

Uponor Fluvia Move PPG-30-A-W

EN Installation and operation manual

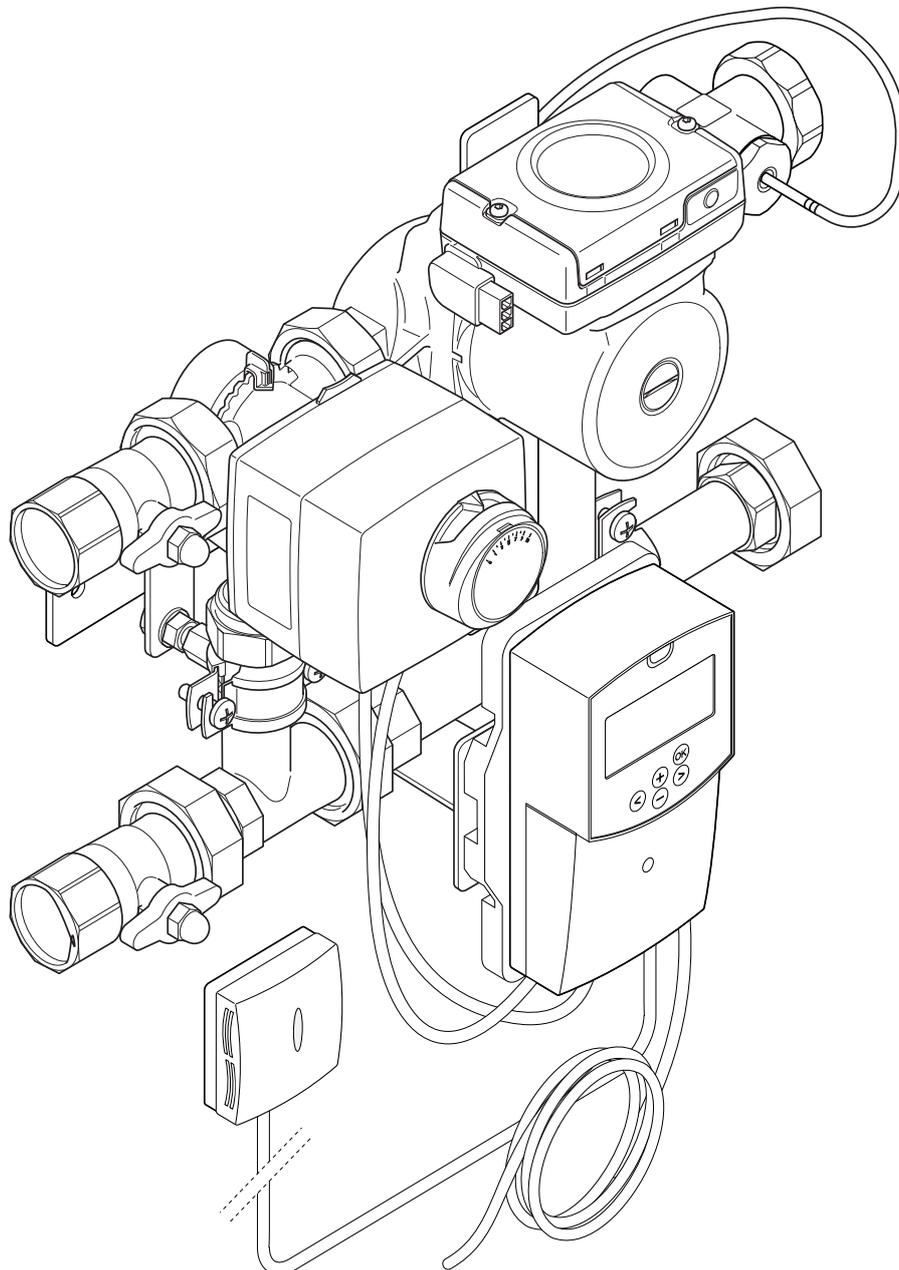


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1 Safety instructions and disclaimer

1.1 Safety instructions

Safety messages used in this document

	Warning! Risk of injury and damage. Ignoring warnings can cause personal injury and/or damage to products and other property.
	Caution! Risk of malfunctions. Ignoring cautions can cause the product to not operate as intended.
	Note Important information to the section in the manual.

