Thermal stores and tanks

Hot water heating installation solutions

Why choose a Daikin Altherma ST thermal store or domestic hot water tank?

Whether you only need hot water or you want to combine your hot water with solar systems, we offer you the best solutions to the highest levels of comfort, energy efficiency and reliability.

Thermal store

Stainless steel tank

Domestic hot water tanks

Stainless steel tanks

Comfort

› EKHTS-AC: available in 200 and 260 L in stainless steel
› EKHWS(U)-B: available in 150, 200 and 300 litres in stainless steel
› EKHWS-B: available for 400V applications
› EKHWS(U)-D: available in 150, 180, 200, 250 and 300 litres in stainless steel

Efficiency

› High-quality insulation keeps heat loss to a minimum
› Efficient temperature heating: from 10 °C to 50 °C in only 60 minutes
› Available as an integrated solution or separate tank

Reliability

› At necessary intervals, the unit can heat up water up to 60 °C to prevent the risk of bacteria growth

The ECH$_2$0 thermal store range

ECH$_2$O thermal store: additional hot water comfort

Combine your monobloc with a thermal store to achieve the ultimate comfort at home.

› Fresh water principle: receive domestic hot water on demand while eliminating the risk of contamination and sedimentation
› Optimal domestic hot water performance: the low temperature evolution enables high tapping performance
› Fit for the future: possibility to integrate with renewable solar energy and other heat sources, e.g. fireplace
› Lightweight and robust build of the unit combined with the cascade principle offers flexible installation options

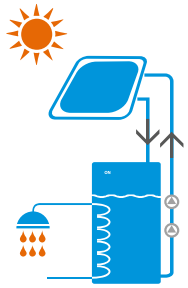
Built for small and large homes, customers can choose between a pressureless and a pressurised hot water system.

Efficiency

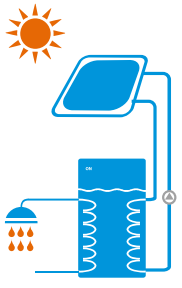
› Fit for the future: maximise renewable energy sources
› Intelligent Heat Storage Management: ensures continuous heating during defrost mode, and uses stored heat for space heating
› High-quality insulation keeps heat loss to a minimum

Reliability

› Maintenance-free tank: no corrosion, anode, scale or lime deposits, and no water loss through the safety valve



Drain-back solar system



Pressurised solar system

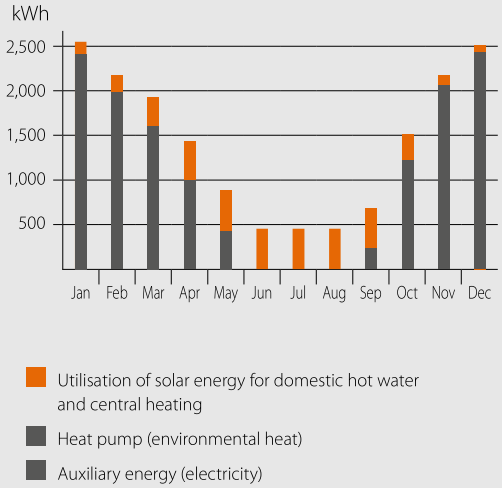
Pressureless (drain-back) solar system

› The solar collectors are only filled with water when sufficient heating is provided by the sun
› The pumps in the control and pump unit switch on briefly and fill the collectors with storage tank water
› After filling, water circulation is maintained by the remaining pump

Pressurised solar system

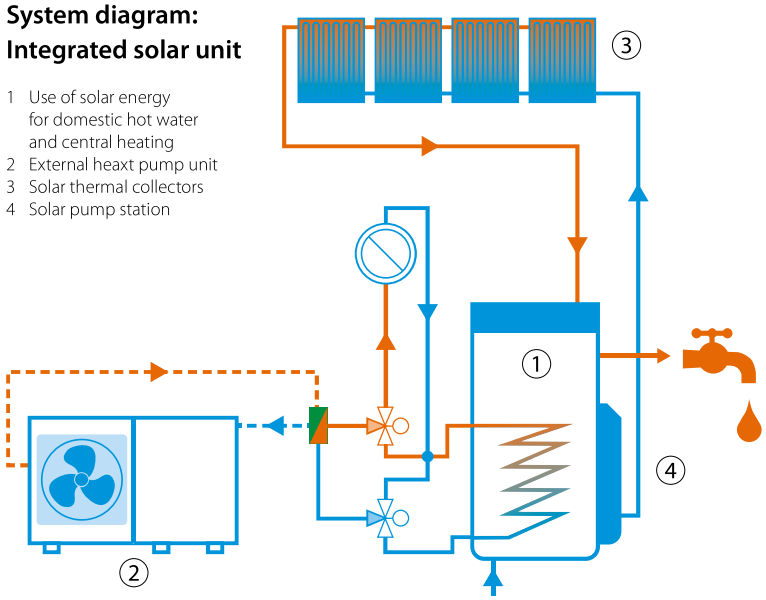
› System is filled with heat transfer fluid with the correct amount of antifreeze to avoid freezing in winter
› System is pressurised and sealed

