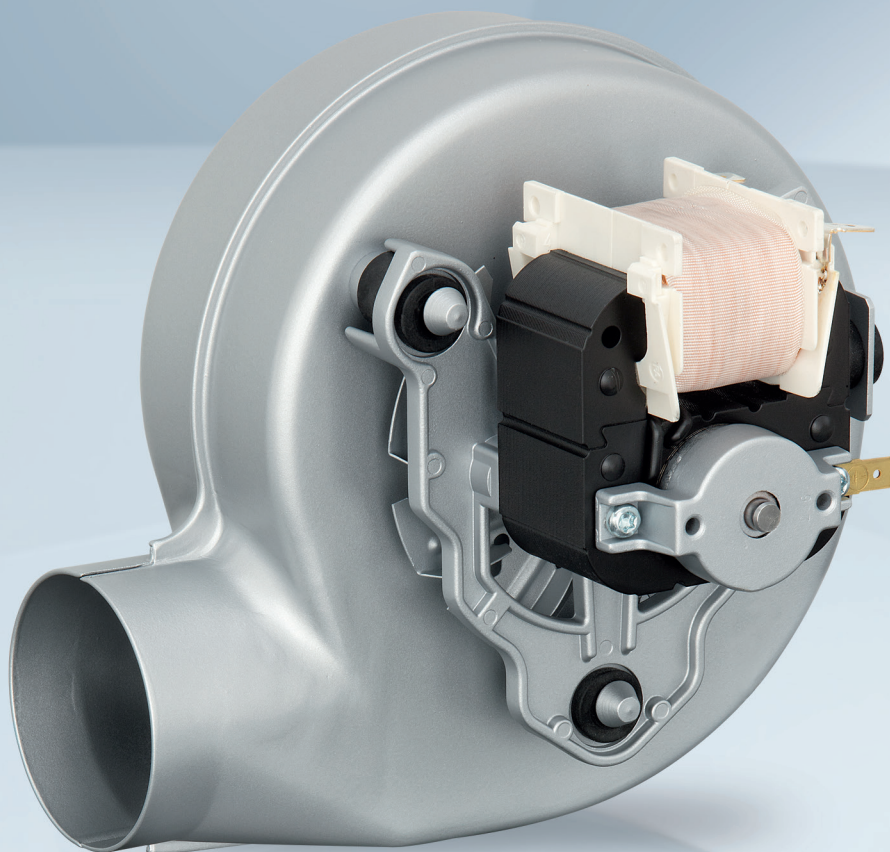


Standard-efficiency gas heating.

Innovation is our tradition.

ebmpapst

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. 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.

Proximity to our customers. At 57 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.



Playing an active part in creating the future of heating engineering – this is both our claim and our commitment at ebm-papst. Our products for conventional heating are known for their groundbreaking and extremely reliable solutions. We offer a unique and extensive range of high-efficiency AC and EC radial blowers for manufacturers of conventional gas heating systems.

These exhaust blowers are designed for high-temperature conditions and ensure maintenance-free operation.

Most of our customers approach us in the early stages of their developments and have direct access to our engineers in R&D. Together they think their way into the task at hand and come up with optimal solutions based on experience, their skills and our wide and extensive basic program. And so there is hardly an application ebm-papst does not have a solution for – whether for gas- or fuel-fired heaters, solid-fuel burners, electric fireplaces, fuel cells, electric storage heaters and boilers, fan heaters, mobile heat generators or heating pumps.

Ideas and technologies for keeping warm.

More ideas and more know-how for heating. Undoubtedly, this is the segment we are experts in, as our product range traditionally focuses on heating. For decades, our innovative motor and fan technology has contributed to making modern heating engineering more powerful, economical and environmentally friendly.

Fuel gas blowers for conventional gas boilers.

Conventional gas heating systems place special demands on the temperature stability of a blower. Whereas the combustion air is sucked into the atmospheric burner without blower support, the efficiency of the boiler will be lost. These losses can be regained with the support of our radial blowers. These blowers can reliably handle hot exhaust gases up to 250°C.

The motors, mostly AC shaded pole motors, are mounted outside the hot exhaust gas flow and are thermally and acoustically decoupled from the blower unit. Depending on the specification, the housings are either made of die-cast aluminium or sheet metal with sheet

steel (FAL) or aluminium impellers featuring forward curved blades inside. In conjunction with other technical features, such as the use of cooling impellers, bearing systems suitable for high temperatures and relevant coil structure, all demands for this type of application can be met. Pressure sensors and impulse transmitters for control functions can also be integrated.

