D2E146-AP47-14

AC centrifugal fan

forward curved, dual inlet

with housing (without flange)

D2E146-AP47-14 ebmpapst Datasheet
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Nominal data

Type	**D2E146-AP47-14**
Motor	**M2E068-EC**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	2300
Power input	W	265
Current draw	A	1.16
Motor capacitor	µF	8
Capacitor voltage	VDB	400
Min. back pressure	Pa	300
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

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_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		28.2	26.8	33.8
Efficiency grade N		38.4	37	44
Power input P_e	kW	0.24		
Air flow q_v	m^3/h	705		
Pressure increase p_{fs}	Pa	351		
Speed n	min^{-1}	2435		

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

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Technical features

Mass	4.6 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 class	F2-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
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
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

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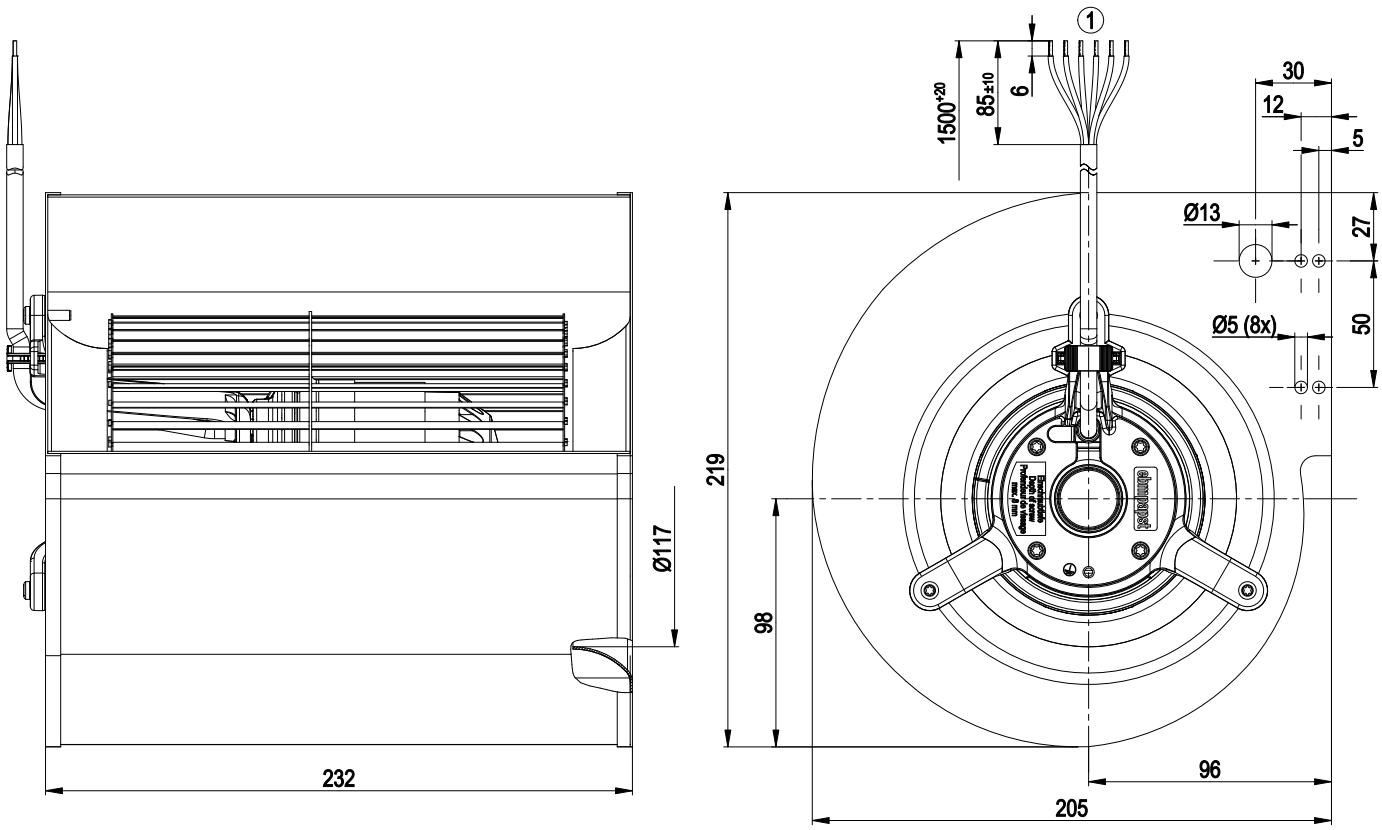
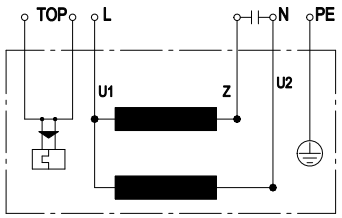
Product drawing



1	Connection line halogen-free 6G 0.5 mm², 6x lead tips crimped

Connection screen



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

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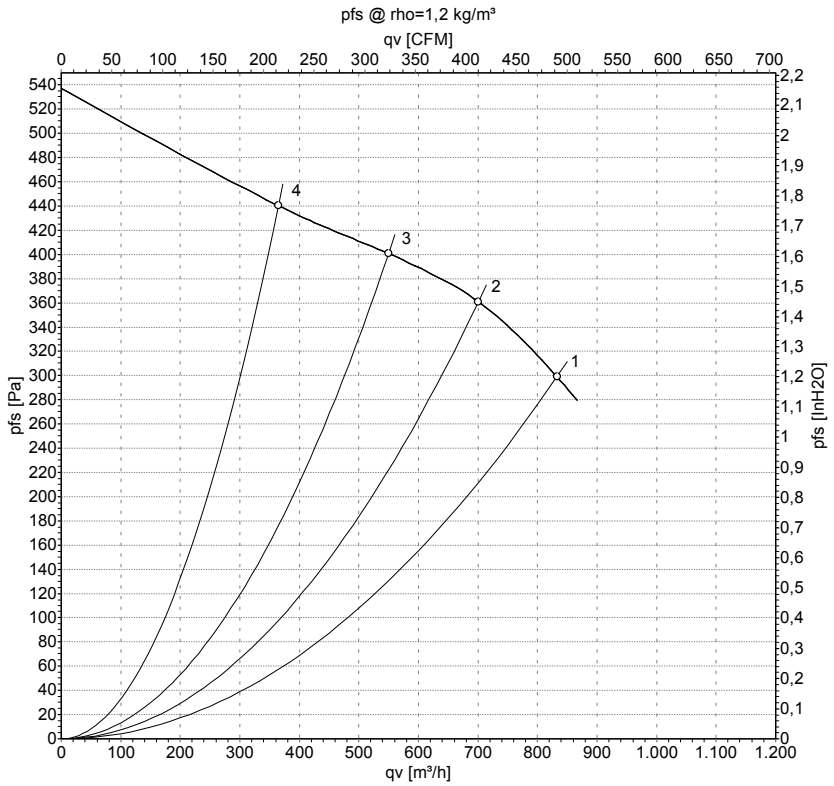
Charts: Air flow 50 Hz Y



Measurement: LU-32744

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

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Y	230	50	2300	265	1.16	835	300
2	Y	230	50	2435	242	1.06	700	360
3	Y	230	50	2560	218	0.96	550	400
4	Y	230	50	2675	191	0.84	365	440

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase