Air source heat pumps

WPL-A 13.2 Trend HK 400

ORDER NO: 206119



WPL-A 07.2 Trend HK 230

ORDER NO: 206114

WPL-A 10.2 Trend HK 230

ORDER NO: 206116

WPL-A 13.2 Trend HK 230

ORDER NO: 206118

WPL-A 17.2 Trend HK 400

ORDER NO: 206120

Key features

- Air source heat pump installed outdoors for modernisation and new build
- Compact design for small wall clearances and flexible positioning
- Low costs and high living comfort thanks to efficient R290 refrigerant circuit
- Efficient cooling possible thanks to circuit reversal
- Multi stage safety concept for the R290 refrigerant circuit
- Many solutions for different applications possible with flexible installation options and customised accessories






Type	WPL-A 07.2 Trend HK 230 ORDER NO: 206114	WPL-A 10.2 Trend HK 230 ORDER NO: 206116	WPL-A 13.2 Trend HK 230 ORDER NO: 206118	WPL-A 13.2 Trend HK 400 ORDER NO: 206119
Order No	206114	206116	206118	206119
Energy data				
Energy efficiency class, heat pump W35 (A+++ – D)	A+++	A+++	A+++	A+++
Energy efficiency class, heat pump W55 (A+++ – D)	A+++	A++	A+++	A+++
SCOP 35 °C (EN 14825)	4.67	4.59	4.65	4.65
SCOP 55 °C (EN 14825)	3.83	3.79	3.85	3.85
	6.36	6.34	5.79	5.79
	4.63	4.64	4.70	4.70
Heating output				
Heating output at A7/W35 (min./max.)	2,76 / 8,14 kW	2,76 / 10,97 kW	3,69 / 13,92 kW	3,68 / 13,92 kW
Heating output at A2/W35 (min./max.)	2,36 / 6,76 kW	2,36 / 9,24 kW	3,05 / 11,99 kW	3,05 / 11,99 kW
Heating output at A-7/W35 (min./max.)	1,71 / 6,92 kW	1,71 / 9,49 kW	2,67 / 12,47 kW	2,67 / 12,47 kW
Heating output at A7/W35 (EN 14511)	2.91 kW	4.26 kW	5.56 kW	5.56 kW
Heating output at A7/W55 (EN 14511)	2.88 kW	3.70 kW	5.04 kW	5.04 kW
Heating output at A2/W35 (EN 14511)	4.24 kW	5.87 kW	4.09 kW	7.45 kW
Heating output at A2/W35 (EN 14511) with defrosting	4.24 kW	5.87 kW		7.45 kW
Heating output at A2/W55 (EN 14511)	4.12 kW	6.05 kW		7.38 kW
Heating output at A-7/W35 (EN 14511)	6.92 kW	9.49 kW	12.47 kW	12.47 kW
Heating output at A-7/W55 (EN 14511)	6.76 kW	9.66 kW	12.41 kW	12.41 kW

Heating output at A-7/W65 (EN 14511)	6.05 kW	8.40 kW	12.00 kW	12.00 kW
Heating output at A-7/W75 (EN 14511)	5.64 kW	6.99 kW	9.50 kW	9.50 kW
Cooling capacity at A35/W7, partial load (EN 14511)	2.34 kW	3.57 kW	3.53 kW	4.31 kW
Max. cooling capacity at A35/W7	6.04 kW	8.27 kW	9.56 kW	9.56 kW
Cooling capacity at A35/W18, partial load (EN 14511)	3.35 kW	3.96 kW	4.29 kW	4.99 kW
Max. cooling capacity at A35/W18	6.66 kW	8.94 kW	11.49 kW	11.49 kW

