
EIS ENERGY SAVE
High efficiency
Heat Pumps
Versatile
Water Tanks
Modern
Fan Coils
SWEDISH INGENUITY
REDUCED ENERGY COSTS – INCREASED ENVIRONMENTAL BENEFITS
2022

Contents

ES Heat pumps and system solutions for maximum savings

Whether you are heating your property with electricity, oil, wood, pellets or district heating today, you can use a highly efficient ES air-to-water heat pump as a starting point to create great savings, functionality and security in a modern, open and future-proof heating system – with the ability to change and complement the system in the future as your needs change!

Energy Save develops and offer cost effective, smart and flexible solutions for maximum energy savings to the market.

Be smart – and green!

Green ECO-friendly refrigerant

New ES heat pump line AW-R32 uses an ECO friendly R32 refrigerant. The conventional refrigerants used for inverter heat pumps today has a global warming potential (GWP) more then three times higher than R32 refrigerant which is used for the new ES heat pump line. The units have also less refrigerant volume for the same or even higher heating capacities. With this refrigerant we fulfil the EU norms that are not mandatory yet, but will become in the future. It also contributes to a high efficiency working of the heat pump.

Low noise units

AW-R32 units use a special variable speed fan motor and fan blades with innovative blade design to reduce the sound level from the heat pump. The compressor is placed in an extra compartment that is insulated with sound absorbing materials. With these technologies we achieve low sound levels that makes the units almost not hearable, even running at maximum speeds. The units can also be set to work during the night in even lower sound levels via weekly timers.

High efficiency heat pumps

ES heat pumps are equipped with the latest technology on the market that is designed specifically for heat pumps, to insure the best performances and low heating costs. Components used in the ES heat pumps are from worldwide known producers, that are making innovations in this field, with a long and successful history.

Reliable and efficient technology

All ES heat pumps have a 5-year warranty on the compressor due to the use of highly efficient and reliable compressor technology, that also makes the unit low noise and helps reduce the heating costs to a minimum.

Remote control

ES heat pumps can be connected to an external monitoring and controlling system via a Modbus connection such as a Building management system (BMS). This allows full control of the ES heat pumps with climate control systems currently used in the building.

Control via internet

Each ES heat pump is equipped with an internet connection that allows the customer monitor and adjust the settings of the heat pump at any given time and place. The unit connects to the internet and can be controlled by any smart device or PC.

The AW-R32-M V8 Series

The AW-R32-M V8 heat pump series uses the latest technologies for maximum efficiency and minimum environmental impact. The units are very quiet thanks to the special designed fans and a noise shielded compressor compartment.

The R32 refrigerant is more eco-friendly, and more efficient then other types of refrigerants. The “M” in the name stands for Monobloc, which means the refrigerant system is a factory sealed circuit. The connection between indoor system and outdoor unit, a hydraulic connection, provides an easier installation.

The series contains three different types of indoor units, AWC-version that enables to dock the outdoor unit directly to any given heating system or buffer tank. The AWT/AWST versions have a 250 liter tank for domestic hot water (DHW). AWT has DHW heated through coils in the water volume and AWST has a DHW storage tank. AWT/AWST versions have diverting valve, 3–9 kW electric heater, expansion vessels, etc. while the AWC indoor unit have terminals for connecting a variety of pumps, and valves. The outdoor units have an anti-freezing device, to prevent freezing damage in case of any failure.

Heating power ranges from 6–19 kW. We call the tank versions “All in One” as they are a complete heating/cooling/hot water source you need for your house.

See full range, page 9–14.

SWEDISH INGENUITY

The AW-R32-S V8 Series

The AW R32-S V8 units are highly efficient heat pumps that use te eco-friendly R32 refrigerant. The heat pumps are designed withe the latest technology for high performance and long lifespan.

The “S” in the name stands for a Split type connection which means that the hydraulic system is connected to the indoor unit. The connection between the indoor and the outdoor unit is made with refrigerant piping. In case of power failure over longer time there is no risk of water freezing in the outdoor unit.

Heating power ranges from 6–12 kW. There are two types, the AWH and the AWST version. The The AWH has an indoor unit containing the controls, heat exchanger and water pump, suitable for adapting to any existing heating system. The AWST has a so called All-In-One indoor unit, with a water tank for preparing fresh sanitary water. The AWST has a DHW storage tank in stainless steel.

The AW-R32-S V8 heat pumps will make your home warm and cosy.

See full range, page 14–17.

SWEDISH INGENUITY

Advanced LED Touch Screen Controller

All ES heat pumps use an advanced LED Touch Screen controller which allows a big range of installation options, ensuring the best performance to reduce heating costs and offer sophisticated safety features for a carefree working of the heat pump.

The state-of-the-art controller has 22 languages and enables you to further maximize your savings and comfort. It has hourly and weekly timer for reduced/increased set point, hot water storage or extra silent mode.

Key features

- Heating, cooling and DHW mode
- Two mixing heating/cooling circuits
- Night mode
- Controlling additional heating sources
- Dual temperature settings for DHW
- Vacation mode
- Floor curing
- Anti-Legionella function

Info menu for easy diagnostics

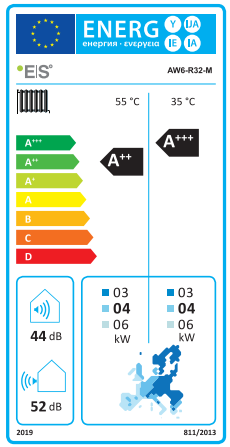
The Info menu makes an easy diagnostic of the working of the heat pump with a hydraulic and refrigerant scheme containing all needed data at one place.

Heat Pumps

AWC6 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,74
Heating capacity: 6,50 kW
COP: 4,70
Max. temperature outlet: 58 °C
Working range: –25°C to +65 °C
Sound power level: 52 dB(A)
Refrigerant: R32

Technical specifications, see page 20.



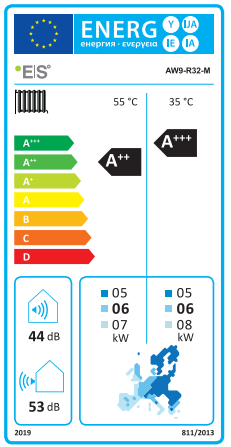
R32 ECO FRIENDLY REFRIGERANT
A+++
>dB Low noise
CONTROL VIA INTERNET
BMS compatibility
5 years COMPRESSOR WARRANTY
Download on the App Store
GET IT ON Google Play

120317 120315

AWC9 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,73
Heating capacity: 9,20 kW
COP: 4,71
Max. temperature outlet: 58 °C
Working range: –25°C to +65°C
Sound power level: 53 dB(A)
Refrigerant: R32

Technical specifications, see page 20.



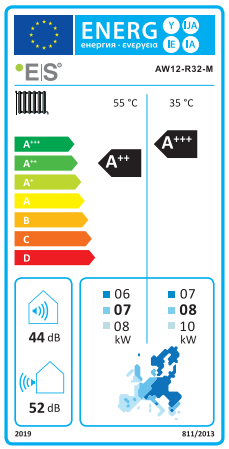
R32 ECO FRIENDLY REFRIGERANT
A+++
>dB Low noise
CONTROL VIA INTERNET
BMS compatibility
5 years COMPRESSOR WARRANTY
Download on the App Store
GET IT ON Google Play

120318 120315

AWC12 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,71
Heating capacity: 11,60 kW
COP: 4,90
Max. temperature outlet: 58 °C
Working range: –25°C to +65 °C
Sound power level: 52 dB(A)
Refrigerant: R32

Technical specifications, see page 20.