Monthly energy consumption of an average detached house



System diagram: Integrated solar unit

1 Use of solar energy for domestic hot water and central heating
2 External heaxt pump unit
3 Solar thermal collectors
4 Solar pump station



Daikin Altherma ST Thermal store

Plastic domestic **hot water tank with solar support**

- The thermal store EKHWP* is designed to work with Daikin Altherma heat pumps
- Fresh water principle: receive domestic hot water on demand while eliminating the risk of contamination and sedimentation
- Optimal domestic hot water performance: the low temperature evolution enables high tapping performance
- Fit for the future: possibility to integrate with renewable solar energy and other heat sources, e.g. fireplace
- Lightweight and robust build of the unit combined with the cascade principle offers flexible installation options
- Available in 300 and 500 liters

Accessory				EKHWP	300B	500B	300PB	500PB	54419B
Casing	Colour				Traffic white (RAL9016) / Dark grey (RAL7011)				
	Material				Impact resistant polypropylene				
Dimensions	Unit	Width	mm		595	790	595	790	
		Depth	mm		615	790	615	790	
		Height	mm		1,646	1,658	1,646	1,658	
Weight	Unit	Empty	kg		53	76	56	82	71
Tank	Water volume		L		294	477	294	477	
	Material				Polypropylene				
	Maximum water temperature		°C		85				
	Insulation	Heat loss	kWh/24h		1.5	1.7	1.5	1.7	
	Energy efficiency class				B				
	Standing heat loss		W		64	72	64	72	
	Storage volume		L		290	393	290	393	
Heat exchanger	Domestic hot water	Quantity			1				
		Tube material			Stainless steel (DIN 1.4404)				
		Face area	m^2		5.6	5.8	5.6	5.9	5.8
		Internal coil volume	L		27.8	28.9	27.8	29	28.9
		Operating pressure	bar		6				
	Charging	Quantity			1				
		Tube material			Stainless steel (DIN 1.4404)				
		Face area	m^2		2.66	3.7	2.66	3.7	1.95
		Internal coil volume	L		12.9	18.1	12.9	18.1	10
		Operating pressure	bar		3				
	Auxiliary solar heating	Tube material			-	Stainless steel (DIN 1.4404)	-	Stainless steel (DIN 1.4404)	
		Face area	m^2		-	0.76	-	0.76	
		Internal coil volume	L		-	3.9	-	3.9	
		Operating pressure	bar		-	3	-	3	

Daikin Altherma ST Thermal store

Plastic domestic **hot water tank with solar support**

- The thermal store EKHWC* is designed to work with a gas/oil boiler
- The thermal store EKHWD* is designed to work with boilers as well as with Daikin Altherma High Temperature
- Fresh water principle: receive domestic hot water on demand while eliminating the risk of contamination and sedimentation
- Optimal domestic hot water performance: the low temperature evolution enables high tapping performance
- Fit for the future: possibility to integrate with renewable solar energy and other heat sources, e.g. fireplace
- Lightweight and robust build of the unit combined with the cascade principle offers flexible installation options
- Available in 300 or 500 liters

