

AC axial fans



AC axial fan overview
AC axial fans

203
204

AC axial fans

Technical information



Product line

The renowned ebm-papst AC fans are used when DC voltage is not available. The AC range of fans is based on experience gained from decades of development activity, millions of units in series production and competence in innovation of a world-wide technological leader.

A wide range of fans for AC operation is presented in this catalogue. In addition to complete device fans, you will also find fans without external housing, providing a particularly economical advantage when the air duct can be integrated in the respective device.

Variety of sizes

AC fans are available in a variety of sizes with either air exhaust or air intake over struts. Silent running models with sleeve bearings (or for extreme ambient conditions) fans with ball bearings are available. Electrical connection with plug connection or external leads are available.

Shaded-pole or capacitor motors

Fan drives by shaded-pole or capacitor motors, most of which incorporate the world-famous ebm-papst external rotor principle: The fan blades are directly attached to the external rotor of the external rotor motor, thus combining both high performance and profitability.

Flat built AC fans

ebm-papst also has particularly flat built AC fans with internal rotor motor. Their advantage: quick start to full speed. A plastic impeller and the both smaller and lighter internal rotor motor lead to a lower moment of inertia.

Bearings

AC fans with sleeve bearings are powered by Class E insulated motors. Fans with ball bearings are equipped with Class B, E or F insulated motors.

Type of protection

All fans are equipped with type of protection IP 20 as standard. IP 54 / IP 68 and further types of protection are available on request.

AC voltage

The line of AC fans for Euro voltage according to IEC 60038 (230 V + 6 %, -10 %) is basically also available for 115 V.

Frequencies

AC fans can be operated at frequencies of 50 Hz or 60 Hz. However, their technical data then changes accordingly.

Capacitor

Fans driven by capacitor external motors provide particularly high operating efficiency. Generally, the required operating capacitor is already integrated in the fan housing.

Overloading

Almost all AC fans are protected against overloading (e.g. due to locked rotor) the drive motors are either impedance protected (marked "Impedance protected", and/or "Z.P.") or are equipped with a thermal switch (marked "Thermally protected" or "Th.P."). The model designation of these fans ends with "S".

Axial fans for AC operation

Overview of air performance

Dimension	Series	Air flow	Air flow (m³/h)												Page					
			10	20	30	40	50	60	70	80	90	100	200	300		400	500	600	700	800
□ 80 x 38	8000 N	30...61	[Performance chart data]												204					
∅ 76 x 37	8000 TV	24...47	[Performance chart data]												205					
□ 92 x 25	3900	31...70	[Performance chart data]												206					
□ 92 x 38	3000	49...89	[Performance chart data]												207					
□ 119 x 25	9900	84...135	[Performance chart data]												208					
□ 119 x 38	4000 N	80...180	[Performance chart data]												209					
□ 119 x 38	4000 Z	100...180	[Performance chart data]												210					
∅ 108 x 37	4600 TZ	125...140	[Performance chart data]												211					
□ 127 x 38	5900	150...206	[Performance chart data]												212					
□ 135 x 38	5600	235...270	[Performance chart data]												213					
150 x 172 x 38	7000	320...380	[Performance chart data]												214					
∅ 150 x 55	7800	325...380	[Performance chart data]												215					
∅ 150 x 55	7400	380...425	[Performance chart data]												216					
∅ 172 x 51	6000	375...500	[Performance chart data]												217					
□ 225 x 80	W2E 200	880...1030	[Performance chart data]												218					
□ 280 x 80	W2E 250	1865	[Performance chart data]												219					
∅ 200	K2E 200	765...840	[Performance chart data]												220					
∅ 200	K2E 200	765...850	[Performance chart data]												222					
∅ 200	K2D 200	780...880	[Performance chart data]												224					

Subject to alternations

Overview of technically feasible designs

Dimension	VDE, UL, CSA	Slider, sleeve bearings/ ball bearings	Speed signal	Humidity protection	IP >= IP 54	IP >= IP 68	Salt fog protection	Page	
									Series
Axial fan									
8000 N	80 x 80 x 38	ja	□/■	-	•	•	•	•	204
8000 TV	∅ 76 x 37	ja	□/■	-	•	•	•	•	205
3900	92 x 92 x 25	ja	□/■	-	•	-	-	-	206
3000	92 x 92 x 38	ja	□/■	-	•	•	•	•	207
9900	119 x 119 x 25	ja	□/■	-	•	-	-	-	208
4000 N	119 x 119 x 38	ja	□/■	•	•	•	•	•	209
4000 Z	119 x 119 x 38	ja	□/■	•	•	•	•	•	210
4600 TZ	∅ 108 x 37	ja	□/■	-	•	•	•	•	211
5900	127 x 127 x 38	ja	□/■	-	•	-	-	-	212
5600	135 x 135 x 38	ja	■	-	•	•	-	•	213
7000	150 x 172 x 38	ja	■	-	-	-	-	-	214
7800	∅ 150 x 55	ja	■	•	-	-	-	-	215
7400	∅ 150 x 55	ja	■	-	-	-	-	-	216
6000	∅ 172 x 51	ja	■	-	-	-	-	-	217

Subject to alternations

• available - not yet available □ Sleeve bearings ■ Ball bearings

max. 61 m³/h

AC axial fans

Series 8000 N 80 x 80 x 38 mm

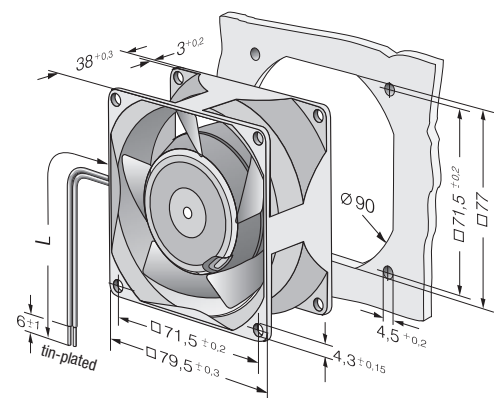
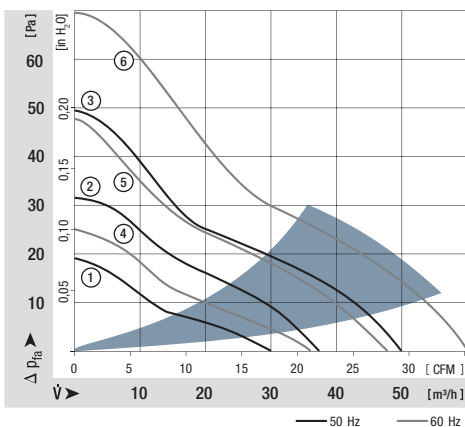


- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Clockwise, seen on rotor
- **Connection:** Via 2 single wires
grounding lug for M4 x 8
- **Mass:** 490 g
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 184
- **Possible special versions:** (See page 12)
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54 / IP 68

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
8880 N	30	17,7	230	50	18	3,3	□/	9,0	1 750	-10...+80	60 000 / 25 000		①
8850 N	37	21,8	230	50	24	3,9	□/	12,5	2 150	-10...+70	52 500 / 25 000		②
8550 N	50	29,4	230	50	30	4,4	□/	12,0	2 700	-10...+70	52 500 / 25 000		③
8556 N	50	29,4	230	50	31	4,5	/■	12,0	2 800	-40...+90	52 500 / 15 000		③
8830 N	36	21,2	115	60	21	3,7	□/	8,0	1 950	-10...+80	62 500 / 25 000		④
8800 N	47	27,7	115	60	28	4,3	□/	11,0	2 500	-10...+70	55 000 / 27 500		⑤
8500 N	61	35,9	115	60	34	4,8	□/	11,0	3 200	-10...+75	55 000 / 25 000		⑥
8506 N	61	35,9	115	60	35	5,0	/■	11,0	3 300	-40...+95	55 000 / 15 000		⑥

