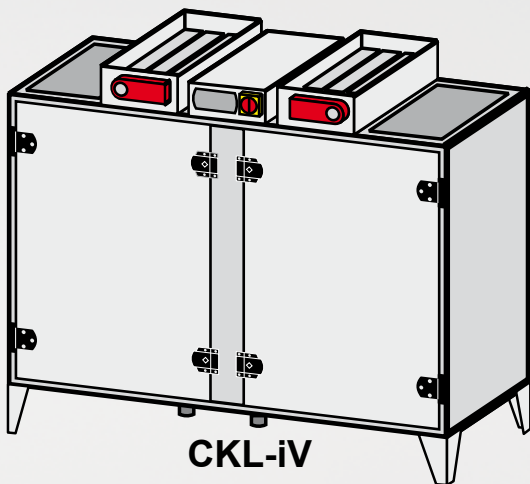


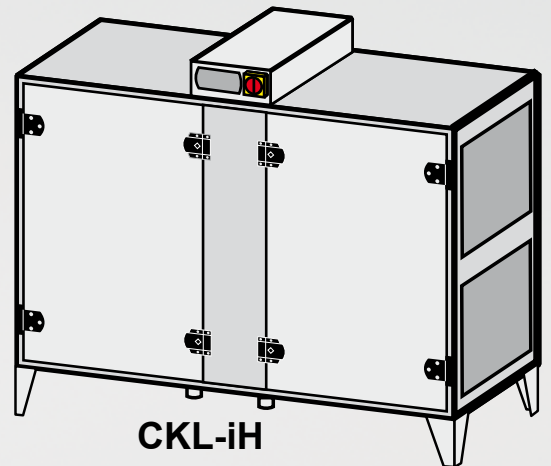
Installation and service instructions

CKL Comfort compact ventilation unit

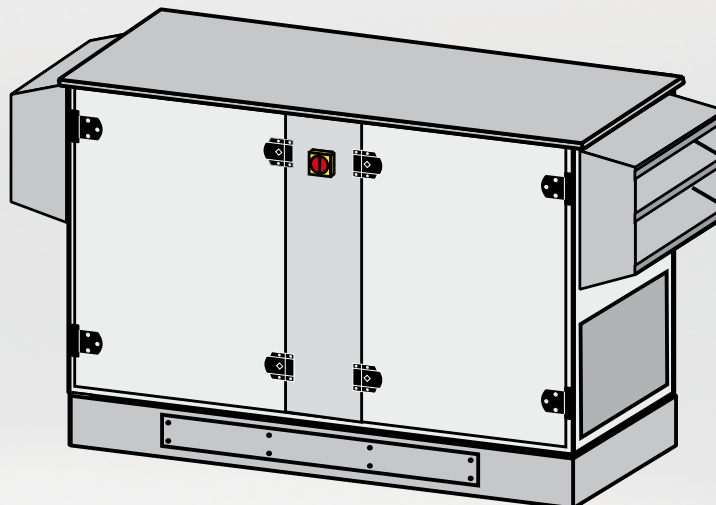
(Translation of the original)



CKL-iV



CKL-iH



CKL-A

Contents	Page
1. General information / safety instructions	3-4
2. Standards and regulations.....	5
3. Unit layout.....	6-8
4. Delivery and handling	9
5. Installation / siting.....	10-12
6. Electrical connection.....	13
7. Commissioning	14-18
8. Service shutdown	19
9. Hygiene checklist.....	20
10. Service instructions	21-23

General information

These service instructions are only applicable to Wolf CKL ventilation units. Authorised personnel should read these instructions before any commissioning or maintenance work. Observe the instructions given in this document. Installation, commissioning and maintenance work must only be carried out by trained personnel.

These instructions should be considered an integral part of the unit supplied, and should always be easily accessible.

Failure to observe these installation and service instructions voids any Wolf GmbH warranty.

Reference symbols

The following symbols are used in this instruction manual. This important information concerns personal as well as operational safety.



"Safety instructions" are instructions which you must follow exactly, to prevent risks or injuries to individuals, and damage to the unit.



Danger through 'live' electrical components!

Please note: Turn off the ON/OFF switch before removing the casing.

Never touch electrical components or contacts when the ON/OFF switch is in the ON position. This would lead to a risk of electrocution that may lead to injury or death.

The main supply terminals are 'live' even when the ON/OFF switch is in the OFF position.

Please note

"Please note" designates technical instructions which you must observe to prevent the unit malfunctioning or being damaged.

Safety instructions

In addition to installation and service instructions, there are notes attached to the unit in the form of labels. These must also be observed.



Only qualified and trained personnel may be appointed for the installation, commissioning, servicing and operation of the unit.

Only qualified electricians are permitted to work on the electrical system. VDE regulations [or local regulations] and those of your local power supply utility are applicable to electrical installation work.

Only operate the unit within its output range, which is stated in the technical documentation supplied by Wolf.



Only operate the unit when it is in perfect technical condition. Any faults or damage which impact or might impact upon the safety or correct function of the unit must be remedied immediately by qualified personnel.

Only replace faulty components and equipment with original WOLF spare parts.

Please note

The unit must only be permitted to handle air. This air must not contain any harmful, combustible, explosive, aggressive, corrosive or otherwise dangerous substances, as these would be distributed throughout the duct system or building, where they could cause a risk to health of, or even kill the occupants, animals or plants living there.

In accordance with DIN 1886, tools are required to open the unit. Wait for the fan to reach standstill (2 minutes). When the doors are opened, negative pressure may draw in loose objects, which could destroy the fan or even cause a risk to life if items of clothing are drawn in.

Electrical connection



Make the electrical connection in accordance with local regulations.

Once the electrical connection work is complete, the installation must undergo a safety test in accordance with VDE 0701-0702 and VDE 0700 part 500, as otherwise there may be a risk of electrical shock that could result in injury or death.



Before working on the unit, shut it down via the repair switch.



Even when the unit has been shut down, voltage will still be present at the terminal and connections of the EC fans. This means there is a risk of electric shock that could result in injury or death.

Do not touch the EC fans for five minutes after disconnecting the power across all poles.

Correct use

Wolf CKL ventilation units are designed to heat and filter normal air. Max. air intake temperature: +40 °C. The use of these units in wet rooms or rooms with explosive atmospheres is not permissible. Handling very dusty or aggressive media is not permissible.

An on-site modification or incorrect use of the unit is not permissible and Wolf GmbH accepts no liability for any damage caused as a result.

Ventilation units intended for internal installation must be placed in rooms that meet the requirements of VDI 2050 (VDI 2050, Requirements for technical equipment rooms - Planning and execution).

Fire

The unit does not present a direct risk of fire. The small numbers of seals fitted inside the unit can burn away if subjected to external influences. If there is a fire, disconnect the unit from the power supply, for example via an on-site smoke detector. Wear respiratory equipment if you fight a fire. The usual extinguishing agents such as water, extinguishing foam or extinguishing powder can be used to extinguish fires. As there are only a small number of flammable seals, the level of pollutants that could be released in a fire is minimal.

Warnings

Removal and disabling of safety and monitoring equipment is prohibited.

Only operate the system in perfect technical condition. Ensure that any faults or damage that may impact on safety are rectified immediately.

Recommended temperatures

The ventilation unit is designed for air intake temperatures between -20 °C and +40 °C. For safety reasons, the room temperature in technical equipment rooms must not fall below 5 °C (risk of frost) or exceed 40 °C. The unit should be operated in room conditions of between 22 °C and 28 °C at approx. 55 % relative humidity.

