DATA SHEET

DUO 1000/200 N PR Thermal Store with immersed DHW tank

Main Features	
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	**19149**
Insulation Code	**19329**

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
	with insulation
Energy efficiency class	N/A
Standing loss	129 W
Storage volume	885 l

Technical Data	
Total volume	903 l
Fluid volume in thermal store	711 l
Immersed DHW tank volume	174 l
Heat exchanger (HX) volume	18 l
Heat exchanger surface area	3.2 m²
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

Materials	
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

Dimensions, tipping height, insulation thickness, weight	
Tank diameter	800 mm
Tank diameter with insulation	1000 mm
Tank overall height	2080 mm
Tipping height without insulation	2120 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulations thickness	120 mm
Empty weight without insulation	195 kg

Accessories	
El. heating elements	types ETT-C, F, M, P
Heating elements max. lenght	3 x 700 mm
Electronic anode rod	code 13793
Expansion vessel (drinking water)	type HW 8 l and larger

Spare Parts	
Magnesium anode rod	code 19152

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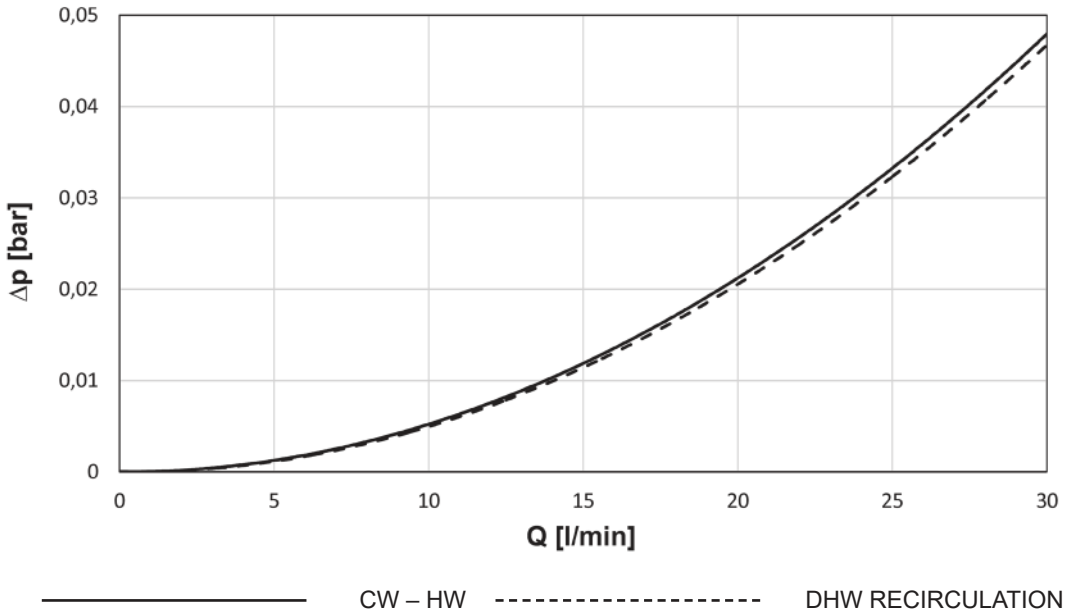
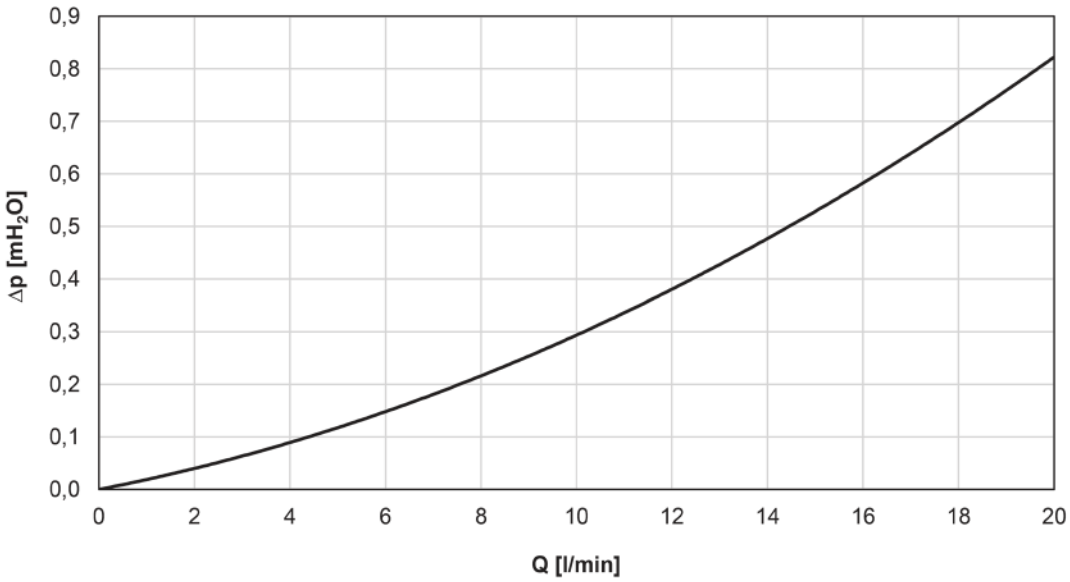
Volume of supplied DHW (heated from 10 °C to 40 °C)												
Heated volume	entire			entire			above separating plate			entire		
Temperature in tank	60 °C			60 °C			60 °C			80 °C		
Backup heater	10 kW			none			10 kW			none		
Flow rate [l/min]	8	12	20	8	12	20	8	12	20	8	12	20
Hot water volume [l]	**730**	**434**	**315**	**538**	**451**	**323**	**254**	**240**	**222**	**1002**	**859**	**665**