Uponor uses safety messages in the document to indicate special precautions required for the installation and operation of any Uponor product.

Safety measures

	Note For safe and proper use, obey the instructions given in this document. Keep them for future reference.
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The installer and operator agree to comply with following measures regarding Uponor products:

- Read and obey the instructions and processes in the document.
- The installation must be performed by a qualified installer in accordance with local regulations.
- Uponor is not liable for modifications not specified in this document.
- Switch off all connected power supplies before starting any wiring work.
- Do not expose the Uponor components to flammable vapours or gases.
- Do not use water to clean electrical Uponor products/ components.

Uponor is not liable for damage caused by ignoring the instructions in this document or the applicable building code.

Power

	Warning! Uponor system power supply: 230 V AC, 50 Hz. In case of emergency, immediately disconnect the power.
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Technical constraints

	Caution! To avoid interference, keep data cables away from components bearing power of more than 50 V.
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1.2 Correct disposal of this product (Waste Electrical and Electronic Equipment)

	Note Applicable in the European Union and other European countries with waste separation systems.
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This icon on the product, or in the related documents indicates that it should not be disposed with household waste. Please, recycle responsibly to support the sustainable use of resources and prevent possible harm to human health and/or the environment.

Household users should contact the retailer where they purchased this product, or their local government office, for details on where and how they can take it for recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. Do not dispose this product with other commercial waste.

1.3 Copyright and disclaimer

This is a generic, European-wide document version. The document may show products that are not available in your location for technical, legal, commercial, or other reasons.

For any questions or queries, please visit the local Uponor website or speak to your Uponor representative.

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This disclaimer applies to, but is not limited to, the accuracy, reliability, or correctness of the document.

The presumption for the document is that the product related safety instructions are fully obeyed. The following requirements apply to the Uponor product (including any components) as covered by the document.

- The system (combination of products) is selected and designed by a competent planner. It is installed and put into operation by a licensed and/or competent installer in compliance with the instructions provided by Uponor. Locally applicable building and plumbing codes/regulations have been obeyed.
- Temperatures, pressure and/or voltage limits according to product and design information have not been exceeded.
- The product remains in its originally installed location and is not repaired, replaced, or interfered with, without prior written consent of Uponor.
- The product is connected to potable water supplies or compatible plumbing, heating and/or cooling systems approved or specified by Uponor.

- The product is not connected to or used with third-party products, parts, or components except for those approved or specified by Uponor.
- The product does not show evidence of tampering, mishandling, insufficient maintenance, improper storage, neglect, or accidental damage before installation and being put into operation.

While Uponor has made all effort to ensure that the document is accurate, the company does not guarantee or warrant the accuracy of the information. Uponor reserves the right to change the product portfolio and the related documentation without prior notification, in line with its policy of continuous improvement and development.

