D2E146-AZ03-E7

AC centrifugal fan

forward curved, dual inlet

with housing (without flange)

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Nominal data

Type	**D2E146-AZ03-E7**	
Motor	**M2E074-EI**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	2300
Power input	W	330
Current draw	A	1.44
Motor capacitor	µF	7
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	235
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	65

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 η_{es}	%	33.5	33.5
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	44
05 Variable speed drive		No	

09 Power input P_e	kW	0.22
09 Air flow q_v	m^3/h	640
09 Pressure increase p_{fs}	Pa	411
10 Speed (rpm) n	min^{-1}	2645
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_{fs} / 100 000 Pa

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Technical features

Mass	4.6 kg
Size	146 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Material of guard grille	Steel, galvanised and plastic-coated in white aluminium (RAL 9006)
Motor suspension	Motor anti-vibration mounted on one side
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"F"
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
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Product conforming to standard	EN 60335-1; CE

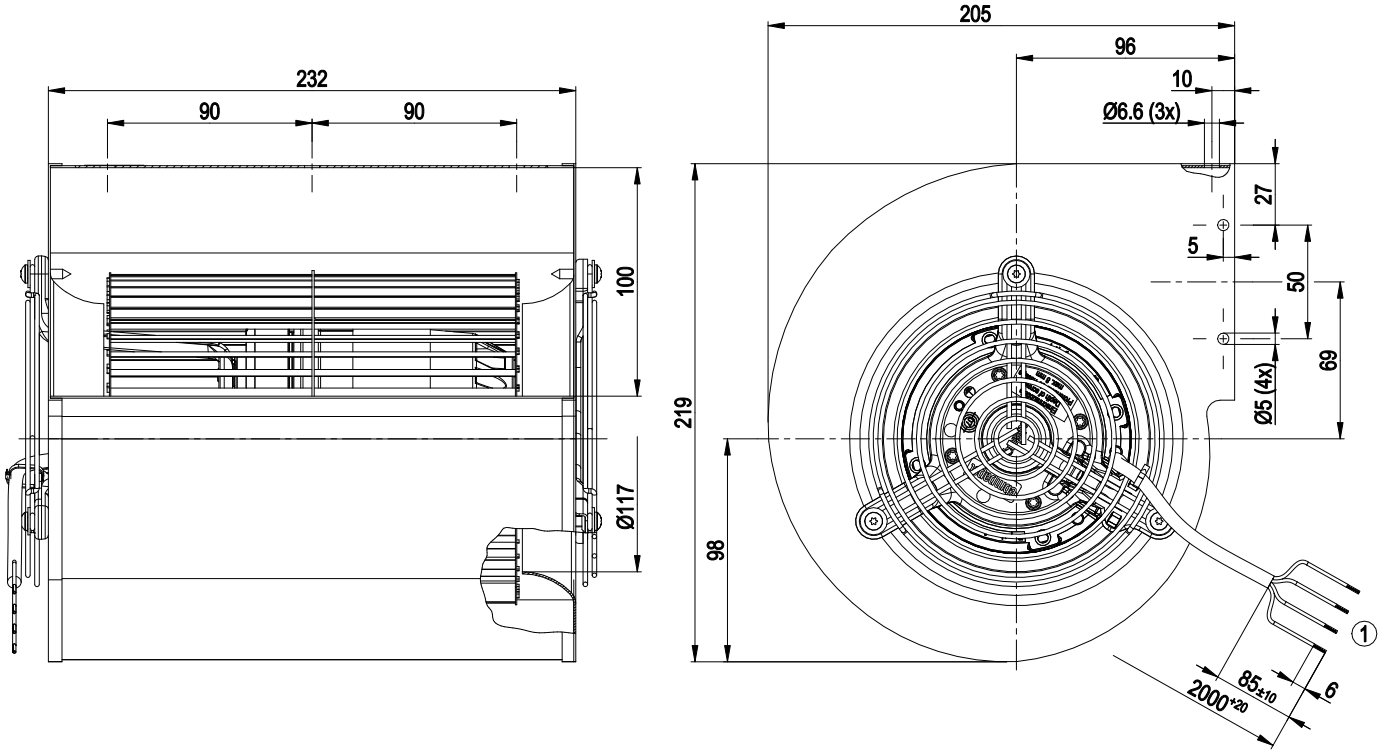
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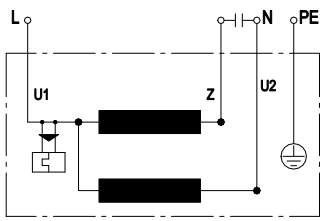
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Product drawing



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

Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

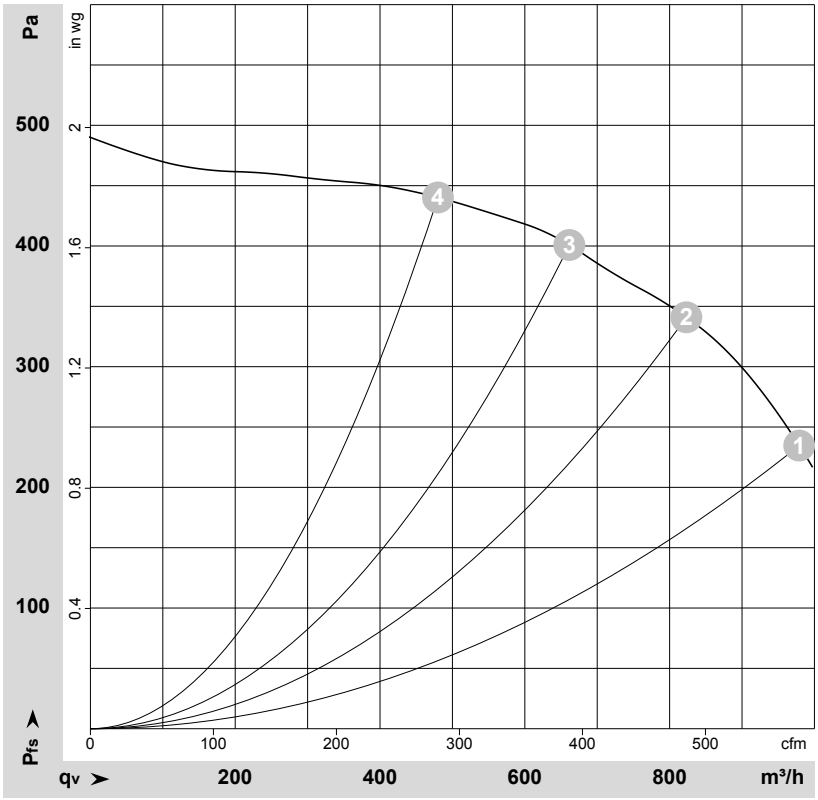
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-166694-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	2300	330	1.44	64	75	980	235	575	0.94
2	230	50	2500	272	1.19	64	75	825	340	485	1.36
3	230	50	2625	234	1.03	64	75	660	400	390	1.61
4	230	50	2720	198	0.88	65	75	480	440	285	1.77

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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