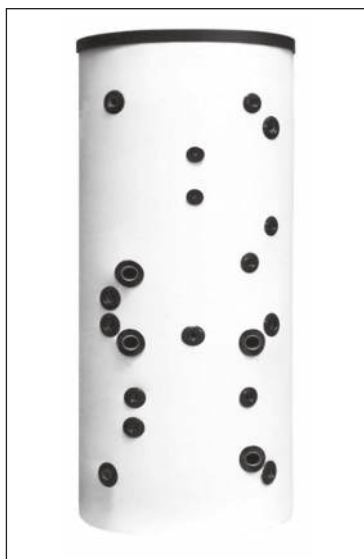


DATA SHEET

DUO 390/130 N P 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	19131
Insulation Code	19318

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
	with insulation
Energy efficiency class	N/A
Standing loss	87 W
Storage volume	396 l

Technical Data	
Total volume	396 l
Fluid volume in thermal store	273 l
Immersed DHW tank volume	123 l
Max. working temp. in thermal store	95 °C
Max. working temp. in DHW tank	95 °C
Max. working pressure in thermal store	3 bar
Max. working pressure in DHW tank	6 bar

Materials	
Thermal store material	S235JR
DHW tank material	AISI 304
Tank perimeter insulation	fleece
Perimeter insulation's outer surface	PU leather
Top and bottom tank insulation	fleece

Dimensions, tipping height, insulation thickness, weight	
Tank diameter	550 mm
Tank diameter with insulation	750 mm
Tank overall height	1910 mm
Tipping height without insulation	1950 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulations thickness	120 mm
Empty weight without insulation	102 kg

Accessories	
El. heating elements	types ETT-C, F, M, P
Heating elements max. length	4 x 500 mm
Electronic anode rod	code 13793
Expansion vessel (drinking water)	type HW 8 l and larger

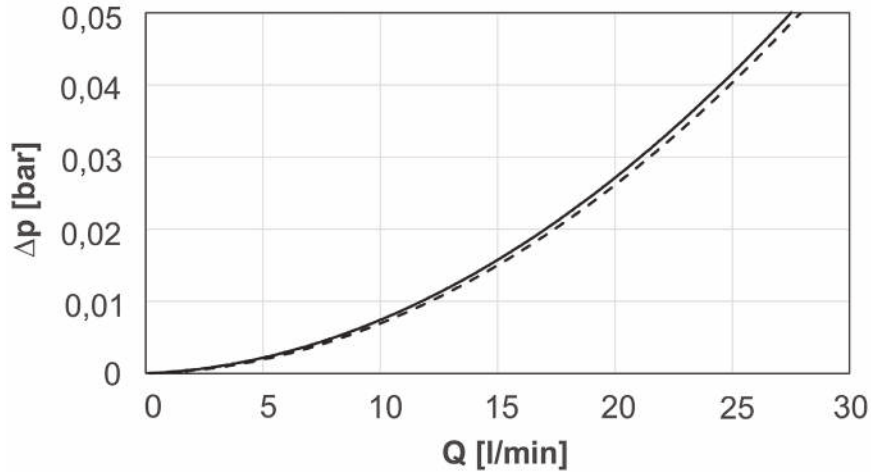
Spare Parts	
Magnesium anode rod	code 19152

DATA SHEET

DUO 390/130 N P Thermal Store with immersed DHW tank

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]	331	223	174	277	254	197	199	176	157	487	458	351

Graph of pressure drop versus flow in the DHW tank


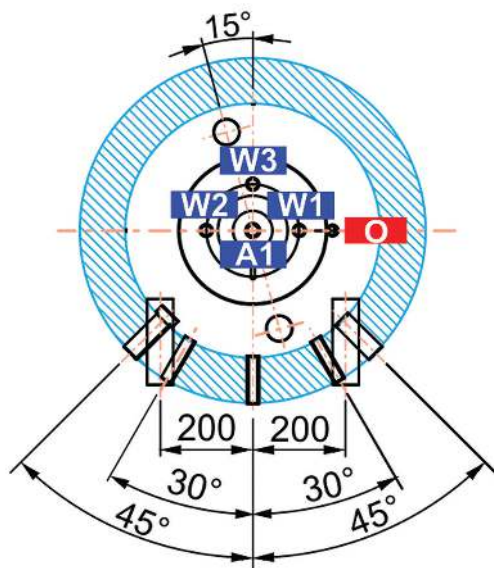
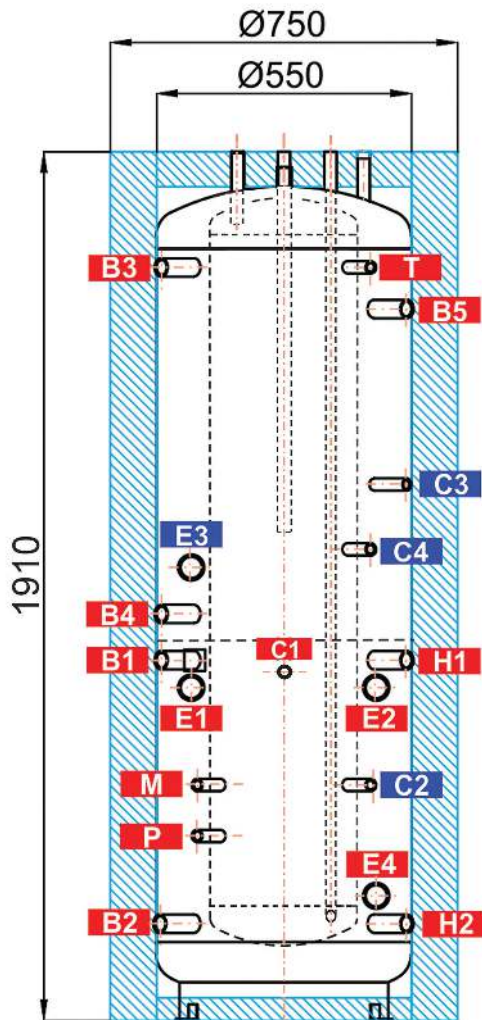
CW - HW
 DHW RECIRCULATION

DATA SHEET

DUO 390/130 N P Thermal Store with immersed DHW tank

Dimensions

Tipping height without insulation 1950 mm



CONNECTIONS

pos.	descriptions	connection	height [mm]
Heat sources			
B1	Incoming from heat source	G 1" F	780
B2	Return to heat source	G 1" F	210
B3	Incoming from heat source	G 1" F	1630
B4	Return to heat source	G 1" F	880
B5	Incoming from heat source	G 1" F	1540
Heating system			
H1	Outlet to the heating circuit	G 1" F	780
H2	Returnable from the heating circuit	G 1" F	210
Electric heating elements			
E1	Electric heating element for space heating	G 6/4" F	720
E2	Electric heating element for space heating	G 6/4" F	720
E3	Electric heating element for DHW heating	G 6/4" F	980
E4	Electric heating element for PV system	G 6/4" F	270
DHW heating			
W1	Cold water	G 3/4" M	1910
W2	Hot water	G 3/4" M	1910
W3	Circulation	G 3/4" M	1910
A1	Anode	G 3/4" F	1855
Control and safety			
C1	Temperature sensor – space heating	G 1/2" F	750
C2	Temperature sensor – DHW heating	G 1/2" F	510
C3	Temperature sensor – DHW heating	G 1/2" F	1160
C4	Temperature sensor – DHW heating	G 1/2" F	1020
T	Thermometer	G 1/2" F	1630
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	1885