Graph of pressure drop versus flow in the DHW tank



Graph of solar exchanger pressure losses



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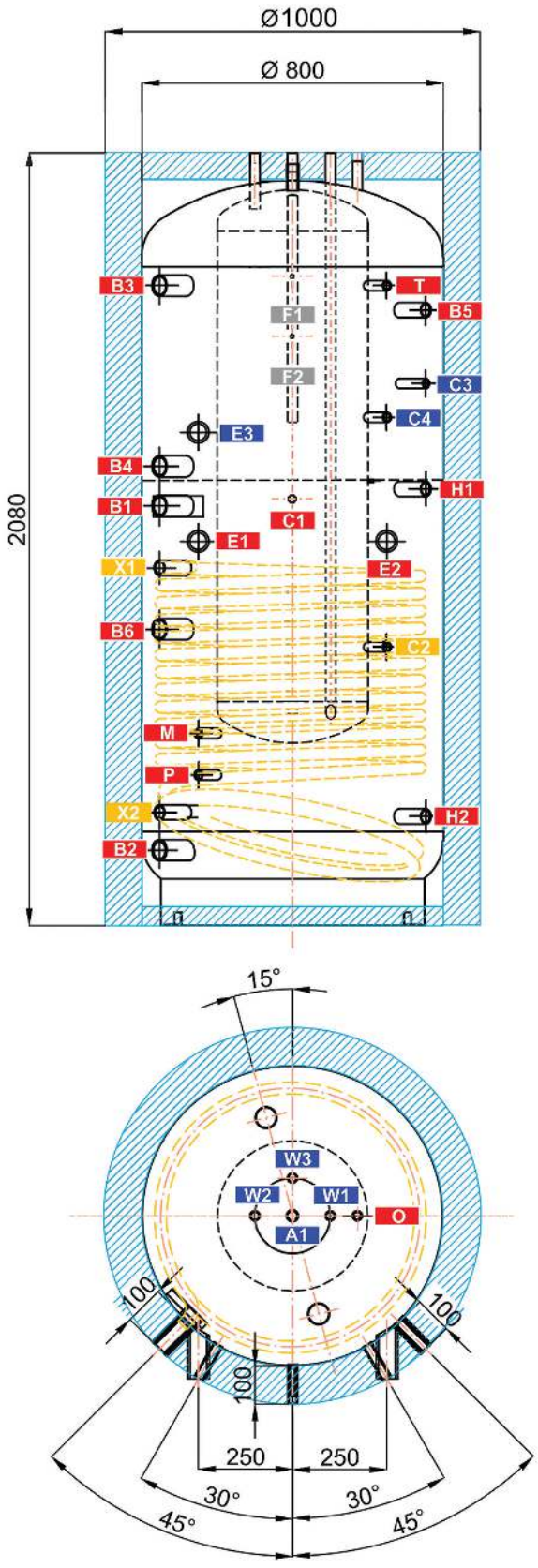
Dimensions

Tipping height without insulation 2120 mm



CONNECTIONS			
pos.	descriptions	connection	height [mm]
Heat sources			
B1	Incoming from heat source	G 6/4" F	1115
B2	Return to heat source	G 6/4" F	200
B3	Incoming from heat source	G 6/4" F	1700
B4	Return to heat source	G 6/4" F	1220
B5	Incoming from heat source	G 1" F	1635
B6	Incoming from heat source	G 6/4" F	785
Heating system			
H1	Outlet to the heating circuit	G 1" F	1160
H2	Return from the heating circuit	G 1" F	290
Solar system			
X1	Incoming from solar collectors	G 1“ F	950
X2	Return to solar collectors	G 1“ F	300
Electric heating elements			
E1	Electric heating element for space heating	G 6/4" F	1020
E2	Electric heating element for space heating	G 6/4" F	1020
E3	Electric heating element for DHW heating	G 6/4" F	1310
DHW heating			
W1	Cold water	G 3/4" M	2080
W2	Hot water	G 3/4" M	2080
W3	Recirculation	G 3/4" M	2080
A1	Anode	G 3/4" F	2025
Control and safety			
C1	Temperature sensor – space heating	G 1/2" F	1130
C2	Temperature sensor – solar	G 1/2" F	740
C3	Temperature sensor – DHW heating	G 1/2" F	1440
C4	Temperature sensor – DHW heating	G 1/2" F	1350
T	Thermometer	G 1/2" F	1700
M	Pressure gauge	G 1/2" F	510
P	Safety valve	G 1/2" F	400
Air release			
O	Air vent valve	G 1/2" F	2055
Other			
F1	Attaching the pump station	M 6	1725
F2	Attaching the pump station	M 6	1565