

ec

technology

aeroefficiency

LOT6

# ETAMASTER INNOVATIVE | UNIVERSAL | FUTURE-PROOF

# **ETAMASTER AC**



Like the related series ETALINE, it has three-dimensionally shaped rotor and stator blades.

The result is a reduced loss in the energy transfer in the rotor.

The downstream three-dimensionally curved stator causes a large part of the dynamic energy from the impeller output to be converted to usable static pressure.

The complex shape of the impeller blades was determined in numerous CFD calculations and compared with real results in extensive laboratory measurements.



#### EFFICIENT

Maximum aerodynamic efficiency through computer-optimized, three-dimensionally curved rotor and stator blades combined with efficient AC and EC motors. The high requirements of the ErP are exceeded with both engine concepts.



#### SILENT

The main causes of noise are swirls and ruptures in the airflow. A higher aerodynamic efficiency reduces therefore also the noise.



# **ETAMASTER EC**

### THE RESULT

ETAMASTER is the most energy efficient tube fan on the market.

All the efficiency requirements of the Ecodesign Directives which are known today, are clearly exceeded with ETAMASTER.

ETAMASTER offers you freedom in choosing the most suitable drive motor - robust and time-tested AC motors or modern EC motors.



## **ECONOMICAL**

The economical efficiency depends essentially on the duration of use, the efficiency, the investment costs and the desired speed control. With ETAMASTER, you have the possibility to choose the best concept according to your application.



# ELEGANT

The optically appealing housing is made out of impact resistant, mineral and glass fiber reinforced polypropylene.



# **UNIVERSALLY APPLICABLE**



Robust single phase asynchronous 3 speed motors (...M) or for direct grid connection (...E). At the maximum speed step, the efficiency is close to that of the EC motors. The ETAMASTER with AC motors is therefore the more economical fan series for applications where less speed control is required.

The ... M version can be economically controlled with a 3-step switch.

The ETAMASTER range is conceived in such a way that even the versions with AC motors achieve solid pressure values.

### **EC MOTORS:**

The EC motors also have the big advantage that their efficiency only drops slightly when speed controlled.

This means in effect that during half speed operation, the efficiency of an EC motor is about three times higher compared to voltage controlled AC motors.

The fan speed can be easily adjusted using a potentiometer, via a 0-10VDC interface.

The stepless control of the fan according to the actual demand is more elegant and economical. Common demand variables are pressure, temperature, CO<sub>2</sub> content of the air, volume flow, etc.

## **EASY INSTALLATION**

ETAMASTER can be integrated directly into the ductwork. Since the housing is only slightly larger than the pipe system, there are almost no additional space requirements.

The standard mounting bracket facilitates assembly by turning the terminal box into any position.

We recommend connecting the pipes via fast clamps.



# A COMPLETE RANGE

### THE ETAMASTER RANGE

Has grown to encompass 10 sizes, with connection diameters from 100 mm to 400 mm, and achieves a maximum volume flow of over 5000 m<sup>3</sup>/h.

# EM...EC

signal

 High efficiency even in the partial load range

Intelligent control via 0-10V

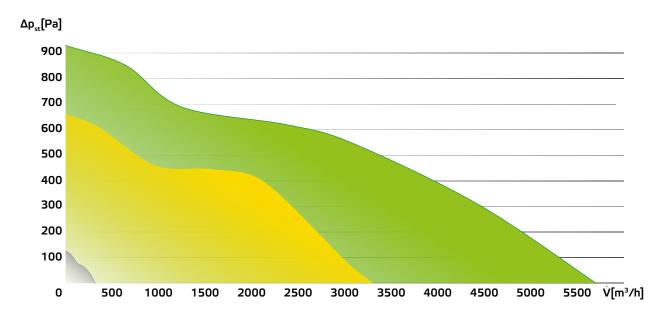
Stepless speed control

High efficiency

EM...M

- 3 speed control
- Transformer is no longer required
- EM...E
- For direct grid connection
- With versions for tube insertion

## MAXIMUM AIR PERFORMANCE CURVES



# OUR PRODUCT RANGE

#### **IN LINE TUBE FANS**

ETALINE and ETAMASTER, the No. 1 in saving energy.



#### **DUCT FANS**

Backward curved centrifugal fans, sound insulated, compact diagonal fans.



#### **EXHAUST FANS**

For industrial or kitchen exhaust, up to  $120 \ ^{\circ}$ C.



#### **ROOF FANS**

With horizontal and vertical discharge, up to 120 °C.



#### **COMPACT AHU**

With counter flow heat exchanger with more than 90% heat recovery efficiency and EC fans. Available with horizontal or vertical air guidance respectively flat units for suspended ceiling mounting.



#### **COMPACT AHU**

With rotary heat exchanger with up to 80% heat recovery efficiency and EC fans. Available with horizontal or vertical air guidance.



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