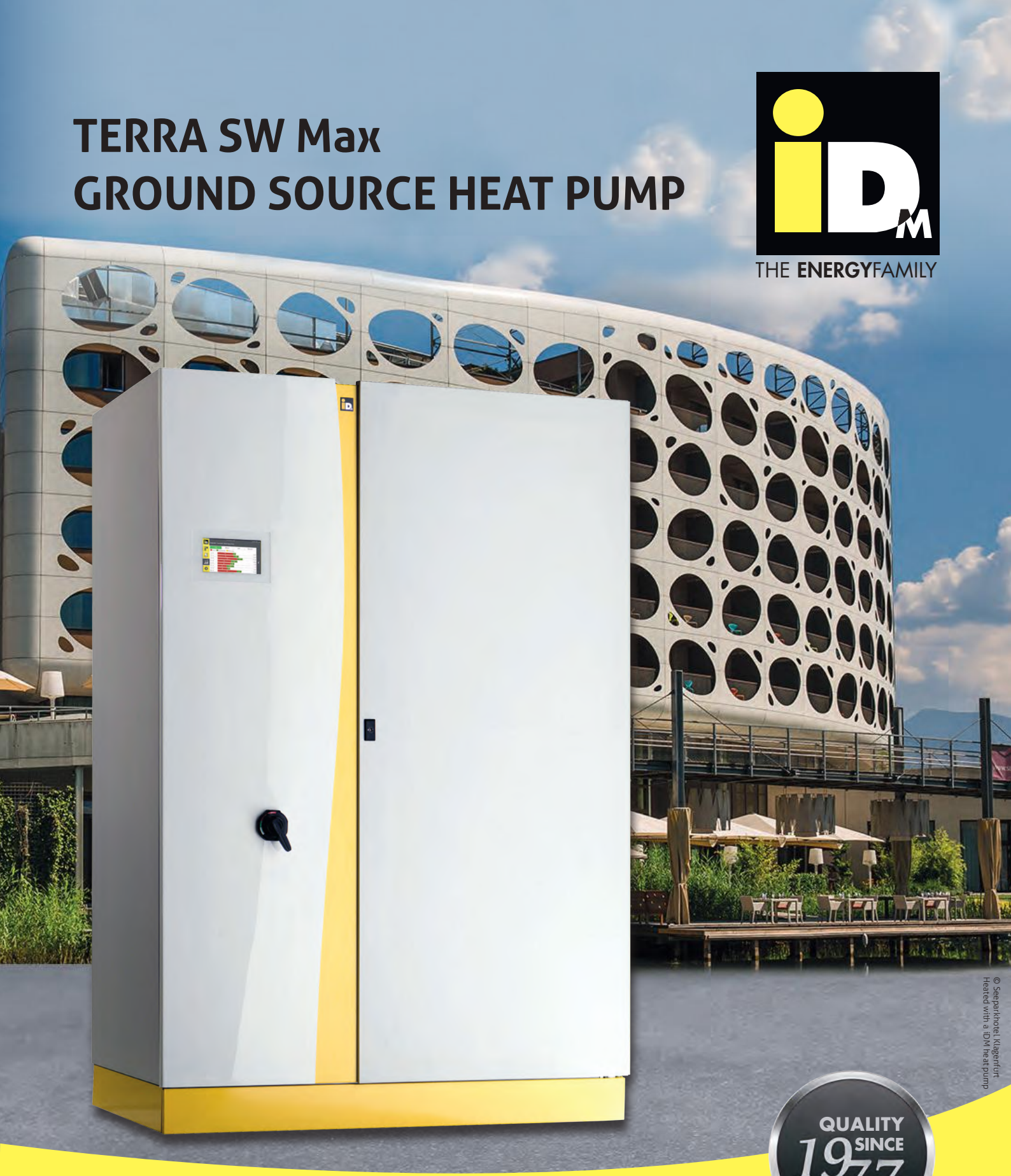
TERRA SW Max
GROUND SOURCE HEAT PUMP

THE ENERGYFAMILY



© Seeparkhotel Klagenfurt
Heated with a iDM heat pump

QUALITY SINCE 1977

HEAT PUMPS FROM AUSTRIA

www.idm-energie.at

TERRA SW Max 50 - 280 kW - COMPACT SOLUTION
FOR HIGH PERFORMANCE REQUIREMENTS

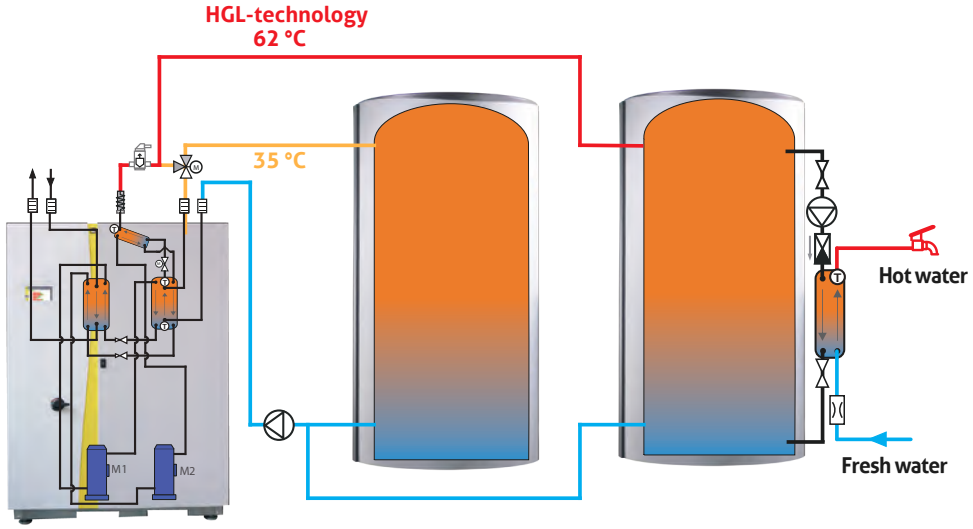
For maximum performance and minimum space requirements iDM has designed the large heat pump series **TERRA SW Max for geothermal and groundwater**. Equipped with the Navigator 2.0 control system, a total of 13 models in various performance classes and versions from 50 to 280 kW are available - by cascading several devices, even power requirements **up to 700 kW** can be met.

iDM TERRA SW Max fills the growing demand for space-saving solutions that can also be observed in the commercial real estate sector, for example for **residential complexes, commerce and industry**, **leisure and tourism** or in **refurbishment**.

- **High COP of 6.07 for low energy consumption**
- **Compact design with very small required installation space (app. 1 m² for 140 kW)**
