

# EC centrifugal fans *with high static pressure.*

Ventilating large buildings efficiently –  
with ready-to-install RadiPacs.

**ebmpapst**

the engineer's choice



# About ebmpapst.

As technological leader for ventilation and drive engineering, ebm-papst is in demand as an engineering partner in many industries. With over 15,000 different products, we provide the right solution for just about any challenge. Our fans and drives are reliable, quiet and energy-efficient.

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## Six reasons that make us the ideal partner:

**Our systems expertise.** As experts in advanced motor technology, electronics and aerodynamics, we provide system solutions from a single source.

**Our spirit of invention.** Our 600 engineers and technicians will develop a solution that precisely fits your needs.

**Our lead in technology.** Our GreenTech EC technology is setting standards worldwide. And our lead is your competitive advantage.

**Closeness to our customers.** At 49 sales offices worldwide.

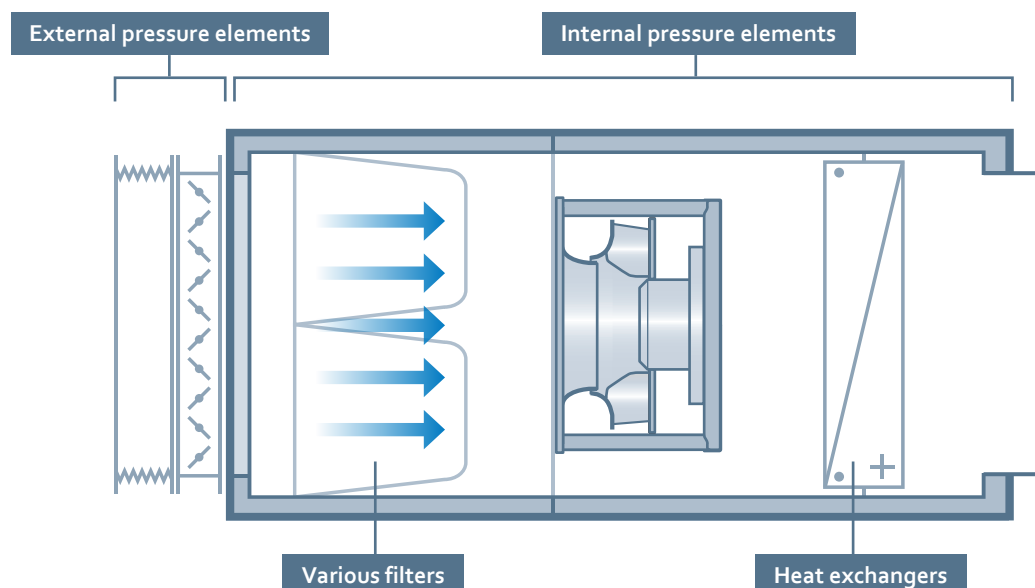
**Our standard of quality.** Our quality management is uncompromising, at every step in every process.

**Our sustainable approach.** We assume responsibility with our energy-saving products, environmentally-friendly processes, and social commitment.

## Long paths and other obstacles.

Air-handling units for large buildings like airports, skyscrapers or hotels face a special challenge: Since residential and commercial space is becoming increasingly expensive, centralized and space-saving solutions are generally preferred. That means the air has to be moved over long distances through external pressure elements and long air ducts to reach its destination – past many corners and

junctions on its way to the outlets. Things get even more difficult when it has to overcome additional obstacles such as activated carbon filters, heat exchangers and separators (internal pressure losses), because they also affect the required pressure increase. For all such cases, fans with particularly high static pressure increase are needed – and they should be compact, efficient and reliable.



# (Air) resistance is futile: *new RadiPacs up to 2,500 Pa.*

Special challenges call for special fans. To provide a reliable solution for AHU users looking to ventilate and air-condition large buildings, ebm-papst has improved and optimized its popular RadiPac series to meet their special requirements. The result: high-performance centrifugal fans with a static pressure increase of up to 2,500 Pa and air flow of up to 15,000 m<sup>3</sup>/h and available in sizes 355, 400, 560 and 630.

