

03	COMPANY
04	HEADQUARTERS
05	COMPANY
06	CERTIFICATES
07	CERTIFICATES
80	PRODUCTION
09	QUALITY
	STORAGE TANKS
10-11	SOLIBUFFER 4
12-13	SOLIBUFFER 8
14-15	SOLIBUFFER
16-17	SOLITANK
18-19	SOLIKOMBI
	ENAMEL COATED TANKS
20-21	ENAMEL TSE-VA
22-23	ENAMEL TSE-VS
24-25	ENAMEL TSE-VS HP
26-27	ENAMEL TSE-VD
	SOLAR WATER HEATERS
28	TSM
29	TSE
30	TSM THERMOSIPHON SYSTEMS
31	TSE THERMOSIPHON SYSTEMS
	SOLAR THERMAL COLLECTORS
32	WUNDER ALS
33	WUNDER ANSG
34	WUNDER ANP
35	WUNDER ALS DRAIN
36	WUNDER ALS HORIZONTAL
<b>37</b>	WUNDER ALS EXCELL
	PV-T HYBRID PANELS
38	EXCELL 590 W
39	PVARM
	HEAT PUMPS
40	VARM UP SERIES
41	VARM BOOST SERIES

**SOLAR THERMAL ACCESSORIES** 

ACCESSORIES

SOLIMPEX-A

42

43

SOLIMPEKS Enerji Paz. Ltd. Şti. | ZMIR / TURKEY



Solimpeks Solarenergie GmbH HANNOVER / GERMANY



# • HEADQUARTERS KONYA / TURKEY



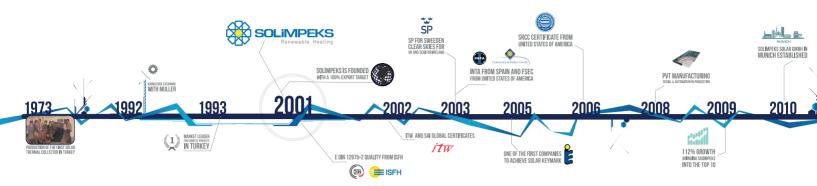


# COMPANY

The origins of Solimpeks date back to 1977. Through R&D and a strong focus on quality, company growth was accelerated and allowed Solimpeks to export in markets all over the world. As a consequence of this expansion Solimpeks now has a reputation as a world leading manufacturer of high-quality renewable heating products almost everywhere under the sun. The company is the world's leading manufacturer of hot water storage tanks, heat pumps, solar water heaters and pv-t hybrid collectors. Solimpeks employs over 300 staff in its locations across Turkey and Germany.



## MILESTONES



## CERTIFICATES



The "Solarkeymark" denotation, is issued by ESTIF and is throughout Europe, has become the most widely accepted certificate for solar thermal products, this has been made obligatory for all goods entering Germany since January 2007 and the favoured certificate to get refund incentive payments EU countries.



The Federal Office of Economics and Export Control (BAFA) is a superior federal authority subordinated to the Federal Ministry of Economics and Technology (BMWi) in Germany. A central task of BAFA in the foreign trade sector is export control. In the energy sector BAFA implements measures to promote a better use of renewable energies, the saving of energy, for the maintenance and extension of the power-heat-linkup and for German coal mining, and participates in crisis-contingency measures in the mineral oil sector.



The German "TÜV" (Technischer Überwachungs Verein) certificate.



SRCC provides authoritative performance ratings, certifications and standards for renewable energy products, with the intention of protecting and providing guidance to consumers, incentive providers, government, and the industry.



IEC (International Electrotechnical Commision) prepares International Standards for systems of photovoltaic conversion of solar energy into electrical energy and for all the elements in the entire photovoltaic energy system.



The "ISFH" (Institute fur Solarenergieforschung) certificate issued by the Leibniz University Solar Energy Research Institute



CSTBat; Worldwide accredited association that promotes the development of France trough the culture of quality.



The "ITW" (Institut für Thermodynamik und Wärmetechnik) certification issued by the Thermodynamics and Heating Techniques Institute at Stuttgart University.



The SEAI (Sustainable Energy Agency of Ireland)



The "CE" (Conformité Européenne) approval certifying health and safety in Europe.



ISO 27001 Information Security Management System certificates; ISO 27001 Information security management system is established by an accredited certification organization to pass through 2 stages of supervision and to prove its continuity.

## **MILESTONES**





## **CERTIFICATES** •



HYB; states that manufacturing facilities comply to Turkish Standarts.



The Turkish Standards Compliance Certificate:
This certification states that the authorized manufacturer's products comply with Turkish Standards.



 $\label{thm:constraint} The \ "INTA" \ (Instituto\ Nacional\ De\ T\'ecnica\ Aeroespacial)\ award\ issued\ by\ the\ Spain's\ International\ Quality\ Institute,$ 



Occupational health and safety management system.



The National Renewable Energy Centre is a technology center specialising in applied research, and the development and promotion of renewable energy. It is highly rated and has acknowledged national and international prestige.



The MCS certificates microgeneration technologies used to produce electricity and heat from renewable sources in the UK.



Worldwide accredited association that promotes the development of Italy through the culture of quality.



Eurofins Scientific is an international life sciences company which provides a unique range of analytical testing services to clients across multiple industries



Fraunhofer is Europe's largest application-oriented research organization based in Munich, GERMANY.



ISO 14001 Environmental Management System (EMS) provides a continuous cycle of planning, implementing, reviewing, and improving the processes and actions that are performed to meet business and environmental goals.

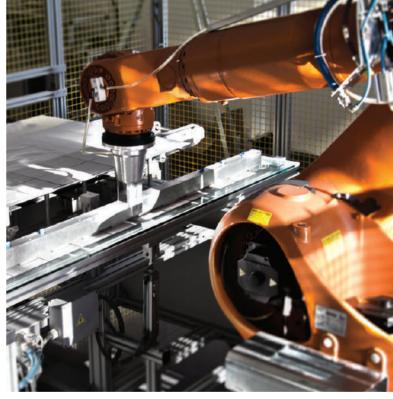


ISO 9001:2015 specifies requirements for a quality management system where an organization, needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements.









Solimpeks products are manufactured using the latest proven industry methods in order to ensure quality and the lowest failure rates. From robotic production lines with a high level of automation to custom-made product-specific machinery; all our products are manufactured in line with industry standards for quality. At the Solimpeks outdoor testing site, the solar products are subjected to extreme climatic and endurance tests. All of our manufactured products are subjected to above the standard requirements for testing, to ensure the products are of the highest quality before leaving our factory.

# QUALITY

At Solimpeks, Quality Assurance and Control processes are our main priority,

In this process, it ensures the production of products in accordance with standards with a quality-oriented approach in order to ensure customer satisfaction, meet customer expectations and create new customer portfolios.

In Solimpeks, all processes starting from the design of the products, through raw material purchasing, production, shipment and usage are carried out in accordance with the quality standards, product standards (EN 12897, EN 12975, ISO 9806, DIN EN 12975, DIN EN 12976-1/2, TS EN 12975, DIN 4753-3, EN 55014-1-2, EN 61000-3-11, EN 62233, EN 61000-3-12, EN 60335-1-2-40, EN 62233, EN 60204, EN 12100-1, EN 14276-1-2, EN 378-1-2-3-4, EN 14825, EN 14511, EN 14511-4, EN 12102-1, EN 61000-3-3, EN 61000-3-2, EN IEC 62311, ETSI EN 300 328) and EU directives (EMC Electromagnetic Compatibility Directive 2014/30/EU, LVD Low Voltage Regulation 2014/35/EU, MD Machinery Directive 2006/42/EC, PED Pressure Equipment Directive 2014/68/EU, ECO Design Directive 2009/125/EC EU 2016/2282:2016-11-30, Energy Labelling 2010/30/EU, RoHS Directive 2011/65/EU, ATEX Directive, RED Radio Equipment Regulation), HP KEYMARK(EU) No 813/2013 ) to ensure compliance with legal requirements, ISO 9001 Quality Management System and ISO 16949 Automotive Quality Management System are implemented.

The system documents we have are; ISO 9001 Quality Management System, ISO 14001 Environmental Management System, ISO 45001 Occupational Health and Safety Management System, ISO 50001 Energy Management System and ISO 27001 Information Security Management System. Our products are tested in accredited laboratories to ensure that they meet the standard requirements and these processes are crowned with certificates (Solarkeymark, ISO, SRCC, QB, TSE...) that are accepted as valid in many parts of the world.

It increases the quality of products delivered to the end user/customer by analyzing the risks in its processes and processes, preparing control plans, analyzing measurement systems according to the control plan and measurement methods, and preparing statistical process controls by statistically monitoring its processes. It also carries out quality studies and studies for different certification processes in customer-specific requests.

Solimpeks has adopted the principle of continuous improvement. It continues to work to continuously improve quality and all other processes through digitalization.





## **VARMBUFFER 4**



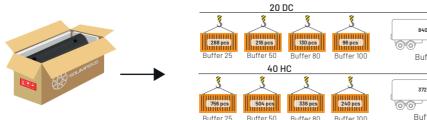
#### **GENERAL INFORMATION**

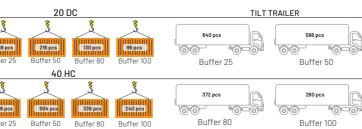
- Varmbuffer Models is a buffer tank suitable for small-scale applications.
- The buffer enables hydraulic separation between the heat pump circuit and heating circuit flows. In addition, it stores excess energy and ensures that hot water is available for sudden demands.
- It protects your heat pump from the negative effects of short cycling. Short cycling not only leads to higher operating costs, but can also damage your heat pump, reducing its lifespan and overall energy efficiency performance.
- Polyurethane with high quality insulation.
- Vinlex Artificial Leather outer cover.
- It can be mounted to the wall.
- Easy insta at ion due to compact design.
- Minimum maintenance.



