

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

D2E146-AP47-97 ebmpapst Datasheet FansCo

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Nominal data

Type	D2E146-AP47-97		
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		-	UL 2111
Speed (rpm)	min ⁻¹	2050	2550
Power consumption	W	300	345
Current draw	A	1.31	1.45
Capacitor	μF	8	8
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	UL
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
Starting current	A	1.53	

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



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Technical description

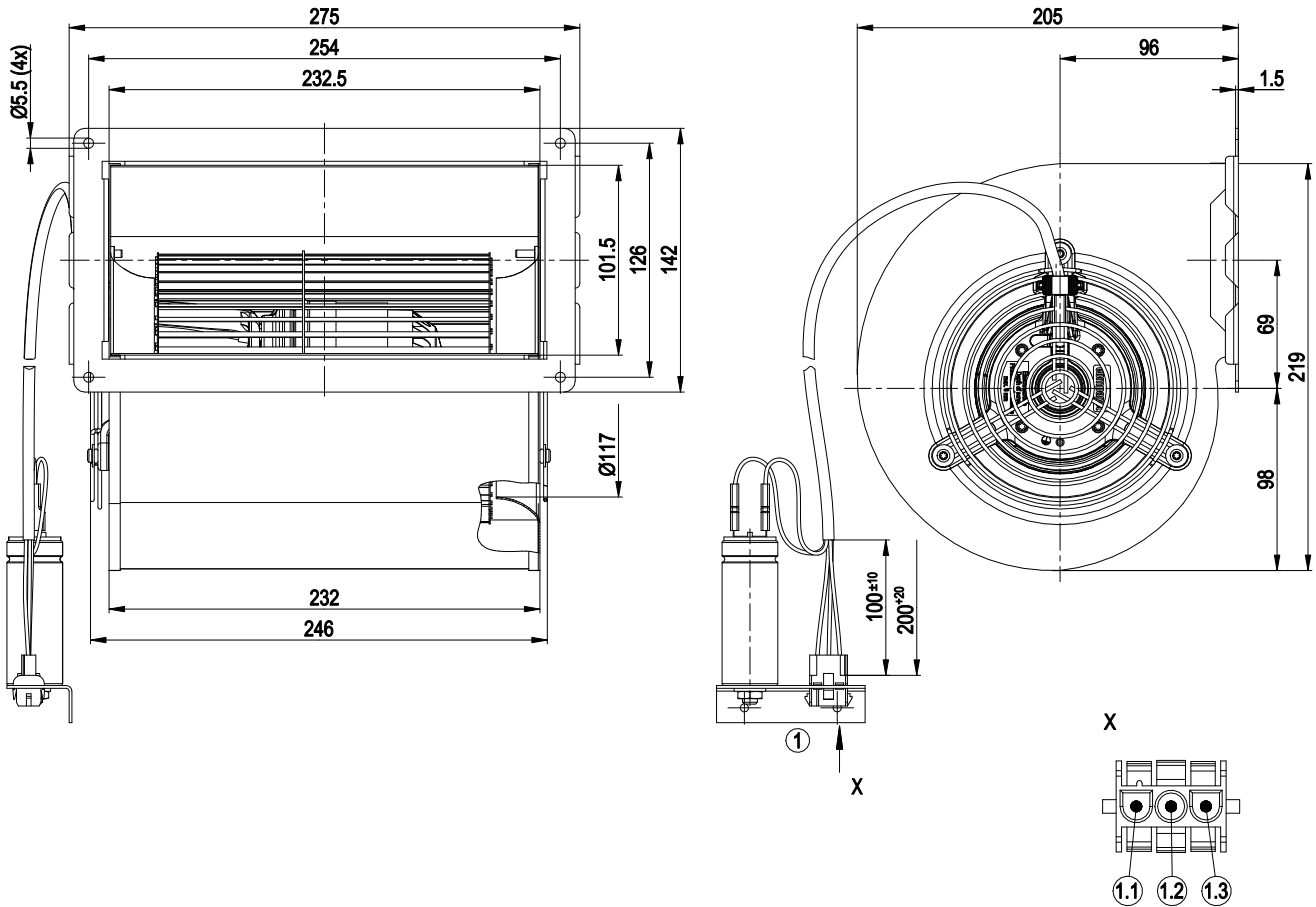
Weight	4.6 kg
Size	146 mm
Motor size	68
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor mounting	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1
Approval	UL 1004-3; CSA C22.2 No. 77; CCC



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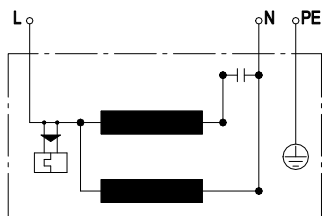
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Product drawing



