

# Fan BL

Technical Information · GB

10 Edition 03.15

- Low running noise in the boiler due to 3-phase motor with radial rotor
- Characteristic curves adjustable as an option using microcontroller
- Simple installation due to compact design
- Cost-effective alternative to conventional radial fans due to compatible dimensions and connections
- Energy-efficient to ERP Directive 2015



## Contents

Fan BL	1
Contents	2
1 Application	3
1.1 Examples of application	4
1.1.1 Heating device with electronic air/gas ratio control system	4
1.1.2 Heating device with pneumatic air/gas ratio control system	4
3 Certification	5
4 Selection	6
4.1 Type code	6
5 Project planning information	7
5.1 Installation	7
6 Accessories	8
6.1 Mixer M1	8
6.2 Adapter, gewinkelt	8
7 Technical data	9
7.1 Characteristic curve	9
7.2 Dimensions	9
Feedback	10
Contact	10

## 1 Application



*Fan BL 118*

In condensing boilers, the speed-controlled fan BL distributes the mixture of gas and air required for the combustion process evenly over the surface of the radiant burner so that it can be combusted perfectly.

The capacity can be adjusted to meet the heat demand via the fan speed. The compact design of the rotor, drive motor and control electronics in a single housing ensures low running noise in the heating device.

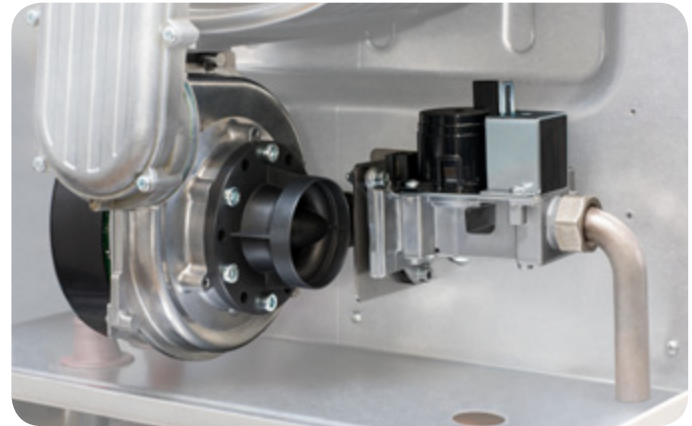
The fan can be used in heating devices which are suitable for operation with natural gas, LPG or bio-methane.

The characteristic curve can be adjusted as an option using the integrated microcontroller.

The optional mixer and adapter enable the fan to be installed direct on the combination control CES.



