D2E160-AH01-35

AC centrifugal fan

forward curved, dual inlet

with housing (without flange)

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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**D2E160-AH01-35**
Motor	**M2E074-LA**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Type of data definition		ml	ml	ml
Valid for approval / standard		CE	CE	UL 2111
Speed	min^{-1}	2780	3120	3120
Power input	W	415	635	655
Current draw	A	1.82	2.78	2.75
Motor capacitor	µF	10	10	10
Capacitor voltage	VDB	400	400	400
Capacitor standard		P2 (CE)	P2 (CE)	UL
Min. back pressure	Pa	600	760	760
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	100	85	85

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.01

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	31.8	28.4	35.4
Efficiency grade N		40.4	37	44
Power input P_e	kW	0.44		
Air flow q_v	m^3/h	905		
Pressure increase p_{fs}	Pa	567		
Speed n	min^{-1}	2800		

Data definition with optimum efficiency. LU-112172
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

Mass	10.4 kg
Size	160 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor mounted anti-vibration on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 00
Insulation class	"F"
Humidity class	F2-1
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, open rotor
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	CSA C22.2 Nr.100; UL 1004-1

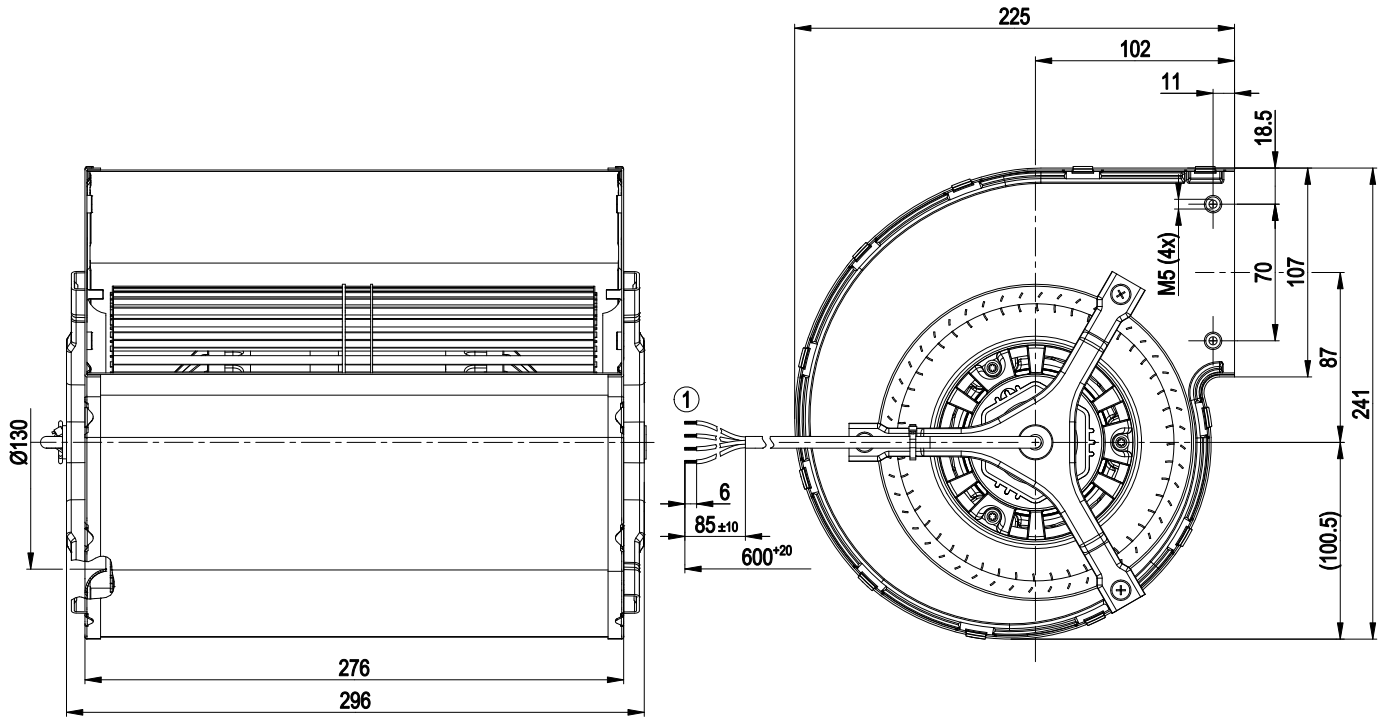
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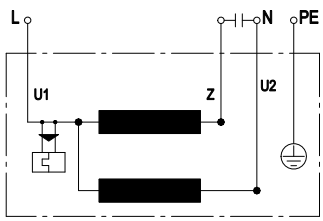
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Product drawing



