



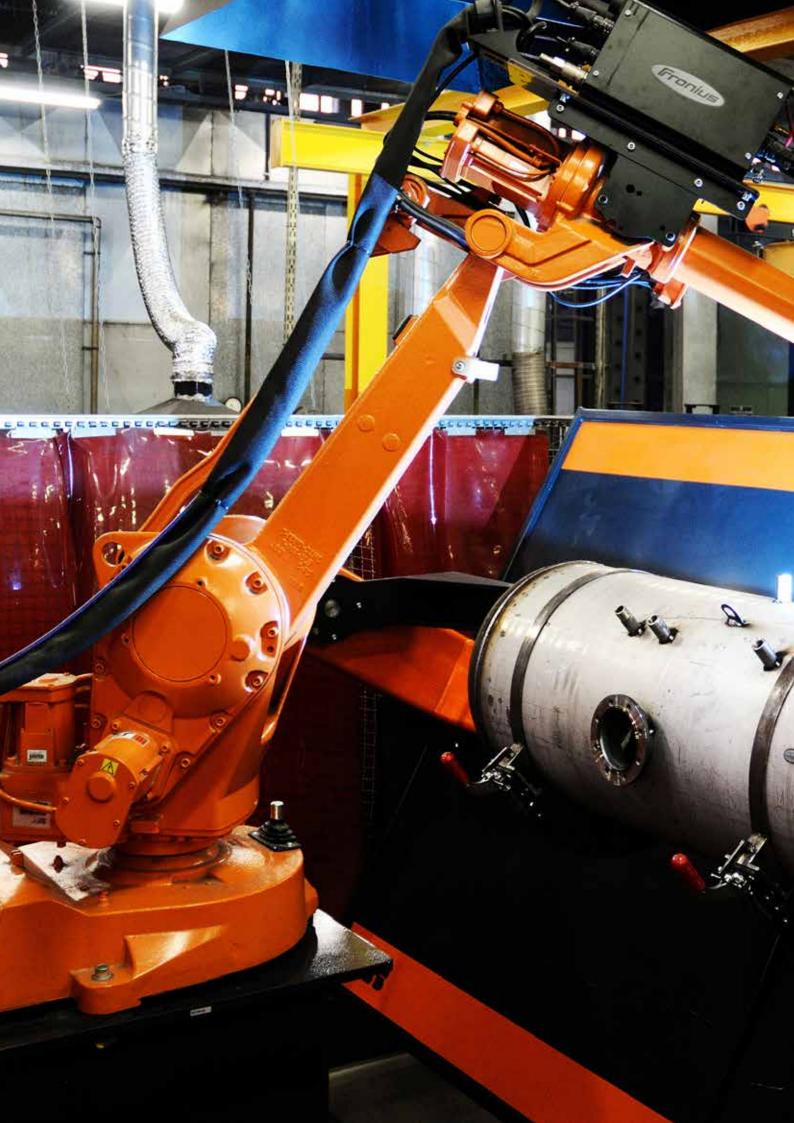
with renewable energy!















We must observe and continue the traditions of our nearly 70-year old Company Group, the culture of mutual respect, as well as the appreciation of our companies in our environment and by partners, and our recognition as a conservatively organised local company with reliable operation providing security.

HAJDU Group is recognised by our partners and customers, both in Hungary and abroad, as a reliable player in our economy, due mainly to our durable, excellent quality, reliable products.

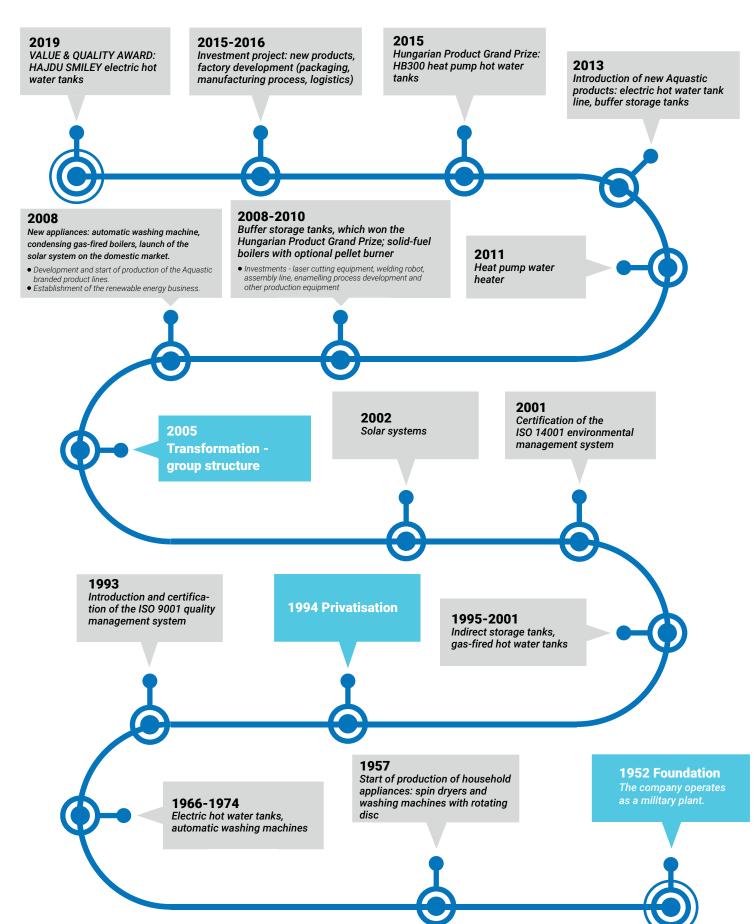
All these have allowed, and will allow us in the future to ensure employment for our nearly 800 employees, as well as continuously growing living standard for their families.

Our aim is to further increase the good reputation and recognition of our companies building on our traditions.

> Lajos Novotni President of HAJDU Group

#### **HISTORY**





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Electrical or electronic equipment included in this Product Catalogue contain components (for example, cables) which, after becoming waste, are classified as hazardous wastes. Hazardous substances in electrical, electronic equipment have a harmful impact on the environment (in particular, the soil and groundwater) and human health, if they are not used and operated in compliance with the relevant environmental regulations. Thus, you are requested to comply with the following requirements, in the interest environment protection:



- Electrical and electronic equipment that has become waste must be collected separately, it may not be placed in the same waste receptacle as municipal wastes, and it cannot be disposed of as municipal waste.
- You can leave used and waste electrical and electronic equipment free of charge at the point of sale, or with any distributor selling
  electrical and electronic equipment that is identical in nature with or has the same functionality as the used and waste electrical or
  electronic equipment.
- By proceeding this way, you can play a valuable role in the re-use, and preparation for re-use of electrical and electronic equipment, and in the reduction of the quantity, the recovery or other forms of recycling of electrical and electronic equipment that has become waste.
- As a manufacturer, we will bear all costs arising in connection with the fulfilment of the abovementioned obligations and expectations. Furthermore, we commit ourselves to paying these costs by issuing the present declaration.



HAJDU Zrt. reserves the right to implement changes. Valid from February 2021



# **ELECTRIC HOT WATER STORAGE TANKS**

Z..., AQ..., C..., SY..., SMART, F...

**Electric hot water storage tanks** are designed to supply hot water needs. The tank of electric water heaters is made of steel, while protection against corrosion is ensured by a special titanium enamel coating and magnesium active anode. These appliances can supply multiple water withdrawal locations and faucets with shower. The thermal insulation of the appliances consists of freon-free polyurethane insulating foam. The versions with metal housing are applied nanoceramic surface pretreatment.

Our electric hot water storage tanks are available with HAJDU and AQUASTIC brand names, from 10 to 300 litres, and with various positioning options: wall mounted vertical, horizontal and floor-standing design.

The new generation units of the HAJDU CUBE and SMART series have self-learning system with SMART Control that enables increased efficiency and cost-effectiveness in the production of domestic hot water. The streamlined Aquastic FLAT models already have an accessible temperature regulator; these dual tank units can be installed both vertically and horizontally.

All new generation models are equipped with a ceramic (steatite) heater, whose great advantages include low scaling, longer service life and significantly lower servicing costs.

The **SMILEY** model features a special split ceramic heater. This unique design developed by HAJDU brings significant energy savings due to the possibility of heating the lower and upper parts of the tank to arbitrarily chosen, different temperatures.



with renewable energy!









**ZF10 ABOVE-SINKINSTALLATION** 





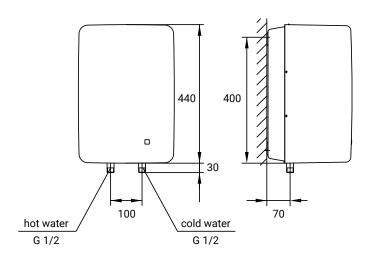


\*2 years full 7 year tank warranty

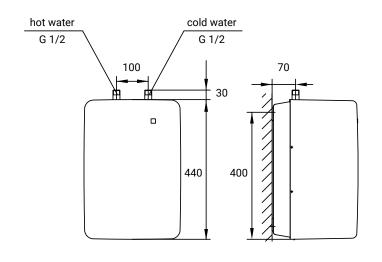
\*For more information about the products and warranty terms, please visit www.hajdurt.hu

#### **ZA10 UNDER-SINK INSTALLATION**





ТҮРЕ	ZF10	ZA10			
Volume	[litre]		0		
Length	[mm]	44	10		
Width	[mm]	34	10		
Depth	[mm]	270			
Water connection		G1/2			
Max. operating pressure	[MPa]	0,6			
Electric power	[kW]	1,2			
Heat-up time to 65 °C	[minute]	30	18		
Standby energy consumption	[kWh/24h]	0,			
Weight	[kg]	8	3		
Hot water temperature	[°C]	max. 75 max. 65			
Maximum load profile		XS XS			
Energy efficiency class		С	С		



#### **ELECTRIC HOT WATER STORAGE TANKS**

AQ10A

**UNDER-SINK** 

**INSTALLATION** 





MULTIPLE WATER WITHDRAWING LOCATIONS





**ACTIVE ANODES** 

#### AQ10F **ABOVE-SINK** INSTALLATION



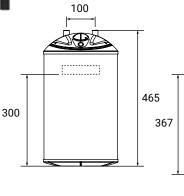
ТҮРЕ	AQ10F	AQ10A		
Volume	[litre]	10		
Electric power	[kW]	1,6 2		
Heat-up time to 65 °C	[minute]	24 18		
Standby energy consumption	[kWh/24h]	0,5	1	
Max. operating pressure	[MPa]	0		
Weight	[kg]		7	
Hot water temperature	[°C]	max. 80		
Maxiumum load profile		XS XS		
Energy efficiency class		С	С	

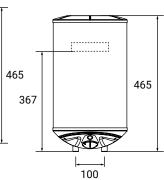
# WARRANTY

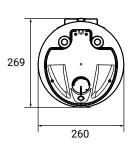
#### 5 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu











**ZF15 ABOVE-SINK INSTALLATION** 



ТҮРЕ	ZF15	ZA15		
Volume	[litre]	15		
Electric power	[kW]	2	2	
Heat-up time to 65 °C	[minute]	30		
Standby energy consumption	[kWh/24h]	0,85		
Max. operating pressure	[MPa]	0	,6	
Weight	[kg]	1	1	
Hot water temperature	[°C]	max. 80		
Maxiumum load profile		XS	XS	
Energy efficiency class		С	С	

### YEAR WARRANTY

#### 2 years full 7 year tank warranty

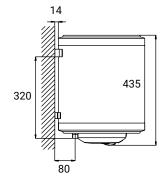
\*For more information about the products and warranty terms, please visit www.hajdurt.hu

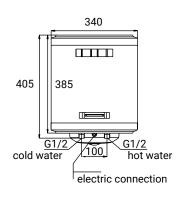


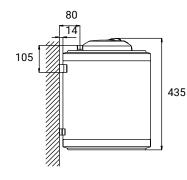
**ZA15** 

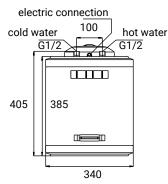
**UNDER-SINK** 

**INSTALLATION** 









#### **ELECTRIC HOT WATER STORAGE TANKS, WALL MOUNTED VERTICAL MODELS**



INSULATION

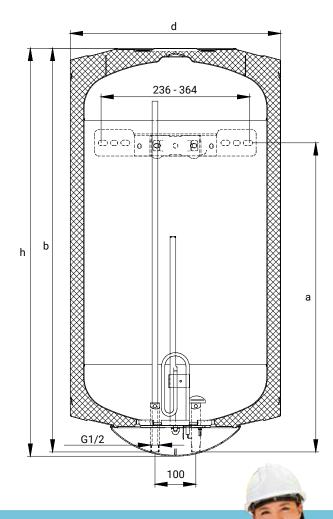




Z...ErP







\*For more information about the products and warranty terms,

ТҮРЕ		Z30ErP	Z50ErP	Z80ErP	Z120ErP	Z150ErP	Z200ErP
Volume	[litre]	30	50	80	120	150	200
h	[mm]	540	550	725	1010	1025	1535
d	[mm]	410			15		544
a	[mm]	343	340	500	750	950	1235
b	[mm]	493	480	650	930	1125	1447
Water connection				G1	1/2		
Max. operating pressure	[MPa]			0	,6		
Electric power	[kW]			1,8			2,4
Heat-up time to 65°C	[h]	1,0	1,8	2,8	4,2	5,3	5,3
Standby energy consumption	[kWh/24h]	0,77	0,89	1,0	1,5	1,5	1,7
Weight	[kg]	16	20	27	33	39	52
Hot water temperature	[°C]	max. 80					
Maxiumum load profile			М	M	L	L	L
Energy efficiency class		С	С	С	С	С	С



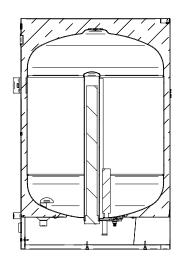


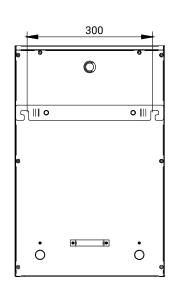


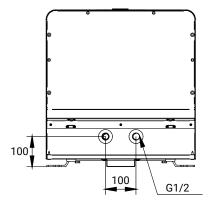
## ELECTRIC HOT WATER STORAGE TANKS, WALL MOUNTED VERTICAL MODELS

















**C...S** 

ТҮРЕ	C50S	C80S	C120S	C150S	C200S		
Volume	[litre]	50	80	120	150	200	
Height	[mm]	587	757	10	37	1324	
Width	[mm]		490		54	40	
Depth	[mm]		490		540		
Water connection		G1/2 G3/4				3/4	
Max. operating pressure	[MPa]			0,6			
Electric power	[kW]	1,2			,4		
Heat-up time	[h]	2,63	2,1	3,16	3,95	5,26	
Standby energy consumption at 65°C	[kWh/24h]	0,94	1,1	1,38	1,56	1,6	
Weight	[kg]	24	38	49	56	68	
Hot water temperature	[°C]	max. 75					
Maxiumum load profile		M	M	M	L	L	
Energy efficiency class		В	В	В	С	С	

#### **ELECTRIC HOT WATER STORAGE TANKS,** WALL MOUNTED VERTICAL MODELS











SY...R

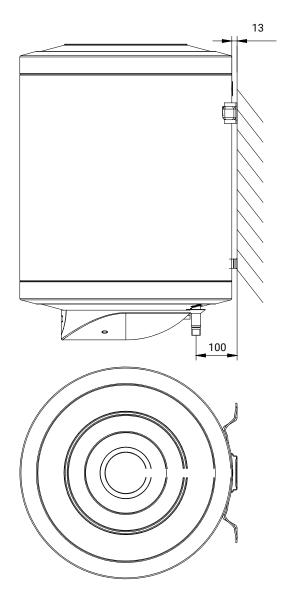


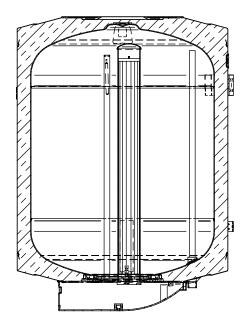


\*2 years full 7 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

ТҮРЕ		SY80R	SY120R	SY150R	
Volume	[litre]	80	120	150	
Height	[mm]	720	1000	1195	
Diameter	[mm]		515		
Water connection			G1/2		
Max. operating pressure	[MPa]	0,6			
Electric power	[kW]	0,8+0,8 (1,6)	1,6+0,	8 (2,4)	
Heat-up time to 65°C	[h]	3,	15	3,94	
Standby energy consumption	[kWh/24h]	0,8	0,93	1,3	
Weight	[kg]	28	37	43	
Hot water temperature	[°C]		max. 80		
Maxiumum load profile		M	M	L	
Energy efficiency class		В	В	С	





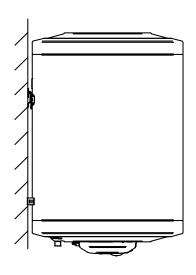


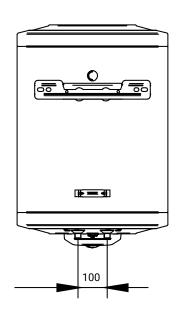


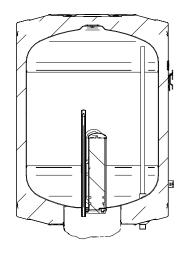


# ELECTRIC HOT WATER STORAGE TANKS, WALL MOUNTED VERTICAL MODELS













\*2 years full 7 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu



#### **Z...SMART**

ТҮРЕ		Z30SMART	Z50SMART	Z80SMART	Z120SMART	Z150SMART	Z200SMART
Volume	[litre]	30	50	80	120	150	195
Height	[mm]	552	592	762	1039	1237	1492
Diameter	[mm]	410			515		
Water connection				G1	1/2		
Max. operating pressure	[MPa]			0	,6		
Electric power	[kW]			1,8			2,4
Heat-up time to 65°C	[h]	0,9	1,8	2,9	4,2	4,3	5,5
Standby energy consumption at 65°C	[kWh/24h]	0,77	0,82	0,96	1,38	1,59	1,97
Weight	[kg]	18	22	27	33	45	50
Hot water temperature	[°C]	max. 65					
Maxiumum load profile		S	M	M	L	L	L
Energy efficiency class		В	В	В	С	С	С

#### **ELECTRIC HOT WATER STORAGE TANKS, WALL MOUNTED HORIZONTAL MODELS**

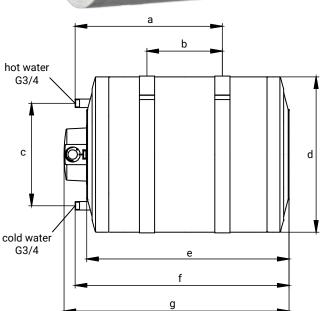


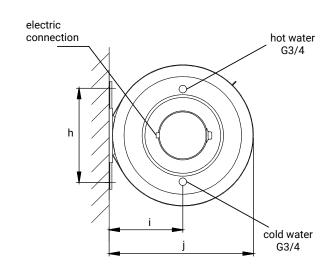


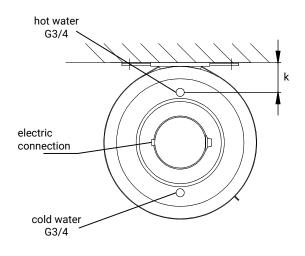


**ZV...ErP** 









ТҮРЕ		ZV80ErP	ZV120ErP	ZV150ErP	ZV200ErP
Volume	[litre]	80	120	150	200
g	[mm]	775	1055	1255	1345
d	[mm]	5	15	544	595
a	[mm]	500	750	1035	1050
b	[mm]	250	500	8	00
С	[mm]		384		375
е	[mm]	690	970	1170	1260
f	[mm]	725	1005	1205	1298
h	[mm]	300	350	360	440
i	[mm]	2	73	288	314
j	[mm]	5:	28	557	608
k	[mm]	8	31	96	123
Water connection			G3	3/4	
Max. operating pressure	[MPa]		0	,6	
Electric power	[kW]	1,2	1,8	2	
Heat-up time to 65°C	[h]	4	,2	4,0	5,3
Standby energy consumption	[kWh/24h]	1,09	1,31	1,40	1,58
Weight	[kg]	29 36		47	53
Hot water temperature	[°C]	adjustable, max.80			
Maxiumum load profile		M	L	L	XL
Energy efficiency class		С	С	С	С

 Appliances can be mounted in right or left looking positions on both walls and ceilings.





