D2E146-AP47-G2

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D2E146-AP47-G2**
Motor	**M2E068-EC**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	2050	2600
Power consumption	W	300	300
Current draw	A	1.31	1.35
Capacitor	µF	8	8
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	200	400
Min. back pressure	in. wg	0.8	1.61
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	45

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Weight	4.4 kg
Size	146 mm
Motor size	68
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Housing material	Sheet steel, galvanized and painted black
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2+S
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing made of stainless steel; (sealed, without air gap)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1
Approval	EAC

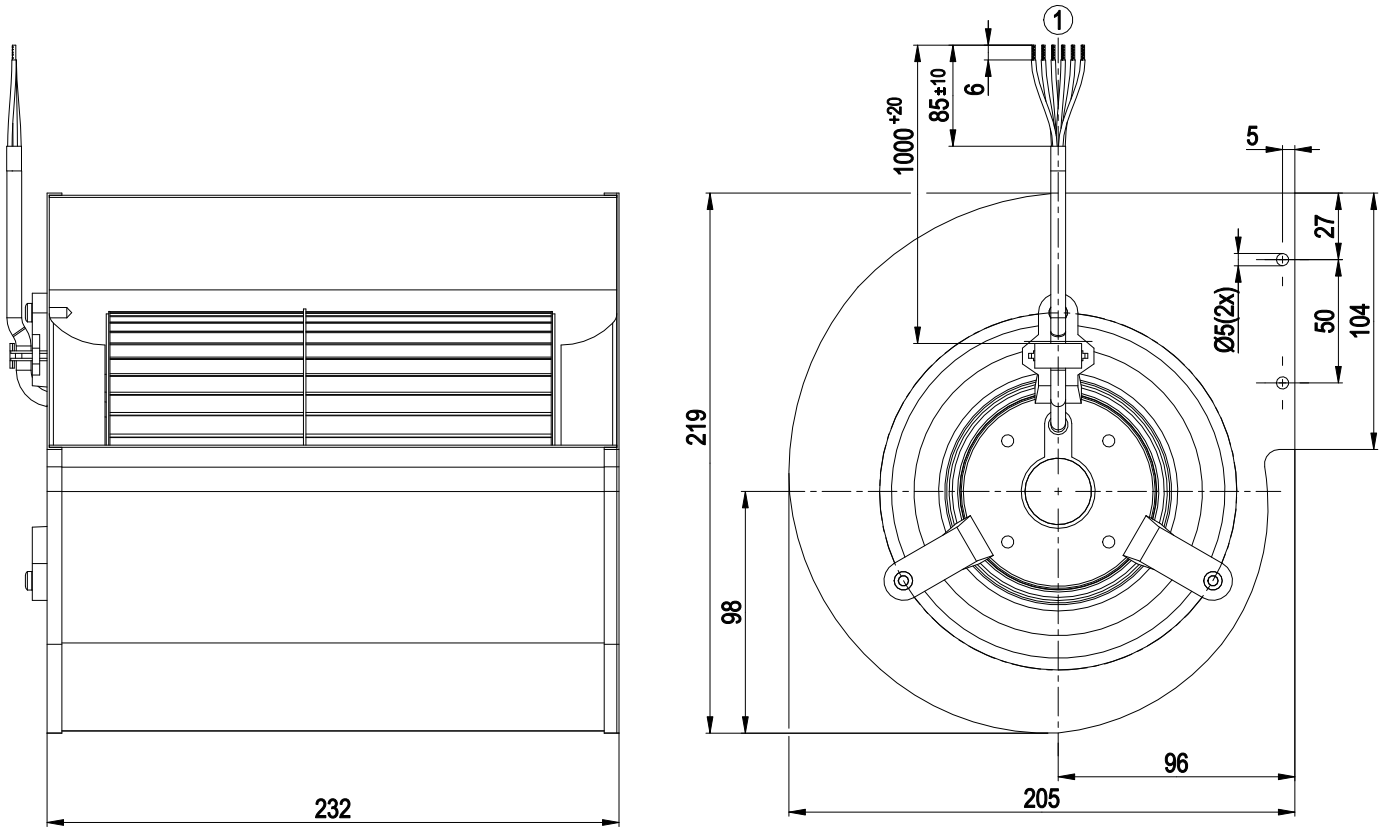
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Product drawing



1	Cable silicone 6G 0.5 mm²
	6x splice

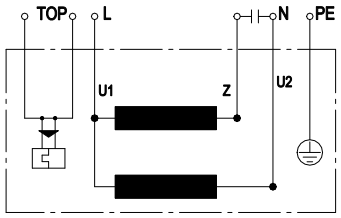
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Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow	TOP	2x gray		

