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# This is WOLF

At WOLF we have been advising and supporting our partners in all their projects for almost 60 years.

From simple installations to the most complex systems, WOLF develops customised solutions.

- System provider for heating and air handling
- Individual solutions for private customers, commerce and industry
- Perfect compatibility between all components
- Smart tools and the simplest possible operation
- Production facilities in Germany and Croatia
- Our appliances: Durable. Efficient. Environment friendly.





Subsidiaries in different countries



# Reference projects from all over the world





#### **Educational buildings**

- · Educational Campus Riensförde, Stade (DE)
- · British Council, Madrid (ES)
- Lycée Hippolyte Fontaine, Dijon (FR)
- Elementary schools, Bielefeld (DE)
- De Haagse Hogeschool, The Hague (NL)
- Catholic University, Leuven (BE)
- School of Medicine, University of Zagreb (HR)
- Schools and kindergardens, Kassel (DE)
- Technohal UT Twente, Enschede (NL)

#### **Shopping centres**

- Amazing Oriental Rotterdam-Centrum, Rotterdam (NL)
- De Bijenkorf, Amsterdam (NL)
- Centro Comercial El Tiro, Murcia (ES)
- FOC Factory Outlet Center, Brehna (DE)
- Shopville Gran Reno, Bologna (IT)
- Z center, Split (HR)

#### **Industrial buildings**

- Audi, Ingolstadt (DE)
- Belupo, Koprivnica (HR)
- BMW, Landshut (DE)
- · Bosch, Drancy (FR)
- Ferrari Automotive, Maranello (IT)
- Glas Trösch, Strasbourg (FR)
- Haribo, Grafschaft (DE)
- Kühne Nagel, Veghel (NL)

- Augustiner-Bräu, Munich (DE)
- · Gate Gourmet, Madrid (ES)
- · Hooters St. Pauli, Hamburg (DE)
- KB Hospital kitchen, Rijeka (HR)
- VTI, Leuven (BE)

#### Hospitals

- Antonius Hospital, Sneek (NL)
- Asklepios Harburg (DE)
- Autocruise ISO 7, Brest (FR)
- Hospital Universitario Vall d'Hebron, Barcelona (ES)
- KBC Rebro, Zagreb (HR)
- Noordwest Ziekenhuis, Den Helder (NL)
- Nuclear Medicine, Leverkusen (DE)

#### Swimming pools

- Amarena, Amersfoort (NL)
- Centre aquatique de La Pommeraye, Les Mauges sur Loire (FR)
- City pool Svetice, Zagreb (HR)
- Osmose Centre aquatique du Grand Longwy, Longwy (FR)
- · Rulantica water world, Rust (DE)

#### Sport facilities

- · ARENA multipurpose event site, Zagreb (HR)
- Straubing ice stadium, Straubing (DE)
- FitX Germany, nationwide (DE)
- Gimnasio McFit, Madrid (ES)
- Stade Roland-Garros, Paris (FR)
- Spaladium Arena sport hall, Split (HR)

#### Office buildings

- · Gresmalt headquarters, Modena (IT)
- Huis van Delft, Delft (NL)
- Park 7, Diegem (BE)
- Siége VINCI, Rueil Malmaison (FR)
- Siemens Campus, Erlangen (DE)
- Sky office, Zagreb (HR)
- Dancing Towers, Hamburg (DE)
- TÜV Süd, Munich (DE)

#### Hotels & catering

- Cantina di Cortaccia, Kurtatsch (IT)
- Hilton Hotel, Schiphol (NL)
- Hotel Kompas, Dubrovnik (HR)
- Hyatt Hotel, Madrid (ES)
- Restaurant Le Jules Verne, Paris (FR)
- L'Osteria, Hamburg (DE)
- Motorworld, Cologne (DE)

#### **Airports**

- · Aéroport de Paris Orly, Paris (FR)
- Airbus, Finkenwerda (DE)
- Aeropuerto Adolfo Suárez Madrid-Barajas, Madrid (ES)
- · Franjo Tuđman Airport, Zagreb (HR)
- Franz-Josef-Strauß Airport, Munich (DE)

#### **ATEX** solutions

- · AD Plastik, Zagreb (HR)
- Airbus, Toledo (ES)
- FACC factory, Jakovlje (HR)
- Frey + Lau, Hamburg (DE)
- tesa Werk, Hamburg (DE)
- · Stadler Germany, Berlin (DE)



# Certified and safe

### Quality at highest level

For maximum safety, efficiency and quality in system planning: WOLF air handling meets the current strict requirements, regulations and legal standards. This applies equally to structural, energy and hygiene criteria.

We actively engage with professional bodies, quality associations, trade associations and other institutions to ensure that we are ready to comply with future standards without delay. That is why we give planners, builders and operators answers to future-oriented topics such as:

- Energy-conscious construction "Green Building"
- Healthy indoor climate vs. sick building syndrome (SBS)
- Comprehensive building cost management "Lifecycle Costs"



#### **German AHU Manufacturers Association**

Definition of energy efficiency classes and labels based on EN 13053 A1 2010. WOLF meets all requirements as per "RLT-TÜV-01" and is authorised to use test marks for energy efficiency classes A+, A and B.