2 years full

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

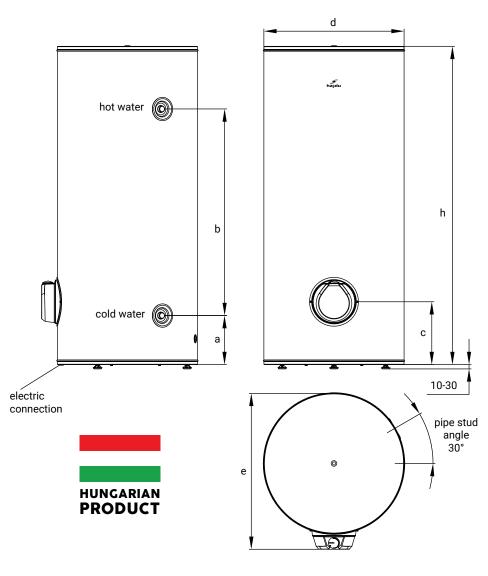






#### **ELECTRIC HOT WATER STORAGE TANKS, WALL MOUNTED AND FLOOR-STANDING MODELS**

CONTROLLED WATER
TEMPERATURE, FROST
PROTECTION



#### Z...S ErP





\*2 years full 7 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

ТҮРЕ		Z150S ErP	Z200S ErP	Z300S ErP		
Volume	[litre]	150	200	300		
h	[mm]	1035	1330	1500		
d	[mm]	59	95	660		
a	[mm]		231			
b	[mm]	510	803	972		
С	[mm]	31	17	296		
е	[mm]	66	734			
Water connection		G3/4				
Max. operating pressure	[MPa]	0,6				
Electric power 1-phase wiring	[W]	24	00	3200		
Heat-up time to 65°C	[h]		5,3	6		
Electric power 3-phase wiring	[W]	3x8	300	3x1066		
Heat-up time to 65°C	[h]		5,3	6		
Standby energy consumption	[kWh/24h]	1,42	1,45	1,89		
Weight	[kg]	51	62	92		
Hot water temperature	[°C]	max. 65				
Maxiumum load profile			XL	XL		
Energy efficiency class		С	С	С		

# ELECTRIC HOT WATER STORAGE TANKS, WALL MOUNTED VERTICAL MODELS

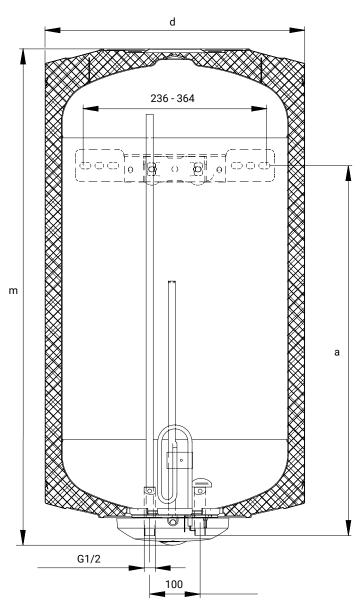














5 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

ТҮРЕ		AQ ECO 30 ErP	AQ ECO 50 ErP	AQ ECO 80 ErP	AQ ECO 100 ErP	AQ ECO 120 ErP	AQ ECO 150 ErP	AQ ECO 200 ErP
Volume	[litre]	30	50	80	100	120	150	200
m	[mm]	540	527	697	847	977	1172	1447
d	[mm]	410	496					
a	[mm]	343	340	500	570	750	950	1230
Water connection			G1/2					
Max. operating pressure	[MPa]				0,6			
Electric power	[kW]							2,4
Heat-up time to 65°C	[h]	1	1,8	2,8	3,5	4,2	5	,3
Weight	[kg]	16	20	26	30	32	39	49
Hot water temperature	[°C]	max. 80	max. 80 max. 65					
Maxiumum load profile		S	M	M			L	L
Energy efficiency class		С	С	С	С	С	С	С

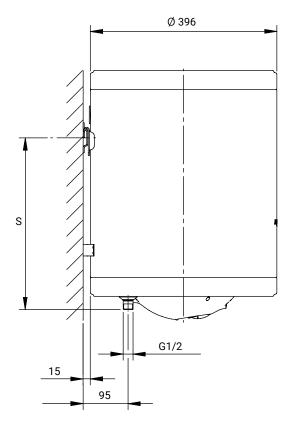


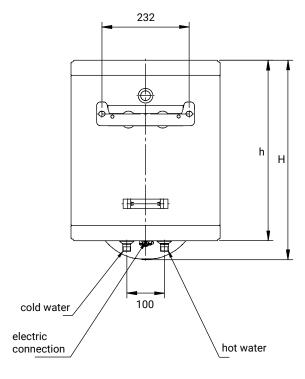




CORROSION PROTECTION WITH ACTIVE ANODES









### **AQ ECO... SLIM**



ТҮРЕ		AQ 30 ECO SLIM	AQ 50 ECO SLIM	AQ 80 ECO SLIM
Volume	[litre]	30	50	80
Н	[mm]	530	744	1054
h	[mm]	479	693	1003
Diameter	[mm]		396	
S	[mm]	365	579	889
Water connection			G1/2	
Max. operating pressure	[MPa]		0,6	
Electric power	[kW]		1,8	
Heat-up time from 15°C to 65°C	[h]	1	1,8	2,8
Standby energy cons. to 65°C	[kWh/24h]	0,9	1,15	1,58
Weight	[kg]	18	24	28
Hot water temperature	[°C]		max. 65	
Maxiumum load profile		S	M	L
Energy efficiency class			С	

**HUNGARIAN PRODUCT** 

#### **ELECTRIC HOT WATER STORAGE TANKS,** WALL MOUNTED VERTICAL/HORIZONTAL **MODELS**





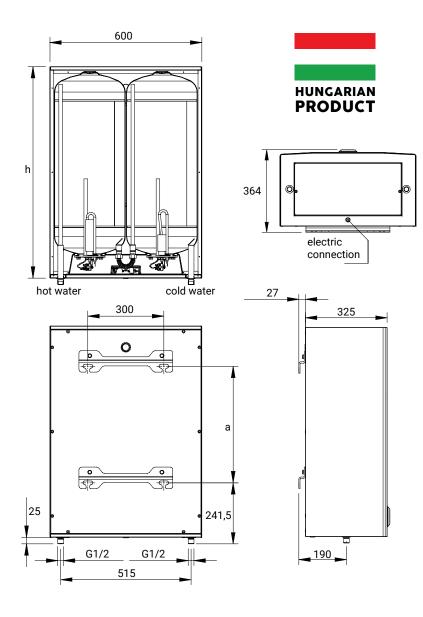






AQ F...ErP





ТҮРЕ		AQ F50 ErP	AQ F80 ErP	AQ F120 ErP		
Volume	[litre]	50	80	120		
h	[mm]	585	835	1135		
a	[mm]	210	460	790		
Water connection			G1/2			
Max. operating pressure	[MPa]		0,6			
Electric power 1~	[kW]		1,2+0,8 (2)			
Heat-up time, vertical (Δt=65°C)	[h]	1,3	2	3,4		
Heat-up time, horizontal (Δt=65°C)	[h]	1	1,7	2,9		
Standby energy consumption, vertical	[kWh/24h]	0,8	0,93	1,3		
Standby energy consumption, horizontal	[kWh/24h]	1,17	1,65	1,71		
Weight	[kg]	30	44	51		
Hot water temperature max.	[°C]	max. 75				
Maxiumum load profile		M L				
Energy efficiency class			С			



#### INDIRECTLY HEATED HOT WATER STORAGE TANKS

AQ IDE...F, IND/IDE..., HR-N..., STXL..., STA..., AQ STA..., HD..., HB..., HPT...

**Indirectly heated hot water tanks** are available with volumes from 75 to 1000 litres. The domestic water in the tank is heated by the heat exchanger pipe coil in the tank.

They are available as wall mounted **F versions** and floor standing **S versions**.

- IND...F ErP and IND...S ErP indirectly heated hot water tank without electric heater
- IDE...F ErP and IDE...S ErP indirectly heated hot water tank with electric heater

The advantage of the models with electric heating element is that they can provide domestic hot water without a boiler or solar collector. A thermostat can be used to control heat-up by the boiler or solar collector, and to set the temperature of the stored water. This thermostat can be set up to 65 °C.

**The HRN high performance tanks** enable heat-up by any heat generator appliance. Their heat exchanger has a large surface area, they are especially suited to low-temperature heating systems and condensing boilers. They come with an anode level indicator and a liquid tension thermometer.

High-performance STXL tanks are especially recommended for heat pump systems.

**Multi-energy, high-capacity solar STA...** tanks include, depending on the model, pipe coils in the lower third of the container (STA....C) or the lower and upper thirds of the container (STA....C2) that heat up the domestic hot water in the tank. Electric heaters can also be installed in the tank.

**HD** models **heated by an external heat exchanger** are recommended for use in heating centres at institutions and condominium, and district heating substations. Hot water is produced in instantaneous mode, the tank is designed to relieve and balance withdrawal peaks. All members of this product line high pressure resistence and equipped with connections of large diameters.



#### **INDIRECTLY HEATED HOT WATER STORAGE TANKS, WALL MOUNTED MODELS**

**AQ IDE...F** 

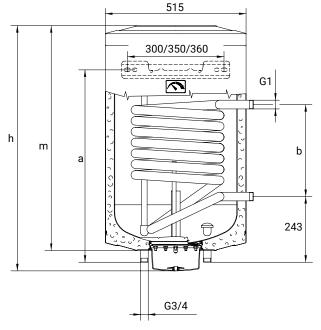
AQUASTIC

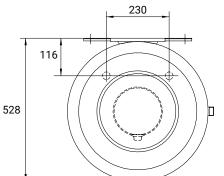






AUXILIARY ELECTRIC HEATING 24 KW POWER







528			*2 years full 5 year tank warrant *For more informati the products and wa please visit www.haj	on about arranty terms,		
TYPE with auxiliary ele	ectric heating	AQ IDE75F	AQ IDE100F	AQ IDE120F	AQ IDE150F	AQ IDE200F
Volume	[litre]	75	100	120	150	200
h	[mm]	750	906	1036	1245	1506
	[mm]	500	570	795	10	050
b	[mm]	260		34	40	
	[mm]	670	840	970	1170	1431
Water connection				G3/4		
Max. operating pressure	[MPa]			0,6		
Electric power, IDE design	[kW]			2,4		
Heat-up time to 65 °C	[h]	1,9	2,5	3,1	3,7	5,0
Heat exchanger surface	[m²]	0,615		0,	81	
Heat exchanger connection				G1		
Heat exchanger flow resistance	[mbar]			82		
Peak performance [litre/fir	st 10 minutes]	125	155	185	215	255
Continuous power	[litre/h]	450		59	90	
Continuous power	[kW]	18,5		2		
Hot water temperature	[°C]			max. 65		
Weight	[kg]	39	45	49	57	64
Standby energy consumption	[kWh/24h]	1,1	1,4	1,6	1,8	2,2

The performance data are valid for flow water at 80 °C, storage at 60 °C and DHW at 45/10 °C.

