

D4E160-DA01-22

# AC centrifugal fan

forward-curved, dual-intake  
with housing (flange)



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## Nominal data

Type	D4E160-DA01-22		
Motor	M4E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	1200	1200
Power consumption	W	117	140
Current draw	A	0.51	0.62
Capacitor	µF	3	3
Capacitor voltage	VDB	450	450
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	40
Starting current	A	0.72	0.72

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



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## Technical description

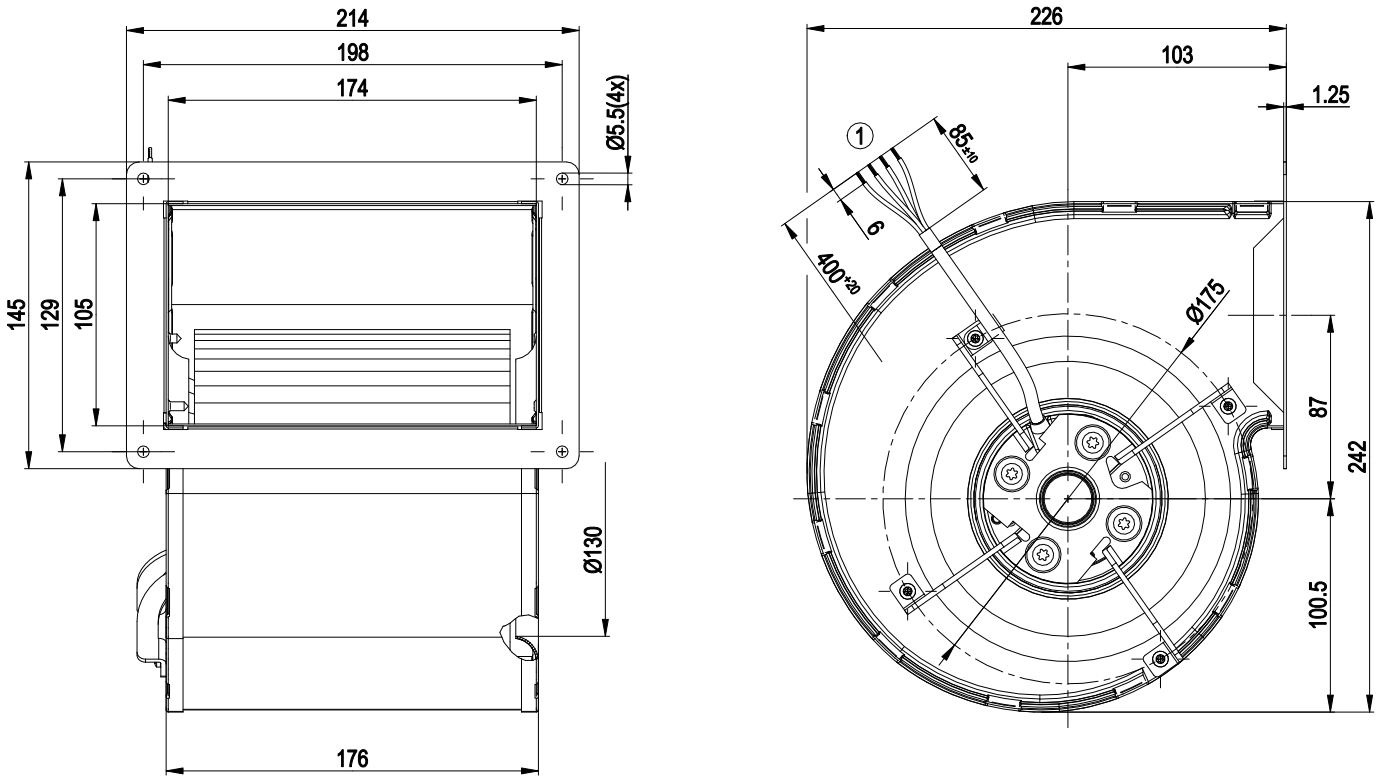
<b>Weight</b>	4 kg
<b>Fan size</b>	160 mm
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Sheet steel, galvanized
<b>Motor suspension</b>	Motor mounted on brackets for one-sided vibration damping
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of 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>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE
<b>Approval</b>	CCC; EAC



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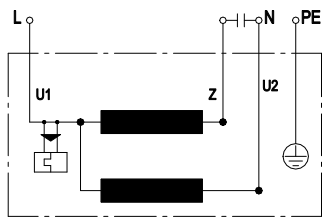
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## Product drawing



