

DATASHEET



ENGLISH

## EMAX - UNIQUE ErP COMPLIANT HIGH EFFICIENCY PROFILE

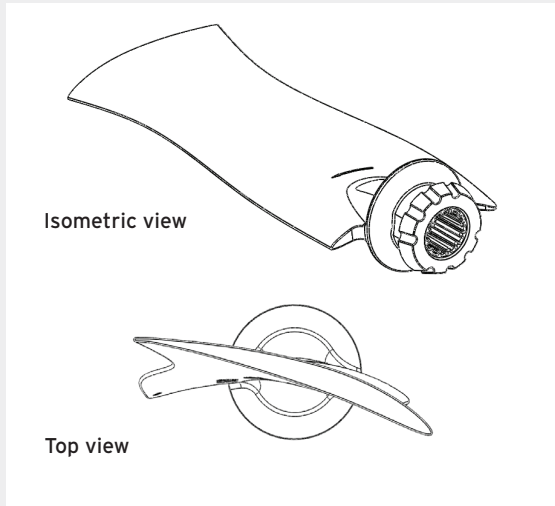
Multi-Wing's high efficiency fan EMAX4 has a unique profile which pushes efficiencies of standard axial fans. It helps minimising the power consumption of your product enabling you to comply with the ErP Directive. It can even help you meet the proposed 2020 requirements, Stage III. And it does so more quietly than before - reducing noise emission by 2-3dB.

The EMAX4 is designed to fit our existing range of hubs and therefore retains all the advantages of the Multi-Wing modular system with variable pitch angles. Available in 5, 6, 7, 9 and 12-bladed configurations with a diameter range from 624 mm to 920 mm.

The high number of possible configurations means that solutions incorporating the EMAX4 is even more flexible than standard solutions. The EMAX4 provides high efficiency rates for a majority of the performance curve and not only in the best efficiency point.

Contact your local Multi-Wing sales engineer for more information on our ErP services and compliant products. And visit our ErP website [www.erpfans.eu](http://www.erpfans.eu)

## EMAX profile



## Design Features

Adjustable pitch settings from 20° to 48,5°. Please refer to the Pitch Settings table.

Available in diameters between 624 mm and 920 mm.

5 hub sizes - 5, 6, 7, 9 and 12 - each available in a range of mounting configurations. Please refer to the dimensions table.

## Materials

The hub parts are as standard manufactured in a pressure die cast silumin alloy (EN AC-AI Si12 Cu1 (Fe)).

The fan blades are available in PPG and PAG to suit applications with different speeds and ambient temperatures.

**PPG** Glass reinforced polypropylene  
Temperature range: -10°C to +90°C

**PAG** Glass reinforced polyamide  
Temperature range: -40°C to +110°C

Please observe penalty factors for temperatures above 40°C

We reserve the right to change the manufacturing materials. The values for the mechanical properties are mean values and can be subject to variations due to the use of different suppliers.

## Dimensions

Hub positions	Number of blades	Max fan diameter [mm]	Hub diameter [mm]	Optimum diameter range [mm]
5	5	785	145	624 - 703
6	3	817	178	703 - 792
6	6	817	178	703 - 792
7	7	824	186	703 - 792
9	3	840	200	703 - 792
9	6	840	200	703 - 792
9	9	840	200	703 - 792
12	6	920	280	792 - 891
12	9	920	280	792 - 891
12	12	920	280	792 - 891

All dimensions are in mm

## Pitch Settings

Pitch setting	Pitch setting with -3,5° offset pin	Pitch setting with +3,5° offset pin
20°	-	23,5°
25°	21,5°	28,5°
30°	26,5°	33,5°
32,5°	29°	36°
35°	31,5°	38,5°
37,5°	34°	41°
40°	36,5°	43,5°
45°	41,5°	48,5°

## EMAX - an ErP compliant fan

The unique EMAX profile is designed to meet the requirements of the ErP Directive. With its high efficiency capabilities it helps minimising the power consumption of the final product.

The EMAX can even help you meet proposed 2020 requirements (Stage III). Connected to an eco-design 2020 compliant 2-4-6 pole motor, the EMAX is significantly above the proposed 2020 requirements.

## Does the ErP Directive apply to your product?

The ErP Directive applies to energy-related products placed on the EU market.

It applies to suppliers of individual components, to suppliers of complete fan sets, and to suppliers integrating electrical motors and fans into their products either as parts or complete fan sets.

The fan industry is impacted by the Commission Regulation (EU) No 327 on fans driven by electrical motors with an input power between 0,125 kW and 500 kW and the Commission Regulation (EU) No 640/2009 on electrical motors.

Multi-Wing can assist you with detailed information on ErP compliance. Visit our web site [erpfans.eu](http://erpfans.eu) or contact your local sales person.

Select ErP compliant fans using our selection software Multi-Wing Optimiser. It also provides the necessary documentation.