Energy efficiency class

## INDIRECTLY HEATED HOT WATER STORAGE TANKS, WALL MOUNTED MODELS

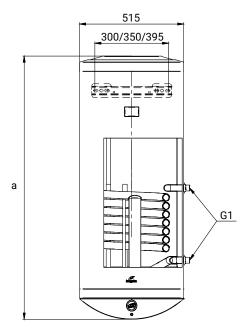


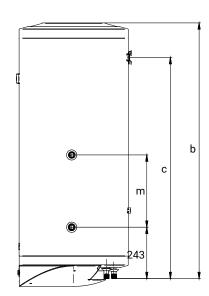


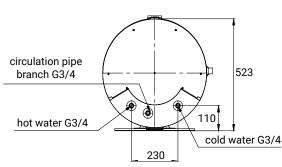
















\*2 years full 7 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

TYPE	electric heating y electric heating	IDE75F ErP IND75F ErP	IDE100F ErP IND100F ErP	IDE150F ErP IND150F ErP	IDE200F ErP IND200F ErP
Volume	[litre]	75	100	150	200
	[mm]	745	905	1235	1505
b	[mm]	710	870	1200	1474
	[mm]	500	570	10	50
m	[mm]	260		340	
Water connection			G	3/4	
Max. operating pressure	[MPa]		0	,6	
Electric power (IDE design)	[kW]		2	,4	
Heat-up time to 65 °C (IDE desi	gn) [h]	1,9	2,5	3,7	5,0
Heat exchanger surface	[m²]	0,615		0,81	
Heat exchanger connection			C	1	
Heat exchanger flow resistance	[mbar]			2	
Peak performance [litre/	first 10 minutes]	125	155	215	255
Continuous power	[litre/h]	450		590	
Continuous power	[kW]	18,5		24	
Hot water temperature	[°C]		max	c. 65	
Weight	[kg]	39/38	45/44	56/55	67/66
Standby energy consumption	[kWh/24h]		1,4	1,8	2,2
Heat loss	[W]	49	53	70	83
Energy efficiency class				Ċ	

The performance data are valid for flow water at 80 °C, storage at 60 °C and DHW at 45/10 °C.

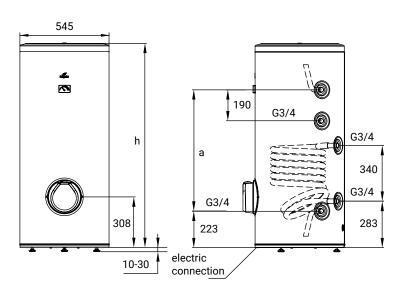


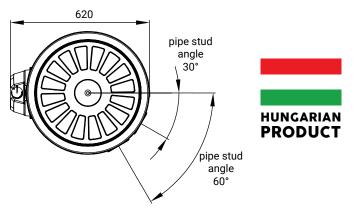




#### **INDIRECTLY HEATED HOT WATER STORAGE TANKS, FLOOR-STANDING MODELS**

#### IDE/IND...S ErP







WARRANTY

7 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

TVDE	vith auxiliary electric heating	IDE100S ErP	IDE150S ErP	IDE200S ErP
TYPE wit	thout auxiliary electric heating	IND100S ErP	IND150S ErP	IND200S ErP
Volume	[litre]	100	150	200
	[mm]	920	1245	1520
	[mm]	415	740	1015
Water connection			G3/4	
Max. operating pressu	ire [MPa]		0,6	
Electric power (IDE de	sign) [kW]		2,4	
Heat-up time to 65 °C	(IDE design) [h]	2,5	3,7	5,0
Heat exchanger surface	ce [m²]		0,81	
Heat exchanger conne	ection		G3/4	
Heat exchanger flow r	esistance [mbar]		82	
Peak performance	[litre/first 10 minutes]	155	215	255
Continuous power	[litre/h]		590	
Continuous power	[kW]		24	
Hot water temperature	[°C]		max. 65	
Weight	[kg]	52/51	61/60	70/69
Standby energy consu	mption at 65 °C [kWh/24h]	1,48	1,6	1,79
Heat loss	[W]	61	66	74
Energy efficiency class			С	

The performance data are valid for flow water at 80 °C, storage at 60 °C and DHW at 45/10 °C.

# HIGH-PERFORMANCE INDIRECTLY HEATED HOT WATER STORAGE TANKS, FLOOR-STANDING MODELS







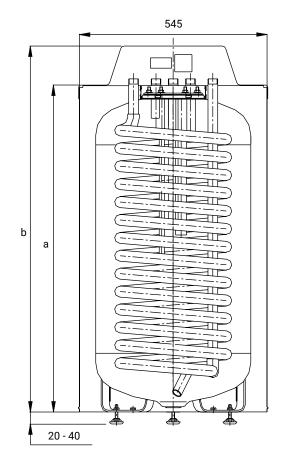
SION 42KW ON WITH POWER

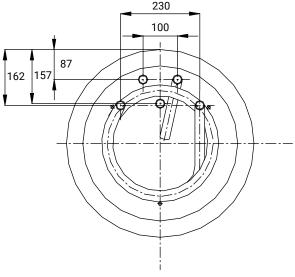
#### HR-N



ТҮРЕ		HR-N30	HR-N40			
Volume	[litre]	120	160			
b	[mm]	1061	1256			
a	[mm]	947	1142			
Water connection		G3/4				
Max. operating pressure	[MPa]	0	,6			
Heat exchanger surface	[m²]	1,4				
Heat exchanger connection		G3/4				
Heat exchanger flow resistance	[mbar]	120				
Peak performance * [litre/first 10	minutes]	180	215			
Continuous power	[litre/h]	1030				
Continuous power *	[kW]		2			
Hot water temperature	[°C]	max	c. 95			
Weight	[kg]	64	70			
Heat loss	[W]	41	49			
Energy efficiency class		E	3			

<sup>\*</sup> The performance data are valid for flow water at 80 °C, storage at 60 °C and DHW at 45/10 °C.









2 years full year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu





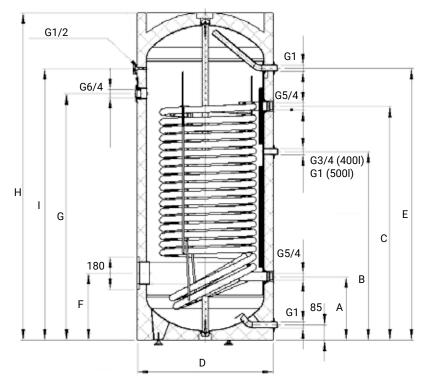


#### **HIGH-PERFORMANCE INDIRECTLY HEATED HOT WATER STORAGETANKS, FLOOR-STANDING MODELS**

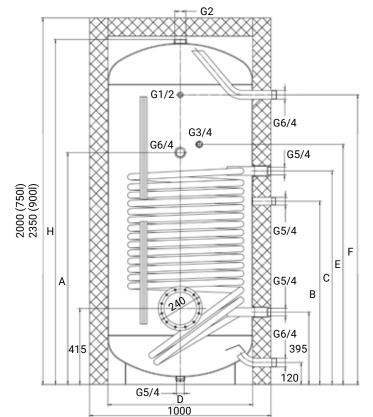
WATER TEMPERATURE

POWER

Sizes (mm) **TYPE** STXL 400C STXL 500C



TYPE		Sizes (mm)									
TIPE	Н	H H+Sz D A B C E									
STXL 750C	1882	2000	790	1265	1000	1165	1310	1580			
STXL 900C	2228	2350	790	1445	1180	1345	1490	1920			



#### **STXL 400-900C**



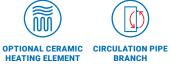


ТҮРЕ		STXL 400C	STXL 500C	STXL 750C	STXL 900C	
Volume	[litre]	400	500	750	900	
Height without insulation	[mm]			1882	2228	
Height with insulation	[mm]	1800	1806	2000	2350	
Diameter	[mm]	680	760	79	90	
Water connection		G1 G6			5/4	
Max. operating pressure	[MPa]	1				
Circulation pipe connection		G3/4	G1	G5	5/4	
Heat exchanger surface	[m²]	5	(	6 7,5		
Heat exchanger connection			G5	5/4		
Weight	[kg]	212	254	317	374	
Standby energy [	kWh/24h]	1,76	1,9	2,56	2,87	
Heat loss	[W]	73,3	79,2	106,7	119,6	
Energy efficiency class		В С				

# MULTI-ENERGY (SOLAR) STORAGE TANKS, FLOOR-STANDING MODELS





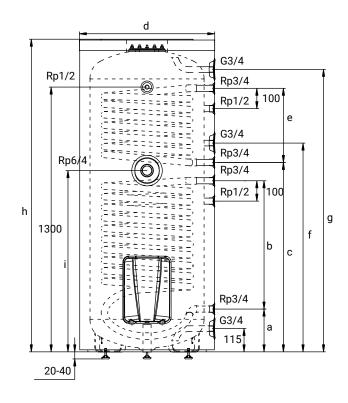


STA...C **SZTEA** 

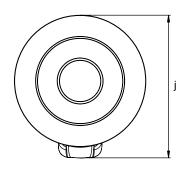


STA...C2 **SZTEA** 





ТҮРЕ		STA200C SZTEA	STA300C SZTEA	STA200C2 SZTEA	STA300C2 SZTEA			
Volume	[litre]	200	300	200	300			
h	[mm]	1530	1535	1530	1535			
d	[mm]	550	665	550	665			
a	[mm]	220	210	220	210			
b	[mm]	570	630	570	630			
С	[mm]	880	930	880	930			
е	[mm]	416	364	416	364			
f	[mm]	975	1025	975	1025			
g	[mm]	1387	1403	1387	1403			
i e	[mm]	840	890	840	890			
j	[mm]	608	720	608	720			
Insulating material		FCKW-free PU						
Water connection		G3/4						
Max. operating pressure	[MPa]	0,6						
Standby energy consumption	[kWh/24h]	1,9	2,5	1,9	2,5			
Heat exchanger surface	[m²]	1	1,5	1+0,8	1,5+1			
Heat exchanger connection			Rp	3/4				
Heat exchanger flow resistance	[mbar]	90	130	170	220			
Peak performance * [litre/first 10	) minutes]	340	510	370	545			
Continuous power *	[litre/h]	735	1100	1125	1590			
Continuous power *	[kW]	30	45	46	65			
Hot water temperature		max	c. 95					
Weight	[kg]	73	93	89	109			
Heat loss	[W]	71	94	71	94			
Energy efficiency class			(	C				







2 years full 7 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

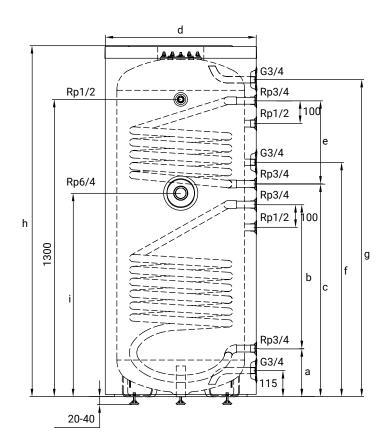
<sup>\*</sup> The data apply for indirect heating only. The performance data are valid for flow water at 80 °C, storage at 60 °C and DHW at 45/10 °C.





