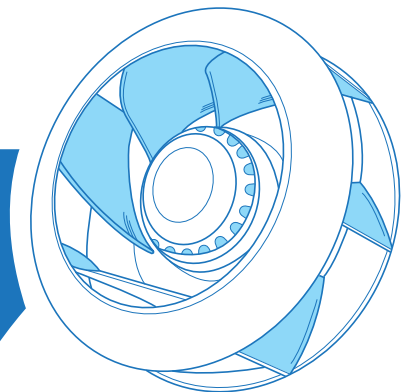
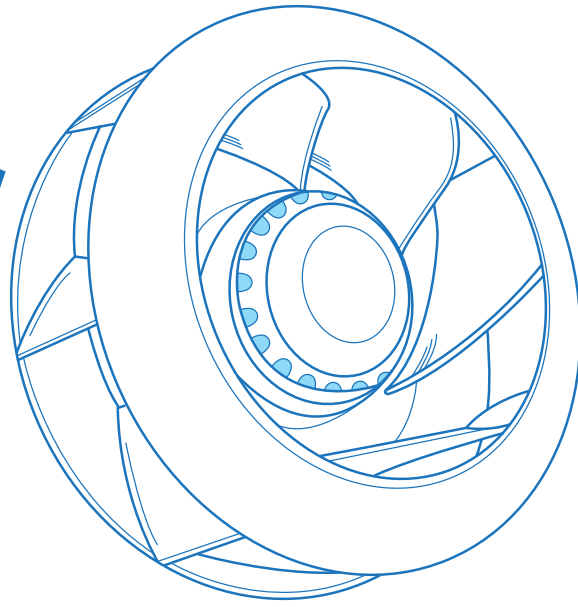


# E-Wheel Backward Curved Centrifugal Fans

OEM 2016



## HIGH PERFORMANCE IMPELLER

Driven by an increased market requirement concerning noise levels, the new E-series impeller design produces significant increases in energy efficiency and major reductions in operating noise levels. It features seven aerofoil design blades for high flow and low to medium pressure applications like computer room air conditioning and air handling, energy recover ventilation, energy recovery units, box and roof fans.

The E-wheel impellers have the same external dimensions as existing impellers and a similar airflow and pressure mix, but system energy efficiency is increased by 4% while the noise level is lowered by 3 to 5 dB (A) depending on system airflow and static pressure.

### E-WHEEL IMPELLER PRODUCT FEATURES

- Low noise
- High quality manufacturing
- High performance
- Suitable for high volume applications
- Suitable for low - medium pressure applications
- Long lasting product material meets all 2015 ERP legislation

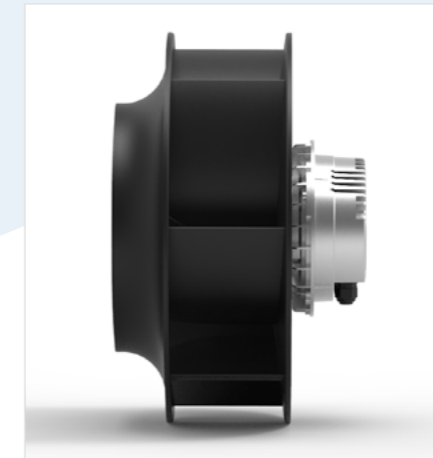


Contact us on **01782 349430** for technical assistance to ensure you choose the right fan for the application or visit our website [www.axair-fans.co.uk](http://www.axair-fans.co.uk) for more information on our full product range.

[#morethanjustafansupplier](#)

## IMPELLER PROPERTIES & MATERIAL BENEFITS

With the help of CFD (Computational Fluid Dynamics) the "E-Series REVOLUTION" or E-Wheel high performance centrifugal impeller, complements our existing range of free running impellers by introducing a line specifically designed for high volume air flows.



### E-WHEEL IMPELLER MATERIAL BENEFITS

- Superior chemical resistance
- Corrosion resistant polypropylene
- Will not absorb liquid
- Low dirt adhesion
- UL listed
- Low noise volume achieved through Improved inherent acoustic damping
- high performance
- No release of toxic combustion gas



Contrary to the pressure focus of the B-Series, manufactured from aluminium, this impeller series is designed and manufactured especially for the use of larger volume flow and lower pressure. The impellers are manufactured using a black, UV-stabilised, long fibre reinforced polypropylene.