Subject to alternations

Fan type					Lead wires	Length "L"
8880 N	8830 N	8800 N	8550 N	8500 N	310 mm long	AWG 18, TR 64
8556 N	8506 N				310 mm long	AWG 22
8850 N					440 mm long	AWG 18, TR 64



max. 47 m³/h

AC axial fans

Series 8000 TV Ø 76 x 37 mm



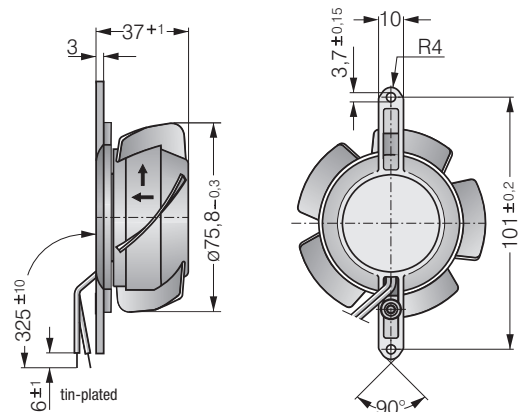
- **Material:** Impeller: Die-cast aluminium
Mounting bracket: Metal
 - **Direction of air flow:** Exhaust over mounting bracket
 - **Direction of rotation:** Clockwise, seen on rotor
 - **Connection:** Via 2 single wires
 - **Mass:** 370 g
- **Possible special versions:** (See page 12)
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54 / IP 68

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sintec sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀	
	m ³ /h	CFM								Hours	Hours
Type	m ³ /h	CFM	V	Hz	dB(A)	□/■	Watts	rpm	°C	at 40 °C	at T _{max}
8880 TV	24	14,1	230	50	15	□/	9,0	1 650	-10...+80	60 000 / 25 000	
8850 TV	31	18,2	230	50	20	□/	12,0	2 100	-10...+70	52 500 / 25 000	
8550 TV	40	23,5	230	50	27	□/	12,0	2 650	-10...+70	52 500 / 25 000	
8556 TV	40	23,5	230	50	28	/■	12,0	2 750	-40...+90	52 500 / 15 000	
8830 TV	27	15,9	115	60	18	□/	8,0	1 850	-10...+80	62 500 / 25 000	
8800 TV	36	21,2	115	60	24	□/	11,0	2 450	-10...+70	55 000 / 27 500	
8500 TV	47	27,7	115	60	32	□/	11,0	3 150	-10...+75	55 000 / 25 000	
8506 TV	47	27,7	115	60	33	/■	11,0	3 250	-40...+95	55 000 / 15 000	

Subject to alternations

The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 76.5 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 8000 N is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

Fan type				Lead wires	Length "L"
8880 TV	8850 TV	8830 TV	8800 TV	325 mm long	AWG 18, TR 64
8550 TV	8500 TV			325 mm long	AWG 18, TR 64
8556 TV	8506 TV			325 mm long	AWG 18



max. 70 m³/h

AC axial fans

Series 3900 92 x 92 x 25 mm

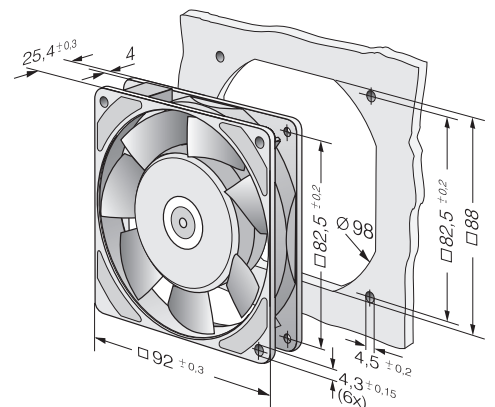
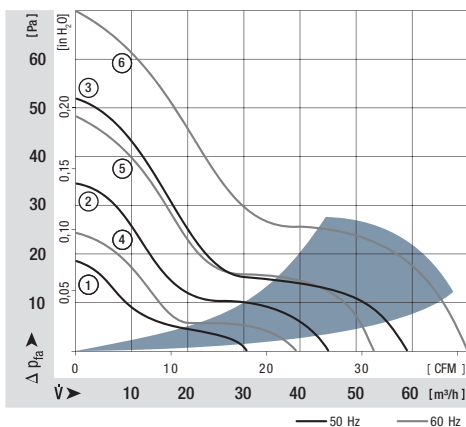


- **Material:** Housing: Die-cast aluminium
Impeller: Mineral-reinforced plastic PA
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Connection:** Via 2 flat plug 2,8 x 0,5 mm grounding lug for M4
- **Mass:** 280 g
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 185

- **Possible special versions:**
(See page 12)
- Protection against moisture

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
3950 L	31	18,2	230	50	24	3,8	□/	6,0	1 550	-10...+80	70 000 / 27 500		①
3956 L	31	18,2	230	50	24	3,8	/■	6,0	1 550	-40...+80	70 000 / 27 500		①
3950 M	45	26,5	230	50	29	4,2	□/	6,0	2 150	-10...+80	70 000 / 27 500		②
3956 M	45	26,5	230	50	29	4,2	/■	6,0	2 150	-40...+80	70 000 / 27 500		②
3950	59	34,7	230	50	35	4,7	□/	11,0	2 650	-20...+80	55 000 / 20 000		③
3956	59	34,7	230	50	35	4,7	/■	11,0	2 650	-40...+80	55 000 / 20 000		③
3900 L	39	23,0	115	60	27	4,0	□/	5,0	1 850	-10...+80	70 000 / 27 500		④
3906 L	39	23,0	115	60	27	4,0	/■	5,0	1 850	-40...+80	70 000 / 27 500		④
3900 M	53	31,2	115	60	34	4,6	□/	5,0	2 600	-10...+80	70 000 / 27 500		⑤
3906 M	53	31,2	115	60	34	4,6	/■	5,0	2 600	-40...+80	70 000 / 27 500		⑤
3900	70	41,2	115	60	40	5,1	□/	9,0	3 150	-20...+80	60 000 / 22 500		⑥
3906	70	41,2	115	60	40	5,1	/■	9,0	3 150	-40...+80	60 000 / 22 500		⑥

Subject to alternations



max. 89 m³/h

AC axial fans

Series 3000 92 x 92 x 38 mm

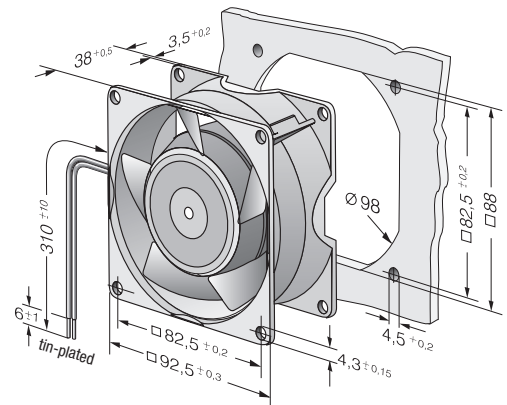
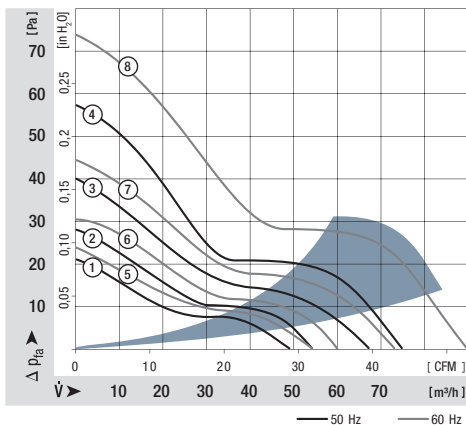


- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Clockwise, seen on rotor
- **Connection:** Via 2 single wires
grounding lug for M4 x 8
- **Mass:** 420 g
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 185
- **Possible special versions:** (See page 12)
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54 / IP 68

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sintec sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									Hours	Hours	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
3850	49	28,8	230	50	24	3,7	□/	9,0	1 750	-10...+75	60 000 / 27 500		①
3856	54	31,8	230	50	26	3,9	/■	9,0	1 950	-40...+90	60 000 / 20 000		②
3550	67	39,4	230	50	32	4,4	□/	8,5	2 300	-10...+80	60 000 / 25 000		③
3556	67	39,4	230	50	33	4,5	/■	8,5	2 400	-40...+90	60 000 / 20 000		③
3650	75	44,1	230	50	36	4,8	□/	12,0	2 650	-10...+55	52 500 / 37 500		④
3656	75	44,1	230	50	37	4,9	/■	12,0	2 700	-40...+75	52 500 / 22 500		④
3800	54	31,8	115	60	26	3,9	□/	8,0	1 900	-10...+80	62 500 / 25 000		⑤
3806	60	35,3	115	60	29	4,2	/■	8,0	2 150	-40...+95	62 500 / 17 500		⑥
3500	73	43,0	115	60	35	4,6	□/	8,0	2 500	-10...+80	62 500 / 25 000		⑦
3506	73	43,0	115	60	36	4,7	/■	8,0	2 600	-40...+95	62 500 / 17 500		⑦
3600	89	52,4	115	60	41	5,1	□/	11,0	3 100	-10...+65	55 000 / 30 000		⑧
3606	89	52,4	115	60	42	5,2	/■	11,0	3 200	-40...+75	55 000 / 25 000		⑧

