

60 Hz: Axial and centrifugal fans with AC motor sizes 094/110/138

Version 07/2009



The engineer's choice

ebmpapst

Large AC fans for 60 Hz applications

Centrifugal and axial fans with robust, asynchronous design external rotor motors have always been given great priority at ebm-papst.

New sizes of fans with AC drives are now available from ebm-papst.

But all the benefits of the products have remained the same: These are fans that require little depth for installation, produce low noise levels and have outstanding efficiency. This combination makes our new AC fan series the number one choice of project and design engineers in ventilation, air conditioning and refrigeration technology.

Robust and versatile

Asynchronous external rotor motors in sizes of 110 and 138 have been developed as drives for axial fans with blade diameters from 500 mm to 910 mm, for backward curved centrifugal fans with impeller diameters from 450 mm to 630 mm, and forward curved centrifugal fans with impeller diameters from 250 mm to 400 mm. The latest motors are available in 4, 6, 8 and 12-pole versions and in a variety of installation lengths.

Depending on the motor size, the axial fans have sickle-shaped plastic blades (HyBlade®) or die-cast blades; in both variants, the blade ends have been optimised by using "winglets". This guarantees particularly quiet operation and, at the same time, high efficiency. Different blade angles for each diameter make it possible to configure almost any operating point required.

A strong connection

In designing the HyBlade® axial fan blades, ebm-papst was the first to use a high-strength, corrosion-resistant aluminium alloy carrier with a jacket of special, fibre-reinforced plastic.

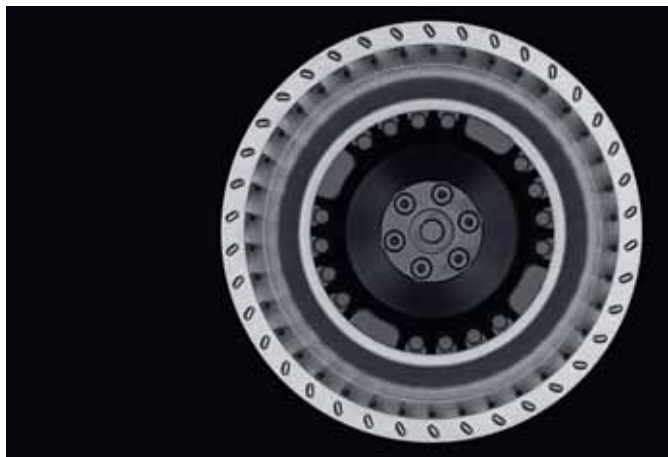
Using the two materials together form an ideal combination of their individual characteristics. The aluminium inlet can withstand the mechanical forces during operation and ensures a durable connection to the rotor, while the plastic encapsulates the carrier structure, giving the blade its optimised aerodynamic shape. At the same time, the plastic jacket has a positive effect on the total weight of the fan. Two features add to the considerable noise reduction as compared to conventional blades: The aerodynamically optimised and profiled contour, and the simple addition of "winglets" to the ends of the blades.

For backward curved centrifugal fans up to 630 mm in diameter, an impeller with three-dimensional backward curved blades is used, which likewise provides the best possible results in terms of noise and efficiency.

The forward curved centrifugal fans, with impeller diameters from 250 mm to 400 mm, are able to be used with the existing external rotor motors of sizes 094, 110 and 138.

These innovative new fans, with their outstanding designs, are the result of intensive research, are based on our many years of experience, and are supported by extensive simulations and complex calculations.

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AC axial fans

AC axial fans

Ø 500 - Ø 910

6



AC axial fans - HyBlade®

Ø 500



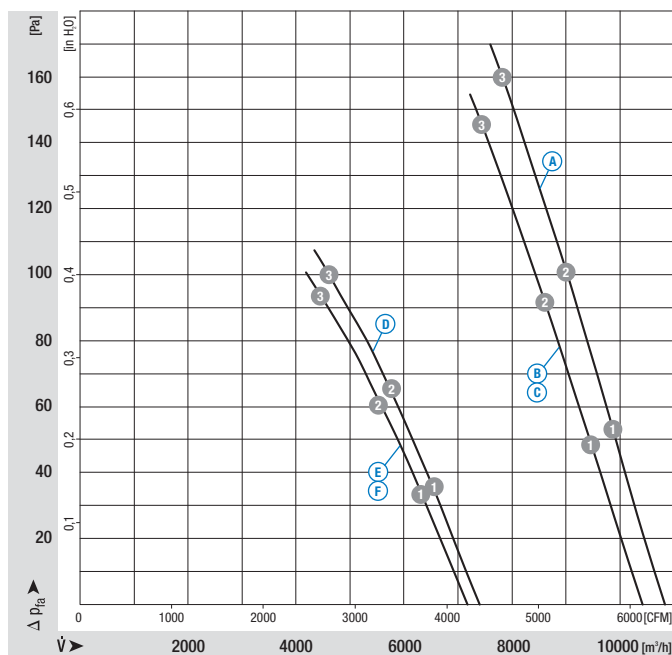
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Pressed-on round sheet steel plate, extrusion-coated in PP plastics
Rotor: Coated in black
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" counter-clockwise, direction of air flow "A" clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*4D 500	M4D 110-GF	0°	A	3~480 Y	60	1590	1.05	1.57	—	160	-40 to +60	F1b)/F2b)
			B	3~400 Y	60	1510	0.95	1.60	—	145	-40 to +60	
			C	3~230 Δ	60	1510	0.95	2.77	—	145	-40 to +60	
*6D 500	M6D 110-EF	0°	D	3~480 Y	60	1095	0.41	0.72	—	100	-40 to +65	F1b)/F2b)
			E	3~400 Y	60	1050	0.38	0.70	—	93	-40 to +65	
			F	3~230 Δ	60	1050	0.38	1.22	—	93	-40 to +65	
*8D 500	M8D 110-EF	0°	G	3~480 Y	60	815	0.21	0.45	—	55	-40 to +65	F1b)/F2b)
			H	3~400 Y	60	785	0.18	0.41	—	50	-40 to +65	
			I	3~230 Δ	60	785	0.18	0.71	—	50	-40 to +65	

subject to alterations

(1) Nominal data in operating point 3 with maximum load

Curves

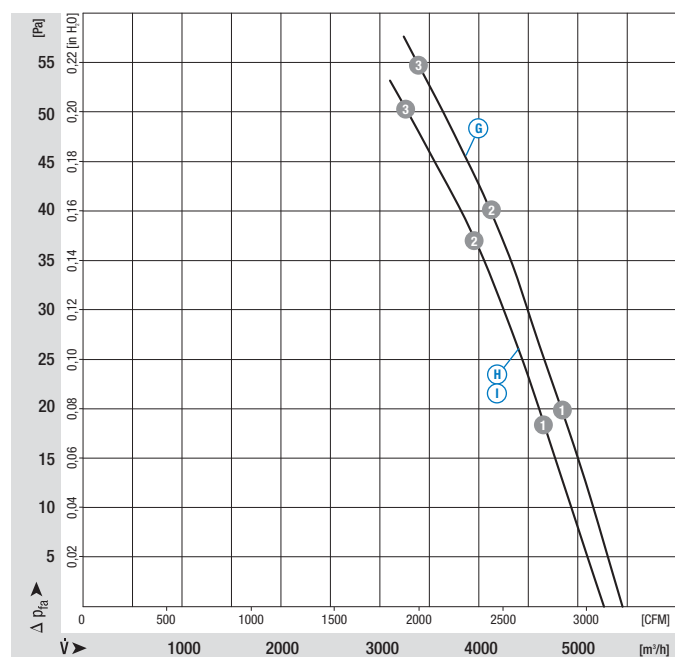


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1630	0.90	1.41	76
A 2	1615	0.96	1.47	75
A 3	1590	1.05	1.57	74
B 1	1565	0.82	1.41	76
B 2	1540	0.88	1.49	74
B 3	1510	0.95	1.60	73
C 1	1565	0.82	2.44	76
C 2	1540	0.88	2.58	74
C 3	1510	0.95	2.77	73
D 1	1120	0.34	0.67	68
D 2	1110	0.37	0.68	66
D 3	1095	0.41	0.72	66
E 1	1085	0.31	0.60	67
E 2	1075	0.34	0.63	65
E 3	1050	0.38	0.70	65
F 1	1085	0.31	1.07	67
F 2	1075	0.34	1.09	65
F 3	1050	0.38	1.22	65

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	< "V"/"A" >		< "V"/"A" >		< "V" >		< "V" >		"A" >		"A" >	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A4D 500-AM01 -03 A4D 500-AM01 -04	W4D 500-GM01 -03 W4D 500-DM01 -04	S4D 500-CM01 -03 —	S4D 500-AM01 -03 —	—	S4D 500-BM01 -04	S4D 500-AM01 -04					
"V" "A"	A6D 500-AJ01 -03 A6D 500-AJ01 -04	W6D 500-GJ01 -03 W6D 500-DJ01 -04	S6D 500-CJ01 -03 —	S6D 500-AJ01 -03 —	—	S6D 500-BJ01 -04	S6D 500-AJ01 -04					
"V" "A"	A8D 500-AJ05 -03 A8D 500-AJ05 -04	W8D 500-GJ05 -03 W8D 500-DJ05 -04	S8D 500-CJ05 -03 —	S8D 500-AJ05 -03 —	—	S8D 500-BJ05 -04	S8D 500-AJ05 -04					

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
G 1	835	0.18	0.42	61
G 2	825	0.19	0.43	59
G 3	815	0.21	0.45	59
H 1	805	0.16	0.37	61
H 2	795	0.17	0.38	59
H 3	785	0.18	0.41	57
I 1	805	0.16	0.64	61
I 2	795	0.17	0.66	59
I 3	785	0.18	0.71	57

AC axial fans - HyBlade®

Ø 500



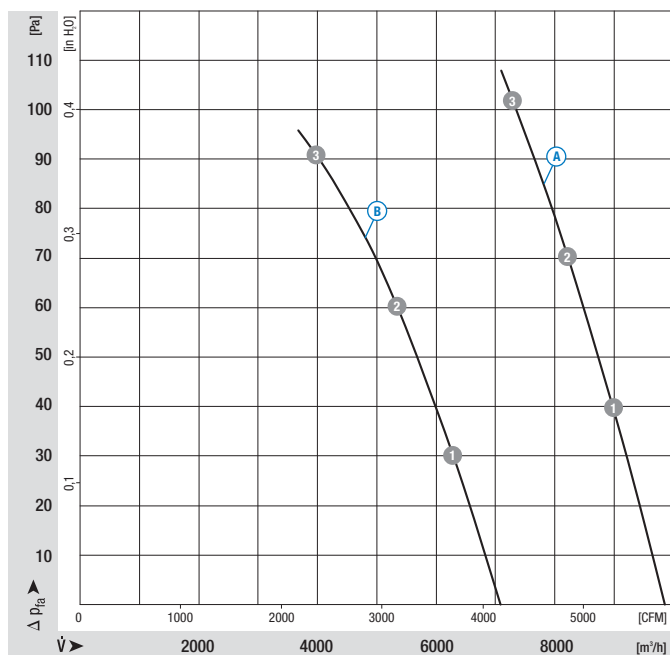
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Pressed-on round sheet steel plate, extrusion-coated in PP plastics
Rotor: Coated in black
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" counter-clockwise, direction of air flow "A" clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*4E 500	M4E 110-GF	0°	A	1~ 230	60	1400	0.88	3.88	12.0/450	100	-40 to +40	A2b)
*6E 500	M6E 110-EF	0°	B	1~ 230	60	1015	0.39	1.72	8.0/400	90	-40 to +65	A2b)
*8E 500	M8E 110-EF	0°	C	1~ 230	60	740	0.17	0.75	3.0/400	45	-40 to +65	A2b)

subject to alterations

(1) Nominal data in operating point 3 with maximum load

Curves

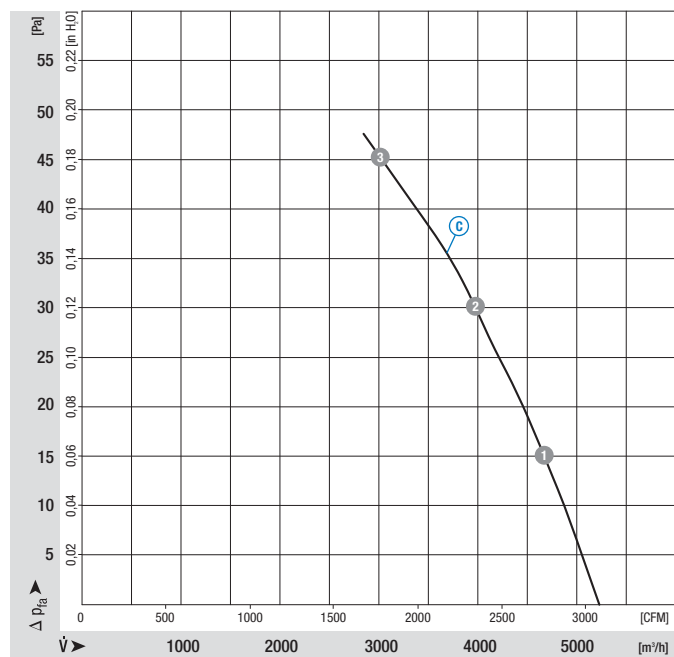


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1485	0.83	3.61	75
A 2	1450	0.85	3.73	73
A 3	1400	0.88	3.88	72
B 1	1075	0.36	1.59	67
B 2	1050	0.38	1.65	65
B 3	1015	0.39	1.72	65

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	◀ "V"/ "A" ▶		◀ "V"/ "A" ▶		◀ "V" ▶		◀ "V" ▶		"A" ▶		"A" ▶	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A4E 500-AM03 -01 A4E 500-AM03 -02	W4E 500-GM03 -01 W4E 500-DM03 -02	S4E 500-CM03 -01 —	S4E 500-AM03 -01 —	—	S4E 500-BM03 -02	—	S4E 500-AM03 -02	—	—	—	—
"V" "A"	A6E 500-AJ03 -01 A6E 500-AJ03 -02	W6E 500-GJ03 -01 W6E 500-DJ03 -02	S6E 500-CJ03 -01 —	S6E 500-AJ03 -01 —	—	S6E 500-BJ03 -02	—	S6E 500-AJ03 -02	—	—	—	—
"V" "A"	A8E 500-AJ03 -01 A8E 500-AJ03 -02	W8E 500-GJ03 -01 W8E 500-DJ03 -02	S8E 500-CJ03 -01 —	S8E 500-AJ03 -01 —	—	S8E 500-BJ03 -02	—	S8E 500-AJ03 -02	—	—	—	—

Curves



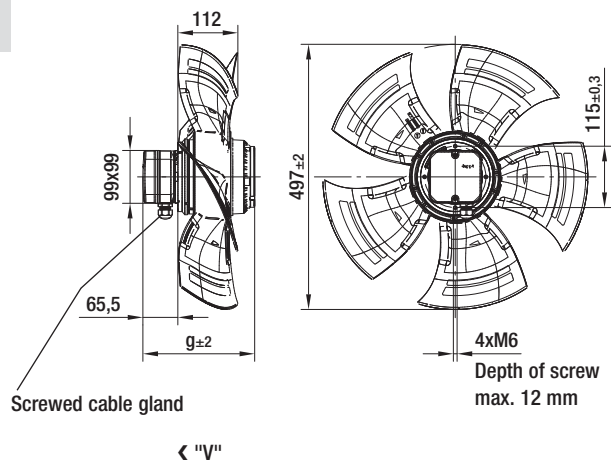
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓒ 1	780	0.15	0.67	61
Ⓒ 2	760	0.16	0.71	58
Ⓒ 3	740	0.17	0.75	56

AC axial fans - HyBlade®

Ø 500, drawings for direction of air flow "V"



Without attachments

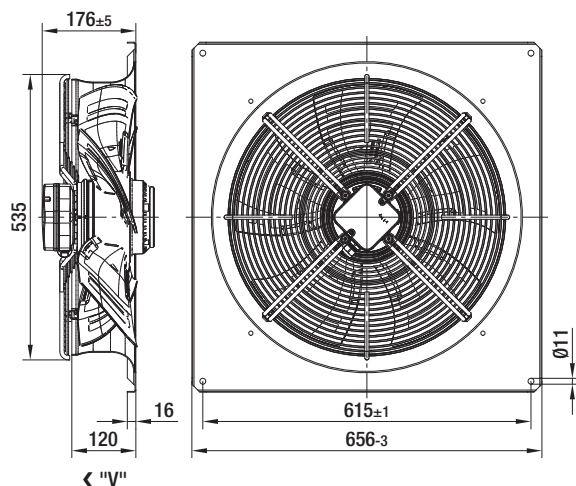


Type	Mass [kg]	g
A4D 500-AM01 -03	10.5	209.5
A6D 500-AJ01 -03	8.5	189.5
A8D 500-AJ05 -03	8.5	189.5
A4E 500-AM03 -01	10.5	209.5
A6E 500-AJ03 -01	8.5	189.5
A8E 500-AJ03 -01	8.5	189.5

Internal diameter of the wall ring at least 503 mm



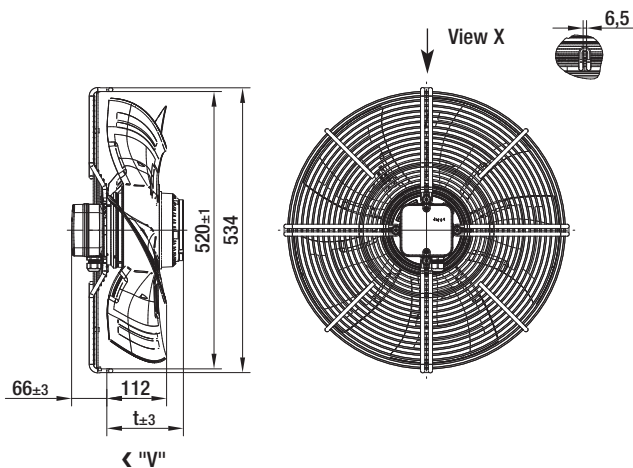
With full square nozzle



Type	Mass [kg]
W4D 500-GM01 -03	18.0
W6D 500-GJ01 -03	16.0
W8D 500-GJ05 -03	16.0
W4E 500-GM03 -01	18.0
W6E 500-GJ03 -01	16.0
W8E 500-GJ03 -01	16.0



With guard grille for full nozzle

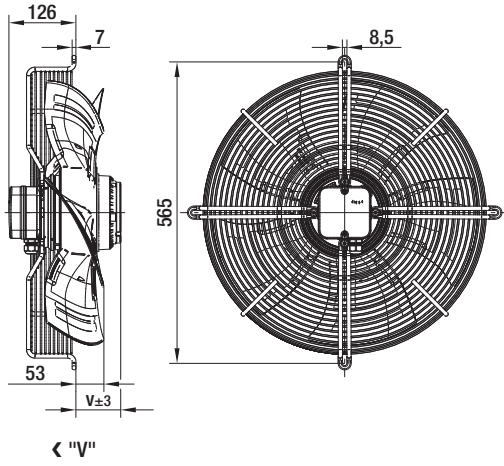


Type	Mass [kg]	t
S4D 500-CM01 -03	12.7	144.0
S6D 500-CJ01 -03	10.7	124.0
S8D 500-CJ05 -03	10.7	124.0
S4E 500-CM03 -01	12.7	144.0
S6E 500-CJ03 -01	10.7	124.0
S8E 500-CJ03 -01	10.7	124.0

Internal diameter of the wall ring at least 503 mm



With guard grille for short nozzle



Type	Mass	
	[kg]	v
S4D 500-AM01 -03	13.8	84.0
S6D 500-AJ01 -03	11.8	64.0
S8D 500-AJ05 -03	11.8	64.0
S4E 500-AM03 -01	13.8	84.0
S6E 500-AJ03 -01	11.8	64.0
S8E 500-AJ03 -01	11.8	64.0

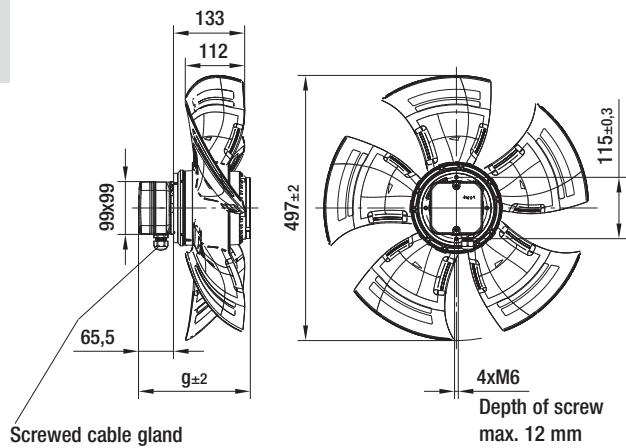
Internal diameter of the wall ring at least 503 mm

AC axial fans - HyBlade®

Ø 500, drawings for direction of air flow "A"



Without attachments



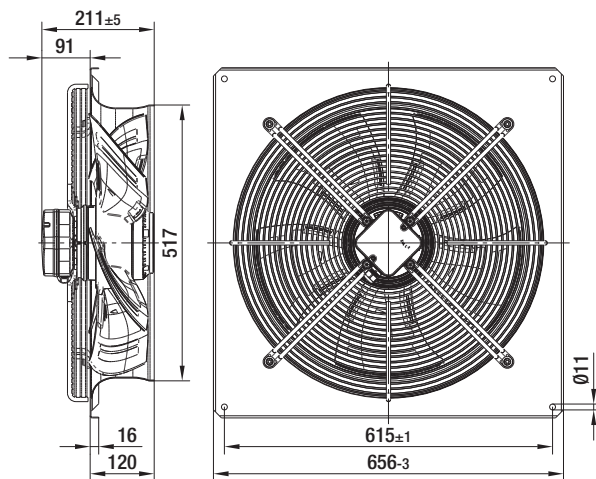
"A" >

Type	Mass [kg]	g
A4D 500-AM01 -04	10.5	209.5
A6D 500-AJ01 -04	8.5	189.5
A8D 500-AJ05 -04	8.5	189.5
A4E 500-AM03 -02	10.5	209.5
A6E 500-AJ03 -02	8.5	189.5
A8E 500-AJ03 -02	8.5	189.5

Internal diameter of the wall ring at least 503 mm



With full square nozzle

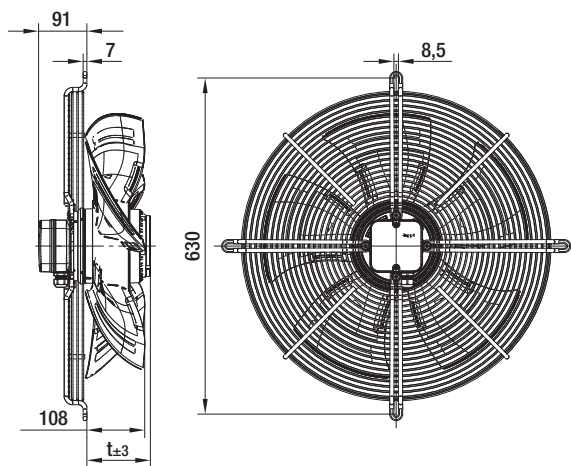


"A" >

Type	Mass [kg]
W4D 500-DM01 -04	18.7
W6D 500-DJ01 -04	16.7
W8D 500-DJ05 -04	16.7
W4E 500-DM03 -02	18.7
W6E 500-DJ03 -02	16.7
W8E 500-DJ03 -02	16.7



With guard grille for full nozzle



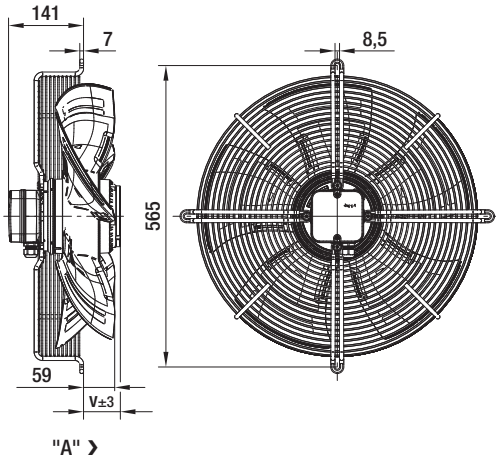
"A" >

Type	Mass [kg]	t
S4D 500-BM01 -04	13.4	119.0
S6D 500-BJ01 -04	11.4	99.0
S8D 500-BJ05 -04	11.4	99.0
S4E 500-BM03 -02	13.4	119.0
S6E 500-BJ03 -02	11.4	99.0
S8E 500-BJ03 -02	11.4	99.0

Internal diameter of the wall ring at least 503 mm



With guard grille for short nozzle



Type	Mass [kg]	v
S4D 500-AM01 -04	13.6	69.0
S6D 500-AJ01 -04	11.6	49.0
S8D 500-AJ05 -04	11.6	49.0
S4E 500-AM03 -02	13.6	69.0
S6E 500-AJ03 -02	11.6	49.0
S8E 500-AJ03 -02	11.6	49.0

Internal diameter of the wall ring at least 503 mm

AC axial fans - HyBlade®

Ø 560



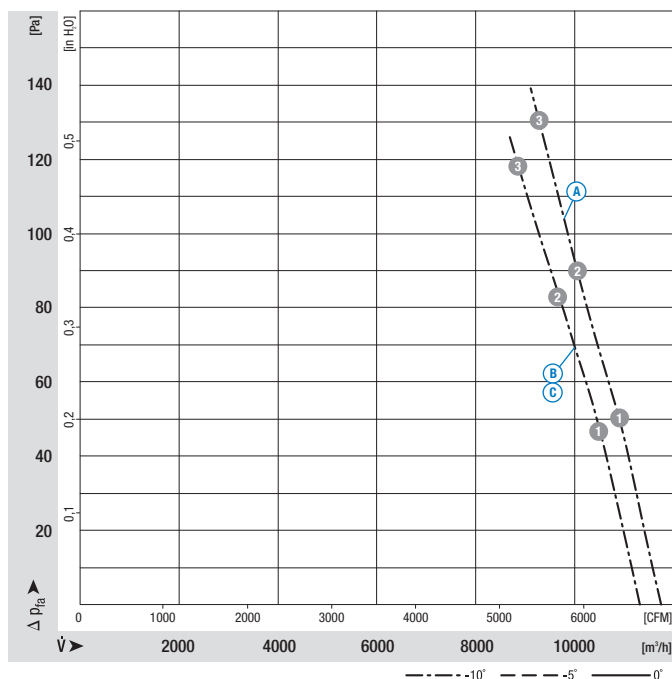
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" counter-clockwise, direction of air flow "A" clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*4D 560	M4D 110-GF	-10°	A	3~ 480 Y	60	1580	1.17	1.83	—	130	-40 to +60	F1b)/F2b)
			B	3~ 400 Y	60	1500	1.05	1.80	—	120	-40 to +60	
			C	3~ 230 Δ	60	1500	1.05	3.12	—	120	-40 to +60	
*4D 560	M4D 110-IA	-10°	D	3~ 480 Y	60	1640	1.42	2.54	—	230	-40 to +65	F1b)/F2b)
			E	3~ 400 Y	60	1575	1.32	2.46	—	215	-40 to +65	
			F	3~ 230 Δ	60	1575	1.32	4.26	—	215	-40 to +65	
*6D 560	M6D 110-EF	-5°	G	3~ 480 Y	60	1040	0.60	0.96	—	110	-40 to +55	F1b)/F2b)
			H	3~ 400 Y	60	970	0.55	0.99	—	95	-40 to +55	
			I	3~ 230 Δ	60	970	0.55	1.71	—	95	-40 to +55	

subject to alterations

(1) Nominal data in operating point 3 with maximum load

Curves

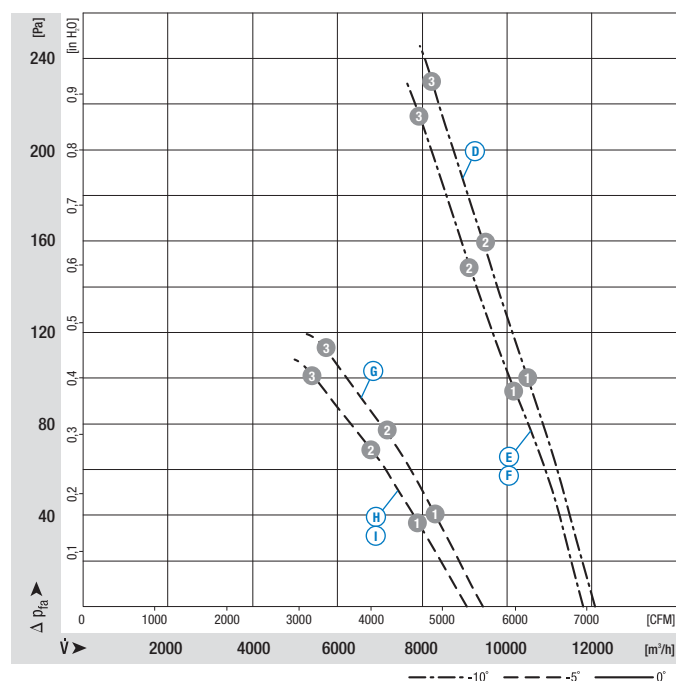


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	1625	0.98	1.53	78
A 2	1605	1.07	1.62	77
A 3	1580	1.17	1.83	78
B 1	1555	0.91	1.54	77
B 2	1525	0.98	1.65	76
B 3	1500	1.05	1.80	77
C 1	1555	0.91	2.68	77
C 2	1525	0.98	2.87	76
C 3	1500	1.05	3.12	77

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	< "V"/ "A" >		< "V"/ "A" >		< "V" >		< "V" >		"A" >		"A" >	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A4D 560-A001 -03 A4D 560-A001 -04	W4D 560-G001 -03 W4D 560-D001 -04	S4D 560-C001 -03 —	S4D 560-A001 -03 —	—	S4D 560-B001 -04	—	S4D 560-A001 -04	—	—	—	—
"V" "A"	A4D 560-AR03 -03 A4D 560-AR03 -04	W4D 560-GR03 -03 W4D 560-DR03 -04	S4D 560-CR03 -03 —	S4D 560-AR03 -03 —	—	S4D 560-BR03 -04	—	S4D 560-AR03 -04	—	—	—	—
"V" "A"	A6D 560-AK01 -03 A6D 560-AK01 -04	W6D 560-GK01 -03 W6D 560-DK01 -04	S6D 560-CK01 -03 —	S6D 560-AK01 -03 —	—	S6D 560-BK01 -04	—	S6D 560-AK01 -04	—	—	—	—

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
D 1	1675	1.18	2.18	79
D 2	1660	1.30	2.30	79
D 3	1640	1.42	2.54	81
E 1	1625	1.09	2.02	78
E 2	1605	1.19	2.16	78
E 3	1575	1.32	2.46	80
F 1	1625	1.09	3.51	78
F 2	1605	1.19	3.76	78
F 3	1575	1.32	4.26	80
G 1	1075	0.51	0.83	68
G 2	1055	0.56	0.88	68
G 3	1040	0.60	0.96	71
H 1	1020	0.46	0.82	66
H 2	995	0.50	0.88	66
H 3	970	0.55	0.99	68
I 1	1020	0.46	1.43	66
I 2	995	0.50	1.53	66
I 3	970	0.55	1.71	68

AC axial fans - HyBlade®

Ø 560



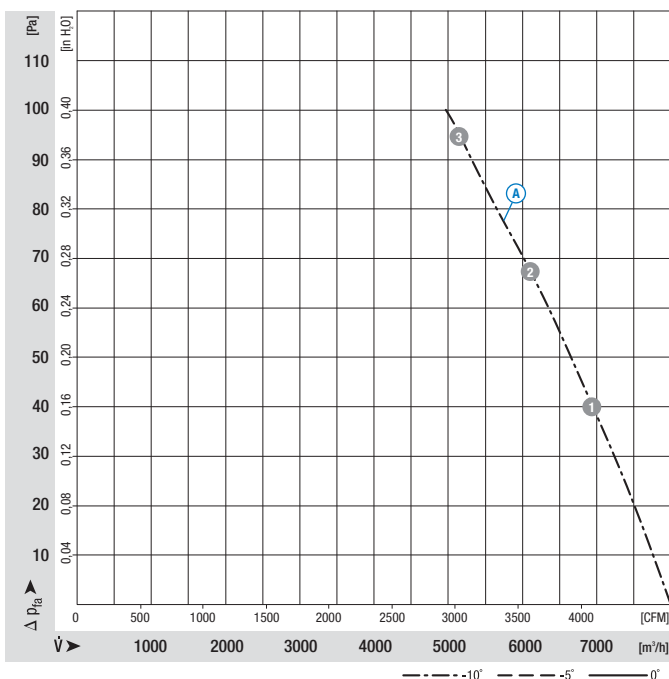
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Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
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- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*6E 560	M6E 110-EF	-10°	Ⓐ	1~ 230	60	1030	0.46	2.10	8.0/450	95	-40 to +55	A2b)
*6E 560	M6E 110-GF	-5°	Ⓑ	1~ 230	60	1010	0.57	2.48	10.0/400	95	-40 to +55	A2b)

subject to alterations (1) Nominal data in operating point ⓐ with maximum load

Curves

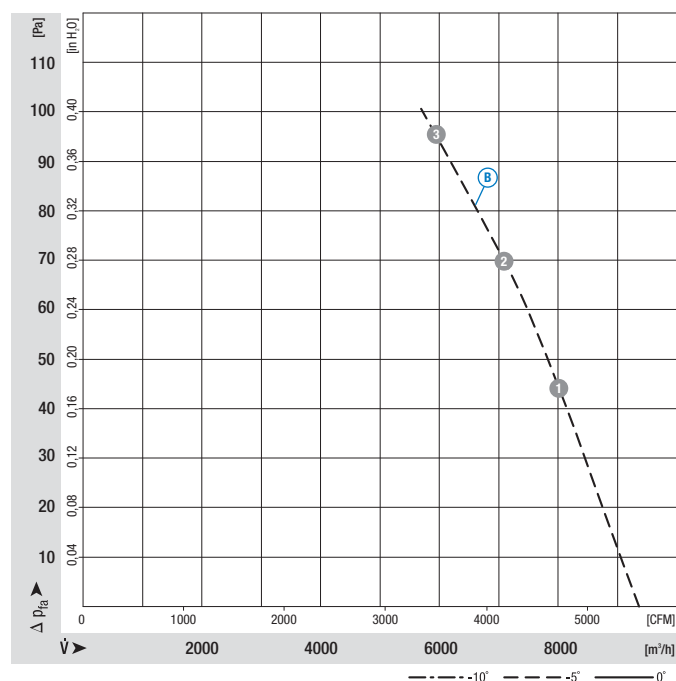
	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	1085	0.40	1.75	67
Ⓐ 2	1055	0.43	1.88	69
Ⓐ 3	1030	0.46	2.10	69



- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	◀ "V"/ "A" ▶		◀ "V"/ "A" ▶		◀ "V" ▶		◀ "V" ▶		"A" ▶		"A" ▶	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A6E 560-AL01 -01 A6E 560-AL01 -02	W6E 560-GL01 -01 W6E 560-DL01 -02	S6E 560-CL01 -01 —	S6E 560-AL01 -01 —	—	S6E 560-BL01 -02	—	S6E 560-AL01 -02	—	—	—	—
"V" "A"	A6E 560-AN01 -01 A6E 560-AN01 -02	W6E 560-GN01 -01 W6E 560-DN01 -02	S6E 560-CN01 -01 —	S6E 560-AN01 -01 —	—	S6E 560-BN01 -02	—	S6E 560-AN01 -02	—	—	—	—

Curves



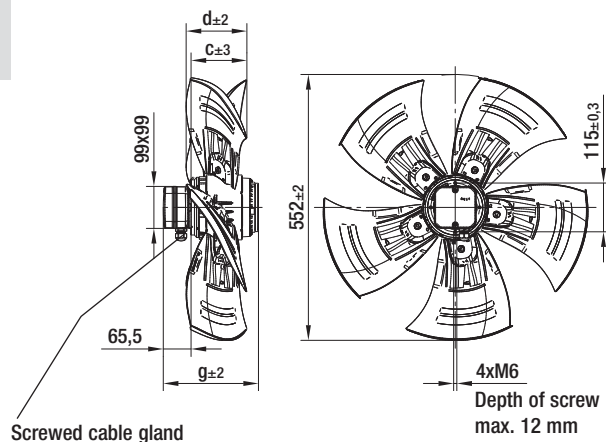
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
ⓑ 1	1065	0.51	2.20	68
ⓑ 2	1040	0.54	2.33	67
ⓑ 3	1010	0.57	2.48	69

AC axial fans - HyBlade®

Ø 560, drawings for direction of air flow "V"



Without attachments



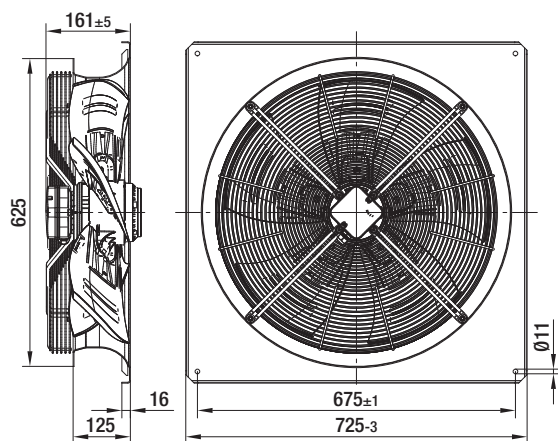
← "V"

Type	Mass [kg]	c	d	g
A4D 560-A001 -03	12.3	102.0	95.0	209.5
A4D 560-AR03 -03	13.8	102.0	95.0	224.5
A6D 560-AK01 -03	10.3	114.0	115.0	189.5
A6E 560-AL01 -01	10.3	102.0	95.0	189.5
A6E 560-AN01 -01	12.3	114.0	115.0	209.5

Internal diameter of the wall ring at least 559 mm



With full square nozzle

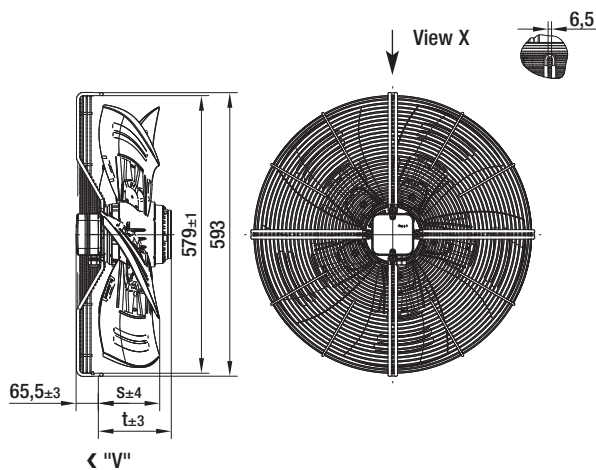


← "V"

Type	Mass [kg]
W4D 560-G001 -03	24.1
W4D 560-GR03 -03	25.6
W6D 560-GK01 -03	22.1
W6E 560-GL01 -01	22.1
W6E 560-GN01 -01	24.1



With guard grille for full nozzle



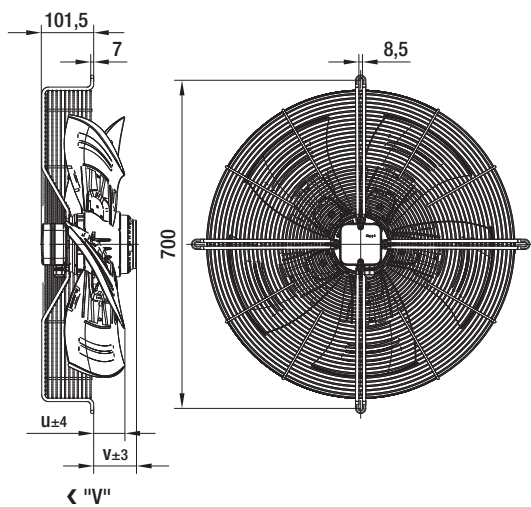
← "V"

Type	Mass [kg]	s	t
S4D 560-C001 -03	15.1	123.0	165.0
S4D 560-CR03 -03	16.6	123.0	180.0
S6D 560-CK01 -03	13.1	135.0	145.0
S6E 560-CL01 -01	13.1	123.0	145.0
S6E 560-CN01 -01	15.1	135.0	165.0

Internal diameter of the wall ring at least 559 mm



With guard grille for short nozzle



Type	Mass [kg]	u	v
S4D 560-A001 -03	16.5	66.0	108.0
S4D 560-AR03 -03	18.0	66.0	123.0
S6D 560-AK01 -03	14.5	78.0	88.0
S6E 560-AL01 -01	14.5	66.0	88.0
S6E 560-AN01 -01	16.5	78.0	108.0