R32
ECO FRIENDLY REFRIGERANT

A+++

dB
Low noise

CONTROL VIA INTERNET

BMS
compatibility

5 years
COMPRESSOR
WARRANTY

Download on the App Store

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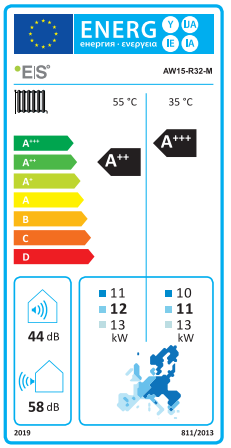
120319

120315

AWC15 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,98
Heating capacity: 15,30 kW
COP: 5,06
Max. temperature outlet: 58 °C
Working range: –25°C to +65°C
Sound power level: 58 dB(A)
Refrigerant: R32

Technical specifications, see page 21.



R32
ECO FRIENDLY REFRIGERANT

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dB
Low noise

CONTROL VIA INTERNET

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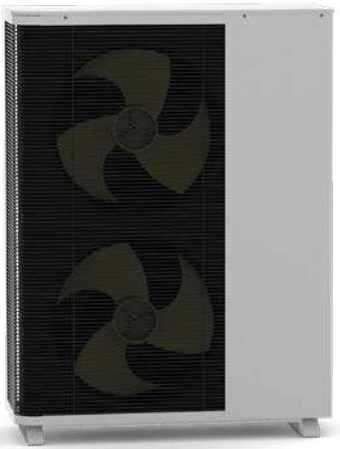


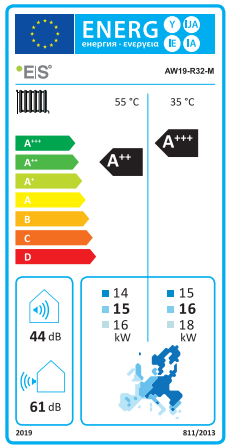
120320

120315

AWC19 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,85
Heating capacity: 18,50 kW
COP: 5,01
Max. temperature outlet: 58 °C
Working range: –25°C to +65°C
Sound power level: 61 dB(A)
Refrigerant: R32

Technical specifications, see page 21.



R32 ECO FRIENDLY REFRIGERANT

A+++

>dB Low noise

CONTROL VIA INTERNET

BMS compatibility

5 years COMPRESSOR WARRANTY

Download on the App Store

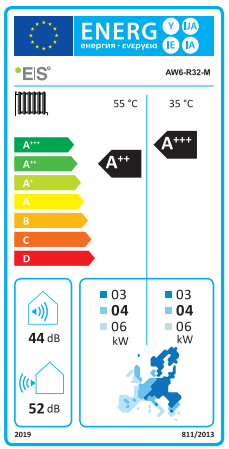
GET IT ON Google Play

120321 120315

AWT6 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,74
Heating capacity: 6,50 kW
COP: 4,70
Max. temperature outlet: 58 °C
Working range: –25°C to +65 °C
Sound power level: 52 dB(A)
Tank: 250 liter
Tank type: Stainless steel
Refrigerant: R32

Technical specifications, see page 22.



R32 ECO FRIENDLY REFRIGERANT

A+++

>dB Low noise

CONTROL VIA INTERNET

BMS compatibility

5 years COMPRESSOR WARRANTY

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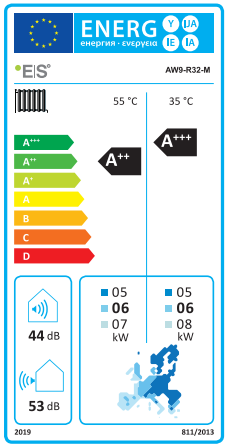
120317 120296

AWT9 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,73
Heating capacity: 9,20 kW
COP: 4,71
Max. temperature outlet: 58 °C
Working range: –25°C to +65 °C
Sound power level: 53 dB(A)
Tank: 250 liter
Tank type: Stainless steel
Refrigerant: R32

Technical specifications, see page 22.



R32
ECO FRIENDLY REFRIGERANT

A+++

dB
Low noise

CONTROL VIA INTERNET

BMS
compatibility

5 years
COMPRESSOR
WARRANTY

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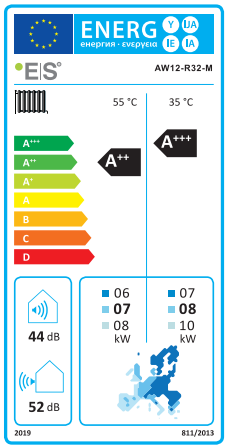
120318 120296

AWT12 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,71
Heating capacity: 11,60 kW
COP: 4,90
Max. temperature outlet: 58 °C
Working range: –25°C to +65°C
Sound power level: 52 dB(A)
Tank: 250 liter
Tank type: Stainless steel
Refrigerant: R32

Technical specifications, see page 22.



R32
ECO FRIENDLY REFRIGERANT

A+++

dB
Low noise

CONTROL VIA INTERNET

BMS
compatibility

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COMPRESSOR
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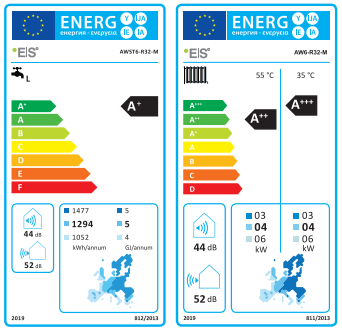
AWST6 – R32-M-V8



Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,74
Heating capacity: 6,50 kW
COP: 4,70
Max. temperature outlet: 58 °C
Working range: –30°C to +65 °C
Sound power level: 52 dB(A)
Tank: 250 liter “DHW storage type”
Tank type: SUS316 Steel
Tap profile: L
Tap water efficiency: A+
Refrigerant: R32

Technical specifications, see page 23.

R32 ECO FRIENDLY REFRIGERANT

A+++

>dB Low noise

CONTROL VIA INTERNET

BMS compatibility

5 years COMPRESSOR WARRANTY

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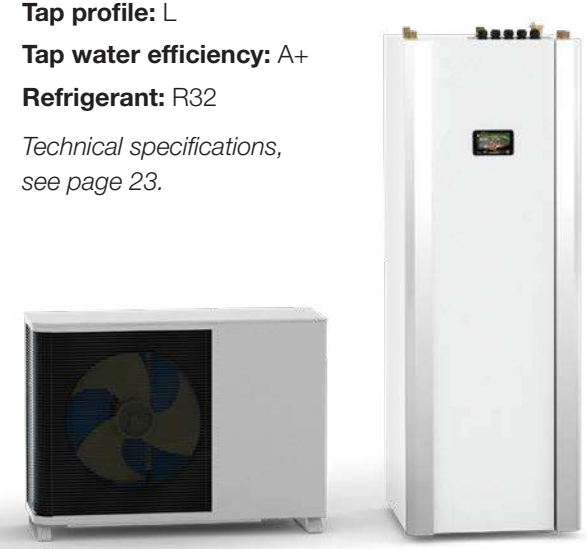
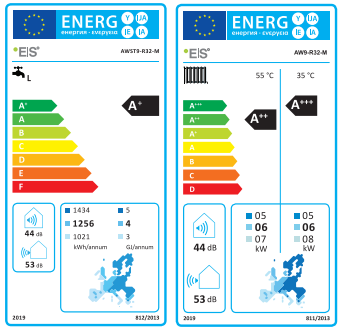


120317 120316

AWST9 – R32-M-V8



Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,73
Heating capacity: 9,20 kW
COP: 4,71
Max. temperature outlet: 58 °C
Working range: –30°C to +65 °C
Sound power level: 53 dB(A)
Tank: 250 liter “DHW storage type”
Tank type: SUS316 Steel
Tap profile: L
Tap water efficiency: A+
Refrigerant: R32

Technical specifications, see page 23.

