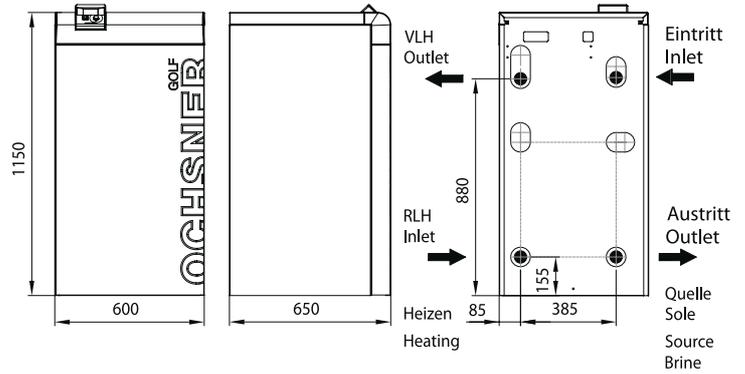


# GMSW 10 PLUS S

**Monovalent heating system with heat source brine**

- » Series: Golf Maxi Plus
- » tv max. 65°C
- » Order number: 264605



## Appliance data:

Dimensions HxWxD	[mm]	1150 x 600 x 650
Hydraulic connection	[inch]	1 1/4"
Weight	[kg]	124
Housing colour		tiger white 29/11289 / grey RAL 7016

## Technical data:

Phases/Nominal voltage/Frequency	[~]/[V]/[Hz]	3/400/50
cos φ		0,747
Fuse (trip characteristic "C")	[A]	10
Max. operating current	[A]	8
Max. start-up current / max. with soft-start	[A]	41/20,5
Sound power level/sound pressure level (in 1m)	[dBA]	43,4/35,4

## Performance data heating operation:

Standard point B0/W35		
Heating capacity	[kW]	<b>10,6</b>
Total power consumption / operating current	[kW]/[A]	<b>2,25/4,7</b>
COP EN14511/EN255		<b>4,7/5,1</b>
Operating point B0/W50		
Heating capacity	[kW]	9,6
Total power consumption / operating current	[kW]/[A]	3/6,3
COP EN14511/EN255		3,2/3,5
Operating point B0/W60		
Heating capacity	[kW]	9,4
Total power consumption / operating current	[kW]/[A]	3,7/7,7
COP EN14511/EN255		2,5/2,7

## Condenser:

Type		plate heat exchanger
Material		stainless steel 1.4301
Quantity	[piece]	1
Max. operating pressure refrigerant	[bar]	30
Max. operating pressure working fluid	[bar]	6
Working fluid temperature difference	[K]	5
Operating range	[°C]	65
Working fluid		water
Testing pressure	[bar]	45
Working fluid flow rate	[m³/h]	1,84
Internal pressure difference	[mbar]	40
Flow meter unit standard	external	VMT-DN20 x 1 1/4" AG kvs 10
Circulation pump heating system WNA	internal	Yonos Para 25/7.5
Residual head   WNA external incl. VMT	[mbar]	571

## Compressor:

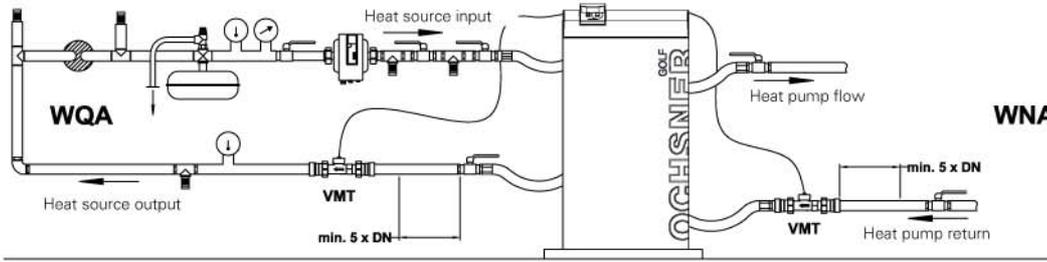
Type		fully hermetic/Scroll
Quantity	[piece]	1
Power stages		1
Rotation speed	[rpm]	2900
Voltage/Frequency	[V]/[Hz]	400/50

