

DATA SHEET

DUO 1700/200 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	19145
Insulation Code	19357

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
	with insulation
Energy efficiency class	N/A
Standing loss	173 W
Storage volume	1660 l

Technical data	
Total volume	1682 l
Fluid volume in thermal store	1486 l
Immersed DHW tank volume	174 l
Heat exchanger (HX) volume	22 l
Heat exchanger surface area	4.0 m ²
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	1100 mm
Tank diameter with insulation	1300 mm
Tank overall height	2080 mm
Tipping height without insulation	2200 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulations thickness	120 mm
Empty weight without insulation	268 kg

Accessories	
El. heating elements	types ETT-C, F, M, P
Heating elements max. length	3 x 955 mm
Electronic anode rod	code 13793
Expansion vessel (drinking water)	type HW 8 l and larger

Spare Parts	
Magnesium anode rod	code 19152

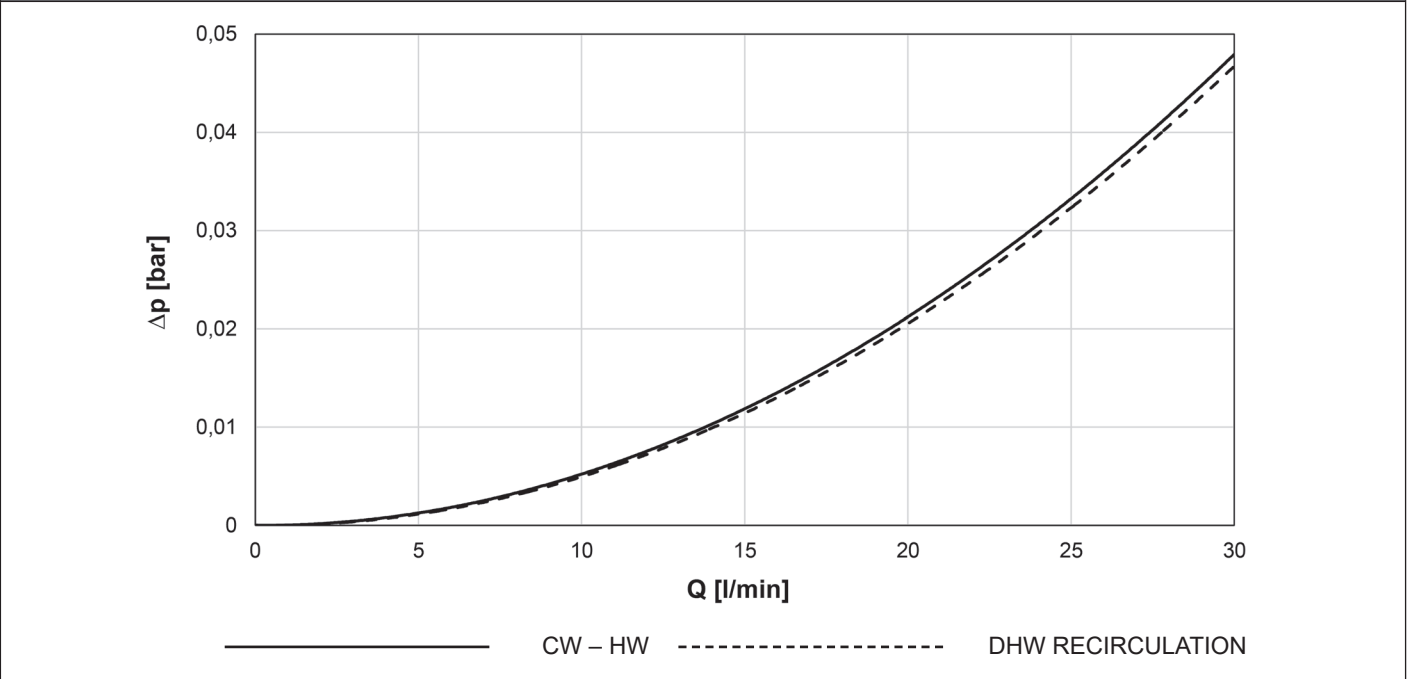
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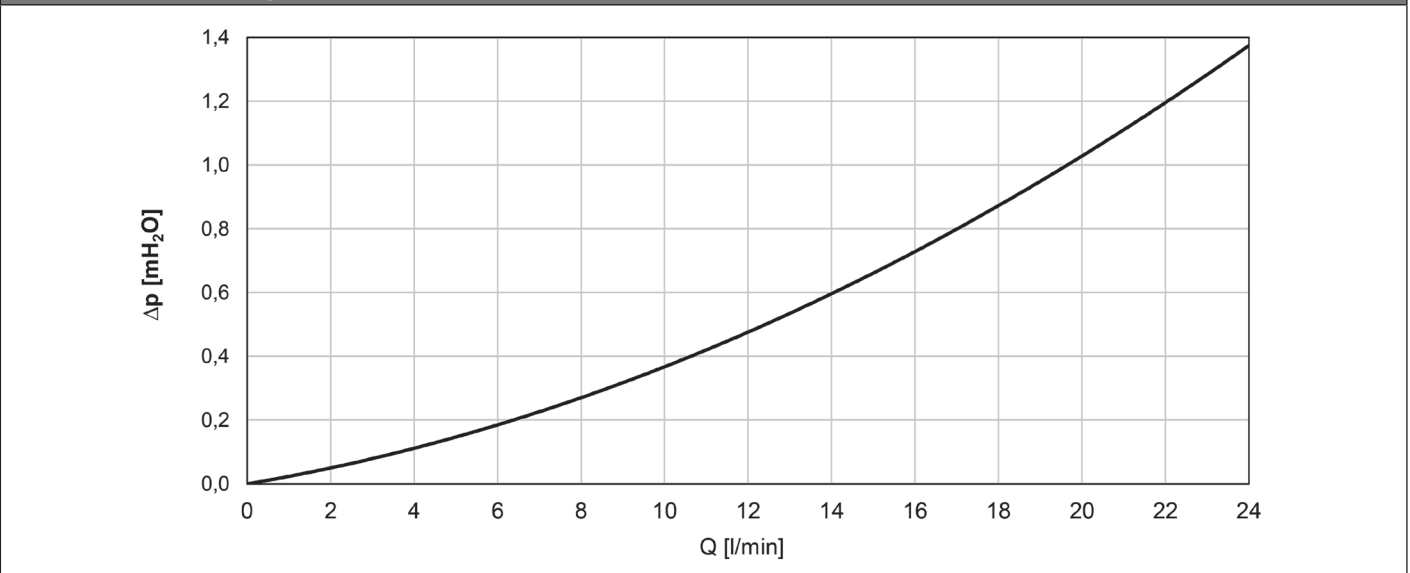
Volume of supplied DHW (heated from 10 °C to 40 °C)

