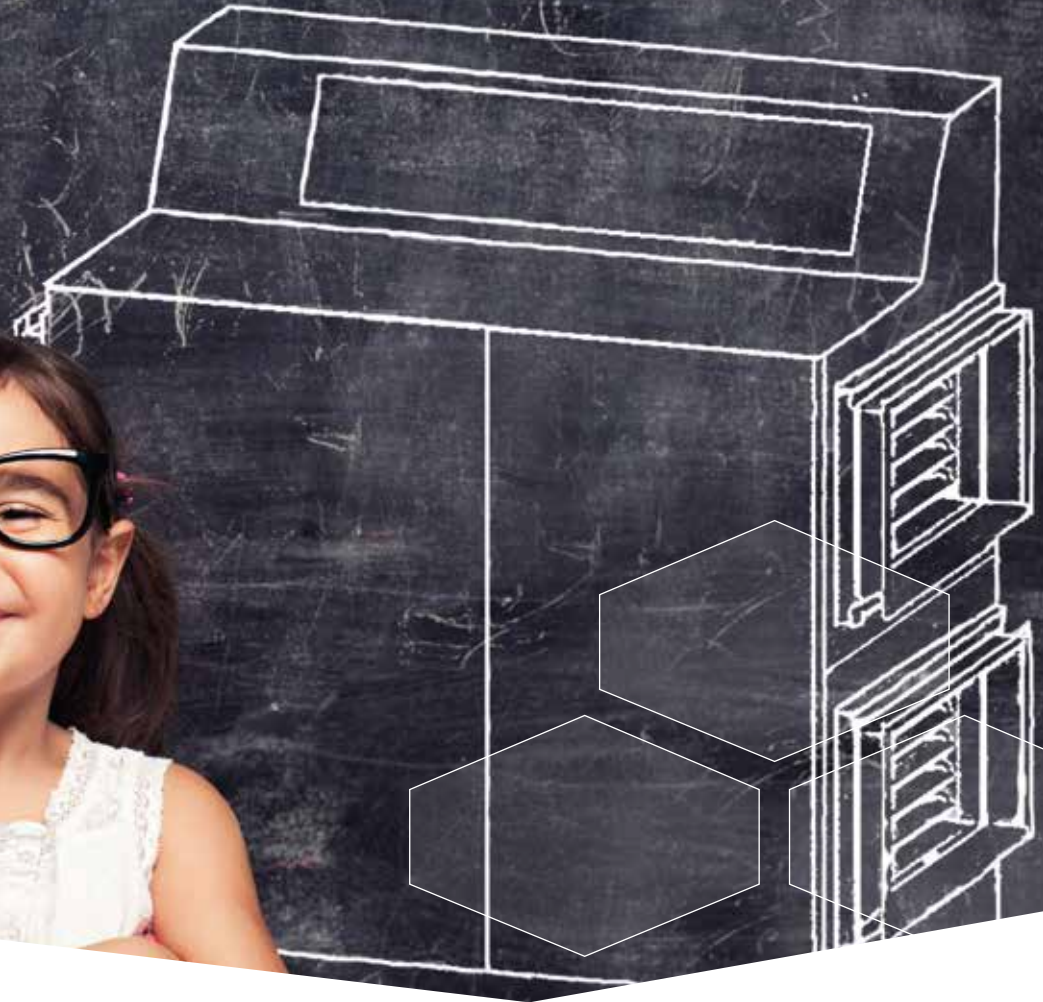




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COMPACT AIR HANDLING / AIR CONDITIONING UNITS

for childcare facilities, schools, sports and event venues

Kompakt 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

COMPACT FLOOR-MOUNTED UNIT

GP-08 compact floor-mounted unit



Air handling unit for schools, sports halls, gyms, meeting rooms, offices, ancillary facilities for swimming pools, retail outlets, medical and therapy practices.