R32 ECO FRIENDLY REFRIGERANT

A+++

>dB Low noise

CONTROL VIA INTERNET

BMS compatibility

5 years COMPRESSOR WARRANTY

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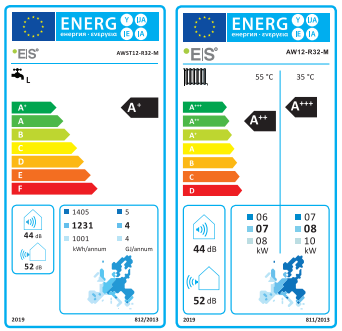
120318 120316

AWST12 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,71
Heating capacity: 11,60 kW
COP: 4,90
Max. temperature outlet: 58 °C
Working range: –30°C to +65°C
Sound power level: 52 dB(A)
Tank: 250 liter “DHW storage type”
Tank type: SUS316 Steel
Tap profile: L
Tap water efficiency: A+
Refrigerant: R32

Technical specifications, see page 23.



R32 ECO FRIENDLY REFRIGERANT
A+++
>dB Low noise
CONTROL VIA INTERNET
BMS compatibility
5 years COMPRESSOR WARRANTY
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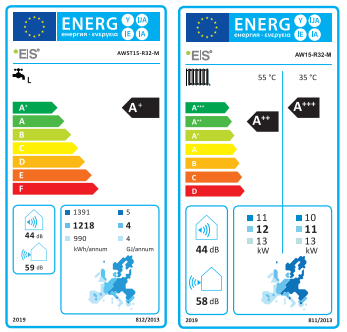
GET IT ON Google Play

120319 120316

AWST15 – R32-M-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,98
Heating capacity: 15,30 kW
COP: 5,06
Max. temperature outlet: 58 °C
Working range: –30°C to +65°C
Sound power level: 58 dB(A)
Tank: 250 liter “DHW storage type”
Tank type: SUS316 Steel
Tap profile: L
Tap water efficiency: A+
Refrigerant: R32

Technical specifications, see page 23.



R32 ECO FRIENDLY REFRIGERANT
A+++
>dB Low noise
CONTROL VIA INTERNET
BMS compatibility
5 years COMPRESSOR WARRANTY
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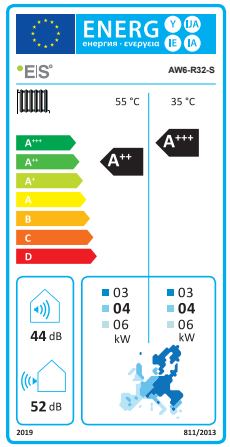
120320 120316

AWH6 – R32-S-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,74
Heating capacity: 6,50 kW
COP: 4,70
Max. temperature outlet: 58 °C
Working range: –30°C to +45°C
Sound power level: 52 dB(A)
Refrigerant: R32

Technical specifications, see page 24.



R32 ECO FRIENDLY REFRIGERANT

A+++

>dB Low noise

CONTROL VIA INTERNET

BMS compatibility

5 years COMPRESSOR WARRANTY

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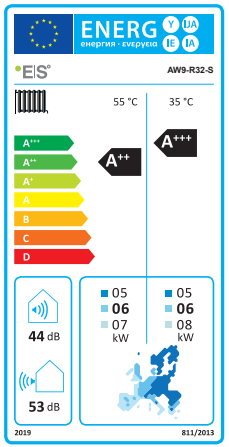
120324 120334

AWH9 – R32-S-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,73
Heating capacity: 9,20 kW
COP: 4,71
Max. temperature outlet: 58 °C
Working range: –30°C to +45°C
Sound power level: 53 dB(A)
Refrigerant: R32

Technical specifications, see page 24.



R32 ECO FRIENDLY REFRIGERANT

A+++

>dB Low noise

CONTROL VIA INTERNET

BMS compatibility

5 years COMPRESSOR WARRANTY

Download on the App Store

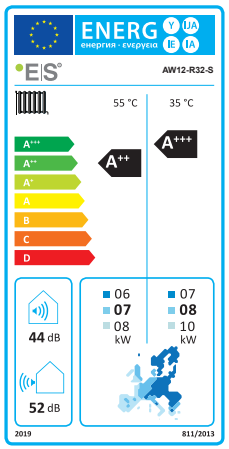
GET IT ON Google Play

120325 120334

AWH12 – R32-S-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,71
Heating capacity: 11,60 kW
COP: 4,90
Max. temperature outlet: 58 °C
Working range: –30°C to +45 °C
Sound power level: 52 dB(A)
Refrigerant: R32

Technical specifications, see page 24.



R32
ECO FRIENDLY REFRIGERANT

A+++

>dB
Low noise

CONTROL VIA INTERNET

BMS
compatibility

5 years
COMPRESSOR
WARRANTY

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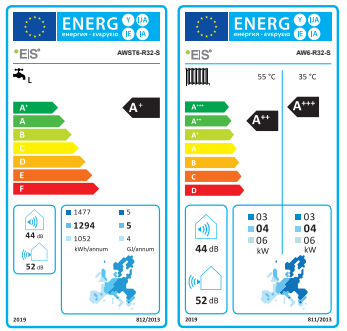
120326

120334

AWST6 – R32-S-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,74
Heating capacity: 6,50 kW
COP: 4,70
Max. temperature outlet: 58 °C
Working range: –30°C to +45°C
Sound power level: 52 dB(A)
Tank: 250 liter “DHW storage type”
Tank type: Stainless steel
Refrigerant: R32

Technical specifications, see page 25.



R32
ECO FRIENDLY REFRIGERANT

A+++

>dB
Low noise

CONTROL VIA INTERNET

BMS
compatibility

5 years
COMPRESSOR
WARRANTY

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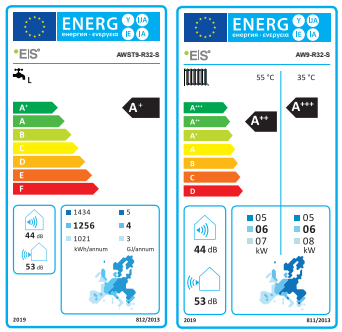
120324

120335

AWST9 – R32-S-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,73
Heating capacity: 9,20 kW
COP: 4,71
Max. temperature outlet: 58 °C
Working range: –30°C to +45°C
Sound power level: 53 dB(A)
Tank: 250 liter “DHW storage type”
Tank type: Stainless steel
Refrigerant: R32

Technical specifications, see page 25.



R32 ECO FRIENDLY REFRIGERANT

A+++

>dB Low noise

CONTROL VIA INTERNET

BMS compatibility

5 years COMPRESSOR WARRANTY

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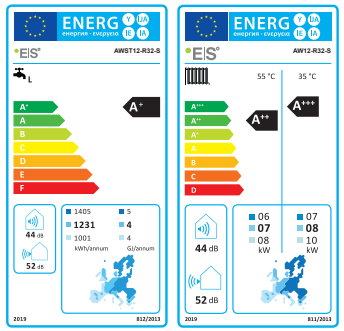
120325 120335

AWST12 – R32-S-V8

Controller: Touch screen
Energy efficiency: A+++ / A++
SCOP: 4,71
Heating capacity: 11,60 kW
COP: 4,90
Max. temperature outlet: 58 °C
Working range: –30°C to +45°C
Sound power level: 52 dB(A)
Tank: 250 liter “DHW storage type”
Tank type: Stainless steel
Refrigerant: R32

Technical specifications, see page 25.