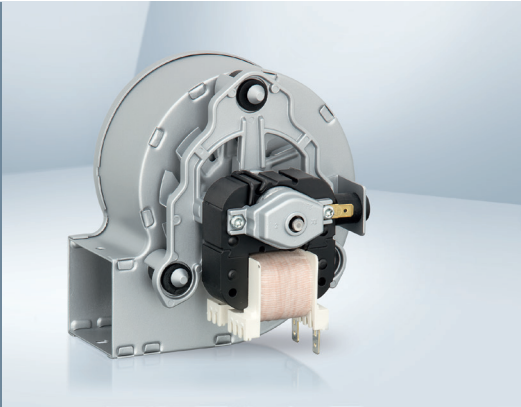
Therefore, our products and solutions for conventional heating meet highest demands on service life, acoustics and efficiency.



RLD 85.

Radial blowers for high temperatures

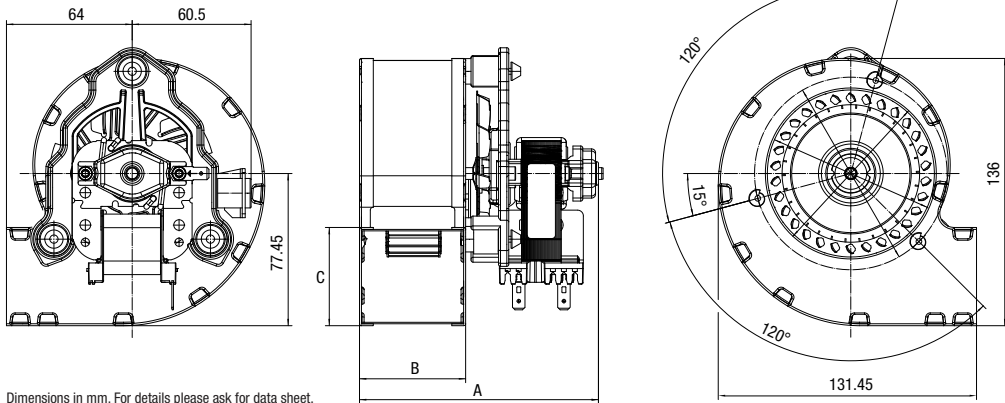
- **Insulation class:** H
- **Housing:** FAL
- **Impeller:** forward curved, FAL
- **Motor mounting:** decoupled by silicon elements
- **Mounting position:** must be specified for corresponding support elements
- **Permissible medium temperature:** -15..+250 °C (with venturi max. 170 °C)
- **Ambient temperature:** 0..+60 °C



Nominal data		Characteristic curve	Nominal voltage	Frequency	Max. air flow	Max. back pressure	Max. power input	Max. speed	Wheel material	Venturi	Speed transmitter	Mounting position	Max. width	Outlet width	Outlet height
Type	Part number	V	Hz	m³/h	Pa	W	rpm	A	B	C					
RLD85/2700-3020*	55460.71220	①	230	50	86	145	28	2300	FAL	No	No	1;2;3	125	54	50
RLD85/3400-3025	55460.73010	②	230	50	98	245	38	2550	FAL	No	No	1;2;3	129	54	50
RLD85/0027-3020**	55460.72090	①	230	50	86	145	28	2300	FAL	Yes	No	1;2;3	123	62	62
RLD85/0034-3025	55460.74050	②	230	50	98	245	38	2550	FAL	No	No	1;2;3	129	58	58
RLD85/0034-3025	55460.74130	②	230	50	98	245	38	2500	FAL	No	No	3	127	54	50

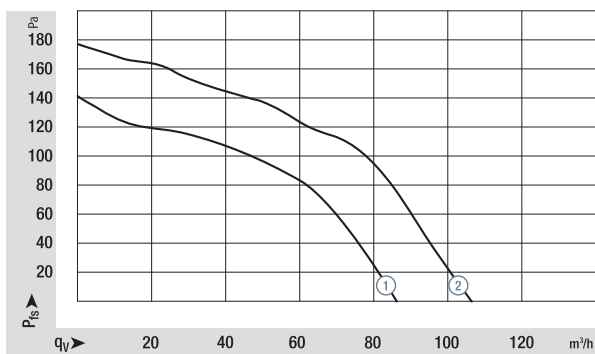
* As illustrated.

** As illustrated, however motor mounted on left side.
Data is subject to change.

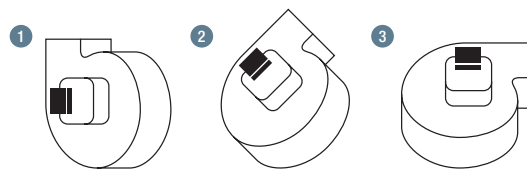


Dimensions in mm. For details please ask for data sheet.