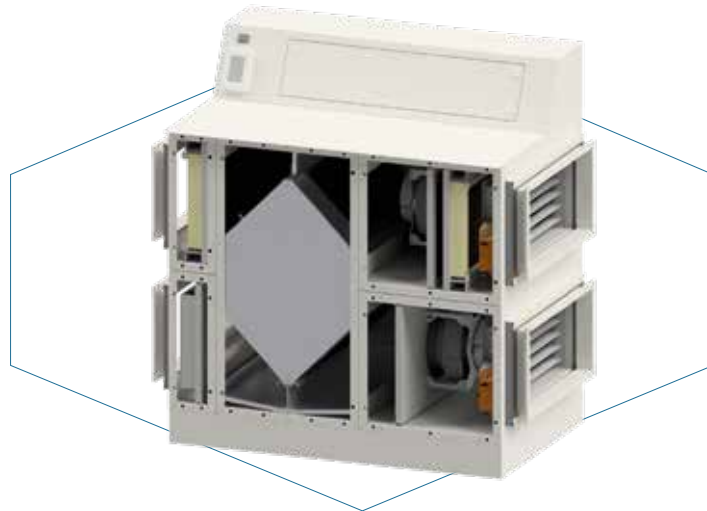
- Heat and cold recovery with counter-flow plate heat exchanger
- Alternatively with moisture recovery
- Continuously controllable EC motors
- Compact complete solution with control cabinet and control system
- VDI 6022 compliant
- Flow rate 500 - 960 m³/h
- Dimensions 690 x 690 x 1000 mm (L X W x H)
- Weight 150 kg
- Optionally with e-heating coil
- Optionally with supply and discharged air louvre dampers

Model identification	Unit	GP-08
Nominal flow rate		
Supply air (SA)	m ³ /h	500-960
Exhaust air (EA)	m ³ /h	500-960
Energy recovery *		
Heat recovery system		Cross-flow / countercurrent heat exchanger
Efficiency	%	80
Supply air temperature	°C	16.5
Ext. pressure increase (max)		
OA - SA and RA - EA	Pa	400
Sound power level * L _{WA}	dB(A)	72
Type of integrated drive		EC
Power requirement at operating point for 800 m³/h 400 Pa external pressure in each case		
Supply air fan incl. commutation unit	kW	0.35
Exhaust air fan incl. commutation unit	kW	0.35
Motor rated power		
Supply air fan incl. commutation unit	kW	0.50
Exhaust air fan incl. commutation unit	kW	0.50
Operating voltage	V	230
Supply air filter		ISO ePM1 50% (F7)
Exhaust air filter		ISO ePM10 75% (M5)

* T_{outside air} = -12 °C / RH = 90%, T_{exhaust air} = 22 °C / RH = 40%, nominal flow rate 800 m³/h

Luftbox 800 floor-mounted unit GP2-08

Our Luftbox 800 is particularly suitable for retrofitting highly efficient decentralised air handling units in classrooms or group activity rooms.



- Perfectly suited for decentralised retrofitting
- Modular design: Optionally available with sound attenuation modules for ultra-quiet operation, or with the option of having duct silencers installed by the system manufacturer
- Supply air / exhaust air, left or right
- Free discharge or installation of ventilation ducts
- Cross-flow / counterflow heat recovery, also with moisture recovery
- Ready to plug in, 230 V
- RAL 9002 (white) or RAL 7016 (anthracite)
- Needs-based flow control depending on the CO₂ content of the exhaust air, 400 - 800 m³/h
- Optionally with integrated smoke detector
- Optionally with integrated presence detector
- Operation via touch screen
- Optional electric post-heating coil 300 watt electrical input power at 800 m³/h
- Basic unit dimensions: 1053 x 685 x 950 mm (L x W x H) without connection piece and operating hood
- VDI 6022 compliant (hygiene directive)

Model identification
Unit
GP2-08 Luftbox 800

<i>Nominal flow rate</i>		
Supply air (SA)	m ³ /h	400-800
Exhaust air (EA)	m ³ /h	400-800
<i>Energy recovery *</i>		
Heat recovery system		Cross-flow / countercurrent heat exchanger
Efficiency	%	80
Supply air temperature	°C	16.5
<i>Ext. pressure increase (max)</i>		
OA - SA and RA - EA	Pa	400
Sound power level * L _{WA}	dB(A)	63
Type of integrated drive		EC
<i>Power requirement at operating point for 700 m³/h 50 Pa external pressure in each case</i>		
Supply air fan incl. commutation unit	kW	0.15
Exhaust air fan incl. commutation unit	kW	0.16
<i>Motor rated power</i>		
Supply air fan incl. commutation unit	kW	0.50
Exhaust air fan incl. commutation unit	kW	0.50
Operating voltage	V	230
Supply air filter		ISO ePM1 70% (F7)
Exhaust air filter		ISO ePM10 55% (M5)