Of course, you also benefit from the many other advantages offered by this fan line, including high reliability, energy-efficiency and compactness. And the robust cube design is again available as an option. Just install, connect with plug & play, and turn up the pressure.

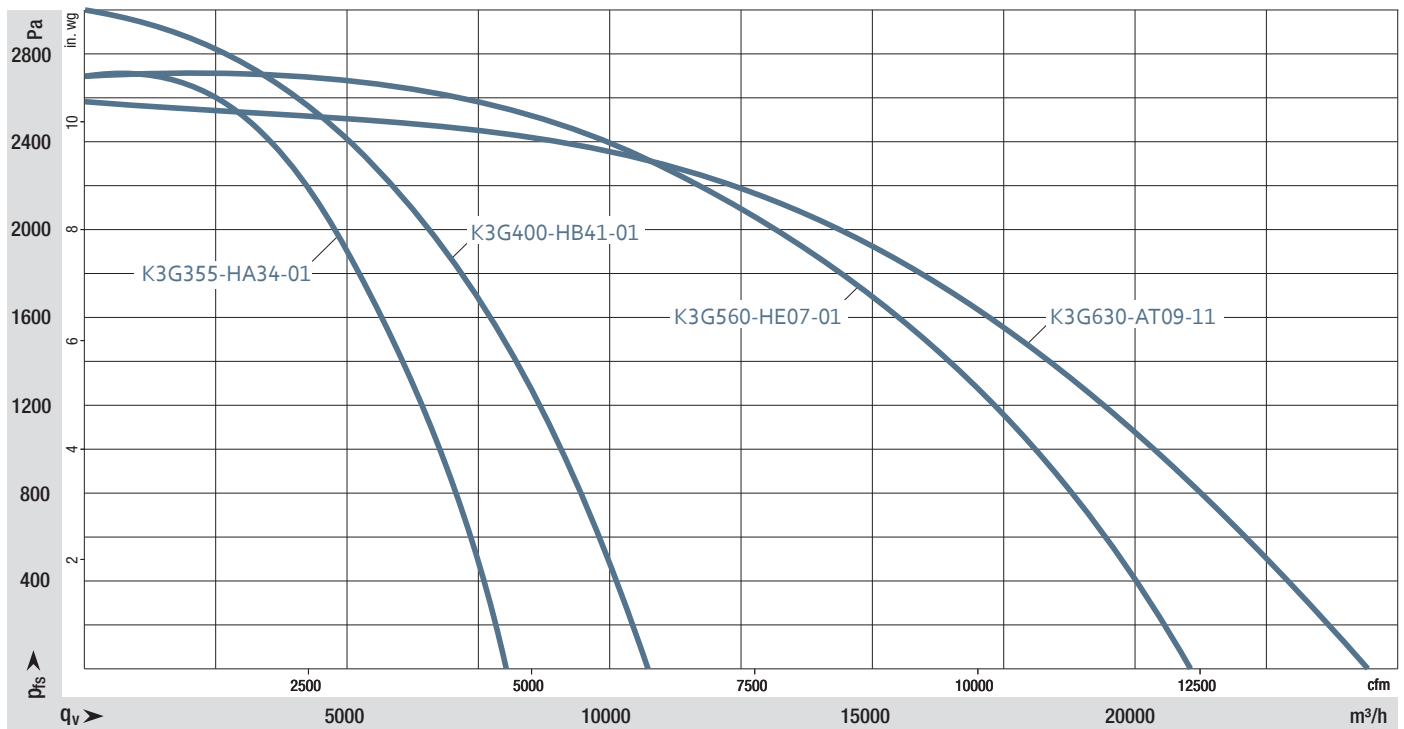


*External pressure losses are a major challenge. The solution: RadiPacs for high pressure.*

# Numbers that add up.

Measurements for fan characteristic curves are carried out on state-of-the-art chamber test rigs. The entire fan unit, consisting of motor, control electronics and impeller, is measured in various load states to ensure that we obtain reliable data and that you can count on these values being achieved when selecting your fan. So there are no unpleasant surprises when commissioning the fans.

The measured data form the basis for our design program, FanScout, which is available on request. This software can be used to calculate the expected operating costs or to perform lifecycle cost analyses.



