STIEBEL ELTRON

Simply the Best

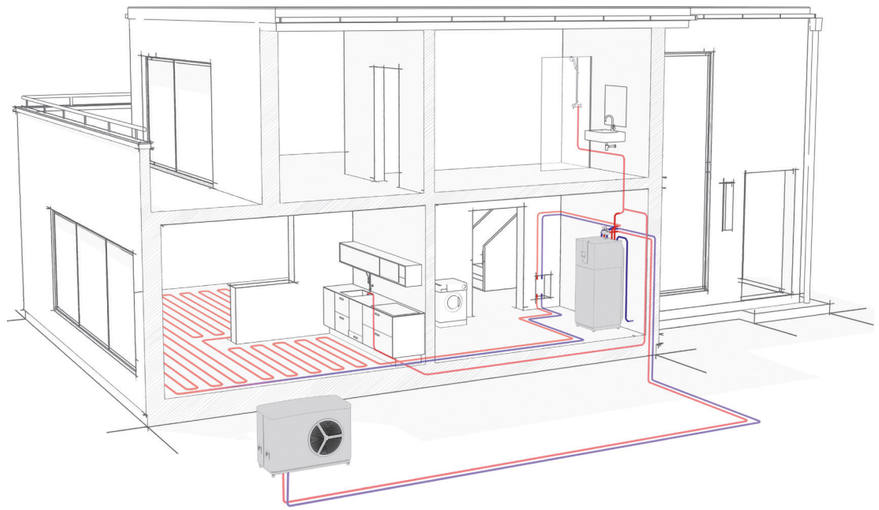
WPL 15 A2W Premium
WPL 25 A2W Premium

AIR-TO-WATER COLD CLIMATE HEAT PUMPS

WPL 15 A2W Premium & WPL 25 A2W Premium with HSBC 300 Integral

Comprehensive air-to-water cold climate heat pump solution

The WPL 15 A2W Premium and WPL 25 A2W Premium cold climate air-source heat pumps use outdoor air to produce hot water for central heating, cooling and domestic hot water production. The compact monobloc design uses output-dependent control and efficient inverter technology, ideally matching heating and cooling output through the variable speed compressor. Improved room climate during summer is accomplished with active cooling using circuit reversal.



3-year limited warranty parts
5-year limited warranty compressor
See website for full warranty details

Flow temperatures of up to 149°F/65°C are achieved even at low outside air temperatures due to a combined enhanced vapor injection/enhanced saturated vapor injection that cools the scroll compressor. The high flow temperature makes the WPL capable of use in modernization projects that may need a high flow temperature, as well as in construction, new or old, designed for lower flow temperatures.

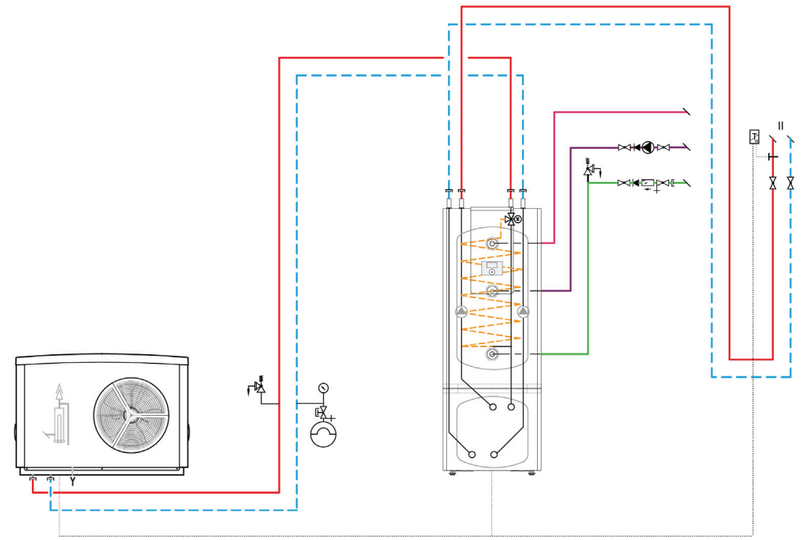
The waste heat from the inverter is used to raise the return temperature. In addition, demand-dependent defrosting by means of circuit reversal and the heating of the condensate pan by the refrigerant circuit increase the overall efficiency of the system. A hydrophilic coating on the fan nozzle prevents ice from forming, meaning that no electric defrost heating is required. High efficiency and low operating costs are realized all year round, thanks to optimally matched components.

