

The logo for WOLF, with the letter 'O' replaced by a red circle. The background of the slide is split diagonally from the top right to the bottom left. The left side is a dark blue gradient with light rays and a satellite in space. The right side is a solid red color.

WOLF

[POWER SYSTEMS]

For partners and end customers
GTK 50 EVO H₂
Edition March 2023

THE NEW GENERATION OF COMBINED HEAT AND POWER GENERATION

GTK 50 EVO H₂

www.wolf-ps.de

Drivers of the energy transition

With over 35 years of experience in the field of decentralized energy systems and over 2400 installed systems worldwide,

we are the partner for energy solutions with combined heat and power - from engineering till integration and maintenance.

We present:

GTK 50 EVO H₂

THE BEST OF COMBINED TECHNOLOGIES





EFFICIENT & CLIMATE-NEUTRAL

THE NEW GENERATION OF CHP UNITS

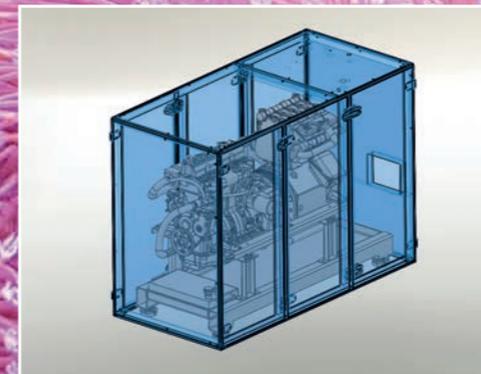
GTK 50 EVO H₂ - flexibel

With the GTK 50 EVO H₂, you play an active role in shaping the energy transition - whether operating with pure hydrogen, biomethane, natural or liquid gas.

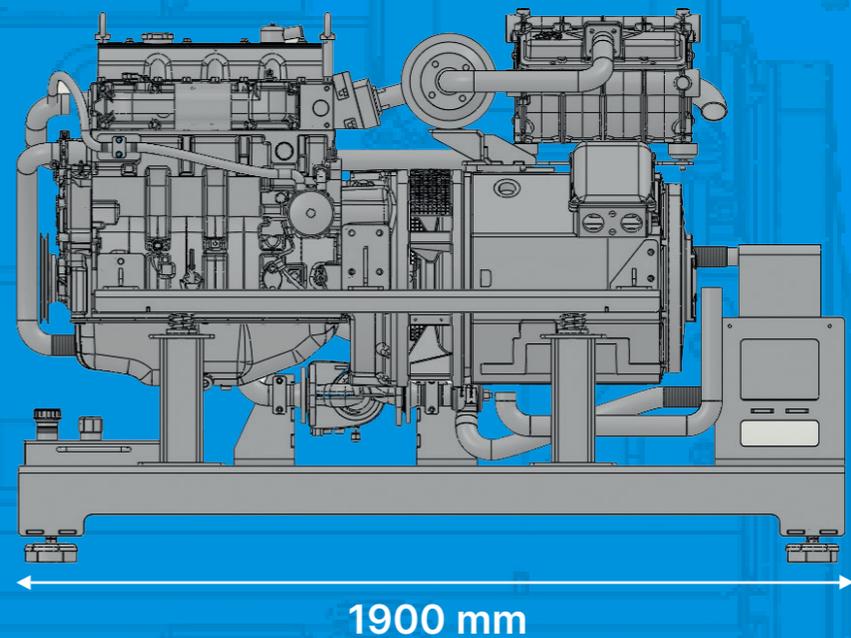
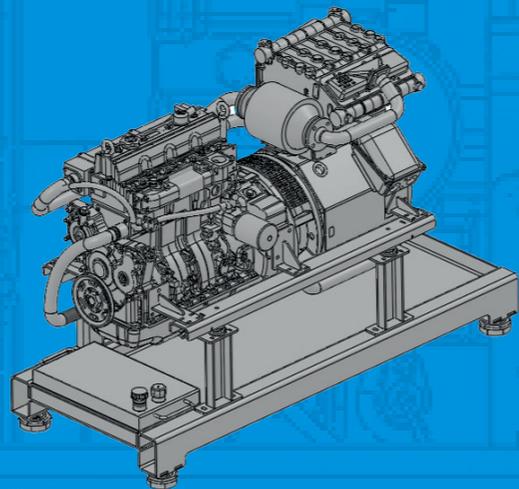
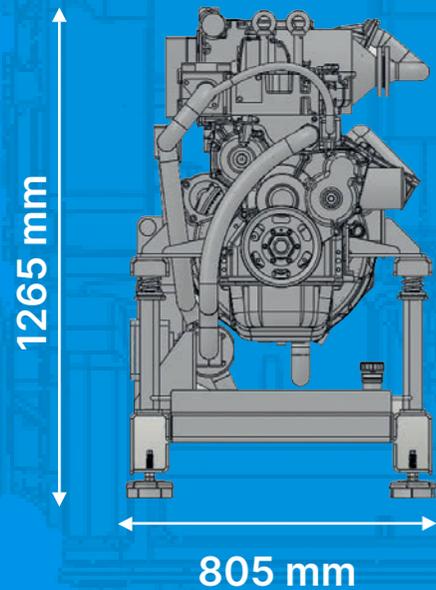
Climate-neutral, demand-driven and optimal generation and use of electricity and heat through CHP.