- **Controlled HGL technology for maximum hot water convenience and a long service life**
- **Two separate refrigeration circuits and two compressors for a high level of operational safety and demand-based output adaptation**
- **Clever construction ensures quiet operation**
- **Intelligent Navigator 2.0 control - heating circuit control, cascade control, communication with building control and energy management system**
- **Simple connection of several systems in a cascade with a total heating capacity up to 700 kW**
- **Hydraulic connection accessories and storage tank for large heat pumps**

HOT WATER WITH iDM'S CONTROLLED **HOT GAS LOADING TECHNOLOGY (HGL)**

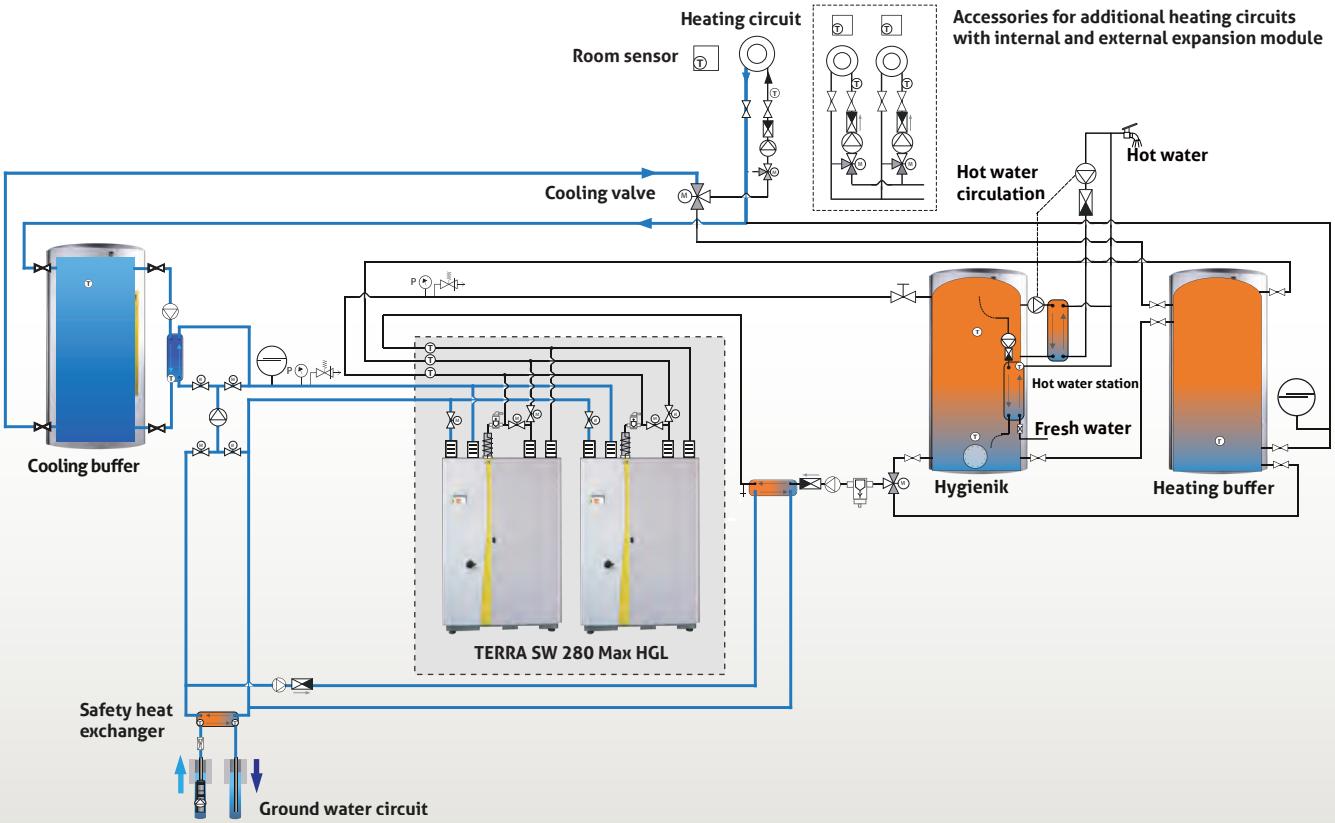
The **iDM TERRA SW Max heat pump** with controlled **HGL technology** not only offers **twice the comfort**, but also helps to **save** on the use of additional energy sources and their associated **costs**. This innovative technology makes your energy go a long way. It divides the energy accordingly: 85 % of the energy goes into the heating circuit at 35 °C. The remaining part reaches around 62 °C - for hot water supply via the Hygienik buffer storage tank.



