**The compact RV45 DC centrifugal fan from ebm-papst was developed to meet the special requirements of medical respirators, where it proved to be very successful. This paved the way for the RVE45, which has been specially developed for use in industrial applications. This impresses with dynamic air delivery at a high static pressure increase.**

The compact RVE45 centrifugal fan with integrated electronics is designed for applications that require dynamic air transport and high pressure, such as vacuum lifters, mobile extraction systems, fire alarm systems, and packaging technology.

**From 0 to 36,500 rpm in less than 500 ms**

Its dynamic EC internal rotor motor facilitates adaptation to rapid pressure changes and switches both quickly and reliably between a high and considerably reduced pressure. The RVE45 implements changes in speed from 0 to 36,500 rpm in less than 500 ms. The aerodynamics and motor of the centrifugal fan are optimized for rapid speed changes. It generates over 4,600 Pa and is still small, lightweight, and quiet.

**Particularly light and compact design**

The high nominal speed permits a dynamic power development made to measure, supported by the rotor’s low moment of inertia. Active braking ensures a similar dynamic response at negative acceleration. Vibration-absorbing materials and optimum aerodynamics ensure a particularly quiet operation. Another advantage for industrial applications is the fan's compact design. It only measures 64 x 64 x 65 mm including the control electronics and only weighs 160 g. The RVE45 is available in two versions with 12 and 24 V DC. The speed is controlled using an analogue or PWM signal.

**Design freedom thanks to hose fitting**

The optional hose fitting for the inlet side can also be used to implement complex installations. An intake hose is fitted to the hose fitting, which has a diameter of 22 mm and draws in the air where the ambient conditions allow. This means that various compact fan positions can be selected within one device, which brings greater freedom when designing an application and makes it easier for the designer to make adaptations in an existing device logic. Therefore, the RVE45 sets up a flexible air supply in a small installation space with a low noise level of just 58 dB(A).

Fig. 1: The RVE45 compact fan from ebm-papst ensures greater design freedom thanks to the optional inlet-side hose fitting.

# Fig. 1 ebm-papst

# Characters Approx. 2,300, including headings and sub-headings

# Tags compact fan, industry, RVE45, design, hose fitting, centrifugal fan, EC internal rotor motor

Link [www.ebmpapst.com/rve45](http://www.ebmpapst.com/rve45)

**About ebm-papst**

The ebm-papst Group, a family-owned company in Mulfingen, Germany, is the world market leader in fans and drives. Founded in 1963, the technology leader with its core competences motor technology, electronics and aerodynamics, has set international market standards ever since. With over 20,000 products, ebm-papst offers customized, energy-efficient and intelligent solutions for virtually any ventilation and drive technology requirements.

In fiscal year 2019/20, the hidden champion achieved a turnover of 2.188 billion euros and employed almost 15,000 people in 29 production sites (e.g. in Germany, China and the US) as well as in 48 sales locations. With their fan and drive solutions, ebm-papst defines and sets the benchmark in practically all industries, such as ventilation, air-conditioning and refrigeration, heating, automotive, IT, mechanical engineering, catering and household appliances, intralogistics and medical engineering.