#### ATEX, directives on explosion protection

ATEX certification by TÜV SÜD confirms that WOLF complies with the directives for equipment and protection systems intended for use in explosive atmospheres 94/9/EC.



### **CE** mark



WOLF confirms conformity with EU regulation 765/2008 for all appliances and is authorised to sell them in the markets of the European Union.



#### Hygiene

Wolf air handling units meet the hygienic requirements of VDI 6022 and, if required, DIN EN 1946-4 for use in operating rooms.



#### **EUROVENT**

WOLF participates in the ECP programme for Air Handling Units. Check ongoing validity of certificate: www.eurovent-certification.com



#### ISO 9001

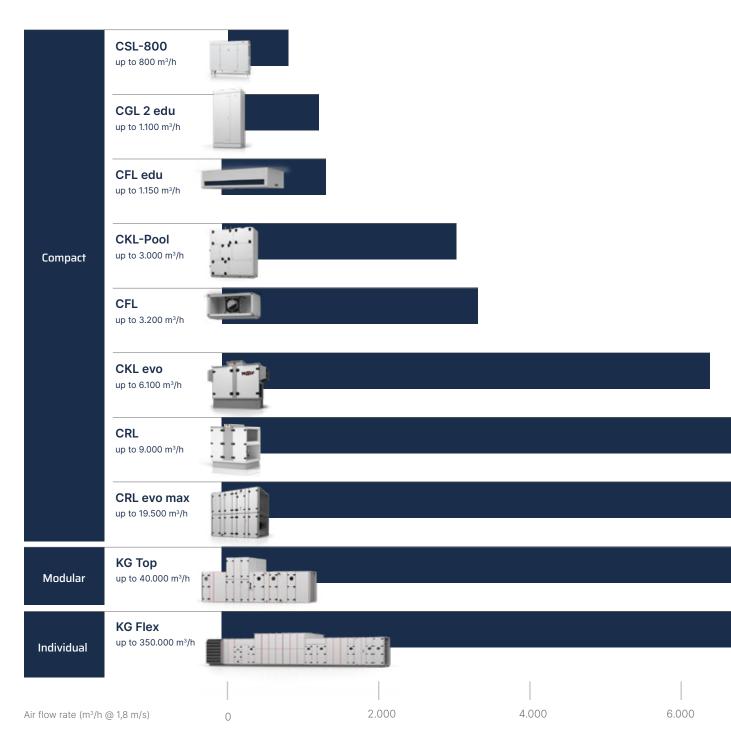
Certified quality management in the company.



# Solutions for all applications

# From compact to individual

WOLF is your strong partner for air handling systems – for every application and building conditions.







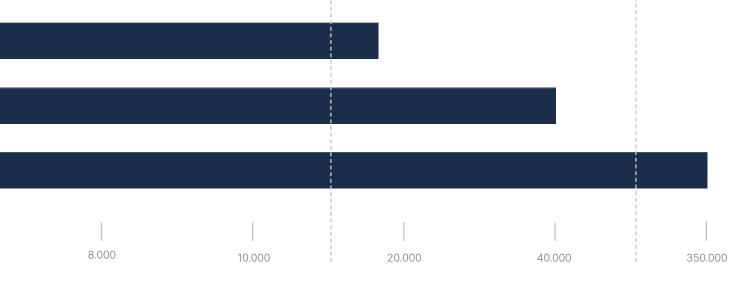
# Use the AHU configurator to find the right AHU in just a few clicks!



# The AHU configurator generates a good foundation for the next planning steps:

- 3D representation of the implemented configuration
- Indication of efficiency classes
- Generation of drawing and data sheet

More info on page 35.





# **Compact units**

# Compact appliances in premium quality

Compact units, quick delivery, straightforward installation. To ensure that there are no problems with a project due to overestimated space availability, delivery times or high operating or purchase costs, the "extra compacts" from WOLF are a perfect choice. Always large enough to ensure maximum comfort and small enough to be deployed anywhere.

# Advantages of the series:

- · Prewired units for quick and easy commissioning
- Premium field devices: Highly efficient, variable-speed EC fans (energy efficiency class IE4 as per DIN EN 60034-30)
- Robust & coated casing (optional for CFL)
- Outdoor units: The CKL evo and CRL series in a weatherproof design
- Remote access with WOLF Link pro via the SmartSet portal as a web application or mobile app
- Tried-and-tested WRS-K control unit with many programmable inputs and outputs provided as standard
- Large range of BMS interfaces (LON, BACnet, Ethernet, Modbus and KNX)
- Extensive range of accessories
- Very short standard delivery times

# CSL-800 compact ventilation unit

# Maximum flexibility for minimum installation effort

- Developed and optimised for low flow rates up to 800 m<sup>3</sup>/h
- Mounting options for all room situations: Standing, wall, ceiling
- Supply air on left or right side
- Wide range of flow rate control options:
  - > flow rate control based on integrated sensors
  - > percentage-based fan control
  - > demand-controlled volume flow
  - > constant channel pressure control (no accessories necessary)
- Heat recovery via high-performance plate heat exchanger with efficiency of over 90%
- Optional enthalpy heat exchanger for moisture recovery
- Integrated bypass for night ventilation as standard feature
- Extensive accessories for air conditioning
- Compliance with the highest hygiene requirements as per VDI 6022
- WOLF WRS-K control system with interfaces for building management system
- Integrated energy monitoring for fans and heat recovery



