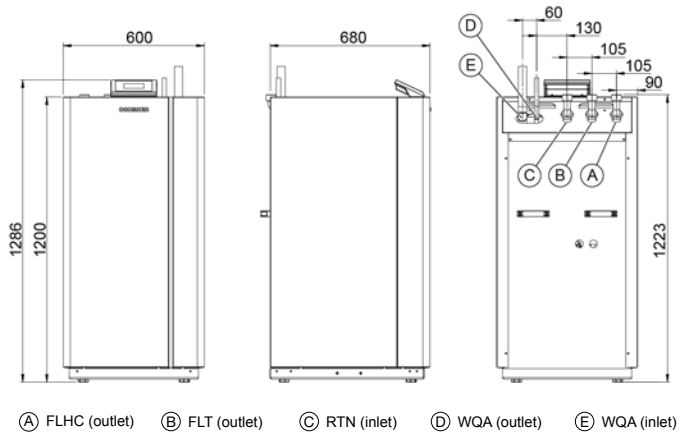


AIR 18 C11A

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

ORDER NUMBER: 287030
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]	135
Casing colour		White/anthracite

HEATING MODE PERFORMANCE FIGURES (to EN 14511)

Standard point A10/W35

Heating output	[kW]	16,00
Total power consumption / operating current	[kW]/[A]	3,00 / 6,20
COP		5,30

Operating point A7/W35

Heating output	[kW]	15,10
Total power consumption / operating current	[kW]/[A]	3,00 / 6,20
COP		5,00

Standard point A2/W35

Heating output	[kW]	13,20
Total power consumption / operating current	[kW]/[A]	3,00 / 6,20
COP		4,40

Standard point L-7/W35

Heating output	[kW]	10,60
Total power consumption / operating current	[kW]/[A]	3,00 / 6,10
COP		3,60

Operating point L-10/W35

Heating output	[kW]	9,90
Total power consumption / operating current	[kW]/[A]	2,90 / 6,00
COP		3,40

Operating point A2/W50

Heating output	[kW]	12,30
Total power consumption / operating current	[kW]/[A]	4,00 / 8,20
COP		3,10

Operating point A2/W60

Heating output	[kW]	12,10
Total power consumption / operating current	[kW]/[A]	4,40 / 9,10
COP		2,80

COOLING MODE PERFORMANCE FIGURES

Operating point A30/W18

Cooling capacity	[kW]	11,20
Total power consumption / operating current	[kW]/[A]	3,30 / 6,80
Energy efficiency ratio EER		3,40

Operating point A30/W7

Cooling capacity	[kW]	10,70
Total power consumption / operating current	[kW]/[A]	3,30 / 6,80
Energy efficiency ratio EER		3,20

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

SPECIFICATION

Phases/nominal voltage/frequency	[~]/[V]/[Hz]	3/400/50
Output factor cos φ		0,76
Fuse protection (tripping curve "C")	[A]	16
Max. operating current	[A]	11,40
Max. starting current/max. with soft start	[A]	64,00 / 32,00
Sound power/sound pressure level (at 1 m distance) indoor unit	[dBA]	47,50 / 39,50
Sound power/sound pressure level (at 10 m distance), outdoor unit	[dBA]	54,0 / 26,0

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]	2,20
Internal pressure differential	[mbar]	324
Flow meter (FM)	Internal	Installed as
Circulation pump heat sink (WNA)	Internal	Yonos Para HPS 25/7.5
Residual head I WNA external	[mbar]	175

REFRIGERANT CIRCUIT

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

COMPRESSOR

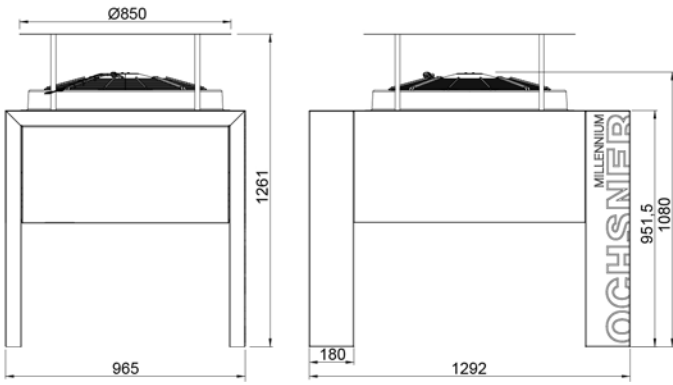
Type		Scroll
Output levels		1
Speed	[rpm]	2900
Voltage/frequency	[V]/[Hz]	400/50

