

HPA-O 07.2 Plus HC 230

AIR SOURCE HEAT PUMPS

PRODUCT-NO.: 207430

Application • Air source heat pump with inverter technology and all-in-one design for universal use in modernisation and new build. Compact mono block version for siting outdoors. Thanks to minimal operating noise, it is also suitable for densely built-up areas. Low operating costs through high efficiency all year round. • Indoor modules with different storage volumes are available depending on the DHW demand. The system delivers the required heating output, ensures a reliable supply of domestic hot water and can be used for efficient cooling through circuit reversal. • The WPM heat pump manager (accessory at extra cost) controls the system reliably and efficiently with a connection to the STIEBEL ELTRON Servicewelt. • Cascade solution of up to six heat pumps possible. • Extended, three-stage safety concept for reliable protection of the heating circuit against refrigerant ingress.

Convenience features • Very quiet operation is made possible by the encapsulated refrigerant circuit and acoustically isolated compressor. Contributing to the low sound power level are the modulating fans and the wide gaps between the evaporator fins which reduce air resistance. • Very low operating noise and therefore free choice of installation location. Additional, dB-precise and demand-orientated sound limitation with silent mode. • High DHW temperatures are assured without the need for electric backup, even in the winter; this is because the heat pump works with high flow temperatures all year round. • The consistent design delivers a timeless and high quality aesthetic.

Installation • Easier transport and placement thanks to the innovative carrying concept, compact dimensions and low weight. • Quick installation thanks to integral anti-vibration mount, no additional components required. • Easy access to the electrical connection panel at the side, secure connection thanks to spring terminal technology. • Siting and connection of the components is supported and simplified by coordinated accessories in the product range.

Efficiency • The refrigerant circuit works with the eco-friendly and futureproof refrigerant R290. In combination with the optimally and generously matched components, efficient operation is possible all year round. • Further increase in system efficiency by optimising the number of defrosting processes with demand-dependent control and natural defrosting without using the compressor.



HPA-O 10.2 Plus HC 400

Product-No.: 207433



HPA-O 13.2 Plus HC 400

Product-No.: 207435

The main features

Air source heat pump installed outdoors for modernisation and new build

Also suitable for densely built-up areas due to very low operating noise

Low costs thanks to R290 refrigerant circuit remaining efficient all year round, as well as optimally matched components

Compact mono block version in a timeless design

Efficient cooling possible thanks to circuit reversal

Many solutions for different applications possible with flexible installation options and customised accessories

Multi stage safety concept for the R290 refrigerant circuit



Type	HPA-O 07.2 Plus HC 230	HPA-O 10.2 Plus HC 400	HPA-O 13.2 Plus HC 400
Part no.	207430	207433	207435

Energy data

Energy efficiency class, heat pump W35 (A+++ → D)	A+++	A+++	A+++
Energy efficiency class, heat pump W55 (A+++ → D)	A+++	A+++	A+++
SCOP 35 °C (EN 14825)	5.09	4.96	4.89

Heating output

Heating output at A7/W35 (min./max.)	2,76 / 8,47 kW	3,69 / 11,97 kW	5,11 / 15,31 kW
Heating output at A2/W35 (min./max.)	2,36 / 6,96 kW	3,05 / 9,84 kW	4,36 / 13,04 kW
Heating output at A-7/W35 (min./max.)	1,71 / 7,09 kW	2,67 / 10,07 kW	3,21 / 13,15 kW
Heating output at A7/W35 (EN 14511)	3.05 kW	4.32 kW	5.79 kW
Heating output at A7/W55 (EN 14511)	2.65 kW	4.05 kW	5.10 kW
Heating output at A2/W35 (EN 14511)	3.29 kW	4.09 kW	4.82 kW
Heating output at A2/W35 (EN 14511) with defrosting	4.30 kW	5.92 kW	8.10 kW
Heating output at A2/W55 (EN 14511)	4.43 kW	6.14 kW	8.14 kW
Heating output at A-7/W35 (EN 14511)	7.09 kW	10.07 kW	13.15 kW
Heating output at A-7/W55 (EN 14511)	7.09 kW	10.02 kW	13.11 kW
Heating output at A-7/W65 (EN 14511)	6.71 kW	9.65 kW	12.89 kW
Heating output at A-7/W75 (EN 14511)	5.64 kW	9.00 kW	12.32 kW
Cooling capacity at A35/W7 partial load	2.32 kW	3.53 kW	4.29 kW
Max. cooling capacity at A35/W7	6.51 kW	9.33 kW	10.09 kW

Cooling capacity at A35/W18 partial load	3.15 kW	4.29 kW	5.81 kW
Max. cooling capacity at A35/W18	6.98 kW	10.51 kW	12.95 kW

