

GRUNDFOS HVAC OEM UPM3 SOLAR

UPM3 Solar is an OEM high efficient circulator offering flexible solutions for thermal solar systems now and in the future. It is designed to work both with and without PWM signal, allowing you to upgrade your systems without having to change the controller.

For Thermal Solar Systems with or without externally PWM speed control using Mini Superseal signal cable connection

Via user interface or as factory pre-set it might runs in one of

- 4 Constant Curve (runs without PWM signal)
- 4 PWM solar profile C curves (stops without PWM signal)

Exceeding benchmark level of the Ecodesign requirements in 2015, $EEL \leq 0.20$ EN 16297/3



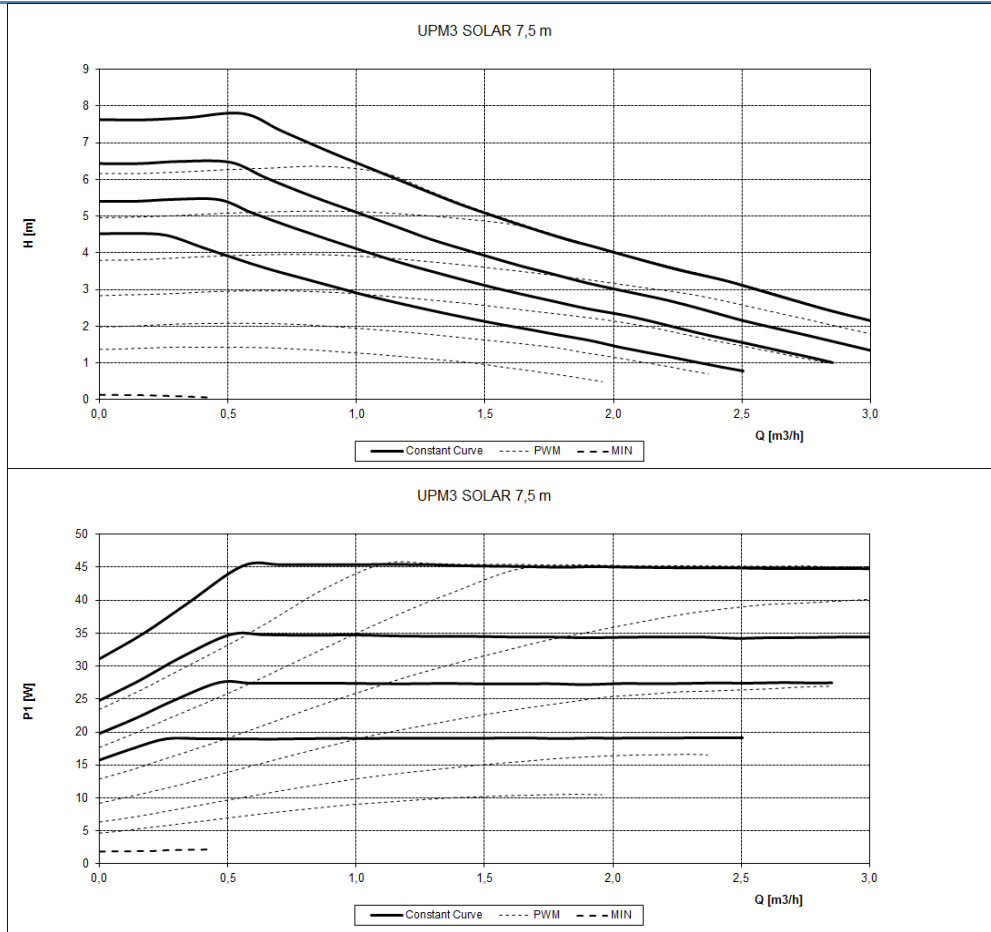
CONSTANT CURVE		PWM PROFILE C (SOLAR)	
<p>Constant curve The pump runs on a constant curve which means that it runs at a constant speed or power.</p>		<p>PWM Profile C (solar) The pump runs on constant speed curves depending on the current PWM value. Speed will increase with increasing PWM value. If PWM equals 0, the pump stops.</p>	
<p>Constant Curve 1</p>		<p>PWM Profile C 1</p>	
<p>Constant Curve 2</p>		<p>PWM Profile C 2</p>	
<p>Constant Curve 3</p>		<p>PWM Profile C 3</p>	
<p>Constant Curve 4/MAX</p>		<p>PWM Profile C 4/MAX</p>	