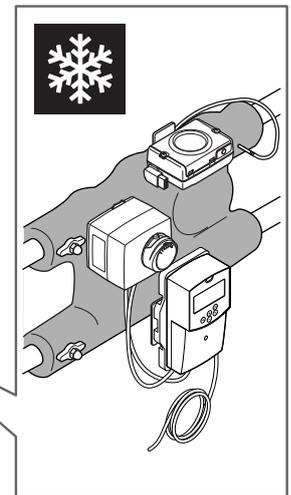
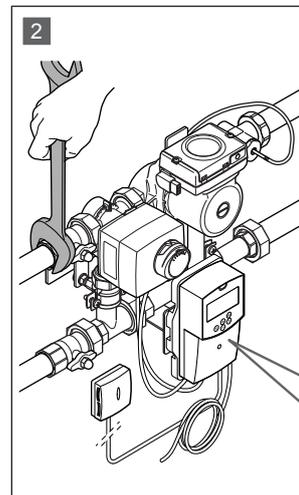
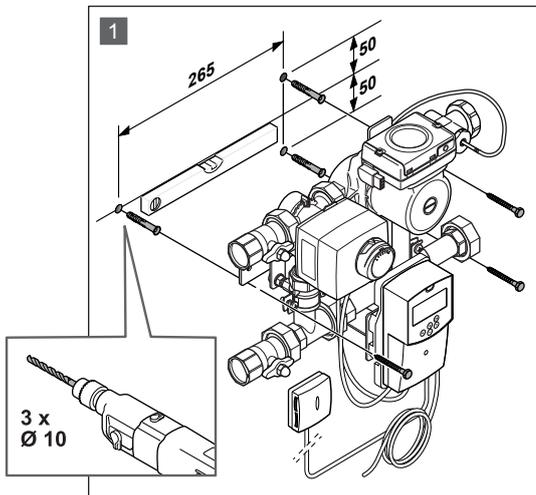
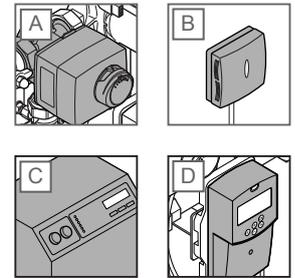
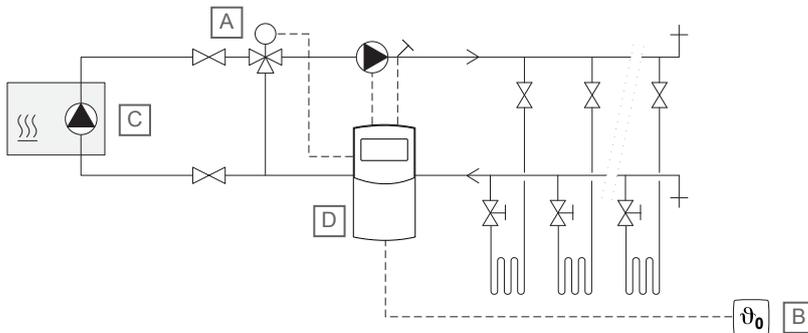
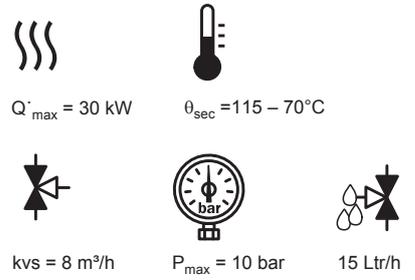
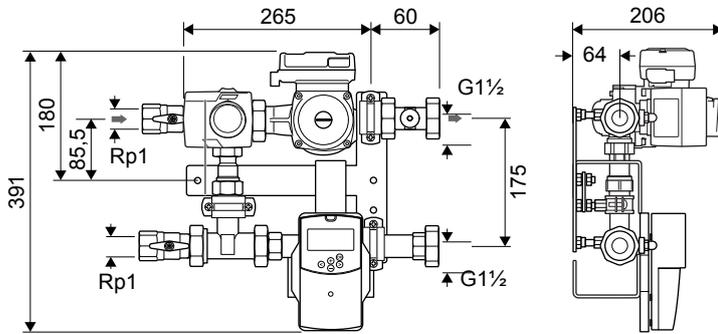
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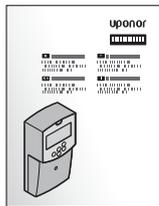
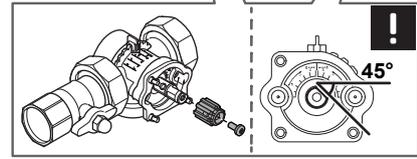
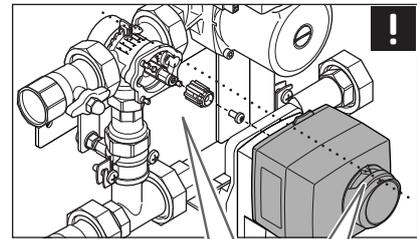
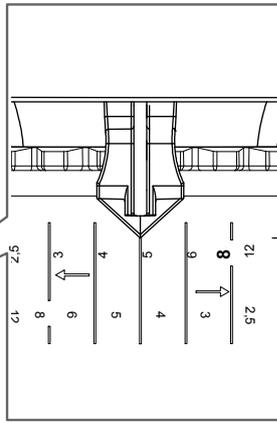
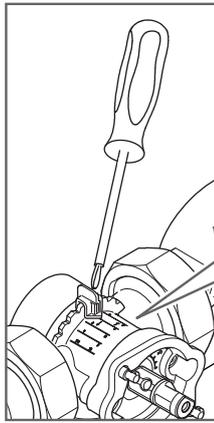
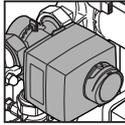
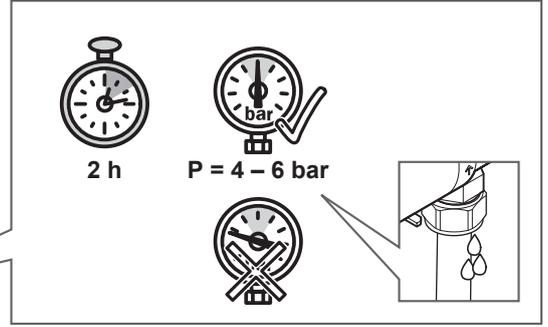
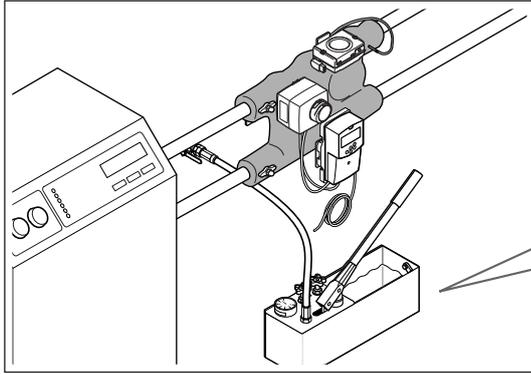
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2 Installation