Subject to alternations

Fan type	Lead wires	Length "L"
With sleeve bearings	310 mm long	AWG 18, TR 64
With ball bearings	310 mm long	AWG 18



max. 135 m³/h

AC axial fans

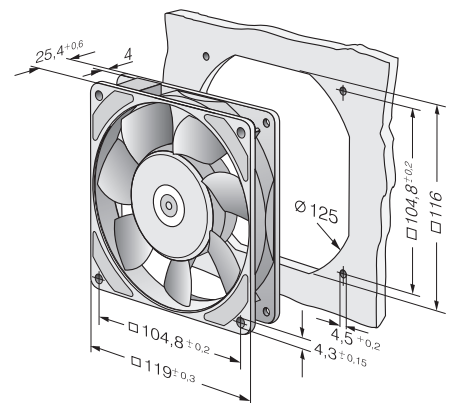
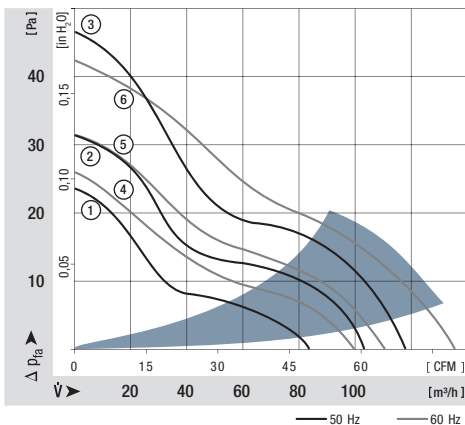
Series 9900 119 x 119 x 25 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Mineral-reinforced plastic PA
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Connection:** Via 2 flat plug 2,8 x 0,5 mm grounding lug for M4
- **Mass:** 320 g
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 188
- **Possible special versions:** (See page 12)
- Protection against moisture

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
9956 L	84	49,4	230	50	29	4,4	/■	9,5	1850	-40...+80	57 500 / 22 500		①
9956 M	104	61,2	230	50	35	4,7	/■	10,0	2250	-40...+80	57 500 / 22 500		②
9950	117	68,9	230	50	37	5,0	□/	14,0	2450	-20...+70	47 500 / 22 500		③
9956	117	68,9	230	50	37	5,0	/■	14,0	2450	-40...+70	47 500 / 22 500		③
9906 L	100	58,9	115	60	34	4,6	/■	8,0	2100	-40...+80	62 500 / 25 000		④
9906 M	111	65,3	115	60	37	5,0	/■	8,0	2450	-40...+80	62 500 / 25 000		⑤
9900	135	79,5	115	60	42	5,4	□/	12,0	2850	-20...+70	52 500 / 25 000		⑥
9906	135	79,5	115	60	42	5,4	/■	12,0	2850	-40...+70	52 500 / 25 000		⑥

Subject to alternations



max. 180 m³/h

AC axial fans

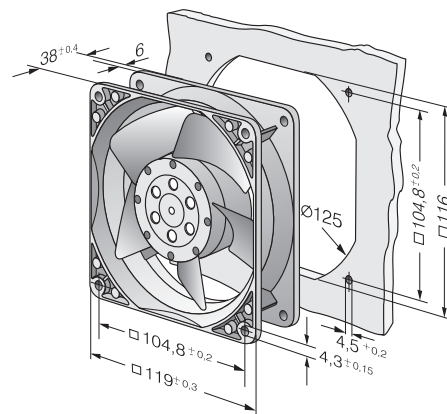
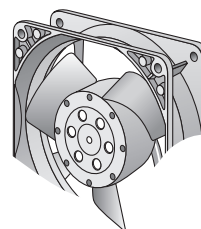
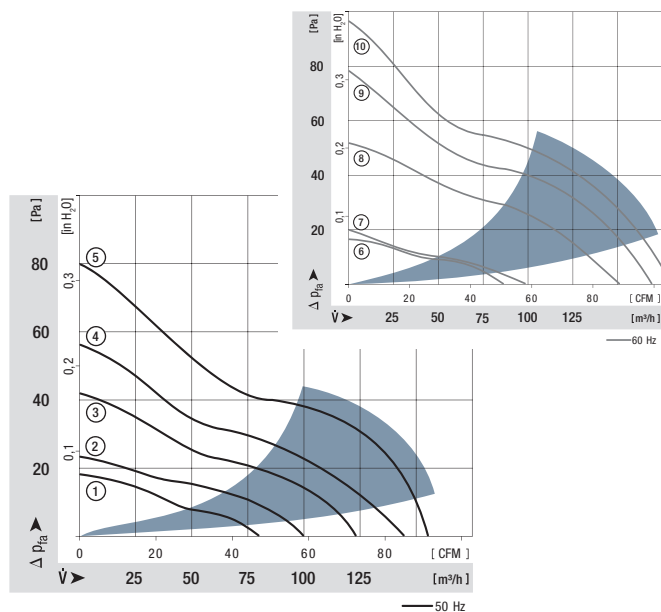
Series 4000 N 119 x 119 x 38 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
- **Direction of air flow:** Intake over struts
Types 4890 N and 4840 N exhaust over struts
- **Direction of rotation:** Clockwise, seen on rotor
- **Connection:** Via 2 single wires
grounding lug for M4 and UNC
- **Mass:** 550 g
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 188
- **Optionally available:** Variants with strengthened mounting flanges and customizable single strands
- **Possible special versions:** (See page 12)
 - Speed signal
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54 / IP 68

Nominal data	Air flow	Air flow	Nominal voltage	Frequency	Sound pressure level	Sound power level	Sintec sleeve bearings	Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀ at 40 °C	at T _{max}	Curve
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours		
4890 N	80	47	230	50	25	4,0	□/	11,0	1 550	-10...+70	55 000 / 27 500			①
4850 N*	100	59	230	50	32	4,4	□/	10,0	1 800	-10...+70	57 500 / 27 500			②
4580 N*	123	72	230	50	41	5,2	□/	18,0	2 350	-10...+55	40 000 / 27 500			③
4550 N*	145	85	230	50	44	5,4	□/	16,5	2 550	-10...+55	42 500 / 30 000			④
4650 N	160	94	230	50	46	5,4	□/	19,0	2 650	-10...+55	37 500 / 27 500			⑤
4656 N	160	94	230	50	47	5,5	/■	19,0	2 650	-40...+85	37 500 / 15 000			⑤
4840 N	85	50	115	60	26	4,1	□/	10,0	1 650	-10...+75	57 500 / 25 000			⑥
4800 N*	97	57	115	60	32	4,3	□/	9,0	1 750	-10...+75	60 000 / 27 500			⑦
4530 N*	151	89	115	60	45	5,4	□/	16,0	2 700	-10...+65	42 500 / 25 000			⑧
4500 N*	169	100	115	60	48	5,7	□/	15,0	3 000	-10...+65	47 500 / 25 000			⑨
4600 N	180	106	115	60	50	5,7	□/	18,0	3 100	-10...+60	40 000 / 25 000			⑩
4606 N	180	106	115	60	51	5,8	/■	18,0	3 100	-40...+90	40 000 / 15 000			⑩

Subject to alternations



max. 180 m³/h

AC axial fans

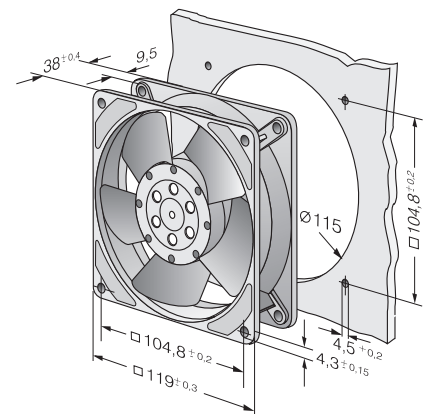
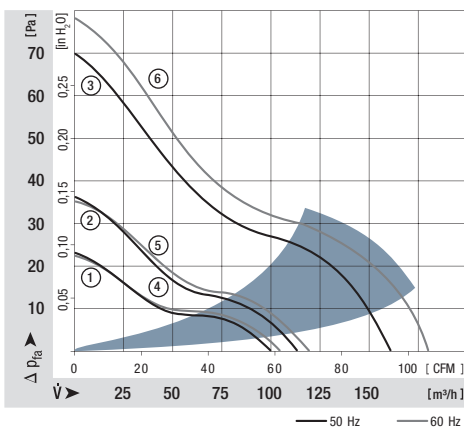
Series 4000 Z 119 x 119 x 38 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
 - **Direction of air flow:** Exhaust over struts
 - **Direction of rotation:** Clockwise, seen on rotor
 - **Connection:** Via 2 flat plug 2,8 x 0,5 mm
grounding lug for M4 x 8
 - **Mass:** 540 g
 - **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 188
- **Possible special versions:** (See page 12)
 - Speed signal
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54 / IP 68