Characteristic curve



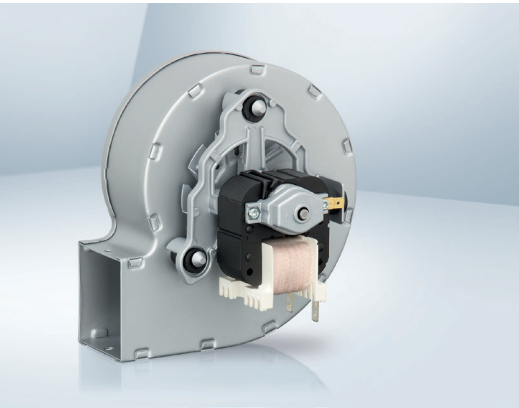
Mounting position



RLA 97 and 108.

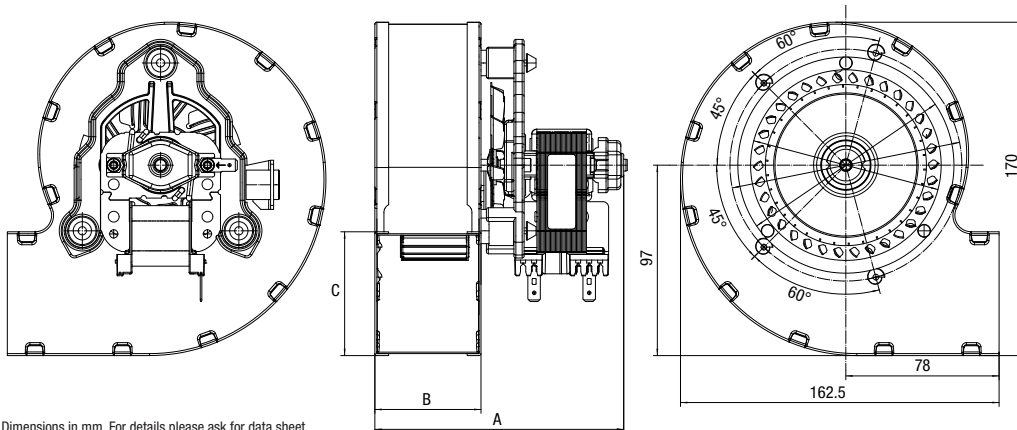
Radial blowers for high temperatures

- **Insulation class:** H
- **Housing:** FAL
- **Impeller:** forward curved, AL or FAL
- **Motor mounting:** decoupled by silicon elements
- **Mounting position:** must be specified for corresponding support element
- **Permissible medium temperature***:** -15..+250 °C (with AL impeller max. 200 °C)
- **Ambient temperature:** 0..+60 °C



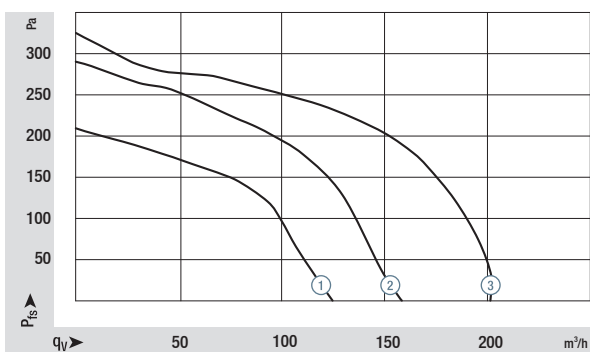
Nominal data		Characteristic curve	Nominal voltage	Frequency	Max. air flow	Max. back pressure	Max. power input	Max. speed	Wheel material	Venturi	Speed transmitter	Mounting position	Max. width	Outlet width	Outlet height
Type	Part number	V	Hz	m ³ /h	Pa	W	rpm	A	B	C					
RLA97/3400-3025*	55461.13200	①	230	50	130	220	41	2000	FAL	No	No	1,2;3	128	54	64
RLA108/3400-3030	55461.21920	②	230	50	155	280	59	1900	FAL	No	No	1,2;3	144	54	64
RLA108/4200-3030	55461.22751	②	230	50	145	290	61	1850	FAL	No	No	1,2;3	152	62	64
RLA108/4200-3038	55461.22600	③	230	50	200	330	78	1950	FAL	No	Yes	1,2;3	165	62	64
RLA108/0034-3030**	55461.21880	②	230	50	155	280	59	1900	FAL	No	No	1,2;3	143	54	64
RLA108/0042-3030	55461.22920	②	230	50	145	290	60	1850	AL	No	No	1,2;3	140	62	64

* As illustrated.
 ** As illustrated, however motor mounted on left side.
 ***-15..+180 °C for RLA108/0042-3030
 Data is subject to change.

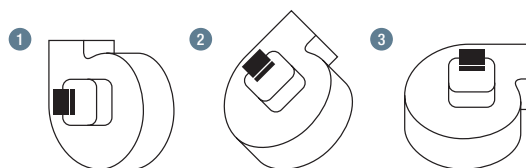


Dimensions in mm. For details please ask for data sheet.

