**Noise protection, active cooling and vibration decoupling of high-pressure fans**

**The new BOX from Elektror provides a complete solution for high-pressure applications**

Ostfildern, 05.06.2023 – Air-related high-pressure applications require industrial fans to run at high speeds. This means noise – often too much for the ergonomic requirements in the direct working environment. Although the sound insulation covers of the past did succeed in reducing the noise of the fans, they also increased the operating temperature, as they were usually complete enclosures. This negatively affected the service life of the fans. To address this, Elektror airsystems gmbh from Ostfildern further developed the concept of sound insulation covers, with the BOX. The BOX offers a noise reduction of up to 29 dB(A), active fan self-cooling with vibration decoupling and the possibility to additionally equip it with an integrated control system.

**Noise protection and increased functional reliability for high-pressure fans**

The BOX decreases the working noise of high-pressure fans by up to 29 dB(A) and thus makes it possible to comply with the applicable occupational safety regulations. Additionally, it functions as a standalone unit and thus decouples the fan from the working environment in the factory hall. This increases the functional reliability.

The Elektror BOX is available in three sizes (S, M, L) and three equipment levels (Basic, Digital, Professional). It is suitable for the high-pressure fans in the HRD and A-HP series from Elektror. To control the fans, preconfigured frequency converters can be installed directly on the fan or on the outside of the BOX. Alternatively, it is also possible to install a control cabinet including PLC control on the BOX. For smooth plug-and-play integration as a standalone solution or as a component of a complex system, the Elektror engineers directly configure the operating points of the frequency converters as required. This simplifies integration of the BOX and the Elektror fans.

Quick-release fasteners on the sides, top and base plate make it easy to open the BOX for maintenance. Additionally, the BOX can be equipped with sensors, filters, different connections and Air Knives for precise control of the outlet air flow. In this way, the BOX can be customised for individual wishes and applications.

**Complete systems for high-pressure applications with the Elektror BOX**

High-pressure applications such as the cooling of welded points or the ventilation of systems with larger air resistances require precisely specified air flows and air flow rates. For this purpose, Elektror manufactures complete systems for simple plug-and-play integration into existing systems according to specific customer requirements. Together with the high-pressure fan, the control and pipe system and Air Knives, the Elektror BOX forms a unit. This unit is 100% tailored to the respective requirements.

From compiling the detailed log of requirements to running 3D simulations, Elektror engineers calculate exactly which air flow and which air flow rate is required at which point in order to achieve the desired effect. Thanks to the compact BOX, these system solutions can be installed directly on the systems or, for example, above existing conveyor belts. This shortens pipe and hose lengths and thus lowers the required air pressure. This saves energy and costs.

**About Elektror airsystems gmbh**

Elektror turns air into a means of production. With our radial fans, axial fans and side channel blowers, we always provide the right air flow volume and pressure for air-related applications. The use of cast aluminium, steel and stainless steel as materials for our fans and compressors makes them suitable for a wide range of operating conditions. Customised solutions, complete systems and competent consulting round off the core competences of Elektror.

Air is a central component of almost all production processes in industry and in manufacturing. That’s why we can be found in many different applications and sectors. For example, our systems dry the chocolate coating on biscuits, keep the air in production halls clean, cool workpieces for further machining, support efficient treatment of drinking water and much more.

Today, Elektror employs a staff of around 450 at its headquarters in Ostfildern (Esslingen district), at numerous international sales locations and at the production sites in Waghäusel (Germany), Plüderhausen (Germany) and Chorzów (Poland).