



Smart ideas – more efficiency.

Innovations and product highlights 2015



Designed to make you feel good

A passion for greater efficiency, ideas for a bigger advantage

All Wolf employees contribute to the continuous improvement of Wolf products and services with their ideas. For the idea of improving efficiency, Wolf employees are working with all the passion and enthusiasm they command. Efficiency in terms of conserving resources is essential for our future. The realisation of this idea increases the market relevance of Wolf products, secures jobs at Wolf and provides our partners with a significant advantage. For us, efficiency is synonymous with improving effectiveness in the rational handling of limited energy resources. **Efficiency is an important prerequisite for sustainability.**

This is why 2015 is such a special year, as the efficiency rating of a technical heating system will be comparable objectively for the first time for all European end users on the basis of a product label. The **ErP energy efficiency label** for space heaters, DHW cylinders and water heaters is due for implementation on 26 September 2015. "ErP" stands here for Energy related Products.

All heating systems up to 70 kW and water heaters and cylinders up to 500 l must bear the energy efficiency label by this date. Design engineers, traders and installers will be obliged to provide energy efficiency figures in their quotations to customers, in the form of datasheets and energy efficiency labels.

Wolf wants to help prepare its partners as much as possible for the transition to the new ErP Directive by providing both advice and support.



WOLF



Contents

Summary of new developments in efficiency 2015

HEATING EQUIPMENT

- 08 The new gas condensing generation
- 10 CGB-2 – wall mounted gas condensing boiler
- 12 CGS-2L/2R – floorstanding gas condensing centre with stratification cylinder or cylinder with internal indirect coil
- 14 CGW-2L – wall mounted gas condensing centre with stratification cylinder
- 16 CSZ-2R – gas condensing solar centre
- 18 TOB and TOB-TS – oil condensing boiler with and without stratification cylinder
- 20 MGK-2 – gas condensing industrial/commercial boiler
- 22 CGU-2K – conventional gas boiler with high efficiency heating circuit pump
- 24 BWL-1S(B) – split air source heat pump
- 26 Hybrid system: Split air source heat pump combined with gas condensing technology
- 28 The perfect building services centre: CWL-T-300 Excellent mechanical ventilation unit
- 30 SWP-260 DHW heat pump
- 32 FWS-2 freshwater module and LS-2 cylinder loading system
- 34 FWS-2-60/60L freshwater modules for BSP stratification cylinders
- 36 TopSon F3-1Q solar collector in a transverse design
- 38 GTK-4 gas micro CHP module
- 40 BM-2 programming unit
- 42 ISM7i and ISM7e LAN/WLAN interface modules
- 44 The new KNX interface and the ISM8 control board
- 46 Wolf Smartset operating app
- 48 The Wolf ErP portal for composite systems

AIR HANDLING AND VENTILATION EQUIPMENT

- 52 KG Top air handling unit
- 54 BMK-T10 air handling control unit with touch panel
- 56 High performance run-around-coil system
- 58 The new, high performance, thermal wheel heat exchanger
- 60 CRL Comfort thermal wheel heat exchanger ventilation unit for indoor installation
- 62 CRL Comfort thermal wheel heat exchanger ventilation unit for outdoor installation
- 64 CFL-32 – the new model size with power reserves
- 66 LH-EC air heaters with EC fans
- 68 CWL-T-300 Excellent mechanical ventilation unit

RESIDENTIAL HEATING AND VENTILATION EQUIPMENT

Wolf supplies a comprehensive range of products for increasing the efficiency of new and existing buildings of all types. This means perfect system compatibility with no restrictions in the selection and combination of potential units. Whether it be heat generators, solar thermal cylinders and modules, ventilation or heat recovery – at Wolf everything matches and can be controlled centrally or remotely.



*Die BlueStream® condensing boilers for gas or oil –
discover many interesting new developments*



Split air source heat pumps – now in new output classes

CWL-T Comfort mechanical ventilation combined with a heat generator – the perfect building services centre

The new GTK-4 gas micro CHP module – lower electricity prices all round



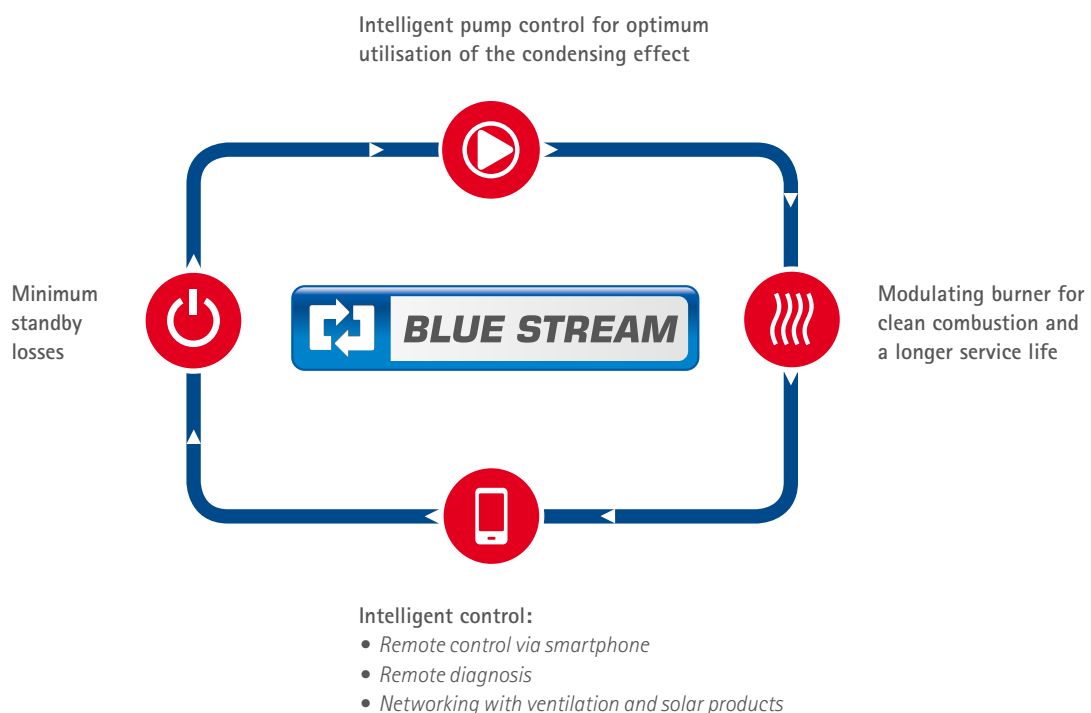
The beauty of progress

The new gas condensing generation

You will quickly be won over by the inner values of the new CGB-2 series of gas condensing boilers from Wolf. The efficiency concept has moved on from the previous series, and now offers four notable benefits:

1. The **self-calibrating combustion control that adapts to the prevailing gas quality** means that the gas:air mixture needs never to be adjusted again. This also applies to changing gas qualities (also with biogas mixed in). Furthermore, the system can modulate down to a minimum output of 1.8 kW. This translates into fewer burner starts, extremely clean combustion and the highest level of efficiency.
2. The low standby losses, for which Wolf appliances have a high reputation and receive praise **in many consumer tests, have been improved even further**. Not only are fossil fuels becoming ever more expensive – the price of electricity keeps rising too.
3. The **intelligent pump control** also ensures lower power consumption by further reducing the overall auxiliary power demand. No overflow valve and no return temperature raising facility are required – for the highest utilisation of the condensing effect.
4. This **intelligent control equipment**, which can be adjusted and optimised by smartphone or PC, lets consumers regulate the system precisely in accordance with their heat demand.

We thought these new inner technological achievements deserved an external design to match! So, the new CGB-2 series brings together our outstanding new technology in a highly contemporary and elegant design.





More versatile than ever – better than ever

CGB-2 series – gas condensing technology as efficient as never before

The new CGB-2 wall mounted gas condensing boilers are worthy successors to their consumer test winning predecessors. With output levels of 14, 20 or 24kW, they offer the best possible solution for a wide range of buildings.

What makes these appliances so special is the electronic, gas-adaptive combustion control that adjusts automatically to the prevailing gas quality. Users will also enjoy the low standby losses and high efficiency, while the environment will benefit from extremely clean combustion. Customers will find the highly compact design of these appliances make them the perfect choice when replacing older boilers in any situation. A pivoting combustion chamber and a clear and accessible layout make them as easy to service as their predecessors.

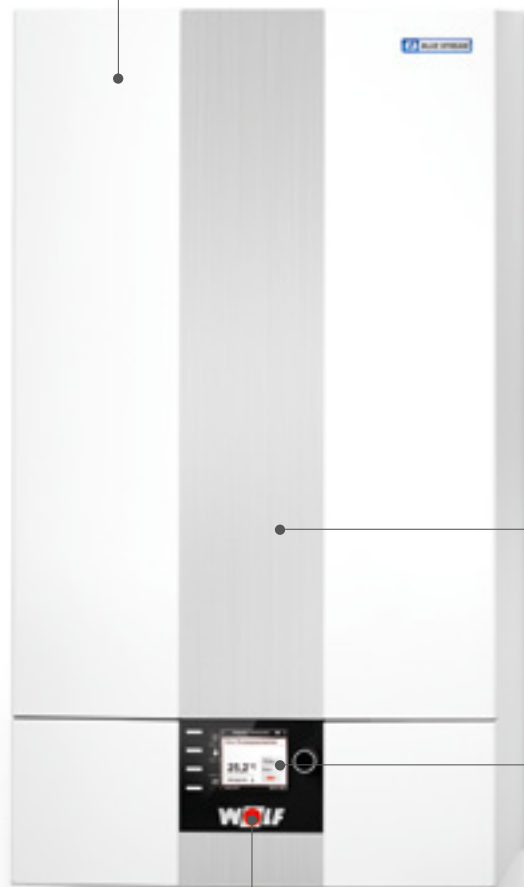
The CGB-2 at a glance:

- Variable modulating output from as low as 1.8 kW
- Gas-adaptive and self-calibrating combustion control for extremely clean combustion and adaptation to changing gas qualities (also with biogas mixed in)
- No need to adjust the gas:air mixture
- Convertible to LPG without CO₂ adjustment
- Long burner runtimes, fewer burner starts, improved efficiency
- ALUPro coated heating water heat exchanger
- Sustainable design that holds its value – components can be replaced individually
- Optimum utilisation of the condensing effect by controlling the spread (flow/return temperature)
- Connections compatible with previous models
- Casing insulated on the inside for quiet operation
- No overflow valve and no return temperature raising facility are required – for the highest utilisation of the condensing effect
- Integral high efficiency pump EEL < 0.23
- Electronic system pressure gauge
- Equipped with the new Wolf control system
- Common operation of central heating, DHW, mechanical ventilation and solar via a single programming unit or smartphone app

TYPE		CGB-2 14	CGB-2(K) 20	CGB-2(K) 24
Heating output min.–max.	kW	1.8-15.2	3.8-20.4	4.8-25.8
Output during cylinder charging	kW	1.8-13.5	3.8-22.2	4.8-27.1
Combined DHW output	kW	–	3.8-22.2	4.8-27.1



Compact dimensions, W x H x D:
44 cm x 35.5 cm x 79 cm



Contemporary design

New operating/display module
with large plain text and
graphic display in colour

Central ON/OFF switch in
the "o" of the Wolf logo



Optional control
via smartphone



High tech successor to the Wolf test winner

CGS-2L/2R – compact heating centres for detached houses and apartment blocks

The CGS-2L gas condensing centre is a larger version of the CGB-2 wall mounted gas condensing boiler, although the benefits are similar. As with its predecessor, the CGS-2L comprises a wall mounted gas condensing boiler with stainless steel DHW heat exchanger and a stratification cylinder. All these parts are assembled into a practical and compact module, which can be split into units of 35 kg and 49 kg.