R32 ECO FRIENDLY REFRIGERANT

A+++

>dB Low noise

CONTROL VIA INTERNET

BMS compatibility

5 years COMPRESSOR WARRANTY

Download on the App Store

GET IT ON Google Play

120326 120335

ES Heat Pump Stand

All AW-R32-V8 outdoor units are delivered with a low heat pump stand, or ”feet”. With these feet the outdoor unit can be mounted on an ES heat pump stand. This way the outdoor unit can be placed a little higher above the ground.

ES heat pump stands are made from a robust and whether resistant material. The width can be adjusted according to the heat pump model. With adjustable feet the heat pump can be positioned also on not so straight floor surface to a horizontal position. Vibration dampers prevent amplification of the sound level and spreading of the vibrations to the floor.

Just three ES stand models are needed for the whole range of AW-R32-V8 heat pumps from 6 kW and up to 19 kW. They all come in the same light grey color as the heat pumps, and can be supplemented with the ES Drain Pan Kit.

OUS-V8 Light Grey

Stand mounted on heat pump.

Outdoor unit standing

Model	OUS-6kW-V8	OUS-9/12kW-V8	OUS-15/19kW-V8
Article number	120334	120335	120336

ES Drain Pan Kit

The drain pan kit collects the condensing water from the outdoor unit to a centralized drain, so no ice sheet can form under the unit. It is designed for an easy and fast installation for all AW-R32-V8 outdoor units.

The drain pan EPS R32 is molded in the heat pump shape in an insulating EPS material that isolates for the cold. It can be an “on the ground” system where the two inch drain hole is put directly on top to the drain in the ground, or as a supplement to the heat pump stand where the drain pan can be mounted between the outdoor unit and the heat pump stand.

The drain pan kit comes in three different sizes to fit the whole range of AW-R32-V8 outdoor units.

Suitable self-adjusting electric heater is recommended in cold area operations.

DP-EPS-V8

Drain Pan mounted on heat pump.

Drain pan outdoor units

Model	DP-EPS-6kW-V8	DP-EPS-9/12kW-V8	DP-EPS-15/19kW-V8
Article number	120337	120338	120339

Technical Specification Heat Pumps

AWC – R32-M-V8 (6–12 kW)

	Unit	AWC6-R32-M-V8	AWC9-R32-M-V8	AWC12-R32-M-V8
Article number (indoor/outdoor unit)		120315/120317	120315/120318	120315/120319
ErP Energy efficiency class		A+++ / A++	A+++ / A++	A+++ / A++
SCOP 35°C (floor heating) EN 14825		4,74	4,73	4,71
Heating mode (A7/W35)				
Heating capacity*	kW	3,50 - 6,50	4,30 - 9,20	5,50 - 11,60
COP max - Coefficient of Performance*		4,74	4,73	4,71
Rated input power*	kW	0,75 – 1,41	0,92 – 2,10	1,10 – 2,68
Max. temperature of heating water	°C	58		
Operating range heating	°C	-25 to +65		
DHW Tank				
Type		/	/	/
Volume	l	/	/	/
Cooling mode				
Cooling capacity**	kW	6,22 – 7,45	6,70 – 9,50	7,00 – 9,80
EER max - Energy Efficiency Ratio**		4,45	4,60	3,80
Min. temperature of cooling water	°C	7		
Operating range cooling	°C	0 to +65		
Power supply – specifications				
Outdoor unit	V/ph/fuse	230V / 1-ph / 10 A/C	230V / 1-ph / 16 A/C	
Indoor unit	V/ph/fuse	230V / 3-ph / 25A/C or 400V / 3-ph / 16A/C		
Anti freeze protection outdoor	V/ph/fuse	230V / 1-ph / 6A/C		
Refrigerant specification				
Type / Mass of refrigerant	kg	R32 / 0,90	R32 / 1,40	R32 / 1,80
Type of connection between indoor-outdoor unit		Hydraulic connection		
Dimensions of hydraulic pipes connectors		G1"		

	Unit	AWC6-R32-M-V8	AWC9-R32-M-V8	AWC12-R32-M-V8
Controller				
Controller Type		LCD Touch Screen		
LCD Size		4,3˝		
Controller features		2x Mixing Heating Circuit + 2x Mixing Cooling Circuit + DHW Heating		
Internet connection		Serial Integrated		
Sound power and sound pressure level				
Sound power level LwA - Indoor unit	dB(A)	/	/	/
Sound power level LwA - Outdoor unit***	dB(A)	52	53	52
Sound pressure level on distance				
Outdoor unit - 1 m	dB(A)	44	45	44
Outdoor unit - 5 m	dB(A)	30	31	30
Outdoor unit - 10 m	dB(A)	24	25	24
Outdoor unit - 15 m	dB(A)	20	21	20
Net dimensions				
Indoor unit (WxHxD)	mm	450 x 380 x 135		
Outdoor unit (WxHxD)	mm	1010 x 735 x 370	1165 x 885 x 370	1165 x 885 x 370
Net weight				
Indoor unit / Outdoor unit	kg	10 / 67	10 / 80	10 / 85
Serial integrated components				
Electrical flow heater	kW/ph	/	/	/
Circulation water pump - A energy class	type	W25-130/9-87/IPWM1		
Temperature Sensors		Serial Integrated - All		
3-way diverting valve for DHW tank		/	/	/
Expansion vessel heating water	l	/	/	/

(*) Measured according to standard EN 14511. Heating condition: water inlet/outlet temperature 30 °C/35 °C, ambient temperature DB/WB 7°C/6°C.

(**) Measured according to standard EN 14511. Cooling condition: water inlet/outlet temperature 18°C and ambient temperature 35°C

(***) Measured according to standard EN 12102.

AWC – R32-M-V8 (15 & 19 kW)

	Unit	AWC15-R32-M-V8	AWC19-R32-M-V8
Article number (indoor/outdoor unit)		120315/120320	120315/120321
ErP Energy efficiency class		A+++ / A++	A+++ / A++
SCOP 35°C (floor heating) EN 14825		4,98	4,85
Heating mode (A7/W35)			
Heating capacity*	kW	6,00 - 15,30	9,20 - 18,50
COP max - Coefficient of Performance*		5,06	5,01
Rated input power*	kW	1,22 – 3,20	1,83 – 4,14
Max. temperature of heating water	°C	58	
Operating range heating	°C	-25 to +65	
DHW Tank			
Type		/	/
Volume	l	/	/
Cooling mode			
Cooling capacity**	kW	7,20 – 18,50	8,50 – 22,50
EER max - Energy Efficiency Ratio**		5,42	5,12
Min. temperature of cooling water	°C	7	
Operating range cooling	°C	0 to +65	
Power supply - specifications			
Outdoor unit	V/ph/fuse	400V / 3-ph / 16 A/C	
Indoor unit	V/ph/fuse	230V / 1-ph / 6A/C	
Anti freeze protection outdoor	V/ph/fuse	230V / 1-ph / 6A/C	
Refrigerant specification			
Type / Mass of refrigerant	kg	R32 / 2,55	R32 / 2,60
Type of connection between indoor-outdoor unit		Hydraulic connection	
Dimensions of hydraulic pipes connectors		G1-1/4"	

