

Reflection of the Sinclair world

turning air into energy

AIR TO WATER
HEAT PUMPS
2022





quality enhances
partnership

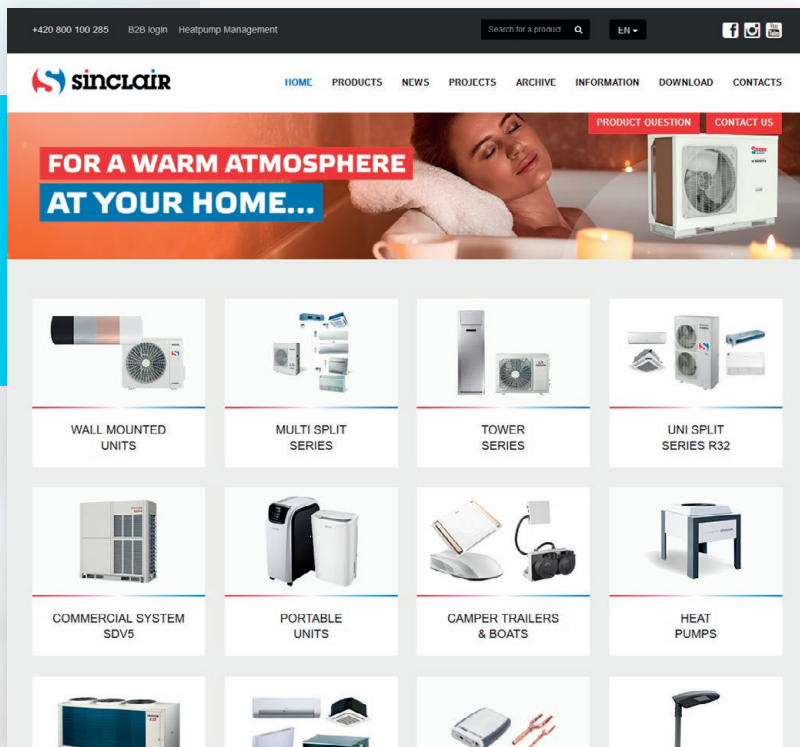
Sinclair Global Group

ABOUT SINCLAIR BRAND

Sinclair brand has long tradition and we believe in a bright future too. Sinclair air conditioners and heat pumps are getting more and more popularity and trust on the market every year. Our strong team of professionals ensures perfect cooperation with partners from many countries around the world. Development of our partnership never ends. SINCLAIR Global Group is based on essential principals of long-term partnership and high-quality products. We regularly organize technical training in our academy to be sure that all our partners have updated information about news in our assortment and proper technical background. SINCLAIR products will secure comfortable temperature in your home or office in all climatic conditions through the whole year. We are more than happy to introduce you SINCLAIR air conditioners. Our product S THERM+ got award as a best product in TOP Energy segment.

OUR VISION AND MISSION

Environment protection becomes more and more crucial for humanity and its future generations. SINCLAIR Global Group perceives it the same way hence we focus on developing and applying new technologies which helps to reduce energy consumption and global warming effect. Our products fulfil strict EU norms and in many cases even surpass them. SINCLAIR believes in long-term, stable and healthy progression supported by hard work and strong code of ethics. Long-term success of any brand depends on satisfied customers. Our customers are satisfied thanks to high-quality, reliable a technically advanced products with reasonable pricing and timeless design.



WWW.SINCLAIR-SOLUTIONS.COM

Our website is dedicated to everyone who wants to learn more about Sinclair heat pumps and other products. Additionally after log-in to partner section there is all technical documentation available for download.

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Why Sinclair Heat Pump?

Heat Pump is long-term investment for you. Our devices are the best solution for you in terms of price, quality and performance.

NEW CONSTRUCTION, RENOVATION OF AN OLDER HOUSE OR A LARGE BUILDING. WE HAVE THE RIGHT SOLUTION FOR YOU.

Now is the right time to get a Sinclair Heat Pump. Devices are intelligently controlled, economic and with long-term service life. In present, people have more focus on costs connect with heating their homes.

Concurrently they want to be respectful of the environment. We think about our planet. We think about climate in which our kids and next generation will grow up.

For this reason, in the new pump types we use R32 refrigerant, which is highly energy efficient and represents more environmentally friendly way of heating.

You won't have to stock up on coal or wood for the winter. Ordinary work as application of coal or wood will no longer bother you. You will appreciate order and cleanliness. Use your time meaningfully.

FROM 1 RETRIEVED KW UP TO 5 KW OF HEAT

Technology of SINCLAIR Heat Pumps reduce consumption and emission of CO₂ energy. We use state-of-the-art DC inverter technology, thanks to it it is achieved high efficiency of Heat Pumps. You get 5kW heat of 1kW removed energy.





welcome to the
Sinclair world

S THERM + 2ND GENERATION OF HEAT PUMPS AIR TO WATER



Made with attention to detail
in the Czech Republic

The S-THERM+ series has been specially designed for cold climates. It can operate at ambient temperatures down to -20 °C. The basic philosophy of this series is to satisfy all heating requirements during the freezing winter and to allow cooling during the hot summer and autumn. The devices are equipped with EVI Scroll compressors with steam injection for more economical operation. The increase in efficiency is achieved by using a two-stage cooling circuit, which also increases the performance in a heating mode. Units from the S-THERM+ series reach a water outlet temperature of up to 58 °C.

