

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.

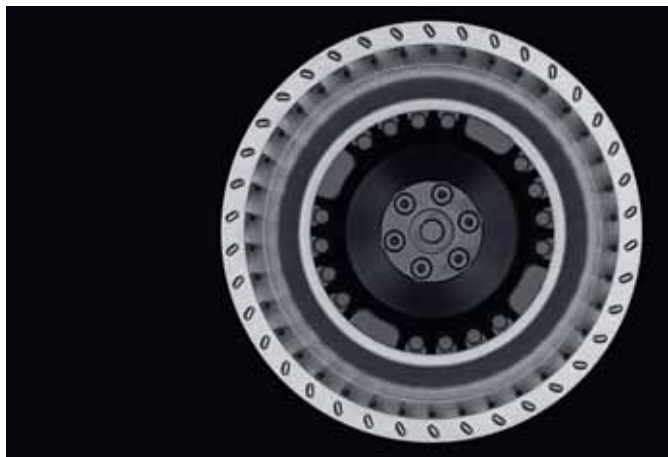
Using the two materials together form an ideal combination of their individual characteristics. The aluminium inlet can withstand the mechanical forces during operation and ensures a durable connection to the rotor, while the plastic encapsulates the carrier structure, giving the blade its optimised 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.

Table of contents



■ Large AC fans for 60 Hz applications	2
■ AC axial fans Ø 500 - Ø 910	5
■ AC centrifugal fans, backward curved Ø 450 - Ø 630	67
■ AC centrifugal fans, forward curved Ø 250 - Ø 400	87
■ Accessories	119
■ Electrical connections	126
■ ebm-papst representatives & subsidiaries	128



AC axial fans

AC axial fans

Ø 500 - Ø 910

6



AC axial fans - HyBlade®

Ø 500



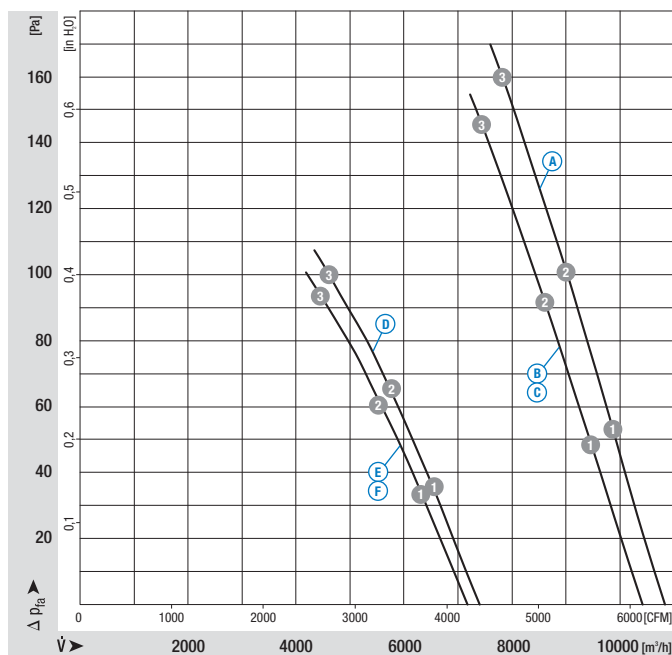
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Pressed-on round sheet steel plate, extrusion-coated in PP plastics
Rotor: Coated in black
- **Number of blades:** 5
- **Direction of rotation:** Direction 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

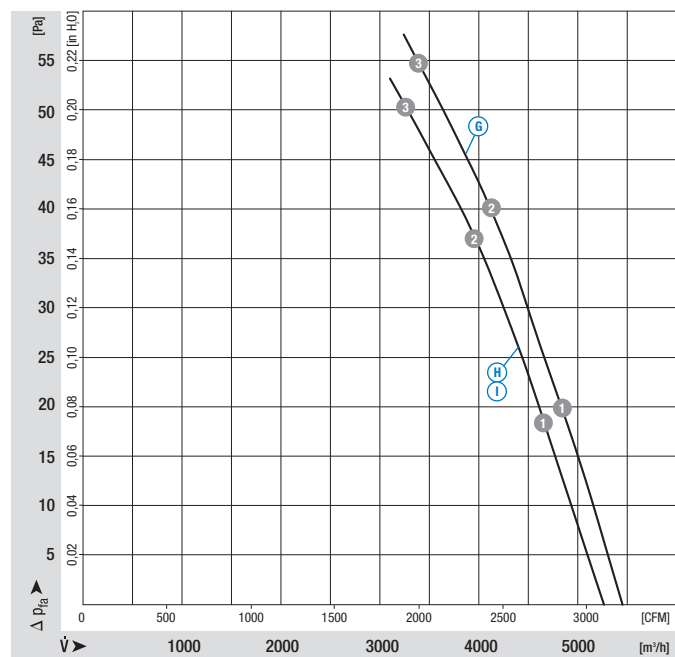


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1630	0.90	1.41	76
A 2	1615	0.96	1.47	75
A 3	1590	1.05	1.57	74
B 1	1565	0.82	1.41	76
B 2	1540	0.88	1.49	74
B 3	1510	0.95	1.60	73
C 1	1565	0.82	2.44	76
C 2	1540	0.88	2.58	74
C 3	1510	0.95	2.77	73
D 1	1120	0.34	0.67	68
D 2	1110	0.37	0.68	66
D 3	1095	0.41	0.72	66
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	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	— 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	— 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	— 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



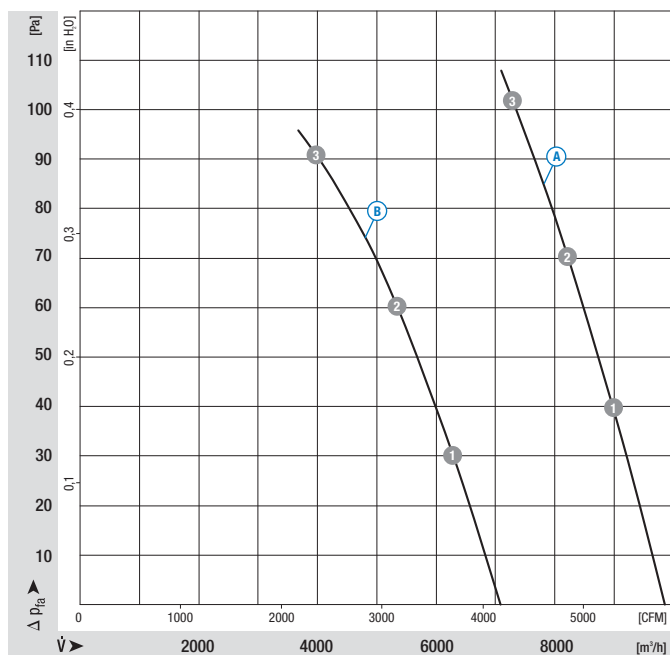
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Pressed-on round sheet steel plate, extrusion-coated in PP plastics
Rotor: Coated in black
- **Number of blades:** 5
- **Direction of rotation:** Direction 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

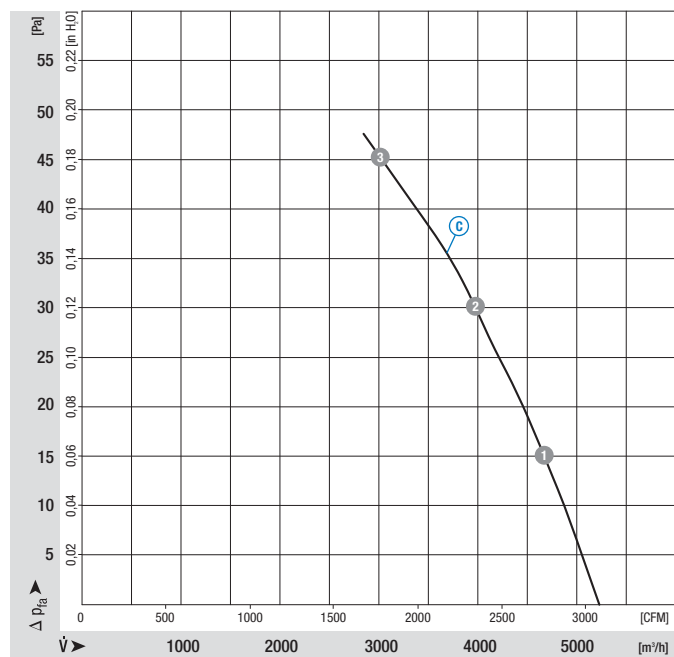


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1485	0.83	3.61	75
A 2	1450	0.85	3.73	73
A 3	1400	0.88	3.88	72
B 1	1075	0.36	1.59	67
B 2	1050	0.38	1.65	65
B 3	1015	0.39	1.72	65

- **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



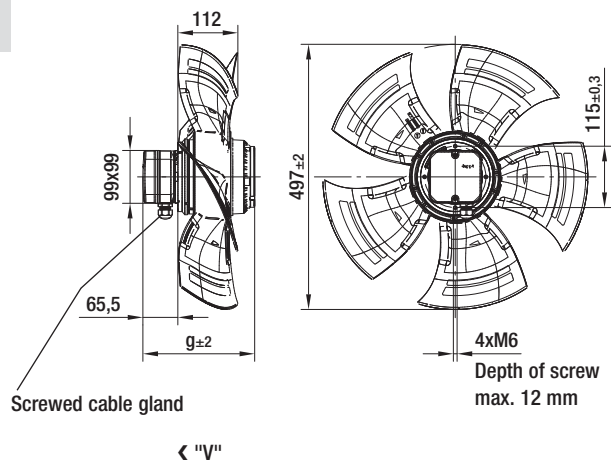
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓒ 1	780	0.15	0.67	61
Ⓒ 2	760	0.16	0.71	58
Ⓒ 3	740	0.17	0.75	56

AC axial fans - HyBlade®

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



Without attachments

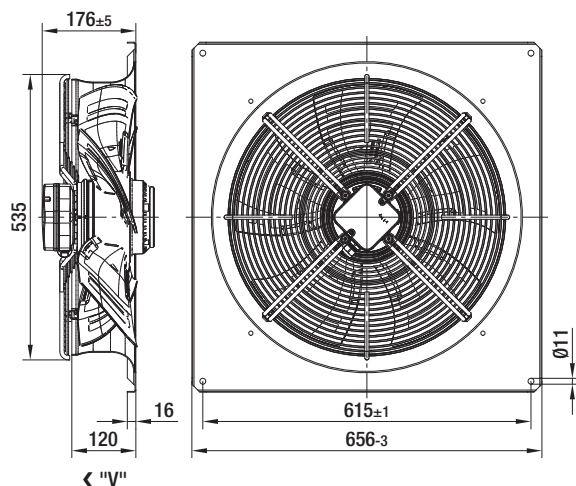


Type	Mass [kg]	g
A4D 500-AM01 -03	10.5	209.5
A6D 500-AJ01 -03	8.5	189.5
A8D 500-AJ05 -03	8.5	189.5
A4E 500-AM03 -01	10.5	209.5
A6E 500-AJ03 -01	8.5	189.5
A8E 500-AJ03 -01	8.5	189.5

Internal diameter of the wall ring at least 503 mm



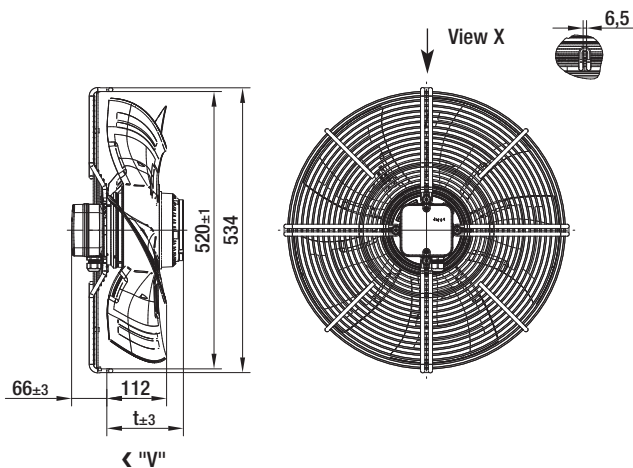
With full square nozzle



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

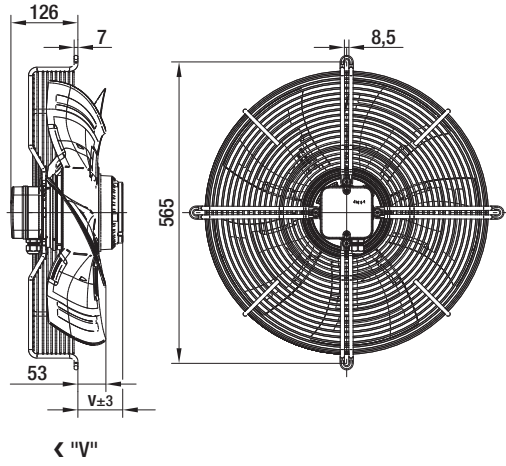


Type	Mass [kg]	t
S4D 500-CM01 -03	12.7	144.0
S6D 500-CJ01 -03	10.7	124.0
S8D 500-CJ05 -03	10.7	124.0
S4E 500-CM03 -01	12.7	144.0
S6E 500-CJ03 -01	10.7	124.0
S8E 500-CJ03 -01	10.7	124.0

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

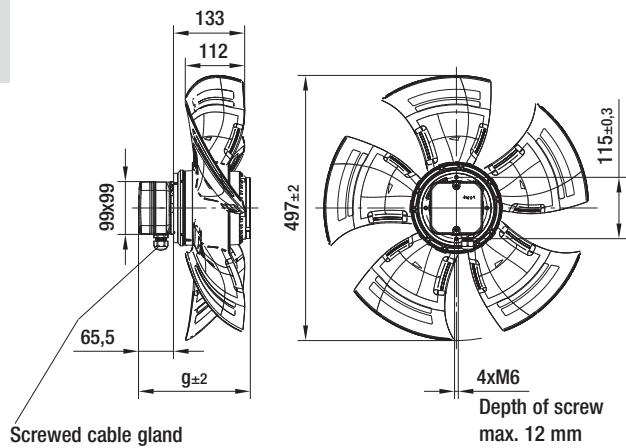
Internal diameter of the wall ring at least 503 mm

AC axial fans - HyBlade®

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



Without attachments



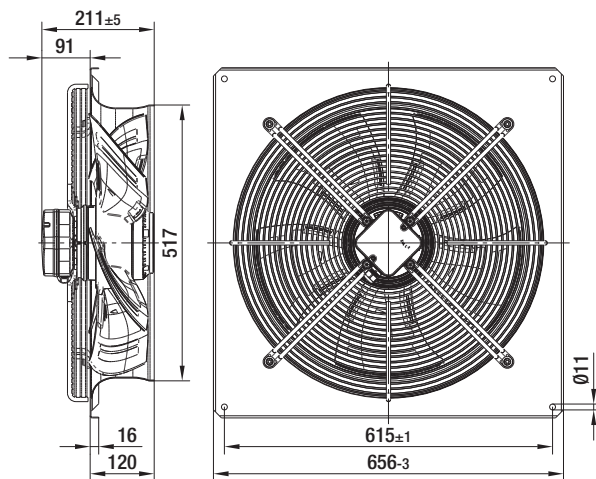
"A" >

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

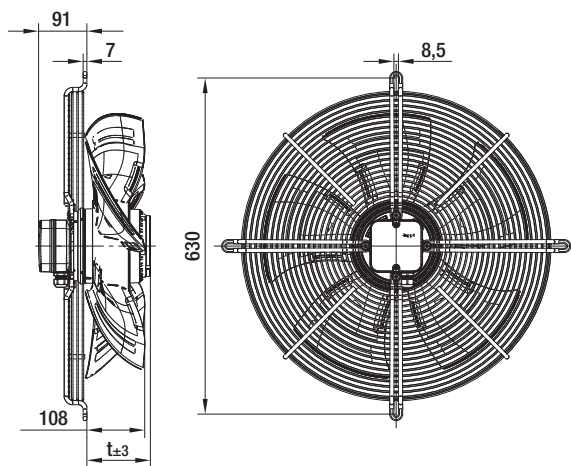


"A" >

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



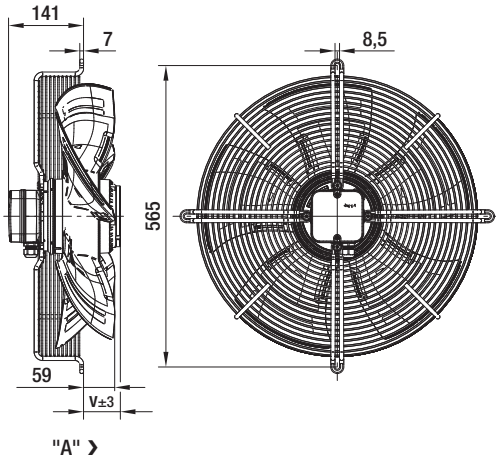
"A" >

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®

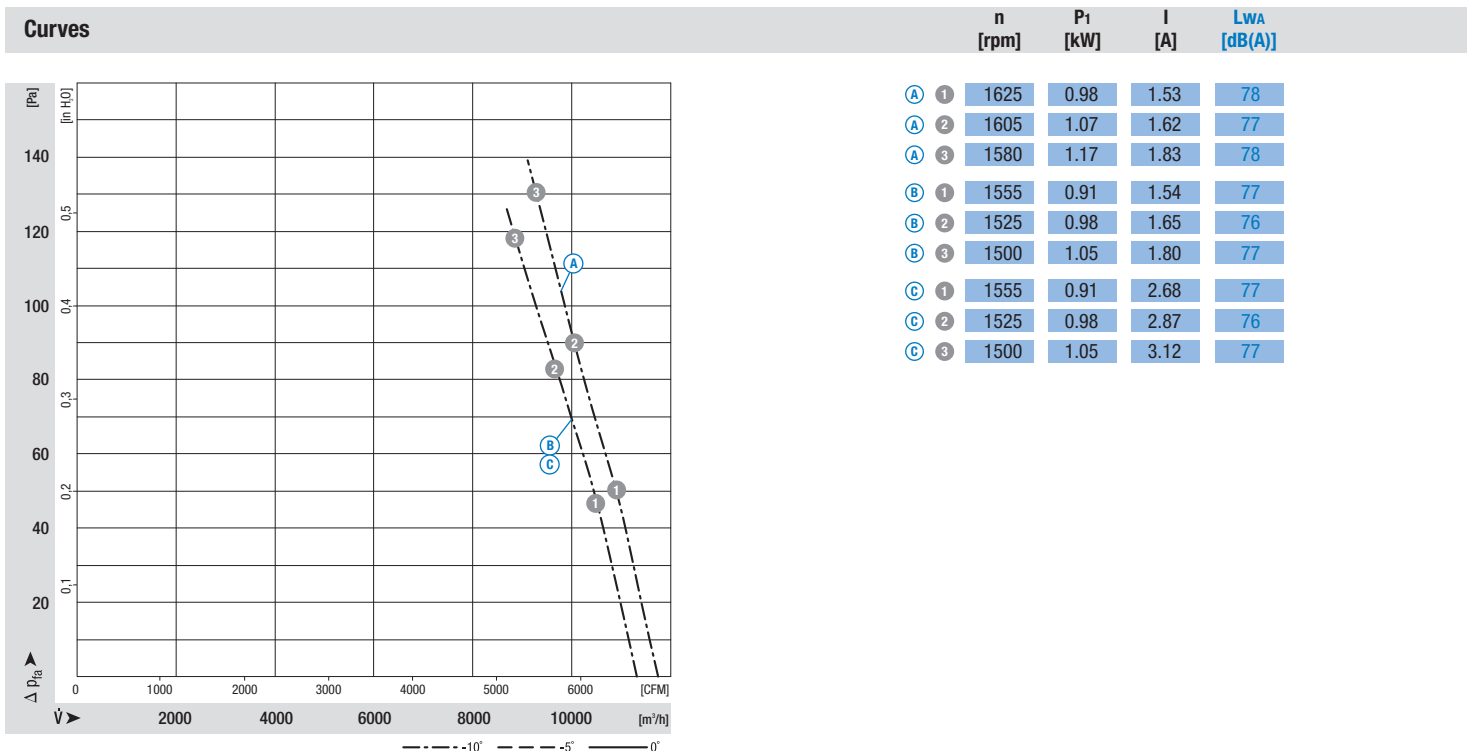
Ø 560



- **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	

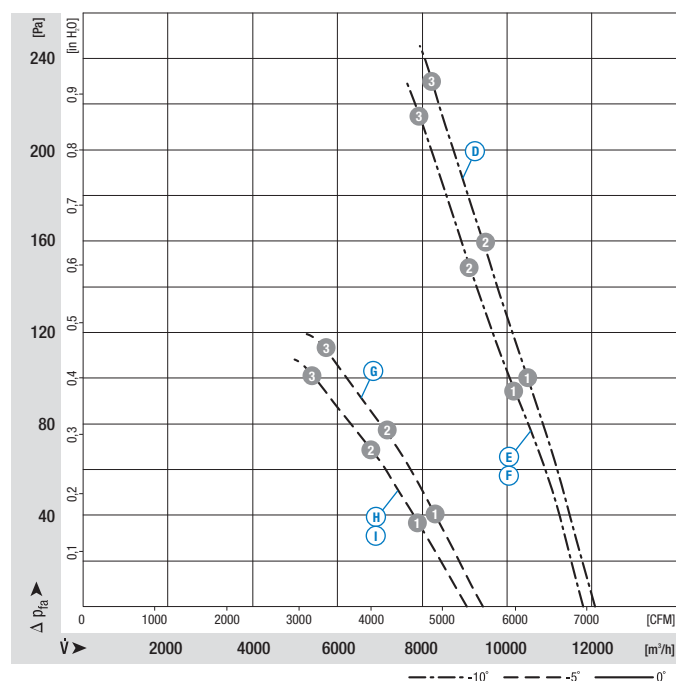
subject to alterations (1) Nominal data in operating point 3 with maximum load



- **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



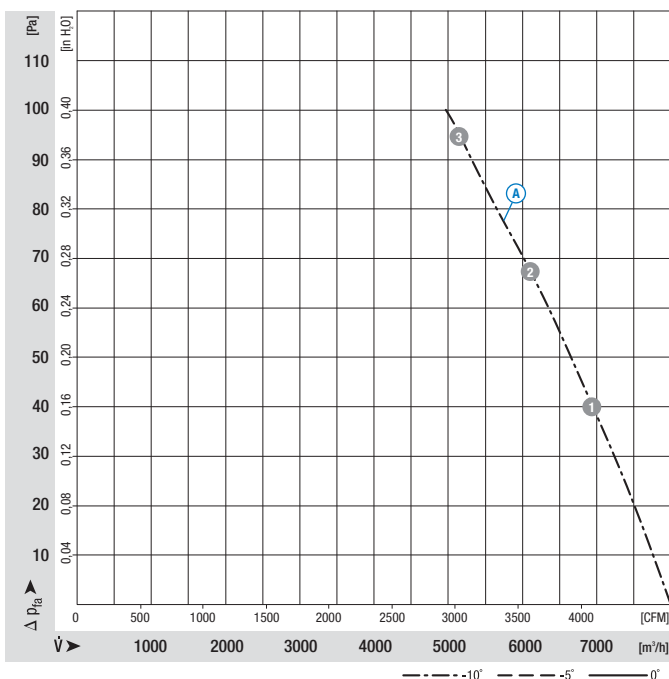
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
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- **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 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

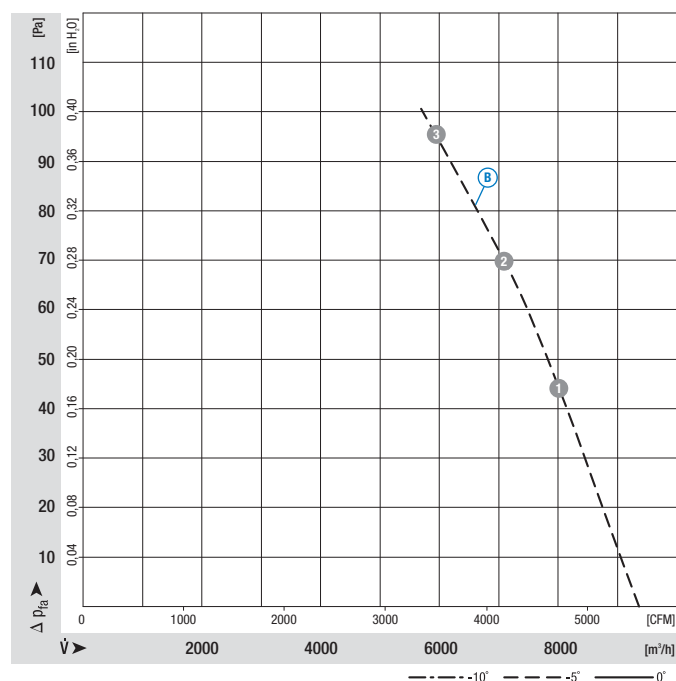
	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	1085	0.40	1.75	67
Ⓐ 2	1055	0.43	1.88	69
Ⓐ 3	1030	0.46	2.10	69



- **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



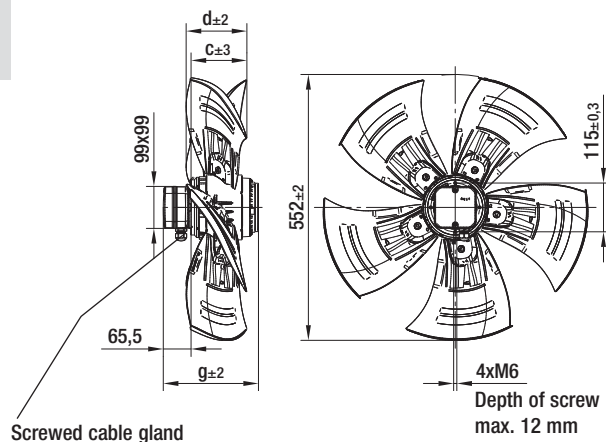
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
ⓑ 1	1065	0.51	2.20	68
ⓑ 2	1040	0.54	2.33	67
ⓑ 3	1010	0.57	2.48	69

AC axial fans - HyBlade®

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



Without attachments



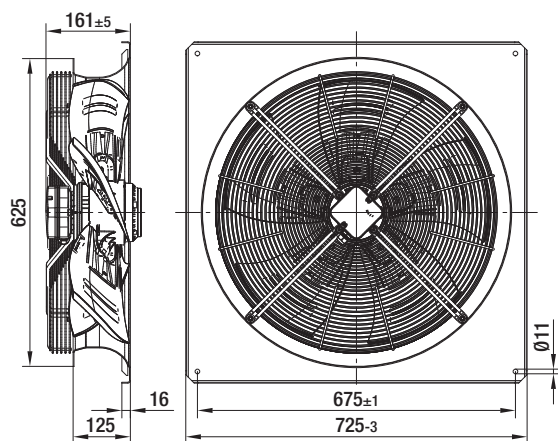
◀ "V"

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

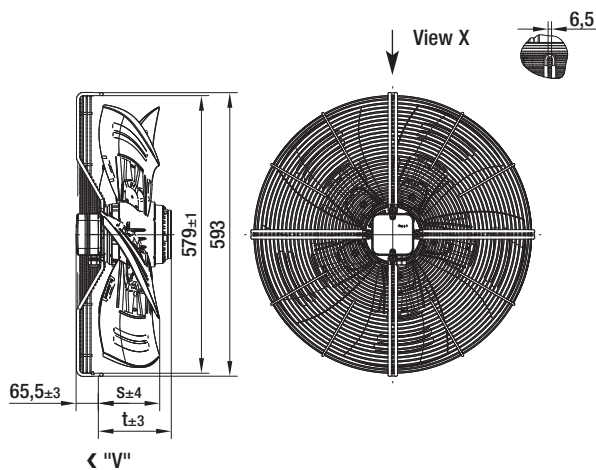


◀ "V"

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



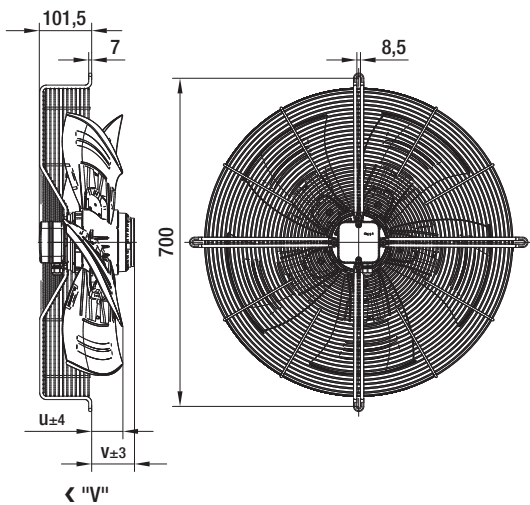
◀ "V"

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

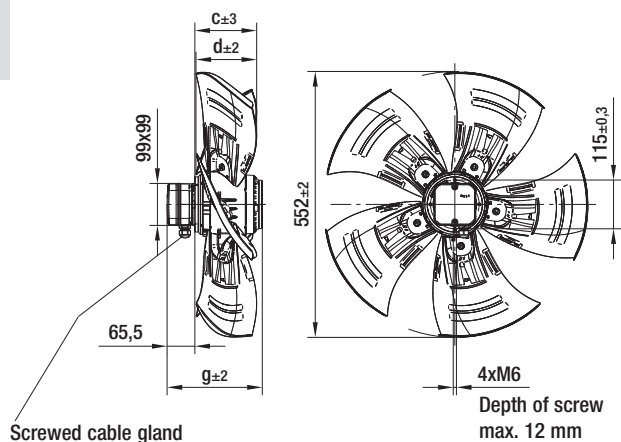
Internal diameter of the wall ring at least 559 mm

AC axial fans - HyBlade®

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



Without attachments



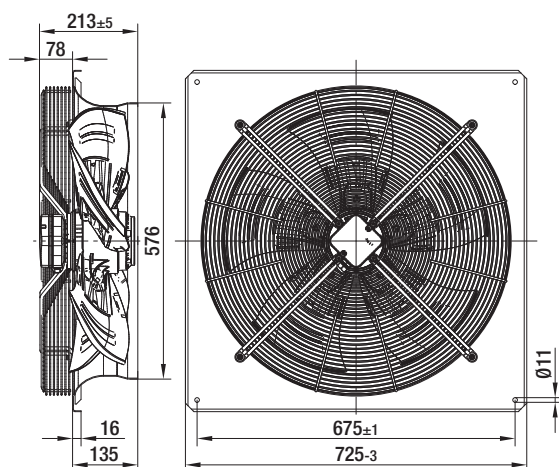
"A" >

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

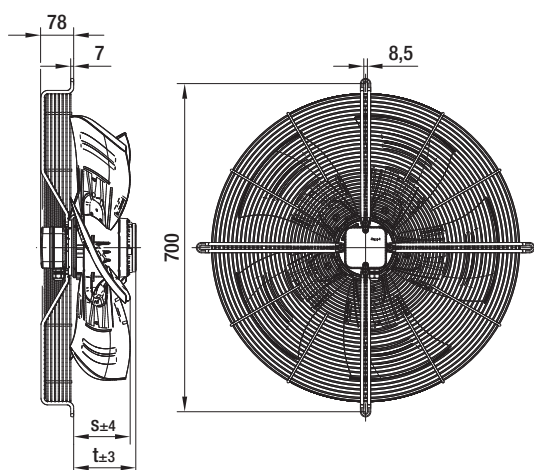


"A" >

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



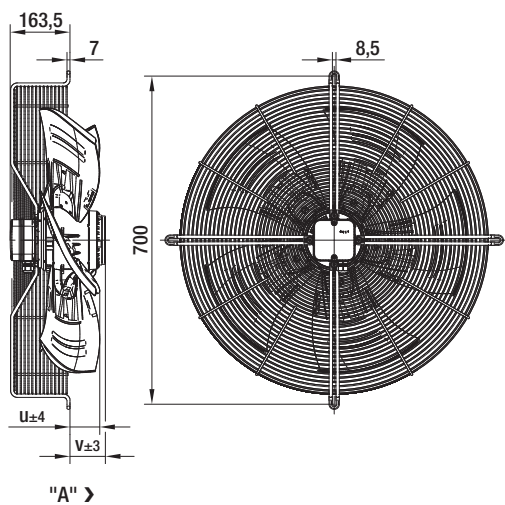
"A" >

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



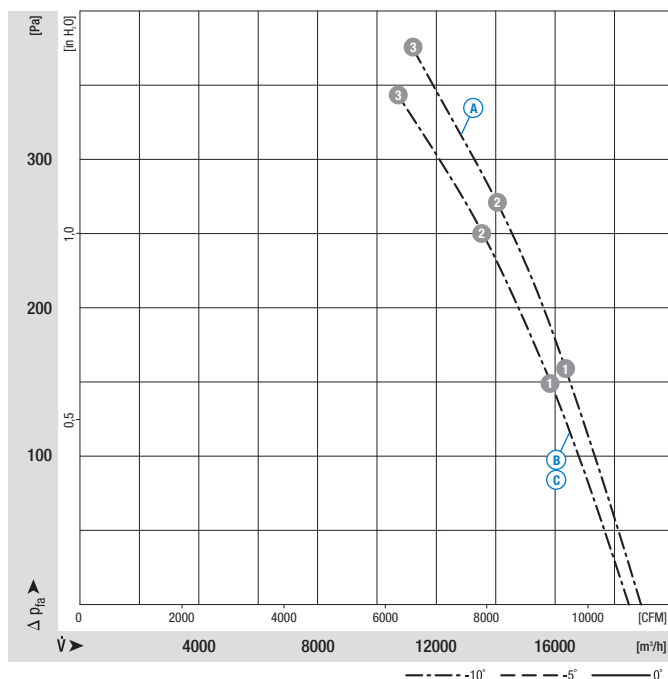
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** 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

