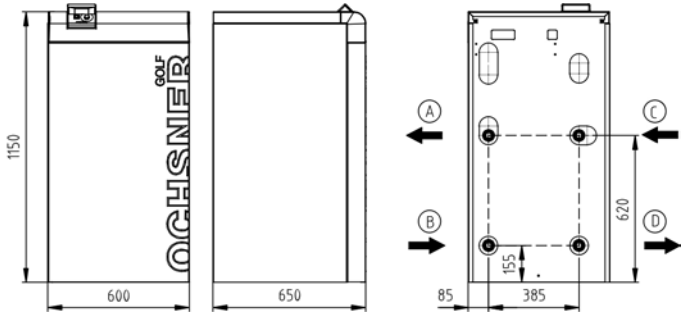


GMSW 27 PLUS

MONOVALENT HEATING SYSTEM WITH BRINE AS HEAT SOURCE

ORDER NUMBER: 264860
SERIES: GOLF MAXI PLUS
TF MAX. 68 °C



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

APPLIANCE DATA

Dimensions HxWxD	[mm]	1150x600x650
Hydraulic connection	[inch]	1 1/2"
Weight	[kg]	265
Casing colour		Tiger white 29/11289/grey RAL 7016

SPECIFICATION

Phases/nominal voltage/frequency	[~]/[V]/[Hz]	3/400/50
Output factor cos φ		0,79
Fuse protection (tripping curve "C")	[A]	25
Max. operating current	[A]	21,00
Max. starting current/max. with soft start	[A]	125.00 / 62.50
Sound power level/sound pressure level (at 1 m distance)	[dBA]	60.10 / 52.10

HEATING MODE PERFORMANCE FIGURES (to EN 14511)

Standard point B0/W35

Heating output	[kW]	26,10
Total power consumption / operating current	[kW]/[A]	5.80 / 10.70
COP		4,50

Operating point B0/W50

Heating output	[kW]	23,40
Total power consumption / operating current	[kW]/[A]	7.40 / 13.60
COP		3,20

Operating point B0/W60

Heating output	[kW]	22,20
Total power consumption / operating current	[kW]/[A]	9.30 / 17.10
COP		2,40

CONDENSER

Type		Plate heat exchanger
Material		Stainless steel 1.4401
Max. refrigerant operating pressure	[bar]	45
Max. heat transfer medium operating pressure	[bar]	6
Heat transfer medium temperature differential	[K]	5
Application range	[°C]	68
Heat transfer medium		Water
Test pressure	[bar]	54
Heat transfer medium flow rate	[m³/h]	4,50
Internal pressure differential	[mbar]	100
Flow meter FM standard	external	FM-DN 25 kvs 20
Circulation pump heat sink (WNA)	external	Stratos Para 30/1-12
Residual head I WNA external, incl. FM	[mbar]	884

REFRIGERANT CIRCUIT

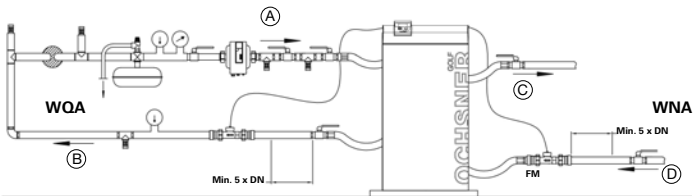
Refrigerant		R410A
Refrigerant charge	[kg]	4,5

COMPRESSOR

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

EVAPORATOR

Type		Plate heat exchanger
Material		Stainless steel 1.4401
Number	[pce]	1
Max. heat transfer medium operating pressure	[bar]	6
Max. refrigerant operating pressure	[bar]	12
Heat transfer medium temperature differential	[K]	3
Application range	[°C]	-6/+20
Heat transfer medium		Brine max. 30%
Test pressure	[bar]	54
Heat transfer medium flow rate	[m³/h]	6,38
Internal pressure differential	[mbar]	215
Flow meter (FM) standard	external	FM-DN 25 kvs 20
Circulation pump heat source (WQA)	Internal	Stratos Para 40/1-12
Residual head I WQA external, incl. FM	[mbar]	933



