



## **ebm-papst provides savings at Copenhagen Central Station**

ebm-papst, Europe's leading manufacturer of high efficiency fan and motor technology, has cut power consumption in a major Danish railway station by 66% thanks to its energy-efficient fans.

Shops and restaurants at Copenhagen Central Station benefitted from ebm-papst's EC fans, which replaced the old AC fans within the building's antiquated ventilation system.

The modern shopping centre is housed in a 100-year-old concourse so the search for energy savings fell on improving the ventilation in the shops and restaurants. Fitting a modern ventilation system into the cramped equipment rooms was impossible, which led to the decision to modernise the existing ones.

Energy consumption measurements conducted before and after the refitting showed savings equal to what a new facility would have provided – but crucially at a lower price. The investment will pay for itself in less than a year.

"The ebm-papst solution at the station is superb," says Property Manager Kim Jensen, who works for the company Steen & Strøm, which operates 16 shopping centres in Denmark, including the Central Station Shopping Centre.

Five fans were replaced at the Central Station in two days and switching from AC to EC fans has already led to direct energy savings.

Helen McHugh, head of sustainability at ebm-papst UK, says: "This case study shows how effective our EC technology is in reducing energy costs and businesses' carbon footprints. It means that motors and fans can be controlled, regulated, and are able to respond quickly to what is required of them. Not only do customers reduce their electricity bills, they also benefit from extended maintenance intervals, which means even greater cost savings for parts and labour."



**FACTS:** Accurate pre-and post-measurements for a specific system with 2 fans.

Energy consumption per. week:

<b>Weekly energy consumption:</b>	<b>Before</b>	<b>After</b>
Supply:	651 KW	296 KW
Extract:	631 KW	139 KW
Total:	1282 KW	435 KW

Weekly savings: 847 KW; annual savings: 44.044 KW = 66 %

**FACTS:** All restaurants and shops are ventilated from two equipment rooms. Rebuilding the ventilation system and tailored adjustments have meant massive savings. Parts of the existing system were merged or taken completely out of service.

**Equipment room 1:** Consumption reduced from 8-10000 KW per. month to 1700 KW for savings of at least 78%.

**Equipment room 2:** A total saving of approximately 40%.