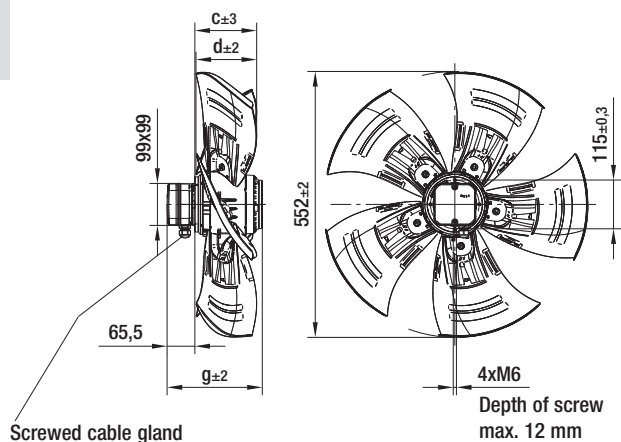
Internal diameter of the wall ring at least 559 mm

AC axial fans - HyBlade®

Ø 560, drawings for direction of air flow "A"



Without attachments



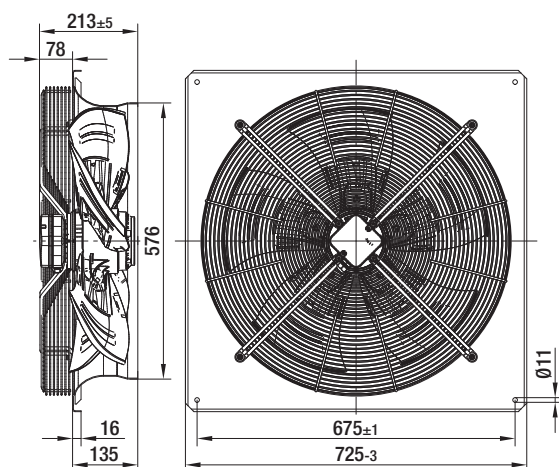
"A" >

Type	Mass [kg]	c	d	g
A4D 560-A001 -04	12.3	127.0	95.0	209.5
A4D 560-AR03 -04	13.8	127.0	95.0	224.5
A6D 560-AK01 -04	10.3	136.0	115.0	189.5
A6E 560-AL01 -02	10.3	127.0	95.0	189.5
A6E 560-AN01 -02	12.3	136.0	115.0	209.5

Internal diameter of the wall ring at least 559 mm



With full square nozzle

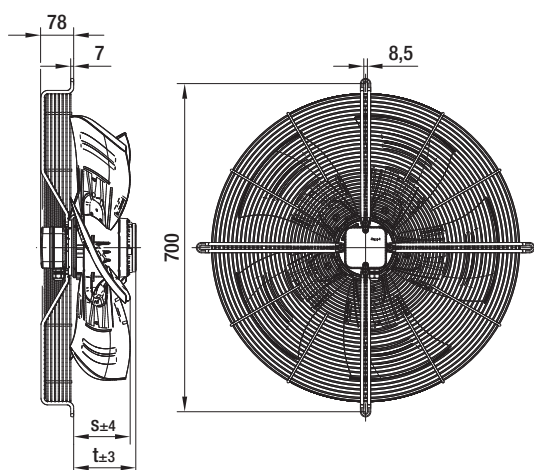


"A" >

Type	Mass [kg]
W4D 560-DO01 -04	25.2
W4D 560-DR03 -04	26.7
W6D 560-DK01 -04	23.2
W6E 560-DL01 -02	23.2
W6E 560-DN01 -02	25.2



With guard grille for full nozzle



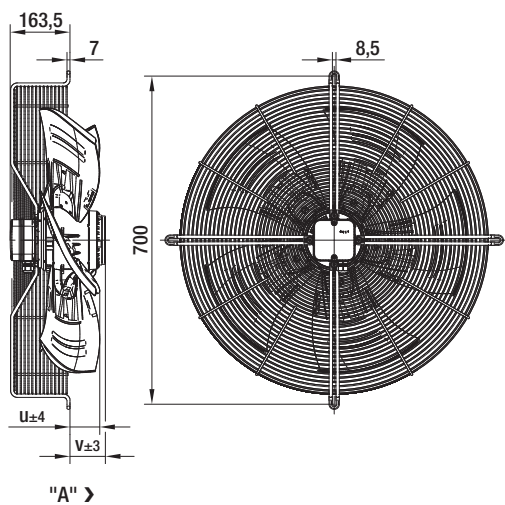
"A" >

Type	Mass [kg]	s	t
S4D 560-B001 -04	16.2	114.0	131.5
S4D 560-BR03 -04	17.7	114.0	146.5
S6D 560-BK01 -04	14.2	124.0	111.5
S6E 560-BL01 -02	14.2	114.0	111.5
S6E 560-BN01 -02	16.2	124.0	131.5

Internal diameter of the wall ring at least 559 mm



With guard grille for short nozzle



Type	Mass [kg]	u	v
S4D 560-A001 -04	17.4	29.0	46.0
S4D 560-AR03 -04	18.9	29.0	61.0
S6D 560-AK01 -04	15.4	38.0	26.0
S6E 560-AL01 -02	15.4	29.0	26.0
S6E 560-AN01 -02	17.4	38.0	46.0

Internal diameter of the wall ring at least 559 mm

AC axial fans - HyBlade®

Ø 630

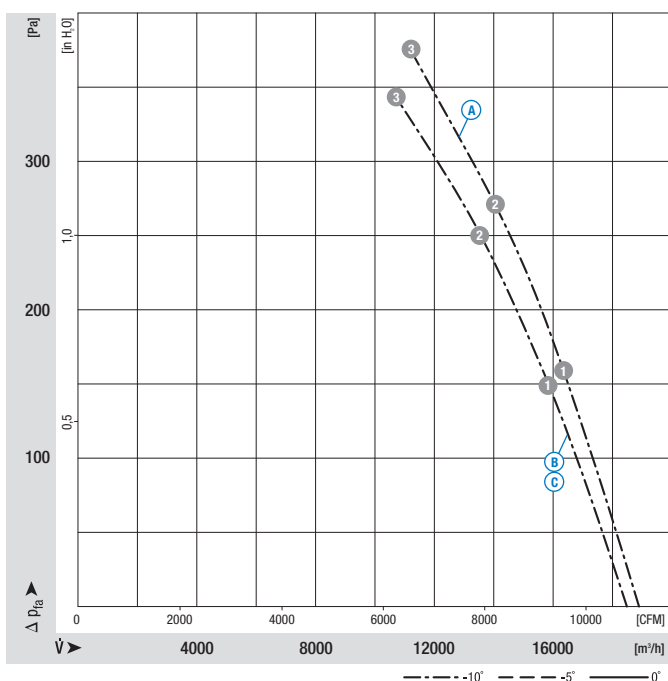


- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" clockwise, direction of air flow "A" counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*4D 630	M4D 138-LA	-10°	Ⓐ	3~ 480 Y	60	1650	2.91	4.91	—	350	-40 to +60	F1b)/F2b)
			Ⓑ	3~ 400 Y	60	1585	2.67	4.92	—	325	-40 to +60	
			Ⓒ	3~ 230 Δ	60	1585	2.67	8.52	—	325	-40 to +60	
*4D 630	M4D 138-NA	-5°	Ⓓ	3~ 480 Y	60	1610	3.30	5.48	—	250	-40 to +60	F1b)/F2b)
			Ⓔ	3~ 400 Y	60	1520	2.96	5.49	—	225	-40 to +60	
			Ⓕ	3~ 230 Δ	60	1520	2.96	9.50	—	225	-40 to +60	

subject to alterations (1) Nominal data in operating point ③ with maximum load

Curves

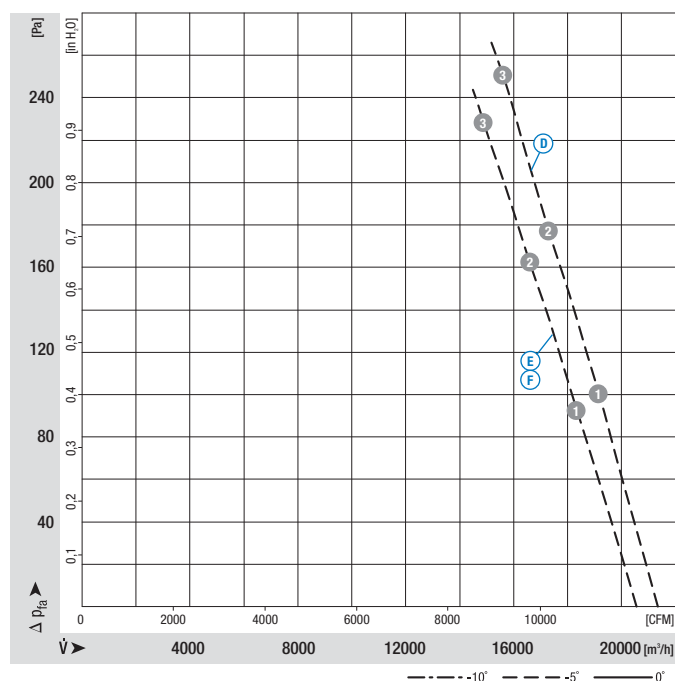


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓐ ①	1695	2.32	4.27	81
Ⓐ ②	1680	2.66	4.64	84
Ⓐ ③	1650	2.91	4.91	88
Ⓑ ①	1640	2.16	4.10	80
Ⓑ ②	1610	2.44	4.56	82
Ⓑ ③	1585	2.67	4.92	87
Ⓒ ①	1640	2.16	7.10	80
Ⓒ ②	1610	2.44	7.90	82
Ⓒ ③	1585	2.67	8.52	87

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	"V"/"A"		"V"/"A"		"V"		"V"		"A"		"A"	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A4D 630-AF03 -03 A4D 630-AF03 -04	W4D 630-GF03 -03 W4D 630-DF03 -04	S4D 630-CF03 -03 —	S4D 630-AF03 -03 —	— S4D 630-BF03 -04	— —						
"V" "A"	A4D 630-AB03 -03 A4D 630-AB03 -04	W4D 630-GB03 -03 W4D 630-DB03 -04	S4D 630-CB03 -03 —	S4D 630-AB03 -03 —	— S4D 630-BB03 -04	— —						

Curves



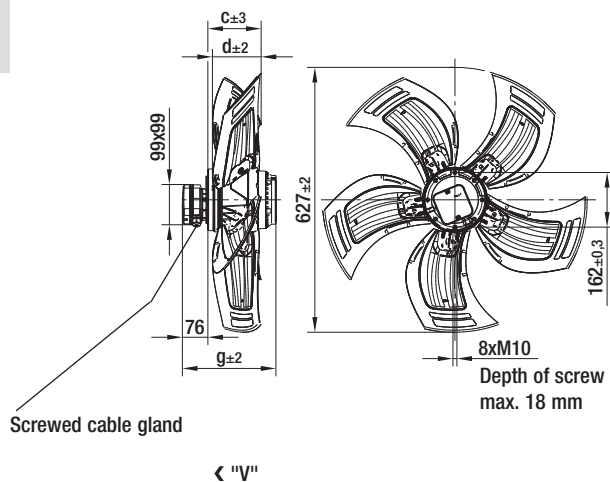
	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
D 1	1645	2.86	4.89	81
D 2	1630	3.08	5.15	80
D 3	1610	3.30	5.48	82
E 1	1575	2.61	4.89	79
E 2	1550	2.79	5.17	79
E 3	1520	2.96	5.49	80
F 1	1575	2.61	8.50	79
F 2	1550	2.79	8.99	79
F 3	1520	2.96	9.50	80

AC axial fans - HyBlade®

Ø 630, drawings for direction of air flow "V"



Without attachments

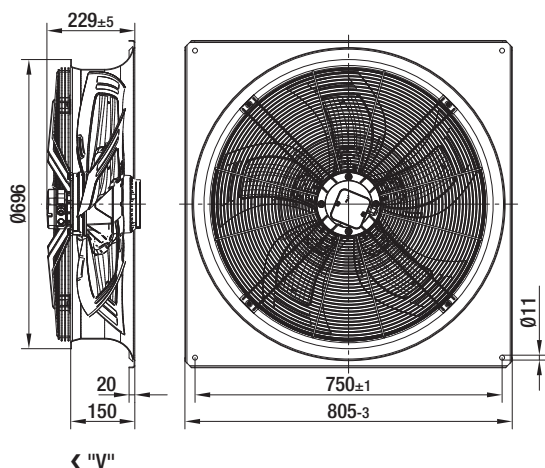


Type	Mass [kg]	c	d	g
A4D 630-AF03 -03	22.3	144.0	116.0	277.0
A4D 630-AB03 -03	25.3	150.0	131.0	297.0

Internal diameter of the wall ring at least 634 mm



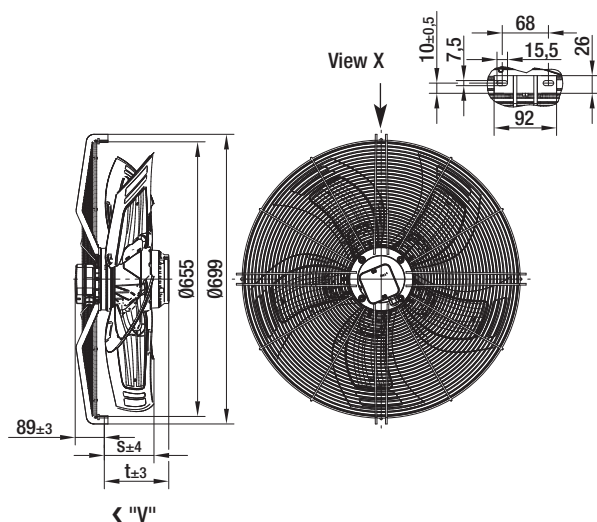
With full square nozzle



Type	Mass [kg]
W4D 630-GF03 -03	38.2
W4D 630-GB03 -03	41.2



With guard grille for full nozzle

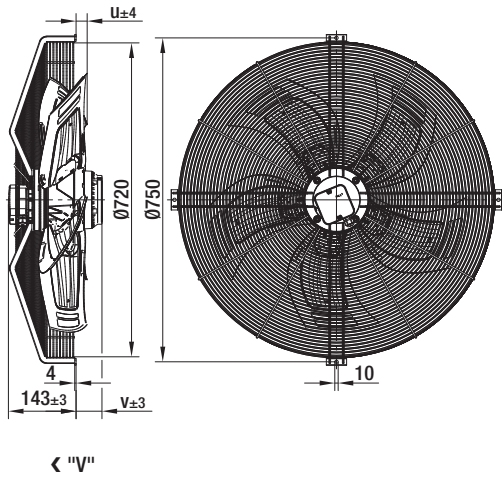


Type	Mass [kg]	s	t
S4D 630-CF03 -03	27.6	131.0	188.0
S4D 630-CB03 -03	30.6	137.0	207.5

Internal diameter of the wall ring at least 634 mm



With guard grille for short nozzle



Type	Mass [kg]	u	v
S4D 630-AF03 -03	28.5	78.0	134.0
S4D 630-AB03 -03	31.5	83.0	154.0

Internal diameter of the wall ring at least 634 mm

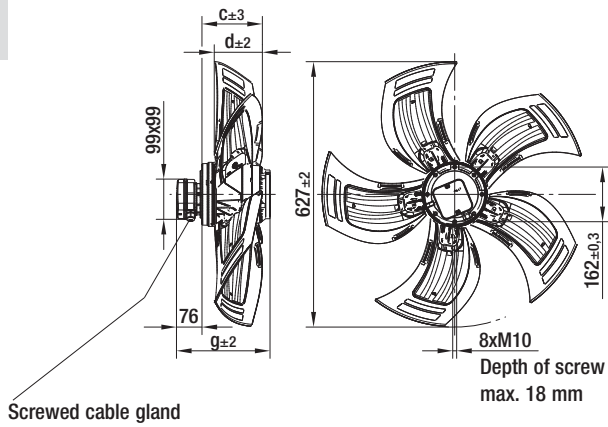
AC axial fans - HyBlade®

Ø 630, drawings for direction of air flow "A"



Without attachments

Type	Mass [kg]	c	d	g
A4D 630-AF03 -04	22.3	162.0	116.0	277.0
A4D 630-AB03 -04	25.3	173.0	131.0	297.0



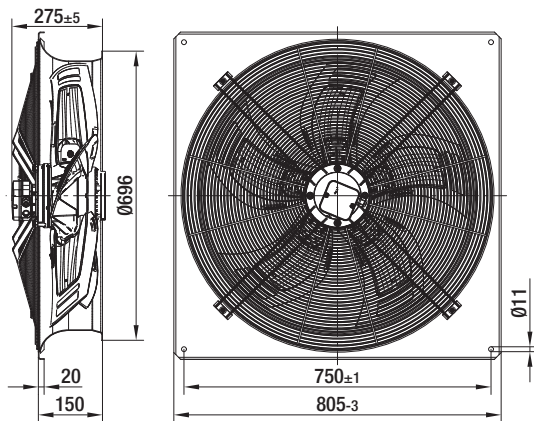
"A" >

Internal diameter of the wall ring at least 634 mm



With full square nozzle

Type	Mass [kg]
W4D 630-DF03 -04	39.3
W4D 630-DB03 -04	42.3

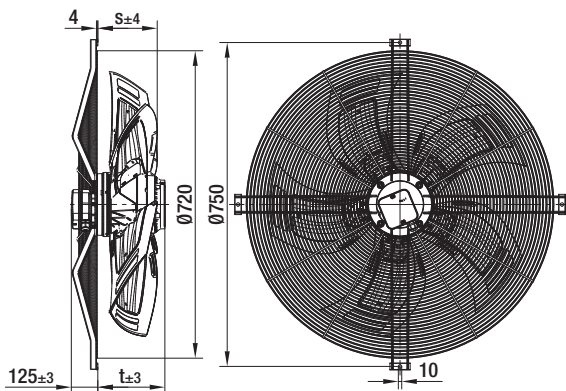


"A" >



With guard grille for full nozzle

Type	Mass [kg]	s	t
S4D 630-BF03 -04	28.2	114.0	152.0
S4D 630-BB03 -04	31.2	124.0	172.0



"A" >

Internal diameter of the wall ring at least 634 mm

AC axial fans - HyBlade®

Ø 630

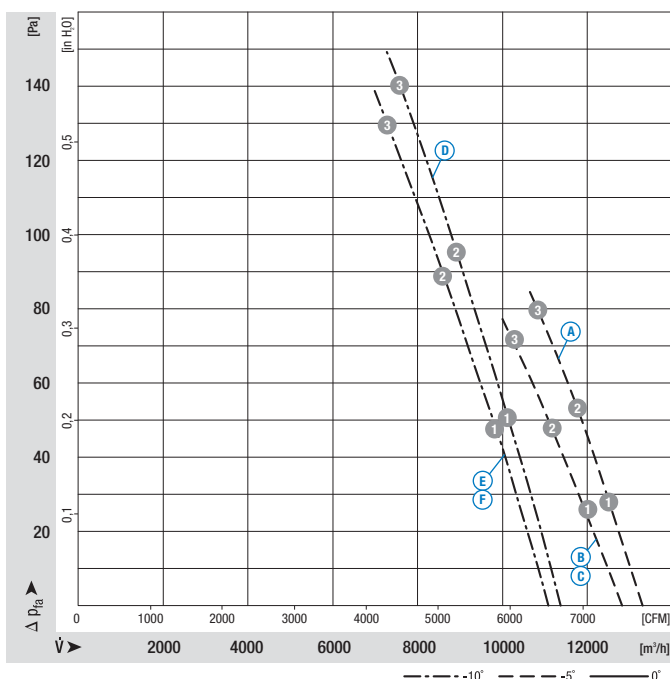


- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" counter-clockwise, direction of air flow "A" clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*6D 630	M6D 110-GF	-5°	A	3~480 Y	60	1065	0.89	1.60	—	80	-40 to +55	F1b)/F2b)
			B	3~400 Y	60	1005	0.79	1.53	—	70	-40 to +55	
			C	3~230 Δ	60	1005	0.79	2.65	—	70	-40 to +55	
*6D 630	M6D 110-GF	-10°	D	3~480 Y	60	1090	0.80	1.42	—	140	-40 to +55	F1b)/F2b)
			E	3~400 Y	60	1040	0.73	1.38	—	128	-40 to +55	
			F	3~230 Δ	60	1040	0.73	2.39	—	128	-40 to +55	
*6D 630	M6D 110-IA	-5°	G	3~480 Y	60	1040	0.98	1.61	—	150	-40 to +55	F1b)/F2b)
			H	3~400 Y	60	975	0.87	1.62	—	130	-40 to +55	
			I	3~230 Δ	60	975	0.87	2.80	—	130	-40 to +55	
*8D 630	M8D 110-GF	-5°	J	3~480 Y	60	770	0.50	0.94	—	80	-40 to +55	F1b)/F2b)
			K	3~400 Y	60	710	0.43	0.89	—	70	-40 to +55	
			L	3~230 Δ	60	710	0.43	1.54	—	70	-40 to +55	

subject to alterations (1) Nominal data in operating point 3 with maximum load

Curves

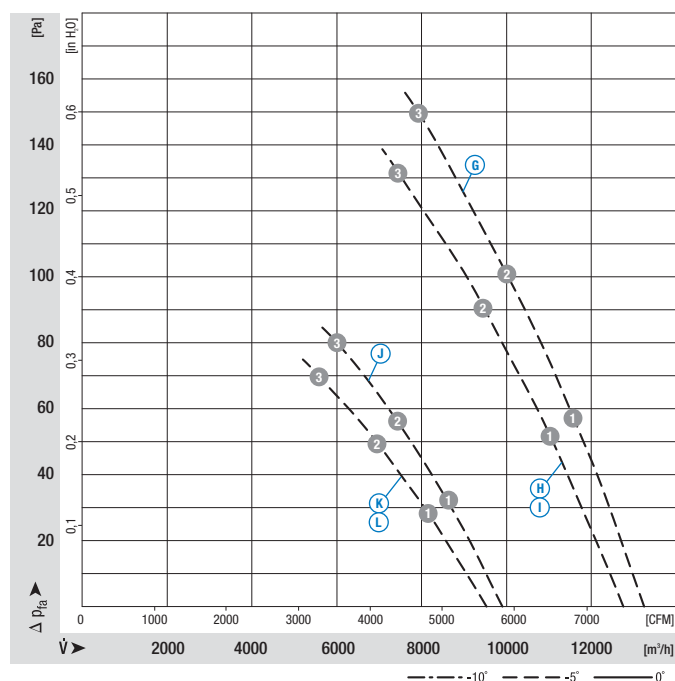


	n [rpm]	P1 [kW]	I [A]	Lwa [dB(A)]
A 1	1090	0.77	1.41	71
A 2	1080	0.82	1.46	69
A 3	1065	0.89	1.60	69
B 1	1045	0.69	1.32	70
B 2	1025	0.75	1.38	68
B 3	1005	0.79	1.53	68
C 1	1045	0.69	2.30	70
C 2	1025	0.75	2.40	68
C 3	1005	0.79	2.65	68
D 1	1120	0.63	1.29	71
D 2	1105	0.72	1.36	70
D 3	1090	0.80	1.42	72
E 1	1085	0.58	1.16	71
E 2	1065	0.65	1.27	69
E 3	1040	0.73	1.38	71
F 1	1085	0.58	2.02	71
F 2	1065	0.65	2.21	69
F 3	1040	0.73	2.39	71

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	"V"/"A"		"V"/"A"		"V"	"V"	"A"	"A"
	Without attachments	With full square nozzle	With guard grille for full nozzle	With guard grille for short nozzle	With guard grille for full nozzle	With guard grille for short nozzle	With guard grille for full nozzle	With guard grille for short nozzle
"V" "A"	A6D 630-AN05 -03 A6D 630-AN05 -04	W6D 630-GN05 -03 W6D 630-DN05 -04	S6D 630-CN05 -03 —	S6D 630-AN05 -03 —	— S6D 630-BN05 -04	— S6D 630-AN05 -04	— S6D 630-BN05 -04	— S6D 630-AN05 -04
"V" "A"	A6D 630-A005 -03 A6D 630-A005 -04	W6D 630-G005 -03 W6D 630-D005 -04	S6D 630-C005 -03 —	S6D 630-A005 -03 —	— S6D 630-B005 -04	— S6D 630-A005 -04	— S6D 630-B005 -04	— S6D 630-A005 -04
"V" "A"	A6D 630-AQ07 -03 A6D 630-AQ07 -04	W6D 630-GQ07 -03 W6D 630-DQ07 -04	S6D 630-CQ07 -03 —	S6D 630-AQ07 -03 —	— S6D 630-BQ07 -04	— S6D 630-AQ07 -04	— S6D 630-BQ07 -04	— S6D 630-AQ07 -04
"V" "A"	A8D 630-AN05 -03 A8D 630-AN05 -04	W8D 630-GN05 -03 W8D 630-DN05 -04	S8D 630-CN05 -03 —	S8D 630-AN05 -03 —	— S8D 630-BN05 -04	— S8D 630-AN05 -04	— S8D 630-BN05 -04	— S8D 630-AN05 -04

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
G 1	1080	0.80	1.33	69
G 2	1065	0.88	1.43	69
G 3	1040	0.98	1.61	71
H 1	1025	0.73	1.31	68
H 2	1000	0.80	1.43	68
H 3	975	0.87	1.62	70
I 1	1025	0.73	2.28	68
I 2	1000	0.80	2.49	68
I 3	975	0.87	2.80	70
J 1	800	0.42	0.87	64
J 2	785	0.46	0.89	63
J 3	770	0.50	0.94	64
K 1	755	0.36	0.78	62
K 2	735	0.39	0.83	61
K 3	710	0.43	0.89	63
L 1	755	0.36	1.36	62
L 2	735	0.39	1.44	61
L 3	710	0.43	1.54	63

AC axial fans - HyBlade®

Ø 630



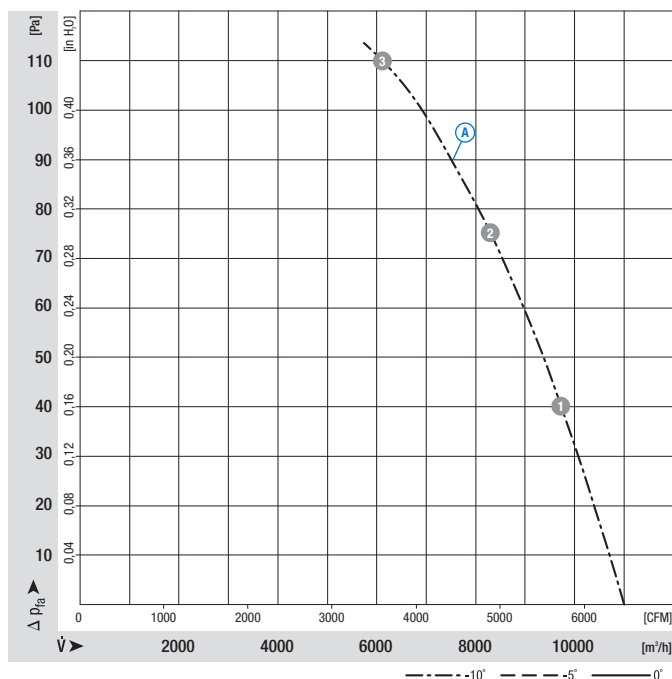
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" counter-clockwise, direction of air flow "A" clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*6E 630	M6E 110-GF	-10°	Ⓐ	1~ 230	60	920	0.69	3.02	12.0/450	110	-40 to +40	A2b)
*8E 630	M8E 110-GF	-5°	Ⓑ	1~ 230	60	710	0.46	2.12	7.0/450	75	-40 to +55	A2b)

subject to alterations

(1) Nominal data in operating point ⓐ with maximum load

Curves

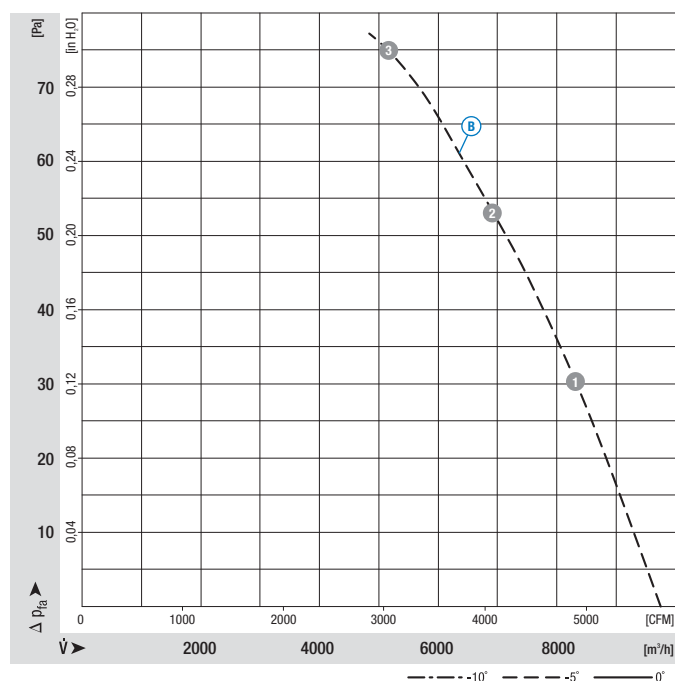


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓐ ①	1060	0.59	2.59	72
Ⓐ ②	1015	0.64	2.79	68
Ⓐ ③	920	0.69	3.02	69

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	◀ "V"/ "A" ▶		◀ "V"/ "A" ▶		◀ "V" ▶		◀ "V" ▶		▶ "A" ▶		▶ "A" ▶	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A6E 630-A001 -01 A6E 630-A001 -02	W6E 630-G001 -01 W6E 630-D001 -02	S6E 630-C001 -01 —	S6E 630-A001 -01 —	— S6E 630-B001 -02	— S6E 630-A001 -02						
"V" "A"	A8E 630-AN01 -01 A8E 630-AN01 -02	W8E 630-GN01 -01 W8E 630-DN01 -02	S8E 630-CN01 -01 —	S8E 630-AN01 -01 —	— S8E 630-BN01 -02	— S8E 630-AN01 -02						

Curves



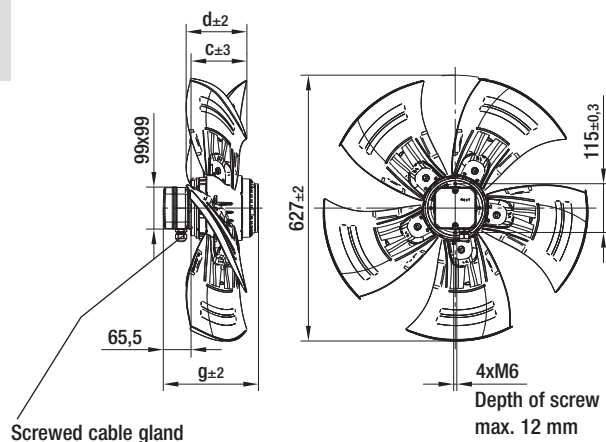
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
ⓑ 1	780	0.42	1.88	63
ⓑ 2	750	0.44	2.01	62
ⓑ 3	710	0.46	2.12	64

AC axial fans - HyBlade®

Ø 630, drawings for direction of air flow "V"



Without attachments



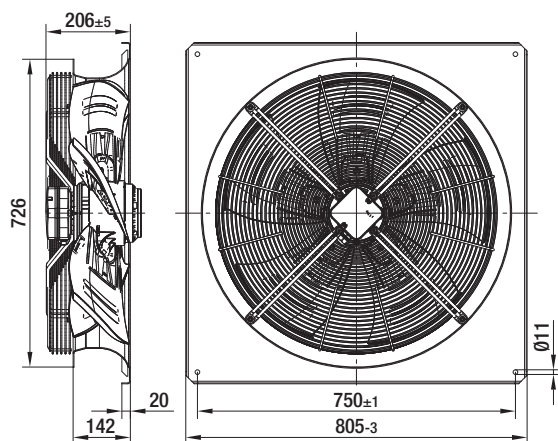
◀ "V"

Type	Mass [kg]	c	d	g
A6D 630-AN05 -03	12.5	119.0	121.0	209.5
A6D 630-A005 -03	12.5	105.0	98.0	209.5
A6D 630-AQ07 -03	14.0	119.0	121.0	224.5
A8D 630-AN05 -03	12.5	119.0	121.0	209.5
A6E 630-A001 -01	12.5	105.0	98.0	209.5
A8E 630-AN01 -01	12.5	119.0	121.0	209.5

Internal diameter of the wall ring at least 634 mm



With full square nozzle

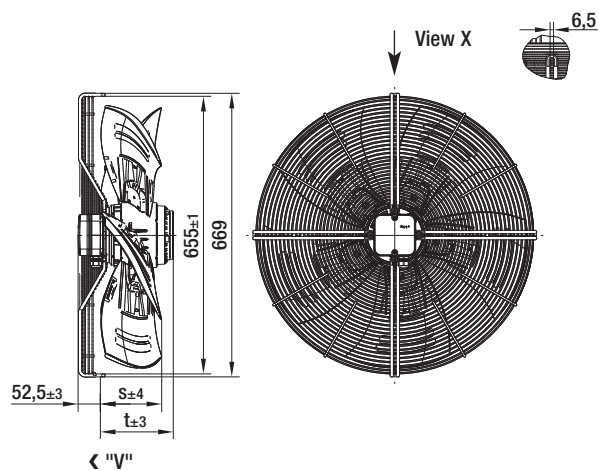


◀ "V"

Type	Mass [kg]
W6D 630-GN05 -03	27.4
W6D 630-GQ05 -03	27.4
W6D 630-GQ07 -03	28.9
W8D 630-GN05 -03	27.4
W6E 630-GQ01 -01	27.4
W8E 630-GN01 -01	27.4



With guard grille for full nozzle



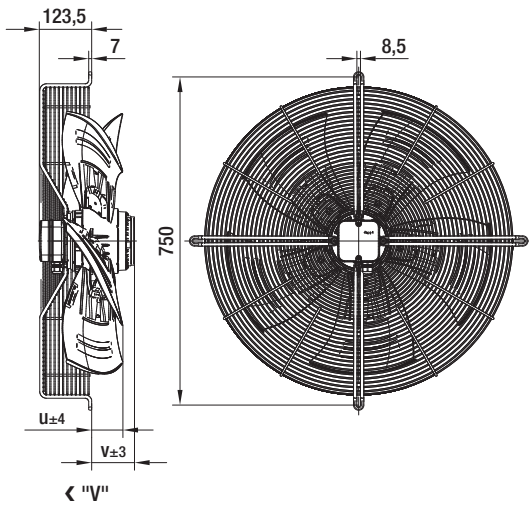
◀ "V"

Type	Mass [kg]	s	t
S6D 630-CN05 -03	16.0	132.0	157.0
S6D 630-CO05 -03	16.0	118.0	157.0
S6D 630-CQ07 -03	17.5	132.0	172.0
S8D 630-CN05 -03	16.0	132.0	157.0
S6E 630-CO01 -01	16.0	118.0	157.0
S8E 630-CN01 -01	16.0	132.0	157.0

Internal diameter of the wall ring at least 634 mm



With guard grille for short nozzle



Type	Mass [kg]	u		v	
		u	v	u	v
S6D 630-AN05 -03	17.7	61.0	86.0		
S6D 630-A005 -03	17.7	47.0	86.0		
S6D 630-AQ07 -03	19.2	61.0	101.0		
S8D 630-AN05 -03	17.7	61.0	86.0		
S6E 630-A001 -01	17.7	47.0	86.0		
S8E 630-AN01 -01	17.7	61.0	86.0		

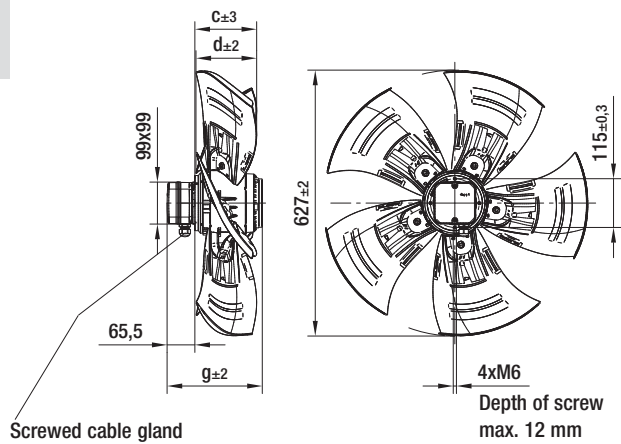
Internal diameter of the wall ring at least 634 mm

AC axial fans - HyBlade®

Ø 630, drawings for direction of air flow "A"



Without attachments



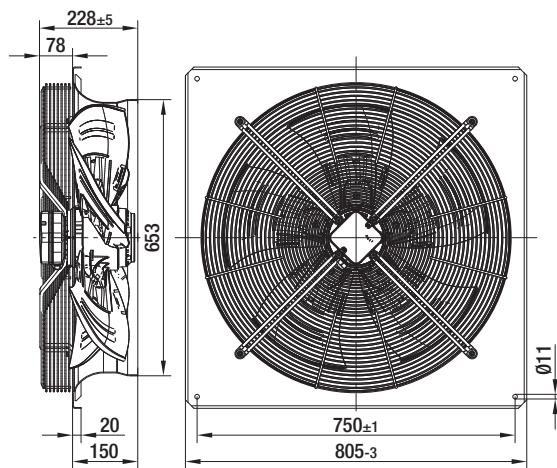
"A" >

Type	Mass [kg]	c	d	g
A6D 630-AN05 -04	12.5	136.0	121.0	209.5
A6D 630-AO05 -04	12.5	127.0	98.0	209.5
A6D 630-AQ07 -04	14.0	136.0	121.0	224.5
A8D 630-AN05 -04	12.5	136.0	121.0	209.5
A6E 630-AO01 -02	12.5	127.0	98.0	209.5
A8E 630-AN01 -02	12.5	136.0	121.0	209.5

Internal diameter of the wall ring at least 634 mm



With full square nozzle

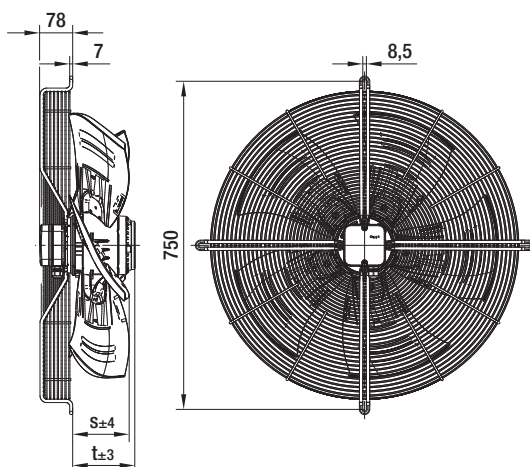


"A" >

Type	Mass [kg]
W6D 630-DN05 -04	28.2
W6D 630-DO05 -04	28.2
W6D 630-DQ07 -04	29.7
W8D 630-DN05 -04	28.2
W6E 630-DO01 -02	28.2
W8E 630-DN01 -02	28.2



With guard grille for full nozzle



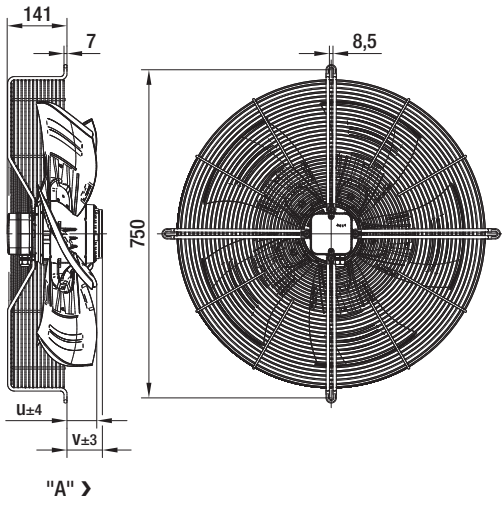
"A" >

Type	Mass [kg]	s	t
S6D 630-BN05 -04	17.1	123.0	131.5
S6D 630-BO05 -04	17.1	114.0	131.5
S6D 630-BQ07 -04	18.6	123.0	146.5
S8D 630-BN05 -04	17.1	123.0	131.5
S6E 630-BO01 -02	17.1	114.0	131.5
S8E 630-BN01 -02	17.1	123.0	131.5

Internal diameter of the wall ring at least 634 mm



With guard grille for short nozzle



Type	Mass [kg]	u	v
S6D 630-AN05 -04	18.1	61.0	68.5
S6D 630-AO05 -04	18.1	42.0	68.5
S6D 630-AQ07 -04	19.6	61.0	83.5
S8D 630-AN05 -04	18.1	61.0	68.5
S6E 630-AO01 -02	16.1	42.0	68.5
S8E 630-AN01 -02	18.1	61.0	68.5