PRODUCT DATA ErP: GMSW 27 PLUS

	COLDER	MEAN	HOTTER
LOW TEMPERATURE	A++		35°C
η_s	190	184	186
Energy consumption	[kWh] 12794	11034	7088
P rated	[kW] 26	26	26
SCOP	4,95	4,81	4,84
MEDIUM TEMPERATURE	A++		55°C
η_s	130	127	128
Energy consumption	[kWh] 16235	13947	8995
P rated	[kW] 23	23	23
SCOP	3,46	3,38	3,39
DHW	A		SP500
η_{WH}	84	84	84
Energy consumption	[kWh] 1651	1651	1651
Draw-off profile	XL		
Tank losses	[W]	117	

RECOMMENDED ACCESSORIES

Heat pump separating cylinders	min. PU800	30 l/kW at B0/W35
DHW tank	SP750	30 l/kW at B0/W25
3-way switching module	DN40 (1 1/2")	kvs 25, pressure loss 32 mbar
External PHE for DHW heating	PHE 5007	Prim.: 1 1/4" / 25 mbar Sec.: 1" / 32 mbar
Brine collector set for shallow laying	ESKP 14	Pressure loss 80 mbar incl. brine distributor

EXTRACTION CAPACITY ACC. TO VDI 4640

FOR SHALLOW LAYING

Soil conditions	Max. spec. extraction capacity at 1800 h/a	Max. spec. extraction capacity at 2400 h/a
Dry, non-cohesive soil	10 W/m ²	8 W/m ²
Cohesive soil, moist	25 W/m ²	20 W/m ²
Water-saturated soil with sand/gravel	40 W/m ²	32 W/m ²

FOR DEEP TRENCH LAYING

Soil conditions	Max. spec. extraction capacity at 1800 h/a
Cohesive soil, moist	100 W/m deep trench
Water-saturated soil	125 W/m deep trench

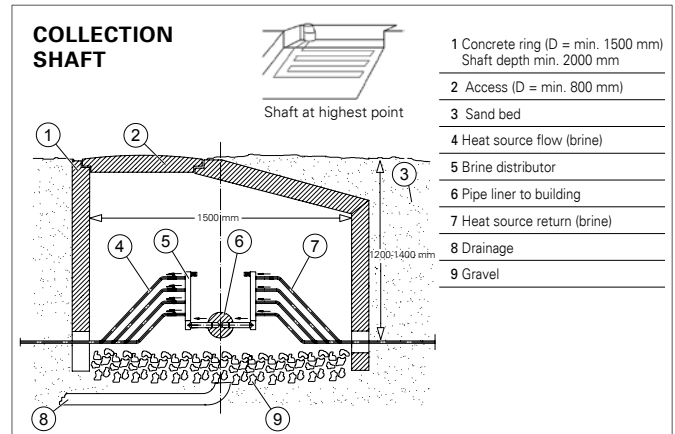
FOR GEOTHERMAL PROBES

Soil conditions	Spec. extraction capacity at 1800 h/a	Max. spec. extraction capacity at 2400 h/a
Dry sediment	25 W/m	20 W/m
Shale, slate	45 W/m	35 W/m
Firm rock with high thermal conductivity	84 W/m	70 W/m
Substratum with high groundwater flow	65-80 W/m	55-65 W/m

SIZING RECOMMENDATION WITH BRINE AS HEAT SOURCE

Pressure loss in connection line, incl. individual losses	Max. 100 mbar
Pressure loss in brine circuits or probes, incl. brine distributor	Max. 300 mbar

	indoor	outdoor
Sound power level	[dBA] 60,1	-
Controller class with room remote control	VII	Controller contribution [%] 3,5
Controller class without room remote control	III	Controller contribution [%] 1,5



PERFORMANCE CURVES GMSW 27 PLUS

