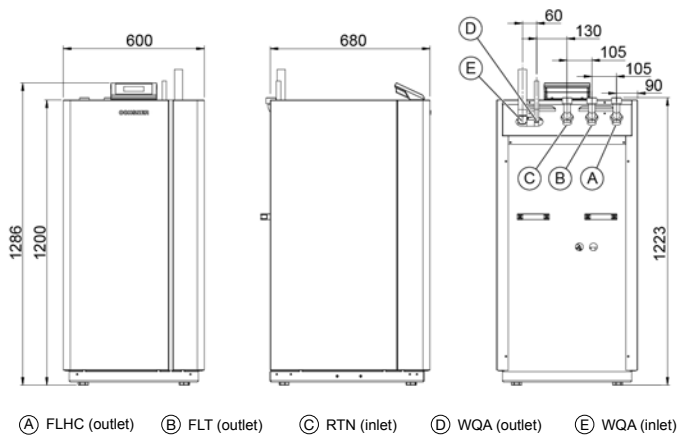


AIR 41 C12A

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

ORDER NUMBER: 287060
SERIES: M4
TF MAX. 65 °C
SPLIT



APPLIANCE DATA

Dimensions HxWxD	[mm]	1285x600x681
Hydraulic connection	[inch]	2"
Weight	[kg]	164
Casing colour		White/anthracite

HEATING MODE PERFORMANCE FIGURES (to EN 14511)

Standard point A10/W35		
Heating output	[kW]	40,00
Total power consumption / operating current	[kW]/[A]	8.20 / 16.70
COP		4,90

Operating point A7/W35		
Heating output	[kW]	37,20
Total power consumption / operating current	[kW]/[A]	8.10 / 16.50
COP		4,60

Standard point A2/W35		
Heating output	[kW]	30,30
Total power consumption / operating current	[kW]/[A]	7.40 / 15.00
COP		4,10

Standard point L-7/W35		
Heating output	[kW]	25,10
Total power consumption / operating current	[kW]/[A]	7.40 / 15.00
COP		3,40

Operating point L-10/W35		
Heating output	[kW]	23,40
Total power consumption / operating current	[kW]/[A]	7.40 / 15.00
COP		3,20

Operating point A2/W50		
Heating output	[kW]	27,40
Total power consumption / operating current	[kW]/[A]	8.80 / 17.90
COP		3,10

Operating point A2/W60		
Heating output	[kW]	26,40
Total power consumption / operating current	[kW]/[A]	9.30 / 18.90
COP		2,80

COOLING MODE PERFORMANCE FIGURES

Operating point A30/W18		
Cooling capacity	[kW]	27,20
Total power consumption / operating current	[kW]/[A]	8.40 / 17.10
Energy efficiency ratio EER		3,20

Operating point A30/W7		
Cooling capacity	[kW]	25,90
Total power consumption / operating current	[kW]/[A]	8.30 / 16.90
Energy efficiency ratio EER		3,10

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		0,71
Fuse protection (tripping curve "C")	[A]	25
Max. operating current	[A]	24,80
Max. starting current/max. with soft start	[A]	127.00 / 63.50
Sound power/sound pressure level (at 1 m distance) indoor unit	[dBA]	55.50 / 47.50
Sound power/sound pressure level (at 10 m distance), outdoor unit	[dBA]	61.0 / 33.0

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]	6,00
Internal pressure differential	[mbar]	820
Flow meter (FM)	Internal	Installed as
Circulation pump heat sink (WNA)	Internal	Stratos Para 25/1-12
Residual head I WNA external	[mbar]	109 (M4-1), 406 (M4-4)