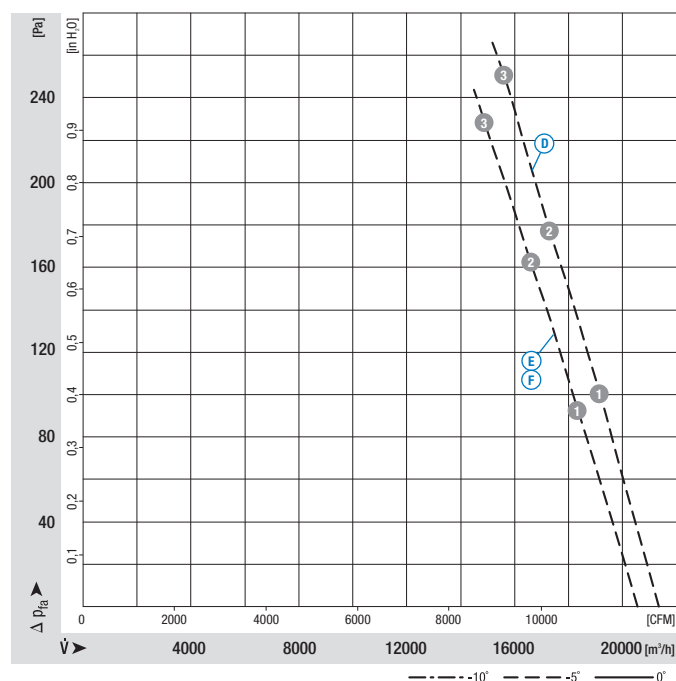


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ ①	1695	2.32	4.27	81
Ⓐ ②	1680	2.66	4.64	84
Ⓐ ③	1650	2.91	4.91	88
Ⓑ ①	1640	2.16	4.10	80
Ⓑ ②	1610	2.44	4.56	82
Ⓑ ③	1585	2.67	4.92	87
Ⓒ ①	1640	2.16	7.10	80
Ⓒ ②	1610	2.44	7.90	82
Ⓒ ③	1585	2.67	8.52	87

- **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



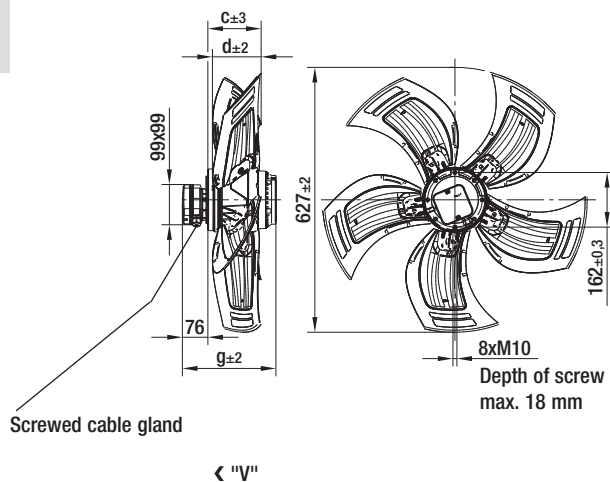
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
D 1	1645	2.86	4.89	81
D 2	1630	3.08	5.15	80
D 3	1610	3.30	5.48	82
E 1	1575	2.61	4.89	79
E 2	1550	2.79	5.17	79
E 3	1520	2.96	5.49	80
F 1	1575	2.61	8.50	79
F 2	1550	2.79	8.99	79
F 3	1520	2.96	9.50	80

AC axial fans - HyBlade®

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



Without attachments

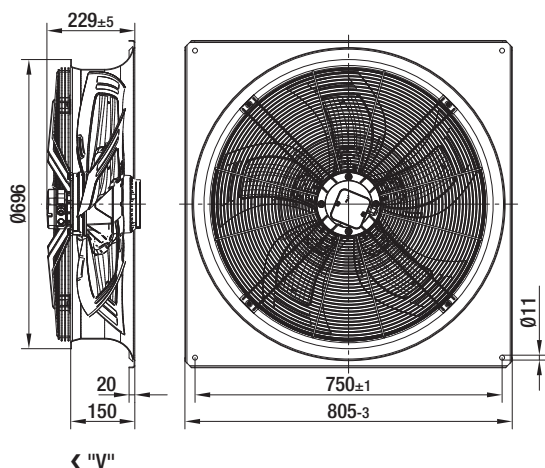


Type	Mass [kg]	c	d	g
A4D 630-AF03 -03	22.3	144.0	116.0	277.0
A4D 630-AB03 -03	25.3	150.0	131.0	297.0

Internal diameter of the wall ring at least 634 mm



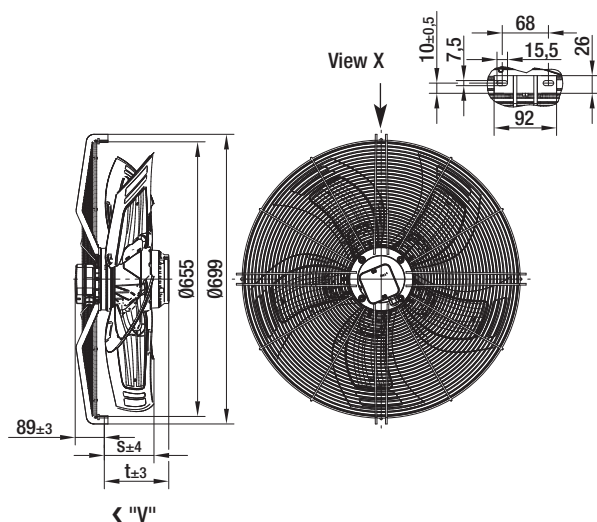
With full square nozzle



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



With guard grille for full nozzle

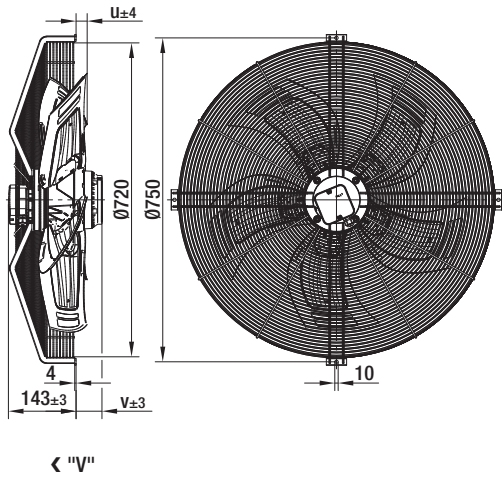


Type	Mass [kg]	s	t
S4D 630-CF03 -03	27.6	131.0	188.0
S4D 630-CB03 -03	30.6	137.0	207.5

Internal diameter of the wall ring at least 634 mm



With guard grille for short nozzle



Type	Mass [kg]	Mass	
		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

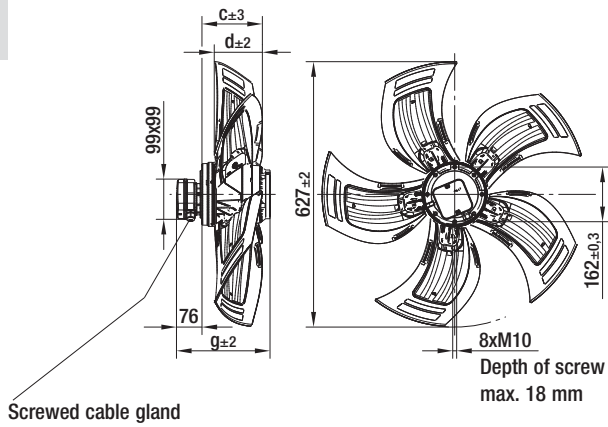
AC axial fans - HyBlade®

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



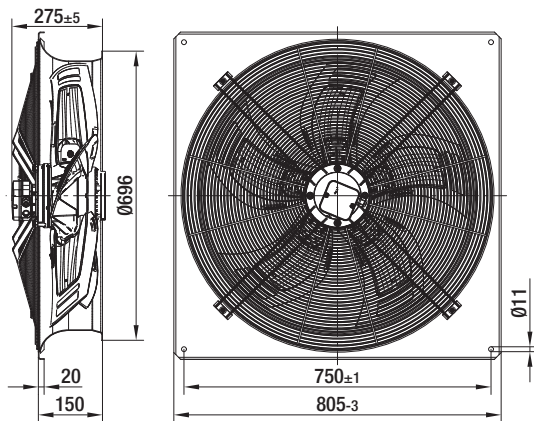
"A" >

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

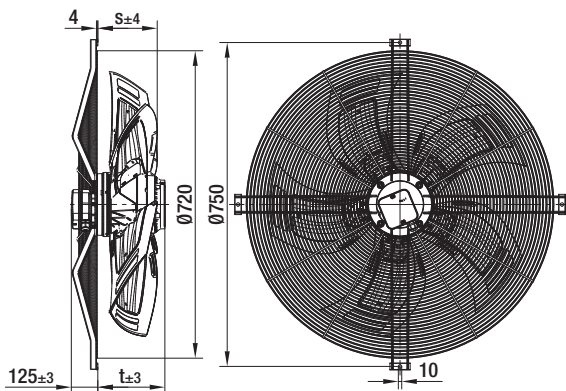


"A" >



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



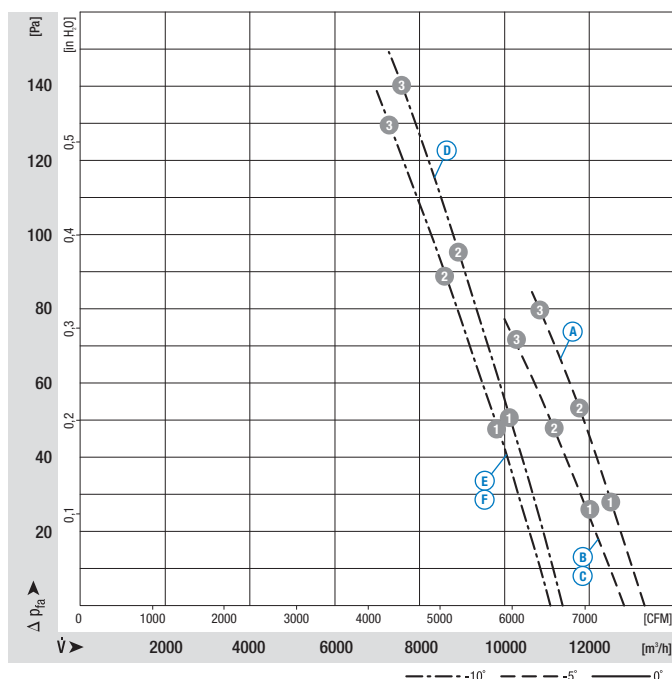
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** 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

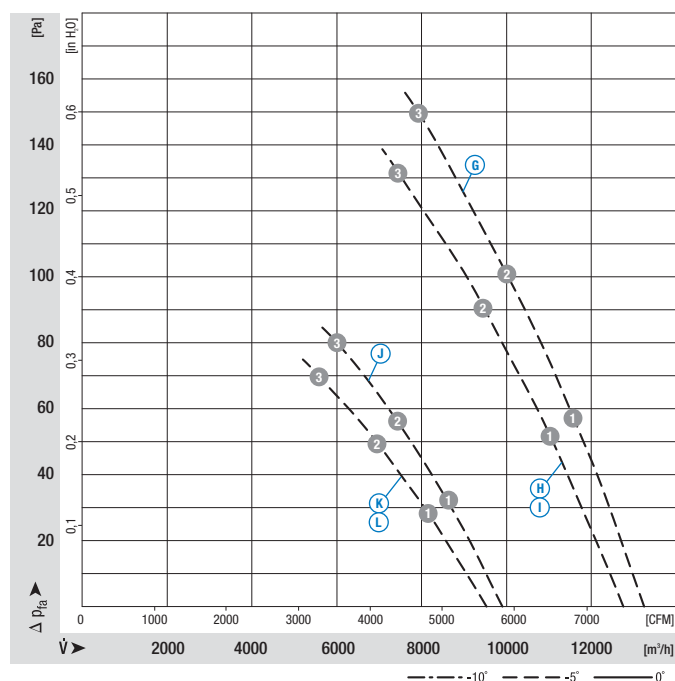


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1090	0.77	1.41	71
A 2	1080	0.82	1.46	69
A 3	1065	0.89	1.60	69
B 1	1045	0.69	1.32	70
B 2	1025	0.75	1.38	68
B 3	1005	0.79	1.53	68
C 1	1045	0.69	2.30	70
C 2	1025	0.75	2.40	68
C 3	1005	0.79	2.65	68
D 1	1120	0.63	1.29	71
D 2	1105	0.72	1.36	70
D 3	1090	0.80	1.42	72
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

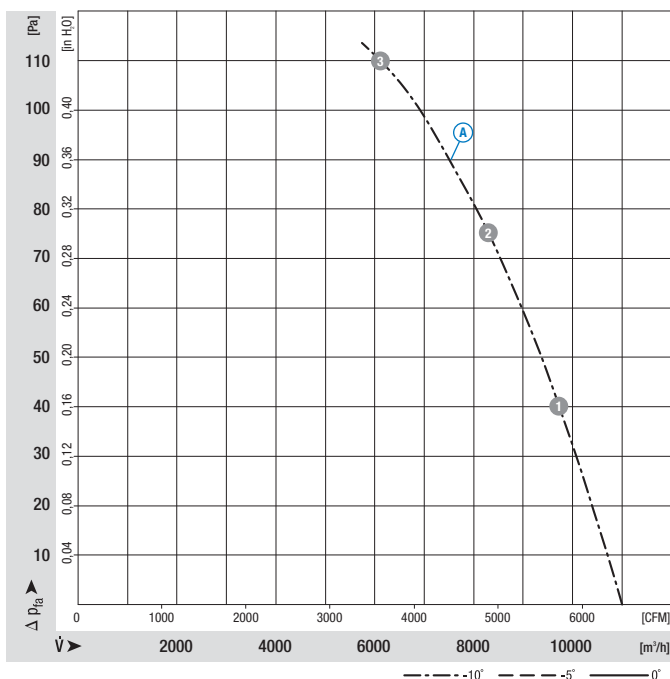


- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** 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

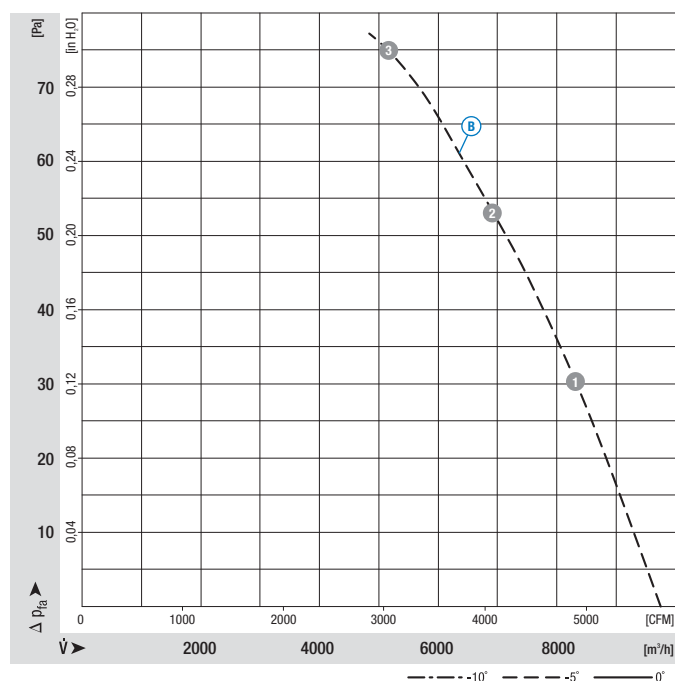


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓐ ①	1060	0.59	2.59	72
Ⓐ ②	1015	0.64	2.79	68
Ⓐ ③	920	0.69	3.02	69

- **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



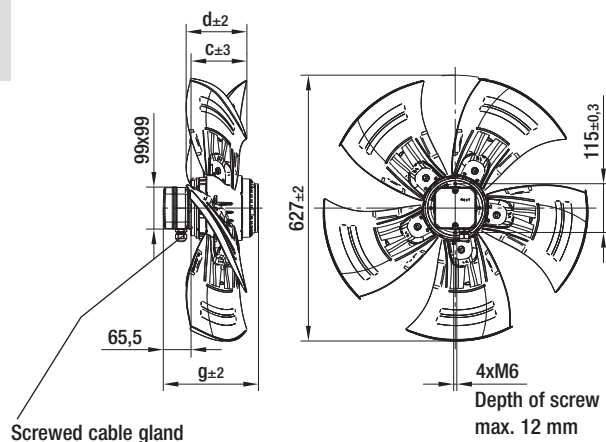
	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
ⓑ 1	780	0.42	1.88	63
ⓑ 2	750	0.44	2.01	62
ⓑ 3	710	0.46	2.12	64

AC axial fans - HyBlade®

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



Without attachments



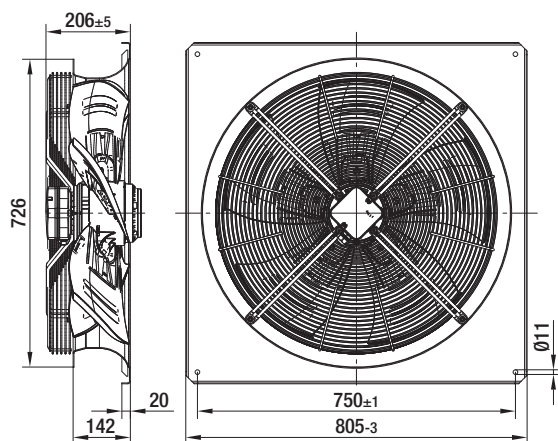
◀ "V"

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

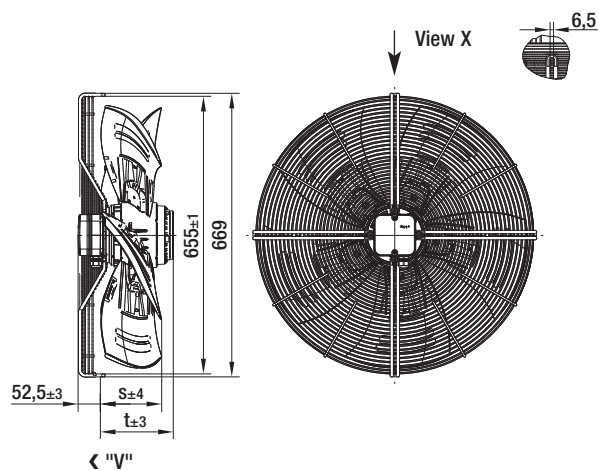


◀ "V"

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



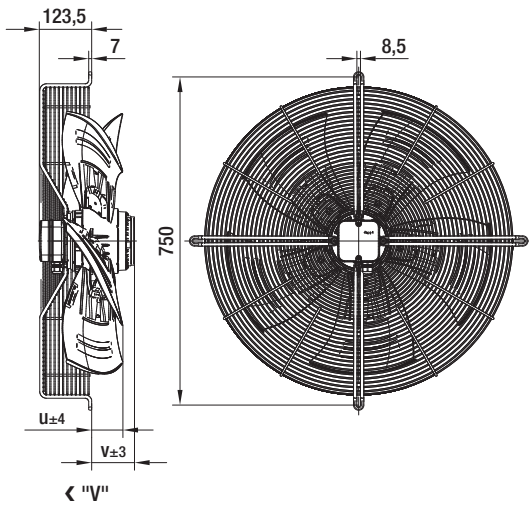
◀ "V"

Type	Mass [kg]	s	t
S6D 630-CN05 -03	16.0	132.0	157.0
S6D 630-C005 -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-C001 -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]	Fan speed	
		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

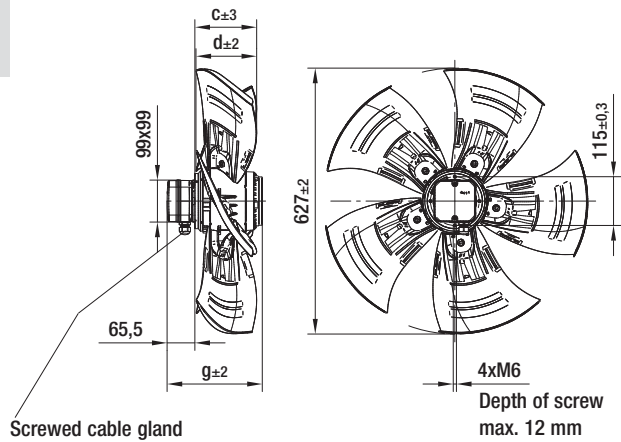
Internal diameter of the wall ring at least 634 mm

AC axial fans - HyBlade®

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



Without attachments



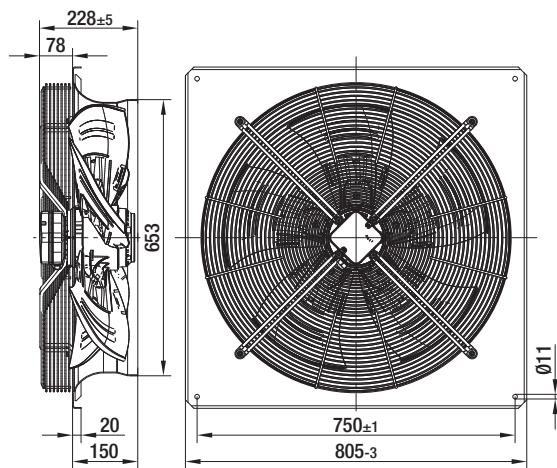
"A" >

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

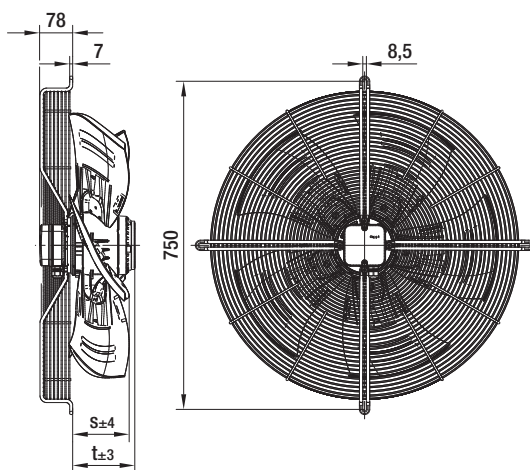


"A" >

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



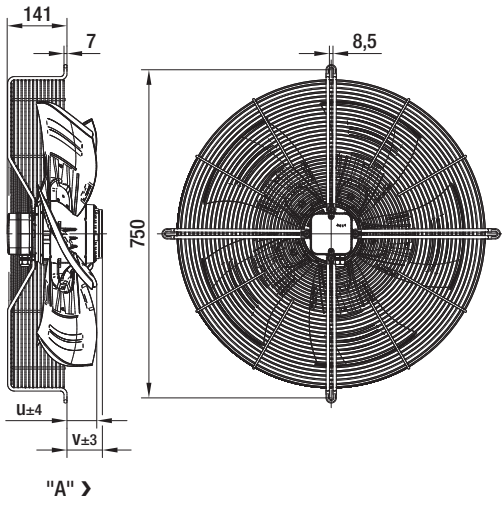
"A" >

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



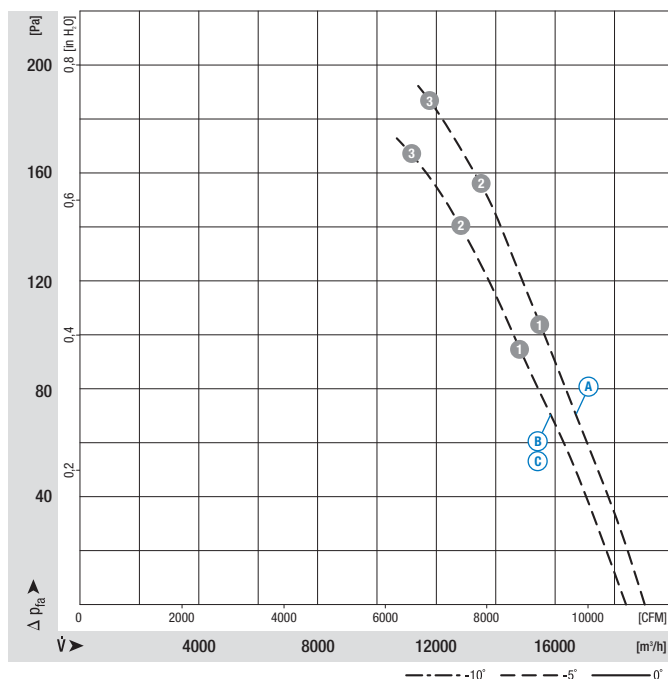
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** 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 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-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	—

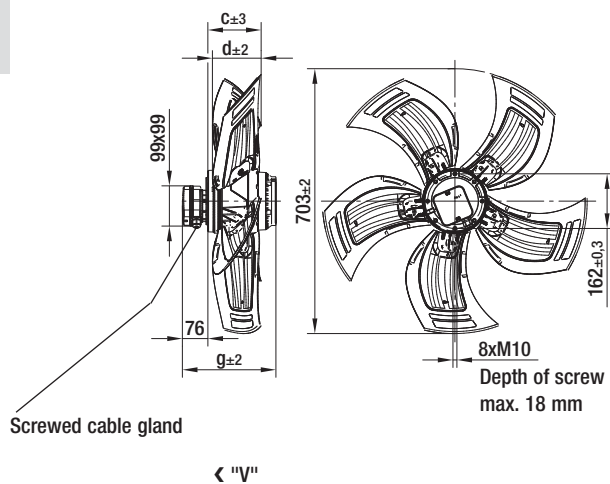
AC axial fans - HyBlade®

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

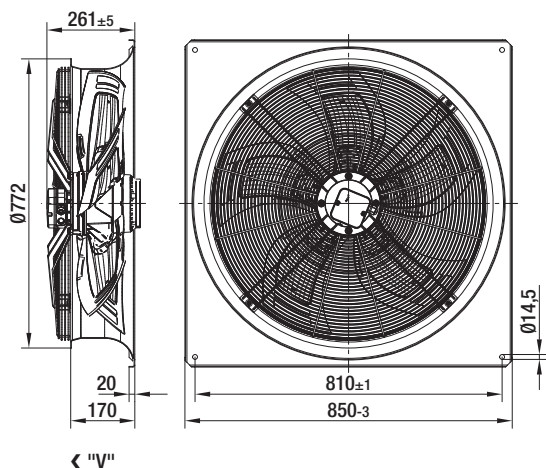


Internal diameter of the wall ring at least 710 mm



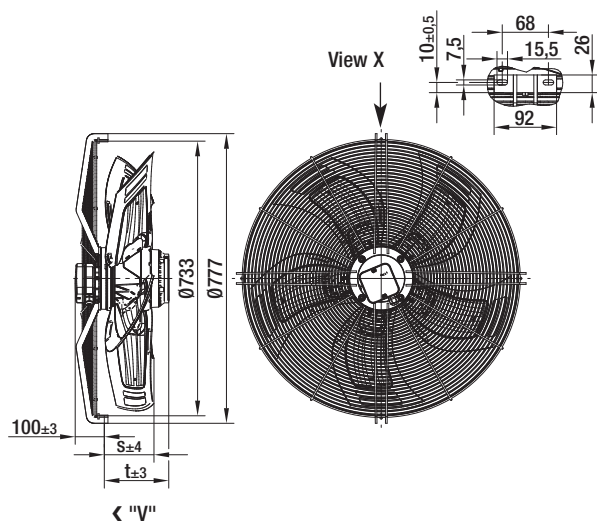
With full square nozzle

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

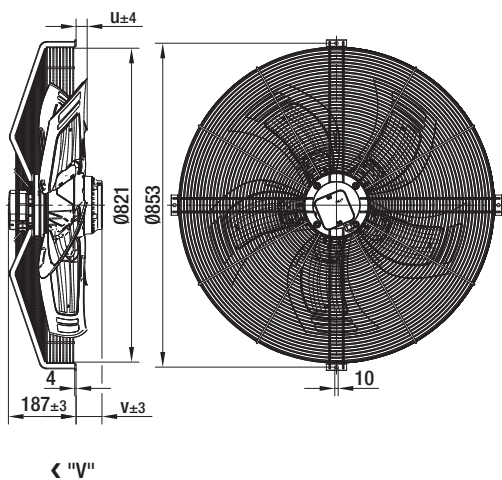
v

S6D 710-AH03 -03

26.6

37.0

66.0



Internal diameter of the
wall ring at least 710 mm

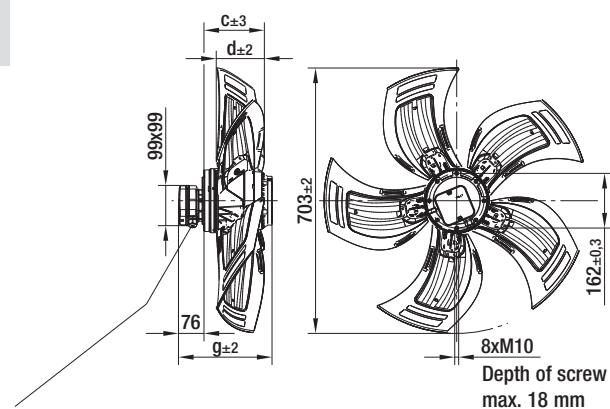
AC axial fans - HyBlade®

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



Screwed cable gland

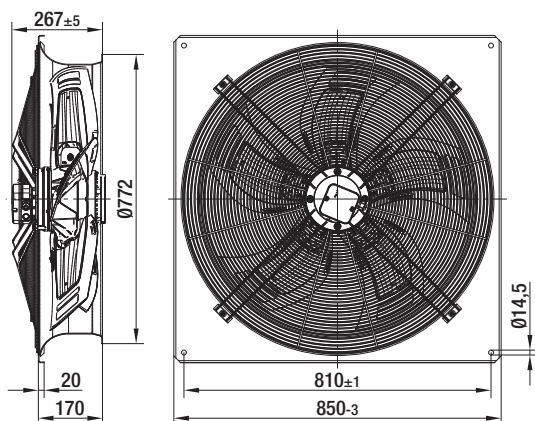
"A" >

Internal diameter of the wall ring at least 710 mm



With full square nozzle

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

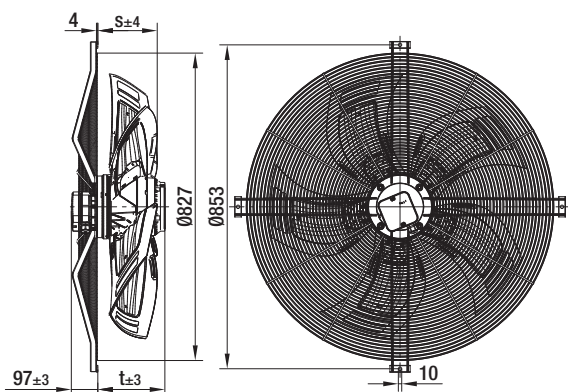


"A" >



With guard grille for full nozzle

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



"A" >

Internal diameter of the wall ring at least 710 mm

AC axial fans - HyBlade®

Ø 710



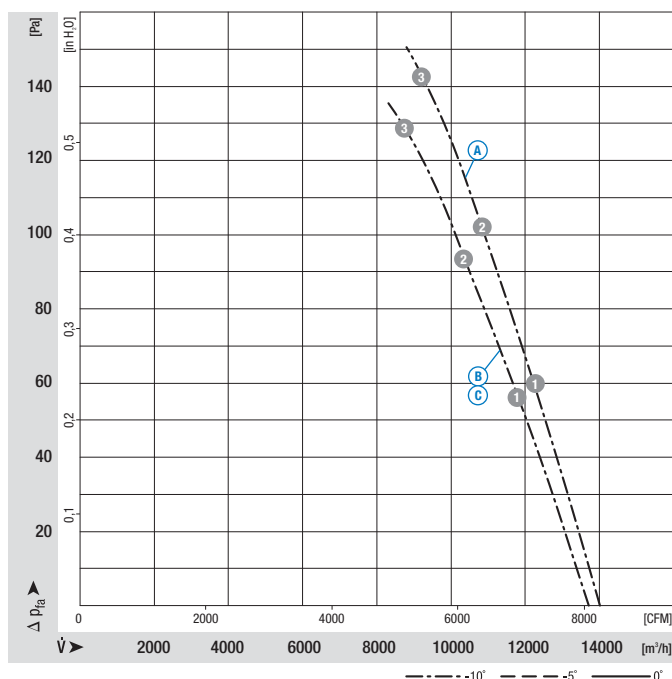
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** Direction of air flow "V" 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

