning remarks in the text are indicated by a red warning triangle with a white exclamation point and enclosed by a frame.

1.1 Documentation validity

The instructions specified herein are valid for Hydromodul **ACOND**® with **ACOND**® **THERM** regulation with SW versions 150.XX and 160.XX.

If these instructions are not followed during installation, operation and maintenance, then the obligations of **ACOND a.s.** stemming from the terms of the warranty shall cease to apply.

ACOND a.s. hereby reserves the right to make changes to any parts of the documentation and specifications without prior notice.

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2 Important information

The hydromodule is a separately functional unit, but it can also be installed with an Acond heat pump if the conditions specified in this manual are met



The device must not operate persons with limited mental abilities or lack of experience and knowledge (including children) unless they are under supervision of instructed persons responsible for their safety.

2.1 Function

The Hydromodule heats the heating water using a flow-through heating element and further forces it to circulate in the heating system by means of a circulation pump or by switching the three-way valve it can heat DHW in an indirectly heated water tank.



2.1.1 Installation

- Comply with local regulations
- Installation, maintenance and repairs may only be carried out by authorized installers (see chapter 12)

2.1.2 Use as intended

The device is safe under normal conditions. Improper use or use contrary to the instructions may endanger the life, health of the user, damage to the product or the environment.

2.1.3 Danger to life or health due to changes in the product or its surroundings

Do not make the following changes:

On product

On water inlets

On electricity supply

On safety valves

2.1.4 Fire-fighting equipment

In case of unforeseen circumstances and improper operation of the equipment, it may be damaged and cause a fire. To extinguish the fire, it is necessary to use fire extinguishers suitable for extinguishing electrical equipment, i.e.

- Powder fire extinguisher
- Snow fire extinguisher
- Gas fire extinguisher

3 Models

According to the possibility of connecting a heat pump of the Acond brand, the models of the Hydromodule are distinguished, which differ only in the electrical part of the Hydromodule. For the given model, it is necessary to prepare the correct protection in the home switchboard and bring the correct cables, see the attached diagrams.

| Hydromodul | Heat pump | Supply voltage code; Circuit breaker |
|---------------------|-----------|--------------------------------------|
| Hydromodul PRO-N | PRO-N | 3~N/PE/400V/50Hz; B20A |
| Hydromodul PRO-N SP | PRO-N SP | 1~N/PE/230V/50Hz; B40A |
| Hydromodul PRO-R | PRO-R | 3~N/PE/400V/50Hz; B20A |
| Hydromodul PRO-R SP | PRO-R SP | 1~N/PE/230V/50Hz; B50A |



| Hydromodul Grandis-N | Grandis-N | 3~N/PE/400V/50Hz; B20A |
|-------------------------|--------------|------------------------|
| Hydromodul Grandis-N SP | Grandis-N SP | 1~N/PE/230V/50Hz; B40A |
| Hydromodul Grandis-R | Grandis-R | 3~N/PE/400V/50Hz; B20A |
| Hydromodul Grandis-R SP | Grandis-R SP | 1~N/PE/230V/50Hz; B50A |

4 Parameters

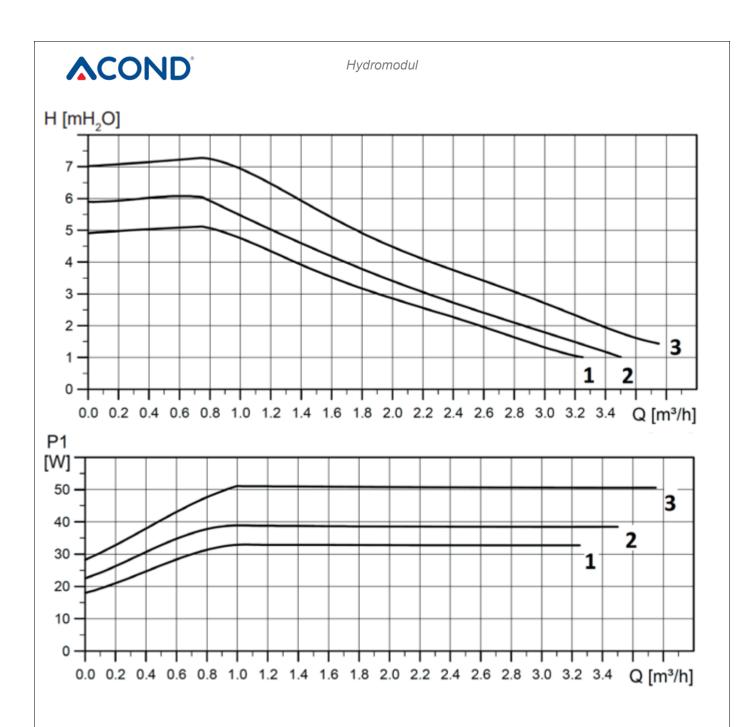
The Hydromodule is a compact solution for heating water, heating water circulation and at the same time, after connection to an indirect hot water tank, it heats it to the desired temperature.

| Height x Width x Depth [mm] | 709 x 457 x 240 |
|--|-----------------|
| Weight [kg] | 22 |
| Protection class | IP20 |
| Max pressure of the heating system [bar] | 3 |
| Maximum heating water temperature [°C] | 85 |
| Minimum heating water temperature [°C] | 20 |
| Hydraulic connection | G1" Male |
| Supply voltage code; Circuit breaker | 6 |
| Heat output [kW] | 7 |

*The pressure in the heating system is designed by the plumbing company according to the parameters of the object and writes the value on the label and attached to the Hydromodule

4.1 Performance parameters

The following graphs show the dependence of the height of the object on the flow through the heating system and the power input of the circulation pump on the flow. The pump has 3 different power settings.