Operation conditions

Maximum ambient temperature	+70 °C
Maximum media temperature	+ 110°C on cast iron housings (short peaks up to 130°C)
Maximum system pressure:	1 MPa (10 bar)
Minimum inlet pressure	0.05 MPa (0.5 bar) at 95 °C liquid temperature
Minimum media temperature	+ 0 °C
Relative air humidity	Maximum 95 %
Storage temperature	-40°C to +75°C
Nominal supply voltage	EU: 1 x 230 V + 10 %/- 15 %, 50 Hz
Minimum supply voltage	160 VAC (with reduced performance)
Motor protection:	The motor is protected by the electronics in the control box and requires no external motor protection.

Subject to alterations

UPM3 SOLAR 15-75 130, 25-75 130, 25-75 180 1 x 230 V, 50 Hz



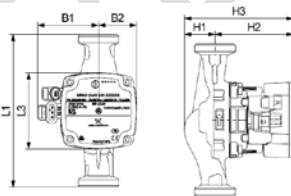
Ecodesign 2015 ready
High Efficiency

EEI ≤ 0,20 Part 3
P_{L,avg} ≤ 20 W

Electrical data, 1 x 230 V, 50 Hz

			Selected curve	H _{nom}	P _{1nom}
Speed	P ₁ [W]	I _{1/1} [A]	Curve 1	4,5 m	19 W
Min.	6	0,08	Curve 2	5,5 m	28 W
Max.	45	0,45	Curve 4	7,5 m	45 W

Dimensional sketches and control box position



Control box position

Pump type	Dimensions [mm]							Connections	Weight [kg]
	L1	L3	B1	B2	H1	H2	H3		
UPM3 15-75 130	130	90	72	45	36	92	128	G1	1,8
UPM3 25-75 130	130	90	72	45	36	92	128	G1 ½	1,9
UPM3 25-75 180	180	90	72	45	36	92	128	G1 ½	2,0