The CGS-2L at a glance:

- Booster for DHW heating and "turbo stop system" for convenient DHW heating, which corresponds to a DHW cylinder (with indirect coil) of 120, 160 or 200l capacity
- In just a few minutes, 90l DHW at 60°C can be available
- High rated output factor up to 2.5
- Heating and cylinder modules can be quickly separated for easier handling
- Equipped with the new Wolf control system
- Electronic system pressure gauge

The Wolf CGS-2R gas condensing centre is ideal for use in regions with high water hardness. Also compact in size, the CGS-2R is not equipped with a stratification cylinder, but with a cylinder with internal indirect coil designed specifically for this purpose. Short heat-up times are assured thanks to the robust internal indirect coil's generously sized heat exchanger surface area. Highly efficient thermal insulation minimises cylinder cool-down losses. Incredibly quietly, the Wolf gas condensing centre provides cosy warmth and the central DHW supply in detached houses and two-family homes.

The new CGS-2R at a glance:

- Cylinder with internal indirect coil with a capacity of 145l for regions with high water hardness
- High rated output factor up to 2.2
- Heating and cylinder modules can be quickly separated for easier handling
- Electronic system pressure gauge
- Equipped with the new Wolf control system
- Common operation of central heating, DHW, mechanical ventilation and solar via a single programming unit or smartphone app



		NEW					
TYPE		CGS-2L 14	CGS-2L 20	CGS-2L 24	CGS-2R 14	CGS-2R 20	CGS-2R 24
Heating output min.-max.	kW	1.8-15.2	3.8-20.4	4.8-25.8	1.8-15.2	3.8-20.4	4.8-25.8
Output during cylinder charging	kW	1.8-13.5	3.8-22.2	4.8-27.1	1.8-13.5	3.8-22.2	4.8-25.8
Equivalent DHW cylinder capacity	l	120	160	200	145	145	145



Floorstanding stratification cylinder



Modular design: wall mounted boiler only 35 kg; cylinder 49 kg

CGS-2L with stratification cylinder

ISM7i LAN/WLAN interface module can be integrated



Optional control via smartphone



The perfect solution for direct replacement of wall mounted appliances

CGW-2L – there's no faster way to upgrade

The CGW-2L wall mounted gas condensing centre comprises a CGB-2 gas condensing boiler with stainless steel DHW heat exchanger and a stratification cylinder with special thermal insulation.

Just like the floorstanding solution, the CGW-2L offers high levels of DHW convenience in a small space – with the added benefit that it is mounted on the wall. It is designed modularly for separation into two transportable modules weighing 35kg and 19kg, making it easier to install. It is fully wired and ready to connect to the water system. This keeps assembly and installation costs to a minimum.

The CGW-2L at a glance:

- Integral and convenient DHW heating – better than a DHW cylinder (with indirect coil) with 100, 120 or 140l capacity
- "DHW turbo" with a new routing and distribution system for hot and cold water inside the stratification cylinder, ensures steady, radial water distribution for excellent DHW output
- High savings on operating costs through efficient DHW heating and innovative insulation technology
- Compact layout of the condensing boiler and stratification cylinder keeps assembly and installation costs to a minimum
- Gas condensing centre, fully wired and ready to connect to the water system
- Can be split quickly and easily into two transportable modules weighing 35 kg and 19 kg for straightforward installation
- Electronic system pressure gauge
- Equipped with the new Wolf control system
- Common operation of central heating, DHW, mechanical ventilation and solar via a single programming unit or smartphone app

TYPE		CGW-2L 14	CGW-2L 20	CGW-2L 24
Heating output min.–max.	kW	1.8-15.2	3.8-20.4	4.8-25.8
Output during cylinder charging	kW	1.8-13.5	3.8-22.2	4.8-27.1
Equivalent DHW cylinder capacity	kW	100	120	140



*Modular design: wall mounted
gas condensing boiler weighing
only 35 kg*

*Stratification
cylinder weighing
only 19 kg*



*New operating/display
module with large plain
text and graphic display
in colour*

*ISM7i LAN/WLAN interface
module can be integrated*



*Optional control
via smartphone*



The perfect combination of gas and solar

CSZ-2R – the sun helps you save, too

The CSZ-2R gas condensing solar centre was also developed and equipped according to the condensing efficiency concept. As a result, the CSZ-2R can cover up to 60% of the DHW heating with solar energy, making it the perfect system solution.

This compact, modular and visually appealing solar centre comprises the following: CGB-2 gas condensing boiler, BM-2 programming unit, solar cylinder, solar pump assembly with high efficiency pumps and SM-2 solar controller, 25l solar expansion vessel and drip pan for the solar fluid. The solar cylinder has a 300l capacity which is sufficient to receive the energy from three collectors for a living space of up to 150 m². This means it complies with the requirements of the German "Renewable Energies Heat Act".

The new programming unit allows the entire system to be controlled and analysed, for example the solar yield, converted into kilowatt hours, cubic metres of natural gas or litres of fuel oil. The solar yield is shown graphically – sorted according to months and years.

The CSZ-2R at a glance:

- Compact gas condensing solar centre
- Solar cylinder with high grade thermal insulation, even protecting the cylinder floor
- Excellent accessibility of all components for operation and service from the front, offering plenty of siting options
- Connections for central heating and solar circuit on the left or the right
- Small side clearance required only on the connection side
- Solar boiler stop for high solar yield
- Electronic system pressure gauge
- Equipped with the new Wolf control system
- Common operation of central heating, DHW, mechanical ventilation and solar via a single programming unit or smartphone app

TYPE		CSZ-2R 14	CSZ-2R 20	CSZ-2R 24
Heating output min.–max.	kW	1.8-15.2	3.8-20.4	4.8-25.8
Output during cylinder charging	kW	1.8-13.5	3.8-22.2	4.8-27.1
		Dual mode cylinder with 300l capacity		



All components accessible from the front



Solar cylinder, 300l capacity, with bare-tube indirect coils and high grade thermal insulation

Control unit with solar boiler stop for high solar yield



Optional control via smartphone



State of the art oil condensing technology

Heating with fuel oil has never been more economical than with the TOB

The TOB is based on the same general principle as the COB – the German consumer association “Stiftung Warentest” test winner. However, Wolf development engineers have now been able to improve the burner unit even further. The most pertinent new development concerns the use of the modulating combustion principle that employs pressure vaporisation and the patented mixing swirl nozzle. Oil preheating and oil evaporation are not required, which saves on auxiliary power consumption.

During combustion, the pump rate is continuously matched to the prevailing demand with the high efficiency, variable speed EC oil pump motor. This ensures the highest efficiency with very clean combustion, whilst the already low auxiliary power consumption is reduced even further. The TOB, just like its gas equivalent, the CGB-2, modulates its output according to the actual demand. It is also available as the TOB-TS with an adjacent stratification cylinder.

The TOB at a glance:

- Latest technology that builds on the success of the COB, German consumer association “Stiftung Warentest” test winner
- Proven combustion principle of pressure vaporisation
- Modulating output from 6.6 to 18.6 kW, always matched to the current heat demand
- Low energy consumption on account of low minimum output and technology that requires no oil preheating or oil evaporation
- Low standby losses
- High efficiency, variable speed EC oil pump motor reduces power consumption even further
- Optimum utilisation of the condensing effect due to stratification operation with TS cylinder and controlled spread (flow/return temperature)
- Can be operated with standard fuel oil, low sulphur fuel oil EL or bio-oil (B10)
- High grade oil filter with vacuum gauge as part of the standard delivery
- Electronic system pressure gauge
- Clean combustion: standard emissions at 40/30 °C to DIN 4702-8:
CO < 6 mg/kWh, NOX < 48 mg/kWh
- Equipped with the new Wolf control system
- Common operation of central heating, DHW, mechanical ventilation and solar via a single programming unit or smartphone app



Small footprint, dimensions
(W x H x D):
56.6 cm x 129 cm x 60.5 cm

TYPE		TOB/TOB-TS 18
Heating output min.–max.	kW	6.6-18.6
Equivalent TS DHW cylinder capacity	l	200



*Modulating combustion,
easy-to-service layout, can be
installed flush against the wall*

*Optionally with TS
stratification cylinder*



*ISM7i LAN/WLAN interface
module can be integrated*



*Optional control
via smartphone*



The heating solution for larger buildings

MGK-2 – saving made easy

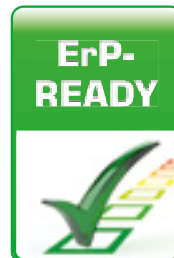
Wolf also recommends the new MGK-2 gas condensing industrial/commercial boiler with 17 to 100% output modulation at a rated output level of 130 to 630kW, or up to 2.5MW in a cascade. With the MGK-2-130-300, Wolf rounds off the lower output range again. Thanks to its quiet operation and compact dimensions, the MGK-2 is especially suitable for effective modernisation or refurbishment of existing buildings. The new MGK-2 requires no minimum amount of circulating water or return temperature raising facility, making it particularly economical. Furthermore, users will be delighted with the easy operation of the BM-2 programming unit, with its built-in colour TFT display and its many new auxiliary functions.

