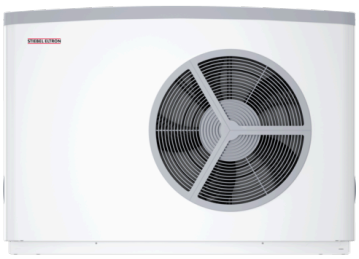
# Air source heat pumps

## WPL 25 ACS

ORDER NO: 236643



## WPL 25 AC

ORDER NO: 236645

## Key features

- The air source heat pump for heating and cooling is installed outdoors
- Inverter technology allows ideally matched heating output through the variable speed compressor
- Even at low outside temperatures, the enhanced vapour injection/enhanced saturated vapour injection of the heat pump achieves a high flow temperature
- Quiet operation thanks to encapsulated refrigerant circuit and variable matched fan speed
- Improved room climate in summer with active cooling using circuit reversal
- Low operating costs as mono mode DHW heating is possible
- Can be integrated into the home network and operated via a smartphone





| Type | WPL 25 AC<br>ORDER NO: 236645 | WPL 25 ACS<br>ORDER NO: 236643 |
|---|---|---|
| Order No | 236645 | 236643 |

## Energy data

| | | |
|---|---|---|
| Energy efficiency class, heat pump W35 (A+++ – D) | A+++ | A+++ |
| Energy efficiency class, heat pump W55 (A+++ – D) | A++ | A++ |
| SCOP 35 °C (EN 14825) | 4.76 | 4.53 |

## Heating output

| | | |
|---|---|---|
| Heating output at A7/W35 (min./max.) | 7,85/12,85 kW | 7,85/12,85 kW |
| Heating output at A2/W35 (min./max.) | 8,33/13,64 kW | 8,33/13,64 kW |
| Heating output at A-7/W35 (min./max.) | 6,16/12,86 kW | 6,16/12,86 kW |
| Heating output at A20/W35 (EN 14511) | 11.40 kW | |
| Heating output at A20/W55 (EN 14511) | 9.83 kW | |
| Heating output at A10/W35 (EN 14511) | 8.58 kW | 8.58 kW |
| Heating output at A7/W35 (EN 14511) | 7.84 kW | 8.00 kW |
| Heating output at A7/W45 (EN 14511) | 7.44 kW | 7.25 kW |
| Heating output at A7/W55 (EN 14511) | 7.36 kW | 7.52 kW |
| Heating output at A2/W35 (EN 14511) | 8.33 kW | 8.33 kW |
| Heating output at A2/W45 (EN 14511) | 8.49 kW | 8.49 kW |
| Heating output at A2/W55 (EN 14511) | 8.64 kW | 8.64 kW |
| Heating output at A-7/W35 (EN 14511) | 12.86 kW | 12.86 kW |

| | | |
|---|---|---|
| Heating output at A-7/W45 (EN 14511) | 13.80 kW | 13.06 kW |
| Heating output at A-7/W55 (EN 14511) | 13.93 kW | 13.97 kW |
| Heating output at A-7/W65 (EN 14511) | 14.30 kW | 14.30 kW |
| Heating output at A-15/W35 (EN 14511) | 12.05 kW | 11.96 kW |
| Heating output at A-15/W55 (EN 14511) | 12.52 kW | 13.10 kW |
| Cooling capacity at A35/W7, partial load (EN 14511) | 6.76 kW | 6.76 kW |
| Max. cooling capacity at A35/W7 | 14.88 kW | 14.88 kW |
| Cooling capacity at A35/W18, partial load (EN 14511) | 6.76 kW | 6.76 kW |
| Max. cooling capacity at A35/W18 | 17.06 kW | 17.06 kW |
| Heating output in reduced night mode A-7/W35 | 9.00 kW | 9.00 kW |
| Heating output in max. reduced night mode A-7/W35 | 7.85 kW | 7.85 kW |

## Power consumption

| | | |
|---|---|---|
| Power consumption at A20/W35 (EN 14511) | 1.77 kW | |
| Power consumption at A20/W55 (EN 14511) | 2.45 kW | |
| Power consumption at A10/W35 (EN 14511) | 1.64 kW | 1.64 kW |
| Power consumption at A7/W35 (EN 14511) | 1.54 kW | 1.66 kW |
| Power consumption at A7/W45 (EN 14511) | 1.97 kW | 1.97 kW |
| Power consumption at A7/W55 (EN 14511) | 2.33 kW | 2.33 kW |
| Power consumption at A7/W65 (EN 14511) | 3.28 kW | 3.28 kW |
| Power consumption at A2/W35 (EN 14511) | 2.01 kW | 2.01 kW |
| Power consumption at A2/W45 (EN 14511) | 2.54 kW | 2.54 kW |
| Power consumption at A2/W55 (EN 14511) | 3.06 kW | 3.06 kW |
| Power consumption at A-7/W35 (EN 14511) | 4.16 kW | 4.31 kW |
| Power consumption at A-7/W45 (EN 14511) | 5.23 kW | 5.22 kW |
| Power consumption at A-7/W55 (EN 14511) | 5,76 kW | 5,94 kW |

| | | |
|---|---|---|
| Power consumption at A-7/W65 (EN 14511) | 7.53 kW | 7.53 kW |
| Power consumption at A-15/W35 (EN 14511) | 4.48 kW | 4.56 kW |
| Power consumption at A-15/W55 (EN 14511) | 6.08 kW | 6.29 kW |

