

# B-Series Plug Fans with Generation 3 EC Motor\*

*The B Series range of aluminium plug fans are designed for medium to high pressure applications. Available from stock or on short lead times, in multiple single & three phase EC variants.*

## **B-Series Modular EC Plug Fans (CIB)**

The B-Series range of plug fans feature a seven blade design (instead of the standard eight) with a unique wheel geometry that provides for impeller efficiencies up to 78% while reducing noise by up to three dBA when compared to standard W impellers. The enhanced wheel design increases airflow compared to standard impellers operating at the same speed. B-Series impellers feature an all aluminium construction and robot assisted welding. All Rosenberg plug fan motors are CE, UL & RoHS approved.



## **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 200-480 VAC (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. \*Gen 3 motors are available on 3 phase fans only.



**On the B-Series impeller, the blade diameter is smaller than the outside diameter of the cover and support plate, which acts as a rotating outlet diffuser, allowing for efficiencies up to 78%.**

## Key Features & Benefits

The B-Series range of modular plug fans, manufactured by Rosenberg in Germany, are optimised for high pressure applications where hygiene is important. A full range of datasheets are available upon request, contact us for more information.

### Energy Efficient B-Wheel (CIB)

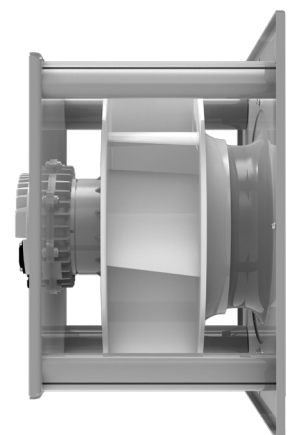
Aluminium B-Series plug fans feature a unique seven blade design in which the blade diameter is smaller than the outside diameter of the cover and support plate, allowing it to act as a rotating outlet diffuser. This wheel geometry provides for impeller efficiencies up to 78% while reducing noise. Fluid optimised inlet cone made of galvanised sheet metal.

### High Pressure

In contrast to its younger sibling, the E-Series, the B-Series can offer more air at a higher pressure. Multiple configurations of motor and electronic combinations are available to achieve improved performance where needed. Talk to our in-house team of fan engineers for more guidance on fan selection.