REFRIGERANT CIRCUIT

Refrigerant		R407C
Defrost technology		Hot gas
Refrigerant charge	[kg]	16

COMPRESSOR

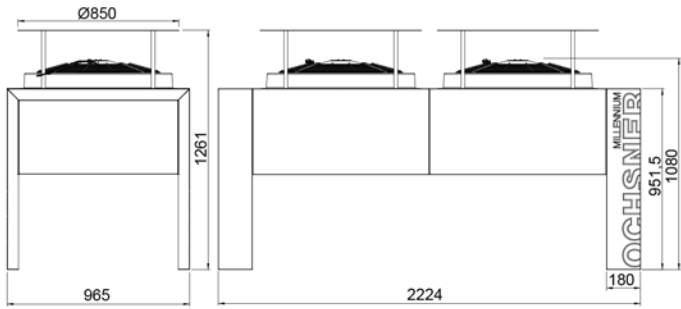
Type		Scroll
Output levels		1
Speed	[rpm]	2900
Voltage/frequency	[V]/[Hz]	400/50

FAN

Type		axial
Number	[pce]	2
Voltage/frequency	[V]/[Hz]	230/50
Power consumption	[W]	1 x 337
Max. operating current	[A]	1 x 2.80

EVAPORATOR

Unit type		VHS-M 35
Dimensions HxWxD	[mm]	1080x2220x960
Type		Finned pipe
Number	[pce]	1
Weight	[kg]	180
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]	5,90
Air flow rate	[m³/h]	9800
Application range min./max	[°C]	-22 / 40



SPLIT EVAPORATOR VHS-M 35

RECOMMENDED ACCESSORIES

	Order no./type	Description	Pressure loss
Heat pump separating cylinders	min. PU1000	30 l/kW at L2/W35	-
DHW tank	min. SP750	30 l/kW at L2/W50	-
External plate heat exchanger (DHW heating)	911316 PHE 9507	Prim.: 2" Sec.: 2"	Prim.: 65 mbar Sec.: 90 mbar
3-way switching module internal	980191	-	58 mbar
3-way switching module external	290342	DN50 (2"), kvs 40	23 mbar
Electric immersion heater internal	-	-	-
External electric immersion heater (heat pump buffer tank)	922509	2 x 9 kW	-

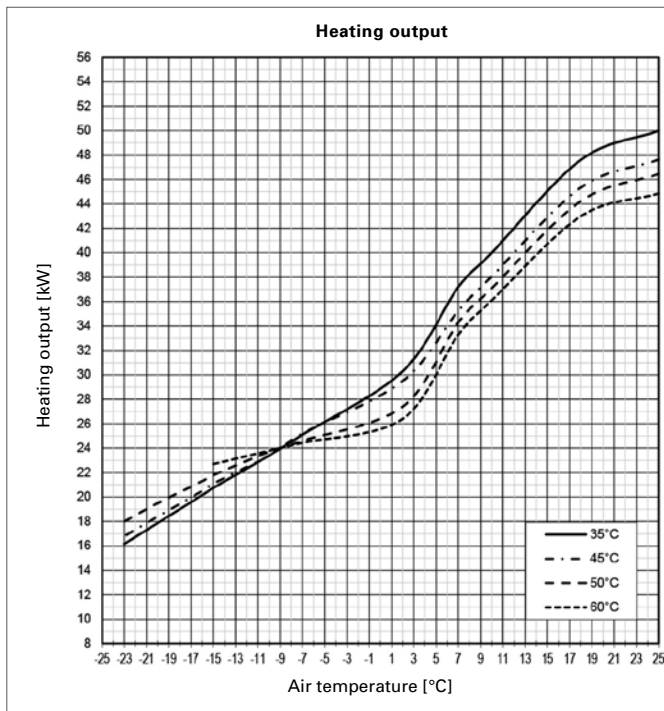
Application	Booster heater output
Bivalent parallel	Sizing according to calculated value (offer program), but with minimum 50% of building heat load
Bivalent partial parallel	Sizing to 100% of building heat load
Bivalent alternative	Sizing to 100% of building heat load