Units are more reliable, efficient and less noisier because of EVI SCROLL compressors.

Indoor unit is designed for very quiet operation. All moving parts are firmly anchored, so as not to disturb the peace of your home. System of pipes is designed to be in vibration limited as much as possible and unit have full isolation.

Device works quietly and efficiently.

CONTROL OVER THE INTERNET

- Access from anywhere via the internet
- Easy access through the web interface on www.sinclairheatpumps.eu
- Account creation and operation are free of charge
- Interactive interface (equitherm curve shows actuals set temperatures)
- Interface is optimized for use on touch-screen devices

INFORMATION DISPLAYED

- Basic overview of the system (temperatures, electrical tariff, etc.)
- Currently set values for each item
- Possibility to view statistics of heat pump

OPTIONS

- Possibility to set all parameters as shown on the control panel of the unit
- User and service levels of the access



Sinclair S-therm+ heat pump, that you'll love

S-Therm+ series of Heat Pumps offers diverse possibility of connection, in each case is needed to use storage tank, thanks to which it is significantly increased service life of the compressor

- S-THERM+ 2nd generation allows connection max 8 units into cascade and get heat performance 144 kW
- Compositions are suitable for heating objects with high heat loss like residential and office buildings
- One heat pump controls other units - directing driver and subordinates - master + slave
- Alternation of units increase service life of the cascade
- Part of the units can heat domestic hot water and part can heat the heating system.

GENERAL CHARACTERISTICS

- Heating control of two independent tanks (domestic and Heat water)
- Equithermal control of two independent circles (for example radiators and floor heating).
- EVI system control to increase COP and performance
- Economization of operation based on HDO tariff
- Monitoring of supply for damage prevention influence wrong connection, overvoltage or undervoltage
- Control defrost based on temperature and time, inclusion outdoor weather influence into defrosting strategy
- Automatic processing of alarms and error conditions

HEATING, WHICH WILL BRING COMFORT INTO YOUR HOME

- Water heating up to 58 °C
- Heating power up 18,4/14,2 kW
- Choice of several mode of heating
- Seasonal SCOP factor 4,07/4,57
- For outdoor temperatures up to -20 °C
- Optional external titanium heat exchanger for pool heating
- Variable cover of fan on exchanger
- Access from anywhere via the internet
- Easy access through the web interface on www.sinclairheatpumps.eu



INDOOR UNITS

SPECIFICATION

- Heating or large-scale cooling
- Possibility of modular connection of 8 unit
- Outflow water temperature up to 58 °C
- Intelligent Smart Sinclair controller and adjustment by a microprocessor
- LCD display of wire controller with JOG wheel
- Measuring of actual COP
- Copeland compressor with EVI technology specially designed for high water temperatures
- Wilo EC water pump installed inside
- Huba Control flow sensor
- 3kW bivalent electric heater inside the indoor unit
- Enhanced base frame reducing noise and vibrations
- Base frame and external panels made of galvanized powder coated steel
- 5 years warranty



SHP-140ICA
SHP-180ICA

INDOOR UNIT			SHP-140ICA	SHP-180ICA	
Temperature Outdoor Air / Outflow Water (°C) *	A7 / W35	Heating Capacity (kW)	14,18	18,43	
		Power Input (kW)	3,1	4,53	
		COP ()	4,57	4,07	
	A2 / W35	Heating Capacity (kW)	10,97	15,43	
		Power Input (kW)	3,05	4,40	
		COP ()	3,6	3,51	
	A-7 / W35	Heating Capacity (kW)	8,59	13,08	
		Power Input (kW)	2,94	4,32	
		COP ()	2,92	3,03	
	A-10 / W35	Heating Capacity (kW)	8,99	12,95	
		Power Input (kW)	2,98	4,69	
		COP ()	3,01	2,76	
Energy Class / SCOP (average)	Low-temperature Application 35 °C	-	A++/4,08	A++/3,85	
	Medium-temperature Application 55 °C	-	A++/3,25	A+/3,06	
Technical Specifications	Power Supply	V / Ph / Hz	400/3/50		
	Outdoor Temperature Range	°C	-20 ~ +40		
	Temperature of Leaving Water	°C	+12 ~ +58		
	Refrigerant	type / charge / t Eq. CO	R407c/7,5/13,31	R407c/8,0/14,20	
	Electric Heater	kW	3		
	Compressor QTY	-	1		
	Compressor	Type	COPELAND EVI Scroll		
	Refrigerant Liquid Pipe	mm (inch)	12 (1/2")	16 (5/8")	
	Refrigerant Gas Pipe	mm (inch)	19 (3/4")	28 (9/8")	
	Water Pipe Inlet / Outlet	-	DN32 (5/4")		
	Sound pressure level at 1m	dB	42,2	45,4	
	Sound power Level	-	55,4	58,6	
	Unit Dimension (W x D x H)	mm	597x596x991	597x596x991	
	Net / Gross Weight	kg	176/184	180/186	

* Values were measured according to EN 14511-2:2014 / EHPA standards including.

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R407C (23% R32, 25% R125, 52% R134a), GWP of refrigerant used: 1774.