Other technical documents

- Wolf WRS-K control unit operating instructions
- Wiring diagram
- Configuration wizard
- Parameter list

Standards and regulations

- Machinery Directive 2006/42/EC
- Low Voltage Directive 2014/35/EC
- EMC Directive 2014/30/EC
- ErP Directive 2009/125/EC
- DIN EN ISO 12100 Safety of machinery; general design principles
- DIN EN ISO 13857 Safety of machinery; safety distances
- DIN EN 349 Safety of machinery; minimum gaps
- DIN EN 953 Safety of machinery; guards
- DIN EN 1886 Ventilation for buildings; central air handling units
- DIN ISO 1940-1 Mechanical vibration; balance quality requirements
- VDMA 24167 Fans; safety requirements
- DIN EN 60204-1 Safety of machinery; electrical equipment
- DIN EN 60730 Automatic electrical controls
- DIN EN 61000 -6-2+3 Electromagnetic compatibility
- DIN EN 60335-1 (VDE 0700-1) Safety of electrical appliances; general requirements

In addition, ÖVE regulations and the local building code apply to Austria.

The following standards and regulations apply to installation and operation:

- DIN EN 50106 (VDE 0700-500) Safety of electrical appliances; tests
- DIN VDE 0100 Regulations regarding the installation of high voltage systems up to 1000 V
- DIN EN 50110-1 (VDE 0105-1) Operation of electrical systems
- DIN VDE 0105-100 Operation of electrical systems; general stipulations
- DIN VDE 0701-0702 Testing following repair and modification of electrical appliances; repeat testing of electrical appliances
- VDI 2050 Requirements for technical equipment rooms; planning and execution

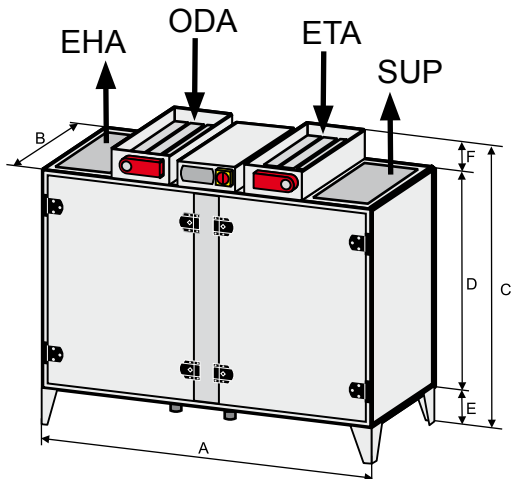
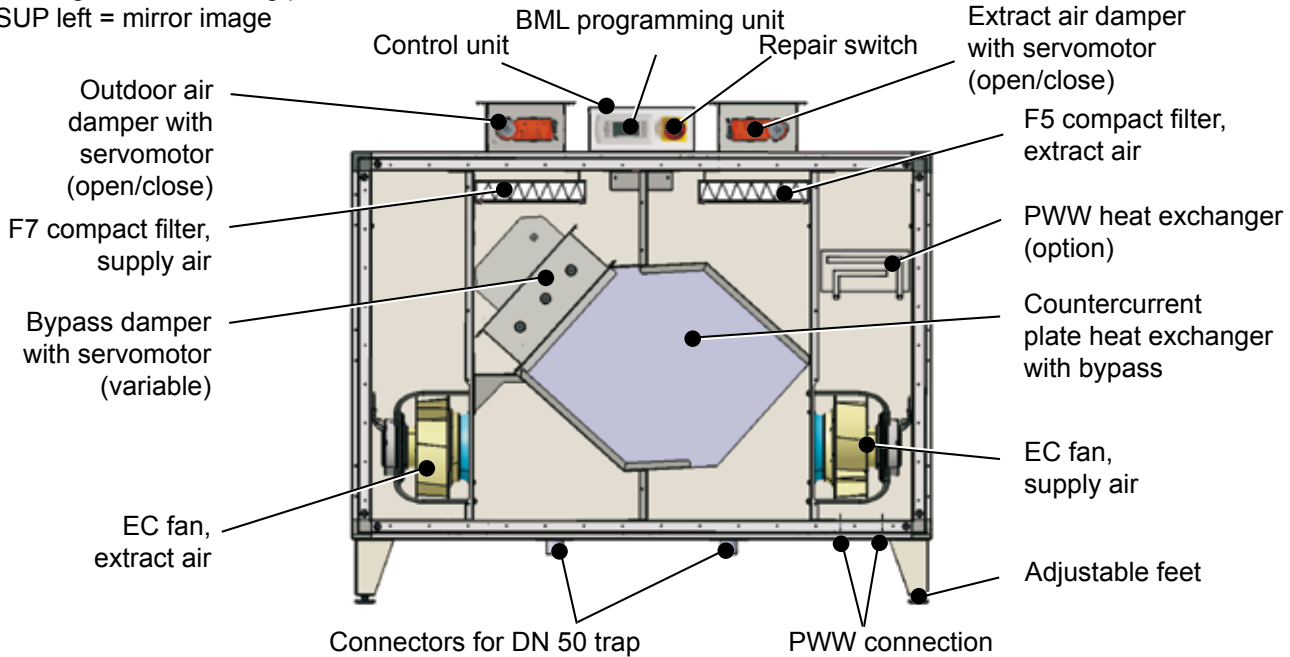
Disposal and recycling

When the unit reaches the end of its service life, it must only be dismantled by qualified personnel. Before starting to dismantle the unit, disconnect the power supply. Power cables must be removed by qualified electricians. Sort and dispose of metal and plastic parts according to material types and in compliance with local regulations. Dispose of electrical and electronic components as electrical waste.

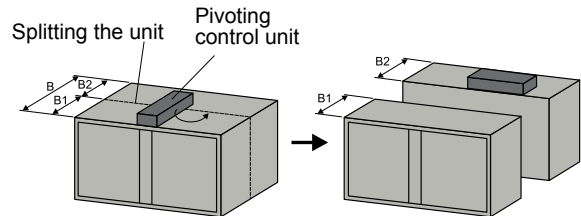
3. Unit layout

CKL-iV Comfort compact ventilation unit for indoor installation, vertical duct connection