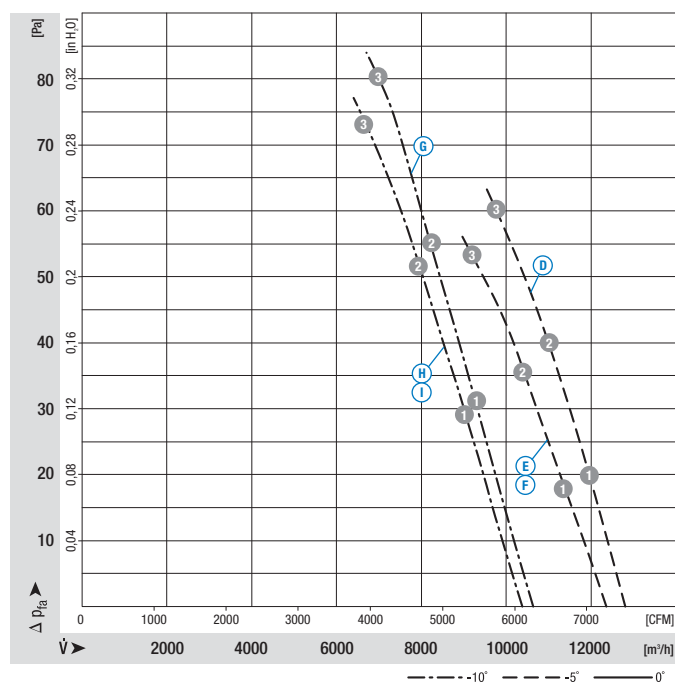


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1115	0.76	1.46	77
A 2	1100	0.87	1.56	77
A 3	1080	0.98	1.75	80
B 1	1080	0.70	1.37	76
B 2	1055	0.80	1.51	76
B 3	1030	0.89	1.71	79
C 1	1080	0.70	2.38	76
C 2	1055	0.80	2.63	76
C 3	1030	0.89	2.96	79

- **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

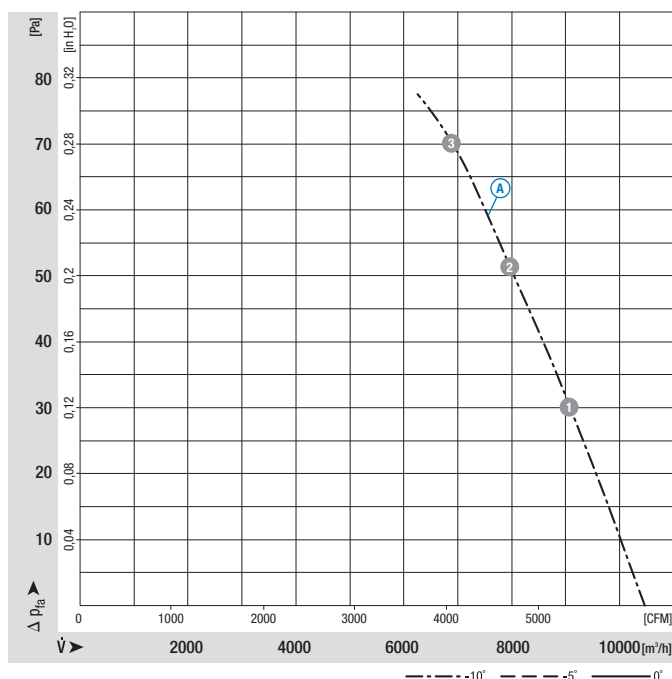
Nominal data

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)

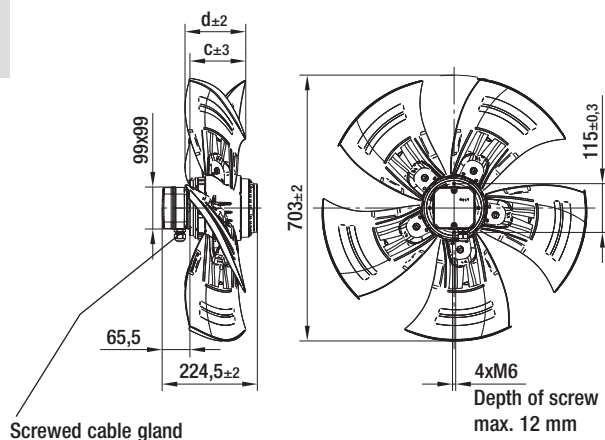
Direction of air flow						
	< "V"/ "A" >	< "V"/ "A" >	< "V" >	< "V" >	"A" >	"A" >
	Without attach-ments	With full square nozzle	With guard grille for full nozzle	With guard grille for short nozzle	With guard grille for full nozzle	With guard grille for short nozzle
"V"	A8E 710-AR01 -03	W8E 710-GR01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



Screwed cable gland

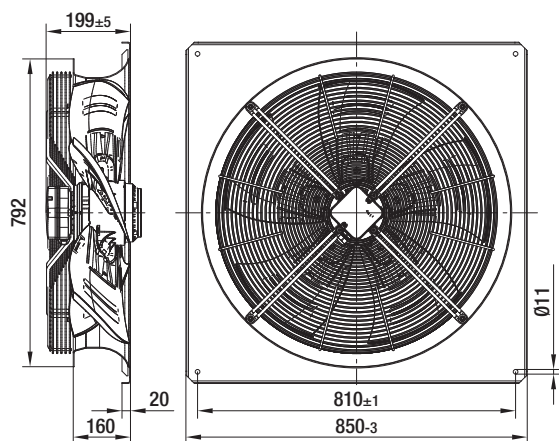
◀ "V"

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

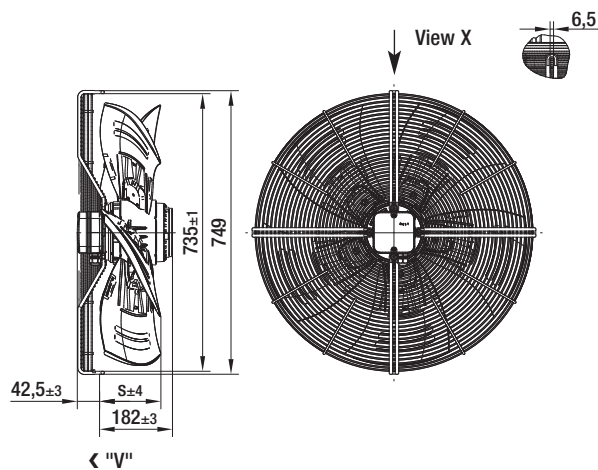


◀ "V"

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



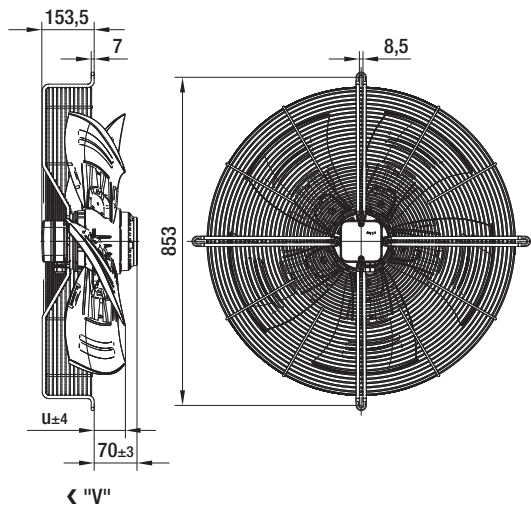
◀ "V"

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

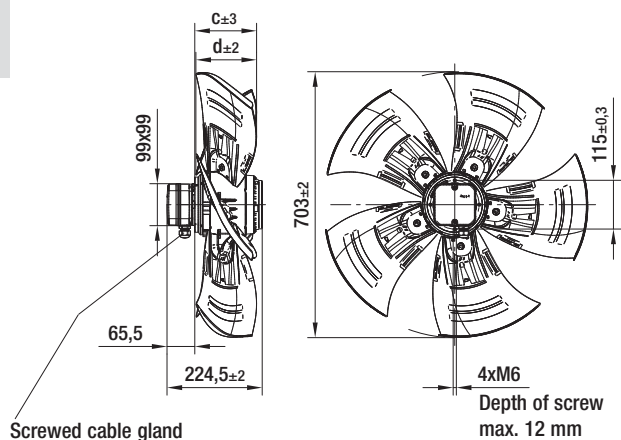
Internal diameter of the wall ring at least 710 mm

AC axial fans - HyBlade®

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



Without attachments



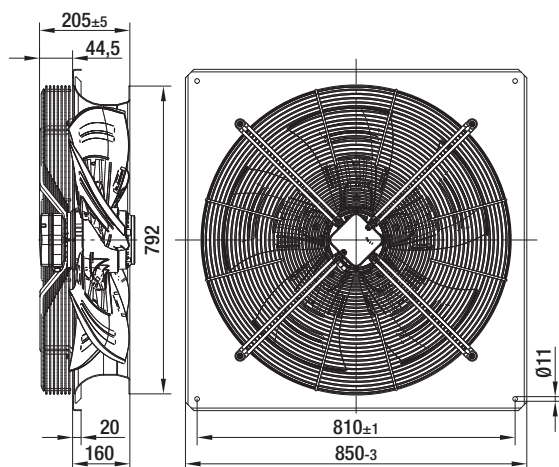
"A" >

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

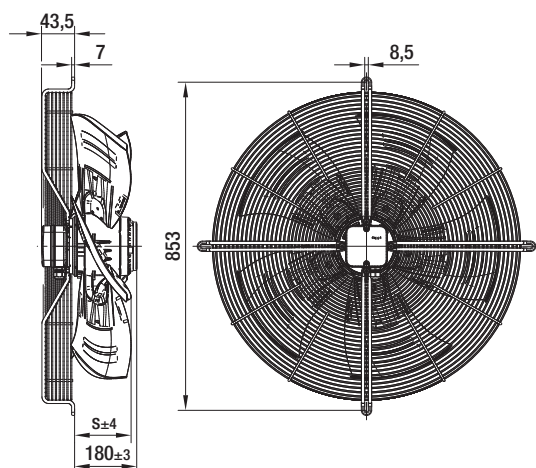


"A" >

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



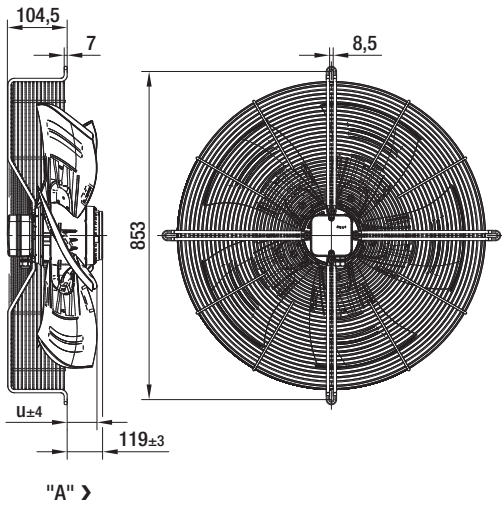
"A" >

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



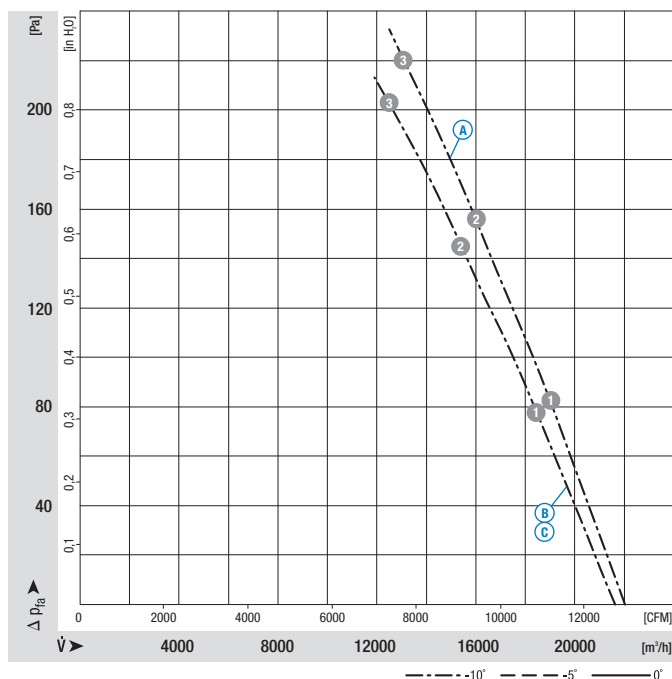
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** 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

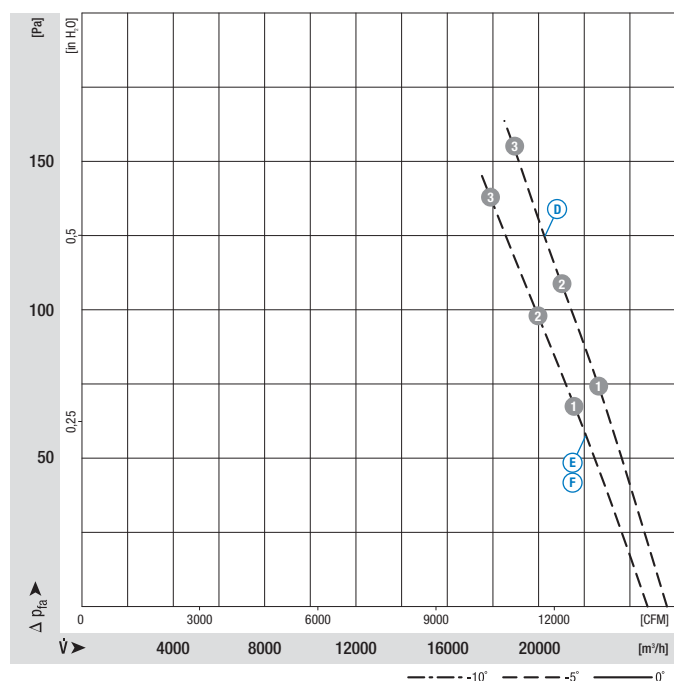


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓐ ①	1130	1.51	3.04	77
Ⓐ ②	1115	1.75	3.30	78
Ⓐ ③	1100	1.98	3.60	80
Ⓑ ①	1100	1.41	2.95	77
Ⓑ ②	1075	1.62	3.27	77
Ⓑ ③	1050	1.80	3.55	79
Ⓒ ①	1100	1.41	5.13	77
Ⓒ ②	1075	1.62	5.69	77
Ⓒ ③	1050	1.80	6.15	79

- **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



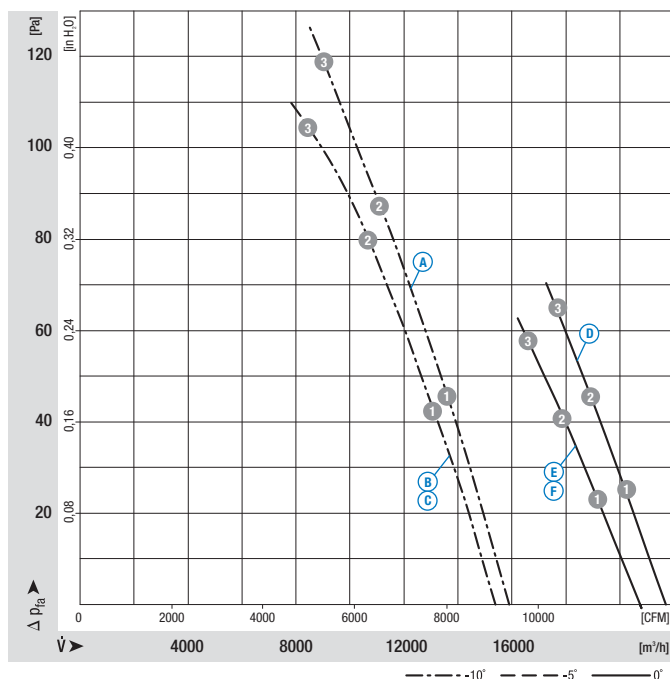
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** 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

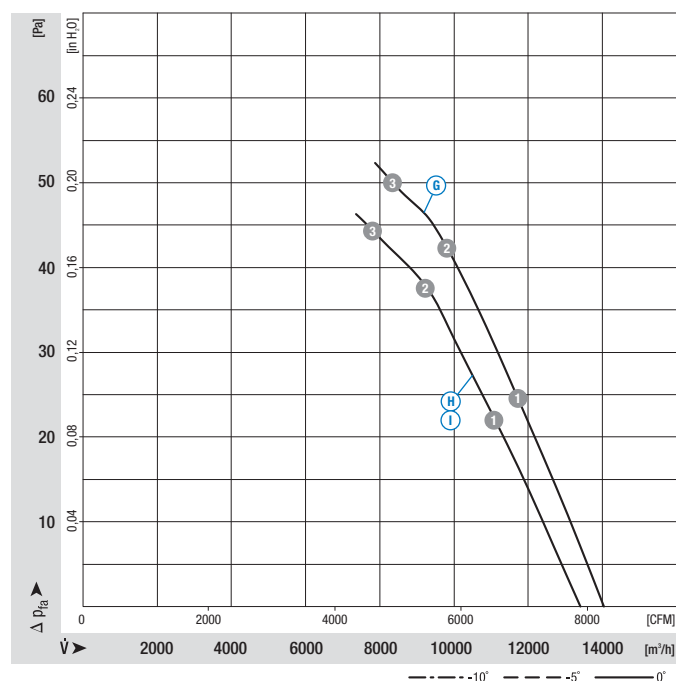


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	825	0.69	1.83	70
A 2	810	0.79	1.89	71
A 3	800	0.87	1.95	72
B 1	800	0.60	1.52	71
B 2	780	0.69	1.64	70
B 3	755	0.76	1.70	71
C 1	800	0.60	2.64	71
C 2	780	0.69	2.85	70
C 3	755	0.76	2.94	71
D 1	815	1.14	2.37	68
D 2	805	1.21	2.44	69
D 3	800	1.27	2.47	69
E 1	770	1.03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



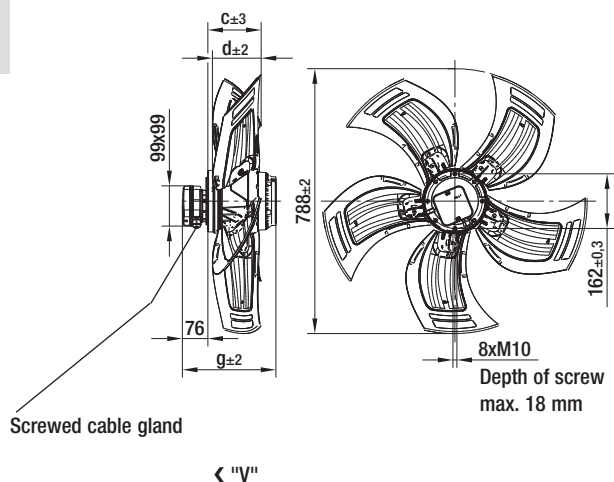
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
G 1	530	0.46	1.16	59
G 2	520	0.48	1.18	59
G 3	510	0.52	1.20	60
H 1	500	0.38	1.01	57
H 2	490	0.40	1.05	58
H 3	480	0.43	1.10	60
I 1	500	0.38	1.76	57
I 2	490	0.40	1.83	58
I 3	480	0.43	1.90	60

AC axial fans - HyBlade®

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



Without attachments

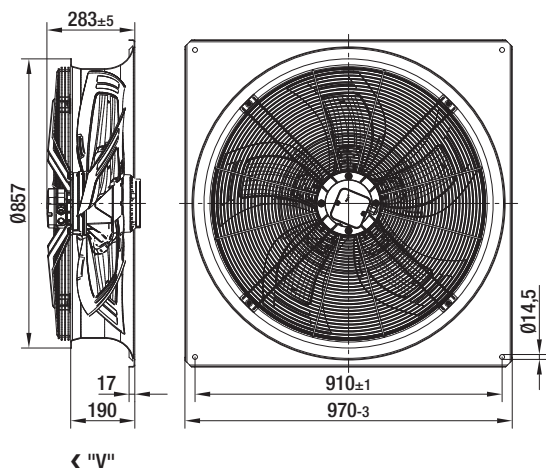


Type	Mass [kg]	c	d	g
A6D 800-AF05 -03	23.0	143.0	112.0	277.0
A6D 800-AE05 -03	23.0	150.0	130.0	277.0
A8D 800-AI09 -03	19.0	143.0	112.0	252.0
A8D 800-AD05 -03	23.0	158.0	143.0	277.0
AZD 800-AG07 -03	19.0	158.0	143.0	252.0

Internal diameter of the wall ring at least 795 mm



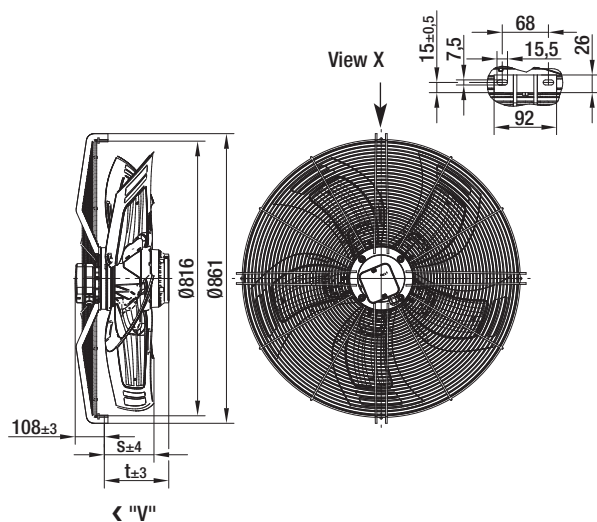
With full square nozzle



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

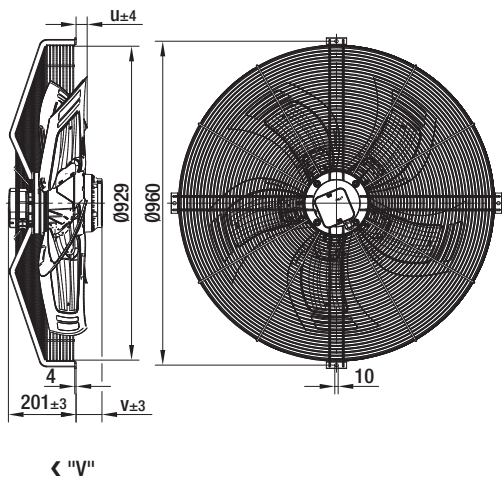


Type	Mass [kg]	s	t
S6D 800-CF05 -03	29.7	111.0	169.0
S6D 800-CE05 -03	29.7	118.0	169.0
S8D 800-CI09 -03	25.7	111.0	144.0
S8D 800-CD05 -03	29.7	127.0	169.0
SZD 800-CG07 -03	25.7	127.0	144.0

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

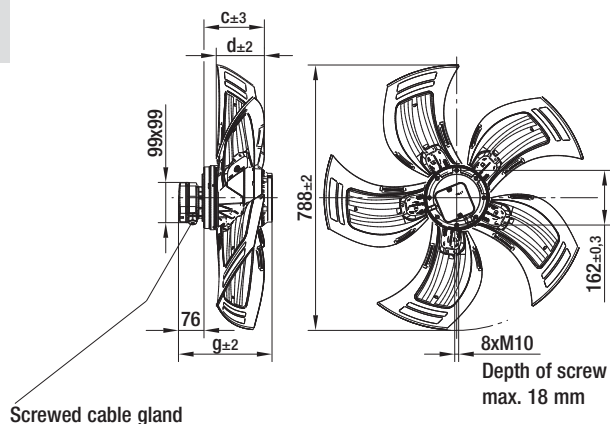
Internal diameter of the wall ring at least 795 mm

AC axial fans - HyBlade®

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



Without attachments



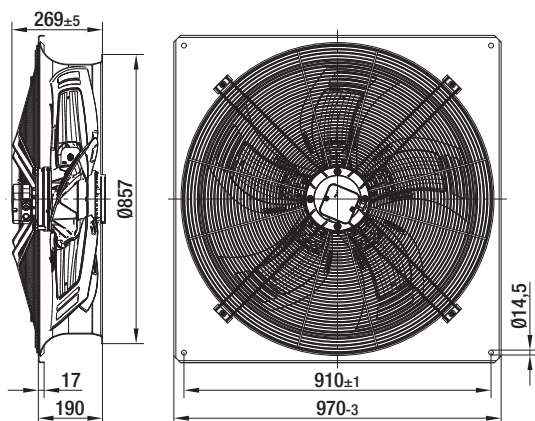
"A" >

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

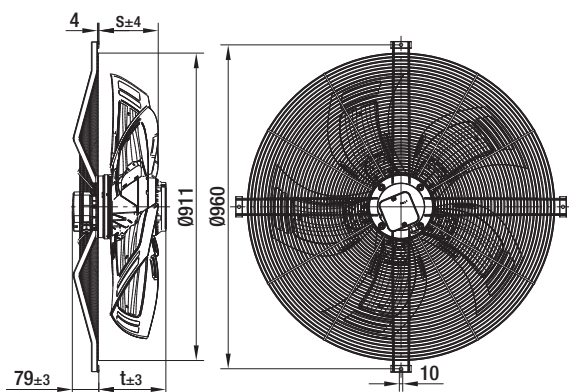


"A" >

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



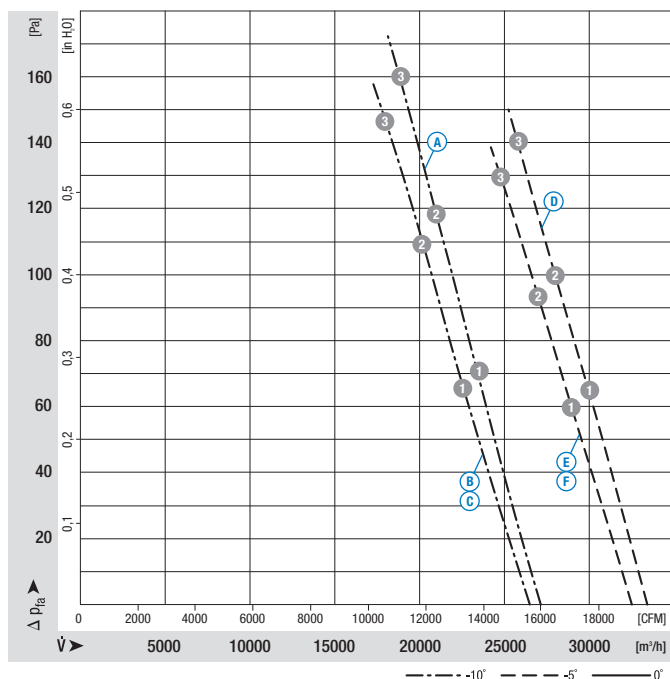
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** 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

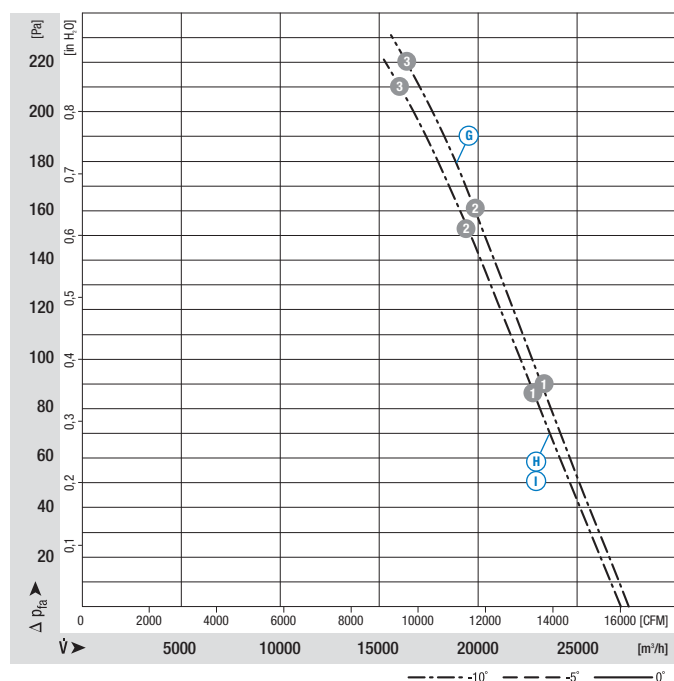


	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
A 1	1115	1.71	3.34	82
A 2	1100	1.97	3.65	82
A 3	1090	2.15	3.86	82
B 1	1080	1.60	3.28	81
B 2	1055	1.81	3.63	81
B 3	1035	1.96	3.90	81
C 1	1080	1.60	5.71	81
C 2	1055	1.81	6.32	81
C 3	1035	1.96	6.75	81
D 1	1120	2.44	4.64	82
D 2	1110	2.63	4.83	81
D 3	1100	2.87	5.13	80
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



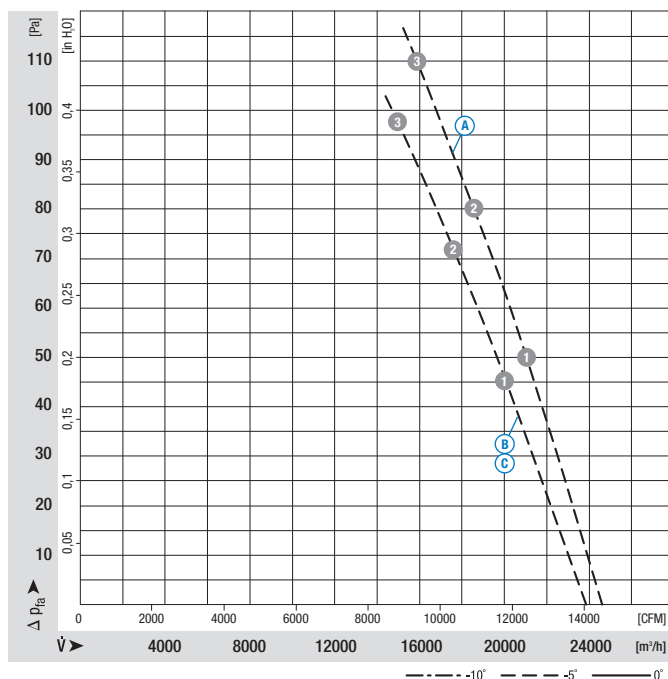
- **Material:** Guard grille: Steel, phosphated and coated in black plastic
Wall ring: Sheet steel, pre-galvanised and coated in black plastic
Blades: Insertion part made of sheet aluminium, extrusion-coated in PP plastics
Rotor: Encased in aluminium
- **Number of blades:** 5
- **Direction of rotation:** 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

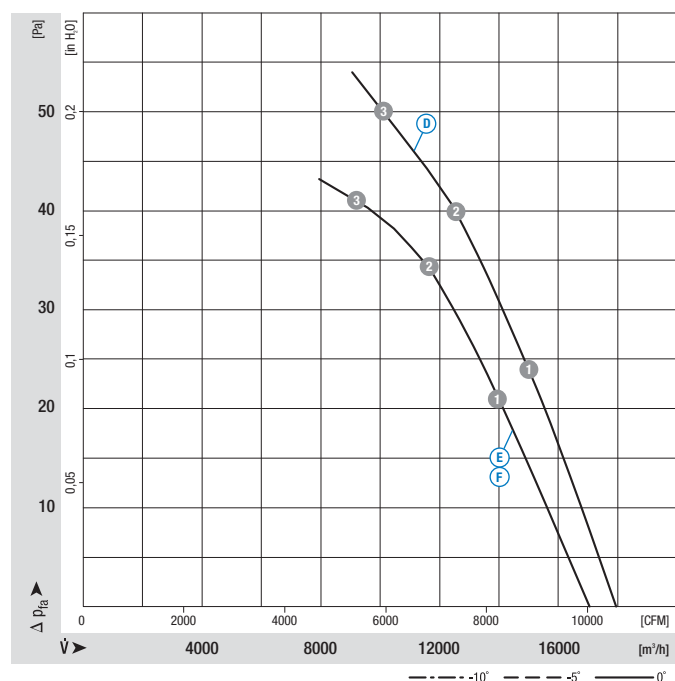


	n [rpm]	P ₁ [kW]	I [A]	Lw _A [dB(A)]
Ⓐ ①	820	1.18	2.54	73
Ⓐ ②	805	1.29	2.66	72
Ⓐ ③	795	1.42	2.75	73
Ⓑ ①	780	1.06	2.40	71
Ⓑ ②	765	1.16	2.55	70
Ⓑ ③	740	1.25	2.68	72
Ⓒ ①	780	1.06	4.18	71
Ⓒ ②	765	1.16	4.44	70
Ⓒ ③	740	1.25	4.65	72

- **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



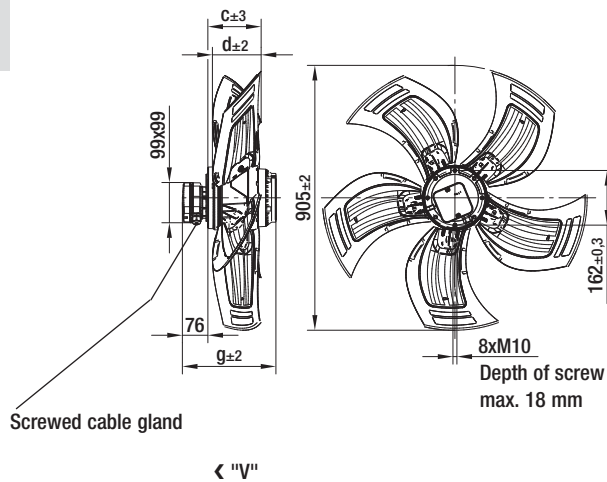
	n [rpm]	P ₁ [kW]	I [A]	L _{wA} [dB(A)]
ⓓ ①	505	0.54	1.24	60
ⓓ ②	490	0.59	1.28	60
ⓓ ③	485	0.61	1.31	62
ⓔ ①	470	0.45	1.13	58
ⓔ ②	450	0.48	1.18	58
ⓔ ③	440	0.50	1.20	60
ⓕ ①	470	0.45	1.97	58
ⓕ ②	450	0.48	2.05	58
ⓕ ③	440	0.50	2.08	60

