

D2E146-AP47-86

# AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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## Nominal data

Type	D2E146-AP47-86		
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 <sup>-1</sup>	2050	2550
Power consumption	W	300	330
Current draw	A	1.31	1.45
Capacitor	µF	8	8
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	200	400
Min. back pressure	inH <sub>2</sub> O	0.8	1.61
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	30	25

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



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## Technical description

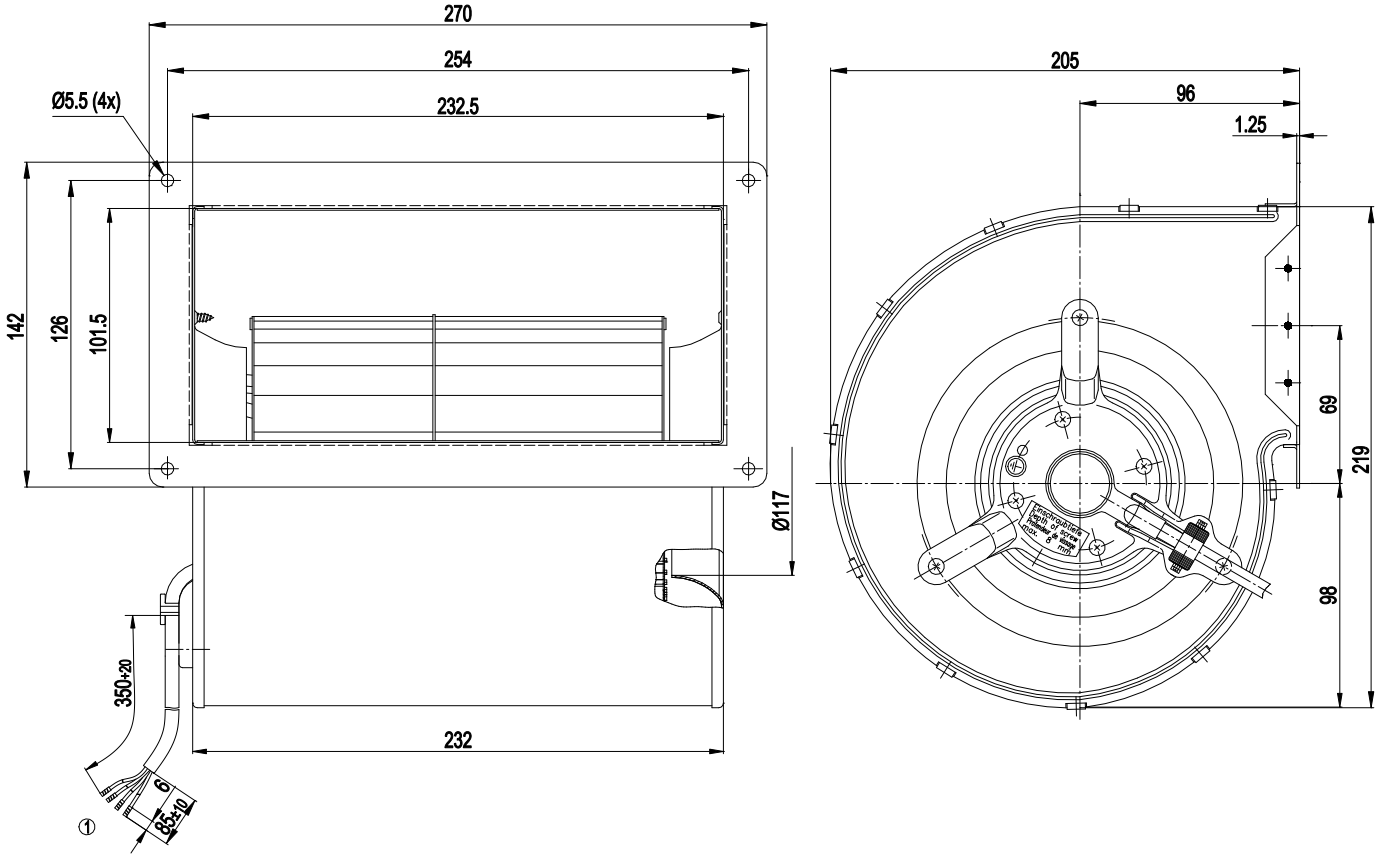
<b>Weight</b>	4.4 kg
<b>Fan size</b>	146 mm
<b>Rotor surface</b>	Unpainted
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Sheet steel, galvanized
<b>Motor suspension</b>	Motor mounted with brackets on one side
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H0 - dry environment
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Axial
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1
<b>Approval</b>	CCC; UL 1004-1; CSA C22.2 No. 100