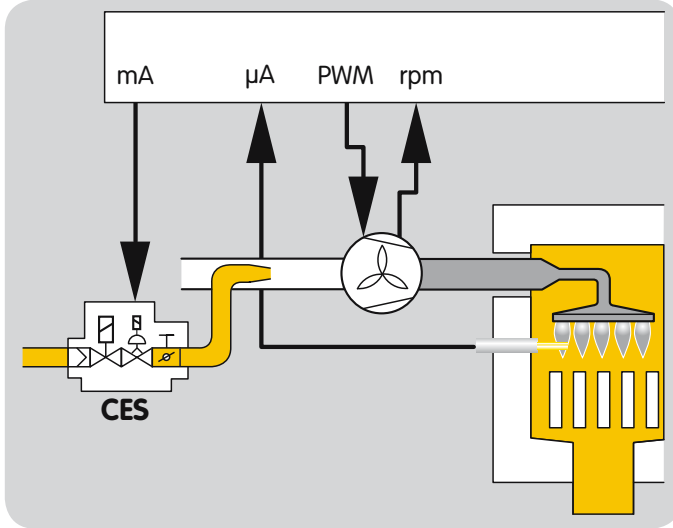
*Plug connectors on the fan*



*Fan BL with mixer and adapter on combination control CES in the boiler*

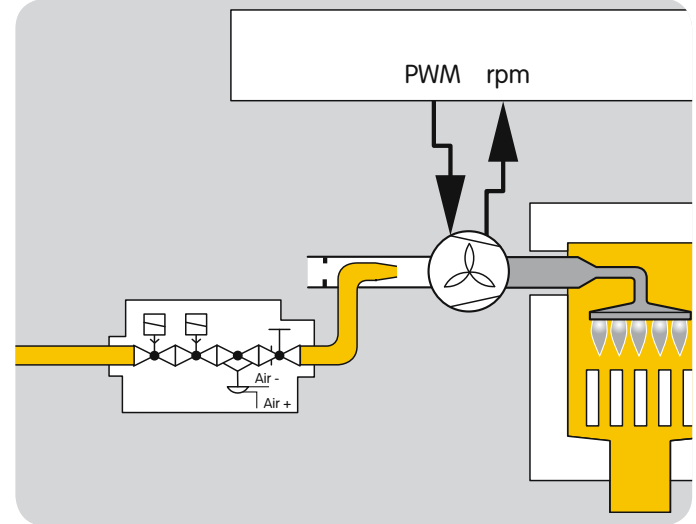
## 1.1 Examples of application

### 1.1.1 Heating device with electronic air/gas ratio control system



An electronic boiler control checks the flame signal in a closed control loop and activates a combination control (e.g. CES) and the fan BL directly for an optimal combustion quality. The fan transports the gas/air mixture required for combustion from the mixer installed at the inlet to the burner.

### 1.1.2 Heating device with pneumatic air/gas ratio control system



The fan transports the gas/air mixture required for combustion via the mixer installed at the inlet to the burner. The fan speed is set by the boiler control. A gas pressure regulator delivers the required gas/air ratio.

### 3 Certification

Energy-efficient to ERP Directive 2015.

VDE approved.

## 4 Selection

	118	A/	W	3	-0	-120	-240	A/	S	71-	E	1	M1	-0--330	A90-A359
BL	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○

● = standard, ○ = available

### Order example

BL 118A/W3-0A/S71-E1M1-0A90

### 4.1 Type code

Code	Description
BL	Fan
118	Rotor diameter 118 mm
A/	Rotor geometry A
W	Mains voltage: 230 V AC, 50/60 Hz
3	3-wire connection
-0	Plug connection: 0°
-120	120°
-240	240°
A/	Equipment version A
S	Inlet: SIT standard
71-	Outlet: 71 mm hole circle Ø
E	With control electronics
1	Characteristic curve: Standard
M1 <sup>1)</sup>	Mixer: Size 1
-0 <sup>1) 2)</sup>	Mixer, pre-fitted: 0°, 30°, 60° to 330°
-30 <sup>1) 2)</sup>	
-60 <sup>1) 2)</sup> ...	
A0-A359 <sup>1) 2)</sup>	Adapter for connection to CES: 0° – 359°

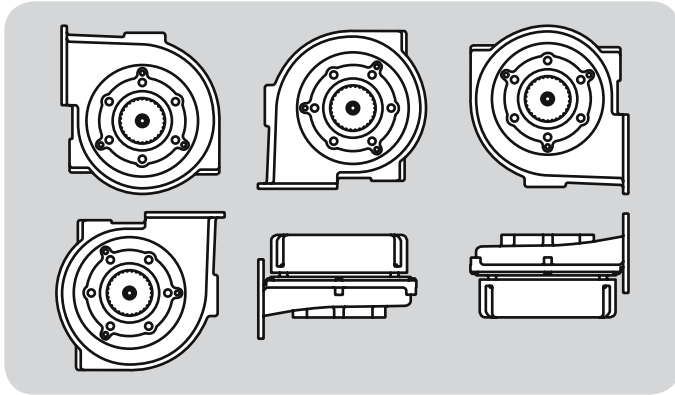
<sup>1)</sup> If "none", this specification is omitted.

<sup>2)</sup> Only in conjunction with mixer size 1.

## 5 Project planning information

### 5.1 Installation

Installation position as required.



## 6 Accessories

### 6.1 Mixer M1

For installation on the fan inlet.

