meting UPM3

instelstand		11 ventielen geopend	
		l/hr	Watt
0	prop. Aut. Adpt.	838	16,5
1	const. Pres. Aut. Adpt.	845	17,5
5	constant pres. 1	560	7,5
6	constant pres. 2	824	17,5
7	constant pres. 3	1010	30

	PWM Aansturing UMR	0%		13%		25%	
		11 ventielen geopend					
PWM A		l/hr	Watt	l/hr	Watt	l/hr	Watt
12		0	0	301	2	386	3
13		0	0	117	2	260	3
14		0	0	240	2	360	4
		1 ventiel geopend					
PWM A		l/hr	Watt	l/hr	Watt	l/hr	Watt
12		0	0	46	2	62	2
13		0	0	57	2	67	2,5
14		0	0	65	2	90	2,5

	PWM 12	
	PWM start 30	10
	met kleine afwijking L/h	100
30 + 10	bij één aangestuurde groep 100 l/hr	
30 + 10 + 10	bij 2 groepen 200l/hr	
30 + 10 + 10 + 10	bij 3 groepen 300l/hr	
30 + 10 + 10 + 10 + 10	bij 4 groepen 400l/hr	

voorstel is een extra item bij settings pomp   basis is start 30% (

PWM A profil

The pump runs o
the current PWM
The speed decrea
PWM equals 0, th

PWM profile	UPM3
A1	1.0
A2	1.5
A3 (max.)	2.0
MAX	UPM3
A1	1.0
A2	1.5
A3	2.0

l/hr	Watt	l/hr	Watt	l/hr	Watt	l/hr	Watt	l/hr	Watt	l/hr	Watt
98	3,5	115	5	144	7,5	175	10	210	15,5	229	19
114	4	138	5,5	163	9	187	12	235	19	255	24,5
118	4,5	143	6,5	191	11	222	15,5	290	24,5	290	31

10	10	10
200	300	400

(instelbaar tussen 0 en 100%)

e (heating)

n constant speed curves depending on
value.

ases when the PWM value increases. If
he pump runs at maximum speed.

	Head [m]		
XX-20	UPM3 XX-50	UPM3 XX-70	UPM3 XX-75
3	5	5	
4	6	6	
5	7	7.5	
XX-20	UPM3 XX-50	UPM3 XX-70	UPM3 XX-75
3	5	5	
4	6	6	
5	7	7.5	

Constant pressure

The head (pressure) is kept constant, irrespective of the heat demand.

The duty point of the pump moves out or in on the selected constant-pressure curve depending on the heat demand in the system.

- CP1: lowest constant-pressure curve
- CP2: intermediate constant-pressure curve
- CP3: highest constant-pressure curve
- AUTO$_{ADAPT}$: highest to lowest constant-pressure curve.

The AUTO$_{ADAPT}$ function enables the pump to control the pump performance automatically within a defined performance range:

- adjusting the pump performance to the size of the system.
- adjusting the pump performance to the variations in load over time.

In constant pressure AUTO$_{ADAPT}$, the pump is set to constant-pressure control.

Overview of operating panel control modes

All UPM3 HYBRID variants can be controlled with the button on the operating panel.

The LEDs on the operating panel shows the control mode.

Related information

Changing the control mode

Ambient and liquid temperature

UPM3 HYBRID

This pump is either for external PWM signal control with profile A or C or internal control with three control modes with $AUTO_{ADAPT}$ (AA).

Control mode	LED1 green	LED2 green	LED3 yellow	LED4 yellow	LED5 yellow
PP AA	●				
CP AA		●			
PP1	●		●		
PP2	●		●	●	
PP3	●		●	●	●
CP1		●	●		
CP2		●	●	●	
CP3		●	●	●	●
CC1			●		
CC2			●	●	
CC3			●	●	●
PWM C signal off		●[1]	●	●	●
PWMC signal on		●[2]	●	●	●
PWM A curve 1 signal off	●[1]		●		
PWM A curve 1 signal on	●[2]		●		
PWM A curve 2 signal off	●[1]		●	●	
PWM A curve 2 signal on	●[2]		●	●	
PWM A curve 3 signal off	●[1]		●	●	●
PWM A curve 3 signal on	●[2]		●	●	●

[1] 1 flash per second.

[2] 12 flashes per second.