Internal diameter of the wall ring at least 634 mm

AC axial fans - HyBlade®

Ø 710



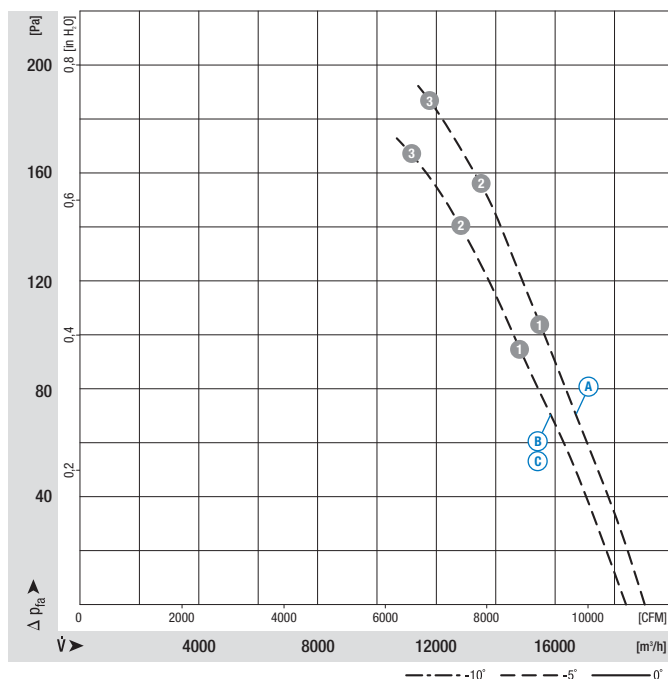
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" clockwise, direction of air flow "A" counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*6D 710	M6D 138-HF	-5°	A	3~ 480 Y	60	1070	1.64	2.88	—	175	-40 to +60	F1b)/F2b)
			B	3~ 400 Y	60	1015	1.48	2.90	—	160	-40 to +60	
			C	3~ 230 Δ	60	1015	1.48	5.00	—	160	-40 to +60	

subject to alterations







(1) Nominal data in operating point 3 with maximum load

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1090	1.45	2.69	76
A 2	1080	1.55	2.80	80
A 3	1070	1.64	2.88	82
B 1	1050	1.31	2.62	75
B 2	1030	1.41	2.79	79
B 3	1015	1.48	2.90	81
C 1	1050	1.31	4.54	75
C 2	1030	1.41	4.83	79
C 3	1015	1.48	5.00	81

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow						
	< "V"/ "A" >	< "V"/ "A" >	< "V" >	< "V" >	"A" >	"A" >
	Without attach- ments	With full square nozzle	With guard grille for full nozzle	With guard grille for short nozzle	With guard grille for full nozzle	With guard grille for short nozzle
"V"	A6D 710-AH03 -03	W6D 710-GH03 -03	S6D 710-CH03 -03	S6D 710-AH03 -03	—	—
"A"	A6D 710-AH03 -04	W6D 710-DH03 -04	—	—	S6D 710-BH03 -04	—

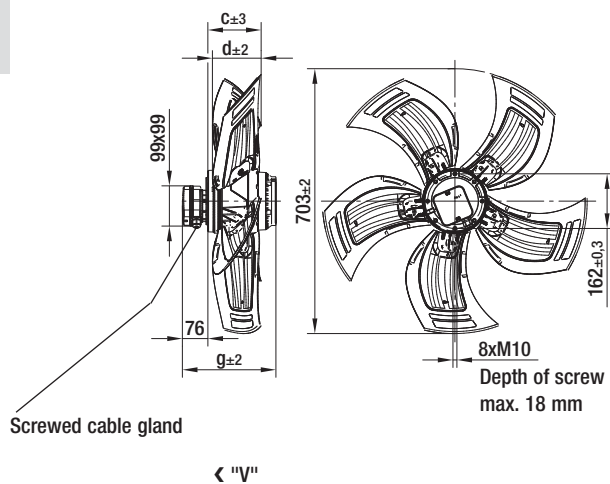
AC axial fans - HyBlade®

Ø 710, drawings for direction of air flow "V"



Without attachments

Type	Mass [kg]	c	d	g
A6D 710-AH03 -03	18.8	148.0	126.0	252.0

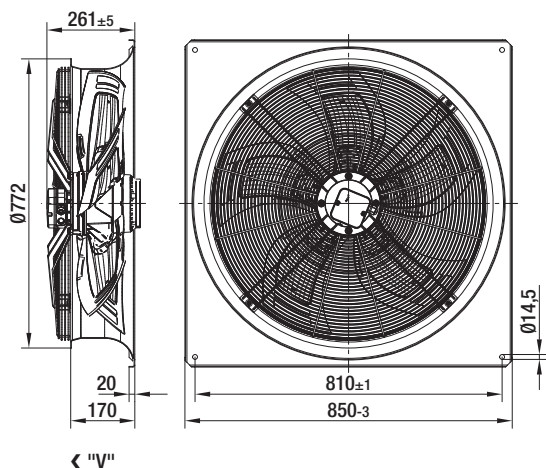


Internal diameter of the wall ring at least 710 mm



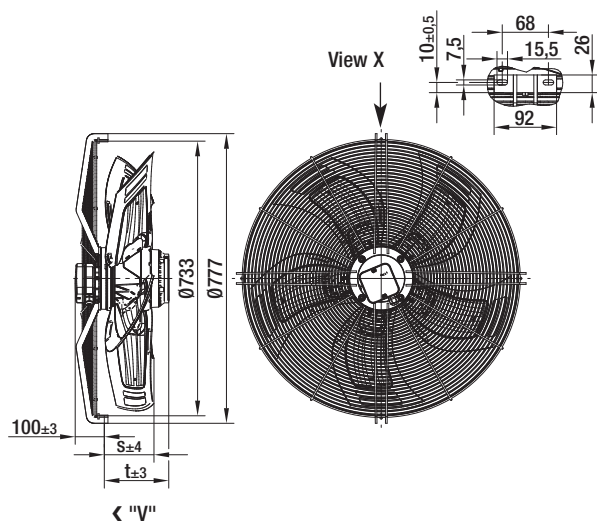
With full square nozzle

Type	Mass [kg]
W6D 710-GH03 -03	36.7



With guard grille for full nozzle

Type	Mass [kg]	s	t
S6D 710-CH03 -03	25.0	124.0	152.0



Internal diameter of the wall ring at least 710 mm



With guard grille for short nozzle

Type

Mass
[kg]

u

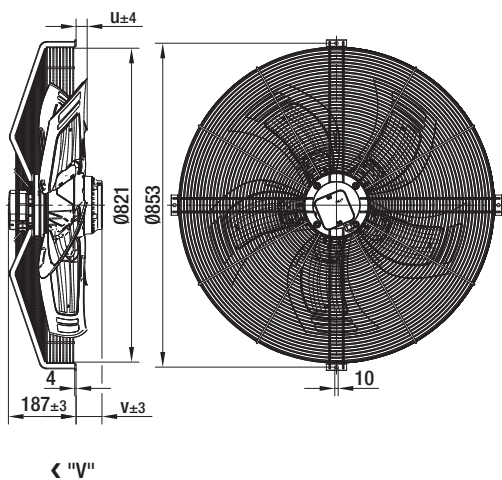
v

S6D 710-AH03 -03

26.6

37.0

66.0



Internal diameter of the
wall ring at least 710 mm

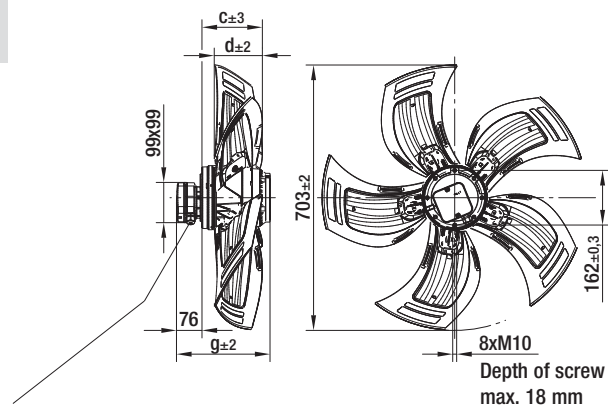
AC axial fans - HyBlade®

Ø 710, drawings for direction of air flow "A"



Without attachments

Type	Mass [kg]	c	d	g
A6D 710-AH03 -04	18.8	169.0	126.0	252.0



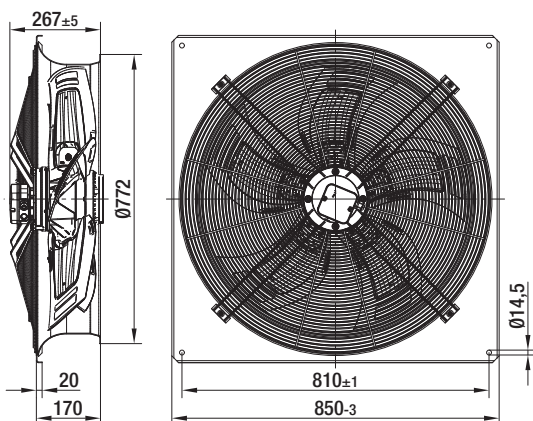
Internal diameter of the wall ring at least 710 mm

"A" >



With full square nozzle

Type	Mass [kg]
W6D 710-DH03 -04	37.3

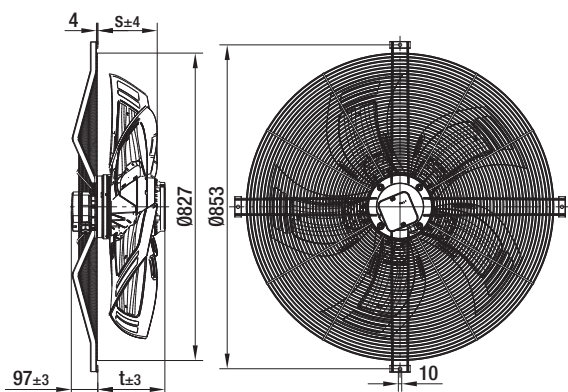


"A" >



With guard grille for full nozzle

Type	Mass [kg]	s	t
S6D 710-BH03 -04	25.1	148.0	156.0



Internal diameter of the wall ring at least 710 mm

"A" >

AC axial fans - HyBlade®

Ø 710



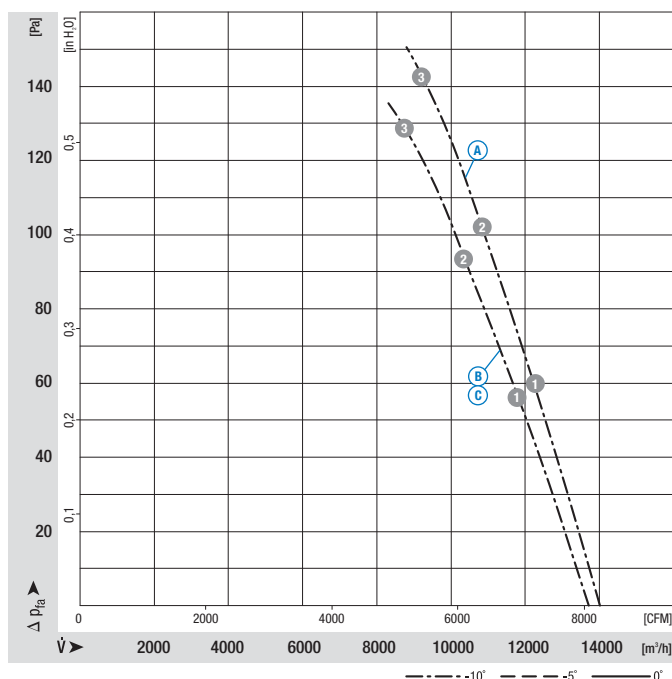
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" counter-clockwise, direction of air flow "A" clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*6D 710	M6D 110-IA	-10°	A	3~ 480 Y	60	1080	0.98	1.75	—	140	-40 to +60	F1b)/F2b)
			B	3~ 400 Y	60	1030	0.89	1.71	—	125	-40 to +60	
			C	3~ 230 Δ	60	1030	0.89	2.96	—	125	-40 to +60	
*8D 710	M8D 110-IA	-5°	D	3~ 480 Y	60	790	0.60	1.16	—	60	-40 to +60	F1b)/F2b)
			E	3~ 400 Y	60	740	0.52	1.09	—	55	-40 to +60	
			F	3~ 230 Δ	60	740	0.52	1.89	—	55	-40 to +60	
*8D 710	M8D 110-IA	-10°	G	3~ 480 Y	60	820	0.50	1.08	—	80	-40 to +65	F1b)/F2b)
			H	3~ 400 Y	60	780	0.44	0.98	—	73	-40 to +65	
			I	3~ 230 Δ	60	780	0.44	1.70	—	73	-40 to +65	

subject to alterations

(1) Nominal data in operating point 3 with maximum load

Curves

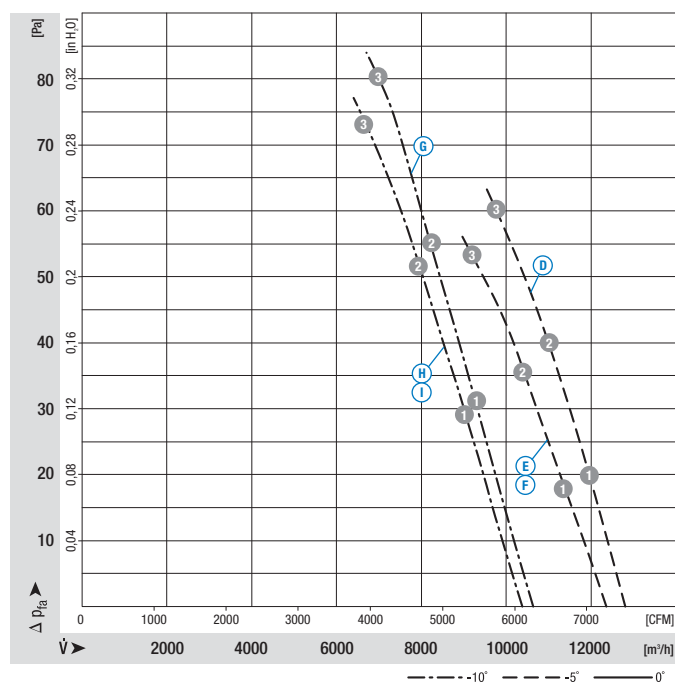


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1115	0.76	1.46	77
A 2	1100	0.87	1.56	77
A 3	1080	0.98	1.75	80
B 1	1080	0.70	1.37	76
B 2	1055	0.80	1.51	76
B 3	1030	0.89	1.71	79
C 1	1080	0.70	2.38	76
C 2	1055	0.80	2.63	76
C 3	1030	0.89	2.96	79

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	← "V"/"A" →		← "V"/"A" →		← "V" →		← "V" →		"A" →		"A" →	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V"	A6D 710-AR05 -03		W6D 710-GR05 -03		S6D 710-CR05 -03		S6D 710-AR05 -03					
"V" "A"	A8D 710-AQ01 -03 A8D 710-AQ01 -04		W8D 710-GQ01 -03 W8D 710-DQ01 -04		S8D 710-CQ01 -03 —		S8D 710-AQ01 -03 —		S8D 710-BQ01 -04		S8D 710-AQ01 -04	
"V" "A"	A8D 710-AR01 -03 A8D 710-AR01 -04		W8D 710-GR01 -03 W8D 710-DR01 -04		S8D 710-CR01 -03 —		S8D 710-AR01 -03 —		S8D 710-BR01 -04		S8D 710-AR01 -04	

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
D 1	825	0.48	1.08	68
D 2	810	0.53	1.12	66
D 3	790	0.60	1.16	65
E 1	785	0.42	0.96	67
E 2	765	0.47	1.01	65
E 3	740	0.52	1.09	64
F 1	785	0.42	1.67	67
F 2	765	0.47	1.76	65
F 3	740	0.52	1.89	64
G 1	840	0.40	1.01	70
G 2	830	0.46	1.05	70
G 3	820	0.50	1.08	72
H 1	815	0.35	0.87	69
H 2	800	0.39	0.93	69
H 3	780	0.44	0.98	71
I 1	815	0.35	1.51	69
I 2	800	0.39	1.62	69
I 3	780	0.44	1.70	71

AC 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: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" counter-clockwise, direction of air flow "A" clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

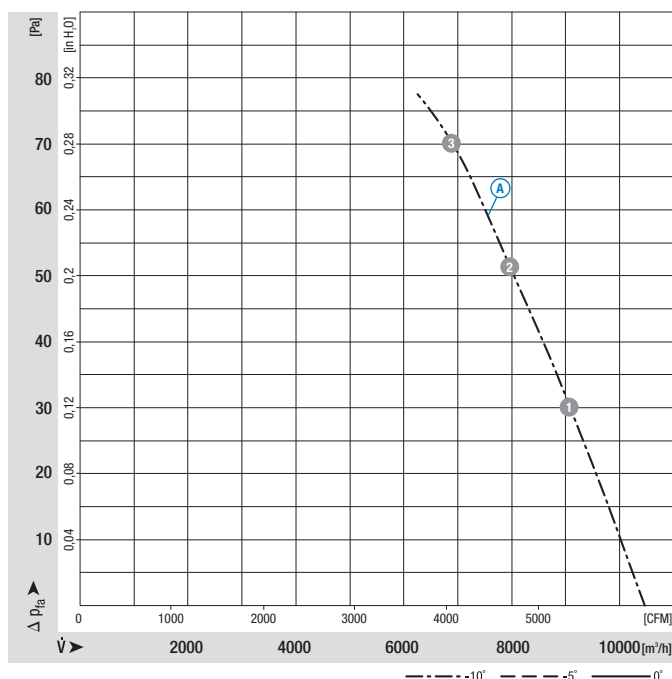
Nominal data

Type	Motor	Blade angle	Curve	Nominal voltage VAC	Frequency Hz	Speed (1) rpm	Max. power input (1) kW	Max. current draw (1) A	Capacitor µF/VDB	Max. operative range Pa	Perm. amp. temp. °C	Electr. connection p. 126
*8E 710	M8E 110-IA	-10°	A	1~ 230	60	775	0.46	2.14	8.0/450	70	-40 to +65	A2b)

subject to alterations







(1) Nominal data in operating point 3 with maximum load

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	820	0.39	1.80	69
A 2	800	0.43	1.98	68
A 3	775	0.46	2.14	70

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

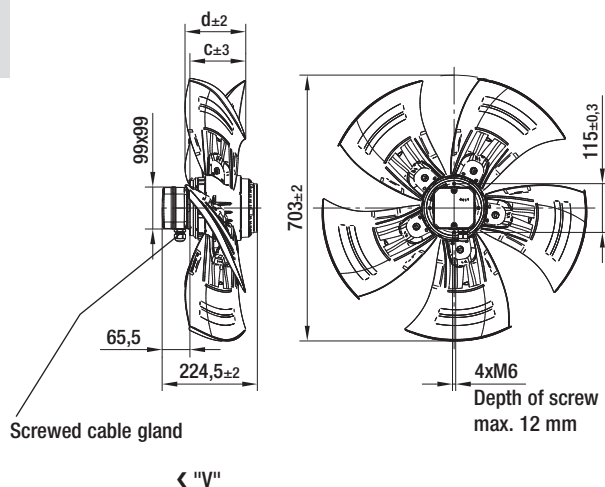
Direction of air flow						
	< "V"/ "A" >	< "V"/ "A" >	< "V" >	< "V" >	"A" >	"A" >
	Without attach-ments	With full square nozzle	With guard grille for full nozzle	With guard grille for short nozzle	With guard grille for full nozzle	With guard grille for short nozzle
"V"	A8E 710-AR01 -03	W8E 710-GR01 -03	S8E 710-CR01 -03	S8E 710-AR01 -03	—	—
"A"	A8E 710-AR01 -04	W8E 710-DR01 -04	—	—	S8E 710-BR01 -04	S8E 710-AR01 -04

AC axial fans - HyBlade®

Ø 710, drawings for direction of air flow "V"



Without attachments

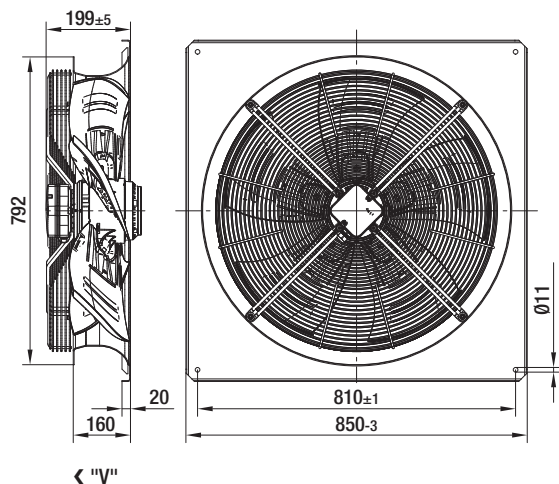


Type	Mass [kg]	c	d
A6D 710-AR05 -03	14.0	111.0	96.0
A8D 710-AQ01 -03	14.0	118.0	113.0
A8D 710-AR01 -03	14.0	111.0	96.0
A8E 710-AR01 -03	14.0	111.0	96.0

Internal diameter of the wall ring at least 710 mm



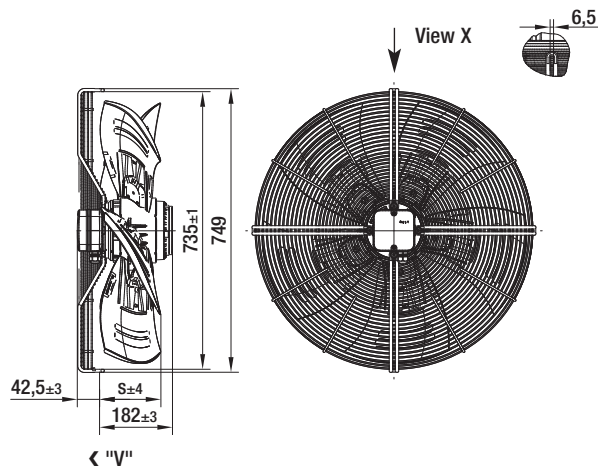
With full square nozzle



Type	Mass [kg]
W6D 710-GR05 -03	29.9
W8D 710-GQ01 -03	29.9
W8D 710-GR01 -03	29.9
W8E 710-GR01 -03	29.9



With guard grille for full nozzle

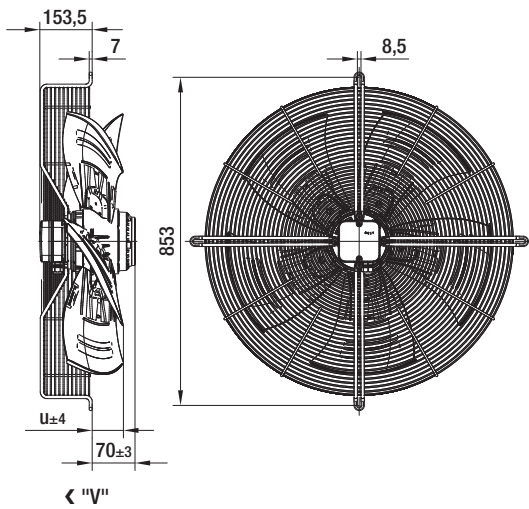


Type	Mass [kg]	s
S6D 710-CR05 -03	17.9	134.0
S8D 710-CQ01 -03	17.9	141.0
S8D 710-CR01 -03	17.9	134.0
S8E 710-CR01 -03	17.9	134.0

Internal diameter of the wall ring at least 710 mm



With guard grille for short nozzle



Type	Mass [kg]	u
S6D 710-AR05 -03	20.5	22.0
S8D 710-AQ01 -03	20.5	29.0
S8D 710-AR01 -03	20.5	22.0
S8E 710-AR01 -03	20.5	22.0

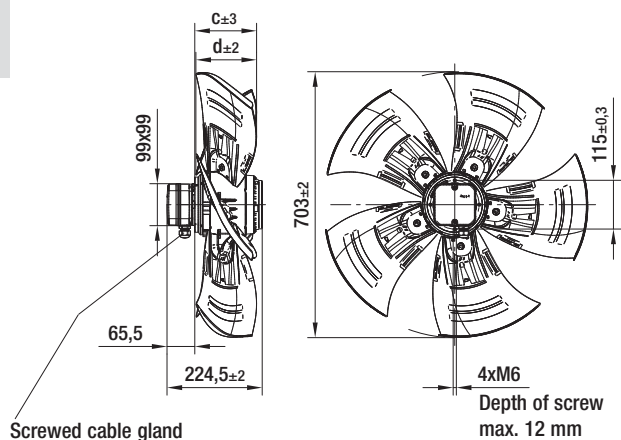
Internal diameter of the wall ring at least 710 mm

AC axial fans - HyBlade®

Ø 710, drawings for direction of air flow "A"



Without attachments



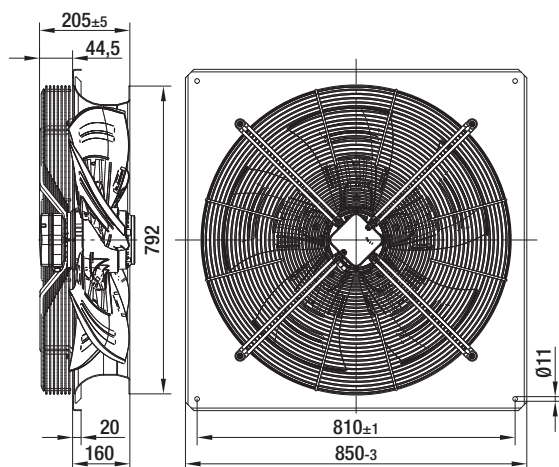
"A" >

Type	Mass [kg]	c	d
A8D 710-AQ01 -04	14.0	131.0	113.0
A8D 710-AR01 -04	14.0	119.0	96.0
A8E 710-AR01 -04	14.0	119.0	96.0

Internal diameter of the wall ring at least 710 mm



With full square nozzle

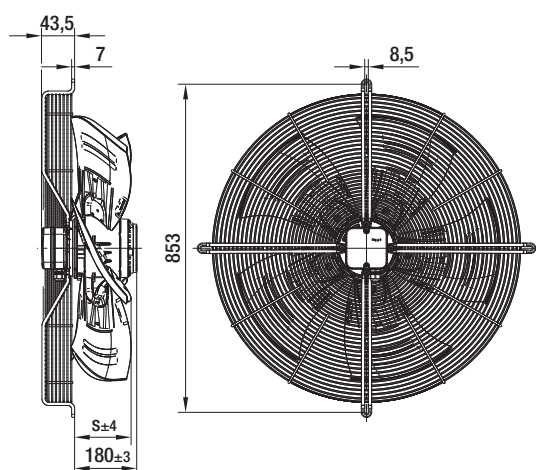


"A" >

Type	Mass [kg]
W8D 710-DQ01 -04	30.8
W8D 710-DR01 -04	30.8
W8E 710-DR01 -04	30.8



With guard grille for full nozzle



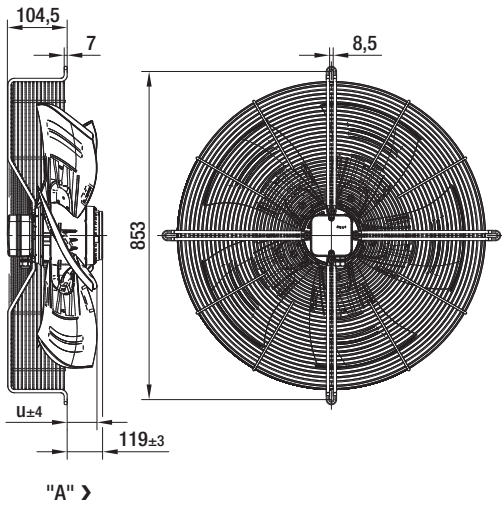
"A" >

Type	Mass [kg]	s
S8D 710-BQ01 -04	18.7	152.0
S8D 710-BR01 -04	18.7	140.0
S8E 710-BR01 -04	18.7	140.0

Internal diameter of the wall ring at least 710 mm



With guard grille for short nozzle



Type	Mass [kg]	u
S8D 710-AQ01 -04	19.8	91.0
S8D 710-AR01 -04	19.8	79.0
S8E 710-AR01 -04	19.8	79.0

Internal diameter of the wall ring at least 710 mm

AC axial fans - HyBlade®

Ø 800



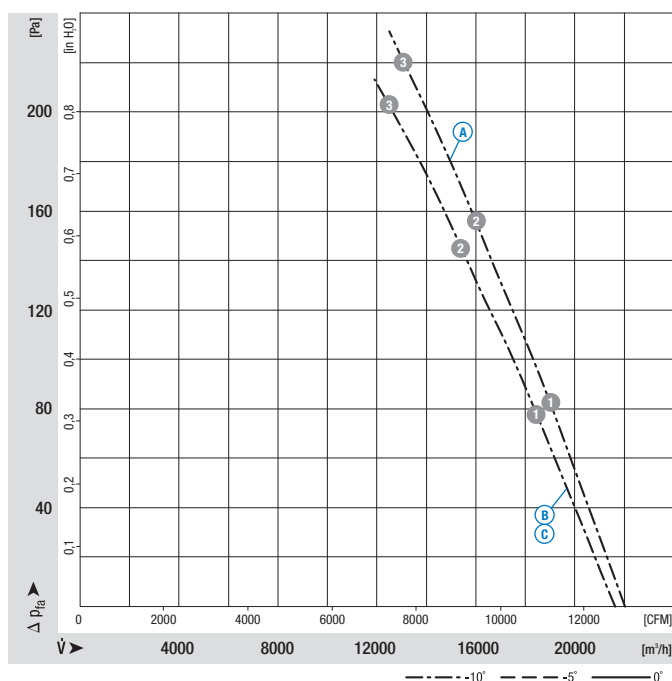
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" clockwise, direction of air flow "A" counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*6D 800	M6D 138-LA	-10°	Ⓐ	3~ 480 Y	60	1100	1.98	3.60	—	220	-40 to +60	F1b)/F2b)
			Ⓑ	3~ 400 Y	60	1050	1.80	3.55	—	200	-40 to +60	
			Ⓒ	3~ 230 Δ	60	1050	1.80	6.15	—	200	-40 to +60	
*6D 800	M6D 138-LA	-5°	Ⓓ	3~ 480 Y	60	1080	2.18	3.80	—	150	-40 to +60	F1b)/F2b)
			Ⓔ	3~ 400 Y	60	1030	1.99	3.78	—	135	-40 to +60	
			Ⓕ	3~ 230 Δ	60	1030	1.99	6.50	—	135	-40 to +60	

subject to alterations

(1) Nominal data in operating point ③ with maximum load

Curves

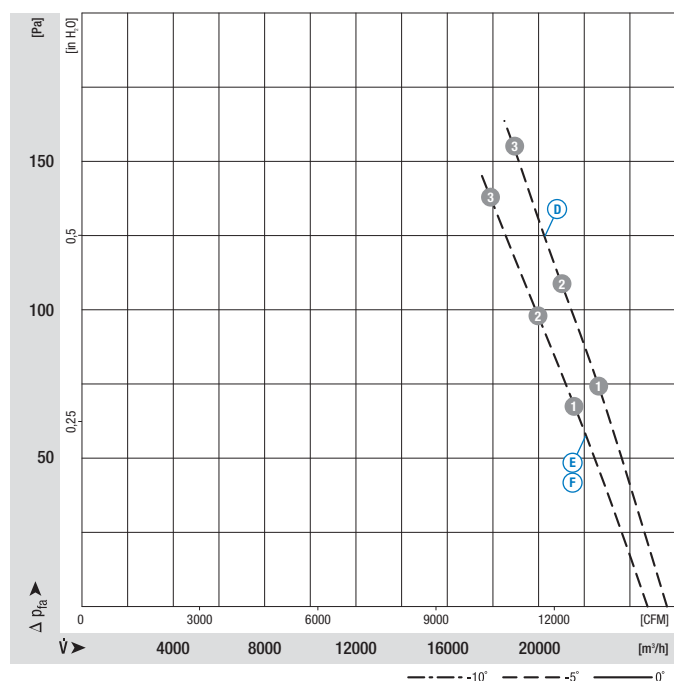


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓐ ①	1130	1.51	3.04	77
Ⓐ ②	1115	1.75	3.30	78
Ⓐ ③	1100	1.98	3.60	80
Ⓑ ①	1100	1.41	2.95	77
Ⓑ ②	1075	1.62	3.27	77
Ⓑ ③	1050	1.80	3.55	79
Ⓒ ①	1100	1.41	5.13	77
Ⓒ ②	1075	1.62	5.69	77
Ⓒ ③	1050	1.80	6.15	79

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	< "V"/ "A" >		< "V"/ "A" >		< "V" >		< "V" >		"A" >		"A" >	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A6D 800-AF05 -03 A6D 800-AF05 -04	W6D 800-GF05 -03 W6D 800-DF05 -04	S6D 800-CF05 -03 —	S6D 800-AF05 -03 —	— S6D 800-BF05 -04	— —						
"V" "A"	A6D 800-AE05 -03 A6D 800-AE05 -04	W6D 800-GE05 -03 W6D 800-DE05 -04	S6D 800-CE05 -03 —	S6D 800-AE05 -03 —	— S6D 800-BE05 -04	— —						

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
D 1	1100	1.91	3.59	75
D 2	1090	2.03	3.72	74
D 3	1080	2.18	3.80	76
E 1	1060	1.74	3.47	74
E 2	1040	1.85	3.64	73
E 3	1030	1.99	3.78	75
F 1	1060	1.74	6.01	74
F 2	1040	1.85	6.30	73
F 3	1030	1.99	6.50	75

AC axial fans - HyBlade®

Ø 800



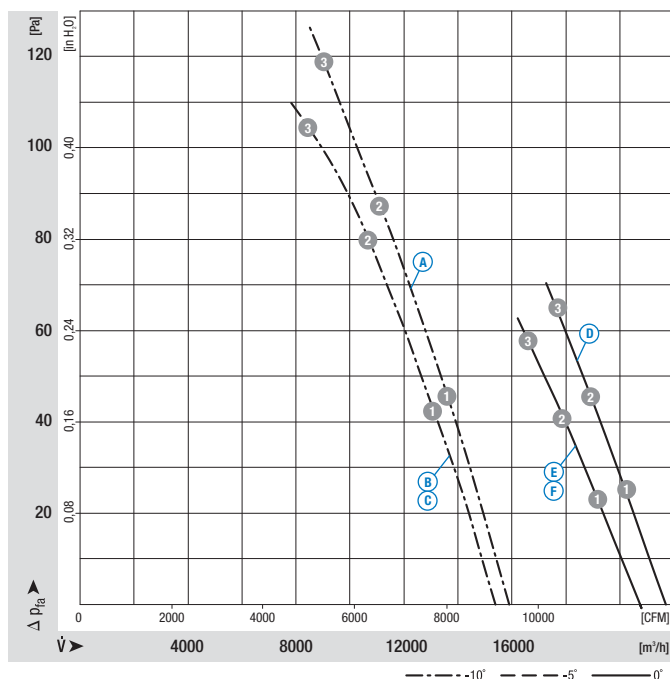
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" clockwise, direction of air flow "A" counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*8D 800	M8D 138-HF	-10°	A	3~480 Y	60	800	0.87	1.95	—	115	-40 to +65	F1b)/F2b)
			B	3~400 Y	60	755	0.76	1.70	—	105	-40 to +65	
			C	3~230 Δ	60	755	0.76	2.94	—	105	-40 to +65	
*8D 800	M8D 138-LA	0°	D	3~480 Y	60	800	1.27	2.47	—	65	-40 to +65	F1b)/F2b)
			E	3~400 Y	60	750	1.12	2.40	—	57	-40 to +65	
			F	3~230 Δ	60	750	1.12	4.15	—	57	-40 to +65	
*ZD 800	MZD 138-HF	0°	G	3~480 Y	60	510	0.52	1.20	—	50	-40 to +65	F1b)/F2b)
			H	3~400 Y	60	480	0.43	1.10	—	44	-40 to +65	
			I	3~230 Δ	60	480	0.43	1.90	—	44	-40 to +65	

subject to alterations

(1) Nominal data in operating point 3 with maximum load

Curves

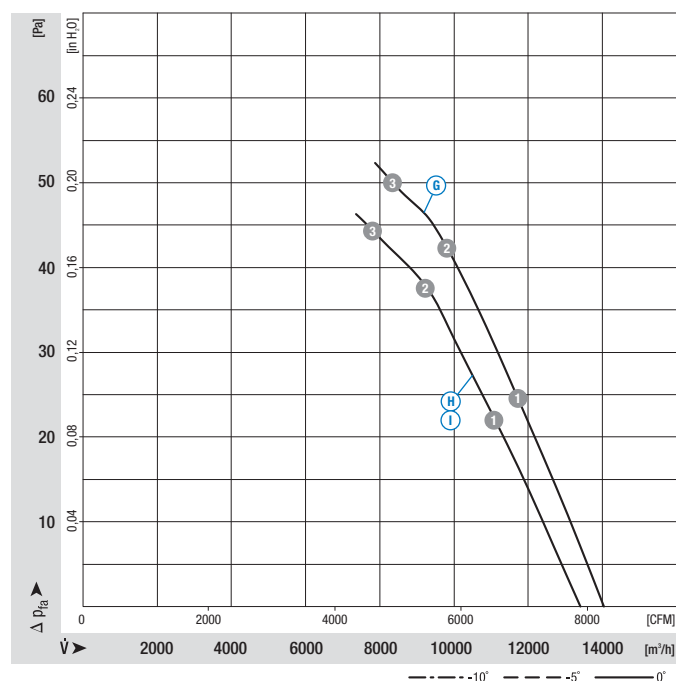


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	825	0.69	1.83	70
A 2	810	0.79	1.89	71
A 3	800	0.87	1.95	72
B 1	800	0.60	1.52	71
B 2	780	0.69	1.64	70
B 3	755	0.76	1.70	71
C 1	800	0.60	2.64	71
C 2	780	0.69	2.85	70
C 3	755	0.76	2.94	71
D 1	815	1.14	2.37	68
D 2	805	1.21	2.44	69
D 3	800	1.27	2.47	69
E 1	770	1.03	2.27	67
E 2	760	1.08	2.36	67
E 3	750	1.12	2.40	68
F 1	770	1.03	3.95	67
F 2	760	1.08	4.10	67
F 3	750	1.12	4.15	68

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	< "V"/ "A" >		< "V"/ "A" >		< "V" >		< "V" >		> "A" >		> "A" >	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A8D 800-AI09 -03 A8D 800-AI09 -04	W8D 800-GI09 -03 W8D 800-DI09 -04	S8D 800-CI09 -03 —	S8D 800-AI09 -03 —	—	S8D 800-BI09 -04 —						
"V" "A"	A8D 800-AD05 -03 A8D 800-AD05 -04	W8D 800-GD05 -03 W8D 800-DD05 -04	S8D 800-CD05 -03 —	S8D 800-AD05 -03 —	—	S8D 800-BD05 -04 —						
"V" "A"	AZD 800-AG07 -03 AZD 800-AG07 -04	WZD 800-GG07 -03 WZD 800-DG07 -04	SZD 800-CG07 -03 —	SZD 800-AG07 -03 —	—	SZD 800-BG07 -04 —						

Curves



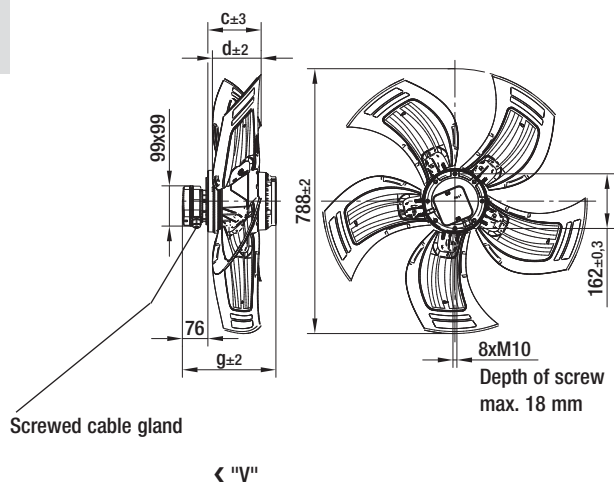
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
G 1	530	0.46	1.16	59
G 2	520	0.48	1.18	59
G 3	510	0.52	1.20	60
H 1	500	0.38	1.01	57
H 2	490	0.40	1.05	58
H 3	480	0.43	1.10	60
I 1	500	0.38	1.76	57
I 2	490	0.40	1.83	58
I 3	480	0.43	1.90	60

AC axial fans - HyBlade®

Ø 800, drawings for direction of air flow "V"