OUTDOOR UNITS

SPECIFICATION

- Air / refrigerant heat exchanger (fins & coil) with hydrophilic coating
- Electronic expansion valve
- Automatic intelligent defrosting function
- General testing and operational test carried out for every unit before production
- Fan with EC motor
- Anti-snow function
- New ventilator Ziehl-Abegg



SHP-140ECA2
SHP-180ECA2

OUTDOOR UNIT		SHP-140ECA2	SHP-180ECA2
Power Supply	V / Ph / Hz	from indoor unit	from indoor unit
Fan Quantity	pcs	1	1
Fan Power Input	W	91	91
Fan Direction	-	Vertical	Vertical
Air Flow	m ³ / h	4500	4500
Refrigeration Liquid Pipe	mm (inch)	12 (1/2")	16 (5/8")
Refrigeration Gas Pipe	mm (inch)	19 (3/4")	28 (9/8")
Sound pressure level at 1m	dB	43,9	54,8
Sound Power Level	dB	60	69,5
Unit Dimension (W x D x H)	mm	1298x987x1195	1298x987x1195
Net / Gross Weight	kg	96/103	94/101

ecological World
Sinclair



A woman with long dark hair, wearing a grey double-breasted jacket with a metallic silver panel on the front, white pants, and white sneakers, is smiling. She is standing in a shop with glass display cases containing various items. In the foreground, a man in a dark leather jacket and dark pants is seen from the back, looking towards the woman. The background shows more of the shop's interior with shelves and display cases.

stylish world
Sinclair

S-THERM 4TH GENERATION OF DC INVERTER HEAT PUMPS INDOOR UNITS HYDROBOX



Heat pump is available as 4, 6, 8, 10, 12, 14 and 16 kW. Allows heating into floor systems, radiators or fancoils.

Thanks to the integrated three-way valve is possible yearlong working in heating warm water mode, in summer in addition, it is possible cooling up to temperature 7 °C. Effective working in temperatures up to -25 °C.

In heating mode inside indoor unit heating energy of refrigerant passes on heat exchanger to water. By this warm water is then supplied to the radiators, underfloor heating and hot water tank.

Devices are executed in one-phase or three-phase (units ending with -3).

The indoor unit contains executive plate exchanger, which is characterized by high endurance against corrosion, compact dimensions and high efficiency.

Expansion vessel into hydrobox has a capacity of 10 liters. The standard pressure inside the tank is 1 bar. It ensures reliable operation of the device and stable pressure in the system.

The energy-efficient and powerful WILO circulation pump ensures smooth water flow in underfloor heating or radiators.

The split version is suitable if the space in the room is limited and there is no need for hot water heating. If a buffer tank or hot water tank is required, these are installed separately.

Connection to hot water, underfloor heating, fancoil units, water tanks, solar panels, gas boilers etc.

Hydrobox includes a circulatory pump Wilo Invertor, board exchanger Alpha Laval PHE, patented two-stage rotational compressor.

INDOOR UNITS HYDROBOX

SPECIFICATION

- Touch screen
- Possibility of control via net with EWPE SMART application
- High efficiency
- Circulatory pump with self-regulation of speed
- Integrated expansion vessel and insurance valve
- Possibility of equithermal regulation, regulation, according to the reference room temperature or by thermostat
- Possibility cooling in convector units
- Preparation of warm water
- Three-way valve is part of indoor unit
- The outlet water temperature is 25 to 60 °C
- Silent mode



GSH-40IRB
GSH-60IRB
GSH-80IRB
GSH-100IRB
GSH-120IRB
GSH-140IRB
GSH-160IRB
GSH-80IRB-3
GSH-100IRB-3
GSH-120IRB-3
GSH-140IRB-3
GSH-160IRB-3

Model GSH-			40IRB	60IRB	80IRB/80IRB-3	100IRB/100IRB-3	120IRB/120IRB-3	140IRB/140IRB-3	160IRB/160IRB-3
Power supply		V / Ph / Hz	220-240/1/50			220-240/1/50 / 380-415/3/50			
Connecting pipe (refrigerant)	Gas	inch / mm	1/2" / 12.0			1/4" / 6.0		5/8" / 16.0	
	Liquid								
Connecting pipe (water)	Inlet	inch				1"			
	Outlet								
Safety valve		bar				3			
Leaving water temperature	Cooling	°C				7-25			
	Heating					25-60			
Main components	Water pump	Type				Inverter			
		Speed				Automatic regulation			
		Max. power	W	75	75/87		87		
	Expansion tank	Volume	l				10		
Max tlak						3			
Pressure		bar				1			
Auxiliary electric heater	Mode					Automatic			
	Capacity	kW	3			6			
	Combination		1.5 + 1.5			3+3			
	Power supply	V / Ph / Hz				220-240/1/50			
Heat exchanger	Type					Brazed Plate			
	Amount					1			
Level of acoustic pressure in 1m		dB (A)				29			
Dimensions	Outline (w x d x h)	mm				460 x 318 x 860			
	Packaged (w x d x h)		565 x 375 x 1130		565 x 375 x 1130/568 x 390 x 1133		568 x 390 x 1133		
Weight	Net	kg	62		62/59,5		59,5		
	Gross		71		71/68,5		68,5		





