

EC axial fans - HyBlade®

US-edition

version 08/2010



The engineer's choice

ebmpapst

The new EC axial fans - HyBlade®

A new and unique hybrid blade design makes ebm-papst axial fans even quieter, more powerful and lasting longer. The novel HyBlade® fan blades use a support structure made of highly robust, corrosion-proof aluminium alloy and a coating made of special reinforced fibre plastics. Their aerodynamically optimal form results in enormous acoustic benefits at even higher efficiencies compared to conventional blades. And this, in turn, offers further benefits when used in refrigeration, heating and ventilation.

A revolutionary development

In refrigeration and ventilation, axial fans are frequently used, for instance to cool heat exchangers with air passing through them. For compact systems, the best tried and tested choice is the ebm-papst external-rotor motor with the axial fan blades mounted onto its rotor. Apart from compact dimensions, the fans in such applications are expected to yield high air performance at minimal noise.

So far, fan blades are conventionally made of sheet steel or aluminium. In order to meet exacting requirement for optimum efficiency and acoustic behaviour, ebm-papst focused intensely on developing new blade geometries. However, the limited design possibilities of a monolithic sheet metal blade with uniform sheet thickness are obstacles engineers have to simply accept.

To manage the required quantum leap and arrive at lower noise and better efficiency, new construction principles and materials, or component structures, to be more precise, are needed. This is the approach ebm-papst took with its revolutionary hybrid blade concept, using hybrid components and structures to join seemingly irreconcilable characteristic in one harmonious functional unit.

The modular system consisting of motor, electronics and impeller allows for optimum configuration, making the new line of EC HyBlade® axial fans unbeatable as to combinatorics and power range. The integrated motor electronics are based on state-of-the-art EC technology and correspond to the "2nd generation". This makes them highly efficient and they already comply with the latest standards of the defined European Efficiency Classes.

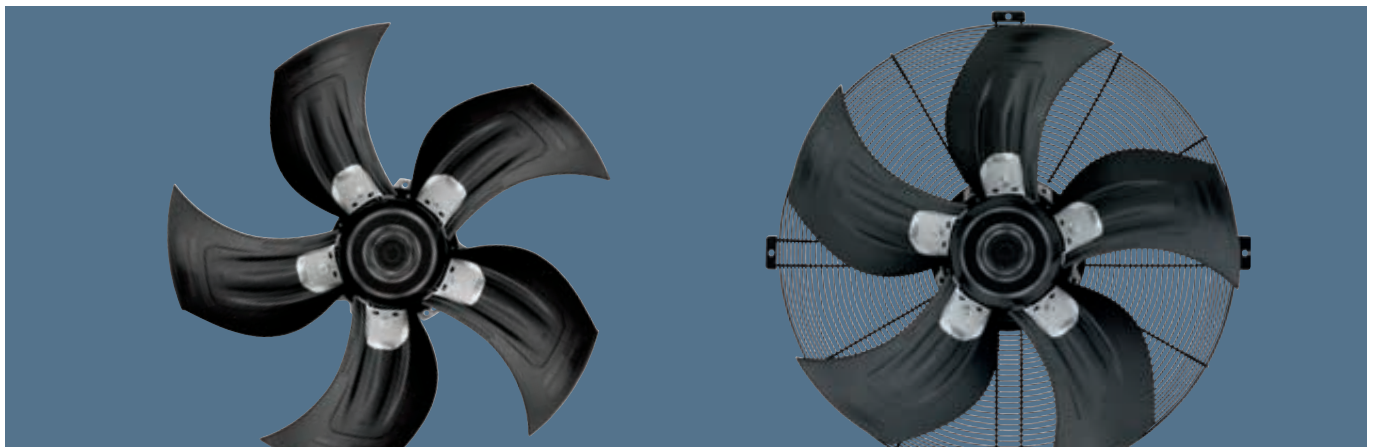


Table of contents



■ New EC axial fans - HyBlade®	2
■ GreenTech: The Green Company	4
■ Size 500	6
■ Size 560	10
■ Size 630	14
■ Size 710	20
■ Size 800	24
■ Size 910	28
■ Size 990	32
■ Electrical connections	36
■ Technical parameters & scope	40
■ ebm-papst representatives & subsidiaries	44

Sustainability is at the Centre of Our Thoughts and Actions. Out of Conviction!

Eco-friendliness and sustainability have always been at the core of our thoughts and actions. For decades, we have worked according to the simple but strict creed of our co-founder Gerhard Sturm: "Each new product we develop has to be better than the last one in terms of economy and ecology." GreenTech is the ultimate expression of our corporate philosophy.





GreenTech is pro-active development.

Even in the design phase, the materials and processes we use are optimised for the greatest possible eco-friendliness, energy balance and – wherever possible – recyclability. We continually improve the material and performance of our products, as well as the flow and noise characteristics. At the same time, we significantly reduce energy consumption. Close cooperation with universities and scientific institutes and the professorship we endow in the area of power engineering and regenerative energies allows us to profit from the latest research findings in these fields – and at the same time ensure highly qualified young academics.

GreenTech is ecofriendly production.

GreenTech also stands for maximum energy efficiency in our production processes. There, the intelligent use of industrial waste heat and ground-water cooling, photovoltaics and, of course, our own cooling and ventilation technology are of the utmost importance. Our most modern plant, for instance, consumes 91% less energy than currently specified and required. In this way, our products contribute to protecting the environment, from their origin to their recyclable packaging.

GreenTech is acknowledged and certified.

Every step in our chain of production meets the stringent standards of environmental specialists and the public. The 2008 Environmental Prize of Baden-Wuerttemberg, the Green Award 2009, the Energy Efficiency Award 2009 of the dena – to give just a few examples – testify to this. The environmental advantage gained in the performance of the products developed from our GreenTech philosophy can also be measured in the fulfilment of the most stringent energy and environmental standards. In many instances, our products are already well below the thresholds energy legislation will impose a few years from now – several times over.

Our customers profit from this every day.

The heart of GreenTech is ebm-papst EC technology. The EC technology at the core of our most efficient motors and fans allows efficiency of up to 90%, saves energy at a very high level, significantly extends service life and makes our products maintenance-free. These values pay off not only for the environment, but every cent also pays off for the user! All ebm-papst products – even those for which EC technology does not (yet) make sense from an application viewpoint – feature the greatest possible connection of economy and ecology.

EC axial fans - HyBlade®

Ø 500



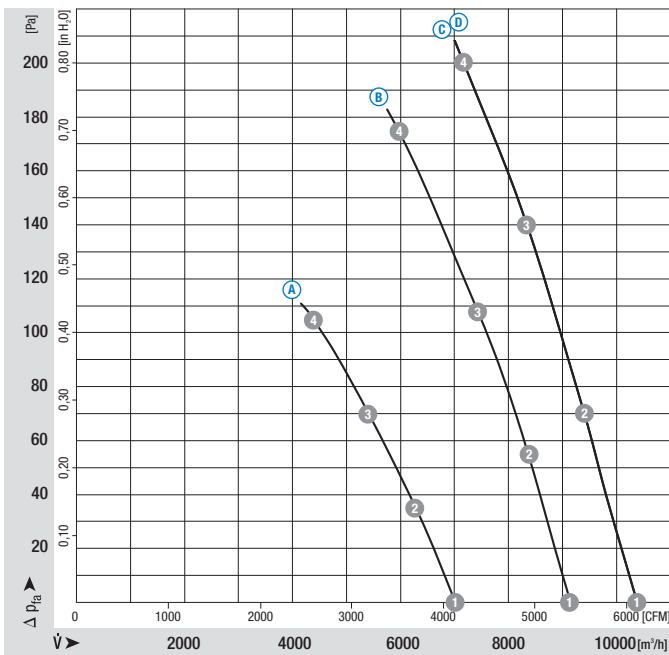
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Pressed-on round sheet steel plate, extrusion-coated in PP plastics
Rotor: Coated in black
Electronics enclosure: Die-cast aluminium, ^(B) ^(C) ^(D) coated in black additionally
- **Number of blades:** 5
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "B" ("F" applying to the main components as per EN)
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage range	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Max. operative range	Perm. amb. temp.	Mass without attachments	Technical features and elect. connections
Type	Motor			VAC	Hz	rpm	kW	A	Pa	°C	kg	
*3G 500	M3G 084-GF	0°	(A)	1~ 100-130	50/60	1080	0,38	3,30	105	-25..+60	6,2	p. 36 / K1)
*3G 500	M3G 112-EA	0°	(B)	1~ 200-277	50/60	1420	0,75	3,40	175	-25..+60	7,2	p. 37 / L3)
*3G 500	M3G 112-GA	0°	(C)	3~ 200-240	50/60	1600	0,98	3,20	200	-25..+60	9,2	p. 39 / K3)
*3G 500	M3G 112-GA	0°	(D)	3~ 380-480	50/60	1600	0,98	1,60	200	-25..+60	9,2	p. 39 / K3)

subject to alterations

(1) Nominal data in operating point with maximum load and 115 VAC or 230 VAC or 400 VAC

Curves



Air performance measured as per: ISO 5801, Installation category A, in ebm-papst full nozzle and without protection against accidental contact

Suction-side noise levels: L_{wA} as per ISO 13347, L_{pA} measured at 1 m distance to fan axis

The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and re-viewed once installed or fitted!

For detailed information see page 40 ff.

		n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
(A)	1	1080	0,26	2,26	72
(A)	2	1080	0,30	2,61	68
(A)	3	1080	0,33	2,87	65
(A)	4	1080	0,38	3,30	66
(B)	1	1420	0,55	2,51	78
(B)	2	1420	0,62	2,80	75
(B)	3	1420	0,68	3,03	73
(B)	4	1420	0,75	3,40	74
(C)	1	1600	0,73	2,32	80
(C)	2	1600	0,83	2,66	77
(C)	3	1600	0,91	2,82	75
(C)	4	1600	0,98	3,20	76
(D)	1	1600	0,73	1,16	80
(D)	2	1600	0,83	1,33	77
(D)	3	1600	0,91	1,41	75
(D)	4	1600	0,98	1,60	76

- **Technical features:** See electrical connections p. 36 ff.
- **EMC:**
 - Ⓐ Ⓑ Interference emission acc. to EN 61000-6-3
 - Ⓒ Ⓓ Interference emission acc. to EN 61000-6-4
 - Interference immunity acc. to EN 61000-6-2
 - Harmonics acc. to EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Cable exit:** Variable
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standards:** CE
- **Approvals:** GOST; UL/CSA are applied for; CCC on request

Direction of air flow	  		
	Without attachments	With full square nozzle	With guard grille for short nozzle
"V"	on request	W3G 500-GD09 -41	on request
"V"	A3G 500-AM56 -21	W3G 500-GM56 -21	S3G 500-AM56 -21
"V"	on request	W3G 500-GN38 -11	on request
"V"	A3G 500-AN33 -01	W3G 500-GN33 -01	S3G 500-AN33 -01
Direction of air flow "A" on request			

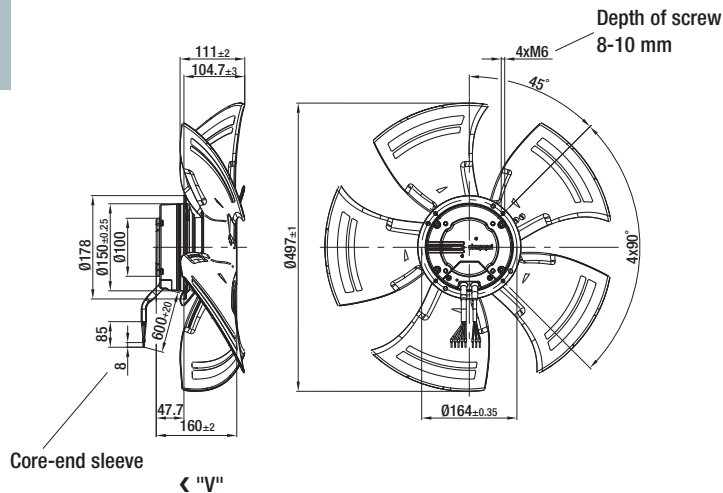
EC axial fans - HyBlade®

Ø 500 with motor M3G084, drawings for direction of air flow "V"



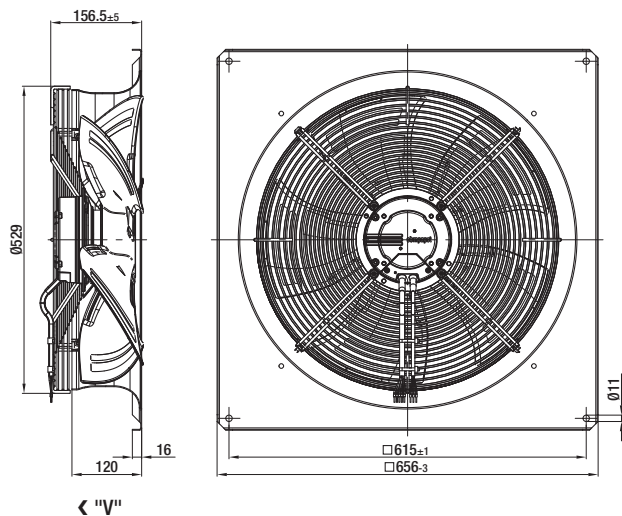
Without attachments

Type	Mass [kg]
Ⓐ on request	6,2



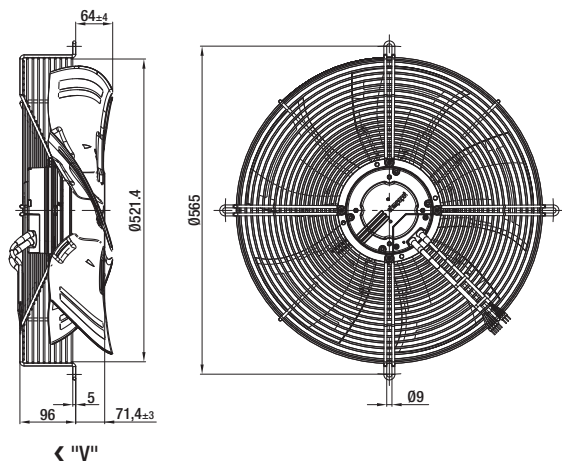
With full square nozzle

Type	Mass [kg]
Ⓐ W3G 500-GD09 -41	12,2



With guard grille for short nozzle

Type	Mass [kg]
Ⓐ on request	8,7





Internal diameter of the wall ring at least 503 mm



Technical drawing of the 656-3 fan unit, showing side and front views with dimensions.

Side View (Left):

- Overall width: 171 ± 5
- Overall height: 65 ± 8
- Mounting flange width: 120
- Flange thickness: 16

Front View (Right):

- Overall width: 615 ± 1
- Overall height: 656 ± 3

The front view shows a circular fan grille with a central motor housing and four mounting brackets. The grille is composed of concentric rings and radial spokes. The motor housing is located in the center, with a small label '656-3' visible.

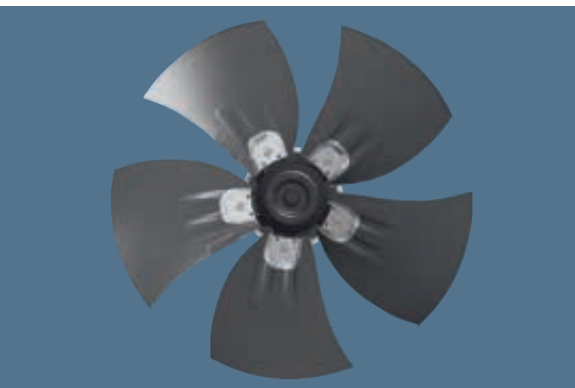
Type	Mass [kg]
W3G 500-GM56 -21	17,2
W3G 500-GN38 -11	19,2
W3G 500-GN33 -01	19,2



Internal diameter of the wall ring at least 503 mm

EC axial fans - HyBlade®

Ø 560



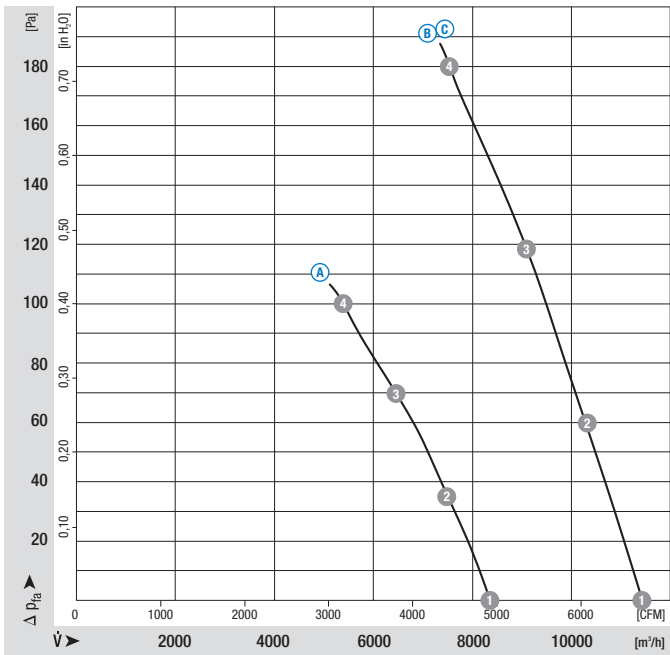
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Coated in black
Electronics enclosure: Die-cast aluminium, coated in black
- **Number of blades:** 5
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "B" ("F" applying to the main components as per EN)
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage range	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Max. operative range	Perm. amb. temp.	Mass without attachments	Technical features and elect. connections
Type	Motor			VAC	Hz	rpm	kW	A	Pa	°C	kg	
*3G 560	M3G 112-EA	-5°	A	1~ 200-277	50/60	1000	0,40	1,80	100	-25..+60	9,3	p. 36 / K1)
*3G 560	M3G 112-GA	-5°	B	3~ 200-240	50/60	1350	0,95	3,00	180	-25..+60	9,3	p. 39 / K3)
*3G 560	M3G 112-GA	-5°	C	3~ 380-480	50/60	1350	0,95	1,50	180	-25..+60	9,3	p. 39 / K3)

subject to alterations

(1) Nominal data in operating point with maximum load and 230 VAC or 400 VAC

Curves



Air performance measured as per: ISO 5801, Installation category A, in ebm-papst full nozzle and without protection against accidental contact

Suction-side noise levels: Lw_A as per ISO 13347, Lp_A measured at 1 m distance to fan axis

The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted!