#### **MULTI-ENERGY (SOLAR) STORAGE TANKS, FLOOR-STANDING MODELS**

(POSSIBILITY TO ADD IMMERSION HEATER)



ТҮРЕ		AQ STA200C	AQ STA300C	AQ STA200C2	AQ STA300C2		
Volume	[litre]	200	300	200	300		
h	[mm]	1530	1535	1530	1535		
d	[mm]	550	665	550	665		
a	[mm]	220	210	220	210		
b	[mm]	570	630	570	630		
С	[mm]	880	930	880	930		
е	[mm]	416	364	416	364		
f	[mm]	975	1025	975	1025		
g	[mm]	1387	1403	1387	1403		
i	[mm]	840	890	840	890		
Insulating material		FCKW-free PU					
Water connection		G3/4					
Max. operating pressure	[MPa]		0	,6			
Standby energy consumption	[kWh/24h]	1,9	2,5	1,9	2,5		
Heat exchanger surface	[m²]	0,8	1	0,8+0,615	1+0,7		
Heat exchanger connection			Rp	3/4			
Heat exchanger flow resistance	[mbar]	80	90	80+65	90+70		
Peak performance * [litre/first	10 minutes]	255	460	255+150	460+220		
Continuous power *	[litre/h]	590	770	590+440	770+500		
Continuous power *	[kW]	24	31	24+18	31+20		
Hot water temperature	[°C]		max	c. 95			
Weight	[kg]	63	81	83	93		
Heat loss	[W]	71	94	71	94		
Energy efficiency class			(	C			

### AQ STA...C/C2







2 years full 5 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

\* The data apply for indirect heating only. The performance data are valid for flow water at 80 °C, storage at 60 °C and DHW at 45/10 °C.

#### **MULTI-ENERGY (SOLAR) STORAGE TANKS, FLOOR-STANDING MODELS**





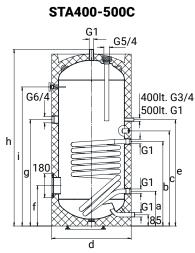


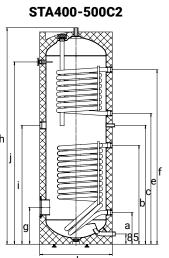
STA...C/C2

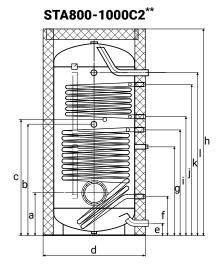


\*For more information about the products and warranty terms, please visit www.hajdurt.hu









\*\* STA800C and STA1000C without the upper coil.

ТҮРЕ	STA400C	STA500C	STA800C	STA1000C	STA400C2	STA500C2	STA800C2	STA1000C2
Volume [litre	400	500	800	1000	400	500	800	1000
h [mm]	1832	1838	2000	2350	1832	1838	2000	2350
d [mm	670	750	10	00	670	750	1000	1000
a [mm	320	370	415	415	320	370	415	415
b [mm]	880	930	1080	1255	880	930	1080	1255
c [mm	960	1010	1125	1300	1000	1095	1125	1300
e [mm	1000	1095	120	120	1100	1195	120	120
f [mm	345	370	380	380	1460	1465	380	380
g [mm	1000	1095	860	1025	345	370	860	1025
i [mm	1521	1498	1025	1190	1000	1095	1025	1190
j [mm]	-	-	-	-	1521	1498	1150	1335
k [mm	-	-	-	-	910	960	1465	1785
I [mm]			-		1490	1465	1580	1920
m [mm	-	-	-	-	560	560	-	-
n [mm			-		370	310	-	-
Insulating material	FCKW-	free PU		ent-friendly I polyester	FCKW-	ECU SKIN polyes		
Water connection	G	31	G	5/4	G	1	Ge	5/4
Max. operating pressure [MPa			0	,6		1	0	,6
Heat exchanger surface [m²]	1,8		2	2,4	1,8+1,0	2,0+1,0	2,0+1,2	2,4+1,2
Heat exchanger connection	G	1	G!	5/4	G1-	+G1	G5/4	1+G1
Heat exchanger flow resistance [mbar]	53	41	42	48	53+12	42+19	42+13	48+27
Peak performance * [litre/first 10 minutes]	600	750	1200	1500	628	785	1257	1570
Continuous power * [litre/h]	863	942	878	952	863+531	942+499	878+572	952+598
Continuous power * [kW	35	38	36	39	35+22	38+20	36+23	39+24
Hot water temperature [°C				max	c. 95			
Weight [kg	145	160	268	284	158	172	284	320
Standby energy consumption [kWh/24h	2,45	2,72	2,66	3,09	2,45	2,72	2,66	3,09
Heat loss [W	102	113	111	129	102	113	111	129
Energy efficiency class	С	С	_	_	С	С	_	_

<sup>\*</sup> The data apply for indirect heating only. The performance data are valid for flow water at 80 °C, storage at 60 °C and DHW at 45/10 °C.

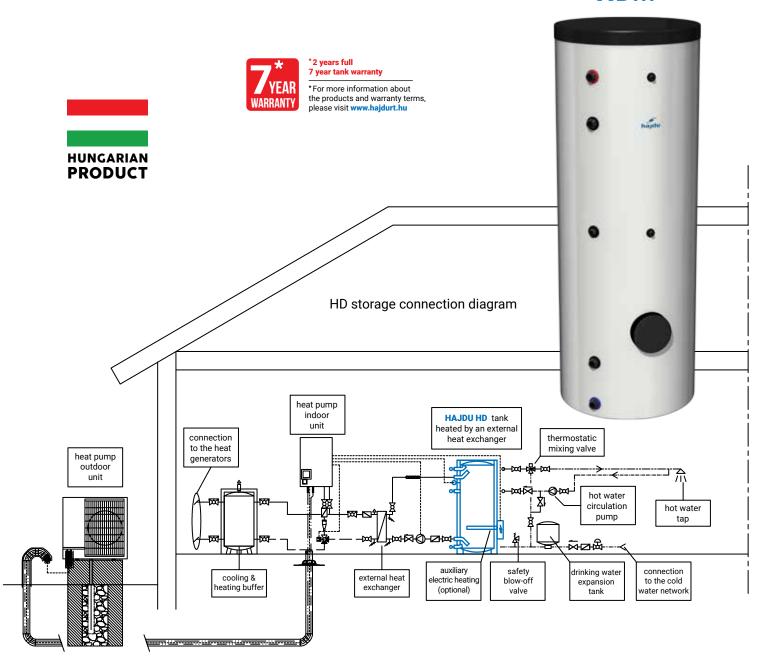






#### **STORAGE TANKS (EMPTY) HEATED BY** AN EXTERNAL HEAT EXCHANGER, **FLOOR-STANDING MODELS**

#### **HD...**



ТҮРЕ		HD 200	HD 300	HD 400	HD 500	HD 800	HD 1000	HD 1500	HD 2000		
Volume	[litre]	200	300	400	500	800	1000	1500	2000		
Height	[mm]	15	30	1785	1806	2000	2350	2215	2130		
Diameter	[mm]	545	660	670	750	99	90	1000	1250		
Water connection			G5	5/4			G	2			
Max. operating pressure	[MPa]					,0					
Circulation pipe connection		G	1		R	o1		G	2		
Thermometer pipe branch					Rp	1/2					
Regulator pipe branch					Rp	1/2					
Weight	[kg]	87	120	141	184	200	270	280	400		
Standby energy	[kWh/24h]	1,9	2,5	2,9	3,2	3,6	4	3,85	4,8		
Heat loss	[W]	83	94	102	113	109	127	160	200		
Energy efficiency class			(			-	-	-	-		

#### **HEAT PUMP APPLIANCES**

#### HB..., HPT..., HPAW

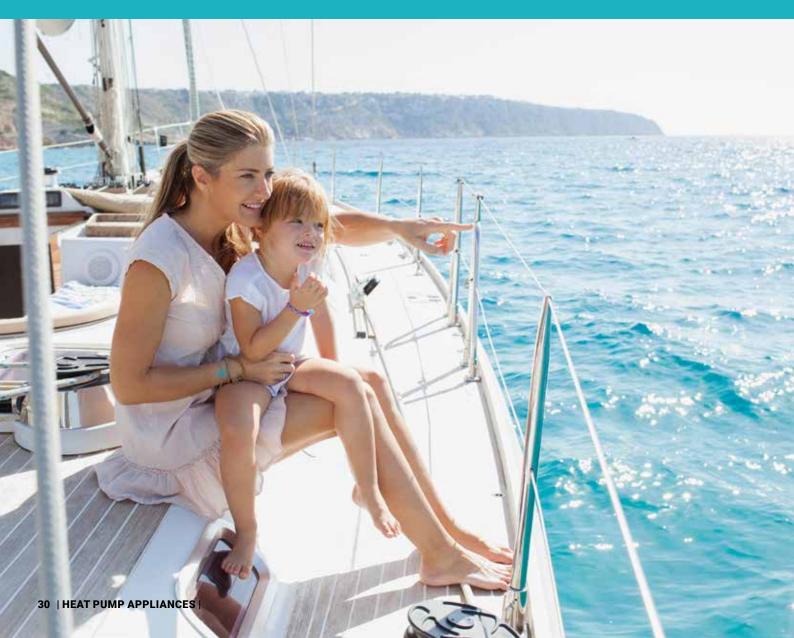
The heat pump of the **HB** model hot water tank uses the heat energy of air to heat up the water in the tank. **Appliance with** heat pump can produce at least 2 kW of heat from 0.5 kW of energy! This is the most efficient domestic hot water production method known today!

Interior rooms can be cooled using the air from the heat pump, and the ventilation of a room or home can also be supported by removing the cooled air. The appliance can also be connected to the ventilation system of the house. Thereby, in addition to domestic hot water production, these appliances can also be used to support ventilation, air conditioning and demisting. The **HB... C** type hot water tank with heat pump contains a lower heat exchanger enabling to connect directly to a solar system or boiler.

The **HB300C1** model includes an upper heat exchanger enabling to connect to the heating circuit, whereby it can be used in low temperature heating systems.

The **HP TOWER, HPT** series can be connected to an external solar system and integrated in a Smart Grid system.

Heat pump appliances; The **HPAW** air-to-water heat pump can provide a complete solution for heating, cooling and domestic hot water production in a wide range of environmental conditions. It is an ideal solution for both the setup and modernisation of state-of-the-art and environmentally friendly heating and air-conditioning systems in already existing and newly built properties. It can be added conventional, gas or other heating systems. It has a monobloc design, the heat pump and hydrobox are incorporated in a single housing.



