

# AC centrifugal fan

forward curved, dual inlet  
with housing (large flange)

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### Nominal data

Type	D4E225-CC01-56		
Motor	M4E074-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 (rpm)	min <sup>-1</sup>	1210	1300
Power input	W	540	625
Current draw	A	2.4	2.75
Motor capacitor	μF	16	16
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	250	300
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	30	30

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

### Data in accordance with ecodesign regulation EU 327/2011

		Actual	Request 2015
01 Overall efficiency $\eta_e$	%	40.2	40.2
02 Measurement category		B	
03 Efficiency category		Total	
04 Efficiency grade N		49	49
05 Variable speed drive		No	

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

09 Power input $P_e$	kW	0.4
09 Air flow $q_v$	m <sup>3</sup> /h	1595
09 Pressure increase $p_f$	Pa	355
10 Speed (rpm) $n$	min <sup>-1</sup>	1345
11 Specific ratio <sup>*</sup>		1.00

<sup>\*</sup> Specific ratio =  $1 + p_f / 100\,000\text{ Pa}$

LU-135956



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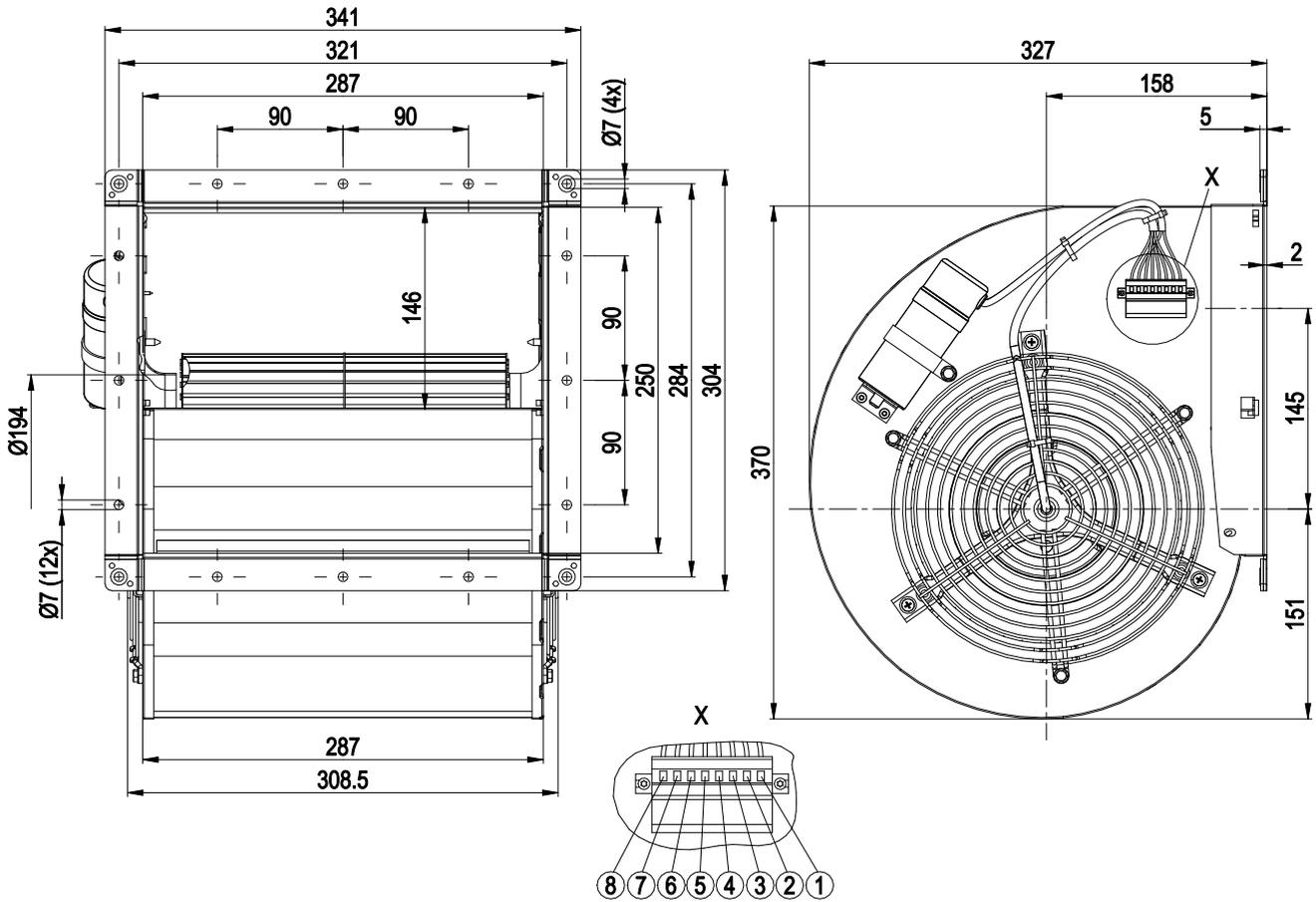
## Technical features

<b>Mass</b>	12 kg
<b>Size</b>	225 mm
<b>Motor size</b>	74
<b>Material of impeller</b>	Sheet steel, galvanised
<b>Housing material</b>	Sheet steel, galvanised
<b>Material of guard grille</b>	Steel, coated in white aluminium plastic (RAL 9006)
<b>Motor suspension</b>	Motor mounted anti-vibration on both sides
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP22
<b>Insulation class</b>	"B"
<b>Humidity (F) / environmental protection class (H)</b>	H0 - dry environment
<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>Condensation drainage holes</b>	None, open rotor
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearings made of stainless steel
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) brought out, basic insulation
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Motor capacitor according to EN 60252-1 in safety protection class</b>	S2
<b>Product conforming to standard</b>	EN 60335-1; CE
<b>Approval</b>	UL 1004-1; CCC; CSA C22.2 no. 100

