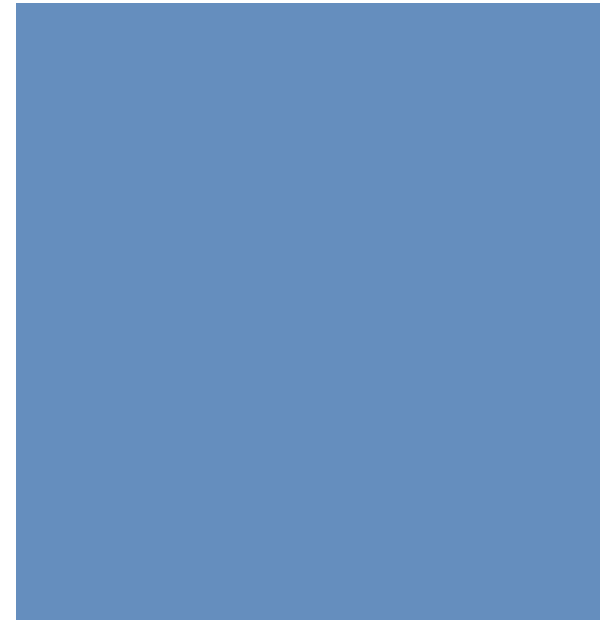


# ACmaxx

Simply better than AC



# AC fans

The standard for decades

## Status quo

- Almost no possibility of innovation for 50 years
- No flexibility
- Short expected operational life
- 70 % of the power consumed is converted into heat
- No increase in air performance



**Does AC represent a sustainable technology?**

# ACmaxx

## 5 reasons to go for it

A new generation of alternating voltage fans for:

- Max. air performance
- Max. efficiency
- Max. operational life
- Max. flexibility (integrated intelligence for variable speed and output signals)
- Max. simplicity (compatible with worldwide line voltage)



**ACmaxx** offers maximum benefits

# ACmaxx

## Benefits – energy efficiency

Technology	Model	Flow (cfm)	Pressure (PA)	Power (W)
ACmaxx	AC 4300	100	85	6.5
Standard AC	4656N	94	80	19.0

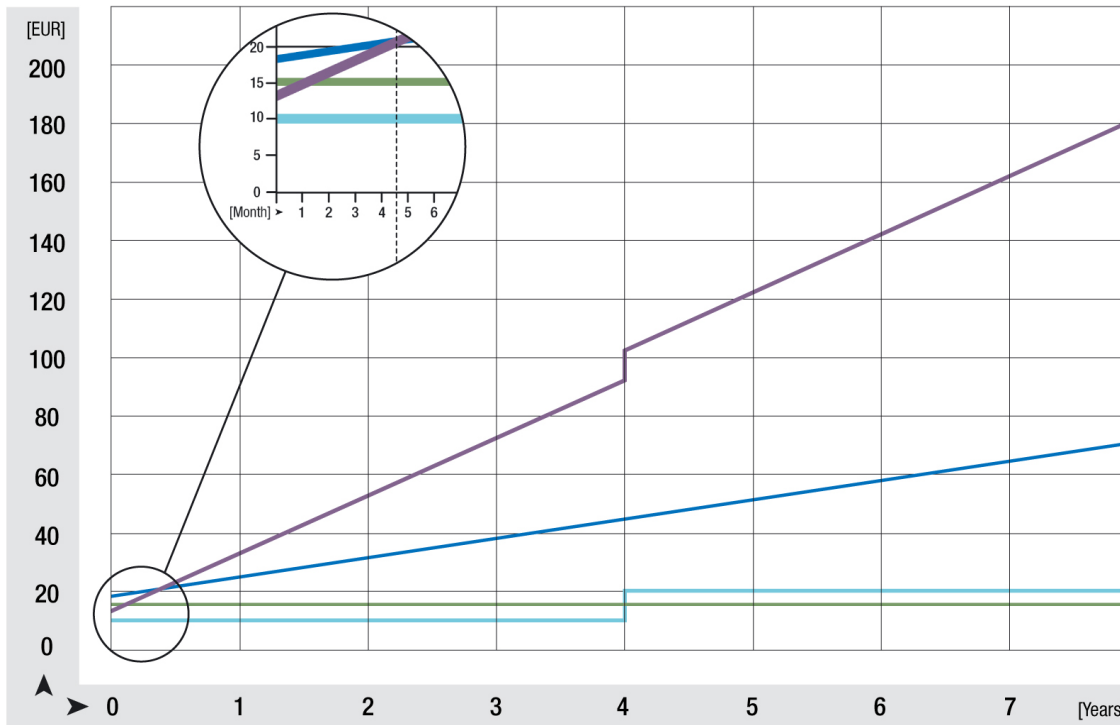
Technology	Model	Cost/kWh	Consumption per year	Cost per year & fan
ACmaxx	AC 4300	\$0.12	56.94 kWh	\$6.83
Standard AC	4656N	\$0.12	166.44 kWh	\$19.97