For detailed information see page 40 ff.

	n [rpm]	P ₁ [kW]	I [A]	Lw _A [dB(A)]
A 1	1000	0,29	1,29	67
A 2	1000	0,34	1,48	66
A 3	1000	0,37	1,61	66
A 4	1000	0,40	1,80	68
B 1	1350	0,67	2,22	75
B 2	1350	0,78	2,50	74
B 3	1350	0,86	2,74	73
B 4	1350	0,95	3,00	77
C 1	1350	0,67	1,11	75
C 2	1350	0,78	1,25	74
C 3	1350	0,86	1,37	73
C 4	1350	0,95	1,50	77

- **Technical features:** See electrical connections p. 36 ff.
- **EMC:**
 - ⓑ ⓐ Interference emission acc. to EN 61000-6-3
 - ⓐ Interference emission acc. to EN 61000-6-4
 - Interference immunity acc. to EN 61000-6-2
 - Harmonics acc. to EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Cable exit:** Variable
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standards:** CE
- **Approvals:** GOST; UL/CSA are applied for; CCC on request

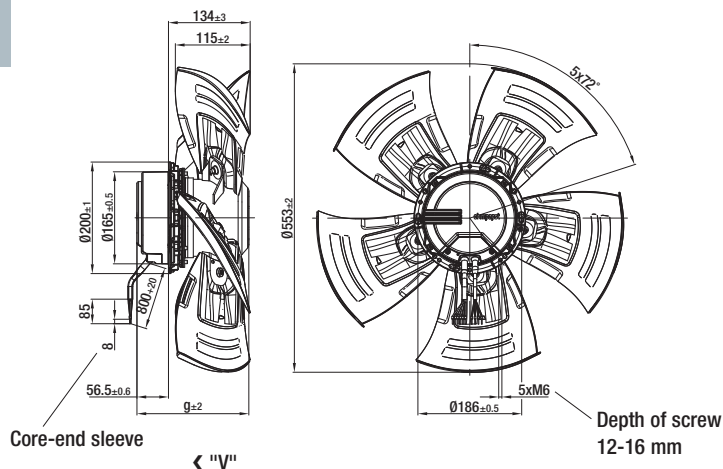
Direction of air flow	 < "V"		
	 < "V"		
	 < "V"		
	Without attachments	With full square nozzle	With guard grille for short nozzle
"V"	A3G 560-AP68 -21	W3G 560-GP68 -21	S3G 560-AP68 -21
"V"	on request	W3G 560-GQ49 -11	on request
"V"	A3G 560-AQ41 -01	W3G 560-GQ41 -01	S3G 560-AQ41 -01
Direction of air flow "A" on request			

EC axial fans - HyBlade®

Ø 560 with motor M3G112, drawings for direction of air flow "V"



Without attachments



Type

Mass
[kg]

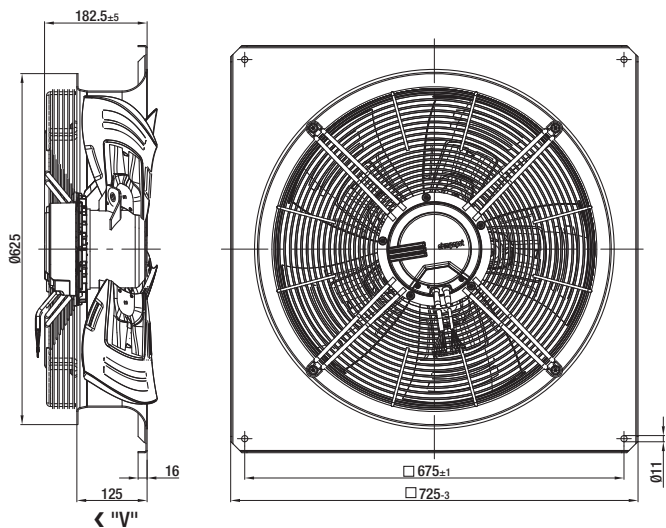
g

A	A3G 560-AP68 -21	7,2	180,5
B	on request	9,3	200,5
C	A3G 560-AQ41 -01	9,3	200,5

Internal diameter of the wall ring at least 559 mm



With full square nozzle



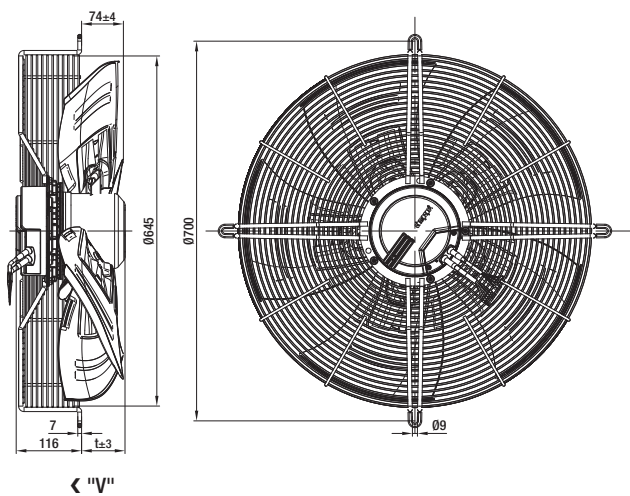
Type

Mass
[kg]

A	W3G 560-GP68 -21	18,9
B	W3G 560-GQ49 -11	21,0
C	W3G 560-GQ41 -01	21,0



With guard grille for short nozzle



Type

Mass
[kg]

t

A	S3G 560-AP68 -21	11,8	64
B	on request	13,9	84
C	S3G 560-AQ41 -01	13,9	84

Internal diameter of the wall ring at least 559 mm

EC axial fans - HyBlade®

Ø 630



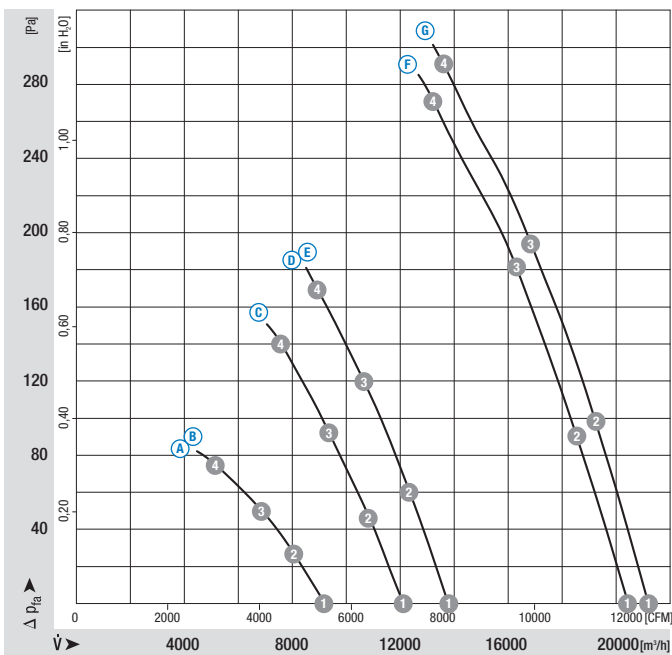
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades (5): (A) (B) (C) (D) (E) Pressed-on round sheet steel plate; (F) (G) Insertion part made of sheet aluminium; Both versions extrusion-coated in PP plastics
Rotor: Coated in black
Electronics enclosure: Die-cast aluminium, (G) (D) (E) (F) (G) coated in black additionally
- **Direction of rotation:** (A) (B) (C) (D) (E) counter-clockwise, (F) (G) clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** (A) (B) (C) (D) (E) "B" ("F" applying to the main components as per EN), (F) (G) "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage range	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Max. operative range	Perm. amb. temp.	Mass without attachments	Technical features and elect. connections
Type	Motor			VAC	Hz	rpm	kW	A	Pa	°C	kg	
*3G 630	M3G 084-GF	0°	(A)	1~ 100-130	50/60	800	0,28	2,40	75	-25..+60	6,3	p. 36 / K1)
*3G 630	M3G 084-GF	0°	(B)	1~ 200-277	50/60	800	0,28	1,20	75	-25..+60	6,3	p. 36 / K1)
*3G 630	M3G 112-GA	-5°	(C)	1~ 200-277	50/60	1000	0,72	3,20	140	-25..+60	9,3	p. 37 / L3)
*3G 630	M3G 112-IA	-5°	(D)	3~ 200-240	50/60	1140	0,97	3,20	170	-25..+60	11,3	p. 39 / K3)
*3G 630	M3G 112-IA	-5°	(E)	3~ 380-480	50/60	1140	0,97	1,60	170	-25..+60	11,3	p. 39 / K3)
*3G 630	M3G 150-IF	0°	(F)	3~ 200-240	50/60	1450	2,95	8,90	270	-25..+60	24,4	p. 38 / L5)
*3G 630	M3G 150-IF	0°	(G)	3~ 380-480	50/60	1510	3,20	5,00	290	-25..+65	24,4	p. 38 / L5)

subject to alterations

(1) Nominal data in operating point with maximum load and 115 VAC or 230 VAC or 400 VAC

Curves



Air performance measured as per: ISO 5801, Installation category A, in ebm-papst full nozzle and without protection against accidental contact

Suction-side noise levels: Lw_A as per ISO 13347, Lp_A measured at 1 m distance to fan axis

The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and re-viewed once installed or fitted!

For detailed information see page 40 ff.

	n [rpm]	P ₁ [kW]	I [A]	Lw _A [dB(A)]
(A) 1	800	0,18	1,64	65
(A) 2	800	0,23	2,04	63
(A) 3	800	0,27	2,34	63
(A) 4	800	0,28	2,40	66
(B) 1	800	0,18	0,82	65
(B) 2	800	0,23	1,02	63
(B) 3	800	0,27	1,17	63
(B) 4	800	0,28	1,20	66
(C) 1	1000	0,46	2,11	71
(C) 2	1000	0,55	2,51	68
(C) 3	1000	0,64	2,88	68
(C) 4	1000	0,72	3,20	71
(D) 1	1140	0,64	2,04	74
(D) 2	1140	0,78	2,50	71
(D) 3	1140	0,89	2,84	72
(D) 4	1140	0,97	3,20	74

- **Technical features:** See electrical connections p. 36 ff.
- **EMC:** [A](#) [B](#) [D](#) [E](#) [F](#) [G](#) Interference emission acc. to EN 61000-6-3
[G](#) Interference emission acc. to EN 61000-6-4
Interference immunity acc. to EN 61000-6-2
Harmonics acc. to EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Cable exit:** [A](#) [B](#) [C](#) [D](#) [E](#) Variable
- **Terminal box:** [F](#) [G](#) Electrical connection via terminal strip
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standards:** CE
- **Approvals:** [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) GOST; UL/CSA are applied for; CCC on request
[G](#) GOST, UL/CSA; CCC on request

Direction of air flow	  		
	Without attachments	With full square nozzle	With guard grille for short nozzle
"V"	on request	W3G 630-GD10 -41	on request
"V"	A3G 630-AD03 -A1	W3G 630-GD03 -A1	S3G 630-AD03 -A1
"V"	A3G 630-AQ37 -21	W3G 630-GQ37 -21	S3G 630-AQ37 -21
"V"	on request	W3G 630-GR92 -11	on request
"V"	A3G 630-AR85 -01	W3G 630-GR85 -01	S3G 630-AR85 -01
"V"	on request	W3G 630-GU29 -11	on request
"V"	A3G 630-AU23 -01	W3G 630-GU23 -01	S3G 630-AU23 -01
Direction of air flow "A" on request			

	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
E ①	1140	0,64	1,02	74
E ②	1140	0,78	1,25	71
E ③	1140	0,89	1,42	72
E ④	1140	0,97	1,60	74
F ①	1450	2,24	6,80	81
F ②	1450	2,45	7,50	80
F ③	1450	2,67	8,20	80
F ④	1450	2,95	8,90	84
G ①	1510	2,49	3,77	81
G ②	1510	2,74	4,18	81
G ③	1510	2,94	4,47	81
G ④	1510	3,20	5,00	85

EC axial fans - HyBlade®

Ø 630 with motor M3G084, drawings for direction of air flow "V"

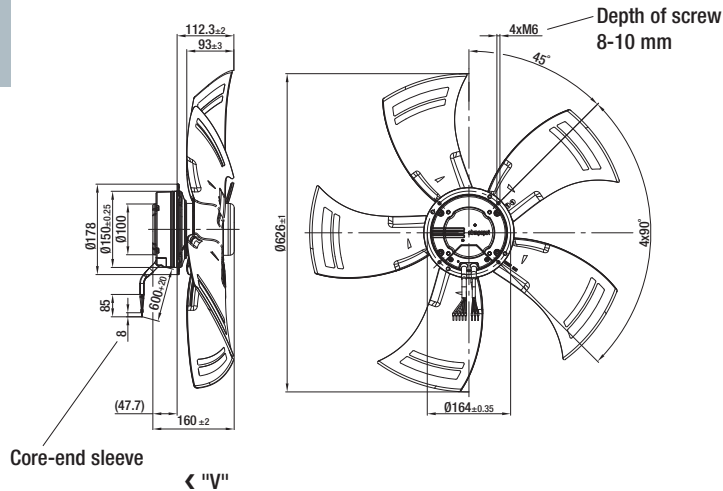


Without attachments

Type

Mass

A	on request	6,3
B	A3G 630-AD03 -A1	6,3



Internal diameter of the wall ring at least 634 mm

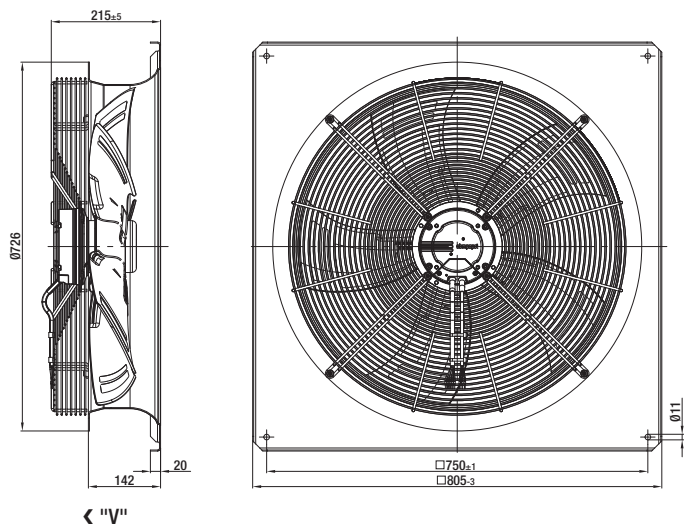


With full square nozzle

Type

Mass

A	W3G 630-GD10 -41	20,4
B	W3G 630-GD03 -A1	20,4

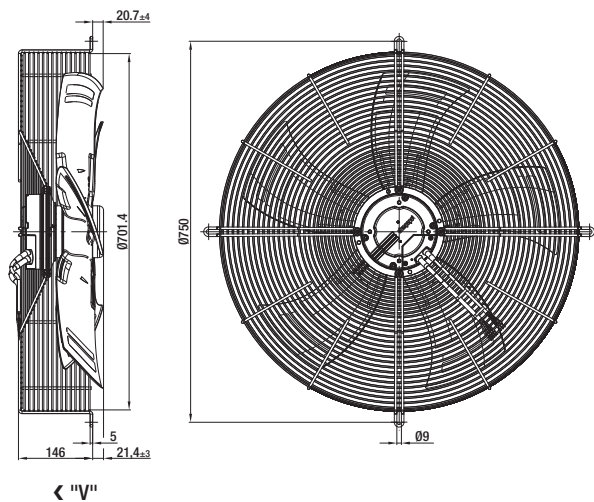


With guard grille for short nozzle

Type

Mass

A	on request	10,6
B	S3G 630-AD03 -A1	10,6

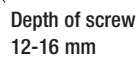


Internal diameter of the wall ring at least 634 mm

Ø 630 with motor M3G112, drawings for direction of air flow "V"

Mass
[kg]

Technical drawing of the Core-end sleeve (Fig. 10). The drawing shows a side view of the sleeve with a cable passing through it. Dimensions are given in millimeters (mm). The sleeve has an outer diameter of $\varnothing 200 \pm 0.1$ mm and an inner diameter of $\varnothing 165 \pm 0.5$ mm. The length of the sleeve is 144 ± 3 mm. The distance from the front face to the center of the cable is 123 ± 2 mm. The distance from the front face to the end of the sleeve is 85 mm. The distance from the front face to the center of the cable is 8 mm. The distance from the front face to the end of the sleeve is 56.5 ± 0.6 mm. The distance from the front face to the end of the sleeve is $g \pm 2$ mm. The drawing also shows a cross-section of the sleeve with a cable passing through it, labeled with a dimension of $\varnothing 101 \pm 0.2$ mm. A note indicates that the sleeve is made of stainless steel (SUS316).