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## Product drawing



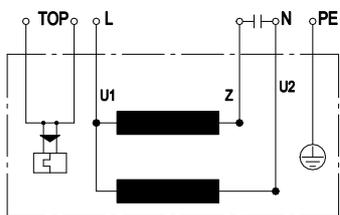
1	Capacitor	2	Z (brown)	3	L (blue)
4	TOP (grey)	5	PE (green/yellow)	6	TOP (grey)
7	Capacitor	8	N (black)		

D4E225-CC01-56

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## Connection screen



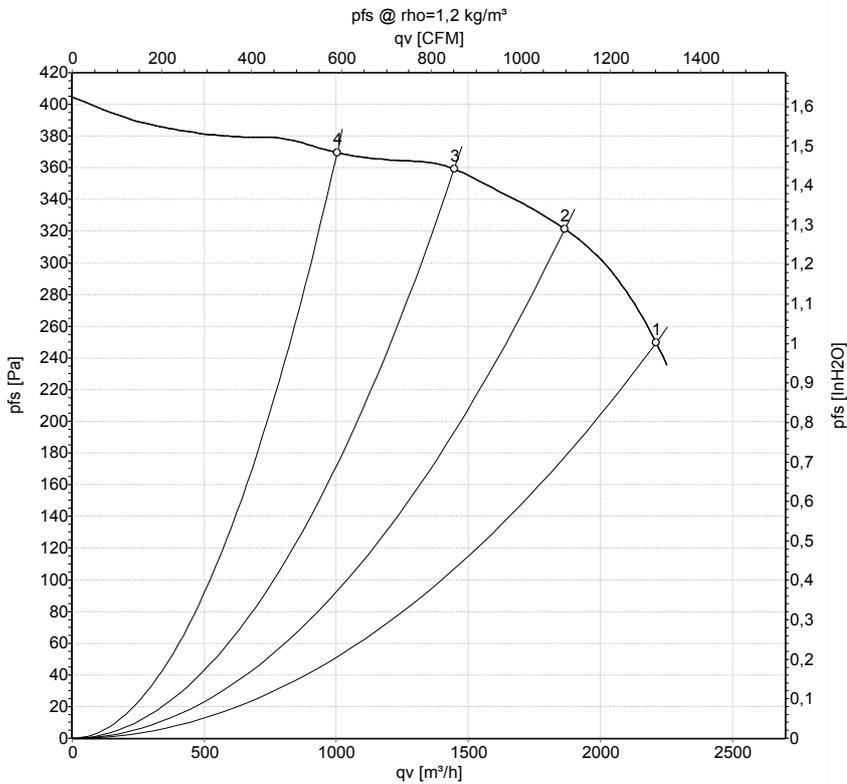
U1	Blue	Z	brown	U2	black
PE	green/yellow	TOP	2 x grey		



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## Charts: Air flow 50 Hz



Measurement: LU-135956-1

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: 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	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	1210	540	2.40	2210	250	1300	1.00
2	230	50	1300	459	2.04	1865	320	1100	1.28
3	230	50	1365	378	1.71	1445	360	850	1.45
4	230	50	1405	320	1.48	1005	370	590	1.49

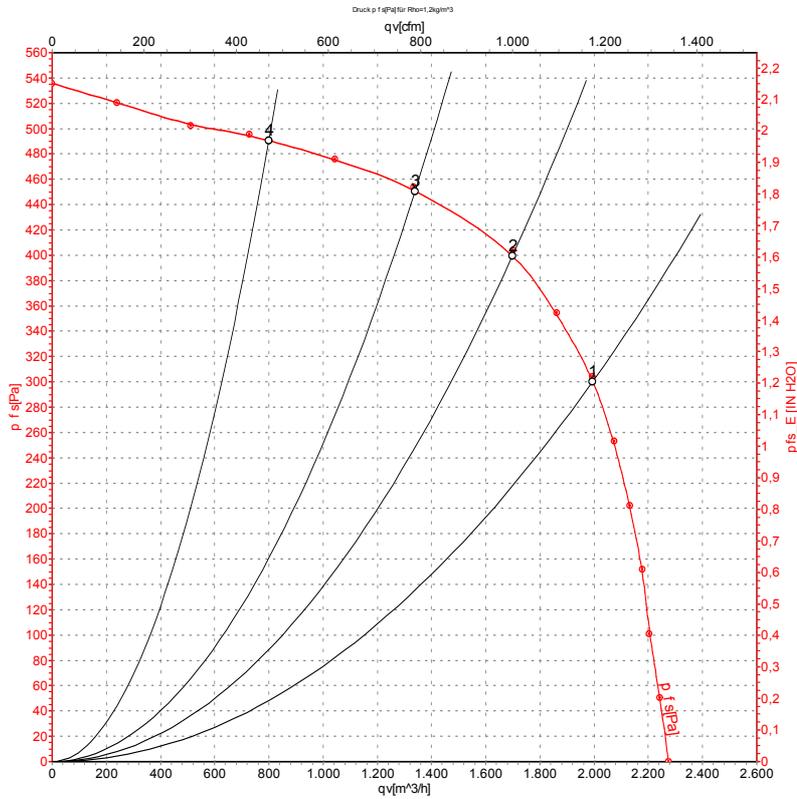
U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



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## Charts: Air flow 60 Hz



Measurement: LU-35316-1

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: 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	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	1300	625	2.75	1995	300	1175	1.20
2	230	60	1465	553	2.43	1700	400	1000	1.61
3	230	60	1565	474	2.13	1340	450	790	1.81
4	230	60	1645	390	1.83	800	490	470	1.97

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

