

## AxiCool fans

A breath of fresh air in refrigeration technology

**ebm**papst

The engineer's choice



## Setting tomorrow's standards today

AxiCool sets ...

**new standards in the evaporator and cooling unit market. Not least thanks to the level of system efficiency achieved through the perfect interaction of the individual components. And that's not the only good thing about AxiCool: The compact axial fan is also extremely easy to handle and offers outstanding efficiency throughout whilst making sparing use of resources. Convenient service, ease of operation and excellent air throw round off the spectrum of positive features. The AxiCool fans are based on the HyBlade® product range.**



### Installation made simple

Plug and Play: There is no longer any need to worry about aligning and gap dimensions. Just four screws are required for fitting the AxiCool! Quick and easy. And thanks to the connection line, fan installation takes no time at all.

### Customer benefits

- Quick mounting with just four screws
- Simple installation by way of the connection line



4, 3, 2, 1 – done! Four screws and the AxiCool is fitted.

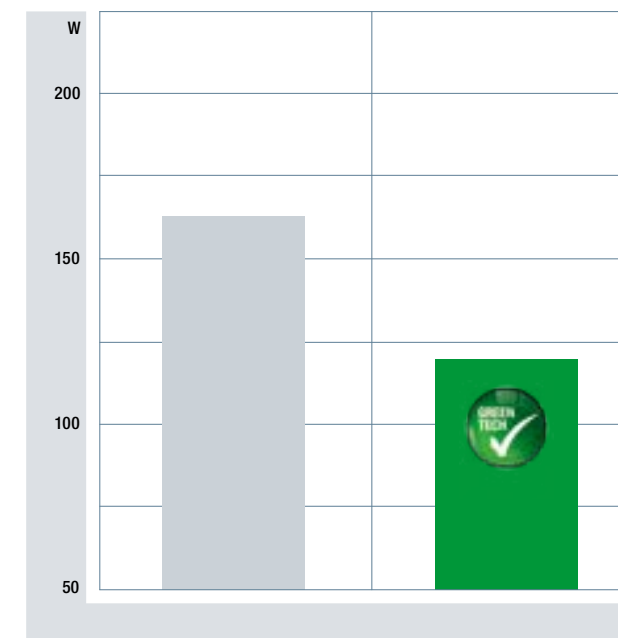


### Top efficiency

The ErP Directive sets out stringent specifications to come into effect in 2015. So it is reassuring to know that these specifications on binding limit values are already surpassed by ebm-papst and that all the benefits of this superior efficiency are there for customers to enjoy. In a nutshell: AxiCool can reduce power consumption by up to 25 %. What's more, ideal system regulation guarantees highly efficient operation – even at part load. And last but not least, optimised cooling and thawing cycles also help to enhance efficiency.

### Customer benefits

- Efficiency specifications as per ErP 2013 and ErP 2015 already surpassed today
- Up to 25 % lower power consumption
- Highly efficient operation even at part load
- Optimised cooling and thawing cycles



Size 350 for example: 25 % lower power consumption than an AC fan.



### Truly sustainable

In our view ecology, sustainability and economical operation are inseparable issues. This "GreenTech" concept is embedded in the ebm-papst philosophy and characterises the entire life cycle: It stands for recycling, waste avoidance, ecological materials, lower emission levels, reduced energy consumption and hence greater efficiency. AxiCool for instance attains just such efficiency with a GreenTech EC motor, which operates at various speed settings or with regulation by way of a linear interface. In addition, the AxiCool product range supports the concept of sustainability with a particularly long service life. It is often possible to preserve resources with simple means: From the outset, AxiCool was designed to have smooth surfaces to facilitate cleaning and so save water.

### Customer benefits

- GreenTech concept combining ecology, sustainability and economical operation through the use of a GreenTech EC motor for example
- Preservation of resources by using less water



Ecology and preservation of resources – two of the factors in the AxiCool success story.