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]	1238	562	347	791	468	326	271	242	220	1410	1077	667

Graph of pressure drop versus flow in the DHW tank



Graph of solar exchanger pressure losses

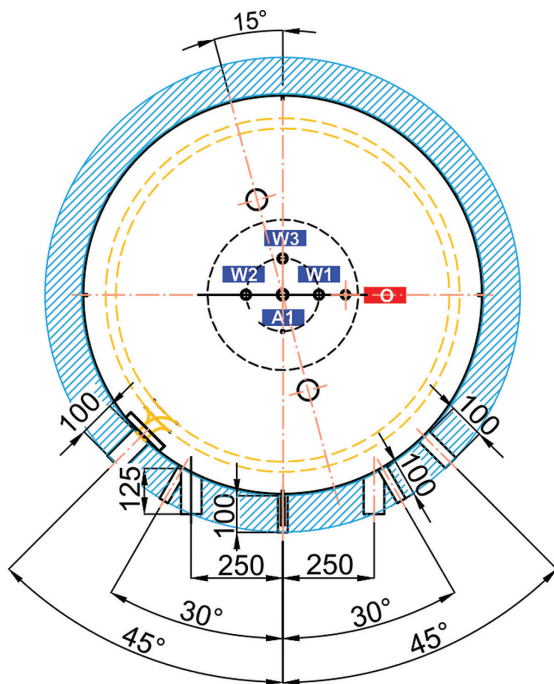
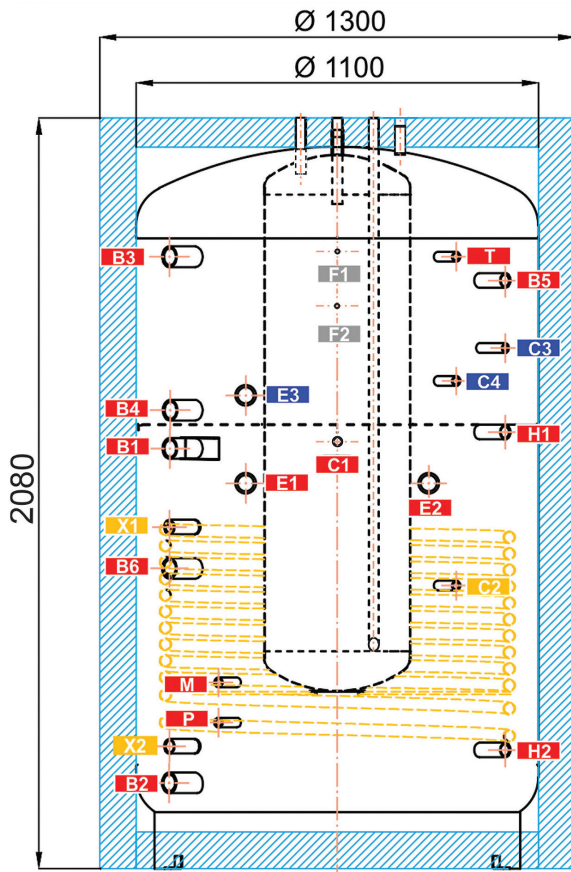


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Dimensions

Tipping height without insulation 2200 mm



CONNECTIONS

pos.	descriptions	connection	height [mm]
Heat sources			
B1	Incoming from heat source	G 6/4" F	1150
B2	Return to heat source	G 6/4" F	235
B3	Incoming from heat source	G 6/4" F	1675
B4	Return to heat source	G 6/4" F	1255
B5	Incoming from heat source	G 1" F	1610
B6	Incoming from heat source	G 6/4" F	820
Heating system			
H1	Outlet to the heating circuit	G 1" F	1195
H2	Return from the heating circuit	G 1" F	325
Solar system			
X1	Incoming from solar collectors	G 1" F	935
X2	Return to solar collectors	G 1" F	335
Electric heating elements			
E1	Electric heating element for space heating	G 6/4" F	1055
E2	Electric heating element for space heating	G 6/4" F	1055
E3	Electric heating element for DHW heating	G 6/4" F	1295
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	1165
C2	Temperature sensor – solar	G 1/2" F	775
C3	Temperature sensor – DHW heating	G 1/2" F	1425
C4	Temperature sensor – DHW heating	G 1/2" F	1335
T	Thermometer	G 1/2" F	1675
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	1700
F2	Attaching the pump station	M 6	1540