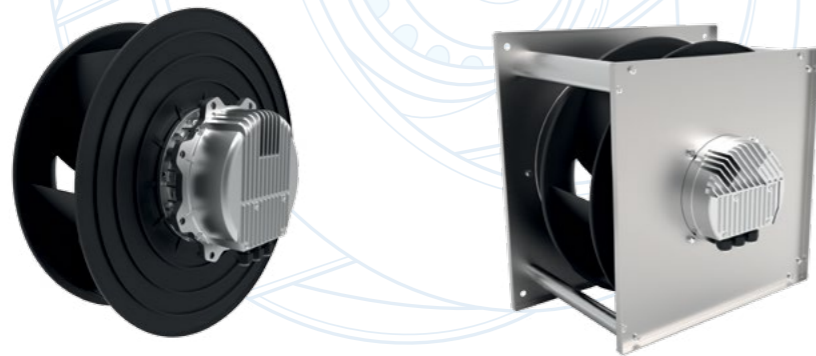
# PROPERTIES AND CONSTRUCTIONS

## E-SERIES "REVOLUTION"

When used with an Electronically Commutated Motor (EC-Motor) or an AC-External Rotor Motor, the range of Axair centrifugal fans with reduced noise, free-running, backward curved, high performance impellers make a very compact, efficient and optimally designed fan unit for your application.

### The fan units are available as:

- GKHR = Motorised Impeller (Inlet cone as accessory) (EC)
  - GKHM = Fan Module / Plug Type (EC)
- Other configurations available on request



- EKHR / DKHR = Motorised Impeller (Inlet cone as accessory) (AC)
  - EKHM / DKHM = Fan Module / Plug Type (AC)
- Other configurations available on request

