# **Press Release** Thermotechnology



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## New manager on the hybrid team Bosch efficiently controls hybrid heating systems

- Hybrid heating technology is the key to a socially just energy transition.
- New OptiEnergy function intelligently mediates between conventional heat generators and heat pumps.
- Olio Condens 8800i F is a future-proof player in the hybrid team.

Wernau – Constant high performance and future-proof operation: Hybrid heating systems combine the individual benefits of condensing boilers and heat pumps into an efficient team – a green perspective, especially for existing buildings. The new intelligent OptiEnergy function from Bosch now ensures even more sustainability on the hybrid team.

## Hybrid solutions for a demand-driven energy transition

The reconciliation of economic growth, environmental protection and social justice is fundamental in paving the way towards a sustainable heat supply. This is the benchmark for the combination of condensing boilers and heat pumps, which makes the installation of renewable energy technologies in existing buildings easier than ever. While heat pumps supply the majority of the heat, peak load boilers only step in at very low outside temperatures or for thermal disinfection of domestic water. Taking into account fluctuating gas, oil and electricity prices, hybrid heating systems offer more flexibility than a single heat source alone. Besides environmental benefits such as lower carbon emissions, this primarily results in an economic advantage.

## Optimum control of the energy supply

The efficiency of a hybrid heating system depends largely on the way it is controlled. If all components of the heating system are perfectly matched, the entire system can be intelligently controlled. In buildings with high flow temperatures, the combination of oil/gas condensing boilers and heat pumps offers a high level of comfort at optimum efficiency. The goal is to use both energy sources in the best possible way. This ensures that the heat pump

Bosch Thermotechnik GmbH Junkersstraße 20-24 D-73243 Wernau E-mail: patricia.rieth@de.bosch.com Phone: +49 7153 306 2652 Communications (TT/COM) Head: Thomas Pelizaeus www.bosch-presse.de operates at an optimum COP and the condensing boiler at maximum efficiency. The new OptiEnergy control function from Bosch takes advantage of this effect. Your smart control centre: Hybrid Manager MH 200-1. With the help of the MH 200-1, OptiEnergy takes into account parameters such as the sensor temperatures, the temperature requirements of the respective heating system, the generation of domestic hot water, the outside temperature and the heat pump's operating status. Based on previously set customer preferences regarding comfort and energy prices, OptiEnergy then calculates the optimum operating point of the respective heat generator. In doing so, OptiEnergy focuses on either cost-optimised or environmentally optimised control of the hybrid heating system. As part of the modular control system, the UI 800 control panel helps OptiEnergy analyse current electricity and gas prices and uses them to decide which heat generator is more economical. However, if the user's main priority is to save carbon emissions, OptiEnergy takes this into account in controlling the heating system, and the renewable heat source is used preferentially. In addition to optimised system operation, OptiEnergy allows to operate hybrid heating systems without an additional buffer storage tank.

#### Heat generator with potential for the future

The new Olio Condens 8800i F oil condensing boiler from Bosch is clearly geared towards sustainability. Improved combustion, sophisticated electronics and efficient operation make it an ideal component of hybrid heating systems. Controlled via the MH 200-1 hybrid manager and equipped with the high-quality UI 800 colour touch display and K30 internet gateway, the Olio Condens 8800i F quickly and easily becomes part of an efficient hybrid solution thanks to the new OptiEnergy control function. And its adaptability makes this oil condensing boiler a future-proof addition to Bosch's range of condensing boilers: Depending on the requirements, the boiler can be converted to gas in just a few steps. The conversion kit also allows using liquid gas. PHC professionals then use the corresponding wheel to select the preferred gas type (L, H or LP gas). Besides green fuels, the new Olio Condens 8800i F also allows a hydrogen admixture of 20 percent after conversion to natural gas. The oil condensing boiler operates in two stages. Once converted to gas, it becomes a fully modulating boiler (1:10). Thanks to the selectable maintenance position, all relevant components of the Olio Condens 8800i F are easily accessible, ensuring high efficiency and a long service life.

The Olio Condens 8800i F oil condensing boiler will be available starting October 2023.



#### Bosch press photo 01:

Hybrid heating systems combine the individual benefits of condensing boilers and heat pumps into an efficient team – a green perspective, especially for existing buildings. (Source: Bosch)



#### Bosch press photo 02:

The Olio Condens 8800i F oil/gas condensing boiler can be operated with liquid fuels with a maximum of 10 percent FAME (EL A Bio 10 heating oil according to DIN SPEC 51603-6, HVO, R33, etc.) as well as with 100 percent paraffinic fuels (Hydrogenated Vegetable Oil (HVO) and Power to Liquid (PtL) based on DIN 51603-1/-6/-8). These have very good combustion properties and are ideally suited as greenhouse gas-reducing admixtures or as substitutes for EL heating oil. (Source: Bosch)



#### Bosch press photo 03:

Based on previously set customer preferences regarding comfort and energy prices, the OptiEnergy control function calculates the optimum operating point of the heat pump and condensing boiler and then decides which technology is more economical at a given time. (Source: Bosch)

#### Contact person for press inquiries:

Patricia Rieth Phone: +49 7153 306 2652

The Bosch heating and air conditioning brand offers sustainable solutions for heating, cooling and greater comfort and well-being throughout the home. The product portfolio comprises efficient, resource-saving and future-oriented heat pumps, hybrid solutions, solar thermal systems, electric water heaters, air conditioners as well as intelligent energy management systems including home charging solutions for electromobility. The product portfolio is complemented by a comprehensive range of digital tools and services that facilitate the daily work of PHC professionals. The technical solutions from Bosch cover all requirements of new buildings and modernisation projects and are quick and easy to install, simple to maintain and effortless to connect.

For maximum comfort and well-being in your own home, Bosch also offers solutions for better air and water quality. These include home ventilation systems, air purifiers and bathroom fans for clean and fresh air, and water softeners for perfect water quality throughout the home. The well-being portfolio of the Bosch heating and air conditioning brand is completed by infrared panels, bathroom radiators, electric heaters and other indoor climate solutions.

More information as well as press texts and images are available for download on the website at <u>www.bosch-einfach-heizen.de</u> .