The MGK-2 at a glance:

- Rated output 130–300kW (up to 1.2 MW in a cascade) and 390–630 kW (up to 2.5MW in a cascade)
- Wide modulation range from 17 to 100%
- Extremely modest dimensions: fits through an 80cm doorway; easy handling with pallet truck
- Ideal for modernisation projects as it is easy to split: largest module 1460 mm x 1295 mm x 790 mm
- Removable cover for optimum accessibility (MGK-2-390 to -630)
- Equipped with the new Wolf control system and BM-2 programming unit with plain text display
- Optimum utilisation of the condensing effect by controlling the spread (flow/return temperature)
- Optimum, easy-to-service neutralising box with booster pump to make the granulate last longer
- Directly switched three-phase pumps (MGK-2-390 to -630)
- Appliance has full thermal insulation
- Electronic system pressure gauge
- ISM7i LAN/WLAN module allows communication via smartphone, laptop or PC
- 0-10V input for integration into BMS
- 230V fault message output
- Header sensor connection option for low loss header

	NEW									
MGK-2	130	170	210	250	300	390	470	550	630	
Heating output min.–max.	kW	26-126	30-167	37-208	44-250	49-294	64-392	79-467	94-549	107-627
Modulation range	%	19-100	17-100	17-100	17-100	17-100	17-100	17-100	17-100	17-100
Weight	kg	195	250	271	292	313	390	420	450	480

With integral controlled spread for optimised utilisation of the condensing effect



Compact dimensions:
1300 mm x 995 mm x 640 mm or
1300 mm x 1355 mm x 640 mm
(from MGK-2-170)

Complete maintenance exclusively from front and right. The boiler can therefore be positioned against the wall, both at the back and on the left.

MGK-2-130 to -300

ISM7i LAN/WLAN interface module can be integrated

Compact dimensions: fits through an 80 cm doorway. Easy to split: largest module 1460 mm x 1295 mm x 790 mm



Optimum accessibility for adjustments and maintenance thanks to removable cover

Cascades with up to four gas condensing boilers provide an output range of up to 1.2 MW; non-return valve for cascade operation already integrated



Optional control via smartphone

MGK-2-390 to -630

Slot at the back for pallet truck forks to facilitate handling



Replacement without chimney refurbishment

The CGU-2K conventional gas boiler with high efficiency heating circuit pump

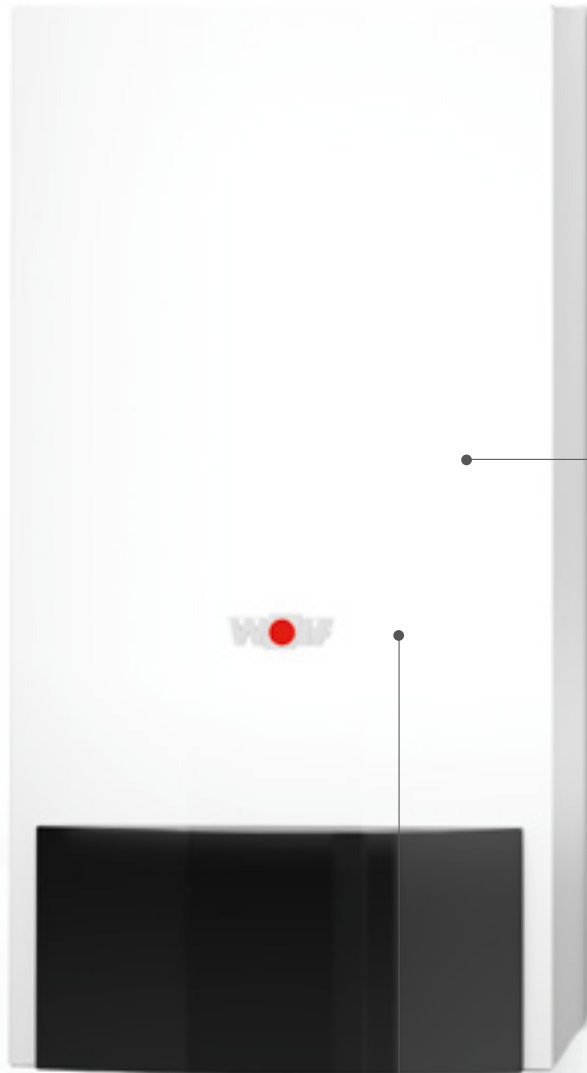
In many cases, chimney refurbishment or an external ventilation air supply is not possible. Wolf has designed an open flue conventional boiler with draught hood for this purpose, which makes chimney refurbishment no longer necessary. The CGU-2K is equipped with a high efficiency heating circuit pump, thereby ensuring low power consumption. The appliance is extremely easy to install and particularly suitable for modernising single storey solutions in residential buildings. It can be ordered now for delivery from May 2015 onwards.

The new CGU-2K at a glance:

- Integral high efficiency heating circuit pump (EEI < 0.23)
- Convenient DHW quick start
- Combi boiler with stainless steel plate heat exchanger
- Low cost replacement



TYPE	NEW	
	CGU-2K-18	CGU-2K-24
Heating output min.-max. kW	8-18	10.9-24



*Integral high efficiency
heating circuit pump*

*Compact dimensions:
440 mm x 390 mm x 850 mm*



The heating system that also provides cooling

BWL-1S(B) split air source heat pump

The BWL-1S(B) split air source heat pump is new to the Wolf heat pump range. This appliance is ideal for all locations where cooling as well as heating will be required. By modulating its output, the BWL-1S(B) matches its heating, cooling and DHW operation to demand perfectly.

The compact outdoor module can be installed at a distance of up to 25 m from the indoor module, requiring just two refrigerant lines of Ø10 mm and Ø16 mm. This provides a high degree of flexibility and easy installation. The space saving outdoor module can be installed either on a plinth or on a wall mounting support.

The BWL-1S(B) at a glance:

- Electronic output control via inverter compressor
- High efficiency with COP of up to 3.8 at A2/W35 (EN 14511)
- Integral calorimeter
- Fully compatible with Wolf control system
- Operation with integral BM-2 programming unit or AM display module
- ISM7i LAN/WLAN module allows communication via smartphone, laptop or PC
- Integral high efficiency pump EEI <0.23
- 6 kW electric heating element (400V or 230V connection options)
- Can also be supplied as BWL-1S(B): indoor module **without** electric heating element for dual mode operation with an external heat generator (fuel oil/gas/biomass/solar)
- Also available as heating centre in combination with the CEW-2-200 DHW cylinder
- Hydraulic connection set for quick on-site installation of cylinder and indoor module
- Increase in consumption of on-site power from photovoltaic system thanks to smart grid ready connection at inverter

				NEW		
TYPE		BWL-1S(B) 07/230 V	BWL-1S(B) 10/400 V	BWL-1S(B) 14/400 V	BWL-1SB 10/230 V	BWL-1SB 14/230 V
Outdoor module dimensions (width x depth x height)	mm	1040 x 340 x 865	900 x 340 x 1255	900 x 340 x 1255	900 x 340 x 1255	900 x 340 x 1255
Indoor module dimensions (width x depth x height)	mm	440 x 340 x 790	440 x 340 x 790	440 x 340 x 790	440 x 340 x 790	440 x 340 x 790
Weight of outdoor module/ indoor module	kg	66/31.9	110/33.7	110/35.5	110/30	110/31.8
Heating output / COP at A7/W35 to EN 14511	kW / -	6.8/4.3	10.2/4.8	12.1/4.8	11.1/4.7	14.1/4.3
Heating output / COP at A2/W35 to EN 14511	kW / -	5.1/3.3	7.6/3.8	8.8/3.8	7.7/3.5	9.6/3.3
Heating output range at A2/W35	kW	1.9-8.8	2.9-10.6	3.1-12.4	3.6-9.5	3.6-10.9
Cooling capacity/EER at A35/W18 to EN 14511	kW / -	8.6/3.3	8.7/4.1	12/3.4	8.5/3.4	10.1/2.9



Indoor module for convenient heating, cooling and DHW

Indoor module becomes a heating centre in conjunction with CEW-2-200 DHW cylinder



Outdoor module with electronic output control via inverter compressor



Wolf heat pumps have been awarded the EHPA Quality Label for an all-round guarantee of quality and highest levels of environmental and consumer protection.



The SG Ready label (SG = smart grid) is awarded to those heat pumps that have been equipped with control equipment enabling them to be integrated into a smart grid.

Hybrid – the technology with two best sides

Hybrid system: Split air source heat pump combined with gas condensing technology

Two leading technologies from Wolf combined with each other intelligently: The Wolf BWL-1SB air source heat pump makes efficient use of the available environmental heat. Only when outside temperatures fall to frosty levels, does the CGB-2 BlueStream® gas condensing module with high power reserves take over heat generation. You have a high degree of flexibility when installing the wall mounted indoor modules, because the units can be fitted compactly next to each other or separately from one another. This makes this hybrid system the perfect solution – both for modernisation and for new build.

Hybrid technology at a glance:

- Optimum utilisation of environmental heat by air source heat pump with electronic inverter control
- High output and temperature reserves thanks to energy efficient gas condensing technology
- Intelligent hybrid control via eBUS communication, taking account of electricity and gas prices
- Automatic utilisation of the cheapest energy source in each case
- High heating water temperatures, even when outside temperatures fall to very frosty levels
- Installation of the compact indoor modules either together or apart
- ISM7i LAN/WLAN module allows communication via smartphone, laptop or PC
- Integral high efficiency pumps EEI < 0.23
- Increase in consumption of on-site power from photovoltaic system thanks to smart grid ready connection at inverter



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		NEW		
HYBRID SYSTEMS		BWL-1SB-07 + CGB-2-14	BWL-1SB-07 + CGB-2-20	BWL-1SB-07 + CGB-2-24
Dimensions of both indoor modules (width x depth x height)	mm	880 x 340 x 790	880 x 340 x 790	880 x 340 x 790
Outdoor module dimensions (width x depth x height)	mm	1040 x 340 x 865	1040 x 340 x 865	1040 x 340 x 865
Heat pump heating output range at A2/W35	kW	1.9-8.8	1.9-8.8	1.9-8.8
Gas condensing boiler heating output range	kW	1.8-14	3.9-20	4.9-24



Module arrangement either right or left

CGB-2 gas condensing boiler

Indoor module for BWL-1S split air source heat pump

AM display module

BM-2 programming unit

Outdoor module with output control via inverter



Optional control via smartphone



Doubly clean savings

NEW

The perfect building services centre from Wolf

A team only excels when its individual talents complement each other. Accordingly, the new CWL-T-300 Excellent ventilation unit makes a perfect team with Wolf heat generators.

Together, the ventilation unit and the heat generator form both a visual and a technical entity. Supply air for living spaces is heated to a comfortable temperature by the optional hydraulic reheater coil. The required heating output is produced and made available by the adjacent Wolf heat generator, e.g. BWL-1S, CGS-2 or TOB.

The BM-2 is your key to the "smart home" – networked, intelligent and mobile control for the entire heating and ventilation system.