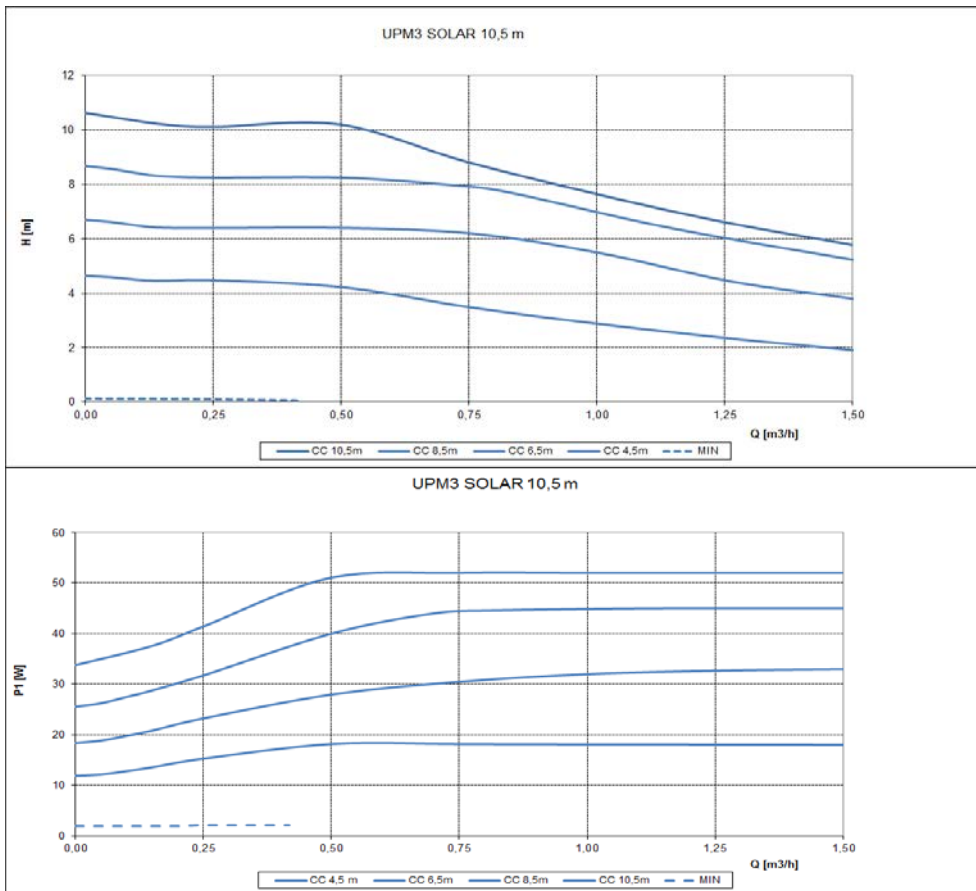
Technical data

System pressure:	Max. 1.0 MPa (10 bar)	Enclosure class:	IPX4D
Minimum inlet pressure:	0.05 MPa (0.50 bar) at 95 °C liquid temperature	Motor protection:	No external needed
Liquid temperature:	+2 °C to +110 °C (TF 110)	Approval and marking:	VDE,CE

SOP planned III/2014

Subject to alterations

UPM3 SOLAR 15-105 130, 25-105 130, 25-105 180 1 x 230 V, 50 Hz



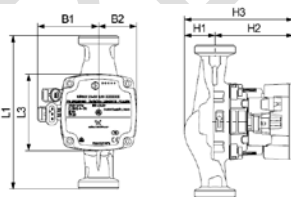
Ecodesign 2015 ready
High Efficiency

EEI ≤ 0,20 Part 3
P_{L,avg} ≤ 23 W

Electrical data, 1 x 230 V, 50 Hz

			Selected curve	H _{nom}	P _{1nom}
Speed	P ₁ [W]	I _{1/1} [A]	Curve 1	10,5 m	52 W
Min.	2	0,04	Curve 2	8,5 m	45 W
Max.	52	0,56	Curve 3	6,5 m	33 W
			Curve 4	4,5 m	18 W

Dimensional sketches and control box position



Control box position

Pump type	Dimensions [mm]							Connections	Weight [kg]
	L1	L3	B1	B2	H1	H2	H3		
UPM3 15-105 130	130	90	72	45	25	101	128	G1	2,3
UPM3 25-105 130	130	90	72	45	25	101	128	G1 ½	2,4
UPM3 25-105 180	180	90	72	45	25	101	128	G1 ½	2,5

