

I-Series Plug Fans with Generation 3 EC Motor*

The aluminium I-Series motorised impeller and plug type module, in combination with the high efficiency Generation 3+ EC motor gives class leading performance with optimum noise efficiency. Three phase variants available on short lead times.

I-Series Modular EC Plug Fans (CII)

The latest high efficiency, high volume airflow orientated I-impeller features 5 backward curved, hollow profiled, aerofoil section blades, contoured in sheet aluminium. The new design significantly reduces the turbulent downstream air produced by traditional backward curved impellers. The effect of this reduction is significantly reduced noise and increased in-application efficiency. I Series EC plug fans are optimised for high airflow applications.



Generation 3+ EC Motor*

The Generation 3+ EC motor from Rosenberg is 30% more powerful than the previous generation. As standard, the motors input voltage range is 200-480VAC (50/60Hz) and offers additional upgrades such as an integrated inspection LED to visualise the motors condition, improved ModBus RTU functionality, electronic quick change technology (EQC), IT network support. The maximum electrical input power is 4.7kW. *Featured on 3 phase fans only.



I-Series EC plug fans are designed to reduce turbulent downstream air, ideally suited to [high airflow applications](#)

Key Features & Benefits

To complement the existing range of energy efficient EC backward curved plug fans, Rosenberg have manufactured the latest in high efficiency plug fan: The I-series.

Optimised for Airflow

5 backward curved, hollow profiled, aerofoil section blades, contoured in sheet aluminium. I-series blades are positioned diagonally and top flared to enable the discharge airflow direction to be optimised for the highest efficiency and flow rates.

Aluminium Impeller

Aluminium (AlMg3) motorised impeller, statically and dynamically balanced according to DIN ISO 21940 - 11 at least with quality level G6.3.

EC Generation 3+ Motor (Gen 3 & Gen3+)

The Gen 3 EC motor from Rosenberg exceeds in accordance with IEC 60034-30-2 minimum requirements for IE5 and is 30% more powerful than the Gen 2 equivalent. Gen 3 motors allows for an input voltage of 200-480 VAC, 50/60Hz in the same reference. Motor made of die cast aluminium. Protection class IP54 and insulation class F.

Significantly Reduced Noise

The effect of reduced turbulent downstream air is a significant reduction in noise and increased in-application efficiency. The I series offers a significant reduction in sound when compared with the high pressure B series.

