



COMPACT SOLUTIONS FOR TECHNICAL / SERVER ROOMS

Recirculating air cooling units from HANSA

ReCool Line



ABOUT US

Since 1961, HANSA Klimasysteme GmbH has had its headquarters in Strücklingen in the municipality of Saterland – which, with its Saterland Frisian dialect, is recognised as the smallest language enclave in Germany. However, we speak plainly through our products.

Our company

Since the company was established, we have earned a positive reputation throughout Germany and far beyond for the construction of air handling equipment for schools, sports halls, swimming pools, hospitals and industrial and process engineering applications. On this basis, we offer a broad range of different air conditioning units for a wide variety of applications.

We guarantee a maximum level of quality, functionality and reliability, as well as excellent energy efficiency. Throughout the

We have been the guarantee for high-quality, technically sophisticated air conditioning systems for many decades. Our company is distinguished by continuity and stability, with the Neumann family having managed the enterprise since 1971.

course of our development work, numerous property rights have been registered with the European Patent Office, where they were found to be patentable and worthy of protection.

As a member of RLT Herstellerverband e.V., the AHU manufacturers' association, we design our units to comply with AHU directives, ensuring that our customers and the operators of our systems enjoy quality, operational reliability and legal certainty at all times.

Our team

We continuously train our employees and young talent in order to safeguard our future. The HANSA team consists of experienced skilled professionals in the areas of air handling equipment manufacturing and the associated specialised divisions for refrigeration technology and control technology and systems.

Design and production are executed under QM conditions and in accordance with DIN EN ISO 9001:2015.

Our sales team consists of experts who are certain to plan and develop the ideal solution for you.

Our philosophy

Our goal is to fulfil our customer's wishes in an optimum manner and, also, contribute to the protection of the environment. We provide systems for this purpose which, thanks to flexible production processes and modern components, can be adapted to the individual operating conditions at customers while simultaneously consuming as little energy as

possible. Investment and energy costs also fall, as the energy needs of the entire system and individual modules can be reduced without impairing the performance of the system.

We have been a climate-neutral company since 2020, and the manufacture of our products is also climate-neutral.

Committed to the climate – and not only through our equipment



HANSA is a member of the Herstellerverband Raumlufotechnische Geräte e.V. association for AHU manufacturers

RECOOL LINE

Overview

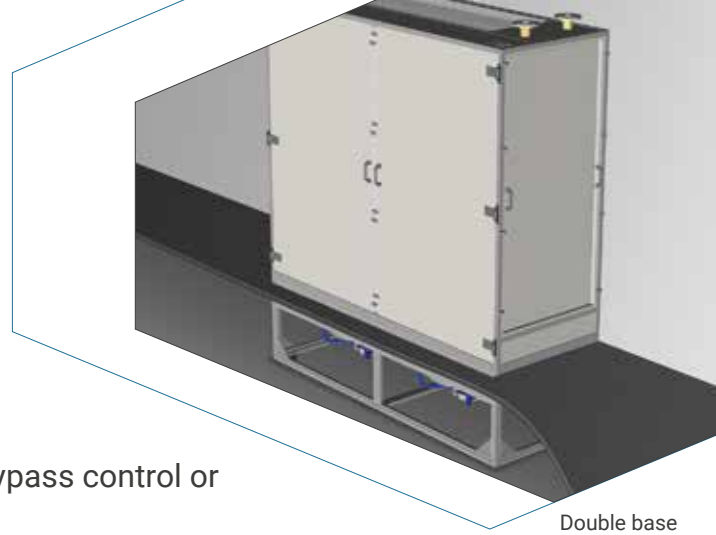
VDI6022 compliant recirculating air cooling units for cooling technical / server rooms, with and without a double base.

Depending on the version involved, ReCool Line units contain an integrated refrigeration system with a direct evaporator or cold water coil, including a hydraulic circuit. A cooling capacity of 13 to 88 kW is achieved at a temperature spread of 14K and 36 °C / 35% RH

exhaust air conditions. The units can be expanded with modules for free cooling (FreeCool). They have ISO ePM 10 \geq 50% class exhaust air filters.

ReCool Line recirculating air cooling units can be expanded in a variety of manners for optimum integration in the customer's project. Revit BIM models are available for all ReCool Line types. This facilitates your planning.





Double base

Options

- Integrated mechanical refrigeration: Hot gas bypass control or digital scroll and direct evaporator
- Cold water coil: hydraulic control with a two or three-way valve / pump
- DDC: Saia or HEC; touchpanel or hand-held terminal
- FreeCool module for use of free cooling with outside air

Advantages

- Compact
- Integration in building management system possible
- Automatic mode and manual control
- Diverse redundancy circuits can be realised
- Unproblematic integration (unit depth 880 mm)
- Expandable (FreeCool attachment)
- Revit BIM models available



Designation		ReCool Line 03 KW	ReCool Line 05 KW	ReCool Line 10 KW	ReCool Line 18 KW
Supply air flow rate	m ³ /h	3000	5000	10000	18000
Cooling capacity ($\Delta T = 14\text{ K}, 36\text{ °C} / 35\% \text{ RH}$)		14.5	24	48	88
Electrical data					
Network connection		400 V / 50 Hz			
Total nominal connection	kW	2.2	3	4.5	8
Total nominal current consumption	A	4.5	6	9	15
Sound data					
Sound power level $L_w / \text{Oct-Hz}$					
RA air 63 Hz	dB	51.7	53.5	58.6	60.2
RA air 125 Hz	dB	56.8	59.5	68.5	69.6