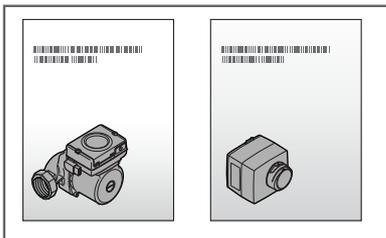
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Uponor Smatrix Move



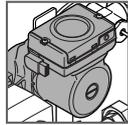
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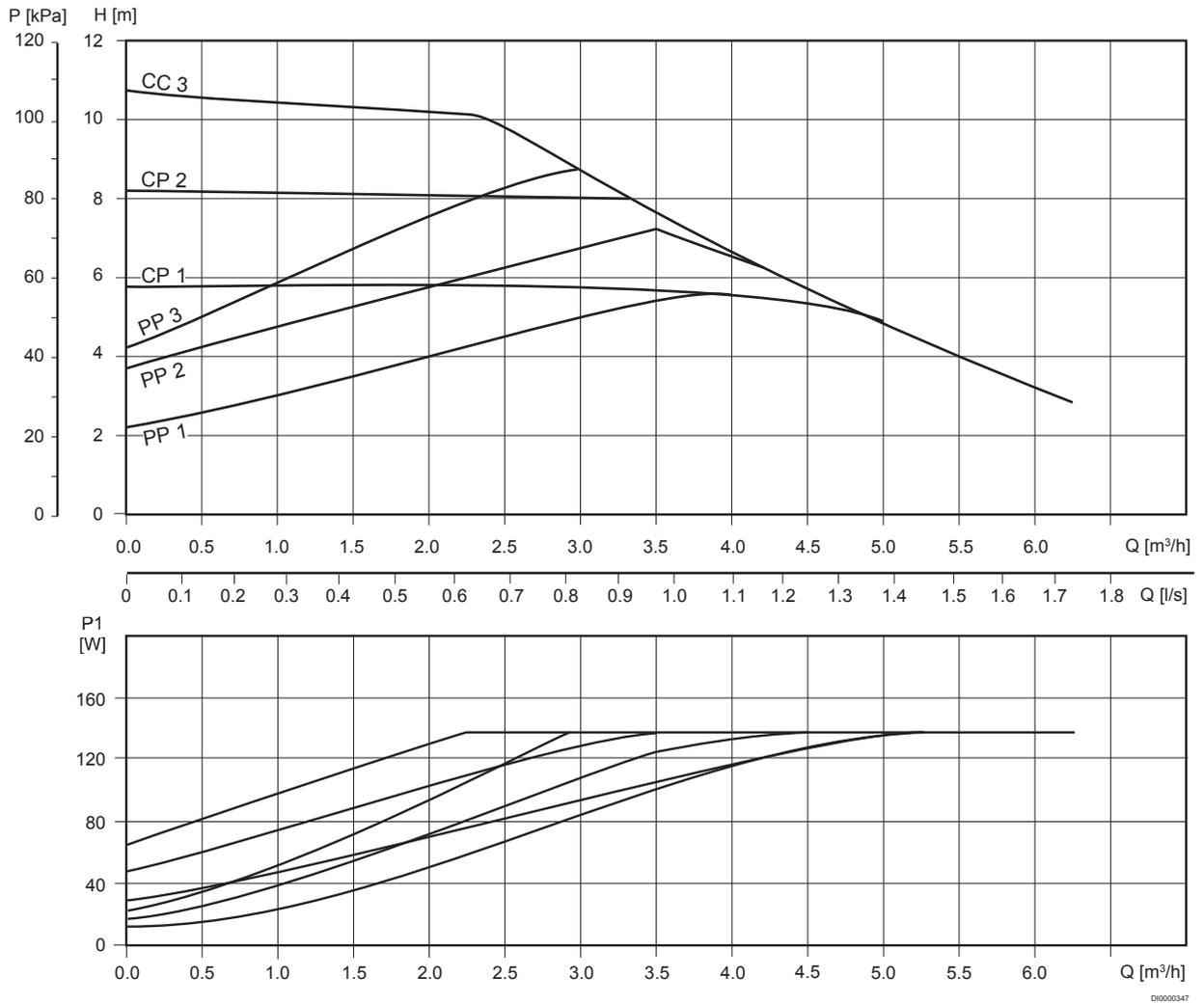
3 Operation