Flow rate	m³/h	300 - 800
Nominal flow rate at 150 Pa (ext.) pressure	m³/h	710
Dimensions (H* x W x D)	mm	1.159 × 1.380 × 340
Weight	kg	127
Housing colour	RAL	9016

\*Including 126 mm feet







# CKL evo compact ventilation unit

# with plate heat exchanger

The CKL evo is available as an indoor unit with vertical or horizontal duct connection (CKL-iV/iH evo) and as a weatherproof outdoor unit CKL-A evo.

#### Advantages:

- Double filter stage for maximum hygiene requirements as well as numerous extension modules and extensive accessories
- Night ventilation (cooling) with bypass mode as standard
- Heat recovery: Heat recovery factors up to and exceeding 90%





CKL-iH evo		1400	2400	3300	4700	6100
Max. air volume	m³/h	1,400	2,400	3,300	4,700	6,100
Height	mm	1,017	1,424	1,424	1,424	1,424
Width	mm	1,525	2,033	2,033	2,237	2,237
Depth	mm	750	750	950	1,360	1,665
Weight	kg	250	360	450	645	725







# CRL and CRL evo max compact ventilation unit

# with rotary heat exchanger

The CRL line of units features high performance rotary heat exchangers and various duct connection options. This makes them ideal for flexible applications.

- · Wide range of rotor types:
  - > Sorption rotor recommended by WOLF
  - > Enthalpy rotor
  - > Condensation rotor
- Patented WOLF labyrinth seal with a leakage rate of only 2%
- Easy installation of slimline units and units supporting disassembly
- Wide range of air duct routing options Indoor installation:
  - > Bottom horizontal \_ top vertical (iD)
  - > Horizontal (iH)
  - > Bottom horizontal top vertical/horizontal (iHD)
- Weatherproof outdoor installation: Horizontal (A)



CRL		1300	2500	3500	4800	6200	9000
Max. air volume	m³/h	1,300	2,500	3,500	4,800	6,200	9,000
Height	mm	1,017	1,424	1,424	1,424	1,424	1,627
Width	mm	1,525	1,626	1,626	1,728	1,932	2,136
Depth	mm	750	950	1,155	1,360	1,665	2,070
Weight	kg	266	381	470	590	715	845

CRL evo max		11,000	13,500	16,500	19,500
Max. air volume	m³/h	11,000	13,500	16,500	19,500
Height	mm	2,034	2,644	2,644	2,644
Width	mm	2,950	2,950	2,950	2,950
Depth	mm	1,970	1,970	2,275	2,580
Weight	kg	1,370	1,550	1,790	2,020







# **CFL-EC slimline ventilation unit**

# with plate heat exchanger

The compact installed heights of CFL appliances make them ideal for use in suspended ceilings. They are available in four different sizes as pure supply or extract air units (CFL-EC) or equipped with highly efficient heat recovery (CFL-WRG).

- Fans designed as free-running impellers are infinitely variable with EC technology
- Heat recovery with an efficiency of over 90% using an aluminium countercurrent plate heat exchanger (PHE)
- Flat, compact design enables easy integration and assembly
- Wide range of accessories available



CFL		10 WRG	15 WRG	22 WRG	32 WRG
Max. air volume	m³/h	1,000	1,500	2,200	3,200
Height	mm	367	367	411	495
Width	mm	1,017	1,423	1,830	1,932
Depth	mm	1,322	1,322	1,525	1,932
Weight	kg	130	160	240	340







# CGL 2 edu compact ventilation unit

# The decentralised, floorstanding AHU

#### Features:

- Whisper quiet with a very high flow rate
- CO<sub>2</sub>-based flow rate as standard
- Heat recovered by means of a high performance plate heat exchanger with efficiency of over 90%
- Optional enthalpy heat exchanger for moisture recovery
- Integral bypass as standard for night ventilation
- Integrated damper for outdoor and extract air
- Compliance with the highest hygiene requirements as per VDI 6022
- Optional second filter stage in supply air line
- WOLF WRS-K control system with interfaces for building management system
- Optional integration of electric preheater and reheaters
- Various options for air distribution in the room







CGL 2 edu

Max. air volume	m³/h	1,100		
Flow rate at 35 dB(A) sound pressure level*	m³/h	930		
Sound pressure level *	dB(A)	28 (600 m³/h) 32 (800 m³/h) 37 (1,000 m³/h)		
Dimensions (H x W x D)	mm	2,133 × 1,070 × 620		
Weight	kg	283		

Including Intake silencer and exhaust module







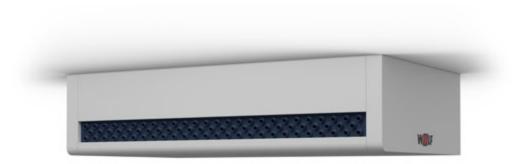
<sup>\*</sup> Determined by TÜV Süd Industrie Service GmbH at a distance of 1 m as per DIN EN ISO 11203

