



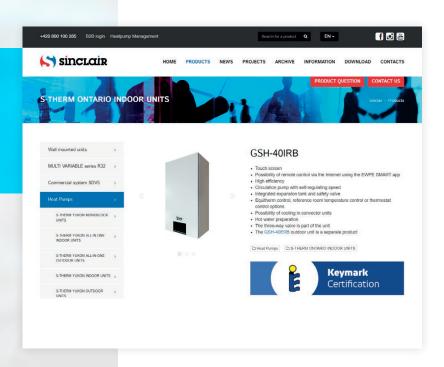
## Sinclair Global Group

#### **ABOUT THE SINCLAIR BRAND**

The SINCLAIR brand has a long tradition and on market with the heating technology is constantly gaining on popularity and trust. We are a professional company, behind which stands a strong team. We have partners in many countries and we are constantly developing our cooperation. The building blocks of the SINCLAIR Global Group are based on long-term partnerships and quality and competitive products. We regularly organize technical trainings to make sure, that all our partners know our products in detail and have up-to-date information on all the news in our assortment. We can find a comfortable solution for any climatic conditions. Both Ontario and Yukon series heat pumps have received Keymark certification.

#### **OUR VISION AND MISSION**

Protecting the environment is becoming a fundamental issue for humanity and for our future generations. For SINCLAIR Global Group, environmental protection is is also a key issue. We strive to apply and develop the latest technologies, that will help to implement new products with higher energy efficiency and which will have a minimal burden on the environment. SINCLAIR products meet the strict standards of the European Union and in many cases even surpass them. SINCLAIR believes in stable, long-term and healthy development, backed by hard work and a strong code of ethics. The long-term success of any brand depends on satisfied customers. Customers are satisfied, when they receive high quality, reliable and technically advanced product with the right price level and a modern design.



#### WWW.SINCLAIR-SOLUTIONS.COM

This website is dedicated to all of those, who want to learn about SINCLAIR heating technology. Login to B2B section will be available to business partners, where they will find necessary documentation.

#### CONTENT

Sinclair heat pumps	4
S-therm Yukon	7
S-therm Yukon - remote control	10
S-therm Yukon - hydrobox	13
S-therm Yukon - ALL IN ONE	17
S-therm Yukon - monobloc units	21
S-therm Ontario	25
S-therm Ontario - hydrobox	29
S-therm Ontario - ALL IN ONE	33
S-therm Ontario - monobloc units	37
S-therm Yukon and Ontario - comparison	40
Monobloc hot water heater	43
Split water heaters and storage tanks	47



## Why Sinclair heat pump?

Heat pump is a long-term investment for you. Our equipment is the best solution for you in terms of price, quality and performance.

## NEW BUILDING, RECONSTRUCTION OF AN OLDER HOUSE OR LARGE BUILDING. WE HAVE FOR YOU THE RIGHT SOLUTION

Right now, the time is right, to get a Sinclair heat pump. The units are intelligently controlled, efficient and long-lasting. Currently, people are more and more focused on the costs associated with heating their homes.

At the same time, they want to be environmentally friendly. We care about our planet. We care about the climate, in which our children and future generations will grow up. For this reason, we use the new R32 refrigerant, which is highly energy-efficient and more eco-friendly.

You will no longer have to stock up on coal or wood in the summer for the winter. The daily work of refilling boilers will no longer bother you. You will also appreciate the tidiness and cleanliness. Use your time wisely.

## FROM 1 KW OF ELECTRICAL ENERGY UP TO 5,2 KW OF HEAT

SINCLAIR heat pump technology reduces energy consumption and  $\mathrm{CO}_2$  emissions. We use the most advanced DC INVERTER technology, thanks to which a high efficiency of heat pumps is achieved. You get up to 5.2 kW of heat from 1 kW of electricity (with unit MSH-80EB).

#### **KEYMARK CERTIFICATION**

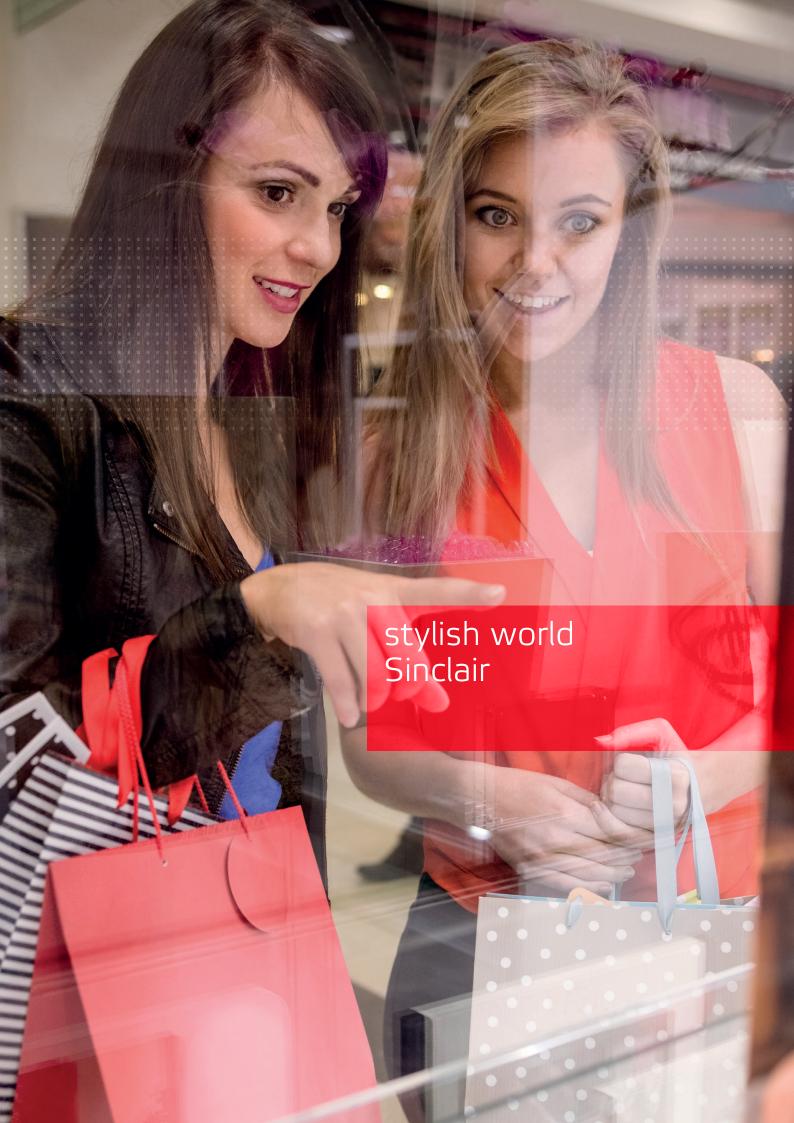
Sinclair heat pumps are Keymark certified. The KEYMARK is a voluntary European product quality mark, that demonstrates compliance with European standards.

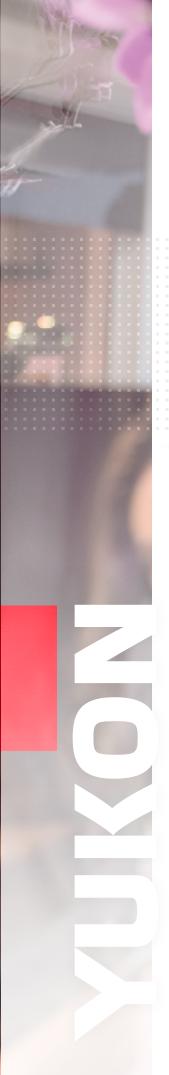
It is owned by the European standards organisations CEN and CENELEC. It complements the CE marking and thus strengthens consumer confidence throughout the Europe and ensures easier access to the European market.











# New S-Therm Yukon premium heat pump series



S-THERM YUKON heat pumps are inspired by the untamed nature of the Yukon Territory in northwestern Canada. They are characterized by majestic performance, high efficiency, reliability, low operating noise and in all aspects they meet the high demands of sustainable development and the ecology of our world.

#### **WE TURN AIR INTO ENERGY**

Global uncertainty of gas availability, irregular energy price turbulence, increasingly rising costs of heating are triggering massive global demand for heat pumps, which so far exceeds the production possibilities of the supplying companies.

#### **NEW TEMPERATURE RANGE OF HEAT PUMPS**

In winter, temperatures in northern Canada drop well below freezing point. Heat pumps S-THERM YUKON have operating conditions set down to -25 °C.

In addition to heating, our heat pumps also ensure the production of sufficient amount of hot water. This guarantees, even in the cold winter, that the heat pumps will provide for your needs and you will always feel comfortable.

