

# AC centrifugal fan

forward curved, dual inlet  
with housing (without flange)

D2E146-AP50-E6 ebmpapst Datasheet  
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## Nominal data

Type	D2E146-AP50-E6	
Motor	M2E068-EC	
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>	2600
Power input	W	250
Current draw	A	1.1
Motor capacitor	µF	8
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	420
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 $\eta_{es}$	%	33.6	33.6	09 Power input $P_e$	kW	0.23
02 Measurement category	A			09 Air flow $q_v$	m <sup>3</sup> /h	620
03 Efficiency category	Static			09 Pressure increase $p_{fs}$	Pa	435
04 Efficiency grade N	44	44		10 Speed (rpm) n	min <sup>-1</sup>	2625
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 =  $1 + p_{fs} / 100\,000\text{ Pa}$

LU-77448



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## Technical features

Mass	4.4 kg
Size	146 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, coated in black
Housing material	Sheet steel, galvanised
Motor suspension	Motor mounted via brackets on one side
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
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) brought out, basic insulation
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

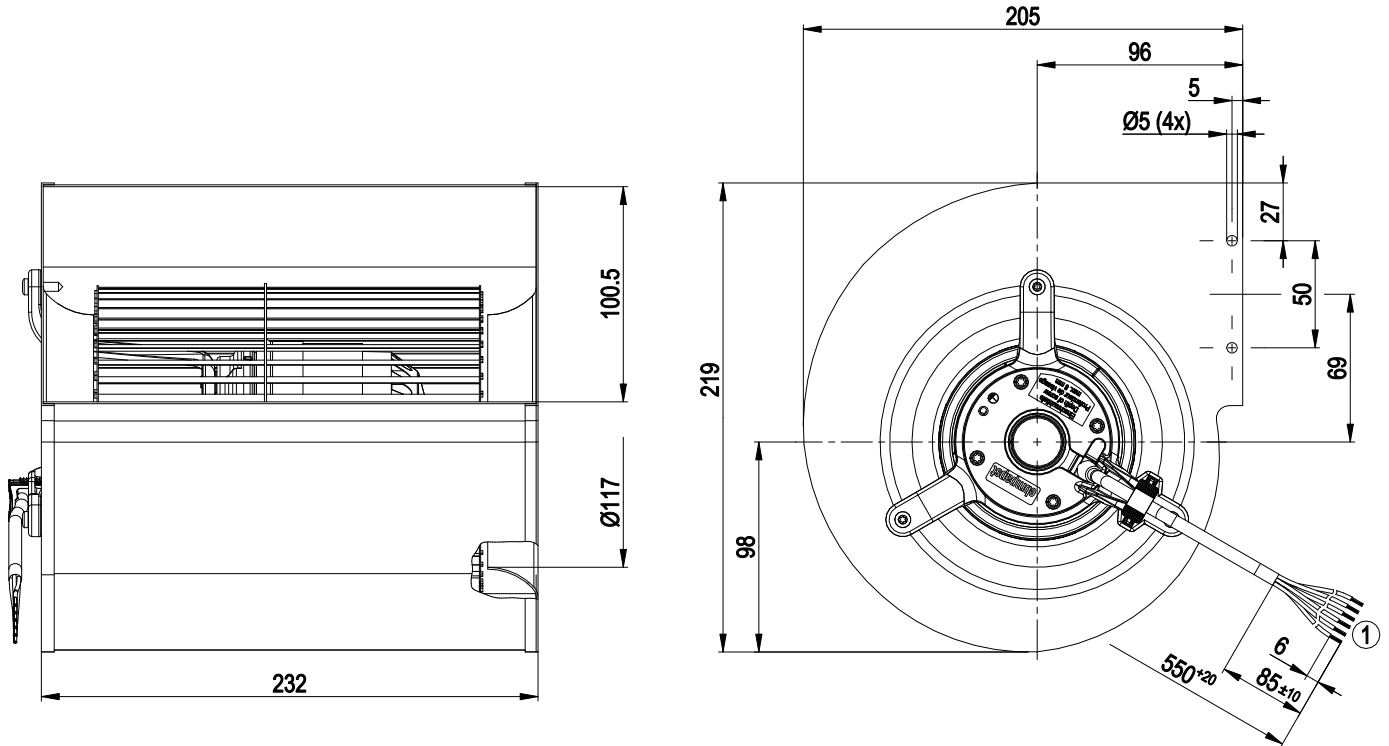


D2E146-AP50-E6

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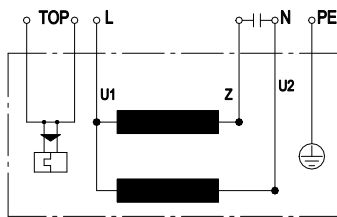
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## Product drawing



Connection line halogen and silicone-free 6G 0.5 mm<sup>2</sup>, 6x lead tips crimped

## Connection screen



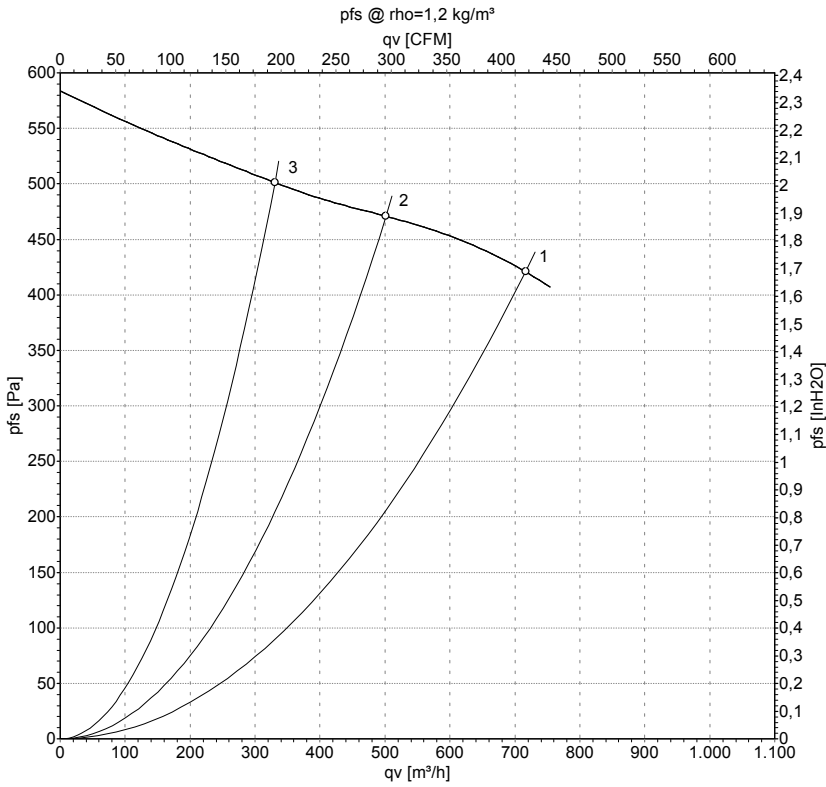
U1	Blue	Z	brown	U2	black
PE	green/yellow	TOP	2 x grey		



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## Charts: Air flow 50 Hz Y



Measurement: LU-77448-1

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	m³/h	Pa	cfm	inH2O
1	230	50	2600	250	1.10	715	420	420	1.69
2	230	50	2690	212	0.94	500	470	295	1.89
3	230	50	2765	186	0.83	330	500	195	2.01

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

