

# GROUND SOURCE HEAT PUMPS

20/26/35/42 kW

18/28 kW at high temperatures

TERRA SW Twin



THE ENERGY FAMILY



Two compressors  
for demand-based  
output adaptations

Controlled HGL technology  
for maximum hot water  
convenience and a long lifecycle

High COP of 5.17 for  
low energy consumption

Sound Reduction System  
for silent operation

NAVIGATOR control system to optimise  
energy consumption and convenience



**We take care of your well-being.**

Leading technology from IDM. Expertise from installers.

[www.idm-energie.com](http://www.idm-energie.com)

# WE MAKE IT EASY FOR YOU TO CHOOSE IDM.

## THE IDM SYSTEM TECHNOLOGY

Regardless of whether it's our development of controlled hot gas charging technology, which is more energy efficient than other systems, our stratified storage tank technology, which ensures optimum use of energy or our hygienic fresh water technology, which produces and provides bacteria-free fresh water exactly when you need it. Our research and development department has been developing solutions for over 35 years that our customers love.

## SAFETY

High operational safety ensured by 2 compressors with 1000-fold proven scroll compressors

## SMART PHONE

Unique on the market: control your new IDM heating easily using the Navigator®. The Navigator® lies at the heart of IDM's system technology. You can control your heating system by using the Navigator, regardless of whether it's via a mobile phone, tablet PC, notebook or a BUS system.



## SMART GRID

All of our heat pumps are Smart Grid ready. Smart grids connect power generators, power plants and electricity consumers. They distribute the load intelligently in the network. The heat pump gathers information from the energy supplier regarding whether the tariff is high, normal or low, and responds accordingly.



## QUALITY

Tested heat pumps with the EHPA seal of approval



**SMART  
PV  
READY**  
Der intelligenteste Weg,  
Energie zu nutzen.



## SOUND REDUCTION SYSTEM SRS

A specially sound-insulated housing, triple-damped compressor storing, flexible connecting hoses and cutting-edge insulation materials reduce the TERRA SW Twin geothermal heat pump's noise emissions to a minimum. The heat pump is even more silent in partial load mode when only one compressor is active.