* T_{outside air} = -12 °C / RH = 90%, T_{exhaust air} = 22 °C / RH = 40%, flow rate 700 m³/h

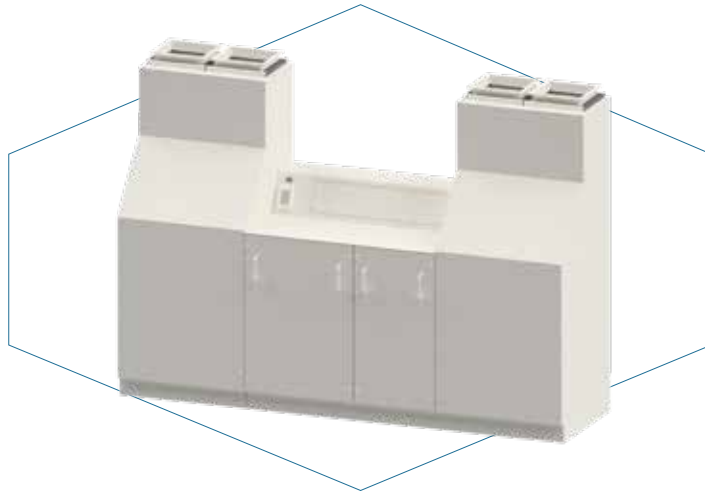
GP2-08 floor-mounted unit with moisture recovery

Model identification	Unit	GP2-08 Luftbox 800 with moisture recovery
Nominal flow rate		
Supply air (SA)	m ³ /h	400-800
Exhaust air (EA)	m ³ /h	400-800
Energy and moisture recovery *		
Heat recovery system	Polymer membrane exchanger package with moisture recovery	
Temperature		
Efficiency	%	73.5
Supply air temperature	°C	13
Humidity		
Supply air humidity	%	47
Humidity efficiency value	%	57.5

* $T_{\text{outside air}} = -12 \text{ °C} / \text{RH} = 90\%$, $T_{\text{exhaust air}} = 22 \text{ °C} / \text{RH} = 40\%$, flow rate 700 m³/h



The Luftbox 800 in the Grundschule Strücklingen primary school. The children call the unit "Lufti".



Luftbox GP2-08 with sound insulation modules

Keeping sound radiation as low as possible is decisive for gaining acceptance for decentralised retrofitting of air handling units in the classroom, not only in the room itself, but also outside where air is expelled and drawn in.

We have designed sound insulation modules that can be optionally fitted directly to the unit, ensuring ultra quiet operation. A major advantage of the Luftbox 800

is its modular structure. It is, depending on the spatial situation, possible to individually decide whether the unit should be integrated into a dust system with duct silencers, or whether sound insulation should be achieved with our sound insulation modules. Where larger quantities are involved, the modules can, in response to customer requests, be adapted within a certain frame.

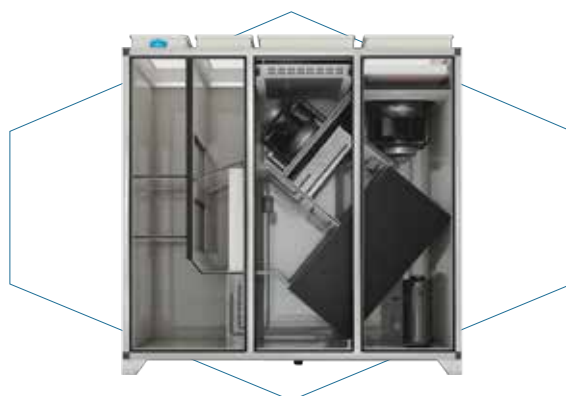
Total sound power level A assessed for a flow rate of 700 m³/h:

- Outside air connection: 49 dB(A)
- Supply air connection: 38 dB(A)
- Exhaust air connection: 38 dB(A)
- Discharged air connection: 44 dB(A)

COMFORT AIR CONDITIONING UNIT

KL-P comfort air conditioning unit

Air handling units for sports halls, gyms, meeting rooms, ancillary facilities for swimming pools and much more.



Air conditioning with a mechanical refrigeration system, including in office buildings, hotels and restaurants, meeting and club rooms and conference halls.