3.1 Performance curves



Grundfos UPML
25-105 180 AUTO AE

EEl ≤ 0.23 Part 2
P_{L,avg} ≤ 58 W

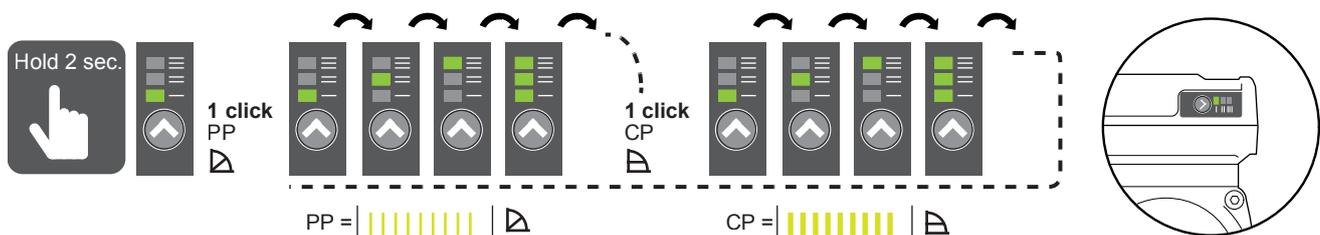


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Setting value	Description		Max. H _{nom}
CP1	Constant Pressure 1, control mode for constant differential pressure		5,5 m
CP2	Constant Pressure 2, control mode for constant differential pressure		8 m
CC3	Constant Curve, control mode limited by speed and power		10,5 m
CCAA	Constant Curve Auto Adapt		

Setting value	Description		Max. H _{nom}
PP1	Proportional Pressure 1, control mode for variable differential pressure		5,5 m
PP2	Proportional Pressure 2, control mode for variable differential pressure		7 m
PP3	Proportional Pressure 3, control mode for variable differential pressure		9 m
PPAA	Proportional Pressure Auto Adapt		

3.2 Changing the pump settings



S10000823

Internally controlled Medium UPM AUTO circulators have a user interface with one pushbutton and three LEDs.

The user interface allows to select between 8 control curves in two control modes:

- Three proportional pressure curves (PP) plus AUTO_{ADAPT} PP
- Three constant pressure/power curves (CP) plus AUTO_{ADAPT} CP

The first time, the pump starts with the factory presetting: Proportional pressure curve, PP2.

- Push the button for two seconds:
 - the pump goes to setting mode - LED starts flashing.
- With each push, the setting changes:
 - LEDs 1-2-3 are permanently on, the control curve and the mode are changed.
- Flashing mode:
 - Fast: Proportional pressure
 - Slow: Constant pressure/power
- If the button is not pushed for ten seconds:
 - the setting is adapted.
 - the pump returns into operating mode

During operation, the display shows the selected setting.

- LED 1 or 2 or 3 is permanently on:
 - Pump is running with the selected curve and mode.

