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 (rpm)	min^{-1}	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
Min. ambient temperature	°C	-25	-25
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

Mass	6.2 kg
Size	160 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, hot-galvanised
Housing material	Sheet steel, hot-galvanised
Motor suspension	Motor anti-vibration mounted on one side via brackets
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC; EAC

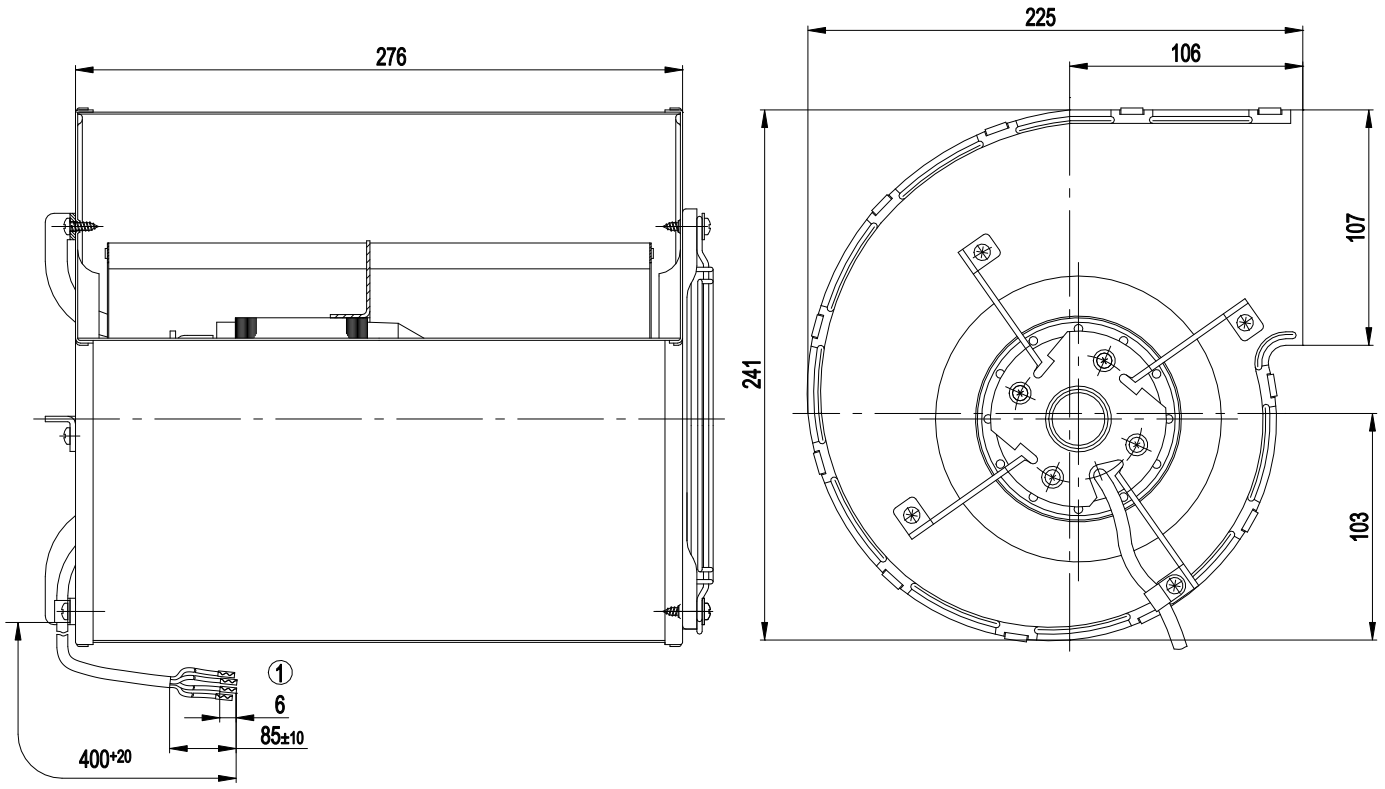
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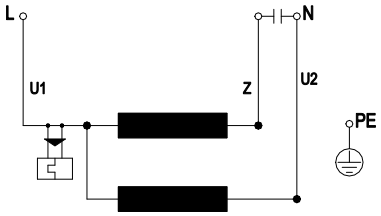
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Product drawing