Without attachments

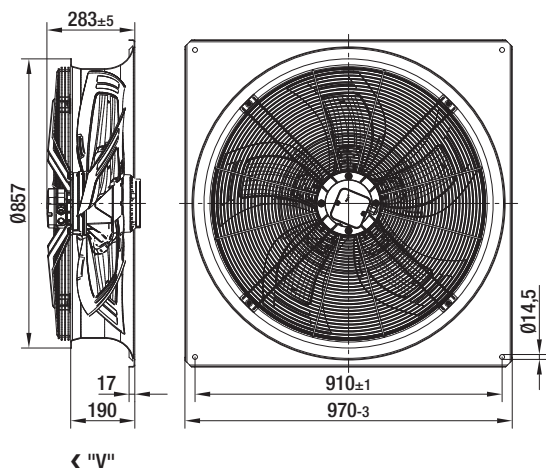


Type	Mass [kg]	c	d	g
A6D 800-AF05 -03	23.0	143.0	112.0	277.0
A6D 800-AE05 -03	23.0	150.0	130.0	277.0
A8D 800-AI09 -03	19.0	143.0	112.0	252.0
A8D 800-AD05 -03	23.0	158.0	143.0	277.0
AZD 800-AG07 -03	19.0	158.0	143.0	252.0

Internal diameter of the wall ring at least 795 mm



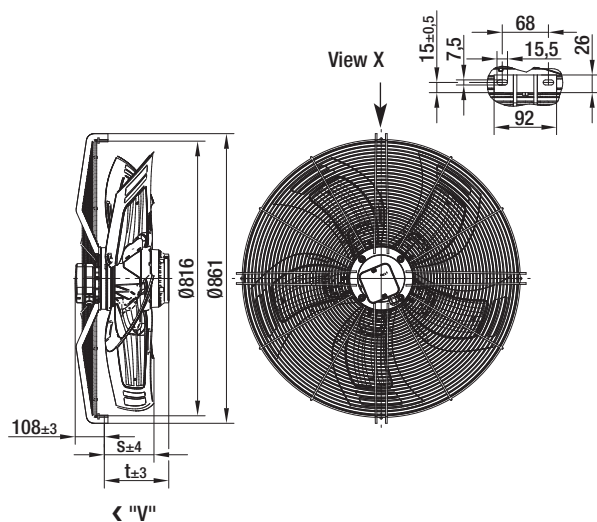
With full square nozzle



Type	Mass [kg]
W6D 800-GF05 -03	44.2
W6D 800-GE05 -03	44.2
W8D 800-GI09 -03	40.2
W8D 800-GD05 -03	44.2
WZD 800-GG07 -03	40.2



With guard grille for full nozzle

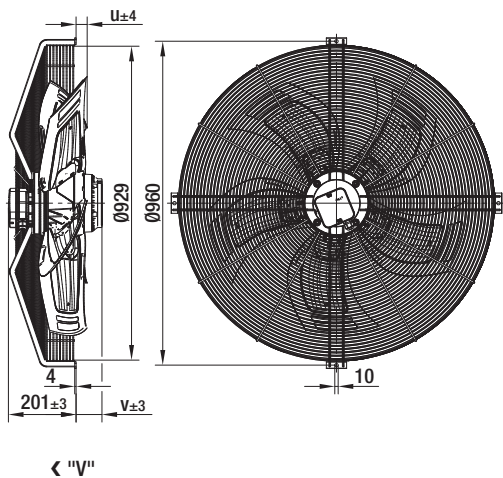


Type	Mass [kg]	s	t
S6D 800-CF05 -03	29.7	111.0	169.0
S6D 800-CE05 -03	29.7	118.0	169.0
S8D 800-CI09 -03	25.7	111.0	144.0
S8D 800-CD05 -03	29.7	127.0	169.0
SZD 800-CG07 -03	25.7	127.0	144.0

Internal diameter of the wall ring at least 795 mm



With guard grille for short nozzle



Type	Mass [kg]	u	v
S6D 800-AF05 -03	30.0	18.0	76.0
S6D 800-AE05 -03	30.0	25.0	76.0
S8D 800-AI09 -03	26.0	18.0	51.0
S8D 800-AD05 -03	30.0	34.0	76.0
SZD 800-AG07 -03	26.0	34.0	51.0

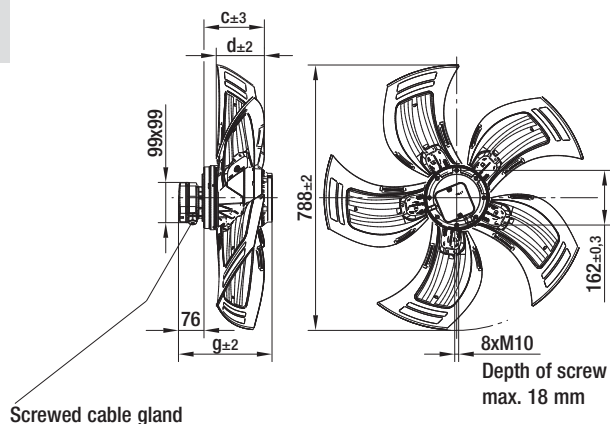
Internal diameter of the wall ring at least 795 mm

AC axial fans - HyBlade®

Ø 800, drawings for direction of air flow "A"



Without attachments



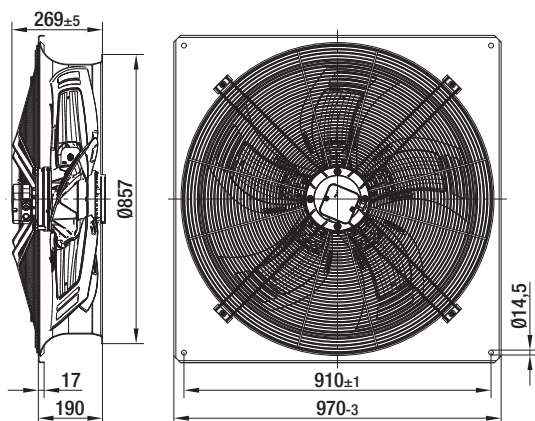
"A" >

Type	Mass [kg]	c	d	g
A6D 800-AF05 -04	23.0	159.0	112.0	277.0
A6D 800-AE05 -04	23.0	171.0	130.0	277.0
A8D 800-AI09 -04	19.0	159.0	112.0	252.0
A8D 800-AD05 -04	23.0	179.0	143.0	277.0
AZD 800-AG07 -04	19.0	179.0	143.0	252.0

Internal diameter of the wall ring at least 795 mm



With full square nozzle

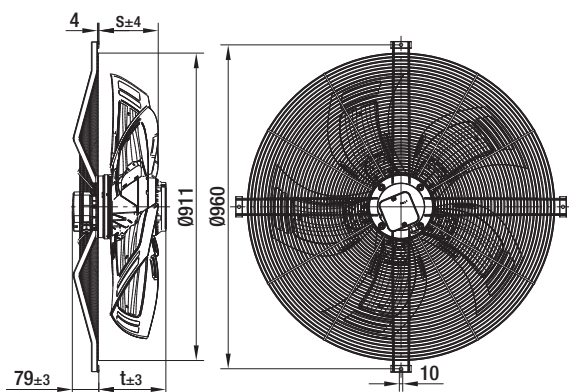


"A" >

Type	Mass [kg]
W6D 800-DF05 -04	44.9
W6D 800-DE05 -04	44.9
W8D 800-DI09 -04	40.9
W8D 800-DD05 -04	44.9
WZD 800-DG07 -04	40.9



With guard grille for full nozzle



"A" >

Type	Mass [kg]	s	t
S6D 800-BF05 -04	30.0	156.0	198.0
S6D 800-BE05 -04	30.0	168.0	198.0
S8D 800-BI09 -04	26.0	156.0	173.0
S8D 800-BD05 -04	30.0	177.0	198.0
SZD 800-BG07 -04	26.0	177.0	173.0

Internal diameter of the wall ring at least 795 mm

AC axial fans - HyBlade®

Ø 910



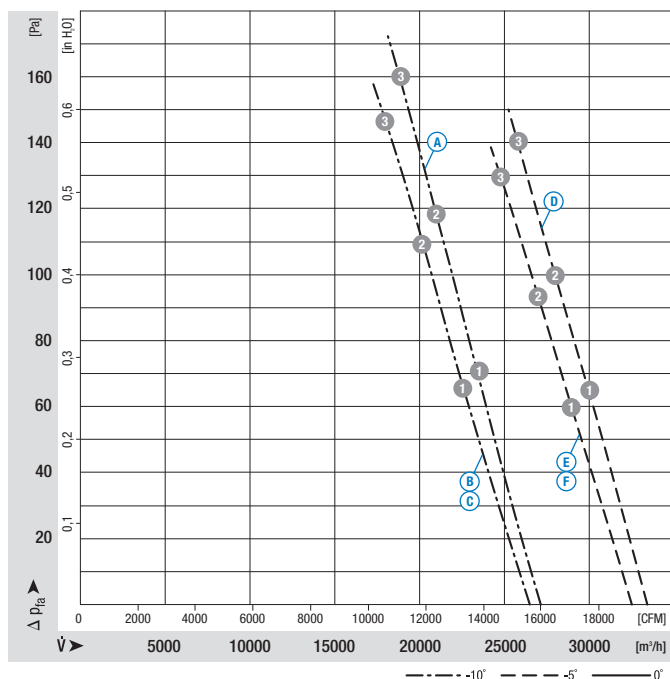
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" clockwise, direction of air flow "A" counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*6D 910	M6D 138-LA	-10°	A	3~480 Y	60	1090	2.15	3.86	—	160	-40 to +60	F1b)/F2b)
			B	3~400 Y	60	1035	1.96	3.90	—	145	-40 to +60	
			C	3~230 Δ	60	1035	1.96	6.75	—	145	-40 to +60	
*6D 910	M6D 138-NA	-5°	D	3~480 Y	60	1100	2.87	5.13	—	140	-40 to +45	F1b)/F2b)
			E	3~400 Y	60	1055	2.65	5.08	—	130	-40 to +45	
			F	3~230 Δ	60	1055	2.65	8.80	—	130	-40 to +45	
*6D 910	M6D 138-NA	-10°	G	3~480 Y	60	1120	2.41	4.76	—	220	-40 to +60	F1b)/F2b)
			H	3~400 Y	60	1085	2.24	4.50	—	205	-40 to +60	
			I	3~230 Δ	60	1085	2.24	7.80	—	205	-40 to +60	

subject to alterations

(1) Nominal data in operating point 3 with maximum load

Curves

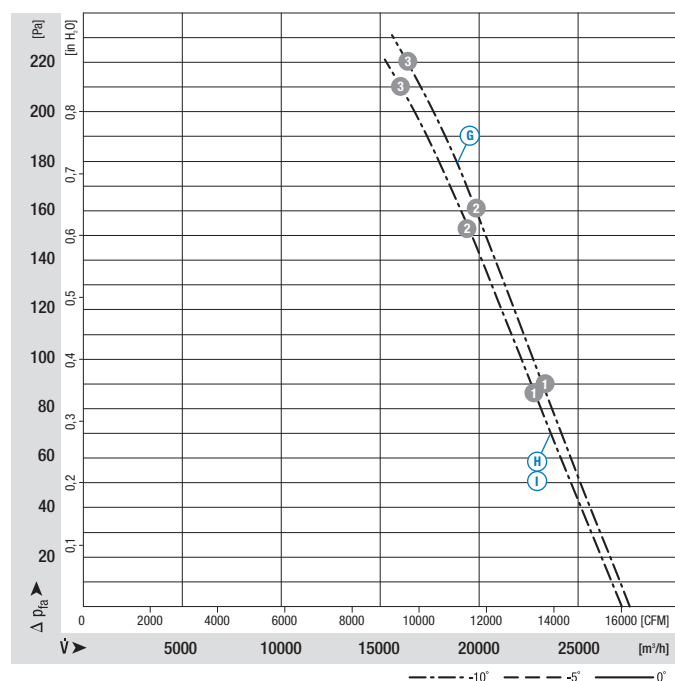


	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
A 1	1115	1.71	3.34	82
A 2	1100	1.97	3.65	82
A 3	1090	2.15	3.86	82
B 1	1080	1.60	3.28	81
B 2	1055	1.81	3.63	81
B 3	1035	1.96	3.90	81
C 1	1080	1.60	5.71	81
C 2	1055	1.81	6.32	81
C 3	1035	1.96	6.75	81
D 1	1120	2.44	4.64	82
D 2	1110	2.63	4.83	81
D 3	1100	2.87	5.13	80
E 1	1085	2.28	4.49	81
E 2	1070	2.45	4.75	80
E 3	1055	2.65	5.08	79
F 1	1085	2.28	7.81	81
F 2	1070	2.45	8.27	80
F 3	1055	2.65	8.80	79

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	"V"/"A"		"V"/"A"		"V"	"V"	"A"	"A"
	Without attachments	With full square nozzle	With guard grille for full nozzle	With guard grille for short nozzle	With guard grille for full nozzle	With guard grille for short nozzle	With guard grille for full nozzle	With guard grille for short nozzle
"V" "A"	A6D 910-AF05 -03 A6D 910-AF05 -04	W6D 910-GF05 -03 W6D 910-DF05 -04	S6D 910-CF05 -03 —	S6D 910-AF05 -03 —	— S6D 910-BF05 -04	— —	— —	— —
"V" "A"	A6D 910-AB05 -03 A6D 910-AB05 -04	W6D 910-GB05 -03 W6D 910-DB05 -04	S6D 910-CB05 -03 —	S6D 910-AB05 -03 —	— S6D 910-BB05 -04	— —	— —	— —
"V" "A"	A6D 910-AC05 -03 A6D 910-AC05 -04	W6D 910-GC05 -03 W6D 910-DC05 -04	S6D 910-CC05 -03 —	S6D 910-AC05 -03 —	— S6D 910-BC05 -04	— —	— —	— —

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
G 1	1140	1.87	4.29	83
G 2	1130	2.19	4.56	83
G 3	1120	2.41	4.76	94
H 1	1115	1.74	3.79	82
H 2	1100	2.00	4.20	83
H 3	1085	2.24	4.50	93
I 1	1115	1.74	6.59	82
I 2	1100	2.00	7.31	83
I 3	1085	2.24	7.80	93

AC axial fans - HyBlade®

Ø 910



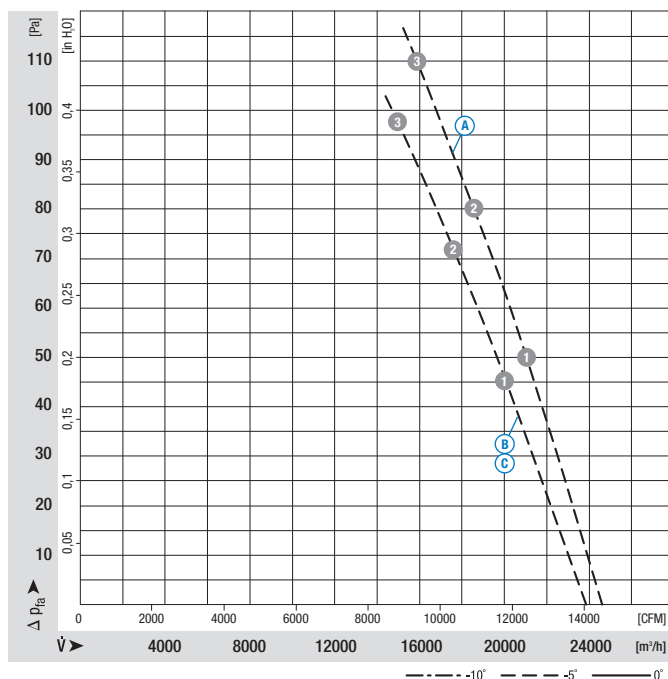
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" clockwise, direction of air flow "A" counter-clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Blade angle	Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Max. operative range	Perm. amp. temp.	Electr. connection
Type	Motor			VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 126
*8D 910	M8D 138-LA	-5°	Ⓐ	3~ 480 Y	60	795	1.42	2.75	—	110	-40 to +60	F1b)/F2b)
			Ⓑ	3~ 400 Y	60	740	1.25	2.68	—	95	-40 to +60	
			Ⓒ	3~ 230 Δ	60	740	1.25	4.65	—	95	-40 to +60	
*ZD 910	MZD 138-HF	0°	Ⓓ	3~ 480 Y	60	485	0.61	1.31	—	50	-40 to +60	F1b)/F2b)
			Ⓔ	3~ 400 Y	60	440	0.50	1.20	—	40	-40 to +60	
			Ⓕ	3~ 230 Δ	60	440	0.50	2.08	—	40	-40 to +60	

subject to alterations

(1) Nominal data in operating point ③ with maximum load

Curves

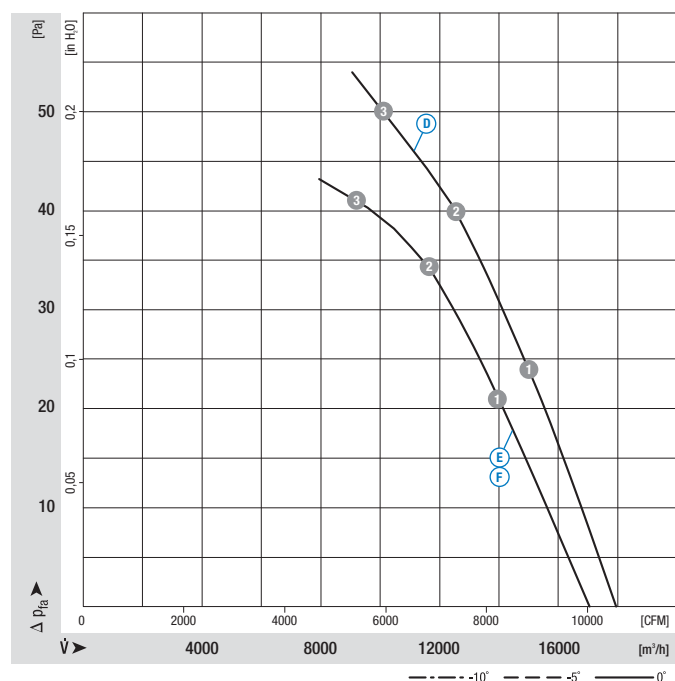


	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
Ⓐ ①	820	1.18	2.54	73
Ⓐ ②	805	1.29	2.66	72
Ⓐ ③	795	1.42	2.75	73
Ⓑ ①	780	1.06	2.40	71
Ⓑ ②	765	1.16	2.55	70
Ⓑ ③	740	1.25	2.68	72
Ⓒ ①	780	1.06	4.18	71
Ⓒ ②	765	1.16	4.44	70
Ⓒ ③	740	1.25	4.65	72

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Via terminal box
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)

Direction of air flow	◀ "V"/ "A" ▶		◀ "V"/ "A" ▶		◀ "V" ▶		◀ "V" ▶		"A" ▶		"A" ▶	
	Without attachments		With full square nozzle		With guard grille for full nozzle		With guard grille for short nozzle		With guard grille for full nozzle		With guard grille for short nozzle	
"V" "A"	A8D 910-AE07 -03 A8D 910-AE07 -04	W8D 910-GE07 -03 W8D 910-DE07 -04	S8D 910-CE07 -03 —	S8D 910-AE07 -03 —	— S8D 910-BE07 -04	— —	— —	— —	— —	— —	— —	— —
"V" "A"	AZD 910-AG07 -03 AZD 910-AG07 -04	WZD 910-GG07 -03 WZD 910-DG07 -04	SZD 910-CG07 -03 —	SZD 910-AG07 -03 —	— SZD 910-BG07 -04	— —	— —	— —	— —	— —	— —	— —

Curves



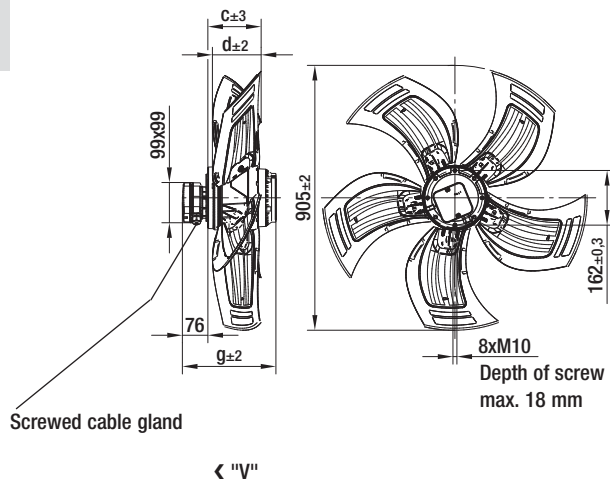
	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
D 1	505	0.54	1.24	60
D 2	490	0.59	1.28	60
D 3	485	0.61	1.31	62
E 1	470	0.45	1.13	58
E 2	450	0.48	1.18	58
E 3	440	0.50	1.20	60
F 1	470	0.45	1.97	58
F 2	450	0.48	2.05	58
F 3	440	0.50	2.08	60

AC axial fans - HyBlade®

Ø 910, drawings for direction of air flow "V"



Without attachments

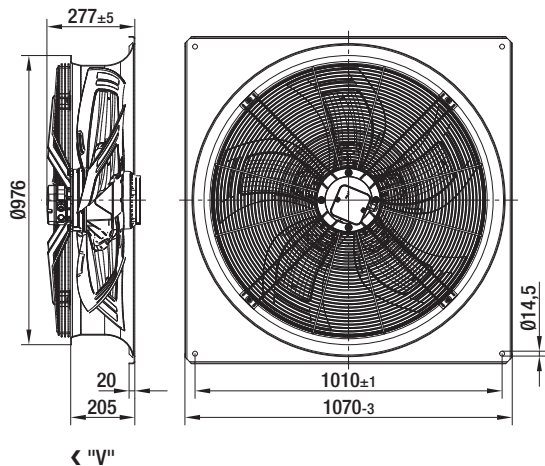


Type	Mass [kg]	c	d	g
A6D 910-AF05 -03	25,1	139,0	94,0	277,0
A6D 910-AB05 -03	28,1	145,0	106,0	297,0
A6D 910-AC05 -03	28,1	139,0	94,0	297,0
A8D 910-AE07 -03	25,1	145,0	106,0	277,0
AZD 910-AG07 -03	20,1	149,0	119,0	252,0

Internal diameter of the wall ring at least 913 mm



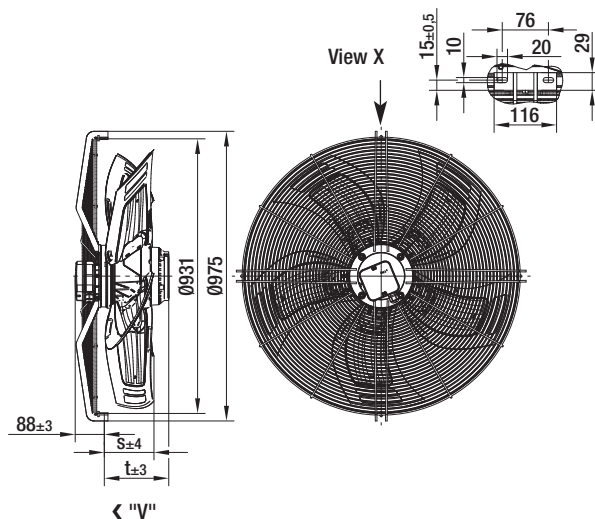
With full square nozzle



Type	Mass [kg]
W6D 910-GF05 -03	45,1
W6D 910-GB05 -03	48,1
W6D 910-GC05 -03	48,1
W8D 910-GE07 -03	45,1
WZD 910-GG07 -03	40,1



With guard grille for full nozzle

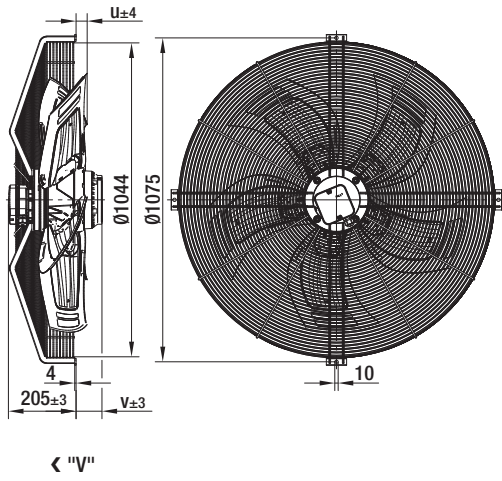


Type	Mass [kg]	s	t
S6D 910-CF05 -03	36,1	127,0	189,0
S6D 910-CB05 -03	39,1	133,0	209,0
S6D 910-CC05 -03	39,1	127,0	209,0
S8D 910-CE07 -03	36,1	133,0	189,0
SZD 910-CG07 -03	31,1	137,0	164,0

Internal diameter of the wall ring at least 913 mm



With guard grille for short nozzle



Type	Mass [kg]	u	v
S6D 910-AF05 -03	38,1	9,0	71,0
S6D 910-AB05 -03	41,1	15,0	91,0
S6D 910-AC05 -03	41,1	9,0	91,0
S8D 910-AE07 -03	38,1	15,0	71,0
SZD 910-AG07 -03	33,1	19,0	46,0

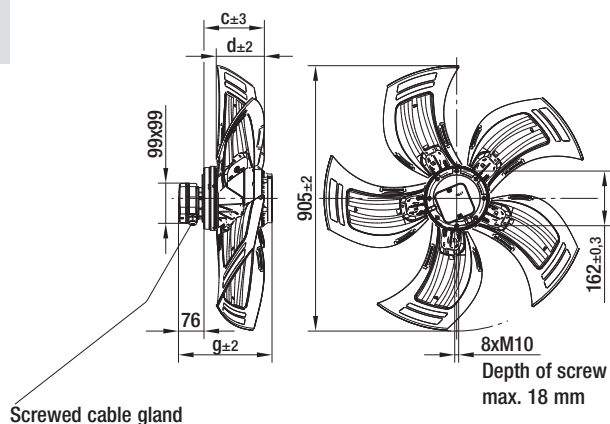
Internal diameter of the wall ring at least 913 mm

AC axial fans - HyBlade®

Ø 910, drawings for direction of air flow "A"



Without attachments



Screwed cable gland

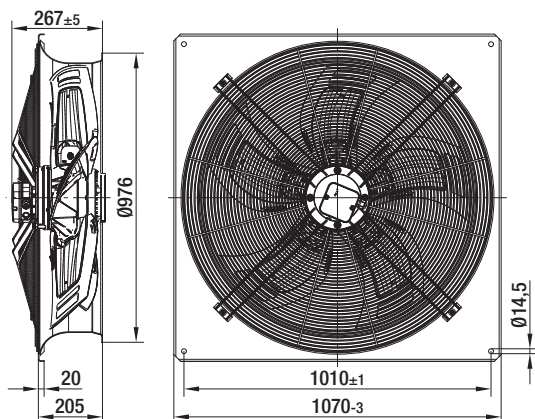
"A" >

Type	Mass [kg]	c	d	g
A6D 910-AF05 -04	25,1	145,0	94,0	277,0
A6D 910-AB05 -04	28,1	152,0	106,0	297,0
A6D 910-AC05 -04	28,1	145,0	94,0	297,0
A8D 910-AE07 -04	25,1	152,0	106,0	277,0
AZD 910-AG07 -04	20,1	159,0	119,0	252,0

Internal diameter of the wall ring at least 913 mm



With full square nozzle

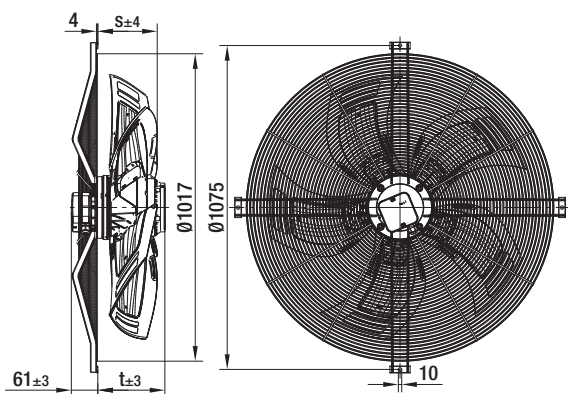


"A" >

Type	Mass [kg]
W6D 910-DF05 -04	46,6
W6D 910-DB05 -04	49,6
W6D 910-DC05 -04	49,6
W8D 910-DE07 -04	46,6
WZD 910-DG07 -04	41,6



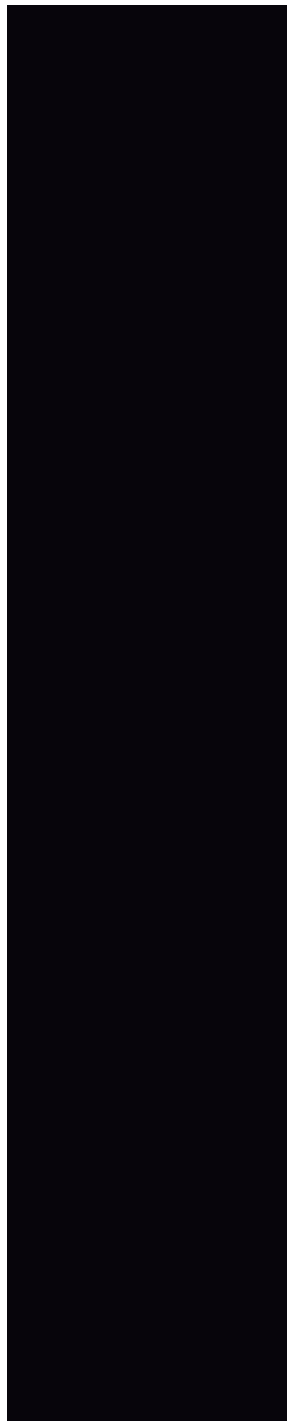
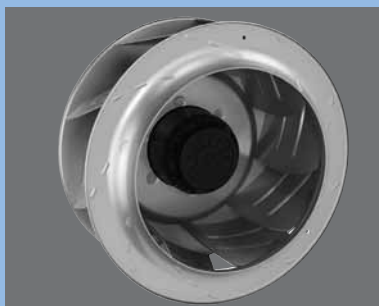
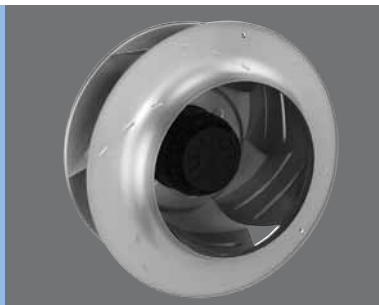
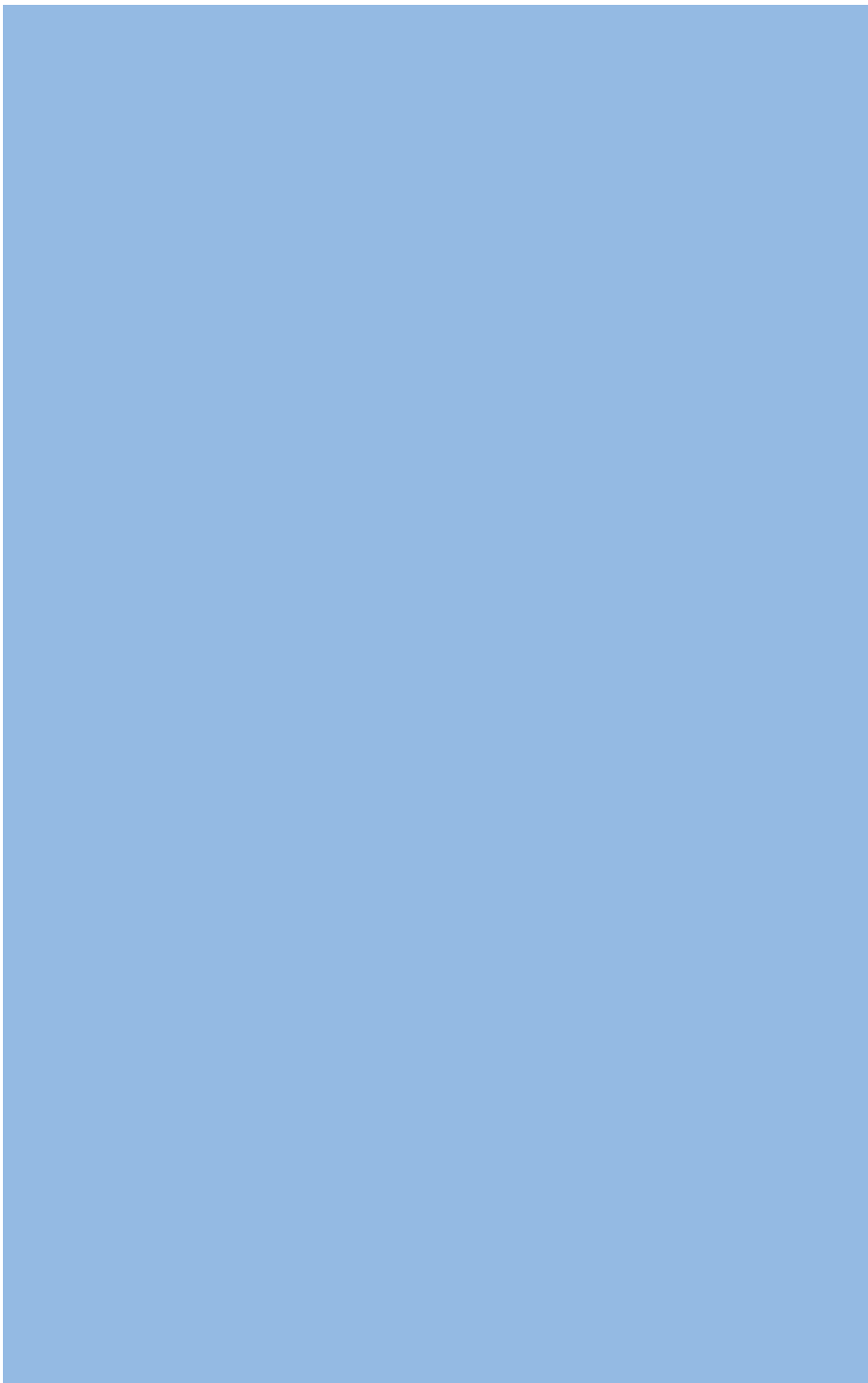
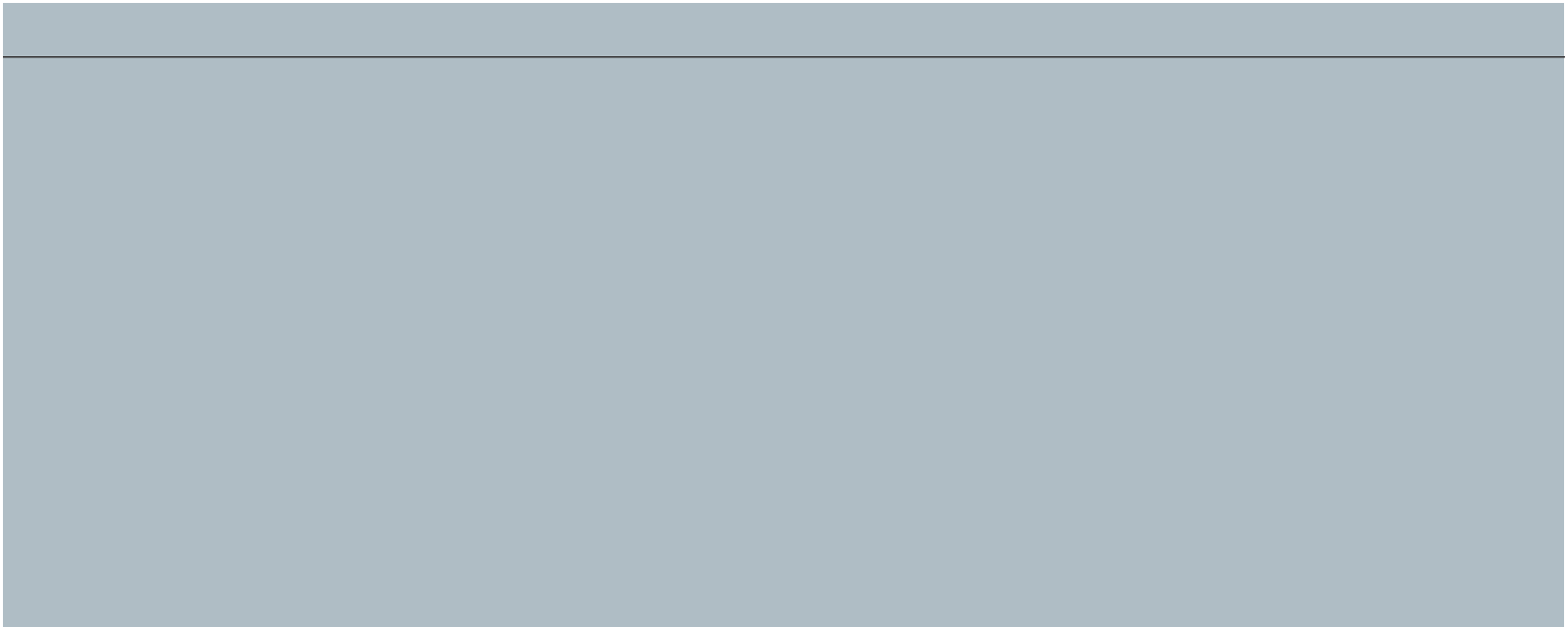
With guard grille for full nozzle



"A" >

Type	Mass [kg]	s	t
S6D 910-BF05 -04	37,1	159,0	215,0
S6D 910-BB05 -04	40,1	166,0	235,0
S6D 910-BC05 -04	40,1	159,0	235,0
S8D 910-BE07 -04	37,1	166,0	215,0
SZD 910-BG07 -04	32,1	173,0	190,0

Internal diameter of the wall ring at least 913 mm



AC centrifugal fans backward curved

AC centrifugal fans, backward curved

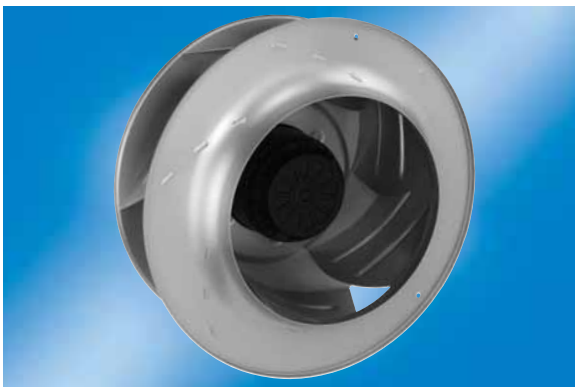
Ø 450 - Ø 630

68



AC centrifugal fans

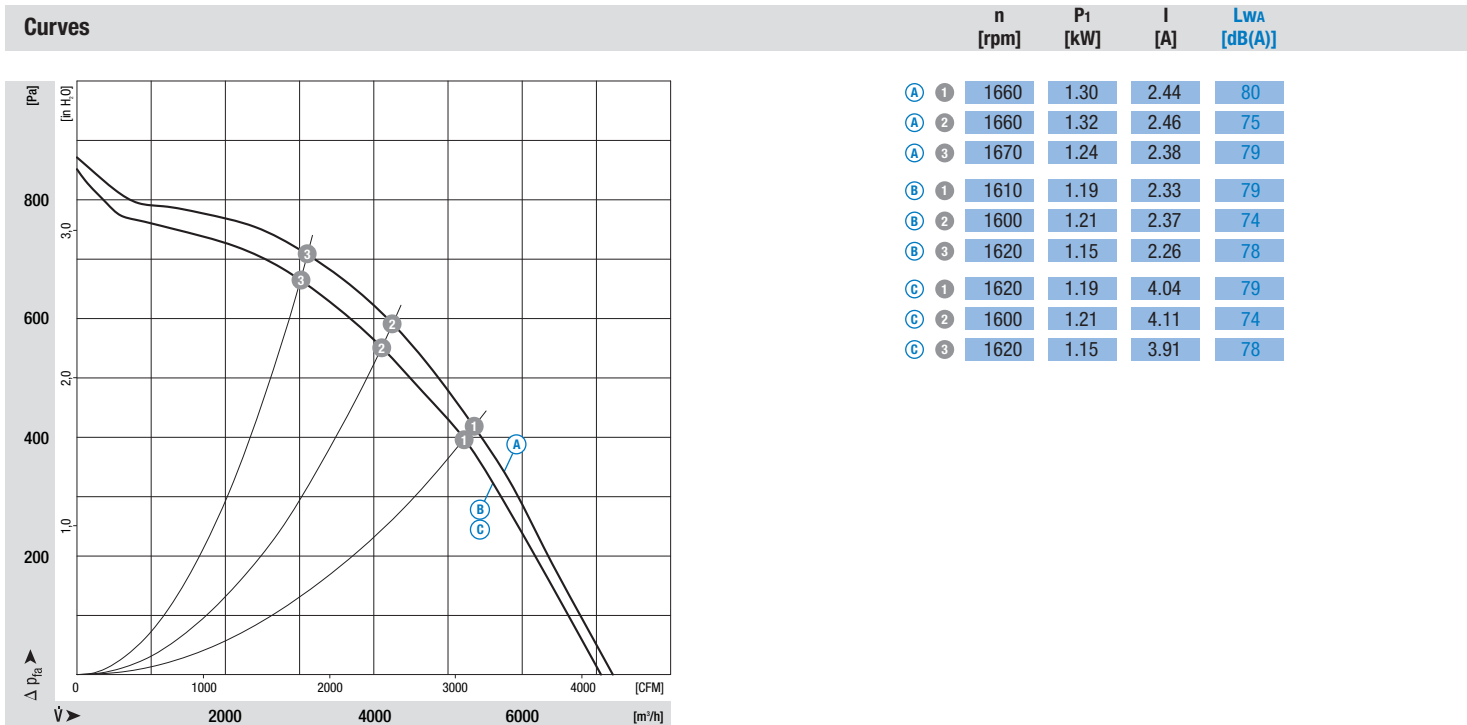
backward curved, 3-D, Ø 450



- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	°C	p. 127	
R4D 450 ⁽²⁾	M4D 110-IA	A 3~ 480 Y	60	1660	1.32	2.46	—	-40 to +65	D1)/D2)	
		B 3~ 400 Y	60	1600	1.21	2.37	—	-40 to +65		
		C 3~ 230 Δ	60	1600	1.21	4.11	—	-40 to +65		