The new Wolf building services centre at a glance:

- CWL-T-300 Excellent Comfort mechanical ventilation unit in modular design can be combined perfectly with Wolf BWL-1S, CGS-2 or TOB heat generators
- Maximum energy efficiency, highly efficient heat generation, optimum heat distribution and heat recovery via the ventilation system (heat recovery of up to 95%)
- Pleasant blow-in temperature, no draughts
- Reduction in heating surfaces
- Doubly clean air: filtered outdoor air, low CO₂ emissions
- Compact construction and visually appealing design
- Central heating, ventilation and DHW heating (cooling in conjunction with BWL-1S)
- Control via BM-2 programming unit
- No additional controller required
- All maintenance from front: filter replacement via filter drawer



The new, modular Wolf CWL-T-300 Excellent Comfort mechanical ventilation unit can be combined perfectly with CGS-2 or TOB



*BWL-1S split air source heat pump
as a heating centre in conjunction
with CEW-2-200 DHW cylinder*



*Optional control
via smartphone*



Power storage made easy

The Wolf SWP-260 DHW heat pump

The new SWP-260 DHW heat pump can couple heating energy from the additional heat generator – either solar, gas, fuel oil or biomass operation – into the DHW heat pump with its integrated indirect coil. Even solar power generated on site by a photovoltaic system can be stored in the domestic hot water by means of a digital input. Another positive side effect is that the cellar or storage room can be dehumidified and cooled.

The compact design of the SWP-260 makes it quick and easy to install. It is operated using four function keys on the display. A choice can be made here between three different operating modes (auto, eco, boost incl. elec. immersion heating) and two time programs. The SWP-260 features a pasteurisation function and a demand-dependent defrost function. Furthermore, the appliance is smart grid ready.

The new SWP-260 at a glance:

- Heating output 1.9 kW
- Increase in consumption of on-site power from photovoltaic system thanks to smart grid ready connection at inverter
- Excellent output values
- DHW cylinder capacity approx. 260 l
- Secure separation of refrigerant from drinking water thanks to external safety condenser
- 1.5 kW electric immersion heater integrated into cylinder
- Contact for external locking of the heat pump in dual mode operation
- Integrated 1 m² indirect coil
- Max. cylinder temperature 62 °C with heat pump; 70 °C with electric immersion heating

		NEW
TYPE		SWP-260
Dimensions (diameter x height)	mm	650 x 1990
Weight	kg	115
Heat pump heating output	kW	1.9
COP at A15/W10-55 to EN 16147		3.54
COP at A7/W10-55 to EN 16147		3.10
Supply and extract air connectors	mm	160
Supply air operating range	°C	-7 to +38



Fully wired heat pump with piston compressor



260 l cylinder with robust ABS plastic jacket

Cylinder with internal indirect coil for dual mode operation (fuel oil/gas/biomass/solar)



The SG Ready label (SG = smart grid) is awarded to those heat pumps that have been equipped with control equipment enabling them to be integrated into a smart grid.



Hygiene and efficiency by design

The new Wolf FWS-2 freshwater module and LS-2 cylinder loading system

The new Wolf freshwater modules are an energy efficient and hygienic system solution. They make storage of large amounts of heated drinking water unnecessary and provide hygienically flawless domestic hot water. Wolf offers two new appliances for heating fresh water.

1. The FWS-2 freshwater module

Domestic hot water heating utilising the instantaneous water heating principle is one of the two options for heating fresh water. DHW is not stored; it is only heated when required. The module ensures a sufficiently high DHW temperature at all times.

2. The LS-2 cylinder loading system

DHW heating utilising the stratification principle is also an efficient, safe solution that meets all hygiene requirements. Hot water is stored at temperatures high enough to kill or prevent the growth of pathogens (pasteurisation). Integrated DHW circulation management is a prerequisite for this. In conjunction with DHW cylinders in the SEL series, these systems are the ideal solution for very high peak draw-off rates when heating output is limited.

Benefits at a glance:

- Ready-to-connect complete system with thermal insulation hood
- High efficiency pumps (EEI <0.23) in heating and DHW areas
- New SLM-20 control unit: graphic display with full text
- Compliance with Drinking Water Ordinance [Germany]
- Constant DHW temperature
- Optimum energy efficiency

		NEW					
TYPE		FWS-2-140	FWS-2-350	FWS-2-455	LS-2-140	LS-2-210	LS-2-315
Rated output	kW	140	350	455	140	210	315
Dimensions (width x depth x height)	mm	900 x 490 x 1990	900 x 490 x 1990	900 x 490 x 1990	900 x 490 x 1990	900 x 490 x 1990	900 x 490 x 1990
Temperatures primary FL/RT secondary CW/DHW	°C	70/25 10/60	70/25 10/60	70/25 10/60	70/45 10/60	70/45 10/60	70/45 10/60
Continuous output secondary at 60°C	l/h	2400	6000	7800	2400	3600	5400
Total weight	kg	79	91	101	89	100	109

Ready-to-connect complete system with thermal insulation hood



LS-2 cylinder loading system

FWS-2 freshwater module



Domestic hot water – always hygienic, always fresh

FWS-2-60 and FWS-2-60L freshwater modules for BSP stratification cylinders

These freshwater modules always ensure the highest level of DHW convenience. Developed for the proven, multi-functional BSP and BSP-W stratification cylinders, they enable every possible system combination in conjunction with a gas or oil boiler, wall mounted boilers, wood or pellet boilers, heat pumps, solar thermal systems or immersion heaters. Particularly when combined with condensing boilers, the stratification cylinder ensures optimum condensation and hence optimum energy yields.

Benefits at a glance:

- Freshwater module for BSP/BSP-W stratification cylinder
- Hygienic DHW heating
- Now with high efficiency pumps (EEL ≤ 0.23) in heating and DHW areas

TYPE	FWS-2-60	FWS-2-60L
DHW output* at 90°C buffer/DHW temperature 43°C	30 l/min	-
DHW output at 50°C buffer/DHW temperature 46°C	-	10 l/min
Weight	kg 17	21
Max. heating/DHW operating pressure	3/10 bar	3/10 bar
Power consumption	W 45	45

* at factory-set thermostat adjustment of 55°C



Fitted with
high efficiency pump



BSP stratification cylinder



The sightly solar thermal collector

TopSon F3-1Q solar collector in a transverse design

Three criteria are absolutely decisive for a solar thermal collector: efficiency, workmanship and longevity. An absorber with highly selective coating ensures maximum solar yields at any time of year. The high-grade quality and technology guarantee safe operation and a long service life.

This high level of durability is also ensured by the specially developed, totally sealed, deep-drawn aluminium collector tray. There are no problematic mitred corners in frame structures, which can cause leaks and require sealing with silicone. Furthermore, a special pattern makes the robust aluminium tray particularly stable.

The Wolf TopSon F3-1Q high performance flat-plate collector is made from environmentally responsible and homogeneous materials, which are futureproof and can easily be sorted and recycled.

The new TopSon F3-1Q solar collector at a glance:

- Deep-drawn, highly weather resistant aluminium collector tray
- Rockwool thermal insulation, 60 mm thick for minimum cool-down losses; additional insulation at the sides
- Aluminium/copper absorber with highly selective coating for very high yields, and naturally eligible for BAFA subsidies [Germany]
- Meets the requirements for "Blue Angel" certificate of environmental excellence to RAL UZ 73
- The meander design guarantees an even flow and effective function in "low flow mode"
- Expansion compensators between collectors
- Safety glass, 3.2 mm thick; hail-proof to EN 12975, thermally pre-stressed, with improved transparency
- EPDM seal
- Up to five collectors can be connected from one side; connection on either left or right
- Collectors self-draining thanks to "four connection technology"

		NEW
TYPE		F3-1Q
Gross collector area	m ²	2.3
Weight	kg	41



Lower electricity prices all round

GTK-4 gas micro CHP module for apartment blocks and commercial premises

The heating system that also generates electricity: The GTK-4 micro CHP module from Wolf offers a new dimension in energy saving. It reduces primary energy consumption by simultaneously generating power and heat, thereby also reducing CO₂ emissions. This is ensured by an exceptionally quiet two-cylinder V-engine, which generates power and turns the waste heat into useable heating energy (combined heat and power generation).

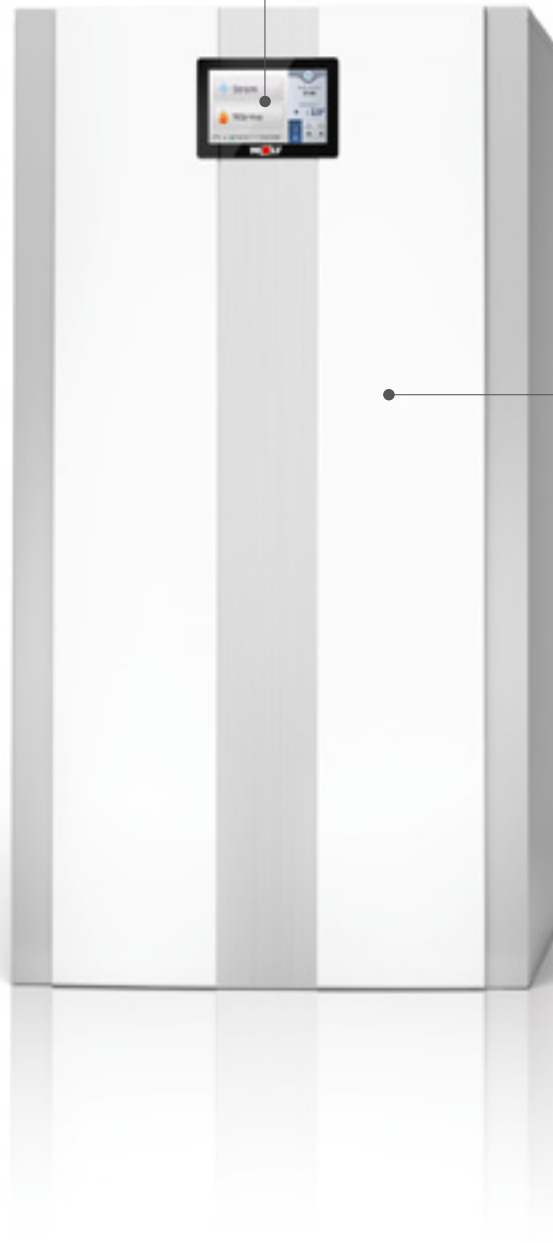
Benefits of the GTK-4 at a glance:

- High overall efficiency of 100 % due to integrated gas condensing technology; no return temperature raising required
- Ideal for use in older buildings: constant, regulated flow temperature of 75 °C
- Compact dimensions and low weight for easy handling and installation; plug-in connections to the control panel
- Clearly structured layout facilitates maintenance
- Power-optimised operating mode enables high proportion of on-site power consumption
- Attractive subsidies available through BAFA and KfW [Germany]

TYPE		GTK-4 MICRO CHP MODULE
Electrical efficiency (net cv)	%	25
Overall efficiency (net cv)	%	100
Thermal output	kW	8.5/10/12
Electrical output, adjustable	kW	2/3/4
Dimensions (width x depth x height)	mm	680 x 790 x 1290
Shipping weight (excl. casing)	kg	230
Total weight	kg	320



*Intuitive operation
with 7" touchscreen*



*Overall efficiency of
100% due to integrated
use of condensing
technology*



The programming unit for the next generation

BM-2 with intuitive system operation – it could hardly be any more convenient

“Smart home” is the key phrase for intelligent, networked building management. The new BM-2 programming unit is the key to effective control over heating, solar thermal and ventilation systems.