B

85 °C

Accessory				EKHWDH 500B	EKHWDB 500B	EKHWCH 300B	EKHWCH 300PB	EKHWC 500B	EKHWCH 500B	EKHWCH 500PB	EKHWCB 500B	EKHWCB 500PB
Casing	Colour			Traffic white (RAL9016) / Dark grey (RAL7011)								
	Material			Impact resistant polypropylene								
Dimensions	Unit	Width	mm	790		595		790				
		Depth	mm	790		615		790				
Weight	Unit	Empty	kg	73	76	51	53	69	74	79	80	86
Tank	Water volume		L	477		294		477				
	Material			Polypropylene								
	Maximum water temperature		°C	85								
	Insulation	Heat loss	kWh/24h	1.7		1.5		1.7				
	Energy efficiency class			B								
	Standing heat loss		W	72		64		72				
	Storage volume		L	477		294		477				
Heat exchanger	Domestic hot water	Quantity		1								
		Tube material		Stainless steel (DIN 1.4404)								
		Face area	m^2	4.900		3.800		4.900				
		Internal coil volume	L	23.8		18.6		23.8			25.8	
		Operating pressure	bar	6								
		Average specifc thermal output	W/K	2,580		1,890		2,450			2,580	
	Charging	Quantity		1				-	1			
		Tube material		Stainless steel (DIN 1.4404)				-	Stainless steel (DIN 1.4404)			
		Face area	m^2	2				-	2			
		Internal coil volume	L	11		9		-	9			
		Operating pressure	bar	3				-	3			
		Average specifc thermal output	W/K	1,030		920		-	1,030			
	Auxiliary solar heating	Tube material		-				Stainless steel (DIN 1.4404)				
		Face area	m^2	-				1				
		Internal coil volume	L	-				4				
		Operating pressure	bar	-				3				
		Average specifc thermal output	W/K	-				350				

Domestic hot water tank

Stainless steel domestic **hot water** tank

› EKHTS-AC: available in 200 and 260 L in stainless steel
› EKHWS(U)-B: available in 150, 200 and 300 litres in stainless steel
› EKHWS-B: available for 400V applications
› EKHWS(U)-D: available in 150, 180, 200, 250 and 300 litres in stainless steel

Accessory				EKHTS	200AC	260AC
Casing	Colour				Metallic grey	
	Material				Galvanised steel (precoated sheet metal)	
Dimensions	Unit	Height	Integrated on indoor unit	mm	2,010	2,285
		Width		mm	600	
		Depth		mm	695	
		Height		mm	1,470	1,745
Weight	Unit	Empty		kg	70	78
Tank	Water volume			L	200	260
	Material				Stainless steel (EN 1.4521)	
	Maximum water temperature			°C	75	
	Insulation	Heat loss		kWh/24h	12.0	15.0
	Energy efficiency class				B	
	Standing heat loss			W	50	63
	Storage volume			L	200	260
Heat exchanger	Quantity				1	
	Tube material				Duplex steel (EN 1.4162)	
	Face area			m^2	1.560	
	Internal coil volume			L	7.5	

Accessory			EKHWS	(U)150B3V3	(U)200B3V3	(U)300B3V3	200B3Z2	300B3Z2
Casing	Colour			Neutral white				
	Material			Epoxy-coated mild steel				
Dimensions	Unit	Width	mm	580				
		Depth	mm	580				
		Height	mm	900	1,150	1,600	1,150	1,600
Weight	Unit	Empty	kg	37	45	59	45	59
Tank	Water volume		L	150	200	285	200	285
	Material			Stainless steel (DIN 1.4521)				
	Maximum water temperature		°C	85				
	Insulation	Heat loss	kWh/24h	1.55	1.77	2.19	1.77	2.19
	Energy efficiency class			C				
	Standing heat loss		W	65	74	91	74	91
	Storage volume		L	150	200	285	200	285
Heat exchanger	Quantity			1				
	Tube material			Duplex steel LDX 2101				
Booster heater	Capacity		kW	3				
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230			2~/50/400	

Accessory				EKHWS(U)	150D3V3	180D3V3	200D3V3	250D3V3	300D3V3
Casing	Colour				Neutral white				
	Material				Epoxy coated steel / Epoxy-coated mild steel				
Dimensions	Unit	Height	Tank	mm	1,000	1,164	1,264	1,535	1,745
Weight	Unit	Empty		kg	45	50	53	58	63
Tank	Water volume			L	145	174	192	242	292
	Material				Stainless steel (EN 1.4521)				
	Maximum water temperature			°C	75				
	Insulation	Heat loss		kWh/24h	1.1	1.2	1.3	1.4	1.6
	Energy efficiency class				B				
	Standing heat loss			W	45	50	55	60	68
	Storage volume			L	145	174	192	242	292
Heat exchanger	Domestic hot water	Quantity			1				
		Tube material			Stainless steel (EN 1.4521)				
		Face area		m^2	1.050	1.400	1.800		
		Internal coil volume		L	4.9	6.5	8.2		
		Operating pressure		bar	10				
Booster heater	Capacity			kW	3				
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230				