Networking provides many benefits

LIN-capable gas blowers for boilers

Digitization has long since become established in the heating systems sector. But until now no streamlined communication solution was available for small boilers. LIN-capable gas blowers from ebm-papst are about to change all that. To the advantage of manufacturers, fitters, and end users.

The Local Interconnect Network (LIN-Bus) interconnects sensors, actuators, and their control devices in a network. For condensing boilers, this means: Pumps, valves, sensors, and blowers are linked to the combustion controller. A prerequisite is that the system components are LIN capable.

Pioneers in heating technology

Engineers at ebm-papst developed a gas blower that satisfied the technical requirements ten years ago, but no other LIN-capable components were available for heating systems at that time. Since then, other manufacturers of components such as pumps have followed suit. This means that for the first time, boilers now exist that are able to make use of this well-established communication system.

Benefits thanks to networking and control

Boiler manufacturers can now also read out additional data, e.g. information about power consumption, speed, and ambient temperature in order to further optimize combustion and increase the boiler’s performance. Since the LIN-Bus is bidirectional, it can also transmit commands. Therefore, it is now optionally possible to position the speed controller directly in the blower. Thanks to faster and more precise speed control, the modulation range can be expanded. Less cabling effort is another benefit. Only one cable is required, which connects all slave units with the master.

Easy maintenance and service

During maintenance, there is no time-consuming troubleshooting since the problem is identified directly on the service technician’s screen. The evaluation of operating hours, start-stop cycles, and ambient temperature profiles permits simple status monitoring with LIN blowers. With the LIN-Bus, it is possible to record states and therefore to initiate a timely replacement of parts before they become defective. This predictive maintenance is another big benefit for the end user.

The two ebm-papst VG 71 and VG 100 blowers for a heat output up to 50 kW from the RadiMix product range are LIN capable. This power range makes them suitable for use in individual houses and apartment blocks. Other sizes, namely the VG 108 and VG 122 for up to 150 kW, are planned.
Networking provides many benefits

LIN-capable gas blowers for boilers

Fig. 1: LIN-capable gas blower VG 100 for use in boilers.

---

**About ebm-papst**

The ebm-papst Group is the world's leading manufacturer of fans and motors. Since it was founded, the technology company has continuously set global industry standards: from the digital interconnection of electronically controlled EC fans to aerodynamic improvements for fan blades to the use of eco-friendly materials.

In fiscal year 2017/18, the company achieved sales of over € 2 billion. ebm-papst employs over 15,000 people at 27 production sites (e.g. in Germany, China and the US) and in 48 sales offices worldwide. Fans and motors from the world market leader are used in many industries, including ventilation, air conditioning and refrigeration, household appliances, heating, automotive and drive engineering.