TECHNICAL DATA

ReCool Line with cold water coil

Designation		ReCool Line 03 KW	ReCool Line 05 KW	ReCool Line 10 KW	ReCool Line 18 KW
RA air 250 Hz	dB	56.0	59.4	70.5	70.6
RA air 500 Hz	dB	54.1	55.1	63.1	63.7
RA air 1000 Hz	dB	47.9	52.8	60.9	62.0
RA air 2000 Hz	dB	47.1	48.9	57.0	58.6
RA air 4000 Hz	dB	49.3	51.4	71.8	70.4
RA air 8000 Hz	dB	38.1	39.6	50.9	51.6
SA air 63 Hz	dB	59.0	61.9	68.4	69.7
SA air 125 Hz	dB	64.8	69.0	78.9	80.1
SA air 250 Hz	dB	61.2	66.0	75.6	76.5
SA air 500 Hz	dB	65.5	69.3	78.1	78.9
SA air 1000 Hz	dB	68.2	71.1	78.6	79.5
SA air 2000 Hz	dB	68.6	69.6	76.5	78.2
SA air 4000 Hz	dB	66.7	68.1	85.8	85.2
SA air 8000 Hz	dB	57.5	58.9	68.7	70.2
Dimensions					
Width	mm	1350	1350	1700	2300
Depth	mm	880	880	880	880
Height	mm	2585	2585	2585	2585
Delivery units		2	2	2	2
Max. width of largest unit part	mm	1350	1350	1700	2300
Max. depth of largest unit part	mm	880	880	880	880
Max. height of largest unit part	mm	1950	1950	1950	1950

Designation
ReCool Line 03 KW
ReCool Line 05 KW
ReCool Line 10 KW
ReCool Line 18 KW

Weight					
Total transport weight	kg	296	333	396	581
Material properties					
Inner shell		Sheet steel (galv.)			
Outer shell		Sheet steel (galv.), hot-dip coated			
Heat exchanger pipe material		Copper			
Heat exchanger fin material		Aluminium			
External pressure RA/SA	Pa	150	150	150	150
RA/SA fan					
RA/SA fan, overall pressure	Pa	343	375	450	487
RA/SA motor rated power	kW	1.1	1.74	3.45	2 x 3.45
RA/SA motor rated current	A	1.7	2.7	5.3	2 x 5.3
Filters					
Filter class		ePM 10 50%			
Number of filter cells		2	2	4	6
Filter width	mm	592	592	592	592
Filter height	mm	490	490	592	592
Filter length	mm	94	94	94	94
Cold water coil					
Cooling medium		Water	Water	Water	Water
Cooling capacity	kW	14.5	24	48	88
Temperature inlet / RH	°C / %	36 / 35	36 / 35	36 / 35	36 / 35
Temperature outlet / RH	°C / %	22 / 72	22 / 72	22 / 72	22 / 72
Temperature water inlet	°C	10	10	10	10
Temperature water outlet	°C	16	16	16	16
Water volume	m ³ /h	2.7	4.6	9.2	16.2
Water pressure loss	kPa	26.8	27.8	30.0	32.1
Connection	DN/Inch	20 / 3/4	25 / 1	40 / 1 1/2	50 / 2

ReCool Line with integrated refrigeration

Designation		ReCool Line 03 iK	ReCool Line 05 iK	ReCool Line 10 iK	ReCool Line 18 iK
Supply air flow rate	m ³ /h	3000	5000	10000	18000
Cooling capacity ($\Delta T = 14 \text{ K}, 36 \text{ }^\circ\text{C} / 35\% \text{ RH}$)	kW	13.3	22	44	79.6
Electrical data					
Network connection	400 V / 50 Hz				
Total nominal connection	kW	7.2	11	20.5	34.5
Total nominal current consumption	A	14.5	21	38	60
Sound data					
Sound power level L_w / Oct-Hz					
RA air 63 Hz	dB	54.5	56.6	61.6	63.2
RA air 125 Hz	dB	57.7	60.4	69.4	70.6
RA air 250 Hz	dB	55.5	59.4	70.5	70.6
RA air 500 Hz	dB	55.7	57.1	65.1	65.7
RA air 1000 Hz	dB	52.6	57.8	65.9	67.0
RA air 2000 Hz	dB	53.0	54.9	63.0	64.6
RA air 4000 Hz	dB	51.2	53.4	73.9	72.4
RA air 8000 Hz	dB	44.0	45.5	56.8	57.6
SA air 63 Hz	dB	58.6	62.1	68.4	69.7
SA air 125 Hz	dB	64.7	69.0	78.9	80.1
SA air 250Hz	dB	60.7	66.0	75.6	76.5
SA air 500 Hz	dB	65.2	69.2	78.1	78.9
SA air 1000 Hz	dB	67.9	71.0	78.6	79.5
SA air 2000 Hz	dB	68.5	69.6	76.5	78.2
SA air 4000 Hz	dB	66.5	68.1	85.9	85.2
SA air 8000 Hz	dB	57.3	58.7	68.6	70.1