Power consumption

Power consumption at A7/W35 (EN 14511)	0.53 kW	0.79 kW	1.04 kW	1.04 kW
Power consumption at A7/W55 (EN 14511)	0.91 kW	1.11 kW	1.55 kW	1.55 kW
Power consumption at A2/W35 (EN 14511)	1.05 kW	1.48 kW	0.90 kW	1.91 kW
Power consumption at A2/W35 (EN 14511) with defrosting	1.05 kW	1.48 kW		1.91 kW
Power consumption at A2/W55 (EN 14511)	1.46 kW	2.11 kW	1.55 kW	2.62 kW
Power consumption at A-7/W35 (EN 14511)	2.43 kW	3.39 kW	4.54 kW	4.54 kW
Power consumption at A-7/W55 (EN 14511)	2,81 kW	4,07 kW	5,43 kW	5,43 kW
Power consumption at A-7/W65 (EN 14511)	3.14 kW	4.41 kW	6.04 kW	6.04 kW
Power consumption at A-7/W75 (EN 14511)	3.56 kW	4.48 kW	6.25 kW	6.25 kW

Coefficients of performance

COP at A7/W35 (EN 14511)	5.44	5.40	5.36	5.36
COP at A7/W55 (EN 14511)	3.15	3.33	3.24	3.24
COP at A2/W35 (EN 14511)	4.02	3.96	4.54	3.91
COP at A2/W35 (EN 14511) with defrosting	4.02	3.96		3.91
COP at A2/W55 (EN 14511)	2.82	2.86	2.98	2.82
COP at A-7/W35 (EN 14511)	2.84	2.80	2.75	2.75

COP at A-7/W55 (EN 14511)	2.41	2.37	2.29	2.29
COP at A-7/W65 (EN 14511)	1.93	1.90	1.99	1.99
COP at A-7/W75 (EN 14511)	1.58	1.56	1.52	1.52
Energy efficiency ratio at A35/W7, partial load (EN 14511)	3.80	3.83	3.87	3.43
Energy efficiency ratio at A35/W7 max.	2.80	2.52	2.70	2.70
Energy efficiency ratio at A35/W18, partial load (EN 14511)	5.18	5.24	5.45	4.81
Energy efficiency ratio at A35/W18 max.	3.70	3.65	3.61	3.60

Sound emissions

Sound power level (EN 12102)	44 dB(A)	46 dB(A)	49 dB(A)	49 dB(A)
Max. sound power level	59 dB(A)	63 dB(A)	66 dB(A)	66 dB(A)
Sound power level, max. reduced night mode	49 dB(A)	53 dB(A)	56 dB(A)	56 dB(A)

Application limits

Min. application limit, heat source	-25 °C	-25 °C	-25 °C	-25 °C
Max. application limit, heat source	40 °C	40 °C	40 °C	40 °C
Min. application limit on heating side	15 °C	15 °C	15 °C	15 °C
Max. application limit on the heating side	75 °C	75 °C	75 °C	75 °C
Min. cooling mode application limit for outside temperature	15 °C	15 °C	15 °C	15 °C
Max. cooling mode application limit for outside temperature	45 °C	45 °C	45 °C	45 °C
Min./max. application limit, heating, outside temperature	-25 / 40 °C	-25 / 40 °C	-25 / 40 °C	-25 / 40 °C
Min./max. application limit, heating, flow temperature	15 / 75 °C	15 / 75 °C	15 / 75 °C	15 / 75 °C
Min./max. application limit, cooling, outside temperature	15 / 45 °C	15 / 45 °C	15 / 45 °C	15 / 45 °C
Operating pressure	0.25 MPa	0.25 MPa	0.25 MPa	0.25 MPa

Dimensions

Height	960 mm	960 mm	1144 mm	1144 mm
Width	1170 mm	1170 mm	1170 mm	1170 mm
Depth	727 mm	727 mm	727 mm	727 mm