1 Cable PVC 4G 0.5 mm<sup>2</sup>, 4x crimped splices

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

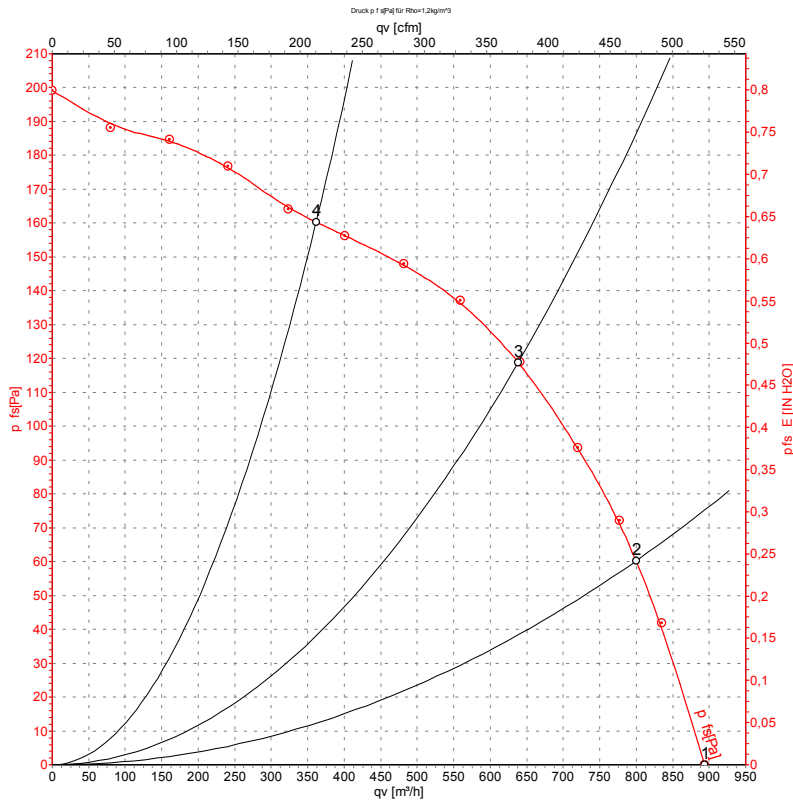


# AC centrifugal fan

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## Curves: Air performance 50 Hz



Measurement: LU-105164-1

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

	U	f	n	P <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	50	1100	120	0.53	895	0	525	0.00
2	230	50	1205	112	0.49	800	60	470	0.24
3	230	50	1305	96	0.42	640	120	375	0.48
4	230	50	1395	81	0.36	360	160	210	0.64

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

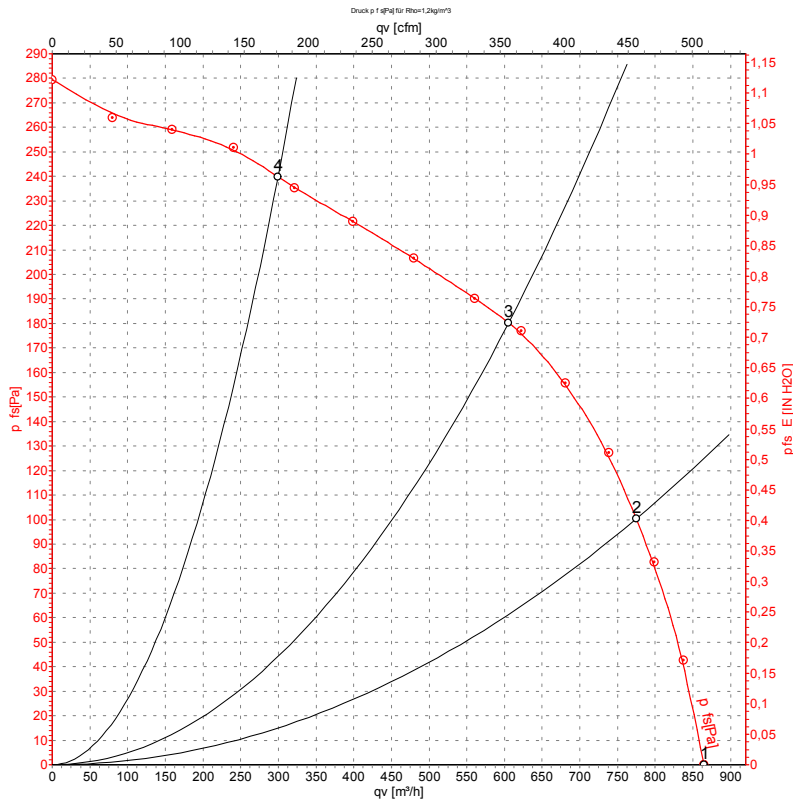


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## Curves: Air performance 60 Hz



Measurement: LU-105166-1

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

	U	f	n	P <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	60	1100	145	0.64	865	0	510	0.00
2	230	60	1330	136	0.59	775	100	455	0.40
3	230	60	1510	122	0.53	605	180	355	0.72
4	230	60	1650	104	0.46	300	240	175	0.96

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