	Max. connection length	Max. height differential
AIR 41 C12A	Lmax ≤ 16	Hmax ≤ 5

LIMITS OF USE AIR 41 C12A

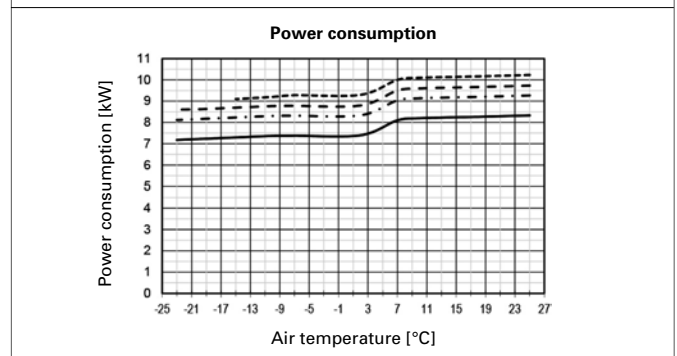
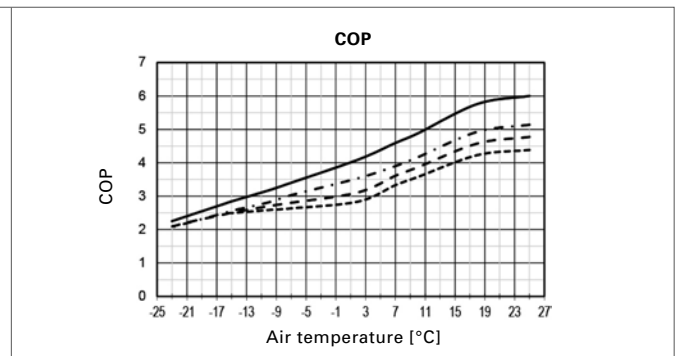
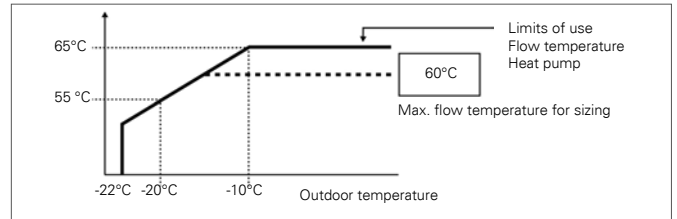
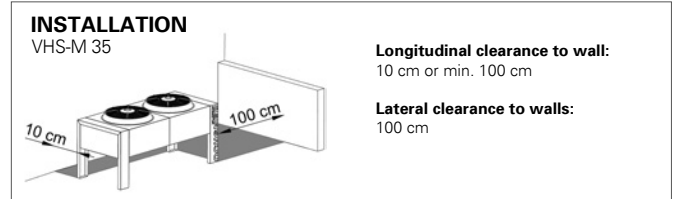
Outdoor temperature/max. heat pump flow temperature	A-10/W65°C A-15/W60°C A-20/W55°C
Underfloor heating (-15°C / 35°C)	YES
Radiators (-15°C / 50°C)	YES
Radiators (-15°C / 55°C)	YES
Radiators (-15°C / 65°C)	YES
Radiators (-15°C / 65°C)	Booster heater should be sized for 100% heat load
Domestic hot water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

PERFORMANCE CURVES AIR 41 C12A



PRODUCT DATA **ErP: AIR 41 C12A**

	COLDER	MEAN	HOTTER
LOW TEMPERATURE	A++	35°C	
ηs	156	170	195
Energy consumption [kWh]	14062	12736	8163
P rated [kW]	23	27	30
SCOP	3,97	4,33	4,96
MEDIUM TEMPERATURE	A++	55°C	
ηs	123	136	158
Energy consumption [kWh]	17392	14962	8927
P rated [kW]	22	25	27
SCOP	3,14	3,47	4,03
	indoor	outdoor	
Sound power level [dBA]	55,5	61,0	
Controller class with room remote control	VII	Controller contribution [%]	3,5
Controller class without room remote control	III	Controller contribution [%]	1,5



AIR 41 C12A / AIR

Status: 2018-08-20