FAN

Type		axial
Number	[pce]	1
Voltage/frequency	[V]/[Hz]	230/50
Power consumption	[W]	1 x 68
Max. operating current	[A]	1 x 1,40

EVAPORATOR

Unit type		VHS-M 14
Dimensions HxWxD	[mm]	1080x1290x960
Type		Finned pipe
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]	4000
Application range min./max	[°C]	-22 / 40



PRODUCT DATA **ErP: AIR 18 C11A**

	COLDER	MEAN	HOTTER
LOW TEMPERATURE	A++	35°C	
ηs	168	185	215
Energy consumption [kWh]	5192	5289	3241
P rated [kW]	9	12	13
SCOP	4,27	4,70	5,44
MEDIUM TEMPERATURE	A++	55°C	
ηs	122	136	158
Energy consumption [kWh]	7367	7683	4048
P rated [kW]	9	13	12
SCOP	3,11	3,48	4,03

SPLIT EVAPORATOR VHS-M 14

RECOMMENDED ACCESSORIES

	Order no./type	Description	Pressure loss
Heat pump separating cylinders	min. PU500	30 l/kW at L2/W35	-
DHW tank	min. SP500/SP550	30 l/kW at L2/W50	-
External plate heat exchanger (DHW heating)	911252 PHE 5007	Prim.: 1 1/4" Sec.: 1"	Prim.: 20 mbar Sec.: 26 mbar
3-way switching module internal	980196	-	-
3-way switching module external	290229	DN32 (1 1/4") kvs 16	19 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	-

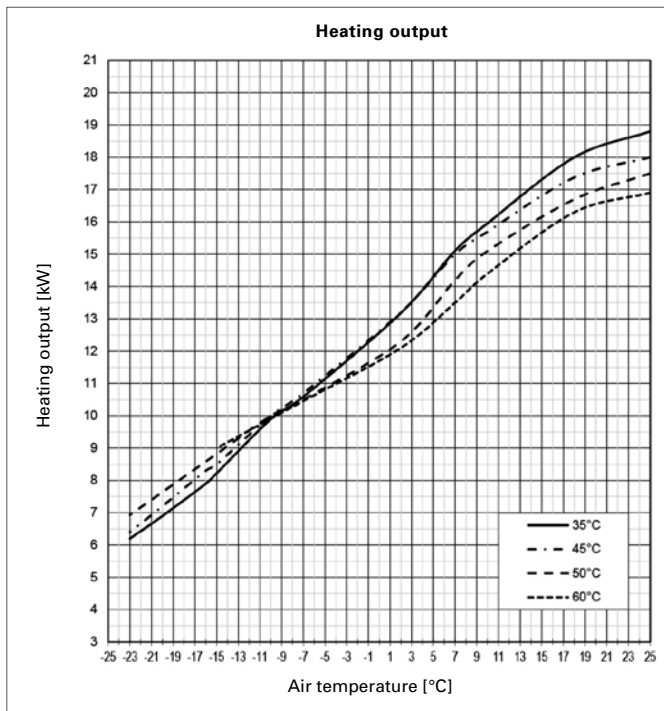
Application	Booster heater output
Bivalent parallel	Sizing according to calculated value (offer program), but with minimum 50% of building heat load
Bivalent partial parallel	Sizing to 100% of building heat load
Bivalent alternative	Sizing to 100% of building heat load

	Max. connection length	Max. height differential
AIR 18 C11A	Lmax ≤ 20	Hmax ≤ 10

LIMITS OF USE AIR 18 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 18 C11A



	A	SP500
DHW		
ηWH	93	102
Energy consumption [kWh]	1486	1359
Draw-off profile		XL
Tank losses [W]		117

	indoor	outdoor
Sound power level [dBA]	47,5	54,0
Controller class with room remote control	VII	Controller contribution [%] 3,5
Controller class without room remote control	III	Controller contribution [%] 1,5