#### **NEW POWER SERIES OF HEAT PUMPS**

The YUKON series gives you twice the performance, as the S-THERM Ontario series. We now offer max. 30 kW monobloc heat pumps. These units can then be connected to larger cascades.

Up to 6 units can be connected in this way, thus achieving a power output of up to 180 kW. S-THERM YUKON heat pumps thus become the ideal heat source for larger commercial buildings, apartment buildings, schools, hotels, manufacturing plants or other buildings with higher heat losses.





### MAIN FEATURES

#### **NEW DESIGN WITH SMALLERS DIMENSIONS**

YUKON series hydroboxes are among the smallest on the market. With a depth of only 270 millimeters, the overall size reduction is 29% (compared to the Ontario Series hydrobox).

With these dimensions, S-therm Yukons hydrobox can easily take the place of your gas boiler.

Outdoor units up to 16 kW have only one fan. Improved fan turbine design reduces air flow resistance and noise level.

#### **HIGH EFFICIENCY OF HEAT PUMPS**

The air, water and ground around us contains a huge amounts of energy, even in winter months. Heat pumps S-THERM YUKON use 75% of energy provided by the outdoor environment.

The remaining 25% is made up of electricity. This efficiency significantly reduces the emissions and pollutants, that are released into the atmosphere. Newest technology and advanced control logic have created one of the most economical and efficient heat pumps on the European and global market.

S-THERM YUKON heat pumps are controlled by an inverter compressor, which ensures precise operation and high performance.

#### **QUIET OPERATION**

With S-THERM YUKON heat pumps, you can provide heating, hot water heating and cooling, not only efficiently and economically, but also quietly.

For example, with 6 kW YUKON heat pump, the level of the sound pressure at 1 metre is only 44 dB(A). In comparison, we present a noise level of 50 dB(A) - this noise level can be imagined as drops of light rain falling.

The most powerful machines, which have a heating capacity of 30 kW, have a noise level at 1 metre of 66 dB(A), which is equivalent to the volume of a normal telephone call.

### ENVIRONMENTALLY FRIENDLY REFRIGERANT R32

In our S-THERM YUKON heat pumps we use R32 refrigerant. This refrigerant has a better heat capacity and systems can use up to 20% less of it, than with its R410a predecessor.

Due to its low GWP potential, the refrigerant has R32 68% less impact on global warming the earth than the previous refrigerant R410a and is cheaper to run.







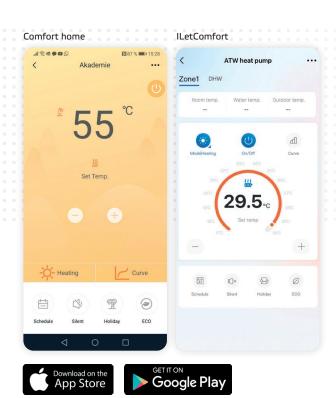


## **REMOTE CONTROL**

#### **REMOTE CONTROL VIA MOBILE APP**

S-therm Yukon heat pumps include a built-in wifi module, that allows them to be controlled remotely via the Comfort home app or ILetComfort app The control is simple and comes with information about the operation of the heat pump.





#### **CONTROLLER**

S-therm Yukon heat pumps are controlled by a wired controller located inside the building. Multiple languages are available with simple interface.

#### **MODES**

- · Heating and cooling
- · DHW heating
- · Cooling + DHW heating
- · Heating + DHW heating
- · Safe mode
- · Silent mode (2 levels)
- · Fast hot water
- · Holiday mode (2 Types)
- · Disinfection mode
- · Equithermal mode







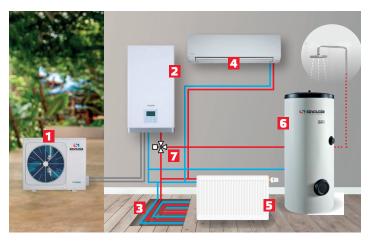
## **EXAMPLES OF CONNECTION FOR HEATING SYSTEM WITH HYDROBOX**



- 1 Outdoor unit
- 2 Hydrobox (indoor unit)
- 3 Floor heating
- 4 Domestic hot water storage tank
- 5 Three-way valve optional



- Outdoor unit
- 2 Hydrobox (indoor unit)
- Floor heating
- 4 Radiator
- 5 Domestic hot water storage tank
- 6 Three-way valve optional



- Outdoor unit
- 2 Hydrobox (indoor unit)
- 3 Floor heating
- 4 Fan Coil
- 5 Radiator
- 6 Domestic hot water storage tank
- 7 Three-way valve optional

These diagrams are not a substitute for technical connection diagrams.



# INDOOR UNITS HYDROBOX

The YUKON Hydrobox is available in three versions with an integrated backup electric heater. It allows heating in floor systems, radiators or fan coils.

THANKS TO THE OPTIONAL THREE-WAY VALVE, THE YEAR-ROUND OPERATION IN HEATING OF HOT DOMESTIC WATER MODE IS POSSIBLE. IN SUMMER, COOLING DOWN TO 5 °C IS AVAILABLE.



Unit works efficiently in temperatures down to -25 °C. In heating mode, in indoor unit, thermal energy of the refrigerant is transferred to the water via plate heat exchanger. This warm water is then supplied to the radiators, underfloor heating and hot domestic water storage tank.

The devices are available in both single-phase and three-phase versions (units with -3 terminals).

The indoor unit contains a powerful plate heat exchanger, which is characterized by high corrosion resistance, compact dimensions and high efficiency.

The expansion tank inside the hydrobox has a capacity of 8 litres. The standard pressure inside the vessel is 1,0 bar. This ensures reliable operation of the equipment and stable system pressure.

The energy-efficient and powerful circulation pump ensures a smooth water flow in the system.

For larger heating systems, size of an expansion vessels must be consulted with the designer.

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

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

The Hydrobox includes a circulating inverter pump and plate heat exchanger.





## **INDOOR UNITS HYDROBOX**

#### **FEATURES**

- · Internet control via the Comfort Home or ILetComfort app
- · High efficiency
- $\cdot$  Circulation pump with self-adjusting speed control
- · Integrated expansion tank and safety valve
- · Equitherm control, control by reference room temperature or thermostat
- · Possibility of cooling in convector units
- · Preparation of domestic hot water
- · Possibility to connect a three-way valve (not included)

POSSIBLE CO	MBINATIONS
INDOOR	OUTDOOR
MSH-60IB/3	MSH-60EB
MSH-100IB/3	MSH-80EB
MSH-100IB/3	MSH-100EB
MSH-100IB-3/9	MSH-80EB
MSH-100IB-3/9	MSH-100EB
MSH-160IB/3	MSH-120EB
MSH-160IB/3	MSH-140EB
MSH-160IB/3	MSH-160EB
MSH-160IB-3/9	MSH-120EB-3
MSH-160IB-3/9	MSH-140EB-3
MSH-160IB-3/9	MSH-160EB-3





Model MSH-				60IB/3	100IB/3 100IB-3/9	160IB/3 160IB-3/9					
Power supply			V / Ph / Hz	220-240 / 1 / 50	220-240 / 1 / 50	/ 380-415 / 3 / 50					
Connecting pipe (	refrigerant)	Gas		5/8" / 16,0							
		Liquid	inch / mm	1/4" / 6,0	1/4" / 6,0 3/8" / 9,5						
Connecting pipe (	water)	Inlet			1"						
		Outlet	inch		l						
Safety valve			bar		3						
Leaving water ten	nperature	Cooling	0.0		5 - 25						
		Heating	°C –		25 - 65						
Main	Water pump	Туре	-		Inverter						
components		Speed	-	Automatic							
Expansior		Max. power	W	90							
	Expansion	Volume	l		8						
	vessel	Max. pressure	bar	3							
		Pressure	bar	1							
	Auxilary	Mode	-		Automatic						
	electric	Capacity	kW	3	(	)					
	heater	Combination	-	3	3+:	3+3					
		Power supply	V / Ph / Hz	220-240 / 1 / 50	220-240/1/50	/ 380-415/3/50					
	Exchanger	Туре	-		Plate						
		Amount	-		1						
Level of acoustic	pressure in 1m		dB (A)	28	30	32					
Dimensions Outline (w x h x d)			mm	420 x 790 x 270							
Packaged (w x h x d)			mm	525 x 1050 x 360							
Weight	Veight Netto			37 39							
		Brutto	kg	4	3	45					





### **OUTDOOR UNITS**

#### **FEATURES**

- We offer you outdoor units in a single-propeller version in capacity of 6, 8, 10, 12, 14, 16 kW in single-phase and threephase versions (units with suffix -3)
- Outdoor units of compact dimensions facilitating problemfree installations and also transportation
- The device uses environmentally friendly refrigerant R32 with low GWP value
- Compressor with intermediate stage injection of refrigerant, thanks to which high efficiency and energy saving are achieved
- Motor control technology by semiconductor frequency converter
- The units are equipped with an inverter control that changes the speed of the 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 30 meters. Elevation up to 20 meters