# CFL edu compact ventilation unit

# The decentralised, ceiling-mounted AHU

#### Features:

- Extremely quiet with a very high flow rate
- Efficient plate heat exchanger for heat recovery
- Integrated electrical preheating coil
- VDI 6022-compliant
- Integral bypass as standard for night ventilation
- Integrated wide-angle nozzles for very good air distribution without an additional duct network
- WOLF WRS-K control system with BacNet interface and much more



CFL edu		675	1000
Max. air volume	m³/h	675	1,150
Sound pressure level	dB(A)	35 (500 m³/h)*	35 (850 m³/h)**
Height	mm	540	600
Width	mm	1,708	2,303
Depth	mm	1,170	1,300
Weight	kg	210	275







Provisional value for sound pressure level at 1 m distance as per DIN EN ISO 11203

<sup>\*\*</sup> Determined by TÜV Süd Industrie Service GmbH at a distance of 1 m as per DIN EN ISO 11203

# **Pool units**

# Highly efficient air dehumidification

The portfolio for pool applications from WOLF includes the CKL Pool as a compact unit as well as the KG Flex Pool with modular device sizes, both with numerous options. Both variants are specially designed to intelligently condition indoor swimming pools.

#### Advantages:

- Continuous ventilation and dehumidification
- Complete system with fully integrated heat pump and control unit
- High efficiency thanks to the heat recovery system
- Resistant to corrosion: fully coated
- Unit fully wired and ready to connect
- Easy installation and quick start-up





		CKL-Pool 20	CKL-Pool 30	KG Flex Pool
Max. air volume	m³/h	2,000	3,000	Individual
Height	mm	1,840	2,040	Individual
Width	mm	1,755	2,155	Individual
Depth	mm	805	855	Individual
Weight	kg	670	800	Individual







# Modular appliances KG Top

Countless options and impressive technical features

Maximum flexibility
 For requirements up to 40,000 m³/h.

### Other advantages:

- > Also available with stainless steel panels
- > Heating coil as per VDI 6022 as standard.
- > Highly efficient energy recovery system
- > HV-tested to VDE 0700 as standard
- > Customer service provided by WOLF TGA experts
- > Manufacturer commissioning and factory comissioning and on site installation support on request

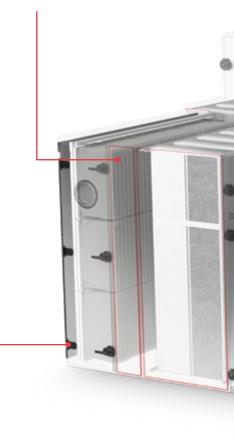
#### ATEX version available

KG Top devices with ATEX certificate according to Directive 94/9/EC guarantee safe use in potentially explosive areas.

Casing specifications confirmed by TÜV SÜD as per DIN EN 1886					
Thermal transmission category	T2				
Thermal bridge category	TB2				
Casing tightness category	L1				
Mechanical strength	D1				
Material category to DIN 4102	A1 (non-combustible)				

### **Filter**

The right filter for any task. With specially developed filters, WOLF goes beyond the requirements of standards, e.g. pocket filters without ground contact for top hygiene.



#### Louvre dampers

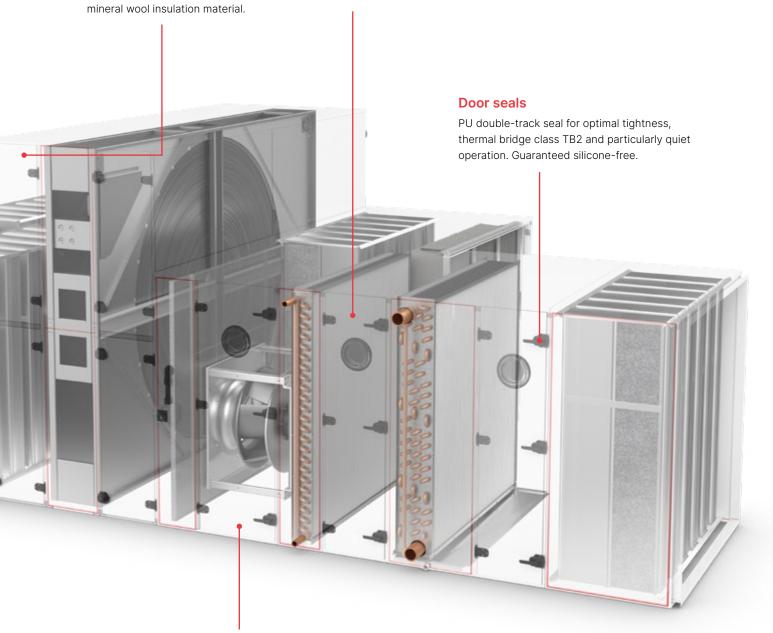
Airtight, externally mounted or integrated as per DIN EN 1751 standard, casing tightness category 2 and 4, optional double lip, zinc-plated, powder-coated or stainless steel finish. Especially hygienic: The gears are outside of the airflow.