SUP right with mounting parts
 SUP left = mirror image



CKL-iV-4400 / CKL-iV-5800 split



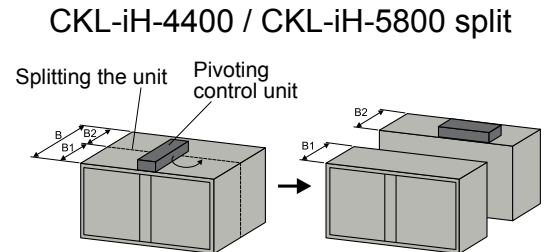
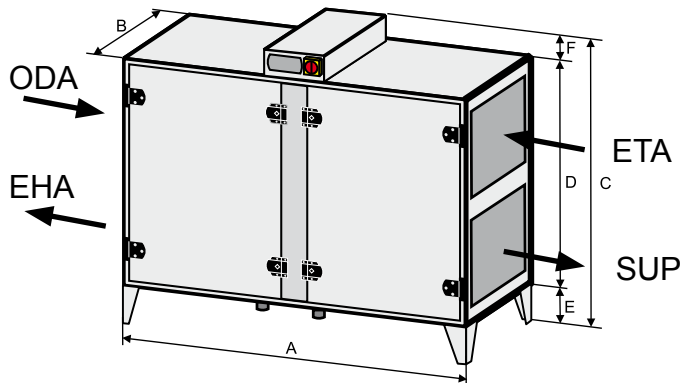
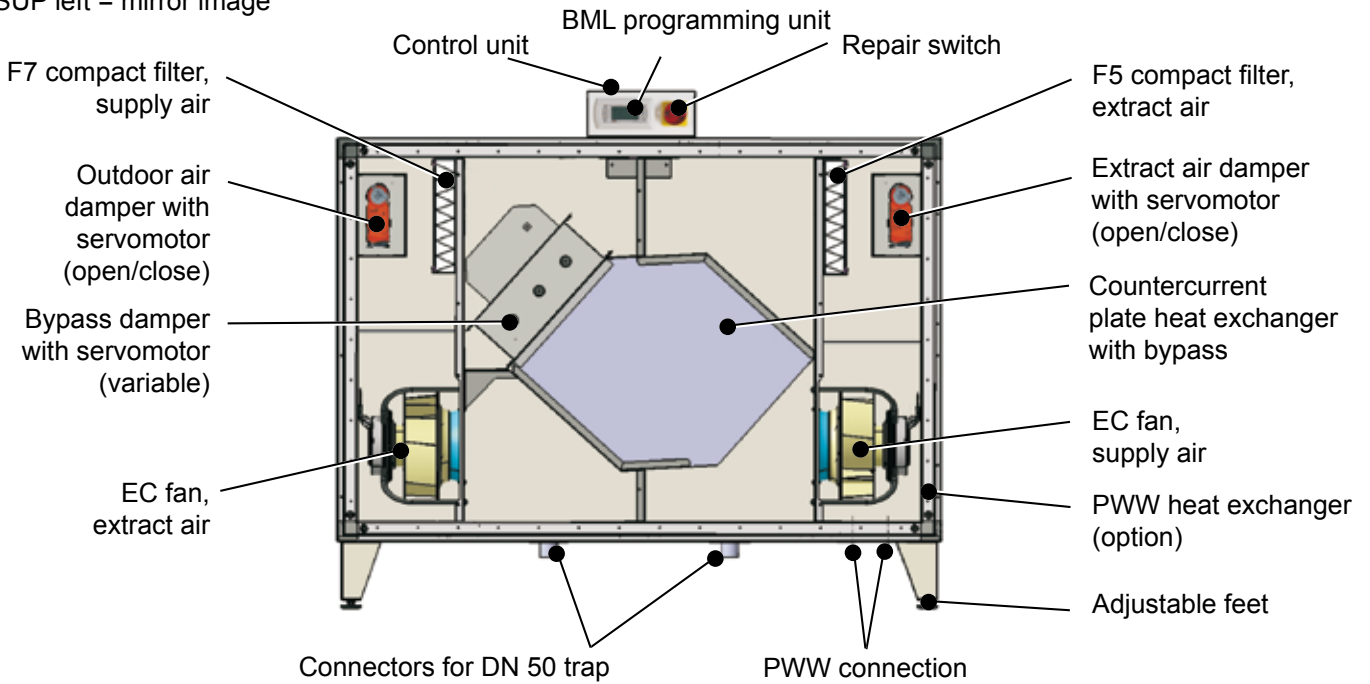
Type		CKL-iV-1300	CKL-iV-2200	CKL-iV-3000	CKL-iV-4400	CKL-iV-5800
Length A	mm	1525	2033	2033	2237	2237
Depth B (incl. locks)	mm	750	750	950	1360	1665
		-	-	-	B1=645 B2=715	B1=950 B2=715
Overall height C	mm	1315	1720	1720	1745	1745
Height D	mm	1017	1425	1425	1425	1425
Foot height E	mm	170	170	170	170	170
Damper height F	mm	128	128	128	150	150
Exhaust air EHA	mm	Li 596x206*	Li 596x307*	Li 799x307*	Li 1222x358*	Li 1527x358*
Outdoor air ODA	mm	Li 596x206*	Li 596x307*	Li 799x307*	Li 1222x358*	Li 1527x358*
Extract air ETA	mm	Li 596x206*	Li 596x307*	Li 799x307*	Li 1222x358*	Li 1527x358*
Supply air SUP	mm	Li 596x206*	Li 596x307*	Li 799x307*	Li 1222x358*	Li 1527x358*
Condensate connector		1½"	1½"	1½"	1½"	1½"
Weight	kg	250	360	450	645	725
Max. flow rate	m³/h	1300	2200	3000	4400	5800

* Duct connection dimensions

3. Unit layout

CKL-iH comfort compact ventilation unit for internal installation, horizontal duct connection

SUP right with mounting parts
 SUP left = mirror image

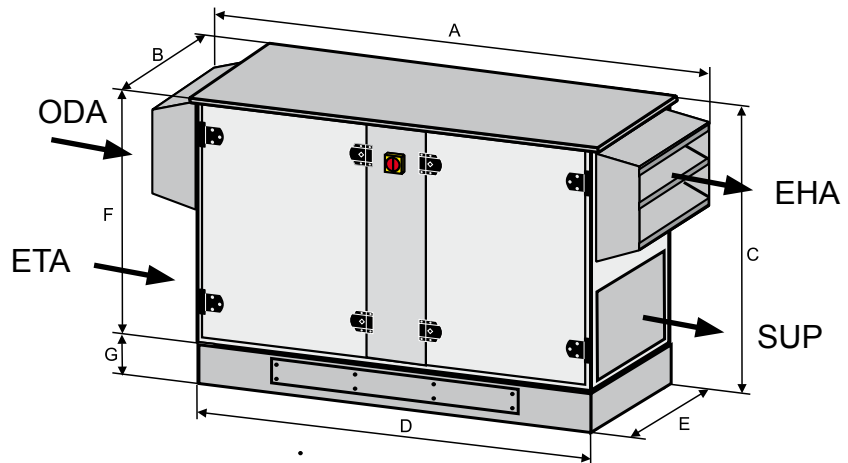
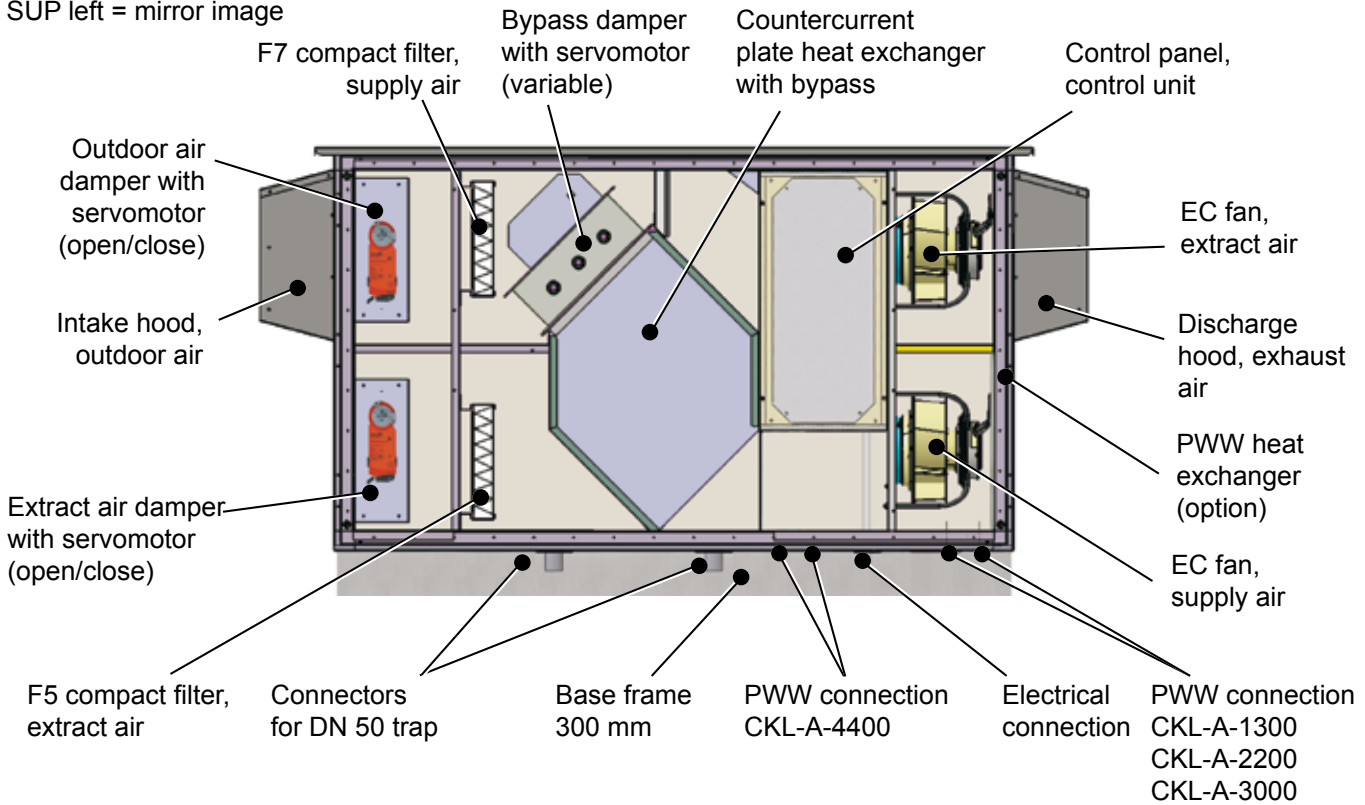


