

# CATALOGUE



**VAN DER HEIDEN**  
Labortechnik GmbH

### Precision from the Beginning

Only specially trained experts are responsible for the manufacturing of the devices in our production department. An order only goes to the production department after all the design instructions have been prepared.

Consistent stock-keeping makes it possible to assemble all the components individually in order to build the required piece of equipment.

State of the art computers at every production workplace document the most important information and transmit all the required parameters for every cooler to the controller.

Every piece of equipment undergoes individual testing with a test report for performance and function.

Take advantage of our experience!

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The following trademarks are registered trademarks of Van der Heijden Labortechnik GmbH in Dörentrup, Germany:  
MINORE®, PARALAQUA® and COOL-CARE®

# ABOUT US

## VAN DER HEIJDEN LABORTECHNIK GMBH

Since 1974 Van der Heijden has been a production facility for recirculating coolers of all types, temperature control devices and, above all, special custom solutions.

Growth and development with the core values of finding the right solution for the customer through very high quality product and manufacturing excellence. Innovation and drive to improve temperature control while always upholding environmental values and an economic solution for its customers has always been a high priority.

A professional approach from first contact through to after sales service ensures long term customer relationships.

Van der Heijden is based in Dörentrup, a municipality in the Lippe district of North Rhine-Westphalia, Germany.



### Mirko Laskowski

Mirko Laskowski is CEO since 2017. He is working for Van der Heijden for many years. Now he is leading the company together with Andrej Kepler and is responsible for the production.



### Andrej Kepler

Andrej Kepler is CEO since 2017. He is working for Van der Heijden for many years. Now he is leading the company together with Mirko Laskowski and is responsible for the service.



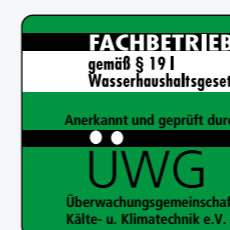
### Christoph Plagens

The former CEO and company owner Christoph Plagens will continue to support the company for another 3-4 years as a mentor and sales manager.

We place particular importance on our customer's wishes regarding the manufacture of their machines and the after-sales service they receive. The whole company is certified to DIN EN ISO9001 ensuring quality now and for many years to come. We guarantee the high quality of our chillers.

Van der Heijden are committed to energy conservation and constantly monitor our operations to ensure that our products, premises and production are as environmentally sustainable as possible, we do this through a modern premises using solar panels, light sensors and the recycling of both materials and heat used during testing of products. We can recycle your old chillers for you too.

Our customers want to save water and energy, we design our chillers to maximise this while keeping prices competitive.



We are specialized in manufacturing special-purpose solutions, beside a wide standard product range. Our particular strength is providing comprehensive advice and individual configurations to meet your requirements.



# PRODUCT RANGE

## VDH Standard Chiller

The Van der Heijden standard chillers are called KÜHLMOBIL. The smallest chillers with castors are called MINORE® and mark the entry level into the world of KÜHLMOBILS. The compact dimensions makes them suitable for a lot of standard applications.

The chillers are available in different standard case sizes.



### Advantages



#### Budget Friendly

Van der Heijden chillers offer very high value due to the competitive pricing, amount of delivered cooling power and the very short payback period compared with running water costs. A 2 year minimum warranty which may be extended to 3, gives reassurance of the high quality and life expectancy of the chillers.



#### Eco-friendly Cooling

Our chillers save 100% water when compared to using running water cooling. Maximum energy efficiency is achieved by only using the compressor when needed. Water to water chillers do not need a compressor, delivering even more savings. Water cooled chillers do not discharge waste air to the ambient room.



#### Company Experience

Van der Heijden have been manufacturing for over 40 years and has extensive knowledge and experience of cooling technology. Having developed many chiller models in close collaboration with world leading instrument manufacturers, you can be assured that we understand your requirements. German design and manufacturing but with a global service support network.



#### Customised Solution

Our chillers are fully customisable with almost infinite options even for a single unit or multiple manufacture.

E.g. models are available as system separators up to 150 kW cooling power, increased stability control, and many more.

Very high quality components and construction can prevent the formation of condensation on pipework during the Summer.



#### Easy Operation

The units are ready to use and easy to set up. The menu shows understandable text descriptions of warnings or fault conditions and no codes.

All models are equipped with a hinged lid for easy coolant refill and easy access at service and castors for easy manoeuvrability. The temperature setting as required (can be factory set).



#### High Quality

Our robust air and water-cooled chillers with a 2 mm epoxy coated metal case are suitable for 24/7 use.

A high-pressure pump feed allows good flow rates. Constant supply of water quality, temperature and pressure. Low or no noise and vibration, no fan and very low heat generation on water-cooled units. No compressor on water-water chillers.

# OUR TECHNOLOGY - YOUR ADVANTAGE!

## VDH Standard Chiller

- Robust air and water-cooled chillers
- 2mm epoxy coated metal case
- Cooling power from 300W up to 40kW / system separators up to 150 kW
- Constant supply of water quality, temperature and pressure
- Very low heat generation on water-cooled units
- Set values as required (can be factory set)
- Low or no noise and vibration - no fan on water-cooled units, no compressor on water-water units
- Easy to use, ON/OFF/SET,
- Hinged lid for easy coolant refill, easy access
- High-pressure pump feed for good flow
- Text descriptions of warnings or fault conditions, no codes
- Castors for manoeuvrability

## Value Propositions

- ✓ 100% water saving and eco-friendly
- ✓ Short payback period vs water costs
- ✓ High cooling power up to 150kW
- ✓ Fully customisable with almost infinite options
- ✓ Very high quality components and construction
- ✓ Suitable for 24/7 use
- ✓ Ready to use, easy to set up, simple set and on/ off
- ✓ Very competitive market price vs. cooling power
- ✓ 2 year warranty extendable to 3 years
- ✓ Over 40 years of experience in cooling technical and service support
- ✓ German design and manufacture
- ✓ Single unit or multiple manufacture

### PRICE POSITIONING

Very high quality, powerful, reliable and robust chillers offering low running costs, made specifically for your application, from a flexible range of options, at an affordable price.



# PRODUCT OVERVIEW

## STANDARD KÜHLMOBIL AIR-COOLED

Model	Article No.	Cooling Capacity (W) at			Pump max.		Tank L		Quick coupling (S) Ball valve (K)	Voltage Hz/ Phase	Dimensions WxDxH mm	Castors mm	Refrigerant (CFC-free)	Weight Kg	Size
		20 °C	10 °C**	0 °C**	bar	l/m									
COOL-CARE®	1-100138	180	140	95	0.15	10	1.6		6/9/13 mm S*	230V/50Hz	290 x 450 x 270	-	R134a	15	-
COOL-CARE®-16	1-100153	180	140	95	0.4	28	1.6		6/9/13 mm S*	230V/50Hz	290 x 450 x 270	-	R134a	15	-
COOL-AIR	6-100000	500 W at 35° C PT and 25° C AT			3.5	10	5		6/9/13 mm S*	230V/50Hz	280 x 480 x 560	-	water	19	KM-5
COOL-AIR-30	6-100004	3000 W at 45° C PT and 25° C AT			3.5	10	5		6/9/13 mm S*	230V/50Hz	430 x 470 x 695	-	water	22	0
MINORE® 0-A-RB400	1-100856	300	210	180	0.4	28	5		6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	31	00
MINORE® I-A-RB400	1-100857	350	250	150	0.4	28	5		6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	37	00
MINORE® II-A-RB400	1-100858	500	400	270	0.4	28	5		6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	38	00
0000-A-RB400	1-100859	600	450	300	0.4	28	5		6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	51	00
0001-A-RB400	1-100860	600	450	300	3.5	10	5		6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	52	00
0002-A-RB400	1-100861	800	620	400	0.4	28	5		6/9/13 mm S*	230V/50Hz	430 x 470 x 695	70	R290	54	0
0004-A-RB400	1-100862	800	620	400	3.5	10	5		6/9/13 mm S*	230V/50Hz	430 x 470 x 695	70	R290	54	0
000-A-RB400	1-100863	1000	800	500	0.4	28	5		6/9/13 mm S*	230V/50Hz	430 x 470 x 695	70	R290	55	0
002-A-RB400	1-100864	1000	800	500	3.5	10	5		6/9/13 mm S*	230V/50Hz	430 x 470 x 695	70	R290	55	0
010-A-RB400	1-100011	1200	850	560	3.5	10	15		6/9/13 mm S*	230V/50Hz	470 x 560 x 690	70	R134a	70	04
101-A-RB400	1-100012	1500	1100	750	3.5	10	15		6/9/13 mm S*	230V/50Hz	470 x 560 x 690	70	R134a	72	04
111-A-RB400	1-100200	1900	1250	850	3.5	10	15		6/9/13 mm S*	230V/50Hz	530 x 580 x 750	70	R134a	79	06
121-A-RB400	1-100014	2100	1500	1150	3.5	10	15		6/9/13 mm S*	230V/50Hz	530 x 580 x 750	70	R134a	81	06
132-A-RB400	1-100015	2400	1750	1200	3.5	10	15		6/9/13 mm S*	230V/50Hz	530 x 580 x 750	70	R134a	82	06
142-A-RB400	1-100309	2900	2000	1300	4.5	27	25		1/2" K	230V/50Hz	580 x 660 x 820	70	R134a	95	08
210-A-B400	1-100403	3200	2400	1600	4.5	27	100		1/2" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134a	175	2
221-A-B400	1-100462	3900	3200	2100	4.5	27	100		1/2" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134a	181	2
311-A-B400	1-100228	4300	3400	2200	4.5	27	100		1/2" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134a	183	2
312-A-B400	1-100021	5000	4300	3100	5.5	66	100		3/4" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134a	189	2
313-A-B400	1-100287	5400	4800	3600	5.5	66	100		3/4" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134a	191	2
322-A-B400	1-100023	6000	4800	3300	5.5	66	100		3/4" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R449A	199	2
423-A-B400	1-100024	7000	5200	3600	5.5	66	200		3/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R134a	223	3
424-A-B400	1-100025	7700	5900	4000	5.5	66	200		3/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R134a	247	3
433-A-B400	1-100026	8300	6500	4900	5.5	66	200		1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R134a	252	3
442-A-B400	1-100379	9500	8000	5200	5.5	66	200		1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R134a	264	3
512-A-B400	1-100405	10000	8300	5500	5.5	66	200		1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R134a	267	3
513-A-B400	1-100243	11500	9300	6600	5.5	66	200		1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R134a	267	3
531-A-B400	1-100433	12500	10800	8000	5.5	66	200		1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	270	3
534-A-B400	1-100031	14500	12200	9100	5.5	66	200		1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	275	3
543-A-B400	1-100032	16000	13200	9800	5.6	100	225		1 1/4" K	400V/50Hz/3Ph	980 x 820 x 1770	125	R449A	337	4
544-A-B400	1-100033	18000	15200	11000	5.6	100	250		1 1/4" K	400V/50Hz/3Ph	1400 x 1000 x 1800	125	R449A	337	5
549-A-B400	1-100439	20000	16500	11600	5.6	100	250		1 1/4" K	400V/50Hz/3Ph	1400 x 1000 x 1800	125	R449A	420	5
615-A-B400	1-100035	23800	19000	14000	5.6	100	250		1 1/4" K	400V/50Hz/3Ph	1400 x 1000 x 1800	125	R449A	425	5
626-A-B400	1-100036	28500	21000	16000	5.6	100	250		1 1/4" K	400V/50Hz/3Ph	1400 x 1000 x 1800	125	R449A	437	5
627-A-B400	1-100037	32000	25000	18000	5.6	100	250		1 1/4" K	400V/50Hz/3Ph	1400 x 1000 x 1800	125	R449A	450	5
634-A-B400	1-100288	38500	31000	23000	5.6	100	250		1 1/4" K	400V/50Hz/3Ph	1400 x 1000 x 1800	125	R449A	476	5