Model MSH-				60EB	80EB	100EB	120EB / 120EB-3	140EB / 140EB-3	160EB / 160EB
Power supply			V / Ph / Hz		220-240 / 1 /50 220-240 / 1 /50 / 380-415				5/3/50
Capacity		Heating	kW	6,2	8,3	10	12,1	14,5	16
		Cooling	kW	6,55	8,4	10	12	13,5	14,2
Power		Heating	kW	1,24	1,6	2,0	2,4	3,1	3,6
Co		Cooling	kW	1,34	1,66	2,08	3,0	3,7	3,9
COP		Heating	-	5	5,2	5	4,95	4,7	4,5
EER		Cooling	-	4,9	5,05	4,8	4	3,61	3,61
Technical parameters	Level of acoustic pressure	1m	dB (A)	45	46	49	50	51	55
	Energy class	Heating (55 °C / 35 °C)	-		A++ / A+++				
	SCOP	Heating (55 °C / 35 °C)	-	3,52 / 4,95	3,37 / 5,22	3,47 / 5,2	3,45 / 4,81	3,47 / 4,72	3,41 / 4,62
R	Refrigerant	Туре	-			R	32		
		Amount	kg	1,5	1,65			1,84	
	Domestic hot water temperature	!	oC.	12-60					
	Refrigerant pipes	Gas	inch / mm			5/8"	/ 16,0		
		Liquid	inch / mm	1/4" / 6,0			3/8" / 9,5		
	Unit Dimension	w x h x d	mm	1008 x 712 x 426			1118 x 865 x 523		
	Package Dimension	w x h x d	mm	1065 x 810 x 485			1190 x 970 x 560		
	Weight	Netto/Brutto	kg	58 / 63,5	75 .	/ 89		112 / 125,5	
	Operating temperature range		oC.			-25	- 43		
	Standard pipe length		m				15		
	Max. pipe length	Max. pipe length					30		
	Max. elevation		m				20		
	Additional refrigeration		g/m	20			38		

#### 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.









## INDOOR UNITS ALL IN ONE

The SINCLAIR ALL IN
ONE heat pump belongs
to a new generation of
heat pumps designed for
heating, cooling and heating
domestic hot water.





The ALL IN ONE design from the Yukon series offers the option of connecting DHW recirculation.

#### 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 and plate exchanger.

TECHNOLOGY, THAT CONNECTS TOGETHER THE INTERNAL UNIT HYDROBOX AND INTEGRATED 190 OR 240 LITRE TANK IN STAINLESS STEEL FOR DOMESTIC HOT WATER





## INDOOR UNIT ALL IN ONE

#### **FEATURES**

- · Internet control via the Comfort Home or ILetComfort app
- · High efficiency
- · Self-regulating circulation pump
- · Integrated expansion tank and safety valve
- Equitherm control, room temperature reference control or thermostat control
- · Quiet mode
- · Three-way valve included in the indoor unit
- · Built-in 3 or 9 kW electric cartridge

POSSIBLE CO	OMBINATIONS
INDOOR	OUTDOOR
MSH-190TB/3	MSH-60EB
MSH-240TB/3	MSH-120EB
MSH-240TB/3	MSH-140EB
MSH-240TB/3	MSH-160EB
MSH-190TB-3/9	MSH-80EB
MSH-190TB-3/9	MSH-100EB
MSH-240TB-3/9	MSH-120EB-3
MSH-240TB-3/9	MSH-140EB-3
MSH-240TB-3/9	MSH-160EB-3



Model MSH-				190TB/3	240TB/3	190TB-3/9	240TB-3/9				
Power supply			V / Ph / Hz	220 - 24	10 / 1 /50	380 - 41	5 / 3 /50				
Connecting pipe(refriger	rant)	Gas			5/8"	/ 16,0					
		Liquid	inch / mm		3/8" / 9,5						
Connecting pipe (water)	)	Inlet	inch								
		Outlet	- Inch	1"							
Safety valve			bar			3					
Leaving water temperat	ture	Cooling	°C		5.	- 25					
		Heating	°C		25	- 65					
Main components	Water pump	Туре	-	Inverter							
		Speed	-		Auto	matic					
		Max. power	W		(	90					
_	Hot water tank	Volume	l	190	240	190	240				
	Expansion tank	Volume	l			8					
		Max. pressure	bar	3							
		Pressure	bar	1							
	Auxiliary electric heater	Mode	-		Auto	matic					
		Capacity	kW	3		9					
		Combination	-	3		3+3+3					
		Power supply	V / Ph / Hz	220 - 240 / 1 /50		380 - 415 / 3 /50					
	Heat exchanger	Туре	-		Braze	d plate					
		Amount	-			1					
Level of acoustic pressu	ure in 1m		dB (A)		2	29					
Dimensions	Outline (w x h x d)		mm	600 x 600 x 1683	600 x 600 x 1943	600 x 600 x 1683	600 x 600 x 1943				
	Packaged (w x h x d)		mm	730 x 730 x 1920	730 x 730 x 2180	730 x 730 x 1920	730 x 730 x 2180				
Weight	Netto		kg	140	157	140	157				
_	Brutto		kg	161	178	161	178				

 $<sup>\</sup>ensuremath{^{\star}}$  Noise level depends on the combination of indoor unit and outdoor unit





### **OUTDOOR UNITS**

#### **FEATURES**

- We offer you outdoor units in a single-propeller version in capacity of 6, 8, 10, 12, 14, 16 kW in single-phase and threephase versions (units with suffix -3)
- Outdoor units of compact dimensions facilitating problem-free installations and also transportation
- The device uses environmentally friendly refrigerant R32 with low GWP value
- Compressor with added economizer and intermediate stage injection of refrigerant, thanks to which high efficiency and energy saving are achieved
- · Motor control technology by semiconductor frequency converter
- The units are equipped with an inverter control that changes the speed of the 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 30 meters. Elevation up to 20 meters



Model MSH-				60EB	80EB	100EB	120EB / 120EB-3	140EB / 140EB-3	160EB / 160EB-3
Power supply			V / Ph / Hz		220-240 / 1 /50		220-240 / 1 / 50 / 380-415 / 3 / 50		
Capacity		Heating	kW	6,2	8,3	10	12,1	14,5	16
		Cooling	kW	6,55	8,4	10	12	13,5	14,2
Power		Heating	kW	1,24	1,6	2,0	2,4	3,1	3,6
		Cooling	kW	1,34	1,66	2,08	3,0	3,7	3,9
СОР			-	5	5,2	5	4,95	4,7	4,5
EER			-	4,9	5,05	4,8	4	3,61	3,61
Technical	Level of acoustic pressure	1m	dB (A)	45	46	49	50	51	55
parameters	Energy class	Heating (55 °C / 35 °C)	-		A++ / A+++				
	SCOP	Heating (55 °C / 35 °C)	-	3,52 / 4,95	3,37 / 5,22	3,47 / 5,2	3,45 / 4,81	3,47 / 4,72	3,41 / 4,62
	Refrigerant	Туре	-		R32				
		Amount	kg	1,5	1,6	65		1,84	
	Domestic hot water temperate	ure	oC.	12 - 60					
	Refrigerant pipes	Gas	inch / mm			5/8"	/ 16,0		
		Liquid	inch / mm	1/4" / 6,0			3/8" / 9,5		
	Unit Dimension	wxhxd	mm	1008 x 712 x 426			1118 x 865 x 523		
	Package Dimension	wxhxd	mm	1065 x 810 x 485			1190 x 970 x 560		
	Weight	Netto/Brutto	kg	58 / 63,5	75 /	/ 89		112 / 125,5	
	Operating temperature range		oC.			-25	- 43		
	Standard pipe length		m			1	15		
	Max. pipe length					3	30	-	
	Max. elevation		m			2	20		
	Additional refrigeration		g/m	20			38		

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.