Mass
[kg]

Technical drawing of the 805-3 fan unit, showing side and front views with dimensions.

Side View (Left):

- Overall width: 209 ± 5
- Overall height: $\varnothing 776$
- Mounting flange thickness: 20
- Base width: 142

Front View (Right):

- Overall width: $\square 750 \pm 1$
- Overall height: $\square 805 - 3$
- Mounting flange thickness: 20

The drawing includes a detailed view of the fan blades and the central motor assembly.

Mass
[kg]

EC axial fans - HyBlade®

Ø 630 with motor M3G150, drawings for direction of air flow "V"

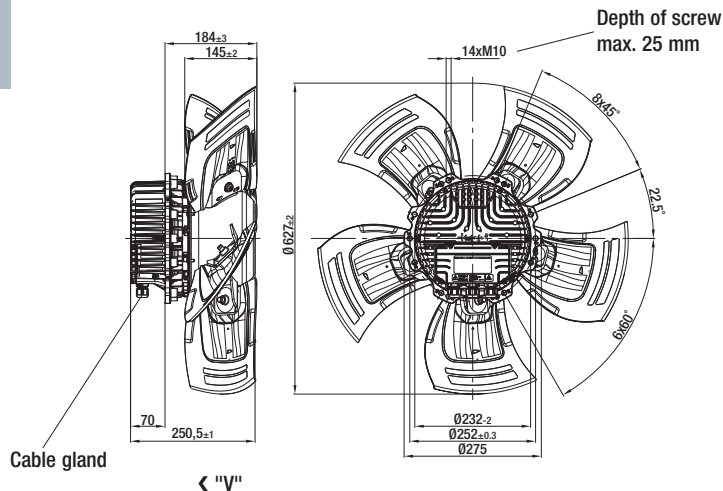


Without attachments

Type

Mass

F	on request	24,4
G	A3G 630-AU23 -01	24,4

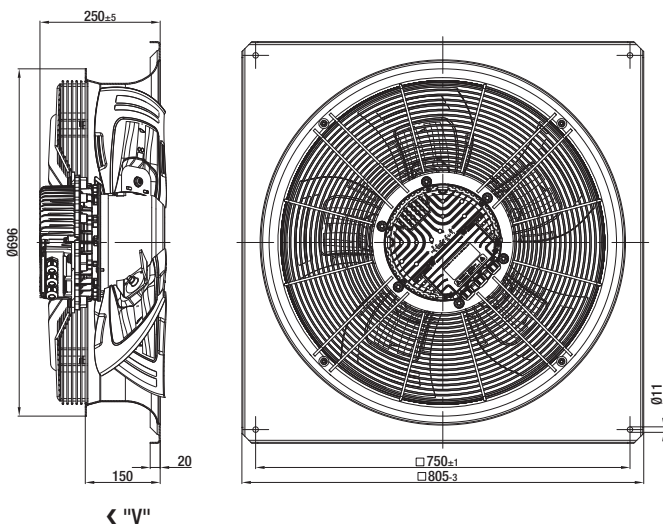


With full square nozzle

Type

Mass

F	W3G 630-GU29 -11	39,5
G	W3G 630-GU23 -01	39,5

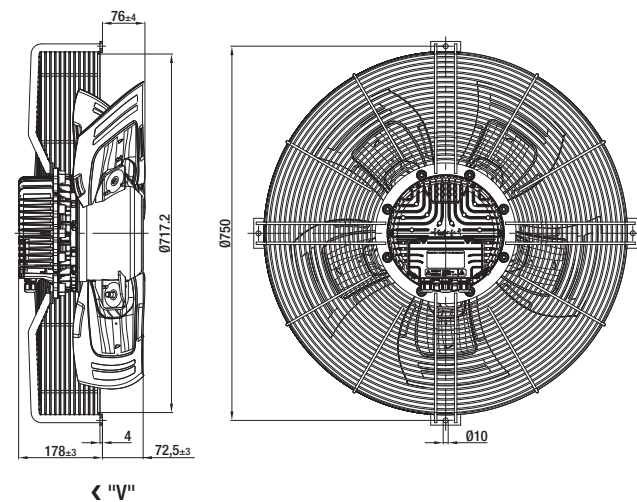


With guard grille for short nozzle

Type

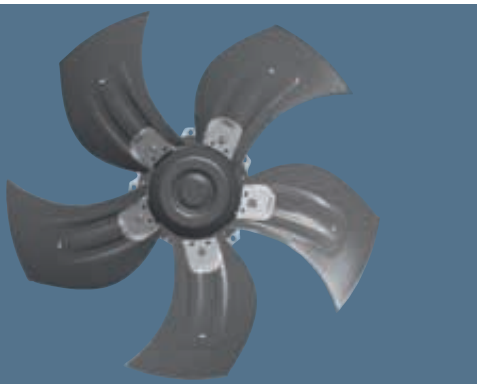
Mass

F	on request	31,5
G	S3G 630-AU23 -01	31,5



EC axial fans - HyBlade®

Ø 710



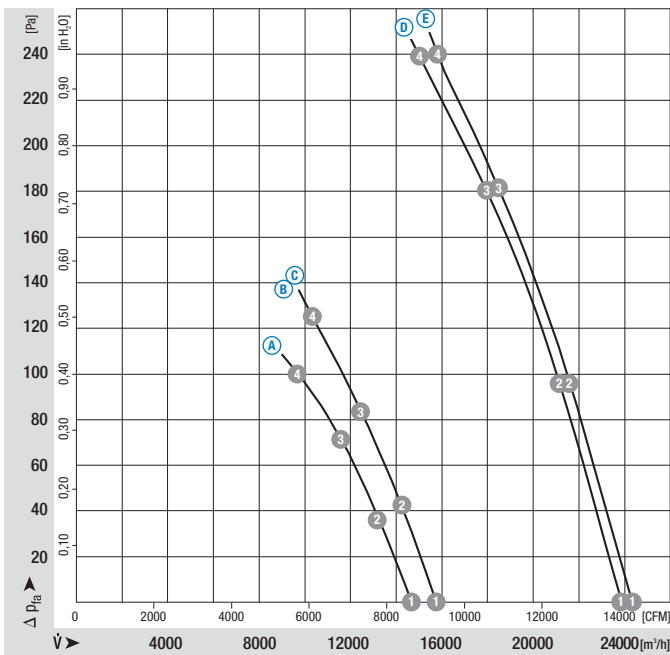
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Coated in black
Electronics enclosure: Die-cast aluminium, coated in black
- **Number of blades:** 5
- **Direction of rotation:** Ⓐ Ⓑ Ⓒ counter-clockwise, Ⓓ Ⓔ clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** Ⓐ Ⓑ Ⓒ "B" ("F" applying to the main components as per EN), Ⓓ Ⓔ "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage range	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Max. operative range	Perm. amb. temp.	Mass without attachments	Technical features and elect. connections
Type	Motor			VAC	Hz	rpm	kW	A	Pa	°C	kg	
*3G 710	M3G 112-IA	0°	Ⓐ	1~ 200-277	50/60	830	0,70	3,10	100	-25..+60	12,0	p. 37 / L3)
*3G 710	M3G 112-IA	0°	Ⓑ	3~ 200-240	50/60	900	0,93	3,00	125	-25..+60	12,0	p. 39 / K3)
*3G 710	M3G 112-IA	0°	Ⓒ	3~ 380-480	50/60	900	0,93	1,50	125	-25..+60	12,0	p. 39 / K3)
*3G 710	M3G 150-IF	0°	Ⓓ	3~ 200-240	50/60	1230	2,65	8,10	240	-25..+60	25,3	p. 38 / L5)
*3G 710	M3G 150-IF	0°	Ⓔ	3~ 380-480	50/60	1250	2,83	4,30	240	-25..+60	25,3	p. 38 / L5)

subject to alterations

(1) Nominal data in operating point with maximum load and 230 VAC or 400 VAC

Curves



Air performance measured as per: ISO 5801, Installation category A, in ebm-papst full nozzle and without protection against accidental contact

Suction-side noise levels: Lw_A as per ISO 13347, Lp_A measured at 1 m distance to fan axis

The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and re-viewed once installed or fitted!

For detailed information see page 40 ff.

	n [rpm]	P ₁ [kW]	I [A]	Lw _A [dB(A)]
Ⓐ ①	830	0,45	2,08	69
Ⓐ ②	830	0,55	2,49	67
Ⓐ ③	830	0,64	2,86	68
Ⓐ ④	830	0,70	3,10	73
Ⓑ ①	900	0,59	1,92	70
Ⓑ ②	900	0,70	2,28	69
Ⓑ ③	900	0,81	2,60	70
Ⓑ ④	900	0,93	3,00	76
Ⓒ ①	900	0,59	0,96	70
Ⓒ ②	900	0,70	1,12	69
Ⓒ ③	900	0,81	1,30	70
Ⓒ ④	900	0,93	1,50	76
Ⓓ ①	1230	2,05	6,40	79
Ⓓ ②	1230	2,33	7,20	78
Ⓓ ③	1230	2,56	7,80	79
Ⓓ ④	1230	2,65	8,10	83
Ⓔ ①	1250	2,23	3,40	79
Ⓔ ②	1250	2,44	3,71	79
Ⓔ ③	1250	2,67	4,06	79
Ⓔ ④	1250	2,83	4,30	83

- **Technical features:** See electrical connections p. 37 ff.
- **EMC:** B C D E Interference emission acc. to EN 61000-6-3
 - A Interference emission acc. to EN 61000-6-4
 - Interference immunity acc. to EN 61000-6-2
 - Harmonics acc. to EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Cable exit:** A B C Variable
- **Terminal box:** D E Electrical connection via terminal strip
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standards:** CE
- **Approvals:** A B C D GOST; UL/CSA are applied for; CCC on request
 - E GOST, UL/CSA; CCC on request

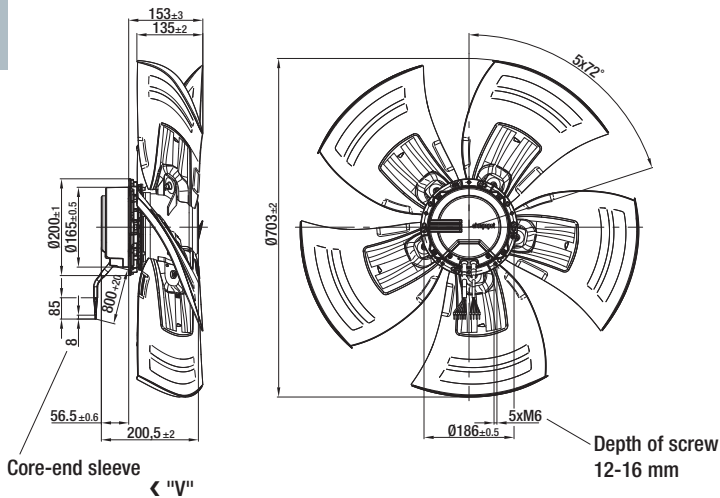
Direction of air flow	 < "V"  < "V"  < "V"		
	Without attachments	With full square nozzle	With guard grille for short nozzle
"V"	A3G 710-A085 -21	W3G 710-G085 -21	S3G 710-A085 -21
"V"	on request	W3G 710-G087 -11	on request
"V"	A3G 710-A081 -01	W3G 710-G081 -01	S3G 710-A081 -01
"V"	on request	W3G 710-GU30 -11	on request
"V"	A3G 710-AU21 -01	W3G 710-GU21 -01	S3G 710-AU21 -01
Direction of air flow "A" on request			

EC axial fans - HyBlade®

Ø 710 with motor M3G112, drawings for direction of air flow "V"



Without attachments

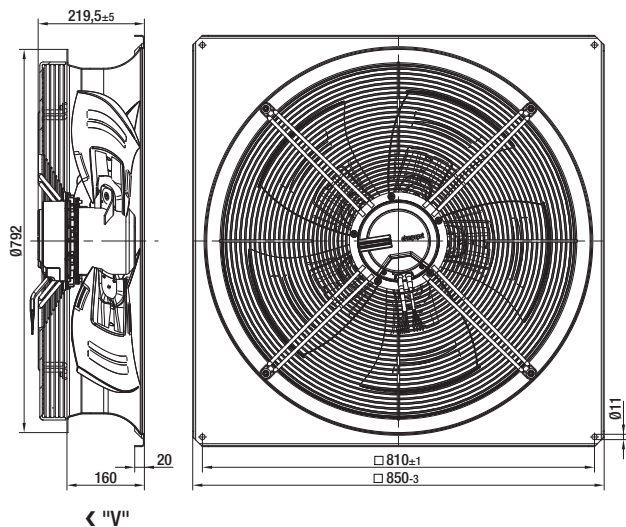


Type	Mass [kg]
A A3G 710-A085 -21	12,0
B on request	12,0
C A3G 710-A081 -01	12,0

Internal diameter of the wall ring at least 710 mm



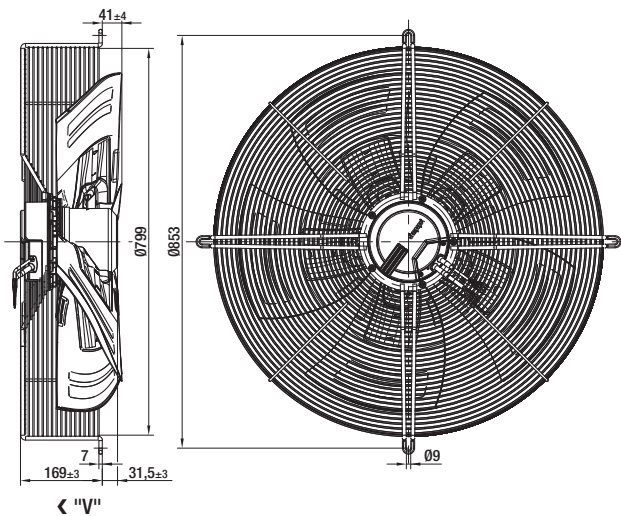
With full square nozzle



Type	Mass [kg]
A W3G 710-G085 -21	26,9
B W3G 710-G087 -11	26,9
C W3G 710-G081 -01	26,9



With guard grille for short nozzle



Type	Mass [kg]
A S3G 710-A085 -21	18,8
B on request	18,8
C S3G 710-A081 -01	18,8

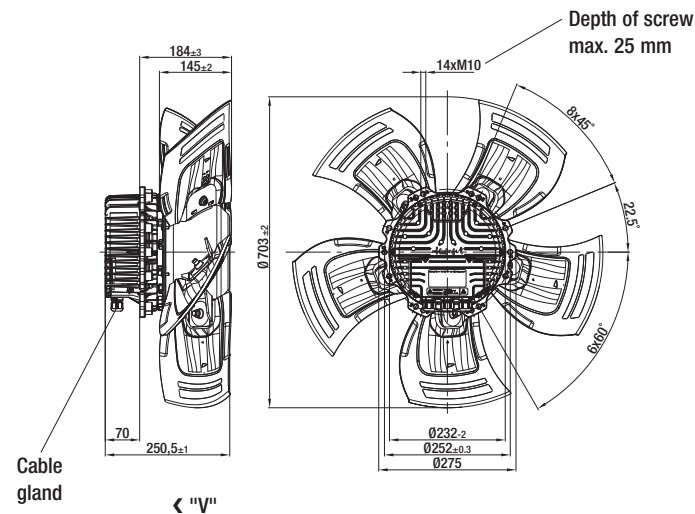
Internal diameter of the wall ring at least 710 mm

EC axial fans - HyBlade®

Ø 710 with motor M3G150, drawings for direction of air flow "V"