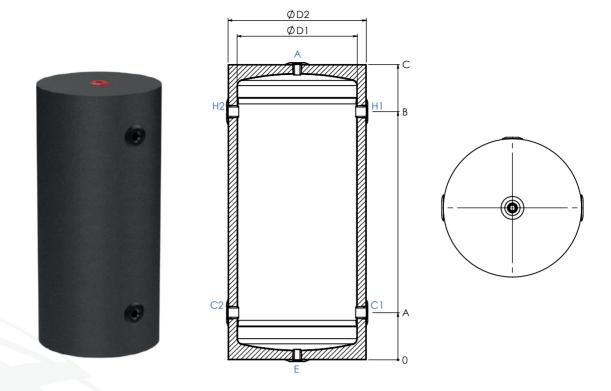
Varmbuffer		25	50	80	100
Capacity	L	28	50	77	105
Net weight	kg	11	17.5	22.5	25
Insulation / (Polyurethane 40kg/m³)	mm	30	30	30	30
Maximum operational temperature	°C	95	95	95	95
Rated pressure	bar	6	6	6	6

Pipe Connection			
C1, C2	Cold water in	inch	IG 1"
H1, H2	Hot water out	inch	IG 1"
A	Venting	inch	IG 1/2"
E	Emptying	inch	IG 1/2"

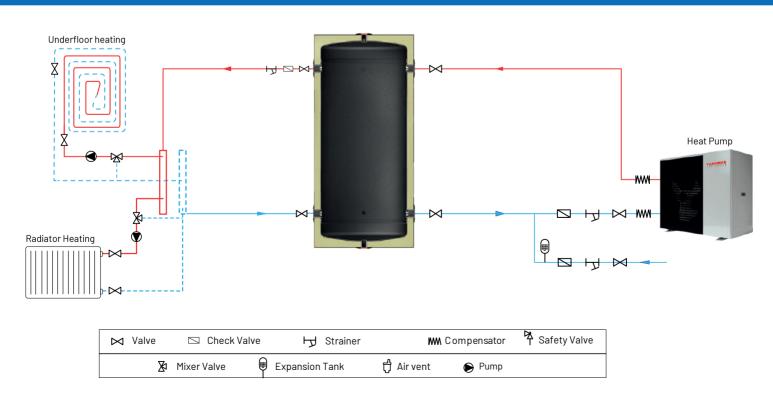








DIMENSIONS									
Varmbuffer	Α	В	С	D1	D2				
25	128	528	655	250	310				
50	125	795	920	280	340				
80	155	1065	1220	304	364				
100	155	815	970	394	454				





## **VARMBUFFER 8**



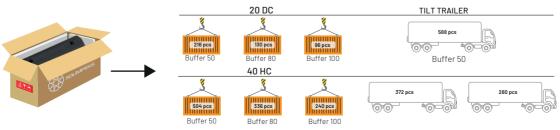
#### **GENERAL INFORMATION**

- Varmbuffer Models is a buffer tank suitable for small-scale applications.
- The buffer enables hydraulic separation between the heat pump circuit and heating circuit flows. In addition, it stores excess energy and ensures that hot water is available for sudden demands.
- It protects your heat pump from the negative effects of short cycling. Short cycling not only leads to higher operating costs, but can also damage your heat pump, reducing its lifespan and overall energy efficiency performance.
- Polyurethane with high quality insulation.
- Vinlex Artificial Leather outer cover.
- It can be mounted to the wall.
- Easy insta at ion due to compact design.
- Minimum maintenance.

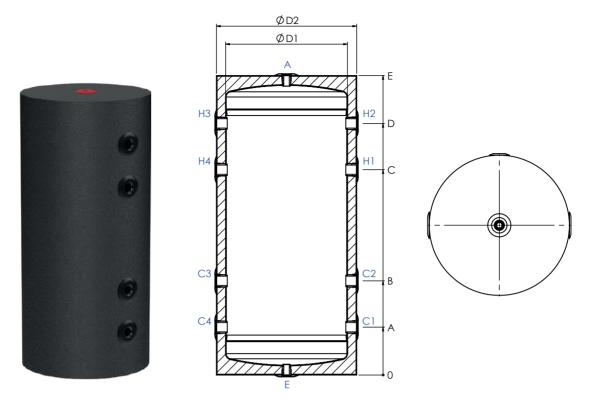


Varmbuffer		50	80	100
Capacity	L	50	77	105
Net weight	kg	18	23.5	25.5
Insulation / (Polyurethane 40kg/m³)	mm	30	30	30
Maximum operational temperature	°C	95	95	95
Rated pressure	bar	6	6	6

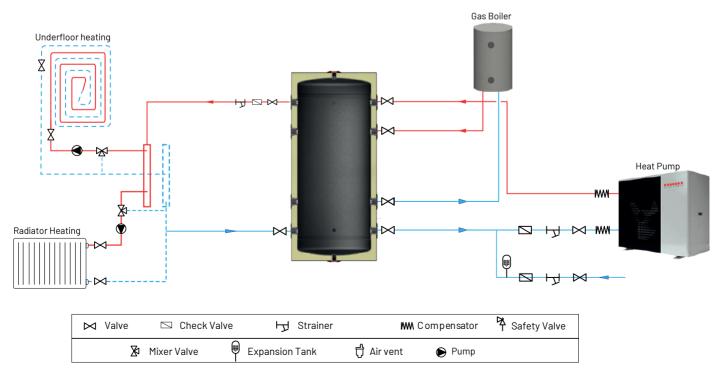
Pipe Connection			
C1, C2, C3, C4	Cold water in	inch	IG 1"
H1, H2, H3, H4	Hot water out	inch	IG 1"
Α	Venting	inch	IG 1/2"
E	Emptying	inch	IG 1/2"







DIMENSIONS										
Varmbuffer	Α	В	С	D	E	D1	D2			
50	125	275	645	795	920	280	340			
80	155	305	915	1065	1220	304	364			
100	155	305	665	815	970	394	454			





## SOLIBUFFER

BUFFFR

#### **GENERAL INFORMATION**

- ✓ When choosing a non-solar heat source, this is the most efficient model.
- ✓ Perfectly compatible with heat pumps.
- ✓ The buffer tank provides hydraulic separation between the heat pump circuit and the heating circuit flows. It also stores excess energy and ensures that hot water is available for sudden demands.
- ✓ Protects your heat pump from the negative effects of short cycling. Short cycling not only leads to higher operating costs, but can also damage your heat pump, reducing its lifespan and overall energy efficiency performance.
- ✓ Optional electric heater support.
- ✓ High-quality insulated polyurethane.
- ✓ No anode rod required.
- ✓ Minimal maintenance.
- ✓ Easy installation thanks to compact design

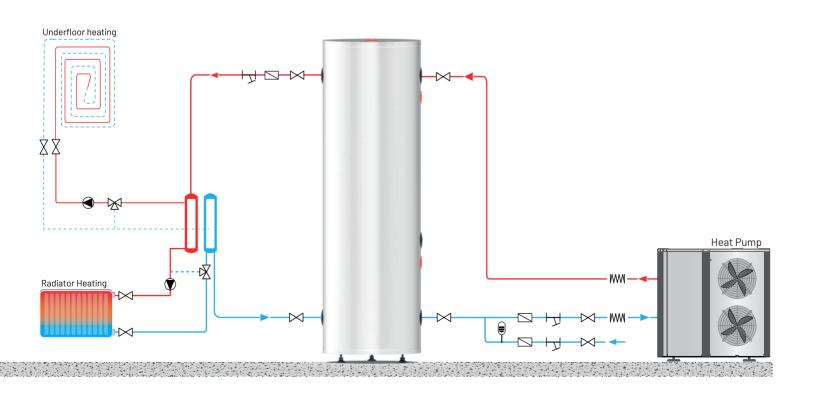


		1/30		-				
SOLIBUFFER		50	100	200	300	500	800	1000
Product information								
Energy efficiency class	-	C	C	C	C	D	E	E
Heat loss	W	54	62	74	85	140	195	220
Tank volume	L	50	100	170	245	460	850	1030
Basic data								
Weight	kg	20	40	55	73	90	140	160
Dimensions (height/diameter)	mm	570 X 450	750 X 540	1200 X 540	1750 X 540	1625 X 750	1850 X 1010	2150 X 1010
Max permissible boiler water temperature	°C	95	95	95	95	95	95	95
Maximum working pressure	bar	6	6	6	6	6	6	6
Insulating material	-	PU	PU	PU	PU	PU	Sponge	Sponge
Insulating thickness	mm	30	50	50	50	50	80	80
Outer cylinder material	-		Static painted g	alvanized sheet			Artificial leathe	ſ
Domestic water exchanger (AISI 316L)								
Water volume of the heat exchanger	L							
Domestic water heat exchanger surface are	e m²							
Maximum working pressure	bar							
Solar heating support (AISI 316L)								
Water volume of the heat exchanger	L							
Domestic water heat exchanger surface area	m <sup>2</sup>							
Maximum working pressure	bar							
Pipe connection								
Feed water in/out	inch	G 1"	G 11/4"	G 11/4"	G 1 1/4"	G 2"	G 2"	G 2"
Underfloor heating in/out	inch	G 1"	G 1 1/4"	G 1 1/4"	G 11/4"	G 2"	G 2"	G 2"
Electric heater	inch	-	G 11/4"	G 1 1/4"	G 11/4"	G 2"	G 2"	G 2"
Sensor	inch	-	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"
Emptying	inch	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"

 $^{*}\text{Solimpeks}$  reserves the right to make changes to this table at any time. Buffer 80  $$\textsc{Buffer}\,100$$ 









## SOLITANK DHW TANK + BUFFER

#### **GENERAL INFORMATION**

- ✓ Solitank models can store in 2 different versions at the same time according to the system needs. Domestic hot water + buffer tank.
- ✓ Hot water stored in the tank is used both for heating support and for heating domestic water.
- ✓ Domestic water is heated instantly in the spiral structure of the Chrome-Nickel 316L stainless steel in the tank. In this way, the formation of Legionella bacteria is prevented.
- ✓ Since Solitank models can be used as buffer tanks, they provide hydraulic separation between the heat pump circuit and the heating circuit flows. They also store excess energy and ensure that hot water is ready for sudden demands.
- ✓ Easy installation thanks to its compact design
- ✓ Perfectly compatible with heat pumps.
- ✓ Optional electric heater support.
- ✓ High quality insulated polyurethane.
- ✓ No anode rod required.
- ✓ Minimum maintenance.







