

GMLW 14 PLUS

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

ORDER NUMBER: 284599
SERIES: GOLF MAXI PLUS
TF MAX. 65 °C
SPLIT

APPLIANCE DATA

Dimensions HxWxD	[mm]	1150x600x650
Hydraulic connection	[inch]	1 1/4"
Weight	[kg]	135
Casing colour		Tiger white 29/11289/grey RAL 7016

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

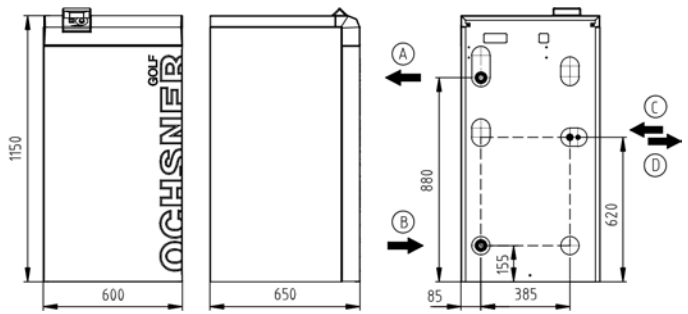
COOLING MODE PERFORMANCE FIGURES

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



(A) FLHC (outlet) (B) RTNHC (inlet) (C) WQA (inlet) (D) WQA (outlet)

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]	10,00
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]	6
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]	2,50
Internal pressure differential	[mbar]	90
Flow meter FM standard	external	FM-DN 20 x 1 1/4" (male) kvs 10
Circulation pump heat sink WNA	Internal	Yonos Para 25/7.5
Residual head I WNA external, incl. FM	[mbar]	298

REFRIGERANT CIRCUIT

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

COMPRESSOR

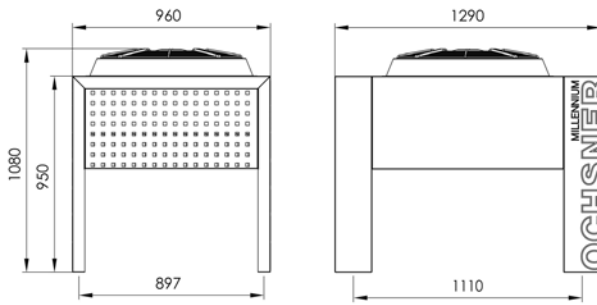
Type	Scroll
Output levels	1
Speed	[rpm] 2900
Voltage/frequency	[V]/[Hz] 400/50

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 / powder coated, grey RAL 7016
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



SPLIT EVAPORATOR VHS-M 14

RECOMMENDED ACCESSORIES

Heat pump buffer tank	min. PU500	30 l/kW at L2/W35
DHW tank	min. SP500/SP550	30 l/kW at L2/W50
3-way switching module	DN32 (1 1/4")	kvs 16, pressure loss 24 mbar
External PHE for DHW heating	PHE 5007	Primary 1 1/4" / 19 mbar Secondary 1" / 25 mbar
Electric immersion heater	Art. no.: 922509	9 kW for heat pump buffer tank

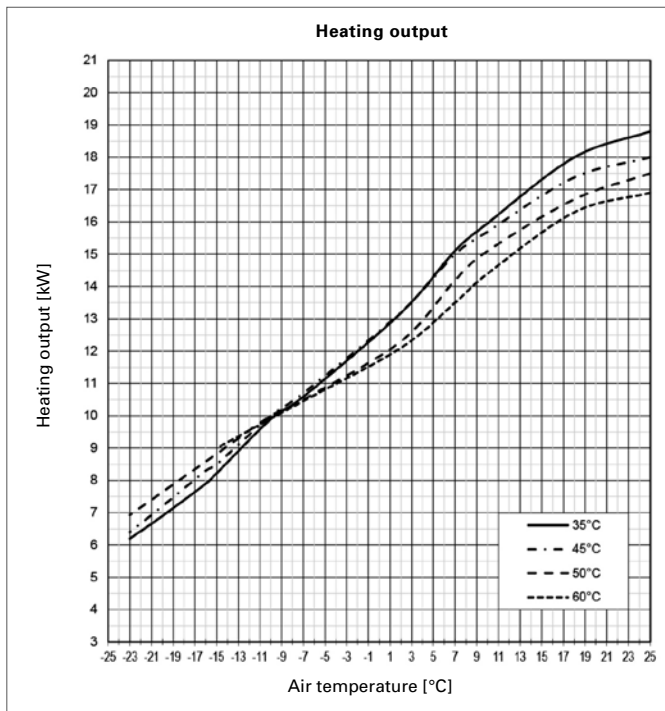
Application	Booster heater output
Bivalent parallel	Sizing according to calculated value (offer program), but with minimum 50% of building heat load
Bivalent partial parallel	Sizing to 100% of building heat load
Bivalent alternative	Sizing to 100% of building heat load

