## Tangential blowers with multiple housings

Optimized air flow – steady distribution.



The engineer's choice



### About ebm-papst.

As a leader in technologies for ventilation and drive engineering, ebm-papst is in demand as an engineering partner in many sectors. 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.



### Six reasons that make us the ideal partner:

#### Our systems expertise.

You want the best solution for every project. The entire ventilation system must thus be considered as a whole. And that's what we do — with motor technology that sets standards, sophisticated electronics and aerodynamic designs — all from a single source and perfectly matched.

### Our spirit of invention.

We are also always able to develop customized solutions for you with our versatile team of over 600 engineers and technicians.

#### Our lead in technology.

We are pioneers and leaders in the development of high-efficiency EC technology. Already today almost our entire product range is also available with GreenTech EC technology. The list of benefits is long: higher efficiency, low maintenance, longer service life, sound reduction, intelligent control characteristics and incomparable energy efficiency.

#### Proximity to our customers.

ebm-papst owns 57 sales offices worldwide, of which 47 are subsidiaries with an extensive network of sales representatives and distributors. You will always have a local contact, someone who speaks your language and knows your market.

### Our standard of quality.

Our quality management is uncompromising, at every step in every process. This is underscored by our certification according to international standards including DIN EN ISO 9001, ISO/TS 16949-2 and DIN EN ISO 14001.

#### Our sustainable approach.

Assuming responsibility for the environment, for our employees and for society is an integral part of our corporate philosophy. We develop products with an eye to maximum environmental compatibility, in particular resource-preserving production methods. We promote environmental awareness among our young staff and are actively involved in sporting, cultural activities and education. That's what makes us a leading company — and an ideal partner for you.

### A plus in output, efficiency and more...

Reliable, durable and extremely quiet — the outstanding features of tangential blowers from ebm-papst. For decades, they have been tried and tested in a wide variety of applications that require the specific characteristics of a flat fan design. Depending on the application, tangential blowers with EC motors have become increasingly popular, for example when high efficiency and stepless modulating are required. EC tangential blowers feature many other beneficial properties that make equally high-performance and energy-efficient end products a reality. Frequently, this provides critical competitive advantages.

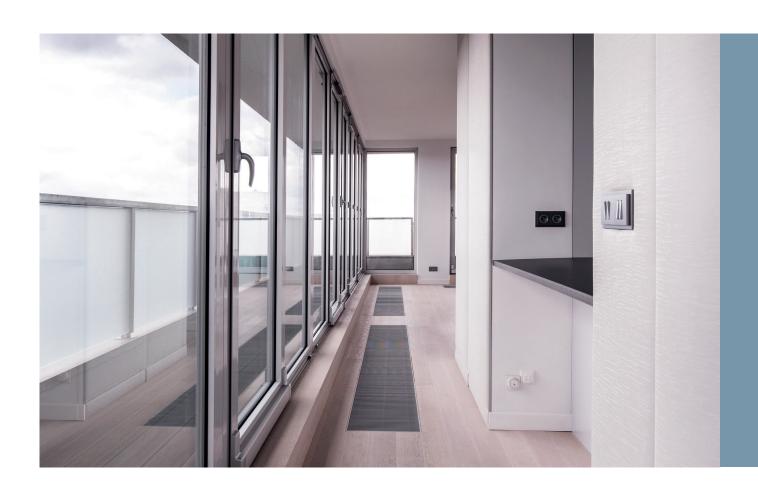
### ebm-papst tangential blowers: one principle, virtually limitless applications

The tangential flow principle is suitable for an extremely wide variety of applications that require an air supply over a wide surface. The very flat design of our products, and the resulting ease of integration, even into tight installation situations, is a result of the mostly small ratio of the shaft diameter to the shaft length. The large intake and discharge cross-section allows a high air flow at low flow rates. ebm-papst tangential blowers also feature a long thrust range and very low noise levels.