Power consumption

Power consumption at A7/W35 (EN 14511)	0.56 kW	0.80 kW	1.07 kW
Power consumption at A7/W55 (EN 14511)	0.83 kW	1.27 kW	1.56 kW
Power consumption at A2/W35 (EN 14511)	0.72 kW	0.90 kW	1.09 kW
Power consumption at A2/W35 (EN 14511) with defrosting	1.01 kW	1.41 kW	1.97 kW
Power consumption at A2/W55 (EN 14511)	1.56 kW	2.12 kW	
Power consumption at A-7/W35 (EN 14511)	2.18 kW	3.20 kW	
Power consumption at A-7/W55 (EN 14511)	2,74 kW	4,04 kW	5,24 kW
Power consumption at A-7/W65 (EN 14511)	3.37 kW	4.79 kW	6.41 kW
Power consumption at A-7/W75 (EN 14511)	3.57 kW	5.88 kW	7.63 kW

Coefficients of performance

COP at A7/W35 (EN 14511)	5.50	5.40	5.41
COP at A7/W55 (EN 14511)	3.19	3.18	3.26
COP at A2/W35 (EN 14511)	4.57	4.54	4.41
COP at A2/W35 (EN 14511) with defrosting	4.26	4.21	4.10
COP at A2/W55 (EN 14511)	2.84	2.90	2.89
COP at A-7/W35 (EN 14511)	3.25	3.15	3.11
COP at A-7/W55 (EN 14511)	2.58	2.48	2.50
COP at A-7/W65 (EN 14511)	1.99	2.02	2.01
COP at A-7/W75 (EN 14511)	1.58	1.53	1.62
Energy efficiency ratio at A35/W7 partial load	3.83	3.87	3.95
Energy efficiency ratio at A35/W7 max.	2.97	2.76	3.14
Energy efficiency ratio at A35/W18 partial load	5.29	5.46	5.41

Energy efficiency ratio at A35/W18 max.

4.28

4.01

4.11

Sound emissions

Sound power level (EN 12102)

43 dB(A)

46 dB(A)

45 dB(A)

Max. sound power level

57 dB(A)

59 dB(A)

60 dB(A)

Sound power level, max. reduced night mode

47 dB(A)

49 dB(A)

50 dB(A)

Application limits

Max. application limit on the heating side

75 °C

75 °C

75 °C

Min./max. application limit, heating, outside temperature

-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

Min./max. application limit, cooling, outside temperature

15 / 45 °C

15 / 45 °C

15 / 45 °C

Operating pressure

0.25 MPa

0.25 MPa

0.25 MPa

Dimensions

Height

960 mm

1144 mm

1365 mm

Width

1170 mm

1170 mm

1170 mm

Depth

727 mm

727 mm

727 mm

Weights

Weight

145 kg

166 kg

205 kg

Electrical data

Rated voltage, compressor

230 V

400 V

400 V

Rated voltage, control unit	230 V	230 V	230 V
Phases, compressor	1/N/PE	3/N/PE	3/N/PE
Phases, control unit	1/N/PE	1/N/PE	1/N/PE
Compressor fuse protection	1 x B 16 A	3 x B 10 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
Max. power consumption, heat pump	3.7 kW	6.8 kW	8.3 kW
Starting current	15.5 A	9.7 A	13 A
Max. operating current	15.50 A	9.70 A	13.00 A
Power factor cos(phi)	0.95	0.95	0.95
Frequency	50 Hz	50 Hz	50 Hz

Hydraulic data

Nominal design flow rate of heating system at A-7/W35 and 7 K	0.30 m³/h		
Design flow rate A-7/W35 7K	0.92 m³/h	1.31 m³/h	1.74 m³/h
Internal pressure drop at design volume rate	102 hPa	137 hPa	207 hPa
kVS value	2.87 m³/h	3.53 m³/h	3.83 m³/h
Min. flow rate, heating	0.30 m³/h	0.42 m³/h	0.54 m³/h
Min. flow rate, defrosting	0.53 m³/h	0.72 m³/h	0.90 m³/h
Standard flow rate to EN 14511, low temperature application	0.5 m³/h	0.8 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
Min. flow rate, heating	0.30 m³/h	0.42 m³/h	0.54 m³/h

Values

Flow rate on heat source side	2990 m³/h	4600 m³/h	5780 m³/h
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Versions

Refrigerant	R290	R290	R290
Refrigerant charge	1,4 kg	1,6 kg	2,15 kg
Global warming potential of the refrigerant (GWP100)	3	3	3
CO2 equivalent (CO2e)	0.0042 t	0.0048 t	0.00645 t
IP rating	IP14B	IP14B	IP14B
Defrost type	Circuit reversal	Circuit reversal	Circuit reversal
Frost protection	•	•	•
Colour	anthracite	anthracite	anthracite
Condenser material	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
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Contact information

Do you have additional questions? Then please do not hesitate to contact us, we would be only too happy to help:

Call 0151 346 2300

Or send an e-mail to

sales@stiebel-eltron.co.uk

Only a qualified contractor should carry out the installation, commissioning, maintenance and repair of this appliance. Where applicable and prior to installation the electricity and/or water utility companies should be notified of your intention to install the product.