

## DATA SHEET

### DUO 600/200 N PR Thermal Store with immersed DHW tank

	<b>Main Features</b>	
	Application	Storage of thermal energy for DHW and space heating.
	Description	Combination Thermal Store with immersed stainless steel DHW tank; a tight separating plate increases seasonal performance factor of a heat pump.
	Working fluid	Water, water/glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (thermal store), water (immersed DHW tank).
	Thermal store Code	<b>19133</b>
	Insulation Code	<b>19321</b>
	<b>Energy Efficiency Data (as per EC Regulation No. 812/2013)</b>	
	<b>with insulation</b>	
	Energy efficiency class	N/A
	Standing loss	100 W
	Storage volume	546 l
<b>Technical Data</b>		
Total volume	559 l	
Fluid volume in thermal store	372 l	
Immersed DHW tank volume	174 l	
Heat exchanger (HX) volume	13 l	
Heat exchanger surface area	2.4 m <sup>2</sup>	
Max. working temp. in thermal store	95 °C	
Max. working temp. in DHW tank	95 °C	
Max. working temperature in heat exchanger	95 °C	
Max. working pressure in thermal store	3 bar	
Max. working pressure in DHW tank	6 bar	
Max. working pressure in HX	10 bar	
<b>Materials</b>		
Thermal store material	S235JR	
DHW tank material	AISI 304	
Exchanger material	S235JR+N	
Tank perimeter insulation	fleece	
Perimeter insulation's outer surface	hard polystyrene	
Top and bottom tank insulation	fleece	
<b>Dimensions, tipping height, insulation thickness, weight</b>		
Tank diameter	650 mm	
Tank diameter with insulation	850 mm	
Tank overall height	1935 mm	
Tipping height without insulation	1970 mm	
Tank perimeter insulation thickness	100 mm	
Bottom insulation thickness	50 mm	
Top insulations thickness	120 mm	
Empty weight without insulation	154 kg	
<b>Accessories</b>		
El. heating elements	types ETT-C, F, M, P	
Heating elements max. lenght	3 x 500 mm	
Electronic anode rod	code 13793	
Expansion vessel (drinking water)	type HW 8 l and larger	
<b>Spare Parts</b>		
Magnesium anode rod	code 19152	