### **Casing panels**

Removable, smooth surface, thermally decoupled, with 50 mm thick, high-quality, non-combustible

#### **Doors**

All doors equipped with glass fibrereinforced handle and rotary closure with automatic safety catch and/or lever/twin-lever closure, optionally lockable.



#### Coated for indoor or outdoor use

Powder-coated in any RAL colour or finished with saltwater-resistant C5-M paint.

### Field devices, actuators and sensors

Individually matched and tested quality components.







# Custom appliances KG Flex

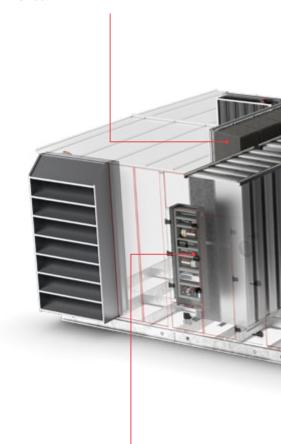
### Some of the product highlights

- Maximum air flow rates
   Custom solutions for performance requirements up to 350,000 m³/h
- Unlimited variety
   Variable cross-sections and different module sizes entirely flexible in terms of size and shape.
- Highest quality standards
   Extensive know-how in planning and production.
- Hygiene experts
   State-of-the-art hygiene solutions fully compliant with VDI 6022.
- Suitable for every environment
   Developed for indoor and outdoor installation in any environment for a wide variety of applications.

Thermal transmission category	T2
Thermal transmission category	12
Thermal bridge category	TB2
Casing tightness category	L1
Mechanical strength	D1

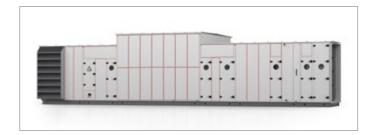
### Superior filter management

Quick-release filter systems for flexible and fast filter management. Many different filter variants are possible for any application.



### Modern control system

As external control cabinet or integrated into the appliance. Easy connection to building management systems.

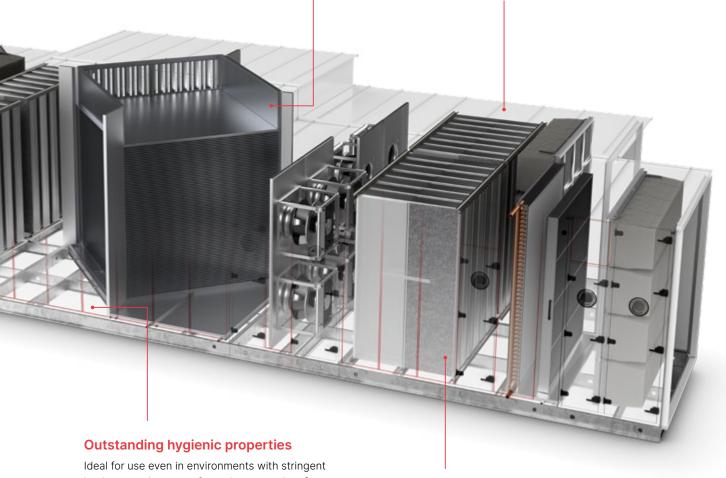


#### Choice of heat recovery options

Energy-efficient and individually selectable energy recovery systems with scrupulous hygiene standards from the latest generation of technology, e.g. rotary heat exchangers or run-around coil systems.

### **Optimal casing characteristics**

New casing design made of thermally isolated 60 mm aluminium profile developed for the highest structural and thermal requirements (L1; D1; T2; TB2 – tested as per DIN EN 1886).



Ideal for use even in environments with stringent hygiene requirements. Smooth trays and surfaces completely in accordance with VDI 6022.

### Flip&Clean silencer

Easy maintenance and cleaning of the silencer baffles.







# **WOLF Clima Split system**

# Your elite partner for heating and cooling

The WOLF Clima Split system consists of an air source heat pump equipped with inverter for connection to a direct evaporator in the air handling unit. The split unit is installed outdoors and is equally suited to cooling (4-24 kW) and heating (4.5-27 kW). The unit can be used in new systems or for retrofitting.

#### The new Clima Split system at a glance:

- Perfect communication between air handling unit and split unit by means of the SplitCom communication system
- Constant supply air temperatures
- Smart defrosting management
- Up to 3 split units can be combined in a single cascade
- Max. cooling capacity: 72 kW, max. heating output: 81 kW
- Extremely quick response speed for changing air flow rates
- Compatible with the CKL evo, CRL and KG Top appliance series and controllable via a common controller
- No precautions against freezing pipes necessary!





# The intelligence of WOLF SplitCom

The SplitCom system enables perfect communication between the air handling unit and split unit, ensuring consistent air supply temperatures.



# Integrated heat pump and cooling technology

Optimised for specific applications and projects

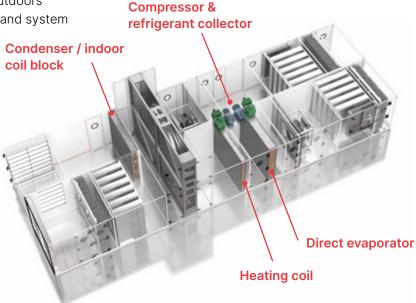
With the modular and individual air handling units from WOLF, cold and heat can also be generated directly in the unit. All necessary components of the cooling process are assembled and tested in the factory. We offer both modular and fully customised solutions that can be fine-tuned to the specific application.

