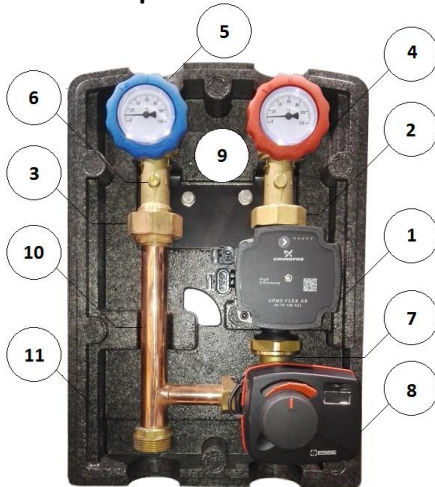


# PUMP GROUP FOR CENTRAL HEATING WITH 3-WAY MIXING VALVE AND COMBINED ACTUATOR AND CONSTANT FLOW TEMPERATURE CONTROLLER WITH RANGE 5-95°C - ENBOX MIX 3D CONSTANS- DN25

## 1. Description of the device



1. GRUNDFOS PUMP UMP3 AUTO L 25-70 130 (MOUNTING LENGTH 130 mm) WITH POWER CABLE WITH ANGULAR PLUG 1 METRE LONG.
2. SHUT-OFF BALL VALVE ON HIGH PARAMETER WITH THERMOMETER SOCKET
3. SHUT-OFF BALL VALVE ON LOW PARAMETER WITH THERMOMETER SOCKET
4. CONTACT THERMOMETER ON LOW PARAMETER, DIAMETER 50 MM MEASURING RANGE 0-120 ° C
5. CONTACT THERMOMETER ON HIGH PARAMETER DIAMETER 50 MM MEASURING RANGE 0-120 ° C
6. RETURN VALVE WITH MANUAL LOCK ON LOW PARAMETER
7. 3-WAY MIXING VALVE WITH FLUENTLY REGULATED BY-PASS
8. OPTIONAL: ROTATING SERVOMOTOR COOPERATING WITH A MIXING VALVE.
9. WALL HANDLE
10. TUBE PART ON LOW PARAMETER
11. INSULATION MADE OF EPP (WYM: 430x300x170mm)

## 2. Technical data

Parameter	Value
Dimensions	430 x 300 x 170 mm
Connection to the installation side	Internal thread 1"
Connection to the boiler side	External thread 1 ¼"
Maximal temperature of work	110°C
Maximal working pressure	6 bar
Medium	Water
Wheelbase	125 mm
Insulating material	EPDM
Type of pump	GRUNDFOS UMP3 AUTO L 25-70 130
Mounting length of the pump	130 mm
Supply voltage	230V ~50Hz
Energy intensity marker EEI	≤ 0,20
Insulation material	Foamed polypropylene EPP
Scale of thermometers	0-120°C
Return valve	1 pcs. built into the thermometer on the low parameter
Actuator model	CRA 111
Kvs factor for a 3-way valve	8,0
Temperature regulation range	5-95°C
Actuator voltage	230 V
Torque	6 Nm
Material of the body of the pump group	Brass and steel components

\* We reserve the right to change or amend the technical data not included in the table.

## 3. Summary of the power of the pump depending on the assumed temperature difference of the heating medium.

NAME OF THE PUMP GROUP	FLOW FROM THE HEAT SOURCE [m³/h]	POWER OF THE PUMP AT ΔT=5°C [kW]	POWER OF THE PUMP AT ΔT=7°C [kW]	POWER OF THE PUMP AT ΔT=10°C [kW]	POWER OF THE PUMP AT ΔT=15°C [kW]	POWER OF THE PUMP AT ΔT=20°C [kW]	POWER OF THE PUMP AT ΔT=25°C [kW]
ENBOX SIMPLE - DN25	2,58	15,0	21,0	30,0	45,0	60,0	75,0
ENBOX TM 2043 -DN25	1,89	11,0	15,4	22,0	33,0	44,0	55,0
ENBOX TM 3560 -DN25	1,42	8,3	11,6	16,5	24,8	33,0	41,3
ENBOX MIX 3D - DN25	2,21	12,9	18,0	25,7	38,6	51,4	64,3
ENBOX MIX 3D PREMIUM DN25	2,40	14,0	19,5	27,9	41,9	55,8	69,8
<b>MIX 3D CONSTANS -DN25</b>	<b>2,40</b>	<b>14,0</b>	<b>19,5</b>	<b>27,9</b>	<b>41,9</b>	<b>55,8</b>	<b>69,8</b>
ENBOX MIX 4D HYBRID	2,45	14,2	19,9	28,5	42,7	57,0	71,2

\* We reserve the right to change or amend the technical data.