AC axial fans - HyBlade®

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



Without attachments

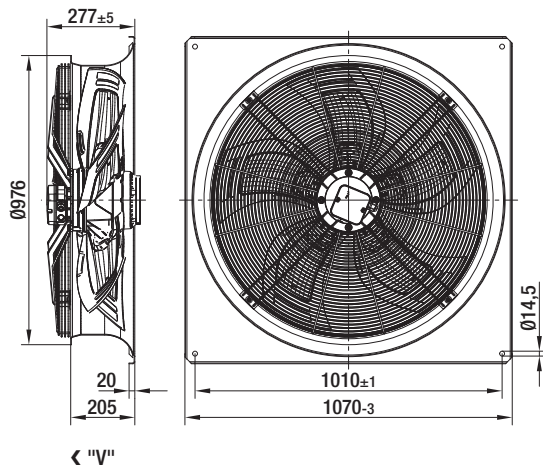


Type	Mass [kg]	c	d	g
A6D 910-AF05 -03	25,1	139,0	94,0	277,0
A6D 910-AB05 -03	28,1	145,0	106,0	297,0
A6D 910-AC05 -03	28,1	139,0	94,0	297,0
A8D 910-AE07 -03	25,1	145,0	106,0	277,0
AZD 910-AG07 -03	20,1	149,0	119,0	252,0

Internal diameter of the wall ring at least 913 mm



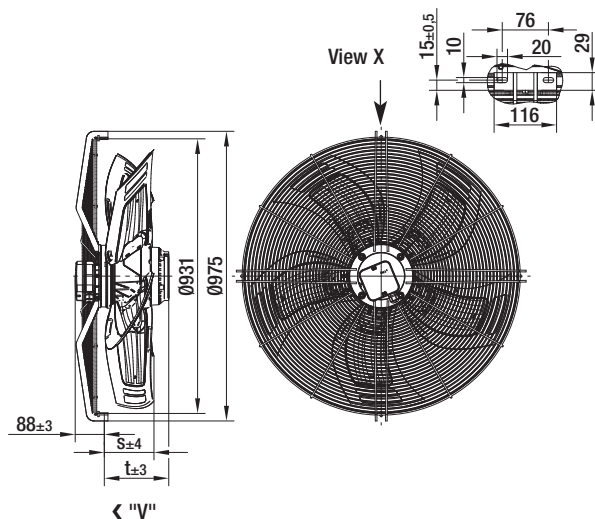
With full square nozzle



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

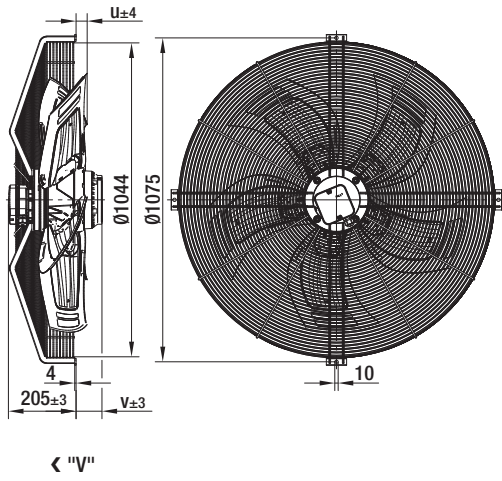


Type	Mass [kg]	s	t
S6D 910-CF05 -03	36,1	127,0	189,0
S6D 910-CB05 -03	39,1	133,0	209,0
S6D 910-CC05 -03	39,1	127,0	209,0
S8D 910-CE07 -03	36,1	133,0	189,0
SZD 910-CG07 -03	31,1	137,0	164,0

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

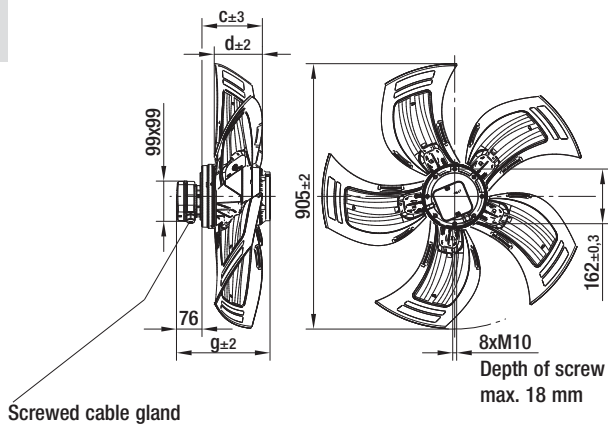
Internal diameter of the wall ring at least 913 mm

AC axial fans - HyBlade®

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



Without attachments



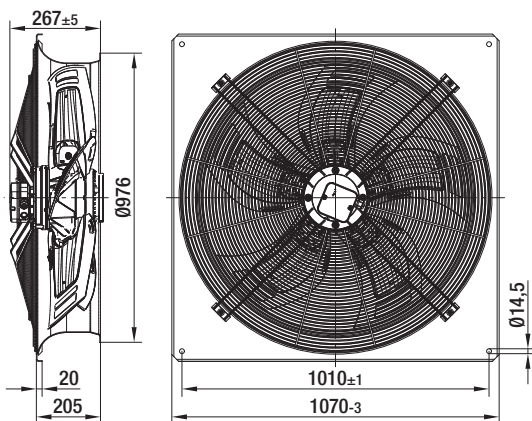
"A" >

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

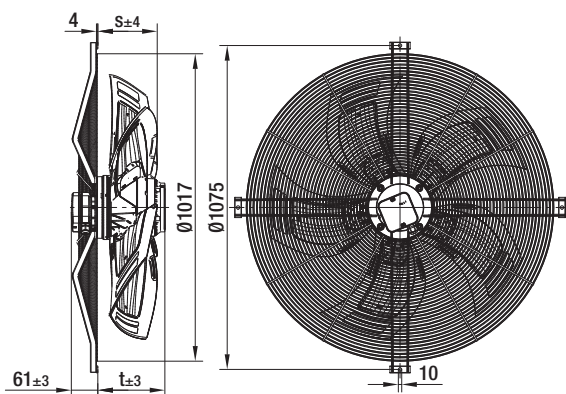


"A" >

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



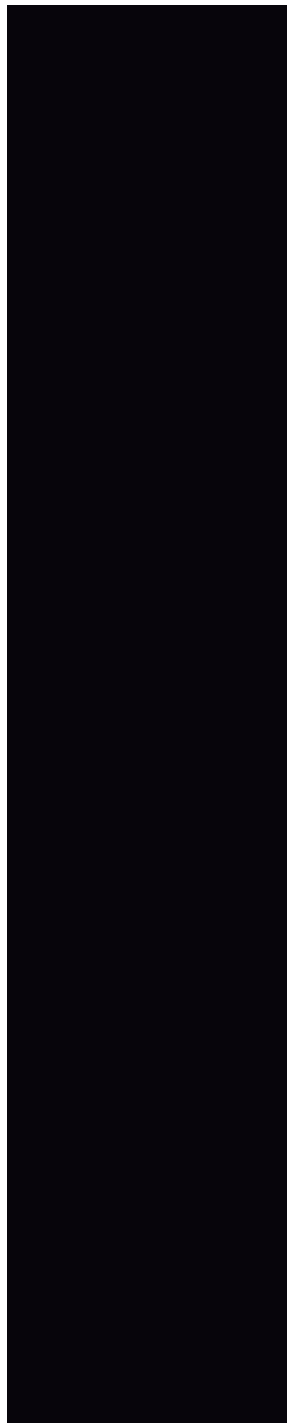
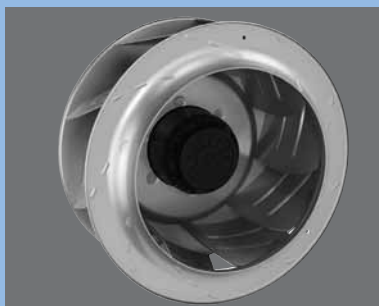
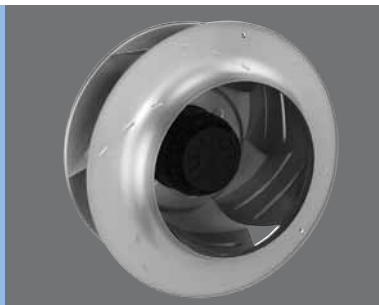
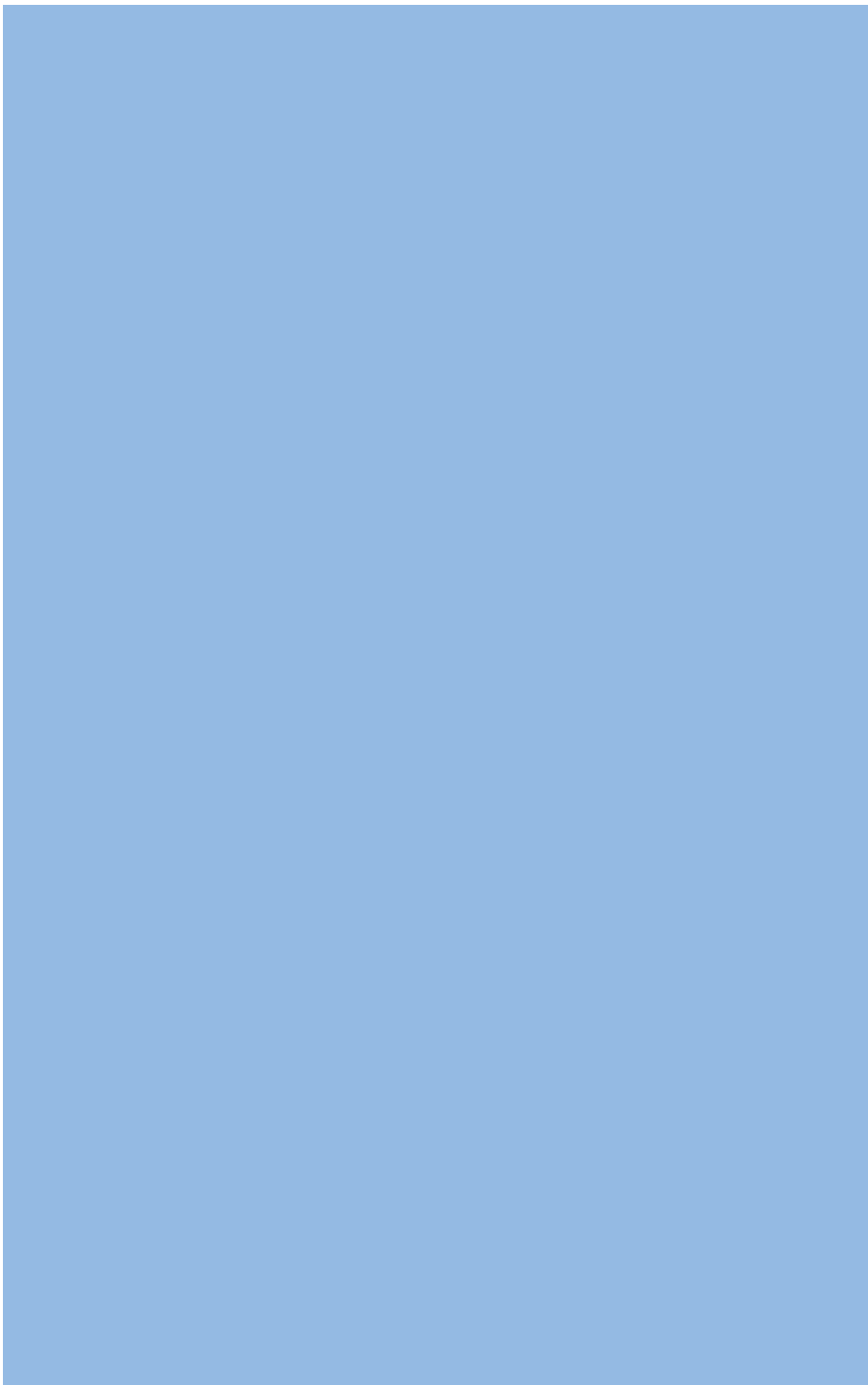
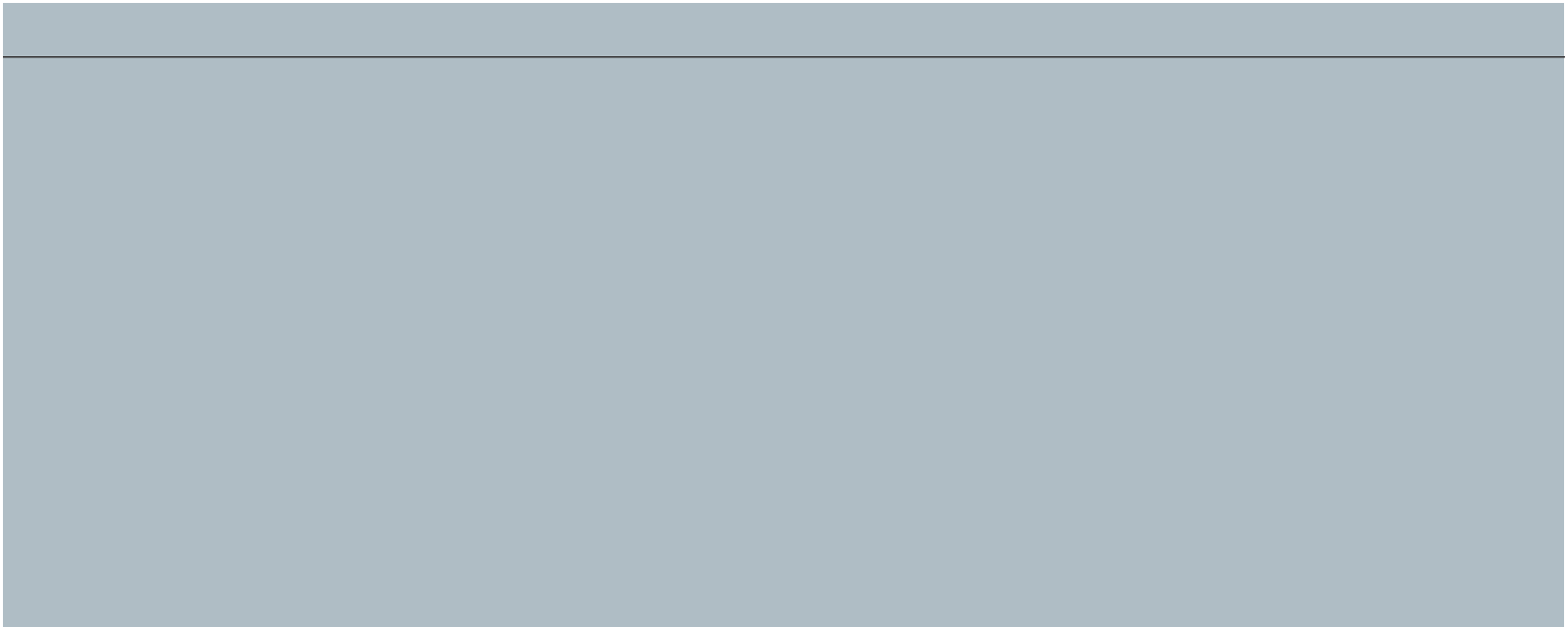
With guard grille for full nozzle



"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

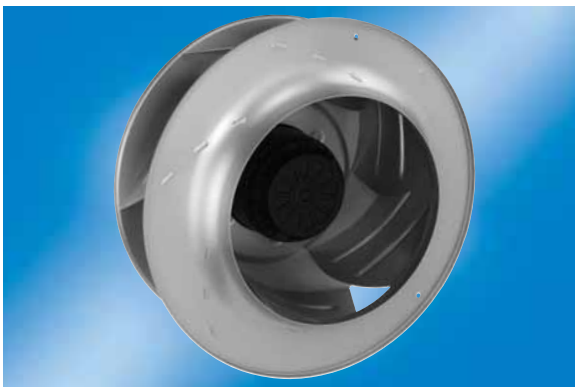
Ø 450 - Ø 630

68



AC centrifugal fans

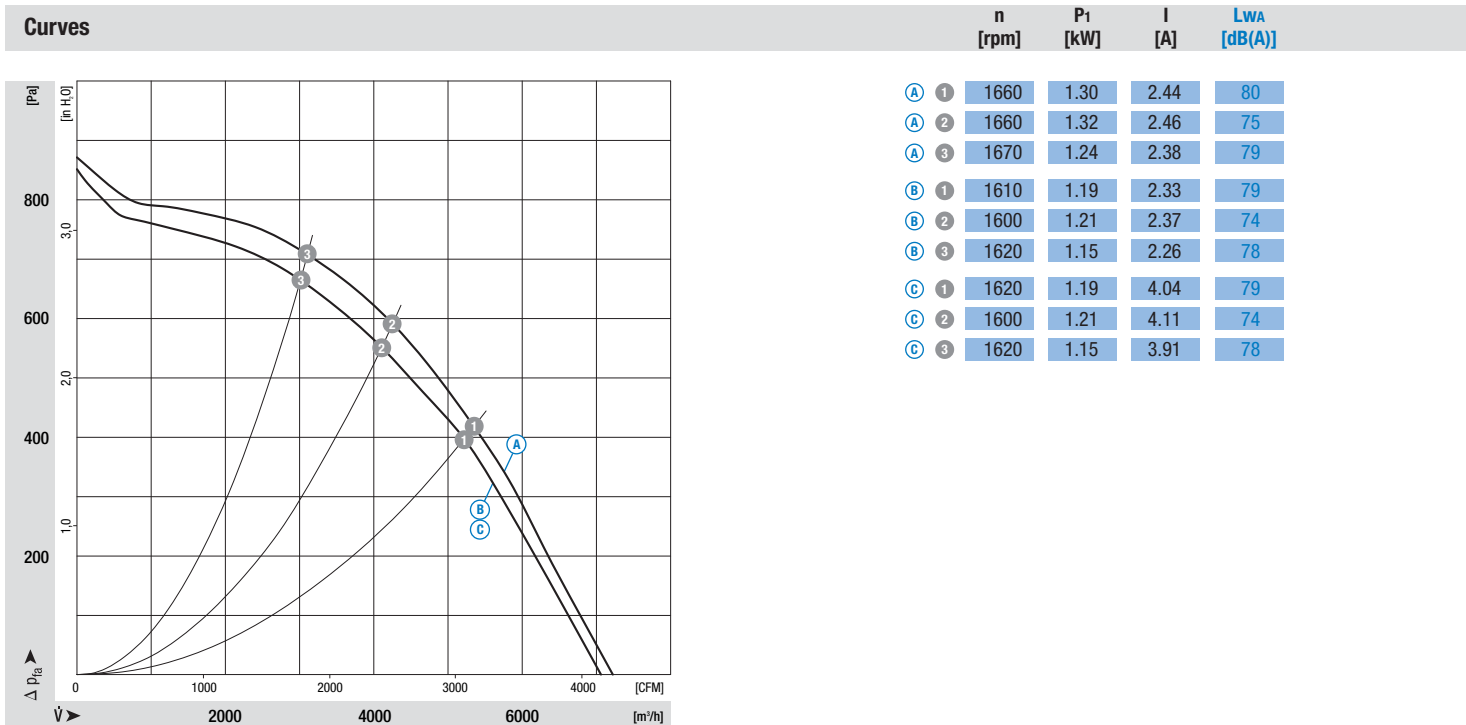
backward curved, 3-D, Ø 450



- **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

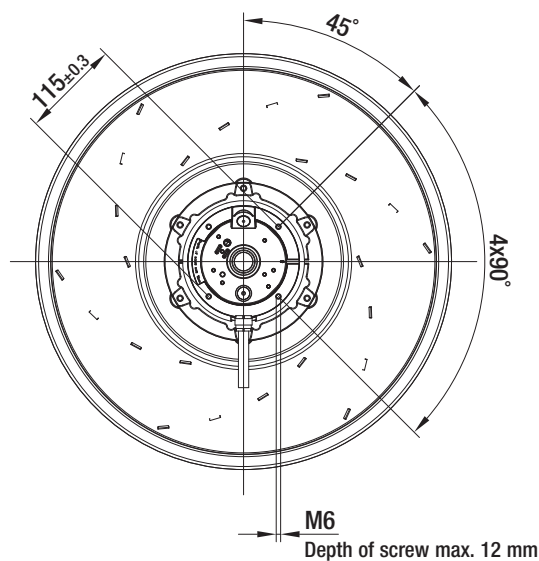
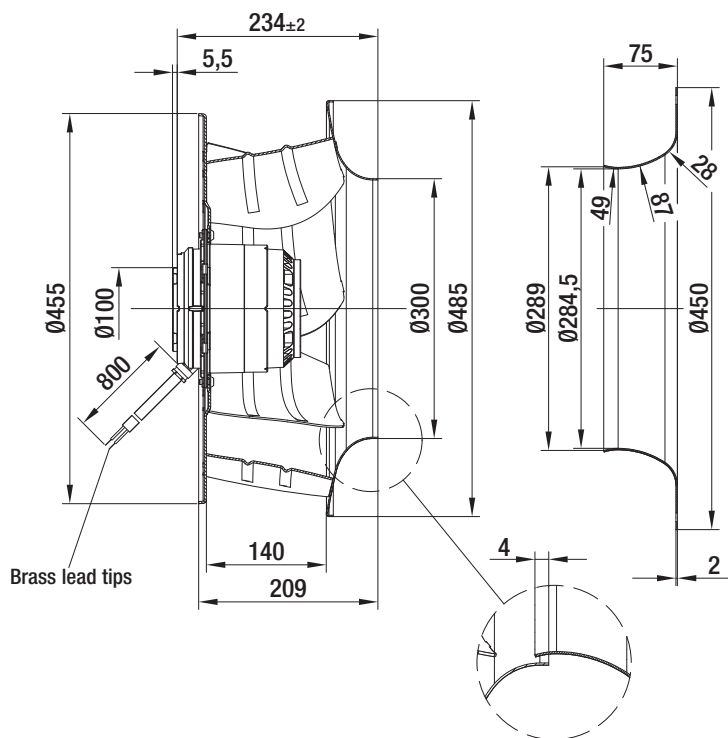
kg

Inlet nozzle (long)

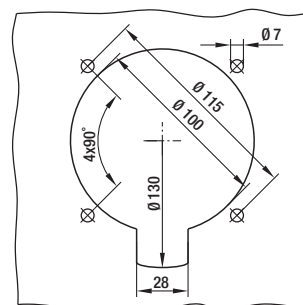
R4D 450-AH03 -01

14.5

63045-2-4013

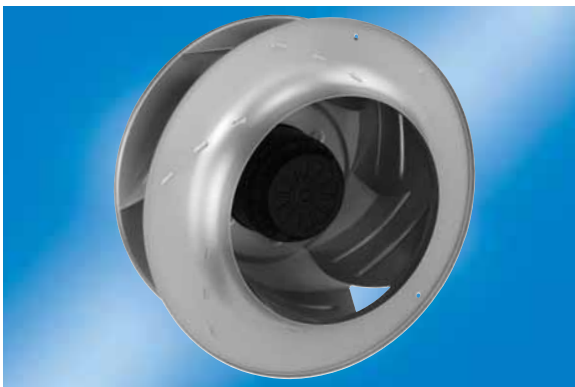


Mounting dimensions



AC centrifugal fans

backward curved, 3-D, Ø 450

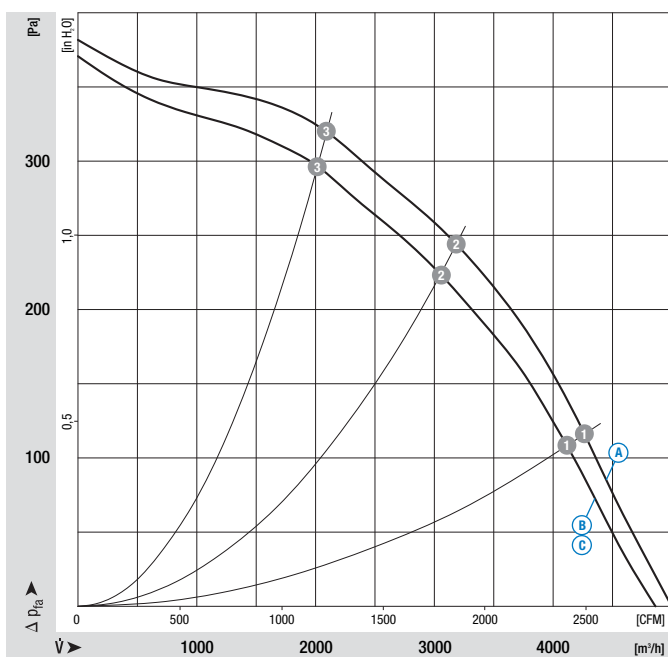


- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; 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		

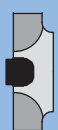
subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y

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

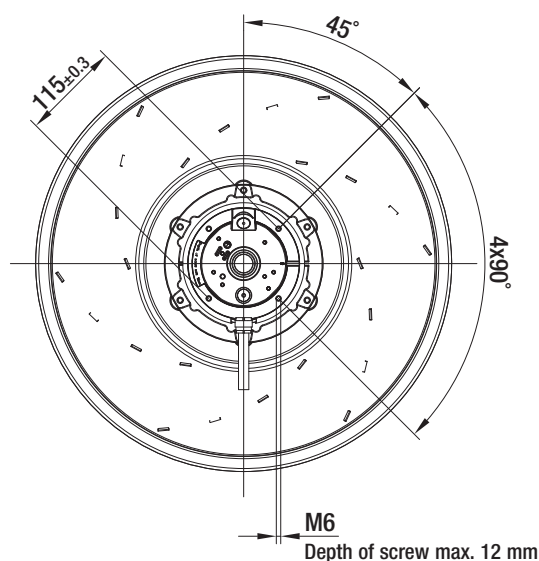
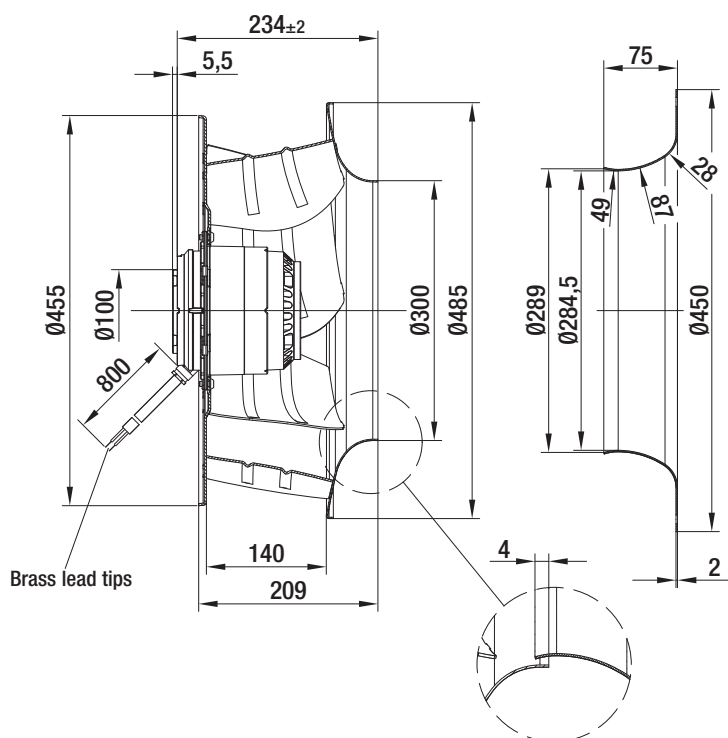
kg

Inlet nozzle (long)

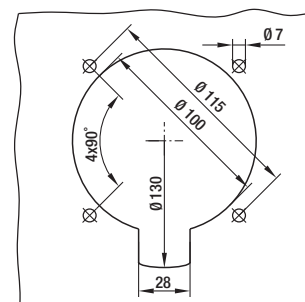
R6D 450-AN01 -01

10.0

63045-2-4013



Mounting dimensions



AC centrifugal fans

backward curved, 3-D, Ø 450

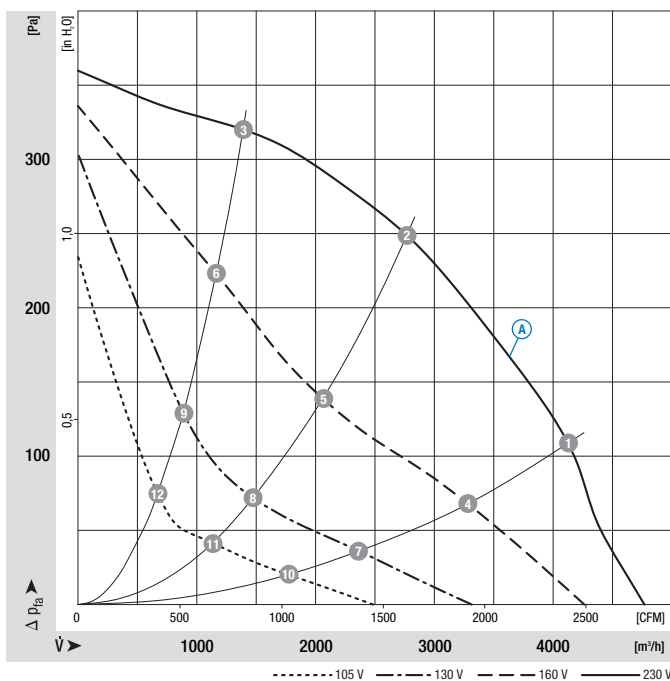


- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 6
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; 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

- **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

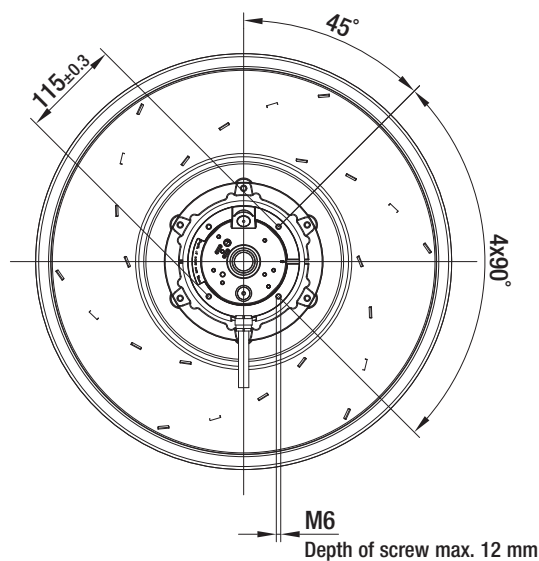
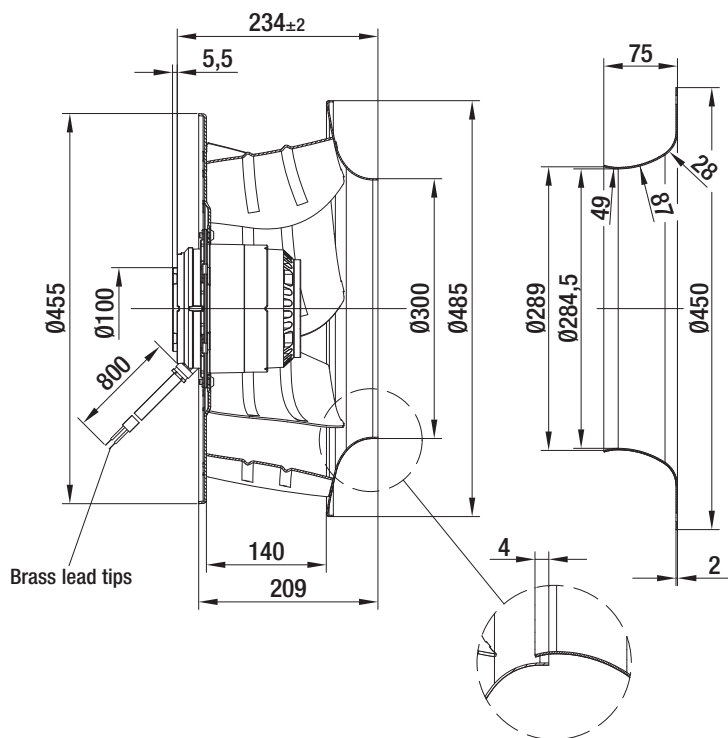
kg

Inlet nozzle (long)

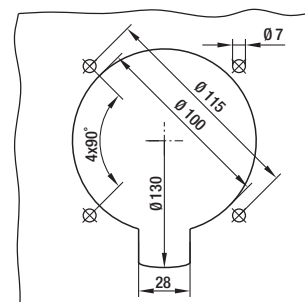
R6E 450-AN01 -01

10.0

63045-2-4013



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

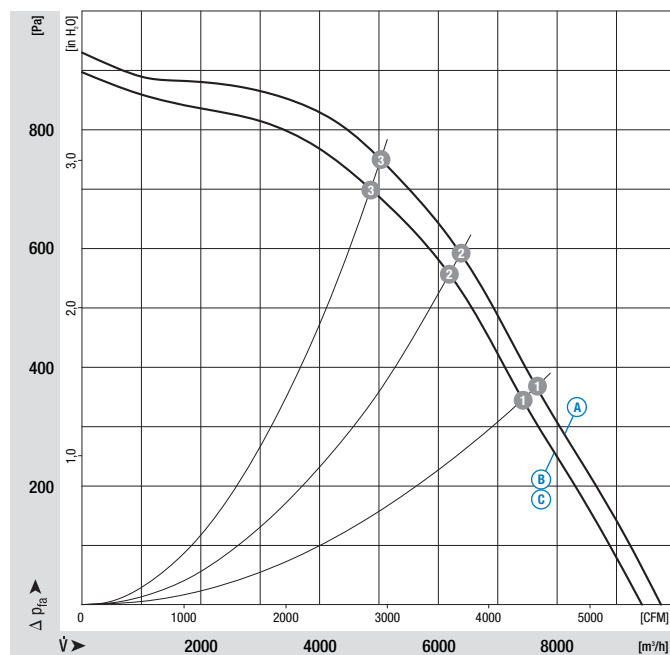
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amp. temp. °C	Electr. connection p. 127
R4D 500 ⁽²⁾	M4D 138-LA	A	3~ 480 Y	60	1670	2.40	3.90	—	-40 to +70	D1)/D2)
		B	3~ 400 Y	60	1600	2.24	3.90	—	-40 to +70	
		C	3~ 230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