This convenient device can be used in all appliances belonging to Wolf's new range of condensing boilers, as well as in split air source heat pumps. The BM-2 programming unit can also be used as an external remote control, fitted in a wall mounting base. For example, the CWLExcellent range of mechanical ventilation systems also interacts seamlessly with this unit because all installed HRS components are automatically recognised and preconfigured via eBUS. In addition, control via smartphone is possible (requires ISMi/ISM7e interface module).

Four function keys and a rotary selector make the programming unit quick and intuitive to control. Software updates can be loaded by the heating system installer using an SD card slot. System status, fault messages and parameters are displayed in plain text and graphics for absolute clarity. The control settings for all system components can be entered centrally in the BM-2 programming unit.



The BM-2 programming unit allows you to integrate new components (e.g. solar thermal system, additional heat generators, mechanical air handling units, etc.) straightforwardly and control them centrally.

TFT colour display, user friendly with clear depiction of graphics and information



Rotary selector with pushbutton function

Four function keys for quick navigation, selection and input by push & turn



Optional control via smartphone



Smart home for everyone

The new ISM7i and ISM7e LAN/WLAN interface modules

Now heating starts to become interesting because the ISM7i (for installation) and ISM7e (external solution for retrofitting) interface modules allow the heating system to be integrated into a LAN or WLAN network. For secure communication via the internet, the interface module is simply linked to the existing DSL router which then makes the connection to the secure Wolf portal server.

The system is controlled remotely via the internet from a smartphone or PC, both of which access the convenient browser-based user interface of the Wolf portal. An internet connection is not required if access to the heating system is to be limited to the local home network.

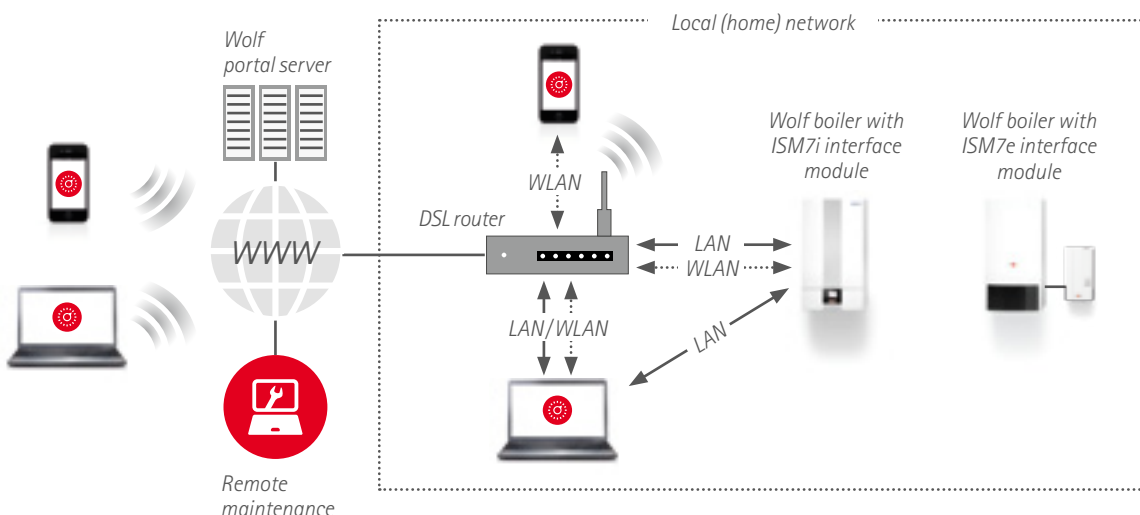
The Wolf communication system gives contractors access to the Wolf heating system via the internet. Fault messages are automatically sent by email to the system operator and the contractor.

The ISM7i at a glance:

- Straightforward installation in the BWL-1S, CGB-2, CGS-2, CGW-2, CSZ-2, MGK-2 and TOB
- Communication via home network or internet
- Heating system operation and monitoring via home network also possible without internet connection
- Remote control and monitoring via the internet
- Remote diagnosis by contractors or Wolf service engineers
- Fault message by email with internet connection

The ISM7e at a glance:

- All the features of the ISM7i
- For use as a mobile interface or for integrating "old" appliances
- Also supports: BM, CGB, CGG-2, CGU-2, COB, MGK, R2, R3 and R21
- Power supply via USB





The ISM7i:

- Integrated interface module with LAN and WLAN interface
- Connection to existing DSL routers on the home network
- Operation via smartphone, tablet, laptop or PC

The new ISM7e:

- External interface module with LAN and WLAN interface via eBUS
- Power supply via USB
- Connection to existing DSL routers on the home network
- Operation via smartphone, tablet, laptop or PC
- Mobile service interface



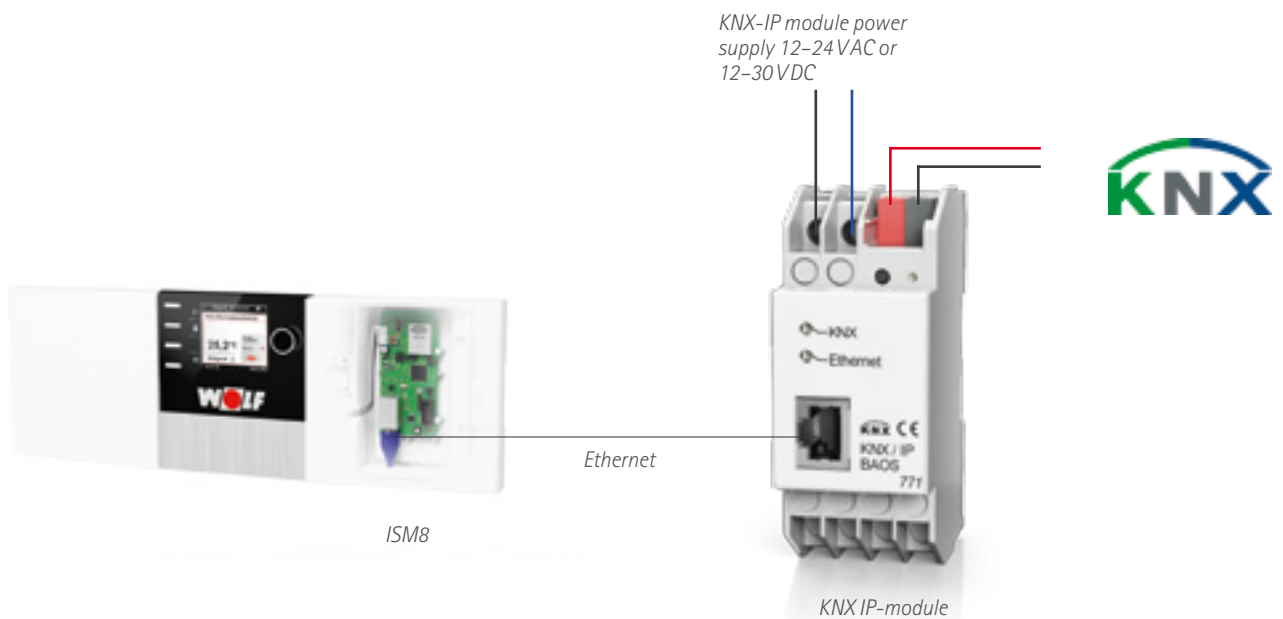
Perfect smart home interface for detached houses and apartment blocks

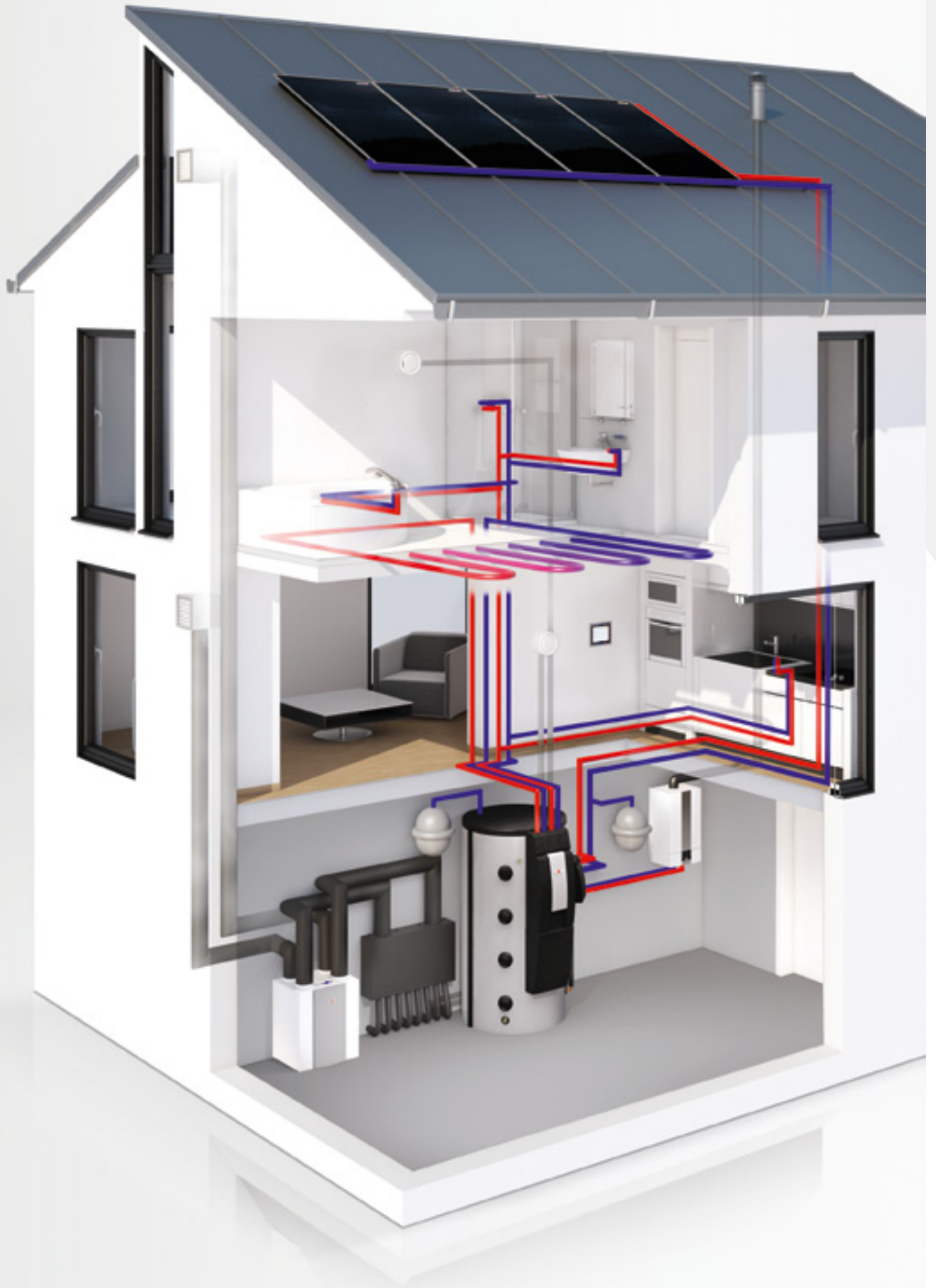
The new KNX interface

The Wolf KNX interface kit makes it possible to integrate Wolf system components into the KNX building automation system. In this way, all gas and oil condensing boilers with BlueStream® (CGB-2, CGS-2, CGW-2, CSZ-2, MGK-2, TOB), plus the BWL-1S split heat pump, can be integrated. Additional components, such as the MM mixer module, KM cascade module and SM1 or SM2 solar module can also be integrated.

