

# AC centrifugal fan

forward curved, dual inlet

with housing (flange)

D4E225-BC01-39 ebmpapst Datasheet

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## Nominal data

Type	D4E225-BC01-39	
Motor	M4E074-LA	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min <sup>-1</sup>	1090
Power input	W	670
Current draw	A	2.92
Motor capacitor	µF	20
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	160
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	35

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

	Actual	Request 2015				
01 Overall efficiency $\eta_e$	%	40.7	40.7	09 Power input $P_e$	kW	0.48
02 Measurement category	B			09 Air flow $q_v$	m <sup>3</sup> /h	1900
03 Efficiency category	Total			09 Pressure increase $p_f$	Pa	356
04 Efficiency grade N	49	49		10 Speed (rpm) n	min <sup>-1</sup>	1330
05 Variable speed drive	No			11 Specific ratio*		1.00

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

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

LU-135955



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## Technical features

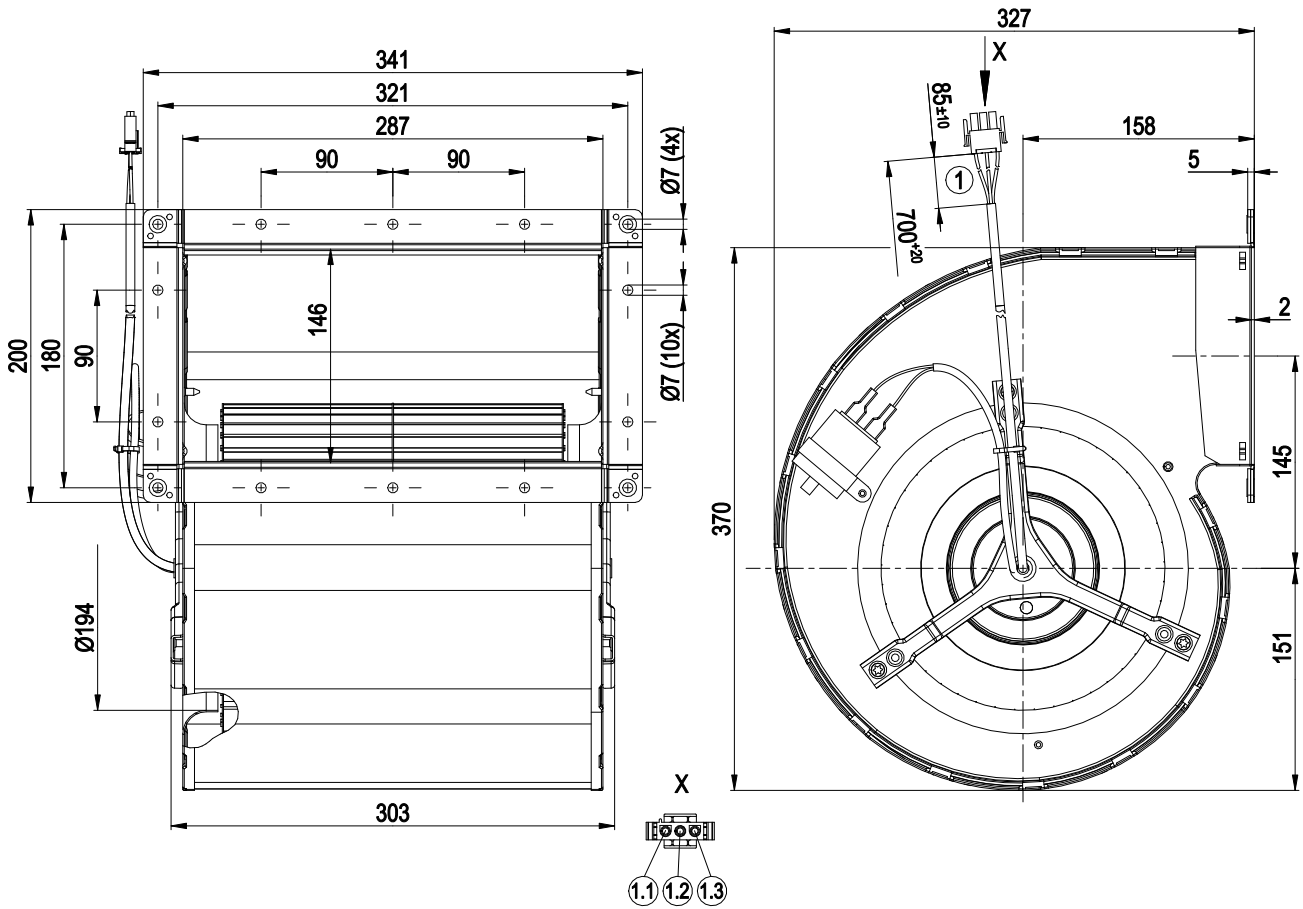
<b>Mass</b>	12 kg
<b>Size</b>	225 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</b>	Sheet steel, galvanised
<b>Housing material</b>	Sheet steel, galvanised
<b>Material of support structure</b>	Sheet steel, galvanised
<b>Motor suspension</b>	Motor anti-vibration mounted on one side via brackets
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 22
<b>Insulation class</b>	"F"
<b>Humidity (F)/environmental protection class (H)</b>	F2-1
<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>Electrical leads</b>	With plug
<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>Motor capacitor according to EN 60252-1 in safety protection class</b>	S2
<b>Product conforming to standard</b>	EN 60335-1; CE