Designation
ReCool Line 03 KW
ReCool Line 05 KW
ReCool Line 10 KW
ReCool Line 18 KW

<i>Dimensions</i>					
Width	mm	1350	1350	2150	2700
Depth	mm	880	880	880	880
Height	mm	2585	2585	2585	2585
Delivery units		2	2	2	2
Max. width of largest unit part	mm	1350	1350	2150	2700
Max. height of largest unit part	mm	1950	1950	1950	1950
Max. depth of largest unit part	mm	880	880	880	880
<i>Weight</i>					
Total transport weight	kg	352	405	546	845
<i>Material properties</i>					
Inner shell		Sheet steel (galv.)			
Outer shell		Sheet steel (galv.), hot-dip coated			
Heat exchanger pipe material		Copper			
Heat exchanger fin material		Aluminium			
External pressure AU/ZU	Pa	150	150	150	150
<i>RA/SA fan</i>					
RA/SA fan, overall pressure	Pa	329	370	445	483
RA/SA motor rated power	kW	1.1	1.74	3.45	2 x 3.45
RA/SA motor rated current	A	1.7	2.70	5.30	2 x 5.30
<i>Filters</i>					
Filter class		ePM 10 50%			
Number of filter cells		2	2	4	6
Filter width	mm	490	490	592	592
Filter height	mm	592	592	592	592
Filter length	mm	94	94	94	94

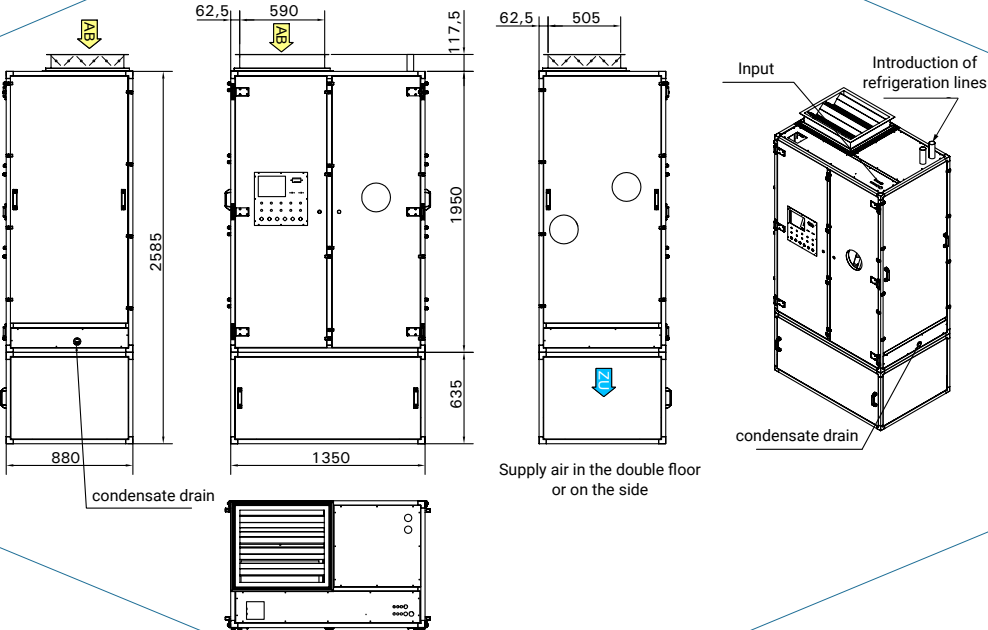
ReCool Line with integrated refrigeration

Designation		ReCool Line 03 iK	ReCool Line 05 iK	ReCool Line 10 iK	ReCool Line 18 iK
Refrigeration system					
Refrigerant		R407C	R407C	R407C	R407C
Cooling capacity	kW	13.3	22	44	79.6
Number of cooling circuits		1	1	2	2
Total cooling connected load	kW	3.5	6	12	19
Max. cooling current consumption	A	15	15	15	22.3
Air inlet temperature / RH	°C / %	36 / 35	36 / 35	36 / 35	36 / 35
Air outlet temperature / RH	°C / %	22 / 72	22 / 72	22 / 72	22 / 72
Air side pressure loss	Pa	23	31	59	64
Table top cooler, quiet version					
		TK quiet 22	TK quiet 35	2x TK quiet 35	2x TK quiet 57
Condenser capacity	kW	22	35	2X 35	2X 57.5
Dimensions (WxHxD)	mm	1490x990x1260	1880x1500x1380	2x (1880x1500x1380)	
Weight, quiet version	kg	208	219	2X 219	2X 326
Sound pressure level, quiet version	dB	60	60	60	60
Air inlet temperature	°C	40	40	40	40
Condenser temperature	°C	50	50	50	50
Fan capacity	W	409	1431	2X 1431	2X 2019
Fan current	A	0.63	2.14	2X 2.14	2X 3.10
Table top cooler, extra quiet version					
		TK super quiet 22	TK super quiet 35	2x TK super quiet 35	2x TK super quiet 57
Condenser capacity	kW	22	35	2X 35	2X 57.5
Dimensions (WxHxD)	mm	1490x990x1260	1880x1500x1380	2x(1880x1500x1380)	2x(3230x1500x1380)
Weight, quiet version	kg	219	278	2X 278	2X 428
Sound pressure level, quiet version	dB	49	49	49	49
Air inlet temperature	°C	40	40	40	40
Condenser temperature	°C	50	50	50	50
Fan capacity	W	272	530	2X 530	4x 350
Fan current	A	0.38	0.87	2X 0.87	4x 1.10