Nominal data		Nominal voltage range	Frequency	Speed	Max. power consumption	Max. input current	Permitted ambient temperature	Weight
Item number	Size	VAC	Hz	rpm	W	A	°C	kg
K3G355-HA34-01	355	3~ 380–480 V	50/60	4,100	4,700	7.2	50	39
K3G400-HB41-01	400	3~ 380–480 V	50/60	3,700	6,100	9.3	40	42
K3G560-HE07-01	560	3~ 380–480 V	50/60	2,600	12,300	19.0	45	111
K3G630-AT09-11	630	3~ 380–480 V	50/60	2,200	13,750	21.0	40	135

Data sheets on request. Subject to technical changes.

# More than meets the eye.

## High-performance impeller

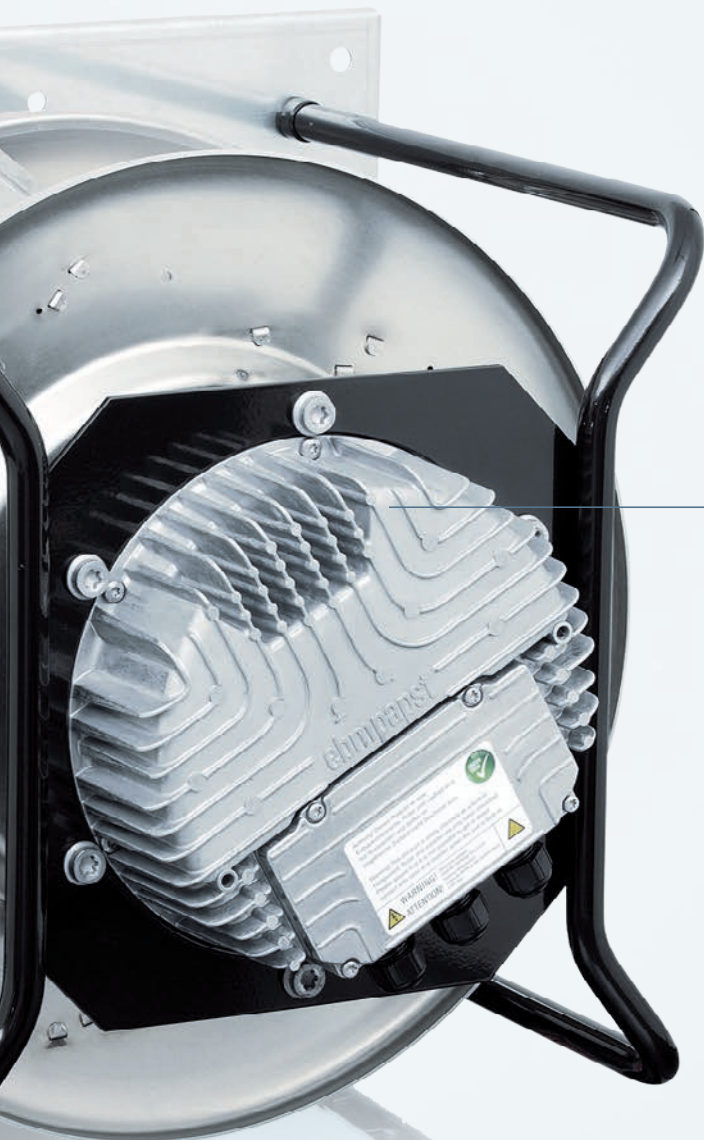
- + **High static efficiency**
  - Aerodynamically optimized blade channel
  - Integrated radial diffuser
- + **Minimal noise emission**
  - Diagonal trailing edge for optimized flow control
- + **Minimal vibration**
  - Dynamic balancing of impeller-rotor unit minimizes induced structure-borne noise and reduces bearing load
- + **Robust design**
  - Suitable for constantly high peripheral speed
  - Corrosion-resistant aluminum