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
4850 Z	100	59	230	50	26	4,0	□/	13,0	1 700	-10...+65	50 000 / 27 500		①
4856 Z	100	59	230	50	26	4,0	/■	13,0	1 700	-40...+75	50 000 / 20 000		①
4580 Z	115	68	230	50	30	4,3	□/	13,0	1 900	-10...+65	50 000 / 27 500		②
4586 Z	115	68	230	50	30	4,3	/■	13,0	1 900	-40...+75	50 000 / 20 000		②
4650 Z	160	94	230	50	40	5,3	□/	19,0	2 650	-10...+50	37 500 / 30 000		③
4656 Z	160	94	230	50	40	5,3	/■	19,0	2 650	-40...+75	37 500 / 17 500		③
4800 Z	105	62	115	60	28	4,1	□/	12,0	1 800	-10...+70	52 500 / 25 000		④
4806 Z	105	62	115	60	28	4,1	/■	12,0	1 800	-40...+75	52 500 / 17 500		④
4530 Z	120	71	115	60	32	4,4	□/	12,0	2 000	-10...+70	52 500 / 25 000		⑤
4536 Z	120	71	115	60	32	4,4	/■	12,0	2 000	-40...+75	52 500 / 17 500		⑤
4600 Z	180	106	115	60	45	5,6	□/	18,0	3 100	-10...+60	40 000 / 25 000		⑥
4606 Z	180	106	115	60	45	5,6	/■	18,0	3 100	-40...+85	40 000 / 15 000		⑥

Subject to alternations



max. 140 m³/h

AC axial fans

Series 4600 TZ Ø 108 x 37 mm



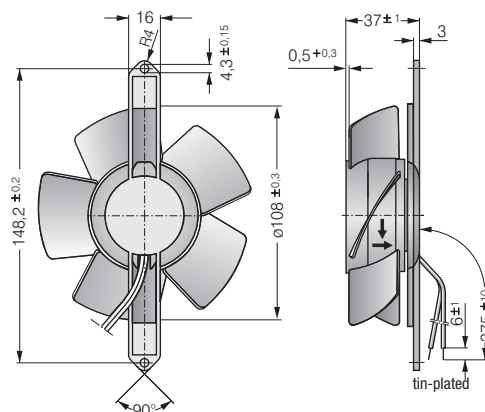
- **Material:** Impeller: Die-cast aluminium
Mounting bracket: Metal
 - **Direction of air flow:** Exhaust over mounting bracket
 - **Direction of rotation:** Clockwise, seen on rotor
 - **Connection:** Via 2 single wires
 - **Mass:** 430 g
- **Possible special versions:** (See page 12)
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54 / IP 68

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sintec sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀	
	m ³ /h	CFM								V	Hz
4650 TZ	125	73,6	230	50	42	□/■	19,0	2 600	-10...+50	37 500 / 30 000	
4656 TZ	125	73,6	230	50	42	/■	19,0	2 600	-40...+65	37 500 / 20 000	
4600 TZ	140	82,4	115	60	45	□/■	18,0	2 950	-10...+50	40 000 / 32 500	
4606 TZ	140	82,4	115	60	45	/■	18,0	2 950	-40...+75	40 000 / 17 500	

Subject to alternations

The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 109 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 4000 Z is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

Fan type	Lead wires
4650 TZ	4600 TZ
4656 TZ	4606 TZ



max. 206 m³/h

AC axial fans

Series 5900 127 x 127 x 38 mm

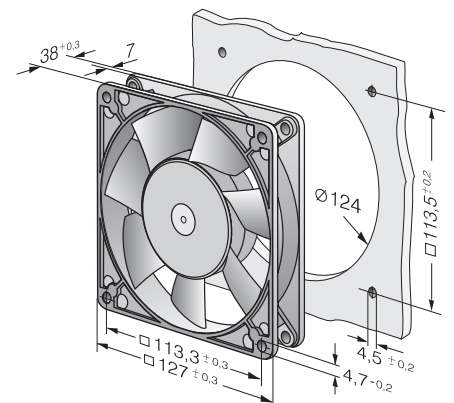
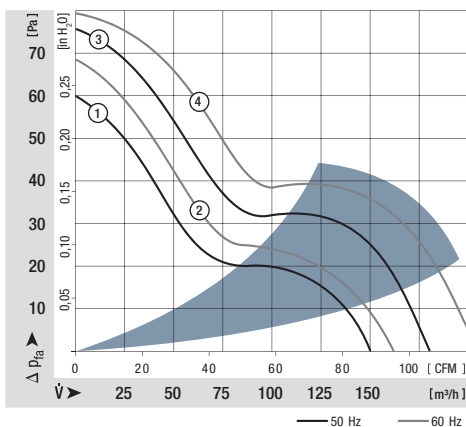


- **Material:** Housing: Die-cast aluminium
Impeller: GRP¹⁾ (PA)
 - **Direction of air flow:** Exhaust over struts
 - **Direction of rotation:** Counter-clockwise, seen on rotor
 - **Connection:** Via 2 flat plug 2,8 x 0,5 mm grounding lug for M4 x 6
 - **Mass:** 570 g
- **Possible special versions:**
(See page 12)
- Protection against moisture

1) Fibreglass-reinforced plastic

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
5988	150	88	230	50	37	4,9	/■	13,0	2 250	-30...+55	35 000 / 20 000		①
5950	180	106	230	50	43	5,4	□/	18,0	2 700	-20...+50	40 000 / 32 500		③
5958	180	106	230	50	44	5,5	/■	18,0	2 750	-30...+60	40 000 / 25 000		③
5938	162	95	115	60	40	4,9	/■	12,0	2 500	-30...+55	35 000 / 20 000		②
5900	206	121	115	60	46	5,7	□/	17,0	3 050	-20...+55	42 500 / 30 000		④
5908	206	121	115	60	47	5,8	/■	17,0	3 100	-30...+75	42 500 / 20 000		④

Subject to alternations



max. 270 m³/h

AC axial fans

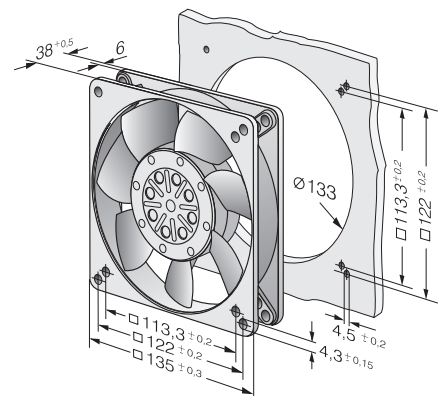
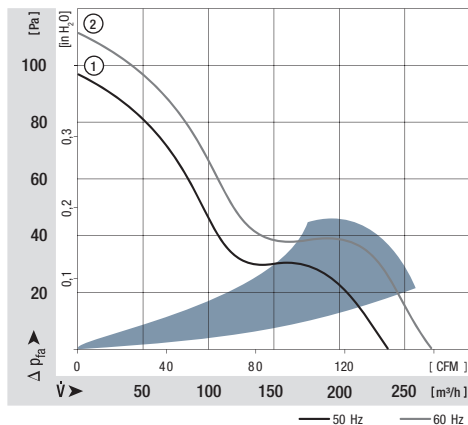
Series 5600 135 x 135 x 38 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Connection:** Via 2 flat plug 2,8 x 0,5 mm grounding lug for M4 x 8
- **Mass:** 800 g
- **Possible special versions:** (See page 12)
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sintec sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									Hours	Hours	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
5656 S	235	138	230	50	46	5,9	/■	30,0	2 700	-35...+70	45 000 / 20 000		①
5606 S	270	159	115	60	50	6,2	/■	26,0	3 100	-35...+80	47 500 / 20 000		②