A CWL Excellent mechanical air handling unit can likewise be incorporated into the system. In conjunction with the BM-2 programming unit, parameters can be read and written via the KNX network.

Measured values and statuses from the respective control units are collected as data points in the ISM8 interface module and made available via the KNX-IP module. Other appliances in the KNX system can read and write these network variables.





Heating equipment



Heating systems under full control

Perfect control via smartphone and PC

The user level: Wolf Smartset smartphone app or Wolf portal

In conjunction with the ISM7i or ISM7e interface module and the Wolf portal, the Smartset smartphone app allows users to operate their heating systems conveniently from a smartphone, no matter where they are. An internet connection will only be made if permitted by the user.

The contractor level: Wolf portal

Full access to the selected heating system is possible at the contractor level of the Wolf portal. The system components are graphically illustrated by various schemes, and the associated operation conditions are also shown. Adjustments can be made and parameters called up and modified. In addition, the integral datalogger can record values and conditions, which can also be shown in graphic form. Furthermore, active fault messages and a fault history are displayed.

The service tool: Wolf Smartset PC app

The Smartset application for Windows PCs allows a system to be configured and diagnosed on site, for example during a service call. The connection between PC and ISM7i or ISM7e interface module is established directly with a network cable. The design and functional scope of the Smartset PC app corresponds to that of the Wolf portal including contractor level.

Noteworthy benefits:

- Easy and clear operation
- Operating mode changeover
- Heating/setback mode demand
- Setting of time programs for heating and DHW
- Set value input
- Solar yield display
- Display and recording of all relevant temperatures and operation conditions
- Display of active fault messages and fault history
- Management of several heating systems by contractors
- Remote diagnosis option for contractors



Wolf Smartset operating app – the user level



Wolf portal – the contractor level
(shown on a tablet)



Efficiency, precision and reliability from a single source

The Wolf ErP portal for composite systems

The deadline for implementing the Ecodesign Directives (ErP) for central heating and DHW is 26 September 2015. As a systems supplier for heating, air handling, ventilation and solar, Wolf has the datasheets and labels for preconfigured system packages available for you to download (including all the documentation for individual components). That means you can immediately generate the appropriate datasheets and labels when drawing up a quotation for a composite system. We save you time-consuming research, meaning more time for you and assurance for your customers.

Of course you still have flexibility when planning Wolf composite systems. For composite systems that you create yourself from the Wolf product range, Wolf can provide you with an online tool for producing the datasheets and labels. This can be found in the new Wolf ErP portal. With it, you can create the right composite system label for your proposed Wolf system in no time at all. It couldn't be simpler, or more reliable.

As with the labels for individual appliances, which we have available for you to download and supply with every product, every quotation for a composite system must specify the energy efficiency category. The label and completed datasheet must be enclosed with the quotation. Even a heat generator plus control unit qualifies as a "composite system". This labelling is the responsibility of our traders and contractors. The relevant trader or contractor is obliged to issue them.

Example of a composite system:



*CGB-2 with BM-2
Gas condensing boiler
with programming unit*



*SE-2 with F3-1
Solar cylinder with solar collector*



It's so easy to create an ErP label and a datasheet in the ErP portal

- Go to the Wolf ErP portal
- Log in
- Select the main heat generator (boiler, heat pump or CHP module) in your composite system, for which you want to create the label and datasheet



- You will be taken to the relevant input screen
- Select the Wolf products by applicable system function according to your quotation
- Only products subject to the (ErP) regulation can be selected



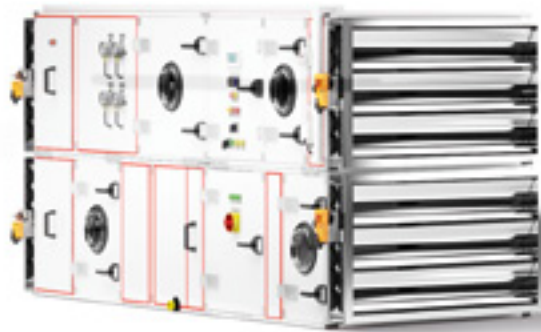
- At a click of the mouse, the portal creates the composite system label (PDF)
- Click again and the associated composite system datasheet is created
- You can now attach both documents to the quotation for your customer

AIR HANDLING AND VENTILATION EQUIPMENT

KG Top is the air handling unit with no limits, as revealed by the new developments for 2015. With tailor-made air handling and ventilation solutions, Wolf is constantly setting new standards. Thanks to its high degree of flexibility, modular design, particularly easy transportation and simple handling, there is scarcely any other model range on the market as established as the KG Top series.

Intelligent complete solutions – the “Wolf Comfort Class” stands for compact ventilation units with highest energy efficiency levels. This year, Wolf is presenting new, compact ventilation solutions featuring thermal wheel heat exchangers that further improve building energy statements and contribute to an even healthier working and living environment.

In the field of mechanical ventilation, Wolf is presenting the new CWL-T Comfort mechanical ventilation unit. In conjunction with a Wolf heat generator, it creates an efficient and futureproof Wolf building services centre.



KG Top: New benchmark in terms of flexibility and efficiency



CRL-A: Now also as a unit for outdoor installation



CRL: New thermal wheel heat exchanger with unrivalled tightness

CWL-T-300 Excellent Comfort mechanical ventilation unit



The air handling range with no limits

KG Top air handling unit – state of the art air handling

Extremely versatile at the engineering stage, easy to handle during transportation and installation, and highly efficient for the user: The KG Top series of appliances represents efficient bespoke air handling equipment for any building project.

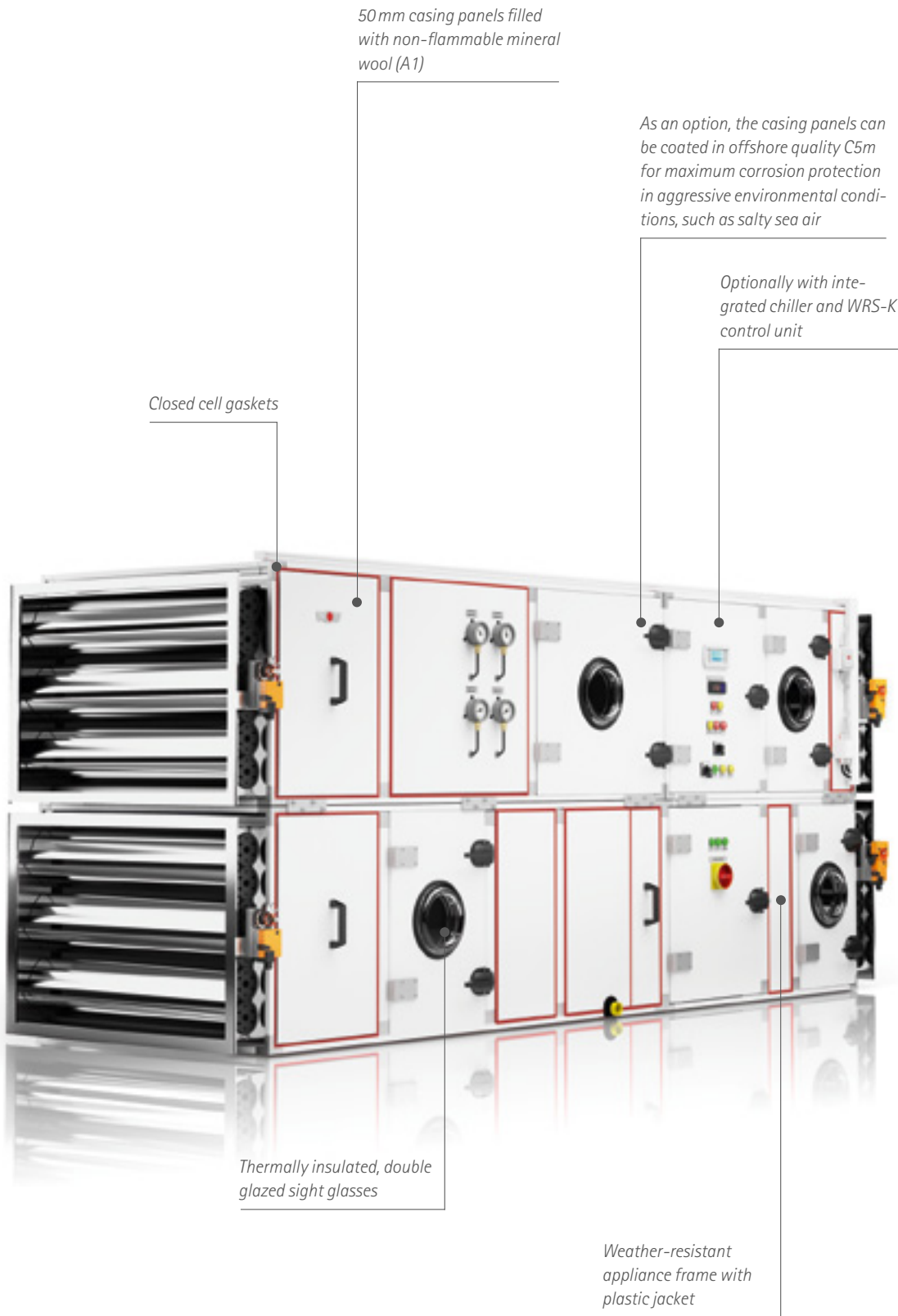
The 50 mm casing panels are insulated with high grade, non-flammable mineral wool (A1). All air-conducting surfaces are galvanised, provided with additional powder coating or made of stainless steel. All gaskets are closed cell, non-moisture absorbent and resistant to disinfectants and ageing.