# PRODUCT OVERVIEW

## STANDARD KÜHLMOBIL WATER-COOLED

Model	Article No.	Cooling Capacity (W) at			Pump max.		Tank L	Quick coupling (S) Ball valve (K)	Voltage Hz/ Phase	Dimensions WxDxH mm	Castors mm	Refrigerant (CFC-free)	Weight Kg	Size
		20 °C	10 °C	0 °C	bar	l/m								
<b>MINORE® 0-W-RB400</b>	2-100271	300	210	180	0.4	28	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	31	00
<b>MINORE® I-W-RB400</b>	2-100272	350	250	150	0.4	28	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	37	00
<b>MINORE® II-W-RB400</b>	2-100273	500	400	270	0.4	28	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	38	00
<b>0002-W-RB400-MT</b>	2-100000	300 W at -15°C			3.5	10	3.5	6/9/13 mm S*	230V/50Hz	253 x 403 x 520	-	R449a	50	MT
<b>0000-W-RB400</b>	2-100274	600	450	300	0.4	28	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	51	00
<b>0001-W-RB400</b>	2-100275	600	450	300	3.5	10	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	52	00
<b>0002-W-RB400</b>	2-100276	800	620	400	0.4	28	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	54	00
<b>0004-W-RB400</b>	2-100277	800	620	400	3.5	10	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	54	00
<b>000-W-RB400</b>	2-100278	1000	800	500	0.4	28	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	55	00
<b>002-W-RB400</b>	2-100279	1000	800	500	3.5	10	5	6/9/13 mm S*	230V/50Hz	360 x 470 x 590	70	R290	55	00
<b>010-W-RB400</b>	2-100280	1200	850	560	3.5	10	15	6/9/13 mm S*	230V/50Hz	470 x 560 x 690	70	R134a	70	04
<b>101-W-RB400</b>	2-100281	1500	1100	750	3.5	10	15	6/9/13 mm S*	230V/50Hz	470 x 560 x 690	70	R134a	72	04
<b>111-W-RB400</b>	2-100282	1900	1250	850	3.5	10	15	6/9/13 mm S*	230V/50Hz	470 x 560 x 690	70	R134a	79	04
<b>121-W-RB400</b>	2-100283	2100	1500	1150	3.5	10	15	6/9/13 mm S*	230V/50Hz	470 x 560 x 690	70	R134a	81	04
<b>132-W-RB400</b>	2-100284	2400	1750	1200	3.5	10	15	6/9/13 mm S*	230V/50Hz	470 x 560 x 690	70	R134a	82	04
<b>142-W-RB400</b>	2-100285	2900	2000	1300	4.5	27	25	1/2" K	230V/50Hz	580 x 660 x 820	70	R134a	95	08
<b>210-W-B400</b>	2-100286	3200	2400	1600	4.5	27	50	1/2" K	400V/50Hz/3Ph	590 x 620 x 1205	125	R134a	175	1
<b>221-W-B400</b>	2-100287	3900	3200	2100	4.5	27	50	1/2" K	400V/50Hz/3Ph	590 x 620 x 1205	125	R134a	181	1
<b>311-W-B400</b>	2-100288	4300	3400	2200	4.5	27	50	1/2" K	400V/50Hz/3Ph	590 x 620 x 1205	125	R134a	183	1
<b>312-W-B400</b>	2-100289	5000	4300	3100	5.5	66	100	3/4" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134a	189	2
<b>313-A-B400</b>	2-100290	5400	4800	3600	5.5	66	100	3/4" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134a	191	2
<b>322-W-B400</b>	2-100291	6000	4800	3300	5.5	66	100	3/4" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R449A	199	2
<b>423-W-B400</b>	2-100292	7000	5200	3600	5.5	66	200	3/4" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134A	223	2
<b>424-W-B400</b>	2-100293	7700	5900	4000	5.5	66	200	3/4" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134A	247	2
<b>433-W-B400</b>	2-100294	8300	6500	4900	5.5	66	200	1" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134A	252	2
<b>442-W-B400</b>	2-100295	9500	8000	5200	5.5	66	200	1" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134A	264	2
<b>512-W-B400</b>	2-100296	10000	8300	5500	5.5	66	200	1" K	400V/50Hz/3Ph	680 x 730 x 1520	125	R134A	267	2
<b>513-W-B400</b>	2-100297	11500	9300	6600	5.5	66	200	1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	267	3
<b>531-W-B400</b>	2-100298	12500	10800	8000	5.5	66	200	1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	270	3
<b>534-W-B400</b>	2-100299	14500	12200	9100	5.5	66	200	1" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	275	3
<b>543-W-B400</b>	2-100300	16000	13200	9800	5.6	100	225	1 1/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	337	3
<b>544-W-B400</b>	2-100301	18000	15200	11000	5.6	100	250	1 1/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	337	3
<b>549-W-B400</b>	2-100302	20000	16500	11600	5.6	100	250	1 1/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	420	3
<b>615-W-B400</b>	2-100303	23800	19000	14000	5.6	100	250	1 1/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	425	3
<b>626-W-B400</b>	2-100304	28500	21000	16000	5.6	100	250	1 1/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	437	3
<b>627-W-B400</b>	2-100305	32000	25000	18000	5.6	100	250	1 1/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	450	3
<b>634-W-B400</b>	2-100306	38500	31000	23000	5.6	100	250	1 1/4" K	400V/50Hz/3Ph	800 x 850 x 1665	125	R449A	476	3

\* at buyer's option

\*\* selectable for KÜHLMOBIL VDH-series



Specifications may change without prior notification.

## COOL-CARE® AIR-COOLED

In order to avoid cooling water being consumed during the range of applications VAN DER HEIJDEN has developed the COOL-CARE®.

The COOL-CARE® operates on the principle of a circulating cooler. A refrigerating unit cools the circulating water or the anti-freeze mixture in a small container made by plastics, from where a circulating pump conveys it to the unit which is to be cooled.

The filling of the container occurs at the top of the unit, which is easily accessible.

The cover can be screwed on. If maintaining the temperature constant within a determined range is more important than water savings, the COOL-CARE® is available with a small heating unit. A wear-resistant microprocessor controlled unit regulated a container heating unit and ensures a very precise water outlet temperature.



### ADVANTAGES

- 100 % water savings
- Temperature of cooling water can be set as required
- Minimal space requirements on any laboratory table
- Virtually silent in operation
- Exceptionally easy to use
- Suitable for wide range of uses

### RANGE OF APPLICATION

- HPLC
- Electrophoresis
- Micro-Rotis
- Soxleth
- Water baths
- and other more

Technical data	COOL-CARE®	COOL-CARE®-16
Cooling capacity	180 W at 20° C	180 W at 20° C
Ambient temperature	approved up to +28° C	approved up to +28° C
Pumping capacity max.	10 l/min.	24 l/min.
Feed pressure max.	0.15 bar	0.4 bar
Connections	3/8" quick lock coupling rear of unit	3/8" quick lock coupling rear of unit
Tank contents	1.6 liter	1.6 liter
Dimensions W x D x H	290 x 450 x 270 mm	290 x 450 x 270 mm
Type of current	230 V / 50 Hz / 1 PH / N / PE	230 V / 50 Hz / 1 PH / N / PE
Power consumption	140 W max.	160 W max.
Weight	15 kg	15 kg
Refrigerant	R134a (CFE-free)	R134a (CFE-free)
Upper housing	pure white	pure white
Lower housing	pure white	pure white

## MINITOWER WATER-COOLED

This picture shows a water-cooled version of a cooling unit. Thanks to its relatively small dimensions it can be easily positioned inside a laboratory cabinet or similarly confined space. Since the unit releases very little heat into the surrounding area, there is no need for ventilation of the installation location. The unit's performance is sufficient to supply up to three workstations with rotating vaporizers.

The chiller can be operated by the capacitive pad which is easy to understand. All error messages are shown on the display and indicated by means of an acoustic alarm. A powerful magnetic coupled feed pump ensures good flow through the heat exchanger. A static maximum pressure up to 3.5 bar is available. All versions of the cooling unit are low-noise. The coolant tank is also located on the front of the unit, also making it easy to top up after the unit has been installed. The filler cap is an easy to open screw top. A yellow symbol indicates if the coolant level in the reservoir tank is too low. The water side connections are located on top of the unit at the rear. This unit is also available for flow temperatures above zero.

As far as the supplier side for the cooling unit is concerned, this can be provided by the building's own water-cooling circuit or by the drinking water supply pipe. The unit consumes only as much water as it needs to meet the cooling output. When the cooling unit is switched off, water consumption is equal to zero. Everything functions automatically and maintenance-free.



Thanks to a special system, two side panels can be removed very quickly, making everything easily accessible and greatly enhancing the service friendliness of the unit. This unit is also available as a system separator without a compressor (water-water cooler), which means that an output of up to 9 kW can be achieved with the same unit dimensions.

Technical data	MINITOWER 0002-W-RB400 MT
Cooling capacity at -15° C	300 W
Ambient temperature	approved up to 35° C
Pumping capacity max.	10 l/min.
Feed pressure max.	3.5 bar
Connections	3/8" inside thread
Tank contents	3.5 liter
Dimensions W x D x H	275 x 405 x 565 mm (including feet)
Type of current	230 V/50 Hz
Power consumption	0.69 kW max.
Weight approx.	30 kg
Refrigerant	R449A
Colour, frame/panelling	RAL 5003 (blue) / RAL 9002 (grey-white)

# MINORE® AIR-COOLED

The MINORE® is a small circulatory cooling unit. A cooling unit cools the circulating water and /or antifreeze mixture in a small container, from which it is extracted by a circulation pump and supplied to the cooling unit. The container is filled from under the hinged cover on the top of the unit and is easily accessible.

This type of unit is available in the same size of casing up to 600 W and 3.0 bars pump pressure. Technical details are provided on the following page. The types involved are models 0000 and 0001.