Subject to alternations



max. 380 m³/h

AC axial fans

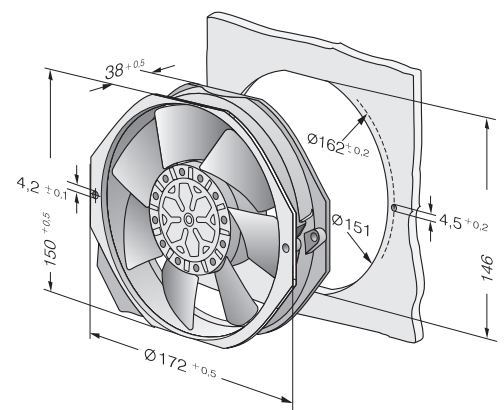
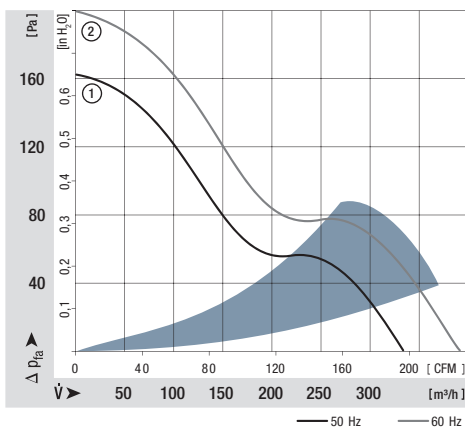
Series 7000 150 x 172 x 38 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Connection:** Via 2 flat plug 2,8 x 0,5 mm grounding lug for M4 x 8
- **Mass:** 900 g
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 190, 192, 193

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
7056 ES	320	188	230	50	51	6,4	/■	27,0	2 800	-25...+55	60 000 / 32 000		①
7006 ES	380	224	115	60	56	6,8	/■	28,0	3 350	-25...+65	55 000 / 18 000		②

Subject to alternations



max. 380 m³/h

AC axial fans

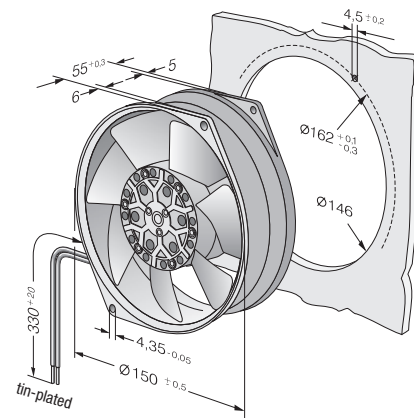
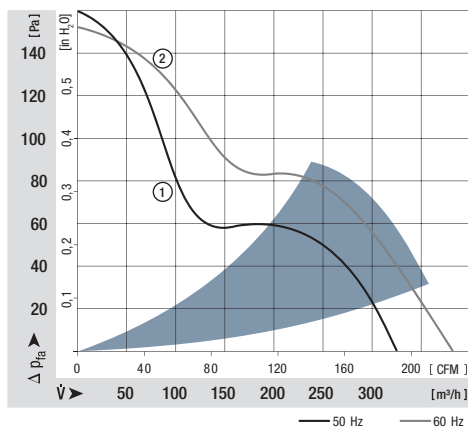
Series 7800 Ø 150 x 55 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Connection:** Via 2 single wires, wire ends with brass lead tips grounding lug for M4 x 8
- **Mass:** 1,1 kg
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 190

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									Hours	Hours	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
7855 ES	325	191	230	50	49	6,0	/■	45,0	2 800	-25...+50	60 000 / 47 500		①
7856 ES	325	191	230	50	49	6,0	/■	45,0	2 800	-25...+70	60 000 / 30 000		①
7805 ES	380	224	115	60	53	6,4	/■	38,0	3 250	-25...+70	60 000 / 47 500		②
7806 ES	380	224	115	60	53	6,4	/■	38,0	3 250	-25...+90	60 000 / 15 000		②

Subject to alternations



max. 425 m³/h

AC axial fans

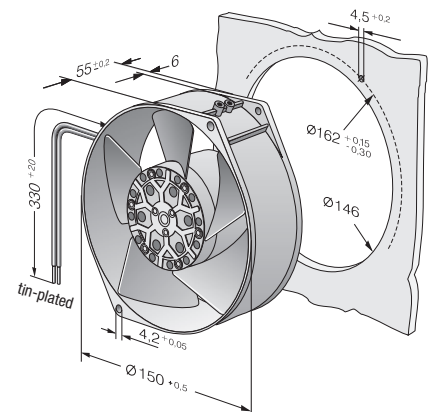
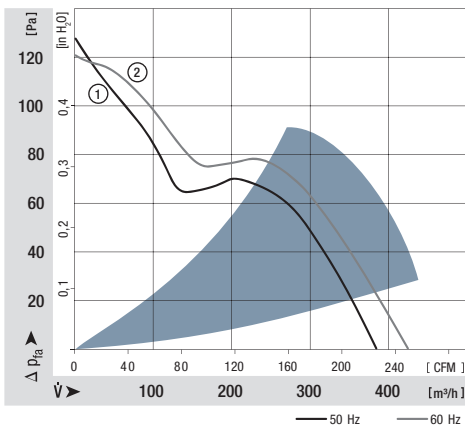
Series 7400 Ø 150 x 55 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Connection:** Via 2 single wires, wire ends with brass lead tips grounding lug for M4 x 8
- **Mass:** 1,1 kg
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 190

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
7450 ES	380	224	230	50	60	6,8	/■	47,0	2 700	-25...+50	63 000 / 50 000		①
7400 ES	425	250	115	60	62	6,9	/■	46,0	3 050	-25...+70	50 000 / 24 000		②

Subject to alternations



max. 500 m³/h

AC axial fans

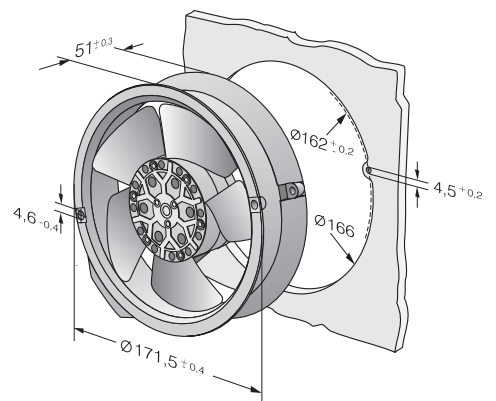
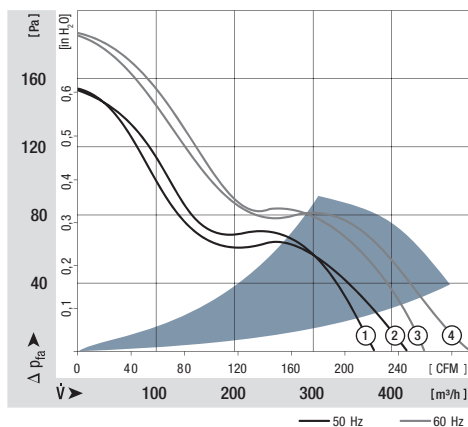
Series 6000 Ø 172 x 51 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Painted sheet steel
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Connection:** Via 2 flat plug 2,8 x 0,5 mm grounding lug for M4 x 6
- **Mass:** 1,0 kg
- **Note:** Please note our new ACmaxx series. With identical mounting dimensions and voltages, this series achieves higher energy efficiency. See page 192,193

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Nominal speed	Temperature range	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
6058 ES	375	221	230	50	55	5,9	/■	24,0	2 800	-25...+70	62 000 / 31 000		①
6078 ES	420	247	230	50	54	6,3	/■	26,0	2 800	-25...+60	62 000 / 39 000		②
6008 ES	440	259	115	60	60	6,4	/■	26,0	3 300	-25...+70	57 000 / 28 000		③
6028 ES	500	284	115	60	58	6,7	/■	29,0	3 300	-25...+75	57 000 / 22 000		④