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



The units are available in 6, 8 and 10 kW (1-phase), 12, 14, 16 kW (1-phase or 3-phase) and 18, 22, 26, 30 kW (3-phase)

#### **ONE COMPACT UNIT, MANY FEATURES**

- The system can be connected to underfloor heating, radiators or fan coils. If you add a hot water tank and a three-way valve, you can
- $\cdot$  use the system to heat domestic hot water
- Environmentally friendly R32 refrigerant in combination with an inverter compressor ensures economical and environmentally friendly operation
- Hermetically sealed refrigerant circuit, minimal risk of refrigerant leakage
- Monobloc heat pump includes circulatory water pump, plate heat exchanger, expansion valve, safety valve and expansion vessel
- · two-stage rotary compressor
- The unit operates reliably even at low temperatures, down to -25 °C, thanks to the intermediate refrigerant injection

IDEAL DEVICE IF YOU DON'T HAVE THE OPTION OF INSTALLING INDOOR UNIT.
JUST CONNECT THE UNIT TO THE HEATING SYSTEM AND TO ELECTRICITY. THIS MINIMISES COSTS AND THE TIME REQUIRED FOR INSTALLATION





## MONOBLOC UNITS

#### **FEATURES**

- · Internet control via Comfort Home or ILetComfort app
- · High efficiency
- · Circulation pump with self-adjusting speed control
- · Integrated expansion tank and safety valve
- · Quiet mode
- $\cdot$  Outlet temperature from 25 °C to 65 °C
- Integrated electric backup heater 3 or 9 kW (according to combinations in the table)





Model SMHM-				60B	80B	100B	120B / 120B-3	140B / 140B-3	160B / 160B-3			
Capacity		Heating	kW	6,35	8,4	10	12,1	14,5	15,9			
		Cooling	kW	6,5	8,3	9,9	12	13,5	14,2			
Power		Heating	kW	1,28	1,63	2,02	2,44	3,15	3,53			
		Cooling	kW	1,35	1,64	2,18	3,04	3,74	3,94			
COP		Heating	-	4,95	5,15	4,95	4,95	4,6	4,5			
EER		Cooling	-	4,8	5,05	4,55	3,95	3,61	3,61			
Energy class		Heating (55 °C / 35 °C)				/A+++						
SCOP .		Heating (55 °C / 35 °C)		3,52 / 4,95 3,37 / 5,22 3,47 / 5,2		3,45 / 4,81	3,47 / 4,72	3,41 / 4,62				
Power supply		,	V/Ph/Hz		220-240 / 1 / 50		220-24	0/1/50 / 380-415	/3/50			
Max. power			kW	2,58	3	3,43	4,78	5,37	6,25			
Max. current			А	18	19	9		30				
Refrigerant		Туре	-	R32								
-		Amount	kg		1,4			1,75				
Vater pipes		Inlet	mm					· · · · · · · · · · · · · · · · · · ·				
		Outlet	mm	5/4*								
Vater temperatures	range	Heating	0C	25-65								
		Cooling	0C	5 - 25								
lain components	Water pump	Max. water flow	m³/h				4,5					
		Power input	W				95					
	Water flow switch	Minimum flow	m³/h	0,4 0,7								
	Expansion tank	Volume	ı	8								
		Maximum pressure	Bar	3								
		Precharged pressure	Bar	1								
	Electric heater	Mode	-			Aut	omatic					
		Steps	-		1			3				
		Capacity	kW		3			9				
		Combination	kW		3			3/6/9				
		Power supply	V/Ph/Hz		220-240/1/50		220	0-240/1/50 / 380-415/3	3/50			
		Possible capacities	kW		none or 3			none or 3 / none or 9				
	Heat exchanger	Туре	-			Plat	e type					
		Quantity	-				1					
	Safety valve	Pressure	bar				3					
evel of acoustic pre		1 m	dB	47,5	48,5	50,5	53,5	54	58			
Jnit Dimension		WxDxH	mm	1295 x 718 x 429			1385 x 865 x 526					
Package Dimension		WxDxH	mm	1375 x 885 x 475			1465 x 1035 x 560					
Weight Netto/Brutto		kg	86/107 105/132 144/172									
Operating temperat	ure range	Cooling	°C			5	- 43					
		Heating	°C			-2!	5 - 35					
		Water heating	0C			-2!	5 - 43	,				

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

COOLING conditions: Indoor Water Temperature 23  $^{\circ}$ C / 18  $^{\circ}$ C. Outdoor Air Temperature 35  $^{\circ}$ C DB / 24  $^{\circ}$ C WB. HEATING conditions: Indoor Water Temperature 30  $^{\circ}$ C / 35  $^{\circ}$ C. Outdoor Air Temperature 7  $^{\circ}$ C DB / 6  $^{\circ}$ C WB.



## MONOBLOC UNITS 18-30 kW

#### **FEATURES**

- · Internet control via the Comfort Home or ILetComfort app
- · High efficiency
- · Circulation pump with self-adjusting speed control
- · Integrated expansion tank and safety valve
- · Quiet mode
- · Outlet temperature from 25 °C to 60 °C
- · Cascade connection with a maximum output of up to 180 kW
  - up to 6 pumps can be connected



Model SMHM-				180B-3	220B-3	260B-3	300B-3			
Capacity		Heating	kW	18	22	26	30,1			
. ,		Cooling	kW	18,5	23	27	31			
Power		Heating	kW	3,83	5	6,37	7,69			
		Cooling	kW	3,89	5	6,27	7,75			
COP		Heating	-	4,7	4,4	4,08	3,91			
EER		Cooling	-	4,75	4,6	4,3	4			
Energy class		Heating (55 °C / 35 °C)	-	.,	<u> </u>	/ A+++				
SCOP		Heating (55 °C / 35 °C)	-	3,2 / 4,6	3,23 / 4,53	3,15 / 4,5	3,15 / 4,2			
Power supply			V/Ph/Hz	5/2 : ./5		5/3/50	5/1511/2			
Max. power			kW	6,66	8,07	8,8	9,38			
Max. current			A	28						
Refrigerant		Туре	-			32				
rterrigerone		Amount	kg			5				
Water pipes		Inlet	mm							
rroter pipes		Outlet	mm	1-1/4"						
Vater temperatures range Heating			°C	25-60						
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Cooling		°C	5-25						
lain components Water pump	Max. water flow	m³/h	6							
		Power	W	305						
\M:	Water flow switch	Minimum flow	m³/h	1,6						
	Expansion tank	Volume	1	8						
	Exponsion cont	Maximum pressure	Bar			3				
		Precharged pressure	Bar			1				
	Electric heater	Mode	-			·				
		Steps	-							
		Capacity	kW							
		Combination	kW							
		Power supply	V/Ph/Hz							
	Heat exchanger	Туре	-		Вгате	d plate				
		Amount	-			1				
	Safety valve	Pressure	bar			<u>.                                    </u>				
Level of acoustic pres		1 m	dB	57,6	59,8	61,5	63,5			
Unit Dimension	r	WxDxH	mm	- 1-		558 x 528				
Package Dimension W x D x H		mm			735 x 565					
Weight		Netto/Brutto	kg			/ 206				
Operating temperatu	re range	Cooling	oC			- 46				
, , ,	preading temperature range	Heating	oC .	-25 - 35						
		Water heating	°C			- 43				

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.









## Heat pumps S-Therm Ontario



S-THERM ONTARIO heat pumps are named after the Canadian province of Ontario, because this region symbolizes some of the harshest conditions for life. The Ontario series has been designed to be able to operate in these conditions. High efficiency even in low temperatures will guarantee enough heat even in the most remote places of these northern regions.

#### THERE IS BEAUTY IN SIMPLICITY

The Ontario series heat pumps were created to maintain the simplicity of both the construction and overall operation. This is done by a touch-sensitive colour controller with simple operation and user-friendly design.

#### **AVAILABILITY FOR EVERYONE**

These challenging times bring many hazards. That's why we've thought of everyone and we bring you an affordable heating solution for your home. If you're looking for a heat pump on the market, that has to meet the parameters of high performance and affordable price, these are the devices are the right solution for you.

#### **MODERN DESIGN**

Ontario series heat pumps with their modern look fit any type of homes. Whether it's new construction or or renovating an older buildings.

#### **WIDE RANGE OF MODELS**

We offer Ontario series heat pumps in capacities from 4 kW to 16 kW. We offer you split versions with hydrobox as well as split versions with an indoor unit that has an integrated domestic hot water tank with a capacity of 190 litres.





### MAIN FEATURES

## REGULATION IN OPERATING MODES FOR MAXIMUM COMFORT

- Heating
- Heating + preparation of hot domestic water
- Cooling
- Cooling + preparation of hot domestic water
- · Preparation of hot domestic water

#### PRIORITY REGULATION

In the controller, the priority can be set for specific modes "heating + domestic hot water" and "cooling + domestic hot water".

#### **OUTPUT TEMPERATURE CONTROL.**

Setting a fixed output temperature.