- 40–75 % lower power consumption
- ACmaxx allows a significant reduction in energy costs

# ACmaxx

## Benefits – cost savings

### Cost comparison standard AC 4650 vs ACmaxx 4300 @ same performance



Ambient temperature: 40 °C

Service costs for standard AC Fan not considered!

- AC maxx Total Costs
- AC Total Costs
- AC maxx Fan Costs
- AC Fan Costs

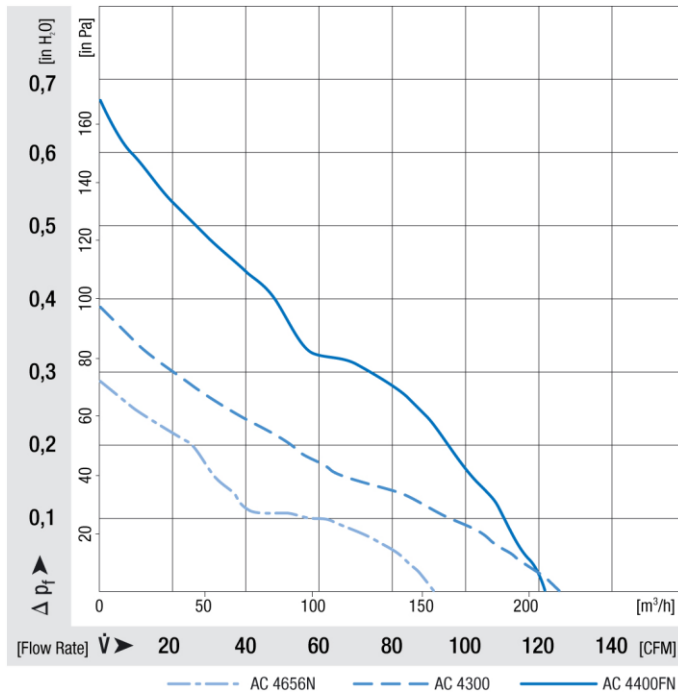
All values per 1 fan.

Energy costs: \$0.12 per kWh.

Break even after 4,5 months

# ACmaxx

## Benefits – better performance



### ACmaxx:

AC 4400FN (5000 rpm, 11 W)

AC 4300 (3500 rpm, 11 W)

### Standard AC:

4656N (2650 rpm, 19 W)

→ Min. 40 % better performance with 42 % lower power consumption!

**ACmaxx** – the first high-performance AC fan!

# ACmaxx

## Benefits – greater reliability and life time

### Fan type Life time L10

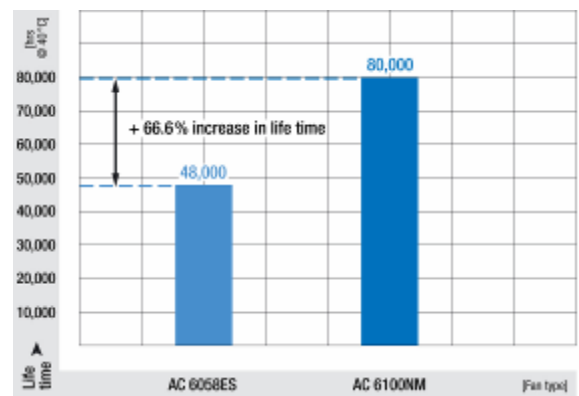
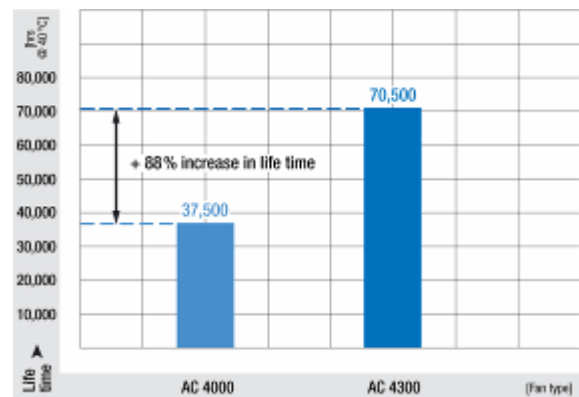
- 120 mm:  
AC 4300: 70,500 hrs @ 40 °C  
4656N: 37,500 hrs @ 40 °C