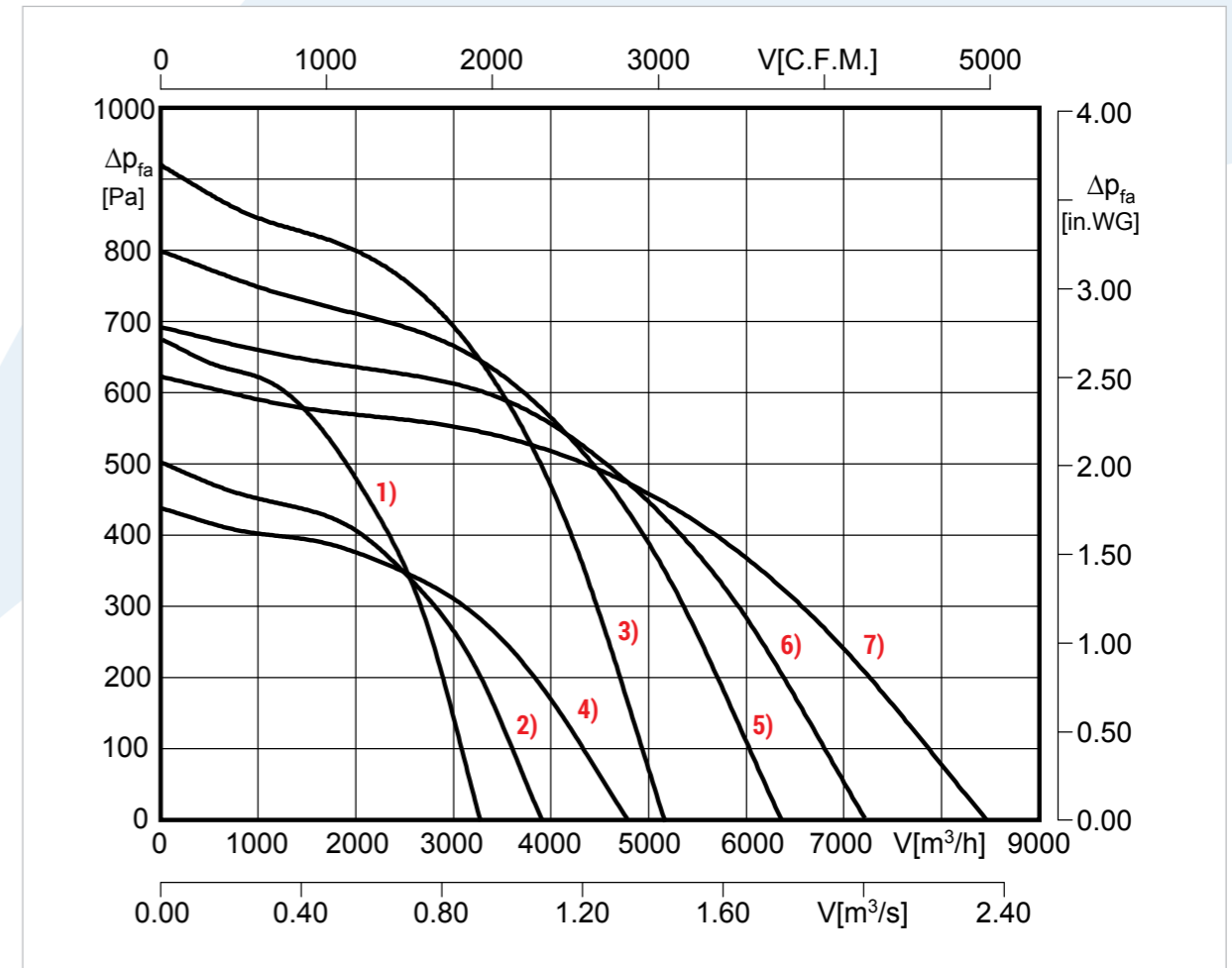


Combining automated impeller manufacturing, efficient sheet metal processing and Rosenberg developed EC-Motors or voltage controllable AC-External Rotor Motors, enables us to manufacture fan modules which offer performance for customers, while been optimally matched with the construction needs of the end application.

The fan design complies to the machinery directive 2006/42/EG, EMC-Directive 2014/30/EU, low-voltage directive 2014/35/EU and ErP-Directive 2009/125/EG.