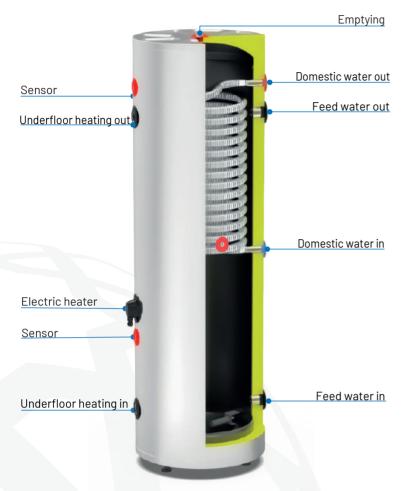




SOLITANK		200	300	500	800	1000
Product information						
Energy efficiency class	-	C	C	D	E	E
Heat loss	W	74	85	140	195	220
Tank volume	L	170	245	460	850	1030
Basic data						
Weight	kg	67	85	106	165	190
Dimensions (height/diameter)	mm	1200 X 540	1750 X 540	1700 X 750	1850 X 1010	2150 X 1010
Max permissible boiler water temperature	°C	95	95	95	95	95
Maximum working pressure	bar	6	6	6	6	6
Insulating material	-	PU	PU	PU	Sponge	Sponge
Insulating thickness	mm	50	50	50	80	80
Outer cylinder material	-	Static painted o	alvanized sheet		Artificial leather	
Domestic water exchanger (AISI 316L)						
Water volume of the heat exchanger	L	12	12	13.5	22.5	27.5
Domestic water heat exchanger surface area	m <sup>2</sup>	3.8	3.8	4.3	7.2	8.7
Maximum working pressure	bar	6	6	6	6	6
Solar heating support (AISI 316L)						
Water volume of the heat exchanger	L					
Domestic water heat exchanger surface area	m <sup>2</sup>					
Maximum working pressure	bar					
Pipe connection						
Feed water in/out	inch	G 11/4"	G 1 1/4"	G 2"	G 2"	G 2"
Underfloor heating in/out	inch	G 11/4"	G 1 1/4"	G 2"	G 2"	G 2"
Electric heater	inch	G 1 1/4"	G 1 1/4"	G 2"	G 2"	G 2"
Domestic water in/out	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Sensor	inch	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"
Emptying	inch	G 1/2"	G 1/2"	G 1/2"	G 1/2"	G 1/2"

\*Solimpeks reserves the right to make changes to this table at any time.

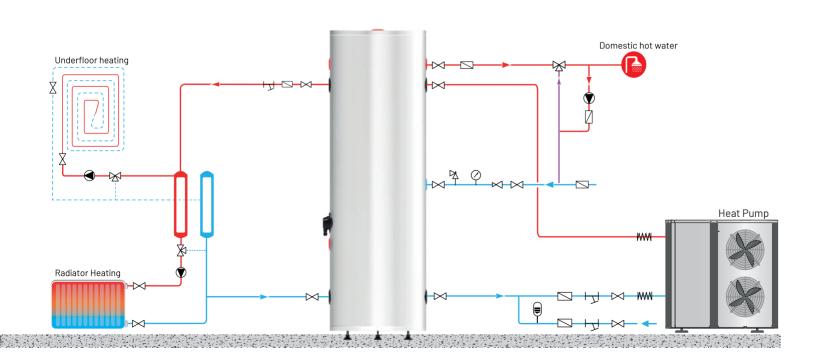




- ✓ More than 50% extra performance compared to traditional pipe
- ✓ Larger surface area, better heat transfer capacity and higher efficiency
- ✓ Stainless steel (AISI 316L) hose is suitable for drinking water application and highly resistant to corrosion.



Single flexible pipe





## SOLIKOMBI

DHW TANK + SOLAR TANK + BUFFER

#### **GENERAL INFORMATION**

- ✓ Solikombi can store in 3 different versions at the same time according to the system needs. Solar energy + domestic hot water + buffer tank.
- ✓ The hot water stored in the tank is used both for heating support and for heating the domestic
  water.
- ✓ The domestic water is heated instantly within the spiral structure of the Chrome-Nickel 316L stainless steel in the tank. In this way, the formation of Legionella bacteria is prevented.
- ✓ Since it can be used as a buffer tank in Solikombi models, it provides hydraulic separation between the heat pump circuit and the heating circuit flows. It also stores excess energy and ensures that hot water is ready for sudden demands.
- ✓ Solikombi boilers can integrate more than one heat source.
- ✓ This is the most effective model when choosing a solar heat source.
- ✓ Perfectly compatible with heat pumps.
- ✓ Easy installation thanks to its compact design
- ✓ Optional electric heater support.
- ✓ High quality insulated polyurethane.
- ✓ No anode rod required.
- ✓ Minimum maintenance.









SOLIKOMBI		300	500	800	1000
Product information					
Energy efficiency class	-	С	D	E	E
Heat loss	W	85	140	195	220
Tank volume	L	245	460	850	1030
Basic data					
Weight	kg	89	112	175	190
Dimensions (height/diameter)	mm	1750 X 540	1700 X 750	1850 X 1010	2150 X 1010
Max permissible boiler water temperature	°C	95	95	95	95
Maximum working pressure	bar	6	6	6	6
Insulating material	-	PU	PU	Sponge	Sponge
Insulating thickness	mm	50	50	80	80
Outer cylinder material	-	Static painted galvanized sheet		Artificial leather	
Domestic water exchanger (AISI 316L)					
Water volume of the heat exchanger	L	12	13.5	22.5	27.5
Domestic water heat exchanger surface area	m <sup>2</sup>	3.8	4.3	7.2	8.7
Maximum working pressure	bar	6	6	6	6
Solar heating support (AISI 316L)					
Water volume of the heat exchanger	L	5.7	6.6	7.8	9.3
Domestic water heat exchanger surface area	m <sup>2</sup>	1.8	2.1	2.5	3
Maximum working pressure	bar	6	6	6	6
Pipe connection					
Feed water in/out	inch	G 1 1/4"	G 2"	G 2"	G 2"
Underfloor heating in/out	inch	G 11/4"	G 2"	G 2"	G 2"
Electric heater	inch	G 11/4"	G 2"	G 2"	G 2"
Domestic water in/out	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Solar input/output	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Sensor	inch	G 1/2"	G 1/2"	G 1/2"	G 1/2"
Emptying	inch	G 1/2"	G 1/2"	G 1/2"	G 1/2"

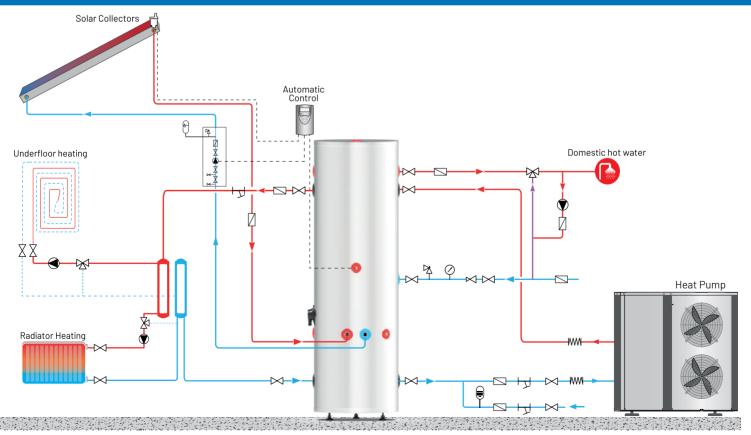
\*Solimpeks reserves the right to make changes to this table at any time.





- ✓ More than 50% extra performance compared to traditional pipe
- ✓ Larger surface area, better heat transfer capacity and higher efficiency
- ✓ Stainless steel (AISI 316L) hose is suitable for drinking water application and highly resistant to corrosion.







## **ENAMEL TSE-VA**

### **GENERAL INFORMATION**

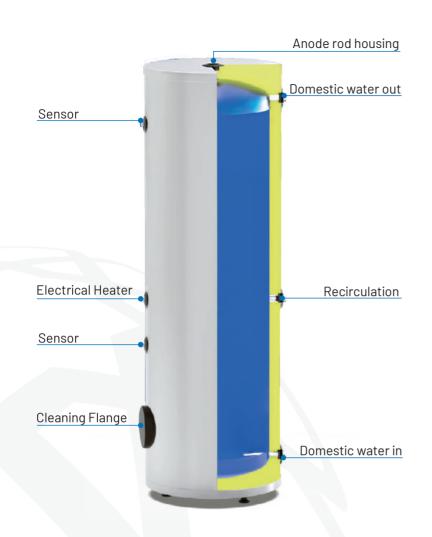
- ✓ Enamel coating in accordance with DIN 4753/3 standard
- ✓ Production in accordance with TS EN 12897 Standard
- ✓ The inner surfaces of the boiler are advanced technology enamel
- ✓ 200-400 µm enamel thickness
- ✓ Polyurethane with high quality insulation.
- ✓ Easy installation thanks to its compact design
- ✓ Optional electric heater support.