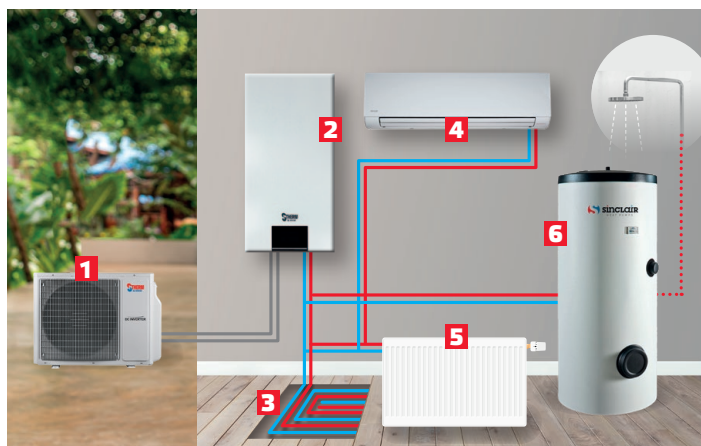
EXAMPLES OF CONNECTION FOR HEATING SYSTEM WITH HYDROBOX



- 1 Outdoor unit
- 2 Hydrobox
- 3 Underfloor heating
- 4 Domestic hot water storage tank



- 1 Outdoor unit
- 2 Hydrobox
- 3 Underfloor heating
- 4 Radiator
- 5 Domestic hot water storage tank



- 1 Outdoor unit
- 2 Hydrobox
- 3 Underfloor heating
- 4 Fan Coil
- 5 Radiator
- 6 Domestic hot water storage tank



healthy world
Sinclair





comfort world
Sinclair

S-THERM 4TH GENERATION OF DC INVERTER HEAT PUMPS INDOOR UNITS ALL IN ONE



Indoor hydrobox unit with integrated 185 litre enamelled hot water tank

Heat Pump SINCLAIR ALL IN ONE belongs to new generation of heat pumps designated for heating, cooling and heating of warm utility water in homes.

- Technology that combines an indoor hydrobox unit and an integrated 185 litre enamelled hot water tank
- Solution ALL IN ONE we offer you in 4, 6, 8, 10, 12, 14, 16 kW performances. Units are in one-phase or three-phase (devices end with -3) execution
- With solution All In One no need instalation of buffer tank for collateral minimum volume in heating system, while maintaining high capacity and efficiency at outdoor temperatures up -25 °C

SAVE SPACE IN THE HOUSE

Thanks to the connection of the hydro unit and the tank, you only need a small space for this heat pump. Indoor unit ALL IN ONE includes circulatory pump Wilo and board exchanger Alpha Laval PHE.



INDOOR UNITS ALL IN ONE

SPECIFICATION

- Touch screen
- Possibility of control via net with EWPE SMART application
- High efficiency
- Circulatory pump with self-regulation of speed
- Integrated expansion vessel and insurance valve
- Possibility of the equitherm control, control by reference room temperature or thermostat
- Silent mode
- Three-way valve is part of indoor unit
- BUILT-IN electric cartridge in hot water tank with 3 or 6 kW performance
- New version 2 also includes a circulation pump and an external heat exchanger directly for domestic hot water heating, thus increasing the total tank volume
- Single-phase units with power of 4, 6, 8, 10 kW can only be combined with outdoor units ending with 2
- The outlet temperature is 25 to 60 °C
- Integrated hot water tank

GSH-40TRB2
GSH-60TRB2
GSH-80TRB2
GSH-100TRB2
GSH-120TRB2
GSH-140TRB2
GSH-160TRB2
GSH-80TRB2-3
GSH-100TRB2-3
GSH-120TRB2-3
GSH-140TRB2-3
GSH-160TRB2-3



Model GSH-			40TRB2	60TRB2	80TRB2/80TRB2-3	100TRB2/100TRB2-3	120TRB2/120TRB2-3	140TRB2/140TRB2-3	160TRB2/160TRB2-3
Power supply		V / Ph / Hz	220-240/1/50			220-240/1/50 / 380-415/3/50			
Connecting pipe(refrigerant)		Gas				1/2" / 12.0			
		liquid				1/4" / 6.0			
Connecting pipe(water)		Inlet				1"			
		Outlet							
Safety valve		bar	3						
Leaving water temperature		Cooling	°C						
		Heating	°C						
Main components		Water pump	Type	-					
		Speed	-						
		Max. power	W						
Hot water tank		Volume	l						
		El. heater	kW						
		Expansion tank	Volume	l					
		Max pressure	bar						
		pressure	bar						
		Auxiliary electric heater	Mode	-					
		Capacity	kW			Automatic regulation			
		Combination	-			6			
		Power supply	V / Ph / Hz			3+3			
Heat exchanger		Type	-						
		Amount	-						
Level of acoustic pressure in 1m		dB (A)	29						
Dimensions		Outline (w x d x h)	mm						
		Packaged (š x h x v)	mm						
Weight		Netto	kg						
		Brutto	kg						



CONTROLS OF HYDROBOXES AND UNITS ALL IN ONE

Controls of hydroboxes and units ALL IN ONE is solved by built-in touch controllers. Controller allows equitherm regulation, week program, regulation by sensor of reference room and other possibility. We guarantee you enjoyable heat comfort during the year.

REGULATION OPERATING MODES FOR MAX COMFORT

- Heat
- Heat + preparation domestic hot water
- Cooling
- Cooling+preparation domestic hot water
- Preparation domestic hot water

PRIORITY REGULATION

Regulator can set preference at modes heat+ preparation of domestic hot water or cooling+preparation of domestic hot water.

INLET TEMPERATURE CONTROL

Enter a fixed flow temperature.

