

EBS Rotary Screw Blowers

Pure efficiency

The EBS 410 rotary screw blower from Kaeser represents a new milestone in the development of oil-free compression blower technology, designed especially with water industry applications in mind.

With a flow rate of 10 – 40 m³/min and pressure differentials from 0.3 to 1.1, as well as a selection of motors ranging from 22 to 75 kW, the innovative EBS 410 sets new standards in terms of energy efficiency, space-saving design and automation.

The SFC version is equipped with a frequency converter and a synchronous reluctance motor – a slip-free design that combines all the advantages of high efficiency permanent-magnet motors with those of robust, service-friendly asynchronous motors. Thanks to variable speed control, the flow rate can be adjusted as required and a control range of 1:4 is achieved, which allows exceptionally dynamic operation.

The STC version is now equipped with an energy-saving IE4 Super Premium Efficiency motor that reduces energy consumption and therefore costs, making the STC version more efficient than ever before.

With both versions, power transmission from the motor to the airend takes place via loss-free and maintenance-free gearing, which results in an up to 8 % improvement in specific power compared to the previous model. The complete machine achieves an isentropic efficiency of up to 80%, representing the pinnacle of performance for oil-free compression machines. In order to ensure that the specified performance figures are translated into reality, Kaeser guarantees performance in accordance with the strict tolerances of the ISO 1217-C/E standard.

Furthermore, efficiency remains constant across the entire control range and flow rate is virtually unaffected by pressure fluctuations. This allows the blower to be precisely regulated and adjusted at all times via the master control system. This achieves even greater energy savings and also ensures effortless integration with other control technologies.

These new models will be available in two different sizes – up to 37 kW and 75 kW respectively. They not only stand out on account of their attractive, contemporary design, but they can also be installed side-by-side, leading to considerable space savings. The 37 kW version in particular is impressively compact, featuring a footprint of only 2.2 m² (or 2.6 m² for the 75 kW version).

EBS 410 rotary screw blowers are delivered ready for immediate connection, including controller and frequency converter, or star-delta starter. All units are CE and EMC-certified, thereby minimising the planning, construction, certification, documentation and commissioning costs for planners, operators and plant manufacturers. Last but not least, highly effective sound and pulsation damping ensure exceptionally quiet operation.

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Images:



EBS series rotary screw blowers are true standouts with their high efficiency and compact design.