Subject to alternations



max. 1030 m³/h

AC axial fans

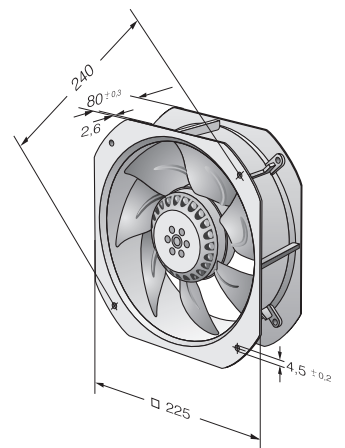
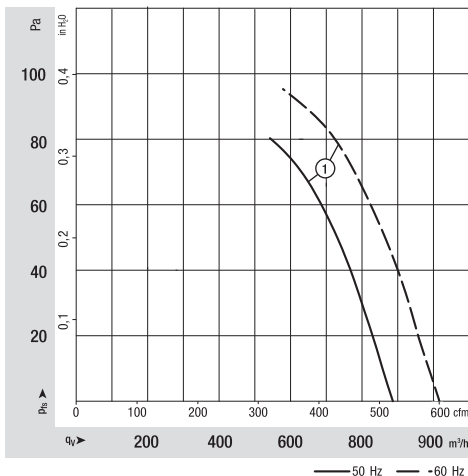
225 x 225 x 80 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Sheet steel
- **Number of blades:** 7
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP44, depending on installation and position
- **Insulation class:** "B"
- **Mounting position:** Any
- **Connection:** Terminal strips (operating capacitor connected)
- **Mass:** 2,0 kg
- **Operation mode:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Speed / rpm	Perm. amb. temp.	Service life L ₁₀		Curve
	m ³ /h	CFM									at 40 °C	at T _{max}	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□/■	Watts	rpm	°C	Hours	Hours	
W2E 200-HK86-01	1030	606	115	60	61	6,7	/■	80,0	2800	-25...+65	60 000 / 58 000		①
W2E 200-HK38-01	880	518	230	50	58	6,6	/■	64,0	2550	-25...+60	63 000 / 60 000		①

Subject to alternations



max. 1865 m³/h

AC axial fans

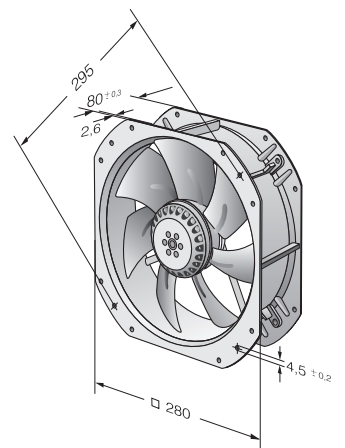
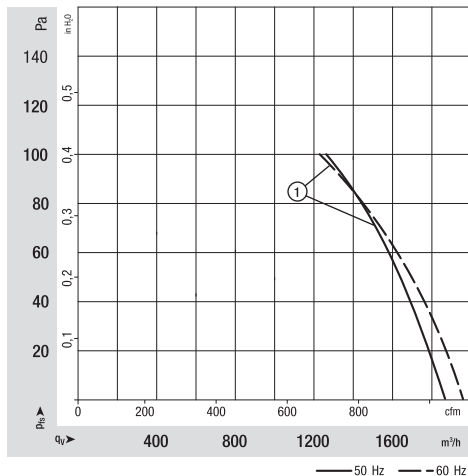
280 x 280 x 80 mm



- **Material:** Housing: Die-cast aluminium
Impeller: Sheet steel
- **Number of blades:** 7
- **Direction of air flow:** Exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP44, depending on installation and position
- **Insulation class:** "F"
- **Mounting position:** Any
- **Connection:** Terminal strips (operating capacitor connected)
- **Mass:** 2,0 kg
- **Operation mode:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data	Air flow		Nominal voltage	Frequency	Sound pressure level	Sound power level	Sinter sleeve bearings Ball bearings	Input power	Speed / rpm	Perm. amb. temp.	Service life L ₁₀		Curve
	m ³ /h	CFM									Hours	Hours	
Type	m ³ /h	CFM	V	Hz	dB(A)	Bel(A)	□ / ■	Watts	rpm	°C	Hours	Hours	①
W2E 250-HL06-01	1865	1077	230	50	66	7,2	□ / ■	127,0	2 550	-25...+60	63 000 / 70 000		①

Subject to alternations



max. 850 m³/h

AC diagonal module

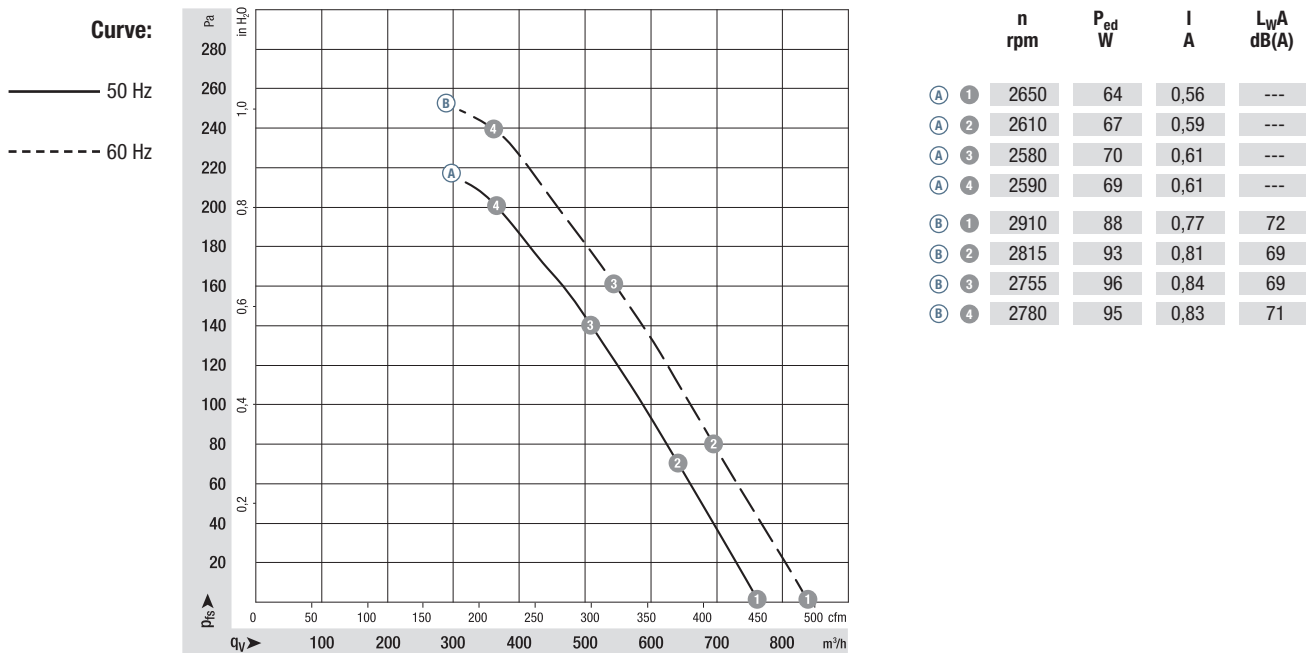
Ø 200 mm



- **Material:** Housing: Plastic PA
Support bracket: Plastic PA
Impeller: Plastic PA
Rotor: Coated in black
- **Number of blades:** 7
- **Direction of air flow:** "V"
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44, depending on installation and position
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Operation mode:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