Integrations & Configurations

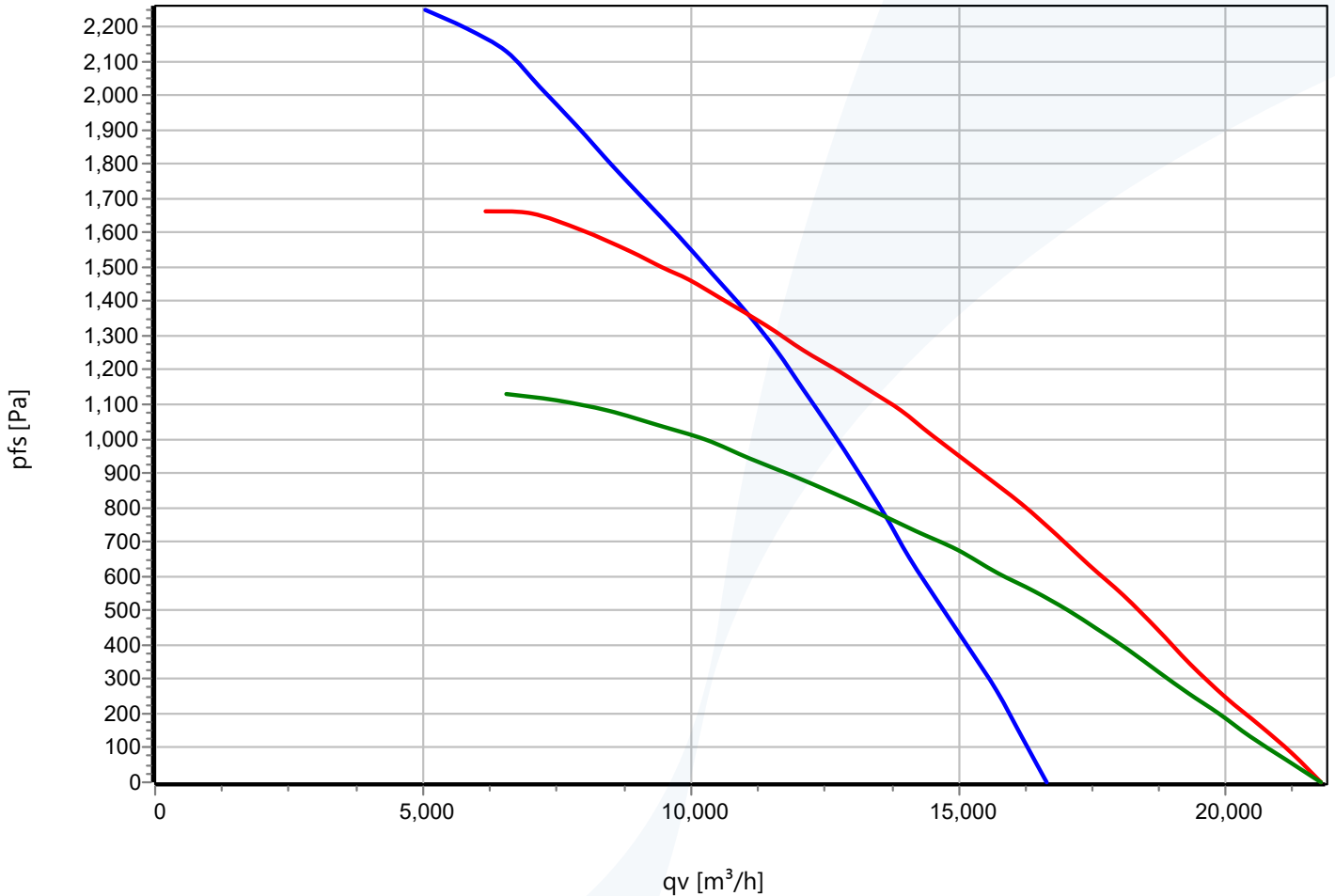
Electronic with integrated terminal box and environmental resistant cable glands. 100% speed controllable with integrated Motor Protection and Soft Start. ModBus RTU Interface integrated. Busconfiguration possible on site.

I-series blades are positioned diagonally and top flared for the highest efficiency & flow rates.

I-Series Material:

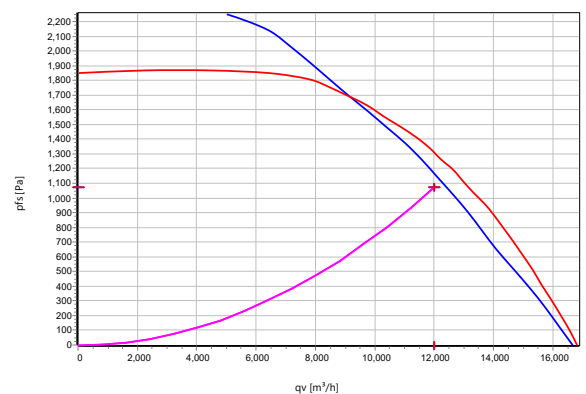
Hollow profiled, aerofoil section blades contoured in sheet aluminium (AlMg3).

GKHR 450-CII.147.6IF IE Gen 3+	N86-45702
GKHR 560-CII.183-6NA IE Gen 3+	N86-56700
GKHR 630-CII.200.6NA IE Gen 3	N86-63700



B & I Wheel Comparisons

Using a smaller impeller, with a smaller motor can result in a cost saving of up to 10% when compared with the B series, with very similar operating characteristics. This can be seen in the comparison to the right. The I wheel shows a 450Ø, while the B wheel shows a 500Ø and a motor one size up. Sound power is also significantly reduced.



Fan	V	m3/h	Pa	kW	r/min	A	%	500	dB
GKHM 450-CII.147.6IF IE Gen3+	3x 380-480V	11996	1073	5.79	2747	8.9	62	1.33	92
GKHM 500-CIB.160.6NA IE Gen3+	3x 380-480V	11996	1073	5.88	2112	9	61	1.31	95