Characteristic curve



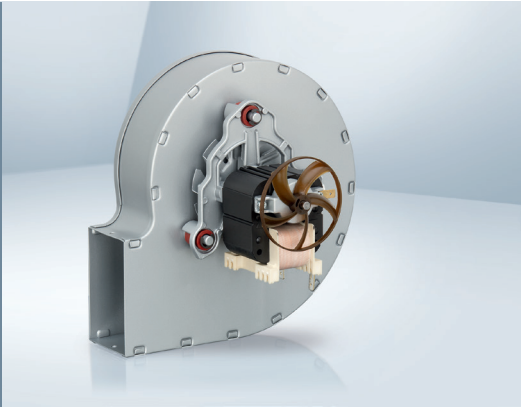
Mounting position



RLB 130.

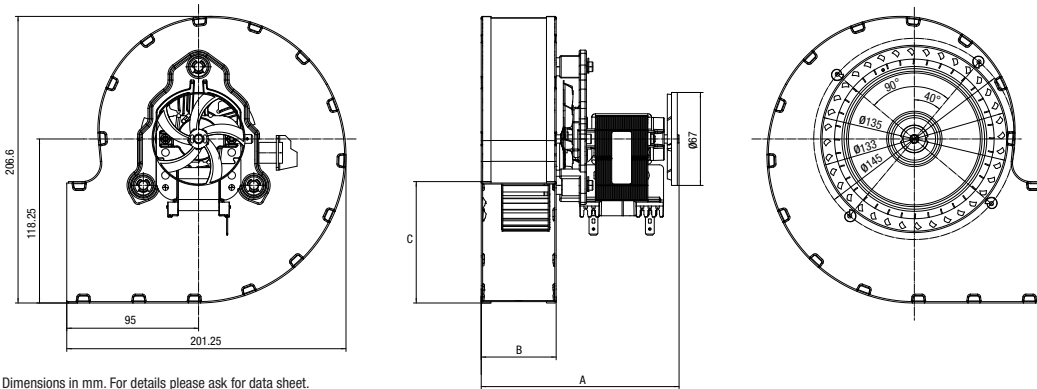
Radial blowers for high temperatures

- **Insulation class:** H
- **Housing:** FAL
- **Impeller:** forward curved, AL or FAL
- **Motor mounting:** decoupled by silicon elements
- **Mounting position:** must be specified for corresponding support elements
- **Permissible medium temperature**:** -15..+250 °C (with AL impeller max. 200 °C)
- **Ambient temperature:** 0..+60 °C



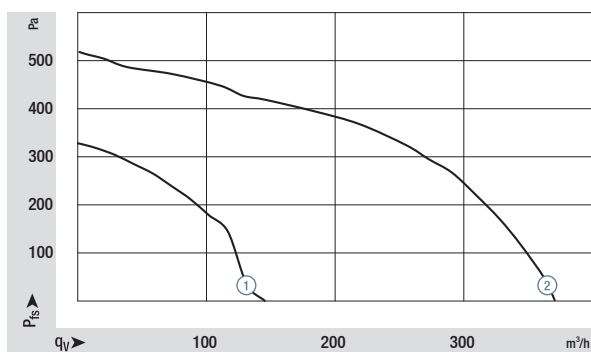
Nominal data		Characteristic curve	Nominal voltage	Frequency	Max. air flow	Max. back pressure	Max. power input	Max. speed	Wheel material	Venturi	Speed transmitter	Mounting position	Max. width	Outlet width	Outlet height
Type	Part number	V	Hz	m ³ /h	Pa	W	rpm	A	B	C					
RLB130/3400-3038*	55461.35120	①	230	50	140	325	70	1500	AL	No	No	1;2;3	145	54	86
RLB130/0042-4330	55461.36020	②	230	50	380	500	133	2000	FAL	No	No	1;2;3	205	62	86

*As illustrated.
 **-15..+180 °C for RLB130/3400-3038
 Data is subject to change.

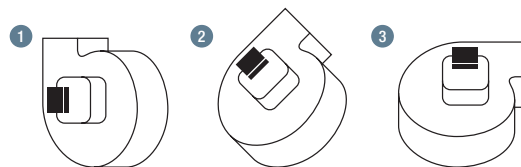


Dimensions in mm. For details please ask for data sheet.

Characteristic curve



Mounting position



RLG 97 and 108.