The hermetically sealed refrigerant circuit uses R410A and is rigorously tested for leaks at the factory. The encapsulated refrigerant circuit and acoustically isolated compressor, plus modulating fans and wide gaps between the evaporator fins that reduce air resistance, make for extremely quiet operation. An emergency/auxiliary electric resistance heater is incorporated for efficient operation when necessary.

The integral anti-vibration mount enables the heat pump to be connected directly to the heating system, with a pivoting electrical connection panel for easier installation. The condensate pan is easily reached through a cleaning aperture on the back of the casing. The enamelled, corrosion-protected metal casing in alpine white is made from hot-dip galvanized, powder coated sheet steel. Fan grill, recessed grips and top cover are made from weatherproof, UV-resistant plastic in aluminum white.

The HSBC 300 Integral comprises a DHW tank plus buffer tank in a single appliance. Almost halving the space required for separate tanks side-by-side, this frees up valuable floor space. The connection between the WPL and the HSBC is hydraulic, not refrigerant. This comprehensive solution makes installation easy, affordable, and suitable for both new construction or existing system modernization.

The HSBC also houses the WPM heat manager controller for the system. The WPM is highly programmable but comes pre-programmed with factory-set default parameters for a quick initial start-up.



- Highly integrated & comprehensive cold climate heat pump and tank system
- Monobloc with energy efficient inverter technology
- Central heating and cooling, with DHW heating
- 149°F/65°C flow temperature
- 2.77 COP Cold Climate Efficiency
- Low operating noise

Made in Germany

WPL 15/25 A2W Premium Technical Data

Model	WPL 15 A2W Premium	WPL 25 A2W Premium
Item no.	203252	203253
Heating output		
Full load capacity	23.04 kBtu/hr	50.4 kBtu/hr
A45/LWT95 (min/max)	11.4 / 22.79 kBtu/hr	26.78 / 43.84 kBtu/hr
A35/LWT95 (min/max)	8.43 / 24.19 kBtu/hr	28.42 / 46.35 kBtu/hr
A19/LWT131 (min/max)	8.56 / 24.19 kBtu/hr	22.45 / 47.53 kBtu/hr
A-4/LWT149 (min/max)	15.28 / 18.8 kBtu/hr	29.37 / 36.17 kBtu/hr
Cooling output		
Full load capacity	2.13 ton	4.09 ton
Full load efficiency	1.65 kW/ton	1.51 kW/ton
A95/LWT 45 (min/max)	14,433 Btu/hr	28,423 Btu/hr
A95/LWT 64 (min/max)	11.09 / 29.55 kBtu/hr	33.37 / 58.21 kBtu/hr
Power consumption, heating		
A45/LWT95 (min/max)	0.84 kW / 2.21 kW	1.54 kW / 3.81 kW
A35/LWT95 (min/max)	0.72 kW / 2.51 kW	2.01 kW / 4.33 kW
A-4/LWT149 (min/max)	2.97 kW / 3.65 kW	5.25 kW / 7.53 kW
Power consumption, emergency/booster heater	6.75 kW @ 240 V	6.75 kW @ 240 V
Power consumption, cooling		
A95/LWT 45 (min/max)	0.9 kW / 3.26 kW	2.31 kW / 6.26 kW
A95/LWT 64 (min/max)	0.86 kW / 3.02 kW	2.53 kW / 6.02 kW
COP heating (50% capacity)		
A45/LWT95	4.55	4.17
A35/LWT95	3.9	3.85
A19/LWT131	3.1	3.28
A-4/LWT149	1.51	1.79
IPLV cooling		
EER	13.6	13.55
IPLV	15.68	16.83
Sound power level		
Outdoor installation, max capacity	61 dB(A)	66 dB(A)
Outdoor installation, silent mode	50 dB(A)	54 dB(A)
Application limits		
Heat source min (air) LWT 140	10.4 °F (-12 °C)	5 °F (-15 °C)
Heat source min (air) LWT 149	24.8 °F (-4 °C)	24.8 °F (-4 °C)
Heat source min (air) LWT 131	-4 °F (-20 °C)	-4 °F (-20 °C)
Cooling mode: heat source max/min (air)	104 °F / 59 °F (40 °C / 15 °C)	104 °F / 59 °F (40 °C / 15 °C)
LWT min in cooling mode	-4 °F (-20 °C)	-4 °F (-20 °C)
Water hardness	143–152 ppm	143–152 ppm
Electrical data		
Rated voltage	220–240 V	220–240 V
Breaker size, compressor (DP)	20 A	35 A
Breaker size, controller (DP)	15 A	15 A
Breaker size, backup element (DP)	30 A	30 A
Starting current	7 A	10 A
Max. operating current	19.5 A	30 A
Refrigerant data		
Type	R410A	R410A
Charge	9.3 lb (4.2 kg)	9.3 lb (4.2 kg)
IP rating	IP 14B	IP 14B
Condenser material	1.4401/Cu	1.4401/Cu
Evaporator material	Aluminum/copper	Aluminum/copper
Dimensions		
Height	35 3/8″ (900 mm)	41 1/8″ (1045 mm)
Width	50″ (1270 mm)	58 5/8″ (1490 mm)
Depth	23 3/8″ (593 mm)	23 3/8″ (593 mm)
Weight	309 lb (140 kg)	386 lb (175 kg)