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## Product drawing



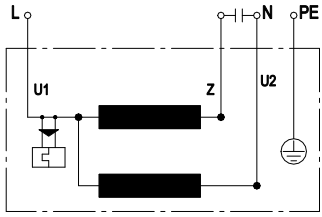
1	Connection line ETFE AWG20, 3-pole connector housing tyco 350766-4, 3x plug pin tyco 926885-1
1.1	PE (green/yellow)
1.2	N (black)
1.3	L (blue)



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## Connection screen



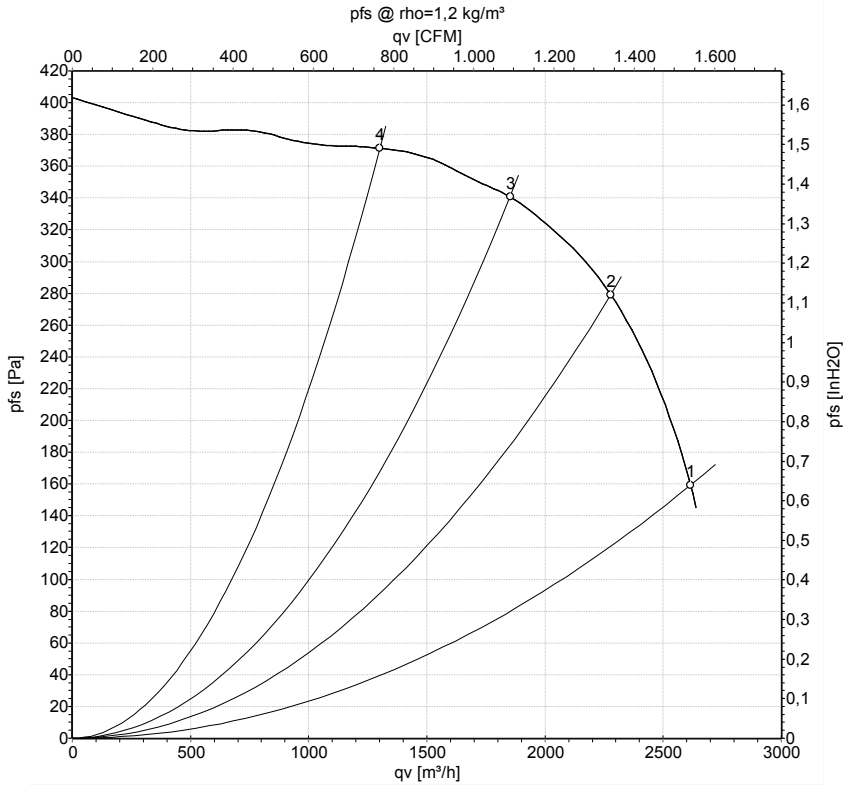
U1	blue	Z	brown	U2	black
PE	green/yellow				



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## Charts: Air flow 50 Hz



Measurement: LU-135955-1

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 <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	inH2O
1	230	50	1090	670	2.92	2615	160	1540	0.64
2	230	50	1250	562	2.49	2280	280	1340	1.12
3	230	50	1335	474	2.13	1850	340	1090	1.36
4	230	50	1390	393	1.83	1300	370	765	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

