

AIR EAGLE 414 C11B G1-1

HIGH EFFICIENCY AIR/WATER HEAT PUMP INCL. HORIZONTAL SPLIT EVAPORATOR

ORDER NUMBER: 285630

SERIES: G1-1

TF MAX. 65 °C

SPLIT

APPLIANCE DATA

Dimensions of outdoor unit HxWxD	[mm]	1260x1480x965
Dimensions of indoor unit HxWxD	[mm]	1150x400x650
Hydraulic connection	[inch]	1" fem.
Weight of outdoor unit	[kg]	200
Weight of indoor unit	[kg]	75
Casing colour		Tiger white 29/11289/grey RAL 7016

SPECIFICATION

Phases/nominal voltage/frequency Outdoor unit, controller	[-]/[V]/[Hz]	1/230/50
Phases/nominal voltage/frequency Electric immersion heater	[-]/[V]/[Hz]	3/400/50 or 1/230/50
Electric immersion heater internal	[kW]	8.8 (2.6/3.0/3.2)
Output factor cos φ		0,93
Fuse protection (tripping curve "C")	[A]	20
Max. operating current	[A]	20,00
Max. starting current, compressor	[A]	< 10,00
Sound power/sound pressure level (at 3 m distance), indoor unit	[dBA]**	< 50,00 / 32,00
Sound power level (A7/W35)/sound pressure level (at 10 m distance), outdoor unit	[dBA]	57,0 / 29,0

HEATING MODE PERFORMANCE FIGURES (to EN 14511)

Standard point A7/W35

Heating output range	[kW]	3.50 - 10.60
Heating output/power consumption	[kW]	6.00 / 1.30
COP		4,50

Operating point A2/W35

Heating output range	[kW]	3.10 - 10.20
Heating output/power consumption	[kW]	5.50 / 1.40
COP		4,00

Standard point A7/W55

Heating output range	[kW]	3.90 - 11.00
Heating output/power consumption	[kW]	6.40 / 2.10
COP		3,10

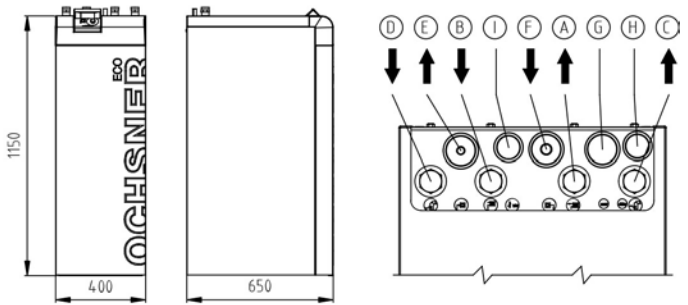
Standard point A-7/W34

Heating output range	[kW]	2.60 - 8.60
Heating output/power consumption	[kW]	7.80 / 2.70
COP		2,90

COOLING MODE PERFORMANCE FIGURES

Operating point A35/W18

Cooling capacity range	[kW]	2.60 - 6.60
Nominal cooling capacity	[kW]	5,60
Total nominal power consumption	[kW]	1,70
Energy efficiency ratio EER at nominal output		3,30



Indoor unit

- (A) FL heating/cooling
- (B) RTN heating/cooling
- (C) FL DHW charging
- (D) RTN DHW charging
- (E) Refrigerant line LL (liquid line)
- (F) Refrigerant line HG (hot gas line)
- (G) Controller 230 V
- (H) booster heater 400 V/230 V
- (I) Sensor < 12 V

CONDENSER

Type		Plate heat exchanger
Material		Stainless steel 1.4301
Max. refrigerant operating pressure	[bar]	45
Max. heat transfer medium operating pressure	[bar]	3
Heat transfer medium temperature differential	[K]	5
Application range	[°C]	65
Heat transfer medium		Water
Test pressure	[bar]	78
Heat transfer medium flow rate	[m³/h]	1,40
Internal pressure differential	[mbar]	160
Flow meter FM standard	Internal	built-in
Circulation pump heat sink WNA	Internal	Yonos Para HPS15/7.5
Residual head I WNA external, incl. FM	[mbar]	590

REFRIGERANT CIRCUIT

Refrigerant		R410A
Defrost technology		Hot gas
Refrigerant charge (from-to)	[kg]	5,5-9,0

COMPRESSOR

Type		Scroll
Output levels		Infinitely variable
Speed	[rpm]	2100-7000
Voltage/frequency	[V]/[Hz]	230/50