## RANGE OF APPLICATION

- Rotation evaporators
- Distillation devices
- Soxleth extractions
- Water baths

## ADVANTAGES

- 100 % water savings in tap water = no tap water costs
- No sewage costs for waste water
- Cooling water temperatur can be regulated
- Constant water quality, no lime, no algae
- Minimum space requirements on every laboratory tabel
- Constant water pressure



- Almost noiseless
- Temperature display in O-LED
- capacitive touch pad
- Can be used for varying applications
- On castors
- Also available with higher pump pressure
- Power regulation by microprocessor controlled heating, this means high temperature constance of water prerun temperature (0.1 K)



Backside this appliance is equipped with a prerun pressure manometer, bypass and quick couplings.



The tank with screwable plug is placed under the lid. NOTE! Our model plates are also placed under the lid. The hinged lid stays after opening like it is shown on the picture, so that it is easy to fill the tank.

Technical data	MINORE® 0-A-RB400	MINORE® I-A-RB400	MINORE® II-A-RB400
Cooling capacity	300 W at 20° C	350 W at 20° C	500 W at 20° C
Ambient temperature	approved up to +32° C	approved up to +32° C	approved up to +32° C
Pumping capacity max.	28 l/min.	28 l/min.	28 l/min.
Feed pressure max.*	0.4 bar	0.4 bar	0.4 bar
Connections	quick lock coupling with 9 mm hose sleeve	quick lock coupling with 9 mm hose sleeve	quick lock coupling with 9 mm hose sleeve
Tank contents	5 liter	5 liter	5 liter
Dimensions W x D x H	360 x 470 x 590 mm	360 x 470 x 590 mm	360 x 470 x 590 mm
Type of current	230 V / 50 Hz / 1 PH / N / PE	230 V / 50 Hz / 1 PH / N / PE	230 V / 50 Hz / 1 PH / N / PE
Power consumption	220 W	270 W	340 W
Weight	31 kg	37 kg	38 kg
Refrigerant	R290	R290	R290
Colour	RAL 5003/RAL 7035	RAL 5003/RAL 7035	RAL 5003/RAL 7035



# KÜHLMOBIL 0000-A-RB400 AND 0001-A-RB400

All the models are available with electronic power control, which provides a highly consistent temperature at the water outlet (0.1 K).

The desired flow volume on the water side can be adjusted using a bypass.

All the units are mobile and equipped with a pump cut-out in the event of water failure.

External installation with appropriate options is available. The feed pump is extremely quiet. Temperature display in O-LED. Faults are shown in the display textual.

Serviceable due to the new fixing technic of the sheets. Every side has just 2 screws which are easy to release.

In standard version these appliances will be delivered with castors.

## RANGE OF APPLICATION

- Rotation evaporators
- E-Mics
- AAS devices
- ICP devices
- Extraction devices
- Distillation devices
- and other more



# KÜHLMOBIL 0002-A-RB400 AND 0004-A-RB400



Standard version backside

Technical data	KÜHLMOBIL 0000-A-RB400	KÜHLMOBIL 0001-A-RB400
Cooling capacity	600 W at 20° C	600 W at 20° C
Ambient temperature	approved up to +32° C	approved up to +32° C
Pumping capacity max.	28 l/min.	10 l/min.
Feed pressure max.	0.4 bar	3.5 bar
Connections	quick lock coupling with 9 mm hose sleeve	quick lock coupling with 9 mm hose sleeve
Tank contents	5 liter	5 liter
Dimensions W x D x H	360 x 470 x 590 mm	360 x 470 x 590 mm
Type of current	230 V / 50 Hz / 1 PH	230 V / 50 Hz / 1 PH
Power consumption	430 W max.	500 W max.
Weight	51 kg	52 kg
Refrigerant	R290	R290
Colour	RAL 5003/RAL 7035	RAL 5003/RAL 7035

Technical data	KÜHLMOBIL 0002-A-RB400	KÜHLMOBIL 0004-A-RB400
Cooling capacity	800 W at 20° C	800 W at 20° C
Ambient temperature	approved up to +32° C	approved up to +32° C
Pumping capacity max.	28 l/min.	10 l/min.
Feed pressure max.	0.4 bar	3.5 bar
Connections	quick lock coupling with 9 mm hose sleeve	quick lock coupling with 9 mm hose sleeve
Tank contents	5 liter	5 liter
Dimensions W x D x H	430 x 470 x 695 mm	430 x 470 x 695 mm
Type of current	230 V / 50 Hz / 1 PH	230 V / 50 Hz / 1 PH
Power consumption	550 W max.	630 W max.
Weight	52 kg	54 kg
Refrigerant	R290	R290
Colour	RAL 5003/RAL 7035	RAL 5003/RAL 7035

# KÜHLMOBIL 000-A-RB400 UP TO 010-A-RB400

All the models switch off completely in the event of a fault or water failure.

The air inlet is on the front face. The air outlet is at the rear.

If no warming of the surrounding area is desired, every version can be supplied water-cooled. Versions as temper units are possible too.



Shows the backside of the chiller with a plug contact as interface for the floating contact.



# KÜHLMOBIL 101-A-RB400 AND 111-A-RB400

## RANGE OF APPLICATION

- Laser devices
- High frequency furnaces
- Sputtering systems
- Trout ponds
- and other more



Technical data	KÜHLMOBIL 000-A-RB400	KÜHLMOBIL 002-A-RB400	KÜHLMOBIL 010-A-RB400
Cooling capacity	1000 W at 20° C	1000 W at 20° C	1200 W at 20° C
Ambient temperature	approved up to +32° C	approved up to +32° C	approved up to +32° C
Pumping capacity max.	28 l/min.	10 l/min.	10 l/min.
Feed pressure max.	0.4 bar	3.5 bar	3.5 bar
Connections	quick lock coupling with 9 mm hose sleeve	quick lock coupling with 9 mm hose sleeve	quick lock coupling with 9 mm hose sleeve
Tank contents	5 liter	5 liter	5 liter
Dimensions W x D x H	430 x 470 x 695 mm	430 x 470 x 695 mm	470 x 560 x 690 mm
Type of current	230 V / 50 Hz / 1 PH	230 V / 50 Hz / 1 PH	230 V / 50 Hz / 1 PH
Power consumption	580 W max.	650 W max.	720 W max.
Weight	55 kg	55 kg	70 kg
Refrigerant	R290	R290	R134a
Colour	RAL 5003/RAL 7035	RAL 5003/RAL 7035	RAL 5003/RAL 7035

Technical data	KÜHLMOBIL 101-A-RB400	KÜHLMOBIL 111-A-RB400
Cooling capacity	1500 W at 20° C	1900 W at 20° C
Ambient temperature	approved up to +32° C	approved up to +32° C
Pumping capacity max.	10 l/min.	10 l/min.
Feed pressure max.	3.5 bar	3.5 bar
Connections	quick lock coupling with 13 mm hose sleeve	quick lock coupling with 13 mm hose sleeve
Tank contents	15 liter	15 liter
Dimensions W x D x H	470 x 560 x 690 mm	530 x 580 x 750 mm
Type of current	230 V / 50 Hz / 1 PH	230 V / 50 Hz / 1 PH
Power consumption	850 W max.	1050 W max.
Weight	72 kg	79 kg
Refrigerant	R134a	R134a
Colour	RAL 5003/RAL 7035	RAL 5003/RAL 7035

# KÜHLMOBIL 121-A-RB400 AND 132-A-RB400

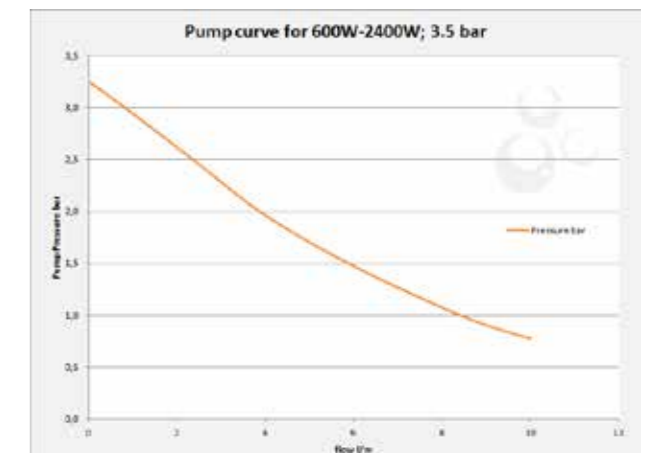
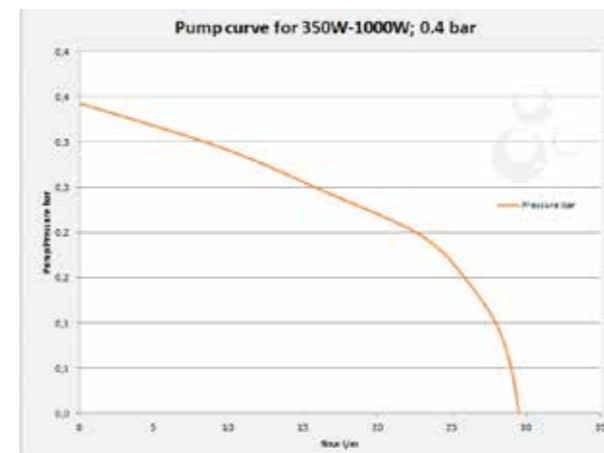
If flow displays are desired as an option, they are essentially installed on the last point on the return. Even with bypass control, the number of litres per minute flowing through the unit being cooled can be read.

With the bypass an exact adjustment is possible. The volume flow will be monitored digital in the front side display of the operating panel.



The tank (15 liter) is placed under the lid.

## PUMP CURVES 0.4 AND 3.5 BAR



Technical data	KÜHLMOBIL 121-A-RB400	KÜHLMOBIL 132-A-RB400
Cooling capacity	2100 W at 20° C	2400 W at 20° C
Ambient temperature	approved up to +32° C	approved up to +32° C
Pumping capacity max.	10 l/min.	10 l/min.
Feed pressure max.	3.5 bar	3.5 bar
Connections	quick lock coupling with 13 mm hose sleeve	quick lock coupling with 13 mm hose sleeve
Tank contents	15 liter	15 liter
Dimensions W x D x H	530 x 580 x 750 mm	530 x 580 x 750 mm
Type of current	230 V / 50 Hz / 1 PH	230 V / 50 Hz / 1 PH
Power consumption	1100 W max.	1140 W max.
Weight	81 kg	82 kg
Refrigerant	R134a	R134a
Colour	RAL 5003/RAL 7035	RAL 5003/RAL 7035



# KÜHLMOBIL 142-A-RB400

The model 142-RB400 is exceptionally compact and particularly suitable for applications that require very constant water temperatures (has to be ordered as option). The litre-performance of the circulation pumps is designed for low volume flow at high pressures.