Type		CKL-iH-1300	CKL-iH-2200	CKL-iH-3000	CKL-iH-4400	CKL-iH-5800
Length A	mm	1525	2033	2033	2237	2237
Depth B (incl. locks)	mm	750	750	950	1360	1665
		-	-	-	B1=645 B2=715	B1=950 B2=715
Overall height C	mm	1305	1711	1711	1711	1711
Height D	mm	1017	1425	1425	1425	1425
Foot height E	mm	170	170	170	170	170
Control unit height F	mm	122	122	122	122	122
Exhaust air EHA	mm	Li 612x409*	Li 612x612*	Li 815x612*	Li 1222x612*	Li 1527x612*
Outdoor air ODA	mm	Li 612x409*	Li 612x612*	Li 815x612*	Li 1222x612*	Li 1527x612*
Extract air ETA	mm	Li 612x409*	Li 612x612*	Li 815x612*	Li 1222x612*	Li 1527x612*
Supply air SUP	mm	Li 612x409*	Li 612x612*	Li 815x612*	Li 1222x612*	Li 1527x612*
Condensate connector		1½"	1½"	1½"	1½"	1½"
Weight	kg	250	360	450	630	725
Max. flow rate	m³/h	1300	2200	3000	4400	5800

* Duct connection dimensions

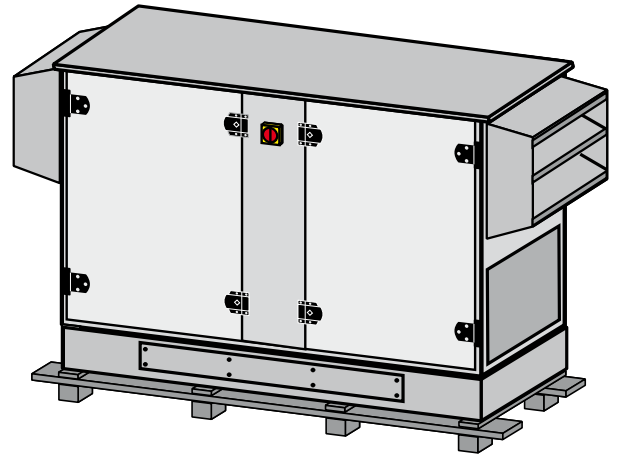
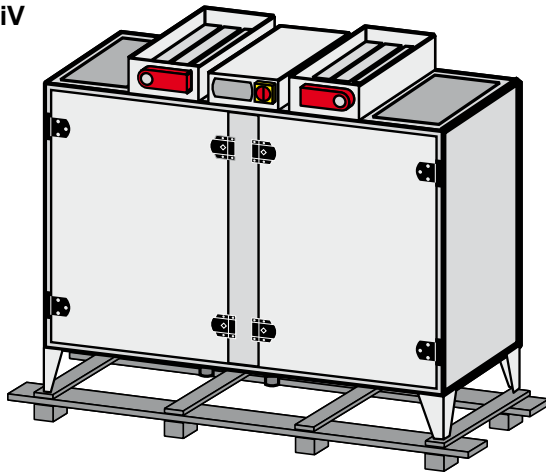
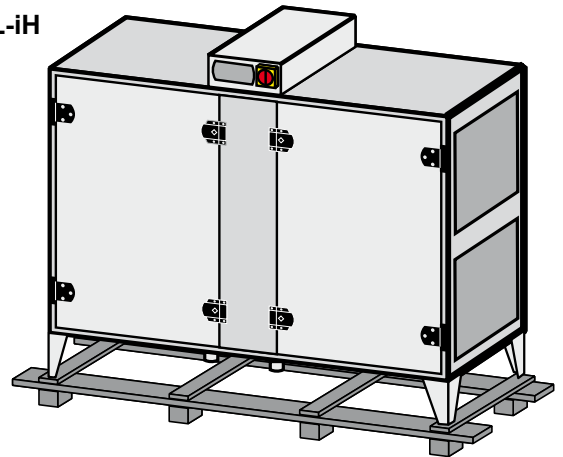
CKL-A Comfort compact ventilation unit for outdoor installation (weatherproof)

External unit (weatherproof)
 SUP right with mounting parts
 SUP left = mirror image



Type		CKL-A-1300	CKL-A-2200	CKL-A-3000	CKL-A-4400	CKL-A-5800
Overall length A	mm	2111	2780	2780	2780	2780
Overall depth B (incl. roof)	mm	812	812	1015	1422	1725
Overall height C	mm	1350	1750	1750	1750	1750
Length D	mm	1729	2236	2236	2236	2236
Depth E	mm	712	712	915	1322	1625
Height F	mm	1050	1450	1450	1450	1450
Base frame G	mm	300	300	300	300	300
Extract air ETA	mm	Li 612x409*	Li 612x612*	Li 815x612*	Li 1222x612*	Li 1525x612*
Supply air SUP	mm	Li 612x409*	Li 612x612*	Li 815x612*	Li 1222x612*	Li 1525x612*
Condensate connector		1½"	1½"	1½"	1½"	1½"
Weight	kg	315	460	555	715	800
Max. flow rate	m³/h	1300	2200	3000	4400	5800

* Duct connection dimensions

Delivered condition**CKL-A****CKL-IV****CKL-iH****Delivery**

CKL ventilation units are supplied in packaging that protects them from dirt and damage. Upon receipt of the goods, check the unit for possible transport damage. If there is any damage or even a suspicion of damage, the recipient must indicate this on the consignment note and have it countersigned by the haulier. The recipient of the goods must notify Wolf of the relevant facts without delay. Dispose of the transport packaging in accordance with local regulations.

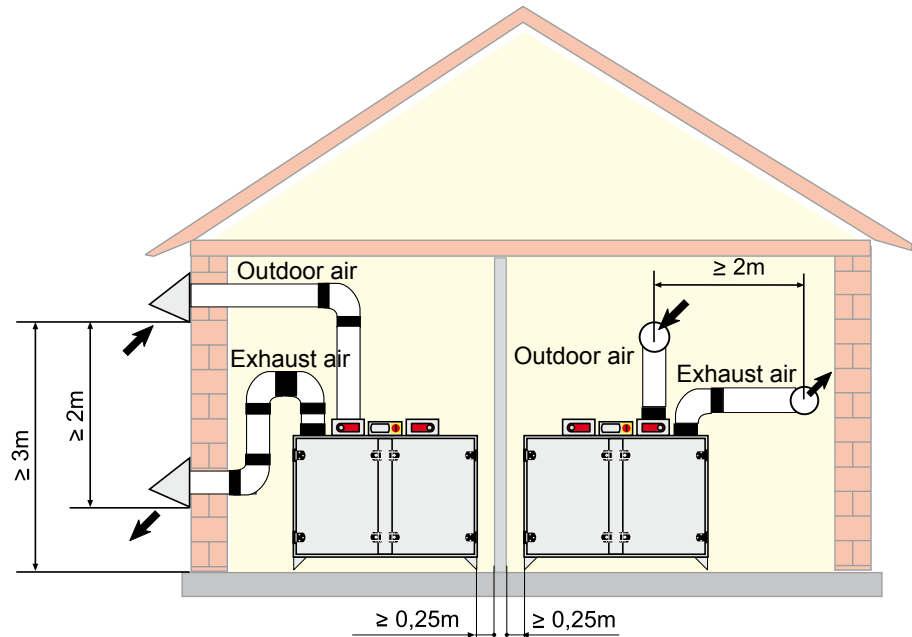
Storage

Only store the ventilation unit in dry rooms at an ambient temperature between $-25\text{ }^{\circ}\text{C}$ and $+55\text{ }^{\circ}\text{C}$. If it is stored for a long time, ensure that all apertures are sealed against air and water ingress.