## ROOM TEMPERATURE CONTROL VIA INTERNAL SENSOR

- Temperature control according to the desired temperature of the reference room. Remote room temperature sensor included
- · Regulation of room temperature using the existing room thermostat
- Heat pump is controlled by the room thermostat in the reference room

#### **FAST CHARGING OF THE HOT WATER TANK**

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

#### **WEEKLY TIME SCHEDULE**

The heat pump can be controlled using a weekly programme. For each day, there are total of three time programmes with start and stop times. In parallel, the output temperature can be set and the water temperature can be switched simultaneously. The individual days of the week can be set to absent, and thus be removed from the time programme.

#### **DISINFECTION FUNCTION**

The hot water tank is heated to  $+70~^{\circ}\text{C}$  by time control to destroy any bacteria. This function is usually carried out at night. Therefore, the desired day of the week, the start time and the desired temperature can be set for this function.

#### **VACATION FUNCTION**

To save energy, you can lower the room temperature in your absence.

#### QUIET MODE OF THE OUTDOOR UNIT

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

#### **REMOTE ON/OFF SWITCH**

Remote WIFI control via the EWPE SMART mobile app





#### **KEYMARK CERTIFICATION**

Ontario Series heat pumps earned Keymark certification in 2023.





### **REMOTE CONTROL**

#### **TOUCH CONTROLLER**

Control of S-therm heat pumps Ontario is done by a touch-sensitive controller, which is located indoors. The control is user-friendly and in the multiple languages.

#### MODES

- · Heating or 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





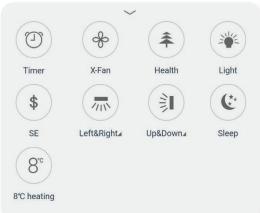
## REMOTE CONTROL USING THE EWPE SMART APP

S-therm Ontario heat pumps have an integrated wifi module and can be controlled via the EWPE Smart app. Remote control is simple and intuitive.











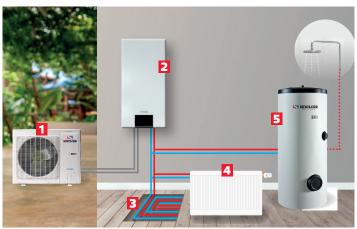




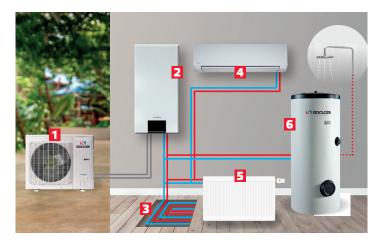
# EXAMPLES OF CONNECTION FOR HEATING SYSTEM WITH HYDROBOX



- 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

These diagrams are not a substitute for technical connection diagrams.



# INDOOR UNITS HYDROBOX

Heat pump in capacities of 4, 6, 8, 10, 12, 14 and 16 kW for heating of underfloor systems, radiators or fan coils

Thanks to the integrated three-way valve, year-round operation in domestic hot water heating mode is possible. In addition, cooling up to 7 °C is possible in summer.

In heating mode, the indoor unit transfers the thermal energy of the refrigerant through the heat exchanger to the water. This hot water is then supplied to radiators, underfloor heating and hot water storage tank.

The units are available in both single-phase and three-phase versions (units with -3 terminals).

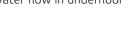
The indoor unit contains a powerful plate heat exchanger, that features high corrosion resistance, compact size and high efficiency.

The expansion tank inside the hydrobox has a capacity of 10 litres. Standard pressure in the vessel is 1.0 bar. This ensures reliable operation of the equipment and a stable pressure in the system.

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



The Hydrobox contains a WILO Invertor circulator and an Alpha Laval plate heat exchanger.







## **INDOOR UNITS HYDROBOX**

#### **FEATURES**

- · Touch screen
- · Possibility of control via internet with EWPE SMART application
- · Circulatory pump with self-regulation of speed
- · Integrated expansion vessel and safety valve
- · Possibility of equithermal regulation, regulation according to
- the reference room temperature or thermostat
- · Possibility of cooling in convector units
- · Preparation of hot domestic water
- · Three-way valve is part of the indoor unit





Model GSH-				40IRB	60IRB	80IRB/80IRB-3	100IRB/100IRB-3	120IRB/120IRB-3	140IRB/140IRB-3	160IRB/160IRB-3	
Alternative designa	ation			40IRBC	60IRBC	80IRBC/80IRBC-3	100IRBC/100IRBC-3	120IRBC/120IRBC-3	140IRBC/140IRBC-3	160IRBC/160IRBC-3	
Power supply			V / Ph / Hz	220-24	40/1/50		220	)-240/1/50 / 380-415/3	1/50		
Connecting pipe(re	frigerant)	Gas			1/2*	/ 12,0			5/8" / 16,0		
	,	Liquid	inch / mm				1/4" / 6,0		·		
Connecting pipe (v	vater)	Inlet					4"				
		Outlet	inch				1"				
Safety valve			bar				3				
Leaving water tem	perature	Cooling	0.5				7-25				
		Heating	• °C				25-60				
Main components	Water pump	Туре	-				Inverter				
		Speed	-				Automatic				
		Max. power	W	-	75	75	5/87		87		
	Expansion tank	Volume	l	10							
		Max. pressure		3							
		Pressure	bar	1							
	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	Туре	-				Deskový pájený				
	exchanger	Amount	-				1				
Level of acoustic p	ressure in 1m		dB (A)				29				
Dimensions Outline (w x h x d)			mm	460 x 318 x 860							
		Packaged (w x h x d)	mm	565 x 37	75 x 1130	565 x 375 x 1130	0/568 x 390 x 1133		568 x 390 x 1133		
Weight	·	Netto	ka	(	52	62.	/59,5		59,5		
		Brutto	kg kg	-	71	71.	/68,5		68,5		

The C-end units include a Shinhoo water pump. Units without the C mark contain a Wilo water pump.





### **OUTDOOR UNIT**

#### **FEATURES**

- We offer you outdoor units in a single-propeller version in capacities of 4, 6, 8, 10, 12, 14, 16 kW in single-phase and threephase versions (units with suffix -3)
- Outdoor units of compact dimensions facilitating problem-free installations and also transportation
- The device uses environmentally friendly refrigerant R32 with low GWP value
- Compressor with added economizer and intermediate stage injection of refrigerant, thanks to which high efficiency and
- · energy saving are achieved
- · Motor control technology by semiconductor frequency converter
- The units are equipped with an inverter control that changes the speed of the 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 20 meters, elevation up to 15 meters



Model GSH-				40ERB	60ERB	80ERB/80ERB-3	100ERB/100ERB-3	120ERB/120ERB-3	140ERB/140ERB-3	160ERB/160ERB-3	
Power supply			V / Ph / Hz	220-24	40/1/50	220-240/1/50 /380-415/3/50		220	220-240/1/50 / 380-415/3/50		
Capacity		Heating	kW	4	6	8	9,5 / 10	12	14	15,5	
		Cooling	kW	3,8	5,8	7/8,5	8,5 / 10	11	12,6	13	
Power		Heating	kW	0,78	1,2	1,7 / 1,63	2,07 / 2,15	2,4	3,0	3,4	
		Cooling	kW	0,8	1,32	1,75 / 1,74	2,24 / 2,15	2,5	3,4	3,6	
COP		Heating	-	5,1	5	4,7 / 5,16	4,6 / 4,65	5	4,7	4,5	
EER		Cooling	-	4,75	4,4	4 / 4,89	3,8 / 4,29	4,4	3,7	3,6	
Technical	Level of acoustic pressure	Max	dB (A)	ľ	52		5	60	6	1	
parameters	Energy class	Heating (55 °C / 35 °C)	-	A++	A++	A++/A+++	A++/A+++	A++/A+++	A++/A+++	A++/A+++	
_	SCOP	Heating (55 °C / 35 °C)	-	3,3	3,3	3,3/4,6 3,2/4,6	3,3/4,6 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	Туре	-				R32				
		Amount	kg	1		1,6/	1,84		1,84		
	Domestic hot water tempera	iture	°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	mm	975x7	02x396	1010x828x460	)/982x787x395		940x820x460		
	Package Dimension	w x h x d	mm	1028x8	330x458	1083x973x573	/1094x917x474		1103x973x573	_	
	Weight	Netto/Brutto	kg	55	/65	82/92	/ 88/98		104/114 / 110/121		
	Operating temperature range	2	°C				-25 - 45				
	Standard pipe length		m				5				
	Max. pipe length		m	- 2	20	1	5		15		
	Max. elevation		m				15				
	Additional refrigeration		g/m	1	16			-			

CAPACITIES AND POWER INPUTS ARE BASED ON THE FOLLOWING CONDITIONS:

Cooling conditions: Indoor Water Temperature 23°C / 18°C; Outdoor Air Temperature 35°CDB / 24°CWB Heating conditions: Indoor Water Temperature 30°C / 35°C; Outdoor Air Temperature 7°CDB / 6°CWB