# PERFORMANCE CURVES & TECHNICAL DATA

## EC-FANS (230V)

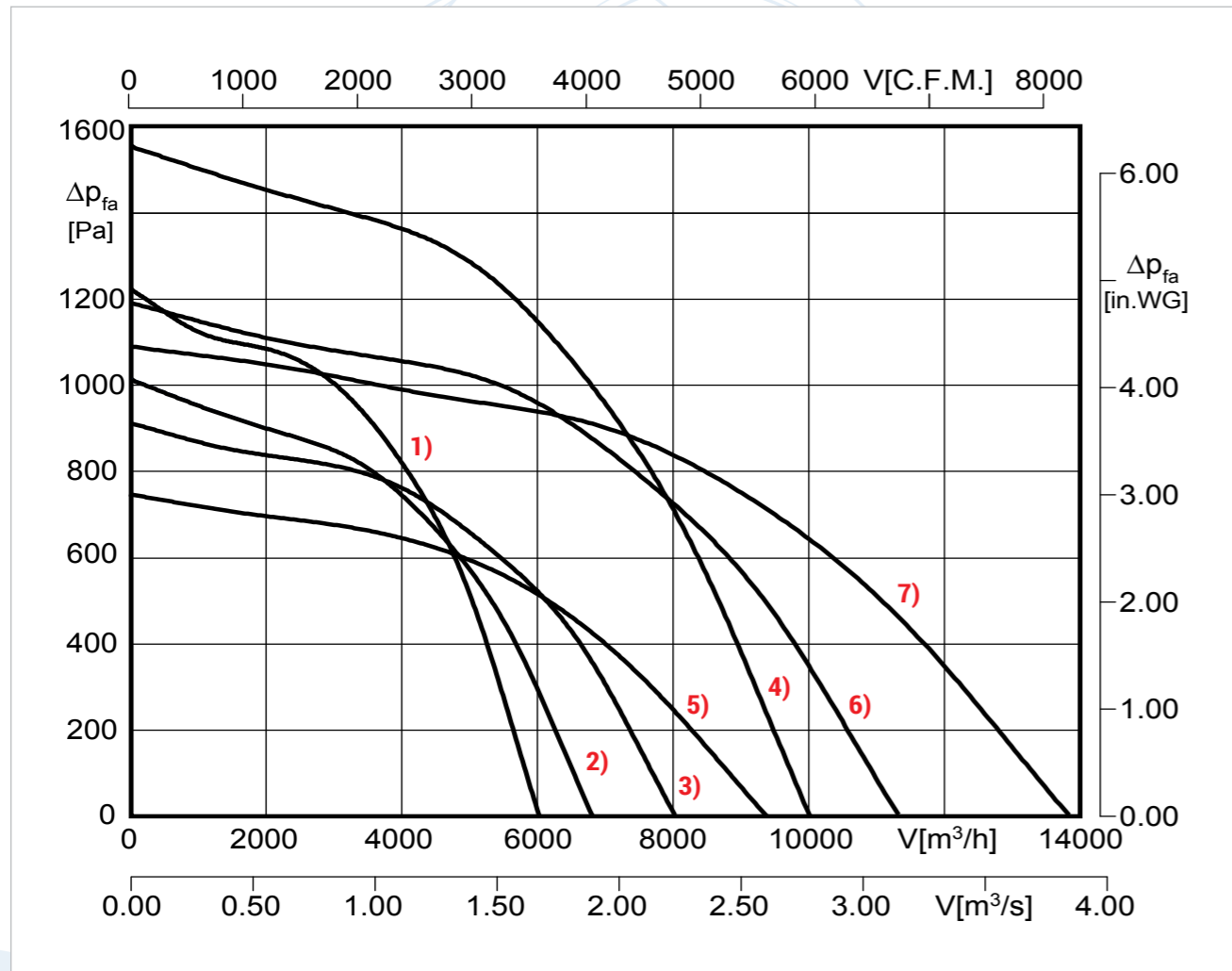


Fan Type	Performance Curve	Rated Voltage [V]	Frequency [Hz]	Input Power [kW]	Rated Current [A]	Speed [rpm]	Max. Air Temperature [°C]	Protection Class	Sound Power Level * dB(A)
GKH_315-CIE.088.4EA	1	1~200-277	50/60	0.5	2.8	2200	40	IP54	69
GKH_355-CIE.112.4EA	2	1~200-277	50/60	0.5	2.7	1650	40	IP54	69
GKH_355-CIE.112.5FA	3	1~200-277	50/60	1.12	5.0	2250	45	IP54	76
GKH_400-CIE.125.4FF	4	1~200-277	50/60	0.5	2.8	1380	40	IP54	67
GKH_400-CIE.125.5FA	5	1~200-277	50/60	1.16	5.2	1875	40	IP54	73
GKH_450-CIE.136.5FA	6	1~200-277	50/60	1.15	5.1	1550	40	IP54	71
GKH_500-CIE.154.5HF	7	1~200-277	50/60	1.15	5.1	1300	40	IP54	71

\* A-weighted free-outlet sound power level according to ISO 3745  
 \*\* at 230V (50 Hz)

# PERFORMANCE CURVES & TECHNICAL DATA

EC-FANS (400V)