### ebm-papst EC technology:

#### a plus in output, efficiency and more ...

Moving air intelligently, minimizing energy consumption, maximizing output: you can do all of this and more with EC technology from ebm-papst. Our tangential blowers with EC motors save money and natural resources thanks to their high efficiency, continuously variable controllability over analog or digital inputs, long, maintenance-free service life and robustness. In addition, they are extremely quiet in operation. Furthermore, GreenTech EC technology enables cost-effective integration of both simple and complex controls.



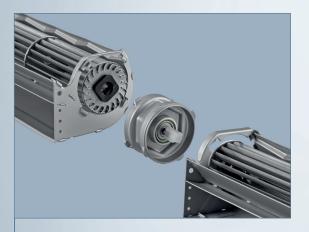
### Maximum air flow capacity at minimum space requirements.

#### Ideal for floor convectors and air curtains

- Steady and consistent air flow due to reduced clearance between impellers
- Only one motor required for a total impeller length of 900 mm
- Suitable for operation in living or office spaces due to very low noise emission

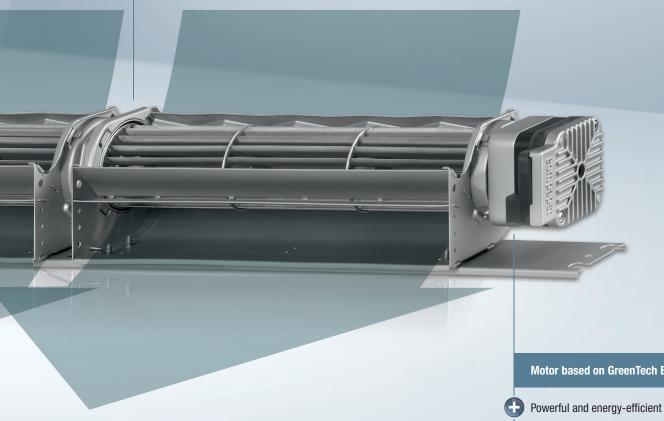


- Optimal space utilization
- Wide intake and output profile allow for high air volume at low velocity
- Total length of blower can be optimally adjusted through combination of different impeller lengths



### **High-quality coupling system**

- Two maintenance-free ball bearings for long service life
- Precise alignment of assembled impellers over the entire blower length



### Motor based on GreenTech EC technology

- High efficiency and long service life
- Continuously adjustable speed via 0-10 V analog voltage signal or PWM signal
- Motor position right (left available on request)

### QLK 45 with EC motor BG 22.



### Tangential blowers with electronically commutated direct current motors

- Impeller diameter: 45 mm

- Impeller length: 300 mm (other lengths on request)

- Mounting position: horizontal; vertical with motor on the bottom on request

- Speed control: closed-loop

- Insulation class: H

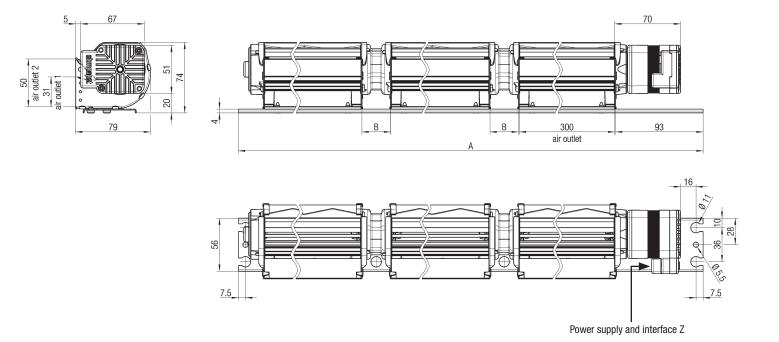
- Degree of protection: motor: IP20

- Protection class: SELV (separated extra-low voltage)

- Blower speed: adjustable via 0 -10 V analog voltage signal or PWM signal

- Interface: 04600.45126 (see page 11)

Nominal data		Number of impellers	Characteristic curve*	Nominal voltage Max. air flow		May book avooring	Max. Dack pressure	Max. power input Max. speed		Permissible ambient temperature (motor)	Permissible medium temperature	Dimensions in mm			
Туре	Part number			٧	m³/h	cfm	Pa	in wg	W	rpm	°C	°C	А	В	
QLK45/3000-2212	55668.11001	1	1	24 DC	140	82	15	0.06	4	1500	0+40	-15+70	421	-	
QLK45/6000-2212	55668.11002	2	2	24 DC	270	159	15	0.06	8	1500	0+40	-15+70	753	1 x 30	
QLK45/9000-2212	55668.11003	3	3	24 DC	420	247	15	0.06	14	1500	0+40	-15+70	1085	2 x 30	
Data is subject to change.			*see p	page 10											



Dimensions in mm.

