


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

	Main Features	
	Application	Combination thermal store with immersed stainless-steel DHW tank, fitted with a tight separating metal plate that increases seasonal coefficient of performance (SCOP) of a heat pump and the efficiency of a solar thermal system, with a solar heat exchanger in the lower tank section below the plate.
	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)**

Energy efficiency class	N/A
Static loss	129 W
Storage volume	885 l

**Technical data**

Total thermal store volume	903 l
Fluid volume in thermal store	711 l
Immersed DHW tank volume	174 l
Fluid volume in solar heat exchanger	18.0 l
Solar heat exchanger surface area	3.2 m <sup>2</sup>
Max. working temperature in thermal store	95 °C
Max. working temperature in immersed DHW tank	95 °C
Max. working temperature in solar heat exchanger	95 °C
Max. working pressure in thermal store	3 bar
Max. working pressure in immersed DHW tank	6 bar
Max. working pressure in solar heat exchanger	10 bar
Thermal store diameter	800 mm
Thermal store diameter with insulation	1000 mm
Thermal store overall height	2055 mm
Tipping height without insulation	2175 mm
Thermal store perimeter insulation thickness	100 mm
Thermal store bottom insulation thickness	50 mm
Thermal store top insulation thickness	100 mm
Empty weight without insulation	180 kg

**Materials**

Thermal store material	S235JR
Thermal store perimeter insulation	fleece
Immersed DHW tank	AISI 304
Thermal store outer surface insulation	PU leather
Top and bottom thermal store insulation	fleece
Solar heat exchanger	S235JR+N

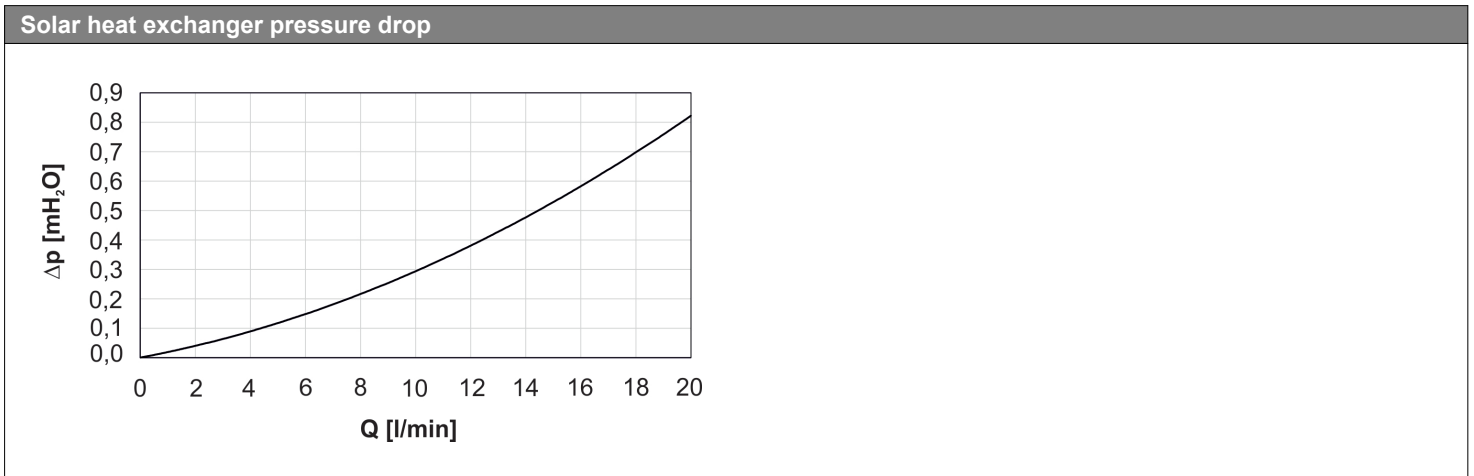
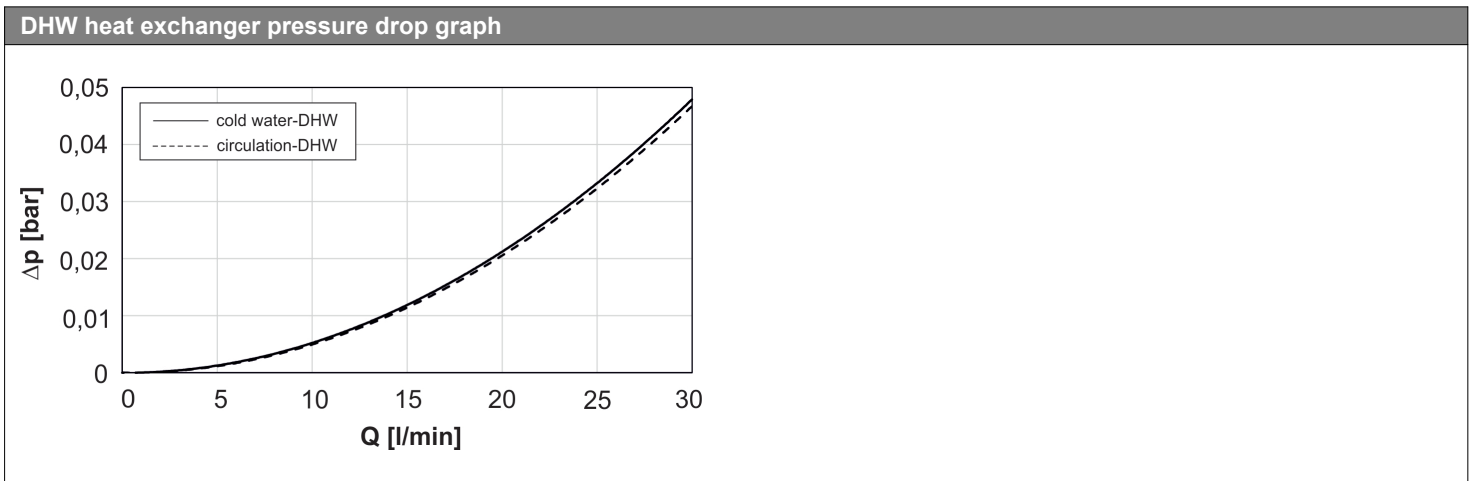
*Insulation thermal conductivity  $\lambda \leq 0.037$  W/mK, thermal resistance (short/long term) 150/100 °C, fire class E.*