Handling

Never tilt the unit when transporting it through doorways or in narrow stairwells (lift). Failure to observe these instructions can destroy internal components (plate heat exchanger).

Minimum clearance between outdoor air intake and exhaust air discharge to prevent an "air short circuit" (DIN 13779)



Siting the CKL internal unit

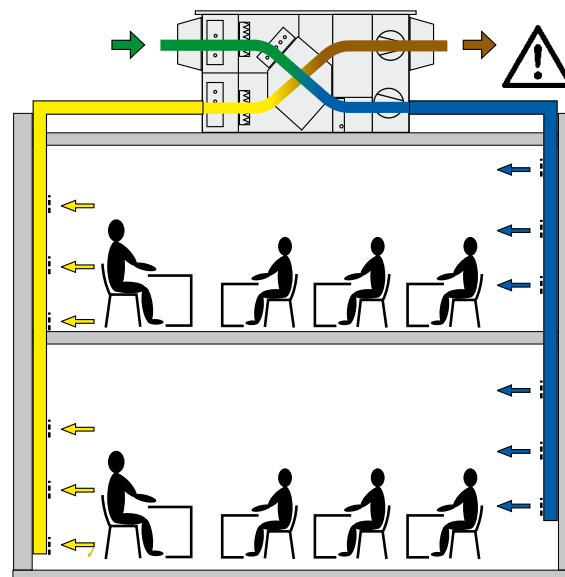
The installation site must be level and sufficiently load bearing (at least 450 kg). Level the unit horizontally (align using the adjustable feet). The installation site must be able to bear the load of the ventilation unit without vibrations on a long term basis. Provide sufficient space at the front of the unit for service work.

Site the unit in a room that is free from the risk of frost.

There must be a drain connection for any condensate that is generated.

A clearance of at least 700 mm for the CKL-1300 and CKL-iV-4400 / 5800, and 900 mm for the CKL-2200 / 3000 / 4400 and CKL-5800 is required in front of the unit to be able to open the inspection doors. Approx. 700 mm clearance is necessary above the unit for air duct connections.

Siting the external unit (weatherproof)

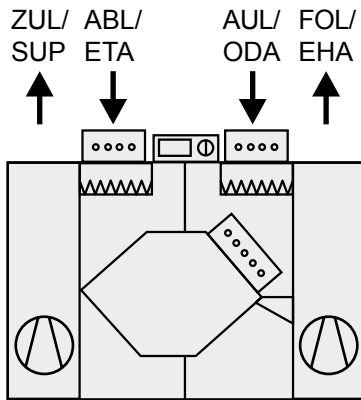


Weatherproof units must not be used for any load-bearing building functions or as a replacement for any part of the roof (VDI 3803 5.1 / DIN EN 13053 6.2).

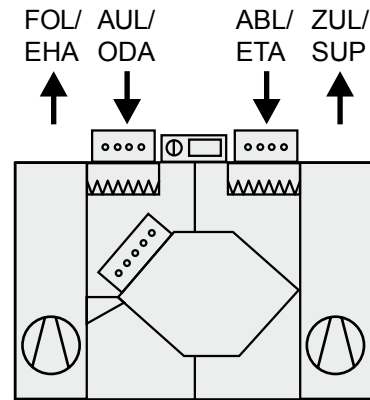
Connecting the condensate drain pipe and PWW heat exchanger

With weatherproof units sited outdoors, keep the condensate drain and PWW heating coil connection free of frost; provide suitable protection if required.

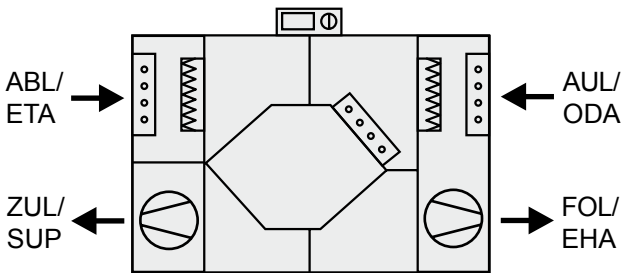
CKL-iV Operating side, supply air, left



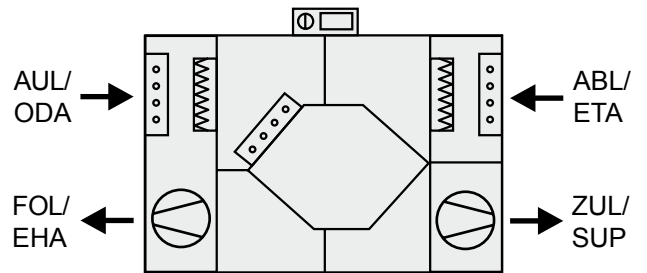
Operating side, supply air, right



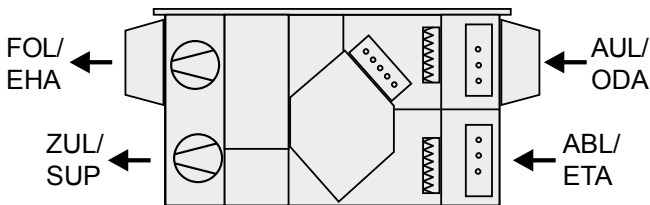
CKL-iH Operating side, supply air, left



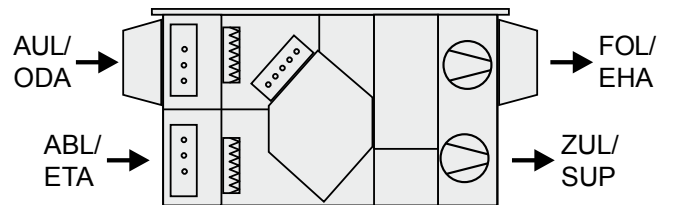
Operating side, supply air, right



CKL-A Operating side, supply air, left

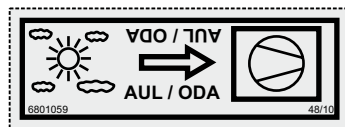


Operating side, supply air, right

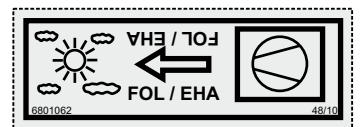


Air duct connections are identified with the following labels:

Outdoor air:



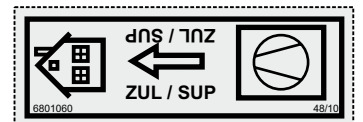
Exhaust air:



Extract air:



Supply air:



5. Installation / siting

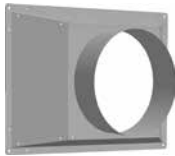
Duct connections (on site)

The unit connectors are rectangular.

Round ducts can be connected directly to the connectors using an adaptor box or connecting plate (from square to round). Insulate the ducts in accordance with applicable regulations and industry standards.



Adaptor box for round duct connection for internal unit; air direction vertical.



Adaptor insulating collar for round, horizontal duct connection for internal unit with weatherproof unit.

Trap



The effective trap head h (mm) must be greater than the maximum under- or overpressure at the condensate connector (1 mmWC = 10 Pa).

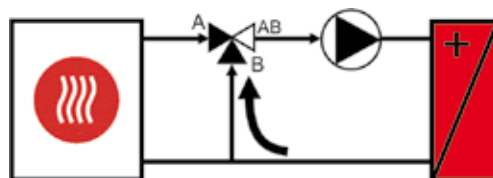
$$h = 1.5 \times p \text{ (mmWC)} + 50 \text{ mm (min.)}$$

p	=	Under- or overpressure in mmWC acc. to appliance design
50 mm (WC)	=	Reserve (inaccurate sizing, evaporation)
1.5	=	Additional safety factor

The trap drain line must not be connected directly to the public sewage system, but rather must be able to run out freely. Vent longer drain lines to prevent condensate backing up in the line (provide additional vent in trap drain line).