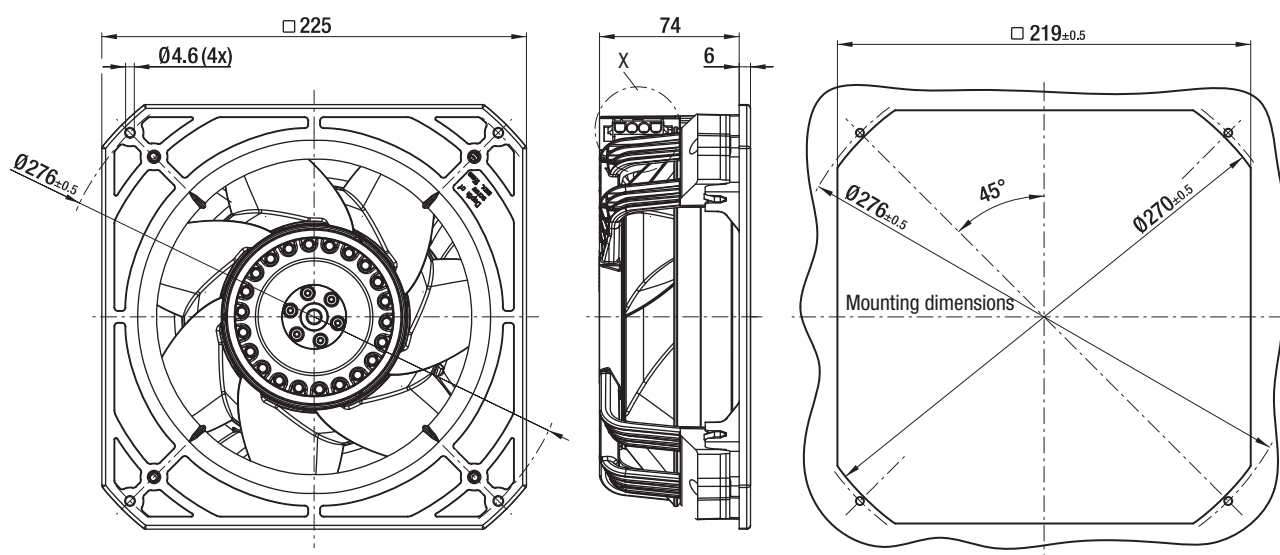
Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed / rpm	Input power	Input current	Capacitor	Sound pressure level	Max. back-pressure	Perm. amb. temp.	Mass	Electrical connection
Type	Motor	VAC	Hz	m ³ /h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	kg		
K2E 200-AA12 -01	M2E 068-CF	Ⓐ 1 ~ 115	50	765	2650	64	0,56	6,0/250	64	200	-25..+65	2,1	p. 259 / A1)	
		Ⓑ 1 ~ 115	60	840	2910	88	0,77	6,0/250	64	240	-25..+65	2,1		

Subject to alternations

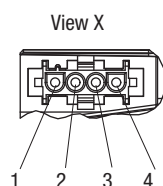


Air performance measured as per: ISO 5801, Installation category A, without protection against accidental contact. Suction-side noise levels: LWA as per ISO 13347, LpA measured at 1 m distance to fan axis. The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation. With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted! For detailed information see <http://www.ebmpapst.com/general conditions>

- **Motor protection:** TOP wired internally
- **Touch current:** < 0,75 mA acc. to IEC 60990 (test circuit, illustration 4)
- **Cable exit:** Lateral
- **Electrical connection:** Via connector
- **Protection class:** I (if customer has provided connection for protective earth)
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** UL 2111, CSA C22.2 Nr. 77



Coded plug system
 Universal-Mate-N-Lok
 Connector shell: AMP 350 780-1
 3 x Pin connector: AMP 926 885-1
 Mating connector (not part of
 delivery):
 Connector shell: AMP 350 779-4
 3 x female terminal: AMP 926 884-1



1 = not used
 2 = N + condensator
 3 = L
 4 = PE

max. 850 m³/h

AC diagonal module

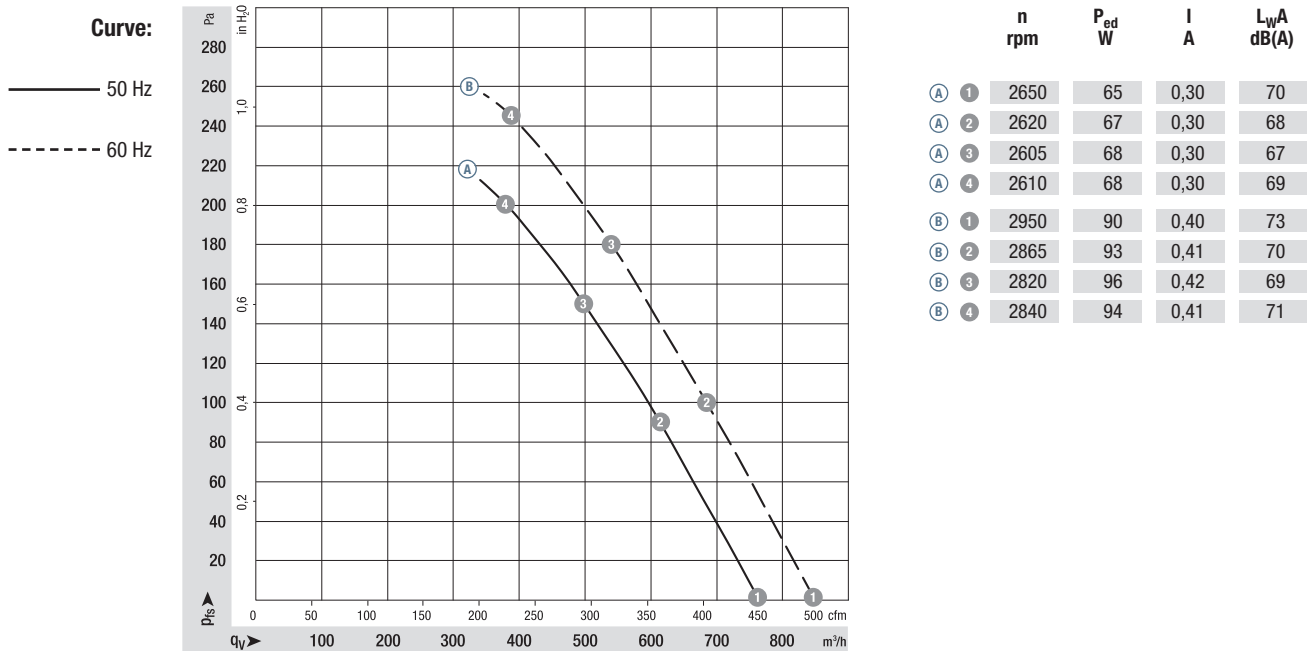
Ø 200 mm



- **Material:** Housing: Plastic PA
Support bracket: Plastic PA
Impeller: Plastic PA
Rotor: Coated in black
- **Number of blades:** 7
- **Direction of air flow:** "V"
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44, depending on installation and position
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Operation mode:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

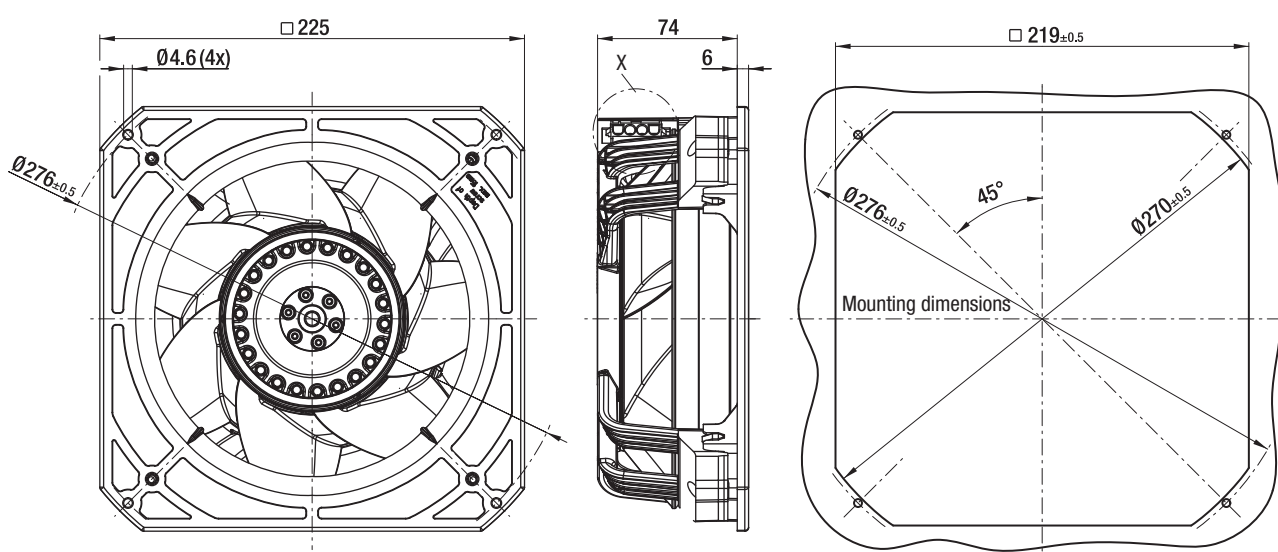
Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed / rpm	Input power	Input current	Capacitor	Sound pressure level	Max. back-pressure	Perm. amb. temp.	Mass	Electrical connection
Type	Motor		VAC	Hz	m ³ /h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	kg	
K2E 200-AA52 -02	M2E 068-CF	Ⓐ 1	~ 230	50	765	2650	65	0,30	2,0/400	62	200	-25..+75	2,1	p. 259 / A1)
		Ⓑ 1	~ 230	60	850	2950	90	0,40	2,0/400	62	245	-25..+75	2,1	

