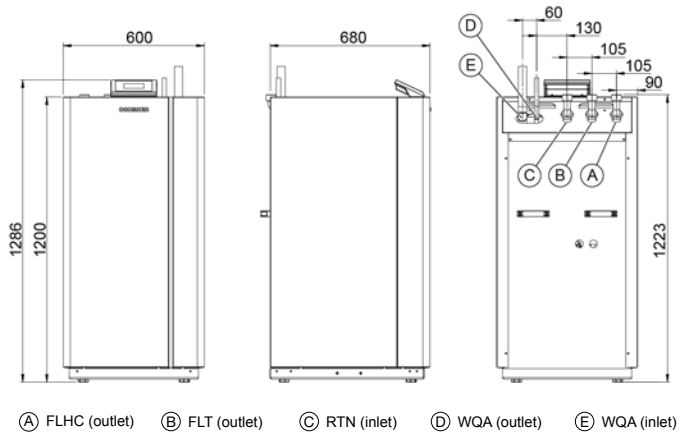


# AIR 11 C11B

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

ORDER NUMBER: 287022  
SERIES: M2  
TF MAX. 65 °C  
SPLIT



(A) FLHC (outlet) (B) FLT (outlet) (C) RTN (inlet) (D) WQA (outlet) (E) WQA (inlet)

## APPLIANCE DATA

Dimensions HxWxD	[mm]	1285x600x681
Hydraulic connection	[inch]	1 1/4"
Weight	[kg]	124
Casing colour		White/anthracite

## HEATING MODE PERFORMANCE FIGURES (to EN 14511)

### Standard point A10/W35

Heating output	[kW]	11,10
Total power consumption / operating current	[kW]/[A]	2.50 / 12.90
COP		4,40

### Operating point A7/W35

Heating output	[kW]	10,20
Total power consumption / operating current	[kW]/[A]	2.40 / 12.40
COP		4,30

### Standard point A2/W35

Heating output	[kW]	8,90
Total power consumption / operating current	[kW]/[A]	2.30 / 11.60
COP		4,00

### Standard point L-7/W35

Heating output	[kW]	6,90
Total power consumption / operating current	[kW]/[A]	2.20 / 11.50
COP		3,10

### Operating point L-10/W35

Heating output	[kW]	6,30
Total power consumption / operating current	[kW]/[A]	2.10 / 10.90
COP		3,00

### Operating point A2/W50

Heating output	[kW]	8,50
Total power consumption / operating current	[kW]/[A]	3.00 / 15.50
COP		2,80

### Operating point A2/W60

Heating output	[kW]	8,40
Total power consumption / operating current	[kW]/[A]	3.30 / 17.10
COP		2,50

## COOLING MODE PERFORMANCE FIGURES

### Operating point A30/W18

Cooling capacity	[kW]	9,50
Total power consumption / operating current	[kW]/[A]	3.20 / 16.60
Energy efficiency ratio EER		3,00

### Operating point A30/W7

Cooling capacity	[kW]	8,60
Total power consumption / operating current	[kW]/[A]	3.10 / 16.00
Energy efficiency ratio EER		2,80

## SPECIFICATION

Phases/nominal voltage/frequency	[~]/[V]/[Hz]	1/230/50
Output factor cos φ		0,84
Fuse protection (tripping curve "C")	[A]	25
Max. operating current	[A]	20,80
Max. starting current/max. with soft start	[A]	97.00 / 48.50
Sound power/sound pressure level (at 1 m distance) indoor unit	[dBA]	44.50 / 36.50
Sound power/sound pressure level (at 10 m distance), outdoor unit	[dBA]	50,4 / 22,4

## CONDENSER

Type	Plate heat exchanger	
Material	Stainless steel 1.4301	
Max. refrigerant operating pressure	[bar]	30
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]	45
Heat transfer medium flow rate	[m³/h]	1,70
Internal pressure differential	[mbar]	205
Flow meter (FM)	Internal	Installed as
Circulation pump heat sink (WNA)	Internal	Yonos Para HPS 25/7.5
Residual head I WNA external	[mbar]	446

## REFRIGERANT CIRCUIT

Refrigerant	R407C	
Defrost technology	Hot gas	
Refrigerant charge	[kg]	9

## COMPRESSOR

Type	Scroll	
Output levels	1	
Speed	[rpm]	2900
Voltage/frequency	[V]/[Hz]	230/50

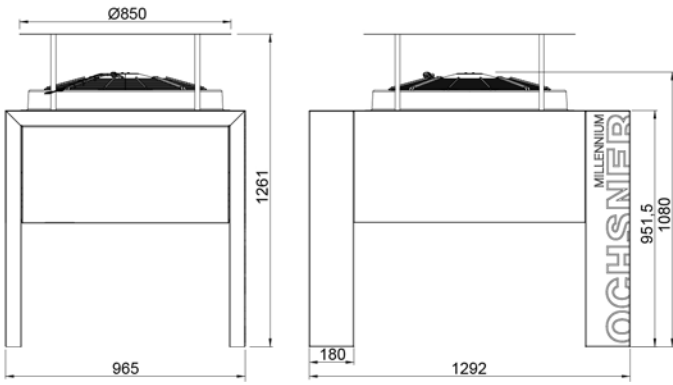
## FAN

Type	axial	
Number	[pce]	1
Voltage/frequency	[V]/[Hz]	230/50
Power consumption	[W]	1 x 40
Max. operating current	[A]	1 x 1.40