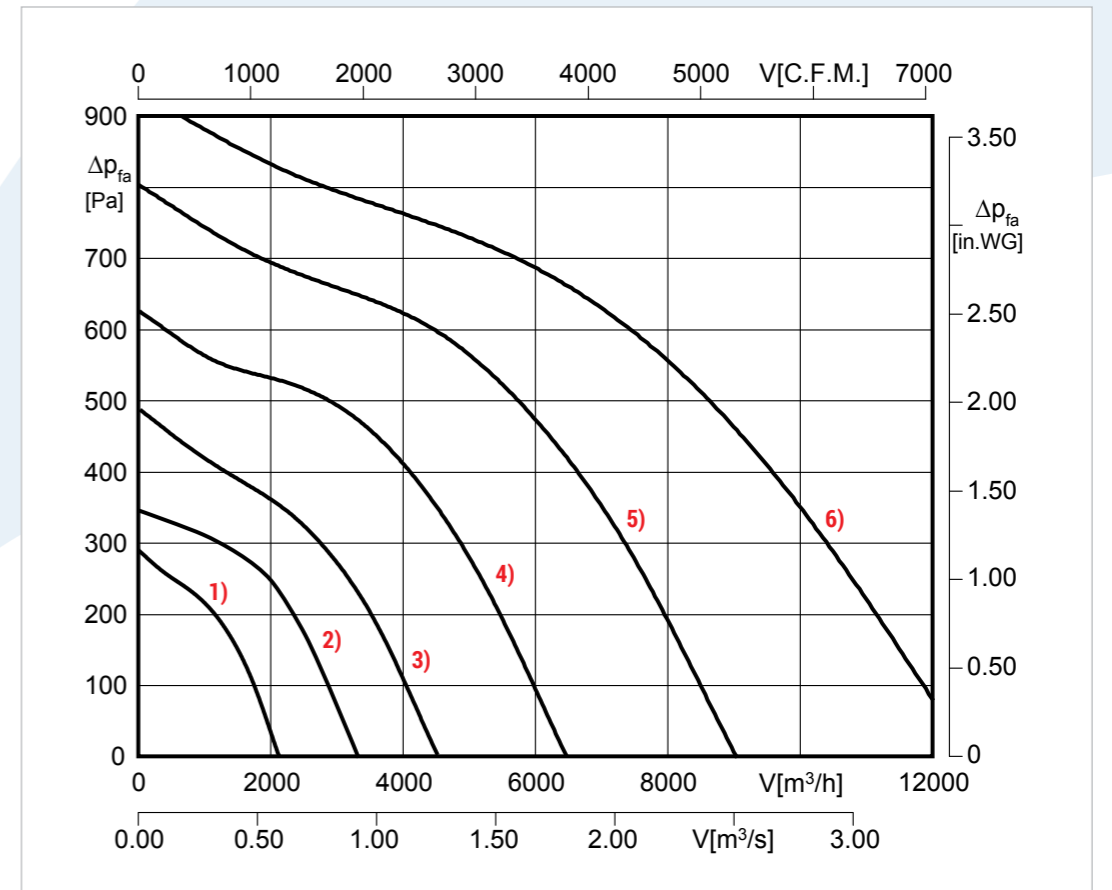
Fan Type	Performance Curve	Rated Voltage [V]	Frequency [Hz]	Input Power [kW]	Rated Current ** [A]	Speed [rpm]	Max. Air Temperature [°C]	Protection Class	Sound Power Level * dB(A)
GKH_355-CIE.112.5FA	1	3~380-480	50/60	1.70	2.8	2600	40	IP54	79
GKH_400-CIE.125.5HF	2	3~380-480	50/60	1.60	2.5	2100	40	IP54	74
GKH_450-CIE.136.5HF	3	3~380-480	50/60	1.65	2.7	1775	40	IP54	75
GKH_450-CIE.136.6FF	4	3~380-480	50/60	3.50	5.1	2300	40	IP54	84
GKH_500-CIE.154.5HF	5	3~380-480	50/60	1.50	2.4	1425	40	IP54	80
GKH_500-CIE.154.6FF	6	3~380-480	50/60	2.90	4.4	1800	60	IP54	80
GKH_560-CIE.175.6IF	7	3~380-480	50/60	3.26	5.0	1550	50	IP54	80

\* A-weighted free-outlet sound power level according to ISO 3745

\*\* at 230V (50 Hz)

# PERFORMANCE CURVES & TECHNICAL DATA

AC-FANS (230V / 400V)



Fan Type	Performance Curve	Rated Voltage [V]	Frequency [Hz]	Input Power [kW]	Rated Current [A]	Speed [rpm]	Max. Air Temperature [°C]	Protection Class	Sound Power Level * dB(A)
EKH_315-4_E088.4EC	1	230	50	0.145	0.70	1370	70	IP54	58
DKH_315-4_E088.4EC	1	400	50	0.15	0.36	1390	70	IP54	58
EKH_355-4_E112.5FA	2	230	50	0.31	1.50	1400	50	IP54	63
DKH_355-4_E112.5DF	2	400	50	0.29	0.67	1385	60	IP54	63
EKH_400-4_E125.5FA	3	230	50	0.55	2.60	1390	65	IP54	64
DKH_400-4_E125.5FA	3	400	50	0.49	0.93	1345	70	IP54	64
EKH_450-4_E136.6FA	4	230	50	0.92	4.36	1410	45	IP54	69
DKH_450-4_E136.6FA	4	400	50	0.88	1.88	1400	65	IP54	69
EKH_500-4_E154.6HF	5	230	50	1.49	6.80	1385	40	IP54	72
DKH_500-4_E154.6HF	5	400	50	1.40	2.90	1395	70	IP54	72
DKH_560-4_E175.6LA	6	400	50	2.20	4.30	1330	50	IP54	75

\* A-weighted free-outlet sound power level according to ISO 3745



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