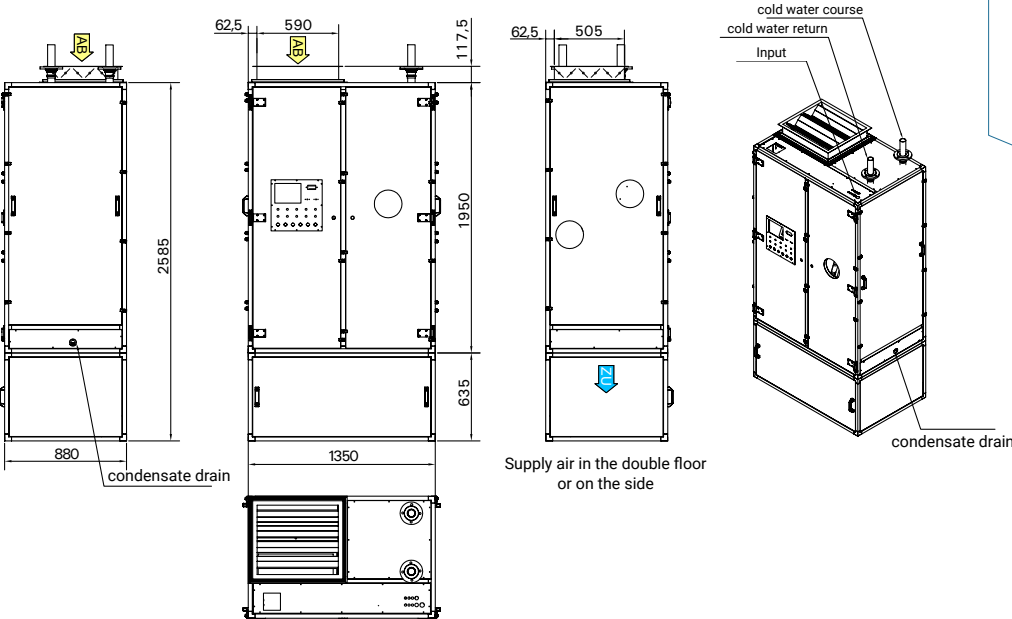
DRAWINGS

ReCool Line 03 + 05

With integrated refrigeration:

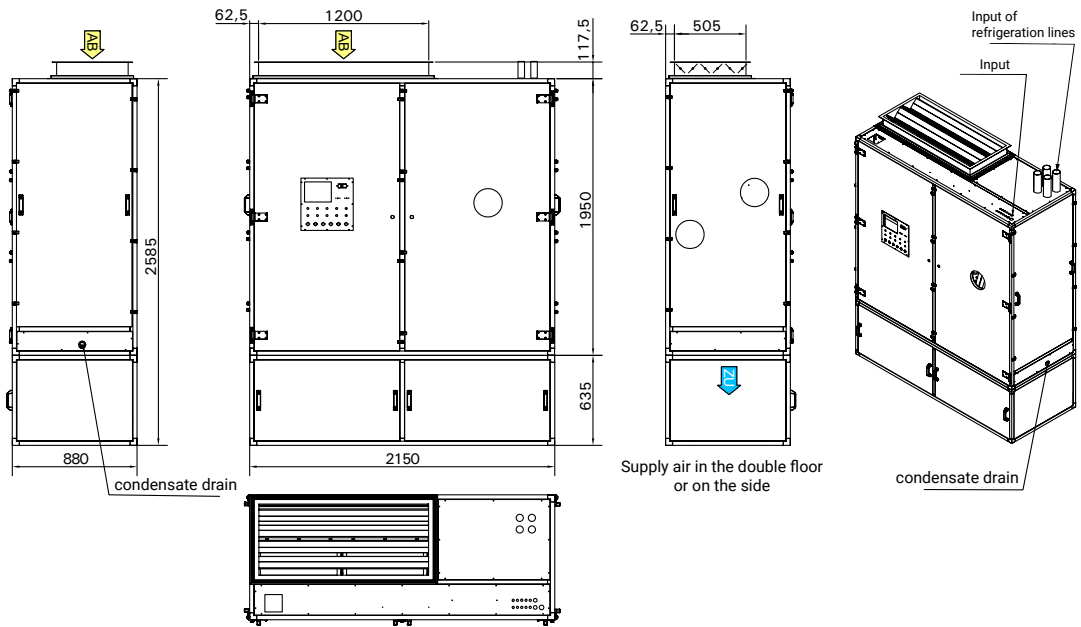


With cold water coil:

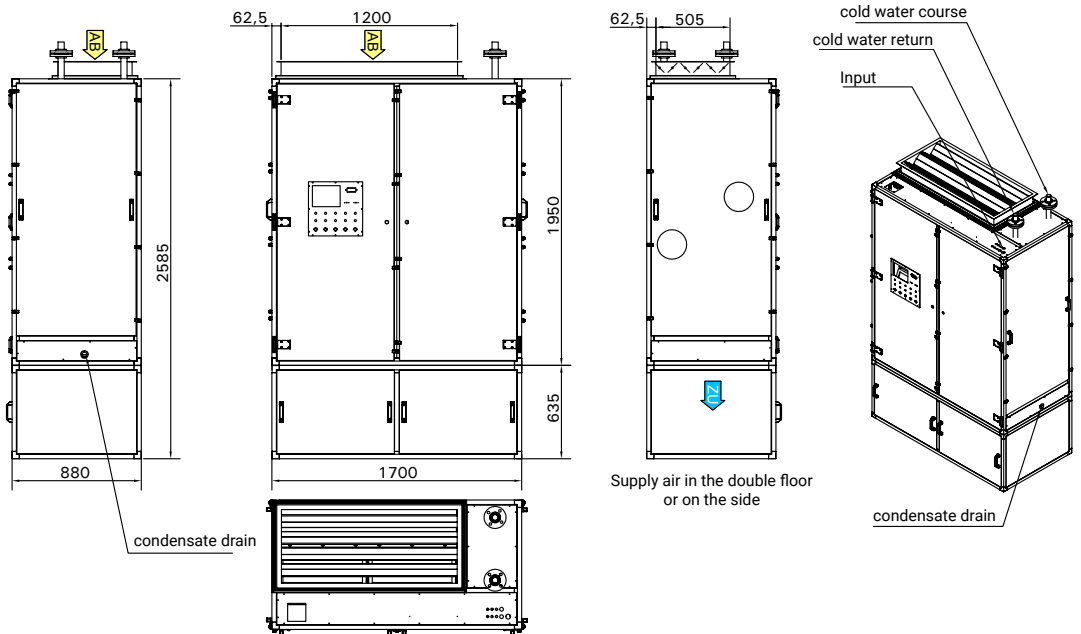


ReCool Line 10

With integrated refrigeration:

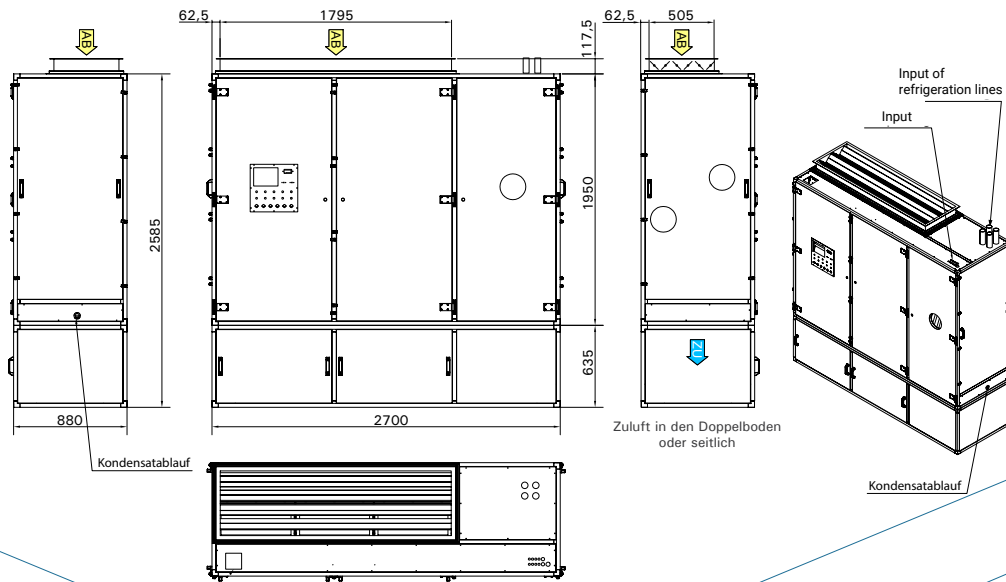


With cold water coil:



ReCool Line 18

With integrated refrigeration:



With cold water coil:

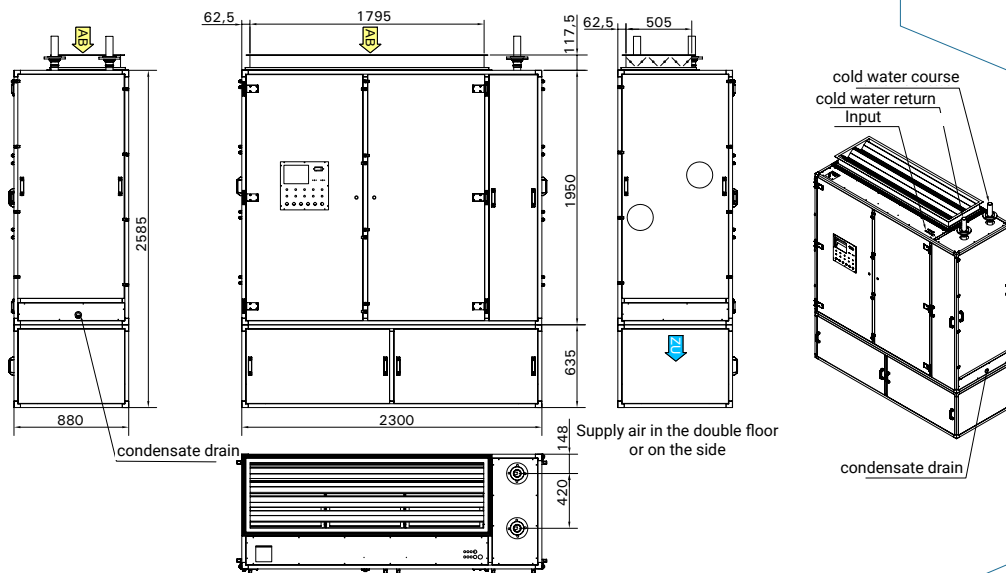
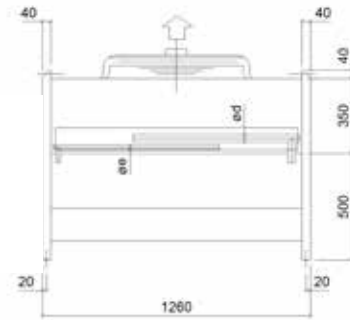
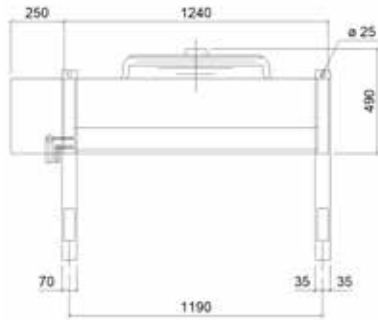
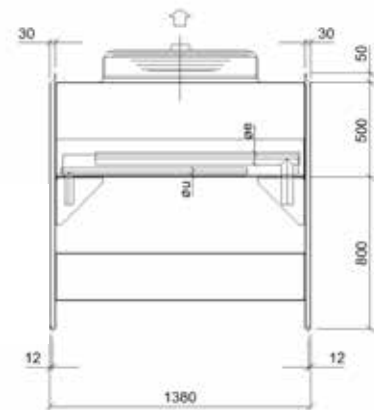
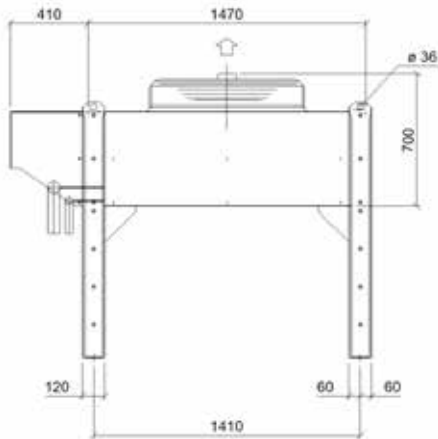


Table top cooler, quiet

TK quiet 22:



TK quiet 35:



TK quiet 57:

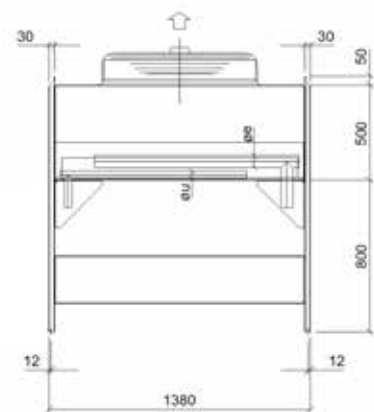
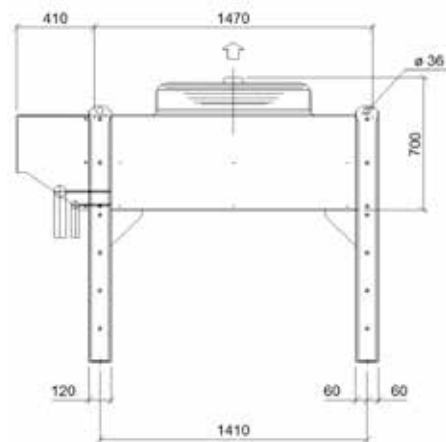
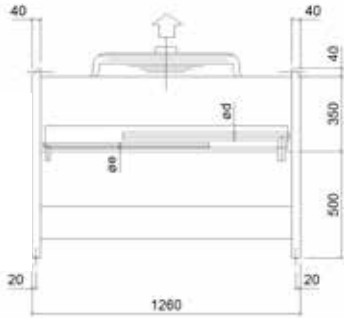
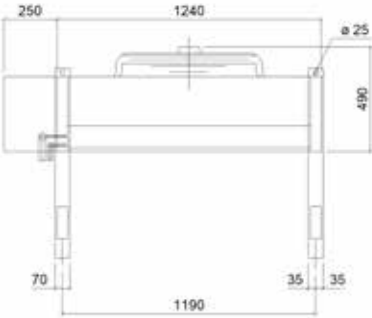
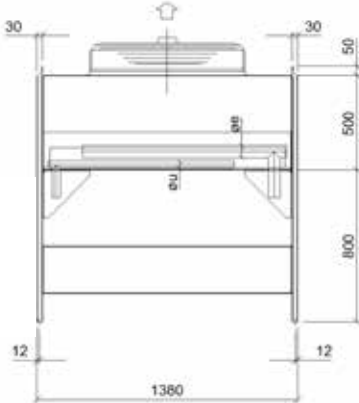
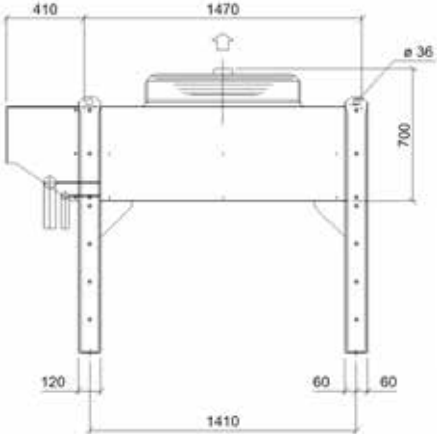