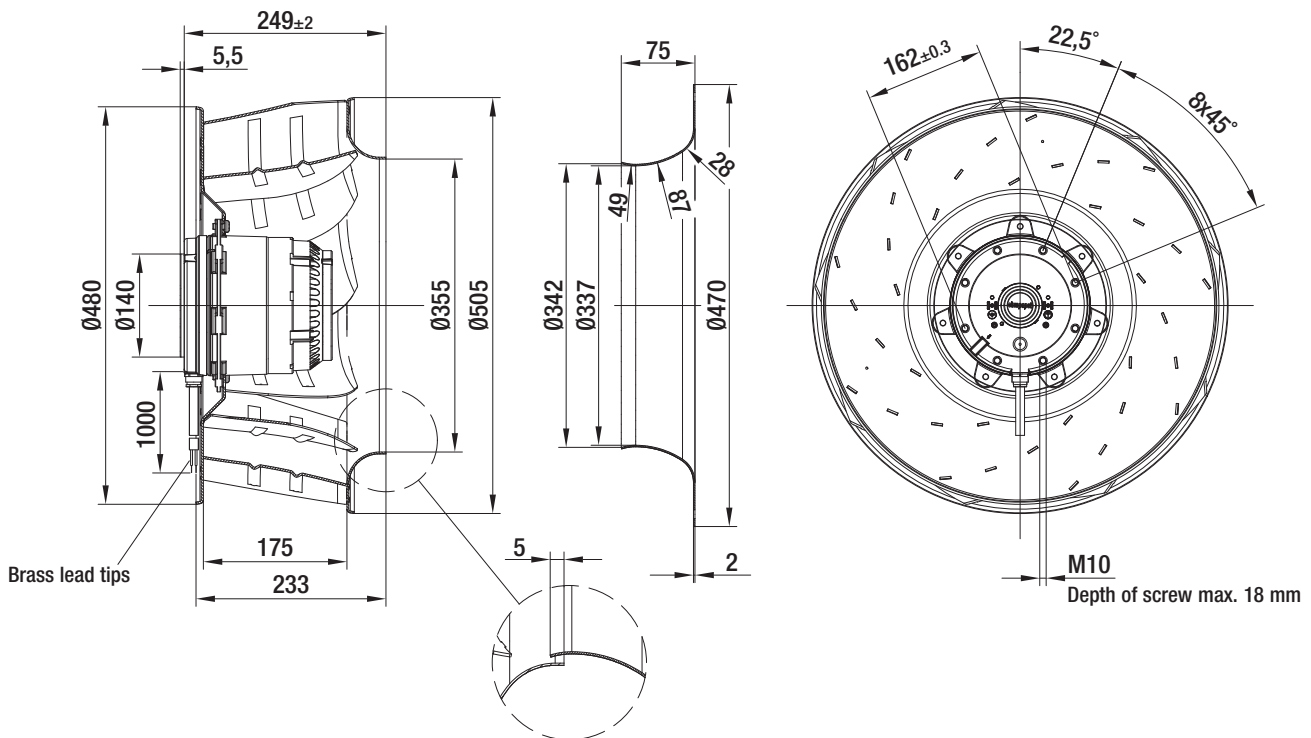
	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	1670	2.30	3.70	86
A 2	1670	2.40	3.90	82
A 3	1670	2.30	3.69	83
B 1	1610	2.16	3.77	85
B 2	1600	2.24	3.90	81
B 3	1610	2.15	3.75	82
C 1	1610	2.16	6.53	85
C 2	1600	2.24	6.75	81
C 3	1610	2.15	6.50	82

- **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)



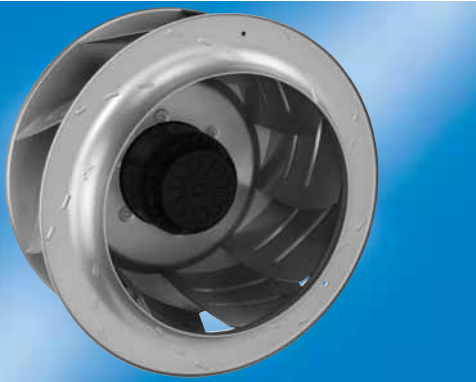
Mass of centrifugal fan

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



AC centrifugal fans

backward curved, 3-D, Ø 500

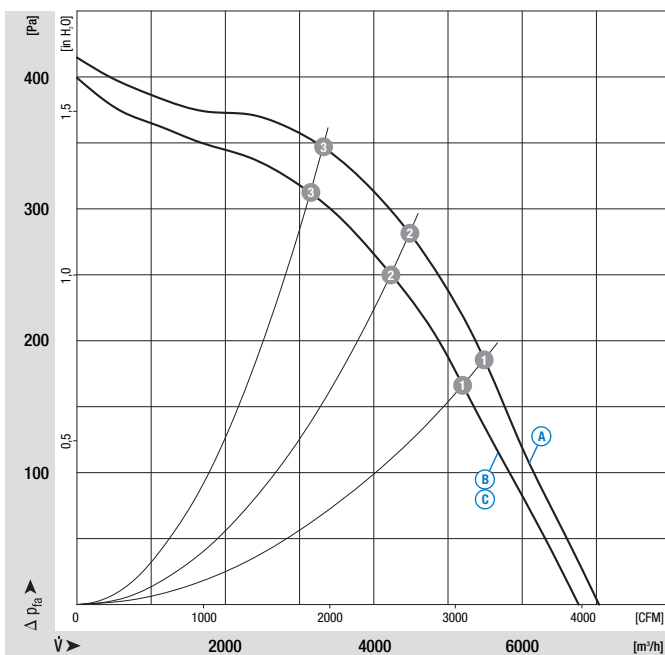


- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 9
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; 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

Curves

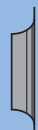


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1070	0.73	1.23	73
A 2	1065	0.78	1.27	71
A 3	1080	0.72	1.21	71
B 1	1020	0.66	1.22	71
B 2	1000	0.70	1.28	69
B 3	1020	0.66	1.21	70
C 1	1020	0.66	2.11	71
C 2	1000	0.70	2.21	69
C 3	1020	0.66	2.10	70

- **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

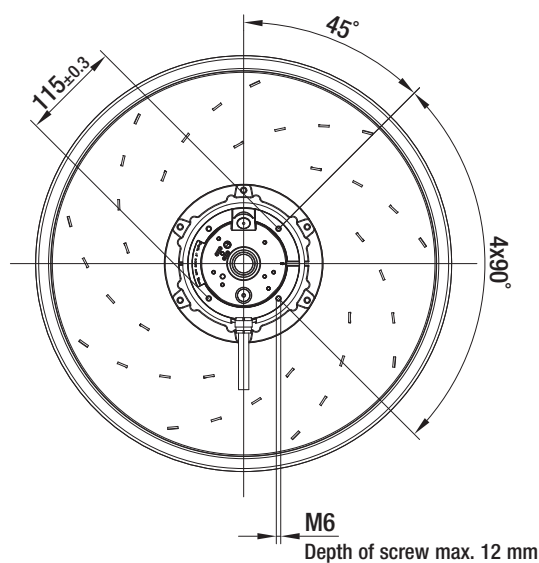
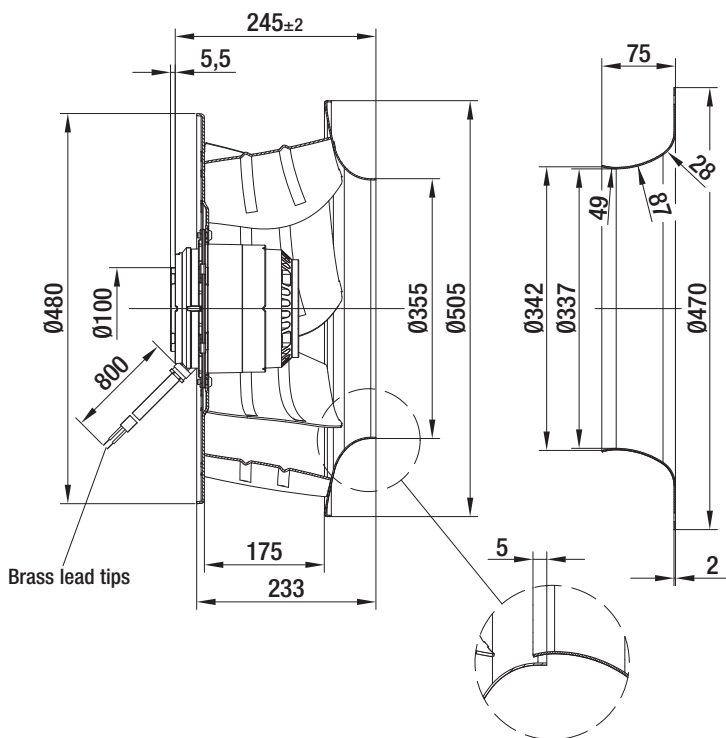
kg

Inlet nozzle (long)

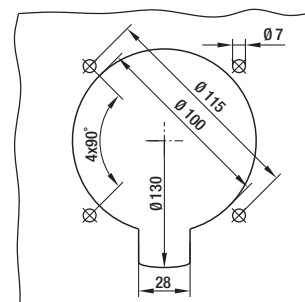
R6D 500-AK03 -01

13.0

63072-2-4013



Mounting dimensions



AC centrifugal fans

backward curved, 3-D, Ø 500

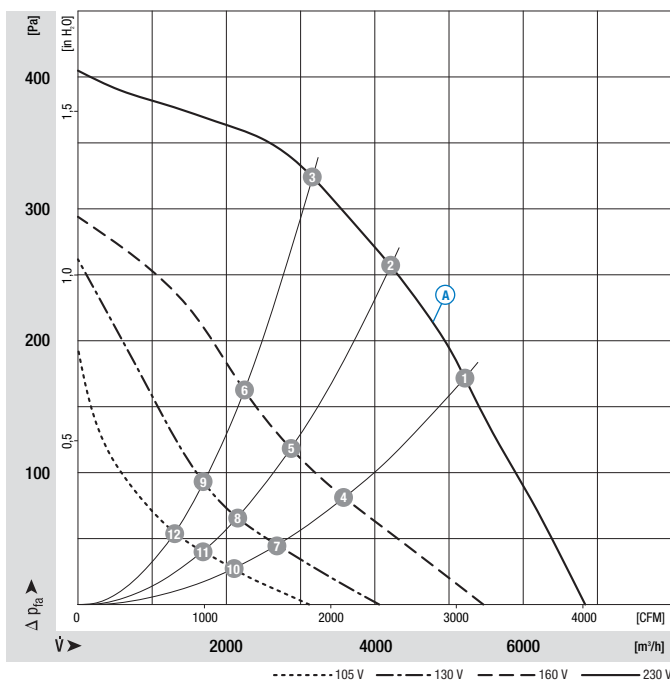


- **Material:** Impeller: Sheet aluminium, welded
Rotor: Cast in aluminium
- **Number of blades:** 9
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; 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

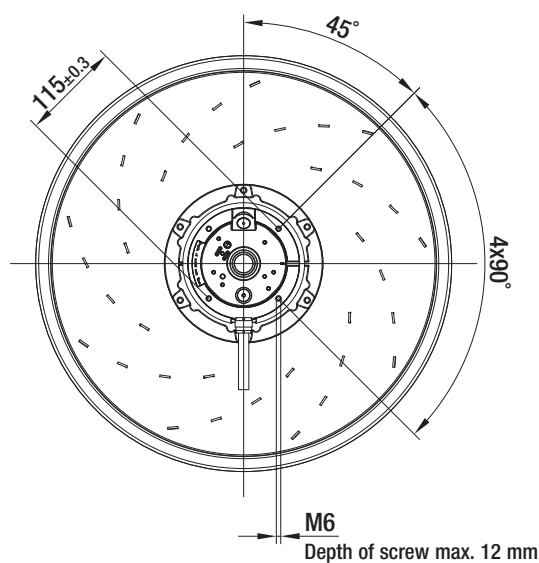
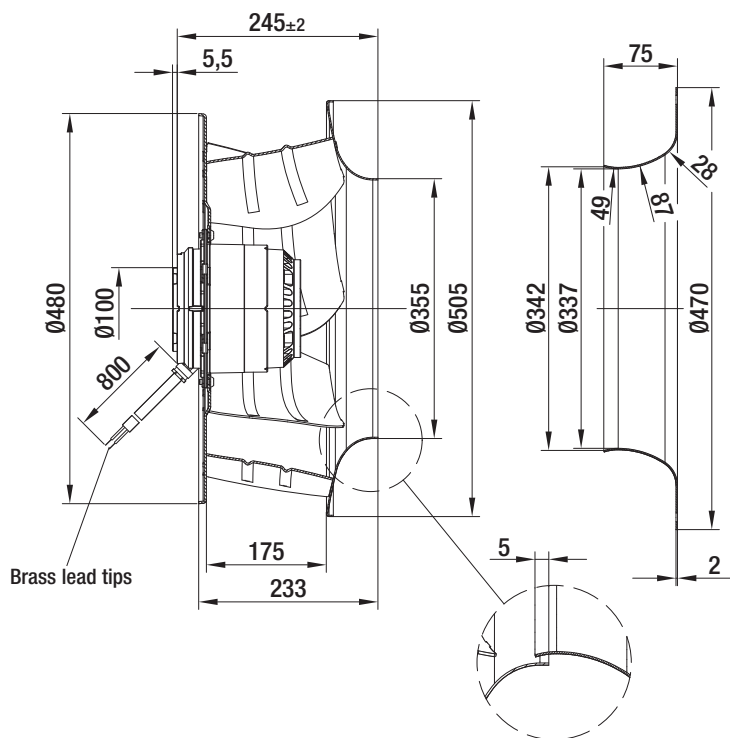
kg

Inlet nozzle (long)

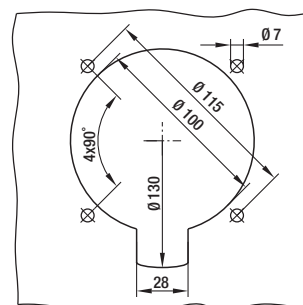
R6E 500-AH03 -01

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

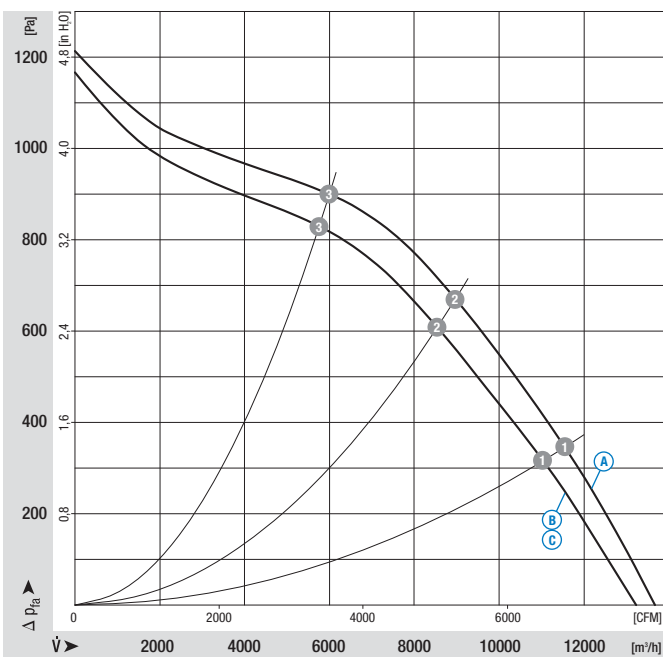
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amp. temp. °C	Electr. connection p. 127
R4D 560 ⁽²⁾	M4D 138-NA	A	3~ 480 Y	60	1610	3.80	5.85	—	-40 to +60	D1)/D2)
		B	3~ 400 Y	60	1520	3.50	6.05	—	-40 to +60	
		C	3~ 230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

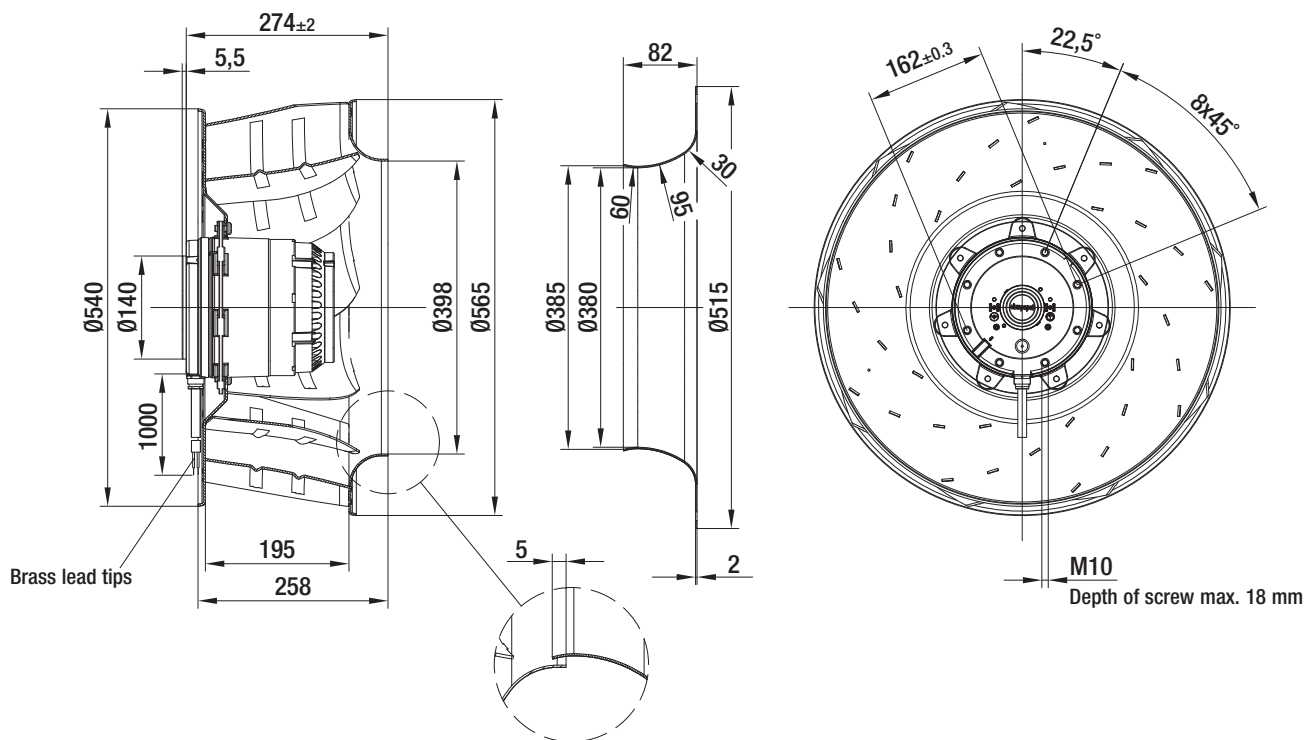
kg

Inlet nozzle (long)

R4D 560-AW03-01

29.0

63071-2-4013



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

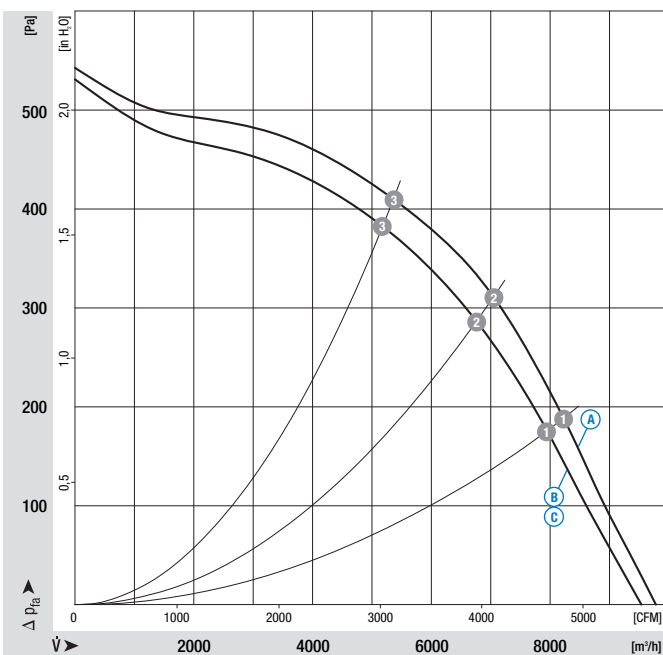
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amp. temp. °C	Electr. connection p. 127
R6D 560 ⁽²⁾	M6D 138-HF	Ⓐ	3~ 480 Y	60	1100	1.33	2.55	—	-40 to +70	D1)/D2)
		Ⓑ	3~ 400 Y	60	1050	1.22	2.40	—	-40 to +70	
		Ⓒ	3~ 230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

subject to alterations

⁽¹⁾ Nominal data in operating point with maximum load

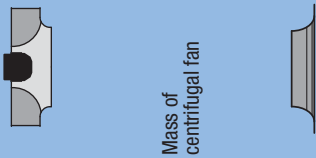
⁽²⁾ 230 VAC Δ / 400 VAC Y / 480 VAC Y

Curves



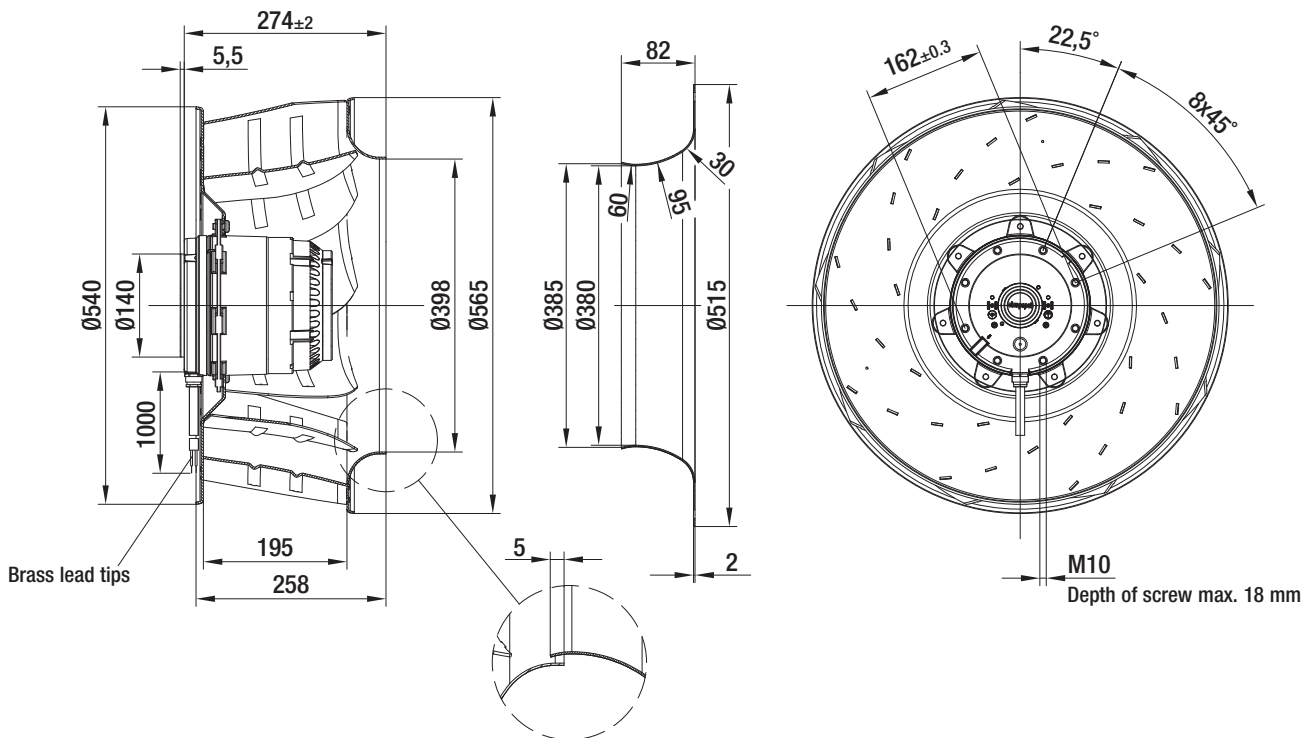
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
Ⓐ 1	1110	1.19	2.32	76
Ⓐ 2	1100	1.33	2.55	75
Ⓐ 3	1100	1.30	2.41	76
Ⓑ 1	1080	1.09	2.20	75
Ⓑ 2	1050	1.22	2.40	75
Ⓑ 3	1060	1.19	2.34	75
Ⓒ 1	1080	1.09	3.81	75
Ⓒ 2	1050	1.22	4.15	75
Ⓒ 3	1060	1.19	4.05	75

- **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

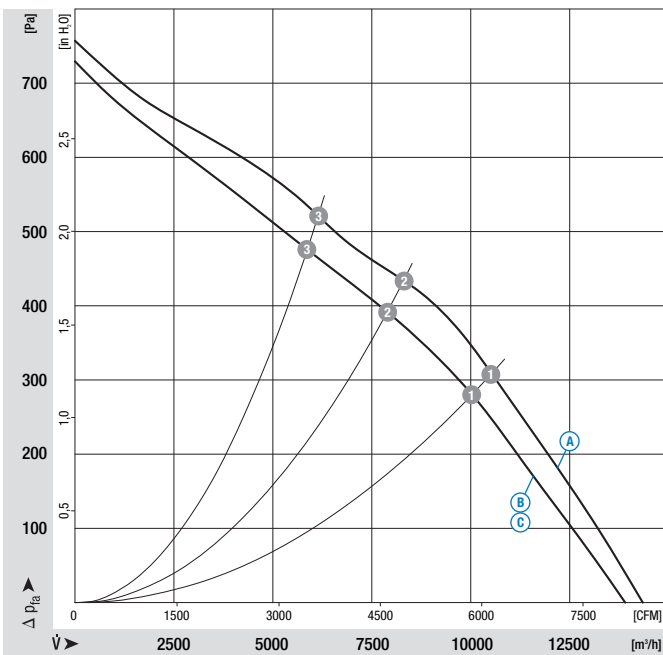
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Perm. amp. temp. °C	Electr. connection p. 127
R6D 630 ⁽²⁾	M6D 138-NA	A	3~ 480 Y	60	1065	2.21	3.58	—	-40 to +50	D1)/D2)
		B	3~ 400 Y	60	1000	2.00	3.72	—	-40 to +50	
		C	3~ 230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



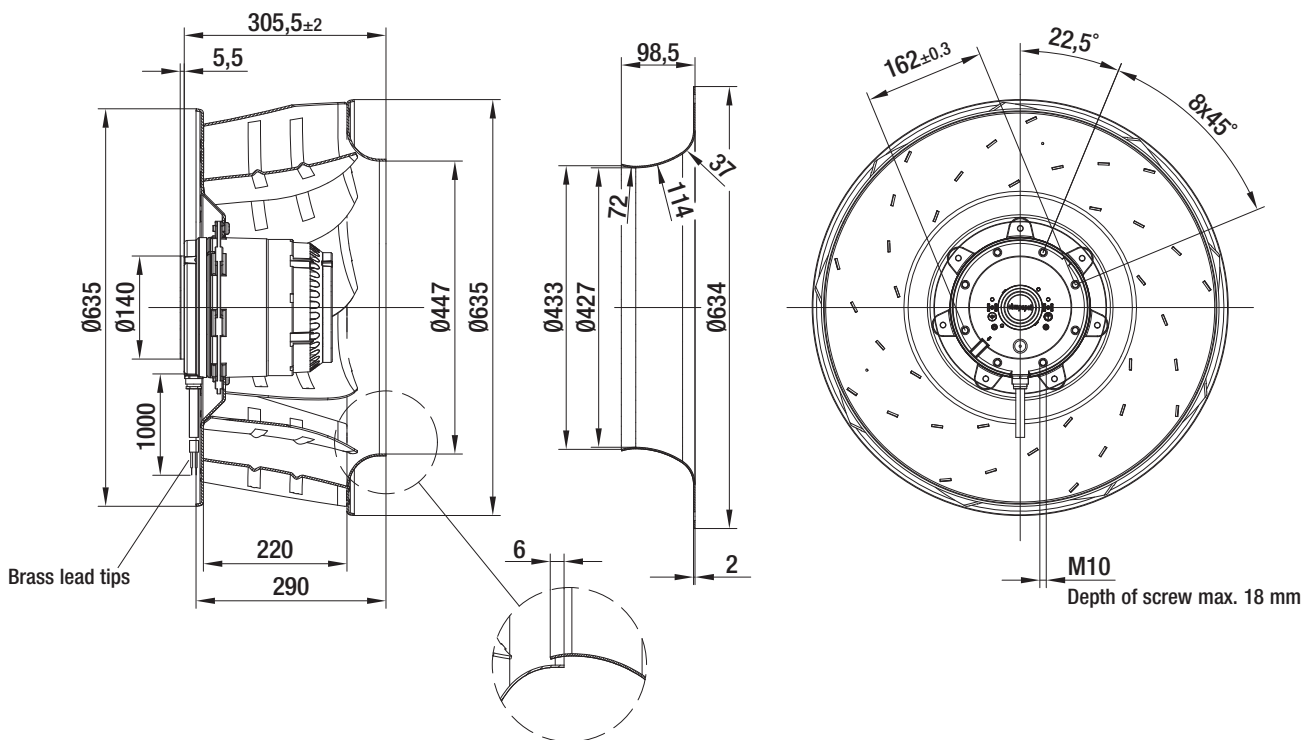
	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1070	2.13	3.48	78
A 2	1065	2.21	3.58	77
A 3	1080	2.05	3.35	78
B 1	1010	1.94	3.61	76
B 2	1000	2.00	3.72	75
B 3	1020	1.85	3.44	76
C 1	1010	1.94	6.25	76
C 2	1000	2.00	6.44	75
C 3	1020	1.85	5.95	76

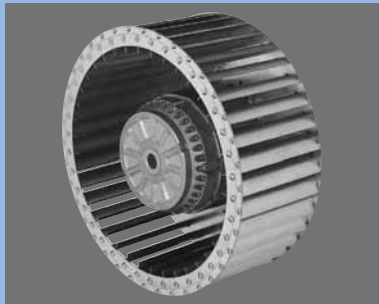
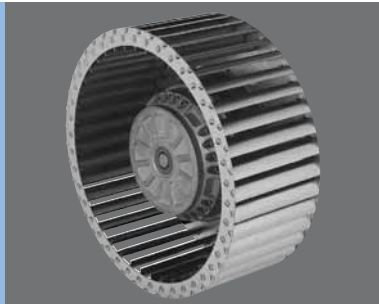
- **Motor protection:** Design with thermal overload protector
- **Cable exit:** Lateral
- **Protection class:** I (in accordance with EN 61800-5-1)
- **Product conforming to standard:** CE
- **Approvals:** UL, VDE (in accordance with EN 60034)