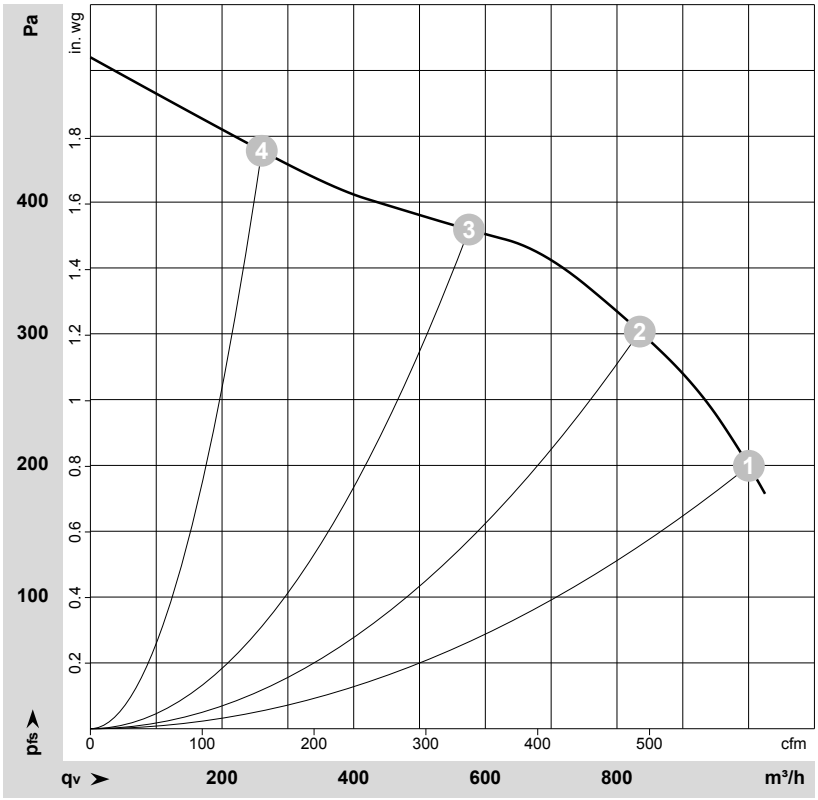
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-200998-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	1~	230	50	2050	300	1.31	1000	200	590	0.80
2	1~	230	50	2300	252	1.10	835	300	490	1.20
3	1~	230	50	2550	207	0.92	575	380	340	1.53
4	1~	230	50	2710	170	0.76	260	440	155	1.77

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

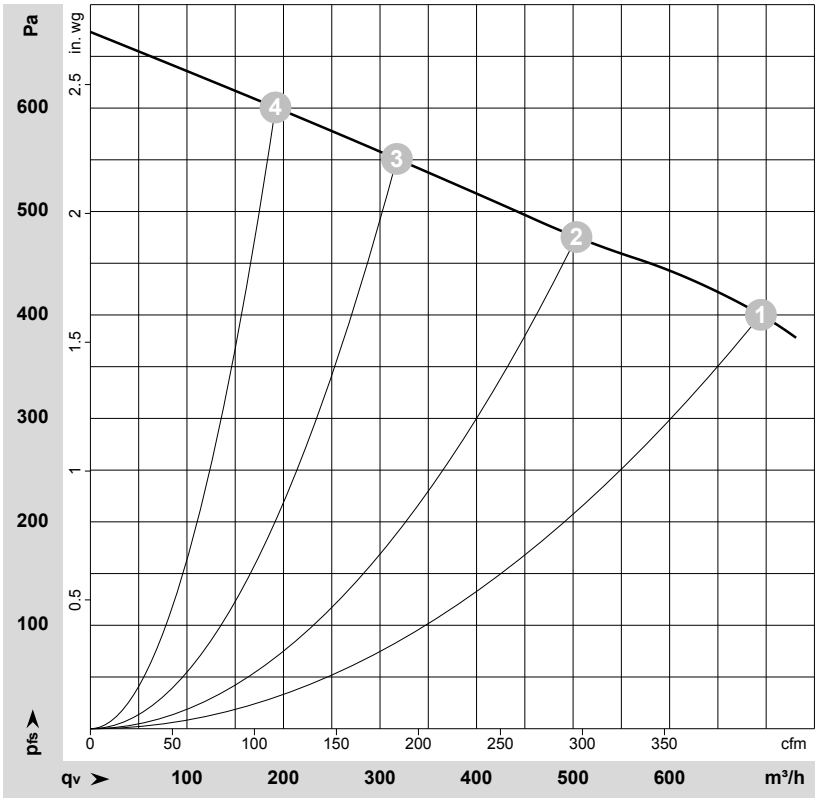
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-201012-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	1~	230	60	2600	300	1.35	695	400	410	1.61
2	1~	230	60	2870	282	1.28	505	475	295	1.91
3	1~	230	60	3015	263	1.22	315	550	185	2.21
4	1~	230	60	3080	254	1.19	190	600	115	2.41

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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