- Meets Ecodesign Directive requirements when the layout suits the building
- Heat recovery efficiency up to and exceeding 80%, energy efficiency class A+
- Continuously controllable EC motors
- Complete solution with control cabinet and control system
- Units available with integrated refrigeration system
- VDI 6022 compliant
- Flow rates up to 3,400 m³/h

Type	Max. supply air volume [m ³ /h]	Dimensions L x W x H [mm]	Weight [kg]	Connected load [kW]
KL-P-15	1500	1860 x 670 x 2000	470	1.5
KL-P-15-iK	1500	1860 x 670 x 2000	550	3.5
KL-P-23	2300	1860 x 880 x 2000	620	2.1
KL-P-23-iK	2300	1860 x 880 x 2000	700	5.1
KL-P-34	3400	2070 x 1080 x 2100	745	3.6
KL-P-34-iK	3400	2070 x 1080 x 2100	830	8.2

Technical data for KL-P without integrated refrigeration

Model identification	Unit	P-15	P-23	P-34
Air volumes				
Supply air, max.	m ³ /h	1500	2300	3400
Exhaust air, max.	m ³ /h	1500	2300	3400
Energy recovery ¹⁾				
Capacity	kW	14.7	22.8	33.7
Efficiency	%	77	79	79
Winter outside air temperature downstream of double plate exchanger	°C	17.6	17.9	17.9
Ext. pressure loss				
OA - SA	Pa	400	400	400
RA - EA	Pa	400	400	400
Sound power level on				
Supply air connection	dB(A)	79	82	84
Exhaust air connection	dB(A)	67	69	73
Outside air connection	dB(A)	60	61	64
Discharged air connection	dB(A)	70	74	76
System capacity input				
Supply air fan	kW	0.51	0.82	1.37
Exhaust air fan	kW	0.48	0.79	1.28
Motor rated power				
Supply air fan incl. commutation unit	kW	0.75	1.05	1.80
Exhaust air fan incl. commutation unit	kW	0.75	1.05	1.80
Operating voltage	V	230	400 / 230	400 / 230
PWW ²⁾				
Capacity	kW	10	16	24
Filters				
Return air	Class	ISO ePM10 75% (M5)		
Outside air	Class	ISO ePM 50% (F7)		

1) $T_{\text{outside air}} = -12 \text{ °C} / \text{RH} = 90\%$, $T_{\text{exhaust air}} = 22 \text{ °C} / \text{RH} = 40\%$

2) 60 / 40 °C at $T_{\text{inlet}} = 13 \text{ °C}$ and $T_{\text{outlet}} = 34 \text{ °C}$



Erfüllt Verordnung (EU) 1253/2014 zur umweltgerechten Gestaltung von Lüftungsanlagen

Data and the respective ErP conformity are examined individually, depending on the application and unit.

Technical data for KL-P-iK with integrated refrigeration

Model identification	Unit	P-15-iK	P-23-iK	P-34-iK
Air volumes				
Supply air	m ³ /h	1500	2300	3400
Exhaust air	m ³ /h	1500	2300	3400
Energy recovery (winter) ¹⁾				
Capacity	kW	14.7	22.8	33.7
Efficiency	%	77	79	79
Outside air temperature downstream of double plate exchanger	°C	17.6	17.9	17.9
Energy recovery (summer) ²⁾				
Capacity	kW	2.4	3.6	5.4
Outside air temperature downstream of double plate exchanger	°C	27.3	27.4	27.3
Mechanical refrigeration system				
Capacity	kW	7.0	9.8	14.5
Supply air temperature downstream of mechanical ²⁾ refrigeration system	°C	18	18	18
Ext. pressure loss				
OA - SA	Pa	400	400	400
RA - EA	Pa	400	400	400
Sound power level on				
Supply air connection	dB(A)	80	82	85
Exhaust air connection	dB(A)	68	69	73
Outside air connection	dB(A)	60	60	64
Discharged air connection	dB(A)	71	73	75
System capacity input				
Supply air fan	kW	0.55	0.90	1.50
Exhaust air fan	kW	0.52	0.84	1.37

