


HSK 1000 P Combination Thermal Store

	Main Features	
	Application	Combination thermal store with DHW heating in an integrated stainless-steel heat exchanger, fitted with a tight separating metal plate that increases Seasonal coefficient of performance (SCOP) of a heat pump. Thermal stores are supplied uninsulated. Thermal insulation is available as a separate item, see the codes below.
	Working fluid	Water (heat exchanger), water; water-glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1 (thermal store)).
	Thermal store code	14555
	Insulation code	18843

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

	valid for a thermal store with insulation
Energy efficiency class	N/A
Static loss	129 W
Storage volume	925 l

Technical data

Total thermal store volume	925 l
Fluid volume in thermal store	904 l
Fluid volume above separating plate	314 l
Fluid volume below separating plate	590 l
Fluid volume of DHW heat exchanger above the separating plate	21.0 l
Surface area of DHW heat exchanger above the separating plate	6.0 m ²
Max. working temperature in thermal store	95 °C
Max. working temperature in DHW heat exchanger	95 °C
Max. working pressure in thermal store	4 bar
Max. working pressure in DHW heat exchanger	10 bar
Thermal store diameter	800 mm
Thermal store diameter with insulation	1000 mm
Thermal store overall height	2080 mm
Tipping height without insulation	2120 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	130 kg

Accessories

Electric heating element	types ETT-C, P, F2, M, U
Heating element max. length	755 mm

Materials

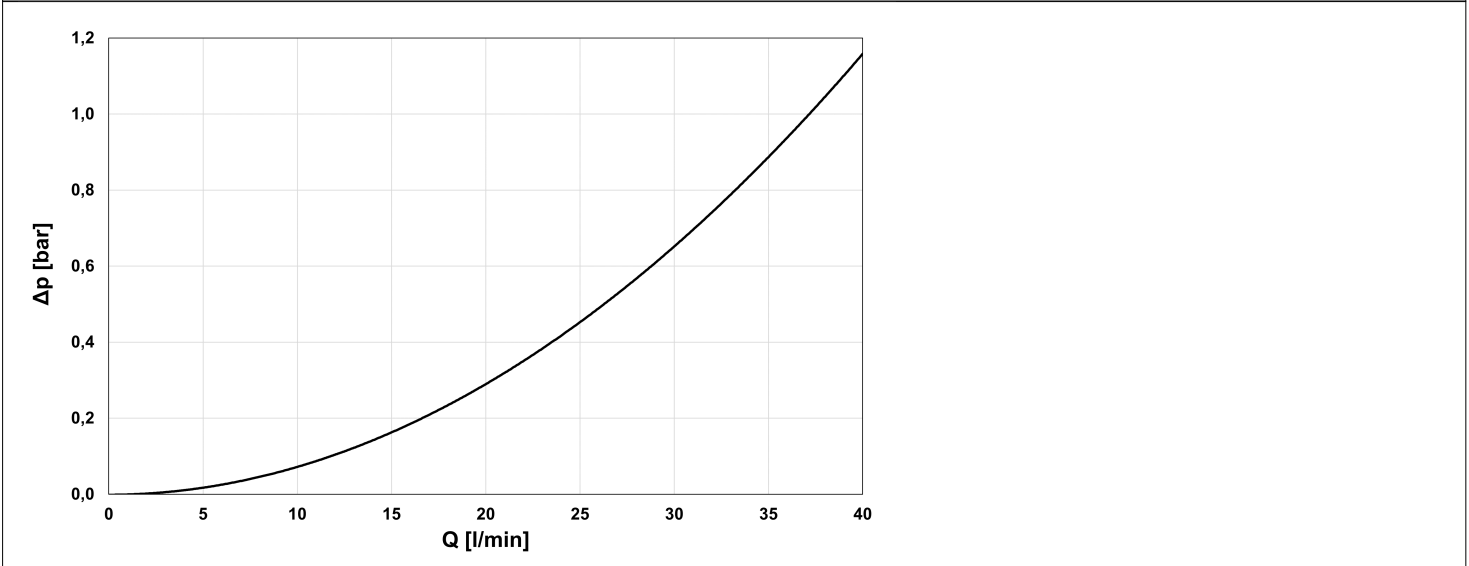
Thermal store material	S235JR
Thermal store perimeter insulation	fleece
Thermal store outer surface insulation	hard polystyrene
Top and bottom thermal store insulation	fleece
DHW heat exchanger	AISI 316 L