### EC Generation 3 Motor (Gen 3)

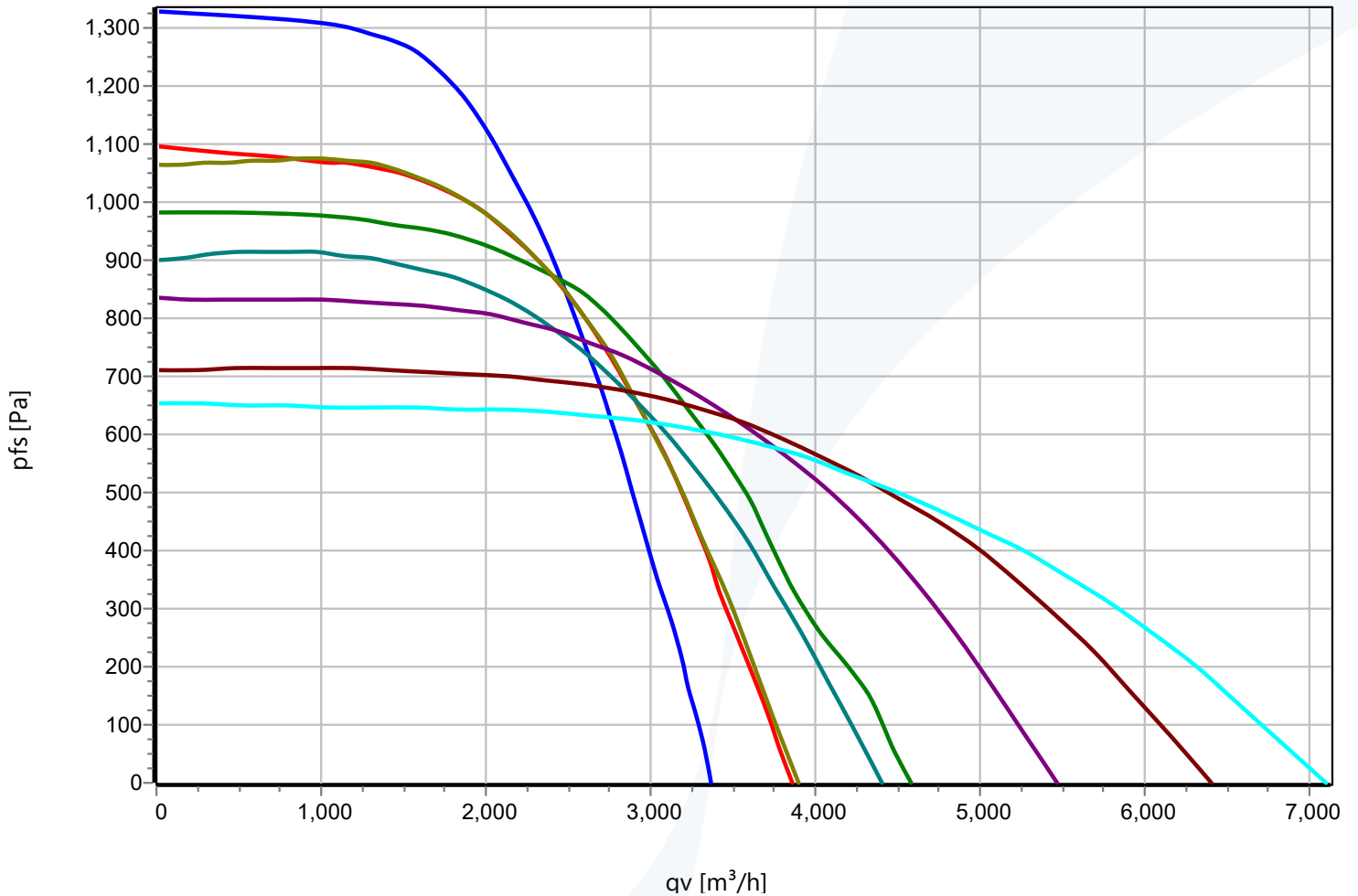
While previous EC motor generations were designed for either 200-230VAC or 380-480VAC input, the Gen 3 motor automatically adjusts to the actual input power across the entire range, allowing reduced inventory cost and easier design-in. The 3-phase, 50-60Hz motors are rated IP54 and UL-R motor class F. They are 30% more powerful than the previous "Generation 2" motors of the same size. The operating temperature range is -25°C to +40°C at full speed.



**B-Series Material:**

High efficiency aluminium (AlMg3) impeller

GKHR 250-CIB.080.4EA IE MX	N86-25315
GKHR 280-CIB.090.4EA IE MX	N86-28321
GKHR 315-CIB.100.4FF IE MX	N43-35509
GKHR 280-CIB.090.5FA IE	N43-40007
GKHR 315-CIB.110.5FA IE	N43-50014
GKHR 355-CIB.112.5FA IE	N86-35811
GKHR 400-CIB.125.5FA IE	N86-40305
GKHR 450-CIB.125.5FA	N86-45303



