

DUO 750/200 N PR Thermal Store with immersed DHW tank

		Main Features
		<p>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.</p>
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		19135
Insulation code		19327

Energy Efficiency Data (as per EC Regulation No. 812/2013)

Energy efficiency class	N/A
Static loss	116 W
Storage volume	742 l

Technical data

Total thermal store volume	757 l
Fluid volume in thermal store	568 l
Immersed DHW tank volume	174 l
Fluid volume in solar heat exchanger	15.0 l
Solar heat exchanger surface area	2.5 m ²
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	750 mm
Thermal store diameter with insulation	950 mm
Thermal store overall height	1955 mm
Tipping height without insulation	2015 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	166 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 λ ≤ 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				635 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	527		
			12	407		
			20	302		
Entire	60 °C	none	8	464		
			12	390		
			20	324		
Above metal sheet	60 °C	10 kW	8	262		
			12	238		
			20	217		
Entire	80 °C	none	8	906		
			12	788		
			20	584		
DHW heat exchanger pressure drop graph						
Solar heat exchanger pressure drop						

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Dimensions			
CONNECTIONS			
pos.	description	connection	height [mm]
Heat sources			
B1	Supply from heat source	G 6/4" F	960
B2	Return to heat source	G 6/4" F	155
B3	Supply from heat source	G 6/4" F	1655
B4	Return to heat source	G 6/4" F	1065
B5	Supply from heat source	G 1" F	1590
B6	Supply from heat source	G 6/4" F	635
Heating system			
H1	Flow to heating system	G 1" F	1005
H2	Return from heating system	G 1" F	245
Solar thermal system			
X1	Supply from solar collectors	G 1" F	795
X2	Return to solar collectors	G 1" F	255
Electric heating element			
E1	El. heating element (DHW)	G 6/4" F	1155
E2	El. heating element (space heating)	G 6/4" F	865
E3	El. heating element (space heating)	G 6/4" F	865
DHW heating			
W1	Cold water	G 3/4" F	1955
W2	Domestic hot water	G 3/4" F	1955
W3	Recirculation	G 3/4" F	1955
A1	Anode	G 3/4" F	1925
Control and safety			
C1	Temperature sensor	G 1/2" F	975
C2	Temperature sensor	G 1/2" F	615
C3	Temperature sensor	G 1/2" F	1285
C4	Temperature sensor	G 1/2" F	1195
T	Thermometer	G 1/2" F	1655
M	Pressure gauge	G 1/2" F	510
P	Safety valve	G 1/2" F	400
O	Air vent valve	G 1/2" F	1955
Air discharge			
F1	Pump station support – upper	M6	1680
F2	Pump station support – lower	M6	1520