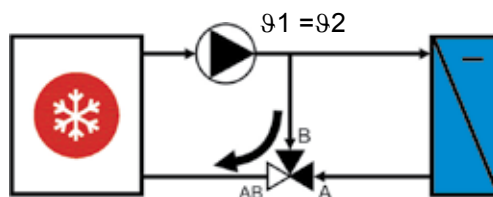
Hydraulic connection

Heating coil: Hydraulic connection example



Admixing circuit
Benefits: good control characteristics, low risk of freezing

Cooling coil: Hydraulic connection example



Diverting circuit
Benefits: constant flow temperature in cooling coil, good dehumidification even at partial load

Note: Positioning valves close to the heat exchanger improves the control characteristics

Electrical connection

Cable entry for on-site cables



Make the electrical connection in accordance with local regulations. When connecting the control unit and control accessories, observe the instructions and wiring diagrams provided.

Once the electrical connection work is complete, the installation must undergo a safety test in accordance with VDE 0701-0702 and VDE 0700 part 500, as otherwise there may be a risk of electrical shock that could result in injury or death.



Before working on the unit, shut it down via the repair switch.

The control panel on/in the unit has a cable entry for the on-site cable.

CKL-1300 power cable: 3 x 1.5 mm²; on-site fuse/MCB protection 16 A
 CKL-2200 / CKL-3000 power cable: 5 x 1.5 mm²; on-site fuse/MCB protection 10 A
 CKL-4400 / CKL-5800 power cable: 5 x 2.5 mm²; on-site fuse/MCB protection 20 A



Even when the unit has been shut down, voltage will still be present at the terminal and connections of the EC fans. This means there is a risk of electric shock that could result in injury or death.

Do not touch the EC fans for five minutes after disconnecting the power across all poles.

Use a rubber mat if working on the unit when it is electrically charged.



Only use cables that meet local wiring regulations with regard to voltage, current, insulation material, load etc. Always fit an earth conductor.

RCD

Only AC/DC-sensitive RCDs of type B with 300 mA rating are permissible. There is no personnel protection if the appliance is operated with RCDs.

Regularly check the perfect function of all electrical equipment.

Observe the specified electrical fuse/MCB protection ratings.

We accept no liability for any damage or loss resulting from technical modifications to Wolf control units.

Motor data	CKL-1300	CKL-2200	CKL-3000	CKL-4400	CKL-5800
Rated voltage	1x230 V (50/60 Hz)	3x400 V (50/60 Hz)	3x400 V (50/60 Hz)	3x400 V (50/60 Hz)	3x400 V (50/60 Hz)
Max. power consumption / Max. current draw of both fans	0.96 kW / 4.2 A	2.0 kW / 3.2 A	2.0 kW / 3.3 A	6.0 kW / 9.2A	6.0 kW / 9.2A
Fan speed	2970 rpm	3100 rpm	2580 rpm	2550 rpm	2550 rpm
IP rating / safety category	IP54 / Iso B	IP54 / Iso B	IP54 / Iso B	IP 54 / Iso F	IP 54 / Iso F

Commissioning regulations

Commissioning and maintenance work must only be carried out by trained personnel.

Only work on the unit with it being at zero volt.



According to DIN EN 50110-1 (VDE 0105-1), only qualified electricians may carry out the installation and commissioning of the ventilation control unit and connected accessories.

Observe all regulations stipulated by your local power supply utility and all VDE or local regulations.



DIN VDE 0100 regulations regarding the installation of high voltage systems up to 1000 V

DIN VDE 0105-100 operation of electrical systems

Only original Wolf accessories may be used (electric heating coils, servomotors etc.), otherwise Wolf cannot accept any liability.

For Austria, the ÖVE regulations and local building regulations apply.

Before commissioning, check whether the operating data on the type plate is adhered to.

The unit must not be operated before all necessary safety equipment has been fitted and connected. Intake and discharge apertures must be connected to ensure contact protection. The CKL unit must be level and safely secured.

Commissioning must be carried out by authorised personnel (Wolf service).

Record the date of commissioning, e.g. in a log book.



According to DIN 1886, tools must be used to open the unit. Wait for the fans to come to a complete standstill before opening the inspection doors. When opening the doors, negative pressure may draw in loose objects, which could damage the fan irreparably or even cause a risk to life if items of clothing are drawn in. Use tools to tightly seal the doors before commissioning (unit tightness).

Commissioning procedure

Connect the power cable and accessories in accordance with the wiring diagram provided.



A high leakage current can be expected due to the EC motors. Ensure that a secure earth connection is in place before connecting the power supply and commencing commissioning.



If control voltage is present or a set speed is saved, the EC fans will restart automatically following a power failure.

- Switch ON the unit repair switch.
- Wait until the BMK programming module initialises and changes to the display mode.
- Select the required operating mode at the BMK; the system will start with the preset parameters.
- To modify functions and parameters, see the installation and operating instructions provided.

Where the system is not commissioned by Wolf, check all inputs and outputs for correct wiring and function:

- Frost protection function
- Fan rotational direction
- Outdoor air/extract air damper rotational direction
- Plausible sensor values (room sensor, supply air sensor, extract air sensor, outdoor air sensor, ice sensor)
- Checking motor currents
- Overload relay (thermal contacts / positor)
- Air flow monitor
- Filter monitor
- Bypass damper function (rotational direction)
- Actuator, heating / cooling
- Heating circuit pump / cooling circuit pump
- As well as all other system-specific functions



The Wolf warranty will be void if the function test is not carried out correctly.

Fans



Use tools to tightly seal the doors before commissioning (unit tightness), otherwise there is a risk of motor overload.

(1 x 230 V / 50 Hz; 2.7 A for CKL-1300)

(3 x 400 V / 50 Hz; 1.7 A for CKL-2200 / CKL-3000 / CKL-4400)

Please note

Carry out air flow rate tests with the doors closed.

Route test hose connections out of the unit (see flow rate calculation).

Changes are made via the BMK programming module (see relevant operating instructions).

Electric preheater coil (accessory)



To prevent the electric reheater shutting down, never operate the CKL below its minimum air flow rate.

Follow the relevant safety regulations for electric heaters.

The electric heating coil must be protected from moisture and water.

The electric preheater coil (filter pre-dryer) starts automatically at outside temperatures below 0 °C.

The electric reheater is switched by the temperature controller.

Electric reheater coil (accessory)



Recomm. min. air flow rate CKL-1300 = 600 m³/h

CKL-2200 = 1100 m³/h

CKL-3000 = 1500 m³/h

CKL-4400 = 2200 m³/h

CKL-5800 = 2900 m³/h

Countercurrent plate heat exchanger



The countercurrent plate heat exchanger is generally maintenance-free.

During commissioning, check whether the servomotor for the bypass damper is rotating in the correct direction (bypass/HR mode).

Condensate pans



Provide a trap for each of the two condensate drains and route the condensate into the public sewer system.

Protect the condensate drains against frost.

Fill the traps with water.

7. Commissioning

Flow rate calculation

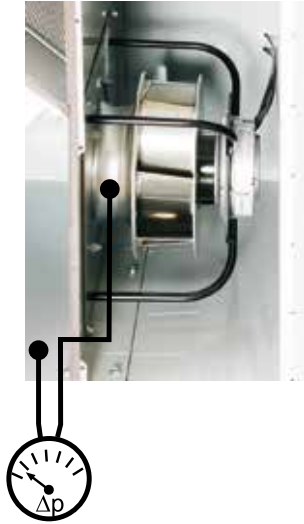
$$\dot{V} = k \cdot \sqrt{\Delta p_w}$$

\dot{V} in [m³/h] und Δp_w in [Pa]

The flow rate is calculated using the effective pressure method. This involves comparing the static pressure upstream of the intake nozzle with the static pressure in the intake nozzle.