#### Advantages:

- Wide performance range for cooling & heating
- · Integrated and decentralised heating and cooling supply
- Plug & play for particularly rapid installation
- · Perfect interplay between compressor and control unit
- No danger of freezing pipes
- Maximum efficiency by using the thermal energy of the extract air
- No external technology required outdoors
- Extensive know-how in consulting and system dimensioning

#### Three implementation options:

- · Cooling: Integrated chiller
- Heating: Integrated heat pump
- Cooling & heating: Integrated reversible heat pump



Compressor	Digital Scroll		Semi-hermetic reciprocating piston	Semi-hermetic reciprocating piston
Output control		Variable	4-stage / 6-stage	Variable
Output range	kW	7 - 35	30 - 130 / 150 - 250	10 - 140



# **Energy centre**

### WOLF know-how: Unique system competence

WOLF combines ultra-modern air handling unit technology with innovative heating systems in a single module. The "all-in-one solution" consists of:

- AHU with highly efficient heat recovery
- Integrated heat pump and cooling technology
- · Heating system
- · DHW heating

The system is suitable for any type of boiler selected by the operator. Thanks to the measurement, control and regulation technology from WOLF, the whole solution works completely independently.

#### Advantages:

- · Delivered ready for connection on a base frame
- · Rapid deployment with a single lift
- Minimal disruption to operations
- Large system range: Heat pumps, solar technology, gas/oil condensing boilers, combined heat and power generation
- Easy expansion for additional on-site consumers
- Uniform control and regulation technology avoids interface problems
- Interfaces for building management systems



Integral WOLF CGB-2 wall mounted gas condensing boiler featuring state of the art condensing technology for peak loads



# Hygroflow





#### Advantages:

- Highly suited for larger air flow rates
- Hygienic, open floor even with high air flow rates
- Redundancy mode possible
- Extremely small installation length
- Perfect distribution of the air flow to the next section (replaces diffuser)

### Optionally with fan wall damper:

- No air recirculation through inactive fan (redundancy mode)
- No additional electrical connection necessary
- · Control of the fans via ModBus

#### Advantages:

- Exact humidification performance through proportional humidification control
- Only 900 mm overall length, regardless of the size of the air handling unit
- Particularly flexible with fan situated on the suction or pressure side
- Removable dual-stage aerosol separators for easy access and aerosol-free air
- Certified hygienic design as per VDI 6022, confirmed by TÜV Nord
- · Individually configurable
- All components from WOLF to avoid interface problems



# **EasyLifting**

### The air handling unit spreads its wings

Difficult site conditions for engineers and installers? WOLF has the solution: the Easy Lifting System. It makes transport onto or into a building much easier, and the installation of these functional units becomes quicker and more accurate. It's so simple that even our largest components, such as rotary or plate heat exchangers, can be easily brought into any building or positioned on the roof.

#### Advantages:

- Easy handling and installation
- Lifting lug for particularly straightforward lifting by crane or helicopter
- No balance problems: Lifting from the top instead of from the bottom (with bars, rails, etc.)
- Cube connector for quick assembly and perfect tightness class L1, in compliance with DIN EN 1886
- Optimised design of large components, such as rotary or plate heat exchangers



# Lifting lug

Suitable for lifting by crane or helicopter.



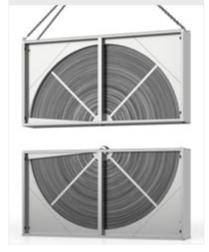
# **Cube connectors**

For quick assembly with perfect tightness.



# Rotary heat exchanger

Straightforward installation in two modules.

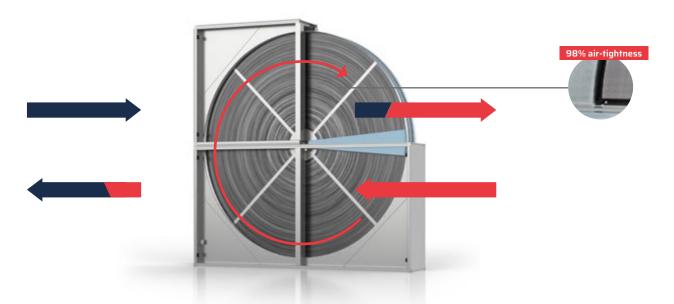




# SuperSeal

### **Uncompromising leak protection**

With the SuperSeal system from WOLF, maximum air handling hygiene is guaranteed. No dirt particles can get into the device via joints. In addition, the heat recovery minimises potentially contaminated circulating air – a decisive advantage, especially if the room air may be contaminated with viruses.



# Doors & casing

The robust doors have a pressure stability (positive and negative pressure) of up to 2,000 Pa. The door panel is fitted with a PU double-track seal and thus achieves thermal class TB2 as per EN 1886. In combination with the visually striking red sealing profiles, WOLF air handling units achieve tightness class L1 according to EN 1886 as standard. And this applies equally to outdoor and indoor units.