If higher circulation quantities are required then the model 142-A-B400 / special size 1) is recommended.

The control of the cooler displays permanent the actual value and set value at the same time. The OLED display is very visible even at a distance.

The simple attachment of the casing provides quick service- friendly detachment possible. Everything is accessible and can be replaced relatively easily.

Despite a cooling power of 2900 W the device is over proportionally quiet.



# KÜHLMOBIL 142-A-B400 / SPECIAL SIZE 1

This circulatory cooling unit is particularly popular because of its sturdiness and versatility.

The unit is easy to operate and the controls are readily accessible through the door of the control cabinet.

With a ramp regulator, this model can also be used as a heating unit up to +85 °C. Several temperature levels can be time-controlled and run automatically in another casing size.

If the KÜHLMOBIL is not directly in the same room, a plug-in remote control is available.

Multi-port distributors with up to 6 ports can readily be installed on the KÜHLMOBIL.

## RANGE OF APPLICATION

- Bi-Distillation devices
- Drum cooling
- X-ray devices
- High frequency spindles
- and other more



Technical data	KÜHLMOBIL 142-A-RB400
Cooling capacity	2900 W at 20° C
Ambient temperature	approved up to +32° C
Pumping capacity max.	27 l/min.
Feed pressure max.	4.5 bar
Connections	ball valves 1/2"
Tank contents	25 liter
Dimensions W x D x H	580 x 660 x 820 mm
Type of current	230 V / 50 Hz / 1 PH
Power consumption	1.48 kW
Weight	91 kg
Refrigerant	R134a
Colour	RAL 5003/RAL 7035

Technical data	KÜHLMOBIL 142-A-B400 / SPECIAL SIZE 1
Cooling capacity	3000 W at 20° C
Ambient temperature	approved up to +32° C
Pumping capacity max.	27 l/min.
Feed pressure max.	4.5 bar
Connections	ball valves 1/2" hose sockets
Tank contents	50 liter
Dimensions W x D x H	580 x 620 x 1205 mm
Type of current	230 V / 50 Hz / 1 PH
Power consumption	1.5 kW
Weight	128 kg
Refrigerant	R134a
Colour	RAL 5003/RAL 7035

# KÜHLMOBIL 210-A-B400 UP TO 512-A-B400

These models of cooling unit are also mobile units with plug-in connections.

Depending on the performance, the tanks contain 100 to 250 litres. The containers are easy to fill thanks to the large filling holes on the top of each cooling unit. Screwable covers with sealing rings tightly seal off the water side. Evaporation rates are very low.

Since the heat emitted from units of this size can be very considerable (warming of more than 40% to the surrounding area from the cooling operation), these units are frequently installed outside, in technical areas or even in large fields.

The amortisation times are relatively short since the KÜHLMOBIL saves significant amounts of water per year.

All the variants are also possible on these versions.



This application shows a version with manual bypass. Automatic bypass as option which opens when the unit which is to be cooled closes.

There will be customers cases where the water ways will be closed by magnetic valves. To let the feed pump of the chiller not run against closed valves, this automatic bypass opens in this case and water will flow by a short circuit. The pump will not be damaged by this and the maximum pressure will be limited.

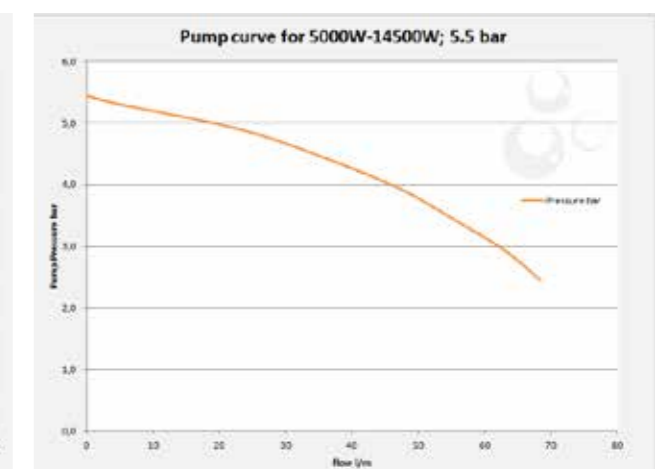
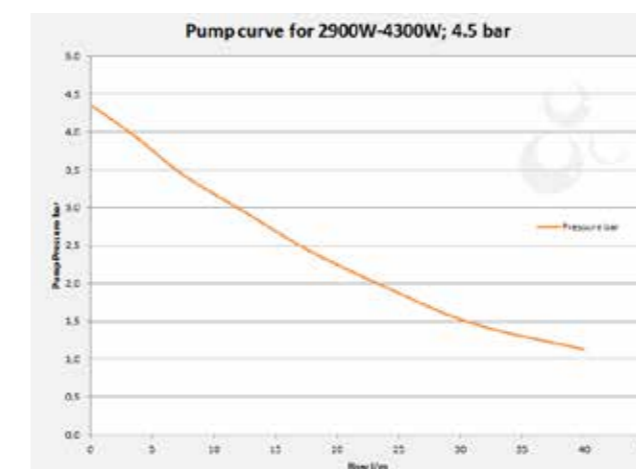
The required opening pressure will be adjusted here in our production. But due to the good access another adjustments are also possible. Turn right means more pressure and turn left means low pressure.

## RANGE OF APPLICATION

- Packaging machinery
- Sputtering systems
- X-ray fluorescence spectrometer
- X-ray generators
- Form presses
- and other more

Technical data	KÜHLMOBIL 313-A-B400
Cooling capacity	5400 W at 20° C
Ambient temperature	approved up to +32° C
Pumping capacity max.	66 l/min.
Feed pressure max.	5.5 bar
Connections	ball valves 3/4" hose sockets
Tank contents	100 liter
Dimensions W x D x H	680 x 730 x 1520 mm
Type of current	400 V / 50 Hz / 3 PH
Power consumption	3.4 kW
Weight	191 kg
Refrigerant	R134a
Colour	RAL 5003/RAL 7035

## PUMP CURVES 4.5 AND 5.5. BAR



# LCS 80:



Technical Data	KÜHLMOBIL LCS 80
Cooling power	20 kW at -15°C / 16 kW at -25° C / 8,5 kW at -40° C
Ambient temperature	up to +50° C
Pump capacity max.	53 l/min.
Feed pressure max.	4.7 bar
Connections	1" ball valves with hose connections
Tank volume	105 l
Dimensions W x D x H	2015 x 1100 x 2000 mm
Power supply requirement	400 V 3~ 50 Hz
Max. current	60 A
Weight	880 kg
Refrigerant	R449A
Sound pressure level +/- 4 dB(A)	77 dB(A)

## BETTER, STRONGER AND COLDER:

The latest product from Van der Heijden is the LCS 80 developed for Huber USA.

The device is performance-optimized thanks to a built-in high-performance fan motor and micro-channel technology, and can be set up both indoors and outdoors. The permissible ambient temperature is -20°C to +50°C. It can be operated comfortably from the interior.

The chiller delivers an excellent cooling capacity of 8 kW at -40° C and is equipped with a capacitive user interface as a remote control with OLED display. The LCS 80 chiller has an air-cooled cooling unit and a powerful circulation pump (stainless steel). With plug-and-play technology, the LCS 80 is a solution for wide-ranging applications.

In the USA, the device is mainly used in the extraction industry and in the pharmaceutical sector and is set to conquer the market there. Further modified versions are planned.



# WATER-WATER CHILLER (SYSTEM SEPARATOR)



PHOTO SHOWS WATER-WATER COOLER FROM 1 KW TO 15 KW (FOR EXAMPLE)



Water-water coolers from Van der Heijden Labortechnik GmbH are available in the same performance versions as the standard KÜHLMOBIL.

All the models are specially designed for the existing water circuits and can be supplied with outputs up to 150 kW.

The standard models are fitted with bypass, manometer and sensor to monitor the flow. The unit switches off if any kind of fault occurs. Temperature control is on the secondary circuit. A motorised valve on the primary circuit automatically regulates the water volume. The stepped motor operates in fine stages to ensure a highly consistent temperature.

So that these units can be designed specifically, the following domestic water details are required:

- Water outlet temperature on the domestic water side and/or the inlet temperature to the cooling unit.
- The pressure differential over the domestic water circuit
- How much water is available?

Please call us. We will gladly design a suitable unit for you!

These models of cooling unit are increasingly cheaper than cold compression units the higher the output. This also applies to the size and the noise levels. These units provide particularly good noise insulation, are relatively quiet at high output levels and are extremely compact.

The heat emitted to the surrounding environment is virtually negligible. There are no problems with condensation because the primary circuit essentially is isolated. If this model of KÜHLMOBIL is to be connected to fixed pipes, feet are available instead of castors.

Water-Water-Chillers in different sizes and capacities showed backside. All systems are equipped as standard with 3-way motor valves.

# WATER-WATER CHILLER (SYSTEM SEPARATOR)



## WATER-WATER COOLER FROM 30 UP TO 150 KW

Today, many institutes already have their own cooling water supply. This cooling water is generally too cold to cool a laser or an electronical microscope or the water quality may be of a poor quality.

As a system separator, the KÜHLMOBIL offers the ideal solution for such problems and has relative small dimensions. It operates without a compressor and consequently without any refrigerant - only the feed pump requires energy, as the refrigerant output uses the domestic cooling water system.

The drawing on the next page shows the basic functional principle. The purchasing price of such a device is far below those of a compressor cooled device.