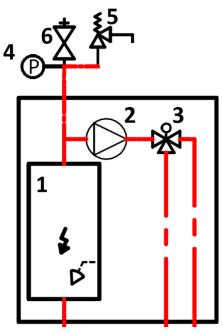


5 Internal scheme

The internal diagram shown in the following picture is for illustrative purposes only.



Hydromodul



Obrázek 1 Vnitřní schéma

5.1 Components

Components at positions 4, 5 and 6 can be replaced with any equivalent parts suitable for the stated maximum operating pressure and temperatures.

Z Heating water can leak out of the pressure relief valve in the event of a malfunction, so a hose leading to the drain must be connected to it.

Table 1 – Table of components

| No. | Components | Original component | Possible replacement |
|-----|------------------------------|-----------------------------------|-------------------------------|
| 1 | E-Heater | Acond EK6-335 | - |
| 2 | Circulation pump | Grundfos UPM3 15-70 130 Hybrid | Grundofos Alpha1 15-80 130 |
| 3.1 | Three-way valve | Lufberg ZV3A-25-13 | - |
| 3. | Three-way valve motor | Lufberg ZV-A230 | - |
| 4 | Pressure gauge | - | - |
| 5 | Safety pressure relief valve | - | - |
| 6 | Vent valve | - | - |

6 Installation location

6.1 Hydromodul

The utility room must be spacious enough and dry. The air temperature must be between 10°C and 35°C and the relative humidity should not permanently exceed 70%.

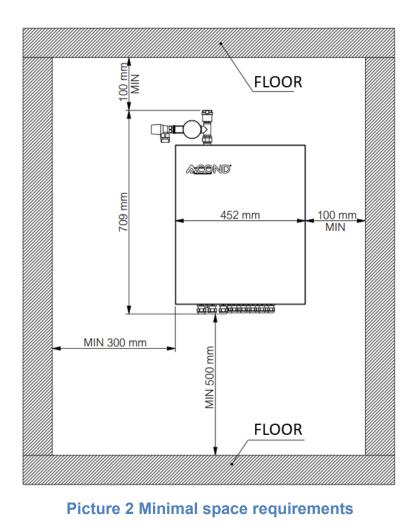


Under no circumstances must the Hydromodule be installed on walls made of flammable materials!

The spatial demands of the installation are drawn in Picture 2, where the minimum distances to obstacles are shown.



Failure to comply with the minimum distances from other objects at the installation site will increase the price of the service paid by the customer.



6.1.1 Electrical preparation

The electrical connection is made from the bottom side, where leave a free cable length of at least 2m. The cables to be brought in are given by the diagrams annexed to this document.

6.2 Indoor room unit

The indoor C-ID room unit shall be placed in a heated reference room. The heating rod will be switched if the temperature in the reference room unit drops below the set temperature in the AcondTherm regulation.



A thermostatic valve shall not be placed in the reference room.

7 Parameters setting

Setting of the parameters of heating water and hot water is carried out according to the instructions for regulation AcondTherm. Regulation guidance can be downloaded from the website https://acond.cz/tepelna-cerpadla/servis/.

8 Operation

The Hydromodule contains electrical components and therefore the front lid must not be removed!

8.1 Circulation pump operation and maintenance



A circulation pump is a component that has possible replacements according to market availability. The model of the circulation pump is written on its label. If one of the possible substitutes is used, visit the manufacturer's website to find the operating instructions for the circulation pump.

8.1.1 Circulation pump Grundfos UPM3 15-70 130

The circulation pump is accessible from the left side through a window. First, hold down the button (indicated by an arrow) until the LEDs start blinking. Then, to select the desired setting, press the button (marked with an arrow) until you find the setting you need. If you miss it, you must continue around until it reappears.

| Display | Performance curve | State | Max. height of the building |
|---------|----------------------|-------|-----------------------------|
|---------|----------------------|-------|-----------------------------|

Operation manual

| Hydromodul | | |
|------------|--------------|----|
| 1 | Low power | 5m |
| 2 | Medium power | 6m |
| 3 | High power | 7m |

8.1.2 Circulation pump malfunction

In the event of a breakdown, check what mode the pump is in and contact the service.

| Display | Control mode |
|---|--------------------|
| $\bullet \bullet \bullet \bullet \bullet$ | Blocked pump |
| | Low supply voltage |
| | Electric fault |

8.2 Checking the pressure of the heating system

The pressure check is carried out on a pressure gauge (position 4). In the event of a pressure drop in the heating system, pressure the heating system set by the installer.

8.3 Safety valve check

Turn the safety valve at least once every six months to check its functionality.

Be careful, hot water may flow out of the valve.

8.4 Disconnect from the mains

First, use the AcondTherm regulation to switch off the device and then disconnect the device from the main by switching off the circuit breaker in the main home switchboard.

8.5 Cleaning

Clean the hydromodule with products designed for stainless materials.



Hydromodul

Do not use any types of sprays around the hydromodulu. This is especially true for

- Solvents
- Cleaning products containing chlorine
- Colors
- Glues

9 Warranty

The manufacturer provides a warranty for the product within the period, performance and under the conditions specified in the warranty card. The warranty card is included in the delivery and must be filled in for its validity.

10 Service

Service work on the product may only be carried out by authorized service technicians. For more, contact the plumbing company that performed the installation.