## System efficiency: From Standard to High-End

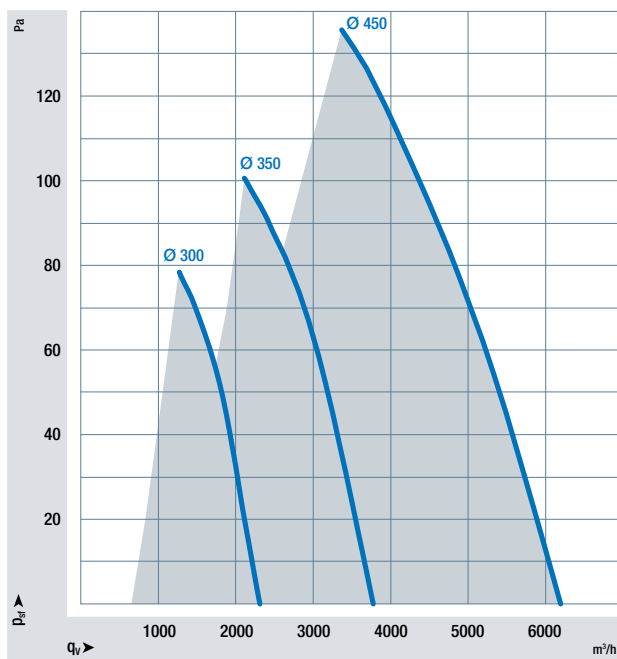
No matter how efficient the components are, the overall result will only be ideal if everything is in perfect balance: System efficiency. So it is good to know that the AxiCool product range operates on precisely this principle.

### Innovation meets perfection

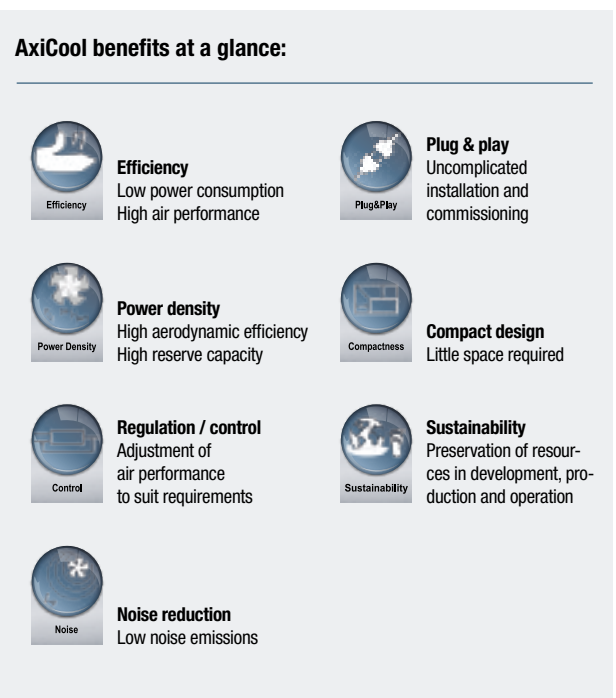
Whichever version of the AxiCool series you decide on: You can be sure of making the right choice, as the innovative features incorporated into this product range always produce perfect results. Four versions of the axial fan are available: A standard version, a version with hinge for easier cleaning or with air-guiding system for ideal cold storage air distribution and a high-end version with hinge and air-guiding system offering the full range of advantages.

The fans can be supplied as size 300, 350 and 450 mm models with AC or GreenTech EC motor to suit all requirements: For instance, AxiCool is also available for both air flow directions. In addition, the EC technology permits control by way of two speed settings or regulation via a linear interface.

The adjacent symbols highlight the winning features of the entire AxiCool series at a glance.



AxiCool air performance range.



Four versions of the same convincing concept: Standard, with hinge, with air-guiding system and high-end model.



#### Patented cavity wall ring

##### + Shorter thawing cycles

- Two-piece plastic wall ring with integrated channels for water drainage, thus reducing ice formation

##### + Simple retrofitting

- Convenient retrofitting of heating tape: For optimised thawing cycles and reduced transfer of heat into cooling chamber

##### + Rapid installation

- Quick and easy to fit with 4 screws

##### + Aerodynamically optimised

- Innovative efficiency-enhancing shape
- Quiet running thanks to ideal aerodynamic design

##### + Convenient cleaning

- Easy-clean surfaces to satisfy maximum hygiene standards



#### HyBlade® impeller

##### + Innovative materials

- HyBlade® impeller made of composite material

##### + High efficiency

- More efficient than other fans on the market thanks to profiled blade geometry and winglets

