

D4E160-FH12-05

# AC centrifugal fan

forward curved, dual inlet

with housing (flange)

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## Nominal data

Type	D4E160-FH12-05		
Motor	M4E068-GA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1350	1450
Power input	W	185	270
Current draw	A	0.81	1.18
Motor capacitor	µF	6	6
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	0	0
Max. ambient temperature	°C	70	40
Starting current	A	1.85	1.7

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



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## Technical features

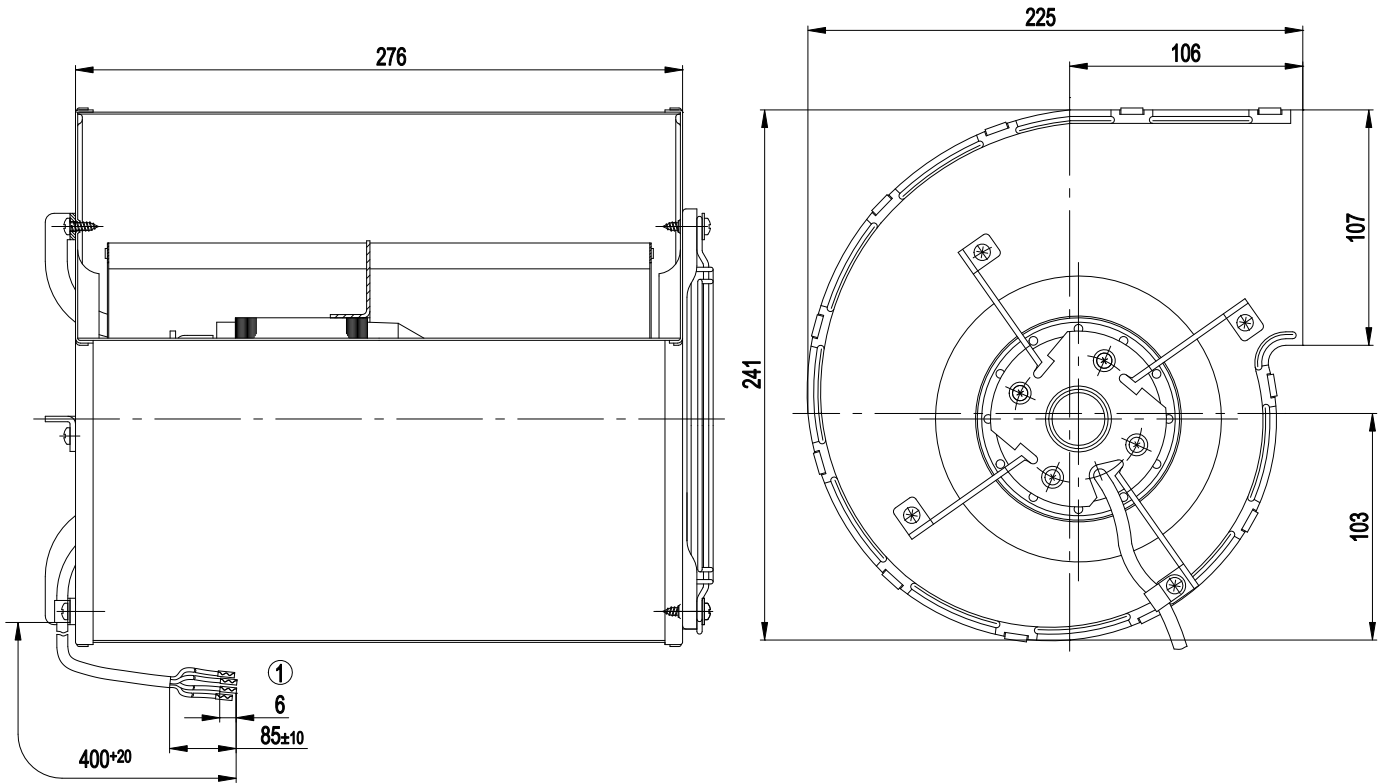
<b>Mass</b>	6.2 kg
<b>Size</b>	160 mm
<b>Surface of rotor</b>	Uncoated
<b>Material of impeller</b>	Sheet steel, hot-galvanised
<b>Housing material</b>	Sheet steel, hot-galvanised
<b>Motor suspension</b>	Motor anti-vibration mounted on one side via brackets
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F0
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Axial
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1; CE
<b>Approval</b>	CCC; GOST



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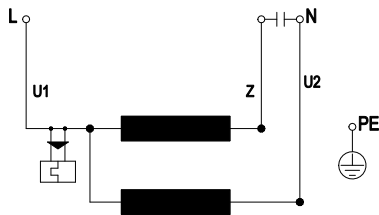
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## Product drawing