# **Filter**

The high-quality filters according to ISO 16890 are set in specially designed frames and clamping devices to achieve the lowest possible filter bypass leakage for hygienic indoor air.

# Labyrinth sealing system

- Labyrinth seal mounted directly on the edge of the rotor
- No extra fixation or readjustment required
- Leakage rate < 2%
- 4-fold cascade seal and purging chamber on the rotor hub
- Larger area for heat recovery
- Temperature transfer rate of over 90%



# High-performance run-around coil system

# with hydraulic station

The solution for highly efficient heat recovery in areas with particularly stringent indoor air quality requirements.

#### The run-around coil system at a glance:

- 100% separation of supply/extract air
- Maximum efficiency thanks to the optimum ratio of heat flows, which cannot be achieved with systems assembled on site
- Hydraulic unit with minimised pressure drop, HE pump with variable output control and precise flow rate capture using ultrasonic meters
- · Optional injection of heating/cooling energy
- Complete integration into the WOLF WRS-K air handling control unit
- Continuous function and performance monitoring
- Extremely compact design, fits through every door
- Also available in a weatherproof version
- Now also controllable via the BMK T10









# Hygiene applications – made by WOLF

### When cleanliness also means purity

If required, WOLF KG Top devices are designed strictly according to the hygiene guideline DIN 1946 – Part 4 and built with the greatest care. For engineers and developers, this guarantees straightforward planning, problem-free approval and safe operation in hospitals, clean rooms and areas with the strictest hygiene requirements.

Clean air of the highest quality: The hygiene versions of the WOLF AHUs are suitable for highly sensitive, category 1A air flows and can be integrated into low-turbulence, displacement flow ceilings in operating theatres, for example.



#### Strict adherence to the design rules of DIN 1946 - Part 4, such as:

- Smooth interior surfaces can be cleaned leaving no residues
- Inside of floor panels made of stainless steel 1.4301
- Insides of wall and top panels with powder coating (optionally stainless steel 1.4301)
- Stainless steel filter mounting frame with foam seal, gapless
- CuAl heating coil with coated frame or stainless steel 1.4301 and minimum fin spacing of 2.0 mm



# **ATEX**

# **Explosion-proof design**

A comprehensive risk and hazard analysis forms the basis for effective explosion control measures. At the customer's request, units of the KG Top series can be supplied in an ATEX version.

TÜV SÜD confirms that WOLF appliances and components comply with Directive 94/9/EC (ATEX 95) for use in accordance with their intended application in areas at risk of explosion with safety categories 2G and 3G, temperature classes T1 to T4 or deployment zones 1 and 2.



#### Special features of WOLF air handling units in ATEX design:

- · All casing components and fitted parts are electrically conductive and earthed
- Air filter with filter medium in conductive filter mounting frame
- Fans with ATEX certification according to classification
- All components (coils, silencers, louvre dampers, heat recovery, etc.) are electrically conductive and earthed
- No use of materials that enable sparks or electrostatic charging
- All fitted parts are also ATEX-compliant

A checklist specially developed by WOLF makes it easier for design engineers, operators and system installers to classify air handling units according to the directives.



# Control systems

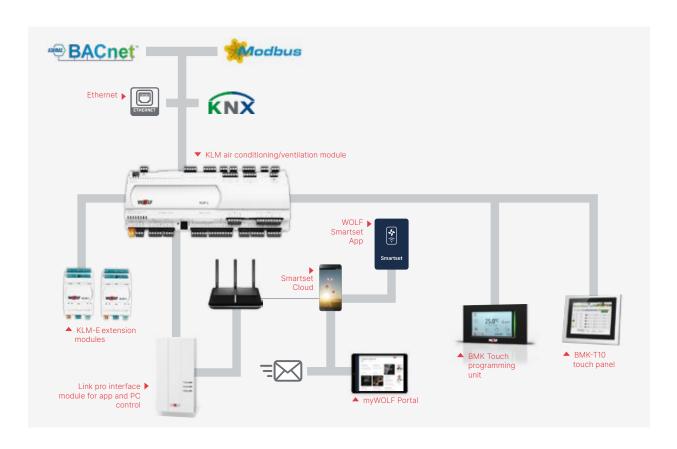
### Intelligent and designed with care

Accurate control is essential for optimum operation of AHUs and ventilation systems. The WOLF WRS-K control system makes operation even easier, ensures the best possible energy efficiency and enables individual system configuration.

Easy retrofitting or expansion of functionality (e.g. humidification, adiabatic cooling) as well as communication with a building management system (e.g. via Modbus or BACnet) is possible.

#### WRS-K key features:

- · Software configured individually for each AHU
- Perfect interplay between AHU and control system
- · Simple commissioning
- Custom programming possible on request
- · Factory pre-programmed control application, optimally calibrated for the specific unit configuration
- Subsequent functional extensions can be configured at a later time using the programming unit
- BMK Touch programming unit in over 24 languages
- Connection to the internet is child's play with WOLF Link pro





# Plug & Play

# Reduce installation times – avoid mistakes

We provide fully prewired units ex works, not only for our compact models but also for all other WOLF appliances.

