

HSK 600 PV Combination Thermal Store



Main features	
Application	accumulation of thermal energy for space and DHW heating
Description	this combination Thermal Store utilizes a heat pump with PV panels as a heat source for both space and DHW heating; DHW is being prepared in 2 integrated stainless-steel heat exchangers; a tightly fitting separating metal plate increases the heat pump's seasonal coefficient of performance, a dedicated PV heating element is placed in the lower tank section; more electric heating elements can be installed if needed
Working fluid	water (DHW heat exchanger) water; water/glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (thermal store)

Code	
Thermal Store	16158
Insulation	18839

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
HSK 600 PV with insulation	
Energy efficiency class	N/A
Standing loss	99 W
Storage volume	557 l

Technical Data	
Total tank volume	557 l
Fluid volume in tank	525 l
Fluid volume above the separating plate	235 l
Fluid volume below the separating plate	290 l
Upper DHW heat exchanger volume	21 l
Lower DHW heat exchanger volume	11 l
DHW heat exchanger surface area	6 m ²
Plocha výměníku TV pod dělicím plechem	3 m ²
Max. working temperature in Thermal Store	95 °C
Max. working temperature in DHW HE	95 °C
Max. working pressure in Thermal Store	4 bar
Max. working pressure in DHW HE	10 bar

Tank Materials	
Tank material	S235JR
DHW heat exchanger material	AISI 316 L

Insulation Materials	
Tank perimeter insulation	fleece
Tank perimeter insulation outer surface	hard polystyrene
Top and bottom tank insulation	fleece

Dimensions, Tipping height, Insulation thickness, Weight	
Tank diameter	650 mm
Tank diameter with insulation	850 mm
Tank overall height	1935 mm
Tipping height without insulation	2050 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulation thickness	120 mm
Empty weight without insulation	157 kg

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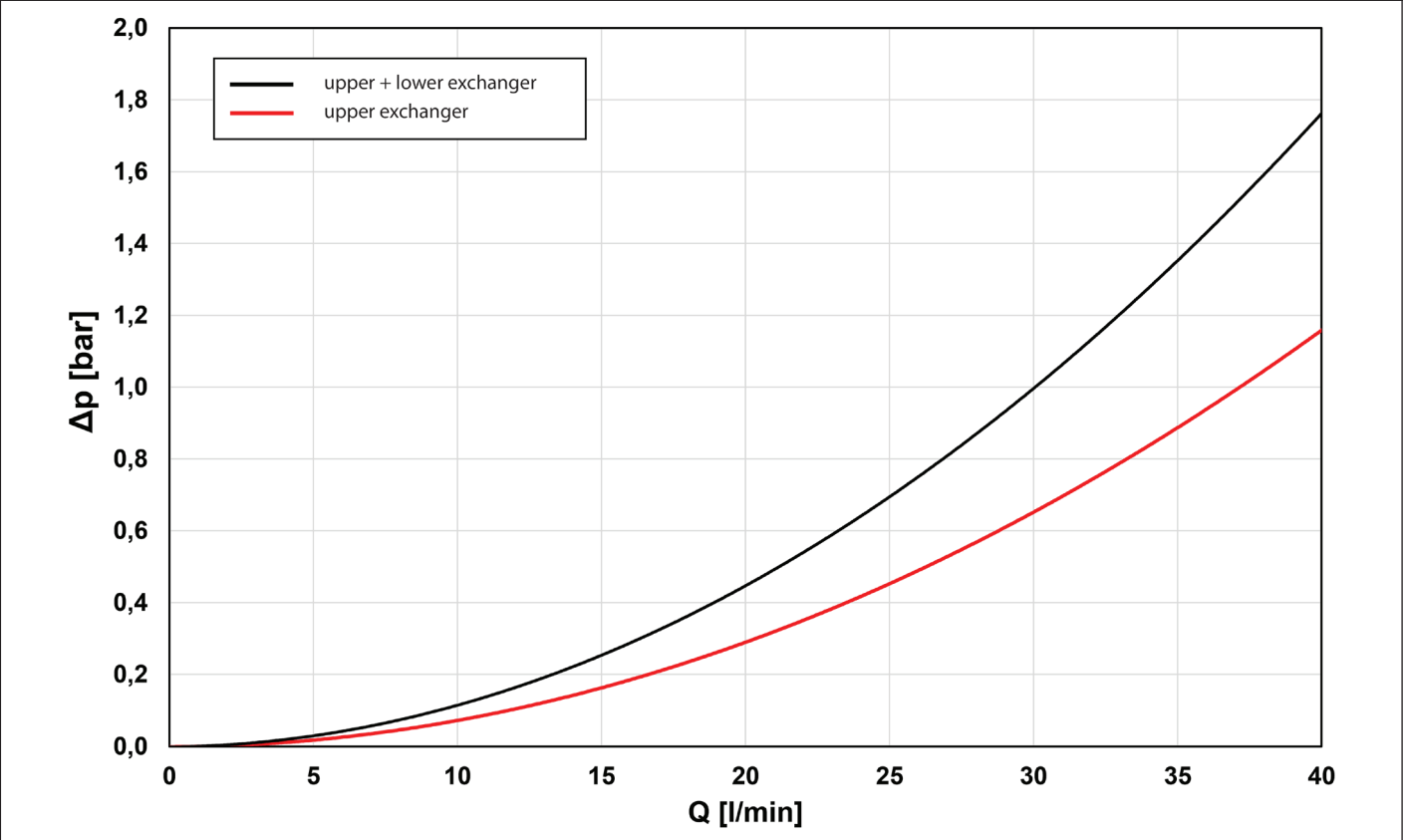
Accessories