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y



- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

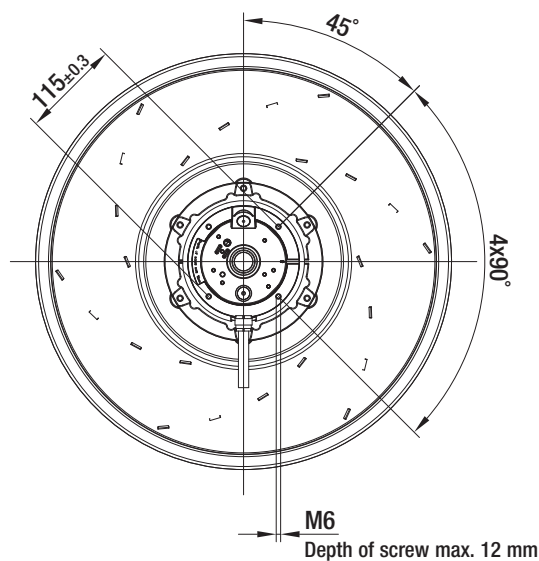
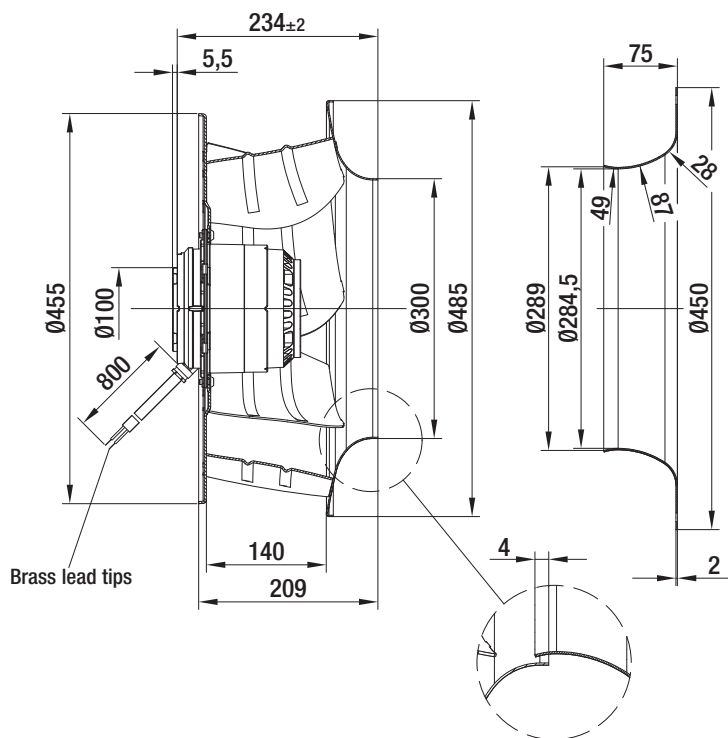
kg

Inlet nozzle (long)

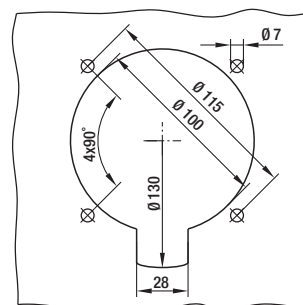
R4D 450-AH03 -01

14.5

63045-2-4013

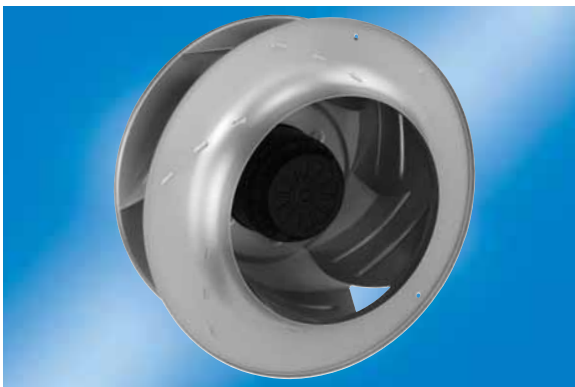


Mounting dimensions



AC centrifugal fans

backward curved, 3-D, Ø 450

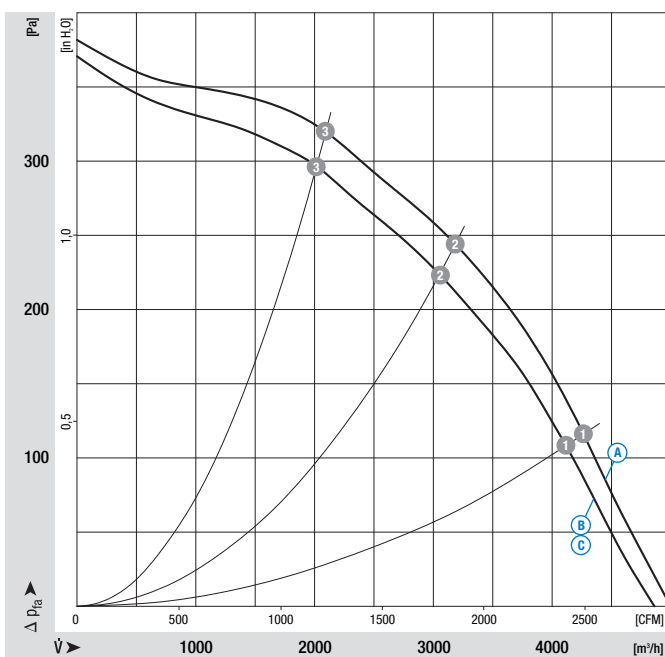


- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	°C	p. 127	
R6D 450 ⁽²⁾	M6D 110-EF	A 3~ 480 Y	60	1110	0.44	0.81	—	-40 to +70	D1)/D2)	
		B 3~ 400 Y	60	1060	0.40	0.77	—	-40 to +70		
		C 3~ 230 Δ	60	1060	0.40	1.33	—	-40 to +70		

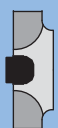
subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	1110	0.40	0.79	70
A 2	1110	0.44	0.81	66
A 3	1110	0.42	0.80	69
B 1	1070	0.37	0.73	69
B 2	1060	0.40	0.77	65
B 3	1060	0.38	0.74	68
C 1	1070	0.37	1.26	69
C 2	1060	0.40	1.33	65
C 3	1060	0.38	1.28	68

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

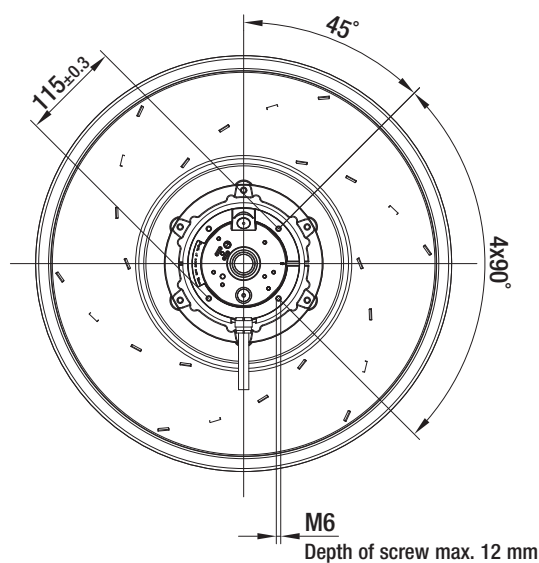
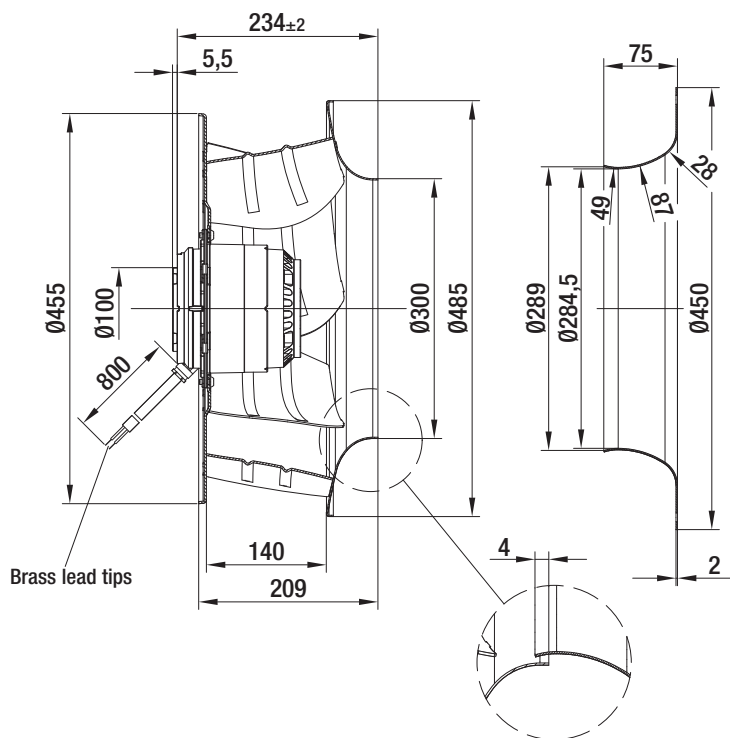
kg

Inlet nozzle (long)

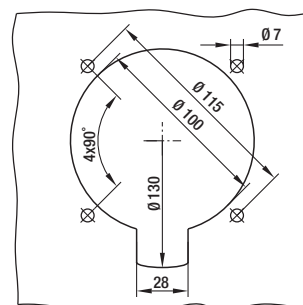
R6D 450-AN01 -01

10.0

63045-2-4013



Mounting dimensions



AC centrifugal fans

backward curved, 3-D, Ø 450

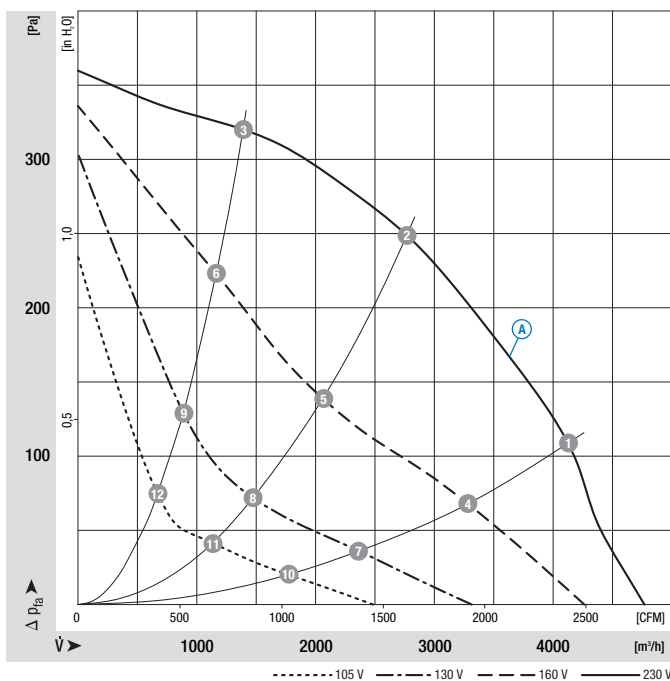


- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	°C	p. 127	
R6E 450	M6E 110-EF	Ⓐ 1~ 230	60	1060	0.43	1.85	8.0/450	-40 to +55	A2a)	

subject to alterations (1) Nominal data in operating point with maximum load

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	1090	0.39	1.72	69
Ⓐ 2	1060	0.43	1.85	64
Ⓐ 3	1100	0.38	1.65	70
Ⓐ 4	840	0.26	1.71	62
Ⓐ 5	750	0.27	1.80	55
Ⓐ 6	890	0.26	1.70	65
Ⓐ 7	590	0.18	1.50	52
Ⓐ 8	540	0.18	1.50	47
Ⓐ 9	630	0.18	1.50	56
Ⓐ 10	450	0.11	1.20	45
Ⓐ 11	410	0.11	1.20	43
Ⓐ 12	470	0.11	1.20	48

AC centrifugal fans

backward curved, 3-D, Ø 500



- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 9
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data

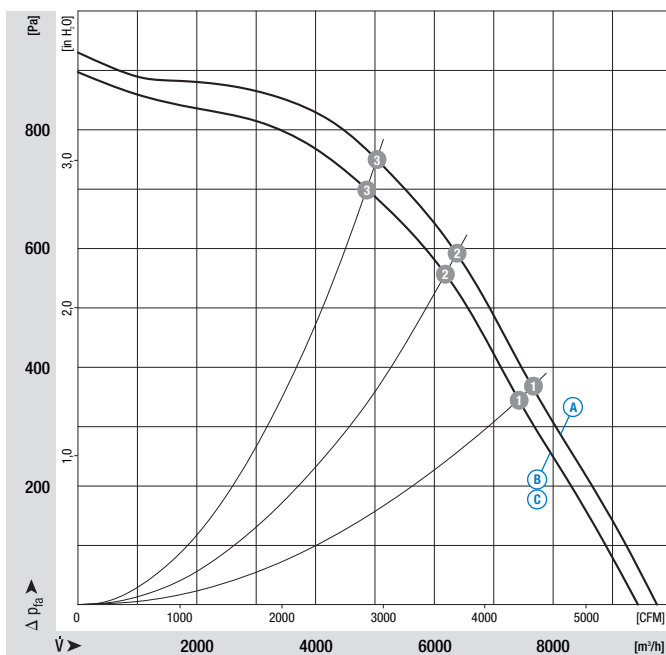
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amp. temp. °C	Electr. connection p. 127
R4D 500 ⁽²⁾	M4D 138-LA	A	3~ 480 Y	60	1670	2.40	3.90	—	-40 to +70	D1)/D2)
		B	3~ 400 Y	60	1600	2.24	3.90	—	-40 to +70	
		C	3~ 230 Δ	60	1600	2.24	6.75	—	-40 to +70	

subject to alterations

⁽¹⁾ Nominal data in operating point with maximum load

⁽²⁾ 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



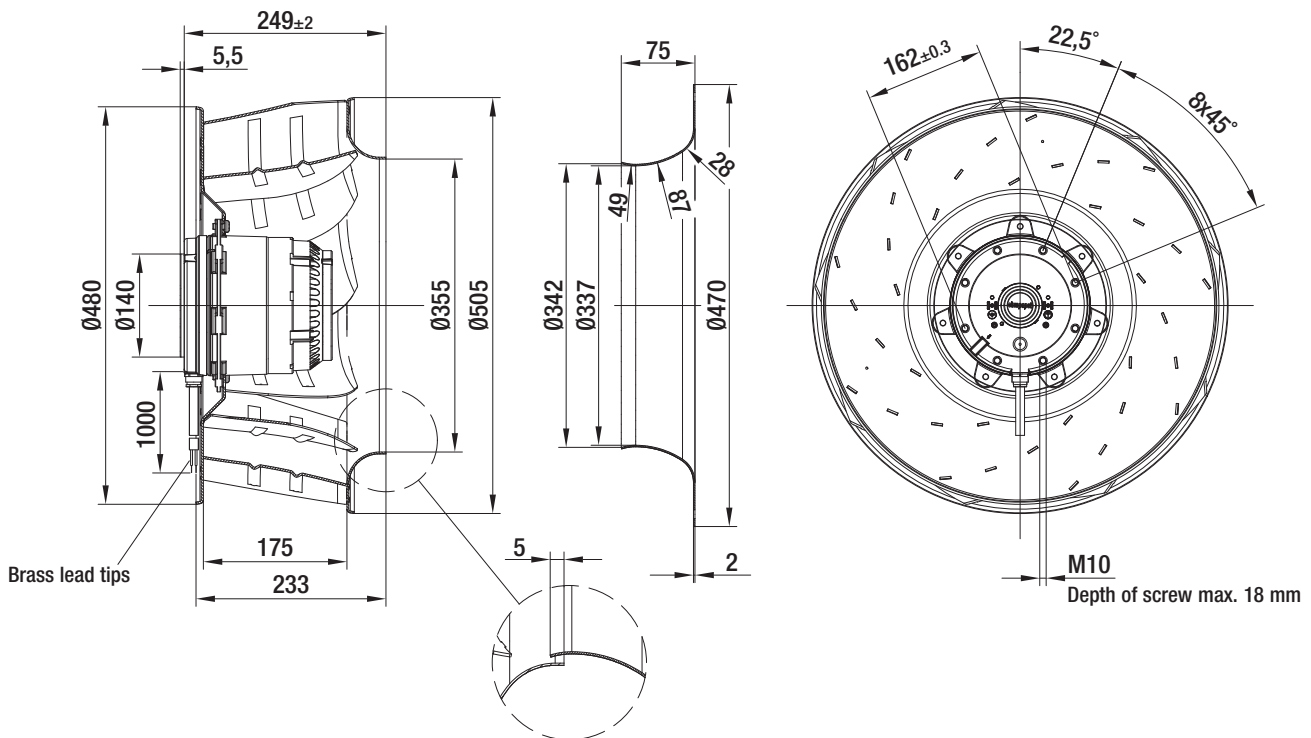
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1670	2.30	3.70	86
A 2	1670	2.40	3.90	82
A 3	1670	2.30	3.69	83
B 1	1610	2.16	3.77	85
B 2	1600	2.24	3.90	81
B 3	1610	2.15	3.75	82
C 1	1610	2.16	6.53	85
C 2	1600	2.24	6.75	81
C 3	1610	2.15	6.50	82

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Lateral
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



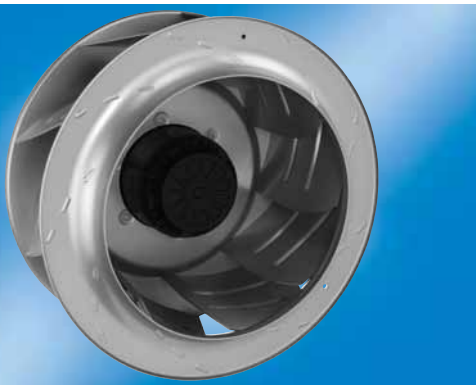
Mass of centrifugal fan

Centrifugal fan	kg	Inlet nozzle (long)
R4D 500-AQ05 -01	27.0	63072-2-4013



AC centrifugal fans

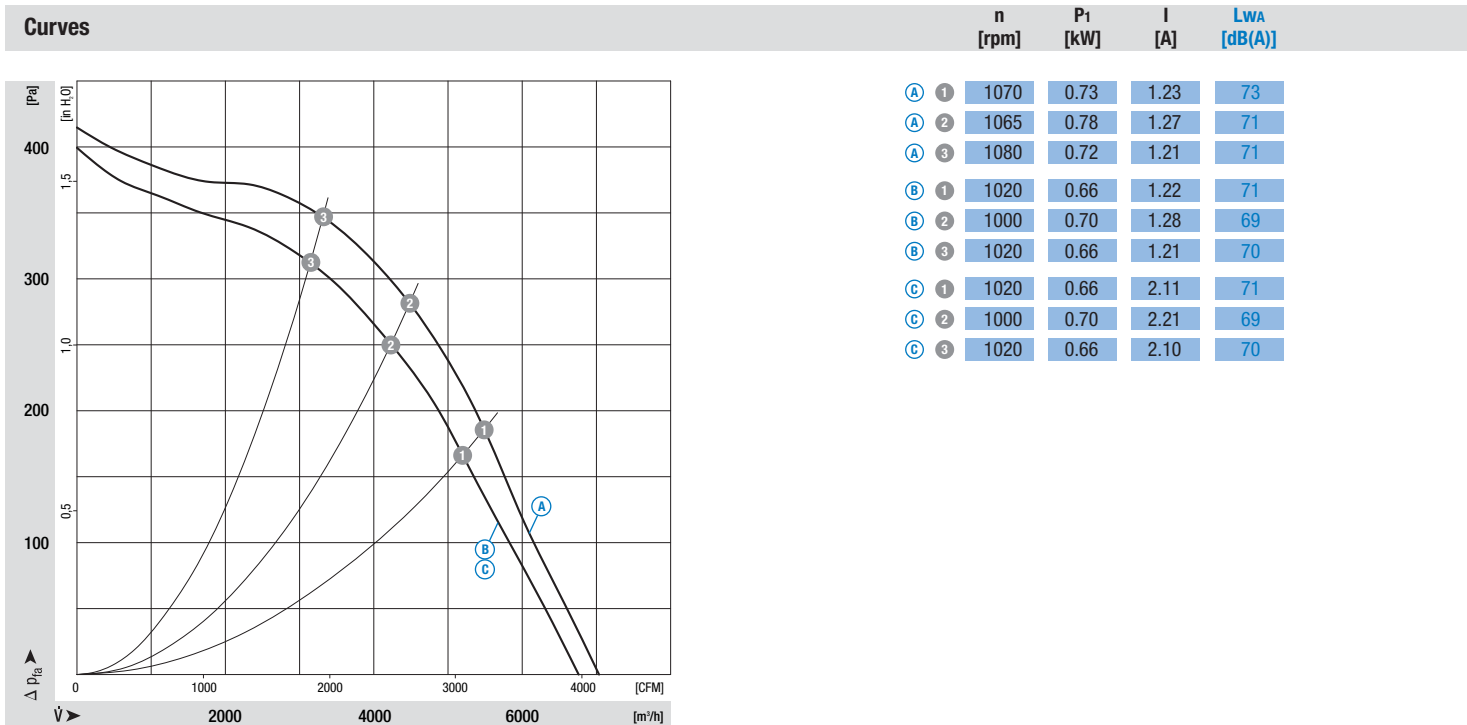
backward curved, 3-D, Ø 500



- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 9
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	°C	p. 127	
R6D 500 ⁽²⁾	M6D 110-GF	A	3~ 480 Y	60	1065	0.78	1.27	—	-40 to +45	D1)/D2)
		B	3~ 400 Y	60	1000	0.70	1.28	—	-40 to +45	
		C	3~ 230 Δ	60	1000	0.70	2.21	—	-40 to +45	

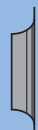
subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y



- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Lateral
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

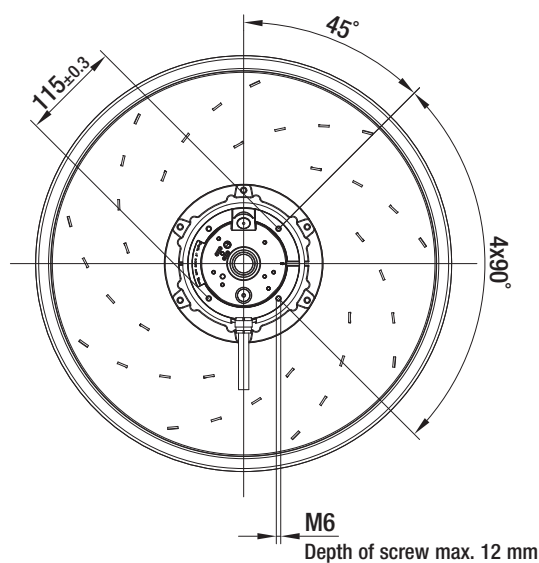
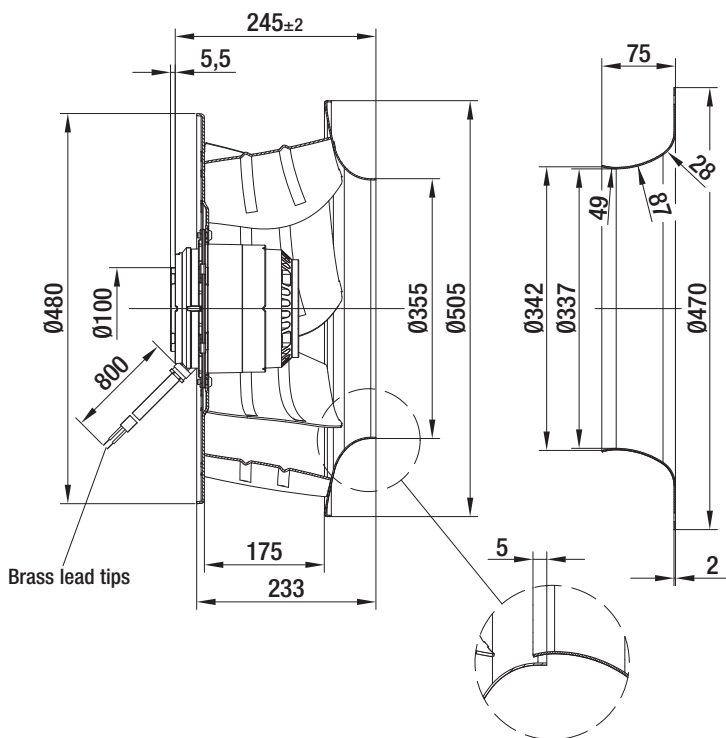
kg

Inlet nozzle (long)

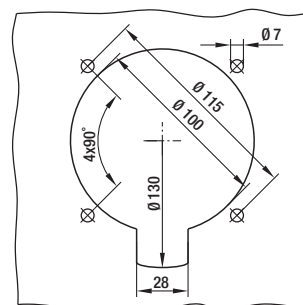
R6D 500-AK03 -01

13.0

63072-2-4013



Mounting dimensions



AC centrifugal fans

backward curved, 3-D, Ø 500

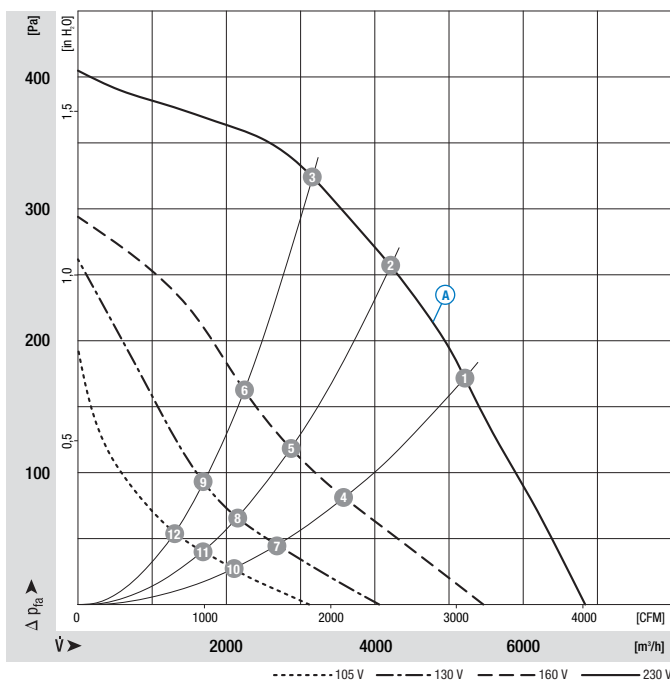


- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 9
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	°C	p. 127	
R6E 500	M6E 110-IA	Ⓐ 1~ 230	60	1020	0.76	3.33	12.0/450	-40 to +40	A2a)	

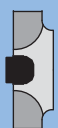
subject to alterations (1) Nominal data in operating point with maximum load

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	1040	0.72	3.18	72
Ⓐ 2	1020	0.76	3.33	66
Ⓐ 3	1040	0.72	3.17	69
Ⓐ 4	680	0.42	2.90	60
Ⓐ 5	650	0.42	2.90	57
Ⓐ 6	710	0.42	2.90	59
Ⓐ 7	520	0.28	2.40	53
Ⓐ 8	490	0.28	2.40	50
Ⓐ 9	530	0.28	2.40	52
Ⓐ 10	400	0.18	2.00	48
Ⓐ 11	390	0.18	2.00	45
Ⓐ 12	410	0.18	2.00	46

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Lateral
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

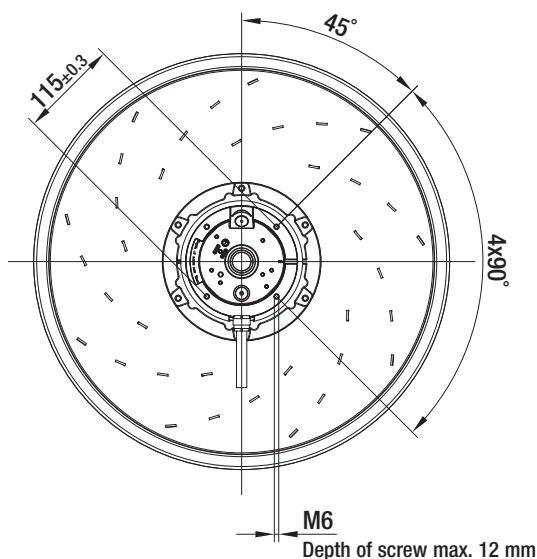
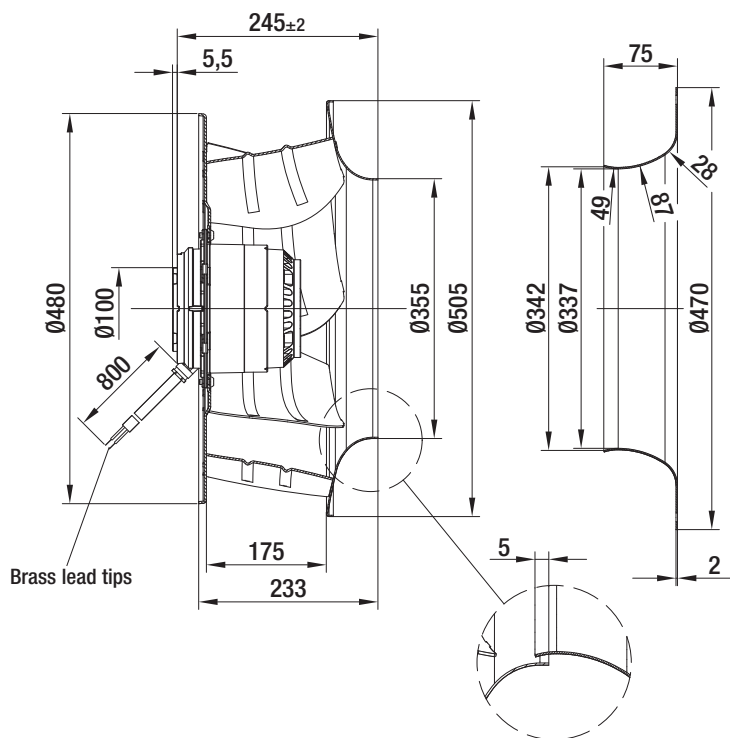
kg

Inlet nozzle (long)

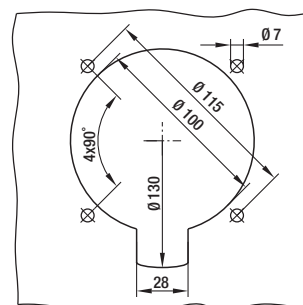
R6E 500-AH03 -01

14.8

63072-2-4013



Mounting dimensions



AC centrifugal fans

backward curved, 3-D, Ø 560



- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 9
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data

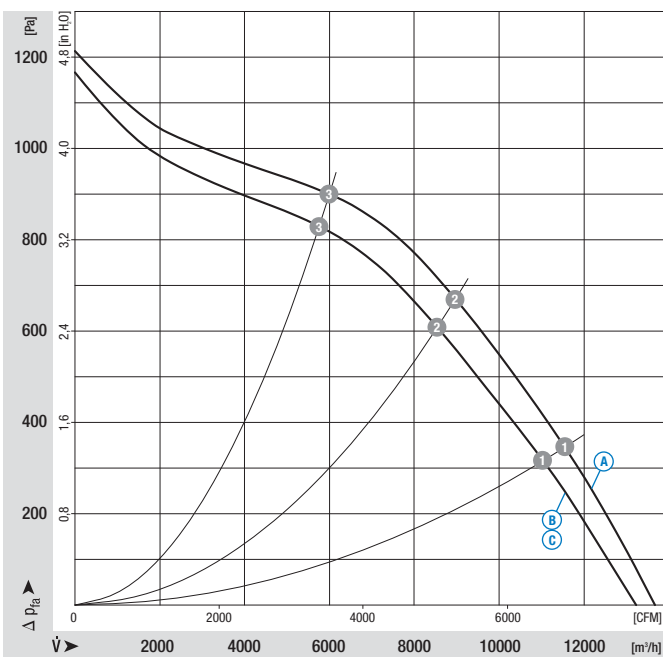
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amp. temp. °C	Electr. connection p. 127
R4D 560 ⁽²⁾	M4D 138-NA	A	3~ 480 Y	60	1610	3.80	5.85	—	-40 to +60	D1)/D2)
		B	3~ 400 Y	60	1520	3.50	6.05	—	-40 to +60	
		C	3~ 230 Δ	60	1520	3.50	10.46	—	-40 to +60	

subject to alterations

⁽¹⁾ Nominal data in operating point with maximum load

⁽²⁾ 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1630	3.50	5.49	88
A 2	1610	3.80	5.85	85
A 3	1630	3.40	5.34	86
B 1	1550	3.25	5.65	86
B 2	1520	3.50	6.05	84
B 3	1550	3.16	5.51	84
C 1	1550	3.25	9.79	86
C 2	1520	3.50	10.46	84
C 3	1550	3.16	9.54	84

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Lateral
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

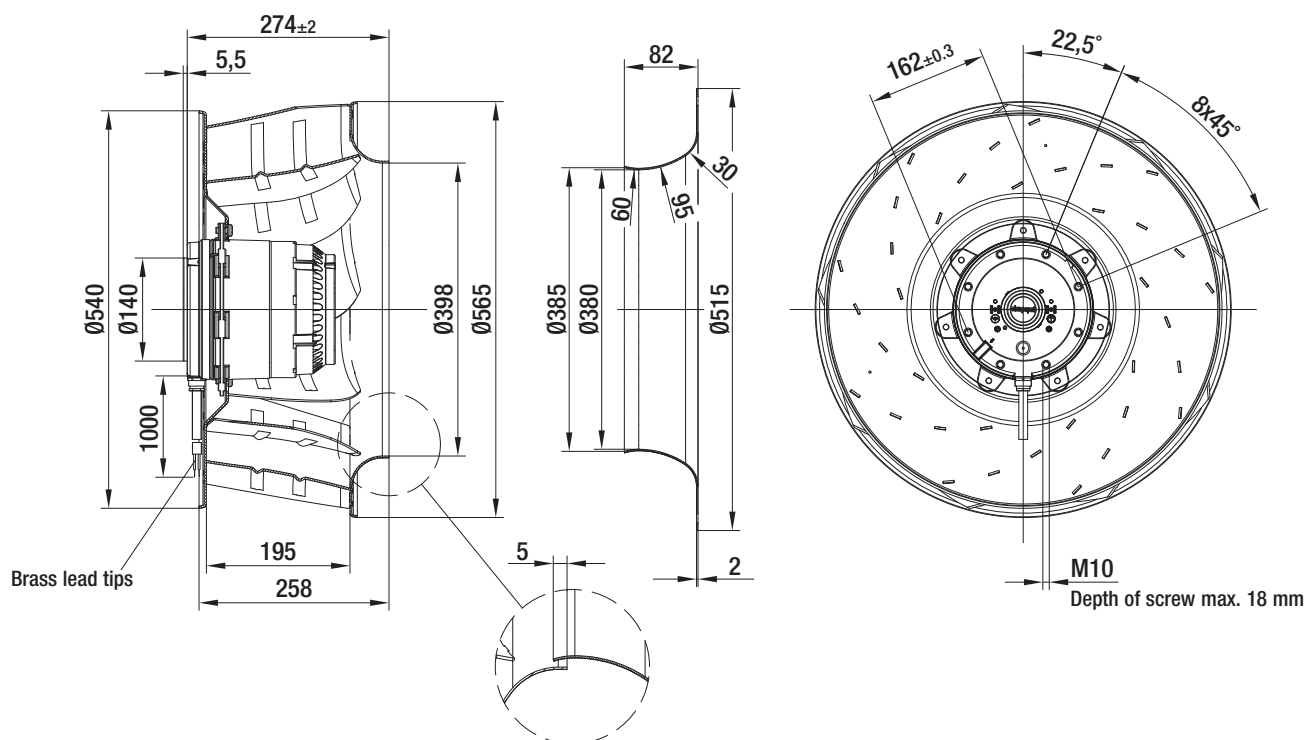
kg

Inlet nozzle (long)

R4D 560-AW03-01

29.0

63071-2-4013



Brass lead tips

AC centrifugal fans

backward curved, 3-D, Ø 560



- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 9
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data

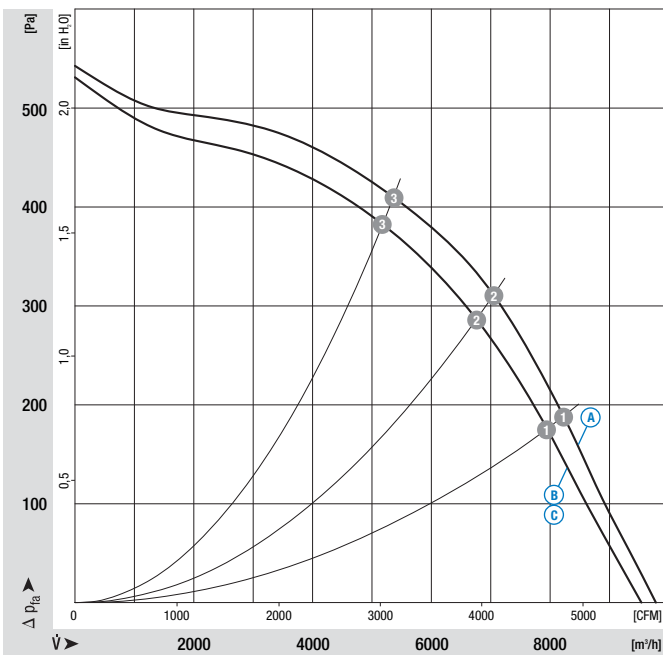
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amp. temp. °C	Electr. connection p. 127
R6D 560 ⁽²⁾	M6D 138-HF	A	3~ 480 Y	60	1100	1.33	2.55	—	-40 to +70	D1)/D2)
		B	3~ 400 Y	60	1050	1.22	2.40	—	-40 to +70	
		C	3~ 230 Δ	60	1050	1.22	4.15	—	-40 to +70	

subject to alterations

⁽¹⁾ Nominal data in operating point with maximum load

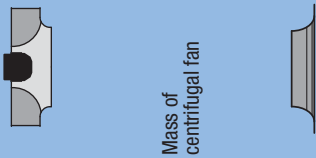
⁽²⁾ 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



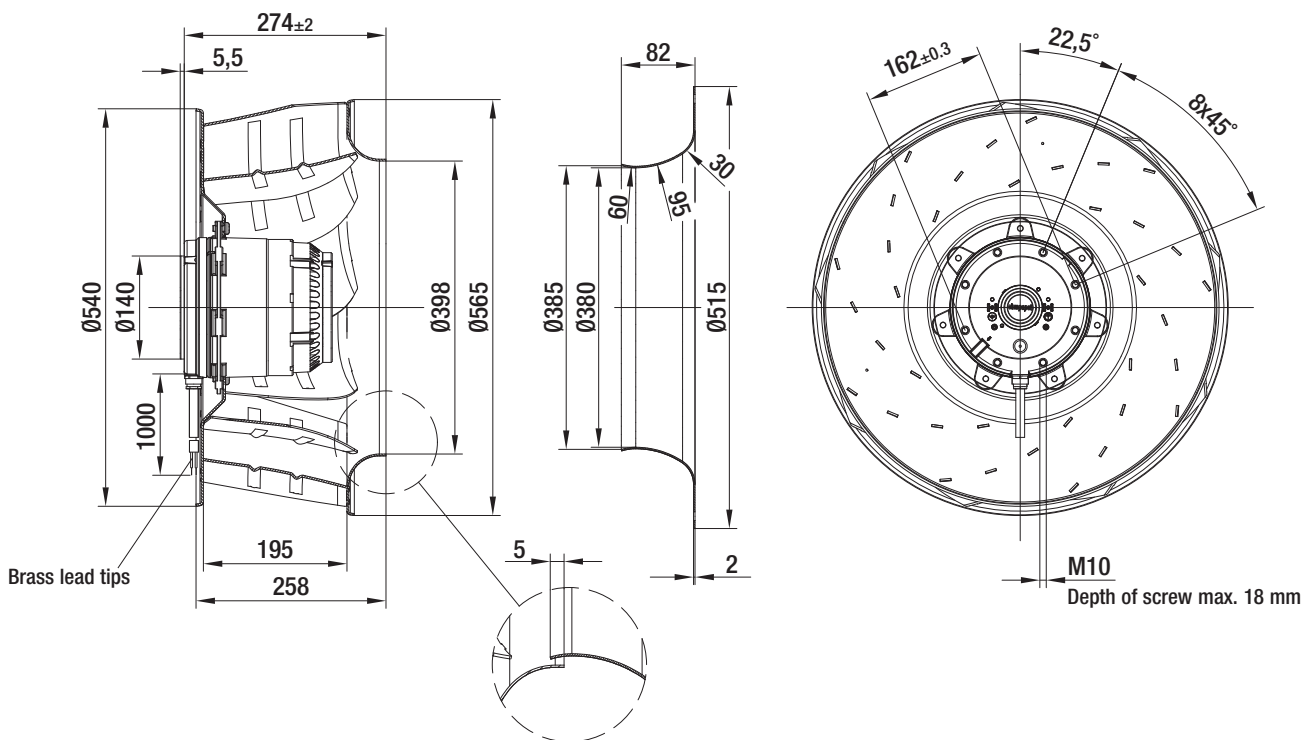
	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	1110	1.19	2.32	76
A 2	1100	1.33	2.55	75
A 3	1100	1.30	2.41	76
B 1	1080	1.09	2.20	75
B 2	1050	1.22	2.40	75
B 3	1060	1.19	2.34	75
C 1	1080	1.09	3.81	75
C 2	1050	1.22	4.15	75
C 3	1060	1.19	4.05	75

