

D4E225-EH01-01

# AC centrifugal fan

forward curved, dual inlet  
with housing (flange)



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## Nominal data

Type	D4E225-EH01-01		
Motor	M4E094-LA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1230	1410
Power input	W	1060	1085
Current draw	A	5.38	5.24
Motor capacitor	µF	10	10
Capacitor voltage	VDB	450	500
Min. back pressure	Pa	0	200
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	45
Starting current	A	6.0	5.2

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*	1.00

\* Specific ratio =  $1 + p_g / 100\,000\text{ Pa}$

		Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	%	32	28.7	35.7
Efficiency grade N		40.3	37	44
Power input $P_e$	kW	0.48		
Air flow $q_v$	m <sup>3</sup> /h	1790		
Pressure increase $p_{fs}$	Pa	316		
Speed n	min <sup>-1</sup>	1425		

Data definition with optimum efficiency.

LU-41781

The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



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## Technical features

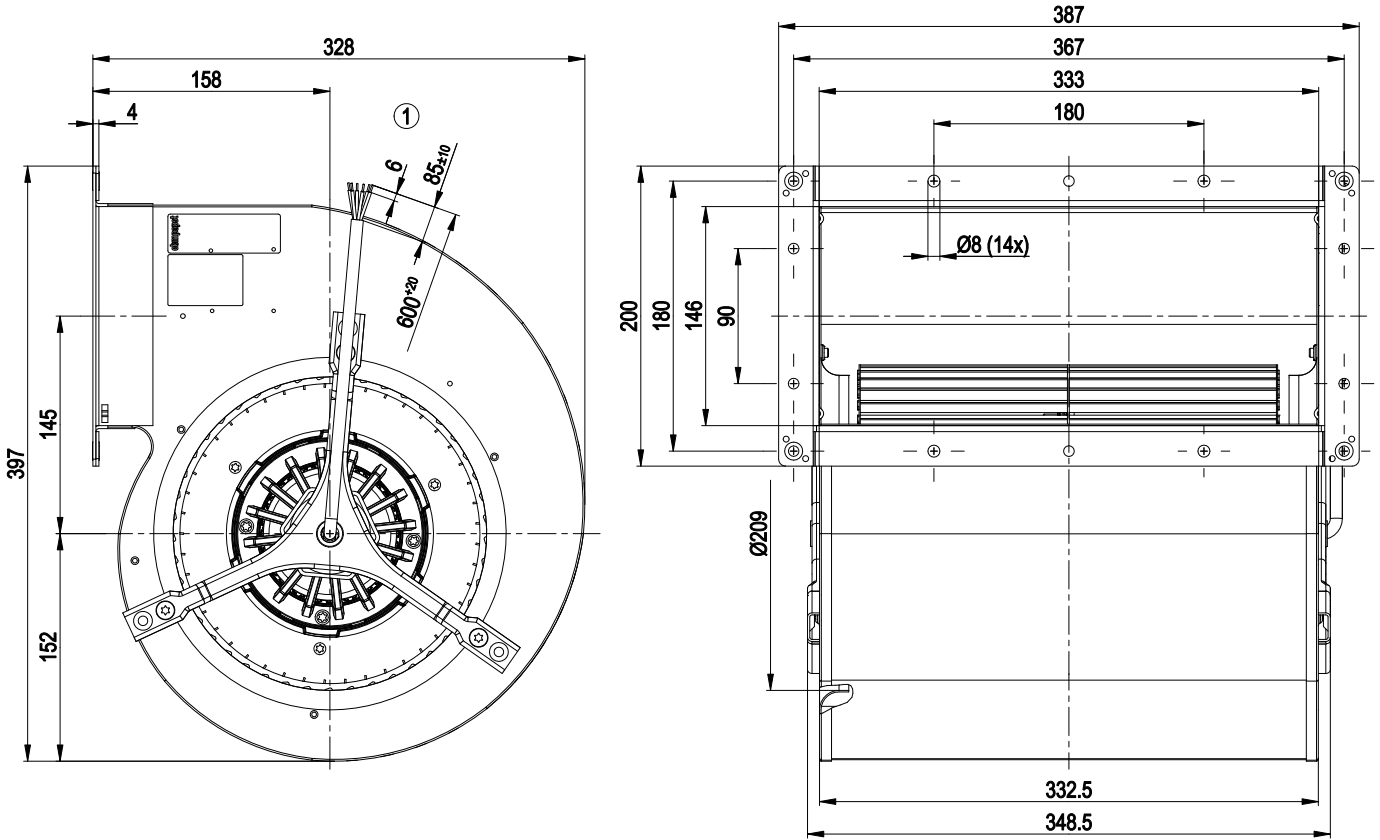
<b>Mass</b>	15.9 kg
<b>Size</b>	225 mm
<b>Material of impeller</b>	Sheet steel, galvanised
<b>Housing material</b>	Sheet steel, galvanised
<b>Motor suspension</b>	Motor mounted vibration-free on both sides
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 20
<b>Insulation class</b>	"F"
<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>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	<= 3.5 mA
<b>Motor protection</b>	Thermal overload protector (TOP) brought out
<b>Cable exit</b>	Axial
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60034-1 (2010); CE
<b>Approval</b>	EAC