### QLZ 06 with EC motor BG 22.



### Tangential blowers with electronically commutated direct current motors

- Impeller diameter: 60 mm

- Impeller length: 300 mm (other lengths on request)

- Mounting position: horizontal; vertical with motor on the bottom on request

- Speed control: closed-loop

- Insulation class: H

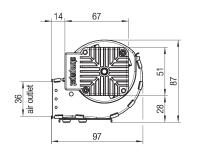
- Degree of protection: motor: IP20

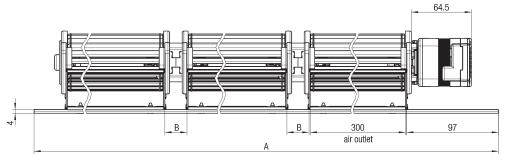
- Protection class: SELV (separated extra-low voltage)

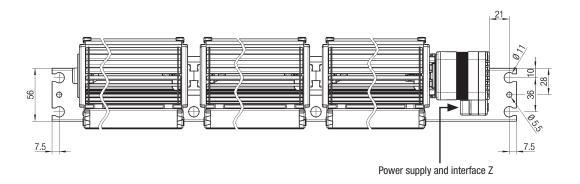
- Blower speed: adjustable via 0 -10 V analog voltage signal or PWM signal

- Interface: 04600.45126 (see page 11)

Nominal data			Characteristic curve*	Nominal voltage Max. air flow		Mod book avenue		Max. power input Max. speed		Permissible ambient temperature (motor)	Permissible medium temperature	Dimensions in mm			
Туре	Part number			V	m³/h	cfm	Pa	in wg	W	rpm	°C	°C	А	В	
QLZ06/3000-2212	55668.39001	1	1	24 DC	220	129	20	0.08	10	1500	0+40	-15+70	421	_	
QLZ06/6000-2212	55668.39002	2	2	24 DC	370	218	20	0.08	16	1500	0+40	-15+70	753	1 x 23.3	
QLZ06/9000-2212	55668.39003	3	3	24 DC	500	294	20	0.08	18	1500	0+40	-15+70	1085	2 x 23.3	
Data is subject to change.			*see p	age 10											

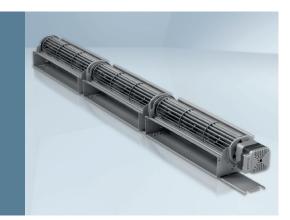






Dimensions in mm.

### QLN 65 with EC motor BG 22.



### Tangential blowers with electronically commutated direct current motors

- Impeller diameter: 65 mm

- Impeller length: 300 mm (other lengths on request)

- Mounting position: horizontal; vertical with motor on the bottom on request

- Speed control: closed-loop

- Insulation class: H

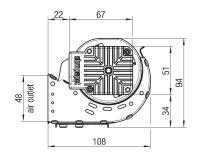
- Degree of protection: motor: IP20

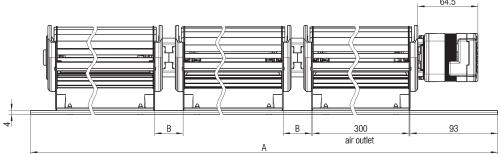
- Protection class: SELV (separated extra-low voltage)

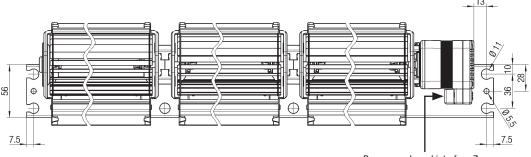
- Blower speed: adjustable via 0 -10 V analog voltage signal or PWM signal