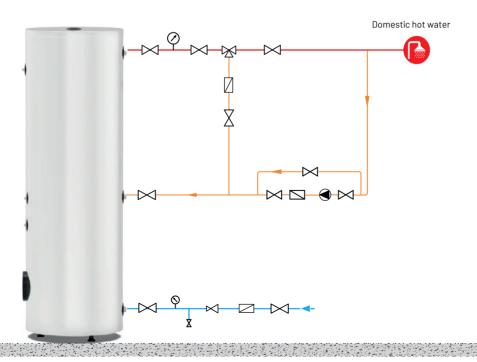
Enamel TSE-VA		160	200	300	500
Code		MA-2312	MA-2298	MA-2301	MA-2313
Weight	kg	50	60	80	80
Dimensions (height/diameter)	mm	1050 X 580	1280 X 580	1780 X 580	1630 X 750
Max permissible boiler water temperature	°C	95	95	95	95
Maximum working pressure	bar	6	6	6	6
Insulating material	-	PU	PU	PU	PU
Insulating thickness	mm	50	50	50	50
Outer cylinder material	-		Static painted galvanized shee	et	Artificial leather
Heat source exchanger					
Water volume of the heat exchanger	L				
Surface area	m²				
Maximum working pressure	bar				
Pipe connection					
Cleaning flange		Universal	Universal	Universal	Universal
Electric heater	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"
Domestic water in/out	inch	IG 3/4"	IG 3/4"	IG 3/4"	IG 3/4"
Recirculation	inch	IG 3/4"	IG 3/4"	IG 3/4"	IG 3/4"
Anode rod	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"
Sensor	inch	IG 1/2"	IG 1/2"	IG 1/2"	IG 1/2"
Blind connection	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"

 ${}^{*}$ Solimpeks reserves the right to make changes to this table at any time.





- ✓ Enamel coating according to DIN 4753-3 Standard
- ✓ 200-400 µm enamel thickness
- ✓ Long service life.





## **ENAMEL TSE-VS**

### **GENERAL INFORMATION**

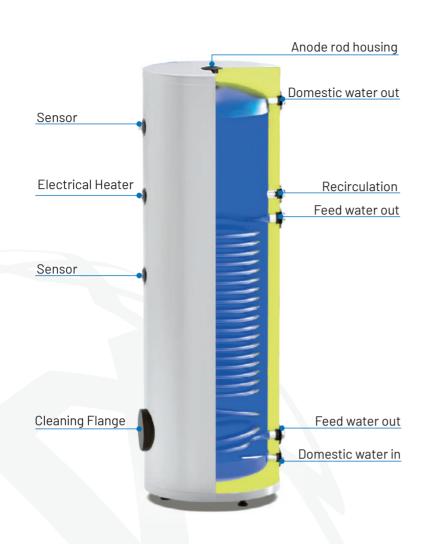
- ✓ Enamel coating in accordance with DIN 4753/3 standard
- ✓ Production in accordance with TS EN 12897 Standard
- ✓ The inner surfaces of the boiler are advanced technology enamel
- ✓ 200-400 µm enamel thickness
- ✓ Perfectly compatible with solar systems.
- ✓ Polyurethane with high quality insulation.
- ✓ Easy installation thanks to its compact design
- ✓ Optional electric heater support.



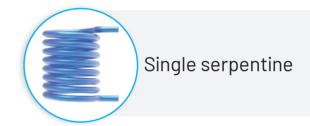
Enamel TSE-VS		160	200	300	500
Code		MA-2314	MA-2297	MA-2302	MA-2315
Weight	kg	65	75	104	108
Dimensions (height/diameter)	mm	1050 X 580	1280 X 580	1780 X 580	1630 X 750
Max permissible boiler water temperature	°C	95	95	95	95
Maximum working pressure	bar	6	6	6	6
Insulating material	-	PU	PU	PU	PU
Insulating thickness	mm	50	50	50	50
Outer cylinder material	-	S	tatic painted galvanized shee	et	Artificial leather
Heat source exchanger					
Water volume of the heat exchanger	L	7	8	11	16
Surface area	m²	0.75	1	1.3	2
Maximum working pressure	bar	6	6	6	6
Pipe connection					
Feed water in/out	inch	IG 1"	IG 1"	IG 1"	IG 1"
Cleaning flange		Universal	Universal	Universal	Universal
Electric heater	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"
Domestic water in/out	inch	IG 3/4"	IG 3/4"	IG 3/4"	IG 3/4"
Recirculation	inch	IG 3/4"	IG 3/4"	IG 3/4"	IG 3/4"
Anode rod	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"
Sensor	inch	IG 1/2"	IG 1/2"	IG 1/2"	IG 1/2"
Blind connection	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"

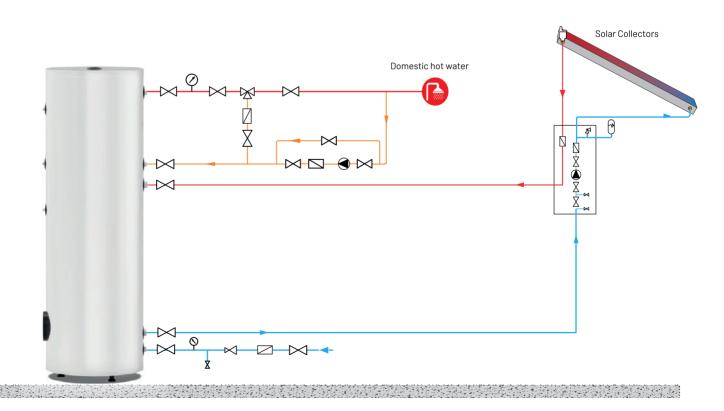
\*Solimpeks reserves the right to make changes to this table at any time.





- Enamel coating according to DIN 4753-3 Standard
- ✓ 200-400 µm enamel thickness
- ✓ Long service life.







## **ENAMEL TSE-VS HP**

### **GENERAL INFORMATION**

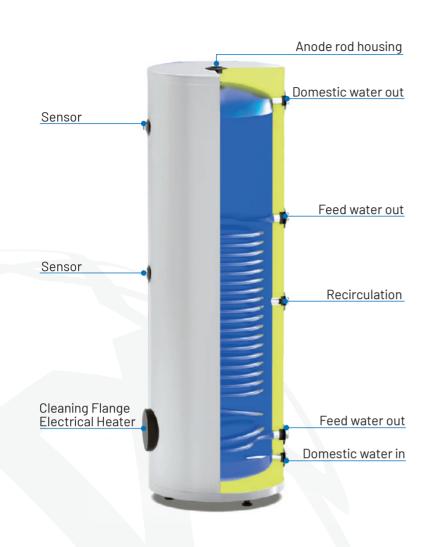
- ✓ Enamel coating in accordance with DIN 4753/3 standard
- ✓ Production in accordance with TS EN 12897 Standard
- ✓ The inner surfaces of the boiler are advanced technology enamel
- ✓ 200-400 µm enamel thickness
- ✓ Perfectly compatible with heat pumps.
- ✓ Polyurethane with high quality insulation.
- ✓ Easy installation thanks to its compact design
- ✓ Optional electric heater support.



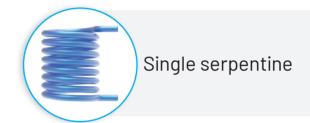
Enamel TSE-VS HP		160	200	300	500
Code		MA-2308	MA-2286	MA-2299	MA-2309
Weight	kg	79	100	140	160
Dimensions (height/diameter)	mm	1050 X 580	1280 X 580	1780 X 580	1630 X 750
Max permissible boiler water temperature	°C	95	95	95	95
Maximum working pressure	bar	6	6	6	6
Insulating material	-	PU	PU	PU	PU
Insulating thickness	mm	50	50	50	50
Outer cylinder material	-	S	tatic painted galvanized shee	et	Artificial leather
Heat source exchanger					
Water volume of the heat exchanger	L	11	18	26	33
Surface area	m <sup>2</sup>	1.3	2.1	3.1	4
Maximum working pressure	bar	6	6	6	6
Pipe connection					
Feed water in/out	inch	IG 1"	IG 1"	IG 1"	IG 1"
Cleaning flange		Universal	Universal	Universal	Universal
Electric heater	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"
Domestic water in/out	inch	IG 3/4"	IG 3/4"	IG 3/4"	IG 3/4"
Recirculation	inch	IG 3/4"	IG 3/4"	IG 3/4"	IG 3/4"
Anode rod	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"
Sensor	inch	IG 1/2"	IG 1/2"	IG 1/2"	IG 1/2"
Blind connection	inch	IG 1 1/4"	IG 11/4"	IG 11/4"	IG 1 1/4"

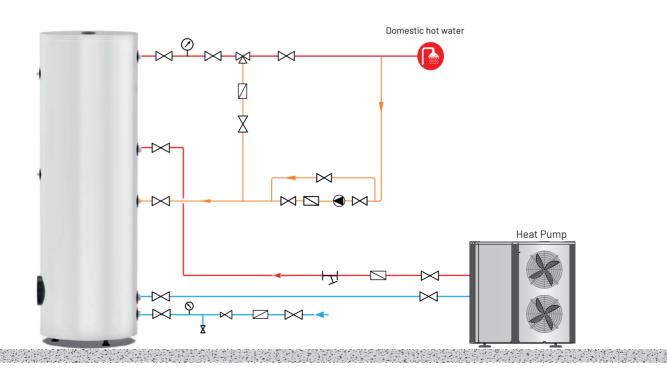
\*Solimpeks reserves the right to make changes to this table at any time.





- ✓ Enamel coating according to DIN 4753-3 Standard
- ✓ 200-400 µm enamel thickness
- ✓ Long service life.







## **ENAMEL TSE-VD**

#### **GENERAL INFORMATION**

- ✓ Enamel coating in accordance with DIN 4753/3 standard
- ✓ Production in accordance with TS EN 12897 Standard
- ✓ Boiler interior surfaces are high-tech enamel
- ✓ 200-400 µm enamel thickness
- ✓ Perfectly compatible with solar energy.
- ✓ Perfectly compatible with heat pumps.
- ✓ High quality insulated polyurethane.
- ✓ Easy installation thanks to its compact design
- ✓ Optional electric heater support.





