

CRUNDFOS UP M3S AUTO 25:60 130 222



EN

Installation and Operation Manual Grundfos UPM3 AUTO 25-60 130 mm Pump

UPM3 AUTO 25-60 130

## UPM3 AUTO 25-60 130 mm Pump

## Design

Wet-running circulation pump with G 6/4" M connection.

Electrical Data	
Power supply	230 V, 50 Hz
Power consumption (min./max.)	2/39 W
Current (min./max.)	0,04/0,40 A
IP rating	IP44
Max. speed	5288 rpm
Weighted average power	≤ 16 W
Energy Efficiency Index	≤ 0,20 by EN 16 297/3
Motor protection	not needed



Minimum pressure at pump suction port		
Minimum pressure at suction port to avoid cavitation	0,5 mH <sub>2</sub> O at 75 °C	
	5,0 mH <sub>2</sub> O at 95 °C	
	10,8 mH <sub>2</sub> O at 110 °C	

## **Pump Control**

The circulation pump can be controlled by selecting a suitable mode and pump performance curve.

## **Performance Curves**



## **Description of Pump Frofiles**

#### a) Proportional pressure

- This mode is suitable for heating systems with radiators, to reduce noise caused by heating fluid flowing through thermostatic valves.
- Head (pressure) decreases with decreasing flow rate (increasing system pressure drop).
- Pump operating point: lies on the selected proportional pressure curve depending on the current system pressure drop.

CONTROL MODE		DESCRIPTION	
	I	The lowest curve of proportional pressure	$\square$
Proportional	II	The middle curve of proportional pressure	
pressure	III	The highest curve of proportional pressure	
	AUTO	Automatically controls performance in the range from the highest to the lowest proportional pressure curve	

#### b) Constant pressure

- This mode is suitable for underfloor heating or for piping of a bigger size. It is also suitable for all applications without variable characteristics (e.g. pumps for heating up a HW storage tank) or for a circuit with a heat exchanger.
- Head (pressure) remains the same in the whole range of flow rates (does not change with the system pressure drop).
- Pump operating point: moves on the selected constant pressure curve depending on the current system pressure drop.

CONTROL	MODE	DESCRIPTION	
I	The lowest curve of constant pressure		
Constant	II	The middle curve of constant pressure	
pressure		The highest curve of constant pressure	
	AUTO	Automatically controls performance in the range from the highest to the lowest constant pressure curve	

#### c) Constant speed

- This mode is suitable for the maximum utilization of the pump performance or for use in systems with constant resistance which require a constant pumping performance.
- Head (pressure) increases with decreasing flow rate (increasing system pressure drop).
- Pump operating point: moves up or down on the selected curve depending on the current system pressure drop.

CONTROL	MODE	Max. H (upper graph)	Max. P <sub>1</sub> (lower graph)	
	I	4 m	25 W	
Constant speed	II	5 m	33 W	
	111	6 m	39 W	

	DISPLAY	CONTROL MODE	
	green LED FLASHING	INTERNAL	
1		Proportional pressure AUTO <sub>ADAPT</sub>	
2		Constant pressure AUTO <sub>ADAPT</sub>	
3		Proportional pressure	Ι
4			II
5			111
6		Constant pressure	Ι
7			II
8			111
9			I
10		Constant speed	II
11			

**WARNING:** LEDs may be turned by 90° or 180°, or mirrored, depending on the specific pump type.

During operation, the selected pump profile is indicated by green LEDs and the power level by yellow LEDs. **push button** 

## **Setting selection**

Pump profiles can be switched by pressing the integrated button. The pump profiles change in a closed loop in the order shown in the table.

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## **Error Display**

DISPLAY	ERROR
	Seized pump
	Too low power supply voltage
	Electric fault

## Prohibited pump positions



Permissible pump (actuator) positions



Pump wiring



socket for power supply (A) and signal transmission (B) – not used in this pump

power supply connector (A)

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