	Max. connection length	Max. height differential
GMLW 14 plus	Lmax ≤ 20	Hmax ≤ 10

LIMITS OF USE GMLW 14 plus

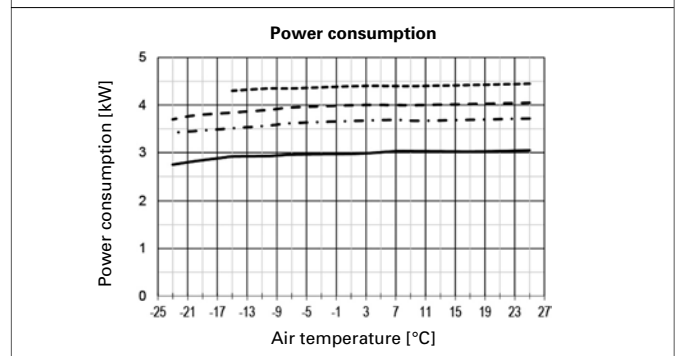
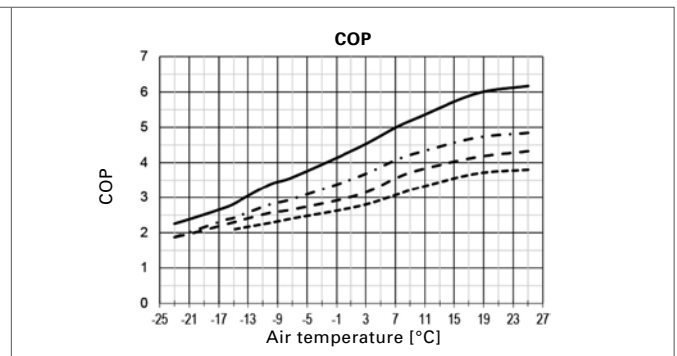
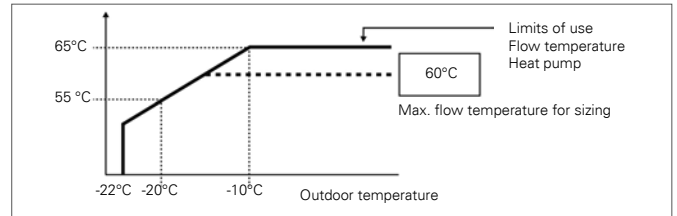
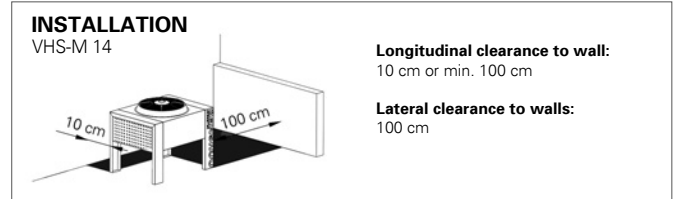
Outdoor temperature/max. heat pump flow temperature	A-10/W65°C A-15/W60°C A-20/W55°C
Underfloor heating (-15°C / 35°C)	YES
Radiators (-15°C / 55°C)	YES
Radiators (-15°C / 65°C)	YES
Radiators (-15°C / 65°C)	Booster heater should be sized for 100% heat load
Domestic hot water	YES

PERFORMANCE CURVES GMLW 14 PLUS



PRODUCT DATA ErP: GMLW 14 PLUS

	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
DHW	A		SP500
ηWH	93	102	118
Energy consumption [kWh]	1486	1359	1179
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



GMLW 14 PLUS / AIR

Status: 2018-08-20