- Interface: 04600.45126 (see page 11)

Nominal data			Characteristic curve*	Nominal voltage Max. air flow			Mov book property		Max. power input	power		Permissible medium temperature	Dimensions in mm		
Туре	Part number			٧	m³/h	cfm	Pa	in wg	W	rpm	°C	°C	А	В	
QLN65/3000-2212	55668.49101	1	1	24 DC	280	165	27	0.11	14	1500	0+40	-15+70	421	_	
QLN65/6000-2212	55668.49102	2	2	24 DC	420	247	27	0.11	15	1500	0+40	-15+70	753	1 x 30	
QLN65/9000-2212	55668.49103	3	3	24 DC	500	294	27	0.11	17	1500	0+40	-15+70	1085	2 x 30	
Data is subject to change.			*see r	page 10											



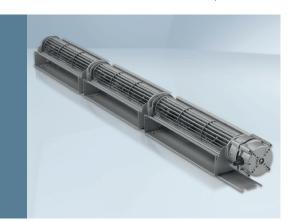




Power supply and interface  $\ensuremath{\mathsf{Z}}$ 

Dimensions in mm.

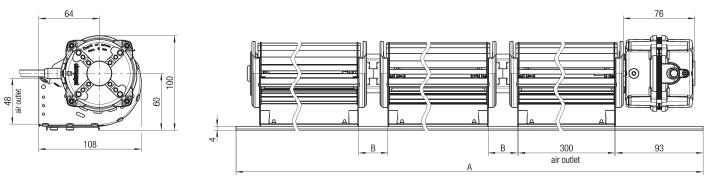
### QLN 65 with EC motor BG 43.

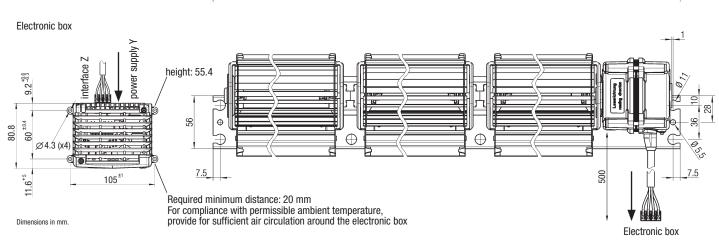


### Tangential blowers with electronically commutated direct current motors

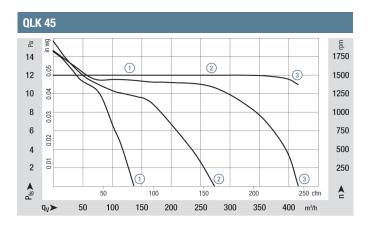
- Impeller diameter: 65 mm
- Impeller length: 300 mm (other lengths on request)
- Mounting position: horizontal; vertical with motor on the bottom on request
- Speed control: closed-loop
- Insulation class: H
- Degree of protection: motor: IP20 (IP54 on request), electronics: IP00
- Protection class: |
- Overload protection: by software class B
- Permissible ambient temperature electronics: 0-50 °C
- Blower speed: adjustable via 0 -10 V analog voltage signal or PWM signal
- Interface: 04600.45172 (see page 11)

Nominal data		Number of impellers	Characteristic curve* Nominal voltage		Frequency	rrequency Max. air flow		Max. back pressure		Max. power input Max. speed		Permissible ambient temperature (motor)	Permissible medium temperature	Dimensions in mm		
Туре	Part number			V	Hz	m³/h	cfm	Pa	in wg	W	rpm	°C	°C	А	В	
QLN65/3000-4310	55669.20001	1	1	220-240 AC**	50/60	460	271	65	0.26	38	2200	0+60	-15+70	421	_	
QLN65/6000-4310	55669.20002	2	2	220-240 AC**	50/60	650	383	65	0.26	38	2200	0+60	-15+70	753	1 x 30	
QLN65/9000-4310	55669.20003	3	3	220-240 AC**	50/60	840	494	65	0.26	38	2200	0+60	-15+70	1085	2 x 30	
Data is subject to change.			*see	page 10 ** UL version	on (115 VAC)	on request.										