Without attachments

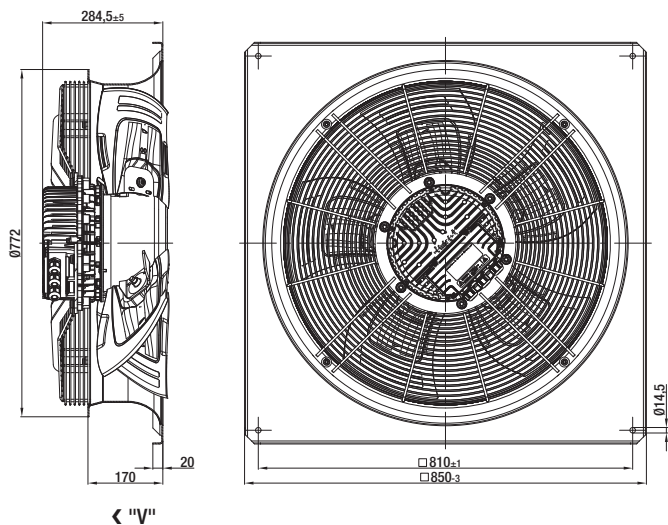


Type	Mass [kg]
Ⓓ on request	25,3
Ⓔ A3G 710-AU21 -01	25,3

Internal diameter of the wall ring at least 710 mm



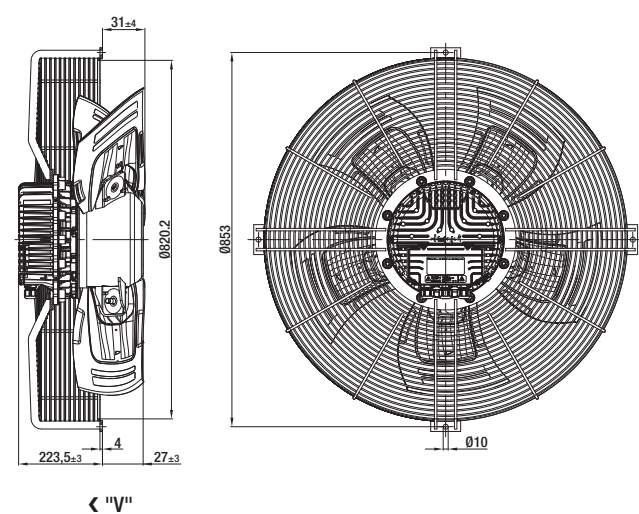
With full square nozzle



Type	Mass [kg]
Ⓓ W3G 710-GU30 -11	42,4
Ⓔ W3G 710-GU21 -01	42,4



With guard grille for short nozzle



Type	Mass [kg]
Ⓓ on request	34,5
Ⓔ S3G 710-AU21 -01	34,5

Internal diameter of the wall ring at least 710 mm

EC axial fans - HyBlade®

Ø 800



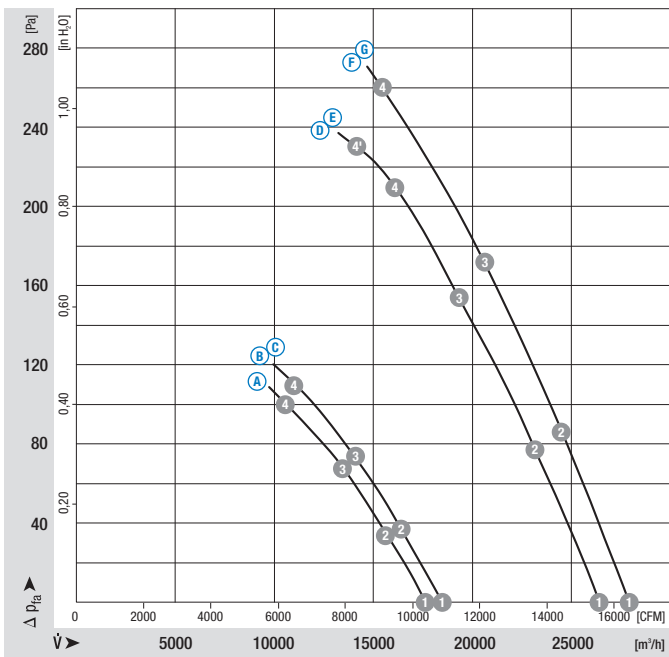
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades (5): [A](#) [B](#) [C](#) Pressed-on round sheet steel plate; [D](#) [E](#) [F](#) [G](#) Insertion part made of sheet aluminium; Both versions extrusion-coated in PP plastics
Rotor: Coated in black
Electronics enclosure: Die-cast aluminium, coated in black
- **Direction of rotation:** clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** [A](#) [B](#) [C](#) "B" ("F" applying to the main components as per EN), [D](#) [E](#) [F](#) [G](#) "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage range	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Max. operative range	Perm. amb. temp.	Mass without attachments	Technical features and elect. connections
Type	Motor			VAC	Hz	rpm	kW	A	Pa	°C	kg	
*3G 800	M3G 112-IA	0°	A	1~ 200-277	50/60	710	0,73	3,20	100	-25..+60	12,1	p. 37 / L3)
*3G 800	M3G 112-IA	0°	B	3~ 200-240	50/60	735	0,84	2,80	110	-25..+60	12,1	p. 39 / K3)
*3G 800	M3G 112-IA	0°	C	3~ 380-480	50/60	735	0,84	1,40	110	-25..+60	12,1	p. 39 / K3)
*3G 800	M3G 150-IF	0°	D	3~ 200-240	50/60	1020	2,40	7,50	210	-25..+60	25,9	p. 38 / L5)
*3G 800	M3G 150-IF	0°	E	3~ 380-480	50/60	1020	2,56	3,90	230	-25..+60	25,9	p. 38 / L5)
*3G 800	M3G 150-NA	0°	F	3~ 200-240	50/60	1090	2,98	9,00	260	-25..+65	30,4	p. 38 / L5)
*3G 800	M3G 150-NA	0°	G	3~ 380-480	50/60	1090	2,98	4,50	260	-25..+65	30,4	p. 38 / L5)

subject to alterations

(1) Nominal data in operating point with maximum load and 230 VAC or 400 VAC

Curves



Air performance measured as per: ISO 5801, Installation category A, in ebm-papst full nozzle and without protection against accidental contact

Suction-side noise levels: L_{wA} as per ISO 13347, L_{pA} measured at 1 m distance to fan axis

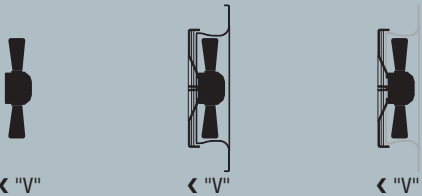
The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted!

For detailed information see page 40 ff.

	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
A 1	710	0,46	2,15	70
A 2	710	0,55	2,49	66
A 3	710	0,63	2,84	64
A 4	710	0,73	3,20	69
B 1	735	0,52	1,76	70
B 2	735	0,62	2,04	66
B 3	735	0,72	2,36	64
B 4	735	0,84	2,80	70
C 1	735	0,52	0,88	70
C 2	735	0,62	1,02	66
C 3	735	0,72	1,18	64
C 4	735	0,84	1,40	70
D 1	1020	1,62	4,94	75
D 2	1020	1,88	5,76	75
D 3	1020	2,15	6,58	77
D 4	1020	2,40	7,50	85

- **Technical features:** See electrical connections p. 37 ff.
- **EMC:** [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) Interference emission acc. to EN 61000-6-3
 - [A](#) Interference emission acc. to EN 61000-6-4
 - Interference immunity acc. to EN 61000-6-2
 - Harmonics acc. to EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Cable exit:** [A](#) [B](#) [C](#) Variable
- **Terminal box:** [D](#) [E](#) [F](#) [G](#) Electrical connection via terminal strip
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standards:** CE
- **Approvals:** [A](#) [B](#) [C](#) [D](#) [F](#) GOST; UL/CSA are applied for; CCC on request
 - [E](#) [G](#) GOST, UL/CSA; CCC on request

Direction of air flow			
	Without attachments	With full square nozzle	With guard grille for full nozzle
"V"	A3G 800-A081 -21	W3G 800-G081 -21	S3G 800-B081 -21
"V"	on request	W3G 800-G091 -11	on request
"V"	A3G 800-A084 -01	W3G 800-G084 -01	S3G 800-B084 -01
"V"	on request	W3G 800-GU24 -11	on request
"V"	A3G 800-AU25 -01	W3G 800-GU25 -01	S3G 800-BU25 -01
"V"	on request	W3G 800-GV10 -11	on request
"V"	A3G 800-AV01 -01	W3G 800-GV01 -01	S3G 800-BV01 -01
Direction of air flow "A" on request			

	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
E ①	1020	1,62	2,47	75
E ②	1020	1,88	2,88	75
E ③	1020	2,15	3,29	77
E ④	1020	2,56	3,90	85
F ①	1090	1,87	5,68	76
F ②	1090	2,18	6,64	76
F ③	1090	2,50	7,62	78
F ④	1090	2,98	9,00	84
G ①	1090	1,87	2,84	76
G ②	1090	2,18	3,32	76
G ③	1090	2,50	3,81	78
G ④	1090	2,98	4,50	84

EC axial fans - HyBlade®

Ø 800 with motor M3G112, drawings for direction of air flow "V"

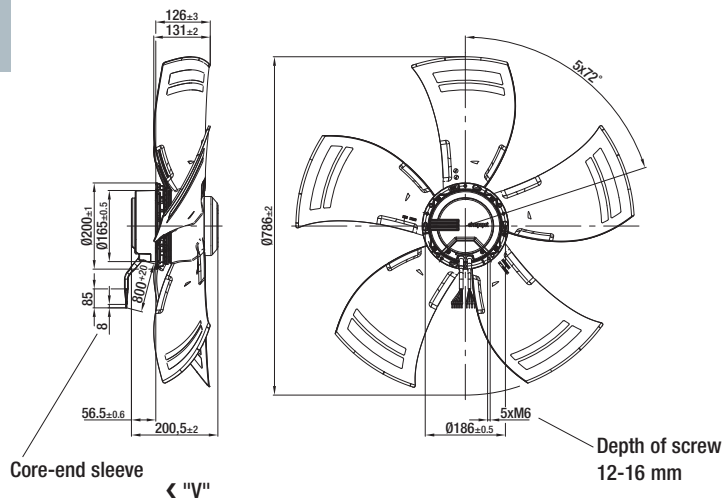


Without attachments

Type

Mass
[kg]

A	A3G 800-A081 -21	12,1
B	on request	12,1
C	A3G 800-A084 -01	12,1



Internal diameter of the
wall ring at least 795 mm

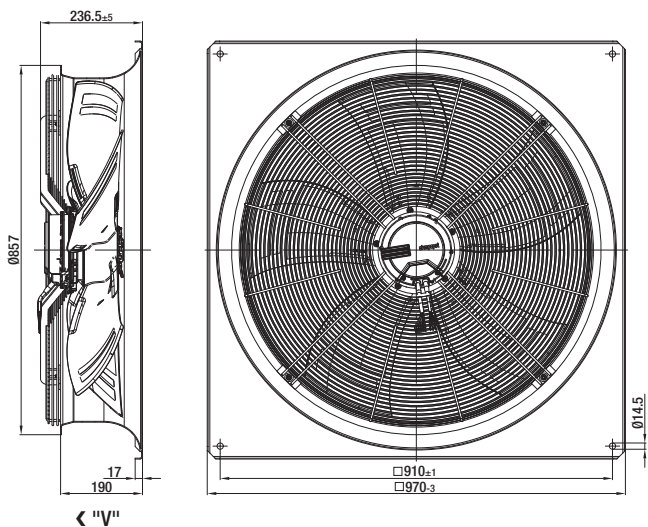


With full square nozzle

Type

Mass
[kg]

A	W3G 800-G081 -21	33,3
B	W3G 800-G091 -11	33,3
C	W3G 800-G084 -01	33,3

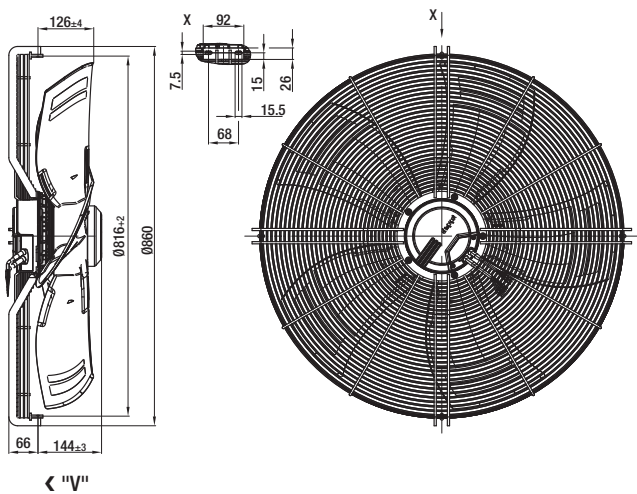


With guard grille for full nozzle

Type

Mass
[kg]

A	S3G 800-B081 -21	18,3
B	on request	18,3
C	S3G 800-B084 -01	18,3



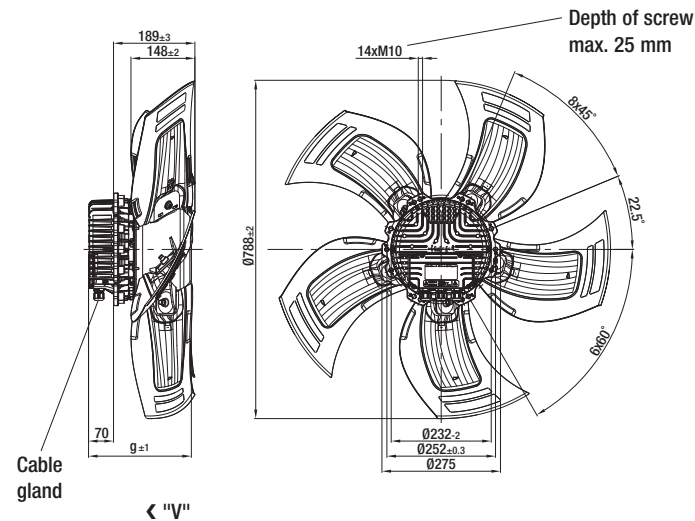
Internal diameter of the
wall ring at least 795 mm

EC axial fans - HyBlade®

Ø 800 with motor M3G150, drawings for direction of air flow "V"



Without attachments

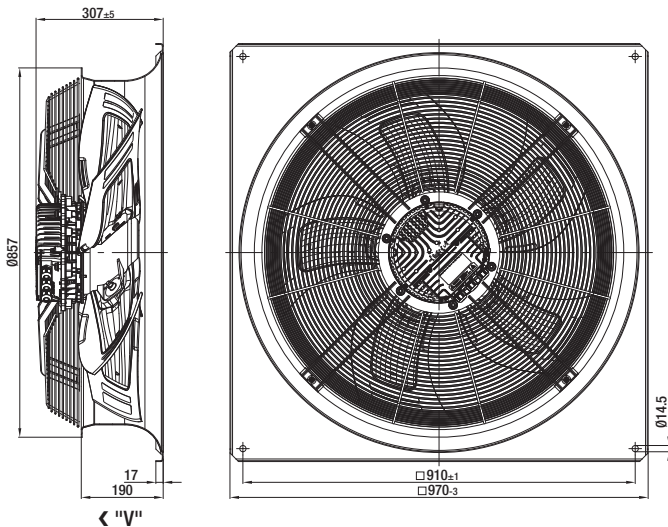


Type	Mass [kg] g	
D on request	25,9	250,5
E A3G 800-AU25 -01	25,9	250,5
F on request	30,4	289,5
G A3G 800-AV01 -01	30,4	289,5

Internal diameter of the
wall ring at least 795 mm



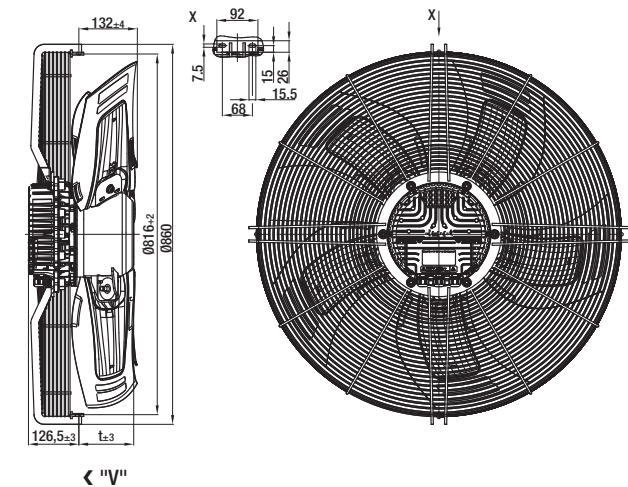
With full square nozzle



Type	Mass [kg]
D W3G 800-GU24 -11	45,7
E W3G 800-GU25 -01	45,7
F W3G 800-GV10 -11	50,2
G W3G 800-GV01 -01	50,2



With guard grille for full nozzle



Type	Mass [kg]	t
D on request	33,7	124,0
E S3G 800-BU25 -01	33,7	124,0
F on request	38,2	163,0
G S3G 800-BV01 -01	38,2	163,0

Internal diameter of the
wall ring at least 795 mm

EC axial fans - HyBlade®

Ø 910



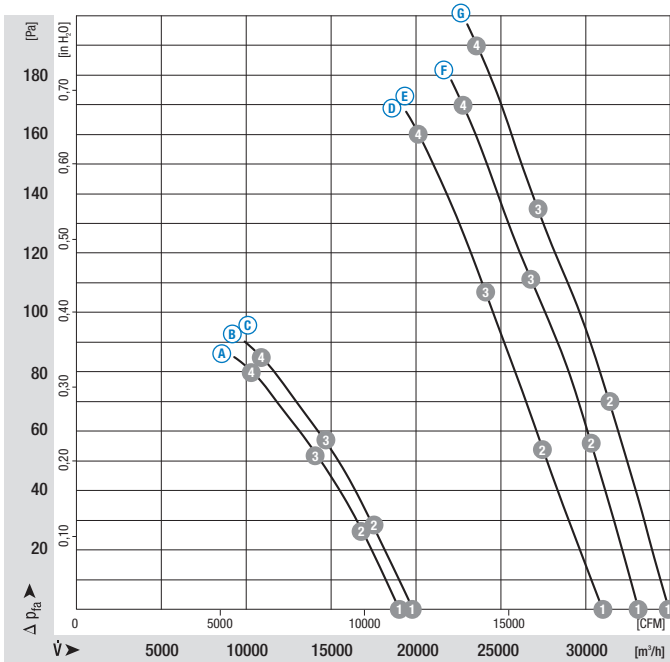
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades (5): [A](#) [B](#) [C](#) Pressed-on round sheet steel plate; [D](#) [E](#) [F](#) [G](#) Insertion part made of sheet aluminium; Both versions extrusion-coated in PP plastics
Rotor: Coated in black
Electronics enclosure: Die-cast aluminium, coated in black
- **Direction of rotation:** clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** [A](#) [B](#) [C](#) "B" ("F" applying to the main components as per EN), [D](#) [E](#) [F](#) [G](#) "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage range	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Max. operative range	Perm. amb. temp.	Mass without attachments	Technical features and elect. connections
Type	Motor			VAC	Hz	rpm	kW	A	Pa	°C	kg	
*3G 910	M3G 112-IA	0°	A	1~ 200-277	50/60	590	0,58	2,60	80	-25..+60	12,2	p. 37 / L3)
*3G 910	M3G 112-IA	0°	B	3~ 200-240	50/60	610	0,63	2,20	85	-25..+60	12,2	p. 39 / K3)
*3G 910	M3G 112-IA	0°	C	3~ 380-480	50/60	610	0,63	1,10	85	-25..+60	12,2	p. 39 / K3)
*3G 910	M3G 150-IF	0°	D	3~ 200-240	50/60	885	2,10	6,40	160	-25..+60	26,4	p. 38 / L5)
*3G 910	M3G 150-IF	0°	E	3~ 380-480	50/60	885	2,10	3,20	160	-25..+60	26,4	p. 38 / L5)
*3G 910	M3G 150-NA	0°	F	3~ 200-240	50/60	960	2,47	7,60	170	-25..+60	30,9	p. 38 / L5)
*3G 910	M3G 150-NA	0°	G	3~ 380-480	50/60	1000	2,88	4,40	190	-25..+65	30,9	p. 38 / L5)

subject to alterations

(1) Nominal data in operating point with maximum load and 230 VAC or 400 VAC

Curves



Air performance measured as per: ISO 5801, Installation category A, in ebm-papst full nozzle and without protection against accidental contact

Suction-side noise levels: Lw_A as per ISO 13347, Lp_A measured at 1 m distance to fan axis

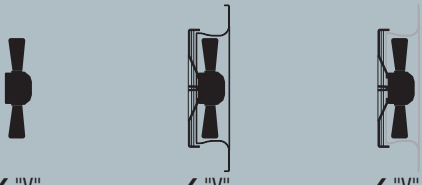
The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted!