	Unit	AWC15-R32-M-V8	AWC19-R32-M-V8
Controller			
Controller Type		LCD Touch Screen	
LCD Size		4,3˝	
Controller features		2x Mixing Heating Circuit + 2x Mixing Cooling Circuit + DHW Heating	
Internet connection		Serial Integrated	
Sound power and sound pressure level			
Sound power level LwA - Indoor unit	dB(A)	/	/
Sound power level LwA - Outdoor unit***	dB(A)	58	61
Sound pressure level on distance			
Outdoor unit - 1 m	dB(A)	50	53
Outdoor unit - 5 m	dB(A)	36	39
Outdoor unit - 10 m	dB(A)	30	33
Outdoor unit - 15 m	dB(A)	27	30
Net dimensions			
Indoor unit (WxHxD)	mm	450 x 380 x 135	
Outdoor unit (WxHxD)	mm	1085 x 1450 x 390	
Net weight			
Indoor unit / Outdoor unit	kg	10 / 120	10 / 140
Serial integrated components			
Electrical flow heater	kW/ph	/	/
Circulation water pump - A energy class	type	25-130/9-87/IPWM1	
Temperature Sensors		Serial Integrated - All	
3-way diverting valve for DHW tank		/	/
Expansion vessel heating water	l	/	/

(*) Measured according to standard EN 14511. Heating condition: water inlet/outlet temperature 30°C/35°C, ambient temperature DB/WB 7°C/6°C.

(**) Measured according to standard EN 14511. Cooling condition: water inlet/outlet temperature 18°C and ambient temperature 35°C

(***) Measured according to standard EN 12102.

AWT – R32-M-V8 (6–12 kW)

	Unit	AWT6-R32-M-V8	AWT9-R32-M-V8	AWT12-R32-M-V8
Article number (indoor/outdoor unit)		120296/120317	120296/120318	120296/120319
ErP Energy efficiency class		A+++ / A++	A+++ / A++	A+++ / A++
SCOP 35°C (floor heating) EN 14825		4,74	4,73	4,71
Heating mode (A7/W35)				
Heating capacity*	kW	3,50 - 6,50	4,30 - 9,20	5,50 - 11,60
COP max - Coefficient of Performance*		4,74	4,73	4,71
Rated input power*	kW	0,75 – 1,41	0,92 – 2,10	1,10 – 2,68
Max. temperature of heating water	°C	58		
Operating range heating	°C	-25 to +65		
DHW Tank				
Type		Stainless steel tank – fresh water system		
Volume	l	250		
Cooling mode				
Cooling capacity**	kW	6,22 – 7,45	6,70 – 9,50	7,00 – 9,80
EER max - Energy Efficiency Ratio**		4,45	4,60	3,80
Min. temperature of cooling water	°C	7		
Operating range cooling	°C	0 to +65		
Power supply - specifications				
Outdoor unit	V/ph/fuse	230V / 1-ph / 10A/C	230V / 1-ph / 16A/C	
Indoor unit + electric flow heater	V/ph/fuse	230V /3-ph / 25A/C or 400V / 3-ph / 16A/C		
Anti freeze protection outdoor	V/ph/fuse	230V / 1-ph / 6A/C		
Refrigerant specification				
Type / Mass of refrigerant	kg	R32 / 0,90	R32 / 1,40	R32 / 1,80
Type of connection between indoor-outdoor unit		Hydraulic connection		
Dimensions of hydraulic pipes connectors		G1"		
Controller				

(*) Measured according to standard EN 14511. Heating condition: water inlet/outlet temperature 30°C/35°C, ambient temperature DB/WB 7°C/6°C.

(**) Measured according to standard EN 14511. Cooling condition: water inlet/outlet temperature 18°C and ambient temperature 35°C

	Unit	AWT6-R32-M-V8	AWT9-R32-M-V8	AWT12-R32-M-V8
Controller Type		LCD Touch Screen		
LCD Size		4,3″		
Controller features		2x Mixing Heating Circuit + 2x Mixing Cooling Circuit + DHW Heating		
Internet connection		Serial Integrated		
Sound power and sound pressure level				
Sound power level LwA - Indoor unit	dB(A)	/	/	/
Sound power level LwA - Outdoor unit***	dB(A)	52	53	52
Sound pressure level on distance				
Outdoor unit - 1 m	dB(A)	44	45	44
Outdoor unit - 5 m	dB(A)	30	31	30
Outdoor unit - 10 m	dB(A)	24	25	24
Outdoor unit - 15 m	dB(A)	20	21	20
Net dimensions				
Indoor unit (WxHxD)	mm	600 x 1780 x 680		
Outdoor unit (WxHxD)	mm	1010 x 735 x 370	1165 x 885 x 370	1165 x 885 x 370
Net weight				
Indoor unit / Outdoor unit	kg	125 / 67	125 / 80	125 / 85
Serial integrated components				
Electrical flow heater	kW	6 (9) kW - 2x 3kW (+ 3 kW)		
Circulation water pump - A energy class	type	Wilo Para 25-130/9-87/IPWM1		
Temperature Sensors		Serial Integrated - All		
3-way diverting valve for DHW tank		Serial Integrated		
Expansion vessel heating water	l	11		

(***) Measured according to standard EN 12102.

AWST – R32-M-V8 (6–15 kW)

	Unit	AWST6 – R32-M-V8	AWST9 – R32-M-V8	AWST12 – R32-M-V8	AWST15 – R32-M-V8
Article number (indoor/outdoor unit)		120316/120317	120316/120318	120316/120319	120316/120320
ErP Energy efficiency class		A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
SCOP 35°C (floor heating) EN 14825		4,74	4,73	4,71	4,98
Tap water profile		L/A+			
Heating mode (A7/W35)					
Heating capacity*	kW	3,50 – 6,50	4,30 – 9,20	5,50 – 11,60	6,00 – 15,30
COP max - Coefficient of Performance*		4,70	4,71	4,90	5,06
Rated input power*	kW	0,75 – 1,41	0,92 – 2,10	1,10 – 2,68	1,22 – 3,20
Max. temperature of heating water	°C	58			
Operating range heating	°C	-30 to +45			
DHW Tank					
Type		SUS316 Steel, DHW storage type			
Volume	l	250			
Cooling mode					
Cooling capacity**	kW	6,22 – 7,45	6,70 – 9,50	7,00 – 9,80	7,20 – 18,50
EER max - Energy Efficiency Ratio**		4,45	4,60	3,80	5,42
Min. temperature of cooling water	°C	7			
Operating range cooling	°C	0 to +65			
Power supply - specifications					
Outdoor unit	V/ph/fuse	230V / 1-ph / 10A/C	230V / 1-ph / 16A/C		400V / 3-ph / 16A/C
Indoor unit + electric flow heater	V/ph/fuse	230V / 3-ph / 25A/C or 400V / 3-ph / 16A/C			
Anti freeze protection outdoor	V/ph/fuse	230V / 1-ph / 6A/C			
Refrigerant specification					
Type / Mass of refrigerant	kg	R32 / 0,90	R32 / 1,40	R32 / 1,80	R32 / 2,55
Type of connection between indoor-outdoor unit		Hydraulic connection			
Dimensions of hydraulic pipes connectors		G1"			G1-1/4"

(*) Measured according to standard EN 14511. Heating condition: water inlet/outlet temperature 30°C/35°C, ambient temperature DB/WB 7°C/6°C.