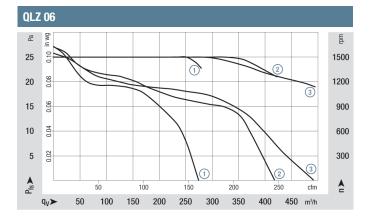




### Characteristic curves and connectors.

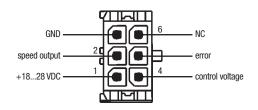


# 1: 1 impeller 2: 2 impellers 3: 3 impellers



### Connector (power supply and interface Z) for motor BG 22

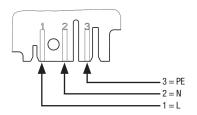
e.g. connector 6-p. Micro-Fit 3.0 43045-0612 (Molex) for mating connector: e.g. 43025-0608 (Molex)

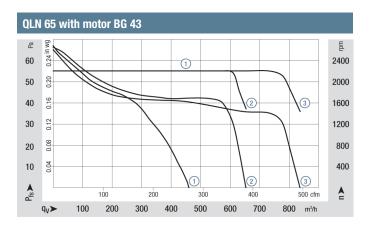


#### **QLN 65** rpm 1400 90.0 1200 15 1000 0.04 800 10 0.03 600 0.02 5 400 0.01 200 3 50 150 200 250 cfm 100 300 200 400 m³/h

### Connector (power supply Y) for QLN 65 with motor BG 43

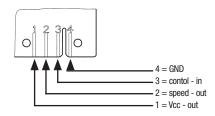
Coding of the PCB fits to edge connector: e.g. MFW9590-03-EF05-000-960-000-00 (Stocko) Part number for mating connector: 24310.45065





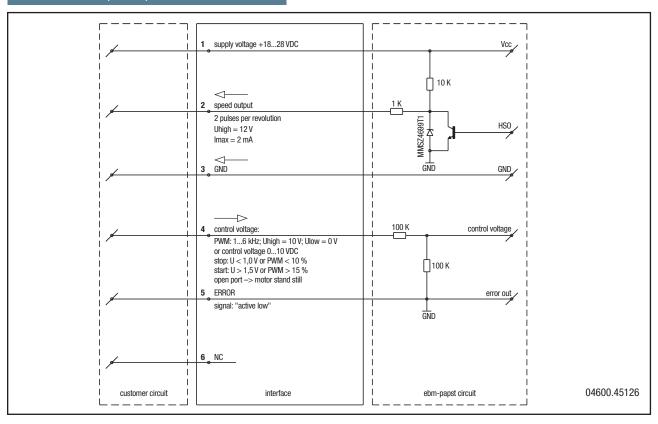
### Connector (interface Z) for QLN 65 with motor BG 43

Coding of the PCB fits to edge connector: e.g. MFW7238-004-061-960-000-00-G (Stocko) Part number for mating connector: 24310.45066

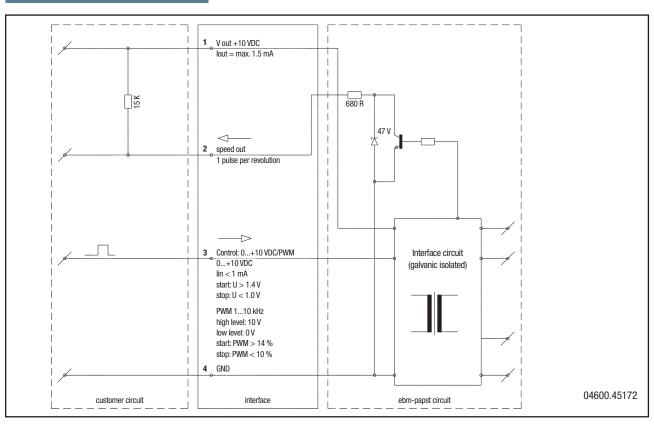


### Electrical interfaces.

### Interface for QLK 45, QLZ 06, QLN 65 with motor BG 22



### Interface for QLN 65 with motor BG 43



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