HSBC 300 Integral Technical Data

Model	HSBC 300 Integral
Item no.	202493
Hydraulic data	
Nominal capacity, DHW tank	71.3 gal (270 l)
Nominal capacity, buffer tank	26.4 gal (100 l)
Surface area, heat exchanger	4.4 ft² (3.20 m²)
Volume, heat exchanger	5.5 gal (21 l)
DHW volume, top indirect coil	58.1 gal (220 l)
Pressure drop at 4.4 gpm (1.0 m³/h), heat exchanger, top	1.9 ft. head (56 hPa)
Reheating time, top heat exchanger	33 min
Application limits	
Max. permissible pressure (design pressure), DHW	101.5 psi (0.7 MPa)
Max. permissible pressure (design pressure), heat exchanger, top	43.5 psi (0.3 MPa)
Test pressure, DHW tank	217.6 psi (1.50 MPa)
Max. flow rate	6.6 gpm (25 l/min)
Max. permissible pressure (design pressure), buffer tank	43.5 psi (0.3 MPa)
Test pressure, buffer tank	65.3 psi (0.45 MPa)
Maximum permissible temperature	192 °F (89 °C)
Heating water quality requirements	
Water hardness	≤50 ppm
pH value (with aluminum fittings)	8.0–8.5
pH value (without aluminum fittings)	8.0–10.0
Conductivity (softening)	< 1000 µS/cm
Conductivity (desalination)	20–100 µS/cm
Chloride	<30 ppm (<30 mg/l)
Oxygen 8–12 weeks after filling (softening)	<0.02 ppm (<0.02 mg/l)
Oxygen 8-12 weeks after filling (desalination)	<0.1 ppm (<0.1 mg/l)
Power consumption	
Max. power consumption, charging pump	60 W
Max. power consumption, circulation pump, heating side	60 W
Energy data	
Standby energy consumption/ 24 h at 149 °F (65 °C)	1.45 kWh
Electrical data	
Rated voltage, control unit	220–240 V
Phase, control unit	Single
Control unit circuit breaker	1 x 15 A
Values	
Nominal heating flow rate at A19/W95 and 13 °F rise	6.2 gpm (23.3 l/min)
Min. flow rate, heating	3.1 gpm (11.7 l/min)
Safety assembly, max. supply pressure	145 psi (1.0 MPa)
Recommended operating pressure, heating circuit	29 psi (0.2 MPa)
Recommended operating pressure, DHW	50.8 psi (0.35 MPa)
Pressure reducer, set value	50.8 psi (0.35 MPa)
T&P valve, nominal set temperature	194 °F (90 °C)
T&P valve, nominal set pressure	101.5 psi (0.7 MPa)
T&P valve, nominal diameter	¾″
Versions	
IP rating	IP20
Height	75 1/2″ (1918 mm)
Width	26 3/4″ (680 mm)
Depth	35 7/8″ (910 mm)
Height when tilted	83 5/8″ (2123 mm)
Weight, full	1413 lb (641 kg)
Weight, empty	551 lb (250 kg)

STIEBEL ELTRON

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Due to our continuous process of engineering and technological advancement, specifications may change without notice.

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