Mass of centrifugal fan

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



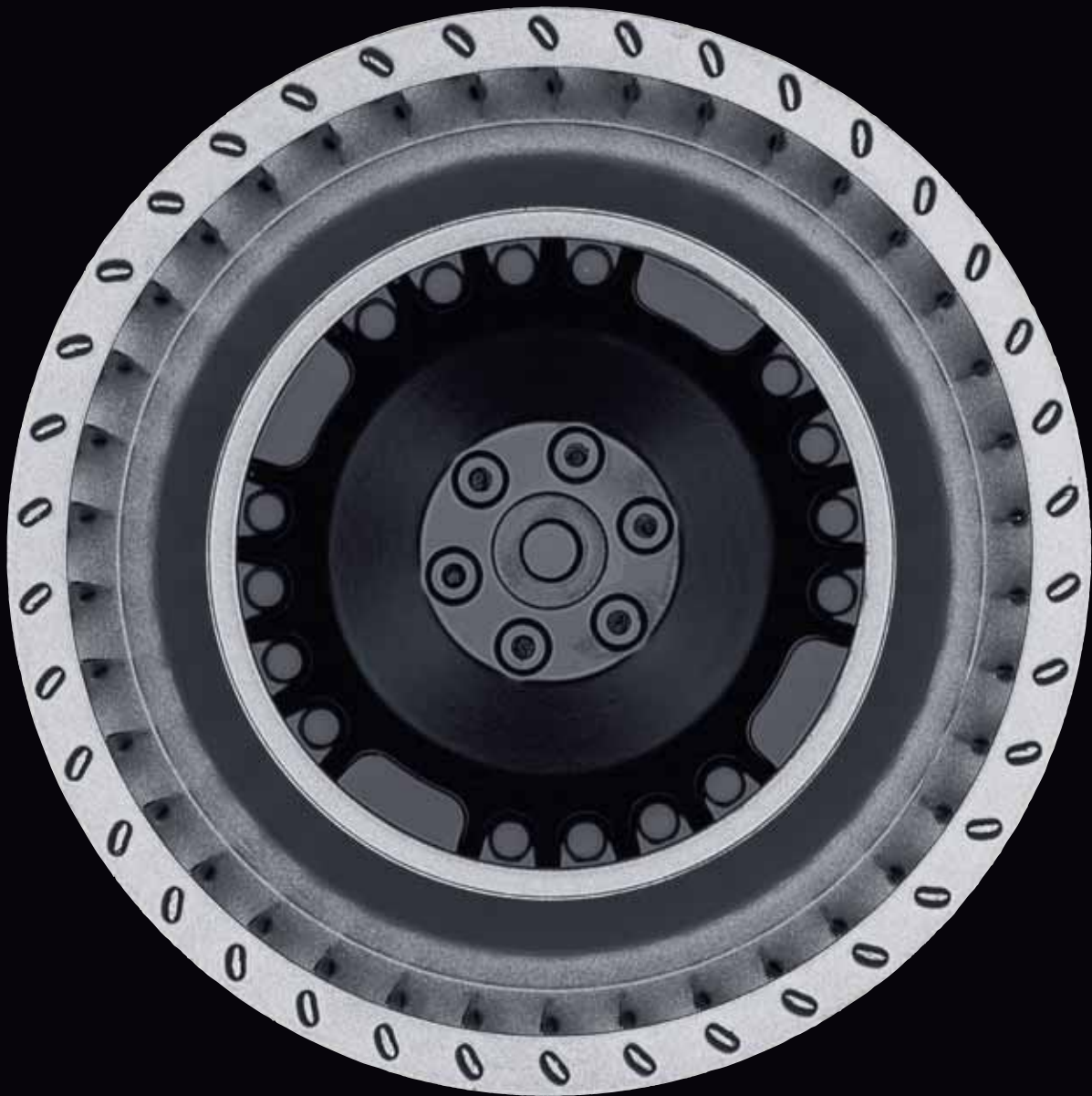


AC centrifugal fans, forward curved

AC centrifugal fans, forward curved, single inlet

Ø 250 - Ø 400

88



AC centrifugal fans

single inlet, Ø 250

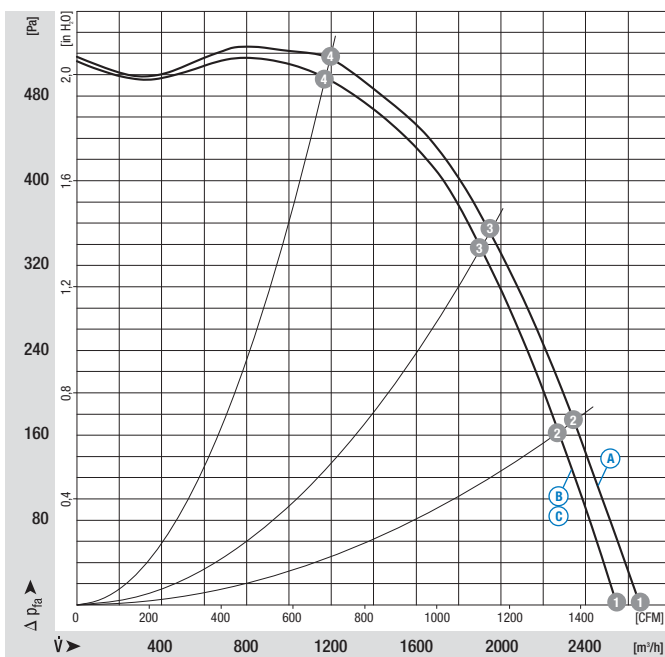


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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

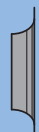


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1650	1.24	1.95	90
A 2	1680	1.04	1.75	88
A 3	1710	0.81	1.51	85
A 4	1750	0.50	1.26	80
B 1	1580	1.17	2.00	89
B 2	1620	0.98	1.76	86
B 3	1670	0.77	1.46	85
B 4	1730	0.47	1.08	80
C 1	1580	1.17	3.46	89
C 2	1620	0.98	3.05	86
C 3	1670	0.77	2.53	85
C 4	1730	0.47	1.87	80

- **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

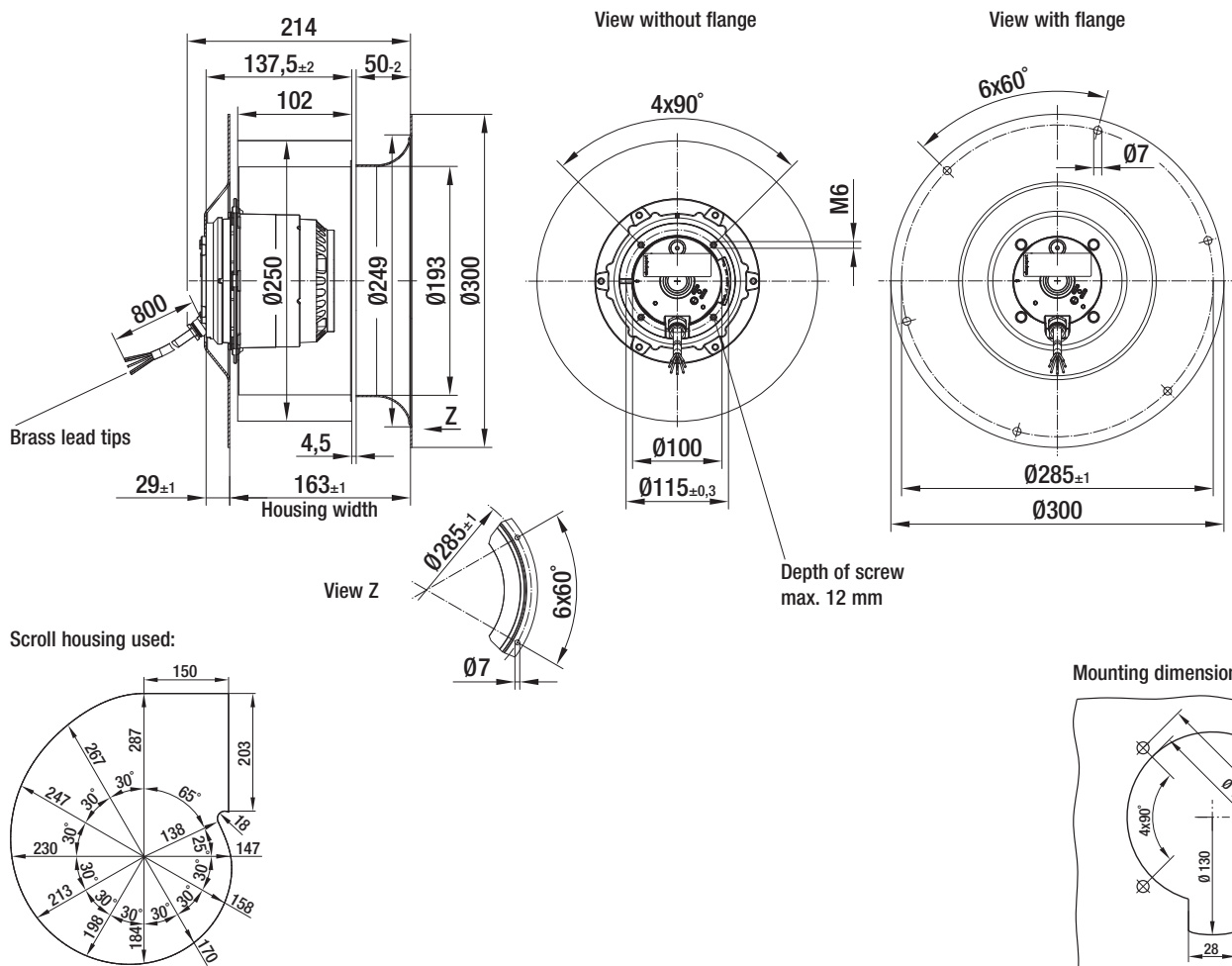
Flange

R4D 250-CG07 -01

12.0

25010-2-4013

94250-2-4017



AC centrifugal fans

single inlet, Ø 250

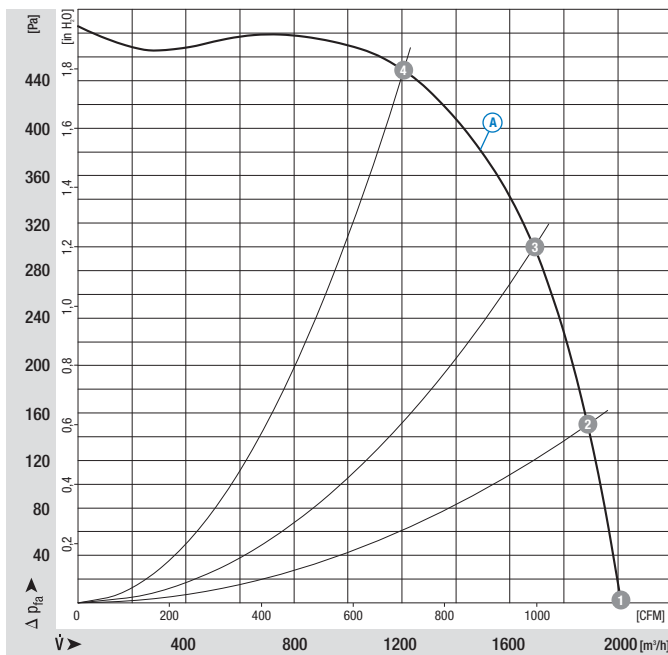


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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

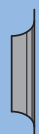


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	1240	0.82	3.70	83
Ⓐ 2	1430	0.76	3.31	82
Ⓐ 3	1550	0.68	2.97	81
Ⓐ 4	1660	0.56	2.57	79

- **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

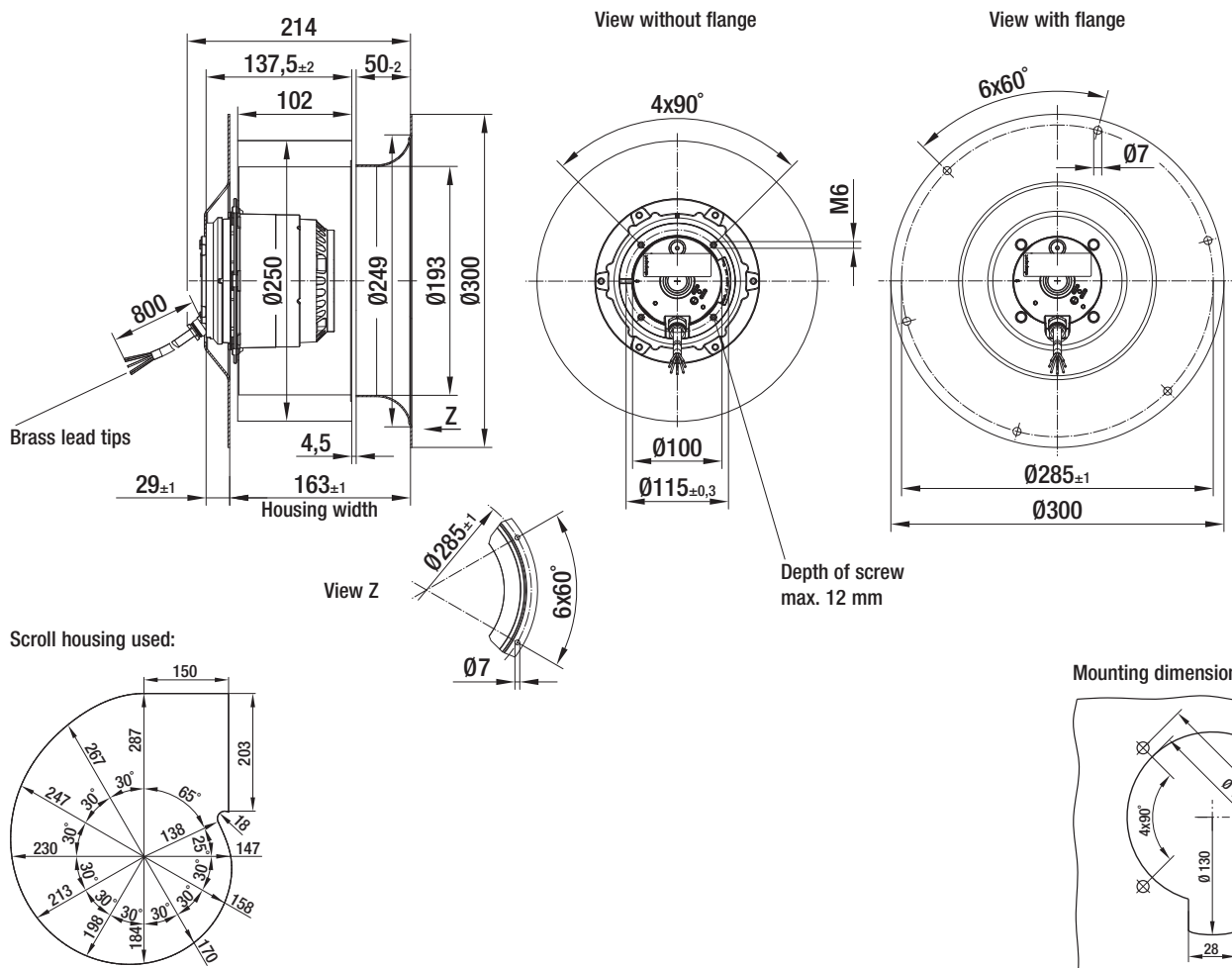
Flange

R4E 250-CG01 -01

12.0

25010-2-4013

94250-2-4017



AC centrifugal fans

single inlet, Ø 250

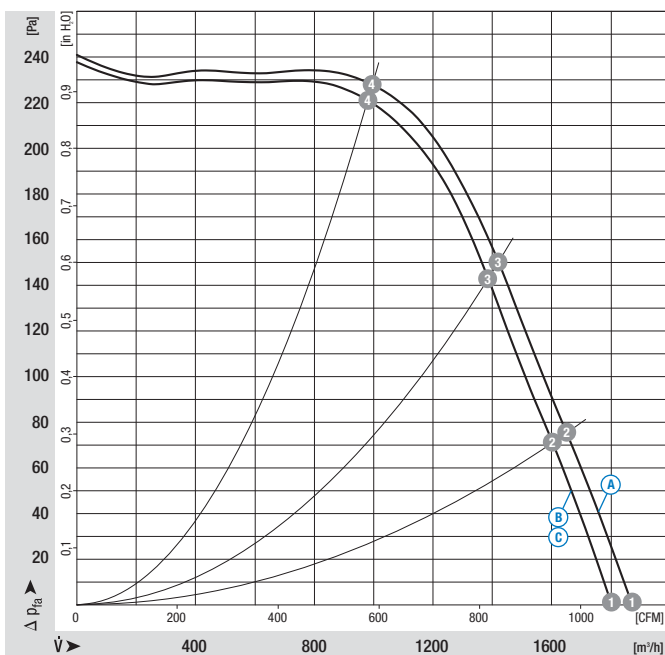


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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

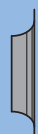


	n [rpm]	P1 [kW]	I [A]	Lwa [dB(A)]
A 1	1100	0.42	0.80	81
A 2	1120	0.36	0.75	78
A 3	1140	0.31	0.72	75
A 4	1160	0.23	0.67	71
B 1	1060	0.38	0.76	80
B 2	1090	0.33	0.69	77
B 3	1110	0.28	0.63	74
B 4	1140	0.20	0.55	71
C 1	1060	0.38	1.32	80
C 2	1090	0.33	1.20	77
C 3	1110	0.28	1.10	74
C 4	1140	0.20	0.96	71

- **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

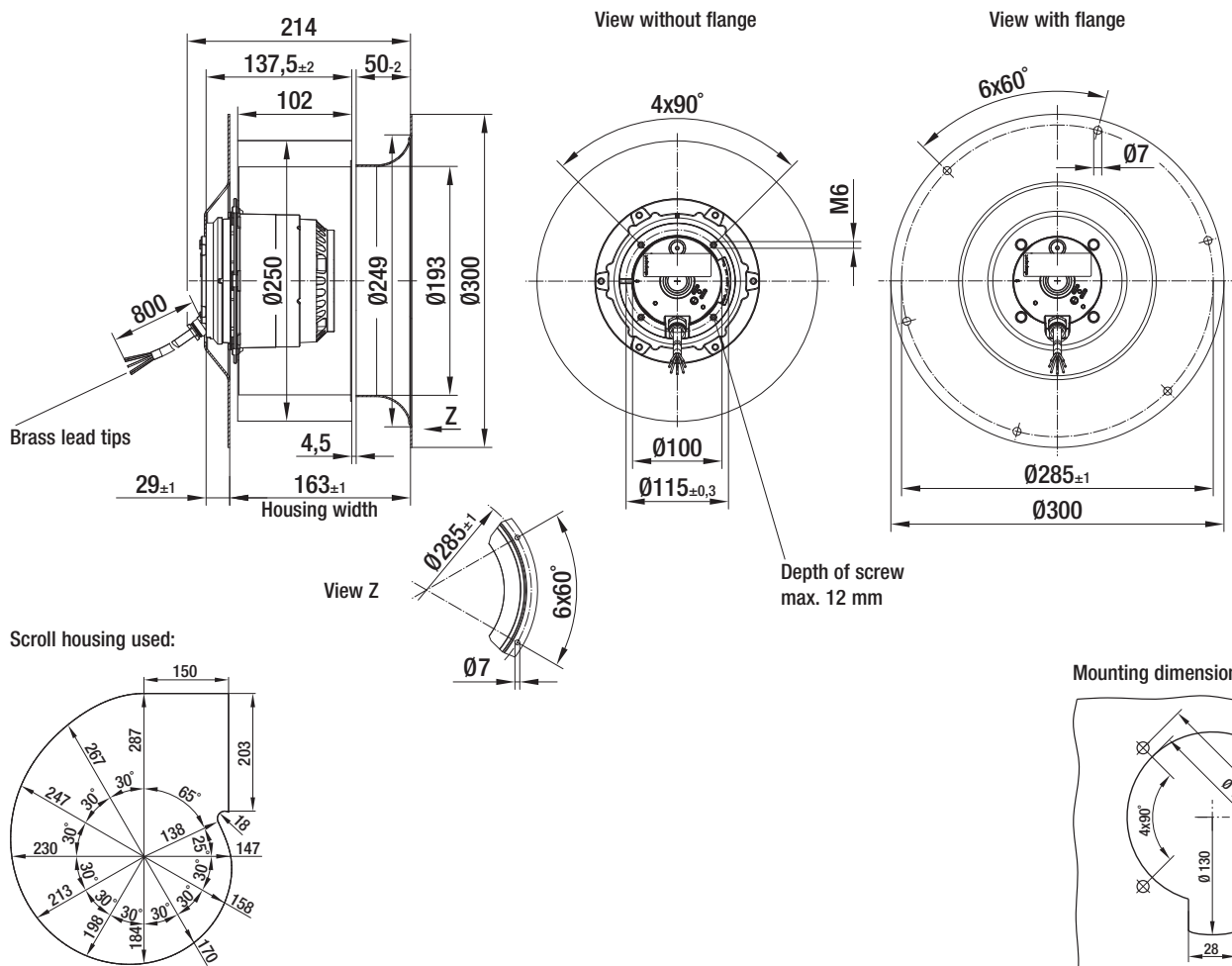
Flange

R6D 250-CE01 -01

9.5

25010-2-4013

94250-2-4017



AC centrifugal fans

single inlet, Ø 250

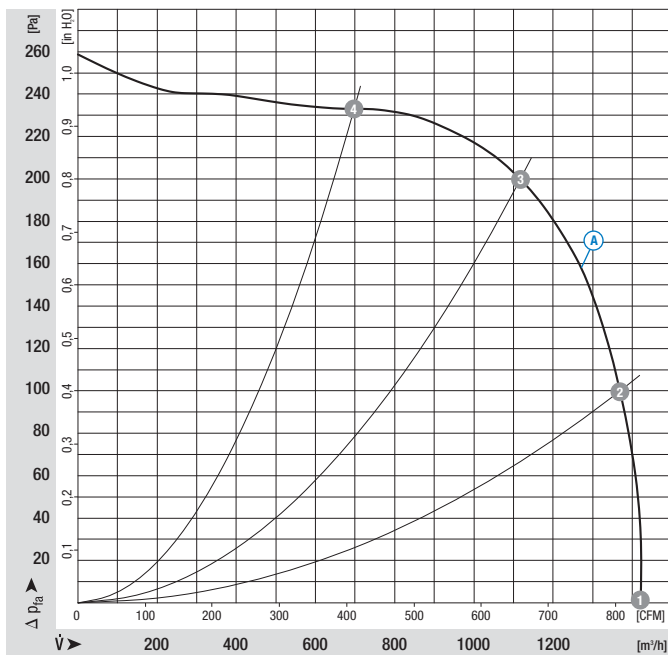


- **Material:** Impeller: Galvanised sheet steel
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharge holes:** None
- **Mode of operation:**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

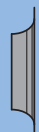


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	780	0.31	1.37	74
Ⓐ 2	970	0.28	1.23	74
Ⓐ 3	1080	0.25	1.07	72
Ⓐ 4	1130	0.21	0.91	69

- **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

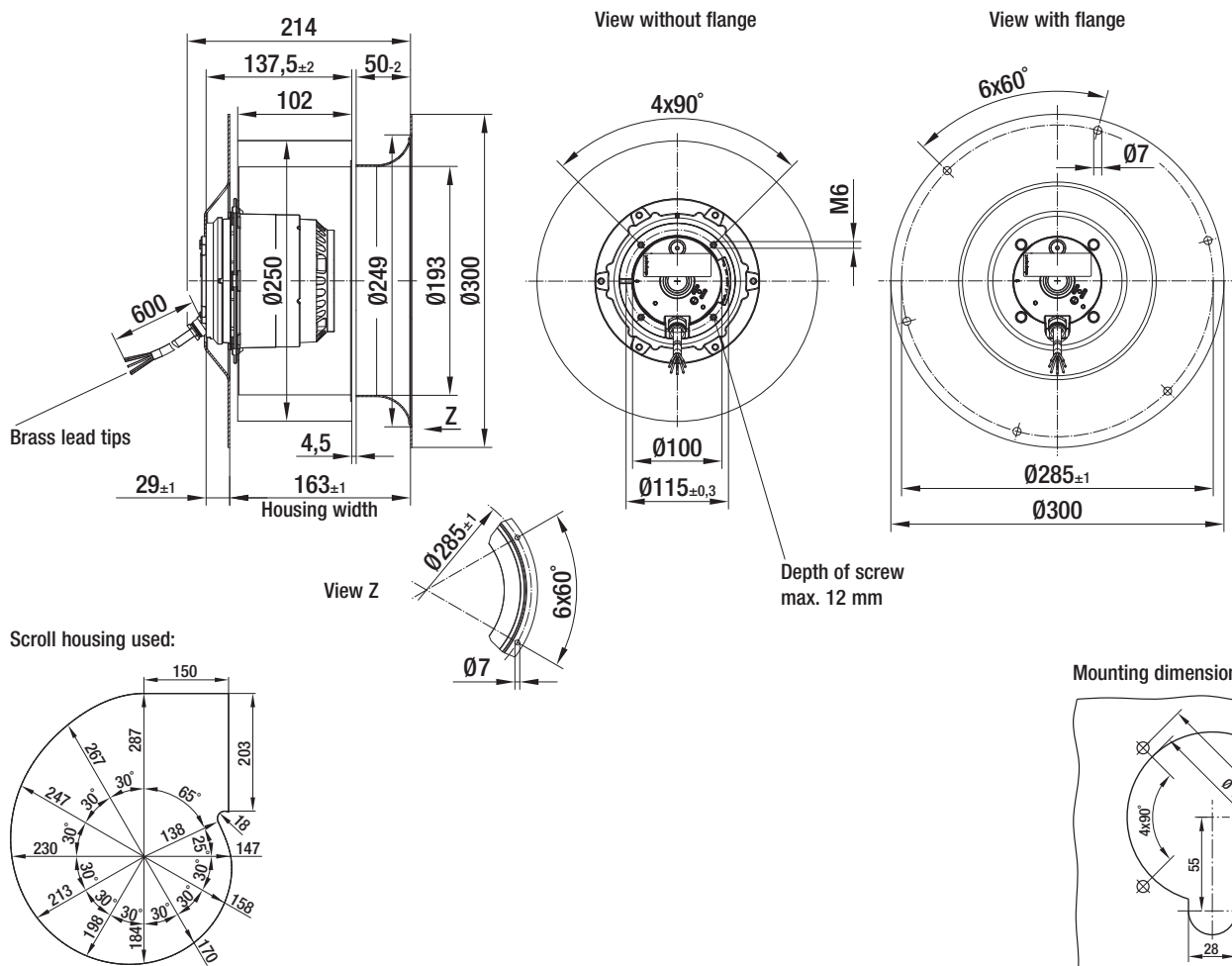
Flange

R6E 250-CA08 -01

7.0

25010-2-4013

94250-2-4017



AC centrifugal fans

single inlet, Ø 280

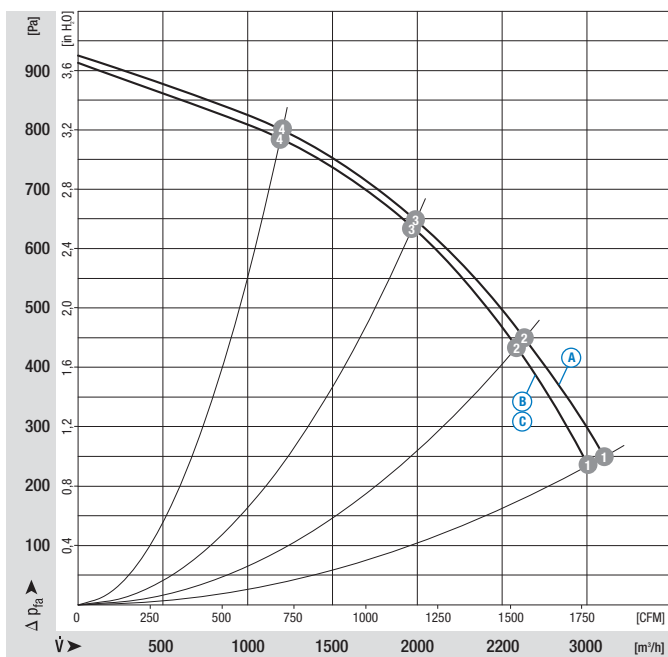


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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

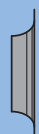


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1590	1.80	2.96	89
A 2	1650	1.38	2.42	87
A 3	1700	1.02	2.06	85
A 4	1730	0.71	1.82	84
B 1	1500	1.63	2.90	88
B 2	1580	1.30	2.40	87
B 3	1650	0.98	1.93	85
B 4	1700	0.66	1.51	84
C 1	1500	1.63	5.05	88
C 2	1580	1.30	4.16	87
C 3	1650	0.98	3.35	85
C 4	1700	0.66	2.62	84

- **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

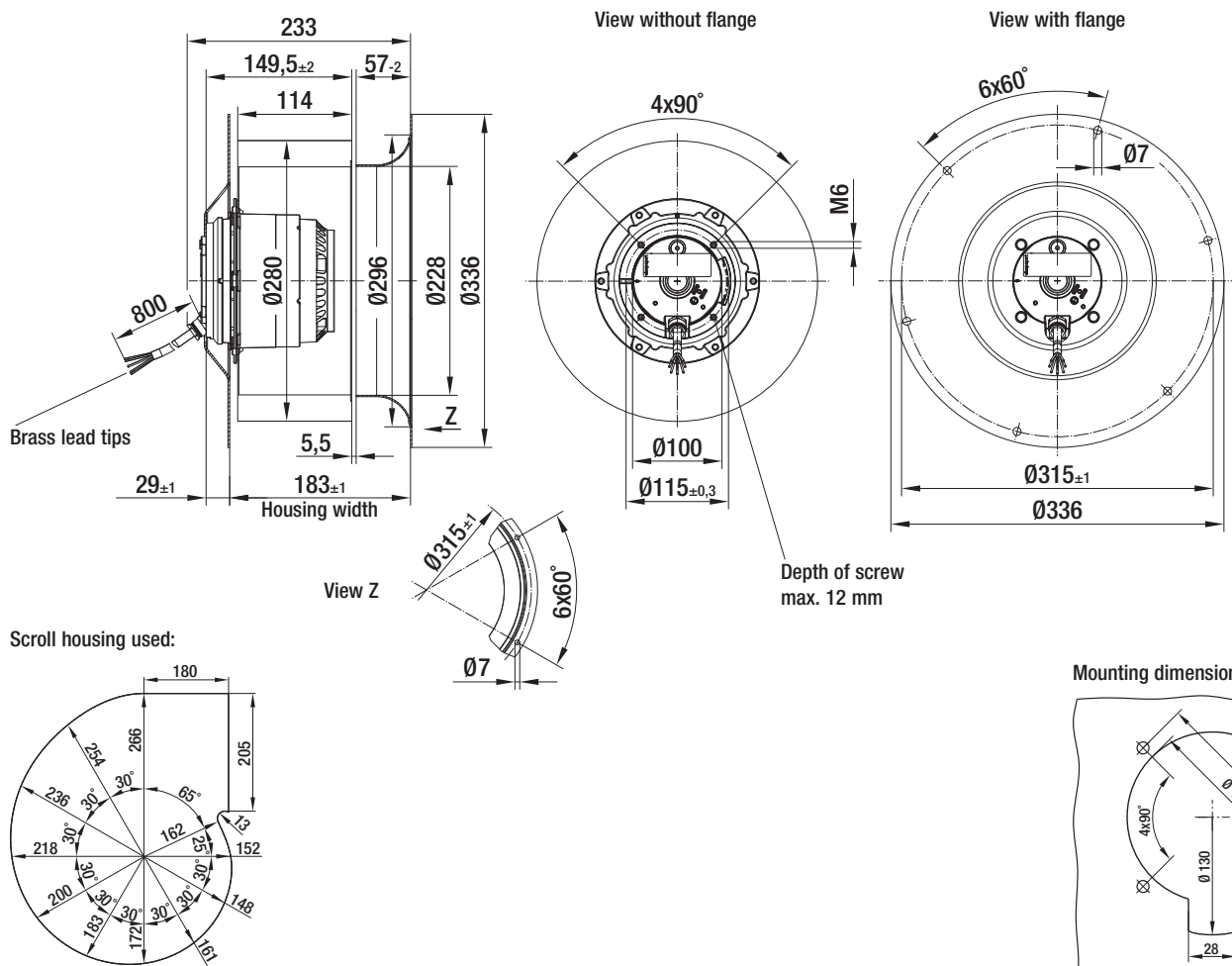
Flange

R4D 280-CI03 -01

14.5

28010-2-4013

10280-2-4017



AC centrifugal fans

single inlet, Ø 280

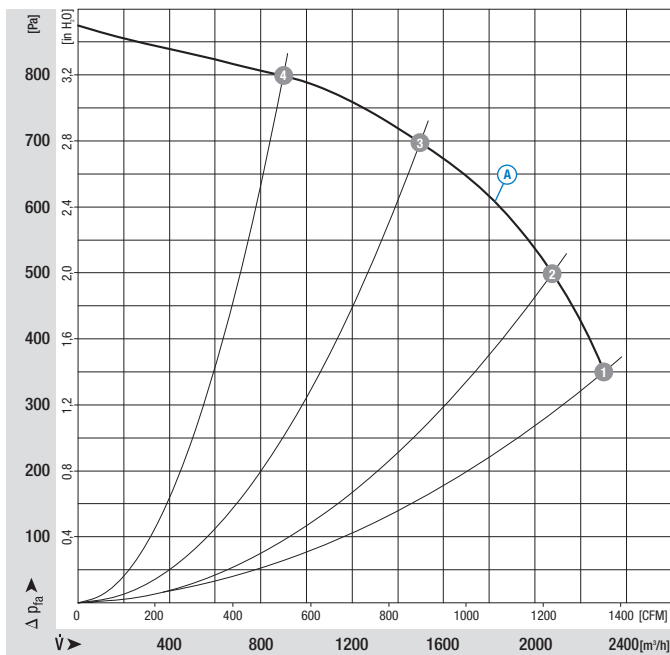


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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	
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

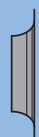


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	1410	1.17	5.13	84
Ⓐ 2	1510	1.09	4.72	84
Ⓐ 3	1630	0.92	4.00	83
Ⓐ 4	1690	0.78	3.52	84