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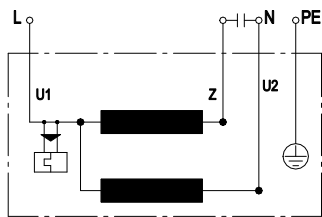
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## Product drawing



1 Cable PVC, 4x crimped splices

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

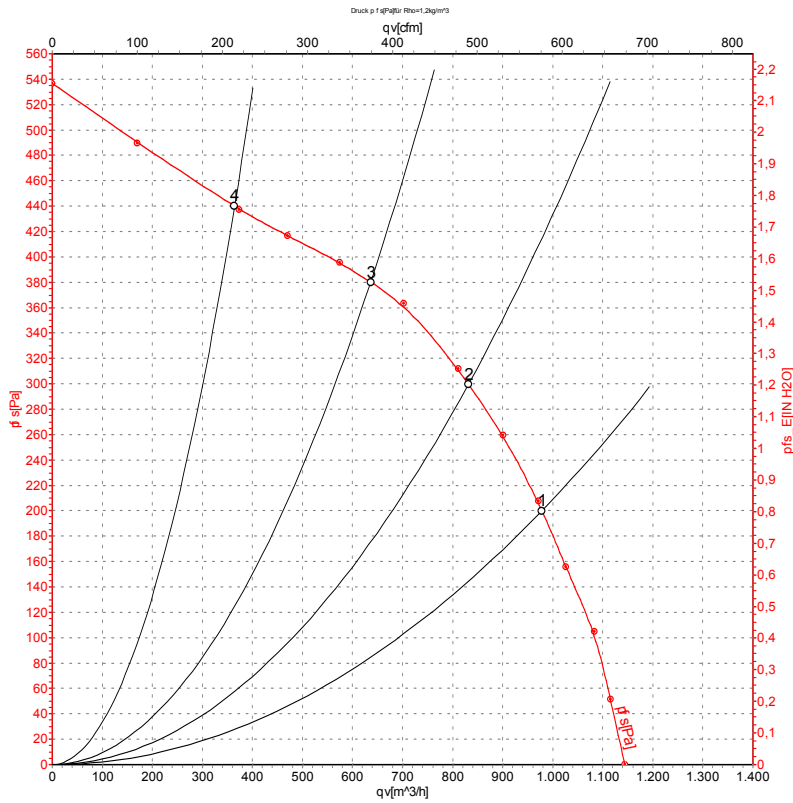


# AC centrifugal fan

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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 <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH2O
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<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

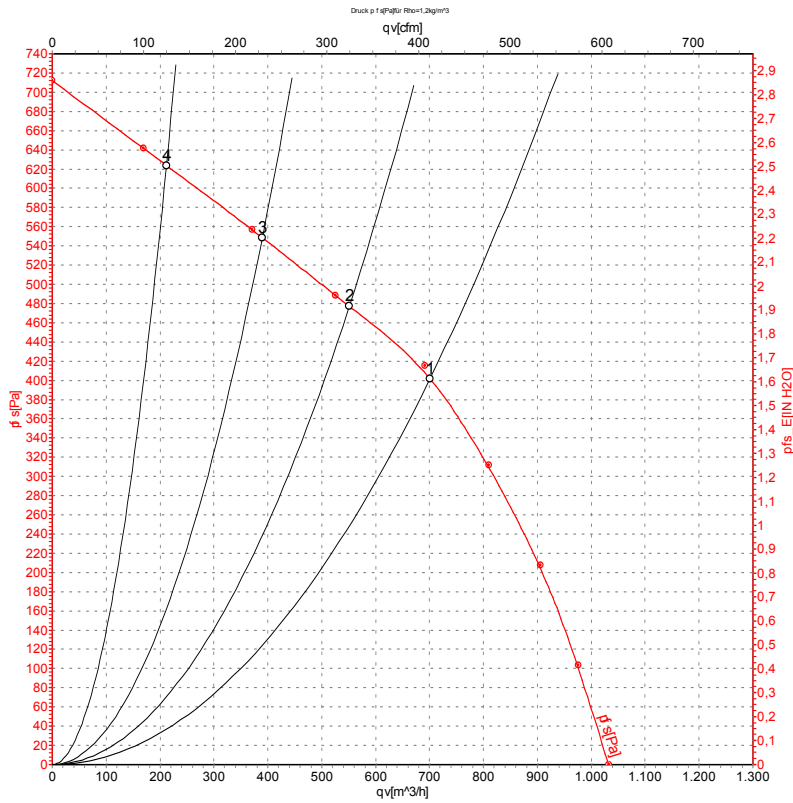


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## Curves: Air performance 60 Hz Y



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 <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH2O
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<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