Table top cooler, extra quiet

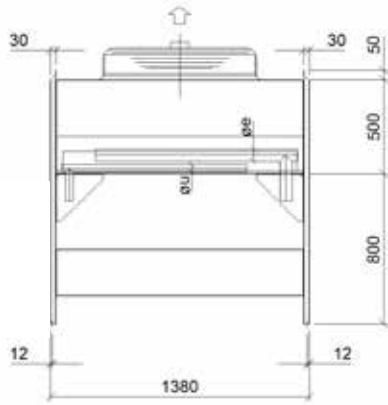
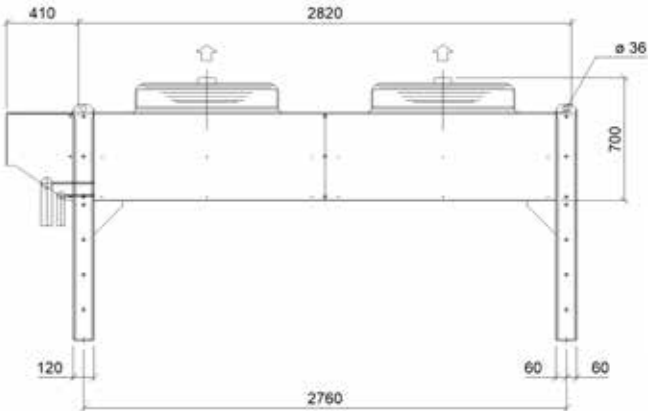
TK super quiet 22:



TK super quiet 35:



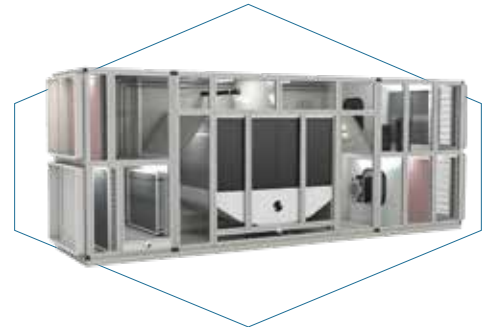
TK super quiet 57:



FURTHER PRODUCTS

Blue Line

Highly customisable air handling and full air conditioning units with a central heat recovery system and maximum energetic efficiency. As heat recovery systems, all conventional systems can be integrated: plate exchangers, rotors, closed-loop systems and Accublock.



Slim Line

Manufactured in the thousands, the highly efficient and compact units for cooling rooms under high thermal stress have an energy advantage of over 70% when compared to purely recirculation or split units.



Free Line

Our Free Line units are freely adaptable and configurable air conditioning units for free cooling of server rooms or general dissipation of process heat. They can be perfectly adapted to a range of application areas.



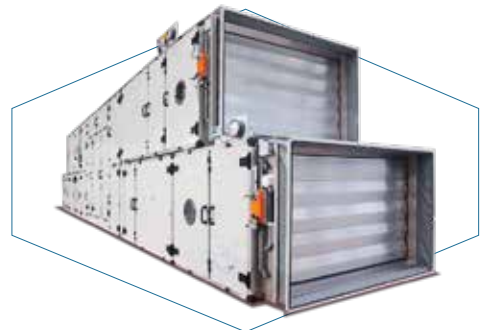
Pool Line

Swimming pool dehumidifiers provide guaranteed comfort and constant building protection. You too can benefit from the durability and energy efficiency of our units while, simultaneously, also reducing your operating costs.



Blue Line Hy

Clean germ-free air is essential for hygienic rooms. Air can be treated according to respective requirements with our Blue Line Hy air handling units.



Compact Line

The concept behind this product line enables cost-effective manufacturing with simultaneous flexibility and application freedom, thanks to modularisation. A higher quality standard and cost-effective operation are guaranteed.



Special units

Special units encompass the LF-HY (food hygiene) and Hygro Line (recirculating air dehumidification) product series and Hepa Tower (400 and 1200) air handling units. You can obtain more precise information on all products on our website.



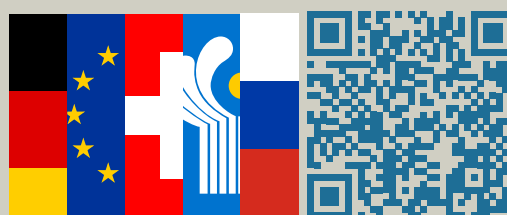
NOTES

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**FIND YOUR CONTACT IN GERMANY
AND INTERNATIONALLY ON OUR WEBSITE:**



