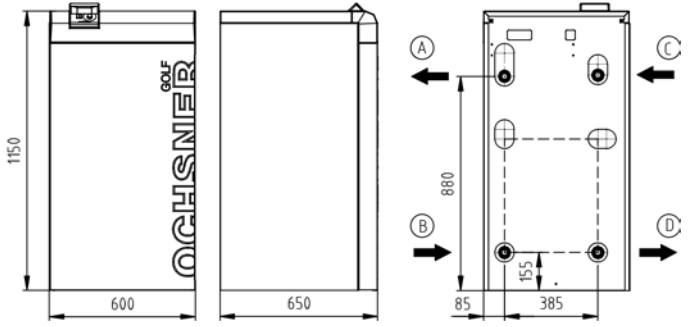


GMSW 17 HK PLUS

MONOVALENT HEATING SYSTEM WITH BRINE AS HEAT SOURCE

ORDER NUMBER: 264758
SERIES: GOLF MAXI HK PLUS
TF MAX. 65 °C



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

APPLIANCE DATA

Dimensions HxWxD	[mm]	1150x600x650
Hydraulic connection	[inch]	1 1/2"
Weight	[kg]	142
Casing colour		Tiger white 29/11289/grey RAL 7016

SPECIFICATION

Phases/nominal voltage/frequency	[~]/[V]/[Hz]	3/400/50
Output factor cos φ		0,71
Fuse protection (tripping curve "C")	[A]	16
Max. operating current	[A]	12,00
Max. starting current/max. with soft start	[A]	70.00 / 35.00
Sound power/sound pressure level (at 1 m distance)	[dBA]	50.20 / 42.20

HEATING MODE PERFORMANCE FIGURES (to EN 14511)

Standard point B0/W35

Heating output	[kW]	16,70
Total power consumption / operating current	[kW]/[A]	3.60 / 7.30
COP		4,60

Operating point B0/W50

Heating output	[kW]	15,20
Total power consumption / operating current	[kW]/[A]	4.60 / 9.40
COP		3,30

Operating point B0/W60

Heating output	[kW]	15,00
Total power consumption / operating current	[kW]/[A]	5.80 / 11.80
COP		2,60

COOLING MODE PERFORMANCE FIGURES

Operating point B25/W18

Cooling capacity	[kW]	20,20
Total power consumption / operating current	[kW]/[A]	3.50 / 7.10
Energy efficiency ratio EER		5,80

Operating point B25/W7

Cooling capacity	[kW]	13,20
Total power consumption / operating current	[kW]/[A]	3.20 / 6.50
Energy efficiency ratio EER		4,10

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]	2,90
Internal pressure differential	[mbar]	100
Flow meter FM standard	external	FM 25 x 1 1/2" (male) kvs 20
Circulation pump heat sink (WNA)	Internal	Yonos Para RS 25/7.5
Residual head I WNA external, incl. FM	[mbar]	266

REFRIGERANT CIRCUIT

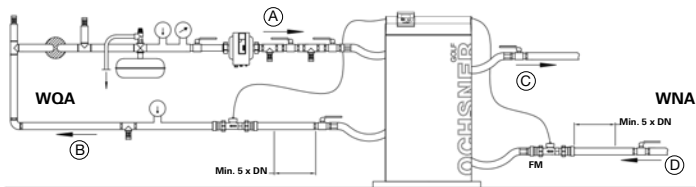
Refrigerant		R407C
Refrigerant charge	[kg]	3,1

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]	45
Heat transfer medium flow rate	[m³/h]	4,00
Internal pressure differential	[mbar]	190
Flow meter (FM) standard	external	FM 25 x 1 1/2" (male) kvs 20
Circulation pump heat source (WQA)	Internal	Stratos Para 25/1-12
Residual head I WQA external, incl. FM	[mbar]	1022



- (A) Heat source inlet
- (B) Heat source outlet
- (C) Heat pump flow
- (D) Heat pump return

RECOMMENDED ACCESSORIES

Heat pump buffer tank	min. PU800	30 l/kW at B0/W35
DHW tank	min. SP500/SP550	30 l/kW at B0/W50
3-way switching module	DN40 (1 1/2")	kvs 25, pressure loss 14 mbar
External PHE for DHW heating	PHE 5007	Prim.: 1 1/4" / 33 mbar Sec.: 1" / 43 mbar
Brine collector set for shallow laying	ESK 8	Pressure loss 60 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

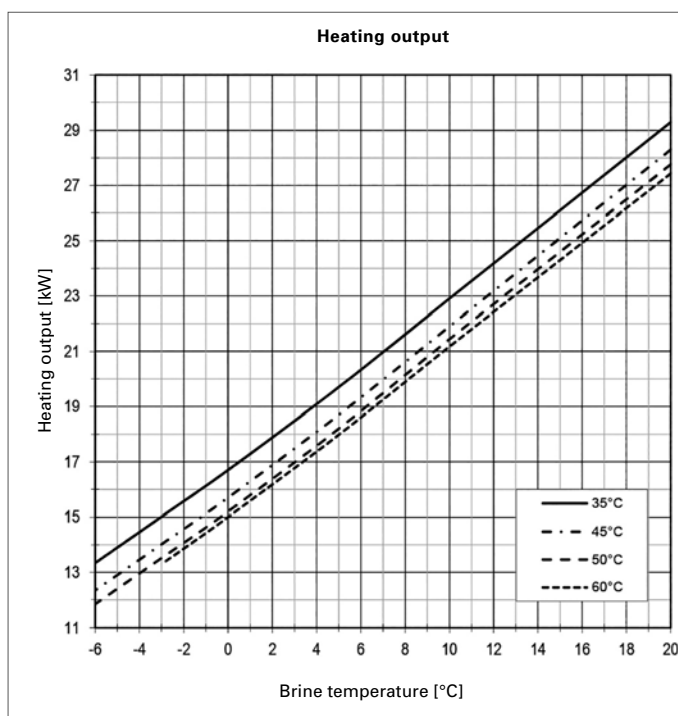
FOR GEOTHERMAL PROBES

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

PERFORMANCE CURVES GMSW 17 HK PLUS



PRODUCT DATA ErP: GMSW 17 HK PLUS

	COLDER	MEAN	HOTTER
LOW TEMPERATURE	A+++		35°C
ηs	199	192	193
Energy consumption	[kWh] 7973	6887	4446
P rated	[kW] 17	17	17
SCOP	5,16	5,01	5,02
MEDIUM TEMPERATURE	A++		55°C
ηs	138	134	134
Energy consumption	[kWh] 10196	8768	5676
P rated	[kW] 15	15	15
SCOP	3,65	3,56	3,55
DHW	A		SP500
ηWH	89	89	89
Energy consumption	[kWh] 1554	1554	1554
Draw-off profile	XL		
Tank losses	[W]	117	

	indoor	outdoor
Sound power level	[dBA] 50,2	-
Controller class with room remote control	VII	Controller contribution [%] 3,5
Controller class without room remote control	III	Controller contribution [%] 1,5