ROOM TEMPERATURE CONTROL VIA INTERNAL SENSOR

- Inlet temperature control according to the required temperature of reference room
- Remote sensor of room temperature is part of package
- Room temperature control using an existing room thermostat
- The heat pump is controlled by a room thermostat in the reference room

QUICK CHARGING OF THE DOMESTIC HOT WATER TANK

The heat pump and the electric heating cartridge work in parallel, that domestic water in the hot water tank as quickly as possible.

DRIVING WITH WEEKLY HOURS

The heat pump can be controlled using a weekly program. A total of five time programs are available for each day with time of on/off. The outlet temperature and the domestic water temperature can be set simultaneously. Individual days of the week can be set to absence and thus excluded from the time program.

ANTI-LEGIONELLA FUNCTION

The hot water tank with time control heated himself to +70 °C to kill any bacteria. This function is usually performed at night. Therefore, it is possible to set the desired day in the week for this function, start time and desired temperature.

ABSENCE FUNCTION

To save energy, you can reduce room temperature during your absence.

SILENT MODE OF THE OUTDOOR UNIT

This function can be used to reduce the noise level of the outdoor unit by using time control.

EXTERNAL ON/OFF

Remote WIFI control using the EWPE SMART mobile application.



OUTDOOR UNITS

SPECIFICATION

- We offer you outdoor units in a single-propeller version in power of 4, 6, 8, 10, 12, 14, 16 kW in single-phase and three-phase versions (units with -3 terminal)
- Outdoor units with compact dimensions facilitating installation and transportation
- Device use ecological gently refrigerant R32 with low value GWP
- Compressor with added economizer and intermediate stage injection of refrigerant, because of it is achieved high efficiency and saved energy
- Motor control technology by semiconductor frequency converter
- Units are equipped by inverter regulation, which change speed of compressor
- The delivered power of the units is precisely adapted to the heating system
- Energy savings of up to 40% and temperature fluctuations are avoided
- Between the outdoor unit and the indoor unit, the pipe length can be up to 25 meters. Elevation up to 15 meters
- Units with terminal 2 can only be combined with single-phase ALL IN ONE indoor units



Model GSH-			40ERB/ 40ERB2	60ERB/ 60ERB2	80ERB/ 80ERB2/ 80ERB-3	100ERB/ 100ERB2/ 100ERB-3	120ERB/ 120ERB-3	140ERB/ 140ERB-3	160ERB/ 160ERB-3		
Power supply		V / Ph / Hz	220-240/1/50		220-240/1/50 / 220-240/1/50 / 380-415/3/50		220-240/1/50 / 380-415/3/50				
Temperature: ambient air/water outlet (°C) *	A7 / W35	Heating capacity	kW		4	6	8	9,5/10/10	12	14	15,5
		Power	kW		0,8	1,2	1,7/1,6/1,6	2,1	2,4	3,0	3,4
		COP	-		5,1/5,2	5/4,88	4,7/4,97/5,16	4,6/4,76/5,2	5	4,7	4,5
Technical parameters	Level of acoustic pressure	Max	dB (A)		52		55		60		61
	SCOP	Heating (55 °C / 35 °C)	-		3,3/4,7 3,3/4,7	3,3/4,5 3,3/4,6	3,3/4,6 3,3/4,6 3,2/4,6	3,3/4,6 3,2/4,6 3,5/4,7	3,5/4,6 3,2/4,5	3,5/4,7 3,4/4,5	3,5/4,5 3,4/4,5
Refrigerant	Type	-									
	Amount	kg	1/1,1		1,6/1,84/1,84		1,84				
Domestic hot water temperature		°C	40-80								
Refrigerant pipes	Gas	inch / mm	1/2" / 12.0						5/8" / 16.0		
	Liquid	inch / mm					1/4" / 6.0				
Unit Dimension		w x h x d	975x702x396		1010x828x460/ 982x787x427/ 982x787x395		940x820x460				
Package Dimension		w x h x d	1028x830x458		1083x973x573/ 1097x937x478/ 1094x917x474		1103x973x573				
Weight netto/brutto		kg	55/65		82/92 / 82/92 / 88/98		104/114 / 110/121				
Operating temperature range		°C	-25 - 45								
Standard pipe length		m	5								
Max. pipe length		m	20		25/25/20		20				
Max. elevation		m	15								
Additional refrigeration		g/m	16								

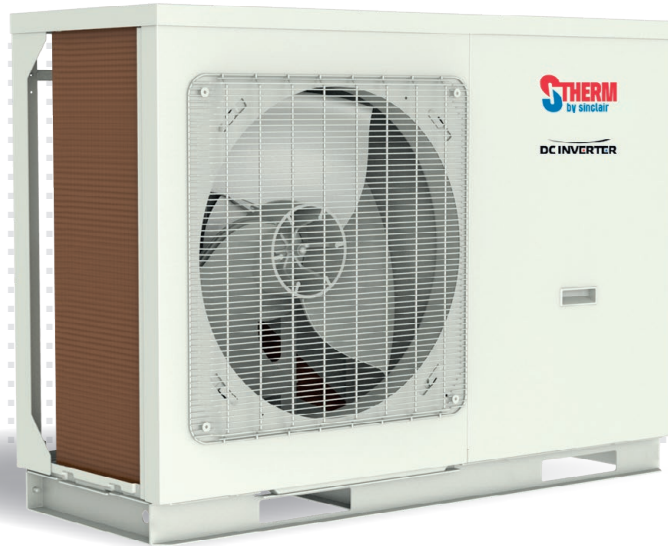
Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R32 (100% HFC-32), GWP of refrigerant used: 675.