All surfaces that come into contact with the air are made of materials that do not emit any hazardous substances or offer any breeding ground for micro-organisms.

The KG Top.eco model, featuring a thermally perfectly separated appliance frame, is particularly suitable for use in all areas subject to high humidity levels, such as saunas, swimming pools, production facilities and tropical regions.

New features at a glance:

- Smooth-running, efficient EC motors combined with latest generation of fan impellers
- Bag filters with no floor contact – free floating so hygienically flawless
- Adjacent, modulating VRF (variable refrigerated flow) units for heating and cooling, 10–50 kW
- Complete air handling unit with heat recovery system, integral boiler, variable speed refrigerator and heat pump
- Highly efficient countercurrent plate heat exchanger or crosscurrent heat exchanger with temperature transfer levels of up to 90% (dry)
- Highly efficient thermal wheel heat exchanger (TWHE) with temperature and humidity transfer levels of over 90% and unprecedented tightness rates of 98% to VDI 3803/5.
- New control unit for swimming pool ventilation enables efficient dehumidification of swimming baths. The heat demand is covered by a heat recovery system, supported by a DHW coil



50 mm casing panels filled with non-flammable mineral wool (A1)

As an option, the casing panels can be coated in offshore quality C5m for maximum corrosion protection in aggressive environmental conditions, such as salty sea air

Optionally with integrated chiller and WRS-K control unit

Closed cell gaskets

Thermally insulated, double glazed sight glasses

Weather-resistant appliance frame with plastic jacket



Intuitive and convenient

The air handling control unit with BMK-T10 touch panel – now also for operating several systems

An attractive 10.4" display provides a convenient overview of the operation conditions for several air handling and ventilation units, and the touch function makes it intuitive to operate. The operating state can be comprehended at a glance, thanks to visualisation of current system information, such as sensor values, signal and set values. The ability to represent and record trends allows complete operating cycles to be depicted simply in a line chart – this also allows system optimisation to be undertaken conveniently at any time.

The BMK-T10 touch panel for operating several systems extends Wolf's air handling control unit (WRS-K) product range and is designed for straightforward control panel integration. The current system parameters and settings can also be displayed on a PC via the Ethernet interface.

The BMK-T10 touch panel at a glance:

- Operation of several systems possible
- Access also via desktop PC or laptop
- Individual programming of system names possible

System example:



Bacteria, odours and pollutants go their separate ways

Wolf high performance run-around-coil system – for hygienic heat recovery

Even in areas with particularly stringent indoor air quality requirements, highly efficient heat recovery is possible. 100% separation of inflows and outflows means that no pollutants, moisture, odours or bacteria can be transferred from one to the other. Heating or cooling energy can be integrated hydraulically in the run-around-coil system. The thermal capacity flow ratio is controlled via air to brine. Connection via BUS to the Wolf WRS-K air handling control unit saves sensors, since all the relevant measured values are transferred automatically. It displays the key operating data, such as heat recovery rate, heat recovery output, day/year energy measurement, and simultaneously monitors the function, performance and plausibility.

The run-around-coil system at a glance:

- 100% separation of supply/extract air
- Renewable Energies Heat Act heat recovery level $\geq 70\%$
- Hydraulic unit with:
 - Minimised pressure drop
 - High efficiency pump with output-dependent control
 - Precise flow rate capture using magnetic-inductive sensors
- Optional injection of heating/cooling energy
- Communication via BUS with WRS-K air handling control unit
- Operation and menu structure familiar from WRS-K air handling control unit
- Permanent function and performance monitoring
- Display of key operating data:
 - Heat recovery rate
 - Heat recovery output
 - Energy measurement day/year



90% heat recovery and 98% tightness

The new, high performance, thermal wheel heat exchanger

Due to their design, traditional thermal wheel heat exchangers are characterised by large leakage air volumes and consequently mixing of stale extract air with fresh outdoor air. Wolf has solved this problem by implementing an innovative approach. The newly developed sealing system is not installed as usual at the sides of the rotor; instead, the gasket itself rotates with the rotor. Several sealing fins are attached to the side walls and ensure highly efficient sealing with the rotating part. The central gaskets, mounted on both inflow and outflow sides in each case, are implemented in a multi stage cascade to form a labyrinth seal. This Wolf rotor sealing system enables an unprecedented tightness rate of 98% to VDI 3803/5.

Normally, the manufacturer must take additional air volumes for supply and exhaust air into account in the fan design because a leakage rate of 10% must be assumed to comply with VDI 3803/5. This is no longer necessary for Wolf products, since this 10% leakage does not need to be factored in during planning or design. Higher power ratings and additional power consumption during operation no longer need to be taken into account for supply and extract air fans.

Previously, the traditional felt gasket always concealed the outer edge of the rotor. In contrast, the innovative Wolf rotor sealing system makes the entire diameter of a rotor available for heat recovery for the first time. Consequently, dry temperature transfer rates of over 90% are achieved with minimal pressure drop and an extremely short design.

An increased moisture transfer rate of over 90% from extract air to supply air can be achieved in the newly developed aluminium rotor design with sorption coating based on natural zeolite. Valuable residual moisture now remains in the building in winter and, in summer, the residual moisture in the extract air can pre-cool the supply air, thereby saving energy. The downstream components, i.e. radiators and, if applicable, humidifiers, can now be sized somewhat smaller.

These highly efficient thermal wheel heat exchangers are used in Wolf KGTop air handling units and CRL Comfort ventilation units.



Innovative labyrinth sealing system



Maximum air quality – maximum tightness

CRL Comfort thermal wheel heat exchanger ventilation unit for indoor installation

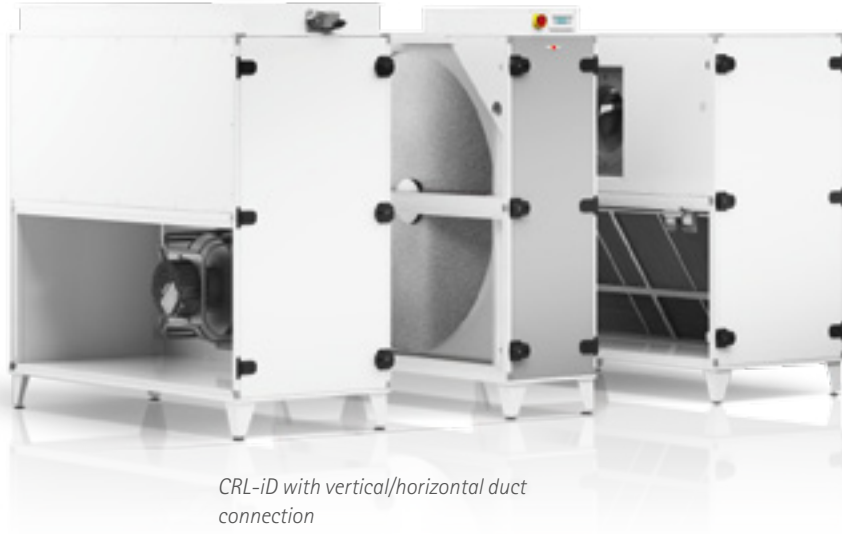
The new CRL series from Wolf sets new standards in many respects. Three different thermal wheel heat exchangers are available to choose from: versions with sorption, enthalpy or condensation rotors. All versions are equipped as standard with the new sealing system that features an extremely high tightness rate of 98%. Optionally, use of sorption rotors enables direct moisture transfer from the extract to the supply air side. All appliances are fully assembled electrically and, thanks to their modular design, very easily installed.

The new CRL series at a glance:

- Combined ventilation unit with integral, high performance, thermal wheel heat exchanger (no condensate removal necessary, resistant to icing-up)
- Highly efficient, variable speed EC fans (rated IE4)
- Three different rotor types: sorption rotor (recommended by Wolf: with the additional benefit of moisture recovery in winter and precooling in summer), enthalpy rotor, condensation rotor
- Thermal wheel heat exchanger types featuring the new, all-round, Wolf labyrinth sealing system with excellent tightness, a temperature transfer rate of up to 90% (dry) and return humidity coefficients of up to 90% or higher
- In an iD version with vertical/horizontal or an iH version with horizontal duct connection
- CRL accessories: silencer + module with heater, radiator and mist eliminator
- The appliances comply with all relevant standards and guidelines, such as VDI 6022, VDI 3803 and DIN EN 13779

TYPE		CRL-IH-4800	CRL-IH-6200	CRL-IH-9000	CRL-ID-4800	CRL-ID-6200	CRL-ID-9000
Nominal flow rate	m ³ /h	4800	6200	9000	4800	6200	9000
Max. flow rate	m ³ /h	5100	7500	11,250	5100	7500	11,250
Length	mm	1728	1932	2136	1728	1932	2136
Depth (incl. locks)	mm	1360	1665	2070	1360	1665	2070
Overall height	mm	1716	1716	1919	1722	1722	1925
Height (appliance)	mm	1424	1424	1627	1424	1424	1627
Foot height	mm	170	170	170	170	170	170
Control unit height	mm	122	122	122	122	122	122
Exhaust air EHA	mm	intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*			
Outdoor air ODA	mm	intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*			
Extract air ETA	mm	intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*			
Supply air SUP	mm	intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*			
Duct connection dimensions, horizontal air routing	mm				intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*
Duct connection dimensions, vertical air routing	mm				intl 1222 x 510*	intl 1527 x 612*	intl 1934 x 714*
Weight	kg	590	715	845	590	715	845

* Duct connection dimensions



CRL-iD with vertical/horizontal duct connection



Programming unit, can also be used as a remote control

Integral, high performance, thermal wheel heat exchanger with all-round labyrinth seal

EC fan

CRL-iD/iH, can be split lengthwise for easier handling

Compact, three-piece housing design with integral control unit, fully wired with optimum ease of installation and disassembly



Minimum leakage – maximum air quality

CRL-A Comfort thermal wheel heat exchanger ventilation unit for outdoor installation

The CRL-A is a match for any weather. However, its most impressive features are its inner values. Three different thermal wheel heat exchangers are available to choose from: versions with sorption, enthalpy or condensation rotors. All versions are based on an innovative sealing system with an extremely high supply air/extract air tightness rate of 98 % (VDI 3803/5).

