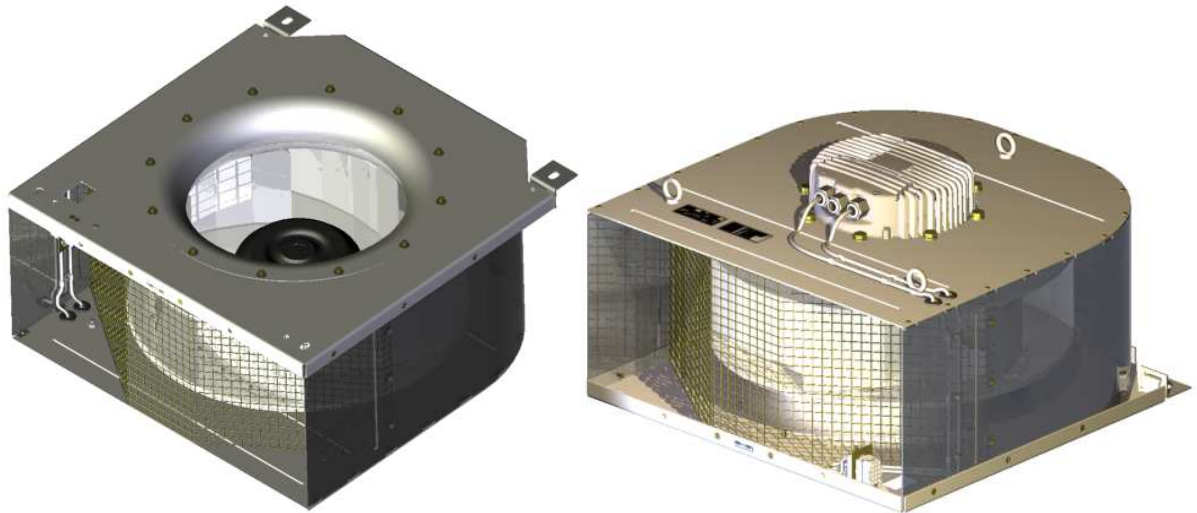


RADIAL FAN

**with integrated commutation
electronics**



RC-R3G 500-EC...V



Gottlieb-Dunkel-Str.20/21
D-12099 Berlin-Tempelhof

Product Radial fan RC – R3G 500V EC...V, single inlet

Exhauster for switch cabinet and converter applications.

Technical data/Description

Nominal voltage	3~380 - 480 V AC
Power frequency	50 / 60 Hz
Max. power consumption P ₁	2.6 kW
Max. mains current I	4.0 A
Volume flow	5000 m ³ /h at 970 Pa
Rated speed	2020 min ⁻¹
Prot. type motor/electronics	IP 54; insulation class F
Operating temperature	-25...+60 °C
Weight	40 kg
Expected service life	>40,000 hours of operation, at 60 °C
Efficiency factor	>0.92 (P ₁ >2.5 kW)
Emission of interference	EN 61000-6-3
Immunity to interference	EN 61000-3-2
Leakage current	<3.5 mA
Certifications	UL, CSA, CE, VDE und GOST
Direction of rotation	clockwise (viewed from rotor)
Direction of movement	inlet on rotor side
Mounting position	rotor axis horizontal or rotor axis vertical, air intake from the bottom
Motor construction type	EC motor
Casing	galvanized sheet steel, colour-coated
Impeller wheel	aluminium sheet

Connection diagram without flap valve, wired up on 15-pole connector



- 01 = KL 1 L3 black 3
- 03 = KL 2 L2 black 2
- 04 = KL 3 L1 black 1
- 06 = KL 4 PE yellow/green
- 10 = KL 2/2 green
- 11 = KL 2/1 yellow
- 12 = KL 2/3 white
- 13 = KL 3/2 grey
- 15 = KL 3/3 brown

with flap valve, wired up on 15-pole connector



- 01 = KL 1 L3 black 3
- 03 = KL 2 L2 black 2
- 04 = KL 3 L1 black 1
- 06 = KL 4 PE yellow/green
- 07 = NC contact flap
- 09 = NC contact flap
- 10 = KL 2/2 green
- 11 = KL 2/1 yellow
- 12 = KL 2/3 white
- 13 = KL 3/2 grey
- 15 = KL 3/3 brown

Particularities

The fan (EC motor) is continuously variable through analog or digital inputs (externally by means of potentiometer, sensor or personal computer). Thus, the performance of the fan can be optimally adjusted to the respective area of application.