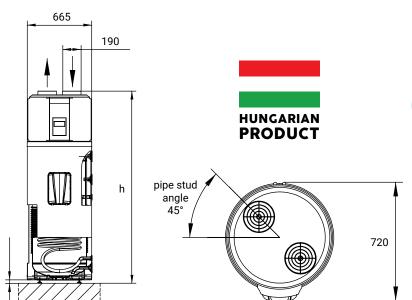
#### **HEAT PUMP HOT WATER STORAGE TANKS, FLOOR-STANDING MODELS**



20-40







ТҮРЕ		HB 200	HB 200C	HB 300	HB 300C	HB 300C1
Diameter/height(h)/depth	[mm]	661/1517/720 661/1950/720				
Voltage/frequency		L/N/PE 230V~ / 50Hz				
Fuse	[A]			16		
TANK						
Rated pressure	[MPa]			0,6		
Rated volume	[liter]	194	182	295	287	289
Water connection				G3/4		
Exchanger surface	[m²]		1,45	_	1,5	0,7
Corrosion protection			special e	enamel + M	/lg anode	
HEAT PUMP						
Туре				air (indoor		
Ventilation connector (inlet/outlet)	[Ø mm]			190		
Condenser			safety	heat exch	nanger	
Coolant/quantity			R1	34a / 1100	0 g	
Max. power consumption	[W]			1200		
Average Power Consumption	[W]			850		
Air flow	[m³/h]			~ 500		
Operating temperature range	[°C]			- 7- +43		
Max. water temperature	[°C]			60		
COP 7 °C (EN 16147)		2,43	2,48	2,15	2,44	2,45
COP 15 °C (EN 16147)		-	-	2,62	-	-
ELECTRICAL HEATING						
Nominal output	[W]			1800		
Max. water temperature	[°C]			60		
OTHER						
Control			prograr	nmable ele	ectronic	
Mg anode maintenance		Anode consumption display				
Electrical connection		fixed				
Legs		adjustable				
Maxiumum load profile		L	L	L	L	L
Energy efficiency class		Α	А	А	А	А







7 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

## HEAT PUMP HOT WATER STORAGE TANKS, FLOOR-STANDING MODELS



**EFFICIENCY** 















\*2 years full 7 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu

ТҮРЕ		HPT200	HPT200C	HPT300	НРТ300С			
Diameter/height/depth	[mm]	667/1480/720 667/1810/720						
Voltage/frequency		L/N/PE 230V~ / 50Hz						
TANK								
Rated pressure	[MPa]		0	,6				
Rated volume	[litre]	194	182	295	287			
Water connection			GS	3/4				
Exchanger surface	[m²]	-	1,45	_	1,5			
Heat insulation/thickness		fre	on free PUR in	sulation / 50	mm			
Corrosion protection			special enam	el + Mg anode				
HEAT PUMP								
Туре	Туре			air (indoor) + optional air duct connection				
Ventilation connector (inlet/outle	160							
Condenser		safety heat exchanger						
Coolant/quantity		R134a / 1100 g						
Max. power consumption	[W]	515						
Air flow	[m³/h]	450						
Operating temperature range	[°C]	- 7− <b>+</b> 38						
Water heating efficiency at 20°C conforming to EN 16147: 2017		139% (A+) 142% (A+)			6 (A+)			
Water heating efficiency at 7°C conforming to EN 16147: 2017		121% (A) 128% (A)			% (A)			
Noise power	[Lw(A)]	With air duct: 52 dB(A); Without air duct: 58 dB(A)						
ELECTRICAL HEATING								
Nominal output	[W]	1800						
Max. water temperature	[°C]	65						
OTHER								
Control		Programmable, PV, Smart Grid ready, Holiday, Frost protection, Child Lock						
Certificates		CE, TÜV CB, EHPA						
Maxiumum load profile		L L XL XL						
Energy efficiency class		A+ A+ A+ A+						

#### **PRODUCT FEATURES**

- Energy efficient: Energy class A<sup>+</sup>!
- Suitable also for indoor cooling
- Smart Grid Ready
- Outer metal housing with nanoceramic finish and and titanium enamel coated inner tank surface
- Child lock, self-diagnostics
- Hidden electronic display
- Ergonomic design
- Simple, cheap installation
- Hidden air duct
- Hot-gas bypass defrosting
- Operation from solar cells
- Smart control pre-programmable for each day of one week

#### **OPERATING MODES**

- Only heat pump
- Heat pump or electric heating with automatic heat source selection
- Anti-legionella function at 65 °C (simultaneous heat pump and electric heating)
- Quick heat-up function (simultaneous heat pump and electric heating)
- Program
- Off peak
- Real time clock
- PV operation from solar cells

#### **SENSORS**

- Water temperature sensor
- Evaporator temperature sensor
- Air temperature sensor
- High pressure switch
- Safety thermostat







HIGH TEMPERATURE **HEATING WATER** IN COLD AMBIENT TEMPERATURE

### 4/6 KW













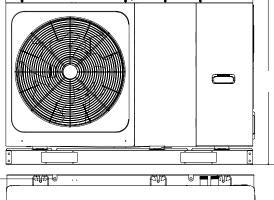
792

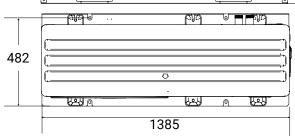
\*3 years full 5 year tank warranty

the products and warranty terms, please visit www.hajdurt.hu



For more information about





397	
397	
1295	

	MODEL		HPAW-4	HPAW-6	HPAW-8	HPAW-10	HPAW-12 3N	HPAW-14 3N	HPAW-16 3N
Voltage/Phase/Frequency V/PH/Hz		230/1/50			400/3/50				
Heating <sup>2</sup>	Capacity	kW	4,30	6,30	8,10	10,00	12,30	14,10	16,00
	Rated input	kW	1,13	1,70	2,10	2,67	3,32	3,92	4,57
	COP		3,80	3,70	3,85	3,75	3,70	3,60	3,50
Seasonal space heating energy efficiency class <sup>6</sup>	Leaving water temperature 35°C	class	A+++						
	Leaving water temperature 55°C	class	A++						
Sound power level <sup>7</sup>	Sound power level <sup>7</sup> dB		55	58	59	60	65	65	68
Unit dimensions (W×F	I×D)	mm	1295×792×429 1385x945x526			6			
	Cooling	°C	-5~43						
Outdoor air temperature range	Heating	°C	-25~35						
temperature range	DHW	°C	-25~43						
Backup E-heater	Standard mounting	kW	3,00 9,00						
	Power supply	V/Ph/Hz	220-240/1/50 380-415/3/50						
Leaving water temperature range	Cooling	°C	5~25						
	Heating	°C	25~65						
	DHW (tank)	°C	30~60						

<sup>&</sup>lt;sup>2</sup> Outside air 7°C, 85% R.H., heating water in/out 40/45°C

<sup>&</sup>lt;sup>6</sup> Seasonal space heating energy efficiency class tests with average climate and normal conditions.

<sup>7.</sup> Testing standard: EN12102-1.

Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02:2014.



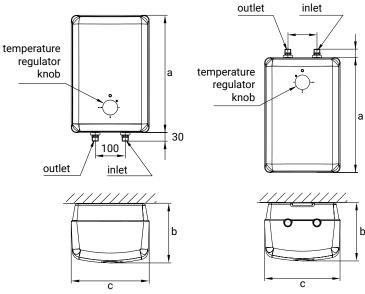






#### **OPEN OUTLET WATER HEATERS SUPPLYING ONE WATER WITHDRAWING LOCATION**





ТҮРЕ		FT5 (above- sink)	FT10 (above- sink)	FTA5 (under- sink)	FTA10 (under- sink)
Volume	[litre]	5	10	5	10
a	[mm]	396	440	396	440
b	[mm]	260	305	260	305
С	[mm]	200	270	200	270
Water connection		G1/2	G1/2	G3/8	G3/8
Max. operating pressure	[MPa]	0			
Electric power	[kW]	1,5			
Heat-up time to 65 °C	[min]	14	28	14	28
Standby energy consumption at 65 °C	[kWh/24h]	0,55	0,65	0,55	0,65
Weight	[kg]	3,5	5	3,5	5
Hot water temperature	[°C]	controllable, max. 80			
Maximum load profile		XXS	S	xxs	S
Energy efficiency class			С		С







Accessories: faucet, connection pipe

FTA...

Outer cover: white plastic



5F

\*2 years full 5 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu



ТҮРЕ		<b>5F</b> (above- sink)	<b>5A</b> (under- sink)	
Volume	[liter]	5		
Length (without faucet)	[mm]	422		
Depth	[mm]	260		
Width	[mm]	200		
Water connection		G1/2 G3/8		
Rated operating pressure	[MPa]	0		
Voltage	[V]	230		
Electric power	[W]	1500 or 2000		
Heat-up time to 65°C	[min]	12		
Weight	[kg]	2,6		
Hot water temperature	[°C]	controllable, max. 80		
Maximum load profile		XXS	XXS	
Energy efficiency class		Α	Α	





### **BUFFER STORAGE TANKS**

The energy store for buffer storage heating systems. Buffer storage tanks compensate for the differences between the times when energy is generated and when there is an actual energy demand, thereby ensuring efficient heating energy use.

The **PT** ... **CF** models include an internal heat exchanger for the direct connection of heat generator equipment, and a flexible stainless steel heat exchanger for domestic hot water production.

The **AQ PT** models of 500 to 2000 litres capacity are available both without, and with single or double heat exchanger. The double heat exchanger versions allow greater flexibility when used with heat generator equipment.

The storage tanks have thermal insulation, which can be installed on site for volumes of at least 500 litres. This solution makes it easier to transport and install the tanks.