4 Maintenance

4.1 Troubleshooting circulation pump

Item	Fault description	Cause	Solution
1	The pump is not running. No power supply.	• The system is switched off	Check the system controller.
		• A fuse is blown in the installation.	Replace the fuse.
		• The circuit breaker has tripped.	Check the power connection and switch on the circuit breaker.
		• A power supply failure exists.	Check the power supply.
2	The pump is not running. Normal power supply.	• Controller is switched off.	Check the controller and its settings.
		• The pump is blocked by impurities.	Remove impurities. Unscrew the deblocking screw at the front of the pump. Unblock the pump from the front of the control box with a screwdriver. Be aware of splashing hot water.
		• The pump is defective.	Replace the pump.
3	Pump runs at maximum speed and cannot be controlled.	• No signal from signal cable.	Check if the cable is connected to the controller. If it is, replace the cable.
4	Noise in the system.	• Air in the system.	Vent the system.
		• Differential pressure is too high.	Reduce the pump performance at the pump or at the external controller.
5	Noise in the pump.	• Air in the system.	Let the pump run. The pump vents itself over time.
		• Inlet pressure is too low.	Increase the system pressure or check the air volume in the expansion tank, if installed.
6	Insufficient flow.	• Pump performance is too low.	Check the external controller and the pump settings.
		• Hydraulic system is closed or system pressure is insufficient.	Check the non-return valve and filter. Increase the system pressure.

5 Technical data

5.1 Circulation pump

Description	Value
Nominal supply voltage	EU: 1 x 230 V + 10 %/- 15 %, 50/60 Hz
Minimum supply voltage	160 VAC (runs with reduced performance)
Motor protection	The motor is protected by the electronics in the control box and requires no external motor protection.
Enclosure class	IPX2D (with drain holes)
Equipment class	I (EN 60335-1)
Insulation class	F (EN 60335-1)
Temperature class	TF95 (EN 60335-2-51)
High voltage protection	EN 60335-1 1000 VAC / 2500 VAC
Max. ambient temperature	55 °C (near circulator surface)
Max. media temperature	95 °C continuously; 110 °C for short periods or with low load. Note: For further lifetime evaluation, the temperature profile must be defined.
Min. media temperature	-10 °C (see validated temperature profile)
Storage temperature	-40 to +70 °C
Max. system pressure	1 MPa (10 bar) (depending on the housing material)
Min. inlet pressure	0.01 MPa (0.10 bar) at 75 °C liquid temperature 0.05 MPa (0.50 bar) at 95 °C liquid temperature 0.10 MPa (1.00 bar) at 110 °C liquid temperature
Flow estimation	Available on demand, based on cast-iron inline housing (25 x 180 mm), accuracy: see PWM specification
Drinking water approvals (ACS, WRAS, UPBA, KTW, DVGW, W270)	All pump head components are compliant. Specific compliant N pump housing is available.
Deblocking device	Manual deblocking device, access from front side
Dry run ability - first start	3 x 20 seconds (5 minutes interval), all circulators are lubricated with glycerine
Dry run ability - during operation	Rotor must be filled with water: fulfils EN 60335-2-51.
Expected lifetime	> 80,000 h (with specified load profile)
Min. switching time power on/off	1 minute.
Inrush current	7.5...11.5 A (reg. VDMA Einheitsblatt 24225) (depending on the variant)
Max. leakage current	≤ 3.5 mA (EN 60335-1)
Speed range	647 to 4697 min ⁻¹ (depending on the variant)
Relative air humidity	Condensation at the motor surface is acceptable, if the drain holes are free.
Standby power consumption	< 3 W
Acoustic sound pressure level	≤ 38 dB(A)
Max. altitude of installation	2000 m above sea level

5.2 Actuator for 3-way mixing valve

Description	Value
Torque	6 Nm
Angle of rotation	90°
Time for 90° rotation	120 s
Control signal/power supply	24 V AC, 230 V AC
Ambient temperature range (operation)	0°C up to 50°C
Electrical demand	2,5 VA
Protection class (EN 60730)	II
Protection category of housing (EN 60529)	IP 42
Dimensions	85,5 x 97 x 99 mm (H x W x L)
Housing material	PC
Cable length	2 m

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Production: Uponor/SDE

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