1	Cable PFA AWG20, 3-pole connector housing tyco 2178474-2, 3x socket tyco 926884-1
1.1	black
1.2	green/yellow
1.3	blue

Connection diagram



L	blue	N	black	PE	green/yellow
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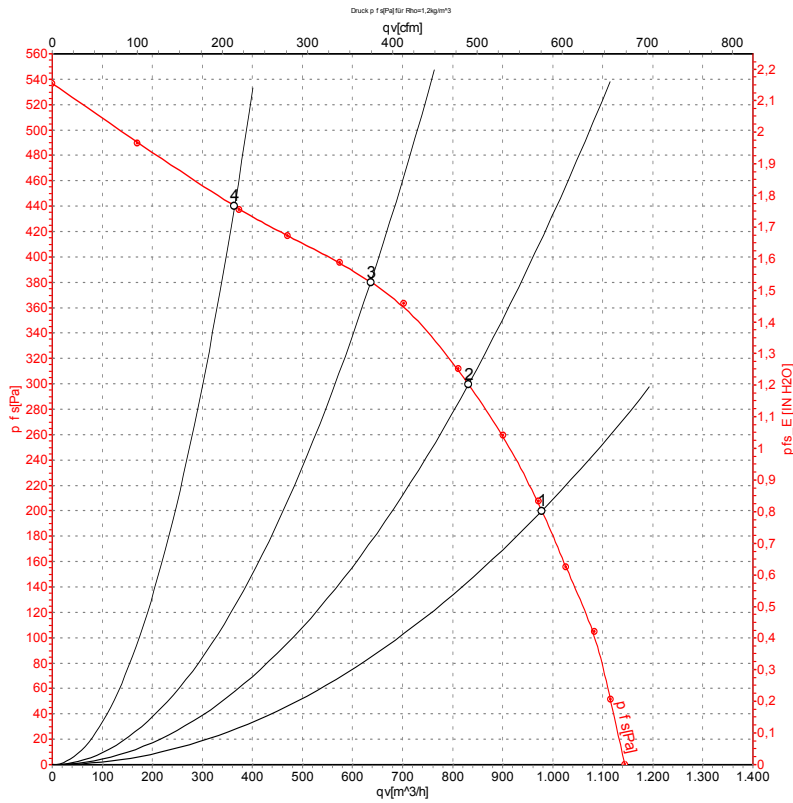


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Curves: Air performance 50 Hz Y



Measurement: LU-32744-1

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	Y	230	50	2050	300	1.31	970	200	570	0.80
2	Y	230	50	2265	267	1.18	830	300	490	1.20
3	Y	230	50	2490	232	1.02	635	380	375	1.53
4	Y	230	50	2675	191	0.84	365	440	215	1.77

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

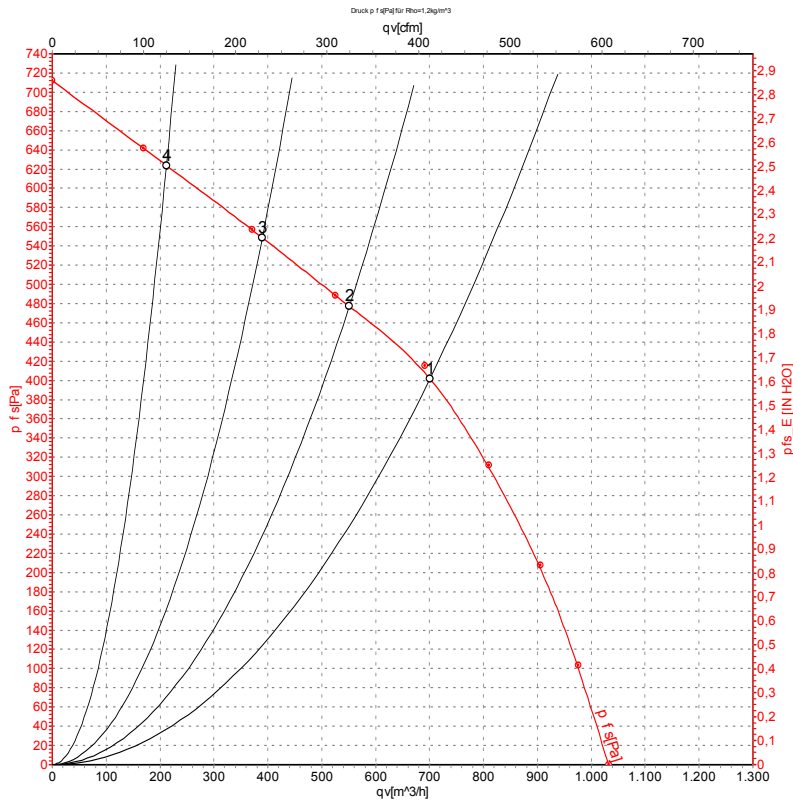


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Curves: Air performance 60 Hz Y



Measurement: LU-32745-1

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	Y	230	60	2550	330	1.45	700	400	410	1.61
2	Y	230	60	2770	300	1.36	550	475	325	1.91
3	Y	230	60	2975	277	1.28	390	550	230	2.21
4	Y	230	60	3095	260	1.22	210	625	125	2.51

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