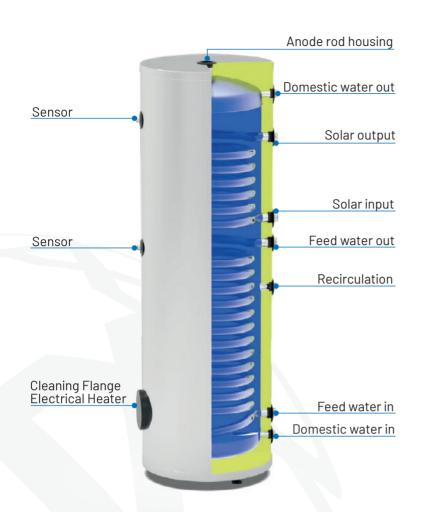




Enamel TSE-VD		160	200	300	500
Code		MA-2310	MA-2296	MA-2300	MA-2311
Weight	kg	70	92	125	140
Dimensions (height/diameter)	mm	1050 X 580	1280 X 580	1780 X 580	1630 X 750
Max permissible boiler water temperature	°C	95	95	95	95
Maximum working pressure	bar	6	6	6	6
Insulating material	-	PU	PU	PU	PU
Insulating thickness	mm	50	50	50	50
Outer cylinder material	-	St	atic painted galvanized shee	et	Artificial leather
1.Heat source exchanger					
Water volume of the heat exchanger	L	3	7	8	11
Surface area	m <sup>2</sup>	0.4	0.75	1	1.3
Maximum working pressure	bar	6	6	6	6
2.Heat source exchanger					
Water volume of the heat exchanger	L	7	8	11	16
Surface area	m²	0.75	1	1.3	2
Maximum working pressure	bar	6	6	6	6
Pipe connection					
Feed water in/out	inch	IG 1"	IG 1"	IG 1"	IG 1"
Cleaning flange		Universal	Universal	Universal	Universal
Electric heater	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"
Domestic water in/out	inch	IG 3/4"	IG 3/4"	IG 3/4"	IG 3/4"
Solar input/output	inch	IG 1"	IG 1"	IG 1"	IG 1"
Recirculation	inch	IG 3/4"	IG 3/4"	IG 3/4"	IG 3/4"
Anode rod	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"
Sensor	inch	IG 1/2"	IG 1/2"	IG 1/2"	IG 1/2"
Blind connection	inch	IG 11/4"	IG 11/4"	IG 11/4"	IG 11/4"

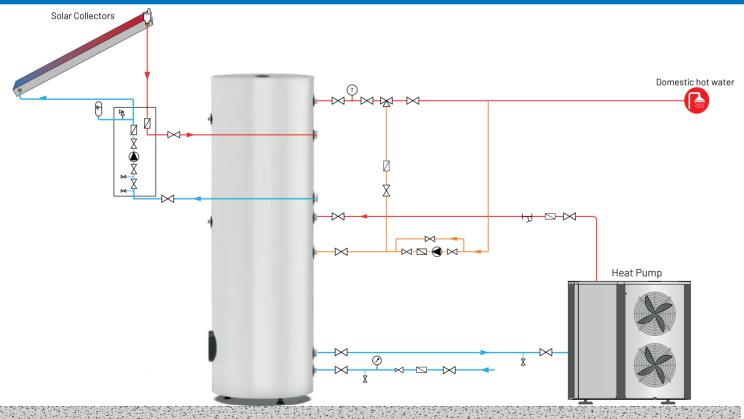
<sup>\*</sup>Solimpeks reserves the right to make changes to this table at any time.





- ✓ Enamel coating according to DIN 4753-3 Standard
- ✓ 200-400 µm enamel thickness
- ✓ Long service life.

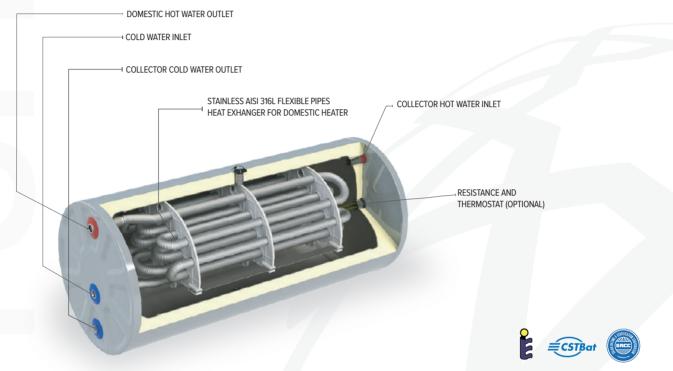






## **TSM**

- ✓ Solar Keymark certified
- ✓ No magnesium anode required and maintenance free
- ✓ Unpressurized tank, pressurized water
- √ 5 years warranty



TSM		120	150	200	300	350
Product information						
Capacity	(L/day)	120	135	170	245	305
Basic data						
Weight	kg	48	52	60	80	100
Dimensions (height/diameter)	mm	950 X 540	1030 X 540	1200 X 540	1725 X 540	2165 X 540
Max permissible boiler water temperature	°C	95	95	95	95	95
Maximum working pressure	bar	6	6	6	6	6
Insulating material	-	PU	PU	PU	PU	PU
Insulating thickness	mm	50	50	50	50	50
Outer cylinder material	-		Static painted g	jalvanized sheet		
Domestic water exchanger (AISI 316L)						
Water volume of the heat exchanger	L	12	12	12	12	12.6
Domestic water heat exchanger surface area	m²	3.8	3.8	3.8	3.8	4
Maximum working pressure	bar	6	6	6	6	6
Pipe connection						
Solar in/out	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Expansion tank connection	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Domestic water in/out	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Tank filling connection	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Electric heater	inch	G 1 1/4"	G 11/4"	G 11/4"	G 11/4"	G 11/4"

\*Solimpeks reserves the right to make changes to this table at any time.



- **TSE**5 years warranty ✓
- Solar Keymark certified ✓
- Double Jacket Heat Exchanger ✓
- High Tech Industrial Enameling ✓
  - Longlife Sacrificial Anode 🗸



COLLECTOR HOT WATER OUTLET







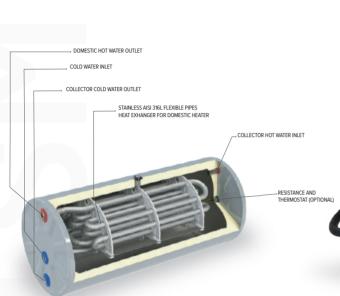


TSE		120	150	200	300
Product information					
Capacity	(L/day)	120	150	200	300
Basic data					
Weight	kg	53	57	70	101
Dimensions (height/diameter)	mm	1275 X 500	1000 X 600	1200 X 600	1800 X 600
Max permissible boiler water temperature	°C	95	95	95	95
Maximum working pressure	bar	6	6	6	6
nsulating material	-	PU	PU	PU	PU
Insulating thickness	mm	50	50	50	50
Outer cylinder material	-		Static painted o	jalvanized sheet	
Domestic water exchanger (AISI 316L)					
Water volume of the heat exchanger	L				
Domestic water heat exchanger surface area	m <sup>2</sup>				
Maximum working pressure	bar				
Pipe connection					
Solar in/out	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Expansion tank connection	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Domestic water in/out	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Safety valve	inch	G 3/4"	G 3/4"	G 3/4"	G 3/4"
Anode rod	inch	1"	1"	1"	1"
Electric heater	inch	G 11/4"	G 11/4"	G 1 1/4"	G 11/4"
Cleaning flange	inch	3"	3"	3"	3"



## THERMOSIPHON SYSTEMS TSM

- ✓ Solar Keymark certified
- ✓ No need for a magnesium anode and maintenance free
- ✓ Unpressurized tank, pressurized water
- √ 5 years warranty





THERMOSIPHON SYSTEMS TSM		TSM 120	TSM 150	TSM 200	TSM 300
Solar fraction	%	84	80	81	82
Capacity	(L/day)	120	135	170	245
Basic data					
Weight	kg	48	52	60	80
Dimensions (height/diameter)	mm	950 X 540	1030 X 540	1200 X 540	1725 X 540
Max permissible boiler water temperature	°C	95	95	95	95
Maximum working pressure	bar	6	6	6	6
Insulating material	-	PU	PU	PU	PU
Insulating thickness	mm	50	50	50	50
Outer cylinder material	-		Static painted	galvanized sheet	
Domestic water exchanger (AISI 316L)					
Water volume of the heat exchanger	L	12	12	12	12
Domestic water heat exchanger surface area	m²	3.8	3.8	3.8	3.8
Maximum working pressure	bar	6	6	6	6

Collector		Wunder ALS 1809	Wunder ALS 2110	Wunder ALS 2512	Wunder ALS 2110 (2 pcs)
Dimensions	mm	1927 X 927 X 90	1988 X 1041 X 90	1988 X 1218 X 90	1988 X 1041 X 90
Gross area	m <sup>2</sup>	1.79	2.07	2.42	2.07
Absorber area	m <sup>2</sup>	1.65	1.93	2.27	1.93
Weight empty	kg	24	28	32	28
Plate material	-		Highly selec	tive aluminum	'
Absorptance	%	95	95	95	95
Emittance	%	3	3	3	3
Glass material	-	Low iron tempered glass			
Insulation material	-	Rock wool	Rock wool	Rock wool	Rock wool

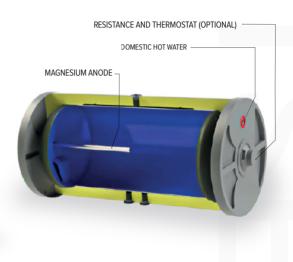
 $\ensuremath{^{*}}\xspace Solimpeks$  reserves the right to make changes to this table at any time.