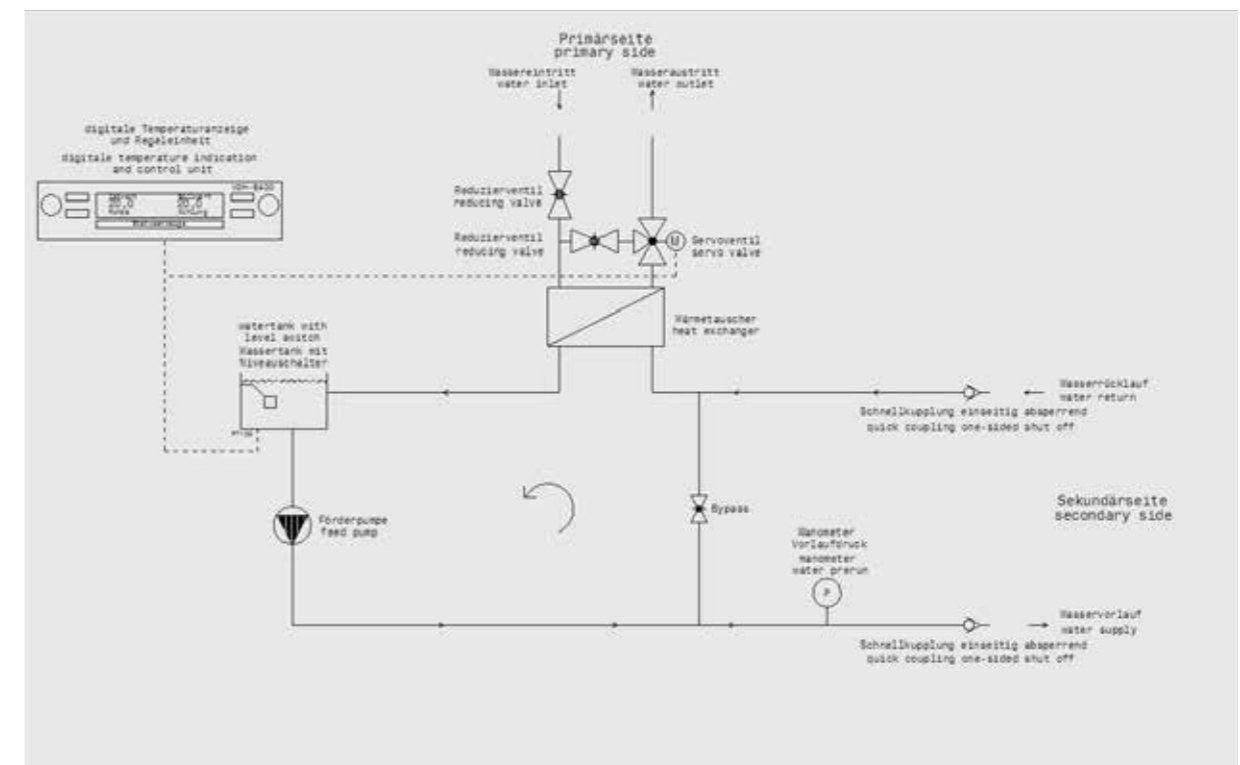
This appliance works with a 3- way motor valve. Due to the analogue steering signals by a PiD-regulator (0-10 V) the constant temperatures will be reached and source of disturbances will be balanced.

This versions can also be delivered with a through-valve as motor valve, if a 3-way valve is not required.

These systems can achieve much higher cooling capacities (up to 150 kW) and are much quieter (hardly any vibrations) and have very low operating costs. The devices are very compact because there is no compressor, especially as the cooling capacity increases. Condensation is eliminated due to the isolation of the primary side.



## PRINCIPLE OF SYSTEM SEPARATOR





# WATER-WATER CHILLER (SYSTEM SEPARATOR)

## NEW:

### SYSTEM SEPARATOR WITHOUT ACTIVE COOLING WITH EXTREMELY HIGH TEMPERATURE CONSTANCY

For many years, Van der Heijden has been supplying so-called water-water coolers (system separators) in a wide variety of applications and thus using existing house cooling systems for heat dissipation, which must be dissipated by the application to be cooled. This type of cooling is extremely energy-efficient, does not require complex, active cooling technology with a refrigerant gas and is extremely quiet.

Waste heat to the surrounding space is almost negligible.

However, since the applications to be cooled in some cases place ever increasing demands on the temperature stability of the water inlet temperature, we have taken up the issue and developed new system separators that have a constant temperature of 0.02 K / min. fulfill.

This high temperature stability makes it e.g. possible to cool electron microscopes with the highest demands without sacrificing image resolution. However, this also applies to other areas of application with such high temperature requirements.

This type of cooler is not only recommended for environmental reasons, but also for price reasons compared to devices with active cooling. The greater the required services, the greater the price advantage and the energy efficiency.

The device works with a 3-way motor valve. Due to the analog control signals via a PiD controller (0-10 V), the constant temperatures are reached and the sources of interference are compensated.

The devices can also be supplied with a 2-port valve as a motor valve if a 3-way valve is not required.



Budget Friendly



Eco-friendly Cooling



Company Experience



Customised Solution



Easy Operation



High Quality

These systems can achieve much higher cooling outputs (up to 150 kW) and are much quieter (hardly any vibrations) and have very low operating costs. The units are very compact because there is no compressor, especially when the cooling capacity increases. Condensation is eliminated due to the insulation on the primary side.

**Do you have applications that require high temperature stability? We would be happy to advise you and design the device specifically for your application!**

# SPLIT SOLUTIONS



## POSSIBILITIES OF DIFFERENT SPLIT SOLUTIONS

There are several ways to reduce waste heat and noise levels in the lab. The waste heat from coolers is annoying for the user and not always makes sense for energy reasons in the premises.

### Version 1 (bottom right):

Here, the condenser is removed from the air-cooled cooler and mounted outside. Thus, the heat generated by the radiator, discharged to the outside. In this case, the heat is no longer inside the room. Only the noise from the compressor is heard in the lab, but the use of sound insulation tries to keep it as low as possible.

### Version 2 (top right):

In this variant, a complete refrigeration unit is mounted to the outside. Thus, a smaller housing can be used and the noise and heat pollution are no longer in the laboratory. The housing is provided with sound insulation as in the first version.

### Version 3 (left):

This solution is an outdoor installation for the entire radiator. Care must be taken here that an anti-freeze (eg glycol) is used to ensure frost protection. It is possible to deliver a cooler freely to the outside, then a rain cover is mounted on the housing. If a covered possibility exists, then it will be ignored.



## OUR STRENGTH - YOUR ADVANTAGE: TAILOR-MADE COOLING SOLUTIONS

Here is any noise outside the lab.

Depending on the application, a suitable cooler for you will be configured.

There are applications that must not be operated with antifreeze as cooling fluid. For these cases we offer special solutions.

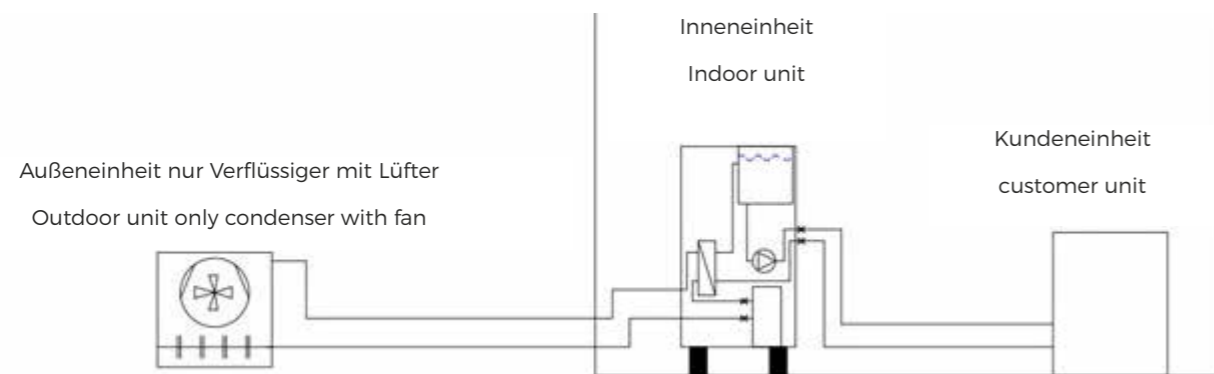
Contact us!

For the first two versions, the systems must be installed and commissioned by qualified personnel. The systems are prepared as well as possible by us for on-site installation.

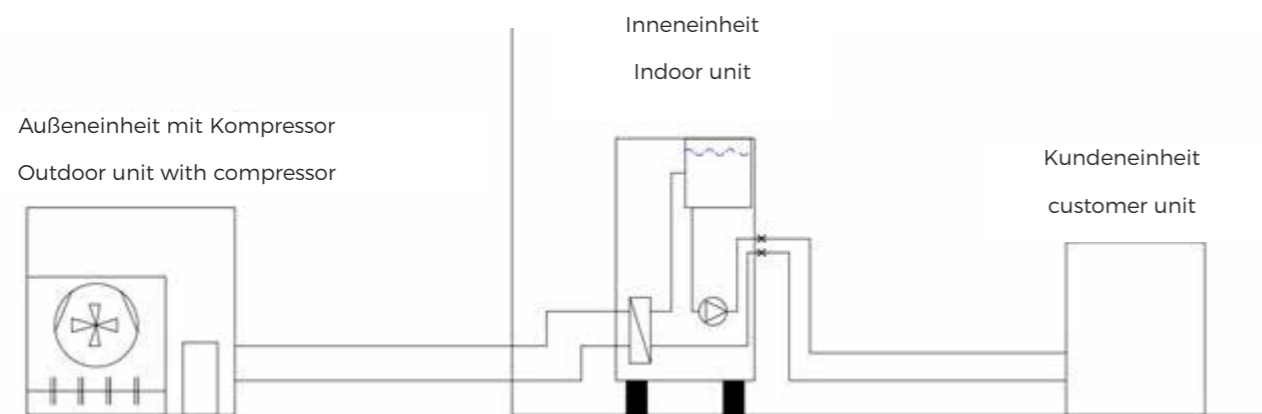
We are also happy to offer installation for you on site.

# SPLIT SOLUTIONS

## POSSIBILITIES OF DIFFERENT SPLIT SOLUTIONS



### VERSION 1



### VERSION 2



### VERSION 3

## ADVANTAGES OF THE SPLIT SOLUTIONS

- no noise in the lab
- no waste heat in the laboratory
- energetically sensible
- no space problems
- individually
- and many more