(**) Measured according to standard EN 14511. Cooling condition: water inlet/outlet temperature 18°C and ambient temperature 35°C

	Unit	AWST6 – R32-M-V8	AWST9 – R32-M-V8	AWST12 – R32-M-V8	AWST15 – R32-M-V8
Controller					
Controller Type		LCD Touch Screen			
LCD Size		4,3″			
Controller features		2x Mixing Heating Circuit + 2x Mixing Cooling Circuit + DHW Heating			
Internet connection		Serial Integrated			
Sound power and sound pressure level					
Sound power level LwA - Indoor unit	dB(A)	44	45	45	45
Sound power level LwA - Outdoor unit***	dB(A)	52	53	52	58
Sound pressure level on distance					
Outdoor unit - 1 m	dB(A)	44	45	44	50
Outdoor unit - 5 m	dB(A)	30	31	30	36
Outdoor unit - 10 m	dB(A)	24	25	24	30
Outdoor unit - 15 m	dB(A)	20	21	20	27
Net dimensions					
Indoor unit (WxHxD)	mm	600 x 1780 x 680			
Outdoor unit (WxHxD)	mm	1010 x 735 x 370	1165 x 885 x 370	1165 x 885 x 370	1085 x 1450 x 390
Net weight					
Indoor unit / Outdoor unit	kg	125 / 67	125 / 80	125 / 85	125 / 140
Serial integrated components					
Electrical flow heater	kW	6 (9) kW - 2x 3kW (+ 3 kW)			
Circulation water pump - A energy class	type	Wilo Para 25-130/9-87/IPWM1			
Temperature Sensors		Serial Integrated - All			
3-way diverting valve for DHW tank		Serial Integrated			
Expansion vessel heating water	l	11			

(***) Measured according to standard EN 12102.

AWH – R32-S-V8 (6–12 kW)

	Unit	AWH6–R32-S-V8	AWH9–R32-S-V8	AWH12–R32-S-V8
Article number (indoor/outdoor unit)		120334/120324	120334/120325	120334/120326
ErP Energy efficiency class		A+++ / A++	A+++ / A++	A+++ / A++
SCOP 35°C (floor heating) EN 14825		4,74	4,73	4,71
Heating mode (A7/W35)				
Heating capacity*	kW	3,50 – 6,50	4,30 – 9,20	5,50 – 11,60
COP max - Coefficient of Performance*	W/W	4,70	4,71	4,90
Rated input power*	kW	0,75 – 1,41	0,92 – 2,10	1,10 – 2,68
Max. temperature of heating water	°C	58		
Operating range heating	°C	-30 to +45		
DHW Tank				
Type		/	/	/
Volume	l	/	/	/
Cooling mode				
Cooling capacity**	kW	6,22 – 7,45	6,70 – 9,50	7,00 – 9,80
EER max - Energy Efficiency Ratio**		4,45	4,60	3,80
Min. temperature of cooling water	°C	7		
Operating range cooling	°C	0 to +65		
Power supply - specifications				
Outdoor unit	V/ph/fuse	230V / 1-ph / 10A/C	230V / 1-ph / 16A/C	
Indoor unit or (indoor + outdoor unit)	V/ph/fuse	230V / 1-ph / 6A/C or (230V / 1-ph / 16A/C)		
Refrigerant specification				
Type / Mass of refrigerant	kg	R32 / 0,90	R32 / 1,40	R32 / 1,80
Type of connection between indooroutdoor unit		Refrigerant flare connection		
Dimensions of refrigerant pipes connectors		1/4" - 1/2"	3/8" - 1/2"	3/8" - 5/8"

	Unit	AWH6–R32-S-V8	AWH9–R32-S-V8	AWH12–R32-S-V8
Controller				
Controller Type		LCD Touch Screen		
LCD Size		4,3″		
Controller features		2x Mixing Heating Circuit + 2x Mixing Cooling Circuit + DHW Heating		
Internet connection		Serial Integrated		
Sound power and sound pressure level				
Sound power level LwA - Indoor unit	dB(A)	44	45	45
Sound power level LwA - Outdoor unit***	dB(A)	52	53	52
Sound pressure level on distance				
Outdoor unit - 1 m	dB(A)	49	50	50
Outdoor unit - 5 m	dB(A)	35	36	36
Outdoor unit - 10 m	dB(A)	29	30	30
Outdoor unit - 15 m	dB(A)	26	26	26
Net dimensions				
Indoor unit (WxHxD)	mm	410 x 750 x 270		
Outdoor unit (WxHxD)	mm	1010 x 735 x 370	1165 x 885 x 370	1165 x 885 x 370
Net weight				
Indoor unit / Outdoor unit	kg	31 / 62	31 / 75	31 / 80
Serial integrated components				
Electrical flow heater	kW/ph	/	/	/
Circulation water pump - A energy class	type	UPM 25-75 180		
Temperature Sensors		Serial Integrated - All		
3-way diverting valve for DHW tank		/	/	/
Expansion vessel heating water	l	/	/	/

(*) Measured according to standard EN 14511. Heating condition: water inlet/outlet temperature 30°C/35°C, ambient temperature DB/WB 7°C/6°C.

(**) Measured according to standard EN 14511. Cooling condition: water inlet/outlet temperature 12°C/7°C and ambient temperature 35°C

(***) Measured according to standard EN 12102.

AWST – R32-S-V8 (6–12 kW)

	Unit	AWST6–R32-S-V8	AWST9–R32-S-V8	AWST12–R32-S-V8
Article number (indoor/outdoor unit)		120335/120324	120335/120325	120335/120326
ErP Energy efficiency class		A+++ / A++	A+++ / A++	A+++ / A++
SCOP 35°C (floor heating) EN 14825		4,74	4,73	4,71
Heating mode (A7/W35)				
Heating capacity*	kW	3,50 – 6,50	4,30 – 9,20	5,50 – 11,60
COP max - Coefficient of Performance*	W/W	4,70	4,71	4,90
Rated input power*	kW	0,75 – 1,41	0,92 – 2,10	1,10 – 2,68
Max. temperature of heating water	°C	58		
Operating range heating	°C	-30 to +45		
DHW Tank				
Type		SUS316 Steel, DHW storage type		
Volume	l	250		
Cooling mode				
Cooling capacity**	kW	6,22 – 7,45	6,70 – 9,50	7,00 – 9,80
EER max - Energy Efficiency Ratio**		4,45	4,60	3,80
Min. temperature of cooling water	°C	7		
Operating range cooling	°C	0 to +65		
Power supply - specifications				
Outdoor unit	V/ph/fuse	230V / 1-ph / 10A/C	230V / 1-ph / 16A/C	
Indoor unit + electric flow heater + (outdoor unit)***	V/ph/fuse	230V / 3-ph / 25A/C or 400V / 3-ph / 16A/C		
Refrigerant specification				
Type / Mass of refrigerant	kg	R32 / 0,90	R32 / 1,40	R32 / 1,80
Type of connection between indoor-outdoor unit		Refrigerant flare connection		
Dimensions of refrigerant pipes connectors		1/4" - 1/2"	3/8" - 1/2"	3/8" - 5/8"

(*) Measured according to standard EN 14511. Heating condition: water inlet/outlet temperature 30°C/35°C, ambient temperature DB/WB 7°C/6°C.

(**) Measured according to standard EN 14511. Cooling condition: water inlet/outlet temperature 12°C/7°C and ambient temperature 35°C.