For detailed information see page 40 ff.

	n [rpm]	P ₁ [kW]	I [A]	Lw _A [dB(A)]
A 1	590	0,35	1,64	67
A 2	590	0,43	1,97	66
A 3	590	0,50	2,26	66
A 4	590	0,58	2,60	71
B 1	610	0,39	1,38	68
B 2	610	0,48	1,40	67
B 3	610	0,56	1,84	66
B 4	610	0,63	2,20	70
C 1	610	0,39	0,69	68
C 2	610	0,48	0,80	67
C 3	610	0,56	0,92	66
C 4	610	0,63	1,10	70
D 1	885	1,36	4,14	76
D 2	885	1,60	4,86	75
D 3	885	1,83	5,58	75
D 4	885	2,10	6,40	78

- **Technical features:** See electrical connections p. 37 ff.
- **EMC:** [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) Interference emission acc. to EN 61000-6-3
 - [A](#) Interference emission acc. to EN 61000-6-4
 - Interference immunity acc. to EN 61000-6-2
 - Harmonics acc. to EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Cable exit:** [A](#) [B](#) [C](#) Variable
- **Terminal box:** [D](#) [E](#) [F](#) [G](#) Electrical connection via terminal strip
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standards:** CE
- **Approvals:** [A](#) [B](#) [C](#) [D](#) [F](#) GOST; UL/CSA are applied for; CCC on request
 - [E](#) [G](#) GOST, UL/CSA; CCC on request

Direction of air flow			
	Without attachments	With full square nozzle	With guard grille for full nozzle
"V"	A3G 910-A084 -21	W3G 910-G084 -21	S3G 910-B084 -21
"V"	on request	W3G 910-G090 -11	on request
"V"	A3G 910-A083 -01	W3G 910-G083 -01	S3G 910-B083 -01
"V"	on request	W3G 910-GU31 -11	on request
"V"	A3G 910-AU22 -01	W3G 910-GU22 -01	S3G 910-BU22 -01
"V"	on request	W3G 910-GV06 -11	on request
"V"	A3G 910-AV02 -01	W3G 910-GV02 -01	S3G 910-BV02 -01
Direction of air flow "A" on request			

	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
E ①	885	1,36	2,07	76
E ②	885	1,60	2,43	75
E ③	885	1,83	2,79	75
E ④	885	2,10	3,20	78
F ①	960	1,64	5,00	78
F ②	960	1,94	6,00	77
F ③	960	2,21	6,80	77
F ④	960	2,47	7,60	80
G ①	1000	1,92	2,91	79
G ②	1000	2,29	3,49	78
G ③	1000	2,60	3,97	79
G ④	1000	2,88	4,40	82

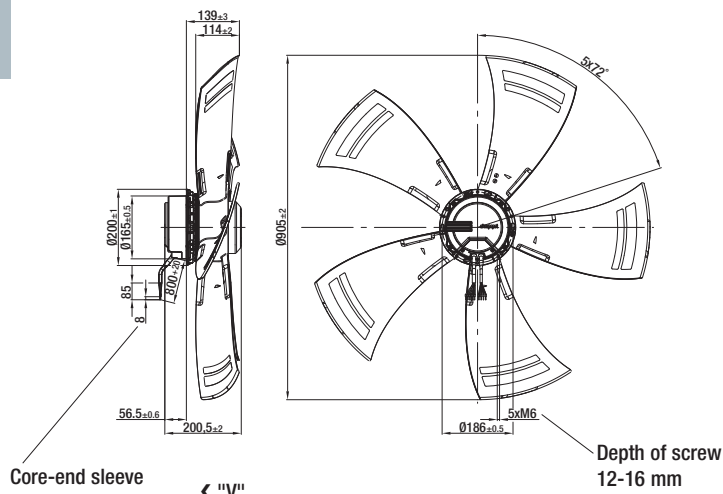
EC axial fans - HyBlade®

Ø 910 with motor M3G112, drawings for direction of air flow "V"



Without attachments

Type	Mass [kg]
A A3G 910-A084 -21	12,2
B on request	12,2
C A3G 910-A083 -01	12,2

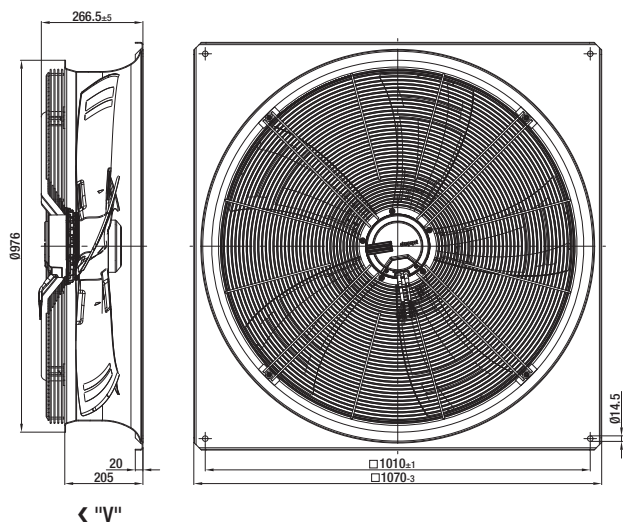


Internal diameter of the wall ring at least 913 mm



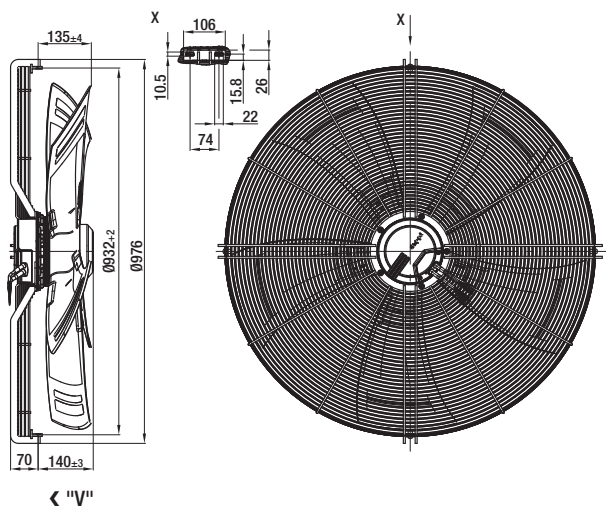
With full square nozzle

Type	Mass [kg]
A W3G910-G084 -21	37,0
B W3G910-G090 -11	37,0
C W3G910-G083 -01	37,0



With guard grille for full nozzle

Type	Mass [kg]
A S3G 910-B084 -21	19,8
B on request	19,8
C S3G 910-B083 -01	19,8



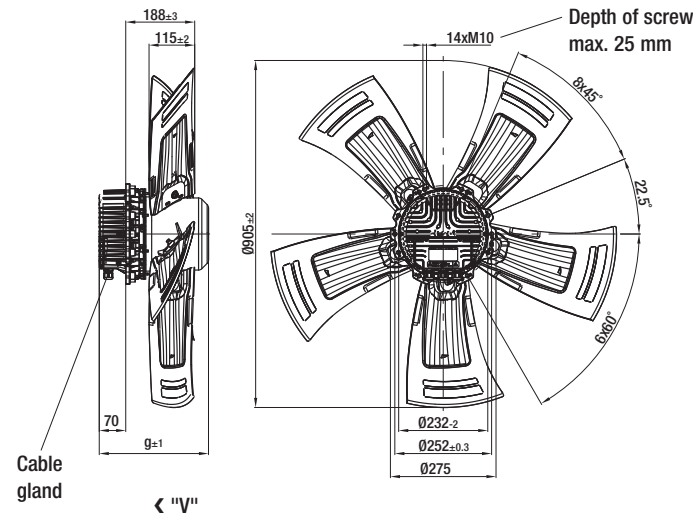
Internal diameter of the wall ring at least 913 mm

EC axial fans - HyBlade®

Ø 910 with motor M3G150, drawings for direction of air flow "V"



Without attachments

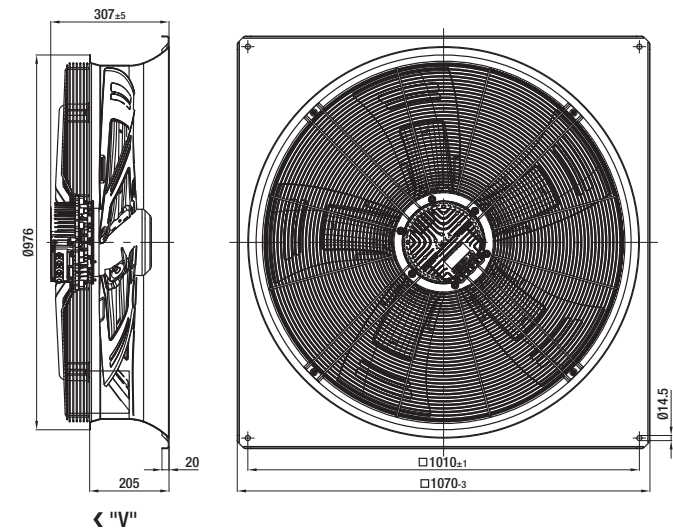


Type	Mass [kg]	g
D on request	26,4	250,0
E A3G 910-AU22 -01	26,4	250,5
F on request	30,9	289,5
G A3G 910-AV02 -01	30,9	289,5

Internal diameter of the wall ring at least 913 mm



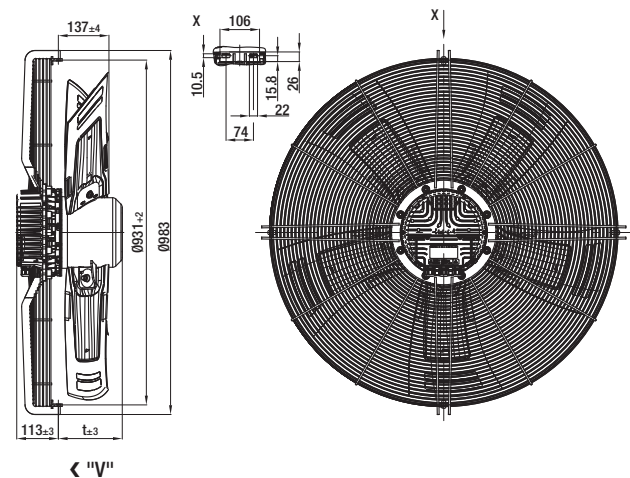
With full square nozzle



Type	Mass [kg]
D W3G910-GU31 -11	51,6
E W3G910-GU22 -01	51,6
F W3G910-GV06 -11	56,1
G W3G910-GV02 -01	56,1



With guard grille for full nozzle

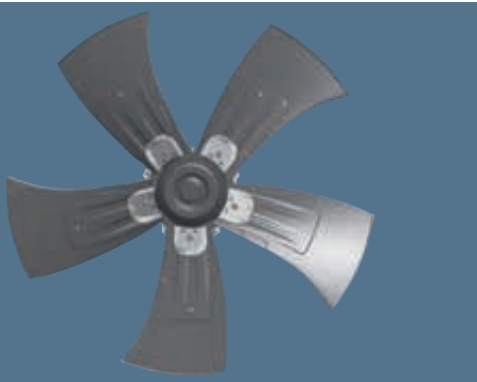


Type	Mass [kg]	t
D on request	35,2	137,5
E S3G 910-BU22 -01	35,2	137,5
F on request	39,7	176,5
G S3G 910-BV02 -01	39,7	176,5

Internal diameter of the wall ring at least 913 mm

EC axial fans - HyBlade®

Ø 990



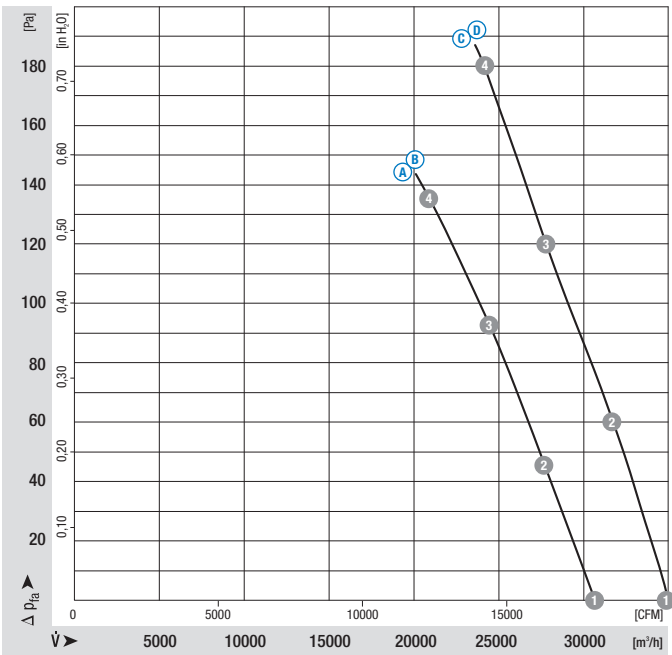
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Coated in black
Electronics enclosure: Die-cast aluminium, coated in black
- **Number of blades:** 5
- **Direction of rotation:** clockwise, seen on rotor
- **Type of protection:** IP 54 (acc. to EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharges:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage range	Frequency	Speed/rpm ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Max. operative range	Perm. amb. temp.	Mass without attachments	Technical features and elect. connections
Type	Motor			VAC	Hz	rpm	kW	A	Pa	°C	kg	
*3G 990	M3G 150-IF	-5°	(A)	3~ 200-240	50/60	820	1,64	5,00	135	-25..+60	25,7	p. 38 / L5)
*3G 990	M3G 150-IF	-5°	(B)	3~ 380-480	50/60	820	1,64	2,50	135	-25..+60	25,7	p. 38 / L5)
*3G 990	M3G 150-NA	-5°	(C)	3~ 200-240	50/60	960	2,58	8,00	180	-25..+65	31,2	p. 38 / L5)
*3G 990	M3G 150-NA	-5°	(D)	3~ 380-480	50/60	960	2,58	4,00	180	-25..+70	31,2	p. 38 / L5)

subject to alterations

(1) Nominal data in operating point with maximum load and 400 VAC

Curves



Air performance measured as per: ISO 5801, Installation category A, in ebm-papst full nozzle and without protection against accidental contact

Suction-side noise levels: Lw_A as per ISO 13347, Lp_A measured at 1 m distance to fan axis

The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation.

With any deviation to the standard setup, the specific values have to be checked and re-viewed once installed or fitted!