**These lists are only a small indication of our flexibility.**

**We modify your device according to your specific needs.**

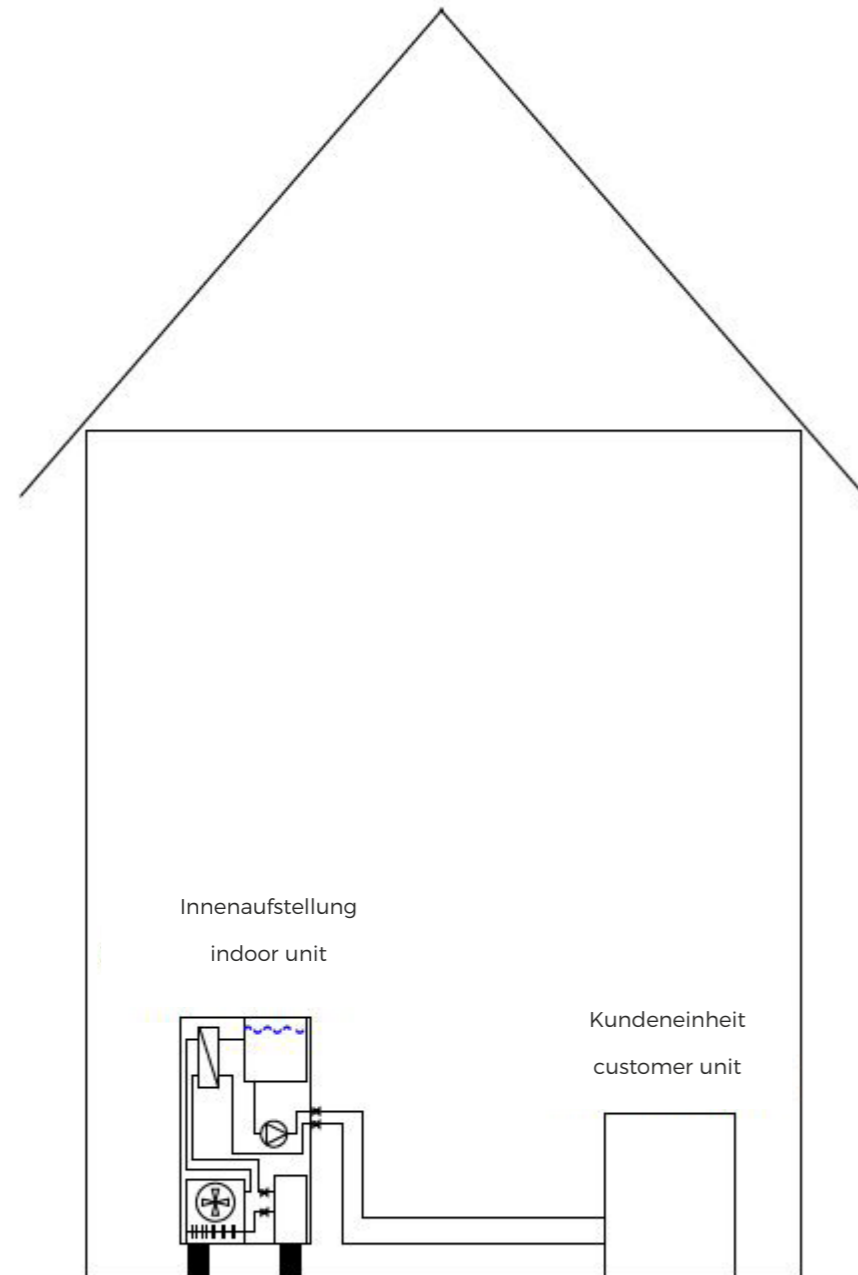
**Please ask for more information about your requirement!**

**And get your very individual offer.**

# SKETCH AIRCOOLED VERSION

## ADVANTAGES OF THE AIRCOOLED VERSION

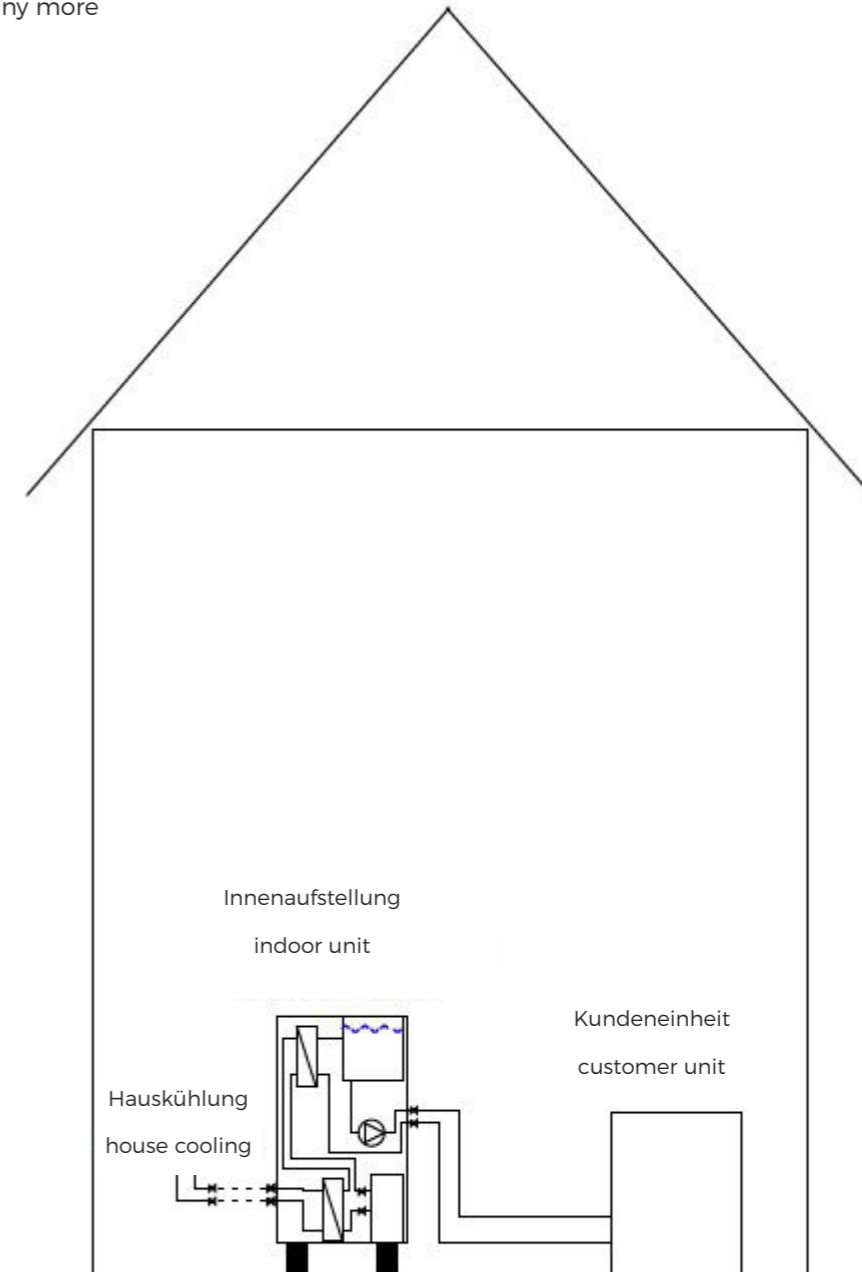
- Simple installation and commissioning
- Flexible locations possible, only power supply and connection to customer unit necessary
- Low maintenance
- Compact unit in optically appealing casing
- and many more



# SKETCH WATERCOOLED VERSION

## ADVANTAGES OF THE WATERCOOLED VERSION

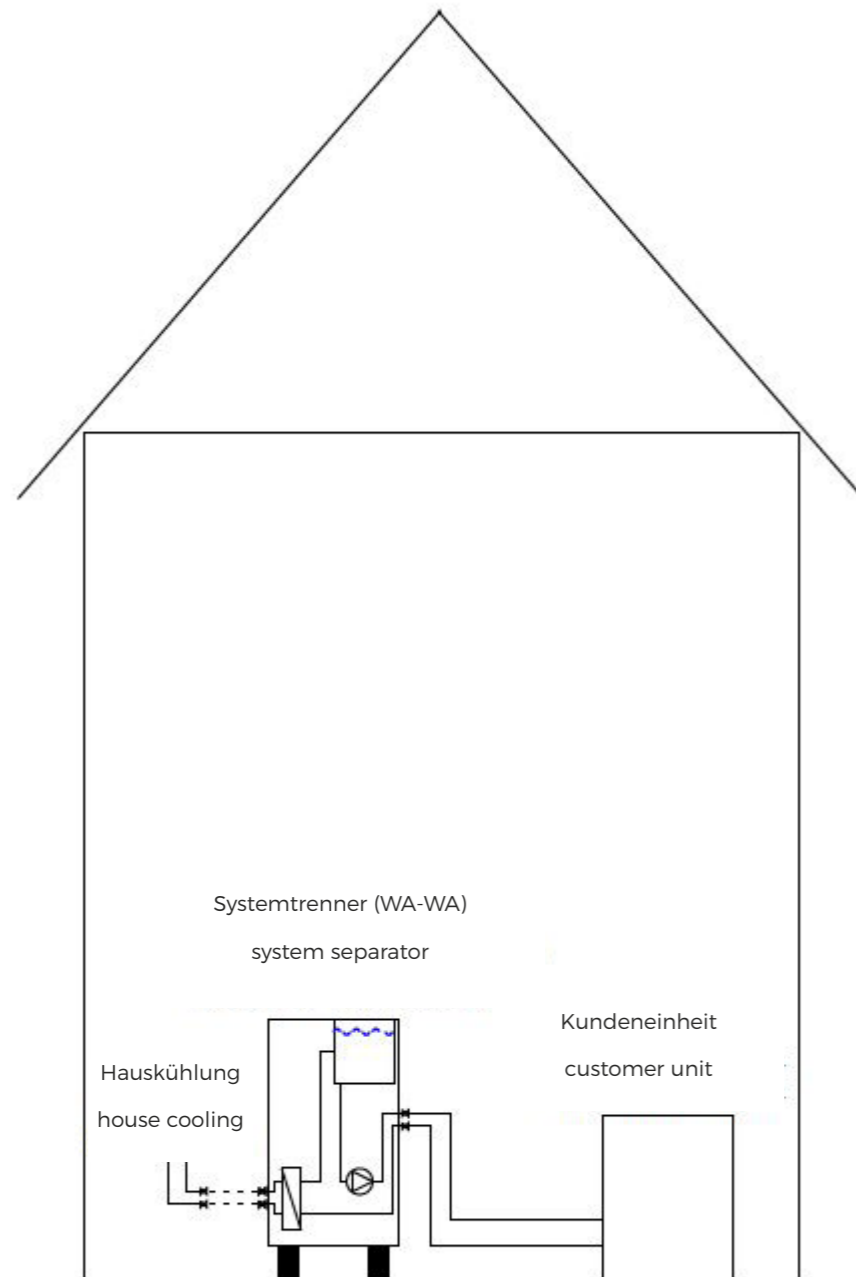
- There is hardly any heat input into the room due to the water-cooled condenser
- Low demands on the house cooling circuit
- Comparatively low water consumption
- Low maintenance
- Compact unit in optically appealing casing
- and many more



# SKETCH WATER-WATER VERSION

## ADVANTAGES OF THE WATER-WATER SYSTEM SEPARATOR

- Low power consumption
- High constancy and precision of the water supply temperature
- Low vibrations, noise emissions and space requirements
- High cooling capacities can be realized in a small casing
- Low maintenance
- Compact unit in optically appealing casing
- and many more



# COOL-HYBRID (COMBINATION DEVICE)

## YOU HAVE ALL OPTIONS: A COMBINATION DEVICE, AIR-, WATER-COOLED WITH ACTIVE COOLING AND AS A SYSTEM SEPARATOR WITHOUT ACTIVE COOLING FEASIBLE

Since many laboratories and institutes are now equipped with cooling water pipes, but this can often not be used directly for cooling analyzer equipment, so-called system separators are used as water-cooled systems.

A particular problem is posed when the radiator or system separator (for whatever reason) is no longer supplied with cooling water or e.g. the temperature of home cooling has increased significantly.

This inevitably leads to a disturbance and thus to a no longer sufficient cooling of an analyzer.

Weekly test series can be interrupted or sample processing can no longer be carried out due to these failures.

In order to ensure trouble-free operation with high reliability, Van der Heijden-Labortechnik GmbH has designed a so-called combination device precisely for these situations.

Faults in the cooling water network are registered by the cooler and a built-in active cooling, as an air-cooled version, automatically takes on the task of cooling.