##### + Quiet operation

- Aerodynamically optimised shape reduces noise by up to 4 dB(A) as compared to other fans available to date



#### GreenTech EC motor

##### + Unrivalled compact design

- Single axial fan unit: Direct integration of external rotor motor into axial impeller

##### + Outstanding energy efficiency

- High degree of efficiency
- Low energy consumption with values already surpassing stringent specifications of ErP Directive for 2015
- Less waste heat

##### + Extremely robust

- Safety class IP 54 for optimum splash water protection

##### + Precision control

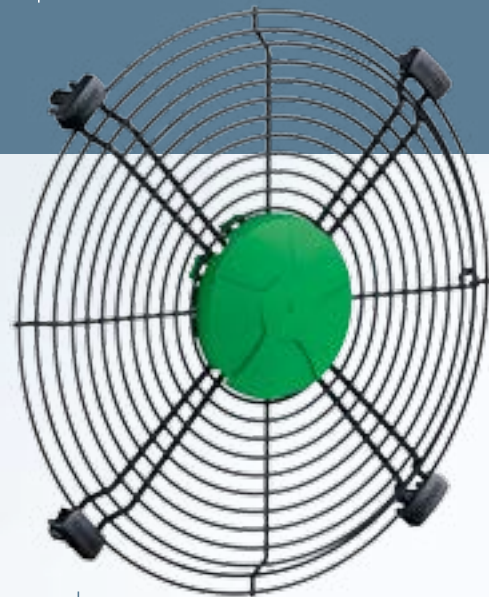
- Exact regulation of air flow – with 0-10 V linear or PWM input and speed signal for controlled operation

##### + Long service life

- Extremely durable thanks to maintenance-free ball bearings and brushless commutation



## Perfection means a perfect match



#### Safety grille

##### + Rugged design

- Standard version with flat metal safety grille: Simple mechanical cleaning in the event of ice formation
- Versions with air-guiding system are applied with a support bracket

##### + Extra splash water protection

- Motor cover guards against splash water



#### Air-guiding system

##### + Excellent air throw

- Air-guiding system can double fan air throw with comparable volumetric flow
- More even cold storage cold air distribution

##### + Simple installation

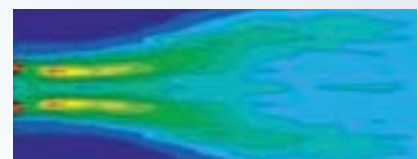
- Uncomplicated retrofitting of air-guiding system

##### + Convenient cleaning

- Easy to detach for cleaning



Cold air distribution without air-guiding system.



Optimised distribution with air-guiding system.

## Keeping fresh produce at its best

The AxiCool product range has an important function to fulfil: Namely, to keep food in cold storage fresh under hygienic conditions. That's why AxiCool is specially designed to ensure an ideal environment right from the start – with the emphasis on hygiene and food safety.

### Maximum hygiene, optimum food safety

A high standard of refrigeration is required to maintain the quality of stored products – only minimal temperature fluctuations and drying-out of the refrigerated items is permissible and the thawing cycles must be short. All these conditions are satisfied by the ideal distribution of cold air in the cold store and innovative concepts such as the patented wall ring design. AxiCool is fully equipped to meet special challenges such as cheese maturing processes or the storage of sensitive fruit and vegetables.

With regard to hygiene, AxiCool cuts no corners. AxiCool features a high level of splash water protection (up to IP 54) and smooth surfaces with no visible screws. The great advantage: Dirt cannot get a grip. And the hinge function ensures easy cleaning of the heat exchanger to HACCP specifications. Simply unfasten the screws, open up the fan and perform cleaning.



AxiCool with hinge – and cleaning becomes child's play.





**ebm-papst**  
**Mulfingen GmbH & Co. KG**

Bachmühle 2  
74673 Mulfingen  
Germany  
Phone +49 7938 81-0  
Fax +49 7938 81-110  
[info1@de.ebmpapst.com](mailto:info1@de.ebmpapst.com)

**ebmpapst**  
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