FAN

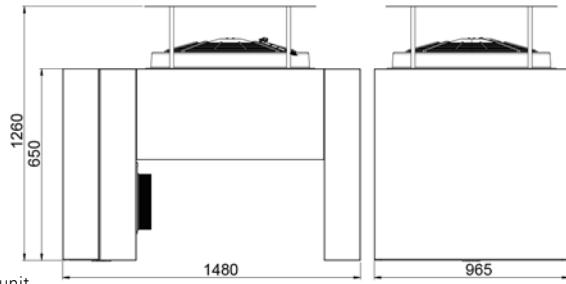
Type		axial
Number	[pce]	1
Voltage/frequency	[V]/[Hz]	230/50
Power consumption	[W]	230

EVAPORATOR

Unit type		built-in
Type		Finned tube
Number	[pce]	1
Fin pack material		Copper/aluminium
Casing material		Stainless steel / powder coated, grey RAL 7016
Max. refrigerant operating pressure	[bar]	40
Relative humidity	[%]	80
Heat transfer medium temperature differential	[K]	5,70
Air flow rate	[m³/h]	4000
Application range min./max	[°C]	-25 / 40

*Starting current, compressor with locked rotor

**Sound pressure level measured in a free field; sound power levels measured at max. nominal speed



Outdoor unit



PRODUCT DATA **ErP: AIR EAGLE 414 C11B G1-1**

	COLDER	MEAN	HOTTER
LOW TEMPERATURE	A++	35°C	
η_s	141	161	191
Energy consumption [kWh]	7273	5177	2641
P rated [kW]	10	10	9
SCOP	3,60	4,10	4,85
MEDIUM TEMPERATURE	A++	55°C	
η_s	118	132	152
Energy consumption [kWh]	9081	6197	3452
P rated [kW]	11	10	10
SCOP	3,02	3,36	3,87
DHW	A	SP300	
η_{WH}	87	95	110
Energy consumption [kWh]	1638	1497	1299
Draw-off profile		XL	
Tank losses [W]		94	

RECOMMENDED ACCESSORIES

Heat pump buffer tank	PU200 (optional)	30 l/kWh, P min. at A20
DHW tank	SP350	30 l/kWh at P min. 8 kW
3-way switching module	built-in	
External PHE for DHW heating	PHE 2007 as of SP300	Primary 1" / 20 mbar Secondary 1" / 16 mbar

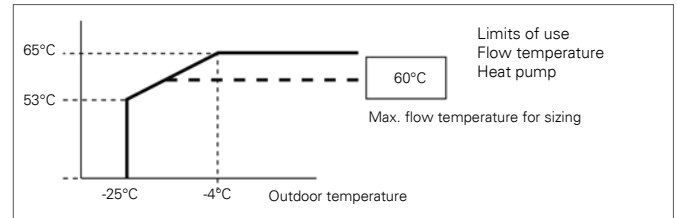
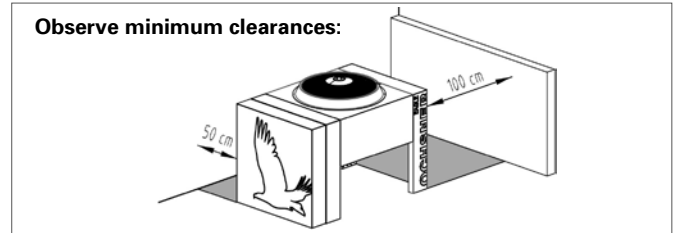
Application	Booster heater output
Bivalent parallel	Sizing according to calculated value (offer program), but with minimum 50% of building heat load
Bivalent partial parallel	Sizing to 100% of building heat load
Bivalent alternative	Sizing to 100% of building heat load

	Max. connection length	Max. height differential
AIR EAGLE 414 C11B G1-1	L ≤ 25	Hmax ≤ 15

	indoor	outdoor
Sound power level [dBA]	-	57
Controller class with room remote control	VI	Controller contribution [%] 4,0
Controller class without room remote control	II	Controller contribution [%] 2,0

LIMITS OF USE AIR EAGLE 414 C11B G1-1

Outdoor temperature/max. heat pump flow temperature	A-10/W60°C A-15/W58°C A-20/W55°C
Underfloor heating (-15°C / 35°C)	YES
Radiators (-15°C / 55°C)	YES
Radiators (-15°C / 60°C)	YES
Domestic hot water	YES



PERFORMANCE CURVES AIR EAGLE 414 C11B G1-1