1	Connection line PVC 4G 0.5 mm², 4x brass lead tips crimped

Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

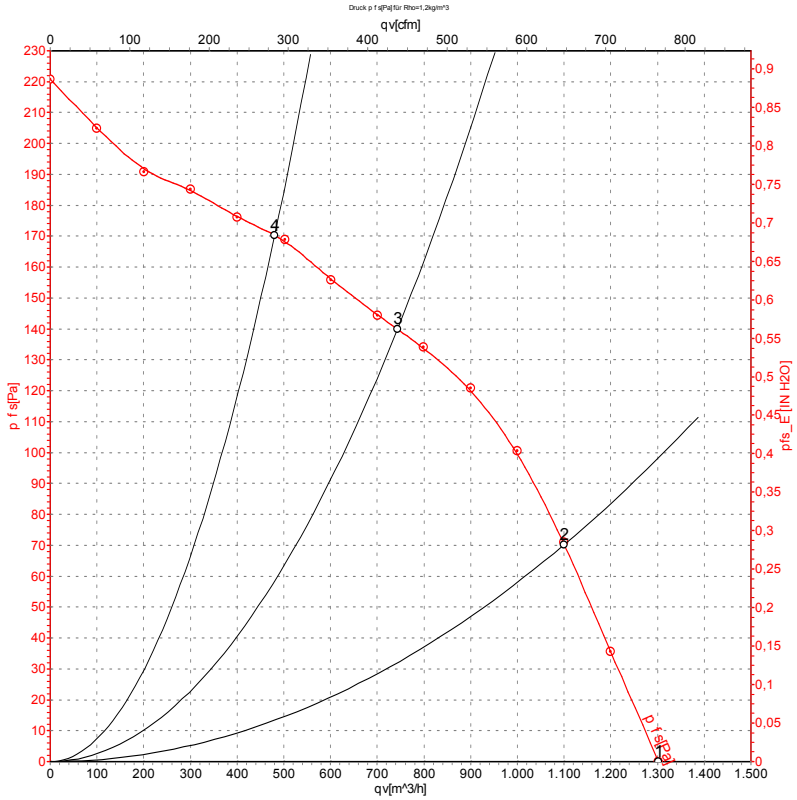
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Charts: Air flow 50 Hz



Measurement: LU-105057-1

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_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1350	185	0.81	1310	0	770	0.00
2	230	50	1385	159	0.69	1100	70	645	0.28
3	230	50	1435	120	0.53	745	140	435	0.56
4	230	50	1450	104	0.47	480	170	285	0.68

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

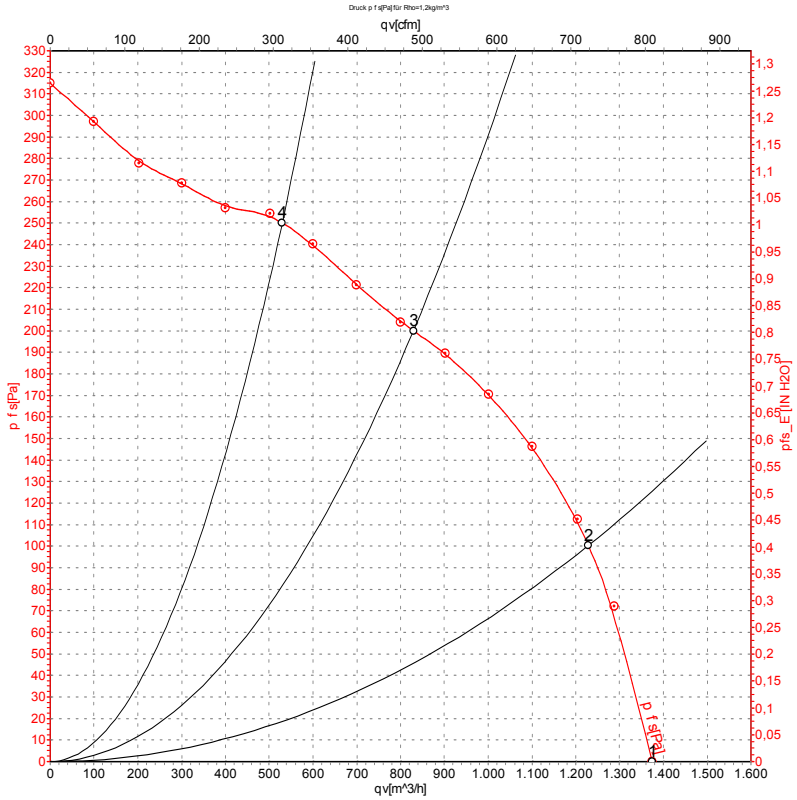
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Charts: Air flow 60 Hz



Measurement: LU-105062-1

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_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	60	1450	270	1.18	1375	0	810	0.00
2	230	60	1555	227	1.00	1230	100	725	0.40
3	230	60	1675	166	0.77	830	200	490	0.80
4	230	60	1710	140	0.67	530	250	310	1.00

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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