For detailed information see page 40 ff.

	n [rpm]	P ₁ [kW]	I [A]	Lw _A [dB(A)]
(A) 1	820	0,98	2,98	80
(A) 2	820	1,22	3,70	78
(A) 3	820	1,46	4,46	78
(A) 4	820	1,64	5,00	79
(B) 1	820	0,98	1,49	80
(B) 2	820	1,22	1,85	78
(B) 3	820	1,46	2,23	78
(B) 4	820	1,64	2,50	79
(C) 1	960	1,49	4,54	85
(C) 2	960	1,90	5,76	83
(C) 3	960	2,26	6,86	84
(C) 4	960	2,58	8,00	85
(D) 1	960	1,49	2,27	85
(D) 2	960	1,90	2,88	83
(D) 3	960	2,26	3,43	84
(D) 4	960	2,58	4,00	85

- **Technical features:** See electrical connections p. 38
- **EMC:** Interference emission acc. to EN 61000-6-3
Interference immunity acc. to EN 61000-6-2
Harmonics acc. to EN 61000-3-2/3
- **Leakage current:** < 3.5 mA acc. to EN 61800-5-1
- **Terminal box:** Electrical connection via terminal strip
- **Protection class:** I (acc. to EN 61800-5-1)
- **Product conforming to standards:** CE
- **Approvals:** A C GOST; UL/CSA are applied for; CCC on request
B D GOST, UL/CSA; CCC on request

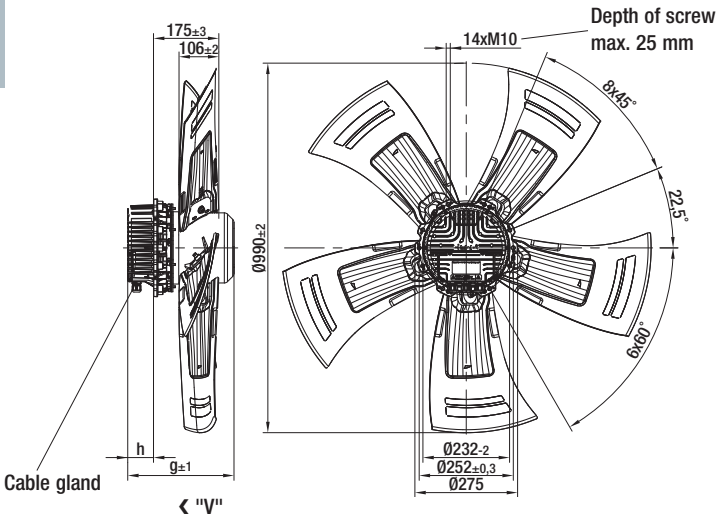
Direction of air flow			
	Without attachments	With full square nozzle	With guard grille for full nozzle
"V"	on request	W3G 990-GY32 -11	on request
"V"	A3G 990-AY28 -01	W3G 990-GY28 -01	S3G 990-BY28 -01
"V"	on request	W3G 990-GZ09 -11	on request
"V"	A3G 990-AZ02 -01	W3G 990-GZ02 -01	S3G 990-BZ02 -01
Direction of air flow "A" on request			

EC axial fans - HyBlade®

Ø 990 with motor M3G150, drawings for direction of air flow "V"



Without attachments

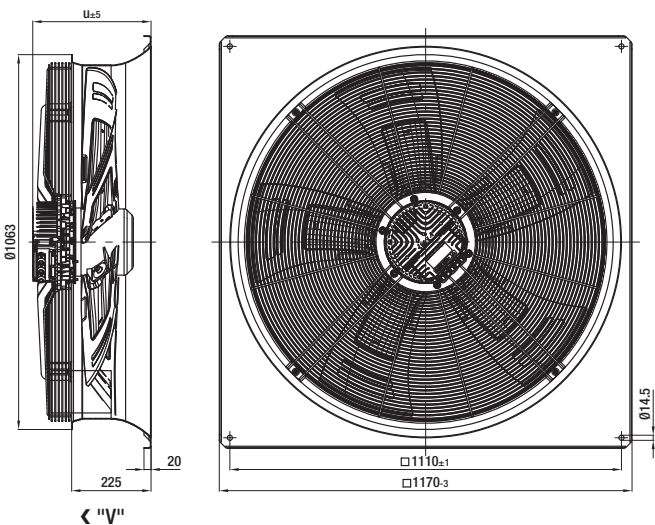


Type	Mass [kg]	g	h
A on request	25,7	238,0	57,5
B A3G 990-AY28 -01	25,7	238,0	57,5
C on request	31,2	289,5	70,0
D A3G 990-AZ02 -01	31,2	289,5	70,0

Internal diameter of the wall ring at least 1000 mm



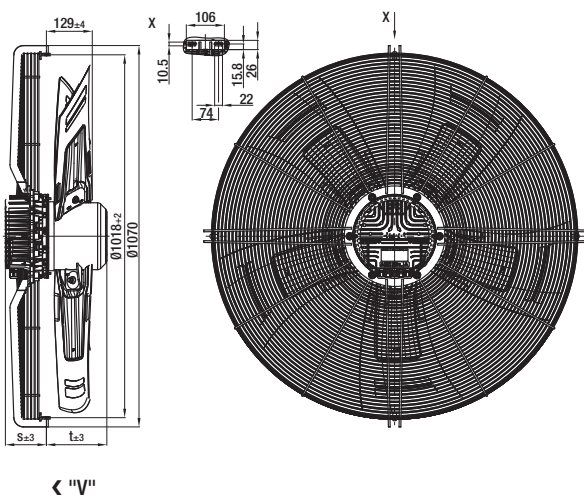
With full square nozzle



Type	Mass [kg]	u
A W3G 990-GY32 -11	55,9	323,5
B W3G 990-GY28 -01	55,9	323,5
C W3G 990-GZ09 -11	61,4	336,0
D W3G 990-GZ02 -01	61,4	336,0



With guard grille for full nozzle



Type	Mass [kg]	s	t
A on request	35,7	103,5	134,5
B S3G 990-BY28 -01	35,7	103,5	134,5
C on request	41,2	116,0	173,5
D S3G 990-BZ02 -01	41,2	116,0	173,5

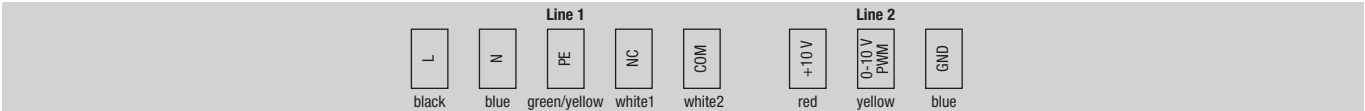
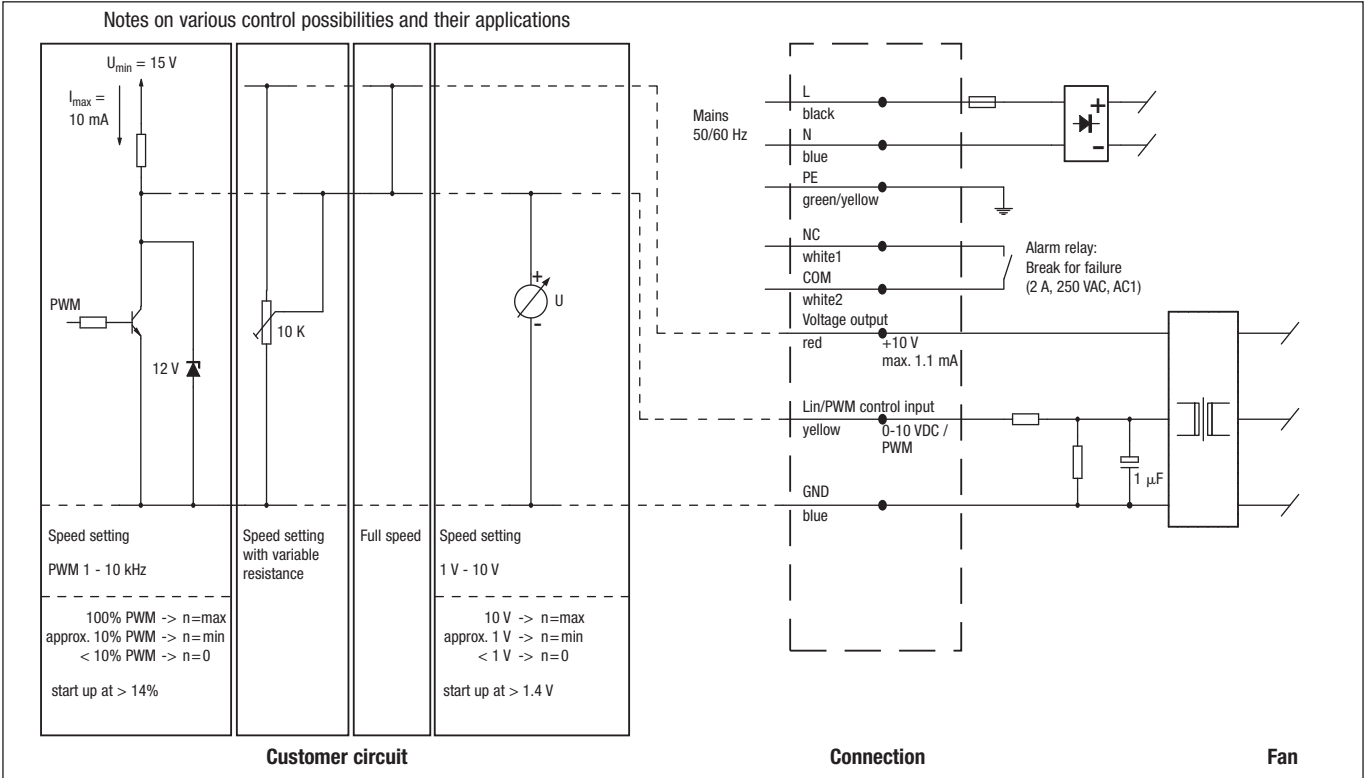
Internal diameter of the wall ring at least 1000 mm

Electrical connections EC

K1)

Technical features:

- Control input 0-10 VDC / PWM
- Output 10 VDC max. 1.1 mA
- Alarm relay
- Electronics / motor overtemperature protection
- Line undervoltage detection
- Motor current limitation
- Locked-rotor protection
- Soft start



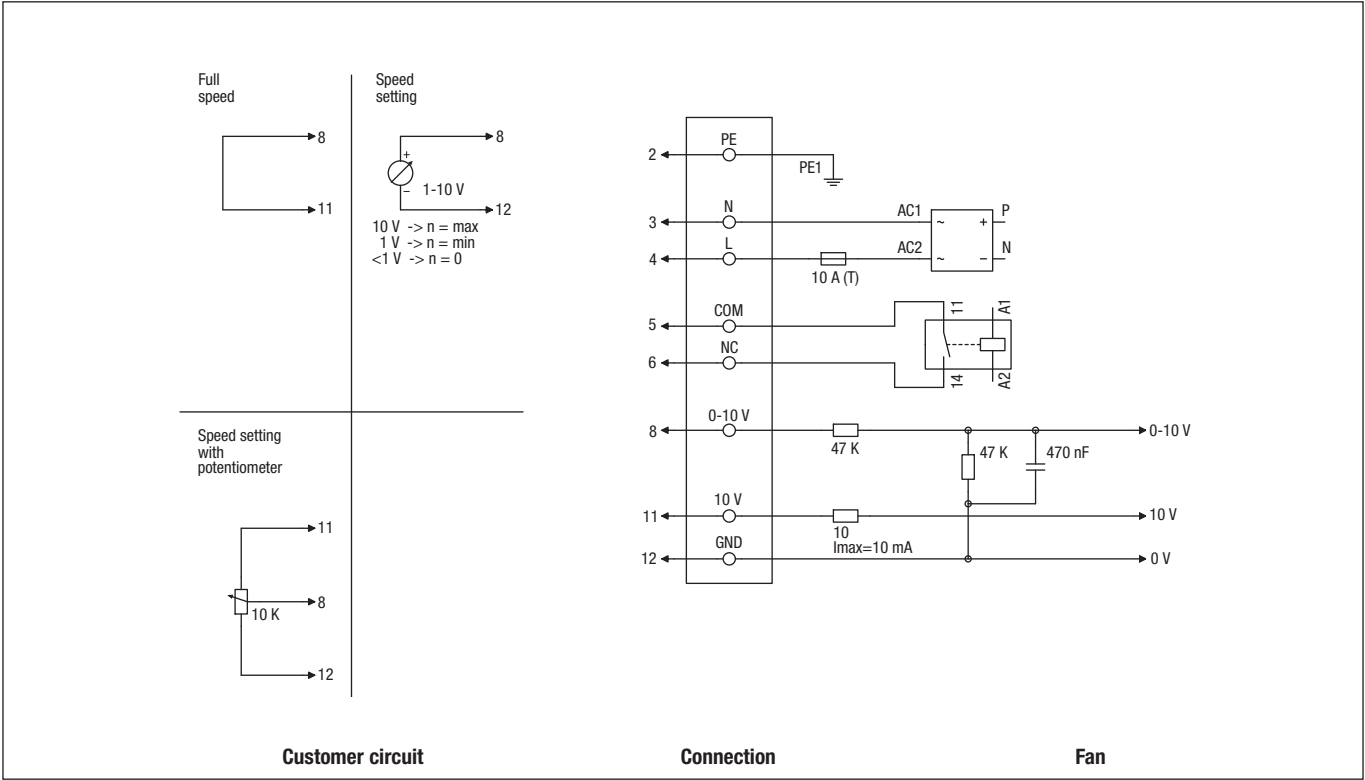
Line	Connection	Colour	Assignment / function	Line	Connection	Colour	Assignment / function
1	L	black	Mains 50/60 Hz, phase	2	+10 V	red	Voltage output +10 V max. 1.1 mA
	N	blue	Mains 50/60 Hz, neutral		0-10 V / PWM	yellow	Control input (Impedance 100 kΩ)
	PE	green/yel	Protective earth		GND	blue	GND
	NC	white1	Alarm relay, break for failure				
	COM	white2	Alarm relay, COMMON				

Electrical connections EC

L3)

Technical features:

- PFC (active)
- Control input 0-10 VDC / PWM
- Output 10 VDC max. 10 mA
- Alarm relay
- Electronics / motor overtemperature protection
- Line undervoltage detection
- Motor current limitation
- Locked-rotor protection, soft start



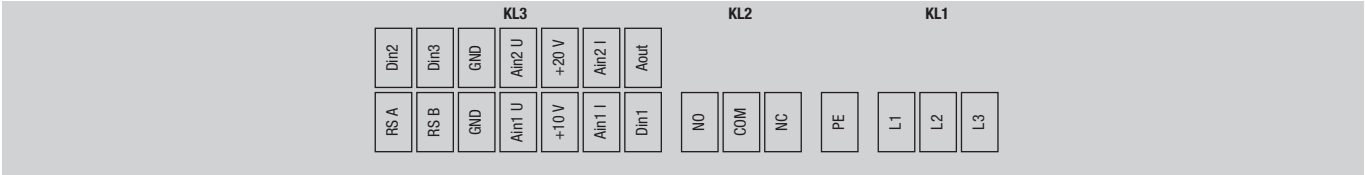
Line	Pin	Connection	Colour	Assignment / function
1	2	PE	green/yellow	Protective earth
1	3	N	blue	Mains 50/60 Hz, neutral
1	4	L	black	Mains 50/60 Hz, phase
1	5	COM	white1	Alarm relay, COMMON (2A, max. 250 VAC, min. 10 mA, AC1)
1	6	NC	white2	Alarm relay, break for failure
2	8	0-10 V	yellow	Control input (Impedance 100 kΩ), SELV
2	11	+10 V	red	Voltage output 10 VDC (+/- 3%), max. 10 mA, supply voltage for external units (e.g. potentiometer), SELV
2	12	GND	blue	GND, SELV

Electrical connections EC

L5)

Technical features:

- PFC (passive)
- Integrated PID controller
- Control input 0-10 VDC or 4-20 mA
- Input for sensor 0-10 V or 4-20 mA
- Slave output 0-10 V max. 5 mA
- Output 20 VDC (+25 % / -10 %) max. 50 mA
- Output 10 VDC (+3 %) max. 10 mA
- RS485 MODBUS
- Motor current limitation, alarm relay
- Line undervoltage / phase failure detection
- Electronics / motor overtemperature protection
- Locked-rotor protection, soft start
- Digital inputs for day/night switch, enabling, cooling / heating



Connector	Connection	Assignment / function
KL1	L3	Mains; L3
	L2	Mains; L2
	L1	Mains; L1
PE	PE	Protective earth
KL2	NC	Alarm relay, break for failure
	COM	Alarm relay, COMMON (2A, 250 VAC, AC1)
	NO	Alarm relay, make for failure