INTELLIGENT DESIGN

GTK 50 EVO H₂ compact



A state-of-the-art steel construction was created from laser edged parts, which guarantee enormous stability with the lowest weight. This enables a compact structure and complete dismantling. Thus, integration is possible even in constrained conditions.



THE COMPACT POWER PACKAGE

Every millimeter counts.

- Plug & Play – ready for connection

GTK 50 EVO H₂ – space saving and space giving

- lowest noise emissions
- space-saving
- highly efficient

only
805 mm wide
1900 mm long
1265 mm high

So that the operation of the plant SILENCE does not have a disturbing effect on the surroundings our

GTK 50 EVO H₂

is designed for the lowest possible noise emissions. Built-in vibration dampers reduce the sound and the separate design of the sound and heat insulation casing as well as the generator unit reduces the structureborne sound power to a minimum. This means that the GTK 50 EVO H₂ can be installed both outdoors and indoors.



UNDISTURBED SILENCE





GTK 50 EVO H₂ sustainable

Thanks to variable interfaces to the customer's plant, the module can be installed in the smallest possible space and offers maximum ease of maintenance.

The sound and heat insulation casing can be removed for maintenance purposes.

**CLEAN
CLIMATE FRIENDLY
FEELING OF FREEDOM**

ONE CONCEPT FOR ALL ENERGY SOURCES



GTK 50 EVO H₂ - adaptable

Intelligent and flexible selection of individual components guarantee efficient use of the energy carrier.

- Flexible suspension depending on the application
- Exhaust gas heat exchanger with utilization of the condensing technology
- guarantees highest efficiencies
- Specially developed exhaust gas silencer system for optimum
- sound insulation

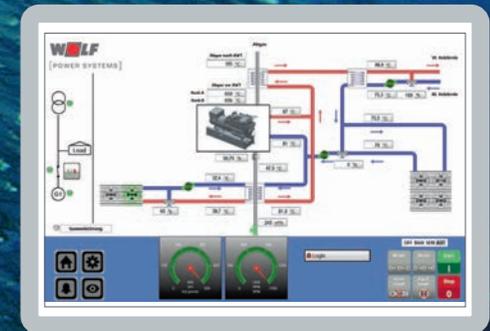
VISUAL REPRESENTATION OF THE OPTIMUM OPERATIONS

GTK 50 EVO H₂ digital

The fast and intuitive usability of the system control offers you a clear display of all relevant information of the system.

The system can be integrated into the building technology via all common BUS systems.

You can monitor the optimal operation at any time via your mobile device.