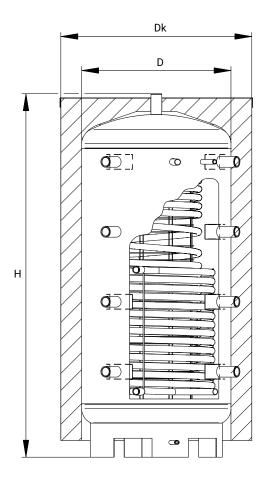












# PT...CF ErP









\*For more information about the products and warranty terms, please visit www.hajdurt.hu

ТҮРЕ		PT300 ErP	PT500CF ErP	PT750CF ErP	PT1000CF ErP		
Rated volume [litre]		300	500	750	1000		
Height H	[mm]	1535	1890	1920	2320		
Diameter (without insulation) D	[mm]		650 790				
Diameter (with insulation) Dk	[mm]	660	870	10	10		
Maximum operating pressure							
- tank	[MPa]	0,6		0,5			
- solar exchanger	[MPa]		0,6				
– DHW pipe	[MPa]						
Water connection		Rp6/4					
Electric heating element connecti	on		Rp	6/4			
Sensor connections			Rp <sup>-</sup>	1/2			
DHW connections			G1"				
Heat exchanger surface	[m²]		2,2 2,8				
DHW exchanger surface		6,8					
Weight (with insulation) [kg]		87	142	172	177		
Heat loss	86	78	92	98			
Energy efficiency class	С	В	В	В			





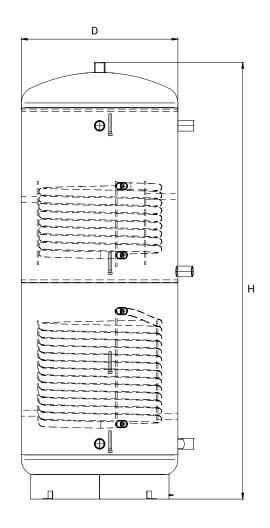
# AQ PT6.2... ErP











ТҮРЕ		AQ PT6.2 500 ErP	AQ PT6.2 750 ErP	AQ PT6.2 1000 ErP	AQ PT6 1500 ErP	AQ PT6 2000 ErP	AQ PT6.2 500C ErP	AQ PT6.2 750C ErP	AQ PT6.2 1000C ErP	AQ PT6 1500C ErP	AQ PT6 2000C ErP	AQ PT6.2 500C2 ErP	AQ PT6.2 750C2 ErP	AQ PT6.2 1000C2 ErP	AQ PT6 1500C2 ErP	AQ PT6 2000C2 ErP
Rated volume	[litre]	500	750	1000	1500	2000	500	750	1000	1500	2000	500	750	1000	1500	2000
Height (with insulation) H	[mm]	1670	1860	2200	2190	2202	1670	1860	2200	2190	2202	1670	1860	2200	2190	2202
Diameter (without insulation) D	[mm]				1000				90		1150		79		1000	1150
Diameter (with insulation) Dk	[mm]	850	99	0	1200	1350	850	99	90	1200	1350	850	99	90	1200	1350
Maximum operating pressure	ļ,															
- tank	[MPa]	0,3														
- lower heat exchanger			- 0,6													
- upper heat exchanger			- 0,6													
Water connection	[ a]	Rp6/4														
Electric heating element connecti	ion	Rp6/4														
Sensor connections		outer pocket tube														
Exchanger connection		- Rp1														
Lower exchanger surface	[m²]							2,9	3	3,6	4,2		2,9		3,6	4,2
Upper exchanger surface													1,8	2	2,4	2,8
Weight (without insulation)	[kg]	66	90		182		92	126	144		274		154		266	329
Heat loss	[W]	114	132	145	170	190	114	132	145	170	190	114	132	145	170	190
Energy efficiency class			С		С				С		С		С		С	С



Gas-fired storage water heaters are available in two designs: GB...1 chimney vented, and GB...2, non chimney vented. They are wall-mounted, closed system appliances that can supply multiple water withdrawal locations withdrawal locations and faucets with shower. The desired water temperature can be set using a knob. Non chimney vented models have the ODS (Oxigen Depletion Sensor) safety feature, i.e. the appliance will turn off before the oxygen content of air decreases to a level constituting health hazard.

HAJDU condensation gas boilers offer an all-round solution for setting up heating and hot water systems. Moreover, they are perfectly suitable for integration in solar systems. HAJDU HGK... and HGK Smart model condensation gas boilers come in wall-mounted design. A specially designed heat exchanger makes enables the production of heat and hot water independently from each other. The heat exchanger is made of aluminium and copper, which ensures a long service life. The application of the most advanced condensation technique results in the highest operational efficiency in this category, while also making the boiler environment-friendly. Since the appliance has neither a sequence valve nor a lamella heat exchanger, it does not require maintenance or replacement of these components either. They are compact appliance with small-footprint, easy and convenient to use, and they require minimum maintenance.

The control of the boiler allows the setting of three types of water heater functions, as needed (conventional - ON/OFF, Comfort - preheated heat exchanger, and ECO - self-learning).

These boilers can be connected to an indirect storage unit. They feature a highly energy-efficient modulation pump. The built-in RF module enables wireless remote control of the boilers via the use of a wireless radio frequency room thermostat. Accurate modulation and the special heat exchanger enable the boiler to function according to the customer's specific needs, whereby they can operate with high water-side efficiency in both heating and water heating mode. While normally running on natural gas (G20), they can be transformed to run on propane (G31).

The appliances are available in versions with maximum heating power of 18, 23, 26, 28, 32 and 41 kW. For higher power requirements, cascading can be applied. The control electronics of the boilers have a built-in weather-aware regulator that enables optimal heating via the connection of an optional external temperature sensor. The boilers can be ordered with a radio frequency room thermostat, HAJDU flue gas deflectors, mounting brackets, as well as a closed expansion tank with safety valve.

## GAS-FIRED HOT WATER STORAGE TANKS, CHIMNEY VENTED AND NON CHIMNEY VENTED DESIGN









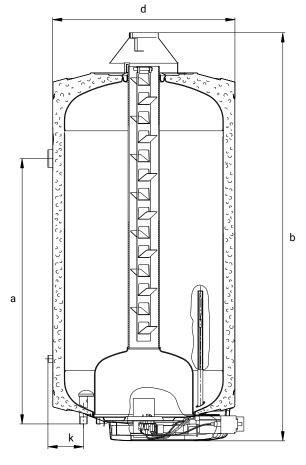






^2 years full 5 year tank warranty

\*For more information about the products and warranty terms, please visit www.hajdurt.hu



ТҮРЕ	C	HIMNEY VENT	NON CHIMNEY VENTED					
TTPE	GB80.1	GB120.1	GB150.1	GB80.2	GB120.2			
Volume	[litre]	80	120	150	80	120		
	[mm]	877	1152	1352	859	1124		
d	[mm]			515				
	[mm]	500	750	1015	500	750		
k	[mm]			100				
Distance between pipe branches	s [mm]			100				
Flue gas deflection Ø	[mm]	- 80						
Water connection				G1/2				
Max. operating pressure	[MPa]			0,6				
Heating capacity for H-gas	[kW]	5,3	5,6	6,3		2		
Heating capacity for S-gas	[kW]	4,6	4,8	5,7	2			
Efficiency	[%]	93*	95*	94*	ç	3		
Heat-up time to 55°C [hou	ır, minute]	0,56	1,09	1,2	2,19	3,37		
Gas consumption	[m³/h]	0,56 0,59 0,63 0,21			21			
Net weight	[kg]	38	47	56	38	47		
Hot water temperature	[°C]	controllable, max. 80						
Flame supervision				thermoelectric				
Maxiumum load profile		M	L	L	М	L		
Energy efficiency class		Α	Α	Α	Α	А		

<sup>\*</sup> factory data; certified value> 84%









# **HGK SMART AND HGK**

### • For sale in Hungary only





ТҮРЕ		HGK-24	HGK-28	HGK-36	HGK-47	HGK Smart 24	HGK Smart 28	HGK Smart 36	
DOMESTIC HOT WATER (DHW)									
Nominal output	[kW]	5,6 - 22,1	7,1 - 28,0	7,2 - 32,7	7,2 - 32,7	5,5 - 23,3	7,2 - 29,1	7,5 - 32,7	
DHW threshold	[l/min]			2			1,5		
DHW flow at 60 °C	[l/min]	6	7,5		9	6	7,5	9	
DHW flow at 40°C	[l/min]	10	12,5			10	12,5	15	
DHW temperature	[°C]				60				
DHW supply time	[sec]				<1				
Water heater efficiency	[%]	83	8	35	87	84	8	7	
HEATING									
Nominal output 80/60°C	[kW]	5,4 - 17,8	6,9 - 22,8	7,1 - 26,3	7,7 - 40,9	5,9 - 22,7	7,7 - 28,4	8,2 - 32,1	
Nominal output 50/30°C	[kW]	5,9 - 18,5	7,6 - 23,4	7,8 - 27,1	8,5 - 42,2	5,5 - 23,3	7,2 - 29,1	7,5 - 32,7	
Max. heating water pressure	[MPa]				0,3				
Max. heating water temperature	[°C]				90				
Gas consumption (G20)	[m³/h]	0,59 - 2,30	0,75 - 2,90	0,75 - 3,40	0,8 - 4,41	0,59 - 2,30	0,75 - 2,90	0,75 - 3,40	
Seasonal room heating efficiency	[%]		93		92	93		94	
ELECTRICAL DATA									
Rated voltage	[V]				230				
Protection	[IP]				IP44				
Energy consumption at full load	[Wh]		80		135		80		
Energy consumption in standby mode	[Wh]				2				
BOILER DIMENSIONS AND WEIGHT									
Height	[mm]	590	650	7	10	590	650	710	
Width	[mm]				450				
Depth	[mm]				240				
Weight	[kg]	30	33		86	30	33	36	
ENERGY EFFICIENCY									
Maxiumum load profile			XL	XL	XL		XL	XL	
Energy efficiency class (heating)		Α	Α	Α	Α	Α	Α	Α	
Energy efficiency class (water heating)		A					А	Α	



# **SOLAR COLLECTORS**

### M4 selective flat plate collectors

The **M4-200 flat plate collectors** contain 8 copper absorber tubes each with a diameter of 8 mm, and a selectively coated monolith absorber plate. The absorber plate is a 0,5 mm thick aluminium plate. It is ultrasonic welded to the tubes, which enables high heat transfer performance.

The collector has 40 mm thick heat insulation (made of rock wool with a density of 50 kg/m3) not only on the rear, but also on the sides.

The collector is covered by 3,2 mm thick tempered solar glass with reduced iron content. The glass has a triple seal: EPDM seal, silicone gel and a flexible fixing/clamping plate. The side wall of the collector, which is also a supporting structuralelement, is made of double-layer anodized aluminium. The back plate is made of anodized aluminium. The collector is fixed to the supporting structure by M8 screws. The screws can be freely moved in the rail formed on the sides of the collectors. The screws are factory-installed in the collector. There are two screws on both the lower left- and right-hand sides, and four screws at the top.

#### VTS evacuated tube collectors with parabolic reflector

**Evacuated tube collectors** consist of 1.5 m long evacuated tubes of 47 mm diameter. The tubes contain two concentric glass tubes. The vacuum between the tubes guarantees excellent insulation.

The inner tube comprises a sunray absorbing selective coating, copper absorber plate and a U-shapped copper tube filled with a mixture of antifreeze and water.

Collectors can be ordered with either 12 or 16 tubes. The aluminium parabolic reflective plate placed behind the tubes focuses sunrays to the tubes, thus making the collector more efficient.