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Lateral
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan

Centrifugal fan	kg	Inlet nozzle (long)
R6D 560-AT03 -01	25.0	63071-2-4013



AC centrifugal fans

backward curved, 3-D, Ø 630



- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 9
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data

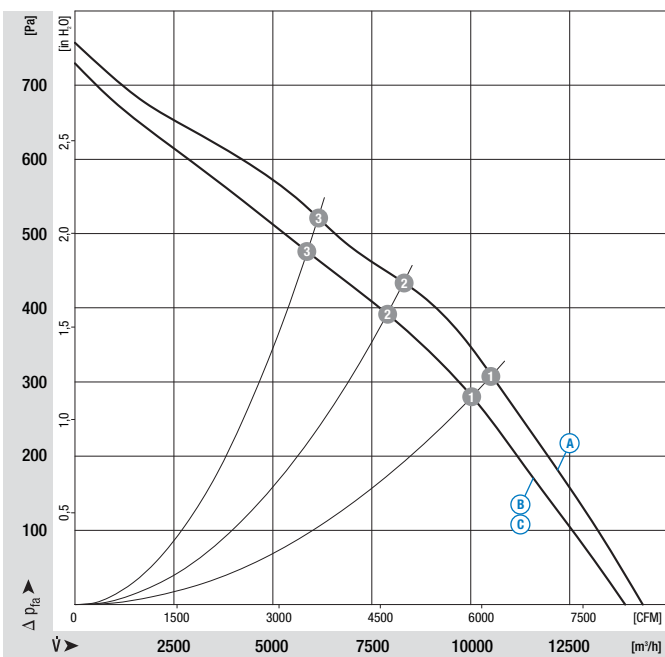
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amp. temp. °C	Electr. connection p. 127
R6D 630 ⁽²⁾	M6D 138-NA	Ⓐ	3~ 480 Y	60	1065	2.21	3.58	—	-40 to +50	D1)/D2)
		Ⓑ	3~ 400 Y	60	1000	2.00	3.72	—	-40 to +50	
		Ⓒ	3~ 230 Δ	60	1000	2.00	6.44	—	-40 to +50	

subject to alterations

⁽¹⁾ Nominal data in operating point with maximum load

⁽²⁾ 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



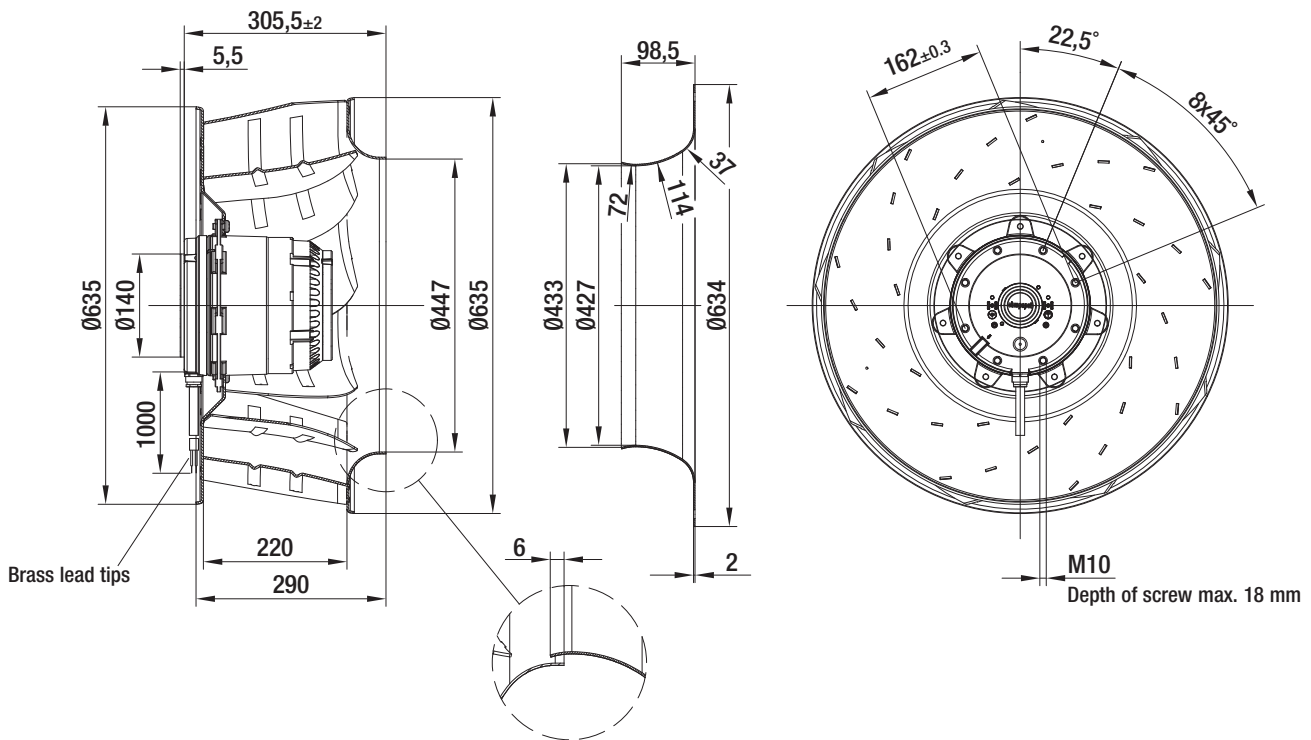
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓐ ①	1070	2.13	3.48	78
Ⓐ ②	1065	2.21	3.58	77
Ⓐ ③	1080	2.05	3.35	78
Ⓑ ①	1010	1.94	3.61	76
Ⓑ ②	1000	2.00	3.72	75
Ⓑ ③	1020	1.85	3.44	76
Ⓒ ①	1010	1.94	6.25	76
Ⓒ ②	1000	2.00	6.44	75
Ⓒ ③	1020	1.85	5.95	76

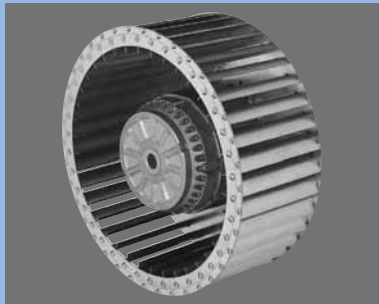
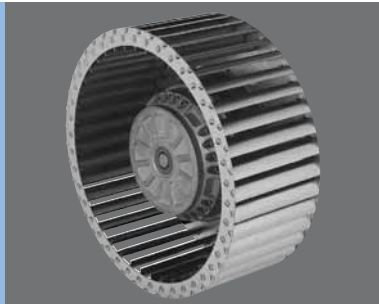
- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Lateral
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan

Centrifugal fan	kg	Inlet nozzle (long)
R6D 630-AW03-01	30.0	63070-2-4013



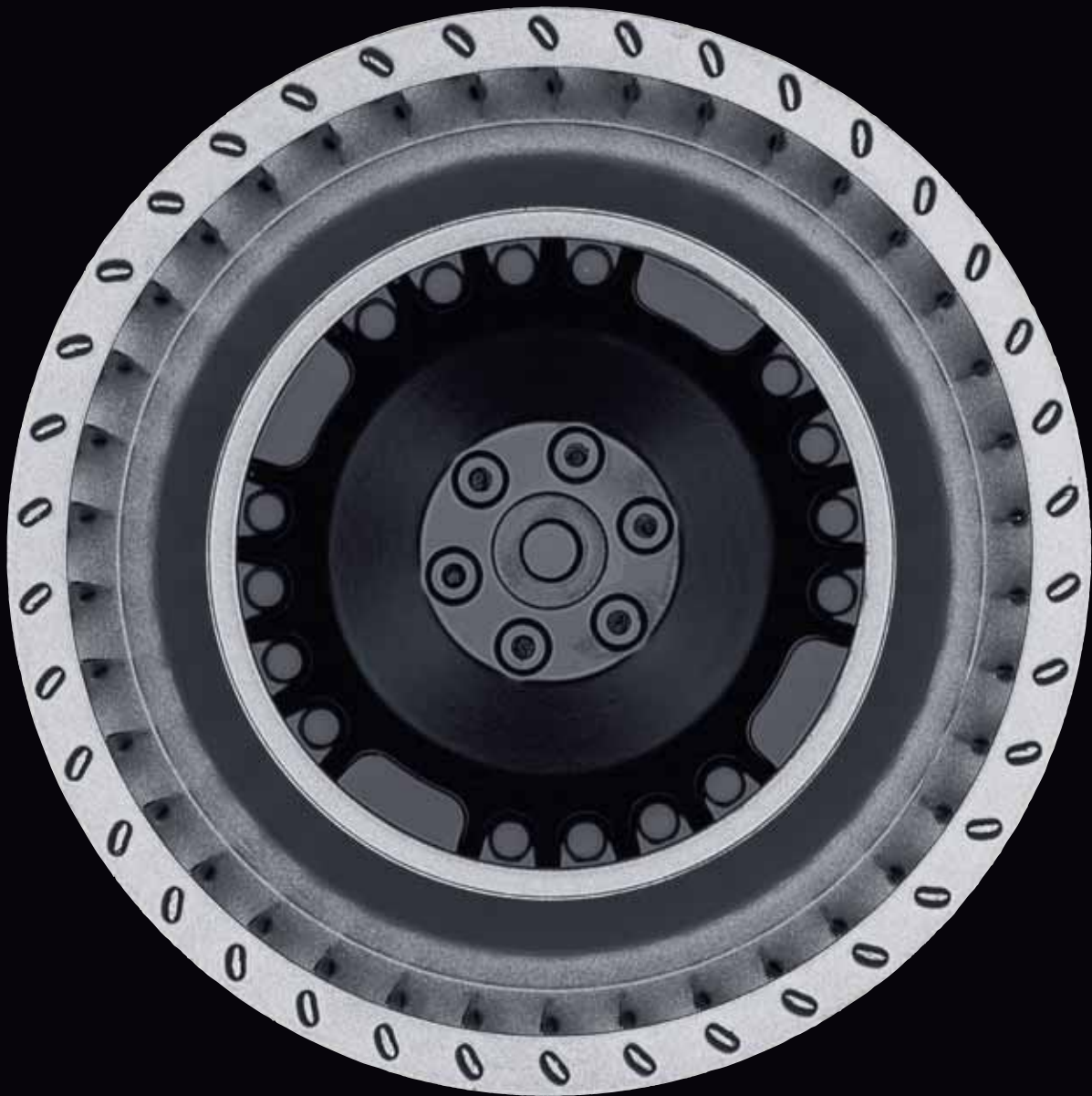


AC centrifugal fans, forward curved

AC centrifugal fans, forward curved, single inlet

Ø 250 - Ø 400

88



AC centrifugal fans

single inlet, Ø 250

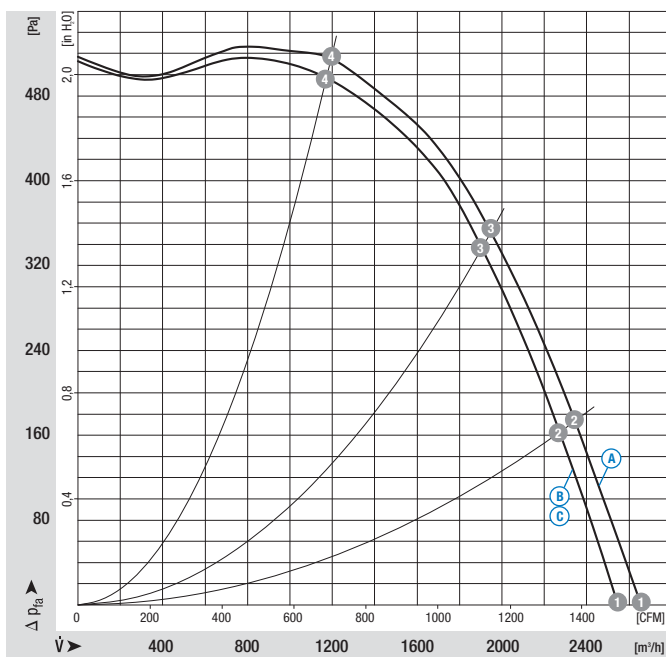


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R4D 250 ⁽²⁾	M4D 110-GF	A 3~ 480 Y	60	1650	1.24	1.95	—	0	-40 to +45	D1)/D2)	
		B 3~ 400 Y	60	1580	1.17	2.00	—	0	-40 to +45		
		C 3~ 230 Δ	60	1580	1.17	3.46	—	0	-40 to +45		

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves

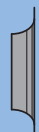


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1650	1.24	1.95	90
A 2	1680	1.04	1.75	88
A 3	1710	0.81	1.51	85
A 4	1750	0.50	1.26	80
B 1	1580	1.17	2.00	89
B 2	1620	0.98	1.76	86
B 3	1670	0.77	1.46	85
B 4	1730	0.47	1.08	80
C 1	1580	1.17	3.46	89
C 2	1620	0.98	3.05	86
C 3	1670	0.77	2.53	85
C 4	1730	0.47	1.87	80

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

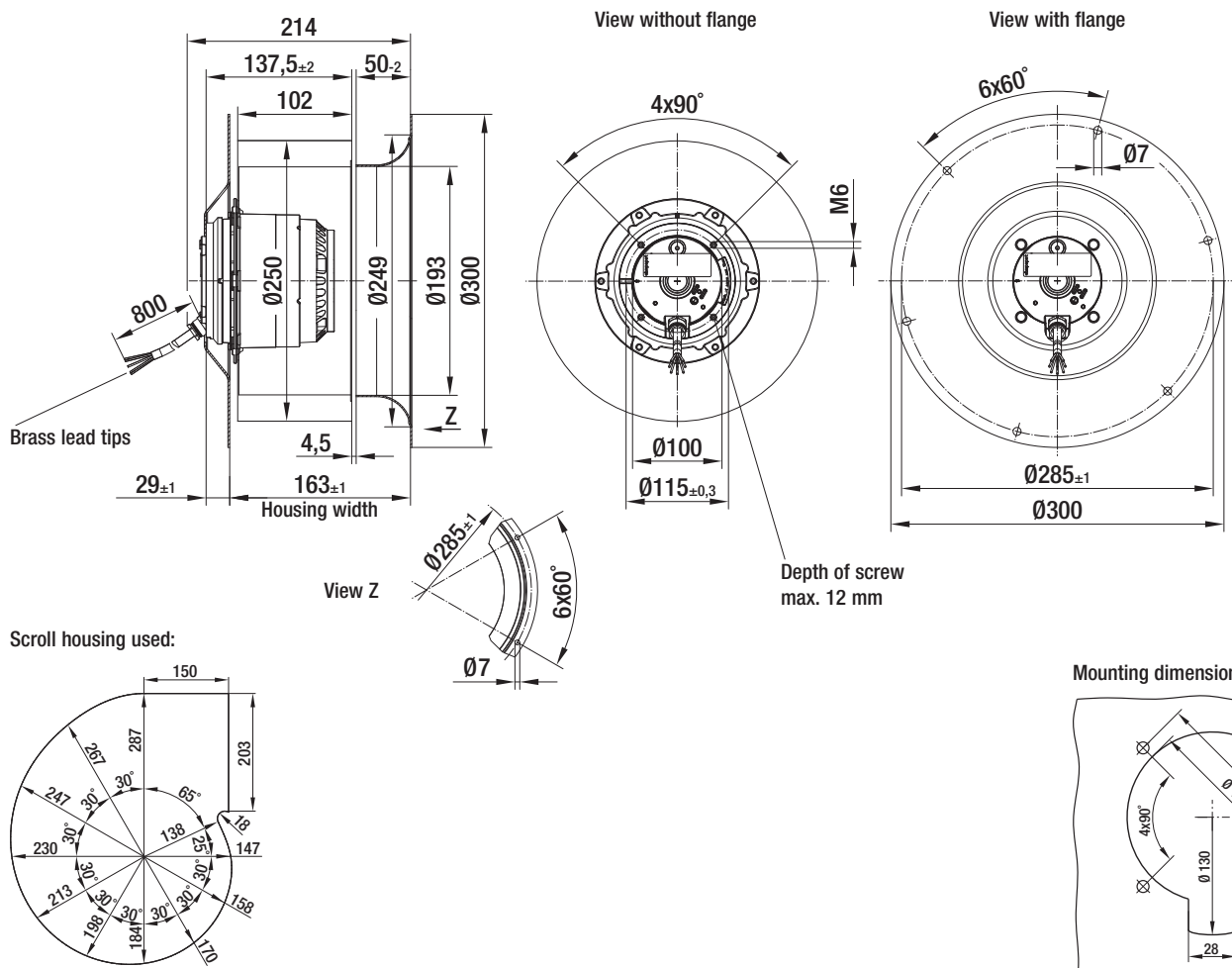
Flange

R4D 250-CG07 -01

12.0

25010-2-4013

94250-2-4017



AC centrifugal fans

single inlet, Ø 250

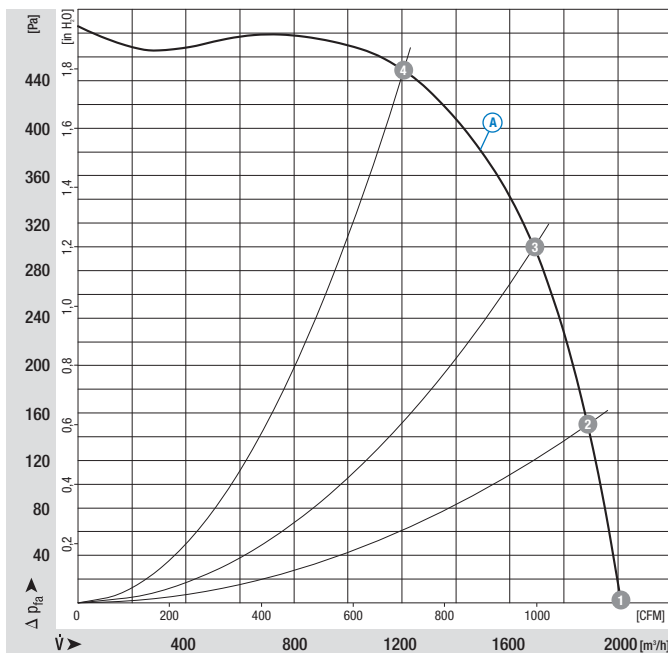


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R4E 250	M4E 110-GF	Ⓐ 1~ 230	60	1240	0.82	3.70	12.0/500	0	-40 to +60	A2a)	

subject to alterations (1) Nominal data in operating point with maximum load

Curves

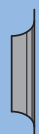


	n [rpm]	P1 [kW]	I [A]	LWA [dB(A)]
Ⓐ 1	1240	0.82	3.70	83
Ⓐ 2	1430	0.76	3.31	82
Ⓐ 3	1550	0.68	2.97	81
Ⓐ 4	1660	0.56	2.57	79

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

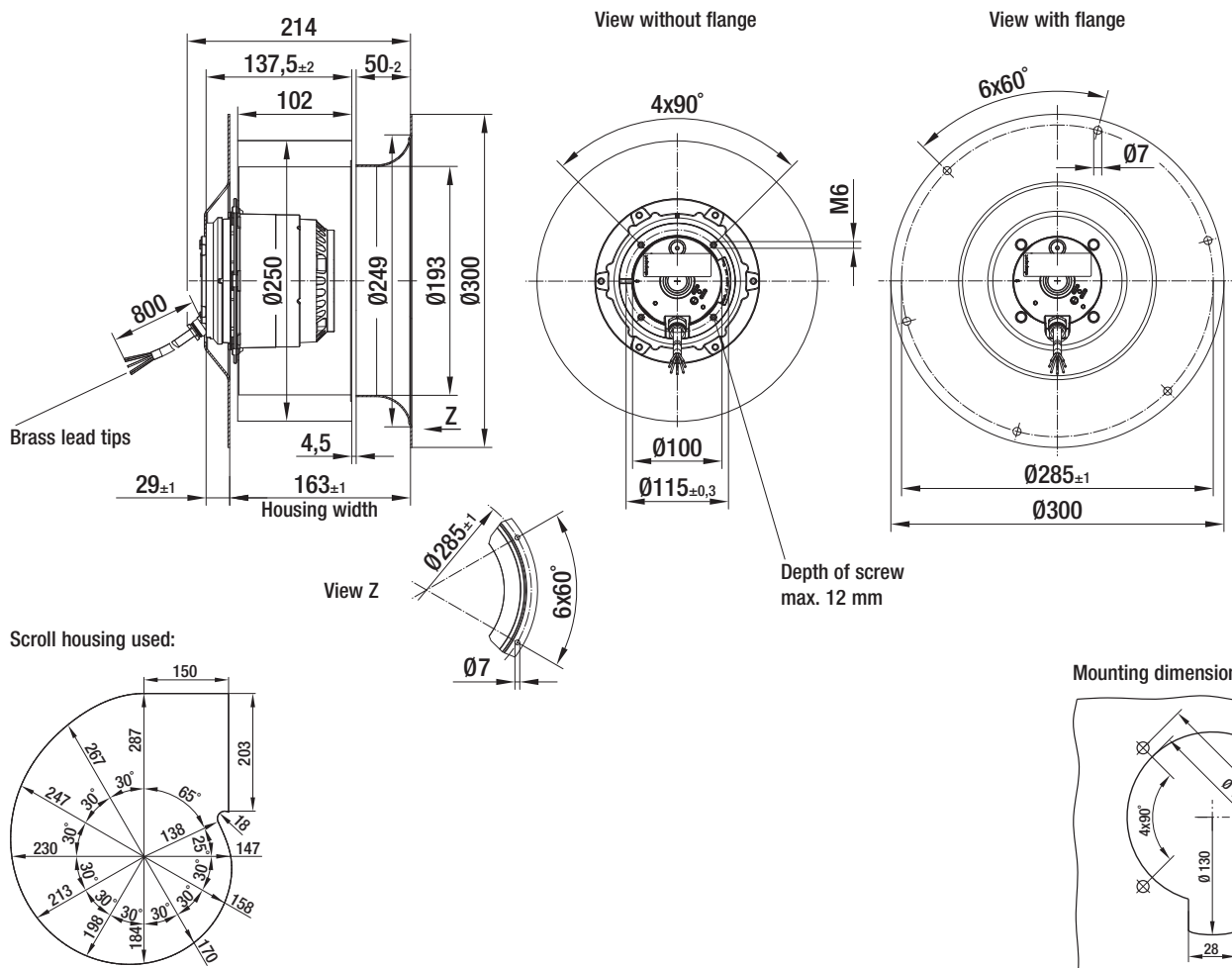
Flange

R4E 250-CG01 -01

12.0

25010-2-4013

94250-2-4017



AC centrifugal fans

single inlet, Ø 250

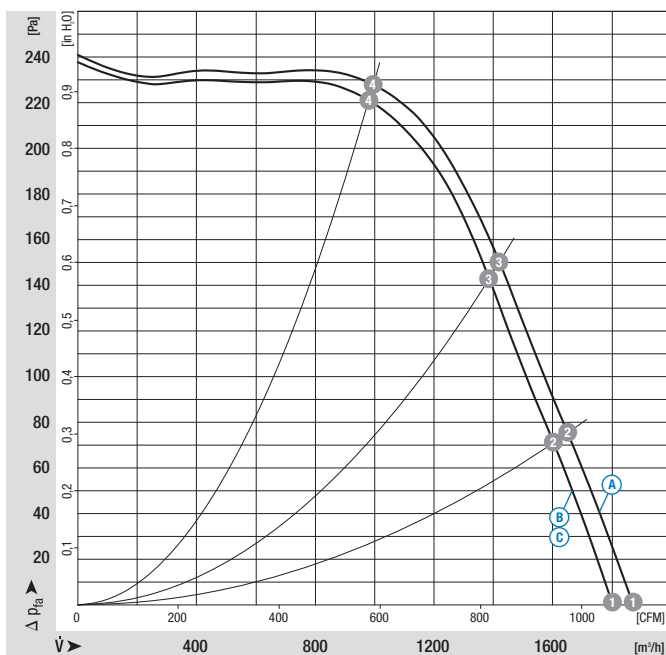


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R6D 250 ⁽²⁾	M6D 110-EF	A	3~ 480 Y	60	1100	0.42	0.80	—	0	-40 to +85	D1)/D2)
		B	3~ 400 Y	60	1060	0.38	0.76	—	0	-40 to +85	
		C	3~ 230 Δ	60	1060	0.38	1.32	—	0	-40 to +85	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves

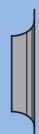


	n [rpm]	P1 [kW]	I [A]	LWA [dB(A)]
A 1	1100	0.42	0.80	81
A 2	1120	0.36	0.75	78
A 3	1140	0.31	0.72	75
A 4	1160	0.23	0.67	71
B 1	1060	0.38	0.76	80
B 2	1090	0.33	0.69	77
B 3	1110	0.28	0.63	74
B 4	1140	0.20	0.55	71
C 1	1060	0.38	1.32	80
C 2	1090	0.33	1.20	77
C 3	1110	0.28	1.10	74
C 4	1140	0.20	0.96	71

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

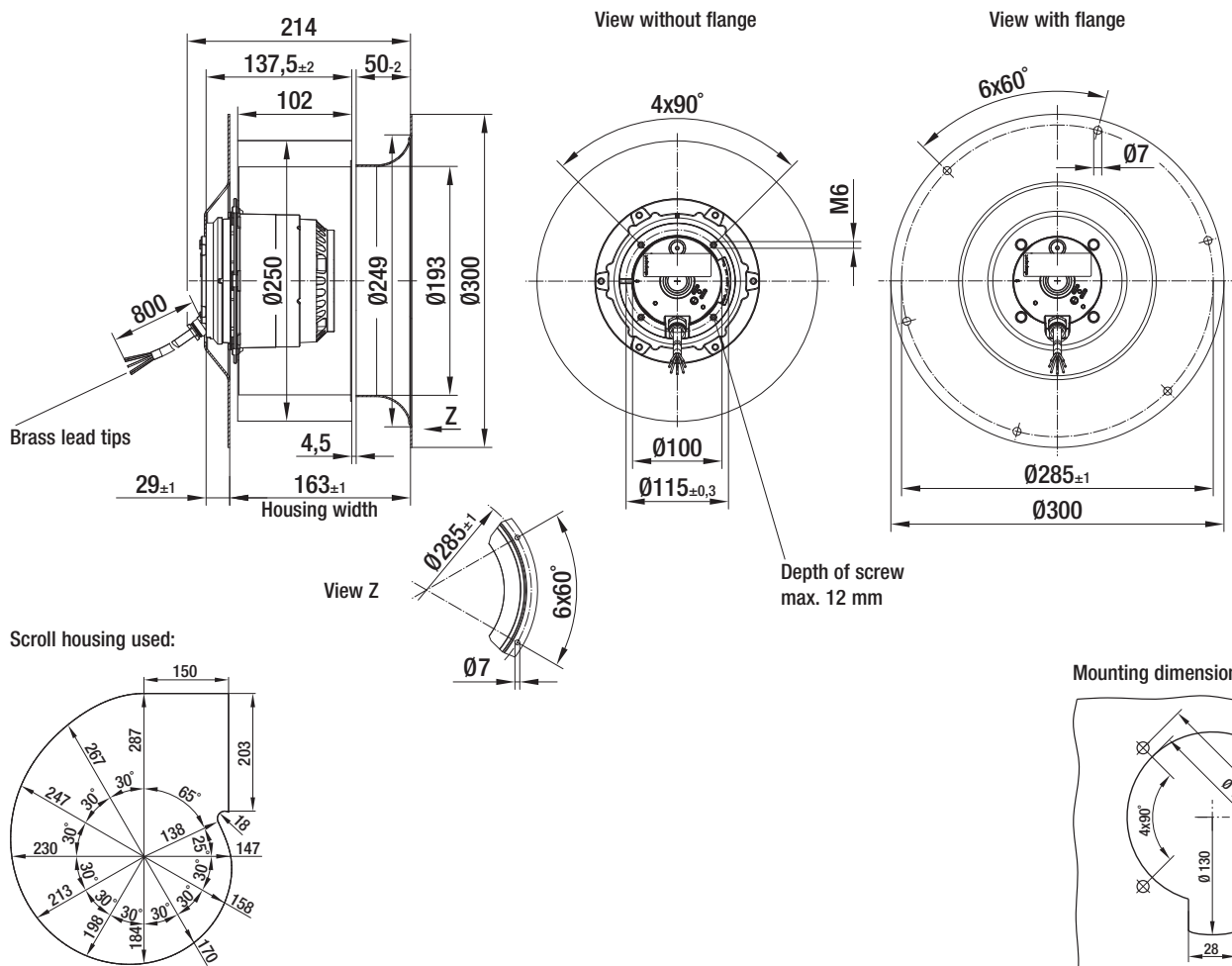
Flange

R6D 250-CE01 -01

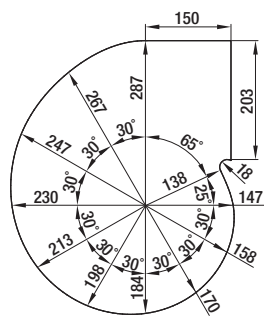
9.5

25010-2-4013

94250-2-4017



Scroll housing used:



AC centrifugal fans

single inlet, Ø 250

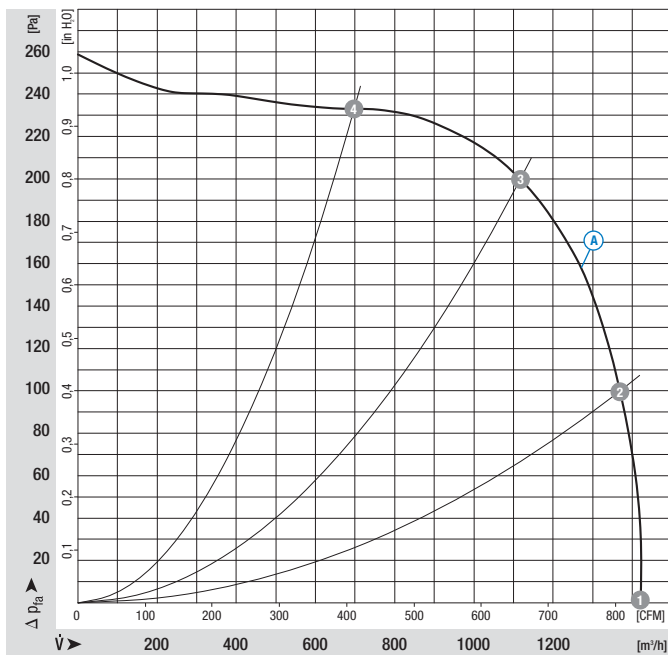


- **Material:** Impeller: Galvanised sheet steel
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R6E 250	M6E 094-FA	Ⓐ 1~ 230	60	780	0.31	1.37	6.0/450	0	-40 to +70	A2a)	

subject to alterations (1) Nominal data in operating point with maximum load

Curves

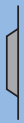
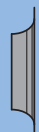


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	780	0.31	1.37	74
Ⓐ 2	970	0.28	1.23	74
Ⓐ 3	1080	0.25	1.07	72
Ⓐ 4	1130	0.21	0.91	69

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

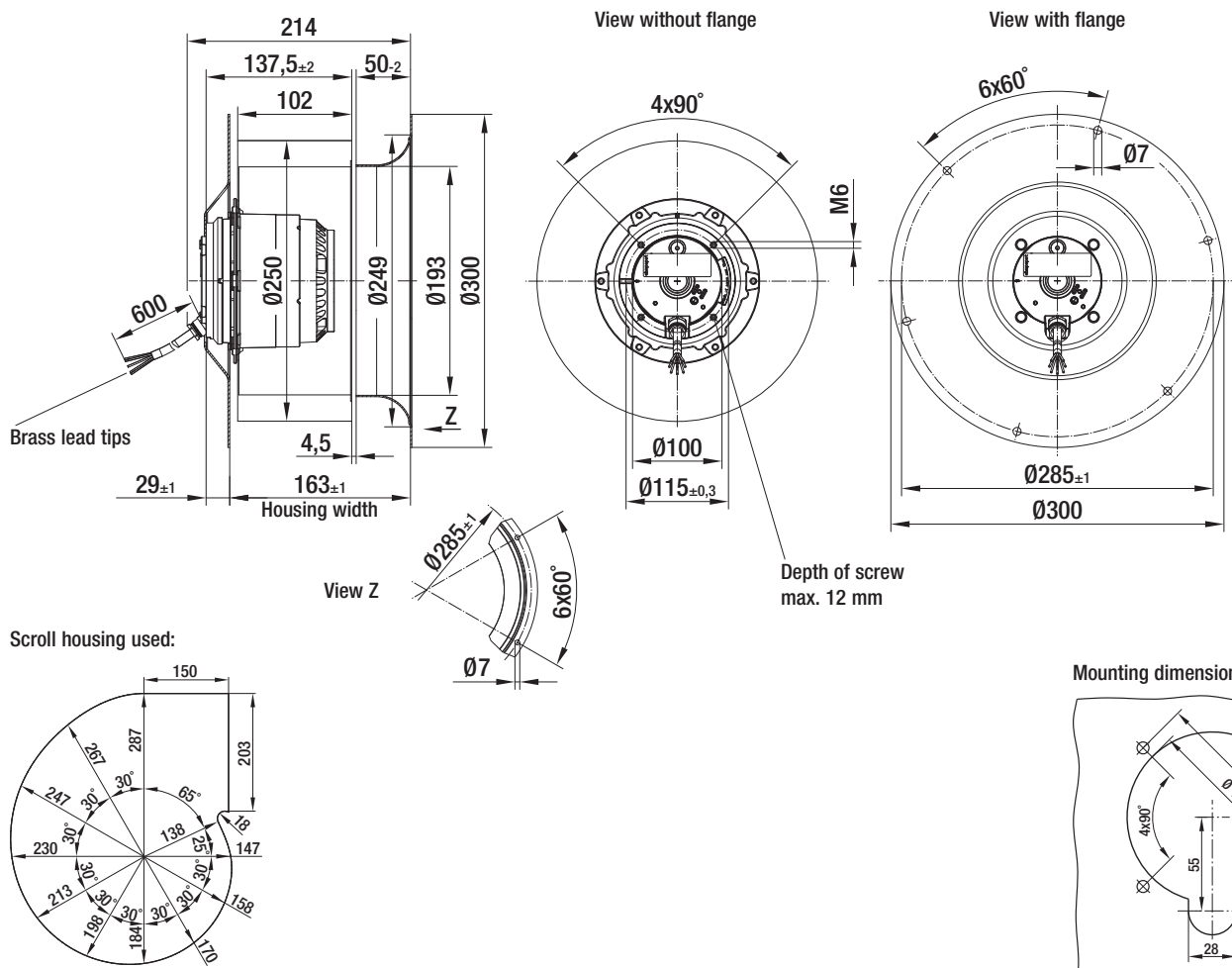
Flange

R6E 250-CA08 -01

7.0

25010-2-4013

94250-2-4017



AC centrifugal fans

single inlet, Ø 280

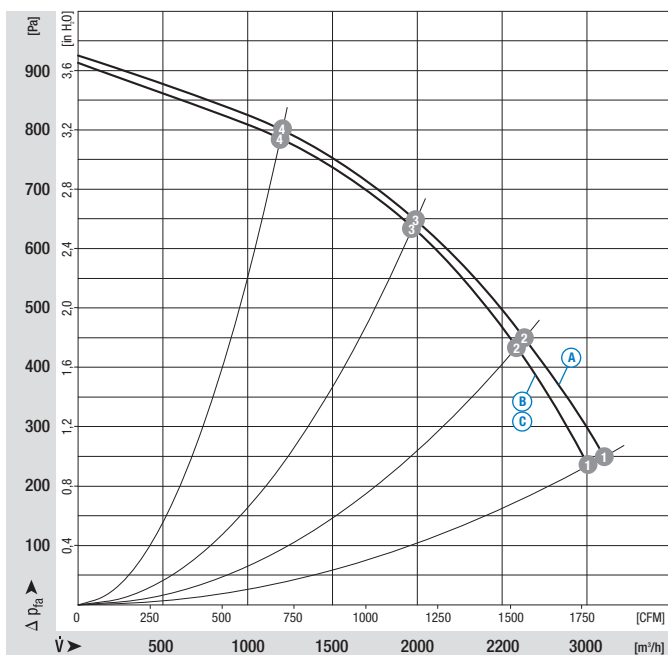


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R4D 280 ⁽²⁾	M4D 110-IA	A	3~ 480 Y	60	1590	1.80	2.96	—	250	-40 to +45	D1)/D2)
		B	3~ 400 Y	60	1500	1.63	2.90	—	235	-40 to +45	
		C	3~ 230 Δ	60	1500	1.63	5.05	—	235	-40 to +45	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	1590	1.80	2.96	89
A 2	1650	1.38	2.42	87
A 3	1700	1.02	2.06	85
A 4	1730	0.71	1.82	84
B 1	1500	1.63	2.90	88
B 2	1580	1.30	2.40	87
B 3	1650	0.98	1.93	85
B 4	1700	0.66	1.51	84
C 1	1500	1.63	5.05	88
C 2	1580	1.30	4.16	87
C 3	1650	0.98	3.35	85
C 4	1700	0.66	2.62	84

AC centrifugal fans

single inlet, Ø 280

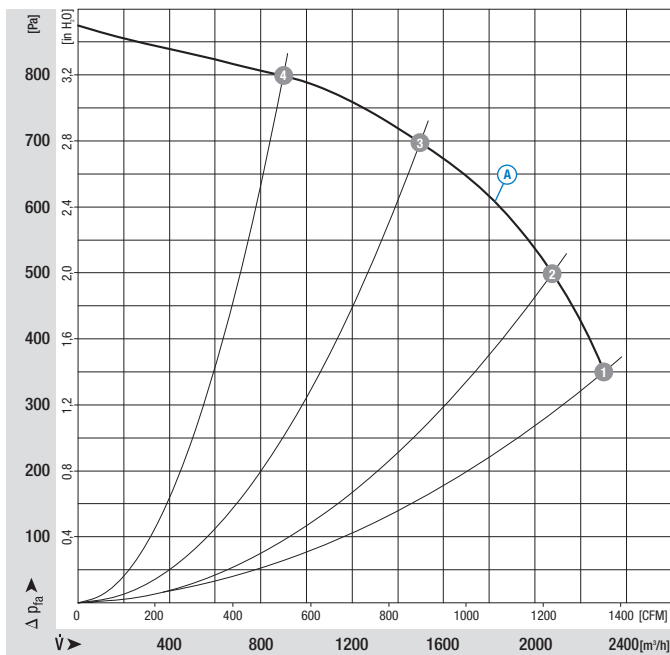


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R4E 280	M4E 110-IA	Ⓐ	1~ 230	60	1410	1.17	5.13	16.0/400	350	-40 to +45	A2a)

subject to alterations (1) Nominal data in operating point with maximum load

Curves

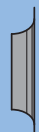


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	1410	1.17	5.13	84
Ⓐ 2	1510	1.09	4.72	84
Ⓐ 3	1630	0.92	4.00	83
Ⓐ 4	1690	0.78	3.52	84