## Electronics and connection area

- + **Adaptable**
  - Continuously adjustable speed
  - Control signal 0–10 VDC and MODBUS-RTU
- + **Universal use**
  - Wide voltage range, 3-phase 380–480 V
  - For use with 50 and 60 Hz grids
- + **Safe operation**
  - Integrated locked-rotor and thermal overload protection
  - Environment-resistant cable glands
  - Monitoring via MODBUS-RTU
- + **Simple commissioning**
  - Central terminal area for supply connection, alarm relay, control and communication
  - Safe separation of terminal area and electronics
  - High-quality terminals
  - No programming effort required





### Support structure

- + **Simple assembly**
  - Quick and easy installation
  - Installation with horizontal or vertical motor shaft
  - Designs for wall or floor mounting
- + **Aerodynamically optimized**
  - Aerodynamically efficient
  - Optimum nozzle position as default setting



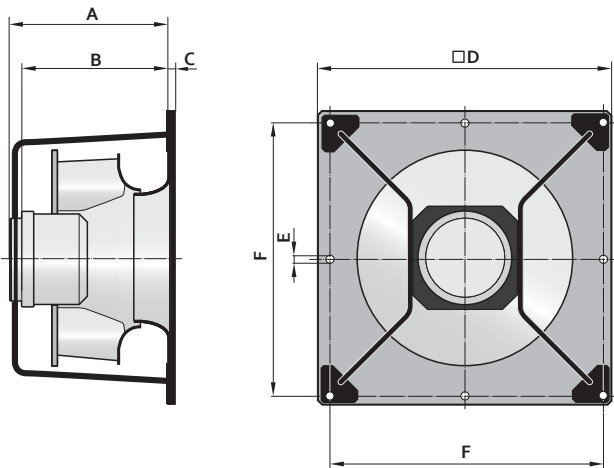
### GreenTech EC motor

- + **High efficiency**
  - Low copper and iron losses
  - Synchronous running prevents slip losses
  - Use of permanent magnets prevents magnetic hysteresis losses in the rotor
- + **Economical operation**
  - Optimized commutation for partial-load operation down to 1:10 with sustained high efficiency
- + **Minimal noise emission**
  - Commutation and stator design ensure low-noise magnetization of excitation field
  - High, acoustically imperceptible cycle frequency
- + **Long service life**
  - Maintenance-free bearings
  - Brushless commutation
- + **Safe operation**
  - Insulated bearing system to prevent bearing currents



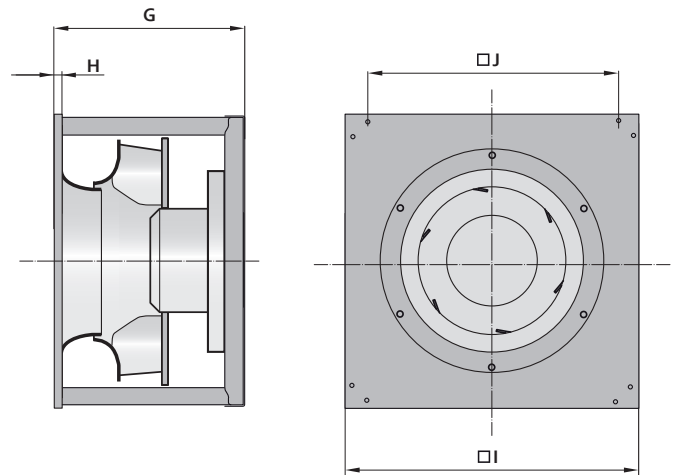
# Convincing figures.

Support bracket



Item number	Size	A	B	C	D	E	F
K3G355-HA34-01	355	389	275	15	500	11	450
K3G400-HB41-01	400	437	324	15	500	11	450

Cube design



Item number	Size	G	H	I	J
K3G560-HE07-01	560	600	40	670	566
K3G630-AT09-11	630	685	40	760	666

All dimensions in mm, data sheets on request. Subject to technical changes.

## Advantages of RadiPac with high static pressure:

- High outlet pressure up to 2,500 Pa and approx. 15,000 m<sup>3</sup>/h
- Support bracket or cube design
- Flexible control and smart connectivity
- Simple plug & play commissioning
- All benefits of the RadiPac family now also for high pressures

## Want to find out more?

We are happy to assist you.  
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or follow us at  
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