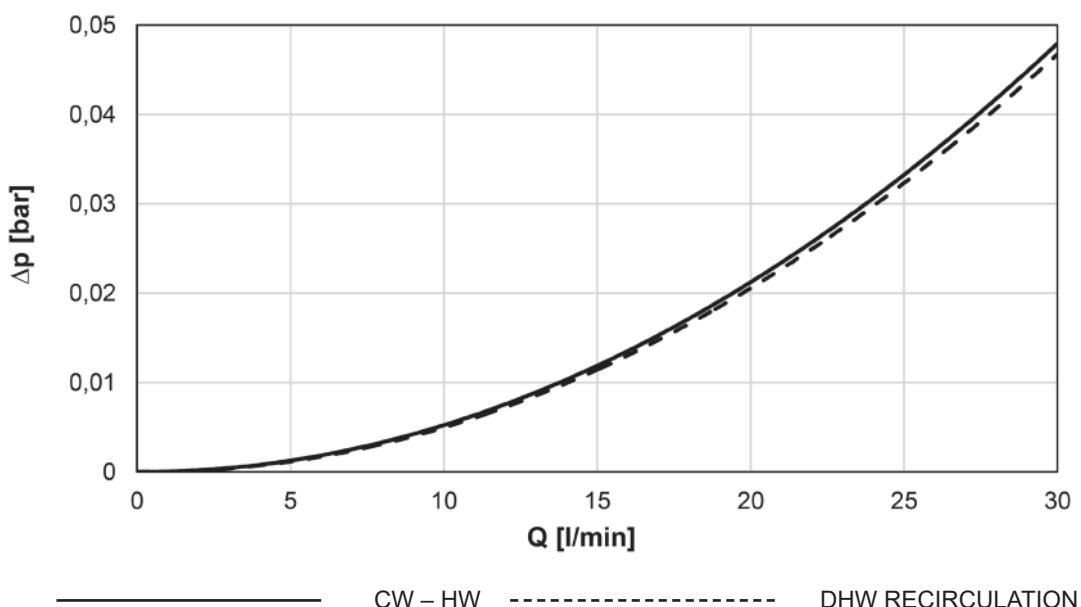
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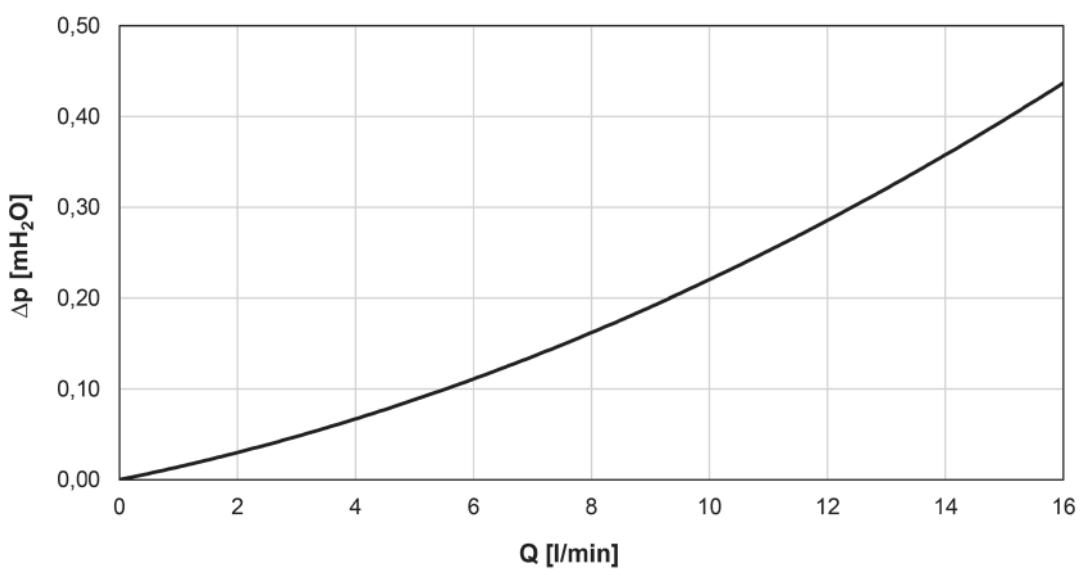
#### Volume of supplied DHW (heated from 10 °C to 40 °C)

Heated volume	entire			entire			above separating plate			entire		
Temperature in tank	60 °C			60 °C			60 °C			80 °C		
Backup heater	10 kW			none			10 kW			none		
Flow rate [l/min]	8	12	20	8	12	20	8	12	20	8	12	20
Hot water volume [l]	526	397	292	457	384	319	267	237	212	766	689	571