This ensures an uninterrupted cooling process and allows the user to continue working normally. With an air-cooled version, you are independent of the cooling water network, which is why cooling is still guaranteed. Also, the combination devices represent an advantage over a pure water-cooled version, since they can still be used when moving to another



laboratory or institute, even if there is no cooling water network or vice versa.

We offer these combination devices with a power of 1 kW to 40 kW.

If the situation on the ground makes it possible, combination units with larger outputs are also possible.

This should be checked in advance by a consultation. Externally and also in terms of operation, these devices do not differ from our standard coolers. There are only two more water connections on the back of the unit, which are used to connect to the existing house cooling or water pipes.

# COOL-AIR WATER AIR COOLER

## AIR COOLERS

Cooling using only air is the most economical method of cooling.

Because of physical limitations, however, the cool water temperature cannot be brought any lower than the ambient temperature.

The units can be used very readily with water distillation units or certain AAS units.

A pre-requisite for this model of cooling is a permissible water inlet temperature for the unit being cooled, which lies above the ambient temperature. The temperature is controlled via a fan control unit.

We deliver this kind of chillers as standard versions with 500 Watt or 3000 Watt capacity. Cooler for outdoor placement can be delivered also with higher capacities.



**PHOTO SHOWS THE COOL-AIR MODEL IN TOWER FORMAT. THE AIR SUPPLY IS FROM LEFT TO RIGHT**



**THE PHOTO SHOWS THE BACK-SIDE OF THE COOL-AIR MODEL WITH OPTIONAL CONTAINER EMP-TYING.**

Technical data	COOL-AIR	COOL-AIR-30 IN CASE SIZE 0
Cooling capacity	500 W at 35° C water outlet temperature and 25° C ambient temperature	3000 W at 45° C water outlet temperature and 25° C ambient temperature
Pumping capacity max.	10 l/min.	10 l/min.
Feed pressure max.	3.5 bar	3.5 bar
Connections	quick lock coupling with 9 mm hose sleeve	quick lock coupling with 9 mm hose sleeve
Tank contents	5 liter	5 liter
Dimensions W x D x H	280 x 480 x 560 mm	430 x 470 x 695 mm
Type of current	230 V / 50 Hz / 1 PH	230 V / 50 Hz / 1 PH
Power consumption	160 W max.	180 W max.
Weight	19 kg	22 kg
Colour	RAL 5002	RAL 5003/RAL 7035

# VAR / VAC

## EASILY INSTALLED VACUUM MEASURING DEVICES FOR USE IN VACUUM LINES

### WORRYING ABOUT MERCURY PRESSURE GAUGE ?

A Bennert Pressure Gauge has the characteristic of always breaking when you have a mishap with it. You then end up down on all fours trying to collect all the mercury that has been dispersed.

We have long time ago solved this by developing a vacuum device that contains

### NO MERCURY

This device is serially switched with an electric vacuum pump (oil or diaphragm pump).

This vacuum is displayed in mbar (no more conversion necessary). Two barrel clamps are attached to the back of this device so that device can be quickly clamped to a supporting wall.

This device is also available with an

### INTEGRATED REGULATOR

so that you can set your own vacuum levels (model VAR).

The vacuum is regulated with a regulator button on the vacuum line, which maintains the pre-set vacuum level.

The precise vacuum, without conversion, is displayed by a vacuum measurement device without any hysteresis problems.



# OPTIONS AND ACCESSORIES

## 12-PORT WATER DISTRIBUTOR WITH REGULATION VALVE



## SPLIT VERSION FOR HIGH AMBIENT TEMPERATURES



## COLOUR VARIATIONS

Technical data	VAR / VAC
Dimensions W x D x H	80 x 80 x 150 mm
Meter	72 x 72 mm
Reading	1020 - 0 mbar
Connections	8 mm nickered

# OPTIONS AND ACCESSORIES

## OPTIONS

Van der Heijden can offer a high quality range of air- or water-cooled standard chillers with a cooling capacities between 180 W and 40 kW.

This product range is complemented by a wide selection of options, variations and recommended accessories, e.g. PVC tubing, remote control, bypass, multiple distributor, etc.

There are more variations available with e.g. higher cooling capacities, increased temperature stability, pump power and much more. Please find some of the most frequently requested options below.

**Please note:** Option-Prices will depend on chiller size. These options are just a small selection of the most frequently requested. There are many more possibilities, please enquire, we have probably helped a user before with the same problem or application.



## ACCESSORIES



### Multiple Manifold

3-port distributor with 6 x ½" ball valves and one flow display per water backrun. In addition, a regulating valve for flow control is installed in the water supply. Designed for external wall mounting and can be placed at any place. The distribution device is mounted on a wall bracket and can be fixed externally in different places. On the biggest size of the wall bracket can be mounted 10 flows and 10 returns.

## Options for MINORE® and KÜHLMOBIL models

Description
Magnetic coupled pump
Increased stability control $\pm 0.1^\circ\text{C}$
Digital flow indicator
Dirt filter <0.25mm house water net
Dirt filter <0.25mm application side
Auto bypass
Auto refill
Easy tank emptying
Increased pump power
Switch on control
Overfill protection

There are more options available, please send enquiry: [info@vdh-online.com](mailto:info@vdh-online.com).





# OPTIONS AND ACCESSORIES

## ACCESSORIES

Description	No.
1 bottle ThermoClean-CPX (blue), 50 ml	00406
Filter cartridge Oyxster® for the elimination of algae without using chemical substances, (possible for additional installation)	00502
HKF10 canister, 10 L, Thermal heat transfer fluid	03672
HKF10 canister, 25 L, Thermal heat transfer fluid	03673
Water hose, flexible and lightproof without hose clamps, convenient for hose sockets , 3/8" – 9 x 3; (NOTE! Hose clamps must be ordered separately)	08265
Water hose, flexible and lightproof without hose clamps, convenient for hose sockets , 1/2" – 13 x 3,5; (NOTE! Hose clamps must be ordered separately)	08266
Water hose, flexible and lightproof without hose clamps, convenient for hose sockets , 3/4" – 19 x 4; (NOTE! Hose clamps must be ordered separately)	50250
Water hose, flexible and lightproof without hose clamps, convenient for hose sockets , 1" – 25 x 4,5; (NOTE! Hose clamps must be ordered separately)	50251

## ELECTRONIC POWER CONTROL

Description	No.	
Electronic power control for keeping the water supply temperature constant at 0.1 K / min. Microprocessor control with setpoint and actual value display on units:	< 3.5 kW	1A
	< 6 kW	1B
	< 12.5 kW	1C
	< 40 kW	1D
Electronic power control via a proportional valve to extend the service life of the cooling unit under reduced loads.	2	
Electronic power control via a pulsed solenoid valve to extend the service life of the cooling unit under reduced loads.	3	

Description	No.
Electronic power control, microprocessor-controlled, for constant flow temperature (only valid for type COOL-CARE® and types MINORE® 0 - II)	8

## DIGITAL FLOW DISPLAY

Description	No.
Digital flow display in l / min. Readable from the front of the control unit, up to 10 l / min.	4

## DIRT FILTER

Description	No.	
Dirt filter with sieve insert ≤0.25 mm, primary side in the water inlet	3/8"	5A
	1/2"	5B
	3/4"	5C
	1"	5D
Dirt filter with sieve insert ≤0.25 mm in the water supply, easily accessible from outside	3/8"	6A
	1/2"	6B
	3/4"	6C
	1"	6D

## AUTOMATIC BYPASS VALVE

Description	No.	
Automatic bypass valve between water supply and return, which opens automatically when the set pressure is exceeded (opening pressure ... bar)	3/8"	7A
	1/2"	7B
	3/4"	7C
	1"	7D
	1 1/4"	7E
	1 1/2"	7F

# OPTIONS AND ACCESSORIES

## WINTER STARTER

Description	No.	
For outdoor units, winter starter; for special order on request	> 5 kW	9A
	> 5 kW	9B
	> 40 kW	9C

## REMOTE CONTROL

Description	No.	
Remote control in console housing for operation, control and temperature display on the remote control. The connectors are located on the remote control. The remote control is optional for all types; Cable length up to	20 m	19A
	40 m	19B
	60 m	19C
	100 m	19D

## INCREASED PUMP CAPACITY

Description	No.
Increased pump capacity, (P024)	16
Increased pump capacity, (3.5 bar)	16A
Increased pump capacity, (4.5 bar)	16B
Increased pump capacity, (6.3 bar)	16C
Increased pump capacity, (VDH301)	16D
Increased pump capacity, (VDH401)	16E
Increased pump capacity, (CM)	16F
Increased pump capacity, (VDH601)	16G
Increased pump capacity, (special design)	16Z

## AUTOMATIC SWITCHING

Description	No.	
Automatic switching to water pipe in case of failure or power failure to maintain the cooling function	3/8"	21A
	1/2"	21B
	3/4"	21C
	1"	21D

## POTENTIAL-FREE CONTACT

Description	No.
Potential-free contact with external plug-in contact as an interface, which <b>opens</b> in the event of a fault	17A
Potential-free contact with external plug-in contact as an interface, which <b>closes</b> in the event of a fault	17B

## OVERFLOW PROTECTION

Description	No.	
Overflow protection: A check valve in the flow and a solenoid valve in the return at geodetic height differences from 5 m, when the cooler is placed below the application	3/8"	27A
	1/2"	27B
	3/4"	27C
	1"	27D

# OPTIONS AND ACCESSORIES

## MANIFOLDS

Description		No.
Multiple manifold, 2-fold with 4 ball valves	3/8"	22/2A
	1/2"	22/2B
	3/4"	22/2C
	1"	22/2D
Multiple manifold, 3-fold with 6 ball valves	3/8"	22/3A
	1/2"	22/3B
	3/4"	22/3C
	1"	22/3D
Multiple manifold, 4-fold with 8 ball valves	3/8"	22/4A
	1/2"	22/4B
	3/4"	22/4C
	1"	22/4D



## Opportunities

- Thermal fluids
- Tubing and hosing
- Manifolds and connectors
- Algaecides
- Filter replacements where used
- Preventative maintenance
- Extended warranty

## Remote Control

Remote control in casing with control unit B400 (with set value and actual value display). The plug connections are mounted on the chiller. The remote control is optional available for all chiller models. Control and temperature display on the casing. Connections on the remote control. The remote control is optional for all models. Cable length up to 100 m.