### **BUFFER STORAGE TANKS**









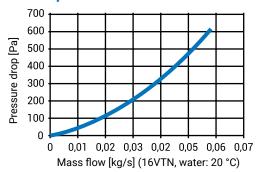




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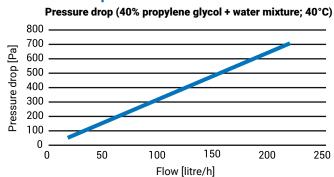


### **Pressure drop for 16VTN evacuated tube collectors**



ТҮРЕ		12VTS	16VTS		
COLLECTOR					
Dimensions: height/width/thickness	[mm]	1600/1330/100	1600/1770/100		
Weight	[kg]	35	45,5		
Gross surface area	[m²]	2,13	2,83		
Usable surface area	[m²]	1,96	2,61		
Number of vacuum tubes		12	16		
External diameter of the vacuum tube	[mm]				
Length of vacuum tube	[mm]	15	00		
Tube wall thickness	[mm]		,5		
Pressure	[Pa]				
ABSORBER					
Absorber material: external diameter of the copper tube, copper plate	[mm/mm]	9,5 /	<sup>'</sup> 0,8		
Coating		sele	ctive		
Absorption factor		a > 0,92			
Emission factor		e < (	0,08		
Optical efficiency η <sub>0</sub>					
Efficiency factor a <sub>1</sub>	1/	48			
Efficiency factor a <sub>2</sub>	[W/(m <sup>2</sup> K)]				
Absorbing glass tube diameter	[mm]	3	3		
	[litre]	2,6	3,4		
Material of the heat transfer medium		glycol + wa	ter mixture		
INSULATION AND HOUSING					
Insulation thickness in house	[mm]	3	0		
Insulating material		fiberglass + p			
Casing material		aluminium			
Connector size	[mm]				
LIMIT VALUES					
Maximum operating temperature	[°C]	22	7,3		
Maximum operating pressure	[MPa]				
Pressure test during production	[MPa]				
Energy output (Germany, Würzburg) [kW	Vh/m²/year]	65	50		
CERTIFICATION					

### Pressure drop for M4-200 evacuated tube collectors



ТҮРЕ		M4-200				
COLLECTOR						
Dimensions: height/width/thickness	[mm]	2060/970/90				
Weight	[kg]	35				
Gross surface area	[m <sup>2</sup> ]	2				
Cover		3.2 mm heat treated glass				
Glass surface (aperture)	[m²]	1,86				
ABSORBER						
Absorber surface	[m²]	1,83				
Material		Selectively coated 0,5 mm aluminium plate and copper tube, D = 8 mr				
Coating						
Absorption factor		a > 0,95				
Optical efficiency η <sub>0</sub>		0,755				
	[W/(m <sup>2</sup> K)]	3,89				
Efficiency factor a <sub>2</sub>	[W/(m <sup>2</sup> K)]	0,013				
		1,6				
NSULATION AND HOUSING						
nsulating material		rock wool				
nsulation thickness	[mm]	40				
Casing (frame/back plate)		anodised aluminium				
Sealing		EPDM				
Connector size						
LIMIT VALUES						
Maximum operating temperature	[°C]	177,6				
Maximum operating pressure	[MPa]	1				
Energy output (Germany, Würzburg) [k	690					
CERTIFICATION						

# **SOLAR SYSTEMS**

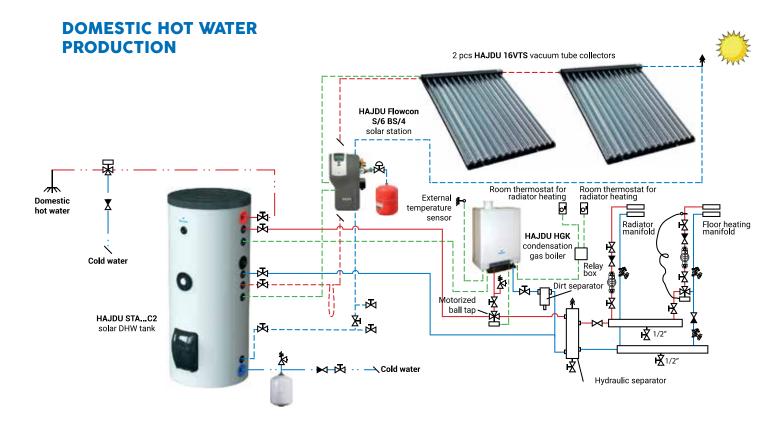
Solar collectors absorb sunrays and transform them into heat, which is then delivered to the antifreeze fluid circulated inside of it. The absorber surface of the collectors has a special selective coating, which guarantees high efficiency, good heat resistance and long service life. A pump helps to transfer the fluid from the collector to the hot water tank, where it passes the solar energy through an internal heat exchanger.

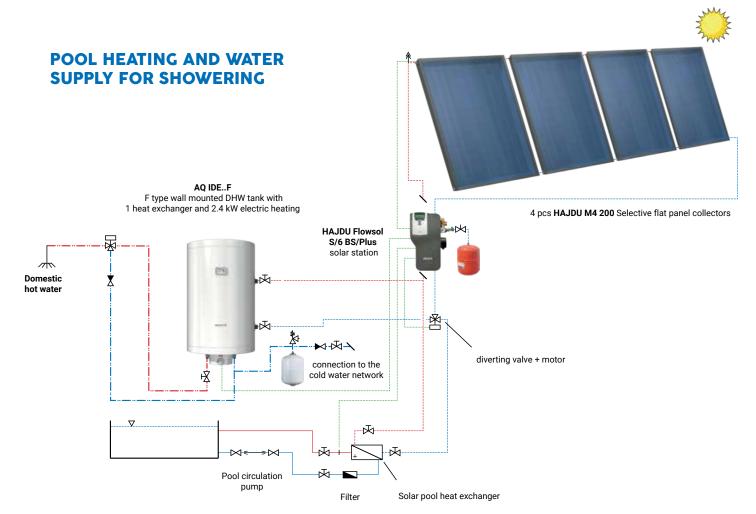
The functioning of the system is constantly monitored by a solar regulator that starts or stops the pump depending on the temperature measured by sensors.







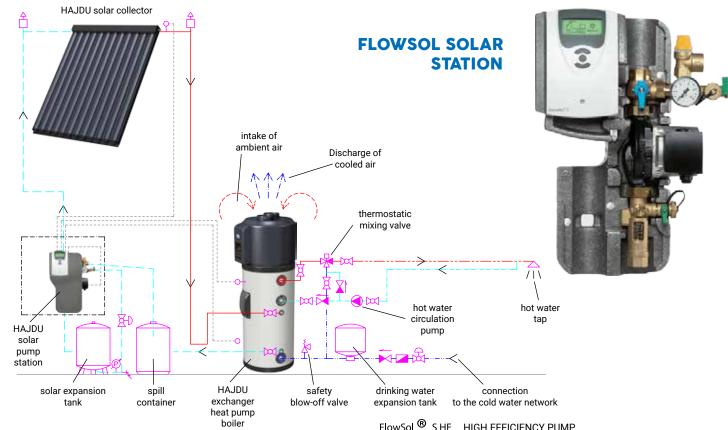












### **FLOWSOL SYSTEM DESIGNS**



Normal solar system



Solar system with heat exchanger



Solar system with reheating



Solar system tanks with layer filling



2 tank solar system with valve logic



2 tank solar systems with pump logic



Solar system with 2 collectors and 1 storage tank



Solar system with reheating by solid-fired boiler



Solar system with return temperature increase in heating circuit



Normal solar system with residual heat removal

	8	FlowSol <sup>®</sup> S HE HIGH EFFICIENCY PUMP	
	7	Wilo Yonos Para ST 15/7 max.	
	-	FlowSol® S 0,6	
Ē	6		ar)
<u>ت</u> إ	5	0,5	S (b
EIG	4	0,4	FOS
16 F	3	0,3	URE
LIFTING HEIGHT (m)	2	0,2	PRESSURE LOSS (bar)
_	1	0,1	<u>=</u>
	0	Wilo Yonos Para ST 15/7 min. 0,0	
		0 5 10 15 20 25 30 35 40 45	
		FLOW (I/min)	

FLOW (I/min)							
TECHNICAL SPECIFICATIONS							
Accelerating pump	Wilo Yonos Para ST 15/7.0 PWM2 ERP ready						
ErP power consumption (W) (at 50% power)	23						
Safety valve (bar)	6						
Pressure gauge (bar)	010						
Flowmeter (liter/minute)	113						
Closing assembly	1 pc one-way ball valve + 1 pc ball valve in the rotameter						
Filling&discharge assembly	2 pcs ball valves						
Expansion tank connection	RP ¾"						
Connector size for solar circuit lines	RP ¾"						
Maximum medium temperature	95°C						
Maximum pressure (bar)	6						
Medium	solar anti-freeze agent, mixture of propylene glycol and water up to 1: 1 dilution ratio						
Dimensions (measured with thermal insulation) (mm)	430 x 223 x 193						
Materials and fittings	brass						
Seals	AFM 34						
Thermal insulation foam	EPP						

# **PARTS & ACCESSORIES**

## **HEATERS**



#### PART NUMBER: 2419991045

Heater 3kW, 6/4", 230V, L390; for types STA, PT, AQ PT...ErP



#### PART NUMBER: 2419991067

Heater 2kW, 6/4", 230V, L390; for types STA, PT, AQ PT...ErP



#### PART NUMBER: 2419991046

Heater 6kW, 6/4", 400V, L620; for types STA500-1000, PT 500-1000 ErP, AQ PT 500-2000 ErP



#### PART NUMBER: 2419991047

Heater 9kW, 6/4", 400V, L780; for types STA800-1000, PT 500-1000 ErP, AQ PT 500-2000 ErP



#### PART NUMBER: 2419991049

Flanged heater 12kW, 400V; for types STA400-500



#### PART NUMBER: 2419991059

Flanged heater 9kW, 400V; for types STA800-1000



#### PART NUMBER: 6104550188

Flanged heater with thermostat and wires 2,4kW, 230V, for types IND...F



#### PART NUMBER: 6104550247

Flanged heater with thermostat and wires 3x1.2 kW, 230/400V, for types STA 200-300



### PART NUMBER: 6104550248

Flanged heater with thermostat and wires 3x1.6 kW, 230/400V, for types STA 200-300



#### PART NUMBER: 6104550256 - 2400 W PART NUMBER: 6104550257 - 3200 W

Ceramic (steatite) heater with thermostat and wires 6104550256 - 2400 W (3x800W), 230/400V, for types STA200 Sztea

6104550257 - 3200 W (3x1066W), 230/400V, for types STA300 Sztea



#### PART NUMBER: 6297129721 -1800W PART NUMBER: 6297129607 - 2400W

Immersion heater for type Z...ErP and AQ...ErP hot water tanks

# **OTHER PARTS**



#### PART NUMBER: 6312040108

Thermostat for IDE and IND type hot water tanks



### PART NUMBER: 6251373002

Flange gasket for STA 200-300 Sztea types



### PART NUMBER: 6251373021

Flange gasket



#### PART NUMBER: 6312040076 (AQ...ERP 80-200L)

Thermostat for AQ...ErP type hot water tanks





# HAJDU Hajdúsági Ipari Zrt.

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