#### Graph of pressure drop versus flow in the DHW tank



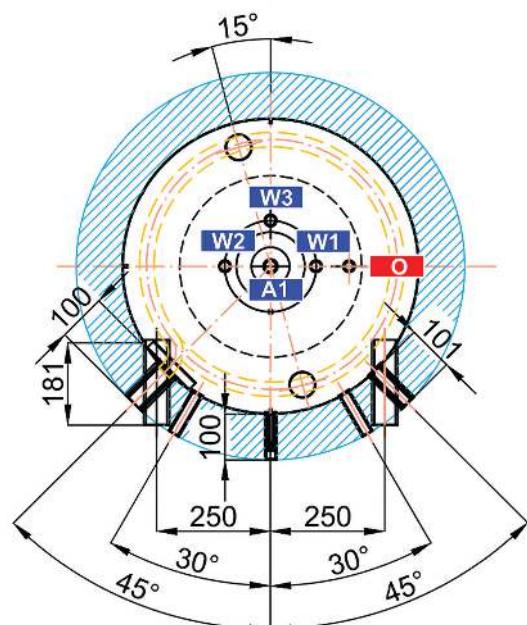
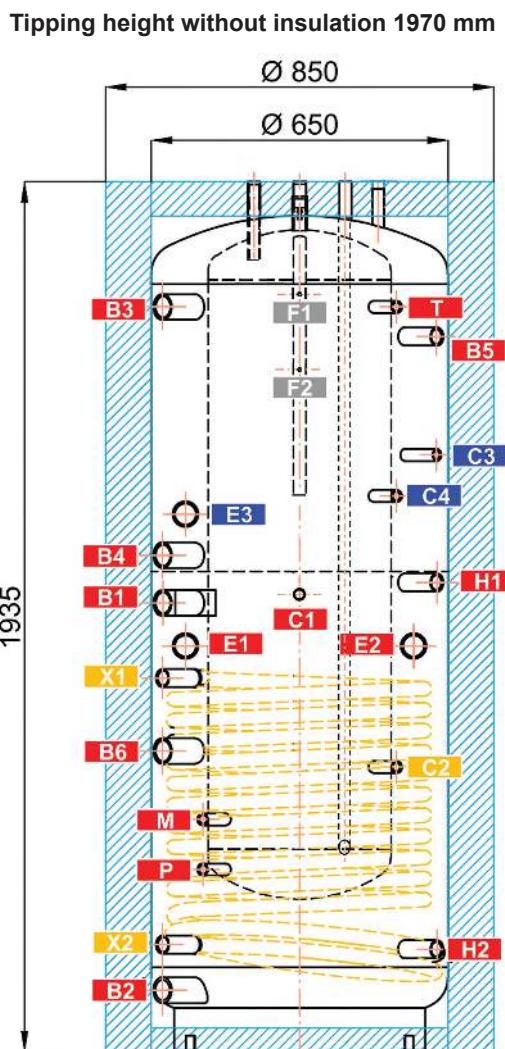
#### Graph of solar exchanger pressure losses



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#### Dimensions



#### CONNECTIONS

pos.	descriptions	connection	height [mm]
<b>Heat sources</b>			
<b>B1</b>	Incoming from heat source	G 6/4" F	985
<b>B2</b>	Return to heat source	G 6/4" F	135
<b>B3</b>	Incoming from heat source	G 6/4" F	1635
<b>B4</b>	Return to heat source	G 6/4" F	1090
<b>B5</b>	Incoming from heat source	G 1" F	1570
<b>B6</b>	Incoming from heat source	G 6/4" F	660
<b>Heating system</b>			
<b>H1</b>	Outlet to the heating circuit	G 1" F	1030
<b>H2</b>	Return from the heating circuit	G 1" F	225
<b>Solar system</b>			
<b>X1</b>	Incoming from solar collectors	G 1" F	820
<b>X2</b>	Return to solar collectors	G 1" F	235
<b>Electric heating elements</b>			
<b>E1</b>	Electric heating element for space heating	G 6/4" F	890
<b>E2</b>	Electric heating element for space heating	G 6/4" F	890
<b>E3</b>	Electric heating element for DHW heating	G 6/4" F	1180
<b>DHW heating</b>			
<b>W1</b>	Cold water	G 3/4" M	1935
<b>W2</b>	Hot water	G 3/4" M	1935
<b>W3</b>	Recirculation	G 3/4" M	1935
<b>A1</b>	Anode	G 3/4" F	1880
<b>Control and safety</b>			
<b>C1</b>	Temperature sensor – space heating	G 1/2" F	1000
<b>C2</b>	Temperature sensor – solar	G 1/2" F	625
<b>C3</b>	Temperature sensor – DHW heating	G 1/2" F	1310
<b>C4</b>	Temperature sensor – DHW heating	G 1/2" F	1220
<b>T</b>	Thermometer	G 1/2" F	1635
<b>M</b>	Pressure gauge	G 1/2" F	510
<b>P</b>	Safety valve	G 1/2" F	400
<b>Air release</b>			
<b>O</b>	Air vent valve	G 1/2" F	1910
<b>Other</b>			
<b>F1</b>	Attaching the pump station	M 6	1660
<b>F2</b>	Attaching the pump station	M 6	1500