

# Hoval TopGas® max (50-150)

Wall-mounted gas condensing boiler for residential dwellings, commerce and industry

A secure prospect
for the future:
suitable for biomethane and
hydrogen

The TopGas® max is already suitable for green gas – 100% biomethane, for example green gas – these the approval certificate

Moreover, it has the approval certificate for operation with natural gas with up to 20% hydrogen added.





Top price-performance ratio



Versatile



Straightforward

# Affordable cost gas condensing boiler solution

TopGas® max is the most affordable gas condensing boiler solution from Hoval. It is perfect for standard applications with higher output requirements in residential, commercial, and industrial buildings.

Whether as a standalone boiler, a monovalent cascade, or part of a hybrid system with a heat pump, this boiler offers a smart, economical solution for heat outputs up to around 500 kW—supported by Hoval's renowned, comprehensive service offering.



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Wall-mounted gas condensing boiler for heating and generating hot water with low operating costs. Infinitely variable output adjustment with controller.

Suitable for blocks of flats, commercial and industrial buildings, new buildings and renovations.



#### Top price-performance ratio

When it comes to higher heat outputs at low costs, there is often no alternative to gas condensing technology. By combining low investment and consumption costs with state-of-the-art technology, TopGas® max is the perfect solution.

Highly efficient gas condensing technology with a stainless steel heat exchanger and a modern premix surface burner – which can adjust its output continuously from approx. 20–100% – makes the TopGas® max an affordable yet high-quality solution.



#### Versatile

TopGas® max is a great fit for applications with a gas heat output of up to approx. 500 kW:

- Monovalent as a single unit or as a cascade
- Bivalent as a hybrid solution, e.g. with heat pumps (up to 80% renewable energy in annual energy consumption)

  TopGas® max is also very flexible when it comes to fuel. It can be operated with:
- Natural gas with an admixture of up to 20% hydrogen (H<sub>2</sub>)
- Propane
- Biomethane (100% renewable energy)
  TopGas® max systems are therefore perfectly produced to the perfect perfect perfectly perfectl

TopGas® max systems are therefore perfectly prepared for developments on the fuel market.



### Straightforward

TopGas® max easily enables the implementation of more complex systems.

Monovalent cascades and connections to a building management system are integrated into the basic control system.

More complex systems such as bivalent hybrid systems are realised with Hoval TopTronic®E. Larger systems are visualised, controlled and monitored with Hoval's own HovalSupervisor cloud control system. The famously reliable range of Hoval services also makes planning, installation and operation much easier.



#### Monovalent cascades

Installing several TopGas® max units in a cascade results in powerful gas condensing systems with heat outputs of more than 500 kW.

When heat outputs of approx. 500 kW or more are required, however, we recommend using the more powerful floor-mounted Hoval UltraGas® 2.



From an output of around 500 kW, the floor-mounted Hoval UltraGas® is often the more favourable option.



#### **Hybrid systems**

The TopGas® max unit requires limited space and is therefore ideal as a peak load boiler for bivalent systems in combination with heat pumps.

Hybrid systems of this kind enable annual coverage with 80% renewable energy from the heat pump – at only 50% of the total heating load.



Hybrid system with heat pumps: from a gas heat output of around 500 kW, we often recommend using the floor-mounted Hoval UltraGas® 2.



# Simple overview for complex systems: HovalSupervisor cloud

The HovalSupervisor cloud control system is suitable for complex systems or for centralised monitoring of heating networks. This makes it very easy to visualise, control and monitor them.

This is also ideal if systems at several locations need to be monitored remotely. In many cases, HovalSupervisor cloud eliminates the need to visit the systems in person.

Hoval TopGas <sup>®</sup> max		(50)	(65)	(100)	(125)	(150)
Energy efficiency class $(A^{***} \rightarrow D)$		А	А	-	-	-
Room heating energy efficiency with controller and room sensor ηs	%	96	96	96	96	96
Nominal heat output at 80/60°C, natural gas 1)	kW	7.8-45.3	13.0-66.4	19.4-94.1	22.5-113.9	25.7-138.3
Nominal heat output at 50/30°C, natural gas 1)	kW	9.1-49.9	14.9-69.9	22.3-102.0	26.3-125.3	29.8-150.4
Nominal heat output at 80/60°C, propane <sup>2)</sup>	kW	7.8-45.3	13.0-66.2	19.4-94.1	22.5-113.9	25.7-138.3
Nominal heat output at 50/30°C, propane <sup>2)</sup>	kW	9.1-49.9	14.9-69.9	22.3-102.0	26.3-125.3	29.8-150.4
Boiler efficiency at 80/60°C in full-load operation (H/H $_{\rm s})$ $^{\rm 3)}$	%	96.3 / 86.8	97.3 / 87.7	98.2 / 88.5	98.2 / 88.5	98.2 / 88.5
Boiler efficiency at 30% partial load operation ( $H_{\text{r}}/H_{\text{s}}$ ) (according to EN 15502) $^{3)}$	%	107.9-97.2	108.2-97.5	108.1-97.4	107.8-97.1	107.9-97.2
Boiler water content (V <sub>(H20)</sub> )	I	4.5	4.5	6.5	8	9.5
Sound power level of heating noise (EN 15036 Part 1) (dependent on room air)	dB(A)	53	53	53	51	51

<sup>&</sup>lt;sup>1)</sup> In relation to natural gas G20 (100% methane). With a hydrogen content (H2) of up to 20 % in accordance with DVGW ZP3100 (D), an output reduction of up to 7% is possible.

<sup>&</sup>lt;sup>2)</sup> Data related to H<sub>i</sub>. TopGas<sup>®</sup> max is also suitable for propane/butane (liquid gas) mixtures.

 $<sup>^{\</sup>scriptscriptstyle{(3)}}$  Conversion acc. to EN 15502-1, Appendix J

## Hoval quality.

### You can count on us.



Hoval is one of the leading international companies for heating and indoor climate solutions. Drawing on more than 80 years of experience and benefiting from a close-knit team culture, the Hoval Group delivers exciting solutions and develops technically superior products. This leadership role requires a sense of responsibility for energy and the environment, which is expressed in an intelligent combination of different heating technologies and customised indoor climate solutions.

Hoval also provides personal consultations and comprehensive customer service. With around 2500 employees in 15 companies around the world, Hoval sees itself not as a conglomerate, but as a large family that thinks and acts globally. Hoval heating and indoor climate solutions are currently exported to

Responsibility for energy and environment Liechtenstein

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