## EVAPORATOR

Unit type	VHS-M 9	
Dimensions HxWxD	[mm]	1080x1290x960
Type	Finned tube	
Number	[pce]	1
Weight	[kg]	93
Fin pack material	Copper/ aluminium	
Casing material	Stainless steel / coated	
Max. refrigerant operating pressure	[bar]	30
Relative humidity	[%]	80
Heat transfer medium temperature differential	[K]	5,70
Air flow rate	[m³/h]	3000
Application range min./max	[°C]	-22 / 40

Hydraulic version			Electric immersion heater		3-way switching module	
			Internal	external	Internal	external
M2-1	M4-1		x		x	
M2-2	M4-2			x	x	
M2-3	M4-3		x			x
M2-4	M4-4	M6		x		x



SPLIT EVAPORATOR VHS-M 9

**RECOMMENDED ACCESSORIES**

	Order no./type	Description	Pressure loss
Heat pump buffer tank	min. PU300	30 l/kW at L2/W35	-
DHW tank	min. SP300/SP350	30 l/kW at L2/W50	-
External plate heat exchanger (DHW/911251 heating)	PHE 2007	Prim.: 1" Sec.: 1"	Prim.: 65 mbar Sec.: 72 mbar
3-way switching module internal	980198	-	-
3-way switching module external	290229	DN32 (1 1/4") kvs 16	11 mbar
Electric immersion heater internal	980197	8.8 kW (2.9 / 2.9 / 2.9)	-
External electric immersion heater (heat pump buffer tank)	922509	9 kW	-

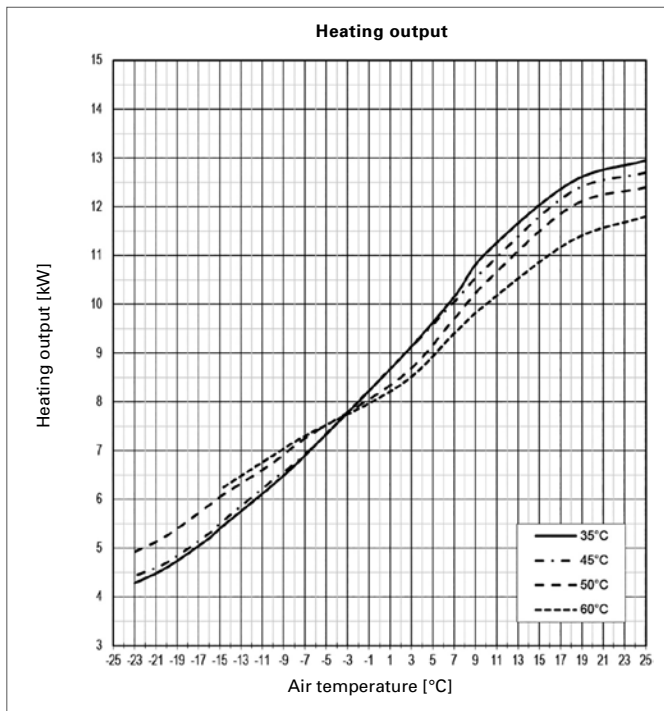
Application	Booster heater output
Bivalent <b>parallel</b>	Sizing according to calculated value (offer program), but with minimum 50% of building heat load
Bivalent <b>partial parallel</b>	Sizing to 100% of building heat load
Bivalent <b>alternative</b>	Sizing to 100% of building heat load

	Max. connection length	Max. height differential
AIR 11 C11B	L ≤ 20	Hmax ≤ 10

**LIMITS OF USE AIR 11 C11B**

Outdoor temperature/max. heat pump flow temperature	A-10/W65°C A-15/W60°C A-20/W55°C
Underfloor heating (-15°C / 35°C)	YES
Radiators (-15°C / 50°C)	YES
Radiators (-15°C / 55°C)	YES
Radiators (-15°C / 65°C)	YES
Radiators (-15°C / 65°C)	Booster heater should be sized for 100% heat load
Domestic hot water	YES

**PERFORMANCE CURVES AIR 11 C11B**



**PRODUCT DATA ErP: AIR 11 C11B**

	COLDER	MEAN	HOTTER
<b>LOW TEMPERATURE</b> <b>A++</b>		<b>35°C</b>	
ηs	153	<b>166</b>	185
Energy consumption [kWh]	3239	<b>3757</b>	2509
P rated [kW]	5	<b>8</b>	9
SCOP	3,90	<b>4,21</b>	4,69
<b>MEDIUM TEMPERATURE</b> <b>A++</b>		<b>55°C</b>	
ηs	122	<b>129</b>	139
Energy consumption [kWh]	5589	<b>5412</b>	3229
P rated [kW]	7	<b>9</b>	9
SCOP	3,12	<b>3,30</b>	3,54
<b>DHW</b> <b>A</b>		<b>SP300</b>	
ηWH	82	<b>90</b>	104
Energy consumption [kWh]	1728	<b>1580</b>	1371
Draw-off profile		<b>XL</b>	
Tank losses [W]		<b>94</b>	
		indoor	outdoor
Sound power level [dBA]		44,5	50,4
Controller class with room remote control	VII	Controller contribution [%]	3,5
Controller class without room remote control	III	Controller contribution [%]	1,5