# INDOOR UNIT ALL IN ONE

Indoor hydrobox unit with an integrated 190 liter enamelled hot water tank



- Technology combines an indoor hydrobox unit and an integrated 190 liter enamelled hot water tank
- · We offer you ALL IN ONE solutions with performances of 4, 6, 8, 10, 12, 14, 16 kW.
- Units are in one-phase or three-phase (devices with suffix -3)

#### **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 plate heat exchanger Alpha Laval.







## INDOOR UNIT ALL IN ONE

#### **FEATURES**

- · Touch screen
- · Possibility of control via internet with EWPE SMART application
- · High efficiency
- · Circulatory pump with self-regulation of speed
- · Integrated expansion vessel and safety valve
- · Possibility of equithermal regulation, regulation according to the reference room temperature or thermostat
- · Silent mode
- · Three-way valve is part of indoor unit
- · Built-in electric cartridge 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 with terminal 2





Model GSH-				40TRB2	60TRB2	80TRB2/80TRB2-3	100TRB2/100TRB2-3	120TRB2/120TRB2-3	140TRB2/140TRB2-3	160TRB2/160TRB2-3			
Power supply			V / Ph / Hz	220-24	40/1/50		22	0-240/1/50 / 380-415/3	/50				
Connecting pipe	e(refrigerant)	Gas	:		1/2"	/12,0		5/8" / 16,0					
		Liquid	inch / mm	1/4* / 6,0									
Connecting pipe	(water)	Inlet	inch		1"								
		Outlet	Inch										
Safety valve			bar				3						
Leaving water t	emperature	Cooling	°C				7-25						
Heating		°C				25-60							
Main	Water pump	Туре	-				PWM						
components		Speed	-				Automatic						
		Max. power	W				75						
-	Hot water tank	Volume	L		190								
		El. heater	kW	3									
	Expansion tank	Volume	l		10								
		Max. pressure	bar	3									
		Pressure	bar				1						
	Auxiliary electric	Mode	-				Automatic						
	heater	Capacity	kW		3			6					
		Combination	-	1,5	+ 1,5			3+3					
		Power supply	V / Ph / Hz			`	220-240/1/50						
	Heat exchanger	Туре	-				Brazed plate pájený						
		Amount	-				1						
Level of acousti	evel of acoustic pressure in 1m dB (A)			29									
Dimensions Outline (w x h x d) mm				650 x 600 x 1800									
	Packaged (w x h x	d)	mm				803 x 703 x 2035						
Weight	Netto		kg				195						
	Brutto		kg				219						





### **OUTDOOR UNITS**

#### **FEATURES**

- 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 suffix -3)
- Outdoor units of compact dimensions facilitating problem-free installations and also transportation
- The device uses environmentally friendly refrigerant R32 with low GWP value
- Compressor with added economizer and intermediate stage injection of refrigerant, thanks to which high efficiency and energy saving are achieved
- · Motor control technology by semiconductor frequency converter
- The units are equipped with an inverter control that changes the speed of the 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 20 meters, elevation up to 15 meters
- Units with terminal 2 can only be combined with single-phase ALL IN ONE indoor units



Model GSH-				40ERB2	60ERB2	80ERB2/80ERB-3	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 / 380-415/3/50		220-240/1/50 / 380-415/3/50		
Capacity		Heating	kW	4	6	8	10 / 10	12	14	15,5
		Cooling	kW	3,9	5,8	7,7 / 8,5	9,35 / 10	11	12,6	13
Power		Heating	kW	0,77	1,2	1,61 / 1,63	2,1 / 2,15	2,4	3,0	3,4
		Cooling	kW	0,68	1,13	1,72 / 1,74	2,36 / 2,15	2,5	3,4	3,6
COP		Heating	-	5,2	4,88	4,97 / 5,16	4,76 / 4,65	5	4,7	4,5
EER		Cooling	-	5,7	5,1	4,5 / 4,89	4 / 4,29	4,4	3,7	3,6
Technical parameters	Level of acoustic pressure	Max.	dB (A)	52		55		60	61	
	Energy class	Heating (55 °C / 35 °C)	-	A+++	A+++	A++/A+++	A++/A+++	A++/A+++	A++/A+++	A++/A+++
	SCOP	Heating (55 °C / 35 °C)	-	4,7	4,6	3,3/4,6 3,2/4,6	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	Туре	-	R32						
		Amount	kg	1,1		1,84	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	wxhxd	mm	975x702x396		982x787x427/982x787x		395 940x820x460		20x460
	Package Dimension	w x h x d	mm	1028x830x458		1097x937x478/1094x917		x474 1103x973x573		
	Weight	Netto/Brutto	kg	65		82/92	22 / 88/98		104/114 / 110/121	
	Operating temperature range		°C	-25 - 45						
	Standard pipe length		m	5						
	Max. pipe length		m	20		15		15		
	Max. elevation		m	15						
	Additional refrigeration		g/m		16			-		

CAPACITIES AND POWER INPUTS ARE BASED ON THE FOLLOWING CONDITIONS:

Cooling conditions: Indoor Water Temperature 23°C / 18°C; Outdoor Air Temperature 35°CDB / 24°CWB Heating conditions: Indoor Water Temperature 30°C / 35°C; Outdoor Air Temperature 7°CDB / 6°CWB







# **MONOBLOC UNITS**





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

# We offer capacities of 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 or fan coils. If you add a hot domestic water tank and a three-way valve, you can also use the device to heat domestic hot water
- The device just needs to be connected to the heating system and to the electricity. This minimizes costs and the time required for installation.
- Environmentally friendly refrigerant R32 in combination with inverter compressor and EVI exchanger ensure economical and naturesaving operation
- Hermetically sealed refrigerant circuit of the device, minimal risk of refrigerant leakage

- Monoblock heat pump includes circulatory pump, plate exchanger, pressure valve, expansion valve, safety valve and two-stage rotary compressor
- The device works reliably even at low temperatures, down to - 25 °C, thanks to the added economizer and intermediate stage refrigerant injection





# MONOBLOC UNITS 4<sup>TH</sup> GENERATION

#### **FEATURES**

- · Touch screen
- · Possibility of control via internet with EWPE SMART application
- · Integrated expansion vessel and safety valve
- · Circulatory pump with self-regulation of speed
- · The outlet water temperature from 25 °C to 60 °C
- High efficiency
- · Silent mode



Model SMH-				40IRB	60IRB	80IRB	100IRB2/100IRB2-3	120IRB2/120IRB2-3	140IRB2/140IRB2-3	160IRB2/160IRB2-3
				40IRBC	60IRBC	80IRBC	100IRBC2/100IRBC2-3	120IRBC2/120IRBC2-3	140IRBC2/140IRBC2-3	160IRBC2/160IRBC2-3
Capacity		Heating	kW	4	6	7,5	10	12	14	15,5
		Cooling	kW	3,8	5,8	6,8	8,8	11	12,5	14,5
Power		Heating	kW	0,78	1,2	1,63	2,15	2,64	3,22	3,6
		Cooling	kW	0,82	1,32	1,55	1,96	2,56	3,05	3,82
СОР		Heating	-	5,1	5	4,6	4,65	4,55	4,3/4,5	4,3
EER		Cooling	-	4,65	4,4	4,4	4,5	4,2	4/4,2	3,7/4
Energy class		Heating (55 °C / 35 °C)	-	A++/A+++	A++/A+++	A++/A+++	A++/A+++	A++/A+++	A++/A++	A++/A++
SCOP		Heating (55 °C / 35 °C)	-	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
Power supply			V/Ph/Hz	220-240/1/50			220-240/1/50	/ 380-415/3/50		
Max. power			kW		2,4			6,7	/8,3	
Max. current			A		10,4			19	/12	
Refrigerant		Туре	-				R32			
		Amount	kg	0,87 2,2						
Water pipes		Inlet	mm				DNOC			
	Outlet		mm				DN25			
Water temperatu	ires range	Heating	°C	20-60						
		Cooling	°C	7-25						
Main	Water pump	Max. water flow	m³/h				3,5 (*3,6)			
components		Power	W				75 (*60)			
	Water flow switch	Minimum flow	m³/h				0,6			
	Expansion tank	Volume	l		2		3			
		Maximum pressure	Bar				3			
		Precharged pressure	Bar				1			
	Electric heater	Mode	-							
		Steps	-							
		Capacity	kW				-			
		Combination	kW							
		Power supply	V/Ph/Hz							
	Heat exchanger	Туре	-				Brazed plate			
		Amount	-				1			
	Safety valve	Pressure	bar				3			
Level of acoustic	pressure LpA	1 m	dB		58			6	51	
Unit Dimension		WxDxH	mm		1150x345x758			1200x4	160x878	
Package Dimensi	ion	WxDxH	mm		1258x488x900			1288x5	88x1020	
Weight		Netto/Brutto	kg		96/109			151	/166	
Operating tempe	erature range	Cooling	°C				10-48			
		Heating	°C				-25-35			
Water heating			oC				-25-45			

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  Values belong to units with alternative designations.