Model identification	Unit	P-15-iK	P-23-iK	P-34-iK
Motor rated power				
Supply air fan incl. commutation unit	kW	0.75	1.05	1.80
Exhaust air fan incl. commutation unit	kW	0.75	1.05	1.80
Power consumption compressor at operating point ³⁾	kW	2.18	3.0	4.56
Operating voltage	V	400 ; 230 / 230	400 ; 230	400 ; 230
PWW ⁴⁾				
Capacity	kW	10	16	24
Filters				
Return air	Class	ISO ePM10 75% (M5)		
Outside air	Class	ISO ePM1 50% (F7)		

1) $T_{\text{outside air}} = -12 \text{ °C} / \text{RH} = 90\%$, $T_{\text{return air}} = 22 \text{ °C} / \text{RH} = 40\%$

2) $T_{\text{outside air}} = 32 \text{ °C} / \text{RH} = 40\%$, $T_{\text{return air}} = 26 \text{ °C} / \text{RH} = 50\%$

3) $t_o = 10 \text{ °C} / t_c = 55 \text{ °C}$

4) 60 / 40 °C at $T_{\text{inlet}} = 13 \text{ °C}$ and $T_{\text{outlet}} = 34 \text{ °C}$

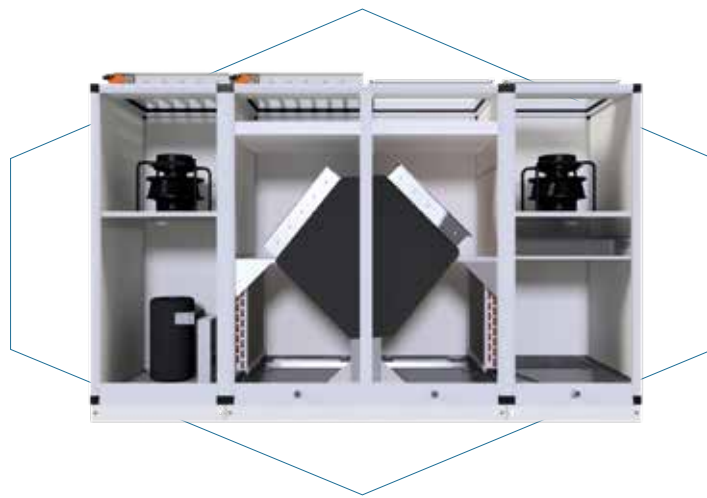


Erfüllt Verordnung (EU) 1253/2014 zur umweltgerechten Gestaltung von Lüftungsanlagen

Data and the respective ErP conformity are examined individually, depending on the application and unit.

KL-PGS comfort air conditioning unit

Air handling units for sports halls, gyms, meeting rooms, ancillary facilities for swimming pools and much more.



Air conditioning with a mechanical refrigeration system, including in office buildings, hotels and restaurants, meeting and club rooms and conference halls.

- Meets Ecodesign Directive requirements when the layout suits the building.
- Heat recovery efficiency up to and exceeding 80% energy efficiency class A+
- Continuously controllable EC motors
- Complete solution with control cabinet and control system
- Units available with integrated refrigeration system or heat pump
- VDI 6022 compliant
- Flow rates up to 8,000 m³/h

Type	Max. supply air volume [m ³ /h]	Dimensions L x W x H [mm]	Weight [kg]	Connected load [kW]
KL-PGS-040	4000	3210 x 1080 x 1865	900	4.8
KL-PGS-040-iK	4000	3210 x 1080 x 1865	1063	8.2
KL-PGS-048	4800	3210 x 1280 x 1865	991	6
KL-PGS-048-iK	4800	3210 x 1280 x 1865	1179	10.2
KL-PGS-065	6500	4060 x 1280 x 2140	1254	9.9
KL-PGS-065-iK	6500	4060 x 1280 x 2140	1505	17
KL-PGS-080	8000	4060 x 1590 x 2140	1439	8.8
KL-PGS-080-iK	8000	4060 x 1590 x 2140	1755	17.3