## THERMOSIPHON SYSTEMS TSE

- 5 years warranty 🗸
- Solar Keymark certified 🗸
- Double Jacket Heat Exchanger ✓
- High Tech Industrial Enameling ✓
  - Longlife Sacrificial Anode ✓





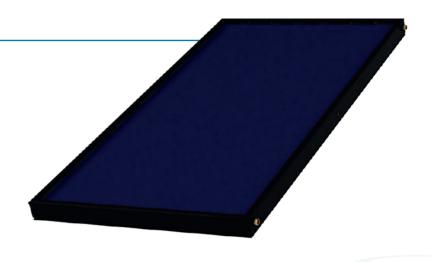
THERMOSIPHON SYSTEMS TSE		TSE 120	TSE 150	TSE 200	TSE 300
Solar fraction	%	84	80	77	82
Capacity	(L/day)	120	150	200	300
Basic data					
Weight	kg	53	57	70	101
Dimensions (height/diameter)	mm	1275 X 500	1000 X 600	1200 X 600	1800 X 600
Max permissible boiler water temperature	°C	95	95	95	95
Maximum working pressure	bar	6	6	6	6
Insulating material	-	PU	PU	PU	PU
Insulating thickness	mm	50	50	50	50
Outer cylinder material	-		Static painted of	galvanized sheet	
Collector		Wunder ALS 1809	Wunder ALS 2110	Wunder ALS 2512	Wunder ALS 2110 (2 pcs)
Dimensions	mm	1927 X 927 X 90	1988 X 1041 X 90	1988 X 1218 X 90	1988 X 1041 X 90
Gross area	m²	1.79	2.07	2.42	2.07
Absorber area	m²	1.65	1.93	2.27	1.93
Weight empty	kg	24	28	32	28
Plate material	-		Highly select	tive aluminum	
Absorptance	%	95	95	95	95
Emittance	%	3	3	3	3
Glass material	-		Low iron ter	mpered glass	
Insulation material	-	Rock wool	Rock wool	Rock wool	Rock wool

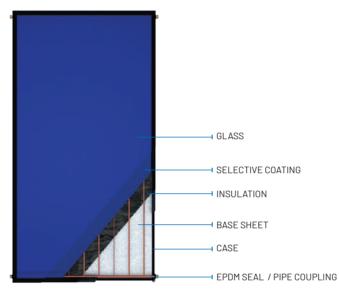
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## WUNDER ALS

- ✓ Solar Keymark certified
- ✓ Selective aluminum
- ✓ Rock wool insulation
- ✓ Copper pipe
- ✓ Low iron tempered glass
- ✓ Laser welding
- √ 10 years warranty













Thermal Efficiency

Transmittance

Absorption Rate

Insulation





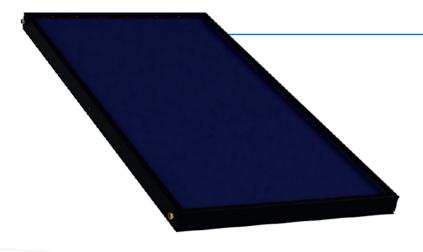


								About #	
Wunder A	ALS		Wunder ALS 1809	Wunder ALS 2110	Wunder ALS 2412	Wunder ALS 2512	Wunder ALS 2710	Wunder ALS 3010	
	Thermal efficiency (Ag)	%	73	73	73	73	73	73	
	Thermal efficiency (Aa)	%	79	79	79	79	79	79	
	Dimensions	mm	1927 X 927 X 90	1988 X 1041 X 90	1988 X 1210 X 90	1988 X 1218 X 90	2220 X 1218 X 90	2427 X 1218 X 90	
	Gross area	m²	1.79	2.07	2.4	2.42	2.7	2.97	
TECHNICAL	Absorber area	m²	1.65	1.93	2.24	2.27	2.54	2.79	
DATA	Weight empty	kg	24	28	32	32	36	39	
	Absorber volume	L	1	1.15	1.45	1.45	1.56	1.6	
	Max working pressure	bar	10	10	10	10	10	10	
	Max operating temperature	°C	130	130	130	130	130	130	
	Flow rate	kg/hm²	72	72	72	72	72	72	
	Plate Material		Highly Selective Aluminum						
ABSORBER SURFACE	Absorptance	%	95	95	95	95	95	95	
OOM ACL	Emittance	%	3	3	3	3	3	3	
	Ø manifold pipe	mm	18	18	18	18	18	18	
000000	Ø absorber pipe	mm	8	8	8	8	8	8	
COPPER PIPE	Connection	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
	Number of pipe		9	10	12	12	12	12	
CL ACC	Glass material				Low Iron Ten	npered Glass			
GLASS	Glass thickness	mm	3.2	3.2	3.2	3.2	3.2	3.2	
	Material		Rock Wool	Rock Wool	Rock Wool	Rock Wool	Rock Wool	Rock Wool	
INSULATION	Thickness	mm	40	40	40	40	40	40	
	Density	kg/m³	50	50	50	50	50	50	





- Solar Keymark certified ✓
  - Selective aluminum ✓
  - Rock wool insulation ✓
    - Copper pipe ✓
- Normal iron tempered glass 🗸
  - Laser welding ✓
  - 10 years warranty 🗸





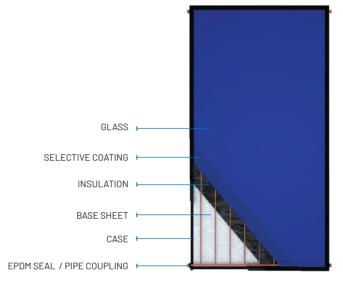






Thermal Radiation Efficiency Transmittance

Absorption Insulation Rate





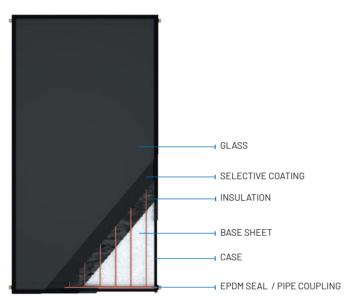


	Name of the second of the seco					
Wunder AN	ISG		Wunder ANSG 1808	Wunder ANSG 2108	Wunder ANSG 2510	
	Thermal efficiency (Ag)	%	70	70	70	
	Thermal efficiency (Aa)	%	77	77	77	
	Dimensions	mm	1927 X 927 X 90	1988 X 1041 X 90	1988 X 1218 X 90	
	Gross area	m²	1.79	2.07	2.42	
TECHNICAL	Absorber area	m²	1.65	1.93	2.27	
DATA	Weight empty	kg	24	27	32	
	Absorber volume	L	1	1.15	1.3	
	Max working pressure	bar	10	10	10	
	Max operating temperature	°C	130	130	130	
	Flow rate	kg/hm²	72	72	72	
	Plate Material		Selective coating aluminum			
ABSORBER SURFACE	Absorptance	%	95	95	95	
SURFACE	Emittance	%	4	4	4	
	Ø manifold pipe	mm	18	18	18	
OODDED DIDE	Ø absorber pipe	mm	8	8	8	
COPPER PIPE	Connection	inch	3/4"	3/4"	3/4"	
	Number of pipe		8	9	10	
01.400	Glass material			Normal Iron Tempered Glass		
GLASS	Glass thickness	mm	3.2	3.2	3.2	
	Material		Glass Wool	Glass Wool	Glass Wool	
INSULATION	Thickness	mm	50	50	50	
	Density	kg/m³	50	50	50	



## WUNDER ANP

- ✓ Solar Keymark certified
- ✓ Painted aluminum
- ✓ Rock wool insulation
- ✓ Copper pipe
- ✓ Normal iron tempered glass
- ✓ Laser welding
- √ 10 years warranty













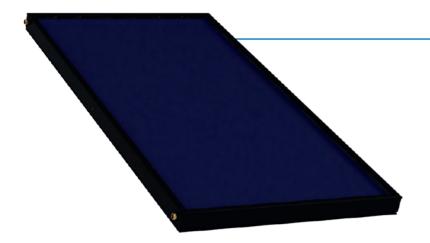






Wunder Al	NP .		Wunder ANP 1808	Wunder ANP 2108	Wunder ANP 2510		
	Thermal efficiency(Ag)	%	64	64	64		
	Thermal efficiency(Aa)	%	67	67	67		
	Dimensions	mm	1927 X 927 X 90	1988 X 1041 X 90	1988 X 1218 X 90		
	Gross area	m <sup>2</sup>	1.79	2.07	2.42		
TECHNICAL	Absorber area	m <sup>2</sup>	1.65	1.93	2.27		
DATA	Weight empty	kg	24	27	32		
	Absorber volume	L	1	1.15	1.3		
	Max working pressure	bar	10	10	10		
	Max operating temperature	°C	130	130	130		
	Flow rate	kg/hm²	72	73	74		
	Plate Material		Black aluminum				
ABSORBER SURFACE	Absorptance	%	74	74	74		
SURFACE	Emittance	%	26	26	26		
	Ø manifold pipe	mm	18	18	18		
OODDED DIDE	Ø absorber pipe	mm	8	8	8		
COPPER PIPE	Connection	inch	3/4"	3/4"	3/4"		
	Number of pipe		8	9	10		
01.400	Glass material			Normal Iron Tempered Glass			
GLASS	Glass thickness	mm	3.2	3.2	3.2		
	Material		Glass Wool	Glass Wool	Glass Wool		
INSULATION	Thickness	mm	50	50	50		
	Density	kg/m³	50	50	50		





## WUNDER ALS DRAIN

- Solar Keymark certified ✓
- Selective aluminum ✓
  - Rock wool insulation ✓
    - Copper pipe ✓
- Low iron tempered glass ✓
  - Laser welding 🗸
  - 10 years warranty ✓







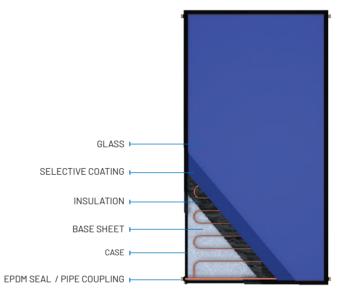


Thermal Radiation
Efficiency Transmittance

Insulation



Wu



			W I ALGOROUPDAIN	W I ALGOSTO DDAIN	
nder ALS DRA	IIN		Wunder ALS 2108 DRAIN	Wunder ALS 2510 DRAIN	
	Thermal efficiency(Ag)	%	71	71	
	Thermal efficiency(Aa)	%	74	74	
	Dimensions	mm	1988 X 1041 X 90	1988 X 1218 X 90	
	Gross area	m <sup>2</sup>	2.07	2.42	
TECHNICAL	Absorber area	m <sup>2</sup>	1.93	2.27	
DATA	Weight empty	kg	29	33	
	Absorber volume	L	1.67	2	
	Max working pressure	bar	10	10	
	Max operating temperature	°C	130	130	
	Flow rate	kg/hm²	72	72	
	Plate Material		Highly Selective Aluminum		
ABSORBER SURFACE	Absorptance	%	95	95	
SURFACE	Emittance	%	3	3	
	Ø manifold pipe	mm	18	18	
	Ø absorber pipe	mm	8	8	
COPPER PIPE	Connection	inch	3/4"	3/4"	
	Glass material		Low Iron Te	mpered Glass	
GLASS	Glass thickness	mm	3.2	3.2	
	Material		Rock Wool	Rock Wool	
INSULATION	Thickness	mm	40	40	
	Density	kg/m³	50	50	



