Innovation is our tradition.

Standard-efficiency gas heating.
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.
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**

<table>
<thead>
<tr>
<th>Type</th>
<th>Part number</th>
<th>V</th>
<th>Hz</th>
<th>m³/h</th>
<th>Pa</th>
<th>W</th>
<th>rpm</th>
<th>Wheel material</th>
<th>Venturi</th>
<th>Speed transmitter</th>
<th>Mounting position</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLD85/2700-3020*</td>
<td>55460.71220</td>
<td>230</td>
<td>50</td>
<td>86</td>
<td>145</td>
<td>28</td>
<td>2300</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>125</td>
<td>54</td>
<td>50</td>
</tr>
<tr>
<td>RLD85/3400-3025</td>
<td>55460.73010</td>
<td>230</td>
<td>50</td>
<td>98</td>
<td>245</td>
<td>38</td>
<td>2550</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>129</td>
<td>54</td>
<td>50</td>
</tr>
<tr>
<td>RLD85/0027-3020**</td>
<td>55460.72090</td>
<td>230</td>
<td>50</td>
<td>86</td>
<td>145</td>
<td>28</td>
<td>2300</td>
<td>FAL</td>
<td>Yes</td>
<td>No</td>
<td>1;2;3</td>
<td>123</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>RLD85/0034-3025</td>
<td>55460.74050</td>
<td>230</td>
<td>50</td>
<td>98</td>
<td>245</td>
<td>38</td>
<td>2550</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>129</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>RLD85/0034-3025*</td>
<td>55460.74130</td>
<td>230</td>
<td>50</td>
<td>98</td>
<td>245</td>
<td>38</td>
<td>2500</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>3</td>
<td>127</td>
<td>54</td>
<td>50</td>
</tr>
</tbody>
</table>

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

**Characteristic curve**

<table>
<thead>
<tr>
<th>V</th>
<th>Hz</th>
<th>m³/h</th>
<th>Pa</th>
<th>W</th>
<th>rpm</th>
<th>Wheel material</th>
<th>Venturi</th>
<th>Speed transmitter</th>
<th>Mounting position</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>m³/h</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mounting position**

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

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

* As illustrated.
** As illustrated, however motor mounted on left side.
*** -15..160 °C for RLA108/0042-3030

Data is subject to change.

---

**Characteristic curve**

<table>
<thead>
<tr>
<th>Qm³/h</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mounting position**

1.  
2.  
3.  

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Part number</th>
<th>Nominal voltage</th>
<th>Frequency</th>
<th>Max. air flow</th>
<th>Max. back pressure</th>
<th>Max. power input</th>
<th>Max. speed</th>
<th>Wheel material</th>
<th>Venturi</th>
<th>Speed transmitter</th>
<th>Mounting position</th>
<th>Max. width</th>
<th>Outlet width</th>
<th>Outlet height</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLB130/3400-3038*</td>
<td>55461.35120</td>
<td>230</td>
<td>50</td>
<td>140</td>
<td>325</td>
<td>70</td>
<td>1500</td>
<td>AL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>145</td>
<td>54</td>
<td>86</td>
</tr>
<tr>
<td>RLB130/0042-4330</td>
<td>55461.36020</td>
<td>230</td>
<td>50</td>
<td>380</td>
<td>500</td>
<td>133</td>
<td>2000</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>205</td>
<td>62</td>
<td>86</td>
</tr>
</tbody>
</table>

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

### Characteristic curve

<table>
<thead>
<tr>
<th>q (m³/h)</th>
<th>100</th>
<th>200</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>ε</td>
<td>500</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>Δp</td>
<td>200</td>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

### Mounting position

1. 2. 3.
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

<table>
<thead>
<tr>
<th>Type</th>
<th>Part number</th>
<th>Characteristic curve</th>
<th>Nominal voltage</th>
<th>Frequency</th>
<th>Max. air flow</th>
<th>Max. back pressure</th>
<th>Max. power input</th>
<th>Max. speed</th>
<th>Wheel material</th>
<th>Venturi</th>
<th>Speed transmitter</th>
<th>Mounting position</th>
<th>Max. width</th>
<th>Outlet width</th>
<th>Outlet height</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLG97/3400-3020</td>
<td>55460.97730</td>
<td></td>
<td>230</td>
<td>50</td>
<td>105</td>
<td>180</td>
<td>27</td>
<td>1500</td>
<td>AL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>126</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>RLG108/4200-3030**</td>
<td>55460.97630</td>
<td></td>
<td>230</td>
<td>50</td>
<td>145</td>
<td>295</td>
<td>61</td>
<td>2400</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>131</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>RLG97/0034-3025</td>
<td>55460.97450</td>
<td></td>
<td>230</td>
<td>50</td>
<td>95</td>
<td>210</td>
<td>43</td>
<td>2400</td>
<td>FAL</td>
<td>Yes</td>
<td>No</td>
<td>1;2;3</td>
<td>130</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>RLG97/0042-3025</td>
<td>55460.97480</td>
<td></td>
<td>230</td>
<td>50</td>
<td>115</td>
<td>205</td>
<td>36</td>
<td>2100</td>
<td>FAL</td>
<td>Yes</td>
<td>Yes</td>
<td>1;2;3</td>
<td>137</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>RLG97/0034-3020</td>
<td>55460.97340</td>
<td></td>
<td>230</td>
<td>50</td>
<td>105</td>
<td>180</td>
<td>27</td>
<td>1500</td>
<td>FAL</td>
<td>Yes</td>
<td>No</td>
<td>1;2;3</td>
<td>125</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>RLG108/0042-3030**</td>
<td>55460.97341</td>
<td></td>
<td>230</td>
<td>50</td>
<td>145</td>
<td>295</td>
<td>61</td>
<td>2400</td>
<td>FAL</td>
<td>Yes</td>
<td>No</td>
<td>1;2;3</td>
<td>125</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>RLG108/0042-3030**</td>
<td>55460.97180</td>
<td></td>
<td>230</td>
<td>50</td>
<td>150</td>
<td>260</td>
<td>66</td>
<td>2450</td>
<td>FAL</td>
<td>Yes</td>
<td>Yes</td>
<td>1;2;3</td>
<td>135</td>
<td>56</td>
<td>56</td>
</tr>
</tbody>
</table>