The new CRL-A series at a glance:

- Robust all-weather construction for outdoor installation
- Combined ventilation unit with integral, high performance, thermal wheel heat exchanger (no condensate removal necessary, resistant to icing-up)
- Highly efficient, variable speed EC fans (rated IE4)
- Three different rotor types: sorption rotor (recommended by Wolf: with the additional benefit of moisture recovery in winter and precooling in summer), enthalpy rotor, condensation rotor
- Thermal wheel heat exchanger types featuring the new Wolf sealing system with an unrivalled tightness rate of 98 %
- Compact, three-piece housing design with integral control unit, fully wired with optimum ease of installation and disassembly
- Programming unit, can also be used as a remote control
- The appliances comply with all relevant standards and guidelines, such as VDI 6022, VDI 3803 and DIN EN 13779

		NEW		
TYPE		CRL-A-4800	CRL-A-6200	CRL-A-9000
Nominal flow rate	m ³ /h	4800	6200	9000
Max. flow rate	m ³ /h	5100	7500	11,250
Length	mm	1728	1932	2136
Depth (incl. roof)	mm	1422	1726	2134
Overall height	mm	1864	1864	2067
Height (appliance)	mm	1424	1424	1627
Base frame height	mm	300	300	300
Exhaust air EHA	mm	intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*
Outdoor air ODA	mm	intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*
Extract air ETA	mm	intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*
Supply air SUP	mm	intl 1222 x 612*	intl 1527 x 612*	intl 1934 x 714*
Weight	kg	660	800	960

* Duct connection dimensions



*Thermal wheel heat
exchanger with minimal
leakage*

*Robust construction and exterior
painting as standard*

The new CRL-A for outdoor installation

*Highly efficient
EC fan*



Flexible installation, convenient operation

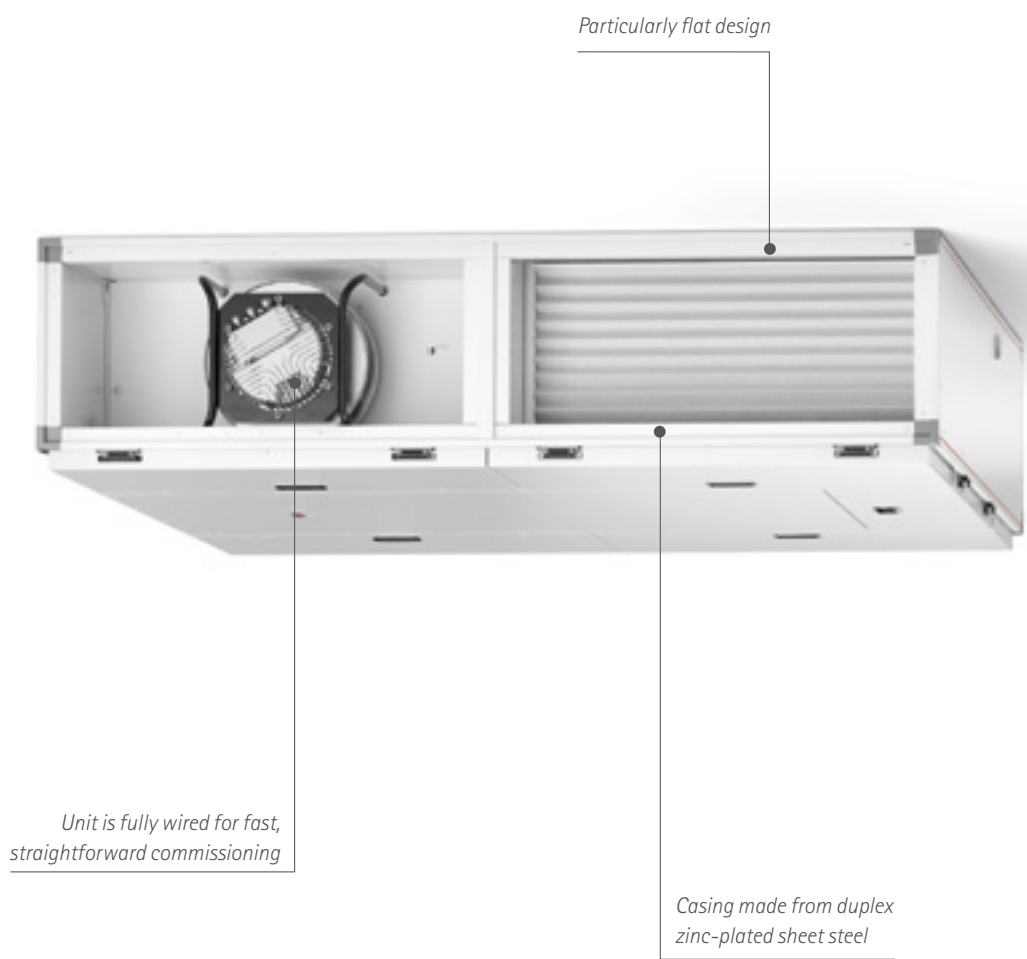
CFL-32 – the new model size with power reserves

Wolf Comfort slimline ventilation units are internal, ceiling mounted units designed to provide controlled ventilation in modern properties. Their compact installation height makes them ideal for use in suspended ceilings. The individual components and the unit layout exceed the increasingly stringent requirements regarding energy efficiency and hygiene. Thanks to the unit layout and the components used, the Wolf Comfort slimline ventilation unit with CFL-WRG heat recovery takes account of all requirements and regulations. Heat is recovered by means of an aluminium countercurrent plate heat exchanger (PHE) with efficiency levels up to and exceeding 90%. If used in combination with the latest EC motor technology, this can result in a significant reduction in primary energy costs.

The new CFL-32 at a glance:

- Particularly flat design
- Compact, inherently stable housing
- Casing made from duplex zinc-plated sheet steel
- High energy efficiency thanks to variable speed, centrifugal fans featuring EC technology (IE4) plus countercurrent plate heat exchangers with efficiency levels over 90% (CFL-WRG)
- Countercurrent plate heat exchanger can be circumvented by means of a bypass
- Unit is fully wired for fast, straightforward commissioning
- Compliant with hygiene guideline VDI 6022
- Control panel with control unit mounted in the appliance; supplied programming unit can be used as a remote control
- Wide range of accessories available

				NEW	
TYPE		CFL-10-WRG	CFL-15-WRG	CFL-22-WRG	CFL-32-WRG
Weight	kg	130	160	240	340
Flow rate	m ³ /h	1000	1500	2200	3200
At available ext. pressure of supply/extract air	Pa	270/295	380/395	220/170	600/610
Heat recovery rate	%	> 90	> 90	> 90	> 90
Length	mm	1322	1322	1525	1932
Width	mm	1017	1423	1830	1932
Height	mm	367	367	411	495
Control panel width	mm	115	115	115	Integrated in the appliance



Heating equipment for industry and commerce

Air heaters with highly efficient EC fans

Designed for all fields of space heating, Wolf air heaters always ensure constantly pleasant temperatures, e.g. in warehouses and production facilities. Equipped with modern, economical EC fans, the new Wolf air heater series greatly reduces power consumption.

Whether in the smaller version, the Wolf LH-EC 25 with a flow rate of 2400 m³/h, or in the most powerful version, the LH-EC 100 with a flow rate of 9400 m³/h, all Wolf air heaters feature well-engineered, sophisticated technology and are easy to install and maintain.

The new LH-EC air heater series at a glance:

- Smooth-running, variable speed fan (230 V/50 Hz)
- Energy saving primarily in the partial load range
- Air flow rates of up to 9400 m³/h
- Very good sound levels – extremely quiet
- Variable control possible via 0-10 V signal
- Very robust housing
- Detachable casing panels allow heat exchanger to be removed
- Cu/Al heat exchanger, suitable for pumped warm water (heating coil, DHW coil), pumped hot water up to 140 °C at nominal pressure up to 16 bar, steam up to 9 bar, alternatively in zinc-plated steel



Smooth-running, variable speed EC fan

LH-EC/TLH-EC/TLHK-EC		25	40	63	100
Voltage	V/Hz	230/50			
Power consumption	kW	0.165	0.31	0.4	0.605
Max. power consumption	A	1.35	1.4	1.8	2.7
Speed	rpm	1475	1350	1000	890
Insulation class	THCL	130 (B)			
IP rating	IP	54			
Excess temperature protection	mm	Integral temperature monitoring			
Controllability	mm	0-10 V (DC), variable			
ErP 2015		Compliant			



Robust housing

LH-EC air heater



Relief not only for allergy sufferers

The Wolf CWL-T-300 Excellent Comfort mechanical ventilation unit

The CWL-T-300 Excellent is a central mechanical air handling unit with heat recovery. In addition to mechanical air handling in line with demand, supply air is preheated and filtered. At the same time, stale and humid air is extracted from bathroom, kitchen and toilet areas.

The appliance is a perfect floorstanding solution. Thanks to its compact design, the unit is ideal for rooms with limited space. Its footprint is significantly smaller than that for comparable appliances and the unit can be positioned against a wall to save space. Access from the front makes the unit particularly easy to service.

A hydraulic reheater coil can be integrated, which allows supply air to be heated with a maximum heating output of 3000 W. It therefore supports the conventional heating system in providing comfortable indoor conditions. Positioning of the CWL-T-300 Excellent next to a Wolf heat generator forms a visually appealing technical entity. This building services centre comprising the CWL-T-300 Excellent and a Wolf heat generator e.g. BWL-1S, CGS-2 or TOB, can be controlled easily, conveniently and completely via the BM-2 programming unit.

The new CWL-T-300 at a glance:

- Positioning against the wall
- All maintenance from front: filter replacement via filter drawer
- Slim, compact, quiet operation
- Modular design suitable for BWL-1S, CGS-2 or TOB Wolf heat generators
- Heat recovery level of up to 95 %
- Constant flow control with EC fans featuring backwards curved impellers
- Low power consumption of 36 W at an air handling performance of 150 m³/h and 50 Pa external pressure
- Air handling performance 50 – 300 m³/h
- Integrated preheater coil 1 kW, infinitely variable
- Filter G4 (optionally F7)
- Corrosion-resistant heat exchanger
- Condensate drain DN 32
- Integrated bypass damper and siphon
- Control unit (accessory) with user prompts, simple operation
- Optional hydraulic reheater coil (max. 3000 W)

		NEW
TYPE		CWL-T-300 EXCELLENT
Max. air flow rate at max. external pressure		300 m ³ /h at 150 Pa
Dimensions (width x depth x height)	mm	475 x 585 x 1287
Integral preheater coil		Yes
Reheater coil	W	Optional, internal, hydraulic, 3000
Bypass		Integrated



Doubly efficient: The CWL-T-300 Excellent can be combined perfectly with Wolf heat generators

Filter drawer

Heat recovery up
to 95%

Positioning against the wall



Optional control
via smartphone



Wolf system design

Smart ideas – more efficiency



Heating



Gas condensing



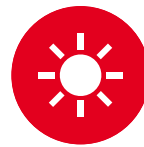
Oil condensing



Biomass



Combined heat and power generation



Solar thermal technology



Heat pumps



Ventilation/air handling



Cooling



Heating



Humidification/dehumidification



Hygiene



Energy recovery



Mechanical air handling



Control technology



Smartphone control



Remote maintenance



Building management system

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Energy saving and environmental protection as standard