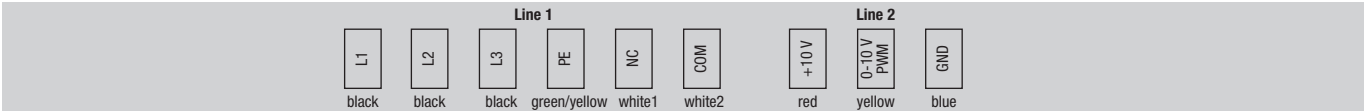
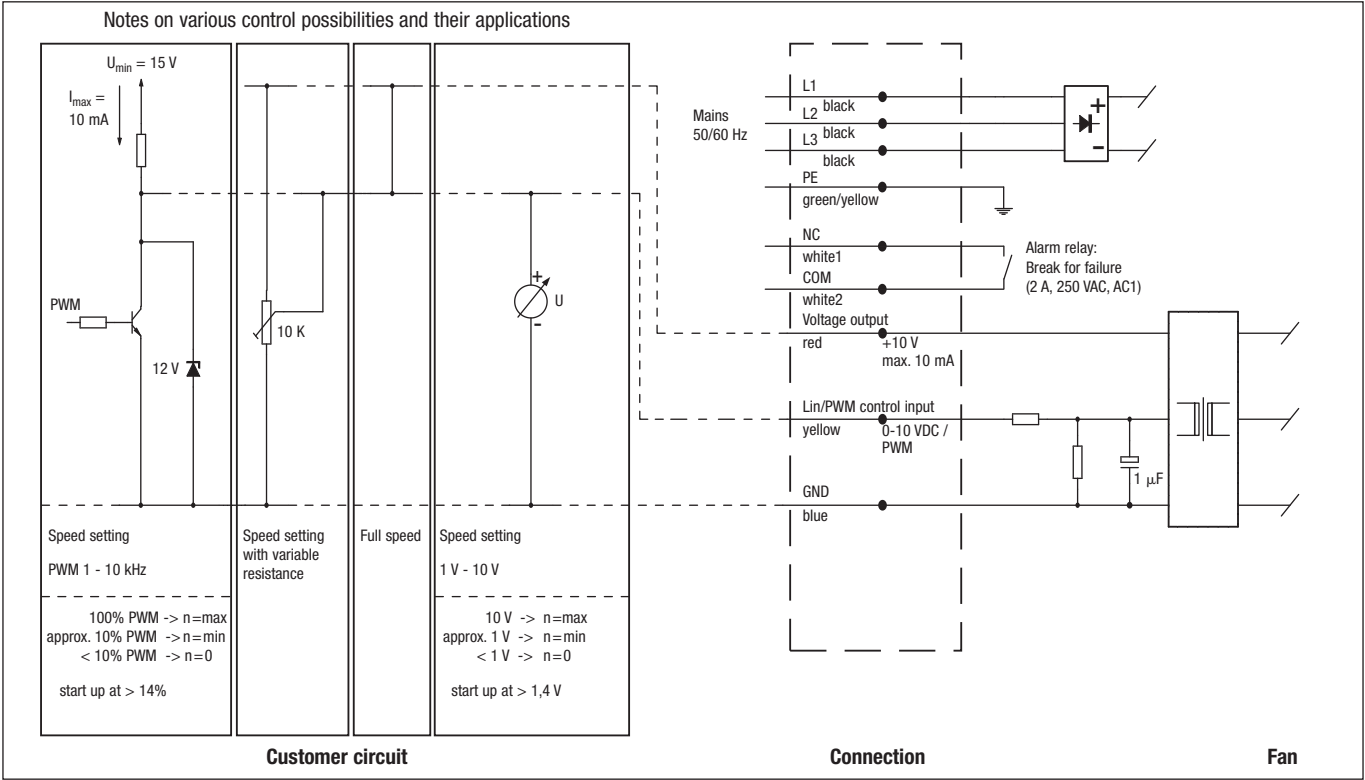
Connector	Connection	Assignment / function
KL3	Din1	Digital input 1 (enabling / disabling of electronics),, Enabling: Pin open or applied voltage 5...50 VDC Disabling: Bridge to GND or applied voltage < 1 VDC
	Ain1 I	Analogue set value input, 4-20 mA (impedance 100 Ω), only to be used as alternative to terminal Ain1 U
	+10 V	Supply for external potentiometer, 10 VDC (±3 %) max. 10 mA
	Ain1U	Analogue set value input, 0-10 V (impedance 100 kΩ), only to be used as alternative to terminal Ain1 I
	GND	GND
	RSB	RS485 interface for MODBUS RTU; RS B
	RSA	RS485 interface for MODBUS RTU; RS A
	Aout	Analogue output 0-10 V max. 5 mA, reading of current motor speed / current motor control factor
	Ain2 I	Analog. actual value input, 4-20mA (impedance 100Ω), only to be used as alternative to terminal Ain2 U
	+20 V	Supply for external sensor, 20 VDC (+25 % / -10%) max. 40 mA
	Ain2 U	Analog. actual value input, 0-10 V (impedance 100 kΩ), only to be used as alternative to terminal Ain2 I
	GND	GND
	Din3	Digital input 3 (switch Normal / Inverse), The preset effective direction of the integrated controller can be selected via BUS or via digital input Normal/Inverse. Normal: Pin open or applied voltage 5...50 VDC Inverse: Bridge to GND or applied voltage < 1 VDC
	Din2	Digital input 2 (switch Day / Night), The preset set of parameters can be selected via BUS or via digital input Day/Night. Day: Pin open or applied voltage 5...50 VDC Night: Bridge to GND or applied voltage < 1 VDC

Electrical connections EC

K3)

Technical features:

- PFC (passive)
- Control input 0-10 VDC / PWM
- Output 10 VDC ($\pm 20\%$) max. 10 mA
- Alarm relay
- Electronics / motor overtemperature protection
- Line undervoltage / phase failure detection
- Motor current limitation
- Locked-rotor protection, soft start



Line	Connection	Colour	Assignment / function
1	L1	black	Mains; L1
	L2	black	Mains; L2
	L3	black	Mains; L3
	PE	green/yel	Protective earth
	NC	white1	Alarm relay, break for failure
	COM	white2	Alarm relay, COMMON

Line	Connection	Colour	Assignment / function
2	+10 V	red	Voltage output +10 V max. 1.1 mA
	0-10 V / PWM	yellow	Control input (Impedance 100 k Ω)
	GND	blue	GND

Technical parameters & scope



High standards for all ebm-papst products

Here at ebm-papst, we constantly strive to further improve our products in order to be able to offer you the best possible product for your application. Careful monitoring of the market ensures that technical innovations are reflected in the improvements of our products.

Based on the technical parameters listed below and the ambience you want our product to operate in, we here at ebm-papst can always work out the best solution for your specific application.

General performance parameters

Any deviations from the technical data and parameters described here are listed on the product-specific data sheet.

Type of protection

The type of protection is specified in the product-specific data sheets.

Insulation class

The insulation class is specified in the product-specific data sheets.

Mounting position

The mounting position is specified in the product-specific data sheets.

Condensate discharge holes

Information on the condensate discharge holes is provided in the product-specific data sheets.

Mode of operation

The mode of operation is specified in the product-specific data sheets.

Protection class

The protection class is specified in the product-specific data sheets..

Service life

The service life of ebm-papst products depends on two major factors:

- The service life of the insulation system
- The service life of the bearing system

The service life of the insulation system mainly depends on voltage level, temperature and ambient conditions, such as humidity and condensation. The service life of the bearing system depends mainly on the thermal load on the bearing.

The majority of our products use maintenance-free ball bearings for any mounting position possible. As an option, sleeve bearings can be used, which is indicated on the product-specific data sheet wherever applicable.

The service life L10 of the ball bearings can be taken as approx. 40,000 operating hours at an ambient temperature of 40 °C, yet this estimate can vary according to the actual ambient conditions.

We will gladly provide you with a lifetime calculation taking into account your specific operating conditions.

Motor protection / thermal protection

Information on motor protection and thermal protection is provided in the product-specific data sheets.

Depending on motor type and field of application, the following protective features are realised:

- Thermal overload protection (TOP), either in-circuit or external
- PTC with electronic diagnostics
- Impedance protection
- Thermal overload protection (TOP) with electronic diagnostics
- Current limitation via electronics

If an external TOP is connected, the customer has to make sure to connect a conventional trigger device for switching it off.

Products without fitted TOP and without protection against improper use, a motor protection complying with the valid standards has to be installed.

Left: Endurance test room
Middle: Shock test
Right: Chamber test rig



■ Mechanical strain / performance parameters

All ebm-papst products are subjected to comprehensive tests complying with the normative specifications. In addition to this, the tests also reflect the vast experience and expertise of ebm-papst.

Vibration test

Vibration tests are carried out in compliance with

- Vibration test in operation according to DIN IEC 68, parts 2-6
- Vibration test at standstill according to DIN IEC 68, parts 2-6

Shock load

Shock load tests are carried out in compliance with

- Shock load according to DIN IEC 68, parts 2-27

Balancing quality

Testing the balancing quality is carried out in compliance with

- Residual imbalance according to DIN ISO 1940
- Standard balancing quality level G 6.3

Should you require a higher balancing quality level for your specific application, please let us know and specify this when ordering your product.

■ Chemo-physical strain / performance parameters

Should you have questions about chemo-physical strain, please direct them to your ebm-papst contact.

■ Fields of application, industries and applications

Our products are used in various industries and applications:

Ventilation, air-conditioning and refrigeration technology, clean room technology, automotive and rail technology, medical and laboratory technology, electronics, computer and office technology, telecommunications, household appliances, heating, machines and plants, drive engineering.

Our products are not designed for use in the aviation and aerospace industry!

■ Legal and normative directives

The products described in this catalogue are designed, developed and produced in keeping with the standards in place for the relevant product and, if known, the conditions governing the relevant fields of application.

Standards

Information on standards is provided in the product-specific data sheets.

EMC

Information on EMC standards is provided in the product-specific data sheets.

Complying with the EMC standards has to be established on the final appliance, as different mounting situations can result in changed EMC properties.

Leakage current

Information on the leakage current is provided in the product-specific data sheets.

Measuring is according to IEC 60990.

Approvals

In case you require a specific approval for your ebm-papst product (VDE, UL, GOST, CCC, CSA, etc.) please let us know.

Most of our products can be supplied with the relevant approval.

Information on existing approvals is provided in the product-specific data sheets.

■ Air performance measurements

All air performance measurements are carried out on suction side and on chamber test beds conforming to the specifications as per ISO 5801 and DIN 24163. The fans under test are installed in the measuring chamber at free air intake and exhaust (installation category A) and are operated at nominal voltage, with AC also at nominal frequency, and without any additional components such as guard grilles.

As required by the standard, the air performance curves correspond to an air density of 1.2 kg/m³.

Room for precision noise measuring



■ Measurement conditions for air and noise measurement

ebm-papst products are measured under the following conditions:

- Axial and diagonal fans in direction of rotation “V” in full nozzle and without guard grille
- Backward curved centrifugal fans, free-running and with inlet nozzle
- Forward curved single and dual inlet centrifugal fans with housing

■ Noise measurements

All noise measurements are carried out in low-reflective test rooms with reverberant floor. Thus the ebm-papst acoustic test chambers meet the requirements of precision class 1 according to DIN EN ISO 3745. For noise measurement, the fans being tested are placed in a reverberant wall and operated at nominal voltage (for AC, also at nominal frequency) without additional attachments such as the guard grille.

Sound pressure level and sound level

All acoustic values are established according to ISO 13347, DIN 45635 and ISO 3744/3745 to accuracy class 2 and given in A-rated form.

When the sound pressure level (L_p) is measured, the microphone is on the intake side of the fan being tested, usually at a distance of 1 m on the fan axis.

To measure the sound level (L_w), 10 microphones are distributed over an enveloping surface on the intake side of the fan being tested (see graphic). The sound level measured can be roughly calculated from the sound pressure level by adding 7 dB.

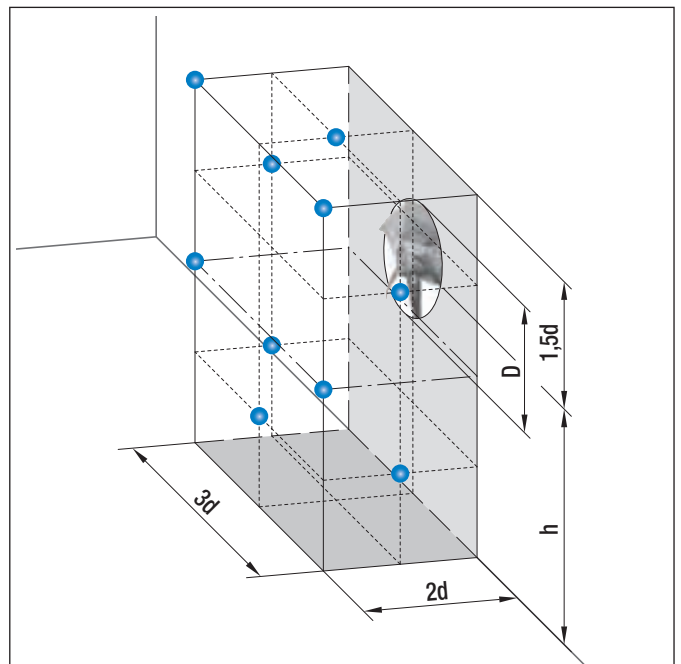
Measuring configuration as per ISO 13347-3 respectively DIN 45635-38:

- 10 measuring points

$$d \geq D$$

$$h = 1,5d \dots 4,5d$$

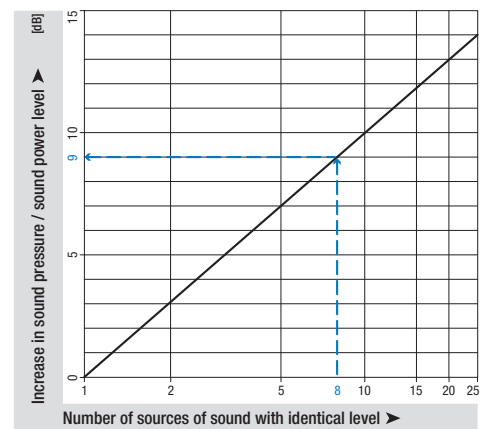
$$\text{Measurement area } S = 6d^2 + 7d(h + 1,5d)$$



Adding multiple noise sources with the same level

Adding 2 noise sources with the same volume results in a level increase of approx. 3 dB. The noise characteristics of multiple identical fans can be determined in advance based on the noise values specified in the data sheet. This is shown in the diagram opposite.

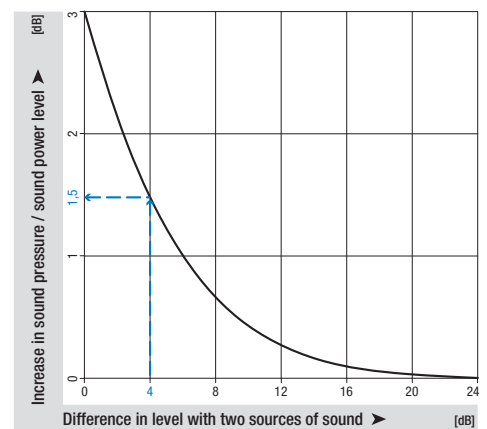
Example: 8 A3G800 axial fans are on a condenser. According to the data sheet, the sound pressure level of a fan is approximately 75 dB(A). The level increase measured from the diagram is 9 dB. Thus the overall sound level of the installation can be expected to be 84 dB(A).



Adding two noise sources with different levels

The acoustic performance of two different fans can be predetermined based on the sound levels given in the data sheet. This is shown in the diagram opposite.

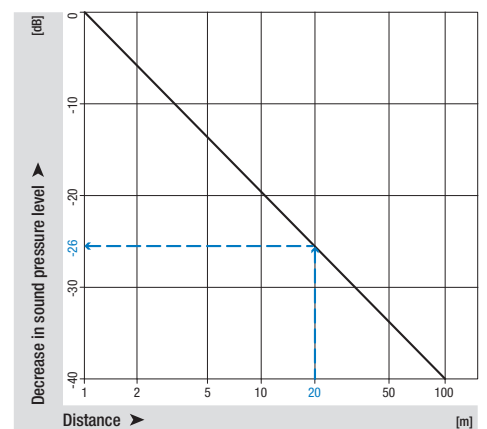
Example: There is an axial fan A3G800 with a sound pressure level of 75 dB(A) at the operating point and an axial fan A3G710 with 71 dB(A) in a ventilation unit. The level difference is 4 dB. The level increase can now be read in the diagram as approx. 1.5 dB. This means that the overall sound level of the unit can be expected to be 76.5 dB(A).



Distance laws

Sound power level is independent of distance to the sound source. In contrast to this, sound pressure level decreases the further away the noise source is. The adjacent diagram shows the decrease in level under far sound field conditions. Far sound field conditions apply whenever the distance between microphone and fan is big when compared to fan diameter and wavelength to be considered. For more information on far sound field, please consult the relevant literature on this complex topic. Per doubling of distance, the level in the far sound field decreases by 6 dB. In the near field of the fan, other correlations apply and the decrease in levels can be considerably smaller. The following example only applies to far sound field conditions and can vary strongly depending on the installation effects:

With an axial fan A3G300, a sound pressure level of 65 dB(A) was measured at a distance of 1 m. According to the adjacent diagram, at a distance of 20 m we would get a reduction by 26 dB, i.e. a sound pressure level of 39 dB(A).



