

AC centrifugal fan

forward curved, dual inlet
with housing (flange)

D2E146-AP50-F1 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	D2E146-AP50-F1	
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 ⁻¹	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	45

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}	%	33.6	33.6	09 Power input P_e	kW	0.23
02 Measurement category		A		09 Air flow q_v	m ³ /h	620
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	435
04 Efficiency grade N		44	44	10 Speed (rpm) n	min ⁻¹	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



AC centrifugal fan

forward curved, dual inlet
with housing (flange)

Technical features

Mass	4.2 kg
Size	146 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, galvanised
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
Insulation class	"B"
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
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	EAC

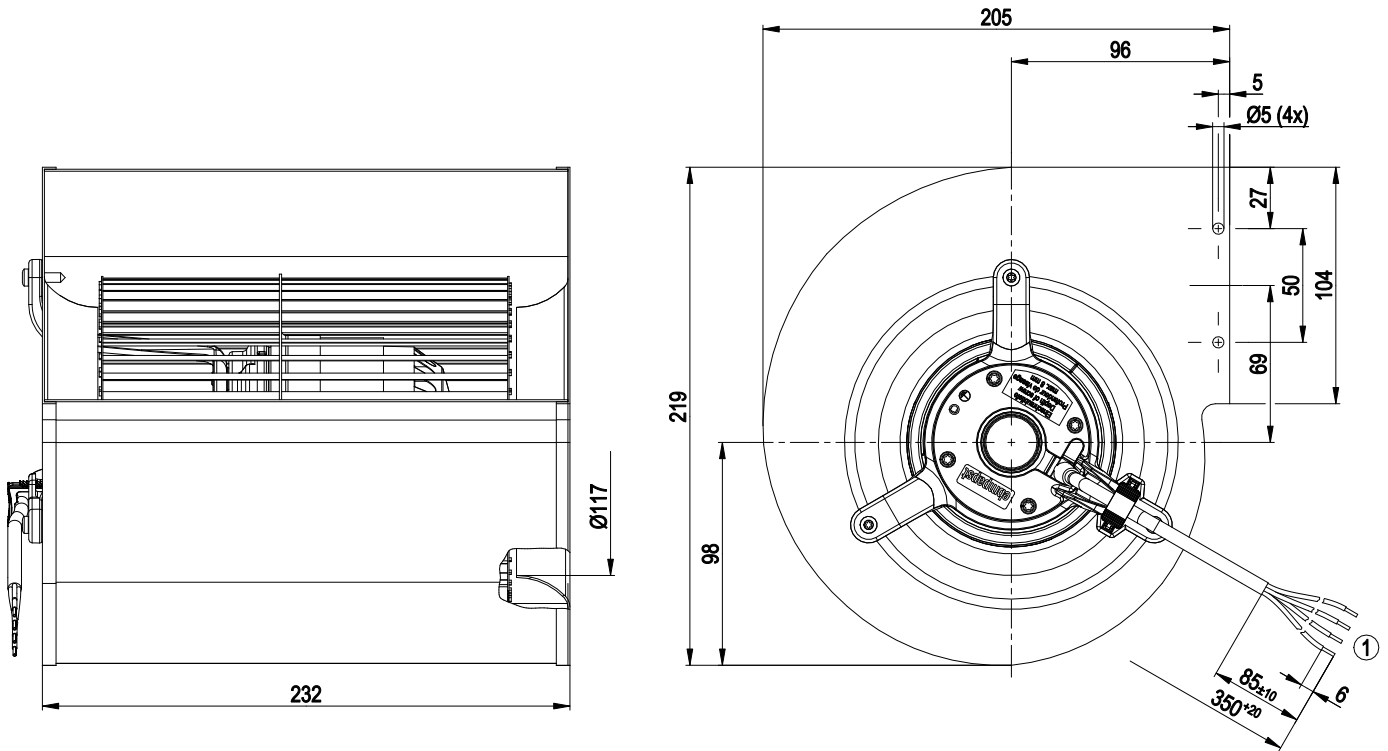


D2E146-AP50-F1

AC centrifugal fan

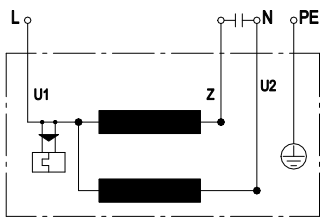
forward curved, dual inlet
with housing (flange)

Product drawing



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

Connection screen



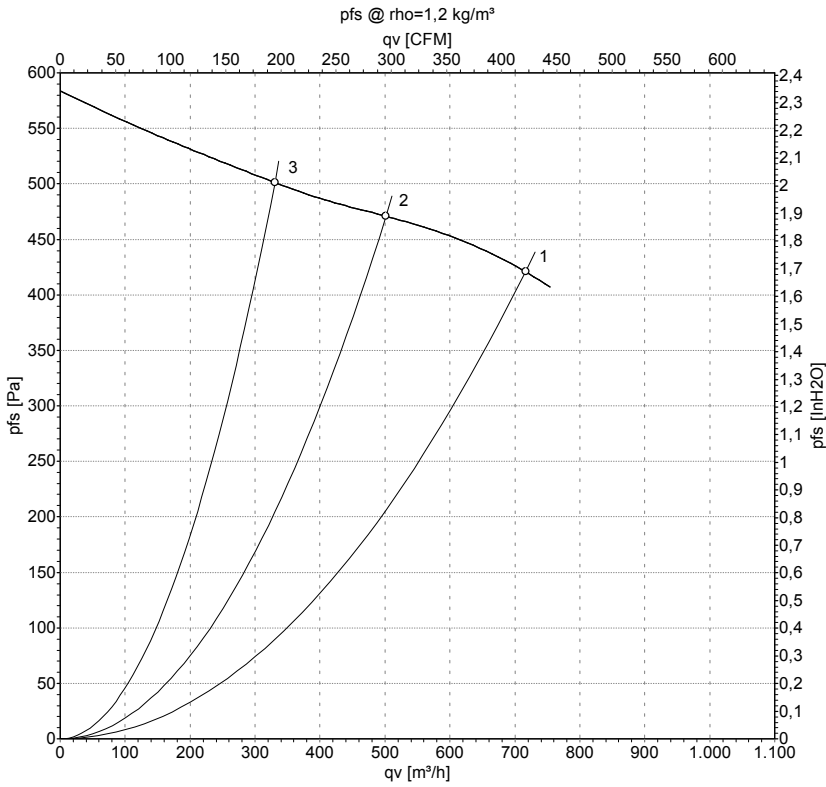
U1	blue	Z	brown	U2	black
PE	green/yellow				



AC centrifugal fan

forward curved, dual inlet
with housing (flange)

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 _e	I	q _v	P _{fs}	q _v	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /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_e = Power input · I = Current draw · q_v = Air flow · P_{fs} = Pressure increase