The C-end units include a Shinhoo water pump. Units without the C mark contain a Wilo water pump.

#### **AUXILIARY ELECTRIC HEATER FOR ONTARIO MONOBLOCS**

The monobloc heat pumps can optionally integrate a bivalent source with the designation EH-SMH. The auxiliary electric heater is available in 3/9~kW - either star connection or in a triangle (3x3 kW, 400V / 3x1 kW, 230V)





# MONOBLOC UNITS 5<sup>TH</sup> GENERATION

#### **FEATURES**

- · Touch screen
- · Possibility of control via internet with EWPE SMART application
- · Integrated expansion vessel and safety valve
- · Circulatory pump with self-regulation of speed
- · The outlet water temperature from 20 °C to 65 °C
- High efficiency
- Silent mode
- · New design
- More powerful units



Model SMH5-	CMII			40B(C)	60B(C)	80B(C)/80B(C)-3	100B(C)/100B(C)-3	120B(C)/120B(C)-3	140B(C)/140B(C)-3	160B(C)/160B(C)-3
Alternative designat	ion SMH-	1		40IRBC	60IRBC	80IRBC/80IRBC-3	100IRBC/100IRBC-3	120IRBC/120IRBC-3	140IRBC/140IRBC-3	160IRBC/160IRBC-3
Capacity		Heating	kW	5,0	6,0	8,2/8,2	10,2/10,2	12,0/12,0	14,2/14,2	15,7/15,7
		Cooling	kW	5,0	6,5	8,3/8,3	10,2/10,2	12,0/12,0	13,7/13,9	15,5/15,40
Power		Heating	kW	0,93	1,11	1,54/1,62	2,02/2,06	2,43/2,49	2,99/3,09	3,45/3,57
	-	Cooling	kW	0,96	1,28	1,56/1,64	2,00/2,13	2,45/2,61	3,00/3,32	3,60/4,05
COP		Heating	-	5,40	5,40	5,32/5,06	5,05/4,95	4,94/4,82	4,75/4,60	4,55/4,40
EER		Cooling	-	5,20	5,10	5,32/5,06	5,10/4,79	4,90/4,60	4,57/4,19	4,31/3,80
Energy class		Heating (55°C / 35°C)	-							
SCOP		Heating (55°C / 35°C)	-	3,50/4,87	3,50/5,05	3,70/4,50 3,45/4,47	3,45/4,47 3,57/4,80	3,67/4,77 3,50/4,57	3,70/4,70 3,52/4,55	3,70/4,67 3,52/4,55
Power supply			V/Ph/Hz	220-2	40/1/50		220	-240/1/50 / 380-415/3	3/50	
Max. power		Heating	kW	1,85	1,85	3,75/3,30	4,00/3,55	3,896/3,384	4,851/5,265	5,337/5,784
		Cooling		2,45	2,45	5,2/5,50	5,75/6,00	6,854/7,967	6,900/8,314	6,900/8,660
Max. current		Heating	А	8,0	8,0	16,5/5,0	17,5/5,5	17,0/5,0	21,0/8,0	23,0/8,5
		Cooling		11,0	11,0	23,0/8,0	25,0/9,0	29,0/11,5	30,0/12,0	30,0/12,5
Refrigerant		Туре	-		•		R32			
		Amount	kg	(	),95	1	1,6		2,2	
Water pipes		Inlet	mm				DUSE			
	Outlet		mm	DN25						
Water temperatures range Heating Cooling		°C	20-65							
		°C	7.25							
Main components	Water pump	Max. water flow	m³/h	0,7	1,1	1,4/1,4	1,7/1,7	2,05/2,05	2,4/2,4	2,75/2,75
		Power	W	3~87	3~87	3~87	3~87	3~87	3~87	3~87
	Water flow switch	Minimum flow	m³/h	0,55	0,55	1,13	1,13	1,13	1,13	1,13
	Expansion tank	Volume	l	2	2	2/3	2/3	3/3	3/3	3/3
		Maximum pressure	Bar	3	3	3/3	3/3	3/3	3/3	
		Precharged pressure	Bar	1	1	1/1	1/1	1/1	1/1	1/1
	Electric heater	Mode	-							
		Steps								
		Capacity	kW							
		Combination	kW	1						
		Power supply	V/Ph/Hz							
	Heat exchanger	Туре					Brazed Plate HEX			
		Amount					1			
	Safety valve	Pressure	bar		-		3			
Level of acoustic pre	· ·	1 m	dB	51	52	52/52	54/54	54/54	55/55	56/56
<u>'</u>		WxHxD	mm	1150x	735x365			1206x878x445	1	
		WxHxD	mm		503x900			1338x553x1020		
Weight	-	Netto	kg		90	120	)/134		138/144	
J -		Brutto			106	+	7/152		156/162	
Operating temperati	ure range	Cooling	°C			1 .57	-15~48			
- r - 223 -2pc/00	Uperating temperature range Cooling Heating		°C				-25~35			
Water heating		°C				-25~45				

 $<sup>^{\</sup>star}$  Units with suffix C include a Shinhoo water pump. Units without C marking contain a Wilo water pump.

CAPACITIES AND POWER INPUTS ARE BASED ON THE FOLLOWING CONDITIONS:

Cooling conditions: Indoor Water Temperature 23°C /  $18^{\circ}$ C; Outdoor Air Temperature 35°CDB /  $24^{\circ}$ CWB Heating conditions: Indoor Water Temperature 30°C /  $35^{\circ}$ C; Outdoor Air Temperature  $7^{\circ}$ CDB /  $6^{\circ}$ CWB

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-32), GWP of refrigerant used: 675. Sound pressure level is tested in a soundless chamber, actual values may be affected by local conditions.

# SERIES COMPARISON

more on page 21



more on page 37



## MONOBLOC

SERIES	YUKON	ONTARIO
Prize	✓	✓
Dimensions	✓	<b>✓</b>
Auxilary heater	✔ (Built-in 3-9 kW)	✓ (available for purchase)
Flow rate sensing	✓	×
Efficiency	<b>✓</b>	<b>✓</b>
Circulation pump	Shimge	WILO/Shinhoo
Noise level	<b>✓</b> (47-57 dB)	<b>✓</b> (58-61 dB)
Smart grid	<b>✓</b>	×





## SPLIT

SERIES	YUKON	ONTARIO	
Prize	✓	✓	
Dimensions - outdoor unit	<b>✓</b>	<b>~</b>	
Dimensions - indoor unit	<b>✓</b>	~	
Max. pipe lenght	<b>✓</b> (30 m)	<b>✓</b> (15-20 m)	
Auxilary heater	<b>✓</b> (3-9 kW)	<b>✓</b> (3-6 kW)	
Flow rate sensing	<b>✓</b>	×	
Efficiency	✓	~	
Circulation pump	Shimge	WILO/Shinhoo	
Noise level - outdoor unit	<b>✓</b> (44-55 dB)	<b>✓</b> (52-61 dB)	
Noise level - indoor unit	<b>✓</b> (28-32 dB)	<b>✓</b> (29 dB)	
3-way valve	(supplied by the installer)	✓ (built-in)	
Smart grid	✓	×	