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Accessories	
Electric heating element	types ETT-C, F2, M, P, U
Heating element max. length	700 mm
Electronic anode rod	code 13793
Expansion vessel	type HW 8 l and larger

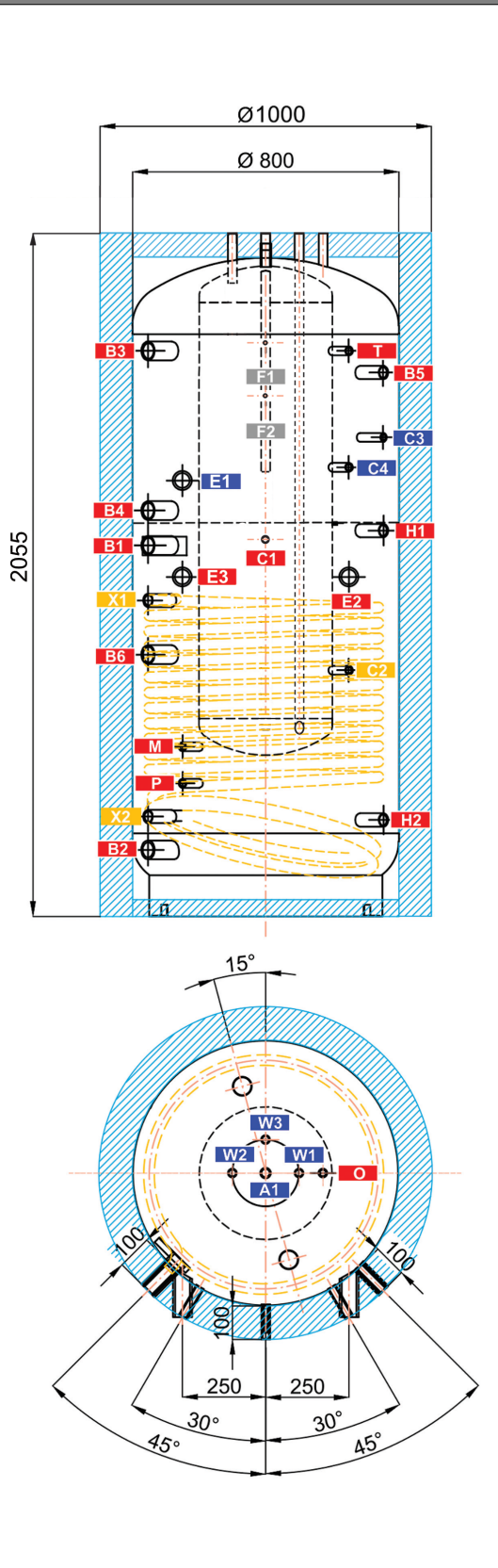
Spare parts (magnesium anode rods)	
Magnesium anode rod	code 19152

Volume of supplied DHW (heated from 10 °C to 40 °C)				
Heated volume	Temperature in thermal store	Backup heater	Flow rate [l/min]	Hot water volume [l]
Entire	60 °C	10 kW	8	730
			12	434
			20	315
Entire	60 °C	none	8	538
			12	451
			20	323
Above metal sheet	60 °C	10 kW	8	254
			12	240
			20	222
Entire	80 °C	none	8	1002
			12	859
			20	665



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**Dimensions**



**CONNECTIONS**

pos.	description	connection	height [mm]
<b>Heat sources</b>			
B1	Supply from heat source	G 6/4" F	1115
B2	Return to heat source	G 6/4" F	200
B3	Supply from heat source	G 6/4" F	1700
B4	Return to heat source	G 6/4" F	1220
B5	Supply from heat source	G 1" F	1635
B6	Supply from heat source	G 6/4" F	785
<b>Heating system</b>			
H1	Flow to heating system	G 1" F	1160
H2	Return from heating system	G 1" F	290
<b>Solar thermal system</b>			
X1	Supply from solar collectors	G 1" F	950
X2	Return to solar collectors	G 1" F	300
<b>Electric heating element</b>			
E1	El. heating element (DHW)	G 6/4" F	1310
E2	El. heating element (space heating)	G 6/4" F	1020
E3	El. heating element (space heating)	G 6/4" F	1020
<b>DHW heating</b>			
W1	Cold water	G 3/4" F	2055
W2	Domestic hot water	G 3/4" F	2055
W3	Recirculation	G 3/4" F	2055
A1	Anode	G 3/4" F	2025
<b>Control and safety</b>			
C1	Temperature sensor	G 1/2" F	1130
C2	Temperature sensor	G 1/2" F	740
C3	Temperature sensor	G 1/2" F	1440
C4	Temperature sensor	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
<b>Air discharge</b>			
O	Air vent valve	G 1/2" F	2055
<b>Pump station support</b>			
F1	Pump station support – upper	M6	1725
F2	Pump station support – lower	M6	1565