Radial blowers for high temperatures

- Insulation class: H
- Housing: FAL
- Impeller: forward curved, FAL
- Motor mounting: decoupled by silicon elements
- Mounting position: must be specified for corresponding support element
- Permissible medium temperature^{***}: -15..+250 °C (with venturi max. 170 °C)
- Ambient temperature: 0..+60 °C



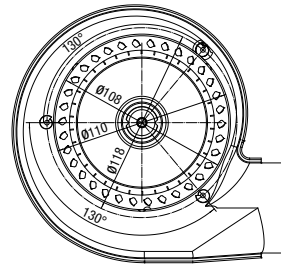
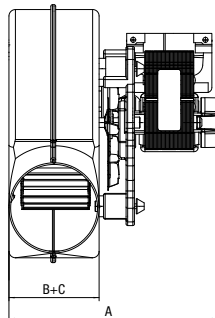
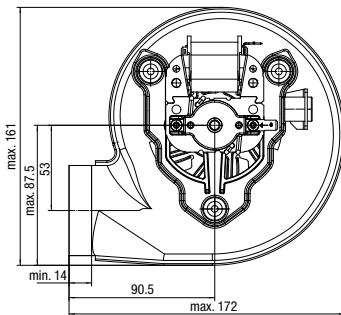
Nominal data		Characteristic curve	Nominal voltage	Frequency	Max. air flow	Max. back pressure	Max. power input	Max. speed	Wheel material	Venturi	Speed transmitter	Mounting position	Max. width	Outlet width	Outlet height
Type	Part number	V	Hz	m ³ /h	Pa	W	rpm	A	B	C					
RLG97/3400-3020	55460.97730	③	230	50	105	180	27	1500	AL	No	No	1,2;3	126	56	56
RLG108/4200-3030*	55460.97630	⑤	230	50	145	295	61	2400	FAL	No	No	1,2;3	131	56	56
RLG97/0034-3025	55460.97450	②	230	50	95	210	43	2400	FAL	Yes	No	1,2;3	130	56	56
RLG97/0042-3025	55460.97480	④	230	50	115	205	36	2100	FAL	Yes	Yes	1,2;3	137	56	56
RLG97/0034-3020	55460.97340	③	230	50	105	180	27	1500	FAL	Yes	No	1,2;3	125	56	56
RLG97/0034-3020	55460.97341	①	230	50	105	195	29	1750	FAL	Yes	No	1,2;3	125	56	56
RLG108/0042-3030**	55460.97080	⑤	230	50	145	295	61	2400	FAL	Yes	No	1,2;3	135	56	56
RLG108/0042-3030**	55460.97180	⑥	230	50	150	260	66	2450	FAL	Yes	Yes	1,2;3	152	56	56

* As illustrated.

** As illustrated, however motor mounted on left side.

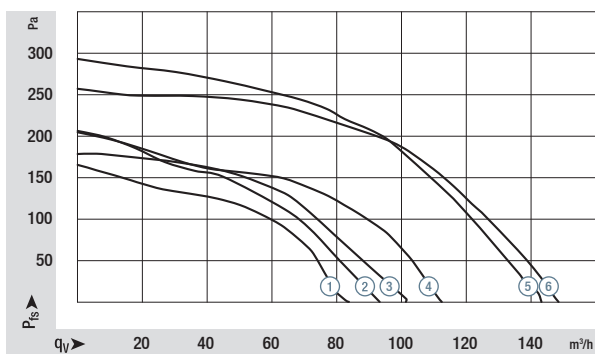
*** -15..+180 °C for RLG97/3400-3020

Data is subject to change.

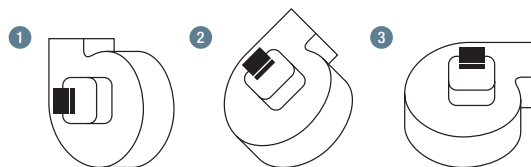


Dimensions in mm. For details please ask for data sheet.

Characteristic curve



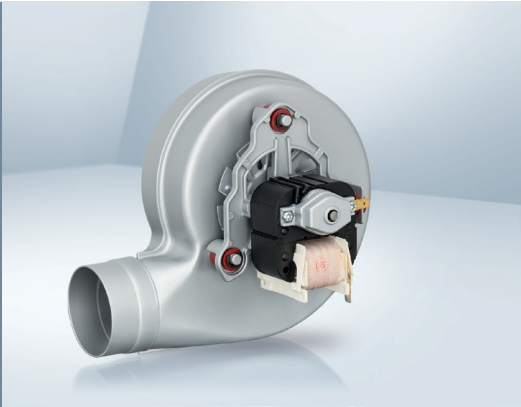
Mounting position



RLH 108 and 120.