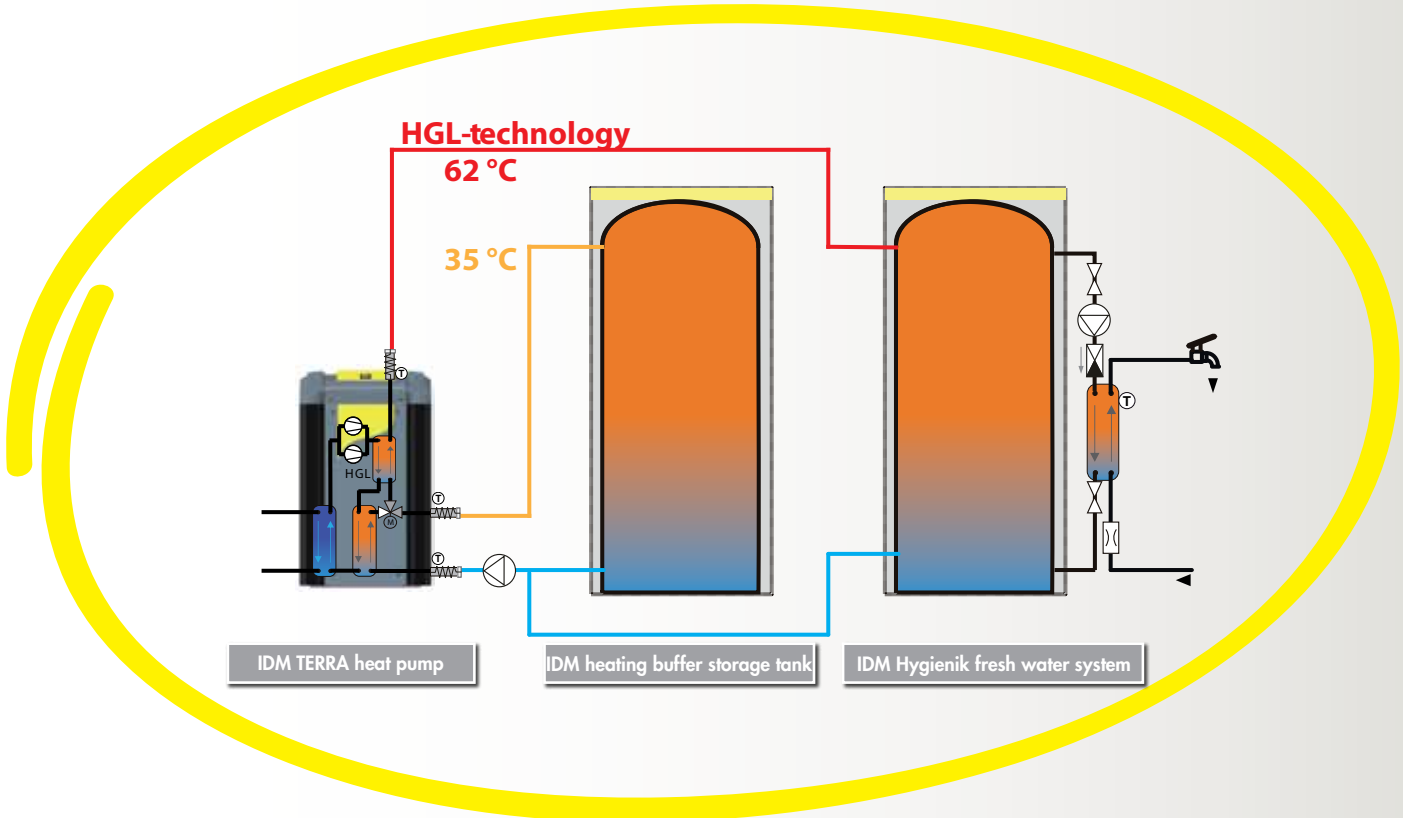


## SMART WEB

The operating data generated by the system is available at "myIDM" as soon as the commissioning phase has been completed. This means that if your heating system develops problems in a worst-case scenario, then our service technician will know about it before you have chance to feel cold.



# WHILE THE TECHNOLOGY MAY BE COMPLEX, OPERATION IS KEPT SIMPLE.

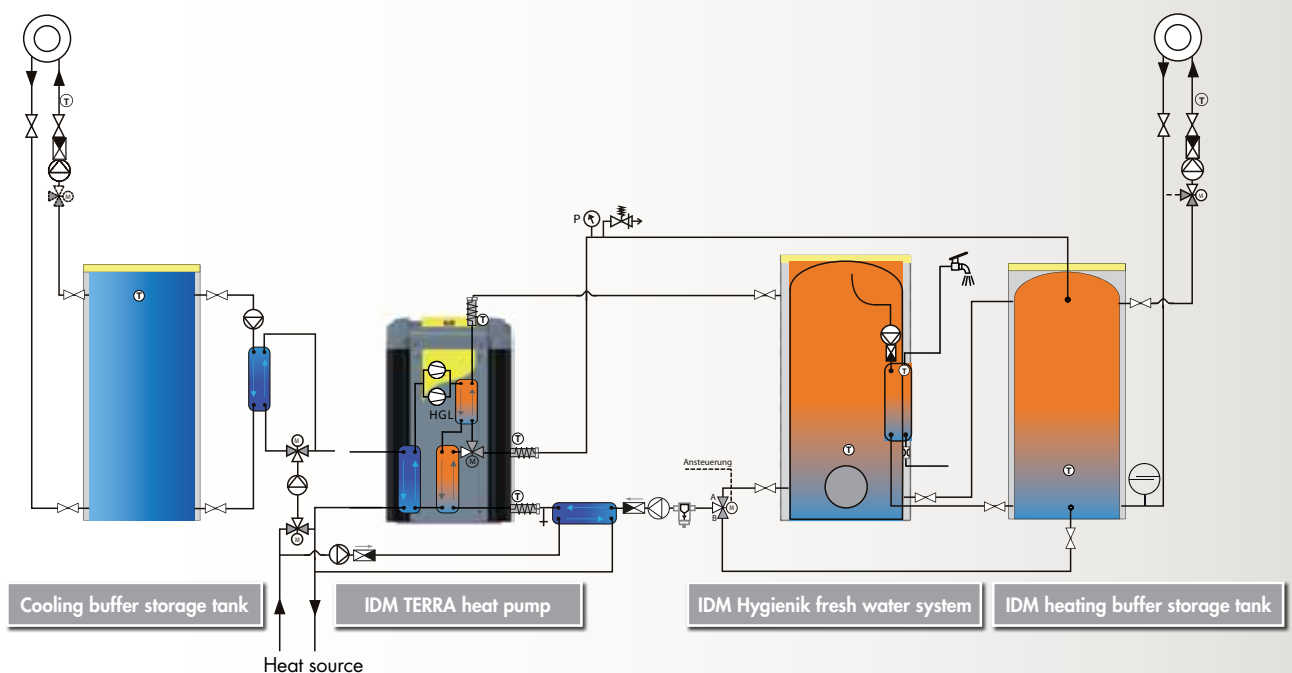


## HOT WATER WITH IDM'S CONTROLLED HOT GAS LOADING TECHNOLOGY

The IDM TERRA SW Twin heat pump with controlled HGL technology not only offers twice the comfort, but also helps save on the use of additional energy sources and their associated costs. This is because 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 second part reaches up to 62°C and is made available for hot water supply via the Hygienik buffer storage tank.