modern world
Sinclair

S-THERM 4TH GENERATION OF DC INVERTER HEAT PUMPS MONOBLOCK HEAT PUMPS



Inverter heat pump, which consists of only 1 compact outdoor unit with everything you need, including hydraulic components

**We offer in variants 4, 6, 8 Kw (1 phase)
and 10, 12, 14, 16 kW (1 phase and 3 phase)**

- The system can be connected to floor heating, radiators, fan coils. If you add a hot water tank and a three-way valve, you can also use the device to heat domestic hot water
- Just connect the device to the heating system and to the mains. This minimizes costs and installation time
- Ecological gently refrigerant R32 in combination with inverter compressor and EVI exchanger ensure economical and nature-saving operation
- Hermetically sealed refrigerant circuit of the device, minimal risk of refrigerant leakage
- Monoblock heat pump included circulatory pump, board exchanger, venting valve, expansion valve, insurance valve and two-stage rotary compressor
- The device works reliably even at low temperatures, up to -25 °C, thanks to the added economizer and intermediate stage refrigerant injection

SPECIFICATION:

- Touch screen
- Possibility of control via net with EWPE SMART application
- High Efficiency
- Circulatory pump with self-regulation of speed
- Integrated expansion vessel and insurance valve
- Silent mode
- The outlet water temperature is 25 to 60 °C

MONOBLOCK HEAT PUMPS

Model SMH-			40IRB	60IRB	80IRB	100IRB2/ 100IRB2-3	120IRB2/ 120IRB2-3	140IRB2/ 140IRB2-3	160IRB2/ 160IRB2-3
Capacity1	Heating (underfloor)	kW	4	6	7,5	10	12	14	15,5
	Cooling (underfloor)	kW	3,8	5,8	6,8	8,8	11	12,5	14,5
Power input 1	Heating (underfloor)	kW	0,78	1,2	1,63	2,15	2,64	3,22	3,6
	Cooling (underfloor)	kW	0,82	1,32	1,55	1,96	2,56	3,05	3,82
COP1	Heating (underfloor)	-	5,1	5	4,6	4,65	4,55	4,3/4,5	4,3
EER1	Cooling (underfloor)	-	4,65	4,4	4,4	4,5	4,2	4/4,2	3,7/4
Capacity2	Heating (fan coils,radiators)	kW	4	6	7,5	10	12	14	15,5
	Cooling (fan coils,radiators)	kW	3	4	5	7,8	9,5	12	13
Power input 2	Heating (fan coils,radiators)	kW	0,98	1,56	2	2,67	3,48	4,18	4,7
	Cooling (fan coils,radiators)	kW	0,94	1,27	1,56	2,48	3,11	4,14	4,73
COP2	Heating (fan coils,radiators)	-	4,1	3,85	3,75	3,75	3,6/3,5	3,5/3,6	3,4/3,5
EER2	Cooling (fan coils)	-	3,2	3,15	3,2	3,15	3,05	2,9/3	2,7/2,9
Energy class		-	A+++	A+++	A+++	A+++	A+++	A++	A++
SCOP		-	3,3/4,8	3,3/4,8	3,3/4,8	3,2/4,5 3,3/4,5	3,2/4,5 3,3/4,5	3,2/4,32 3,2/4,3	3,2/4,2 3,3/4,2
Voltage/phase/frequency		V/Ph/Hz	220-240/1/50			220-240/1/50 / 380-415/3/50			
Max. power input		kW	2,4			6,7/8,3			
Max. current		A	10,4			19/12			
Refrigerant	Type	-	R32						
	Charge	kg	0,87			2,2			
Water pipes	Inlet	mm	DN25						
	Outlet	mm	DN25						
Water temperatures range	Heating	°C	20-60						
	Cooling	°C	7-25						
Main components	Water pump	Max water flow	m ³ /h						
		Power input	W						
Water flow switch	Minimum flow	l/min							
		0,6							
Expansion tank	Volume	l							
		2							
		Maximum pressure	Bar						
			3						
Precharged pressure	Bar								
	1								
Electric heater	Mode	-							
	Steps	-							
	Capacity	kW							
	Combination	kW							
	Voltage/phase/frequency		V/Ph/Hz						
Heat exchanger	Type	-							
	Quantity	-							
		Brazed plate							
		1							
Safety valve	Pressure	bar							
		3							
Sound pressure level LpA	Heating	dB			61				
	Cooling	dB			59				
Unit dimensions	W*D*H	mm			1150x345x758				
Package dimension	W*D*H	mm			1258x488x900				
Weight	Net/Gross	kg			96/109				
Operating temperature range	Cooling	°C			-15-48				
	Heating	°C			-25-35				
	Water heating	°C			-25-45				

1 CAPACITIES AND POWER INPUTS ARE BASED ON THE FOLLOWING CONDITIONS:

COOLING CONDITIONS: Indoor Water Temperature 23 °C / 18 °C; Outdoor Air Temperature 35 °C DB / 24 °C WB
HEATING CONDITIONS: Indoor Water Temperature 30 °C / 35 °C; Outdoor Air Temperature 7 °C DB / 6 °C WB

2 CAPACITIES AND POWER INPUTS ARE BASED ON THE FOLLOWING CONDITIONS:

COOLING CONDITIONS: Indoor Water Temperature 12 °C / 7 °C; Outdoor Air Temperature 35 °C DB / 24 °C WB
HEATING CONDITIONS: Indoor Water Temperature 40 °C / 45 °C; Outdoor Air Temperature 7 °C DB / 6 °C WB

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R32 (100% HFC), GWP of refrigerant used: 675.