El. heating element (models)	ETT-C, P, M
Heating elem. max. length / output	4x 555 mm / 6 kW

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

Heated volume	entire			entire			above metal sheet			entire			entire			above metal sheet			entire		
Temperature in tank	50 °C			50 °C			50 °C			60 °C			60 °C			60 °C			80 °C		
Backup heater	10 kW			none			10 kW			10 kW			none			10 kW			none		
Flow rate [l/min]	8	12	20	8	12	20	8	12	20	8	12	20	8	12	20	8	12	20	8	12	20
Hot water volume [l]	315	287	213	283	247	175	167	152	105	1094	835	406	669	651	567	320	287	257	1037	1007	924

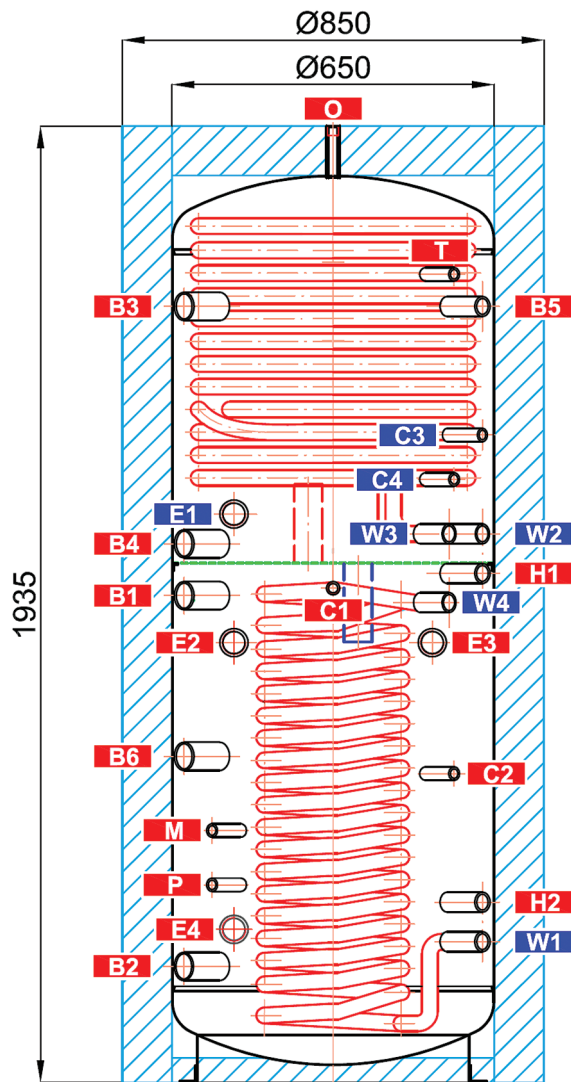
DHW heat exchanger pressure drop graph



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Dimensions

Tipping height without insulation 2050 mm



TAPPINGS

pos.	description	connec-tion	height [mm]
Heat sources			
B1	Incoming from heat source	G 6/4" F	985
B2	Return to heat source	G 6/4" F	135
B3	Incoming from heat source	G 6/4" F	1570
B4	Return to heat source	G 6/4" F	1090
B5	Incoming from heat source	G 1" F	1570
B6	Incoming from heat source	G 6/4" F	660
Heating system			
H1	Supply to the heating circuit	G 1" F	1030
H2	Returnable from the heating circuit	G 1" F	365
EI . heating elements			
E1	Electric heating element for DHW heating	G 6/4" F	1150
E2	Electric heating element for space heating	G 6/4" F	890
E3	Electric heating element for space heating	G 6/4" F	890
E4	Electric heating element for PV system	G 6/4" F	310
DHW heating			
W1	Cold water	G 1" M	285
W2	Hot water	G 1" M	1110
W3	Circulation	G 1" M	1110
W4	Hot water	G 1" M	970
Control and safety			
C1	Temperature sensor	G 1/2" F	1000
C2	Temperature sensor	G 1/2" F	625
C3	Temperature sensor	G 1/2" F	1310
C4	Temperature sensor	G 1/2" F	1220
T	Thermometer	G 1/2" F	1635
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	1935