## Coefficients of performance

| | | |
|---|---|---|
| COP at A20/W35 (EN 14511) | 6.44 | |
| COP at A20/W55 (EN 14511) | 4.01 | |
| COP at A10/W35 (EN 14511) | 5.22 | 5.22 |
| COP at A7/W35 (EN 14511) | 5.09 | 4.82 |
| COP at A7/W45 (EN 14511) | 3.78 | 3.68 |
| COP at A7/W55 (EN 14511) | 3.16 | 3.23 |
| COP at A7/W65 (EN 14511) | 2.57 | 2.57 |
| COP at A2/W35 (EN 14511) | 4.14 | 4.14 |
| COP at A2/W45 (EN 14511) | 3.35 | 3.35 |
| COP at A2/W55 (EN 14511) | 2.82 | 2.82 |
| COP at A-7/W35 (EN 14511) | 2.93 | 2.98 |
| COP at A-7/W45 (EN 14511) | 2.64 | 2.50 |
| COP at A-7/W55 (EN 14511) | 2.42 | 2.35 |
| COP at A-7/W65 (EN 14511) | 1.90 | 1.90 |
| COP at A-15/W35 (EN 14511) | 2.69 | 2.62 |
| COP at A-15/W55 (EN 14511) | 2.06 | 2.08 |
| Energy efficiency ratio at A35/W7, partial load (EN 14511) | 2.93 | 2.93 |
| Energy efficiency ratio at A35/W7 max. | 2.38 | 2.38 |
| Energy efficiency ratio at A35/W18, partial load (EN 14511) | 3.76 | 3.76 |
| Energy efficiency ratio at A35/W18 max. | 2.83 | 2.83 |

## Sound emissions

| | | |
|---|---|---|
| Sound power level (EN 12102) | 55 dB(A) | 55 dB(A) |
| Max. sound power level | 66 dB(A) | 66 dB(A) |
| Sound power level, reduced night mode | 57 dB(A) | 57 dB(A) |
| Sound power level, max. reduced night mode | 55 dB(A) | 55 dB(A) |

## Application limits

| | | |
|---|---|---|
| Min. application limit, heat source | -20 °C | -20 °C |
| Max. application limit, heat source | 40 °C | 40 °C |
| Application limit, heat source at W60 | -20 °C | -20 °C |
| Application limit, heat source at W65 | -20 °C | -20 °C |
| Min. application limit on heating side | 15 °C | 15 °C |
| Max. application limit on the heating side | 65 °C | 65 °C |
| Min. cooling mode application limit for outside temperature | 15 °C | 15 °C |
| Max. cooling mode application limit for outside temperature | 40 °C | 40 °C |
| Operating pressure | 0.30 MPa | 0.30 MPa |

## Dimensions

| | | |
|---|---|---|
| Height | 1045 mm | 1045 mm |
| Width | 1490 mm | 1490 mm |
| Depth | 593 mm | 593 mm |

## Weights

| | | |
|---|---|---|
| Weight | 175 kg | 175 kg |

## Electrical data

| | | |
|---|---|---|
| Rated voltage, compressor | 400 V | 230 V |
| Rated voltage, emergency/auxiliary heater | 400 V | 230 V |
| Rated voltage, control unit | 230 V | 230 V |
| Phases, compressor | 3/N/PE | 1/N/PE |
| Phases, emergency/auxiliary heater | 3/N/PE | 2/N/PE |
| Phases, control unit | 1/N/PE | 1/N/PE |
| Compressor fuse protection | 3 x B 16 A | 1 x B 35 A |
| Emergency/auxiliary heater fuse protection | 3 x B 16 A | 2x B 16 A |
| Control unit fuse protection | 1 x B 16 A | 1 x B 16 A |
| Power consumption, emergency/auxiliary heater | 8.80 kW | 6.20 kW |
| Max. power consumption excl. emergency/auxiliary heater | 7.10 kW | 6.90 kW |
| Max. power consumption, heat pump fan | 0.20 kW | 0.20 kW |
| Starting current | 4 A | 10 A |
| Max. operating current | 10.20 A | 30.00 A |
| Max. current, blocked motor compressor | 38 A | 38 A |
| Power factor cos(phi) | 0.95/0.95 | 0.95/0.95 |

## Hydraulic data

| | | |
|---|---|---|
| Design flow rate A-7/W35 7K | 1.57 m³/h | 1.59 m³/h |

| | | |
|---|---|---|
| Internal pressure drop at design volume flow A-7/W35 7K | 100 hPa | 100 hPa |
| Heating flow rate (EN 14511) at A7/W35, B0/W35 and 5 K | 1.40 m³/h | 1.40 m³/h |
| Min. flow rate, heating | 1.00 m³/h | 1.00 m³/h |

## Values

| | | |
|---|---|---|
| Flow rate on heat source side | 4000 m³/h | 4000 m³/h |

## Versions

| | | |
|---|---|---|
| Refrigerant | R410A | R410A |
| Refrigerant charge | 5,5 kg | 5,5 kg |
| Global warming potential of the refrigerant (GWP100) | 2,088 | 2,088 |
| CO2 equivalent (CO2e) | 11.48 t | 11.48 t |
| IP rating | IP14B | IP14B |
| Defrost type | Circuit reversal | Circuit reversal |
| Frost protection | • | • |
| Colour | white | white |
| Condenser material | 1.4401/Cu | 1.4401/Cu |

## Connections

| | | |
|---|---|---|
| Connection, heating flow/return | 28 mm | 28 mm |

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## Contact information

You have questions? We appreciate to help you:

Call **+27 10 001 85 47** Write an email to **info@stiebel-eltron.co.za**

## Installation information

Please ask your local power supply utility or a registered electrician to install appliances that are not fully wired, i.e. ready to plug in. The electrician should also be able to assist you with obtaining the agreement of the respective power supply utility required for the appliance installation.

## Website

**www.stiebel-eltron.co.za**