THE CONTROL OF MONOBLOCK HEAT PUMP

The control of monoblock heat pump is realized by means of a touch controller, which is located inside the buildings. The control is user-friendly.

MODES

- Heating and cooling
- Heating of Domestic hot water
- Cooling+heating of Domestic hot water
- Heating+Heating of Domestic hot water
- Emergency mode
- Quick heating of Domestic hot water
- Holiday mode
- Disinfection mode
- Equitherm mode



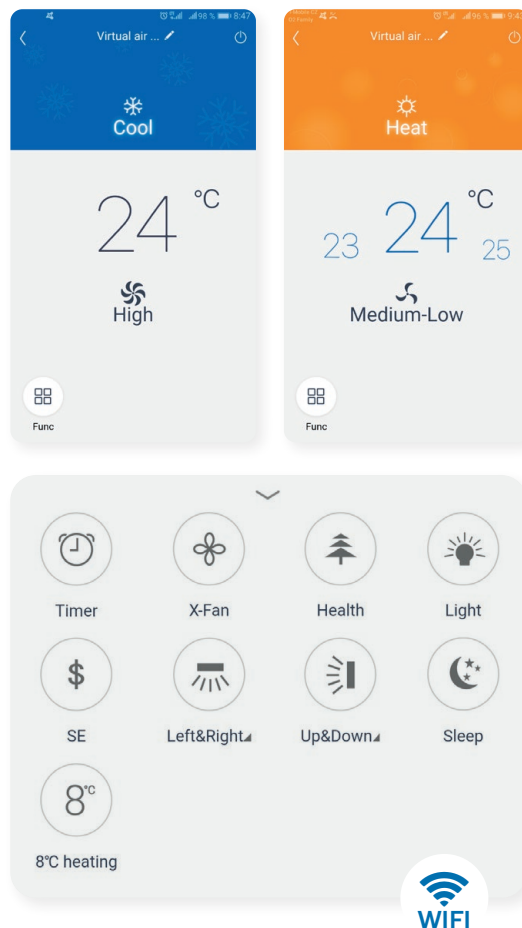
AUXILIARY ELETRIC HEATER

An optional bivalent source with the designation EH-SMH can be integrated into the monoblock thermal. We supply the auxiliary electric heater in the output of 3/9 kW - connection either in a star or in a triangle.



REMOTE CONTROL USING EWPE SMART

4th generation S-therm heat pumps have an integrated wifi module and can be controlled using the EWPE Smart application. Remote control is simple and intuitive. You will flood anytime and from anywhere.





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Sinclair

MONOBLOCK HOT WATER TANK

MONOBLOCK

HEAT PUMPS



Monoblock
hot water in enamel
design



Monoblock hot water in enamel design, which is using ecologic refrigerant R134A. Device with volume 176 or 284 liters. Device working in two modes - economic and electrical heater

- Possibility of connection to solar system - device with S ending
- Adjustable temperature of water 38-70 °C
- Operating ambient temperature -20-43 °C
- 50 mm polyurethane insulation
- 3 year warranty



MONOBLOCK HOT WATER TANKS

SPECIFICATION

- Complete insulation between water and electricity. No potential electric shock problem. No fuel pipes and storage, no potential danger from oil leakage, fire, explosion etc.
- Adopts heat pump principle, which absorbs heat from outdoor air and produces hot water, COP up to 5
- Lower power consumption compared to traditional systems
- Ambient temp: -25 to 45 °C, not affected by night-time temperatures, overcast sky, rain and snow
- No discharge of toxic gas. No pollution of the atmosphere or environment
- Automatic start-up and shutdown, automatic defrosting without any attention
- Possibility of control via Modbus
- Possibility of control via WiFi application



Model SWH-		190IRE2(S)		300IRE2(S)	
		Economy	E-heater	Economy	E-heater
Operating temperature range	°C	-7 ~ 43	-20 ~ 43	-7 ~ 43	-20 ~ 43
Output water temperature	°C	38 ~ 70			
Power supply	V / Ph / Hz	220-240 / 1 / 50			
Water heating capacity	kW	1,62		2,3	
COP	-	3,86		4,34	
Max. power input	kW	0,42		0,53	
Max. current	A	22,2		33,7	
Energy class	-	A+		A+	
Unit dimension (D x H)	mm	Ø610 x 1830		Ø700 x 1930	
Package dimension (W x D x H)	mm	680 x 2070 x 680		775 x 2200 x 745	
Net weight	kg	268/277		398/406	
Sound pressure level at 1m	dB (A)	36,6		38,2	
Refrigerant (type / charge / t Eq. CO2)	kg	R134a / 1,1 / 1,57		R134a / 1,5 / 2,14	
Tank design pressure	Mpa	1,0			
Air flow volume	m3 / h	270 / 230 / 182		414 / 355 / 312	
Water inlet pipe	inch	3/4"			
Water outlet pipe	inch				
Solar water inlet pipe	inch				
Solar water outlet pipe	inch				
Solar pipe max. pressure	Mpa	1			
Solar coil surface	m2	1,1		1,3	
Solar coil material	-	enamel			
E-heater Capacity	kW	1,5		1,5	
Water tank volume	l	176/168		284/272	
Tank material	-	enamel			