Radial blowers for high temperatures

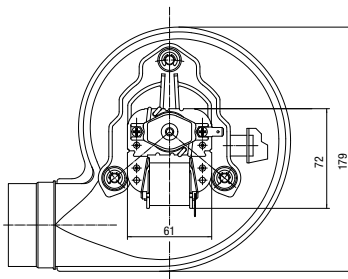
- **Insulation class:** H
- **Housing:** FAL
- **Impeller:** forward curved, FAL
- **Motor mounting:** decoupled by silicon elements
- **Mounting position:** must be specified for corresponding support elements
- **Permissible medium temperature:** -15..+250 °C (with venturi max. 170 °C)
- **Ambient temperature:** 0..+60 °C



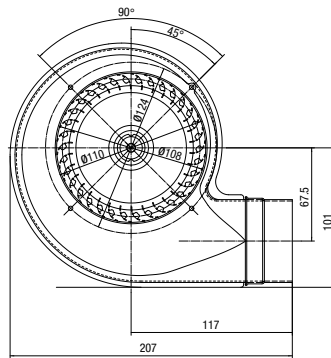
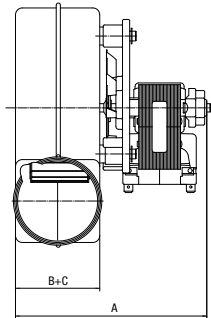
Nominal data		Characteristic curve	Nominal voltage	Frequency	Max. air flow	Max. back pressure	Max. power input	Max. speed	Wheel material	Venturi	Speed transmitter	Mounting position	Max. width	Outlet width	Outlet height
Type	Part number	V	Hz	m ³ /h	Pa	W	rpm	A	B	C					
RLH108/4200-3030*	55460.96210	①	230	50	145	300	58	2150	FAL	No	No	1;2;3	140	58	58
RLH120/3800-3038	55460.96530	③	230	50	175	375	95	2400	FAL	Yes	No	1;2;3	142	58	58
RLH108/0042-3030**	55460.96660	②	230	50	160	275	64	2200	FAL	No	No	1;2;3	141	58	58
RLH120/0038-3038	55460.96520	③	230	50	175	375	95	2400	FAL	No	No	1;2;3	142	58	58

*As illustrated.

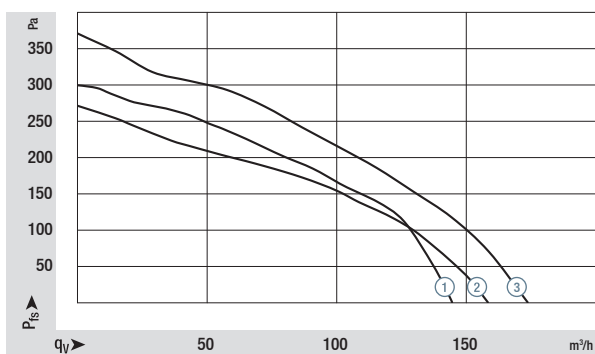
**As illustrated, however motor mounted on left side.
Data is subject to change.



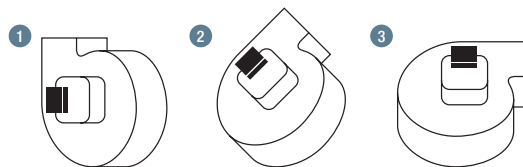
Dimensions in mm. For details please ask for data sheet.



Characteristic curve



Mounting position



RLT 120.

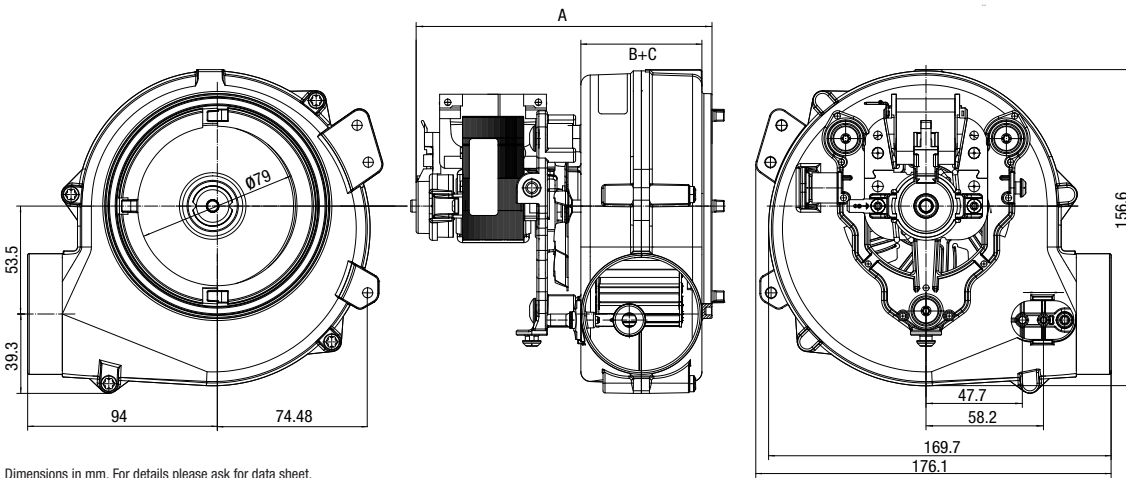
Radial blowers for high temperatures

- **Insulation class:** H
- **Housing:** FAL
- **Impeller:** forward curved, FAL
- **Motor mounting:** decoupled by silicon elements
- **Mounting position:** must be specified for corresponding support element
- **Permissible medium temperature:** -15...+250 °C (with venturi max. 170 °C)
- **Ambient temperature:** 0...+60 °C