## WUNDER ALS HORIZONTAL

- ✓ Solar Keymark certified
- ✓ Selective aluminum
- ✓ Rock wool insulation
- ✓ Copper pipe
- ✓ Low iron tempered glass
- ✓ Laser welding
- √ 10 years warranty









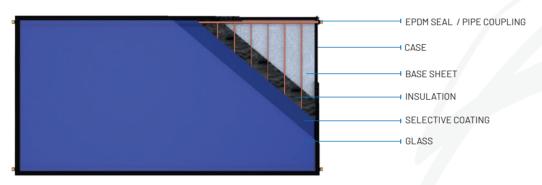


Thermal Efficiency

Radiation Transmittance

Absorption Rate

Insulation



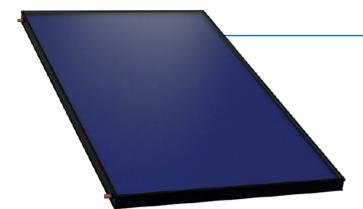






Wunder ALS Ho	prizontal		Wunder ALS 2117 Horizontal	Wunder ALS 2517 Horizontal
	Thermal efficiency (Ag)	%	73	73
	Thermal efficiency (Aa)	%	79	79
	Dimensions	mm	1041 X 1988 X 90	1218 X 1988 X 90
	Gross area	m²	2.07	2.42
TECHNICAL	Absorber area	m²	1.93	2.27
DATA	Weight empty	kg	28.5	33
	Absorber volume	L	1.9	2.1
	Max working pressure	bar	10	10
	Max operating temperature	°C	130	130
	Flow rate	kg/hm²	72	72
	Plate Material		Highly Selecti	ve Aluminum
ABSORBER SURFACE	Absorptance	%	95	95
OOM ACE	Emittance	%	3	3
	Ø manifold pipe	mm	18	18
COPPER	Ø absorber pipe	mm	8	8
PIPE	Connection	inch	3/4"	3/4"
	Number of pipe		17	17
01.400	Glass material		Low Iron Tem	pered Glass
GLASS	Glass thickness	mm	3.2	3.2
	Material		Rock Wool	Rock Wool
INSULATION	Thickness	mm	40	40
	Density	kg/m³	50	50





## **EXCELLENT**

- Solar Keymark certified ✓
  - Selective aluminum ✓
  - Rock wool insulation ✓
    - Copper pipe ✓
- Low iron tempered glass ✓
  - Laser welding ✓
  - 10 years warranty ✓



© ≡CSTBat





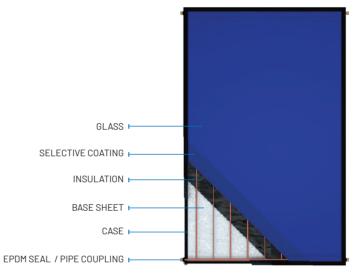


Thermal Radiation Efficiency Transmittance

Absorption e Rate

Insulation





EXCELLEN	Т		EXCELLENT 2.6	EXCELLENT 2.3	
TECHNICAL	Thermal efficiency (Ag)	%	79.4	79.4	
	Thermal efficiency (Aa)	%	82	82	
	Dimensions	mm	2013 X 1355 X 60	2012 X 2012 X 60	
	Gross area	m²	2.59	2.4	
	Absorber area	m²	2.46	2.28	
DATA	Weight empty	kg	40	36	
	Absorber volume	L	1.61	1.41	
	Max working pressure	bar	10	10	
	Max operating temperature	°C	130	130	
	Flow rate	kg/hm²	72	72	
	Plate Material		Highly Selective Aluminum		
ABSORBER SURFACE	Absorptance	%	95	95	
OOM AGE	Emittance	%	3	3	
	Ø manifold pipe	mm	18	18	
COPPER PIPE	Ø absorber pipe	mm	8	8	
	Number of pipe		14	12	
	Glass material		Low Iron Tempe	ered Glass	
GLASS	GLASS Glass thickness mm	3.2	3.2		
INSULATION	Material		Glass Wool	Glass Wool	
	Thickness	mm	15	15	
	Density	kg/m³	50	50	



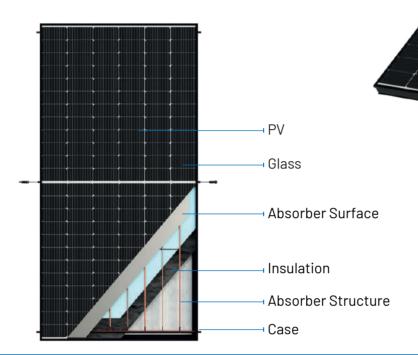
## PV-T EXCELL 590 W

✓ Produces electricity and heat energy simultaneously.

✓ Integrated PV cooling system that increases electrical efficiency.

✓ 22% Electrical Efficiency + 43% Thermal Efficiency.

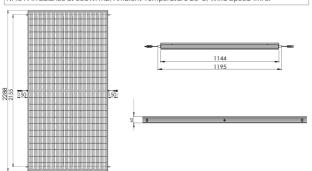
✓ Gross Area 2.7 m<sup>2</sup>.



#### PV-T EXCELL 590 W

Typical Electrical Parameters	
Peak Power Watts-PMAX (Wp)*	590
Power Tolerance Range-PMAX(W)	0~+5
Maximum Power Voltage-VMPP (V)	43,10
Maximum Power Current-IMPP (A)	13,69
Open Circuit Voltage-VOC(V)	51,72
Short Circuit Current-ISC (A)	14,44
Module Efficiency °m (%)	22,84
Maximum Power-PMAX (Wp)	439
Maximum Power Voltage-VMPP (V)	39,9
Maximum Power Current-IMPP (A)	11,00
Open Circuit Voltage-VOC(V)	48,39
Short Circuit Current-ISC (A)	11,77
STC: Irradiance 1000W/m2, Cell Temperature 25°C	, Air Mass AM1.5.

| STC: Irradiance IUUUW/m2, Cell Temperature 25°C, Air Mass AM1.5. | Measuring tolerance: ±3% | NMOT: Irradiance at 800W/m2, Ambient Temperature 20°C, Wind Speed 1m/s.



<b>Mechanical Parameters</b>	
Solar Cells	Monocrystalline
Cell Orientation	144 cells (6 × 24)
Module Dimensions	2278×1134×35 mm (±0,1%)
Weight	28.KG
Front Glass	3,2 mm, High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	POE/EVA
Back Glass	KPFType
Frame	35mm Anodized Aluminium Alloy
J-Box	IP 68 rated and 30cm or (optional 120cm cable)
Cables	Photovoltaic Technology Cable 4.0mm2
Connector	MC4 EV02 / TS4

Specifications/Product Code	EXCELL PVT 590
Dimensions	2288x 1195 x 60mm
Weight	40 kg
Gross Area	2,7 m <sup>2</sup>
Number Of Cells	144
Nominal Power (Wp)	590 W
Glazing	Pv Glass
Absorber Surface (PV)	Mono
Absorber Surface (T)	Copper
Safety Class	II
Maximum over current protection rating	15A
Peak Power perunit (Peak= 1200 W (Kiwa Test Report No. L0000435/B rev.02. Page 20 di 23)	1200 W

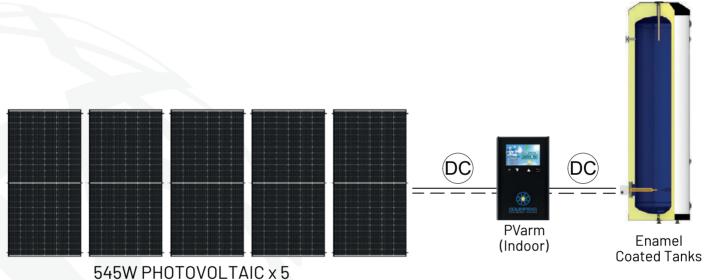




## **PVarm**

### **Advantages Compared to Solar Thermal Systems;**

- ▶ Simple Installation: only two DC cables are needed, no water pipes.
- ▶ There is almost no loss between PV modules and hot water tank.
- ▶ Low Maintenance: no moving parts and no glycol.
- ▶ PV modules provide greater energy efficiency at low outdoor temperatures.
- ► There is no stagnation problem, it starts automatically if the hot water temperature is below the limit.



#### **PVarm**

DC			
DC voltage = MPP voltage range	100 - 360 V (max)		
Number of MPP trackers	1		
Max. input current	13 A, limited		
DC nominal power	2.750 W at 25 °C ambient temperature, built-in derating		
GENERAL DATA			
MPP-efficiency	98,50%		
Total efficiency	>98 % at nominal power		
Protection class	IP20		
Operating temperature range	10 °C to 45 °C		
Display	2.8 inch IPS		
Dimensions	145 x 110 x 50 mm		
Weight	0.8 kg		
Warranty	1 years		



## Varm Up Series

- ✓ The Varm Up Series EVI DC Inverter heat pumps provide heating, cooling, and domestic hot water with high efficiency.
- ✓ Equipped with eco-friendly R32 refrigerant and advanced EVI technology, they operate reliably in temperatures as low as -30°C, boasting an A+++ ERP energy rating.
- ✓ With a color LCD control panel, Wi-Fi connectivity, and precise 0.1°C temperature control, they offer a seamless smart home experience.