1 Connection line PVC 4G 0.5 mm<sup>2</sup>, 4x brass lead tips crimped

## Connection screen



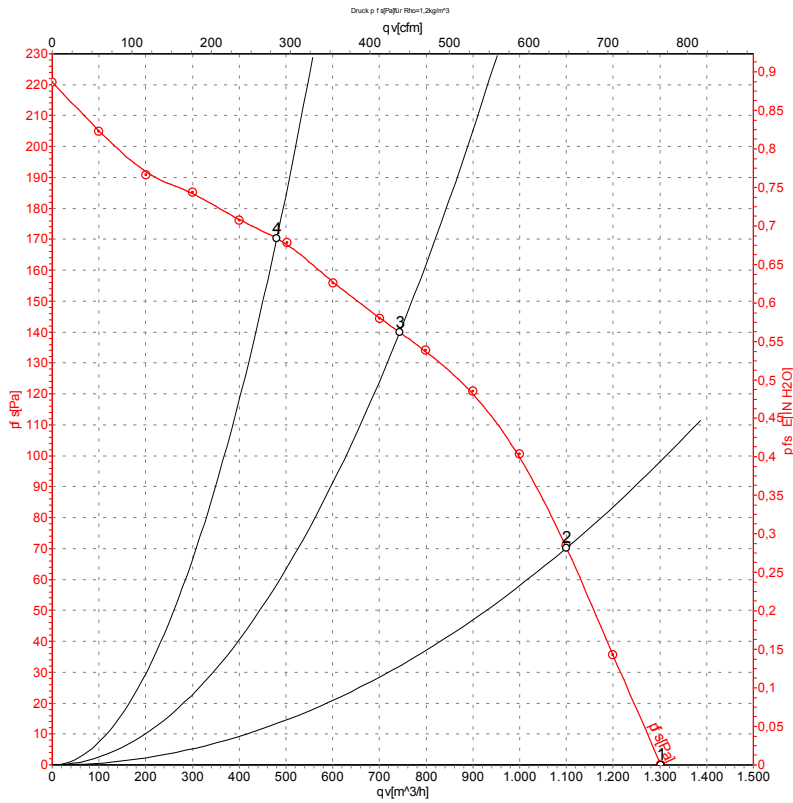
U1	blue	Z	brown	U2	black
PE	green/yellow				



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## Charts: Air flow 50 Hz



Measurement: LU-105057

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>e</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1350	185	0.81	1310	0
2	230	50	1385	159	0.69	1100	70
3	230	50	1435	120	0.53	745	140
4	230	50	1450	104	0.47	480	170

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase

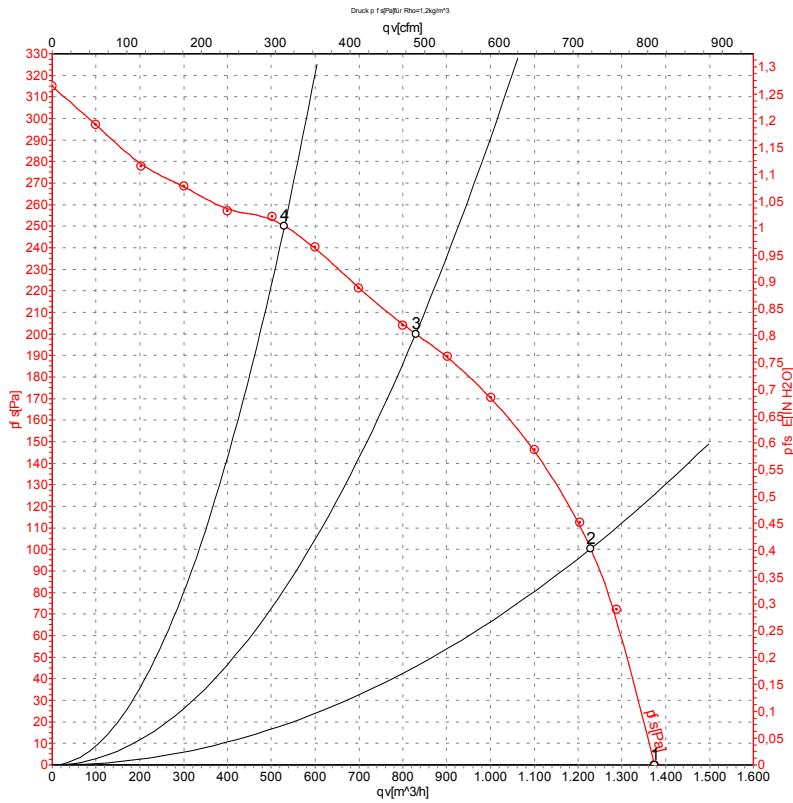


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## Charts: Air flow 60 Hz



Measurement: LU-105062

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>e</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	1450	270	1.18	1375	0
2	230	60	1555	227	1.00	1230	100
3	230	60	1675	166	0.77	830	200
4	230	60	1710	140	0.67	530	250

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase