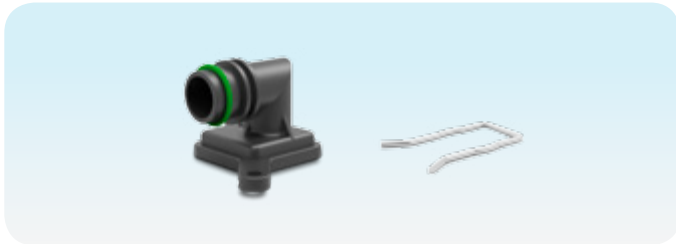
Use 3 M6x16 screws to DIN 7500 for attachment (not supplied).



### 6.2 Adapter, gewinkelt

For connecting the combination control CES to the mixer M1. A securing clip ensures a secure connection of the adapter and mixer.

Bespoke angled adapters can also be supplied on demand.





## 7 Technical data

Mains voltage:

230 V AC, 50/60 Hz.

Power consumption in standby: 0.2 W.

Max. speed: 9385 rpm.

Max. pressure increase: 3142 Pa.

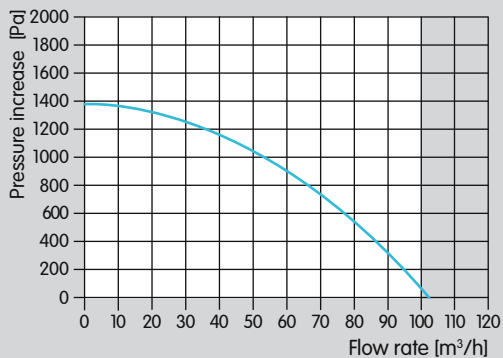
Max. flow rate: 91 m<sup>3</sup>/h.

Enclosure: IP 20.

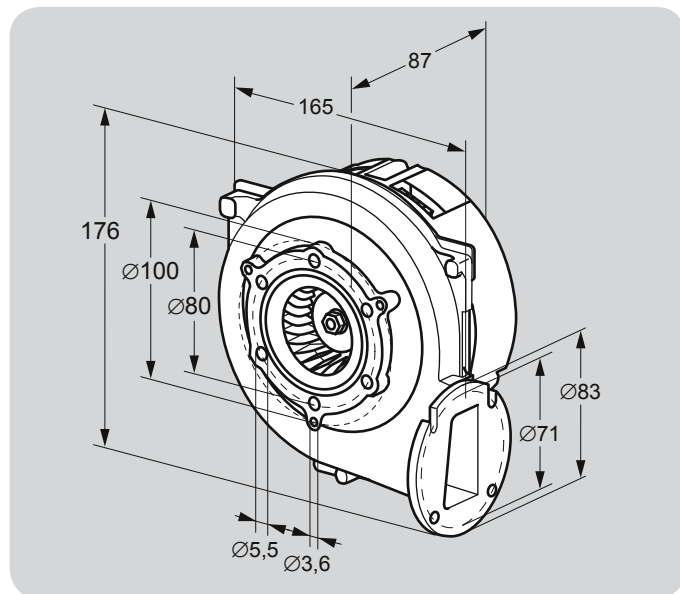
Weight: 1.1 kg.

## 7.1 Characteristic curve

Measurements at 6000 rpm.



## 7.2 Dimensions



## Feedback

Finally, we are offering you the opportunity to assess this "Technical Information (TI)" and to give us your opinion, so that we can improve our documents further and suit them to your needs.

### Clarity

Found information quickly  
Searched for a long time  
Didn't find information  
What is missing?  
No answer

### Comprehension

Coherent  
Too complicated  
No answer

### Scope

Too little  
Sufficient  
Too wide  
No answer

inter  
active

### Use

To get to know the product  
To choose a product  
Planning  
To look for information

### Navigation

I can find my way around  
I got "lost"  
No answer

### My scope of functions

Technical department  
Sales  
No answer

### Remarks

(Adobe Reader 7 or higher required)  
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