A master/slave operation is possible in case several fans are connected in series. Master/slave function means that a signal (actual value) from an external sensor (pressure, temperature, volume flow) is only connected to one fan (the master), which supplies the signals for the other fans (slaves) by means of its deposited setting parameters (target value), which are then controlled at the same speed as the master.

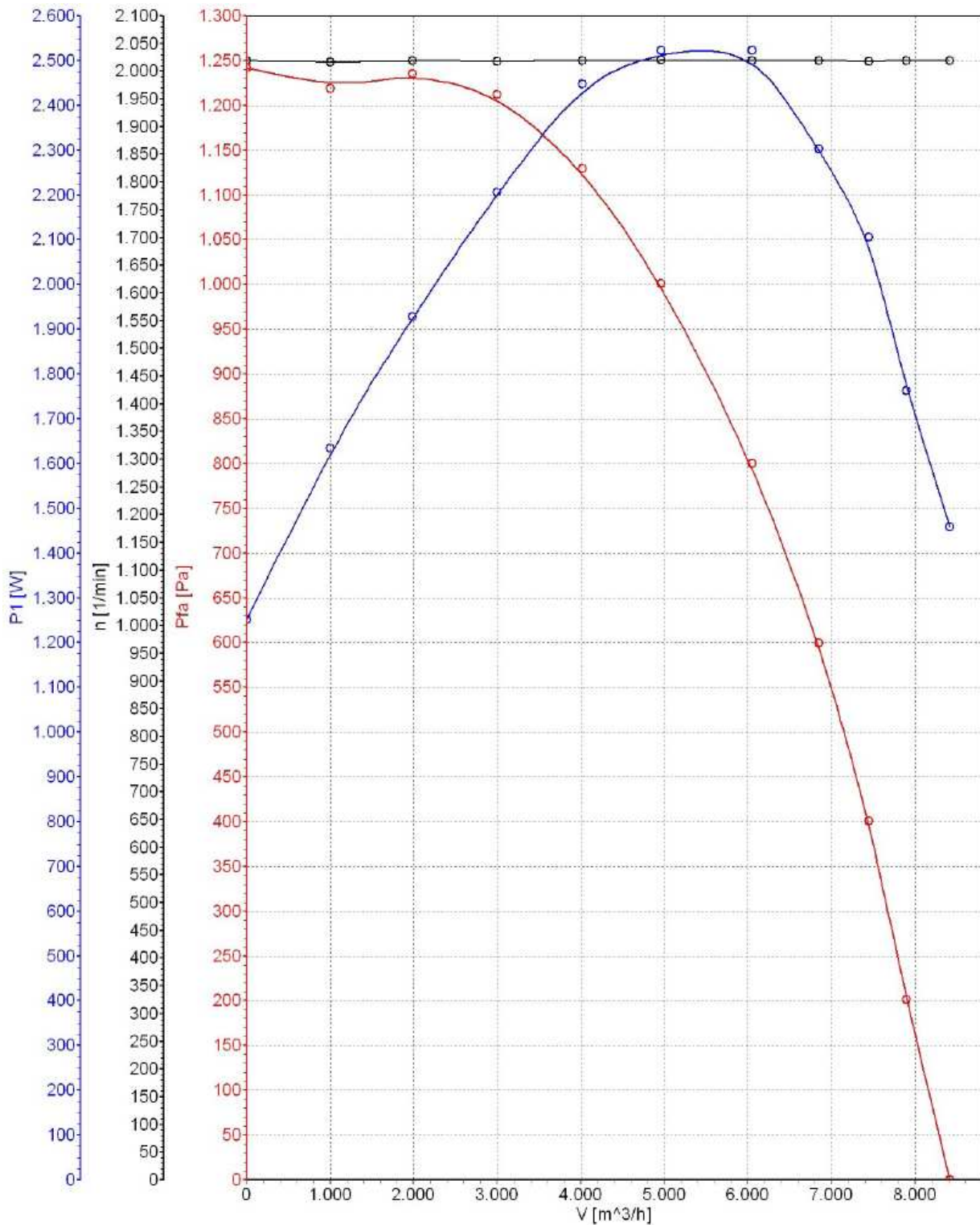
The thermal load of the ball-bearings in the motor is reduced by the high efficiency of the brushless drive, which results in a considerably increased service life of the fan.

The device is equipped with monitoring and protection functions preventing:

- Overtemperature electronics
- Overtemperature motor
- Rotor position recording failure
- Blocked rotor
- Power supply undervoltage
- Phase failure

Performance curve

Voltage 400 V
 Frequency 50/60 Hz



Operating altitude with position above sea level

Compression reduction per 100 m x 0.01

E.g. compression according to performance curve 400 Pa ± 0 above sea level = 320 Pa 2000 m above sea level

