**COMPAMED in Düsseldorf is the leading international trade show for suppliers and developers of medical technology and is being held from November 12-15 this year. ebm-papst is showing ventilation and drive engineering solutions for innovative, reliable medical technology in hall 8b, booth H27.**

**External rotor motors with integrated control electronics**

The brushless VDC-49.15-K4 external rotor motor from ebm-papst features outstanding power density and compact dimensions. It has an integrated speed, torque, and position control function. The drive is equipped with completely integrated K4 operation and control electronics, and in combination with the PerformaxPlus 63 planetary gear, can be used in operating tables and pump drives.

**Internal rotor motors for rehabilitation devices**

The brushless, electronically commutated internal rotor motors feature extremely smooth operation and a long service life. The K1 electronics module is dimensioned for operation with external control electronics that record the rotor position with Hall sensors, for example. In combination with the Performax 42 planetary gear, the ECI-42.40-K1 drive is installed in knee braces that are used in rehabilitation. The motors induce longitudinal displacement.

**Getting there faster**

In the modular system, both standard and preferred types of the ebm-papst drives are available. Preferred types are ready for shipment within 48 hours for quick sampling purposes, for example. In this way, engineers can receive an ebm-papst drive, install it and test it in a short period of time so they can quickly progress in their development work – an important component of time to market.

**Centrifugal fans for respirators**

Patients with sleep apnea suffer from breathing interruptions while sleeping and require a breathing mask for support. The mask transports air (oxygen) into the lungs at regular intervals. Systematic head and air quantity control supports the body’s own breathing reflex, which requires a particularly high level of pressure. At the start of the breathing sequence, a high level of pressure is required and the level is low at the end. This means pressure fluctuations between 400 Pa and 2,000 Pa. The RV45 centrifugal fan from ebm-papst was specially developed for these requirements. Its highly dynamic characteristics enable it to deal with pressure fluctuation within 200 ms and with 410 l/min and a pressure increase of over 5,000 Pa, it delivers the technical support required for a refreshing night’s sleep. The fan is extremely quiet to encourage uninterrupted sleep.



Figure 1: The VDC-49.15-K4 is used in operating tables and allows patients to be positioned perfectly.

# Figure 1 ebm-papst

# Characters approx. 2,600, including headings and sub-headings

# Tags medical technology, Compamed, internal rotor motor, external rotor motor, planetary gear, sleep apnea

# Link <https://www.ebmpapst.com>

**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.