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

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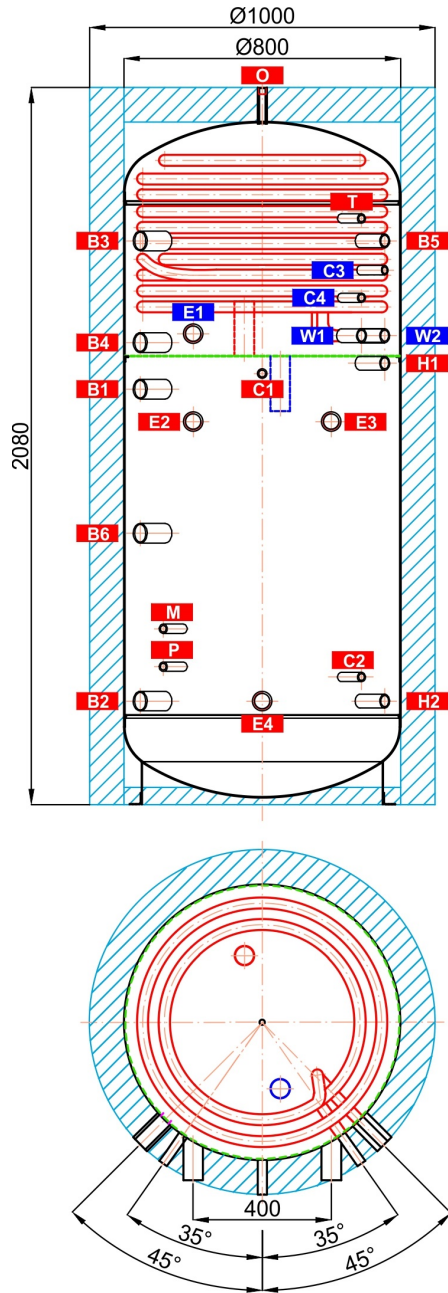
Volume of supplied DHW (heated from 10 °C to 40 °C)				
Heated volume	Temperature in thermal store	Backup heater	Flow rate [l/min]	Hot water volume [l]
Entire	50 °C	10 kW	8	342
			12	303
			20	238
Entire	50 °C	none	8	277
			12	243
			20	146
Above metal sheet	50 °C	10 kW	8	209
			12	178
			20	114
Entire	60 °C	10 kW	8	1086
			12	672
			20	698
Entire	60 °C	none	8	592
			12	523
			20	546
Above metal sheet	60 °C	10 kW	8	394
			12	281
			20	264
Entire	80 °C	none	8	993
			12	948
			20	844

DHW heat exchanger pressure drop graph



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Dimensions



CONNECTIONS

pos.	description	connection	height [mm]
Heat sources			
B1	Supply from heat source	G 6/4" F	1205
B2	Return to heat source	G 6/4" F	300
B3	Supply from heat source	G 6/4" F	1635
B4	Return to heat source	G 6/4" F	1340
B5	Supply from heat source	G 1" F	1635
B6	Supply from heat source	G 6/4" F	787
Heating system			
H1	Flow to heating system	G 1" F	1280
H2	Return from heating system	G 1" F	300
Electric heating element			
E1	El. heating element (DHW)	G 6/4" F	1365
E2	El. heating element (space heating)	G 6/4" F	1110
E3	El. heating element (space heating)	G 6/4" F	1110
E4	El. heating element (for PV system)	G 6/4" F	300
DHW heating			
W1	Cold water	G 1" M	1360
W2	Domestic hot water	G 1" M	1360
Control and safety			
C1	Temperature sensor	G 1/2" F	1250
C2	Temperature sensor	G 1/2" F	370
C3	Temperature sensor	G 1/2" F	1550
C4	Temperature sensor	G 1/2" F	1470
T	Thermometer	G 1/2" F	1700
M	Pressure gauge	G 1/2" F	510
P	Safety valve	G 1/2" F	400
Air discharge			
O	Air vent valve	G 1/2" F	2080