- **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

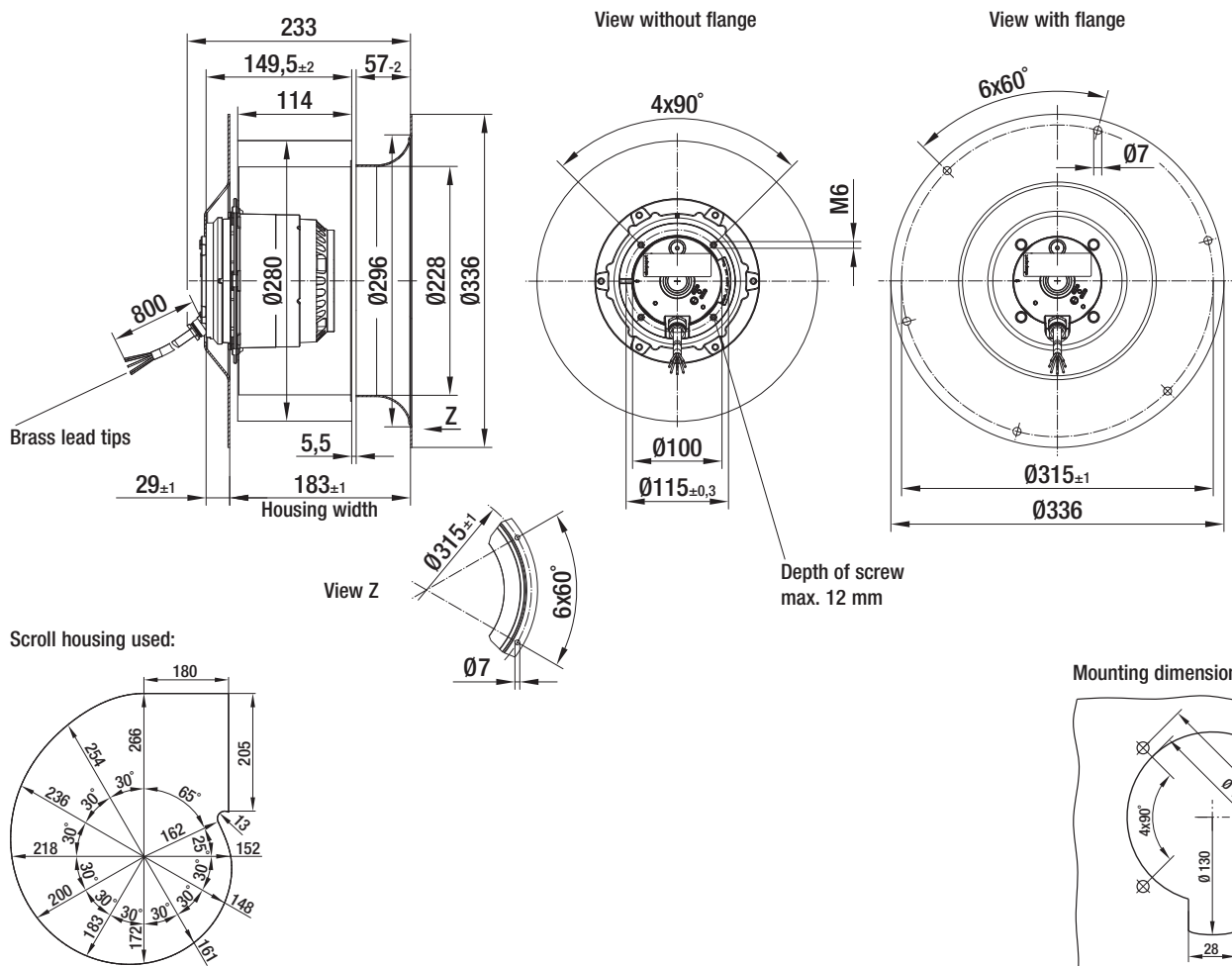
Flange

R4E 280-CI01 -01

14.5

28010-2-4013

10280-2-4017



AC centrifugal fans

single inlet, Ø 280

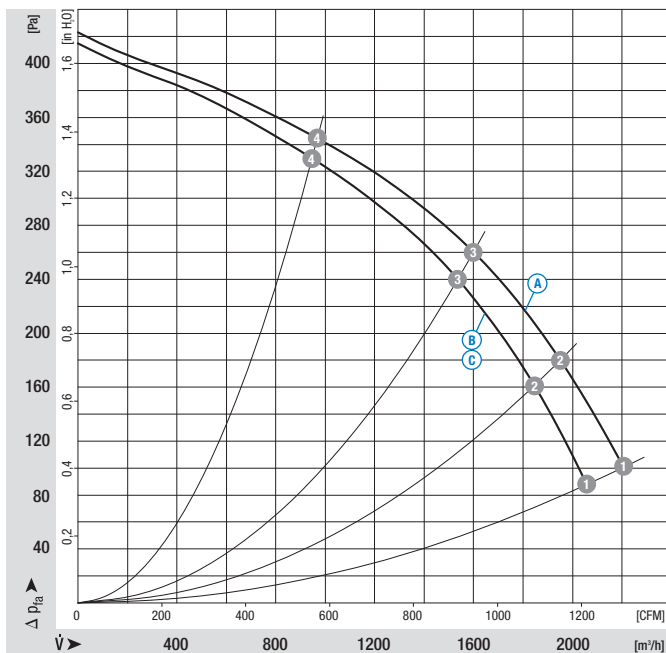


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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

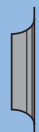


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1040	0.60	1.00	80
A 2	1070	0.52	0.88	78
A 3	1100	0.42	0.78	77
A 4	1140	0.28	0.68	74
B 1	975	0.54	0.98	78
B 2	1010	0.47	0.87	77
B 3	1060	0.38	0.74	76
B 4	1120	0.25	0.59	73
C 1	975	0.54	1.70	78
C 2	1010	0.47	1.51	77
C 3	1060	0.38	1.29	76
C 4	1120	0.25	1.03	73

- **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

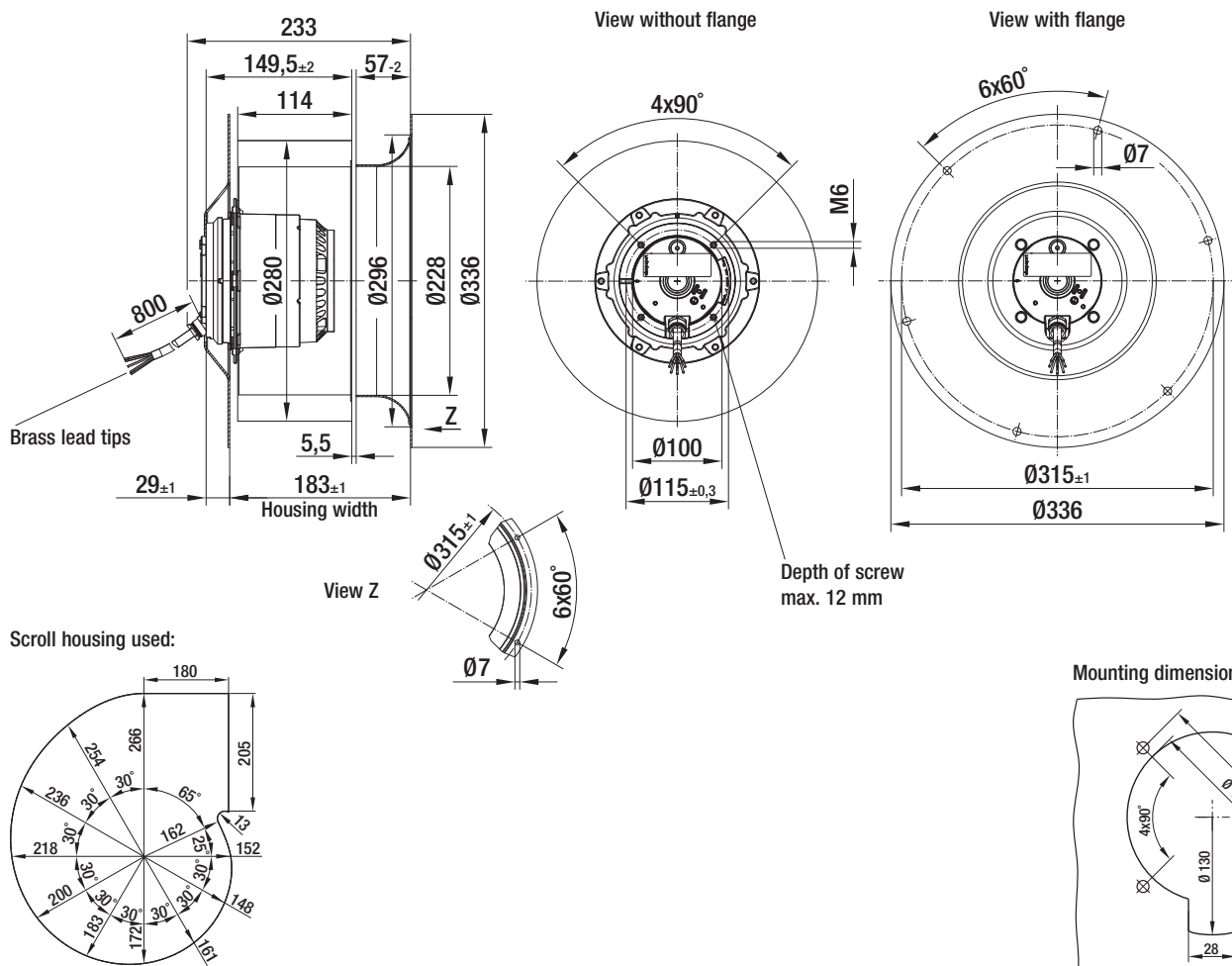
Flange

R6D 280-CE01 -01

10.0

28010-2-4013

10280-2-4017



AC centrifugal fans

single inlet, Ø 280

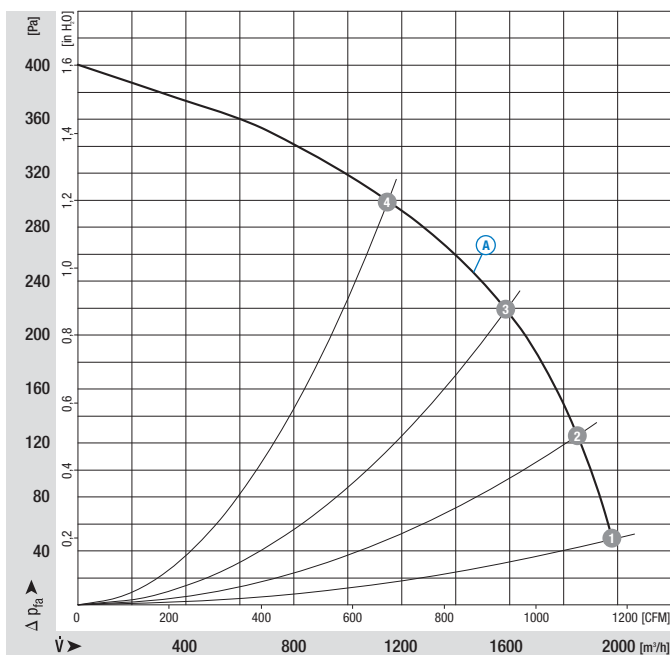


- **Material:** Impeller: Galvanised sheet steel
Rotor: Coated in black
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Mode of operation:**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

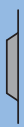
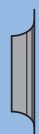


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	880	0.52	2.27	78
Ⓐ 2	950	0.50	2.18	77
Ⓐ 3	1030	0.46	2.03	75
Ⓐ 4	1090	0.41	1.80	73

- **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

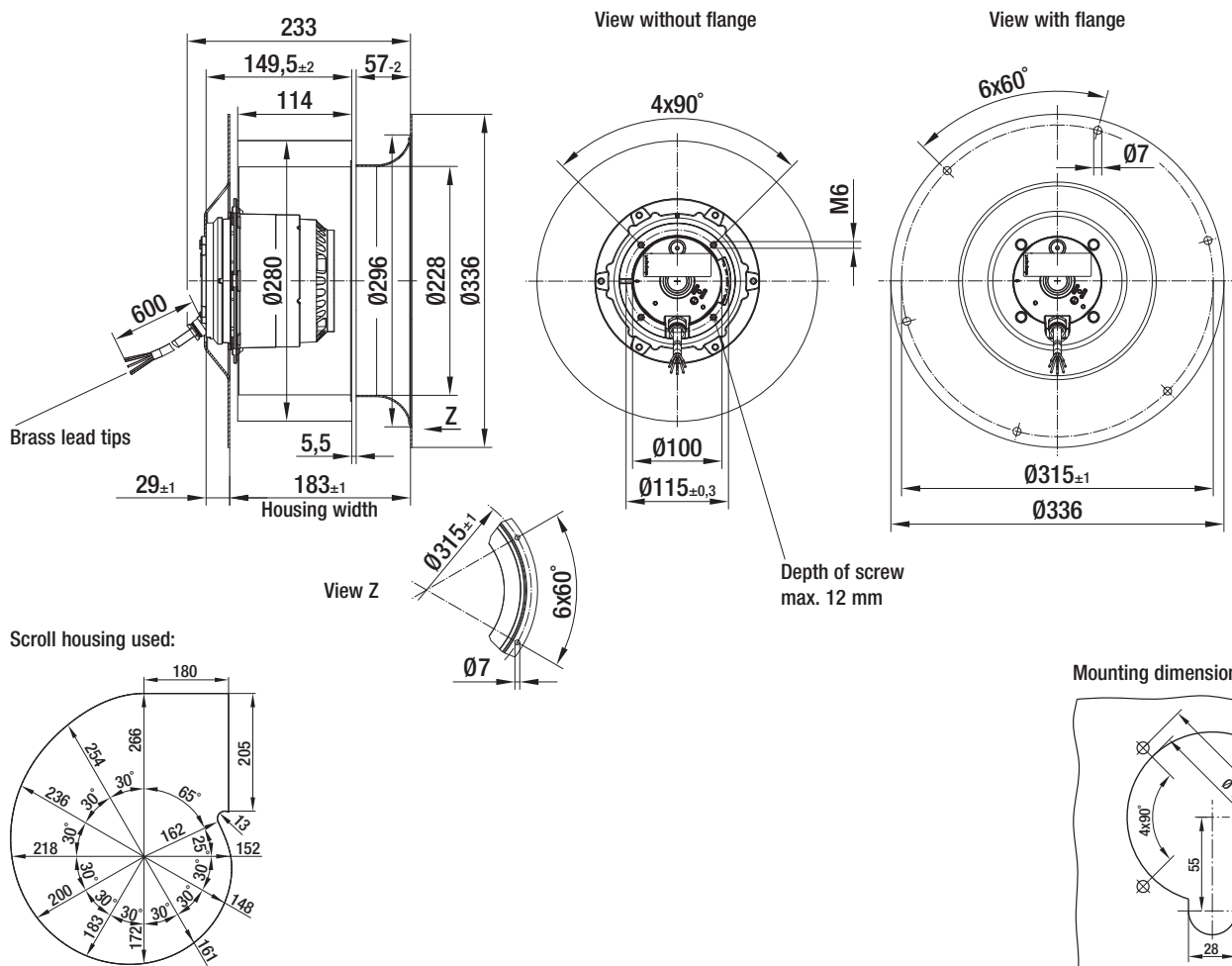
Flange

R6E 280-CC05 -01

9.5

28010-2-4013

10280-2-4017



AC centrifugal fans

single inlet, Ø 310

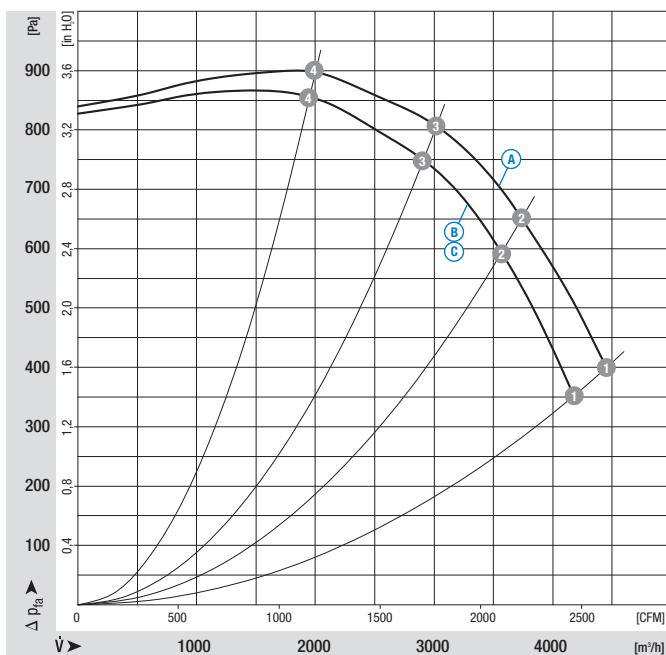


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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

- **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

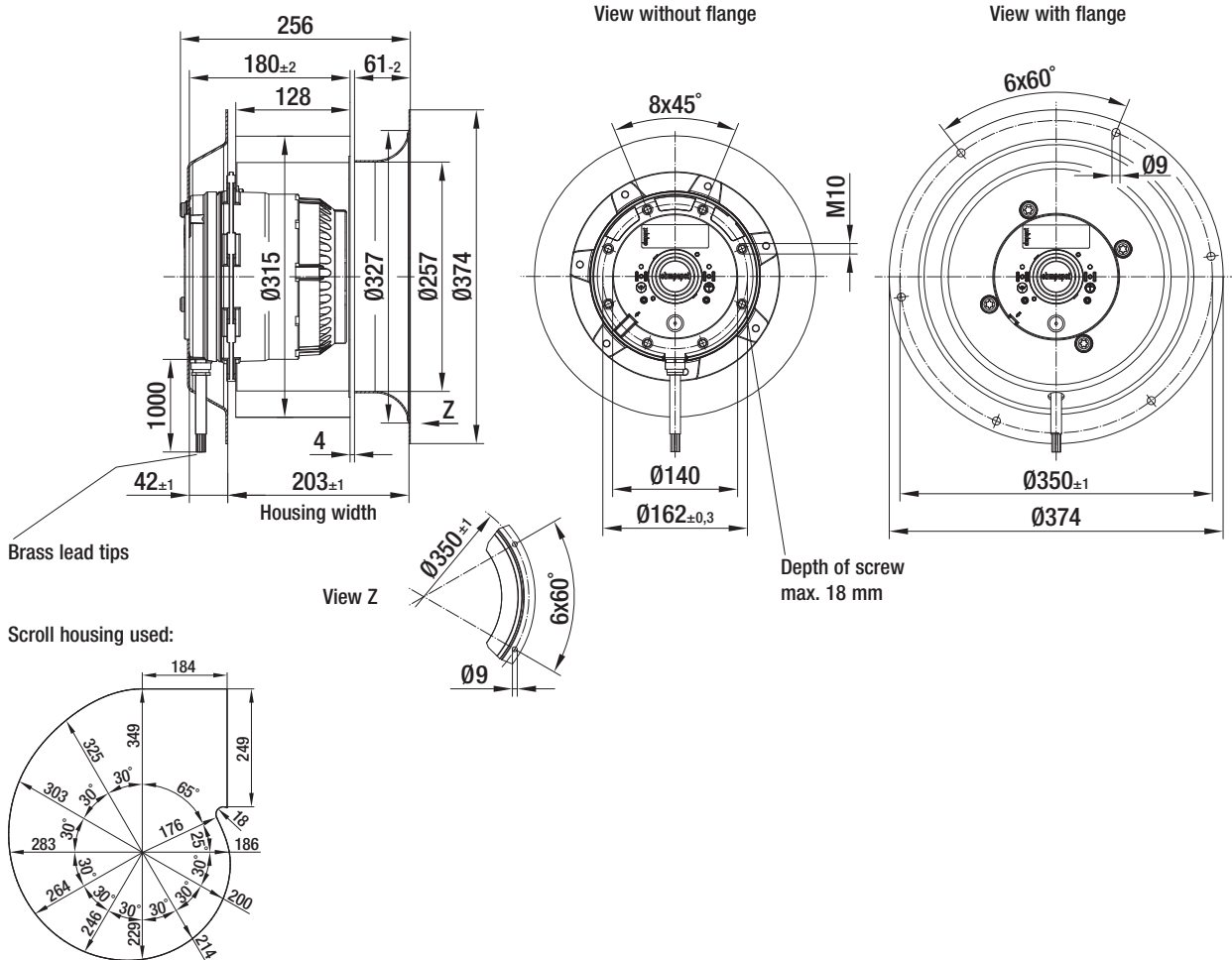
Flange

R4D 310-CK03 -01

24.5

31010-2-4013

38310-2-4017



AC centrifugal fans

single inlet, Ø 310

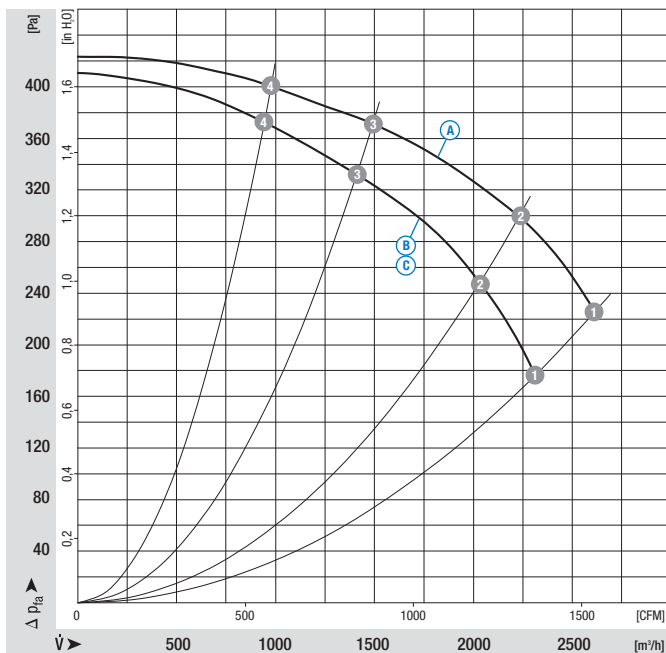


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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-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

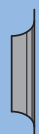


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	950	0.71	1.09	76
A 2	1005	0.60	0.94	75
A 3	1080	0.42	0.71	73
A 4	1120	0.31	0.60	74
B 1	845	0.60	1.10	73
B 2	915	0.53	0.97	73
B 3	1025	0.38	0.73	72
B 4	1085	0.29	0.58	73
C 1	845	0.60	1.90	73
C 2	915	0.53	1.68	73
C 3	1025	0.38	1.27	72
C 4	1085	0.29	1.01	73

- **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

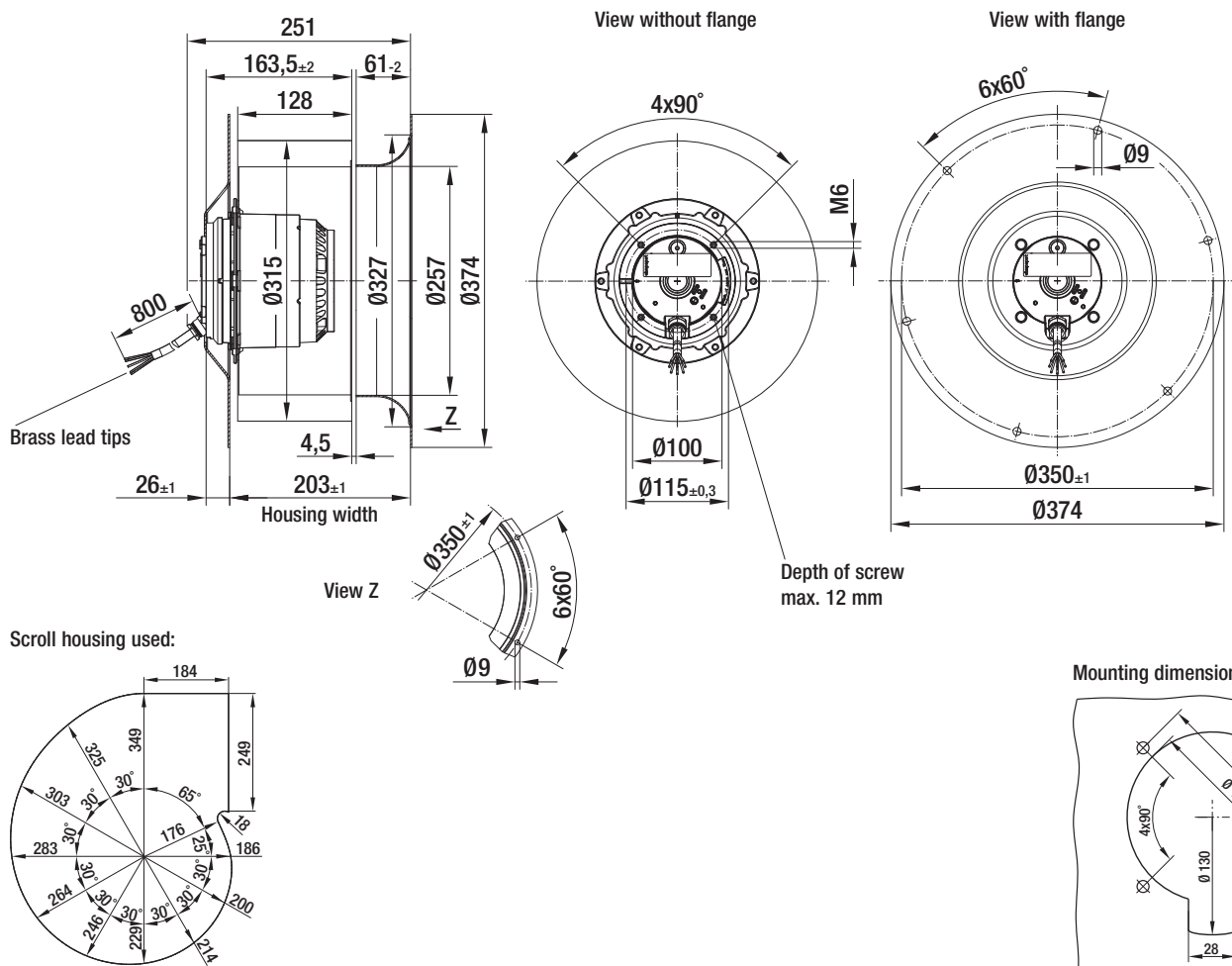
Flange

R6D 310-CG07 -01

12.5

31010-2-4013

10310-2-4017



AC centrifugal fans

single inlet, Ø 310

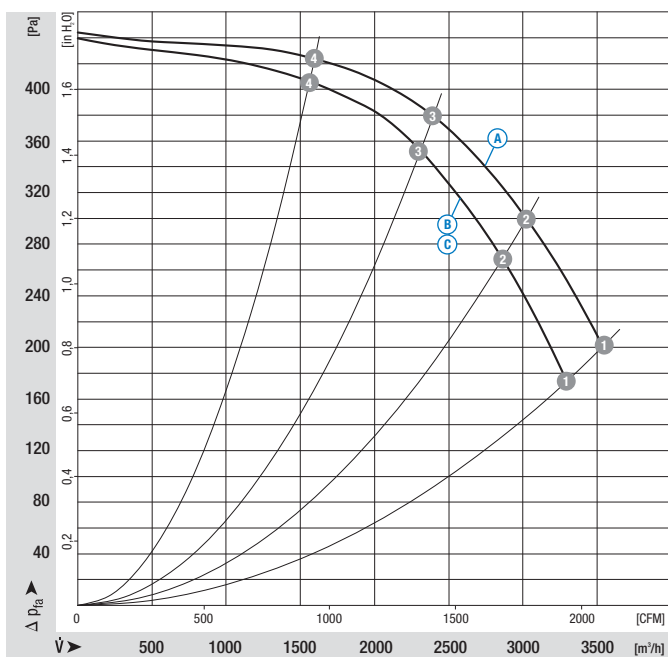


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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

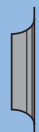


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1050	1,11	1,91	82
A 2	1080	0,92	1,70	80
A 3	1115	0,71	1,48	78
A 4	1145	0,51	1,32	76
B 1	970	0,99	1,80	80
B 2	1025	0,84	1,65	79
B 3	1075	0,65	1,37	77
B 4	1120	0,45	1,12	75
C 1	970	0,99	3,12	80
C 2	1025	0,84	2,86	79
C 3	1075	0,65	2,37	77
C 4	1120	0,45	1,94	75

- **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

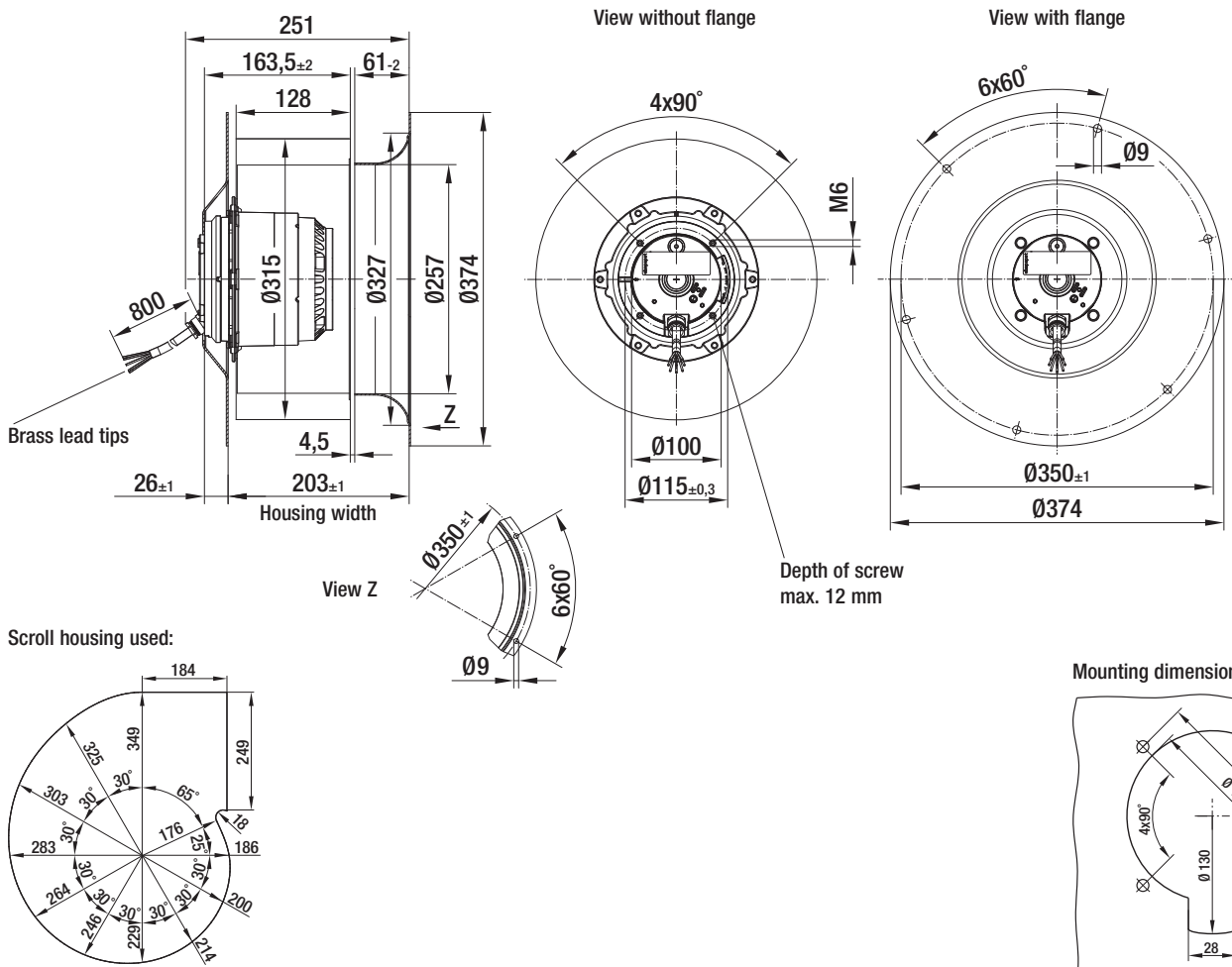
Flange

R6D 310-CI05 -01

15.0

31010-2-4013

10310-2-4017



AC centrifugal fans

single inlet, Ø 310

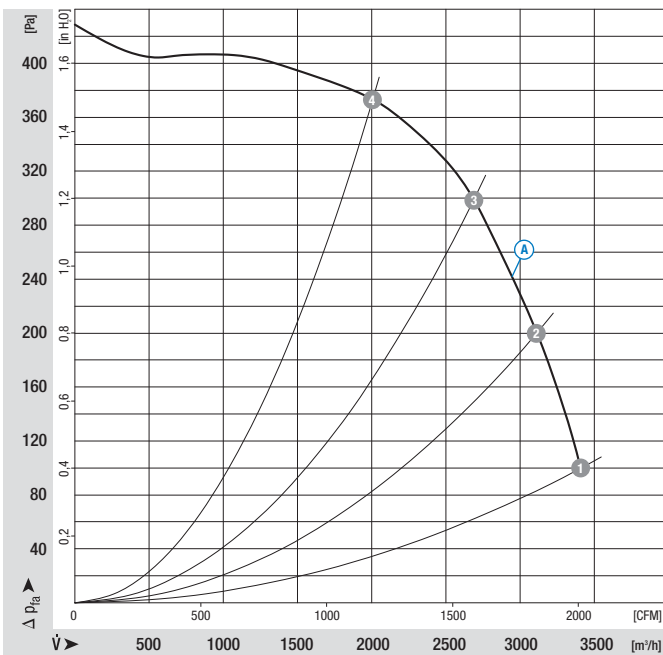


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom; rotor on top on request
- **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

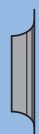


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
Ⓐ 1	950	1.00	4.47	80
Ⓐ 2	1010	0.93	4.11	79
Ⓐ 3	1060	0.85	3.70	78
Ⓐ 4	1110	0.72	3.15	76