-  fan agent
-  compact fan agent
-  motor specialist
-  motor agent

ebm-papst representatives & subsidiaries

Germany

ebm-papst Muldingen GmbH & Co. KG

Bachmühle 2
D-74673 Muldingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com

www.ebmpapst.com

ebm-papst St. Georgen GmbH & Co. KG

Hermann-Papst-Straße 1
D-78112 St. Georgen
Phone +49 7724 81-0
Fax +49 7724 81-1309
info2@de.ebmpapst.com

www.ebmpapst.com

ebm-papst Landshut GmbH

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

www.ebmpapst.com

Agencies

-  **Berlin**
 Dipl.-Ing. (TH) Jens Duchow
 Händelstraße 7
D-16341 Panketal
Phone +49 30 944149-62
Fax +49 30 944149-63
Jens.Duchow@de.ebmpapst.com
-  **Bielefeld**
 Dipl.-Ing. (FH) Wolf-Jürgen Weber
 Niehausweg 13
D-33739 Bielefeld
Phone +49 5206 91732-31
Fax +49 5206 91732-35
Wolf-Juergen.Weber@de.ebmpapst.com
-  **Dortmund**
 Dipl.-Ing. (FH) Hans-Joachim Pundt
 Auf den Steinern 3
D-59519 Möhnesee-Völlinghausen
Phone +49 2925 800-407
Fax +49 2925 800-408
Hans-Joachim.Pundt@de.ebmpapst.com
-  **Frankfurt**
 Dipl.-Ing. Christian Kleffmann
 Dr.-Hermann-Krause-Straße 23
D-63452 Hanau
Phone +49 6181 1898-12
Fax +49 6181 1898-13
Christian.Kleffmann@de.ebmpapst.com
-  **Halle**
 Dipl.-Ing. (TU) Michael Hanning
 Lerchenweg 4
D-06120 Lieskau
Phone +49 345 55124-56
Fax +49 345 55124-57
Michael.Hanning@de.ebmpapst.com
-  **Hamburg**
 Ingenieurbüro Breuell GmbH
 Ing. Dirk Kahl
Elektroingenieur
Grützmlhlenweg 40
D-22339 Hamburg
Phone +49 40 538092-19
Fax +49 40 538092-84
Dirk.Kahl@de.ebmpapst.com

-  **Kassel**
 Dipl.-Ing. (FH) Ralph Brück
 Hoherainstraße 3 b
D-35075 Gladenbach
Phone +49 6462 4071-10
Fax +49 6462 4071-11
Ralph.Brueck@de.ebmpapst.com
-  **Koblenz**
 Winfried Schaefer
 Hinter der Kirch 10
D-56767 Uersfeld
Phone +49 2657 16-96
Fax +49 2657 16-76
Winfried.Schaefer@de.ebmpapst.com
-  **Munich**
 Dipl.-Wirt.-Ing. (FH) Jens Peter
 Uhlandstraße 6
D-74427 Fichtenberg
Phone +49 7971 260-180
Fax +49 7971 260-221
Jens.Peter@de.ebmpapst.com
-  **Nuremberg**
 Friedrich Klein
 Adlerstraße 49/1
D-73540 Heubach
Phone +49 7173 4983
Fax +49 7173 8053
Friedrich.Klein@de.ebmpapst.com
-  **Offenburg**
 Dipl.-Ing. (FH) Ralf Braun
 Hubeneck 21
D-77704 Oberkirch
Phone +49 7802 9822-52
Fax +49 7802 9822-53
Ralf.Braun@de.ebmpapst.com
-  **Stuttgart**
 Dipl.-Ing. (FH) Rudi Weinmann
 Hindenburgstraße 100/1
D-73207 Plochingen
Phone +49 7153 9289-80
Fax +49 7153 9289-81
Rudi.Weinmann@de.ebmpapst.com
-  **Ulm**
 Dipl.-Wirt.-Ing. (FH) Axel Resch
 Bachmühle 2
D-74673 Muldingen
Phone +49 7938 81-7092
Fax +49 7938 81-110
Axel.Resch@de.ebmpapst.com

Distributors

-  **Frankfurt**
R.E.D. Handelsgesellschaft mbH
Gutenbergstraße 3
D-63110 Rodgau - Jügesheim
Phone +49 6106 841-0
Fax +49 6106 841-111
info@red-elektromechanik.de
www.red-elektromechanik.de
-  **Hamburg**
Breuell + Hilgenfeldt GmbH
Grützmlhlenweg 40
D-22339 Hamburg
Phone +49 40 538092-20
Fax +49 40 538092-84
info@breuell-hilgenfeldt.de
-  **Munich**
A. Schweiger GmbH
Ohmstraße 1
D-82054 Sauerlach
Phone +49 8104 897-0
Fax +49 8104 897-90
info@schweiger-gmbh.de
www.schweiger-gmbh.com
- **Express Service-Center** (1 to 5 pieces)
-  **North**
 Breuell + Hilgenfeldt GmbH
 Grützmlhlenweg 40
D-22339 Hamburg
Phone +49 40 538092-20
Fax +49 40 538092-84
ebmpapst@breuell-hilgenfeldt.de
-  **South**
 HDS Ventilatoren Vertriebs GmbH
Glaswiesenstraße 1
D-74677 Dörzbach
Phone +49 7937 8033520
Fax +49 7937 8033525
info@hds-gmbh.net

Europe

**Austria**
ebm-papst Motoren & Ventilatoren GmbH
Straubingstraße 17
A-4030 Linz
Phone +43 732 321150-0
Fax +43 732 321150-20
info@at.ebmpapst.com
www.ebmpapst.at

**Belarus**
ebm-papst Bel AgmbH
P.O. Box 117
BY-220138 Minsk
Phone +375 17 3851556
Fax +375 17 3851556
info@by.ebmpapst.com
www.ebmpapst.by

**Belgium**
ebm-papst Benelux B.V.
Sales office Belgium-Luxemburg
Romeinsestraat 6/0101
Research Park Haasrode
B-3001 Heverlee-Leuven
Phone +32 16 396-220
Fax +32 16 396-220
info@be.ebmpapst.com
www.ebmpapst.be

**Bulgaria**
ebm-papst Romania S.R.L.
Str. Tirnavei Nr. 20
RO-500327 Brasov
Phone +40 268 312-805
Fax +40 268 312-805
dudasludovic@xnet.ro

**Croatia**
ebm-papst Industries Kft.
Ezred u. 2.
H-1044 Budapest
Phone +36 1 8722-190
Fax +36 1 8722-194
office@hu.ebmpapst.com

**Czech Republic / Slovakia**
ebm-papst CZ s.r.o.
Kaštanová 34a
CZ-620 00 Brno
Phone +420 547 232-617
Fax +420 547 232-622
info@ebmpapst.cz
www.ebmpapst.cz

**Denmark**
ebm-papst Denmark ApS
Vallensbækvej 21
DK-2605 Brøndby
Phone +45 43 631111
Fax +45 43 630505
mail@dk.ebmpapst.com
www.ebmpapst.dk

**Estonia**
ebm-papst Oy, Eesti Filiaal
Kesk tee 13
Aaviku küla, Jüri Tehnopol
EST-75301 Rae Vald, Harjumaa
Phone +372 65569-78
Fax +372 65569-79
www.ebmpapst.ee

**Finland**
ebm-papst Oy
Puistotie 1
FIN-02760 Espoo
Phone +358 9 887022-0
Fax +358 9 887022-13
mailbox@ebmpapst.fi
www.ebmpapst.fi

**France**
ebm-papst SARL
ZI Nord - rue A. Mohler
BP 62
F-67212 Obernai-Cedex
Phone +33 820 326266
Fax +33 3 88673883
info@ebmpapst.fr
www.ebmpapst.fr

**Greece**
Helcoma
Th. Rotas & Co OE
Davaki 65
GR-17672 Kallithea-Attiki
Phone +30 210 9513-705
Fax +30 210 9513-490
contact@helcoma.gr
www.helcoma.gr

**Hungary**
ebm-papst Industries Kft.
Ezred u. 2.
H-1044 Budapest
Phone +36 1 8722-190
Fax +36 1 8722-194
office@hu.ebmpapst.com

**Iceland**
RJ Engineers
Stangarhyl 1A
IS-110 Reykjavik
Phone +354 567 8030
Fax +354 567 8015
rj@rj.is
www.rj.is

**Ireland**
ebm-papst Limited
Portlaoise Business & Technology Park
Mountrath Road
IRL-Portlaoise, Co. Laois
Phone +353 5786 643-43
Fax +353 5786 643-46
sales@ie.ebmpapst.com
www.ebmpapst.ie

**Italy**
ebm-papst Srl
Via Cornaggia 108
I-22076 Mozzate (Co)
Phone +39 0331 836201
Fax +39 0331 821510
info@it.ebmpapst.com
www.ebmpapst.it

**Macedonia**
ebm-papst Industries Kft.
Ezred u. 2.
H-1044 Budapest
Phone +36 1 8722-190
Fax +36 1 8722-194
office@hu.ebmpapst.com



fan agent



compact fan agent



motor specialist



motor agent

ebm-papst representatives & subsidiaries



Netherlands

ebm-papst Benelux B.V.
Engelseweg 127
NL-5705 AC Helmond
Phone +31 492 502-900
Fax +31 492 502-950
verkoop@nl.ebmpapst.com
www.ebmpapst.nl



Norway

ebm-papst AS
P.B. 173 Holmlia
N-1203 Oslo
Phone +47 22 763340
Fax +47 22 619173
mailbox@ebmpapst.no
www.ebmpapst.no



Poland

ebm-papst Polska Sp. z o.o.
ul. Annapol 4A
PL-03236 Warszawa
Phone +48 22 6757819
Fax +48 22 6769587
office@ebmpapst.pl
www.ebmpapst.pl



Portugal

ebm-papst (Portugal), Lda.
Av. Marechal Gomes da Costa, 35 e
Rua Conselheiro Emidio Navarro
P-1800-255 Lisboa
Phone +351 218 394-880
Fax +351 218 394-759
info@pt.ebmpapst.com
www.ebmpapst.pt



Romania

ebm-papst Romania S.R.L.
Str. Tirnavei Nr. 20
RO-500327 Brasov
Phone +40 268 312-805
Fax +40 268 312-805
dudasludovic@xnet.ro



Russia

ebm-papst Ural GmbH
Posadskaja-Strasse, 23(E), 3
RU-620102 Ekaterinburg
Phone +7 343 2338000
Fax +7 343 2337788
Konstantin.Molokov@ru.ebmpapst.com
www.ebmpapst.ur.ru



ebm-papst Rus GmbH

proezd 4529, vladenie 5, stroenie 1
RU-141000 Mytistschi, Oblast Moskau
Phone +7 495 9807524
Fax +7 495 5140924
info@ebmpapst.ru
www.ebmpapst.ru



Serbia & Montenegro

ebm-papst Industries Kft.
Ezred u. 2.
H-1044 Budapest
Phone +36 1 8722-190
Fax +36 1 8722-194
office@hu.ebmpapst.com



Spain

ebm-papst Ibérica S.L.
Avda. del Sistema Solar, 29
E-28830 San Fernando de Henares (Madrid)
Phone +34 91 6780894
Fax +34 91 6781530
ventas@ebmpapst.es



Sweden

ebm-papst AB
Äggelundavägen 2
S-17562 Järfälla
Phone +46 8 7619400
Fax +46 8 362306
info@ebmpapst.se
www.ebmpapst.se



Switzerland

ebm-papst AG
Rütisbergstrasse 1
CH-8156 Oberhasli
Phone +41 44 73220-70
Fax +41 44 73220-77
verkauf@ebmpapst.ch
www.ebmpapst.ch



Turkey

Akantel Elektronik San. Tic. LTD. Sti.
Atatürk Organize Sanayi
Bölgesi 10007 SK. No.:6
TR-35620 Cigli-Izmir
Phone +90 232 3282090
Fax +90 232 3280270
akantel@akantel.com.tr
www.ebmpapst.com.tr



Ukraine

ebm-papst Ukraine LLC
Lepse Boulevard, 4, Building 47
UA-03067 Kiev
Phone +38 044 2063091
Fax +38 044 2063091
mail@ebmpapst.ua
www.ebmpapst.ua



United Kingdom

ebm-papst UK Ltd.
Chelmsford Business Park
GB-Chelmsford Essex CM2 5EZ
Phone +44 1245 468555
Fax +44 1245 466336
sales@uk.ebmpapst.com
www.ebmpapst.co.uk



ebm-papst Automotive & Drives (UK) Ltd.
The Smithy
Fidlers Lane, East Ilsley
GB-Berkshire RG20 7LG
Phone +44 1635 2811-11
Fax +44 1635 2811-61
A&DSales@uk.ebmpapst.com
www.ebmpapst-ad.com

America



Argentina



ebm-papst de Argentina S.A.
Hernandarias 148 Lomas del Mirador
Pcia. de Buenos Aires (1752)
Phone +54 11 46576135
Fax +54 11 46572092
ventas@ar.ebmpapst.com
www.ebmpapst.com.ar



Brasil



ebm-papst Motores Ventiladores Ltda.
Av. José Giorgi, 301 Galpões B6+B7
Condominio Logical Center
BR-06707-100 Cotia - São Paulo
Phone +55 11 4613-8700
Fax +55 11 3164-8924
vendas@br.ebmpapst.com
www.ebmpapst.com.br



Canada



ebm-papst Canada Inc.
1800 Ironstone Manor, Unit 2
CDN-Pickering, Ontario, L1W3J9
Phone +1 905 420-3533
Fax +1 905 420-3772
sales@ca.ebmpapst.com
www.ebmpapst.ca



Mexico



ebm Industrial S.de R.L. de C.V.
Paseo de Tamarindos 400-A-5º Piso
Col. Bosques de las Lomas
MEX-Mexico 05120, D.F.
Phone +52 55 3300-5144
Fax +52 55 3300-5243
sales@mx.ebmpapst.com
www.ebmpapst.com.mx

USA



ebm-papst Inc.
P.O. Box 4009
100 Hyde Road
USA-Farmington, CT 06034
Phone +1 860 674-1515
Fax +1 860 674-8536
sales@us.ebmpapst.com
www.ebmpapst.us



ebm-papst Automotive & Drives, Inc.
3200 Greenfield, Suite 255
USA-Dearborn, MI 48120
Phone +1 313 406-8080
Fax +1 313 406-8081
automotive@us.ebmpapst.com
www.ebmpapst-automotive.us

Africa



South Africa



ebm-papst South Africa (Pty) Ltd.
P.O. Box 3124
1119 Yacht Avenue
ZA-2040 Honeydew
Phone +27 11 794-3434
Fax +27 11 794-5020
info@za.ebmpapst.com
www.ebmpapst.co.za



fan agent



compact fan agent



motor specialist



motor agent

ebm-papst representatives & subsidiaries

Asia



China



ebm-papst Ventilator (Shanghai) Co., Ltd.
No. 418, Huajing Road
WaiGaoQiao Free Trade Zone
No. 2001, Yang Gao (N) Road
VRC-200131 Shanghai, P.R. of China
Phone +86 21 5046-0183
Fax +86 21 5046-1119
sales@cn.ebmpapst.com
www.ebmpapst.com.cn



Hong Kong



ebm-papst Hong Kong Ltd.
Unit No. 13,9 / F
Technology Park, 18 On Lai Street
Siu Lek Yuen, Shatin N.T.
Hong Kong - P.R. of China
Phone +852 2145-8678
Fax +852 2145-7678
info@hk.ebmpapst.com



India



ebm-papst India Pvt. Ltd.
26/3, G.N.T. Road, Erukkencherry
IND-Chennai-600118
Phone +91 44 25372556
Fax +91 44 25371149
sales@in.ebmpapst.com
www.ebmpapst.in



Indonesia



ebm-papst Indonesia
Representative Office
German Centre, 4th Floor, Suite 4470
Jl. Kapt. Subijono Dj. Bumi Serpong Damai
RI-15321 Tangerang
Phone +62 21 5376250
Fax +62 21 5388305
salesdept@id.ebmpapst.com



Israel



Polak Bros. Import Agencies Ltd.
9 Hamefalsim Street
IL-Kiryat Arie, Petach-Tikva 49514
Phone +972 3 9100300
Fax +972 3 5796679
polak@polak.co.il
www.polak.co.il



Japan



ebm-papst Industries Japan K.K.
12 Floor, Benex S-3 Bldg.
3-20-8 Shinyokohama, Kohoku-ku
J-222-0033 Yokohama
Phone +81 45 47057-51
Fax +81 45 47057-52
info@jp.ebmpapst.com
www.ebmpapst.jp



Korea



ebm-papst Korea Co. Ltd.
6F, Trutec Bldg.
B 6-2, Digital Media City (DMC)
Sangam-Dong, Mapo-Gu
ROK-Seoul 121-270
Phone +82 2 366213-24
Fax +82 2 366213-26
info@kr.ebmpapst.com
www.ebmpapst.co.kr



Malaysia



ebm-papst Malaysia
Representative Office
Unit 12-2, Jalan USJ Sentral 3
Persiaran Subang, Selangor Darul Ehsan
MAL-47600 Subang Jaya
Phone +60 3 8024-1680
Fax +60 3 8024-8718
salesdept@my.ebmpapst.com



Singapore



ebm-papst SEA Pte. Ltd.
No. 23 Ubi Road 4
#06-00 Olympia Industrial Building
SGP-Singapore 408620
Phone +65 65513789
Fax +65 68428439
salesdept@sg.ebmpapst.com



Taiwan



ETECO Engineering & Trading Corp.
10F-I, No. 92, Teh-Wei Str.
RC-Tsow-Inn District, Kaohsiung
Phone +886 7 557-4268
Fax +886 7 557-2788
eteco@ms22.hinet.net
www.ebmpapst.com.tw



Thailand



ebm-papst Thailand Co., Ltd.
99/349 Na-Nakorn Bldg., 4th Floor
Chaeng Wattana Road, Thungsonghong,
THA-10210 Laksi, BKK
Phone +66 2 57615-24
Fax +66 2 57615-42
salesdept@th.ebmpapst.com



United Arab Emirates



ebm-papst Middle East FZE
PO Box 17755
Jebel Ali Free Zone / FZS1 / AP05
UAE-Dubai
Phone +971 4 88608-26
Fax +971 4 88608-27
info@ae.ebmpapst.com
www.ebmpapst.ae



Vietnam



ebm-papst Vietnam
Representative Office
Room #102, 25 Nguyen Van Thu Street
District 1
VN-Ho Chi Minh City
Phone +84 8 39104099
Fax +84 8 39103970
linh.nguyen@vn.ebmpapst.com

Australia



Australia

ebm-papst A&NZ Pty Ltd.



10 Oxford Road



AUS-Laverton North, Victoria, 3026

Phone +61 3 9360-6400

Fax +61 3 9360-6464

sales@ebmpapst.com.au

www.ebmpapst.com.au



New Zealand

ebm-papst A&NZ Pty Ltd.



102 Henderson Valley Road



NZ-Henderson, Auckland 1230

Phone +64 9 837-1884

Fax +64 9 837-1899

sales@ebmpapst.com.au

www.ebmpapst.com.au

ebm-papst
Mulfingen GmbH & Co. KG

Bachmühle 2
D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com

www.ebmpapst.com



ebmpapst