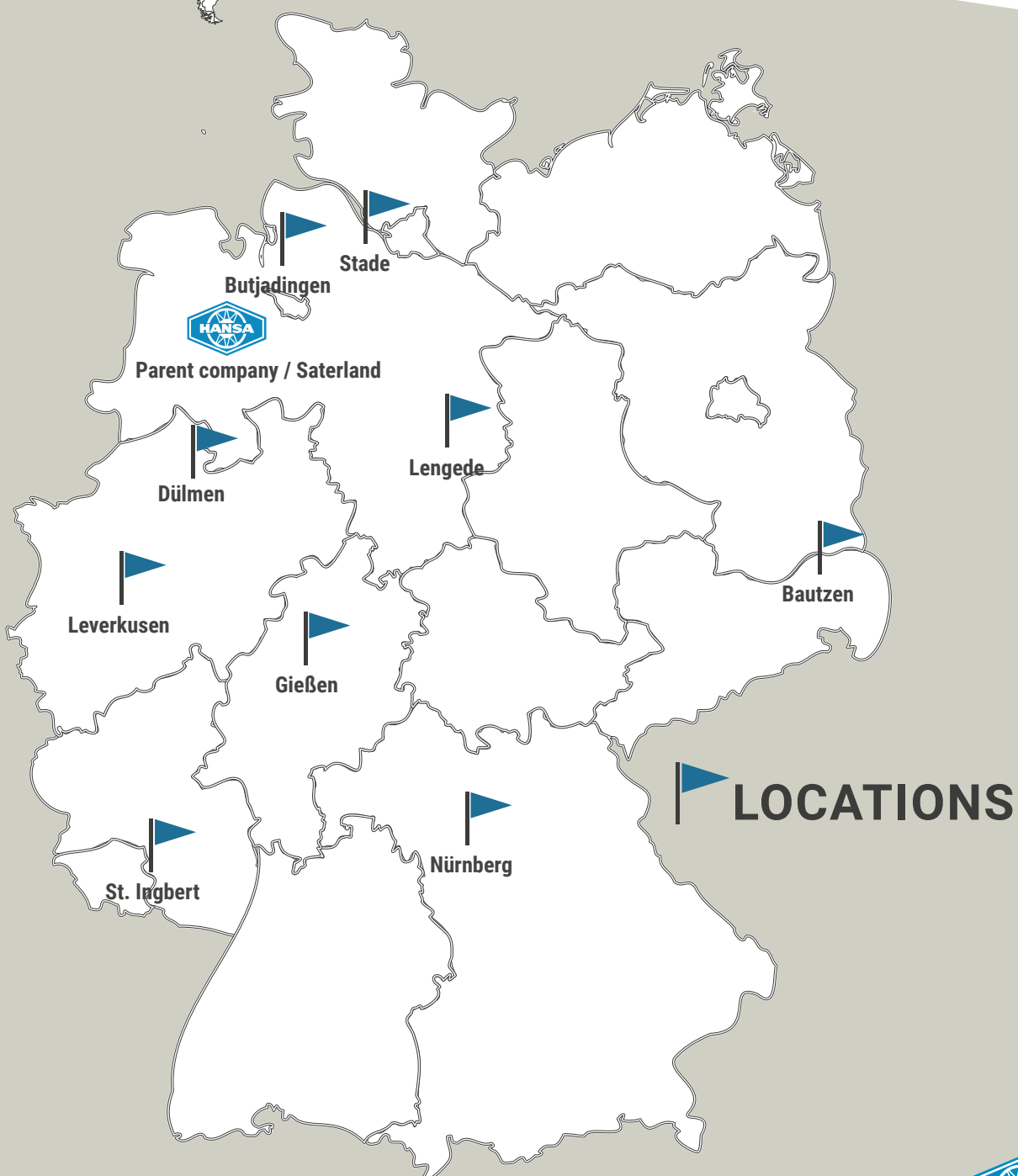
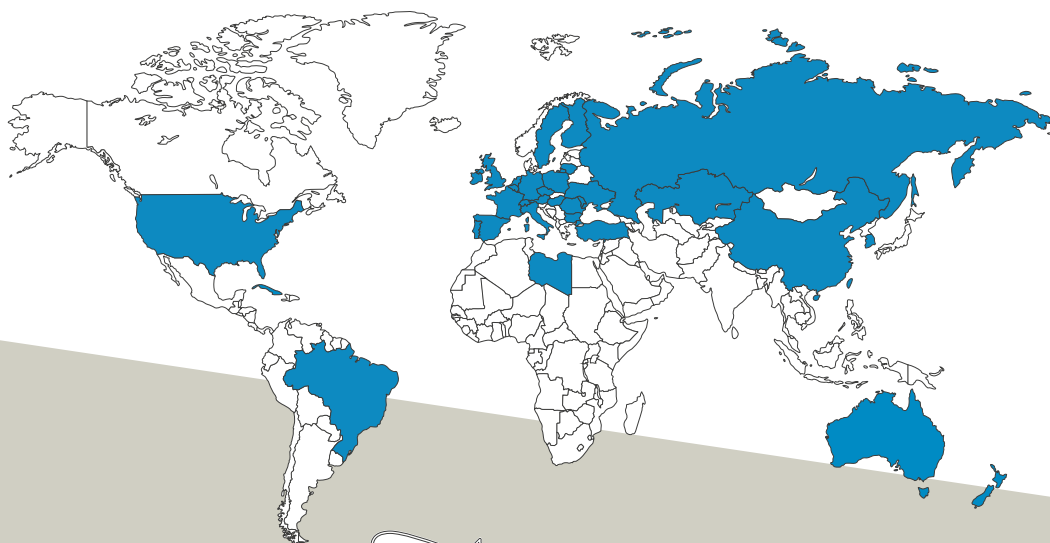
hansa-klima.de/en/distribution/national



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Our units around the world





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hansa-klima.de/en