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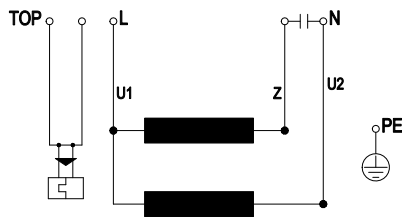
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## Product drawing



1 Connection line ETFE AWG18, 6 x brass lead tips crimped

## Connection screen



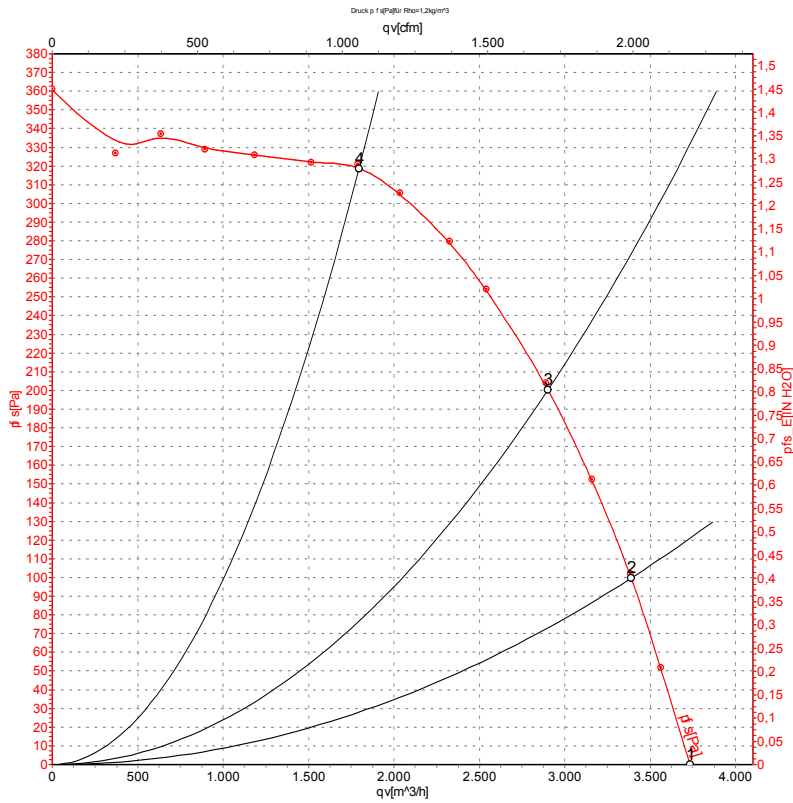
TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		



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## Charts: Air flow 50 Hz



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	1230	1060	5.38	3730	0
2	230	50	1305	883	4.53	3385	100
3	230	50	1360	728	3.84	2900	200
4	230	50	1425	487	2.95	1795	320

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

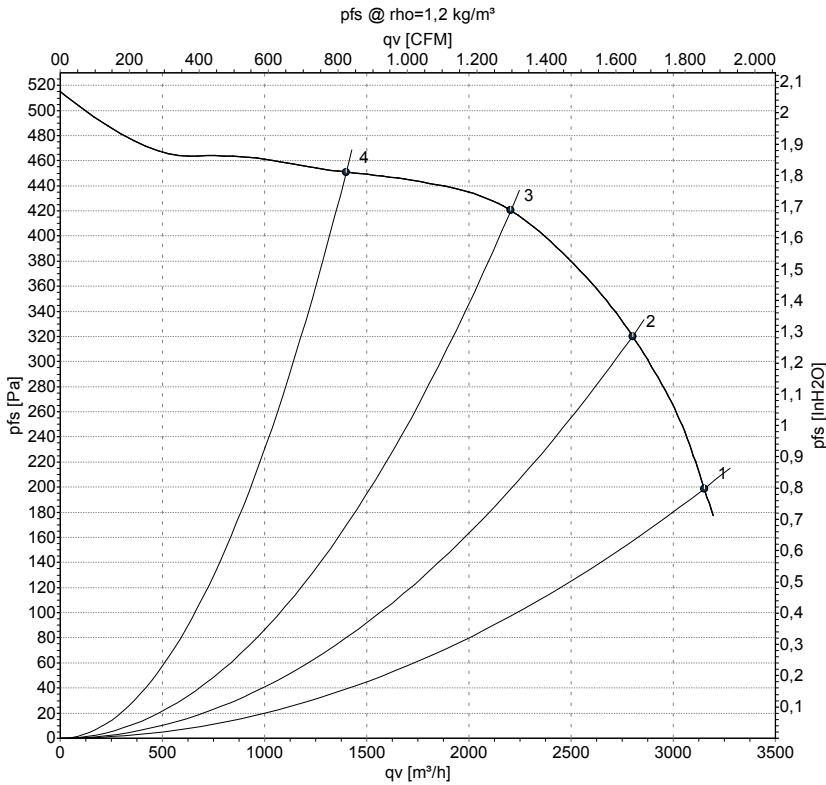


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## Charts: Air flow 60 Hz



Measurement: LU-41782

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	1410	1085	5.24	3150	200
2	230	60	1550	911	4.24	2800	320
3	230	60	1640	716	3.27	2205	420
4	230	60	1700	545	2.48	1400	450

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

