

D2E146-AP50-F2

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	D2E146-AP50-F2	
Motor	M2E068-EC	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min ⁻¹	2600
Power consumption	W	250
Current draw	A	1.1
Capacitor	μF	8
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	420
Min. back pressure	in. wg	1.69
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	65

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	33.6	33.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	44
05 Variable speed drive		No	

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

09 Power consumption P_e	kW	0.23
09 Air flow q_v	m ³ /h	620
09 Pressure increase p_{fs}	Pa	435
10 Speed (rpm) n	min ⁻¹	2625
11 Specific ratio*		1.00

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

LU-77448



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Technical description

Weight	4.5 kg
Size	146 mm
Motor size	68
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE

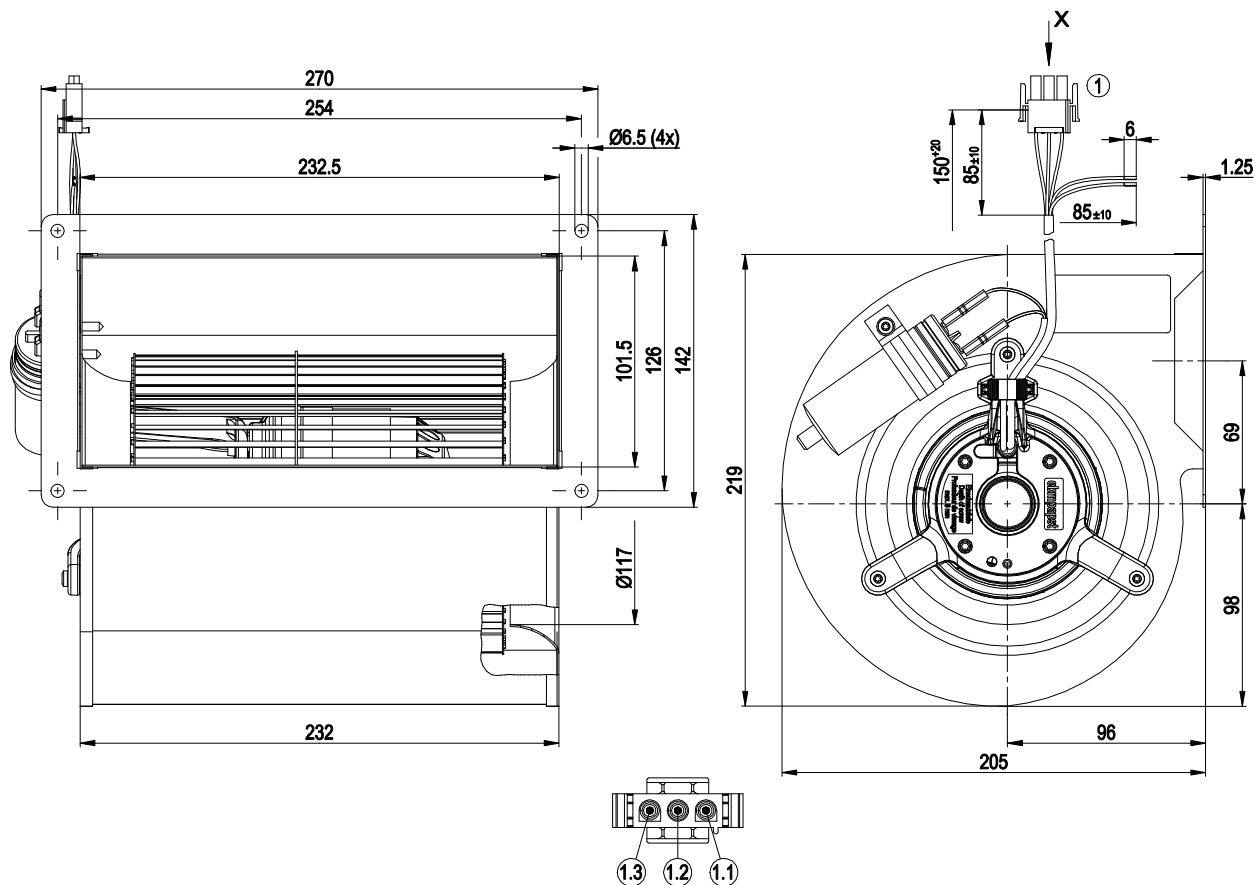


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Product drawing



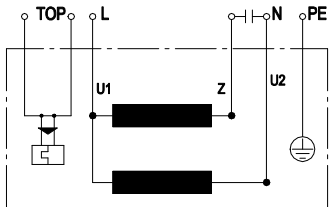
1	Cable halogen-silicone-free 5x 0.5 mm ² , connector housing 3-pole Tyco 1241809-2, 3x plug pin Tyco 926885-1 crimped, 2x crimped splices
1.1	green/yellow
1.2	blue
1.3	black



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Connection diagram



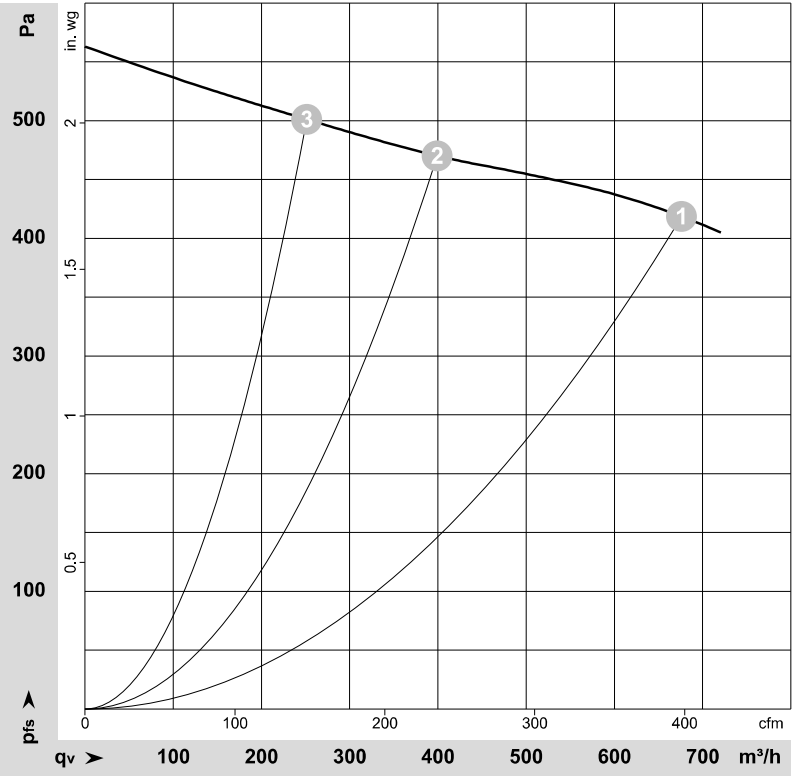
U1	blue	Z	brown	U2	black
PE	green/yellow	TOP	2x gray		



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-77448-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	1~	230	50	2600	250	1.10	675	420	400	1.69
2	1~	230	50	2730	200	0.89	400	470	235	1.89
3	1~	230	50	2795	174	0.78	250	500	150	2.01

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

