


HSK 250 PB Combination Thermal Store

Main Features	
	Application Combination thermal store with integrated stainless-steel heat exchanger and a tight separating metal sheet is intended for heat accumulation and DHW heating. Thanks to its modified design and the tight separating metal sheet, just one zone valve is sufficient for switching between heating the upper and lower tank sections. The tank is suitable for installations with heat pumps and RegulusBOX indoor unit. The tank insulation is not included in supply and shall be ordered separately, see the code 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 20294
	Insulation code 20296

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
	valid for a thermal store with insulation
Energy efficiency class	C
Static loss	71 W
Storage volume	260 l

Technical data	
Total thermal store volume	260 l
Fluid volume in thermal store	239 l
Fluid volume above separating plate	175 l
Fluid volume below separating plate	64 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	450 mm
Thermal store diameter with insulation	650 mm
Thermal store overall height	1850 mm
Tipping height without insulation	1860 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	76 kg

Accessories	
Electric heating element	types ETT-A, D2, R, S, C, F2, M, P, U
Heating element max. length	500 mm

HSK 250 PB Combination Thermal Store

Materials

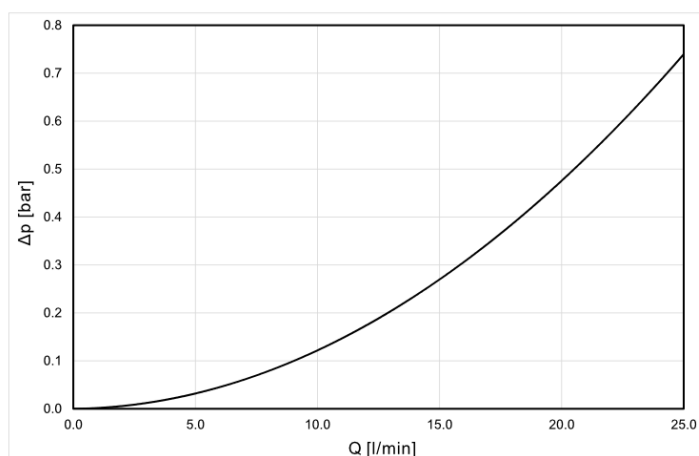
Thermal store material	S235JR
Thermal store perimeter insulation	fleece
Thermal store outer surface insulation	hard polystyrene
Top and bottom thermal store insulation	fleece
DHW heat exchanger	AISI 316 L

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

Volume of supplied DHW (heated from 10 °C to 40 °C)

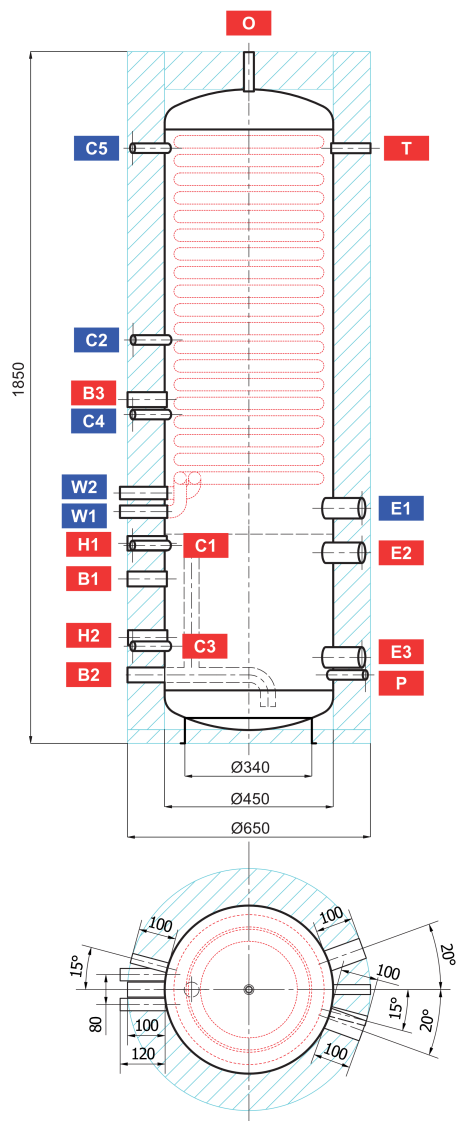
Heated volume	Temperature in thermal store	Backup heater	Flow rate [l/min]	Hot water volume [l]
Entire	50 °C	10 kW	8	191
			12	154
			20	123
Entire	50 °C	none	8	151
			12	125
			20	100
Above metal sheet	50 °C	10 kW	8	176
			12	142
			20	116
Entire	60 °C	10 kW	8	265
			12	244
			20	203
Entire	60 °C	none	8	210
			12	196
			20	156
Above metal sheet	60 °C	10 kW	8	244
			12	222
			20	192

DHW heat exchanger pressure drop graph



HSK 250 PB Combination Thermal Store

Dimensions



CONNECTIONS

pos.	description	connection	height [mm]
Heat sources			
B1	Supply from heat source	G 1" F	440
B2	Return to heat source	G 1" F	183
B3	Supply from heat source	G 1" F	920
Heating system			
H1	Flow to heating system	G 1" F	536
H2	Return from heating system	G 1" F	283
Electric heating element			
E1	El. heating element (DHW)	G 6/4" F	630
E2	El. heating element (space heating)	G 6/4" F	510
E3	El. heating element (space heating)	G 6/4" F	230
DHW heating			
W1	Cold water	G 1" M	620
W2	Domestic hot water	G 1" M	670
Control and safety			
C1	Temperature sensor	G 1/2" F	530
C2	Temperature sensor	G 1/2" F	1080
C3	Temperature sensor	G 1/2" F	260
C4	Temperature sensor	G 1/2" F	880
C5	Temperature sensor	G 1/2" F	1593
T	Thermometer	G 1/2" F	1593
P	Safety valve	G 1/2" F	183
Air discharge			
O	Air vent valve	G 1/2" F	1850