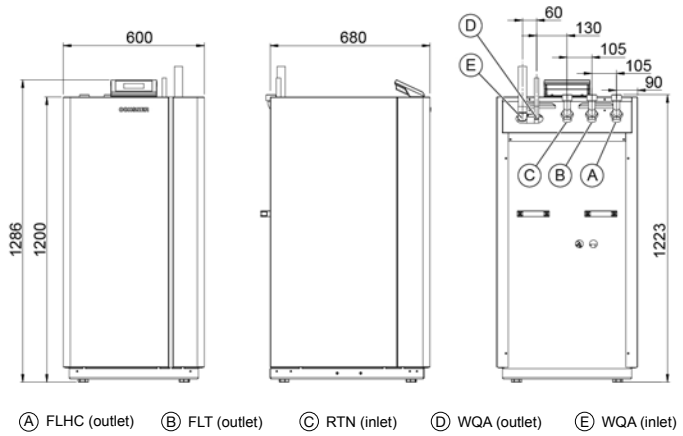


AIR 7 C11A

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

ORDER NUMBER: 287010
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]	114
Casing colour		White/anthracite

HEATING MODE PERFORMANCE FIGURES (to EN 14511)

Standard point A10/W35

Heating output	[kW]	6,80
Total power consumption / operating current	[kW]/[A]	1.33 / 2.65
COP		5,10

Operating point A7/W35

Heating output	[kW]	6,40
Total power consumption / operating current	[kW]/[A]	1.33 / 2.65
COP		4,80

Standard point A2/W35

Heating output	[kW]	5,40
Total power consumption / operating current	[kW]/[A]	1.32 / 2.64
COP		4,10

Standard point L-7/W35

Heating output	[kW]	4,10
Total power consumption / operating current	[kW]/[A]	1.28 / 2.60
COP		3,20

Operating point L-10/W35

Heating output	[kW]	3,70
Total power consumption / operating current	[kW]/[A]	1.25 / 2.55
COP		3,00

Operating point A2/W50

Heating output	[kW]	4,70
Total power consumption / operating current	[kW]/[A]	1.75 / 3.40
COP		2,70

Operating point A2/W60

Heating output	[kW]	4,30
Total power consumption / operating current	[kW]/[A]	1.95 / 3.60
COP		2,20

COOLING MODE PERFORMANCE FIGURES

Operating point A30/W18

Cooling capacity	[kW]	4,40
Total power consumption / operating current	[kW]/[A]	1.34 / 2.80
Energy efficiency ratio EER		3,30

Operating point A30/W7

Cooling capacity	[kW]	3,10
Total power consumption / operating current	[kW]/[A]	1.39 / 2.90
Energy efficiency ratio EER		2,20

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]	5,40
Max. starting current/max. with soft start	[A]	27.00 / 13.50
Sound power/sound pressure level (at 1 m distance) indoor unit	[dBA]	40.90 / 32.90
Sound power/sound pressure level (at 10 m distance), outdoor unit	[dBA]	48.0 / 20.0

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]	1,10
Internal pressure differential	[mbar]	109
Flow meter (FM)	Internal	Installed as
Circulation pump heat sink (WNA)	Internal	Yonos Para HPS 25/7.5
Residual head I WNA external	[mbar]	657

REFRIGERANT CIRCUIT

Refrigerant		R407C
Defrost technology		Hot gas
Refrigerant charge	[kg]	5

COMPRESSOR

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

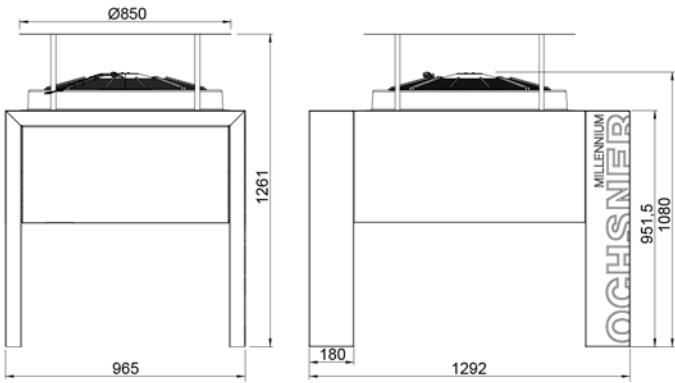
FAN

Type		axial
Number	[pce]	1
Voltage/frequency	[V]/[Hz]	230/50
Power consumption	[W]	1 x 23
Max. operating current	[A]	1 x 1.40

EVAPORATOR

Unit type		VHS-M 5
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]	3,70
Air flow rate	[m³/h]	2100
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 5



PRODUCT DATA **ErP: AIR 7 C11A**

	COLDER	MEAN	HOTTER
LOW TEMPERATURE	A++		35°C
η_s	151	169	196
Energy consumption [kWh]	2164	2237	1450
P rated [kW]	3	5	5
SCOP	3,84	4,30	4,98
MEDIUM TEMPERATURE	A+		55°C
η_s	109	124	143
Energy consumption [kWh]	3779	3293	1796
P rated [kW]	4	5	5
SCOP	2,80	3,17	3,65
DHW	A		SP300
η_{WH}	85	93	107
Energy consumption [kWh]	1682	1537	1334
Draw-off profile	XL		
Tank losses [W]	94		
	indoor	outdoor	
Sound power level [dBA]	40,9	48,0	
Controller class with room remote control	VII	Controller contribution [%]	3,5
Controller class without room remote control	III	Controller contribution [%]	1,5

RECOMMENDED ACCESSORIES

	Order no./type	Description	Pressure loss
Heat pump separating cylinders	min. PU200	30 l/kW at L2/W35	-
DHW tank	min. SP300/SP350	30 l/kW at L2/W50	-
External plate heat exchanger (DHW heating)	911251 PHE 2007	Prim.: 1" Sec.: 1"	Prim.: 64 mbar Sec.: 71 mbar
3-way switching module internal	980196	-	-
3-way switching module external	290229	DN32 (1 1/4") kvs 16	5 mbar
Electric immersion heater internal	980197	8.8 kW (2.9 / 2.9 / 2.9)	-
External electric immersion heater (heat pump buffer tank)	922508	6 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 7 C11A	Lmax ≤ 20	Hmax ≤ 10

LIMITS OF USE AIR 7 C11A

Outdoor temperature/max. heat pump flow temperature	A-10/W55°C A-15/W50°C A-20/W45°C
Underfloor heating (-15°C / 35°C)	YES
Radiators (-15°C / 50°C)	YES
Radiators (-15°C / 55°C)	Booster heater should be sized for 100% heat load
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 7 C11A