## Refrigerant circuit:

Number of circuits	[piece]	1
Refrigerant		R 407 C
Refrigerant filling	[kg]	4,75

## Evaporator:

Type		plate heat exchanger
Material		stainless steel 1.4401
Quantity	[piece]	1
Max. operating pressure working fluid	[bar]	6
Max. operating pressure refrigerant	[bar]	12
Working fluid temperature difference	[K]	3
Operating range	[°C]	-6/+20
Heat carrying medium		brine max. 30%
Testing pressure	[bar]	45
Working fluid flow rate	[m³/h]	2,7
Internal pressure difference	[mbar]	100
Flow meter unit standard	external	VMT-DN20 x 1 1/4" AG kvs 10
Circulation pump heat source WQA	internal	Stratos Para 25/1-8
Residual head   WQA external incl. VMT	[mbar]	511



**Recommended accessories:**

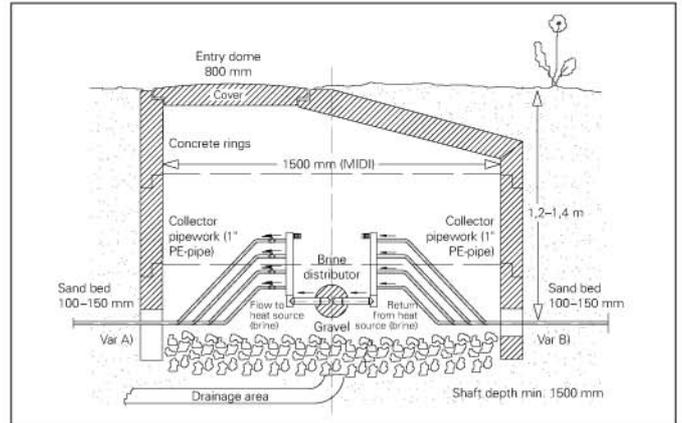
Heat pump separation tank	min. PU 500	30/kW at B0/W35
Hot water storage tank	min. SP 300 / SP 350	30/kW at B0/W50
3-way valve	DN 25-1 1/4"	kvs 10 pressure loss 34 mbar
External PHE for hot water heating	Type 2007	Primary 1" / 20 mbar Secondary 1" / 16 mbar
Set brine collector for flat laying	ESK 6	Pressure loss 117 mbar incl. Brine distributor

**Sizing recommendation heat source brine:**

Pressure loss in connection pipework, incl. individual losses	max. 100 mbar
Pressure loss in brine circuit resp. ground probes, incl. brine distributor	max. 300 mbar

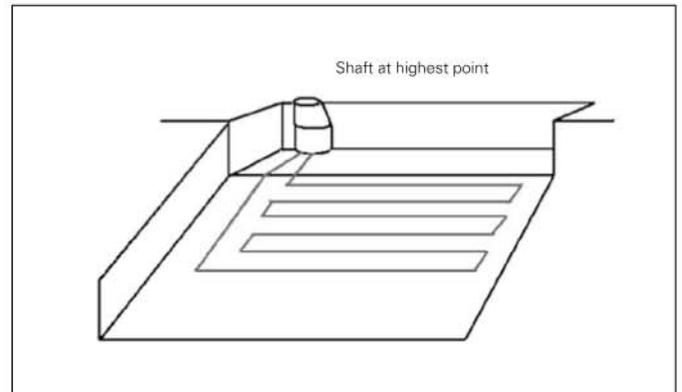
**Extraction capacity for flat laying to VDI 4640**

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 <sup>2</sup>	8 W/m <sup>2</sup>
Moist, cohesive soil	25 W/m <sup>2</sup>	20 W/m <sup>2</sup>
Water saturated soil with sand/gravel	40 W/m <sup>2</sup>	32 W/m <sup>2</sup>



**Extraction capacity for K unette laying to VDI 4640**

Soil conditions	max. spec. extraction capacity at 1800 h/a
Moist, cohesive soil	100 W/m K�unette
Water saturated soil	125 W/m K�unette



**Extraction capacity for ground probes to VDI 4640**

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
Solid bedrock with high thermal conductivity	84 W/m	70 W/m
Subsoil with strong ground water flow	65-80 W/m	55-65 W/m

**Performance curve GMSW 10 plus S:**