* 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

<table>
<thead>
<tr>
<th>Type</th>
<th>Part number</th>
<th>Nominal voltage</th>
<th>Frequency</th>
<th>Max. air flow</th>
<th>Max. back pressure</th>
<th>Max. power input</th>
<th>Max. speed</th>
<th>Wheel material</th>
<th>Venturi</th>
<th>Speed transmitter</th>
<th>Mounting position</th>
<th>Max. width</th>
<th>Outlet width</th>
<th>Outlet height</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLH108/4200-3030*</td>
<td>55460.96210</td>
<td>230</td>
<td>50</td>
<td>145</td>
<td>300</td>
<td>58</td>
<td>2150</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>140</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>RLH120/3800-3038</td>
<td>55460.96530</td>
<td>230</td>
<td>50</td>
<td>175</td>
<td>375</td>
<td>95</td>
<td>2400</td>
<td>FAL</td>
<td>Yes</td>
<td>No</td>
<td>1;2;3</td>
<td>142</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>RLH108/0042-3030**</td>
<td>55460.96660</td>
<td>230</td>
<td>50</td>
<td>160</td>
<td>275</td>
<td>64</td>
<td>2200</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>141</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>RLH120/0038-3038</td>
<td>55460.96520</td>
<td>230</td>
<td>50</td>
<td>175</td>
<td>375</td>
<td>95</td>
<td>2400</td>
<td>FAL</td>
<td>No</td>
<td>No</td>
<td>1;2;3</td>
<td>142</td>
<td>58</td>
<td>58</td>
</tr>
</tbody>
</table>

* 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.
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

<table>
<thead>
<tr>
<th>Type</th>
<th>Part number</th>
<th>Nominal data</th>
<th>Characteristic curve</th>
<th>Nominal voltage</th>
<th>Frequency</th>
<th>Max. air flow</th>
<th>Max. back pressure</th>
<th>Max. power input</th>
<th>Max. speed</th>
<th>Wheel material</th>
<th>Venturi</th>
<th>Speed transmitter</th>
<th>Mounting position</th>
<th>Max. width</th>
<th>Outlet width</th>
<th>Outlet height</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLT120/0042-3025</td>
<td>on request</td>
<td>V 230</td>
<td>Hz 50</td>
<td>m³/h 110</td>
<td>Pa 270</td>
<td>W 43</td>
<td>rpm 1600</td>
<td>FAL</td>
<td>Yes</td>
<td>No</td>
<td>1;2;3</td>
<td></td>
<td>145</td>
<td>60</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>RLT120/0042-3030*</td>
<td>on request</td>
<td>V 230</td>
<td>Hz 50</td>
<td>m³/h 140</td>
<td>Pa 300</td>
<td>W 60</td>
<td>rpm 2000</td>
<td>FAL</td>
<td>Yes</td>
<td>Yes</td>
<td>1;2;3</td>
<td></td>
<td>150</td>
<td>60</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

*As illustrated.
Data is subject to change.

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

Characteristics curve

Mounting position

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Part number</th>
<th>V</th>
<th>Hz</th>
<th>m³/h</th>
<th>Pa</th>
<th>W</th>
<th>rpm</th>
<th>Wheel material</th>
<th>Speed transmitter</th>
<th>Mounting position</th>
<th>Max. width</th>
<th>Outlet width</th>
<th>Outlet height</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLA97/0034-3612*</td>
<td>55667.13005</td>
<td>230</td>
<td>50</td>
<td>230</td>
<td>860</td>
<td>77</td>
<td>3000</td>
<td>FAL</td>
<td>Yes</td>
<td>Yes</td>
<td>1;2;3</td>
<td>133</td>
<td>54</td>
</tr>
<tr>
<td>RLB120/0034-3633</td>
<td>on request</td>
<td>230</td>
<td>50</td>
<td>300</td>
<td>2400</td>
<td>210</td>
<td>6800</td>
<td>FAL</td>
<td>No</td>
<td>Yes</td>
<td>1;2;3</td>
<td>143</td>
<td>100</td>
</tr>
</tbody>
</table>

*As illustrated.
Data is subject to change.

### Characteristic curve

- Nominal voltage: V
- Frequency: Hz
- Max. air flow: m³/h
- Max. back pressure: Pa
- Max. power input: W
- Max. speed: rpm
- Wheel material: Wheel material
- Speed transmitter: Speed transmitter
- Mounting position: Mounting position
- Max. width: A
- Outlet width: B
- Outlet height: C

### Mounting position

1. As shown

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

Electrical interface

Venturi pressure control

Delivers high pressure differences for burner control safety $\Delta p$.

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