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

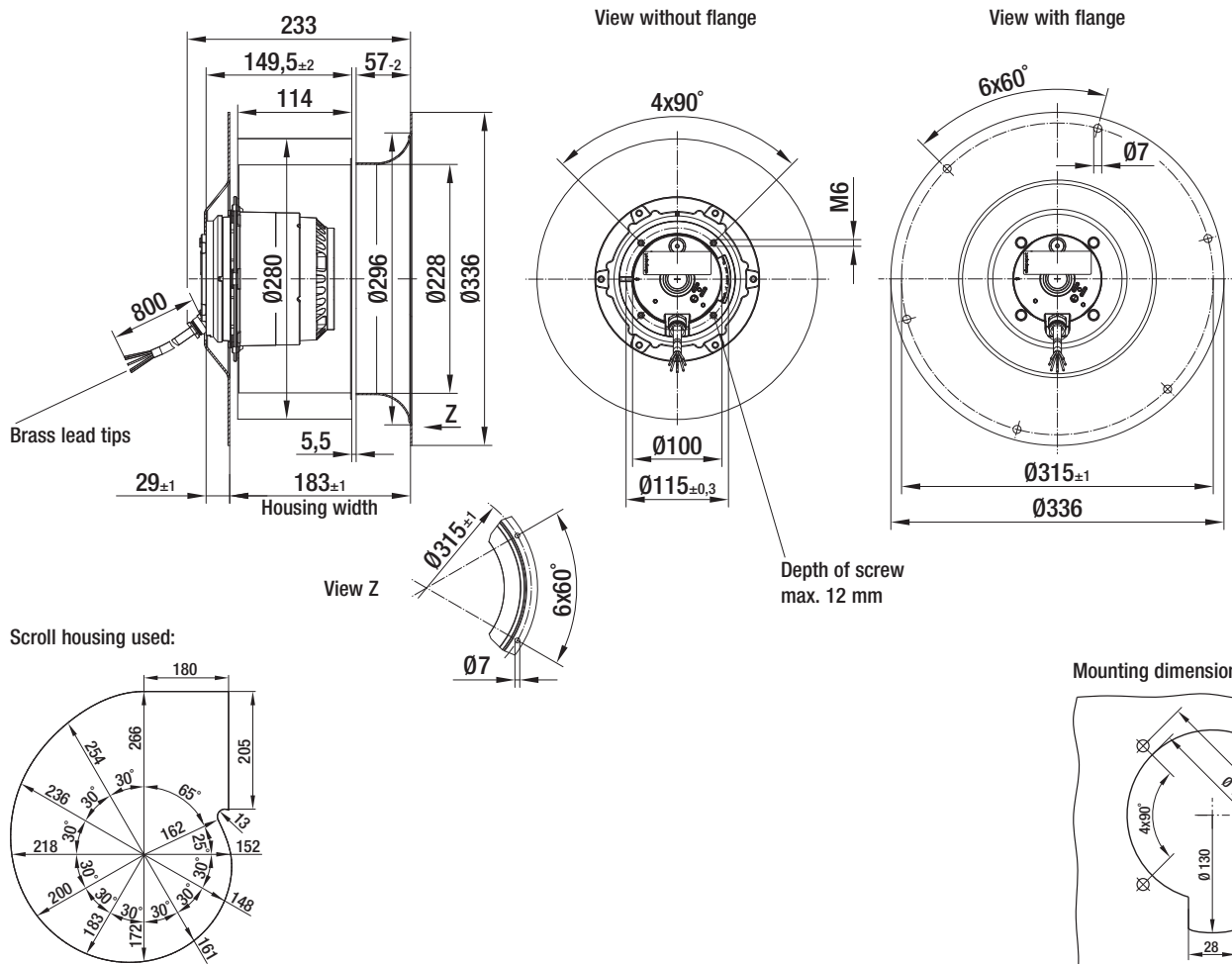
Flange

R4E 280-CI01 -01

14.5

28010-2-4013

10280-2-4017



AC centrifugal fans

single inlet, Ø 280

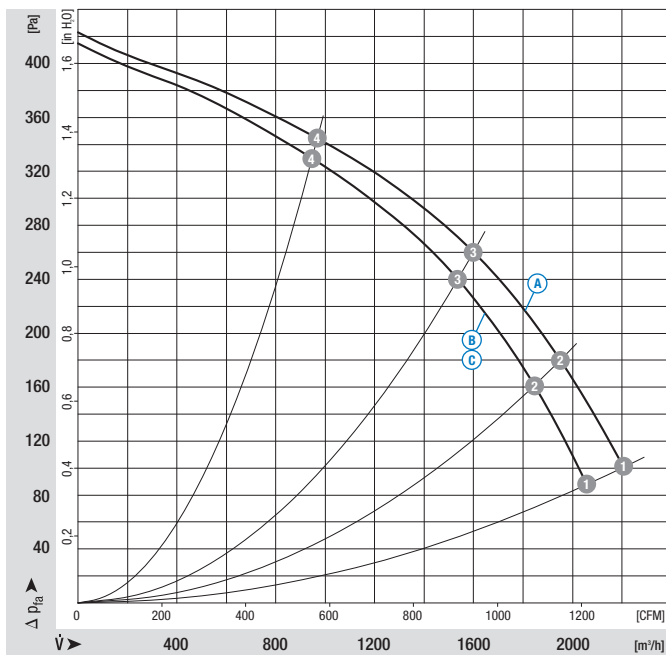


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R6D 280 ⁽²⁾	M6D 110-EF	A	3~ 480 Y	60	1040	0.60	1.00	—	100	-40 to +50	D1)/D2)
		B	3~ 400 Y	60	975	0.54	0.98	—	88	-40 to +50	
		C	3~ 230 Δ	60	975	0.54	1.70	—	88	-40 to +50	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1040	0.60	1.00	80
A 2	1070	0.52	0.88	78
A 3	1100	0.42	0.78	77
A 4	1140	0.28	0.68	74
B 1	975	0.54	0.98	78
B 2	1010	0.47	0.87	77
B 3	1060	0.38	0.74	76
B 4	1120	0.25	0.59	73
C 1	975	0.54	1.70	78
C 2	1010	0.47	1.51	77
C 3	1060	0.38	1.29	76
C 4	1120	0.25	1.03	73

AC centrifugal fans

single inlet, Ø 280

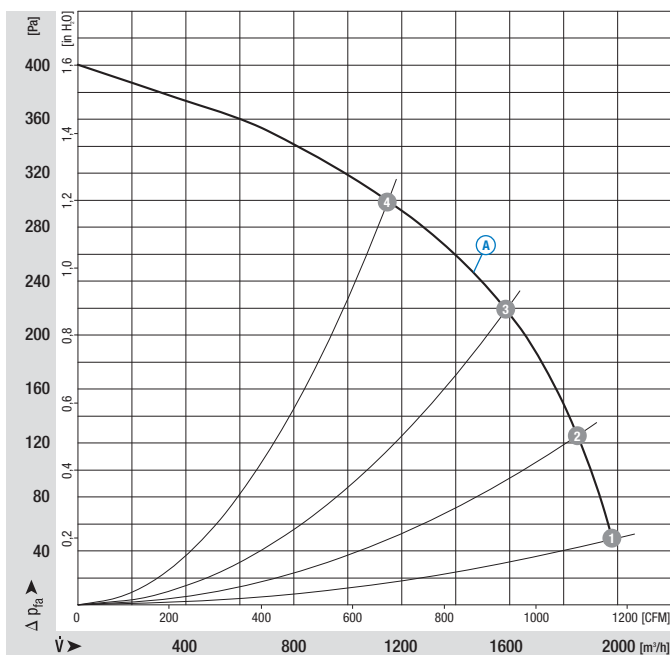


- **Material:** Impeller: Galvanised sheet steel
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R6E 280	M6E 094-HA	Ⓐ 1~ 230	60	880	0.52	2.27	12.0/500	50	-40 to +45	A2a)	

subject to alterations (1) Nominal data in operating point with maximum load

Curves

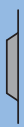
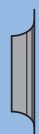


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	880	0.52	2.27	78
Ⓐ 2	950	0.50	2.18	77
Ⓐ 3	1030	0.46	2.03	75
Ⓐ 4	1090	0.41	1.80	73

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

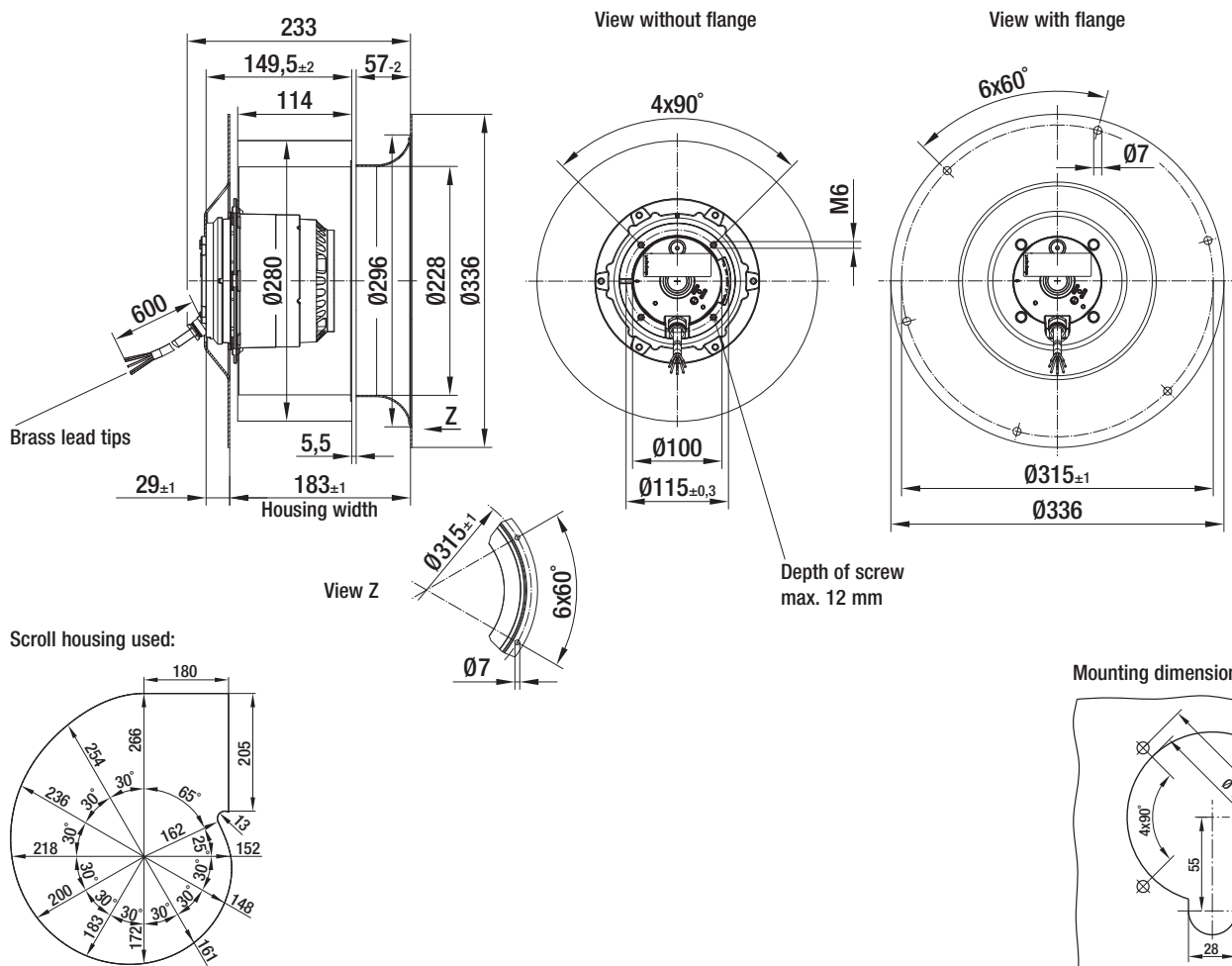
Flange

R6E 280-CC05 -01

9.5

28010-2-4013

10280-2-4017



AC centrifugal fans

single inlet, Ø 310

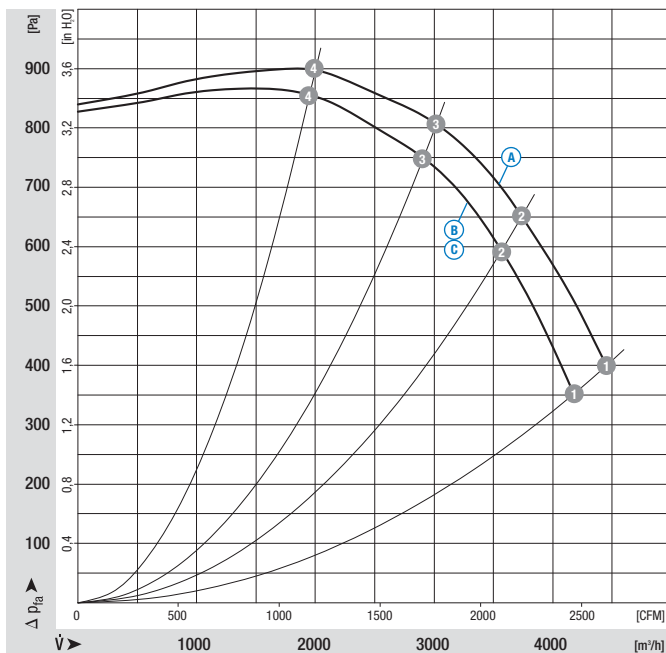


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R4D 310 ⁽²⁾	M4D 138-HF	A 3~ 480 Y	60	1590	2.75	3.98	—	400	-40 to +40	D1)/D2)	
		B 3~ 400 Y	60	1490	2.49	4.23	—	350	-40 to +40		
		C 3~ 230 Δ	60	1490	2.49	7.31	—	350	-40 to +40		

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	1590	2.75	3.98	92
A 2	1630	2.25	3.33	90
A 3	1675	1.78	2.77	88
A 4	1715	1.24	2.18	86
B 1	1490	2.49	4.23	91
B 2	1560	2.08	3.51	89
B 3	1615	1.67	2.88	86
B 4	1680	1.16	2.14	84
C 1	1490	2.49	7.31	91
C 2	1560	2.08	6.08	89
C 3	1615	1.67	4.99	86
C 4	1680	1.16	3.71	84

AC centrifugal fans

single inlet, Ø 310

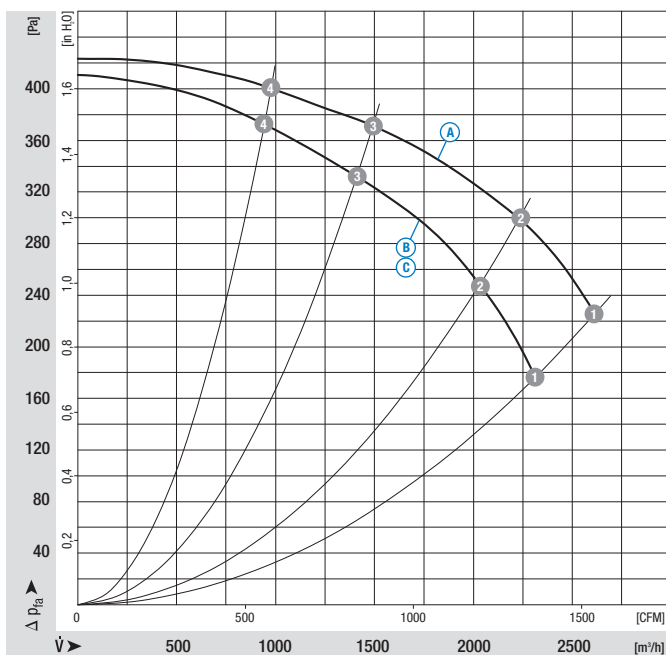


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R6D 310 ⁽²⁾	M6D 110-GF	A	3~ 480 Y	60	950	0.71	1.09	—	225	-40 to +40	D1)/D2)
		B	3~ 400 Y	60	845	0.60	1.10	—	175	-40 to +40	
		C	3~ 230 Δ	60	845	0.60	1.90	—	175	-40 to +40	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves

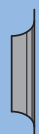


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	950	0.71	1.09	76
A 2	1005	0.60	0.94	75
A 3	1080	0.42	0.71	73
A 4	1120	0.31	0.60	74
B 1	845	0.60	1.10	73
B 2	915	0.53	0.97	73
B 3	1025	0.38	0.73	72
B 4	1085	0.29	0.58	73
C 1	845	0.60	1.90	73
C 2	915	0.53	1.68	73
C 3	1025	0.38	1.27	72
C 4	1085	0.29	1.01	73

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

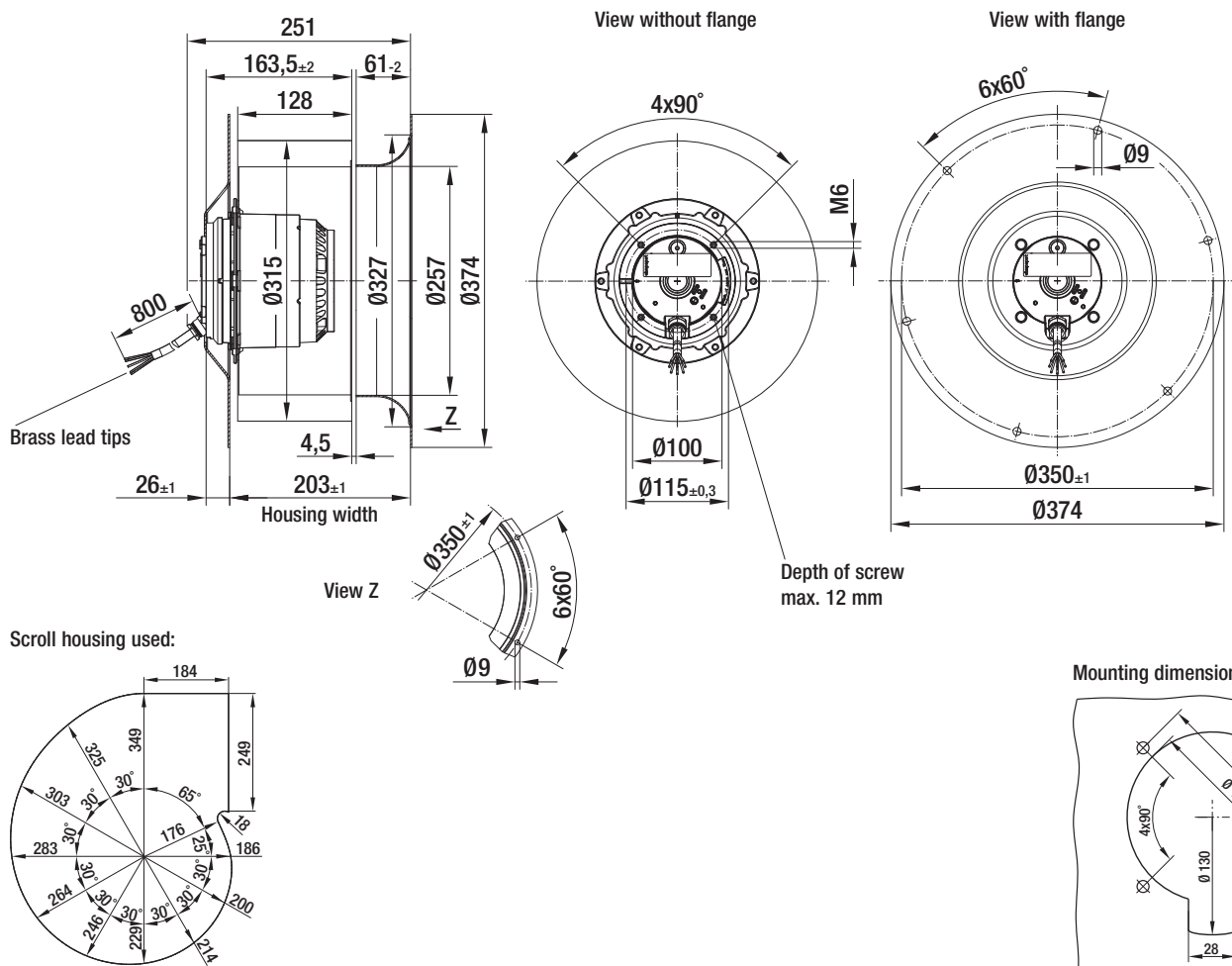
Flange

R6D 310-CG07 -01

12.5

31010-2-4013

10310-2-4017



AC centrifugal fans

single inlet, Ø 310

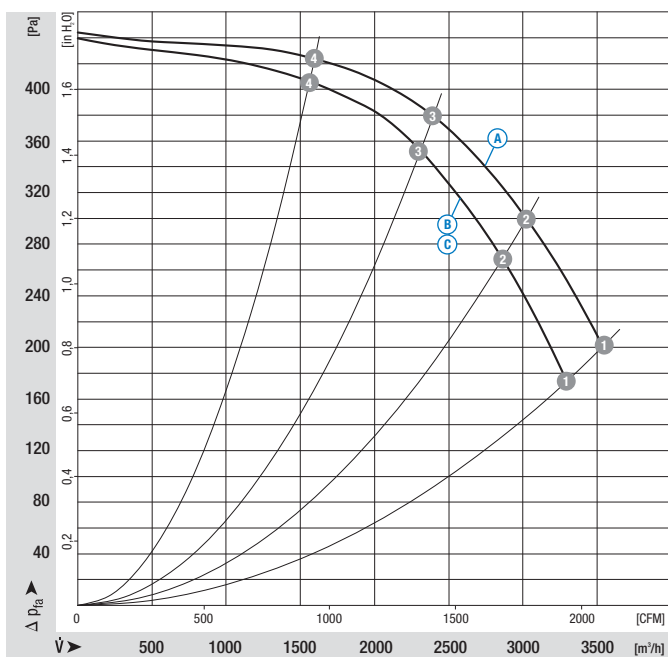


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R6D 310 ⁽²⁾	M6D 110-IA	A	3~ 480 Y	60	1050	1.11	1.91	—	200	-40 to +40	D1)/D2)
		B	3~ 400 Y	60	970	0.99	1.80	—	170	-40 to +40	
		C	3~ 230 Δ	60	970	0.99	3,12	—	170	-40 to +40	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves

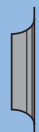


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1050	1,11	1,91	82
A 2	1080	0,92	1,70	80
A 3	1115	0,71	1,48	78
A 4	1145	0,51	1,32	76
B 1	970	0,99	1,80	80
B 2	1025	0,84	1,65	79
B 3	1075	0,65	1,37	77
B 4	1120	0,45	1,12	75
C 1	970	0,99	3,12	80
C 2	1025	0,84	2,86	79
C 3	1075	0,65	2,37	77
C 4	1120	0,45	1,94	75

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

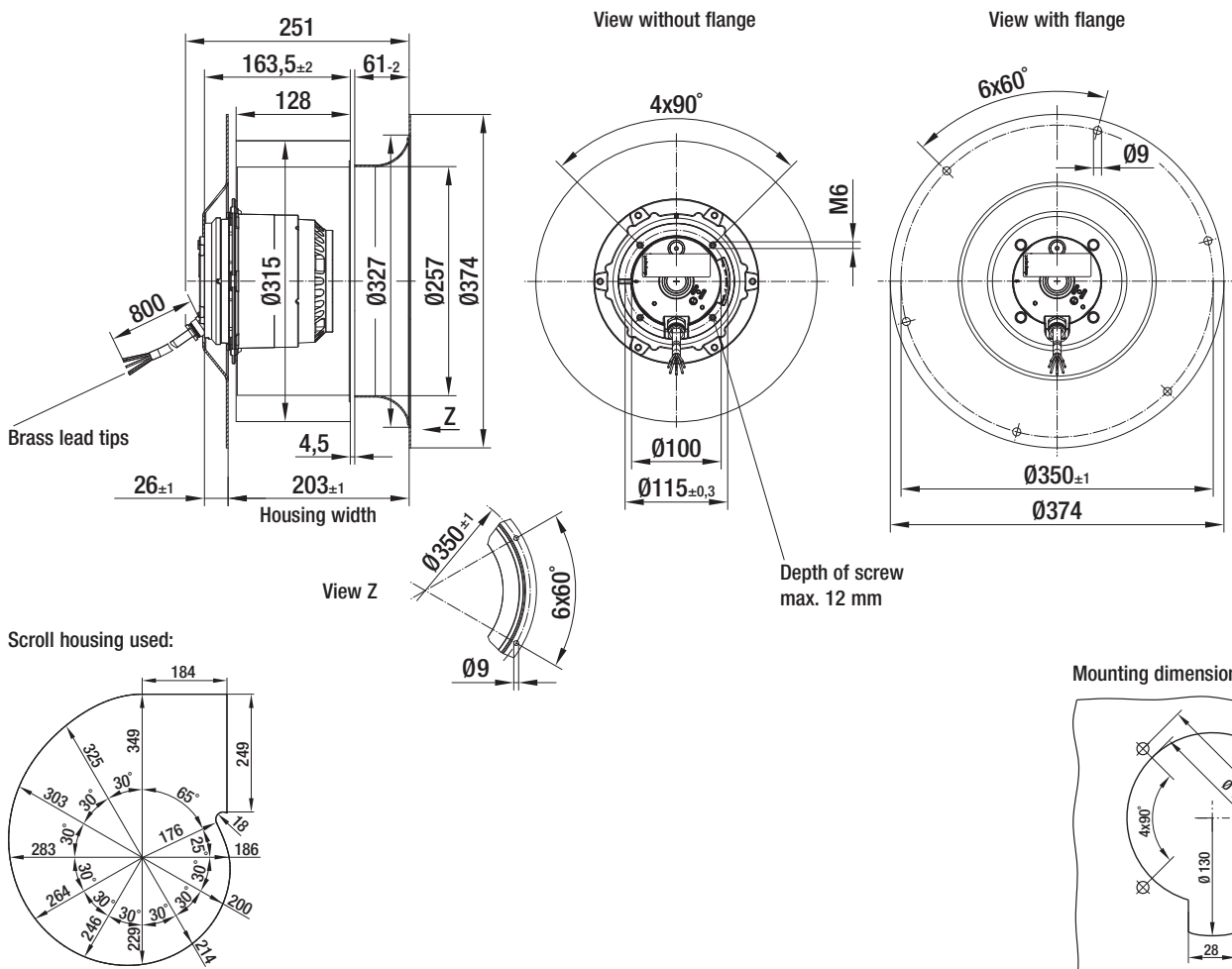
Flange

R6D 310-CI05 -01

15.0

31010-2-4013

10310-2-4017



AC centrifugal fans

single inlet, Ø 310

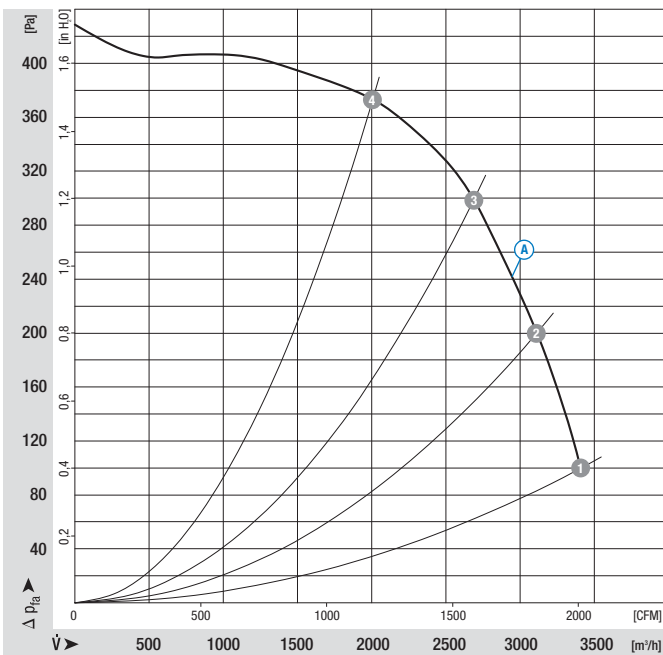


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R6E 310	M6E 110-IA	Ⓐ 1~ 230	60	950	1.00	4.47	16.0/500	100	-40 to +50	A2a)	

subject to alterations (1) Nominal data in operating point with maximum load

Curves

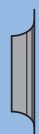


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	950	1.00	4.47	80
Ⓐ 2	1010	0.93	4.11	79
Ⓐ 3	1060	0.85	3.70	78
Ⓐ 4	1110	0.72	3.15	76

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

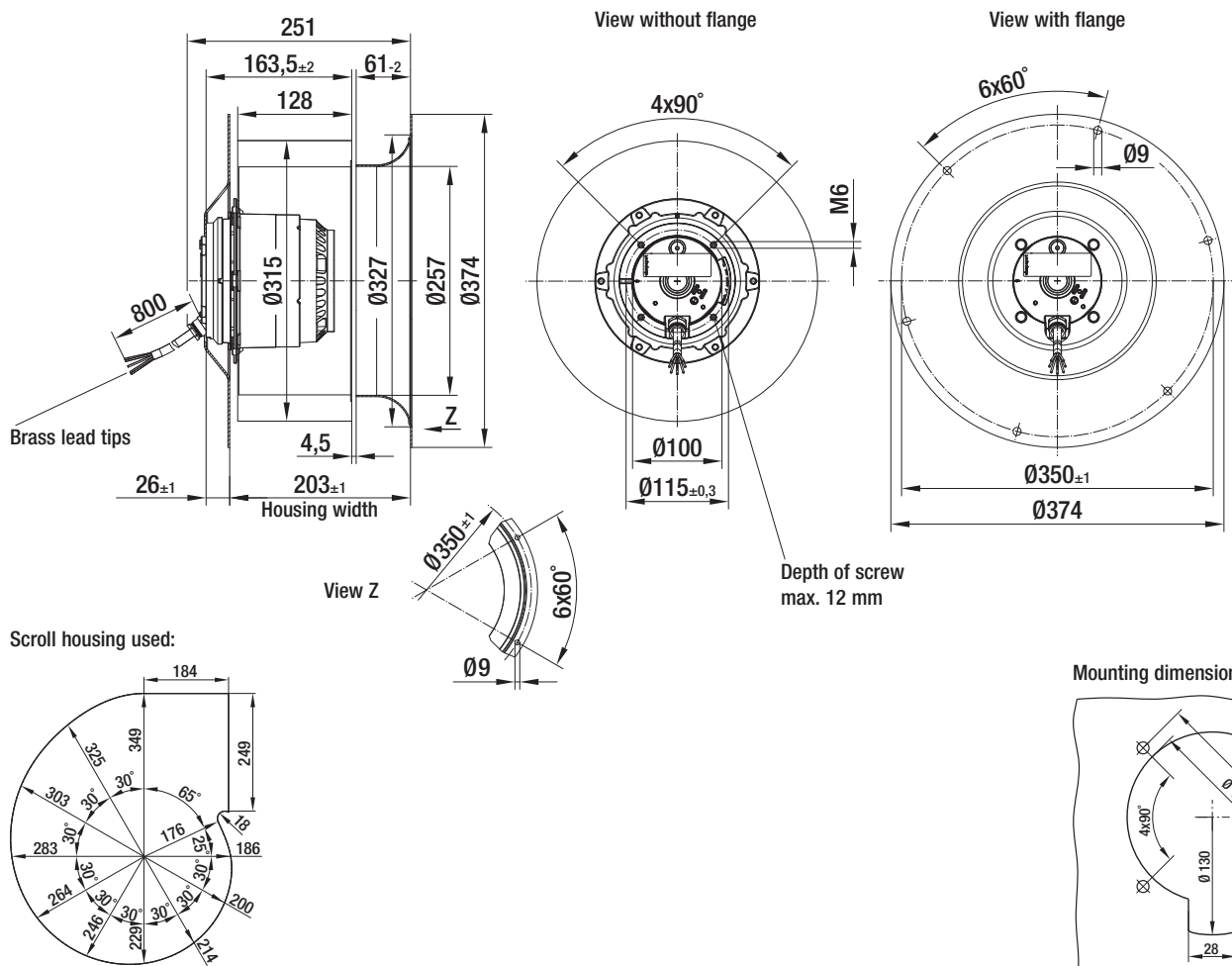
Flange

R6E 310-CI01 -01

15.0

31010-2-4013

10310-2-4017



AC centrifugal fans

single inlet, Ø 355

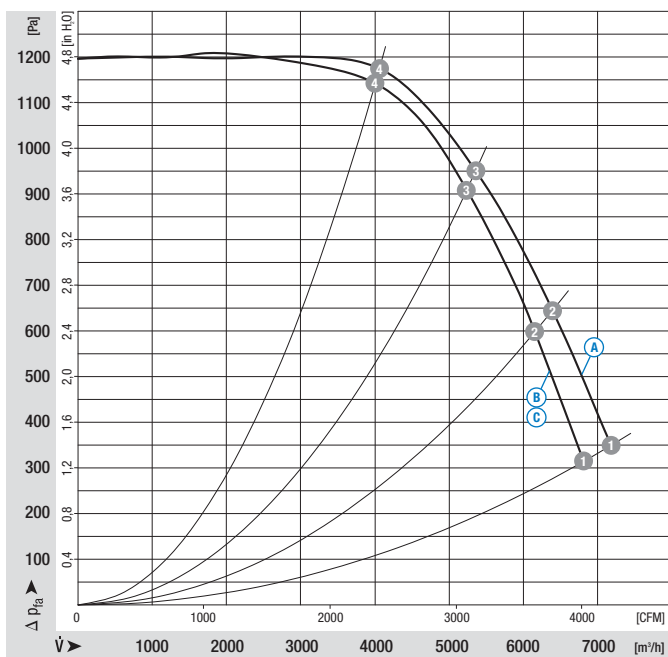


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 20 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R4D 355 ⁽²⁾	M4D 138-LA	A	3~ 480 Y	60	1550	6.00	9.00	—	350	-40 to +40	D1)/D2)
		B	3~ 400 Y	60	1430	5.30	9.80	—	305	-40 to +40	
		C	3~ 230 Δ	60	1430	5.30	16.95	—	305	-40 to +40	

subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves

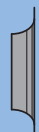


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1550	6.00	9.00	97
A 2	1600	5.18	7.90	95
A 3	1650	4.17	6.54	93
A 4	1700	3.08	5.21	90
B 1	1430	5.30	9.80	95
B 2	1500	4.84	8.70	94
B 3	1570	3.92	7.04	92
B 4	1650	2.90	5.34	90
C 1	1430	5.30	16.95	95
C 2	1500	4.84	15.07	94
C 3	1570	3.92	12.20	92
C 4	1650	2.90	9.25	90

- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Lateral
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

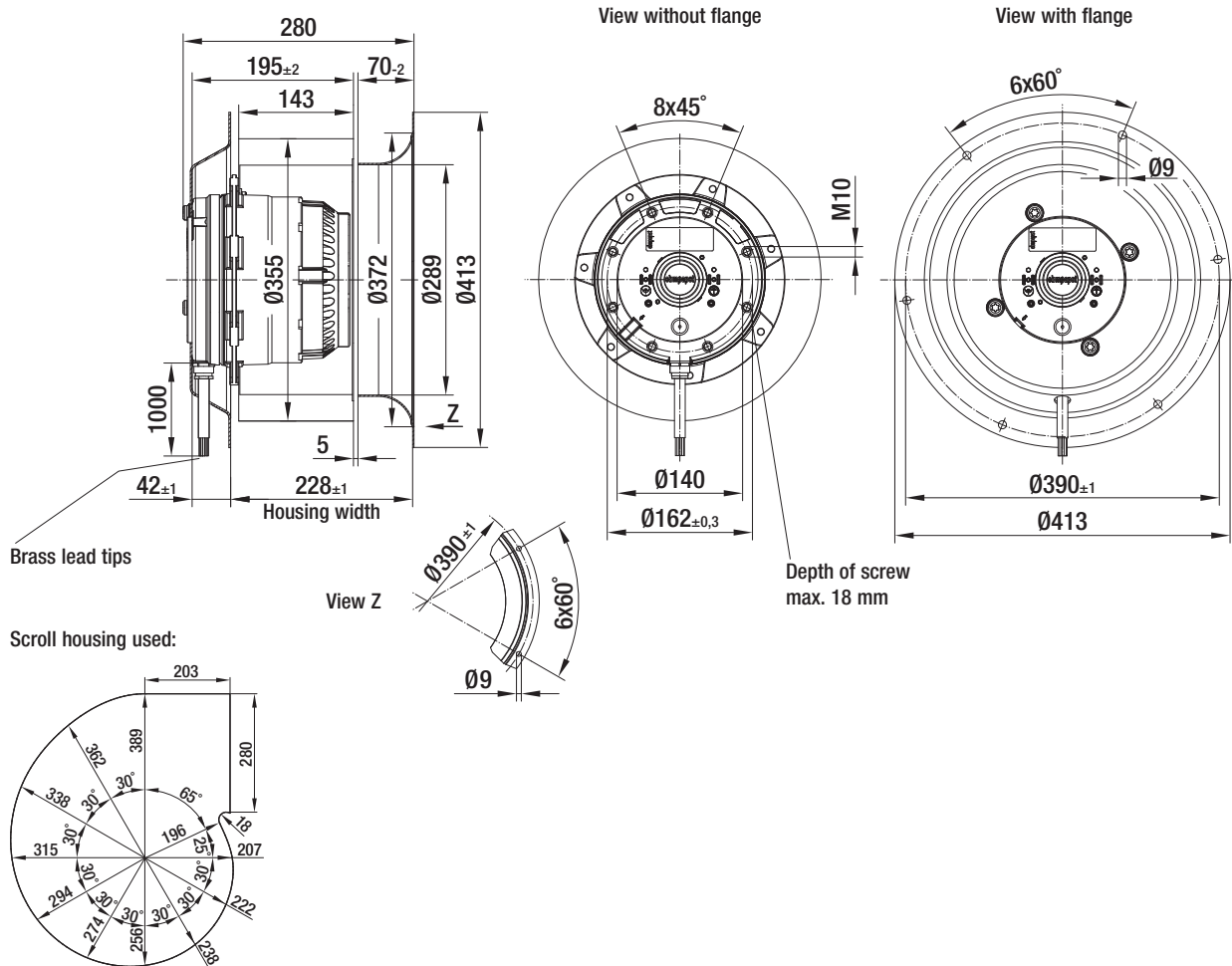
Flange

R4D 355-CM15-01

28.0

35510-2-4013

38355-2-4017



AC centrifugal fans

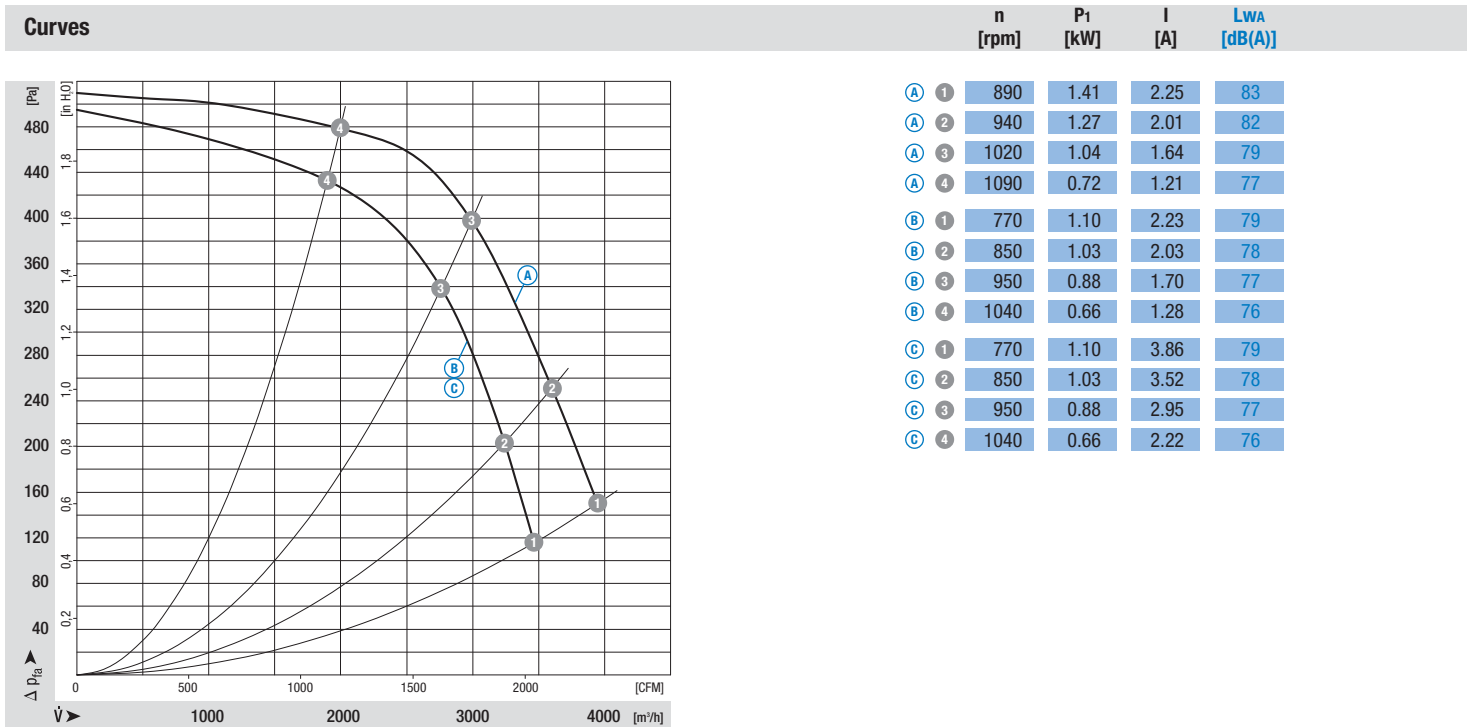
single inlet, Ø 355



- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **Condensate discharge holes:** Rotor-side
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage	Frequency	Speed ⁽¹⁾	Max. power input ⁽¹⁾	Max. current draw ⁽¹⁾	Capacitor	Min. back pressure	Perm. amp. temp.	Electr. connection
Type	Motor	VAC	Hz	rpm	kW	A	µF/VDB	Pa	°C	p. 127	
R6D 355 ⁽²⁾	M6D 138-HF	A 3~ 480 Y	60	890	1.41	2.25	—	150	-40 to +45	D1)/D2)	
		B 3~ 400 Y	60	770	1.10	2.23	—	115	-40 to +45		
		C 3~ 230 Δ	60	770	1.10	3.86	—	115	-40 to +45		