TERRA SW Max HGL

HEATING & COOLING - SIMULTANEOUSLY!

In addition to the energy-saving passive cooling function you can also use **iDM's system cooling** feature (see illustration). The cooling circuit is integrated on the heat source side of the heat pump and constantly cools down the circuit. The waste heat on the heating side can be used for hot water and other heating purposes or be discharged through a heat exchanger into the ground.



TECHNICAL DATA

Type Terra SW Max with refrigerant R410A[1)]

			TERRA SW 55-280 Max (HGL)							
		Unit	55	70	85	110	140	170	220	280
Energy efficiency class package label brine circuit (heat pump + temperature control)			A++	A++	2)	2)	2)	2)	2)	2)
Max. flow temperature		°C	62							
B0°C/W35°C	Heating Capacity	kW	57,87	73,19	84,82	113,42	137,79	169,63	226,84	275,59
	Power consumption	kW	12,50	15,91	18,32	24,55	29,89	36,64	49,10	59,78
	COP	-	4,63	4,60	4,63	4,62	4,61	4,63	4,62	4,61
Energy efficiency class package label ground water (heat pump + temperature control)			A+++	2)	2)	2)	2)	2)	2)	2)
W10°C/W35°C	Heating Capacity	kW	76,86	97,20	112,76	149,14	181,06	225,51	298,27	362,13
	Power consumption	kW	12,66	16,56	19,08	26,03	31,27	38,16	52,05	62,54
	COP	-	6,07	5,87	5,91	5,73	5,79	5,91	5,73	5,79
Cooling			iDM system cooling (passive and active cooling)							
B7°C/W35°C	Cooling Capacity	kW	56,90	71,0	81,2	108,4	131,2	162,4	216,8	262,5
Dimensions (H/W/D)		mm	2020/1066/774			2020/1316/774		2020/2632/774		
Operational safety/power adjustment			two hermetically separate cooling circuits					four hermetically separate cooling circuits		
Integrated heat pump management			NAVIGATOR 2.0							

1) The heat pump contains the F-Gas R410A and is subject to the provisions of F-Gas regulation EU/517/2014.
2) No energy efficiency class is stated, as heat pumps with rated power output > 70 kW (high temperature application and average climate) are not within the scope of the EU-Regulation No. 811/2013 for energy labelling of space heaters and combination heaters. No energy label will be provided for these heat pumps.

Type TERRA SW Max H with refrigerant R134A[1)]

			TERRA SW 50-180 Max H				
		Unit	50	70	90	140	180
Energy efficiency class package label brine circuit (heat pump + temperature control)			A++	A++	2)	2)	2)
Max. flow temperature		°C	70				
B0°C/W35°C	Heating Capacity	kW	52,54	70,99	87,36	141,98	174,72
	Power consumption	kW	11,99	16,36	20,46	32,71	40,90
	COP	-	4,38	4,34	4,27	4,34	4,27
Energy efficiency class package label ground water (heat pump + temperature control)			A+++	2)	2)	2)	2)
W10°C/W35°C	Heting Capacity	kW	71,85	97,10	119,50	194,20	239,00
	Power consumption	kW	12,37	16,86	21,11	33,72	42,22
	COP	-	5,81	5,76	5,66	5,76	5,66
Cooling			iDM system cooling (passive and active cooling)				
B7°C/W35°C	Cooling Capacity	kW	52,7	69,0	89,2	138,0	178,3
Dimensions (H/W/D)		mm	2020/1316/774			2020/2632/774	
Operational safety/power adjustment			two hermetically separate cooling circuits			four hermetically separate cooling circuits	
Integrated heat pump management			NAVIGATOR 2.0				

1) The heat pump contains the F-Gas R410A and is subject to the provisions of F-Gas regulation EU/517/2014.
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Changes & errors excepted.