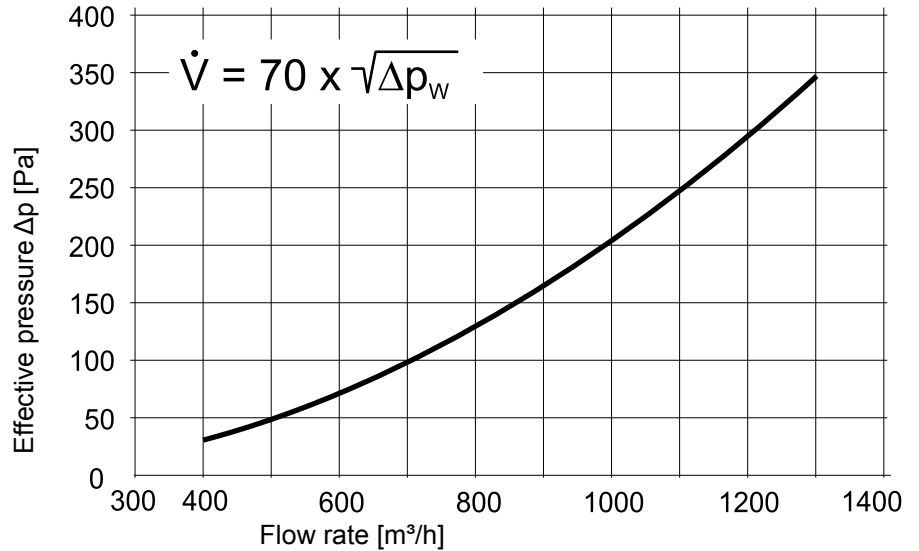
The flow rate can be calculated from the effective pressure Δp_w (differential pressure of the two static pressures) using the following equation. The doors must be closed to determine the correct flow rate. Route the test hoses to the outside when conducting the test. (For example, route CKL-A through the exhaust air aperture, and CKL-iH and CKL-iV through the base of the unit.)

CKL-1300 effective pressure



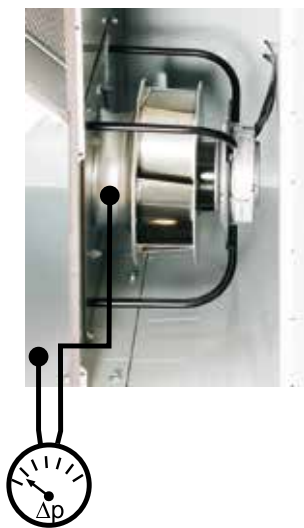
Δp = effective pressure
(symbolic representation)

The fans used for the CKL-1300 have a k value of 70.



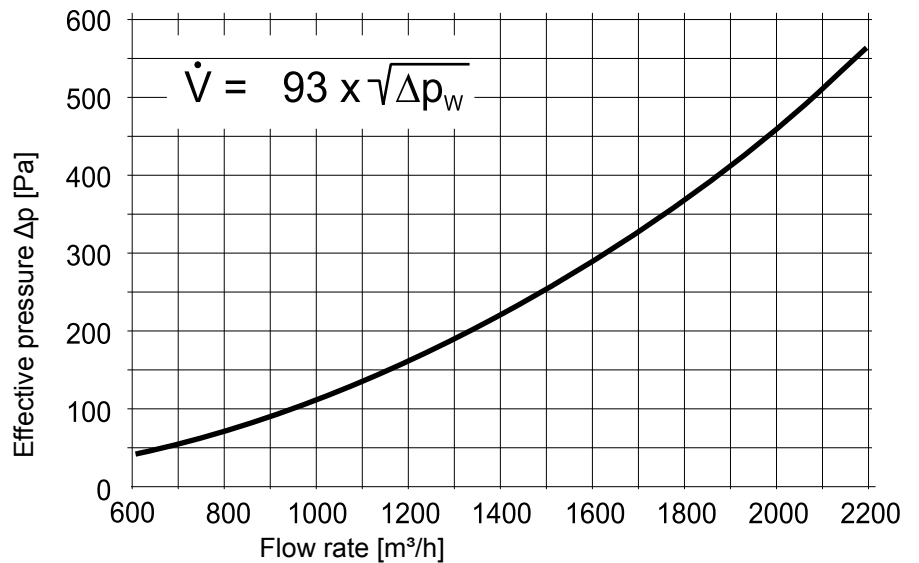
Δp [Pa]	33	51	73	100	130	165	200	250	300	350
\dot{V} [m³/h]	400	500	600	700	800	900	1000	1100	1200	1300

CKL-2200 effective pressure



Δp = effective pressure
(symbolic representation)

The fans used for the CKL-2200 have a k value of 93.



Δp [Pa]	42	74	115	166	226	295	375	463	560
\dot{V} [m³/h]	600	800	1000	1200	1400	1600	1800	2000	2200

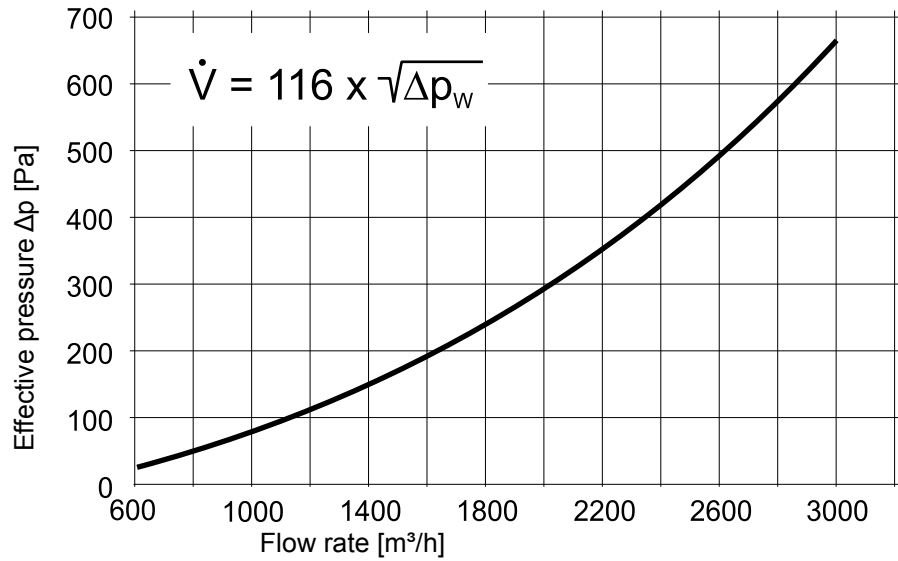
7. Commissioning

CKL-3000 effective pressure



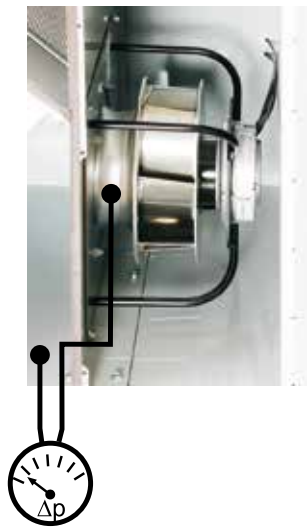
Δp = effective pressure
(symbolic representation)

The fans used for the CKL-3000 have a k value of 116.