→ + 88 % increase in life time

- 172 mm:  
AC 6100NM: 80,000 hrs @ 40 °C  
6058ES: 48,000 hrs @ 40 °C

→ + 66.6 % increase in life time

**ACmaxx – fit it and forget it**



# ACmaxx

## Benefits – worldwide line voltage

Supply-voltage range: 85 VAC – 265 VAC (50/60 Hz)

- Consistent performance at all line frequencies
- Consistent performance at all line voltages

→ Fewer fan models, reduced logistics outlay



**First AC fan compatible with worldwide line voltages: one size fits all**

**ebmpapst**



# ACmaxx

## Benefits – flexibility

### Speed control using integrated intelligence

- Speed control according to temperature (internal or external NTC)
- Speed control using PWM/analogue voltage
- 2-speed design
- Constant flow feature for induct fan (defined constant air flow with varying back pressure conditions)

→ **Speed control allows a further reduction in energy consumption and noise**

Technology	Model	Airflow	Noise	Power
ACmaxx	AC 4300	53 – 121 cfm	30 ~ 51 dB(A)	2 ~ 11 W
Standard AC	AC 4656N	94 cfm	47 dB(A)	19 W

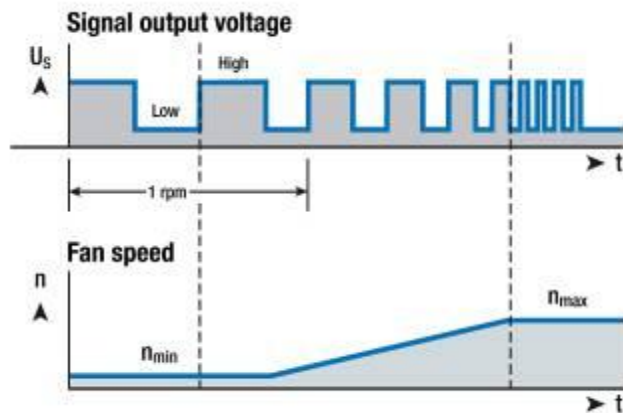
**ACmaxx – first AC fan with integrated speed control**

# ACmaxx

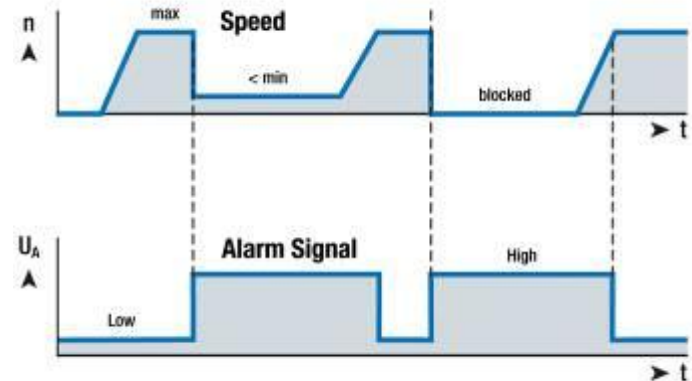
## Benefits – integrated intelligence

### Output signals using integrated intelligence

#### Speed monitoring using **tacho** signal



#### Function monitoring using **alarm** signal



→ Early warning feature/potential to reduce down time

**ACmaxx** – the first AC fan with integrated failure detection

# ACmaxx Products



AC 3200J

92 x 92 x 38mm

+ 32 mm motor module



AC 4400FN

119 x 119 x 25 mm

+ 32 mm motor module



AC 4300

119 x 119 x 32 mm

+ 32 mm motor module

# ACmaxx Products



AC 6100NM

172 x 51mm

+ 32 mm motor module



AC 6200NM

172 x 51 mm

+ 32 mm motor module



AC 3200J

Customised induct fan

100 mm tube