	Unit	AWST6–R32-S-V8	AWST9–R32-S-V8	AWST12–R32-S-V8
Controller				
Controller Type		LCD Touch Screen		
LCD Size		4,3″		
Controller features		2x Mixing Heating Circuit + 2x Mixing Cooling Circuit + DHW Heating		
Internet connection		Serial Integrated		
Sound power and sound pressure level				
Sound power level LwA - Indoor unit	dB(A)	44	45	45
Sound power level LwA - Outdoor unit****	dB(A)	52	53	52
Sound pressure level on distance				
Indoor unit - 1 m	dB(A)	42	32	37
Outdoor unit - 1 m	dB(A)	49	50	50
Outdoor unit - 5 m	dB(A)	35	36	36
Outdoor unit - 10 m	dB(A)	29	30	30
Outdoor unit - 15 m	dB(A)	26	26	26
Net dimensions				
Indoor unit (WxHxD)	mm	600 x 1780 x 680		
Outdoor unit (WxHxD)	mm	1010 x 735 x 370	1165 x 885 x 370	1165 x 885 x 370
Net weight				
Indoor unit / Outdoor unit	kg	130 / 62	130 / 75	130 / 80
Serial integrated components				
Electrical flow heater	kW	6 (9) kW - 2x 3kW (+ 3 kW)		
Electrical heater in tank	kW	0,5		
Circulation water pump - A energy class	type	UPM 25-75 180		
Temperature Sensors		Serial Integrated - All		
3-way diverting valve for DHW tank		Serial Integrated		
Expansion vessel heating water	l	11		

(***) If outdoor unit is powered from indoor unit, the electric backup is reduced from 9 to 6 kW heating capacity.

(****) Measured according to standard EN 12102.

ES Fan Coils

ES Fan Coils used for heating purposes, is basically a radiator with a fan that circulates the air around the heat exchanger.

The fan coil uses water as medium and can be used both for heating and cooling. By circulating the air around the heat exchanger, the heat transfer to the air increases dramatically. For heating purposes this means that the water temperature in the heating system can be lowered quite much and keep the desired room temperature. Lower water temperature also increases the efficiency of the heating system.

The following functions are available and can be adjusted:

- Heating, cooling, dehumidifying and air circulation mode
- Timer operation
- Night mode / silent working
- Fan speed
- Room temperature setting

Automatic keylock activates after 10 seconds without operation.

MODEL	Unit	FCF1550-V3	FCF3100-V3	FCF4600-V3	FCF6300-V3
Article no.		120265	120266	120267	120268
(a) Cooling capacity at 12°C	kW	0,75	1,50	2,20	3,10
(b) Heating capacity at 50°C	kW	0,99	2,00	2,80	4,20
(c) Heating capacity at 70°C	kW	1,55	3,10	4,60	6,30
Water flow	l/hour	162	343	471	600
Pressure drop	kPa	7,00	7,50	19,00	25,00
Volume heat exchanger	l	0,48	0,85	1,15	1,48
Max. water pressure	Bar	10			
Water connection	inch	G1/2			
Air flow min/max	m^3/hour	50/160	150/320	200/460	300/580
Power supply	V/Ph/Hz	230/1/50			
Power consumption	W	14	23	27	33
(d) Sound level min/max	dB(A)	20/39	18/40	19/42	21/42
Net dimensions, W x H x D	mm	694 x 580 x 129	894 x 580 x 129	1094 x 580 x 129	1294 x 580 x 129
Weight	kg	16	22	28	34

(a) Cooling. Water in/out 7/12°C; room temperature DB/WB 27/19°C. (b) Heating. Water inlet 50°C; room temperature 20°C
(c) Heating. Water inlet 70°C; room temperature 20°C. (d) Sound pressure is tested in accordance to EN12102-2008 and ISO3745:201

Easy to use control display.

ES Buffer Tanks

ES Buffer Tanks are manufactured from high performance stainless steel for longer lifespan and for high performance. Due to the chosen construction material the system connected to it is not being polluted with particles that could affect other components in the system, as it may happen with traditional black steel buffer tanks.

The slim design of the ES Buffer Tanks makes sure that the space usage is as less as possible. Both the 100 liter and the 200 liter version need less then 0,2 m^2 of space when installed. The 100 liter versions includes a wall bracket, so that it can also be mounted on the wall for even less space usage.

Both the 100 and 200 liter models have an additional coil inside to have the possibility for connecting additional heating sources or for preheating the sanitary water.

MODEL	Unit	BT100TC-1	BT100TC-2	BT200TC-1
Article no.	bar	120200	120201	120205
Max water pressure	bar	10		
Water temperature Max.	°C	95		
Volume	l	100	100	200
Hight	mm	1500		
Diameter	mm	375		520
Material of inner tank		Stainless steel 304		
Material of coil		Not available	Stainless steel 316	
Insolation – Type / Thickness	mm	Polyurethan / 37,5		Polyurethan / 50,0
Colour		White		
Thermometer		Yes		
Weight	kg	25	29	46
Coil	m	Not available	15	20
Coil diameter	mm	Not available	22	
2 inch/ R50 connector	pcs	1		
Wall bracket		Yes		Not available
Connections		1 inch, top connections		
Thermowell	pcs	2		

Great solution for all installations

ES Multifunctional Tanks

ES Multifunction Tank – designed to efficiently combine several different heat sources and is very well insulated for minimal heat losses and maximum efficiency.

ES Multifunction Tank is a complete heating system for residential and hot water heating. The tank has connections for several sources of energy and becomes the ”hub” in the house’s heating system. It can be used as a clean electric boiler, or connected to solar collector, pellets, heat pump, water-powered wood stove, etc. in combination.

ES Multifunction Tanks are constructed in stainless steel. This keeps the system clean, increases efficiency and has a longer lifespan. The tank is therefore approved also as a pure water heater. Corrugated stainless spirals provide maximum heat transfer between the accumulator volume and hot water or solar collector.

The 300 and 500 liter tanks have a 3 kW electric heater built in to increase the capacity of larger hot water needs. This is thermostat regulated from 30–75 °C and it is intended only as a backup for heating hot water.

MODEL	Unit	MWT 75.4	MWT 300.4-3H	MWT 500.4-3H
Article no.		120177	120175	120176
Water pressure Max.	bar	10		
Water temperature Max.	°C	95		
Volume	l	75	300	500
Height	mm	875	1560	1850
Diameter	mm	476	630	708
Inner tank and coils		Stainless 304 and 316		
Outer tank		Stainless 304, powder-coated		
Insulation		Polyurethane, 50 mm	Polyurethane, 100 mm	Polyurethane, 70 mm
Weight (blank)	kg	30	95	120
Spiral (s) for solar collector/hot water	m	15	10+20+20	15+20+20
Capacity coils, kW total	kW	4,90	16,30	17,90
R50 connector	pcs	1	1	2
Electric heater	kW	-	3	3
Connections Tank/spirals		1 '' female		

Diverting Valve

LK 525 MultiZone 3W is a motorized 3-way zone valve for On/Off control. The zone valve is designed with a turning slide which allows it to withstand a larger pressure difference and reduces the risk of it stalling after a long intermission. This makes it especially suited for heat pump applications where there can be long intermissions between the changes to the direction of the flow during the warm season.

LK 525 MultiZone 3W Diverting valve

Article number (G1"/G1 1/4")	066106/066107
Working temperature	Min. 5 °C/Max. 80 °C (90 °C briefly)
Ambient temperature	Min. 1 °C/Max. 60 °C
Max. working pressure	1.0 MPa (10 bar)
Max. differential pressure	100 kPa (1 bar)
Leakage	< 0.1% of KVS at 100 kPa
Angle of rotation	60°/360°
Media 1	Water – Glycol/Ethanol mixture max. 50%
Hydraulic connection	G1" or G1 1/4"
Thread standard	G –- male thread
Actuator	7 VA, 230 VAC, 50 Hz or 7 VA, 24 VAC, 50 Hz
Operation time	8 seconds (60°)
Electrical connection	Fixed wire alternatively Molex®-compatible connector
Signal connector	Single pole SPST
Protection class	IP 40 (Molex®) / IP 44 (Cable)
Material, external cover	Brass EN 12164 CW614N
Material, slide/spindle	PPS Composite
Cable specification	Dimension 3 x 0.75 mm²
Wire colours	Blue, brown, black
External insulation	PVC
Connection	Molex® or Molex®-compatible connector, 6-circuit

Electrical Heaters

Customizable heating elements

The heating elements are designed to fit one common controller that contains a thermostat for manual control, overheat protection and a contactor which enables a fully automatic control via ES heat pumps. Heating capacities of the heating elements range from 1,5 kW and up to 9 kW to provide an optimal solution for each house. Suitable for 230 V and 400 V connection.