- One contact person no further interfaces
- · Perfect and optimised routing of all electrical wiring
- Top quality and thus high operational reliability and best hygiene properties (VDI 6022)
- Maximum efficiency through perfect sensor positioning
- Plug & play: Preconfigured to minimise the work required on site









Find out more!

# Knowledge base

Planners and system builders will find a detailed knowledge database in the myWOLF portal, which is constantly being expanded.

Find out more!

**WOLF Wissensdatenbank** 

- Digital reference work
- Important information on the legal aspects of AHU planning
- Application-specific structure with practical examples
- · Free registration

# The new myWOLF Portal

All answers for the needs and challenges of our customers digitally in one place – the new myWOLF portal is a central digital services platform.

- Intuitive operation
- State-of-art technical knowledge
- Product information
- Overview of all services
- AHU online configurator for compact and modular devices
- Extensive knowledge base
- Overview of WOLF seminars



# **Tools**

### Support in planning and design



Find out more!

### AHU online configurator

Just enter the key data and you are only a few clicks away from finding the right air handling unit, including an initial design specification. The generated 3D representation of the implemented configuration, information on efficiency classes and the outputted drawings and data sheets form an excellent basis for the next planning steps.

- · Only few basic parameters needed
- Predefinition of desired optional components, e.g. heaters, coolers, silencers
- Files exported as dxf, dwg, ifc, technical drawings as PDF, tender documentation, etc.
- BIM-ready: Output via WOLF BIM browser in Revit
- Available on the go smartphone and tablet compatible



Find out more!

#### **BIM** browser

Building information modelling, or BIM for short, is revolutionising the world of planning. WOLF is BIM-ready and provides designers with Revit-compatible 3D files for all heating and air handling products. System design has never been this easy.

#### **Product advantages**

- · Time savings
- Compatible with Autodesk Revit
- · Provided as ICF file





# **WOLF Campus**

# Knowledge transfer reinvented





Competence and knowledge are essential for your business success. This has never been more true given the ever-increasing pace of change in our high-tech world. But it isn't merely the technology that is changing; the same is true of requirements, expectations, regulations and guidelines. That is why we offer you practical training courses in the field of air handling, ventilation and control. We also bring you reliably up to date on current laws and standards.

The broad selection of WOLF seminars is aimed at both heating and air handling professionals such as plant engineers, technicians, architects and specialist planners. Through our seminars knowledge is imparted directly by qualified specialist. And the demand is proof of quality. More than 15,000 participants every year count on WOLF training to make them fit for the market and the competition.

We share our knowledge to make your work easier.





# **Product Range Overview**

# WOLF AHUs, Technologies, Air Heating & Fan Systems

### **Compact AHUs**





CKL-iH, -iV, -A evo 1,400 – 6,100 m<sup>3</sup>/h Cross-countercurrent heat exchanger



CFL-WRG 1,000 - 3,200 m<sup>3</sup>/h Slimline device



CFL-EC 1,000 – 3,200 m<sup>3</sup>/h Slimline device



CFL edu 675, 1,000 m<sup>3</sup>/h Decentralised ceiling ventilation unit



**CRL-iH, -iD, -iDH, -A** 1,300 – 9,000 m³/h Rotary heat exchanger



CRL-iH, -A evo max 11,000 – 19,500 m³/h Rotary heat exchanger



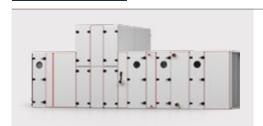
**CKL Pool** 2,000, 3,000 m<sup>3</sup>/h Pool air handling unit



**CGL 2 edu** 1,000 m³/h Decentralised floorstanding unit

### Modular AHUs





**KG Top modular AHUs** 1,000 – 40,000 m³/h @1.5 m/s

### **Individual AHUs**





**KG Flex individual AHUs** 1,000 – 350,000 m<sup>3</sup>/h @1.5 m/s



### Technologies





Clima Split system Heating: 4.5 – 27 kW Cooling: 4.0 – 24 kW



High-performance run-around coil system



HygroFlow LPS/HPS Spray humidifier



**Energy centres** 

### Air heating & fan systems





**LH-(EC)** , **LH-ATEX** Up to approx. 100 kW Air heater



**TopWing TLH, TLHK, TLH(K)-EC**Up to approx. 100 kW Air heater



TLHD (-K), (-EC) Up to approx. 60 kW Ceiling-mounted air heater



**DV-2** Up to 13,000 m³/h Roof extract fan



**TL-2** Up to 8,300 m<sup>3</sup>/h Warm air curtain



**ER** Up to 57,200 m³/h Smoke extract fan



**LD 15** Up to 1,500 m³/h Ceiling mounted fan



# Our experienced advisors will be happy to support you:

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You have not found a contact person or would like to give us feedback? Please feel free to contact us at: int-sales@wolf.eu

Subject to technical modifications. Please note that only the WOLF product is shown in the images of the product. You will usually need incoming and outgoing lines which are connected to the WOLF product from the outside.

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We look forward to hearing from you.