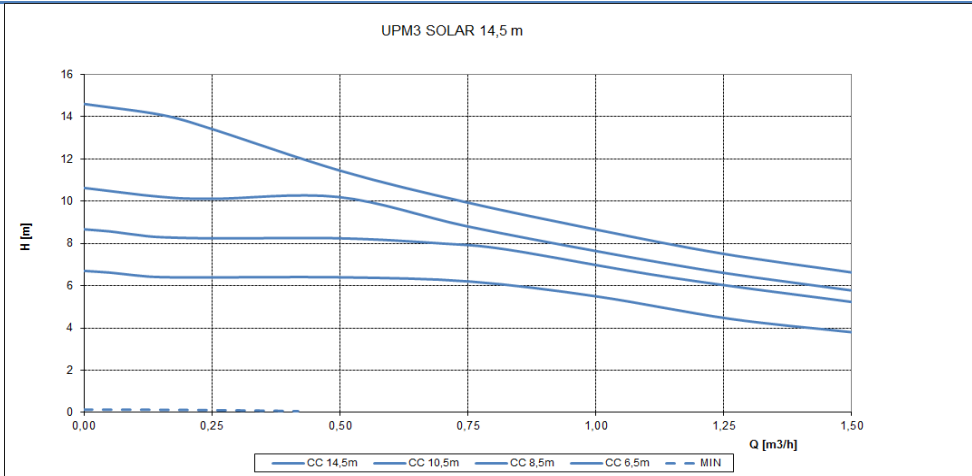
Technical data

System pressure:	Max. 1.0 MPa (10 bar)	Enclosure class:	IPX4D
Minimum inlet pressure:	0.05 MPa (0.50 bar) at 95 °C liquid temperature	Motor protection:	No external needed
Liquid temperature:	+2 °C to +110 °C (TF 110)	Approval and marking:	VDE,CE

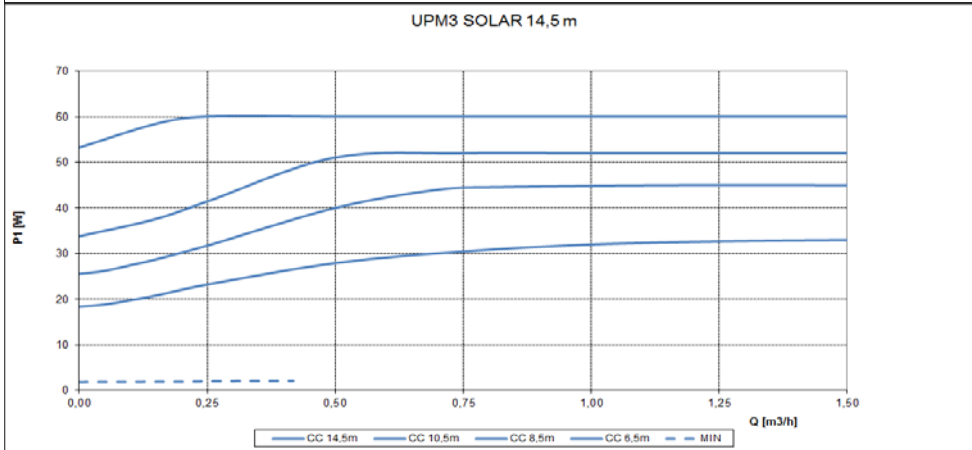
SOP planned 1/2015

Subject to alterations

UPM3 SOLAR 15-145 130, 25-145 130, 25-145 180 1 x 230 V, 50 Hz



Ecodesign 2015 ready
High Efficiency

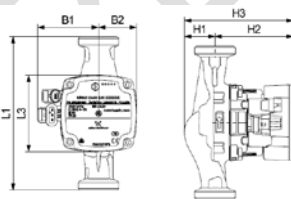


EEI ≤ 0,20 Part 3
P_{L,avg} ≤ 28 W

Electrical data, 1 x 230 V, 50 Hz

			Selected curve	H _{nom}	P _{1nom}
Speed	P ₁ [W]	I _{1/1} [A]	Curve 1	14,5 m	60 W
Min.	2	0,04	Curve 2	10,5 m	52 W
Max.	60	0,56	Curve 3	8,5 m	45 W
			Curve 4	6,5 m	33 W

Dimensional sketches and control box position



Control box position

Pump type	Dimensions [mm]							Connections	Weight [kg]
	L1	L3	B1	B2	H1	H2	H3		
UPM3 15-145 130	130	90	72	45	25	101	128	G1	2,3
UPM3 25-145 130	130	90	72	45	25	101	128	G1 ½	2,4
UPM3 25-145 180	180	90	72	45	25	101	128	G1 ½	2,5

Technical data

System pressure:	Max. 1.0 MPa (10 bar)	Enclosure class:	IPX4D
Minimum inlet pressure:	0.05 MPa (0.50 bar) at 95 °C liquid temperature	Motor protection:	No external needed
Liquid temperature:	+2 °C to +110 °C (TF 110)	Approval and marking:	VDE,CE

SOP planned I/2015

Subject to alterations