Control box G2"

FEATURES	ARTICLE NUMBER	SUITABLE FOR
• Automatic control via heat pump • Manual control via thermostat • Overheat protection	11245KP	Heating elements with G2" connection (whole range).

Heating Elements G2"

LENGTH	ARTICLE NUMBER	OUTPUT POWER	CONNECTION
280 mm	121001	6,0 kW	G2"
390 mm	11081	4,5 kW	G2"
390 mm	11082	6,0 kW	G2"
390 mm	11084	9,0 kW	G2"
485 mm*	112311	4,5 kW	G2"
485 mm*	112312	6,0 kW	G2"
485 mm*	112314	9,0 kW	G2"

* Inactive 150 mm

Heating elements for AWT and NPT units

ES indoor units AWT and NPT have a standard built-in 9 kW Inline back up electrical heater. Those can be modified to a lower power with the 270 mm heating elements to 6 kW or even 3 kW according to local regulations.

Heating Elements DN40

LENGTH	ARTICLE NUMBER	OUTPUT POWER	CONNECTION
270 mm	SP201024	3 kW (3 x 1,0 kW)	DN40
270 mm	SP201025	6 kW (3 x 2,0 kW)	DN40

Dirtmagplus Filter

Multifunction device in composite with dirt separator, magnets and strainer.

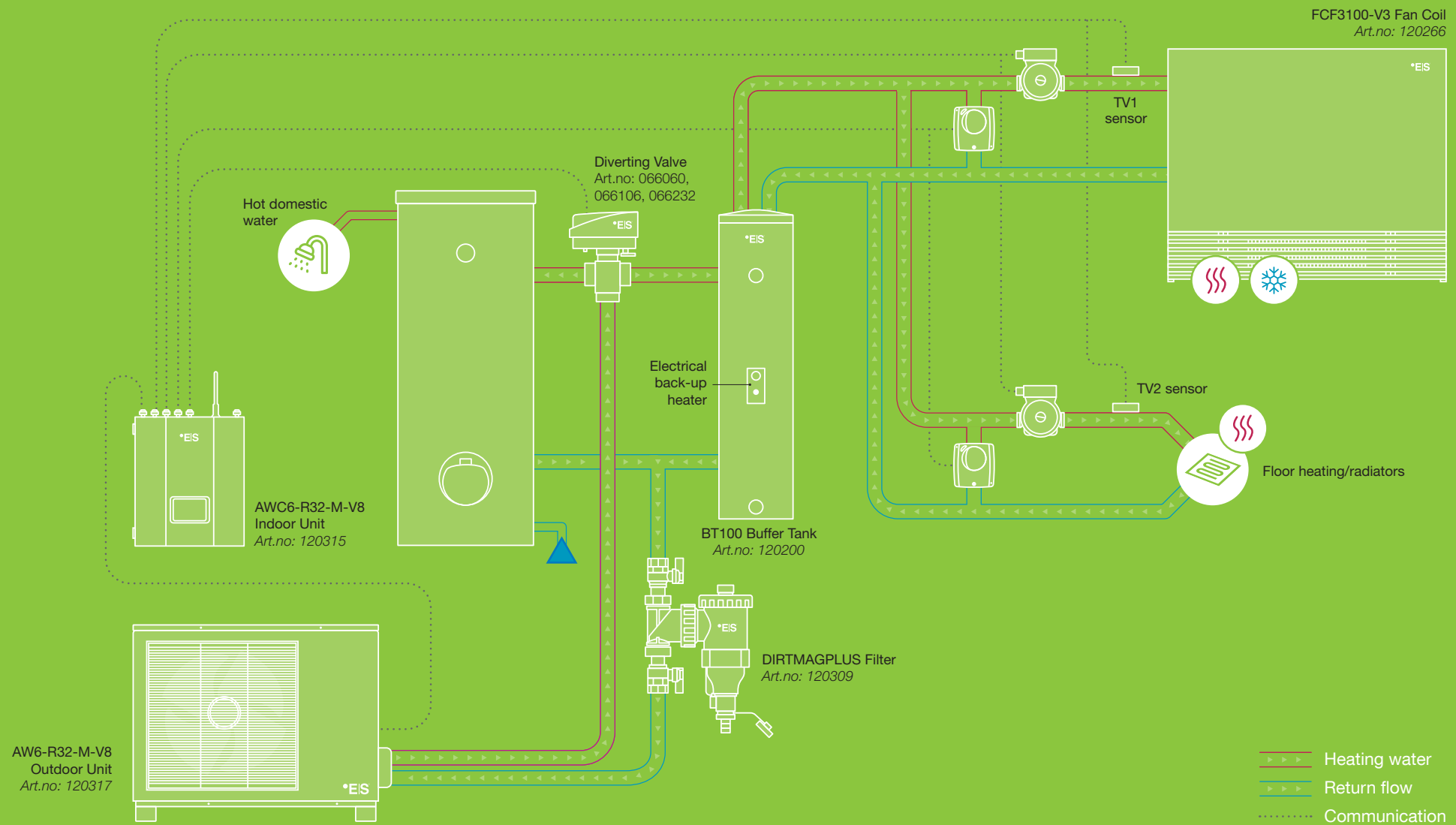
The DIRTMAGPLUS® multifunction device is composed of two separate components arranged in series: a dirt separator and an interchangeable strainer.

The presence of these two components allows for continuous protection of the generator and devices from any impurities that form in the hydraulic circuit both at the time of system start-up and in normal operating conditions.

Ferrous impurities are also trapped inside the body of the device thanks to the action of the two magnets inserted in a special removable outer ring.

Dirmagplus Filter	
Article number	120309
Medium	Water, glycol solutions
Max. percentage of glycol	30%
Maximum working pressure	3 bar
Working temperature range	0–90°C
Ring system magnetic induction	2 x 0,30 T
Initial cleaning strainer mesh size (blue supplied) Ø	0,30 mm
Maintenance strainer mesh size (grey-spare part code F49474/GR) Ø	0,80 mm
Device internal volume	0,40 l

ES Products in a System



What we do

SWEDISH INGENUITY

ES products are design to modernize your existing heating system cost efficiently step by step and therefore provide minimal time to return your investment.

In addition, our products are easy to install and to combine with other ES products as well as the existing heating products of other brands.

Save on your heating costs by adding the heat pump to your existing heating system. Use ES air-to-water heat pumps.

Cost-effective, convenient and environmentally friendly.

About Energy Save

Swedish Energy Save develops and offers cost-effective, smart and flexible products for maximum energy efficiency. We have many years of experience in developing heat pumps for the Nordic market with more than 12,000 units installed since the beginning in 2009. We work with the industries best partners for your building. We package Scandinavian cutting-edge expertise and innovative energy technology through prefabricated energy modules.

Our main target is to always be the market leader offering the best comparison of price to performance ratio to our customers.

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