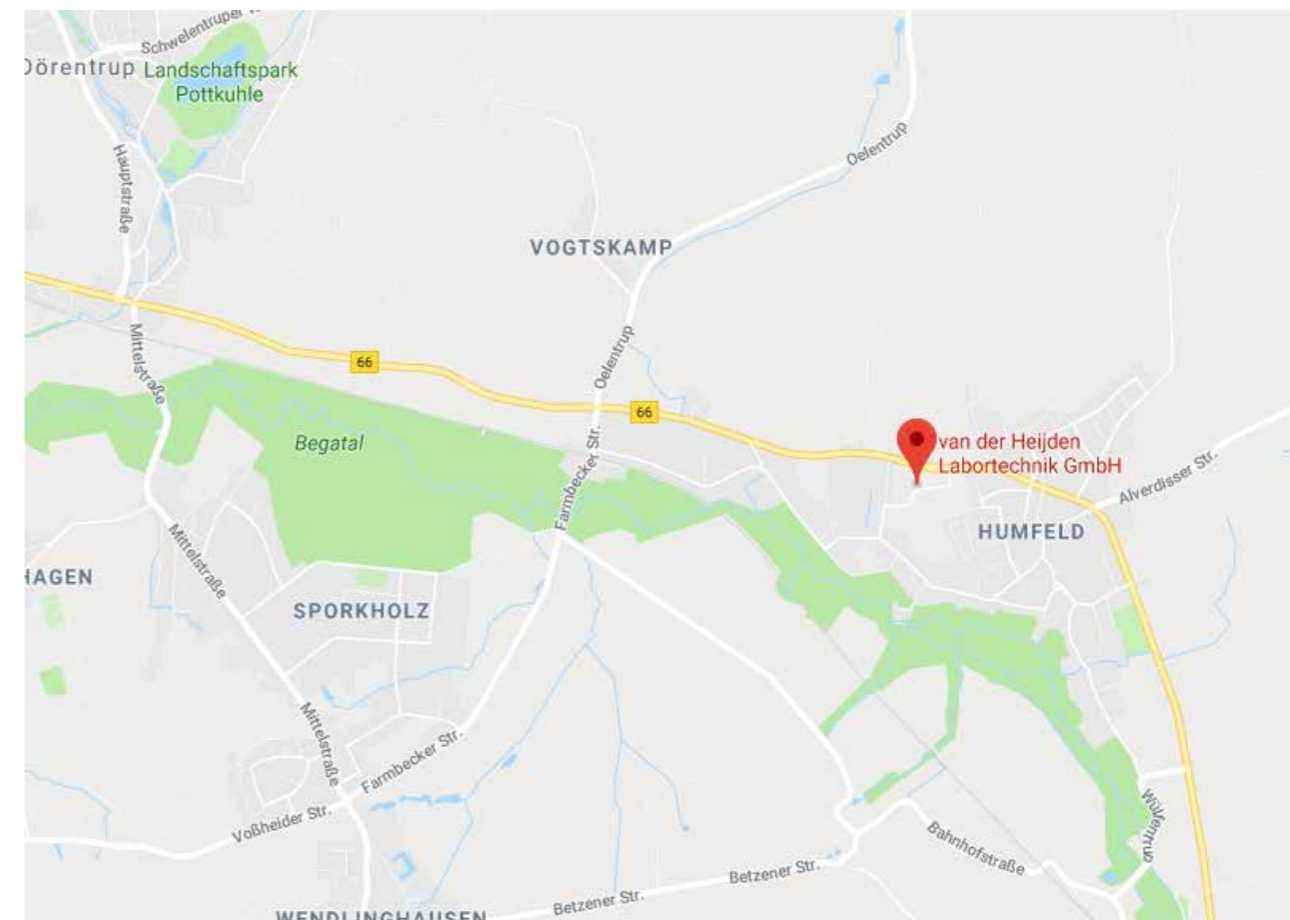


- Light O-LED display
- Easy care and hygienic operating area
- Capacitive touch technique with acoustic confirmation
- Easy reasonable control element, menu guided and multilingual
- Acoustic alarm with reset function
- Display of error messages with explanation about reason and removal
- Quick recognizability of state of function with moving symbols
- Display of parameter without key code
- Display of actual and target temperature simultaneously
- Interface with potential free contact for collective alarm
- PID control characteristic for high temperature constancy of the water flow temperature
- serial number of the chiller available at the display
- Display in °C or Fahrenheit with resolution 1/10° possible
- Electronic calibration
- Delayed pump switch-off for after-cooling possible
- Drive of 3 different pumps within one device possible
- Digital volume flow in l/min displayed by pressing a button (as option)
- RS 232

**WE HAVE MANY MORE OPTIONS, PLEASE ASK FOR SPECIAL REQUIRIES!**



## WHERE DO YOU FIND US?



### FROM DIRECTION OF HAMBURG

Hamburg A 7 direction Hannover  
A 352 direction A2/Dortmund  
A 2 direction Dortmund  
Bad Eilsen exit direction Extertal/Bartrup  
In Bartrup, direction Dörentrup/Lemgo (B 66)  
stay in Humfeld on the B66.  
You can find us directly beside of the B66 on the left side (industrial area Dörentrup)

### FROM DIRECTION OF MUNICH

A 7 direction Hannover/Hamburg  
At Südkreuz Kassel (southern crossroads) on the A 44, direction Dortmund/Paderborn  
Warburg exit, direction Blomberg/Lemgo  
In Donop bear right, direction Wendlinghausen/Spork, direction Dörentrup, until you come up to the B66.  
Make a right turn on the B66 and stay there. You can find us in the industrial area Dörentrup ahead of Humfeld on the right side of the B66

### FROM DIRECTION OF COLOGNE

At the Kamener cross-road the direction for Hannover  
Ostwestfalen-Lippe/Lemgo exit  
In Lemgo, direction Dörentrup/Hamel (B 66); stay on the B66.  
You can find us in the industrial area Dörentrup, ahead of Humfeld on the right side of the B66

### FROM DIRECTION OF BERLIN

A 2 direction Dortmund; Bad Eilsen exit direction Extertal/Bartrup;  
In Bartrup, direction Dörentrup/Lemgo (B66)  
Stay in Humfeld on the B66.  
You can find us directly behind Humfeld on the left side of the B66 in the industrial area Dörentrup.

# FAQ FREQUENTLY ASKED QUESTIONS

## What are the advantages and disadvantages of a water-cooled chiller vs an air-cooled unit?

A water cooled chiller can use readily available 'house' water from a building supply depending on the pressure and temperature, an air cooled chiller uses a fan to cool the condenser.

### Water-cooled pros:

- Can usually deliver higher kW at small dimensions
- Don't eject waste heat into the room
- Quieter than air cooled as there is no fan
- Not affected by the ambient temperature
- Can be placed in smaller locations as air flow is not necessary
- Lower cost to run if there is a clean house cooling system for use

### Water-cooled cons:

- Need to be installed near access to cooling water
- Potential leaks can be substantial
- Require more complex installation
- Require more maintenance depending on the cooling water quality
- Dependence on the house cooling system
- Environmental sustainability if running any cooling water to waste

## What is a water-to-water chiller?

Also known as a 'system separator', as it separates the 'house' cooling water from the application, controlling the temperature and water quality better. This is a chiller without a traditional compressor and refrigerant; instead, it uses a heat exchange system in conjunction with a cooling water supply. These systems can achieve much higher cooling powers up to 150kW from Van der Heijden and are much quieter nearly without vibration and are very low cost to run. The price of a water-to-water system is much lower as there is no compressor, especially as the cooling capacity increases. Condensation is usually eliminated due to isolation of the primary side.



## I don't know what cooling power I need.

We can help you with this, our very experienced team of technicians will be able to guide you to the right chiller, and we may have already built a unit for your exact application or instrument model before.

## I need a custom built chiller but only need one.

Van der Heijden will manufacture as few as one unit for a custom application.

## I am not based in Germany; does this mean I won't be able to have service support?

Van der Heijden is a Huber company, with a global network of service partners, all of who are able to provide this locally for both companies.

## What fluid should I be using for the temperature I need?

Some special thermal fluids are available depending on the application but as a general rule:

- **-30 to 30°C:** 50% water, 50% antifreeze (inhibited ethylene glycol)
- **0 to 30°C:** 80% water, 20% antifreeze (inhibited ethylene glycol)
- **5 to 85°C:** Water

# QUESTIONS TO ANSWER

## Are you looking to decrease the water used/heat generated in your lab?

Van der Heijden chillers will save 100% water waste compared with running water-cooling.

## Are you looking for a quality, robust and reliable chiller?

Van der Heijden chillers are backed up by an all-part, unregistered 2 year warranty, 24/7 use is not a problem

## Specific application questions needed to find the right chiller;

- What should be cooled?
- What heat load must be transported at the unit to be cooled? This load corresponds to the required cooling capacity.
- What volume flow and at what pressure is sufficient for the unit to be cooled?
- Do you need high temperature stability for the unit to be cooled?
- What temperature of the water supply is required at the unit to be cooled?
- Does the chiller need to be placed outside the building?
- Is the water supply into the unit to be cooled blocked by a magnetic valve?

- Is there a building supply of cooling water available to use? If so, we need some information regarding the primary side for water-water-coolers resp. water-cooled devices with active cooling. That means:
  - How warm is the maximum temperature of the house water cooling circuit?
  - What pressure difference is at the tap?
  - How high is the nominal pressure of the house cooling system?
- How much space is available for the chiller?
- May a heat build up occur in the location of the chiller and does this need to be avoided?
- Will the chiller be relocated often? Does it need wheels?
- Is completely demineralized water with permanent low conductance needed for the unit to be cooled required? In this case it is necessary, that all components, which are in contact with the thermal transfer fluid, are made out of optional plastic and stainless steel.

If cooling capacity required is not known, it is possible to measure and calculate it. For this purpose we need to know the water inlet temperature in the unit to be cooled and the water outlet temperature out of the unit to be cooled as well as the real volume flow, all at full load.

With these three values we can calculate the cooling capacity. Attention! The measuring should be done at full load.



# SUPPORT & SERVICE

## What can you expect?

- ✓ **SPECIAL-PURPOSE SOLUTION**  
We are specialized in manufacturing special-purpose solutions, beside a wide standard product range. Our particular strength is providing comprehensive advice and individual configurations to meet your requirements.
- ✓ **PRODUCT TRAINING**  
This training can be delivered to you locally or via webinar, whichever is easiest for you.
- ✓ **SERVICE TRAINING**  
If required you and your team can come over to Van der Heijden for a personalized service training.
- ✓ **2-YEAR WARRANTY**  
Service and repairs are initiated on the first day of return to Van der Heijden' factory, alternatively, spare parts and service manuals can be despatched.



- ✓ **PROMPT AND THOROUGH RESPONSE**  
to your enquiry to you and/or your end user, sometimes on more technical queries. We always aim to respond within 24 hours.

## COOL SOLUTIONS - YOUR ADVANTAGE



## Contact Us

We offer our help to you, quickly and competently, and look forward to your questions and your feedback. Please use the following contact information:

-  Tel: +49 (0) 5265/94552-0  
Fax: +49 (0) 5265/94552-10
-  [info@vdh-online.com](mailto:info@vdh-online.com)  
[www.vdh-online.com](http://www.vdh-online.com)
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