SECURE SUPPLY
ECONOMICAL
SUSTAINABLE

The path to the energy solution

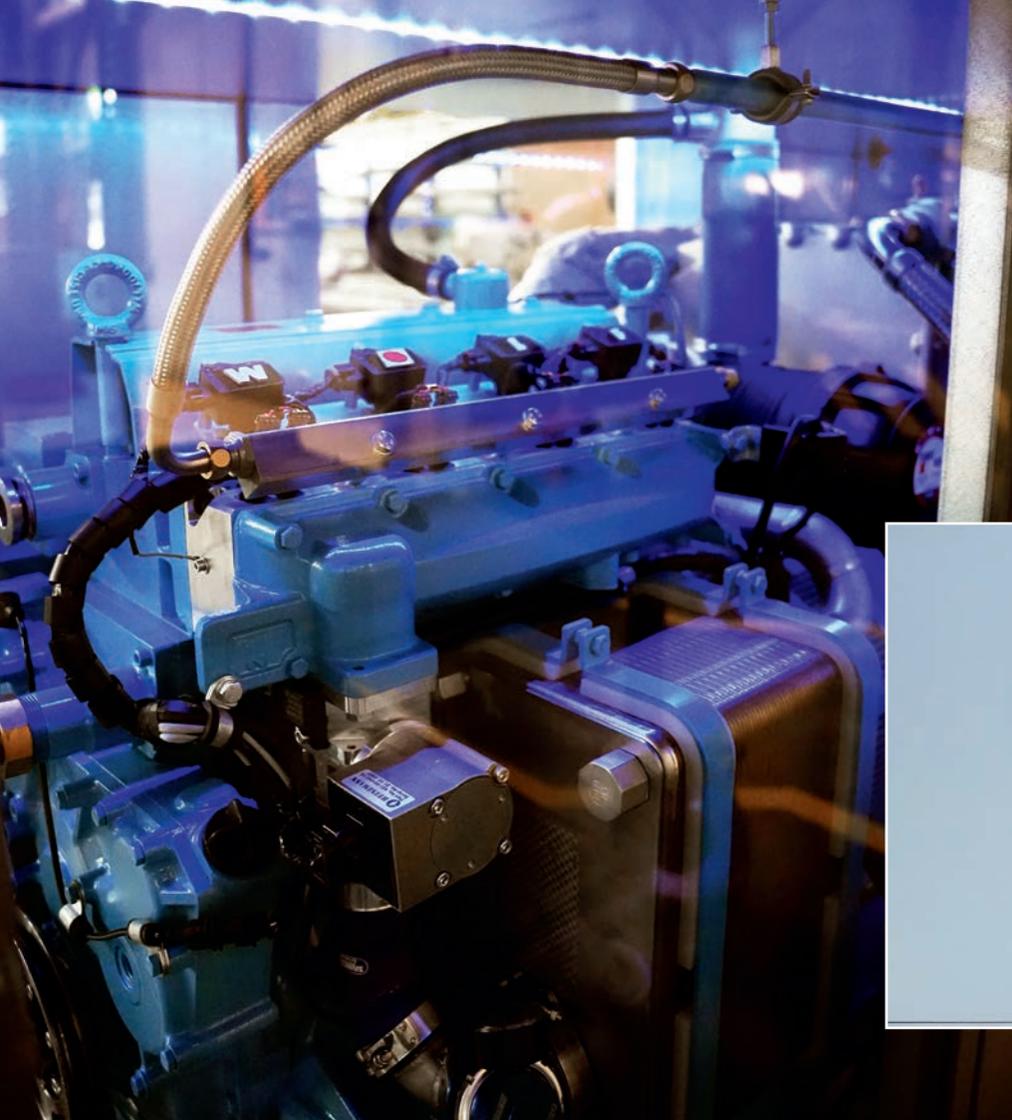
GTK 50 EVO H₂ team capable

We accompany you

- with the design
- with the feasibility study
calculations support you in planning
- with developing a customized concept
- with the integration and installation
- with full maintenance

If you have any questions about the product, please do not hesitate to contact our sales team.





Technical data gas



Core components of the module

Module type	GTK 50 EVO
Engine type	MAG 49.4 S213A
Generator type	WKASYG 250/4-330T

Total power of the genset continuous

electrical power at 100 %	50 kW
thermal power at 100 %	100 kW (Tolerance 5 %)
energy input full load at 100 %	145 kW (Hi) (Tolerance 5 %)

Efficiencies

Continuous electrical power at 100 %	34,5 %
Thermal efficiency at 100 %	69,0 %
Total efficiency at 100 %	103,5 %
Electricity efficiency	
Primary energy savings acc.	0,50