Subject to alternations

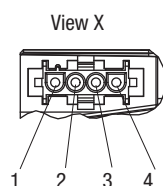


Air performance measured as per: ISO 5801, Installation category A, without protection against accidental contact. Suction-side noise levels: LWA as per ISO 13347, LpA measured at 1 m distance to fan axis. The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation. With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted! For detailed information see <http://www.ebmpapst.com/general conditions>

- **Motor protection:** TOP wired internally
- **Touch current:** < 0,75 mA acc. to IEC 60990 (test circuit, illustration 4)
- **Cable exit:** Lateral
- **Electrical connection:** Via connector
- **Protection class:** I (if customer has provided connection for protective earth)
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** UL 2111, CSA C22.2 Nr. 77



Coded plug system
 Universal-Mate-N-Lok
 Connector shell: AMP 350 780-1
 3 x Pin connector: AMP 926 885-1
 Mating connector (not part of
 delivery):
 Connector shell: AMP 350 779-4
 3 x female terminal: AMP 926 884-1



1 = not used
 2 = N + condensator
 3 = L
 4 = PE

max. 880 m³/h

AC diagonal module

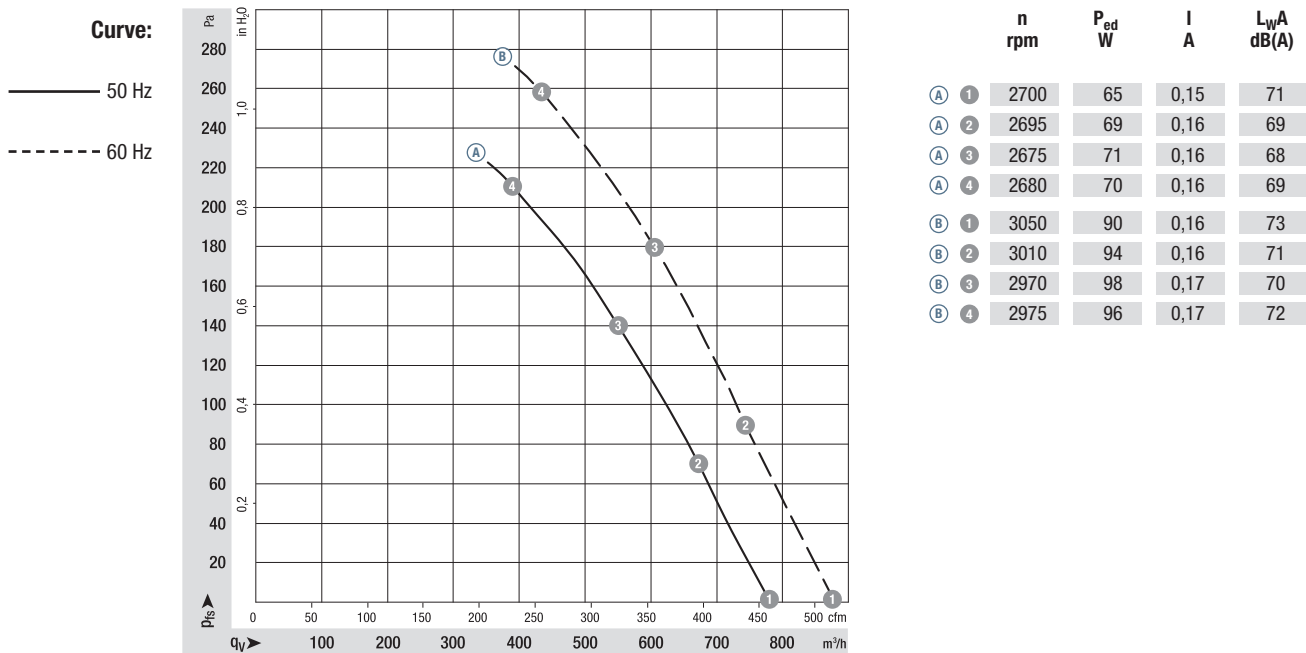
Ø 200 mm



- **Material:** Housing: Plastic PA
Support bracket: Plastic PA
Impeller: Plastic PA
Rotor: Coated in black
- **Number of blades:** 7
- **Direction of air flow:** "V"
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 44, depending on installation and position
- **Insulation class:** "F"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Operation mode:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

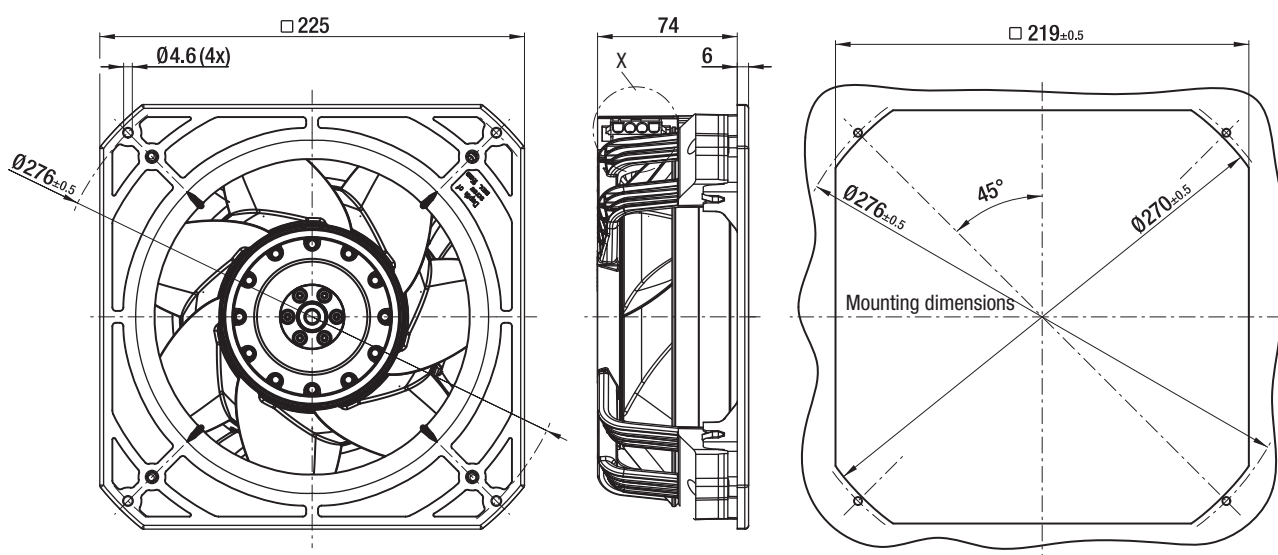
Nominal data		Curve	Nominal voltage	Frequency	Air flow	Speed / rpm	Input power	Input current	Capacitor	Sound pressure level	Max. back-pressure	Perm. amb. temp.	Mass	Electrical connection
Type	Motor		VAC	Hz	m ³ /h	rpm	W	A	µF/VDB	dB(A)	Pa	°C	kg	
K2D 200-AA02 -02	M2D 068-CF	(A)	3~ 400 Y	50	780	2700	65	0,15	---	62	210	-25..+75	2,0	p. 259 / C2)
		(B)	3~ 400 Y	60	880	3050	90	0,16	---	65	260	-25..+75	2,0	

Subject to alternations

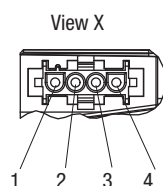


Air performance measured as per: ISO 5801, Installation category A, without protection against accidental contact. Suction-side noise levels: LWA as per ISO 13347, LpA measured at 1 m distance to fan axis. The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation. With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted! For detailed information see <http://www.ebmpapst.com/general conditions>

- **Motor protection:** TOP wired internally
- **Touch current:** < 0,75 mA acc. to IEC 60990 (test circuit, illustration 4)
- **Cable exit:** Lateral
- **Electrical connection:** Via connector
- **Protection class:** I (if customer has provided connection for protective earth)
- **Product conforming to standards:** EN 60335-1, CE



Coded plug system
 Universal-Mate-N-Lok
 Connector shell: AMP 350 780-1
 3 x Pin connector: AMP 926 885-1
 Mating connector (not part of
 delivery):
 Connector shell: AMP 350 779-4
 3 x female terminal: AMP 926 884-1



1 = L3
 2 = L1
 3 = L2
 4 = PE