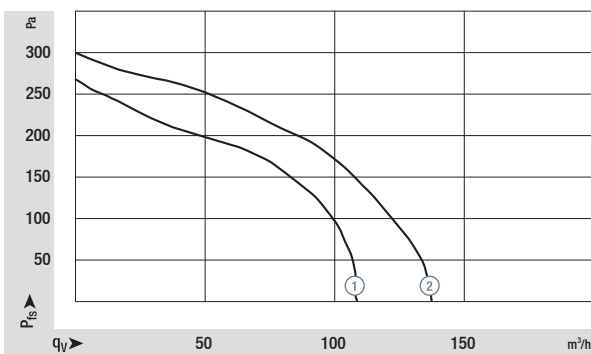


Nominal data		Characteristic curve	Nominal voltage	Frequency	Max. air flow	Max. back pressure	Max. power input	Max. speed	Wheel material	Venturi	Speed transmitter	Mounting position	Max. width	Outlet width	Outlet height
Type	Part number		V	Hz	m ³ /h	Pa	W	rpm					A	B	C
RLT120/0042-3025	on request	①	230	50	110	270	43	1600	FAL	Yes	No	1;2;3	145	60	60
RLT120/0042-3030*	on request	②	230	50	140	300	60	2000	FAL	Yes	Yes	1;2;3	150	60	60

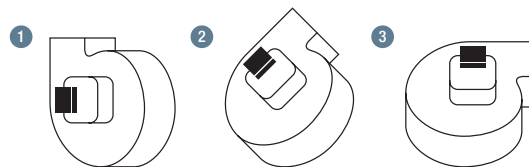
*As illustrated.
Data is subject to change.



Characteristic curve



Mounting position



RLA with BG 36.

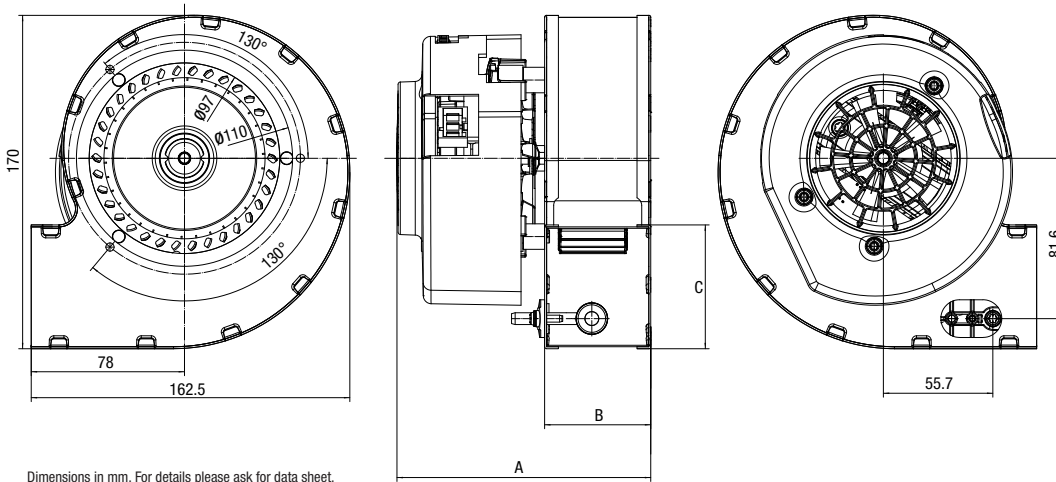
Radial blowers for high temperatures

- Insulation class: H
- Housing: FAL
- Impeller: forward curved, FAL
- Motor mounting: decoupled by silicon elements
- Mounting position: must be specified for corresponding support elements
- Permissible medium temperature: -15..+250 °C (with venturi max. 170 °C)
- Ambient temperature: 0..+60 °C