Technical data for KL-PGS without integrated refrigeration

		PGS-040	PGS-048	PGS-065	PGS-080
Air volumes					
Supply air, max.	m ³ /h	4000	4800	6500	8000
Exhaust air, max.	m ³ /h	4000	4800	6500	8000
Energy recovery ¹⁾					
Capacity	kW	40	47	64	80
Efficiency	%	76.5	76.5	77.5	77.5
Winter outside air temperature downstream of double plate exchanger	°C	17.4	17.4	17.6	17.6
Ext. pressure loss					
OA - SA	Pa	400	400	400	400
RA - EA	Pa	400	400	400	400
Sound power level on					
Supply air connection	dB(A)	84	84	85	85
Exhaust air connection	dB(A)	66	66	66	68
Outside air connection	dB(A)	65	65	65	67
Discharged air connection	dB(A)	84	84	85	85
System capacity input					
Supply air fan	kW	1.3	1.54	2.15	2.57
Exhaust air fan	kW	1.3	1.49	2.08	2.51
Motor rated power					
Supply air fan incl. commutation unit	kW	1.9	2.5	4.45	3.9
Exhaust air fan incl. commutation unit	kW	1.9	2.5	4.45	3.9

		PGS-040	PGS-048	PGS-065	PGS-080
Operating voltage	V	400	400	400	400
<i>PWW</i> ²⁾					
Capacity	kW	23	30	41	50
<i>Filters</i>					
Return air	Class	ISO ePM1 50%			
Outside air	Class	ISO ePM1 50%			

1) $T_{\text{outside air}} = -12\text{ °C} / \text{RH} = 90\%$, $T_{\text{exhaust air}} = 22\text{ °C} / \text{RH} = 40\%$

2) 60 / 40 °C at $T_{\text{inlet}} = 13\text{ °C}$ and $T_{\text{outlet}} = 34\text{ °C}$



Erfüllt Verordnung (EU) 1253/2014 zur umweltgerechten Gestaltung von Lüftungsanlagen

Data and the respective ErP conformity are examined individually, depending on the application and unit.

Technical data for KL-PGS-iK with integrated refrigeration

PGS-040-iK PGS-048-iK PGS-065-iK PGS-080-iK

<i>Air volumes</i>					
Supply air	m ³ /h	4000	4800	6500	8000
Exhaust air	m ³ /h	4000	4800	6500	8000
<i>Energy recovery (winter) ¹⁾</i>					
Capacity	kW	40	47	64	80
Efficiency	%	76.5	76.5	77.5	77.5
Outside air temperature downstream of double plate exchanger	°C	17.4	17.4	17.6	17.6
<i>Energy recovery (summer) ²⁾</i>					
Capacity	kW	6.16	7.41	10.16	12.54
Outside air temperature downstream of double plate exchanger	°C	27.4	27.4	27.3	27.3
<i>Mechanical refrigeration system</i>					
Capacity	kW	13.2	16.2	30.2	34.7
Supply air temperature downstream of mechanical ²⁾ refrigeration system	°C	19	19	18	18
<i>Ext. pressure loss</i>					
OA - SA	Pa	400	400	400	
RA - EA	Pa	400	400	400	
<i>Sound power level on</i>					
Supply air connection	dB(A)	85	85	86	86
Exhaust air connection	dB(A)	67	67	67	69
Outside air connection	dB(A)	66	66	66	68
Discharged air connection	dB(A)	85	85	86	86

PGS-040-iK PGS-048-iK PGS-065-iK PGS-080-iK

<i>System capacity input</i>					
Supply air fan	kW	1.40	1.67	2.30	2.80
Exhaust air fan	kW	1.47	1.62	2.25	2.80
<i>Motor rated power</i>					
Supply air fan incl. commutation unit	kW	1.90	2.50	4.45	3.90
Exhaust air fan incl. commutation unit	kW	1.90	2.50	4.45	3.90
Power consumption compressor at operating point ³⁾	kW	3.40	4.20	7.10	8.50
Operating voltage	V	400	400	400	400
<i>PWW ⁴⁾</i>					
Capacity	kW	23	30	41	50
<i>Filters</i>					
Return air	Class	ISO ePM1 50%			
Outside air	Class	ISO ePM1 50%			

1) $T_{\text{outside air}} = -12\text{ °C} / \text{RH} = 90\%$, $T_{\text{return air}} = 22\text{ °C} / \text{RH} = 40\%$

2) $T_{\text{outside air}} = 32\text{ °C} / \text{RH} = 40\%$, $T_{\text{return air}} = 26\text{ °C} / \text{RH} = 50\%$