# SERIES COMPARISON

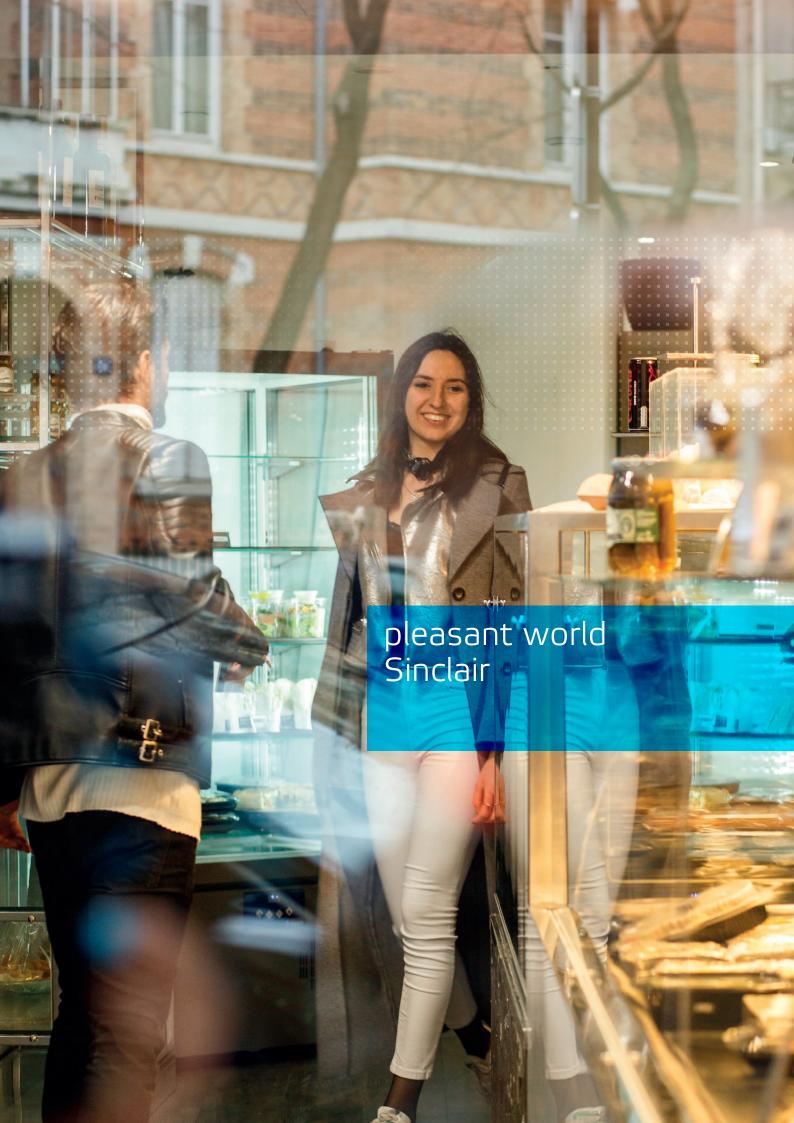


# ALL IN ONE

SERIES	YUKON	ONTARIO	
Prize	✓	✓	
Dimensions - outdoor unit	✓	✓	
Dimensions - indoor unit	✓	✓	
Max. pipe lenght	<b>✓</b> (30 m)	<b>✓</b> (15-20 m)	
Auxilary heater	<b>✓</b> (3-9 kW)	<b>✓</b> (3-6 kW)	
DHW heating element	× (by auxilary heater)	✓ (3 kW)	
Flow rate sensing	✓	×	
Efficiency	✓	~	
Circulation pump	Shimge	WILO	
Noise level - outdoor unit	<b>✓</b> (44-55 dB)	<b>✓</b> (52-61 dB)	
Noise level - indoor unit	<b>✓</b> (27-33 dB)	<b>✓</b> (29 dB)	
3-way valve	✓ (built-in)	✓ (built-in)	
Smart grid	✓	×	
Possibility of recirculation	✓	×	
Tank - capacity	190 l pro 6-10 kW / 240 l pro 12-16 kW	190 l	
Tank - material	stainless steel	enamel	
Weight of the indoor unit	<b>✓</b> (140-157 kg)	<b>✓</b> (195 kg)	

- THE UNIT SUPPORTS
- BETTER FEATURES
  UNIT DOES NOT SUPPORT







# **MONOBLOC UNITS**





Monobloc hot water heater in enamel finish

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Monoblock hot water in enamel design, which using ecologic refrigerant R134A.

Device with volume 176 or 284 liters. Device working in two modes - hybrid and electrical heater.

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



Comfort home

ILetComfort

The unit can be connected via wifi to the Comfort home or ILetComfort app



# **MONOBLOC UNITS**

#### **FEATURES**

- 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: -20 to 43 °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 and shutdown, automatic defrosting without any attention
- · Possibility of control via Modbus
- · Possibility of control via WiFi application





Model SWH-		190IRE2/	190IRES2	300IRE2/300IRES2			
Mode		Hybrid	E-heater	Hybrid	E-heater		
Operating temperature range	oC.	-7 ~ 43	-20 ~ 43	-7 ~ 43	-20 ~ 43		
Output water temperature	oC.	38~70					
Power supply	V / Ph / Hz		220-2	40 / 1 / 50			
Water heating capacity	kW	1,6	52		2,3		
COP	-	3,8	36	4	,34		
Max. power input	kW	0,4	12	0	.53		
Max. current	A	22	,2	3	3,7		
Energy class	-	A	+		<b>4</b> +		
Unit dimension (D x H)	mm	Ø610 x	(1830	Ø700	Ø700 x 1930		
Package dimension (W x H x D)	mm	680 x 20	70 x 680	775 x 2200 x 745			
Netto/Brutto weight	kg	268/	277	398/406			
Sound pressure level at 1m	dB (A)	36	,6	3	38,2		
Refrigerant	Type / Amount / t Eq. CO <sub>2</sub>	R134a / 1,1 / 1,57		R134a /	1,5 / 2,00		
Tank design pressure	MPa			1,0			
Air flow volume	m³/h	270		4	14		
Water inlet pipe	inch						
Water outlet pipe	inch						
Solar water inlet pipe	inch	3/4"					
Solar water outlet pipe	inch						
Solar pipe max. pressure	MPa	1					
Solar coil surface	m²	1,1 1,3		1,3			
Solar coil material	-		E	namel			
E-heater Capacity	kW	1,	5		1,5		
Water tank volume	l	176/168 284/272			1/272		
Tank material	-	Enamel					

The technical specification of the products may differ from the stated values based on the development of the device by the manufacturer. Follow the parameters on the nameplate of the unit. The sound pressure level is tested in an anechoic chamber, values may actually be affected by local conditions. The equipment contains fluorinated greenhouse gases included in the Kyoto Protocol. R134a (100% HFC), GWP value of the refrigerant used: 1430







# SPLIT UNITS



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.





#### SINCLAIR DOMESTIC HOT WATER HEATERS

# **SPLIT UNITS**

#### **FEATURES**

- · 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		kW	3,50 (1,80~3,70)		
Rated Input Power (*)		kW	0,83 (0,36~0,91)		
COP (*)		-	4,1		
Load profile			L		
COP DHW (**)		-	3,08 / 3,76		
Energy class (**)		-	A+		
Water Heating Energy Efficiency		-	1,3		
Annual electricity consumption (av	erage climate conditions)	kWh	795		
Maximum Input Power		W	2000 + 1500 (electric heater)		
Outlet Water T emperature		oC	35~55		
Power Supply		V / Ph / Hz	220-240 / 1 / 50		
Insulation Level		-			
Protection of Ingression		-	IPX4		
Refrigerant	Туре	-	R410A		
	Charge	kg / t Eq. CO <sub>2</sub>	1,40 / 2,92		
Dimension (W x D x H)	Unit	mm	842x320x591		
	Package	mm	948x363x660		
Gross / Net Weight		kg	44,5/38,5		
Sound Power Level (***)		dB (A)	63		
Operating Range		oC	-25~45 ℃		
Standard pipe length		m	10		
Max. pipe length		m	20		
Max. elevation		m	5		
Additional refrigerant (over 10m pi	ipe 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	1,50	
Dimension (W x D x H)	Unit	mm	462 x 462 x 2000	
	Package	mm	583 x 565 x 2108	
Gross / Net Weight		kg	83,0 / 72,5	
Pipe diameter (refrigerant)	Liquid pipe	mm	1/4" / 6,35	
	Gas pipe	mm	3/8" / 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 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. R410 (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Sound pressure level is tested in a soundless chamber, actual values may be affected by local conditions.

# **DOMESTIC HOT WATER TANKS**

#### **FEATURES**

- · Compatible with S-therm Ontario or Yukon heat pumps
- · For the preparation and subsequent distribution of hot water
- · Standing compact design
- · Integrated heat exchanger

#### STAINLESS STEEL

- · High performance stainless steel heat exchanger
- · Highly efficient PU insulation
- · Integrated 1,5 kW DHW e-heater
- · Construction in recycled polymeric materials
- · Heat exchanger with an area of 2.6 m<sup>2</sup>

ST-300DS TANK WITH A VOLUME OF 270 LITERS

#### **ENAMEL**

- · 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

# STAINLESS STEEL Sinclair Sinclair Sinclair

# **ACCUMULATION TANKS**

#### **FEATURES**

- · Possible to connect with Sinclair Ontario or Yukon series
- $\cdot$  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
- · Outer finish: gray PVC cover
- · PU foam insulation with a thickness of 57 mm

AKU ST 50 S STEEL TANK WITH A VOLUME OF 58 LITERS AKU ST 150 S STEEL TANK WITH A VOLUME OF 150 LITERS AKU ST 300 S STEEL TANK WITH A VOLUME OF 284 LITERS





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