- **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

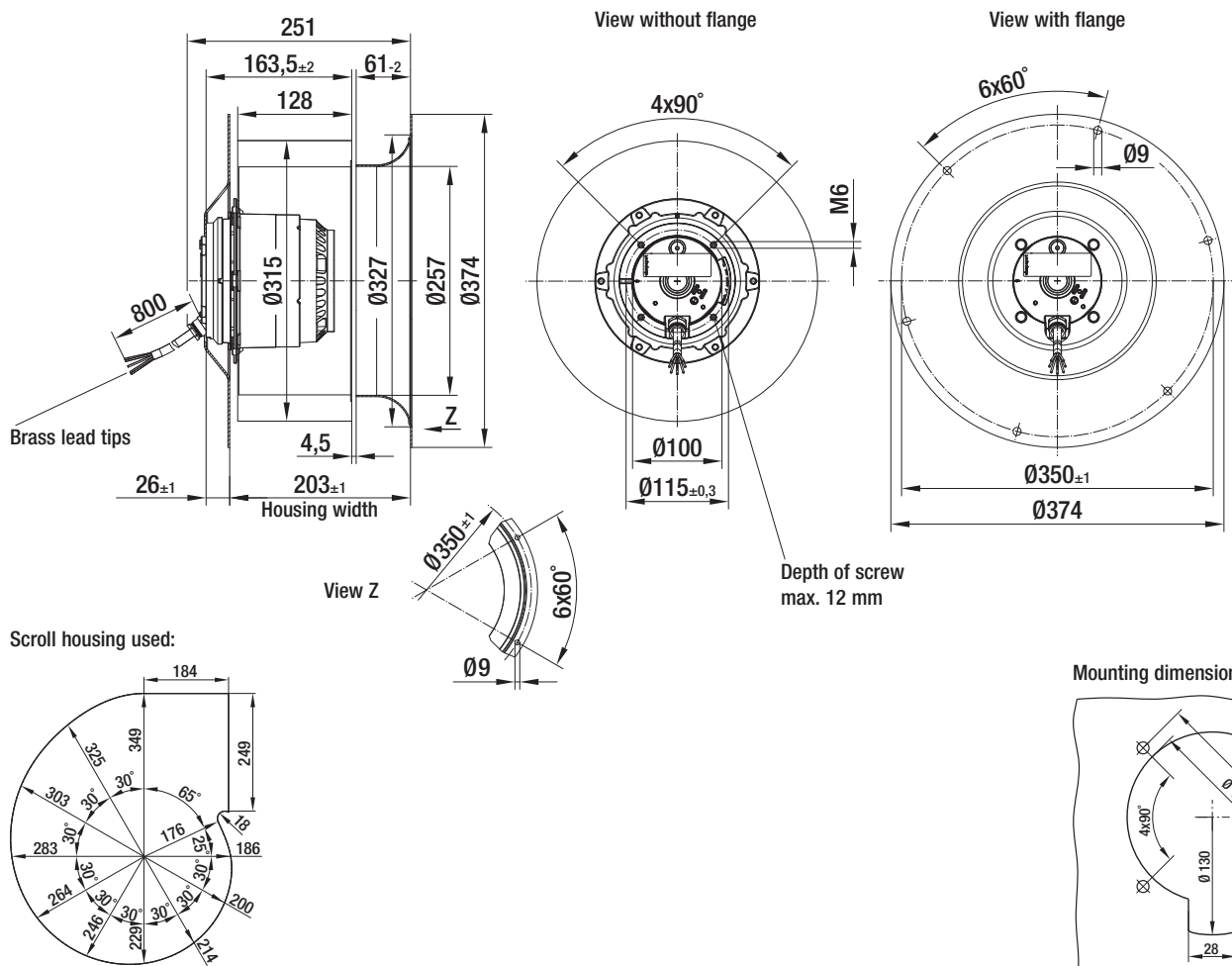
Flange

R6E 310-CI01 -01

15.0

31010-2-4013

10310-2-4017



AC centrifugal fans

single inlet, Ø 355

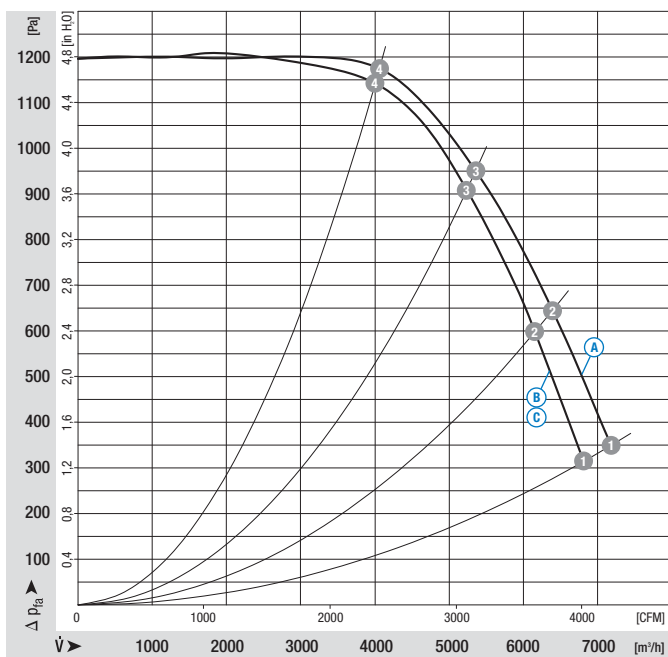


- **Material:** Impeller: Galvanised sheet steel
Rotor: Cast in aluminium
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 20 (in accordance with EN 60529)
- **Insulation class:** "F"
- **Mounting position:** Shaft horizontal or rotor on bottom
- **Condensate discharges:** 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

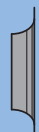


	n [rpm]	P ₁ [kW]	I [A]	L _{WA} [dB(A)]
A 1	1550	6.00	9.00	97
A 2	1600	5.18	7.90	95
A 3	1650	4.17	6.54	93
A 4	1700	3.08	5.21	90
B 1	1430	5.30	9.80	95
B 2	1500	4.84	8.70	94
B 3	1570	3.92	7.04	92
B 4	1650	2.90	5.34	90
C 1	1430	5.30	16.95	95
C 2	1500	4.84	15.07	94
C 3	1570	3.92	12.20	92
C 4	1650	2.90	9.25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

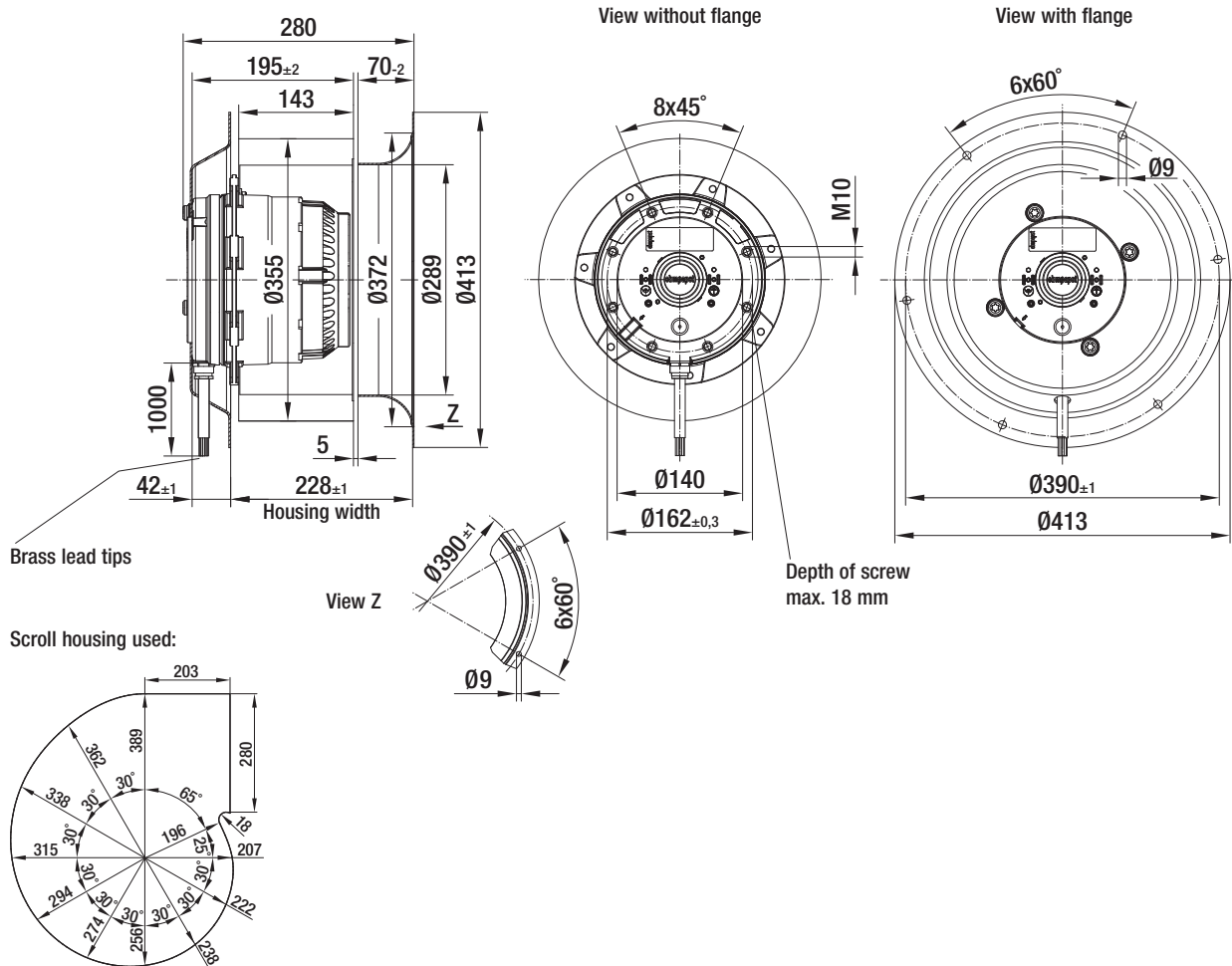
Flange

R4D 355-CM15-01

28.0

35510-2-4013

38355-2-4017



AC centrifugal fans

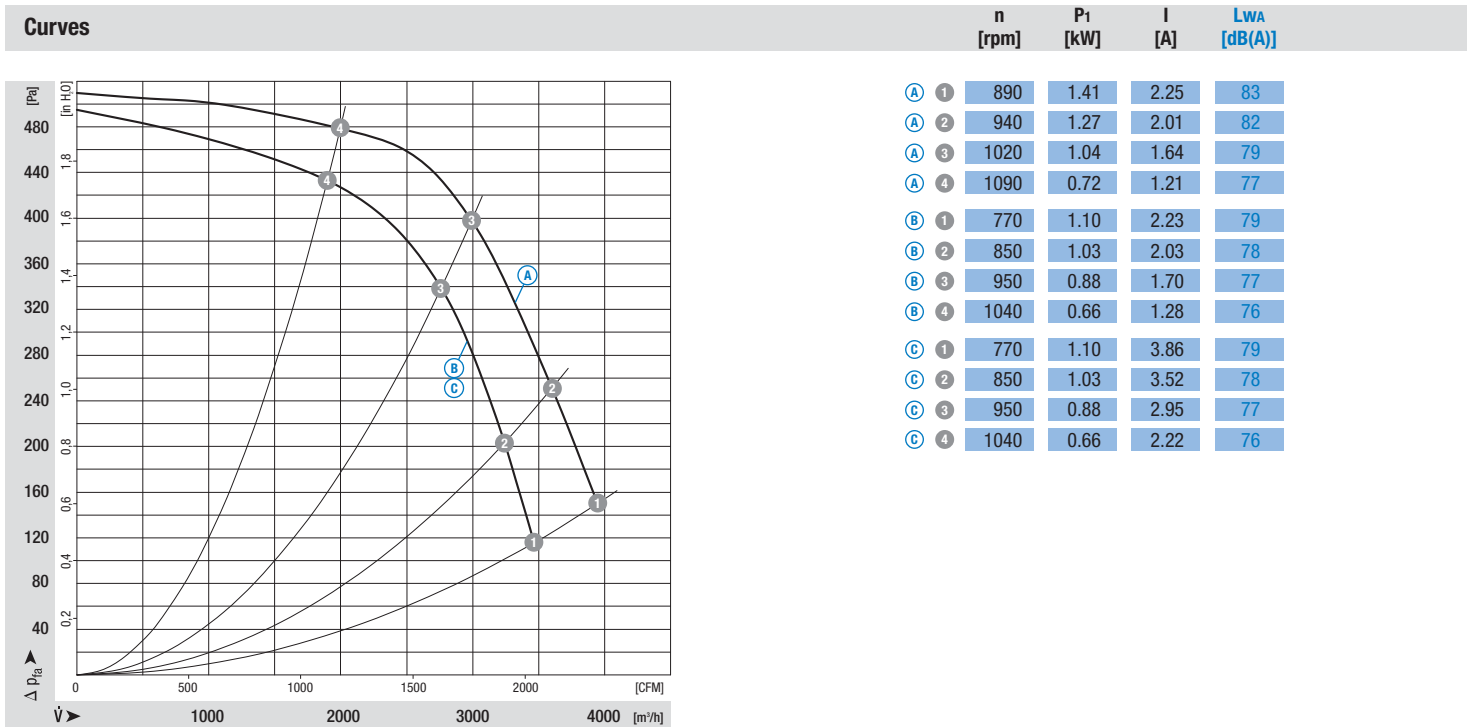
single inlet, Ø 355



- **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		

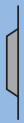
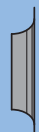
subject to alterations (1) Nominal data in operating point with maximum load (2) 230 VAC Δ / 400 VAC Y / 480 VAC Y



- **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

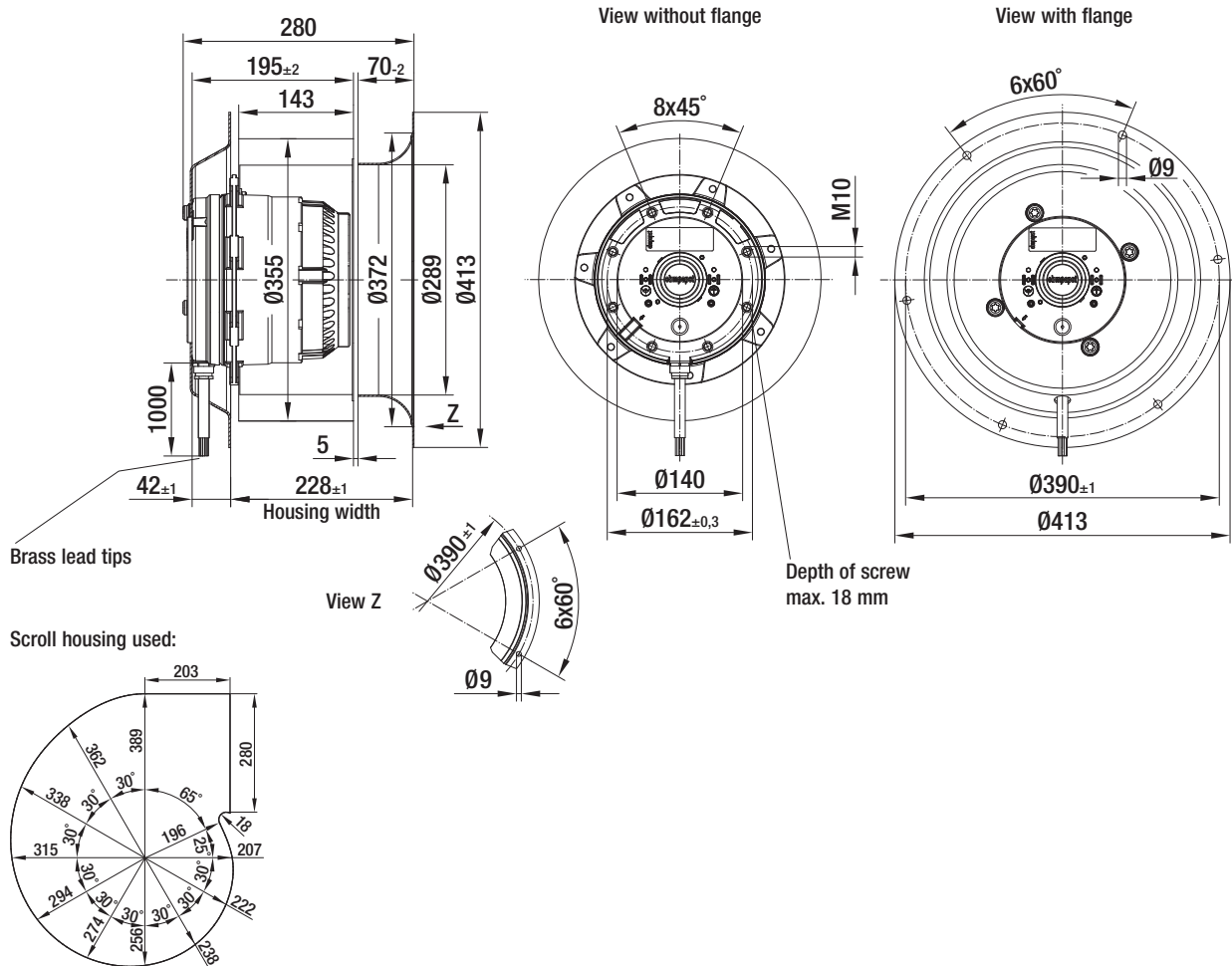
Flange

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

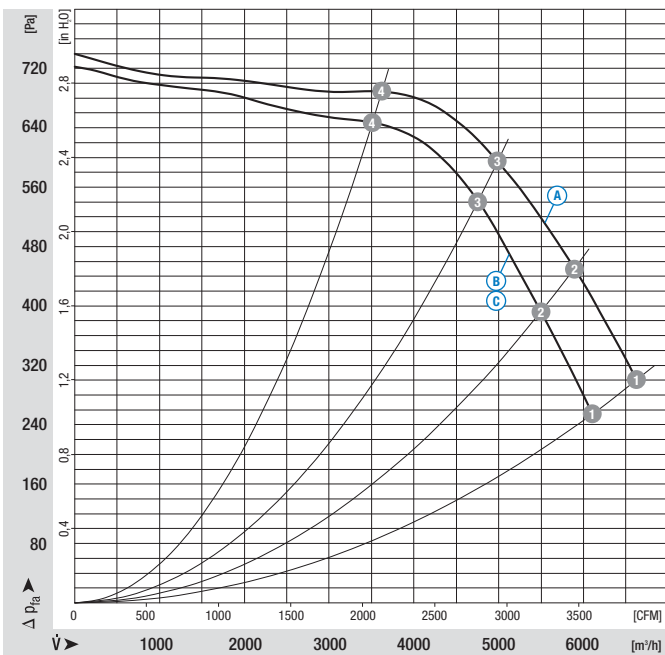
Type	Motor	Curve	Nominal voltage VAC	Frequency Hz	Speed ⁽¹⁾ rpm	Max. power input ⁽¹⁾ kW	Max. current draw ⁽¹⁾ A	Capacitor µF/VDB	Min. back pressure Pa	Perm. amp. temp. °C	Electr. connection p. 127
R6D 400 ⁽²⁾	M6D 138-LA	A	3~ 480 Y	60	1030	2.94	4.90	—	300	-40 to +60	D1)/D2)
		B	3~ 400 Y	60	950	2.58	5.15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

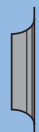


	n [rpm]	P ₁ [kW]	I [A]	L _{wa} [dB(A)]
A 1	1030	2.94	4.90	89
A 2	1060	2.58	4.55	88
A 3	1090	2.12	3.95	85
A 4	1130	1.54	3.31	83
B 1	950	2.58	5.15	87
B 2	990	2.30	4.60	85
B 3	1040	1.94	3.95	84
B 4	1090	1.43	3.12	82
C 1	950	2.58	8.90	87
C 2	990	2.30	7.97	85
C 3	1040	1.94	6.85	84
C 4	1090	1.43	5.41	82

- **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

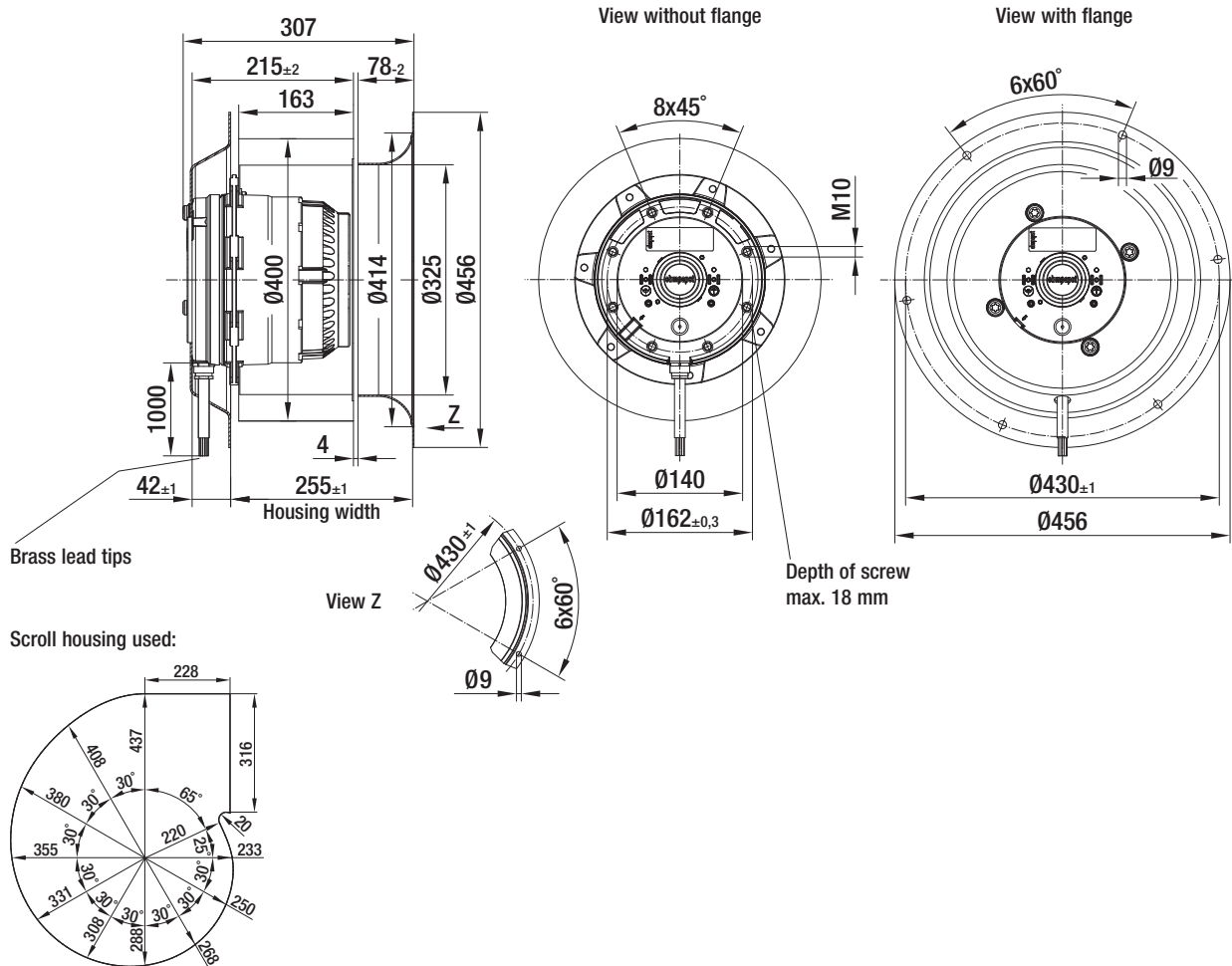
Flange

R6D 400-CM05-01

29.0

40010-2-4013

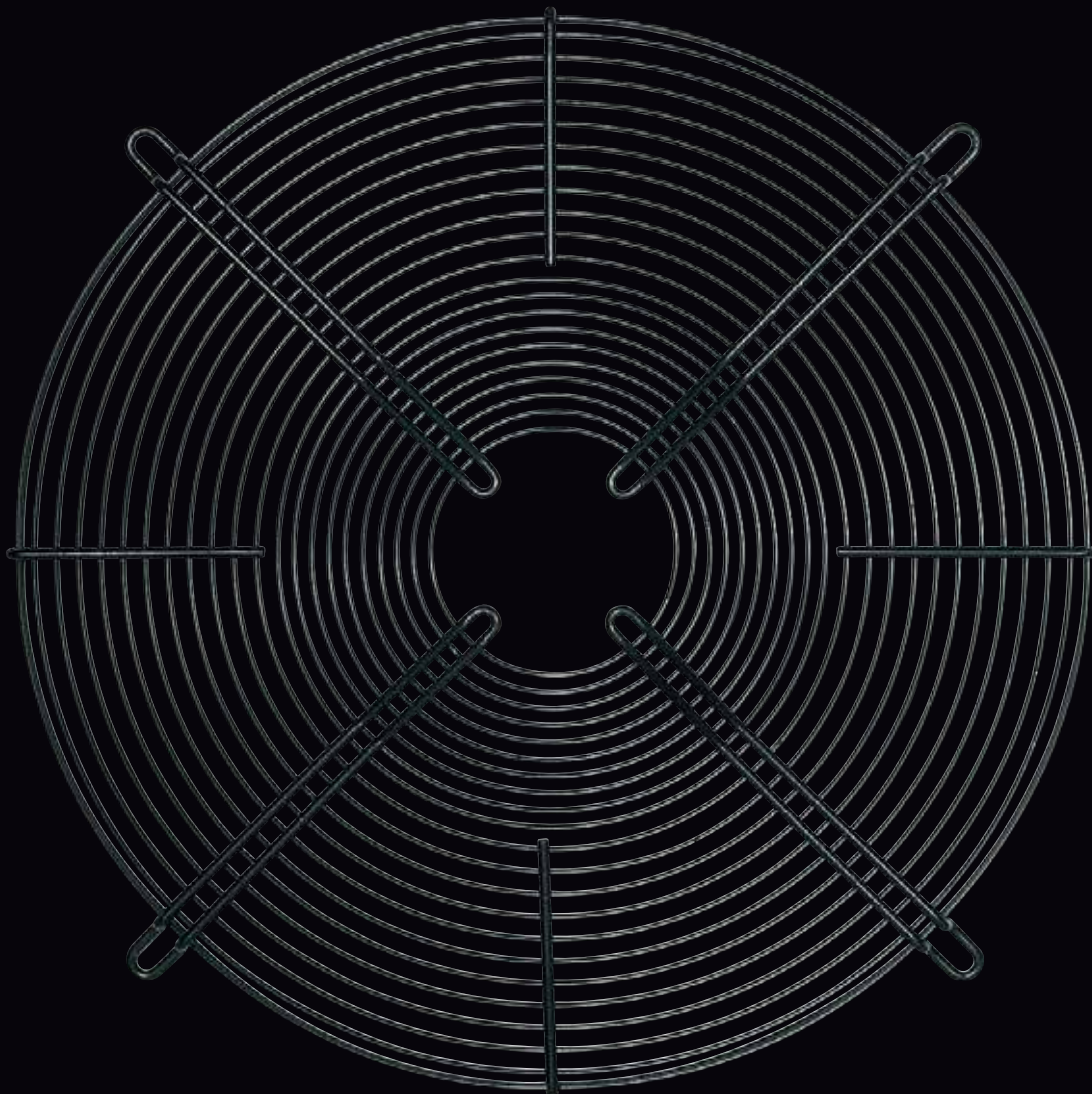
38400-2-4017





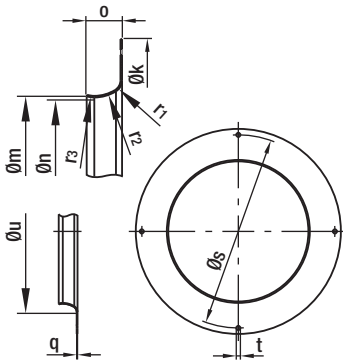
Accessories

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



Inlet nozzles

– **Material:** Galvanised sheet steel



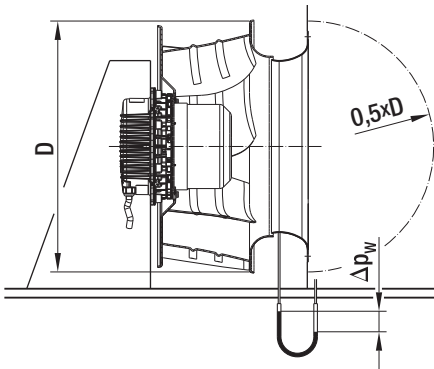
Inlet nozzles for backward curved centrifugal fans

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.

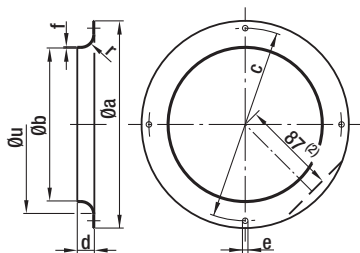
Inlet nozzles with measuring device to determine air flow for backward curved centrifugal fans

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

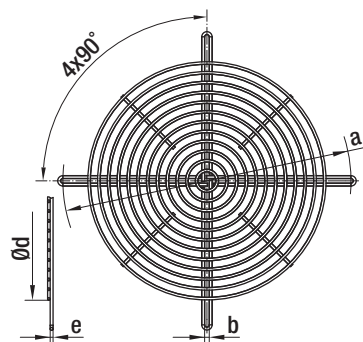


Inlet nozzles for forward curved centrifugal fans

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

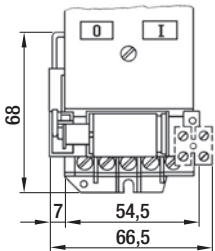
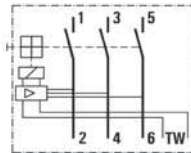
– **Technical features:** Input for TOP



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)

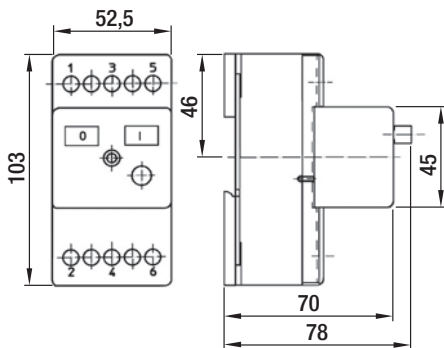
for assembly inside a cabinet

– **Technical features:** Input for TOP

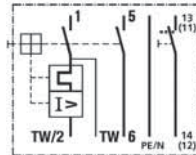


Nominal data	Nominal voltage	Frequency	Current draw	Mass	Auxiliary contactor
Type	VAC	Hz	A	kg	
TPE 100-AB01 -01	1~ 230	50/60	10.0	0.3	without auxiliary contactor
TPE 100-AB01 -02	1~ 230	50/60	10.0	0.3	with break contact
TPE 100-AB01 -03	1~ 230	50/60	10.0	0.3	with make contact

subject to alterations



– **Electr. connection:**



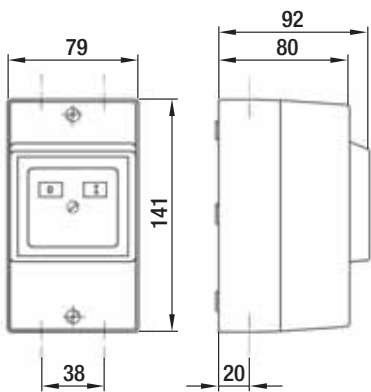
Motor protection switch (single-phase and three-phase) for wall assembly



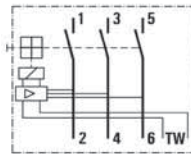
- **Technical features:** Input for TOP
- **Type of protection:** IP 55

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

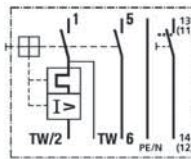
subject to alterations



- 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

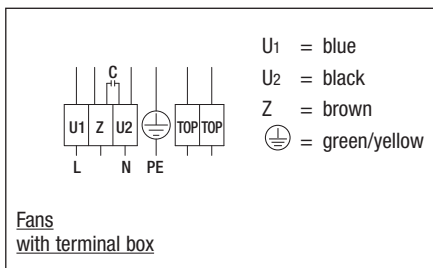
subject to alterations

Electrical connections

Fans with terminal box

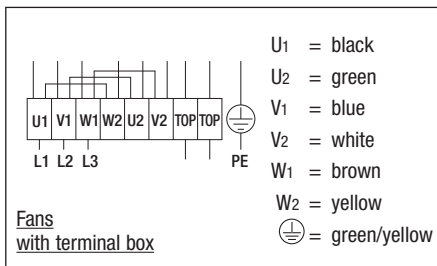
Fans (1~ 230 VAC power line)

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



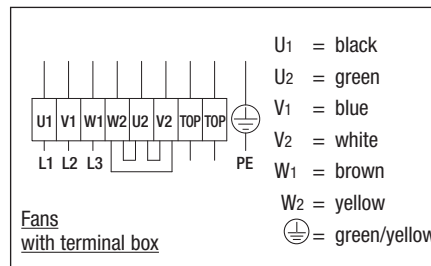
Fans, 1-speed (3~ 230 VAC power line)

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



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

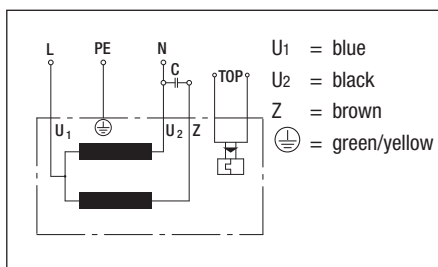
F2b) Star connection (3~ 400 or 480 VAC power line)
with TOP



Fans with cable exit

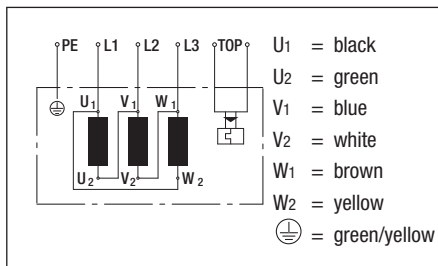
Fans (1~ 230 VAC power line)

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



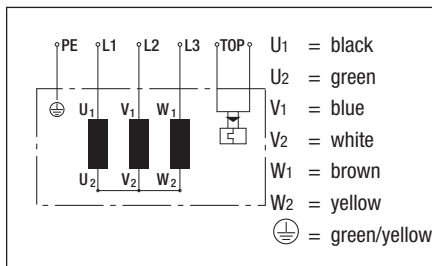
Fans, 1-speed (3~ 230 VAC power line)

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.

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

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










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