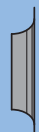
subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y



- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Diagonal
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan



Centrifugal fan

kg

Inlet nozzle

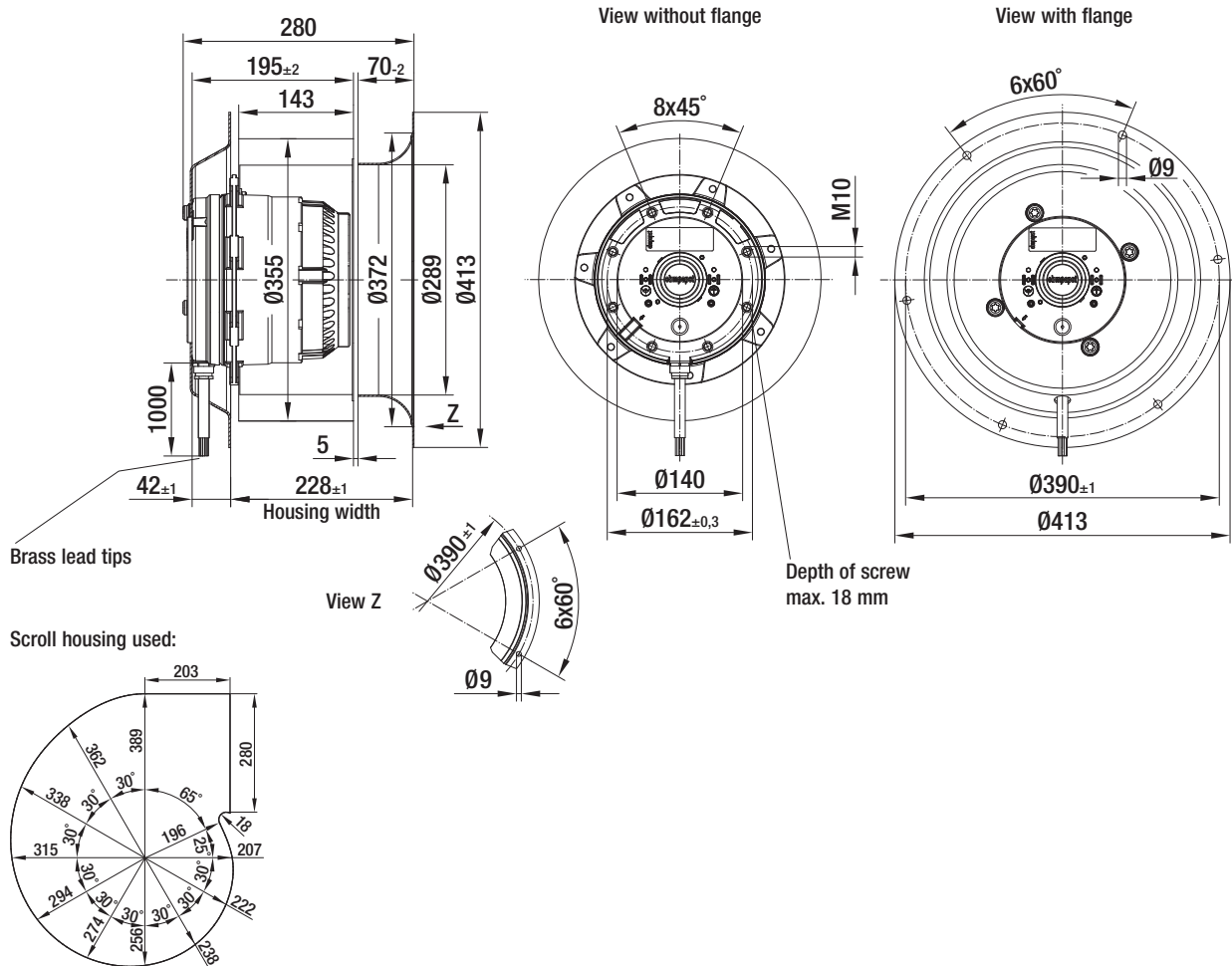
Flange

R6D 355-CK05 -01

25.0

35510-2-4013

38355-2-4017



AC centrifugal fans

single inlet, Ø 400



- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 20 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom
- **Condensate discharges:** None
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data

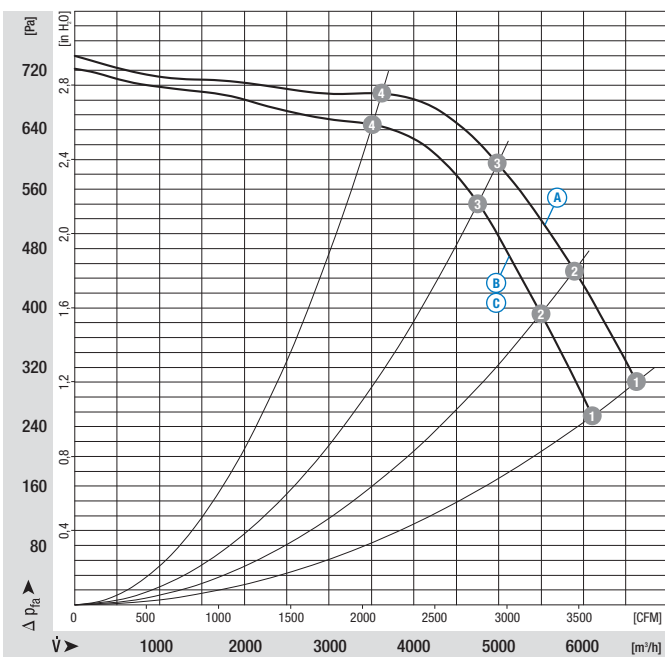
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Min. back pressure Pa	Perm. amp. temp. °C	Electr. connection p. 127
R6D 400 ⁽²⁾	M6D 138-LA	A	3~ 480 Y	60	1030	2.94	4.90	—	300	-40 to +60	D1)/D2)
		B	3~ 400 Y	60	950	2.58	5.15	—	255	-40 to +60	
		C	3~ 230 Δ	60	950	2.58	8.90	—	255	-40 to +60	

subject to alterations

⁽¹⁾ Nominal data in operating point with maximum load

⁽²⁾ 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves

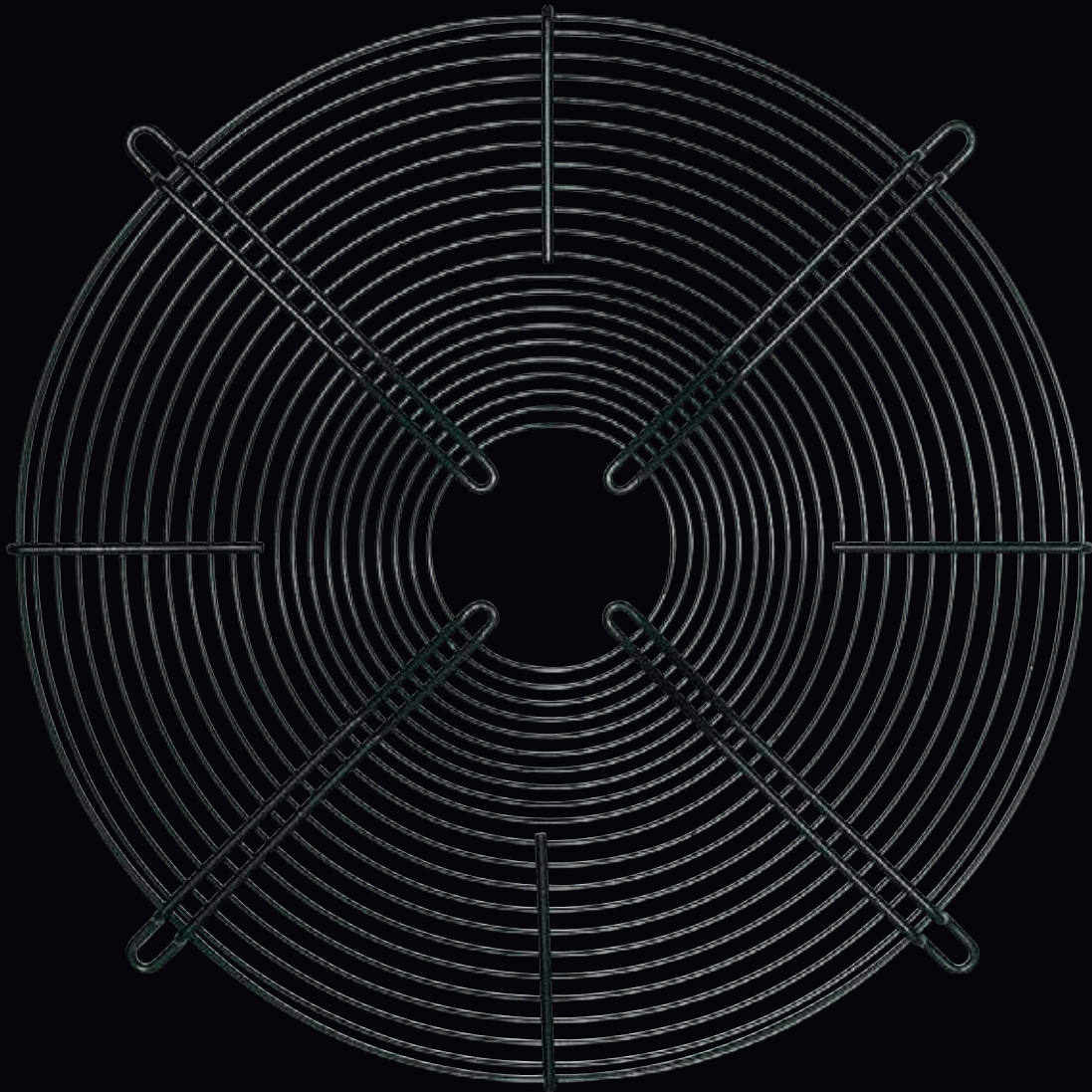


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1030	2.94	4.90	89
A 2	1060	2.58	4.55	88
A 3	1090	2.12	3.95	85
A 4	1130	1.54	3.31	83
B 1	950	2.58	5.15	87
B 2	990	2.30	4.60	85
B 3	1040	1.94	3.95	84
B 4	1090	1.43	3.12	82
C 1	950	2.58	8.90	87
C 2	990	2.30	7.97	85
C 3	1040	1.94	6.85	84
C 4	1090	1.43	5.41	82



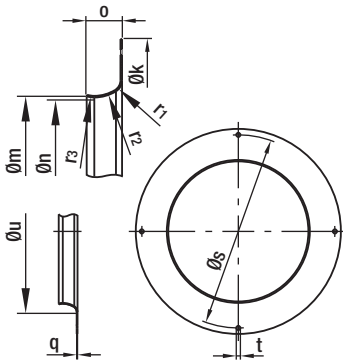
Accessories

Inlet nozzles	120
Guard grilles	121
Motor protection switch	122
Star-delta switch / repair switch	125



Inlet nozzles

– **Material:** Galvanised sheet steel



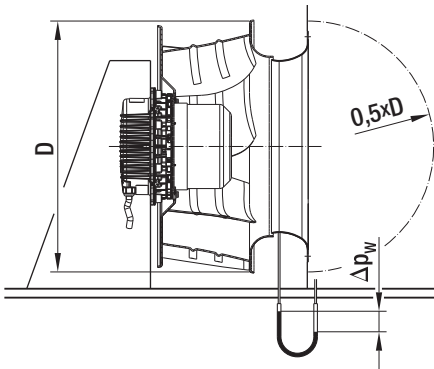
Inlet nozzles for backward curved centrifugal fans

Part no.	Size ⁽¹⁾	k	m	n	o	q	r ₁	r ₂	r ₃	s	t	u
63045-2-4013	450 (A)	450.0	289.0	284.5	75.0	1.5	28.0	87.0	49.0	425.0	6x9	360.0
63072-2-4013	500 (A)	470.0	342.0	337.0	75.0	2.0	28.0	87.0	55.0	445.0	6x9	412.0
63071-2-4013	560 (A)	515.0	385.0	380.0	82.0	2.0	30.0	95.0	60.0	490.0	6x9	461.0
63070-2-4013	630 (A)	634.0	433.0	427.0	98.5	2.0	37.0	114.0	72.0	600.0	6x10.5	525.0

subject to alterations

(1) Size with key for impeller material: (A) = aluminium

Air flow measurement:



The differential pressure approach compares the static pressure before the inlet nozzle with the static pressure inside the inlet nozzle. Air flow can be calculated on the basis of the differential pressure (difference in pressure of the static pressures) in keeping with the following equation:

$$\dot{V} = k \cdot \sqrt{\Delta p_w} \quad \dot{V} \text{ in [m}^3/\text{h]} \text{ and } \Delta p_w \text{ in [Pa]}$$

If constant air flow control is used, then the nozzle pressure has to be kept constant:

$$\Delta p_w = \dot{V}^2 : k^2$$

k takes into account the specific nozzle characteristics.

1 or 4 pressure measuring points are spaced along the circumference of the inlet nozzle. Connection on the customer side is accomplished via a premounted T tube connector. This tube connector is suited for pneumatic hoses with an internal diameter of 4 mm.

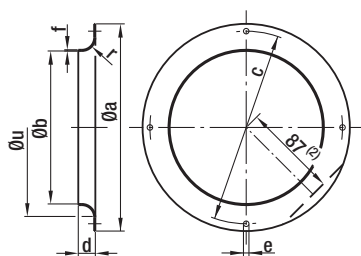
Inlet nozzles with measuring device to determine air flow for backward curved centrifugal fans

Part no. with 1 nozzle	Part no. with 4 nozzles (piezometer ring)	Size	k-value	For dimensions, see above
64015-2-4013	64005-2-4013	450	214	63045-2-4013
64025-2-4013	64002-2-4013	500	283	63072-2-4013
64030-2-4013	64001-2-4013	560	350	63071-2-4013
64040-2-4013	64000-2-4013	630	480	63070-2-4013

subject to alterations

Inlet nozzles, guard grilles

– **Material:** Galvanised sheet steel

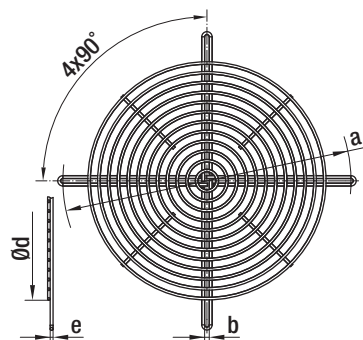


Inlet nozzles for forward curved centrifugal fans

Part no.	Size	a	b	c	d	e	f	r	u
25010-2-4013	250 ⁽¹⁾	300.0	193.0	285.0	51.5	6x7	1.50	27.3	—
28010-2-4013	280 ⁽¹⁾	336.0	228.0	315.0	58.5	6x7	1.50	36.5	296.0
31010-2-4013	310 ⁽¹⁾	374.0	257.0	350.0	62.5	6x9	1.50	39.5	327.0
35510-2-4013	355 ⁽¹⁾	413.0	289.0	390.0	71.5	6x9	1.50	43.5	372.0
40010-2-4013	400 ⁽¹⁾	456.0	325.0	430.0	79.5	6x9	1.50	45.5	414.0

subject to alterations

(1) 6 drilled holes staggered by 60°



– **Material:** Steel wire, plastic coated, silver-metallic gloss

Guard grille for backward curved centrifugal fans (in accordance with EN 294)

Part no.	Size	a	b	d	e
78136-2-4039	450	425.0	8.5	350.0	3.8
78139-2-4039	500	445.0	8.5	410.0	3.8
78137-2-4039	560	490.0	8.5	430.0	3.8
78138-2-4039	630	600.0	8.5	490.0	3.8

subject to alterations

Motor protection switch (three-phase)

for assembly inside a cabinet

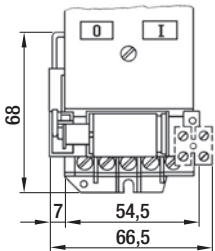
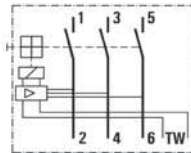
– **Technical features:** Input for TOP



Nominal data	Nominal voltage		Frequency	Current draw		Mass	Auxiliary contactor
Type	VAC	Hz	A	kg			
TPD 250-AB01 -01	3~ 400	50/60	25.0	0.3			without auxiliary contactor
TPD 250-AB01 -02	3~ 400	50/60	25.0	0.3			with break contact
TPD 250-AB01 -03	3~ 400	50/60	25.0	0.3			with make contact

subject to alterations

– **Electr. connection:**



Motor protection switch (single-phase)

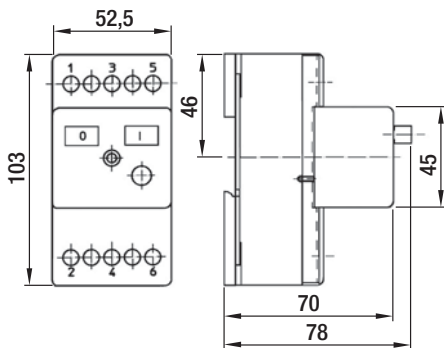
for assembly inside a cabinet

– **Technical features:** Input for TOP

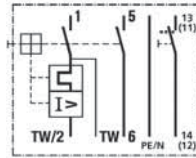


Nominal data	Nominal voltage	Frequency	Current draw	Mass	Auxiliary contactor
Type	VAC	Hz	A	kg	
TPE 100-AB01 -01	1~ 230	50/60	10.0	0.3	without auxiliary contactor
TPE 100-AB01 -02	1~ 230	50/60	10.0	0.3	with break contact
TPE 100-AB01 -03	1~ 230	50/60	10.0	0.3	with make contact

subject to alterations



– **Electr. connection:**



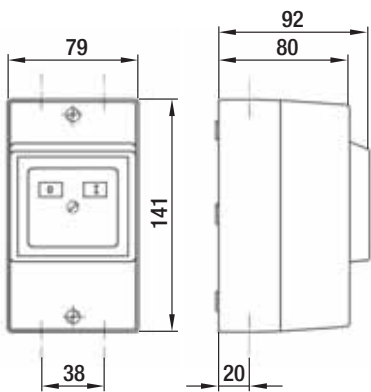
Motor protection switch (single-phase and three-phase) for wall assembly



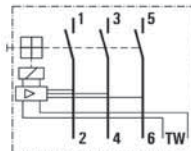
- **Technical features:** Input for TOP
- **Type of protection:** IP 55

Nominal data	Nominal voltage	Frequency	Current draw	Mass	Auxiliary contactor
Type	VAC	Hz	A	kg	
TPD 250-AA01 -01	3~ 400	50/60	25.0	0.6	without auxiliary contactor
TPD 250-AA01 -02	3~ 400	50/60	25.0	0.6	with break contact
TPD 250-AA01 -03	3~ 400	50/60	25.0	0.6	with make contact
TPE 100-AA01 -01	1~ 230	50/60	10.0	0.6	without auxiliary contactor
TPE 100-AA01 -02	1~ 230	50/60	10.0	0.6	with break contact
TPE 100-AA01 -03	1~ 230	50/60	10.0	0.6	with make contact

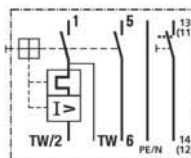
subject to alterations



- Electr. connection, three-phase:



- Electr. connection, single-phase:



Star-delta switch / repair switch

Third-party accessories from Möller Electric GmbH



for wall installation

More information: www.moeller.net

Star-delta switch (available from Möller Electric GmbH)

Designation	Installation
T0-4-8410/I1	Wall installation
T0-4-8410/E	Cabinet installation

subject to alterations



for wall installation

More information: www.moeller.net

Repair switch, lockable (available from Möller Electric GmbH)

Designation	Installation
T0-2-8900/I1/SVB-SW	Wall installation
T0-2-8900/EA/SVB-SW	Cabinet installation

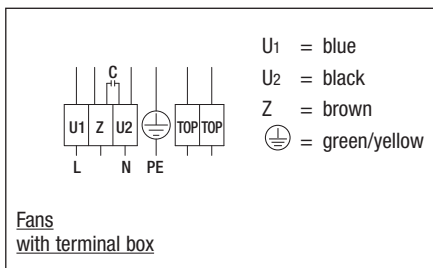
subject to alterations

Electrical connections

Fans with terminal box

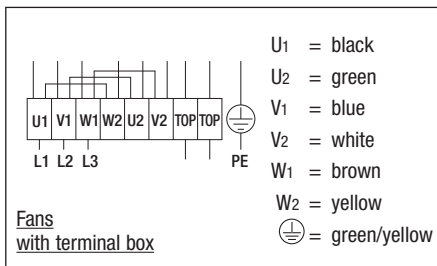
Fans (1~ 230 VAC power line)

A2b) Single-phase capacitor motor
with connection for external TOP



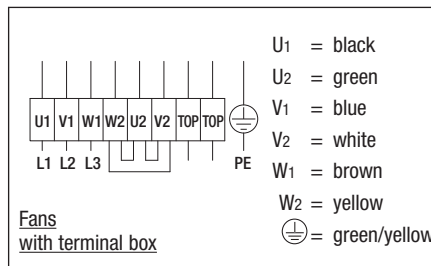
Fans, 1-speed (3~ 230 VAC power line)

F1b) Delta connection (3~ 230 VAC power line)
with TOP



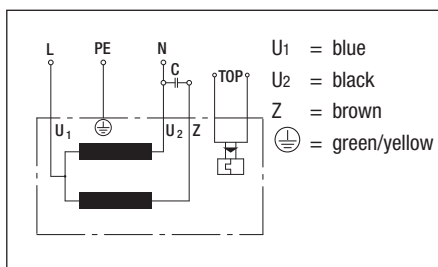
Fans, 1-speed (3~ 400 or 480 VAC power line)

F2b) Star connection (3~ 400 or 480 VAC power line)
with TOP

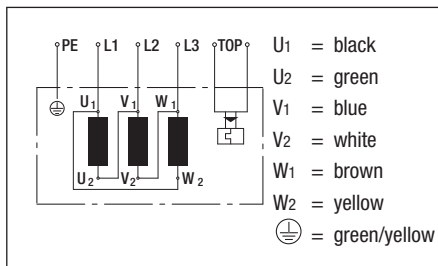


Fans with cable exit

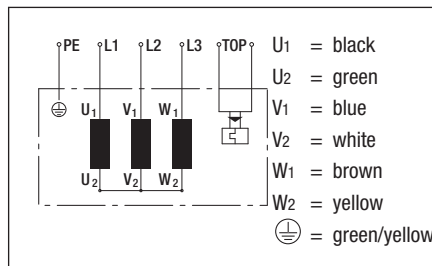
Fans (1~ 230 VAC power line)

A2a) Single-phase capacitor motor
with connection for external TOP





Fans, 1-speed (3~ 230 VAC power line)

D1) Delta connection (3~ 230 VAC power line)
with TOP

Fans, 1-speed (3~ 400 or 480 VAC power line)

D2) Star connection (3~ 400 or 480 VAC power line)
with TOP

Direction of rotation is reversed by swapping two line phases.

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-  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 (0) 79 38 / 81-0
Fax +49 (0) 79 38 / 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 (0) 77 24 / 81-0
Fax +49 (0) 77 24 / 81-13 09
info2@de.ebmpapst.com

www.ebmpapst.com






















ebm-papst Landshut GmbH

Hofmark-Aich-Straße 25
D-84030 Landshut
Phone +49 (0) 8 71 / 707-0
Fax +49 (0) 8 71 / 707-465
info3@de.ebmpapst.com

www.ebmpapst.com

Agencies

-  **Berlin**
 Dipl.-Ing. (TH) Jens Duchow
 Händelstraße 7
D-16341 Panketal
Phone +49 (0) 30 / 94 41 49 62
Fax +49 (0) 30 / 94 41 49 63
Jens.Duchow@de.ebmpapst.com
-  **Bielefeld**
 Dipl.-Ing. (FH) Wolf-Jürgen Weber
 Niehausweg 13
D-33739 Bielefeld
Phone +49 (0) 52 06 / 9 17 32 31
Fax +49 (0) 52 06 / 9 17 32 35
Wolf-Juergen.Weber@de.ebmpapst.com
-  **Dortmund**
 Dipl.-Ing. (FH) Hans-Joachim Pundt
 Auf den Steinern 3
D-59519 Möhnesee-Völlinghausen
Phone +49 (0) 29 25 / 80 04 07
Fax +49 (0) 29 25 / 80 04 08
Hans-Joachim.Pundt@de.ebmpapst.com
-  **Frankfurt**
 Dipl.-Ing. Christian Kleffmann
 Dr.-Hermann-Krause-Straße 23
D-63452 Hanau
Phone +49 (0) 61 81 / 18 98 12
Fax +49 (0) 61 81 / 18 98 13
Christian.Kleffmann@de.ebmpapst.com
-  **Halle**
 Dipl.-Ing. (TU) Michael Hanning
 Lerchenweg 4
D-06120 Lieskau
Phone +49 (0) 3 45 / 5 51 24 56
Fax +49 (0) 3 45 / 5 51 24 57
Michael.Hanning@de.ebmpapst.com
-  **Hamburg**
 Ingenieurbüro Breuell GmbH
 Ing. Dirk Kahl
Elektroingenieur
Grützmühlenweg 40
D-22339 Hamburg
Phone +49 (0) 40 / 53 80 92 55
Fax +49 (0) 40 / 53 80 92 84
Dirk.Kahl@de.ebmpapst.com

-  **Kassel**
 Dipl.-Ing. (FH) Ralph Brück
 Hoherainstraße 38
D-35075 Gladenbach
Phone +49 (0) 64 62 / 40 71 10
Fax +49 (0) 64 62 / 40 71 11
Ralph.Brueck@de.ebmpapst.com
-  **Koblenz**
 Winfried Schaefer
 Hinter der Kirch 10
D-56767 Uersfeld
Phone +49 (0) 26 57 / 16 96
Fax +49 (0) 26 57 / 16 76
Winfried.Schaefer@de.ebmpapst.com
-  **Munich**
 Dipl.-Wirtsch.-Ing. (FH) Jens Peter
 Steinbergweg 6
D-82285 Hattenhofen
Phone +49 (0) 81 45 / 80 92 25
Fax +49 (0) 81 45 / 80 92 26
Jens.Peter@de.ebmpapst.com
-  **Nuremberg**
 Friedrich Klein
 Adlerstraße 49/1
D-73540 Heubach
Phone +49 (0) 71 73 / 49 83
Fax +49 (0) 71 73 / 80 53
Friedrich.Klein@de.ebmpapst.com
-  **Offenburg**
 Dipl.-Ing. (FH) Ralf Braun
 Hubeneck 21
D-77704 Oberkirch
Phone +49 (0) 78 02 / 98 22 52
Fax +49 (0) 78 02 / 98 22 53
Ralf.Braun@de.ebmpapst.com
-  **Stuttgart**
 Dipl.-Ing. (FH) Rudi Weinmann
 Hindenburgstraße 100/1
D-73207 Plochingen
Phone +49 (0) 71 53 / 92 89 80
Fax +49 (0) 71 53 / 92 89 81
Rudi.Weinmann@de.ebmpapst.com
-  **Ulm**
 Günter Wilhelm
 Allgäuer Straße 7
D-89269 Vöhringen
Phone +49 (0) 73 06 / 92 46 08
Fax +49 (0) 73 06 / 92 46 48
Guentel.Wilhelm@de.ebmpapst.com

Distributors

-  **Frankfurt**
R.E.D. Handelsgesellschaft mbH
Gutenbergstraße 3
D-63110 Rodgau - Jügesheim
Phone +49 (0) 61 06 / 84 10
Fax +49 (0) 61 06 / 84 11 11
info@red-elektromechanik.de
www.red-elektromechanik.de
-  **Hamburg**
Breuell + Hilgenfeldt GmbH
Grützmühlenweg 40
D-22339 Hamburg
Phone +49 (0) 40 / 53 80 92 20
Fax +49 (0) 40 / 53 80 92 84
info@breuell-hilgenfeldt.de
-  **Munich**
A. Schweiger GmbH
Ohmstraße 1
D-82054 Sauerlach
Phone +49 (0) 81 04 / 8 97 0
Fax +49 (0) 81 04 / 8 97 90
info@schweiger-gmbh.de
www.schweiger-gmbh.com
- **Express Service-Center** (1 to 5 pieces)
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 Grützmühlenweg 40
D-22339 Hamburg
Phone +49 (0) 40 / 53 80 92 20
Fax +49 (0) 40 / 53 80 92 84
ebmpapst@breuell-hilgenfeldt.de
-  **South**
 HDS Ventilatoren Vertriebs GmbH
Glaswiesenstraße 1
D-74677 Dörzbach
Phone +49 (0) 79 37 / 80 29 68
Fax +49 (0) 79 37 / 80 25 78
info@hds-gmbh.net

Europe



Austria

ebm-papst Motoren & Ventilatoren GmbH
Westbahnstraße 5
A-4490 St. Florian
Phone +43 / 72 24 / 66 01 10
Fax +43 / 72 24 / 66 01 120
info@at.ebmpapst.com
www.ebmpapst.at



Belarus

ebm-papst Bel AgmbH
P.O. Box 117
BY-220138 Minsk
Phone +375 / 17 / 385 15 56
Fax +375 / 17 / 385 15 56
info@by.ebmpapst.com
www.ebmpapst.by



Belgium

VIBO Benelux B. V.
Sales office Belgium-Luxemburg
Romeinsestraat 6/0101
Research Park Haasrode
B-3001 Heverlee-Leuven
Phone +32 / 16 / 39 62 00
Fax +32 / 16 / 39 62 20
info@vibobenelux.com
www.vibobenelux.com



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 / 87 22 190
Fax +36 / 1 / 87 22 194
office@hu.ebmpapst.com
www.ebmpapst.hu



Cyprus

MATERO LTD
37, St. Kyriakides Avenue
P.O. Box 51744
CY-3080 Limassol
Phone +357 / 25 / 87 00 30
Fax +357 / 25 / 38 13 66
matero@cytanet.com.cy
www.matero.com.cy



Czech Republic / Slovakia

ebm-papst CZ s.r.o.
Krátká 379
CZ-66461 Rajhradice u Brna
Phone +420 / 547 / 232 617
Fax +420 / 547 / 232 622
info@ebmpapst.cz
www.ebmpapst.cz



Denmark

Jenk A/S
Vallensbækvej 21
DK-2605 Brøndby
Phone +45 / 43 / 63 11 11
Fax +45 / 43 / 63 05 05
jenk@jenk.dk
www.jenk.dk



Estonia

ebm-papst Oy Eesti Filiaal
Kadaka tee 3
EST-10621 Tallinn
Phone +372 / 65 56 / 978
Fax +372 / 65 56 / 979
www.ebmpapst.ee



Finland

ebm-papst Oy
Puistotie 1
FIN-02760 Espoo
Phone +358 / 9 / 88 70 22 0
Fax +358 / 9 / 88 70 22 13
mailbox@ebmpapst.fi
www.ebmpapst.fi



France

ebm-papst SARL
ZI Nord - rue A. Mohler
BP 62
F-67212 Obernai-Cedex
Phone +33 / 820 326 266
Fax +33 / 3 / 88 67 38 83
info@ebmpapst.fr
www.ebmpapst.fr



Greece

Helcoma
Th. Rotas & Co OE
Davaki 65
GR-17672 Kallithea-Attiki
Phone +30 / 210 / 951 37 05
Fax +30 / 210 / 951 34 90
contact@helcoma.gr
www.helcoma.gr



Hungary

ebm-papst Industries Kft.
Ezred u. 2.
H-1044 Budapest
Phone +36 / 1 / 87 22 190
Fax +36 / 1 / 87 22 194
office@hu.ebmpapst.com
www.ebmpapst.hu



Iceland

RJ Engineers
Stangarhyl 1A
IS-110 Reykjavik
Phone +354 / 567 80 30
Fax +354 / 567 80 15
rj@rj.is
www.rj.is



Ireland

ebm-papst Limited
Portlaoise Business & Technology Park
Mountrath Road
IRL-Portlaoise, Co. Laois
Phone +353 / 57 86 / 643 43
Fax +353 / 57 86 / 643 46
sales@ie.ebmpapst.com
www.ebmpapst.ie







Italy

ebm-papst Srl
Via Cornaggia 108
I-22076 Mozzate (Co)
Phone +39 / 03 31 / 83 62 01
Fax +39 / 03 31 / 82 15 10
info@it.ebmpapst.com
www.ebmpapst.it






Macedonia

ebm-papst Industries Kft.
Ezred u. 2.
H-1044 Budapest
Phone +36 / 1 / 87 22 190
Fax +36 / 1 / 87 22 194
office@hu.ebmpapst.com
www.ebmpapst.hu

-  fan agent
-  compact fan agent
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ebm-papst representatives & subsidiaries



 **Netherlands**
 VIBO Benelux B. V.
 Engelseweg 127
 Postbus 230
 NL-5705 AC Helmond
 Phone +31 / 4 92 / 50 29 00
 Fax +31 / 4 92 / 50 29 50
verkoop@vibobenelux.com
www.vibobenelux.com

 **Norway**
 ebm-papst AS
 P.B. 173 Holmlia
 N-1203 Oslo
 Phone +47 / 22 / 76 33 40
 Fax +47 / 22 / 61 91 73
mailbox@ebmpapst.no
www.ebmpapst.no

 **Poland**
 ebm-papst Polska Sp. z o.o.
 ul. Annopol 4A
 PL-03236 Warszawa
 Phone +48 / 22 / 675 78 19
 Fax +48 / 22 / 676 95 87
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 / 233 80 00
 Fax +7 / 343 / 233 77 88
Konstantin.Molokov@ru.ebmpapst.com
www.ebmpapst.ur.ru

 ebm-papst Rus GmbH
 Nizhegorodskaya 32, str. 15 office 420
 RU-109029 Moskau
 Phone +7 / 495 / 671 53 93
 Fax +7 / 495 / 671 53 95
info@ebmpapst.ru
www.ebmpapst.ru


 **Serbia & Montenegro**
 ebm-papst Industries Kft.
 Ezred u. 2.
 H-1044 Budapest
 Phone +36 / 1 / 87 22 190
 Fax +36 / 1 / 87 22 194
office@hu.ebmpapst.com
www.ebmpapst.hu

 **Spain**
 ebm-papst Ibérica S.L.
 Avda. del Sistema Solar, 29
 E-28830 San Fernando de Henares (Madrid)
 Phone +34 / 91 / 678 08 94
 Fax +34 / 91 / 678 15 30
ventas@ebmpapst.es

 **Sweden**
 ebm-papst AB
 Äggelundavägen 2
 S-17562 Järfälla
 Phone +46 / 8 / 761 94 00
 Fax +46 / 8 / 36 23 06
info@ebmpapst.se
www.ebmpapst.se

 **Switzerland**
 ebm-papst AG
 Rütisbergstrasse 1
 CH-8156 Oberhasli
 Phone +41 / 44 / 732 20 70
 Fax +41 / 44 / 732 20 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 / 328 20 90
 Fax +90 / 232 / 328 02 70
akantel@akantel.com.tr
www.ebmpapst.com.tr

 **Ukraine**
 ebm-papst Ukraine LLC
 Lepse Boulevard, 4, Building 47
 UA-03067 Kiev
 Phone +38 / 044 / 206 30 91
 Fax +38 / 044 / 206 30 91
mail@ebmpapst.ua
www.ebmpapst.ua

 **United Kingdom**
 ebm-papst UK Ltd.
 Chelmsford Business Park
 GB-Chelmsford Essex CM2 5EZ
 Phone +44 / 12 45 / 46 85 55
 Fax +44 / 12 45 / 46 63 36
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 / 16 35 / 28 11 11
 Fax +44 / 16 35 / 28 11 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 46 57 61 35
Fax +54 / 11 46 57 20 92
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 / 31 64 89 00
Fax +55 / 11 / 47 77 14 56
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 / 35 33
Fax +1 / 905 / 420 / 37 72
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 / 33 00 51 44
Fax +52 / 55 / 33 00 52 43
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 15 15
Fax +1 / 860 / 674 85 36
sales@us.ebmpapst.com
www.ebmpapst.us



ebm-papst Automotive & Drives, Inc.
3200 Greenfield, Suite 255
USA-Dearborn, MI 48120
Phone +1 / 313 / 406 80 80
Fax +1 / 313 / 406 80 81
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 34 34
Fax +27 / 11 / 794 50 20
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 / 50 46 01 83
 Fax +86 / 21 / 50 46 11 19
 sales@cn.ebmpapst.com
 www.ebmpapst.com.cn

 **Hong Kong**
 ebm-papst Ventilator (Shanghai) Co., Ltd.
 Hong Kong Representative Office
 Unit Nos. 13-15, 9/F, Technology Park
 18 On Lai Street, Siu Lek Yuen, Shatin,
 N.T. Hong Kong P.R. of China
 Phone +852 / 21 45 / 86 78
 Fax +852 / 21 45 / 76 78
 info@hk.ebmpapst.com

 **India**
 ebm NADI International Pvt Ltd.
 26/3, G.N.T. Road, Erukkencherry
 IND-Chennai-600118
 Phone +91 / 44 / 25 37 25 56
 Fax +91 / 44 / 25 37 11 49
 ebmnadi@md2.vsnl.net.in
 www.ebmnadi.com

 **Indonesia**
 ebm-papst Indonesia
 Wisma Slipi Building 14th Floor, No. 1410
 Jl. Letjend S. Parman Kav. 12
 RI-Jakarta Barat 11480
 Phone +62 / 21 / 53 66 19 01
 Fax +62 / 21 / 53 66 19 05
 salesdept@id.ebmpapst.com

 **Israel**
 Polak Bros. Import Agencies Ltd.
 9 Hamefalsim Street
 IL-Kiryat Arie, Petach-Tikva 49514
 Phone +972 / 3 / 910 03 00
 Fax +972 / 3 / 579 66 79
 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 / 470 / 57 51
 Fax +81 / 45 / 470 / 57 52
 info@jp.ebmpapst.com
 www.ebmpapst.jp

 **Korea**
 ebm-papst Korea Co. Ltd.
 6F, Trutech Bldg.
 B 6-2, Digital Media City (DMC)
 Sangam-Dong, Mapo-Gu
 ROK-Seoul 121-270
 Phone +82 / 2 / 36 62 / 13 24
 Fax +82 / 2 / 36 62 / 13 26
 info@kr.ebmpapst.com
 www.ebmpapst.co.kr

 **Malaysia**
 ebm-papst Malaysia
 Representative Office
 Block F1, 9A-4, Jln PJU 1/42
 Dataran Prima
 MAL-47301 Petaling Jaya
 Phone +60 / 3 / 78 06 54 40
 Fax +60 / 3 / 78 06 54 41
 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 / 65 51 37 89
 Fax +65 / 68 42 84 39
 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 42 68
 Fax +886 / 7 / 557 27 88
 eteco@ms22.hinet.net

 **Thailand**
 ebm-papst Thailand Co., Ltd.
 99/349 Na-Nakorn Bldg., 4th Floor
 Chaeng Wattana Road, Thungsohong,
 THA-10210 Laksi, BKK
 Phone +66 / 2 / 5 76 15 24
 Fax +66 / 2 / 5 76 15 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 / 886 08 26
 Fax +971 / 4 / 886 08 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 / 391 040 99
 Fax +84 / 8 / 391 039 70
 linh.nguyen@vn.ebmpapst.com

Australia



Australia

ebm-papst A&NZ Pty Ltd.



10 Oxford Road



AUS-Laverton North, Victoria, 3026

Phone +61 / 3 / 83 25 64 00

Fax +61 / 3 / 83 25 64 64

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 18 84

Fax +64 / 9 / 837 18 99

sales@ebmpapst.com.au

www.ebmpapst.com.au



ebm-papst
Mulfingen GmbH & Co. KG

Bachmühle 2
D-74673 Mulfingen, Germany
Phone +49 (0) 79 38 / 81-0
Fax +49 (0) 79 38 / 81-110
info1@de.ebmpapst.com

www.ebmpapst.com