

HSK 750 P Combination Thermal Store

		Main Features
		
		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.
	Application	
	Working fluid	Water (heat exchanger), water; water-glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1 (thermal store).
	Thermal store code	14178
	Insulation code	18840

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

	valid for a thermal store with insulation
Energy efficiency class	N/A
Static loss	117 W
Storage volume	760 l

Technical data

Total thermal store volume	760 l
Fluid volume in thermal store	739 l
Fluid volume above separating plate	304 l
Fluid volume below separating plate	435 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	750 mm
Thermal store diameter with insulation	950 mm
Thermal store overall height	1975 mm
Tipping height without insulation	2030 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	120 kg

Accessories

Electric heating element	types ETT-C, P, F2, M, U
Heating element max. length	700 mm

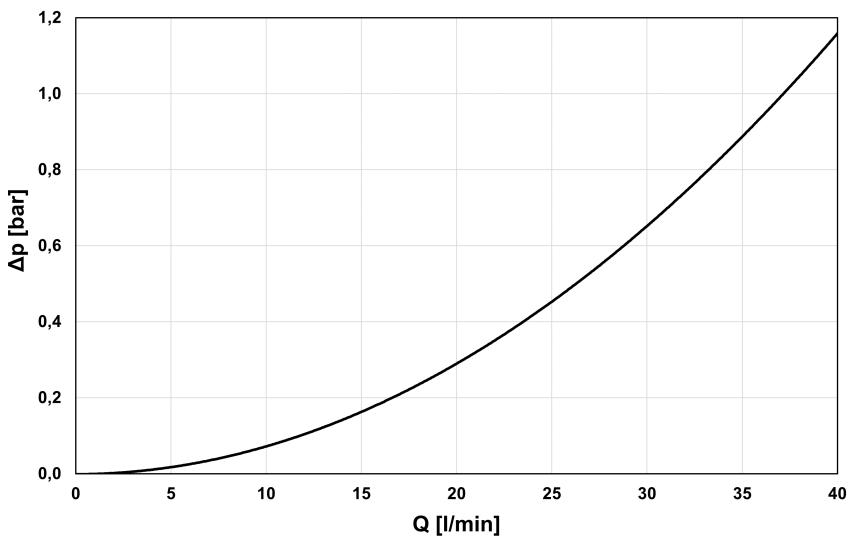
Materials

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 $\lambda \leq 0.037 \text{ W/mK}$, 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	254
			12	227
			20	160
Entire	50 °C	none	8	263
			12	212
			20	137
Above metal sheet	50 °C	10 kW	8	198
			12	152
			20	107
Entire	60 °C	10 kW	8	953
			12	644
			20	648
Entire	60 °C	none	8	548
			12	503
			20	530
Above metal sheet	60 °C	10 kW	8	455
			12	313
			20	280
Entire	80 °C	none	8	874
			12	824
			20	774

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	1010		
B2	Return to heat source	G 6/4" F	255		
B3	Supply from heat source	G 6/4" F	1590		
B4	Return to heat source	G 6/4" F	1115		
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	1055		
H2	Return from heating system	G 1" F	255		
Electric heating element					
E1	El. heating element (DHW)	G 6/4" F	1175		
E2	El. heating element (space heating)	G 6/4" F	915		
E3	El. heating element (space heating)	G 6/4" F	915		
E4	El. heating element (for PV system)	G 6/4" F	255		
DHW heating					
W1	Cold water	G 1" M	1135		
W2	Domestic hot water	G 1" M	1135		
Control and safety					
C1	Temperature sensor	G 1/2" F	1025		
C2	Temperature sensor	G 1/2" F	335		
C3	Temperature sensor	G 1/2" F	1335		
C4	Temperature sensor	G 1/2" F	1245		
T	Thermometer	G 1/2" F	1655		
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	1975		

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