R134A
REFRIGERANT





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SINCLAIR HOT WATER HEATER

SPLIT UNIT



Set of outdoor unit
and enamel hot water
tank with a capacity
of 185 litres

**The water heater with air heat pump is
a modern, efficient, energy-saving and
environmentally friendly product**

- Closed circuit of the refrigerant piping system. There is no risk of contamination of the service water with the refrigerant
- The refrigerant piping is wrapped inside the tank
- The heater control is a wall controller in English, which is standard
- 3 year warranty



SPLIT HOT WATER HEATER

SPECIFICATION

- Set of outdoor unit and enamel hot water tank with a capacity of 185 litres
- The water heater with air heat pump is a modern, efficient, energy-saving and environmentally friendly product
- Closed circuit of the refrigerant piping system. There is no risk of contamination of the service water with the refrigerant
- The refrigerant piping is wrapped inside the tank
- The heater control is a wall controller in English, which is standard
- 3 year warranty



OUTDOOR UNIT		SWH-35ERA2	
Heating Capacity	W	3500 (1800-3700)	
Rated Input Power (*)	W	833 (360-910)	
COP (*)	-	4,1	
Load profile		L	
COP DHW (**)	-	3,08	
Energy class (**)	-	A	
Water Heating Energy Efficiency	-	1,3	
Annual electricity consumption (average climate conditions)	kWh	795	
Maximum Input Power	W	2000 + 1500 (electric heater)	
Outlet Water Temperature	°C	35 ~ 55	
Power Supply	V / Ph / Hz	220-240 / 1 / 50	
Insulation Level	-	I	
Protection of Ingression	-	IPX4	
Refrigerant	Type	-	
	Charge	kg	R410A
Dimension (W x D x H)	Unit	mm	842x320x591
	Package	mm	948x363x660
Gross / Net Weight	kg / kg	44,5/38,5	
Sound Power Level (***)	dB (A)	63	
Operating Range	°C	-25 - 45	
Standard pipe length	m	3	
Max. pipe length	m	20	
Max. elevation	m	10	
Additional refrigerant (over 10m pipe length)	g/m	22	

INDOOR UNIT		SWH-200DE	
Tank volume	l	185	
Power Supply to E-heater	V / Ph / Hz	220-240 / 1 / 50	
E-heater capacity	W	1500	
Dimension (W x D x H)	Unit	mm	462 x 462 x 2000
	Package	mm	2108 x 583 x 565
Gross / Net Weight	kg	83 / 72,5	
Pipe diameter (refrigerant)	Liquid pipe	mm	6
	Gas pipe	mm	9,52
Water Pipe Outlet	mm	12,7 (DN1/2)	
Tank material		enamel	

(*) Value obtained with the following conditions: Outdoor temperature: 20 °C DB / 15 °C WB; Water tank temperature (start / end): 15 °C / 55 °C.

(**) Value obtained with an air temperature of 7 °C and a water inlet at 10 °C, as per EN16147-2011, (EU) No 814 / 2013.

(***) Value obtained as per EN 12102-2008.

The technical specification of the products may differ from the stated values based on the development of the equipment by the manufacturer. Please refer to the parameters on the unit's type plate. Sound pressure level is tested in a soundless chamber, actual values may be affected by local conditions. The equipment contains fluorinated greenhouse gases included in the Kyoto Protocol R410A (50% HFC-32, 50% HFC-125), the GWP of the refrigerant is 2088.

DOMESTIC HOT WATER TANKS

SPECIFICATION

- For preparation and subsequent distribution of hot water
- Free-standing compact design
- Enameled heat exchanger
- Magnesium anode rod - protection against galvanic and electrolytic corrosion
- Possibility of direct installation of el. heaters with an output of 3.3 kW
- Flange for installation of additional solar heat exchanger or electric heating
- Outer finish: gray leatherette
- PU foam insulation with a thickness of 50 mm

ST-250DE TANK WITH A VOLUME OF 234 LITERS
ST-300DE TANK WITH A VOLUME OF 286 LITERS
ST-400DE TANK WITH A VOLUME OF 352 LITERS
ST-500DE TANK WITH A VOLUME OF 469 LITERS



ACCUMULATION TANKS

SPECIFICATION

- For the accumulation and subsequent distribution of heating water
- Free-standing compact design
- Possibility of direct installation of el. heaters up to 3 or 6 kW
- Possibility of instantaneous water heating with FRESH SET
- Outer finish: gray leatherette
- PU foam insulation with a thickness of 50 mm

ST-300AF STEEL TANK WITH A VOLUME OF 300 LITERS
ST-500AF STEEL TANK WITH A VOLUME OF 500 LITERS
ST-1000A STEEL TANK WITH A VOLUME OF 500 LITERS



COMBINED ACCUMULATION TANKS

SPECIFICATION

- For the accumulation and subsequent distribution of heating water
- Free-standing compact design
- Nested flow-through stainless steel exchanger for hot water heating
- Possibility of direct installation of el. radiators up to 6kW
- Outer finish: gray leatherette
- PU foam insulation with a thickness of 50 mm

ST-500MC COMBINED ACCUMULATION TANK WITH A VOLUME OF 500 LITERS
ST-500MCS COMBINED STORAGE TANK WITH A VOLUME OF 500 LITERS EQUIPPED WITH A STAINLESS STEEL HEATING EXCHANGER FOR CONNECTING EXAMPLE A SOLAR SYSTEM





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