GRUNDFOS UPM3 HYBRID 15-70 130 CIRCULATOR

Function

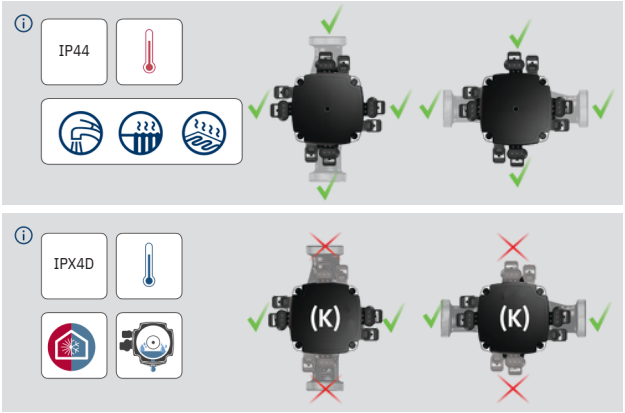
UPM3 pumps are high-efficiency, variable-speed circulators equipped with an electronically commutated motor (ECM), permanent magnet rotor, and frequency converter. They can be externally controlled via low-voltage digital signal using PWM (Pulse-Width Modulation) or LIN bus signal, or internally regulated in constant pressure, proportional pressure, or constant speed modes, defined by a system control panel or factory preset. The product is suitable for pumping clean, thin, non-aggressive, and non-explosive liquids that do not contain solid particles or fibers. In heating systems, the water must meet the quality requirements established by accepted standards for heating system water, such as the German standard VDI 2035.

Technical data

		Ambient temperature at 55 °C and liquid temperature at 95 °C	Ambient temperature at 70 °C and liquid temperature at 65 °C	Ambient temperature at 70 °C and liquid temperature at 110 °C	Ambient temperature at 60 °C and liquid temperature at 130 °C	Ambient temperature at 95 °C
Standard variants						
GFNHB	UPM3S			●	●	●
GFNKB	UPM3			●	●	●
GFNKC	UPM3L	●		●	●	
GFNFB	UPM3			●	●	●

Liquid temperature	75 °C	95 °C	110 °C
Pressure	0.005 MPa 0.05 bar	0.05 MPa 0.5 bar	0.108 MPa 1.08 bar

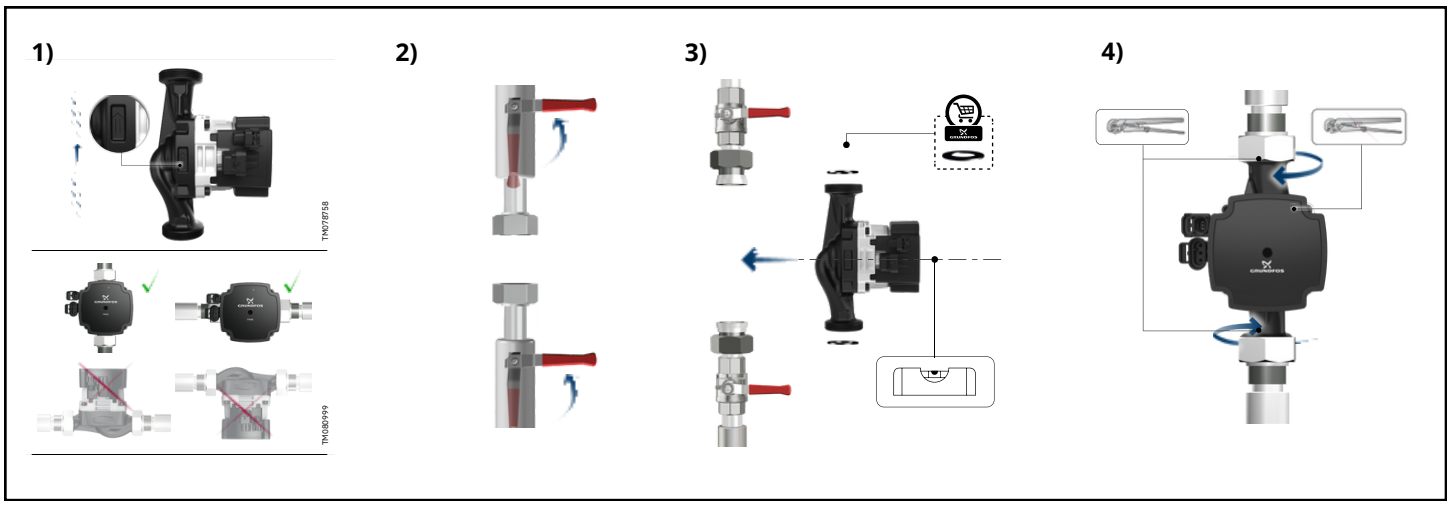
Control box position



The control box provides access to the terminals from the front.
If necessary, the control box can be rotated in 90-degree increments:
- 3 o'clock
- 6 o'clock
- 9 o'clock
- 12 o'clock

By default, the control panel is located in the highest position (12 o'clock) when the terminals are in the 9 o'clock position.
The front panel can be placed in four different positions. This allows you to position it horizontally regardless of the orientation of the control box.

Installation



The pump must be installed in the system so that a significant amount of air flowing or accumulating in the pump housing does not affect the pump when it is not operating.

• If an additional check valve is installed in the discharge pipe, there is a high risk of dry running because air cannot pass through the valve.

• It must be possible to vent the system at the highest point of each segment of the system.

• A permanent vent is recommended.

Certifications

EN: EU Declaration of Conformity Grundfos declares, under its sole responsibility, that the product GFNHH, GFNKL, GFNKJ, to which this declaration refers, complies with the following Council Directives concerning the harmonization of the legislation of the EU Member States.

Low Voltage Directive (2014/35/EU)

Standards used:

• EN 60335-1:2012/A11:2014/A13:2017

• EN 60335-2-51:2003/A1:2008/A2:2012

• EN62233:2008

RoHS Directive 2011/65/EU and 2015/863//EU

Standards used:

• EN 50581:2012

EMC Directive (2014/30/EU)

Standards used:

• EN 55014-1:2017

• EN 55014-2:2015

• EN61000-3-2:2014

• EN61000-3-3:2013

Ecodesign Directive (2009/125/EC)

Commission Regulation (EC) No 641/2009

Commission Regulation (EC) No 622/2012

Standards used:

• EN 16297-1:2012

• EN 16297-2:2012

• EN 16297-3:201

EEI ≤ 0.23 (see individual data sheet or name plate).

The benchmark for the most efficient circulators is EEI ≤ 0,20