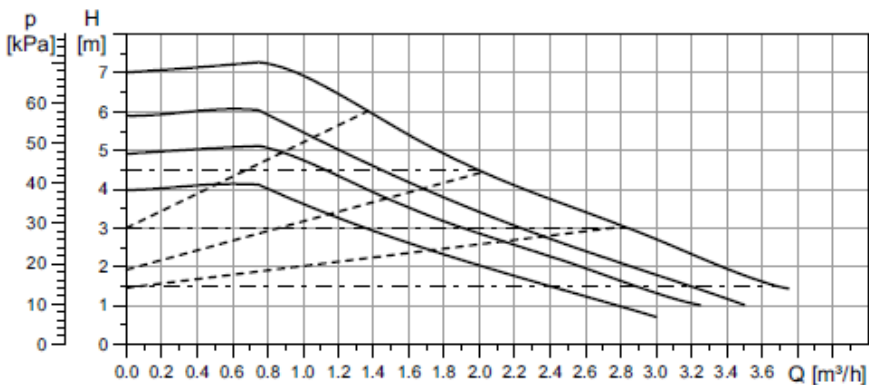
#### 4. Installation of the device

Pump group must be installed in a place where it is isolated from the surroundings. The group cannot be subjected to very high temperatures, such as occur, for example, during welding or soldering. Group should be installed only after such works. After installation the pressure test should be carried out to check for leaks in the threaded connections. After the pressure test, if there are no leaks, installation can be filled.

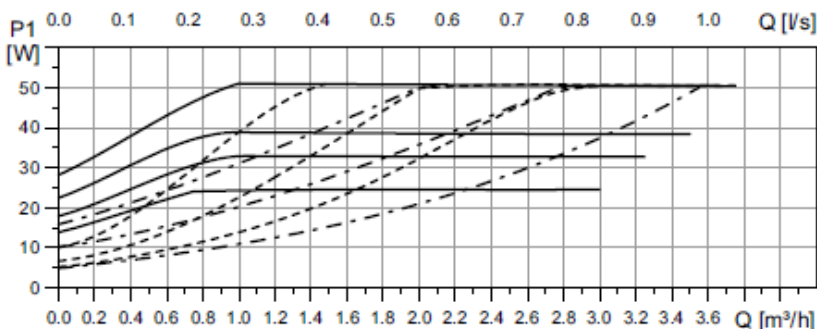
#### 5. Pump groups characteristics

Pump groups characteristics (depending on the setting of the parameter of the pump)

Characteristics Q(H)

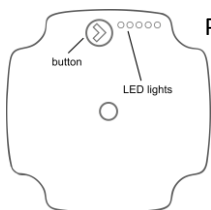


Energy consumption characteristics



Line type	Description
—————	Constant Curve
- - - - -	Proportional Pressure
- . - . -	Constant Pressure

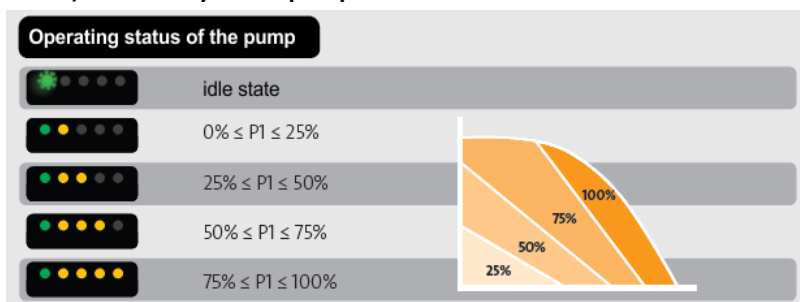
#### 6. Monitoring the work of the pump:



Pump Interface (front panel) is designed in such way, that its operation and monitoring its work is clear and simple. It is controlled by one button. With 5 LEDs we are able to determine:

- The efficiency of the pump,
- The state of pump failure,
- The setting of the pump.

##### a) efficiency of the pump



b) alarm state

Display	Display	Indication	Pump operation	Counter action
One red LED + one yellow LED (LED 5)		Rotor is blocked.	Trying to start again every 1.33 seconds.	Wait or deblock the shaft.
One red LED + one yellow LED (LED 4)		Supply voltage too low.	Only warning, pump runs.	Control the supply voltage.
One red LED + one yellow LED (LED 3)		Electrical error.	Pump is stopped because of low supply voltage or serious failure.	Control the supply voltage / Exchange the pump.

c) setting of the work of the pump

