



Press Release

A switch to energy-saving fans in cooling unit saves 34%

IT and telecom company Jaynet in Denmark saves a third of its energy consumption on its cooling system by changing from stand AC fans to energy-saving EC fans from ebmpapst. The investment will be recouped in about four years.

Jaynet's survival depends on reliability, which is why cooling its 2,000 m² server room is of vital significance. There are seven large chillers lined up along the building with six fans on top of each one. They run 24 hours a day, the speed adjusted up or down as needed. By switching to modern axial fans with integrated speed control and EC motors, Jaynet saves about 7,000 kWh annually on the operation of one of seven units. That corresponds to approximately one third of the energy consumption spent on the fans for the chillers that still run using AC fans.

New fans have initially only been installed on one of the seven chillers and the energy consumption is being closely monitored and compared to measurements from the adjacent unit, where the fans have not been replaced. Data has been collected for six months using secondary meters connected solely to the fans. Jaynet's hosting facility manager Martin Axelsen has looked at the numbers.

The chillers with the new fans use about a third less power than the others, but we won't be able to determine the exact amount of savings before we have done measurements for a full year. The need for cooling varies greatly, of course, in relation to the outside temperature and we just had an extremely hot summer, where the fans really worked hard and ran at up to 100% of their capacity, explains Martin Axelsen.

Better than expected

When the outside temperature drops and the fans run below 100% of their capacity, the size of the savings increases again, and Martin Axelsen believes that the realized savings will be about 7,000 kWh annually, which corresponds to a savings of 34%. This result is a cut above the minimum savings of 28% that ebmpapst, the supplier of the fans, guaranteed prior to replacement.

Gemma Lloyd
Marketing
ebm-papst UK Ltd
Phone: +44 (0)1245 468555
Fax: +44 (0)1245 466336
gemma.lloyd@uk.ebmpapst.com

[Twitter.com/ebmpapstuk](https://twitter.com/ebmpapstuk)
[Facebook.com/ebmpapstuk](https://facebook.com/ebmpapstuk)
[Youtube.com/ebmpapstuk](https://youtube.com/ebmpapstuk)
www.ebmpapst.co.uk



Press Release

- The AC fans that were replaced weren't very old and were of a good quality, which means that the savings will be achieved solely due to the change from AC to EC technology. When we energy renovate a cooling unit, it's most frequently older and poorer types of fans we are replacing, which means that the savings are much larger, all the way up to 70%. Jaynet demonstrates that switching from AC to EC fans always pays off, even though the AC fans were new, says product manager Henrik Dahl Thomsen, ebmpapst.

Gemma Lloyd
Marketing
ebm-papst UK Ltd
Phone: +44 (0)1245 468555
Fax: +44 (0)1245 466336
gemma.lloyd@uk.ebmpapst.com

[Twitter.com/ebmpapstuk](https://twitter.com/ebmpapstuk)
[Facebook.com/ebmpapstuk](https://facebook.com/ebmpapstuk)
[Youtube.com/ebmpapstuk](https://youtube.com/ebmpapstuk)
www.ebmpapst.co.uk