1	Connection line PFA AWG20 (green/yellow AWG18), 4x lead tips crimped

Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

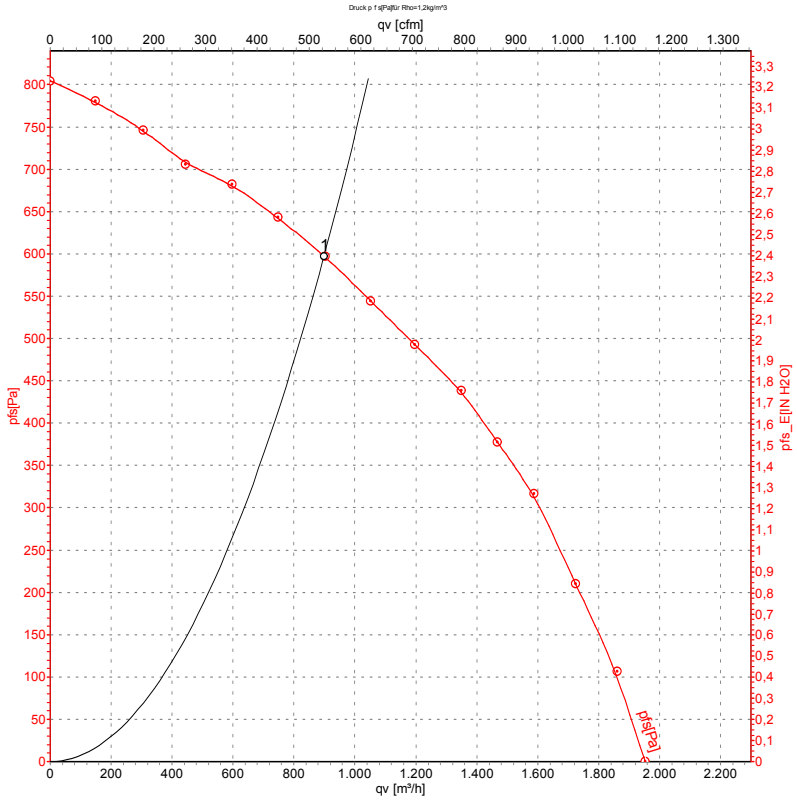
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Charts: Air flow 50 Hz



Measurement: LU-112172

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	2780	415	1.82	900	600

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

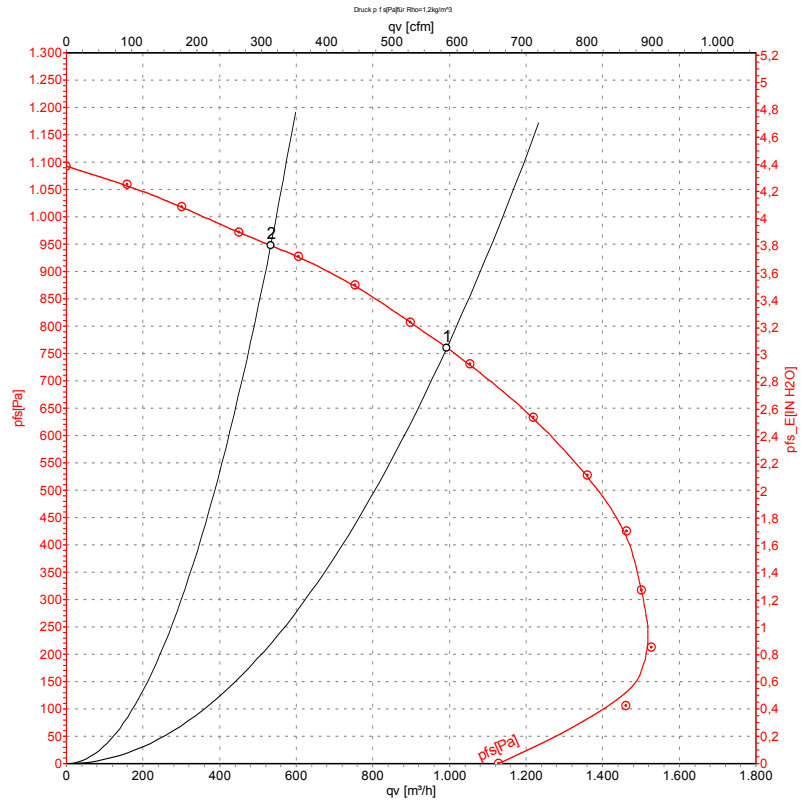
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Charts: Air flow 60 Hz



Measurement: LU-112173

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	60	3120	635	2.78	995	760
2	230	60	3320	539	2.36	535	950

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

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