Weights

Weight	145 kg	146 kg	170 kg	170 kg

Electrical data

Rated voltage, compressor	230 V	230 V	230 V	400 V
Rated voltage, control unit	230 V	230 V	230 V	230 V
Phases, compressor	1/N/PE	1/N/PE	1/N/PE	1/N/PE
Phases, control unit	1/N/PE	1/N/PE	1/N/PE	1/N/PE
Compressor fuse protection	1 x B 16 A	1 x B 20 A	1 x B 32 A	3 x B 16 A
Control unit fuse protection	1 x B 16 A	1 x B 16 A	1 x B 16 A	1 x B 16 A
Max. power consumption, heat pump	3.6 kW	4.6 kW	6.5 kW	7.7 kW
Starting current	8.4 A	8.4 A		5.2 A
Max. operating current	15.90 A		28.10 A	11.60 A
Power factor cos(phi)	0.95	0.95		0.95
Frequency	50 Hz	50 Hz	50 Hz	50 Hz

Hydraulic data

Design flow rate A-7/W35 7K	0.90 m³/h	1.28 m³/h	1.63 m³/h	1.63 m³/h

Internal pressure drop at design volume rate	96 hPa	196 hPa		211 hPa
kVS value	2.87 m³/h	2.87 m³/h	3.53 m³/h	3.53 m³/h
Min. flow rate, heating	0.30 m³/h	0.30 m³/h	0.42 m³/h	0.42 m³/h
Min. flow rate, defrosting	0.53 m³/h	0.53 m³/h	0.72 m³/h	0.72 m³/h
Min. flow rate, cooling	0.66 m³/h	0.53 m³/h	0.72 m³/h	0.72 m³/h
Standard flow rate to EN 14511, low temperature application	0.5 m³/h	0.7 m³/h	1.0 m³/h	1.0 m³/h
Standard flow rate to EN 14511, average temperature application	0.3 m³/h	0.4 m³/h	0.6 m³/h	0.6 m³/h
Min. flow rate, heating	0.30 m³/h	0.30 m³/h	0.42 m³/h	0.42 m³/h

Values

Flow rate on heat source side	2990 m³/h	3750 m³/h	6100 m³/h	6100 m³/h

Versions

Refrigerant	R290	R290	R290	R290
Refrigerant charge	1,4 kg	1,4 kg	1,6 kg	1,6 kg
Global warming potential of the refrigerant (GWP100)	3	3	3	3
CO2 equivalent (CO2e)	0.0042 t	0.0042 t	0.0048 t	0.0048 t
IP rating	IP14B	IP14B	IP14B	IP14B
Defrost type	Circuit reversal	Circuit reversal	Circuit reversal	Circuit reversal
Frost protection	•	•	•	•
Colour	Dark grey RAL 7021	Dark grey RAL 7021	Dark grey RAL 7021	Dark grey RAL 7021
Condenser material	1.4401/Cu	1.4401/Cu	1.4401/Cu	1.4401/Cu

Connections

Connection, heating flow/return	G 1 1/4 A	G 1 1/4 A	G 1 1/4 A	G 1 1/4 A



Type	WPL-A 17.2 Trend HK 400 ORDER NO: 206120
Order No	206120

Energy data

Energy efficiency class, heat pump W35 (A+++ – D)	A+++
Energy efficiency class, heat pump W55 (A+++ – D)	A+++
SCOP 35 °C (EN 14825)	4.55
SCOP 55 °C (EN 14825)	3.83
	6.52
	4.98

Heating output

Heating output at A7/W35 (min./max.)	5,11 / 19,64 kW kW
Heating output at A2/W35 (min./max.)	4,36 / 17,93 kW kW
Heating output at A-7/W35 (min./max.)	3,21 / 17,36 kW kW
Heating output at A7/W35 (EN 14511)	7.96 kW
Heating output at A7/W55 (EN 14511)	6.48 kW
Heating output at A2/W35 (EN 14511)	10.29 kW
Heating output at A2/W35 (EN 14511) with defrosting	10.29 kW
Heating output at A2/W55 (EN 14511)	11.05 kW

Heating output at A-7/W35 (EN 14511)	17.36 kW
Heating output at A-7/W55 (EN 14511)	17.88 kW
Heating output at A-7/W65 (EN 14511)	16.62 kW
Heating output at A-7/W75 (EN 14511)	15.47 kW
Cooling capacity at A35/W7, partial load (EN 14511)	5.20 kW
Max. cooling capacity at A35/W7	9.75 kW
Cooling capacity at A35/W18, partial load (EN 14511)	7.13 kW
Max. cooling capacity at A35/W18	15.55 kW

Power consumption

Power consumption at A7/W35 (EN 14511)	1.51 kW
Power consumption at A7/W55 (EN 14511)	1.93 kW
Power consumption at A2/W35 (EN 14511)	2.63 kW
Power consumption at A2/W35 (EN 14511) with defrosting	2.63 kW
Power consumption at A2/W55 (EN 14511)	3.85 kW
Power consumption at A-7/W35 (EN 14511)	6.61 kW
Power consumption at A-7/W55 (EN 14511)	7,98 kW
Power consumption at A-7/W65 (EN 14511)	9.30 kW
Power consumption at A-7/W75 (EN 14511)	9.82 kW

Coefficients of performance

COP at A7/W35 (EN 14511)	5.29
COP at A7/W55 (EN 14511)	3.36
COP at A2/W35 (EN 14511)	3.91
COP at A2/W35 (EN 14511) with defrosting	3.91

COP at A2/W55 (EN 14511)	2.87
COP at A-7/W35 (EN 14511)	2.62
COP at A-7/W55 (EN 14511)	2.24
COP at A-7/W65 (EN 14511)	1.79
COP at A-7/W75 (EN 14511)	1.58
Energy efficiency ratio at A35/W7, partial load (EN 14511)	3.73
Energy efficiency ratio at A35/W7 max.	3.16
Energy efficiency ratio at A35/W18, partial load (EN 14511)	5.13
Energy efficiency ratio at A35/W18 max.	3.75

Sound emissions

Sound power level (EN 12102)	52 dB(A)
Max. sound power level	67 dB(A)
Sound power level, max. reduced night mode	57 dB(A)

Application limits

Min. application limit, heat source	-25 °C
Max. application limit, heat source	40 °C
Min. application limit on heating side	15 °C
Max. application limit on the heating side	75 °C
Min. cooling mode application limit for outside temperature	15 °C
Max. cooling mode application limit for outside temperature	45 °C
Min./max. application limit, heating, outside temperature	-25 / +40 °C °C
Min./max. application limit, heating, flow temperature	+15 / +75 °C °C

Min./max. application limit, cooling, outside temperature	15 / 45 °C °C
Operating pressure	0.25 MPa

Dimensions

Height	1365 mm
Width	1170 mm
Depth	727 mm

Weights

Weight	206 kg

Electrical data

Rated voltage, compressor	400 V
Rated voltage, control unit	230 V
Phases, compressor	3/N/PE
Phases, control unit	1/N/PE
Compressor fuse protection	3 x B 16 A A
Control unit fuse protection	1 x B 16 A A
Max. power consumption, heat pump	10.2 kW
Starting current	4.8 A
Max. operating current	15.40 A
Power factor cos(phi)	0.95
Frequency	50 Hz

Hydraulic data

Design flow rate A-7/W35 7K	2.29 m³/h
Internal pressure drop at design volume rate	357 hPa
kVS value	3.83 m³/h
Min. flow rate, heating	0.54 m³/h
Min. flow rate, defrosting	0.90 m³/h
Min. flow rate, cooling	0.90 m³/h
Standard flow rate to EN 14511, low temperature application	1.4 m³/h
Standard flow rate to EN 14511, average temperature application	0.7 m³/h
Min. flow rate, heating	0.54 m³/h

Values

Flow rate on heat source side	7120 m³/h

Versions

Refrigerant	R290
Refrigerant charge	2,15 kg
Global warming potential of the refrigerant (GWP100)	3
CO2 equivalent (CO2e)	0.0065 t
IP rating	IP14B
Defrost type	Circuit reversal
Frost protection	•
Colour	Dark grey RAL 7021

Condenser material	1.4401/Cu

Connections

Connection, heating flow/return	G 1 1/4 A

STIEBEL ELTRON

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