## COOLING

In addition to the energy-saving passive cooling function and the effective active cooling function with reversible heat pump, you can also use IDM's system cooling feature (see illustration). In this process, the system uses the hot water production return and the low geothermal temperatures for cooling, while simultaneously heating hot water or even heating a different heating circuit.



## TECHNICAL DATA:

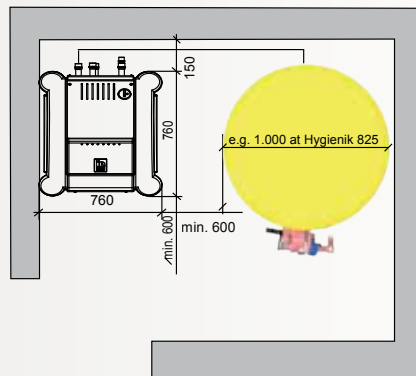
### TERRA SW Twin geothermal heat pump

TERRA type		Unit	SW 20 Twin (HGL)	SW 26 Twin (HGL)	SW 35 Twin (HGL)	SW 42 Twin (HGL)
S0/W35	Heating capacity <sub>1</sub>	kW	20.42	26.21	35.25	41.97
	Power consumption <sub>1</sub>	kW	4.18	5.47	7.11	8.82
	COP <sub>1</sub>		4.89	4.79	4.96	4.76
S0/W35 SINGLE-STAGE	Heating capacity <sub>1</sub>	kW	10.65	13.65	18.39	21.86
	Power consumption <sub>1</sub>	kW	2.09	2.73	3.56	4.41
	COP <sub>1</sub>		5.10	4.99	5.17	4.96
W10/W35	Heating capacity <sub>1</sub>	kW	27.32	35.07	46.38	55.38
	Power consumption <sub>1</sub>	kW	4.18	5.48	7.24	9.14
	COP <sub>1</sub>		6.53	6.40	6.41	6.06
Dimensions (HxWxD)		mm	1323x760x760			
Weight with controlled HGL technology		kg	265	272	278	287
Weight without HGL		kg	260	265	273	280

1: according to EN14511 with 5K splay between flow and return

#### Simple installation in confined spaces

Thanks to the small required installation space, the TERRA SW Twin geothermal heat pump and Hygienik storage unit are easily installed. You may also decide to install the unit in a storage or hobby room as the heat pump does not require fire prevention mechanisms. For more details please refer to the installation instructions or your IDM installer.



The **TERRA SW Twin HGL** delivery scope includes: a heat pump unit with two suction gas-cooled scroll capsule compressors, a copper brazed stainless steel plate heat exchanger as a condenser, a copper brazed stainless steel plate heat exchanger as an evaporator, an HGL exchanger with control valve including an actuator, refrigerant dryer, refrigerant sight glass, electronic expansion valve, electronic high and low pressure monitoring unit, control panel with navigator control, sturdy base frame, cladding for thermal and acoustic insulation, 5 x flexible connecting hoses.

The TERRA SW Twin HGL is available as 26 and 42 series model, as well as in a version with process reversal. In order to enable a cooling procedure (reversible operation) a four-way reversing valve is incorporated in the refrigerant circuit. It is controlled in the NAVIGATOR®.

The **TERRA SW Twin** package includes: a heat pump unit with two suction gas-cooled scroll capsule compressors, a copper brazed stainless steel plate heat exchanger as a condenser, a copper brazed stainless steel plate heat exchanger as an evaporator, refrigerant dryer, refrigerant sight glass, electronic expansion valve, electronic high and low pressure monitoring unit, control panel with navigator control, 4 x flexible connecting hoses and all of the necessary sensors.

The **TERRA SW-H** with R134a refrigerant is a special version for particularly high flow temperatures of up to 65°C. It is used for hot water supply in large-scale systems, but also in renovation projects.

TERRA type		Unit	SW 18 H	SW 28 H
S0/W35	Heating capacity <sub>1</sub>	kW	18.01	27.43
	Power consumption <sub>1</sub>	kW	4.11	6.36
	COP <sub>1</sub>		4.38	4.31
W10/W35	Heating capacity <sub>1</sub>	kW	24.57	37.20
	Power consumption <sub>1</sub>	kW	4.61	7.11
	COP <sub>1</sub>		5.33	5.23
Maximum flow temperature		°C	65	
Dimensions (HxWxD)		mm	1323x760x760	
Weight		kg	260	280



EN ISO 9001  
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