

VHE 800 HPM



High-efficiency axial motorised fan

LEROY-SOMER has been the partner of refrigeration and air conditioning manufacturers for many years. The company's experience, acquired through working with some of the greatest names in the profession, makes LEROY-SOMER a specialist in the motors and motorised fans fitted on machines produced by these industries.

The new **VHE 800 HPM range of axial fans** meets the requirements of the HVAC industry, yet offers real innovations:

Firstly, regarding the drive mechanism, the **VHE 800** has adopted the new **HPM (Hybrid Permanent Magnet)** technology for **synchronous motors**, making it easier to integrate the motorised fan in the machine. This type of drive mechanism ensures very high, constant efficiency over the entire speed range and is exceptionally compact.

Another major advantage of this new range is the use of **remote control electronics**, exclusive to LEROY-SOMER. Unlike many motorised fans, where the control electronics are integrated at the motor non-drive end, this fixing outside the external fan case, away from the air flow, ensures cooling of the variable speed drive and prevents it from operating in high ambient temperatures which can reach 70°C.

◆ Main advantages!

- **Very high motor efficiency:** 90% over the entire speed range.
- **Very low noise level:** Optimised blades with winglet.
- **The extremely compact size** of the **HPM** motor, which reduces the axial dimensions of the motorised fan, making it more easily integrated into the manufacturer's machine.
- **Exceptional reliability**, due to:
 - Use of sensorless technology
 - Being placed outside the air flow, the remote electronics are no longer thermally linked to the motor and are therefore no longer at risk of overheating
 - The variable speed drive is encapsulated in resin, promoting better heat exchange with its environment and reducing the risk of external stresses (humidity, vibrations, etc.)
 - The steel fan case removes heat from the variable speed drive by means of the heat dissipation fixing component
- **Ease of commissioning:** Modular electronic switching.
- **Ease of accessibility:** Being placed outside the fan case, the electronics are easily accessible and can be changed quickly due to the use of fast-on connectors.

The **VHE 800**, fitted with a synchronous motor of the **HPM** technology developed by **LEROY-SOMER**, incorporates the best available technology to anticipate the requirements of future European directives.