Directive (natural gas) 2012/27/EU

Dimensions without sound insulation hood

Length / width / height 31,3 %

Dimensions with sound insulation hood 1.900 / 780 / 1.265 mm

Length / width / height

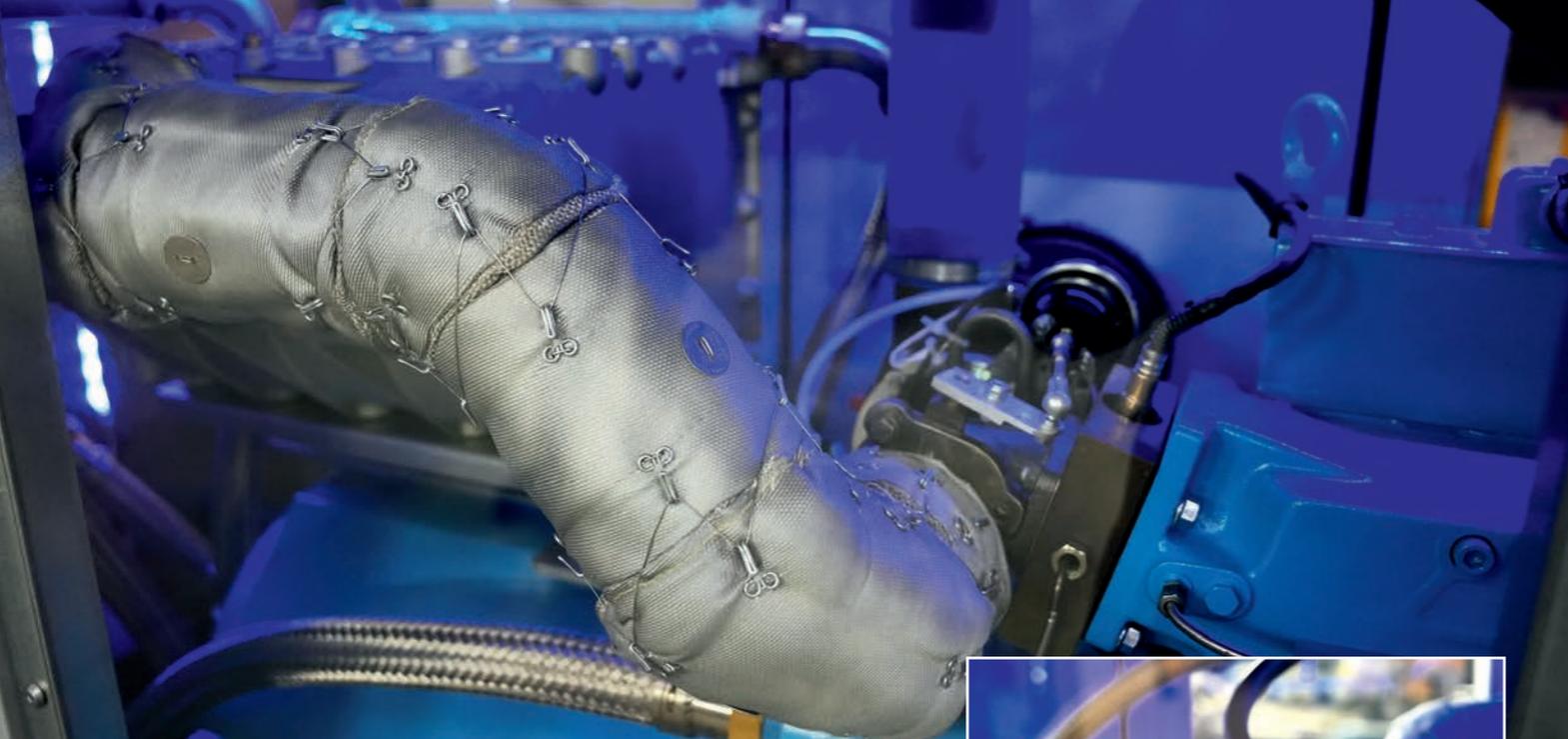
Exhaust emission values Exhaust gas 2.200 / 1.100 / 2.000 mm

purification system Pollutant emissions

NOx content	3-Wege KAT
CO content	< 100 mg/Nm ³
Formaldehyde CH ₂ O	< 100 mg/Nm ³
Exhaust gas Sound pressure level pa10m according to module	< 20 mg/Nm ³ 65 db (A)

HIGHLIGHTS:

- Industrial gas Otto engine
- Water-cooled asynchronous generator
- Exhaust gas heat exchanger with calorific value utilization
- Three-way catalytic converter
- Enormous stability and space-saving due to compact design
- Control cabinet removable from module
- Lowest noise emissions
- No active housing ventilation
- > High thermal efficiency
- Plug & Play ready for connection
- Maximum ease of maintenance due to variable interfaces to the customer's plant



Technical data hydrogen

Core components of the module

Module type	GTK 50 EVO H ₂
Engine type	MAH 49.4 TI211A
Generator type	WKASYG 250/4-330T

Total power of the genset continuous

electrical power at 100 %	50 kW
thermal power at 100 %	95 kW (Tolerance 5 %)
energy input full load at 100 %	142 kW (Hi) (Tolerance 5 %)

Efficiencies

Continuous electrical power at 100 %	
Thermal efficiency at 100 %	34,8 %
Total efficiency at 100 %	67,3 %
Electricity efficiency	102,1 %
Primary energy savings acc. Directive (natural gas) 2012/27/EU	0,53

Dimensions without sound insulation hood

Length / width / height	30,7 %
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Dimensions with sound insulation hood

Length / width / height	1.900 / 780 / 1.265 mm
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Exhaust emission values Exhaust gas

purification system	2.200 / 1.100 / 2.000 mm
Pollutant emissions	
NOx content	3-Wege KAT
CO content	< 60 mg/Nm ³
Formaldehyde CH ₂ O	< 60 mg/Nm ³
Exhaust gas Sound pressure level pa10m according to module	< 10 mg/Nm ³ 65 db (A)

HIGHLIGHTS:

- Enormous stability and space-saving due to compact design
- Industrial gas Otto engine
- Water-cooled asynchronous generator
- Exhaust gas heat exchanger with calorific value utilization
- Control cabinet removable from module
- Lowest noise emissions
- No active housing ventilation
- > High thermal efficiency
- Maximum ease of maintenance due to variable interfaces to the customer's plant
- Plug & Play ready for connection

GTK 50 EVO H₂



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