3) $t_o = 10\text{ °C} / t_c = 55\text{ °C}$

4) $60 / 40\text{ °C}$ at $T_{\text{inlet}} = 13\text{ °C}$ and $T_{\text{outlet}} = 34\text{ °C}$



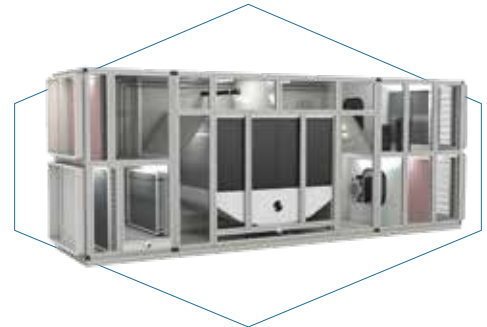
Erfüllt Verordnung (EU) 1253/2014 zur umweltgerechten Gestaltung von Lüftungsanlagen

Data and the respective ErP conformity are examined individually, depending on the application and unit.

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.



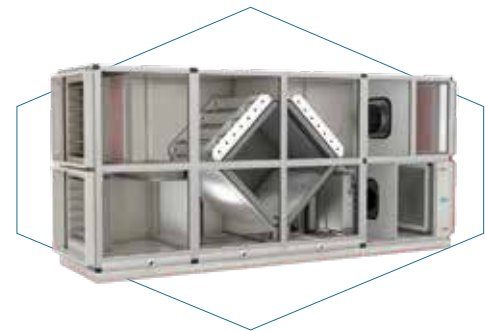
ReCool Line

Recirculating air cooling units for cooling rooms under high thermal stress. Whatever the marginal conditions may be, place your trust in HANSA, the air conditioning specialist, and select the right recirculating air cooling unit for your needs.



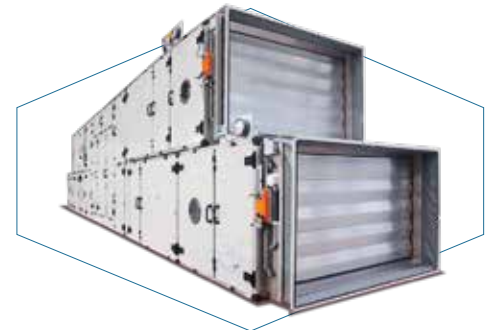
Pool Line

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.



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.