**B Series aluminium impellers offer more air at a higher pressure.**

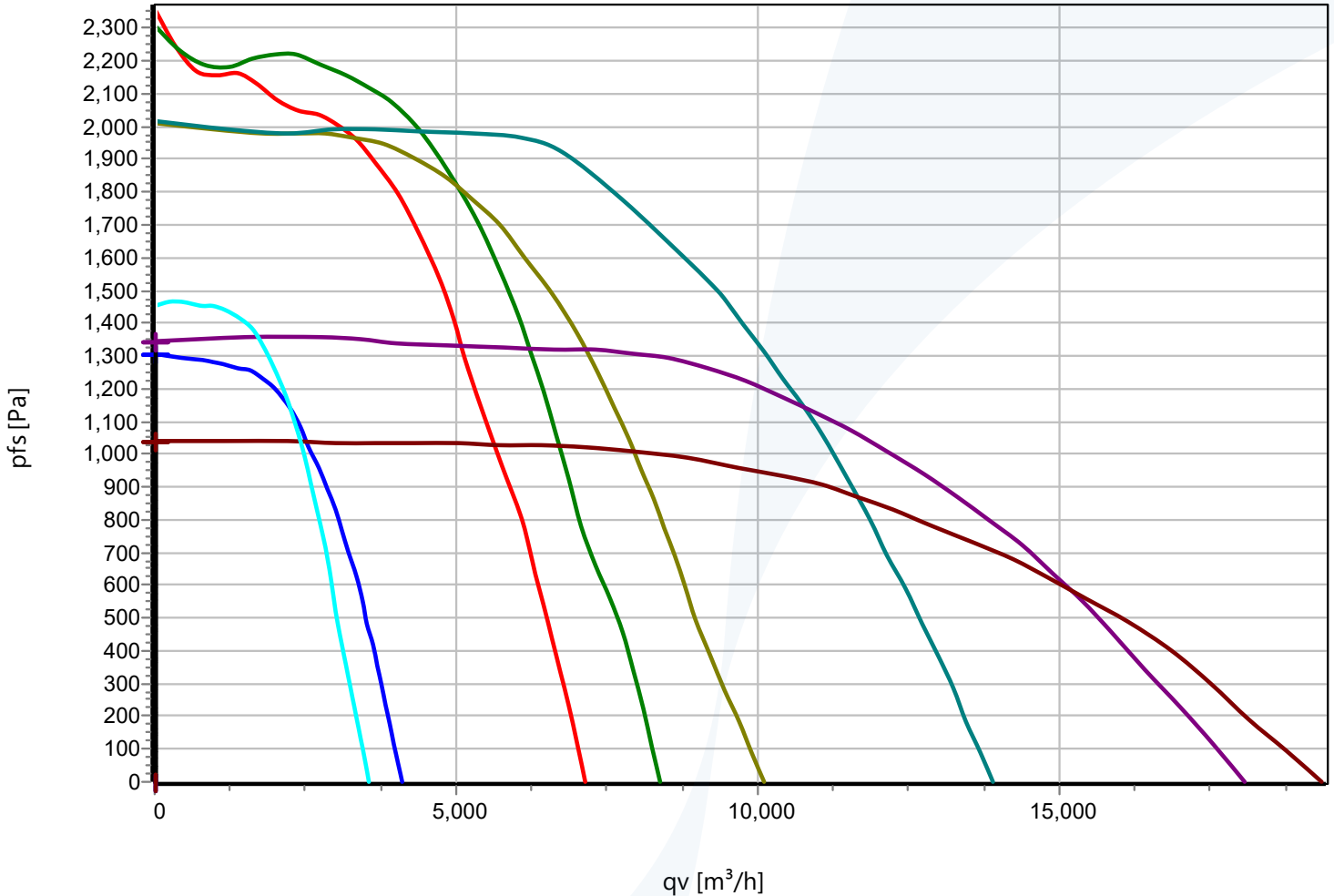
**Single Phase EC**

Generation 2 Energy saving EC external - rotor motor exceeds IE4 Super Premium Efficiency. Maintenance free ball bearings, closed on both sides with long-term lubrication. Magnets without rare earth elements. Motor coated black and/or die casted aluminum. Protection Class IP54 and insulation class F. For supply and controlling and integrated active PFC (Power Factor Correction).

**B-Series Material:**

High efficiency aluminium (AlMg3) impeller

GKHR 280-CIB.090.4FF IE MX	N86-28323
GKHR 315-CIB.112.6FF IE Gen3	N86-31815
GKHR 355-CIB.125.6FF IE Gen3	N86-35814
GKHR 400-CIB.125.6FF IE Gen3	N86-40306
GKHR 450-CIB.140.6NA IE Gen3+	N86-45309
GKHR 560-CIB.180.6NA IE Gen3+	N86-56306
GKHR 630-CIB.200.6NA IE Gen3	N86-63303
GKHR 250-CIB.080.4EA IE MX	N86-25317



**Gen 3 motors exceed in accordance with IEC 60034-30-2 minimum requirements for IE5 Ultra Premium Efficiency.**

### Three Phase EC

3- types with integrated terminal box and environmental resistant cable glands (3x M20x1,5). 100% speed controllable with integrated Motor Protection. ModBus RTU Interface integrated. Busconfiguration possible on site by customer. Soft Start. Potential -free Alarm. Contact and integrated 24V Supply for Accessories. Gen 3 motors exceed IE5 efficiency.