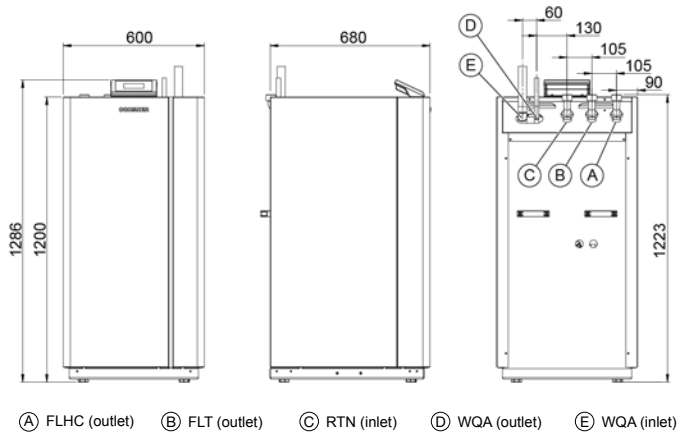


AIR 11 C11A

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

ORDER NUMBER: 287020
SERIES: M2
TF MAX. 65 °C
SPLIT



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]	11,00
Total power consumption / operating current	[kW]/[A]	2.30 / 4.70
COP		4,90

Operating point A7/W35

Heating output	[kW]	10,20
Total power consumption / operating current	[kW]/[A]	2.30 / 4.50
COP		4,50

Standard point A2/W35

Heating output	[kW]	8,80
Total power consumption / operating current	[kW]/[A]	2.20 / 4.40
COP		4,00

Standard point L-7/W35

Heating output	[kW]	6,80
Total power consumption / operating current	[kW]/[A]	2.00 / 4.20
COP		3,30

Operating point L-10/W35

Heating output	[kW]	6,20
Total power consumption / operating current	[kW]/[A]	2.00 / 4.10
COP		3,10

Operating point A2/W50

Heating output	[kW]	7,90
Total power consumption / operating current	[kW]/[A]	2.80 / 5.80
COP		2,80

Operating point A2/W60

Heating output	[kW]	7,60
Total power consumption / operating current	[kW]/[A]	3.20 / 6.60
COP		2,40

COOLING MODE PERFORMANCE FIGURES

Operating point A30/W18

Cooling capacity	[kW]	9,60
Total power consumption / operating current	[kW]/[A]	3.00 / 6.20
Energy efficiency ratio EER		3,20

Operating point A30/W7

Cooling capacity	[kW]	8,70
Total power consumption / operating current	[kW]/[A]	2.90 / 6.00
Energy efficiency ratio EER		3,00

SPECIFICATION

Phases/nominal voltage/frequency	[~]/[V]/[Hz]	3/400/50
Output factor cos φ		0,70
Fuse protection (tripping curve "C")	[A]	10
Max. operating current	[A]	7,90
Max. starting current/max. with soft start	[A]	40.00 / 20.00
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] 400/50

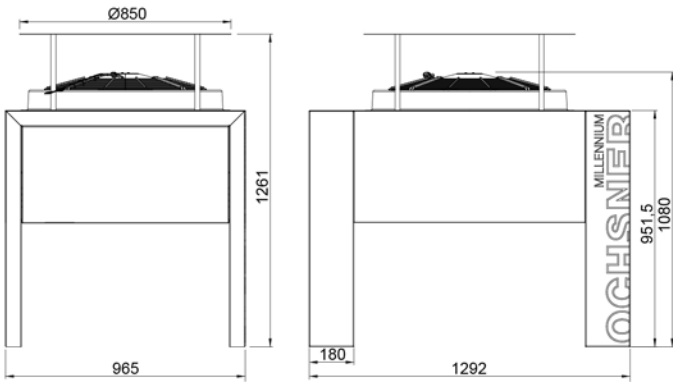
FAN

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	-

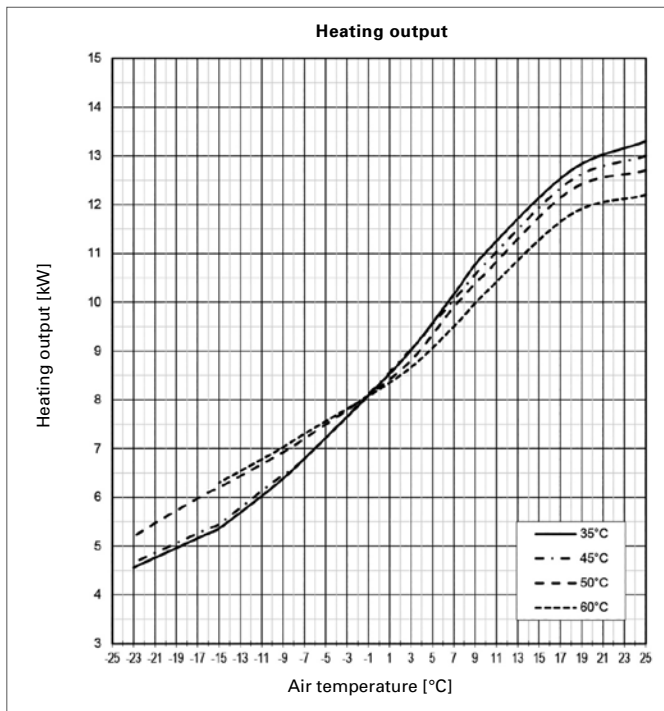
Application	Booster heater output
Bivalent parallel	Sizing according to calculated value (offer program), but with minimum 50% of building heat load
Bivalent partial parallel	Sizing to 100% of building heat load
Bivalent alternative	Sizing to 100% of building heat load

	Max. connection length	Max. height differential
AIR 11 C11A	L ≤ 20	Hmax ≤ 10

LIMITS OF USE AIR 11 C11A

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 C11A



PRODUCT DATA ErP: AIR 11 C11A

	COLDER	MEAN	HOTTER
LOW TEMPERATURE	A++		35°C
ηs	153	166	185
Energy consumption [kWh]	3239	3757	2509
P rated [kW]	5	8	9
SCOP	3,90	4,21	4,69
MEDIUM TEMPERATURE	A++		55°C
ηs	122	129	139
Energy consumption [kWh]	5589	5412	3229
P rated [kW]	7	9	9
SCOP	3,12	3,30	3,54
DHW	A		SP300
ηWH	82	90	104
Energy consumption [kWh]	1728	1580	1371
Draw-off profile			XL
Tank losses [W]			94
	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