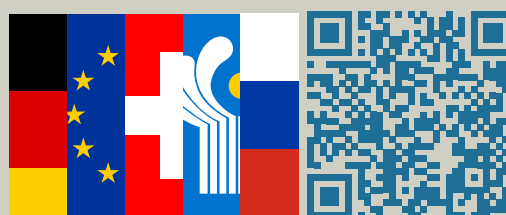
NOTES

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



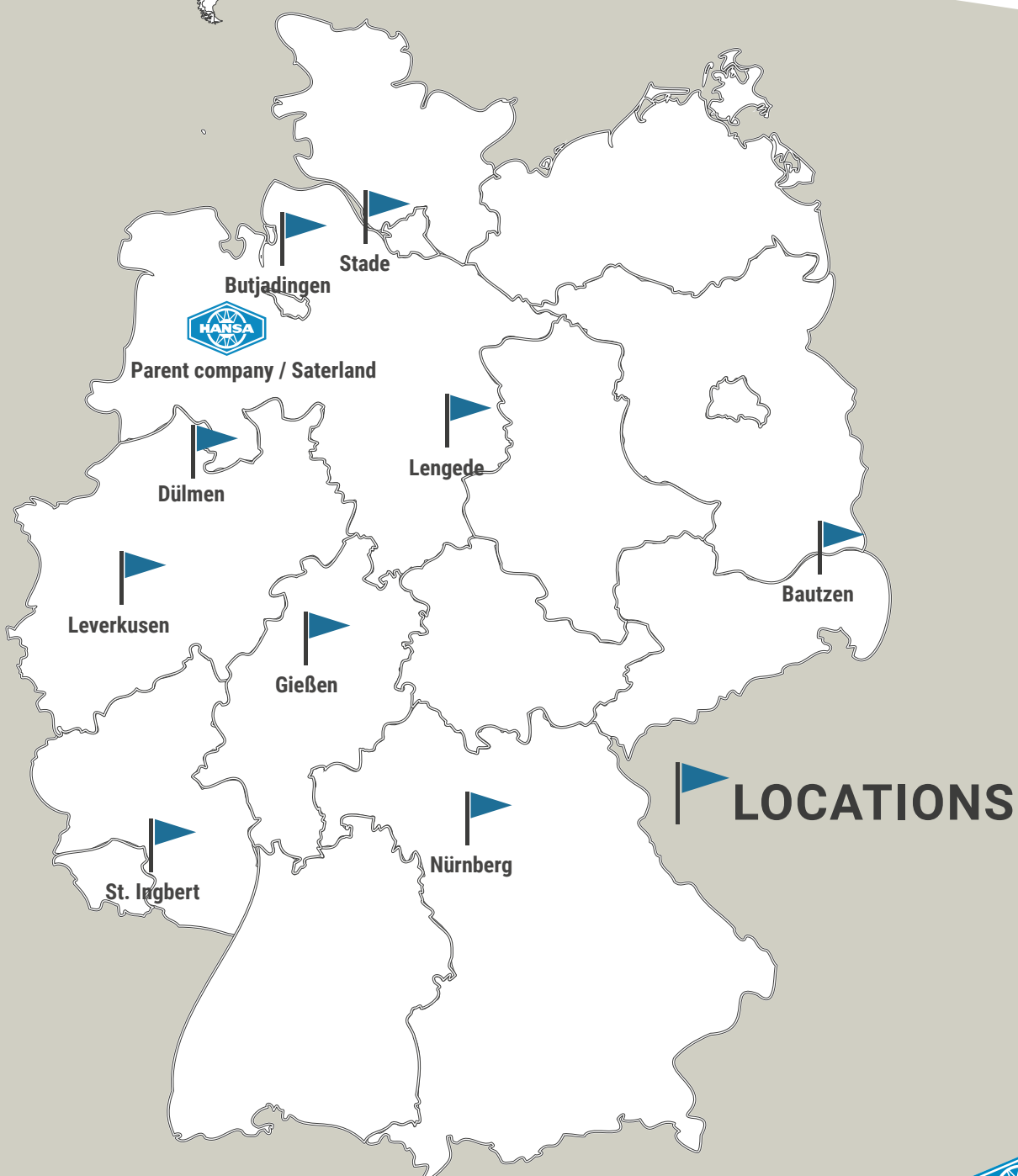
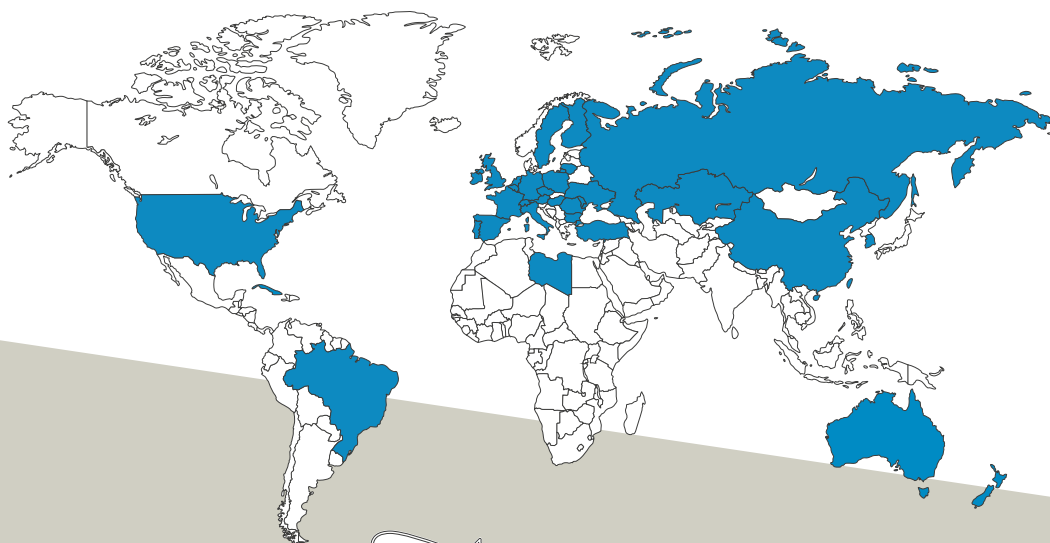
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Our units around the world





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HRB 151863 (German Commercial Register)



hansa-klima.de/en