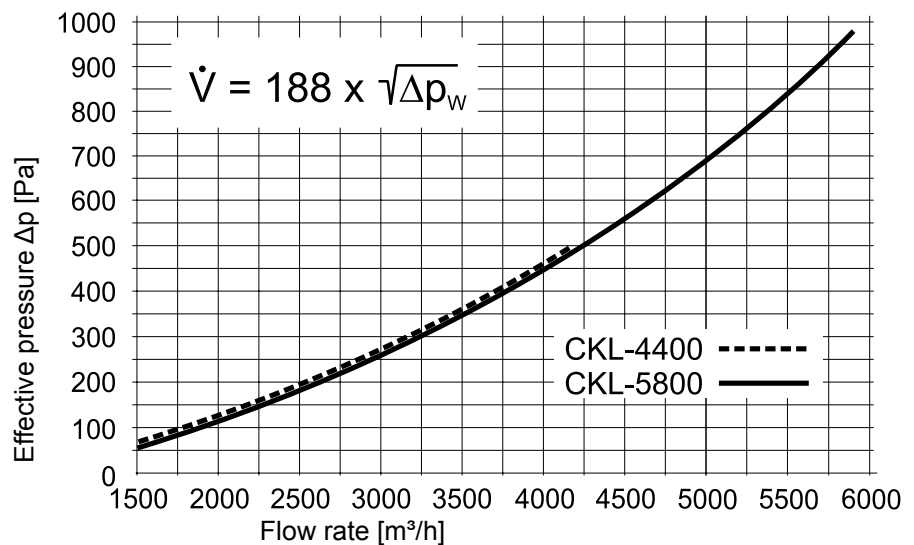
Δp	[Pa]	27	74	145	240	360	500	670
\dot{V}	[m³/h]	600	1000	1400	1800	2200	2600	3000

CKL-4400 effective pressure



Δp = effective pressure
(symbolic representation)

The fans used for the CKL-4400 have a k value of 188.



Δp	[Pa]	70	115	160	220	290	365	450	545	700	900	1000
\dot{V}	[m³/h]	1600	2000	2400	2800	3200	3600	4000	4400	5000	5600	5950

Further settings for the BMK and accessories

Further settings for the BMK programming module can be found in the operating instructions for the WRS-K control unit.

Accessories are installed in accordance with separate instruction manuals which are provided with the relevant accessories.

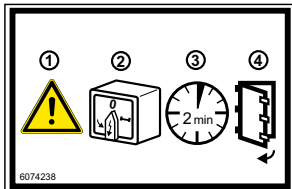
Before starting any maintenance work, switch OFF the mains isolator and safeguard against unauthorised reconnection. If the mains isolator is switched back on unintentionally, maintenance staff or others in the vicinity could be at risk from rotating parts.

Wait for the fans to come to a complete standstill before opening the doors (approx. 2 minutes). When the doors are opened, negative pressure may draw in loose objects, which could destroy the fan or even cause a risk to life.



Even when the unit has been shut down, voltage will still be present at the terminal and connections of the EC fans. This means there is a risk of electric shock that could result in injury or death.

- Do not touch the EC fans for five minutes after disconnecting the power across all poles.
- Use a rubber mat if working on the unit when it is electrically charged.



CKL-iV

Open inspection doors using a quadrant key

Mains isolator



CKL-iH

Open inspection doors using a quadrant key

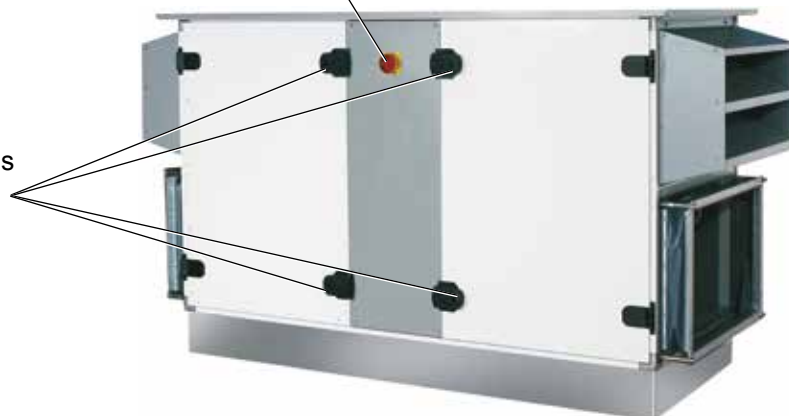
Mains isolator



CKL-A

Open inspection doors using a quadrant key

Mains isolator



9. Hygiene checklist

Service

Regularly check that the ventilation unit is functioning correctly.
Replace the air filters in the unit at least once a year.
 Wear a suitable dust mask when handling the air filters.
 Dispose of the air filters in accordance with local regulations.

Hygiene checklist (extract from VDI 6022, sheet 1)

System commissioning: Date _____

Activity	Action if required	1 month	3 months	6 months	12 months	24 months
Hygiene inspection						X
Outdoor air intakes						
Check for contamination, damage and corrosion	Clean and repair				X	
Structural units / appliance casing						
Check for contamination, damage and corrosion on the air side	Clean and repair				X	
Check for condensation	Clean			X		
Check casing for contamination, damage and corrosion	Clean and repair				X	
Air vents						
Check air vents, integral perforated plates, wire mesh or sieves for contamination, damage and corrosion (spot check)	Clean or replace				X	
Spot check filter fleece	Replace				X	
Spot check air vents with indoor air induction and extract air intakes for deposits	Clean				X	
Air filters						
Check for impermissible contamination, damage (leaks) and odours	Replace affected air filters (never operate the system without filters)		X			
Longest filter replacement interval					X	
Air ducts						
Check accessible air duct sections for damage	Repair				X	
Check inner air duct surface for contamination, corrosion and condensation at two or three representative points	Inspect the duct network at further points and decide whether cleaning is necessary (not only the visible areas)				X	
Silencers						
Check silencers for contamination, damage and corrosion	Repair or replace; contact spotting if required				X	
Fans						
Check for contamination, damage and corrosion	Clean and repair			X		
Heat exchanger (including HR)						
Visual inspection of air/air plate heat exchanger for contamination, damage and corrosion	Visual inspection			X		
	Clean, remove if necessary (undo spacer and clean out countercurrent heat exchanger)				X	
Heater: Check for contamination, damage, corrosion and tightness	Clean and repair			X		
Check condensate pan for contamination, corrosion, damage and tightness	Clean and repair		X			
Check the function of the drain and trap	Clean and repair		X			

Repairs

Only qualified personnel may remove faults or repair damage. Only replace faulty components with original Wolf spare parts.

Fan motor unit



Please note

Motor and bearings are maintenance-free.
If necessary, clean the impeller with a soapy solution.

Check that the test lead is seated firmly at the test connector on the intake nozzle.
Loose seating can result in faulty measurements.

Electrical equipment



- Regularly check the electrical equipment of the unit
- Replace loose connections and faulty cables immediately
- Regularly check the earth conductor

Countercurrent plate heat exchanger (PHE)



Please note

Check and clean at regular intervals.
Cleaning the heat exchanger (possible without replacing the PHE):

- Vacuum, taking care not to bend the fins
- Clean with water (unpressurised) or a soapy solution

Cleaning methods that use high pressure (e.g. steam jet / high pressure washer) carry a risk of mechanically destroying the plate heat exchanger

Electric preheater coil (accessory)



Please note

Check and clean at regular intervals.
Cleaning the electric heating coils:

- Vacuum, taking care not to bend the heating coils
- Blast with compressed air, max. 1 bar

If the pressure used when cleaning is too high, there is a risk of mechanically destroying the electric heating coils.

The electric heating coils must be protected from moisture and water.

Electric reheater coil (accessory)



Bypass damper / extract air damper / outdoor air damper



Check the dampers for ease of movement. Never lubricate the dampers. This could destroy the plastic used and compromise the damper function. To clean, wipe down with a soapy solution; otherwise maintenance-free.

Compact filters



The compact filters are not renewable. They must be replaced when they are dirty, or no later than after 12 months. The compact filters can be removed from the unit casing once the r.h. inspection door has been opened (see spare parts).

Never operate the CKL ventilation unit without filters.

Servomotors on the dampers



Servomotor
OPEN / CLOSE



Servomotor
variable

The motors are maintenance-free. At regular intervals, check that the connection from the servomotor to the damper drive is firmly seated.

Condensate pans



Regularly check the condensate pans for contamination and clean if required (see checklist).

Trap



Regularly check the DN 50 traps (accessories) for possible soiling and clean if required (see checklist).
Refill the traps with water before returning them to use.

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