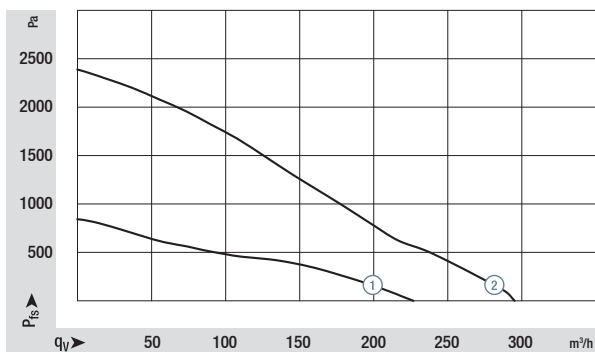
Nominal data		Characteristic curve	Nominal voltage	Frequency	Max. air flow	Max. back pressure	Max. power input	Max. speed	Wheel material	Venturi	Speed transmitter	Mounting position	Max. width	Outlet width	Outlet height
Type	Part number	V	Hz	m ³ /h	Pa	W	rpm	A	B	C					
RLA97/0034-3612*	55667.13005	①	230	50	230	860	77	3000	FAL	Yes	Yes	1;2;3	133	54	64
RLB120/0034-3633	on request	②	230	50	300	2400	210	6800	FAL	No	Yes	1;2;3	143	100	86

*As illustrated.
Data is subject to change.

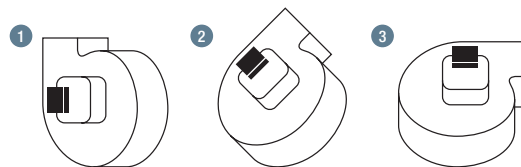


Dimensions in mm. For details please ask for data sheet.

Characteristic curve



Mounting position



Impulse transmitter, electrical interface and venturi pressure control.



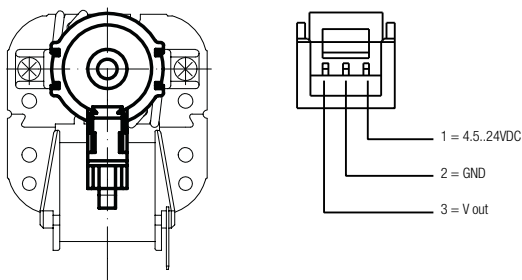
The signal transmitter SG2 is an impulse transmitter suitable to be connected to EM30 and KM motors. 12 square impulses per rotation of the motor shaft are formed by means of a 24-pole, plastic-bonded ferrite magnet ring, in connection with a Hall-IC. A secondary electronic system can be applied to use this signal as speed recognition, speed control.

In a simple case, a supply voltage of 4.5 – 24V as well as a pull-up resistor of e.g. 2.7 kΩ and 0.25W is necessary to obtain a digital signal of equal amplitude at the output.

Features of the signal transmitter are high operating reliability, small dimensions, no limitation to build-in position and no operating noise.

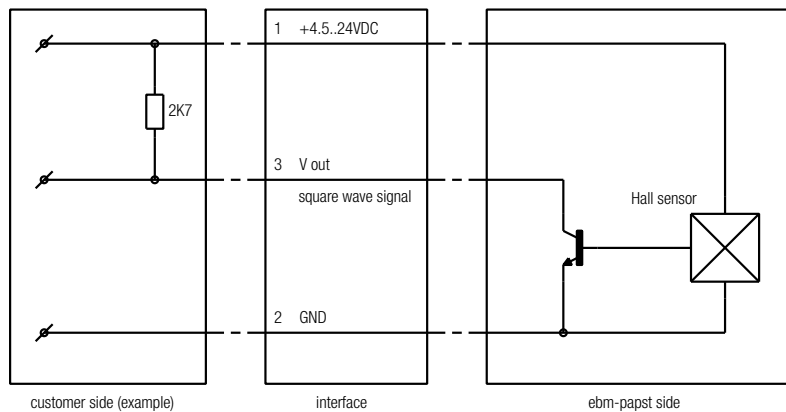
Part number connector shell: 24309.45049

Part number crimp socket: 24308.45082



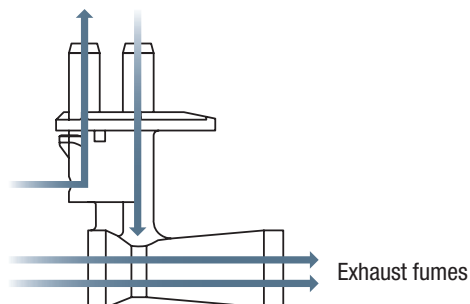
3-pin pin-connector according to RAST 2.5 suitable for mating connector according to RAST 2.5 e. g. Molex Spox order number: 51191-0300 and 3 x socket 50802-8000

Electrical interface

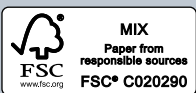


Venturi pressure control

Delivers high pressure differences for burner control safety Δp .



Long term temperature index: 170 °C
Heat distortion temperature (up to 10 min): max. 200 °C



ebm-papst
Landshut GmbH

Hofmark-Aich-Straße 25
84030 Landshut
Germany
Phone +49 871 707-0
Fax +49 871 707-465
info3@de.ebmpapst.com

ebmpapst

The engineer's choice