Control via WiFi





Varme	ks Model	VM-1MB1112008	VM-1MB1112013	VM-1MB1112016	VM-1MB1112018	
Power Supply		230V/1Ph/50-60 Hz 230V/1Ph/50-60 Hz		230V/1Ph/50-60 Hz	230V/1Ph/50-60 Hz	
Circulation Pump		Shimge DC Pump	Shimge DC Pump	Shimge DC Pump	Shimge DC Pump	
Heating	Heating Capacity Range (kW)	1.57~8.40	4.40~13.00	5.8~15.5	5.9~18.2	
	Heating Input Range (kW)	0.32~1.87	0.90~3.02	1.22~3.66	1.20~4.11	
	Current Range (A)	1.42~8.30	4.12~13.8	5.58~16.57	5.49~18.8	
	COP Range	4.49~4.91	4.30~4.90	4.23~4.75	4.43~4.92	
	Cooling Capacity Range (kW)	0.99~6.22	2.80~8.20	5.5~11.0	3.81~11.53	
Cooling	Cooling Input Power (kW)	0.29~2.18	0.85~3.31	1.67~3.99	1.11~4.05	
Cooling	Current Range (A)	1.28~9.67	3.89~15.1	7.64~18.26	5.08~18.5	
	EER Range	2.85~3.41	2.48~3.29	2.76~3.29	2.85~3.43	
	Heating Capacity Range (kW)	1.28~6.81	3.52~10.50	8.2~13.6	4.80~14.72	
DHW	Heating Input Range (kW)	0.31~2.13	0.88~3.39	1.91~3.68	1.17~4.60	
	Current Range (A)	1.38~9.45	4.03~15.5	8.74~16.74	5.35~21.1	
	COP Range	3.2~4.1	3.1~4.0	3.7~4.3	3.2~4.1	
Refrigerant R32 (GWP only 1/3 of R410a)			ly 1/3 of R410a)			
Working	Area	-30~43 °C				
Water Circulation (m³/h)		1,4	2,2	2,7	3,1	
Water Pressure Drop (kPa)		31	25	35	35	
P Grade (	Level of Protection)	IPX4	IPX4	IPX4	IPX4	
Anti-Elec	tric Shock Rate	I	I	I	I	
Noise dB	(A) at 1m	≤53	≤55	≤57	≤57	
Net Weig	ht/Gross Weight (kg)	112/120	139/150	140/145	173/180	
Diameter	of Pipe (mm)	DN25	DN25	DN25	DN25	
Body Size (W*D*H)(mm)		981×482×809	1082×482×957	1088×512×1056	1055×482×1362	
Packing Size (W*D*H)(Carton)		1005×506×830	1120×490×980	1112×525×1080	1395×515×1091	
Packing Size (W*D*H) (Polywood)		1125×506×830	1240×490×980	1232×525×1080	1515x515x1091	
Compres	sor Brand		Panasonic			
Operating Water Temp. (°C) DHW		9~60 °C		28~55 °C	9~60 °C	
Operating	g Water Temp. (°C) Heating	9~5	9~55 °C		9~55 °C	
	Water Temp. (°C) Cooling		7~35 °C		7~35 °C	

 $\label{eq:condition:} Heating: Inlet water temp. 30 °C, Outlet water temp. 35 °C, Dry bulb temp. 7 °C, Wet bulb temp. 6 °C' Cooling: Inlet water temp. 12 °C, Outlet water temp. 7 °C, Dry bulb temp. 55 °C, Wet bulb temp. 24 °C' DHW: Inlet water temp. 15 °C, Outlet water temp. 55 °C, Dry bulb temp. 7 °C, Wet bulb temp. 6 °C' COUTLET WATER TEMP. 15 °C, Outlet water temp. 15 °C, Dry bulb temp. 7 °C, Wet bulb temp. 8 °C' COUTLET WATER TEMP. 15 °C, Dry bulb temp. 8 °C' COUTLET WATER TEMP. 15 °C, Dry bulb temp. 15 °C, Wet bulb temp. 15 °C, Dry bulb temp. 16 °C' COUTLET WATER TEMP. 15 °C, Dry bulb temp. 17 °C, Wet bulb temp. 18 °C' COUTLET WATER TEMP. 18 °C' COUTLET$ 



## **Varm Boost Series**

- The Varm Boost series, equipped with environmentally friendly R290 gas, features an A+++ energy label. 🗸
  - The Varm Boost series offers heating, cooling, and domestic hot water modes. 🗸
- It can operate in ambient temperatures down to -25°C. Enjoy user convenience with the colored LCD panel. 🗸















Defrost

Hot Water Output up to 75°C



<b>Varmeks</b> I	<b>Model</b>	VM-0MB1402008	VM-0MB1402011	VM-0MB1402015	VM-0MB3402022
Heating Condition -	Ambient Temp.(DB/WB): 7/6 °C, Water Temp.(In/Out):	30/35 °C			
Heating Capacity Ra	nge (kW)	3.3~8.3	4.5~11.4	5.9~14.8	8.8~22.0
Heating Power Input	Range(kW)	0.64~2.18	0.85~2.95	1.13~3.83	1.68~5.77
COP Range	-	3.81~5.17	3.86~5.29	3.86~5.22	3.81~5.24
DHW Condition-Amb	pient Temp.(DB/WB): 7/6 °C, Water Temp.(In/Out):15/5	5°C	•	<u> </u>	<b>'</b>
Heating Capacity Ra		3.7~7.4	5.2~10.2	6.6~13.2	7.8~17.6
Heating Power Input	Range(kW)	0.79~2.10	1.10~2.87	1.41~3.73	1.67~5.01
COP Range		3.52~4.69	3.55~4.71	3.54~4.67	3.51~4.66
Heated Water Outpu	t (L/H)	159	219	283	377
	Ambient Temp.(DB/WB):35/24 °C, Water Temp.(In/Out			200	
Cooling Capacity Ra	•	2.4~5.8	3.3~8.2	4.3~10.8	6.2~15.3
Cooling Power Input		0.79~2.19	1.08~3.07	1.39~3.99	1.99~5.60
EER Range	y-1,	2.65~3.04	2.67~3.06	2.71~3.10	2.73~3.12
	Rated Heat Output (kW)	5,82	7,89	9,95	14,05
Space Heating	Seasonal Space Heating Energy Efficiency (ns)	182.7%	181.0%	182.9%	184.6%
(According to	Seasonal Space Heating Energy Efficiency (SCOP)	4,64	4,6	4,65	4,69
EN14825:2022)	ErP Level	A+++	Δ+++	A+++	Δ+++
Average Climate Water Outlet 35°C	Sound Pressure Level (dB(A)) at 1 meter	44	43	45	45
Water outlet 35 C	Sound Power Level (dB(A))	58	57	59	60
	Rated Heat Output (kW)	5,59	8.7	9,23	13,47
Cases Heating	Seasonal Space Heating Energy Efficiency (ηs)	136.0%	137.0%	131.9%	138.9%
Space Heating (According to EN14825:2022)	Seasonal Space Heating Energy Efficiency (SCOP)	3,48	3,5		3,55
	ErP Level	3,48 A++	Δ++	3,37	3,55 A++
Average Climate		44	47	A++	46
Water Outlet 55°C	Sound Pressure Level (dB(A)) at 1 meter	58	61	46	62
Power Supply	Sound Power Level (dB(A))	58	230V/1Ph/50 Hz/60 H	60	
Max. Power Input (kW		3,1	4,1	5,2	380V/3Ph/50-60Hz 7,6
Max. Current (A)		14,2	18,8	23,8	14,3
Fuse or Circuit Breake	r(A)	20	25	32	20
Wire Diameter mm <sup>2</sup>		2,5	4	6	4
Diameter of Pipe (mm		DN25	DN25	DN25	DN25
Water Flow (m³/h) Water Pressure Drop (max) kPa		1,43 30	1,96 35	2,55	3,78 45
Net Weight (kg)		112	120	40 138	170
Body Size (W*D*H)(mm)		1080×460×820	1080×460×960	1080×480×1060	1080×480×1372
IP Grade (Level of protection)		IPX4	IPX4	IPX4	IPX4
Anti-Electric Shock R	ate	I		I	I
Refrigerant	Doord	R290/1.0kg	R290/0.95kg	R290/1.45kg	R290/1.4kg
Compressor Water Pump	Brand Brand	HIGHLY SHIMGE	HIGHLY SHIMGE	HIGHLY	HIGHLY SHIMGE
Operation ambient temp. (°C)			SHIMGE Operating water temp. (°C): 20-70 °	SHIMGE	vater temp. (°C): 7-35 °C (Cooling)



## **ACCESSORIES**



Pump Station
TI-0131 and TI-0129



Solar Controller
TI-0209 and TI-0210



Expansion Vessel
TI-0531



Air Purger HA -1498



End Cap HA - 0345



Flexible Connection YA - 0215





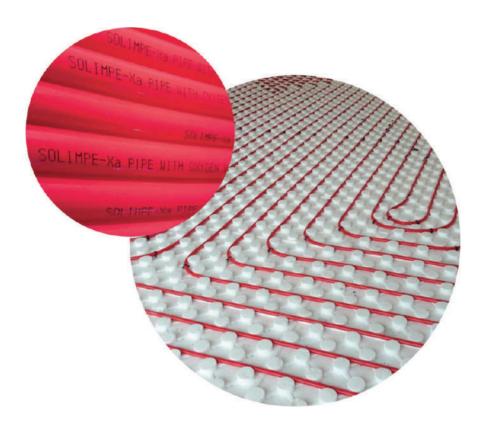


End Fittings Pack



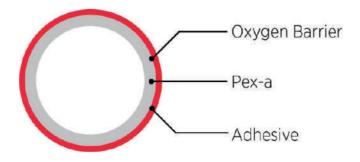
## SOLIMPEX-A

- Pex-a Evoh ✓
- Crosslinked polyethylene pipes Pex-a. Oxygen barrier EVOH in 3 layers ✓
  - Maximum fiexibility ✓
- Polyethylene resistant to High Temperatures. Pi pes for systems pressure ✓
  - 6 Bar ✓



#### **TECHNICAL SPECIFICATIONS**

Ext. diam.	Pex-A Oxygen Barrier Evoh Range Wall Thickness (mm)
8 mm	1,1
10 mm	1,2
12 mm	1,1-2,0
16 mm	1,8-2,0
17mm	2,0
18 mm	2,0
20 mm	1,9-2,0
25 mm	2,3







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