D2E146-AA03-14

AC centrifugal fan

backward-curved, single-intake

for rail applications

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Nominal data

Type	**D2E146-AA03-14**
Motor	**M2E068-GA**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		-
Speed (rpm)	min^{-1}	2100
Power consumption	W	330
Current draw	A	1.44
Capacitor	µF	8
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	200
Min. back pressure	inH2O	0.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

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Technical description

Weight	5 kg
Fan size	146 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized and painted black
Housing material	Sheet steel, galvanized
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F2-2
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
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	Axial
Protection class	I (with customer connection of protective earth)

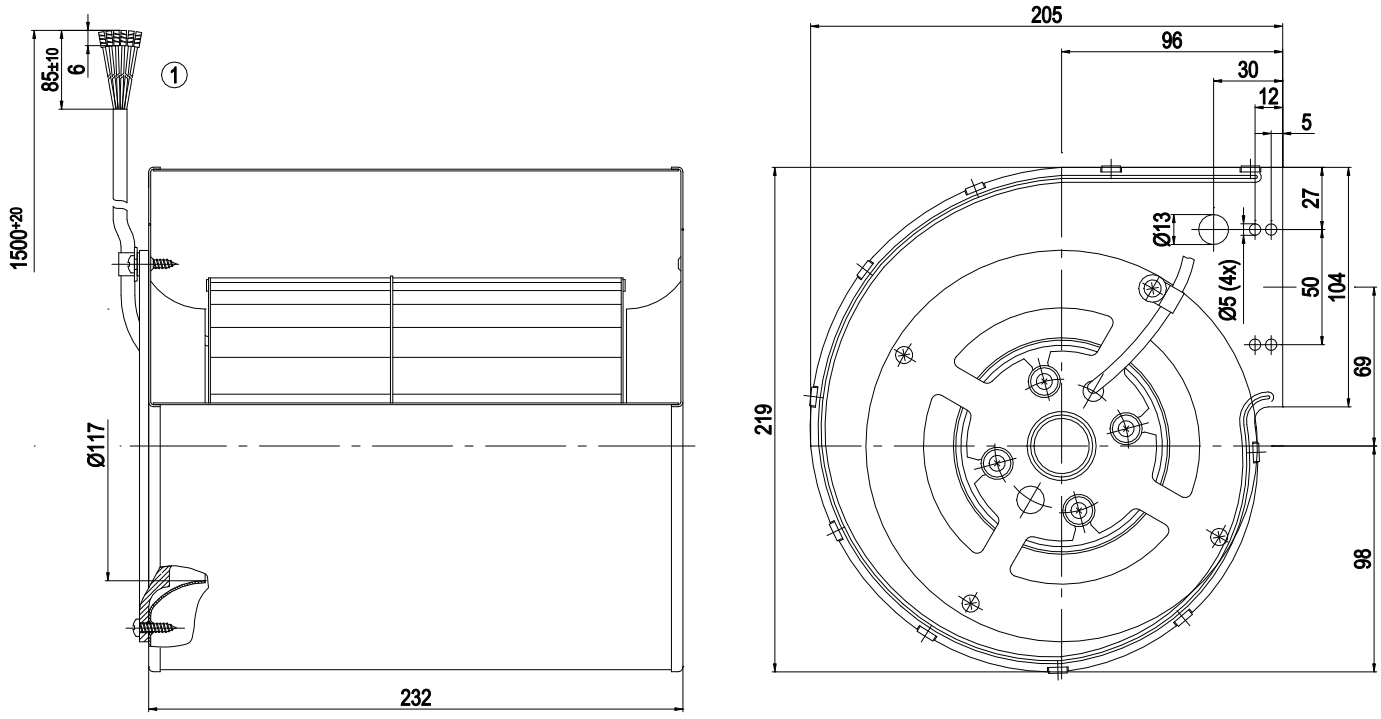
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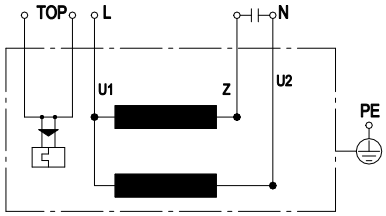
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Product drawing



1	Cable halogen-free, BETAtrans® 3 GKW flex, sw 6G 0.5 mm², 6x crimped splices

Connection diagram



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

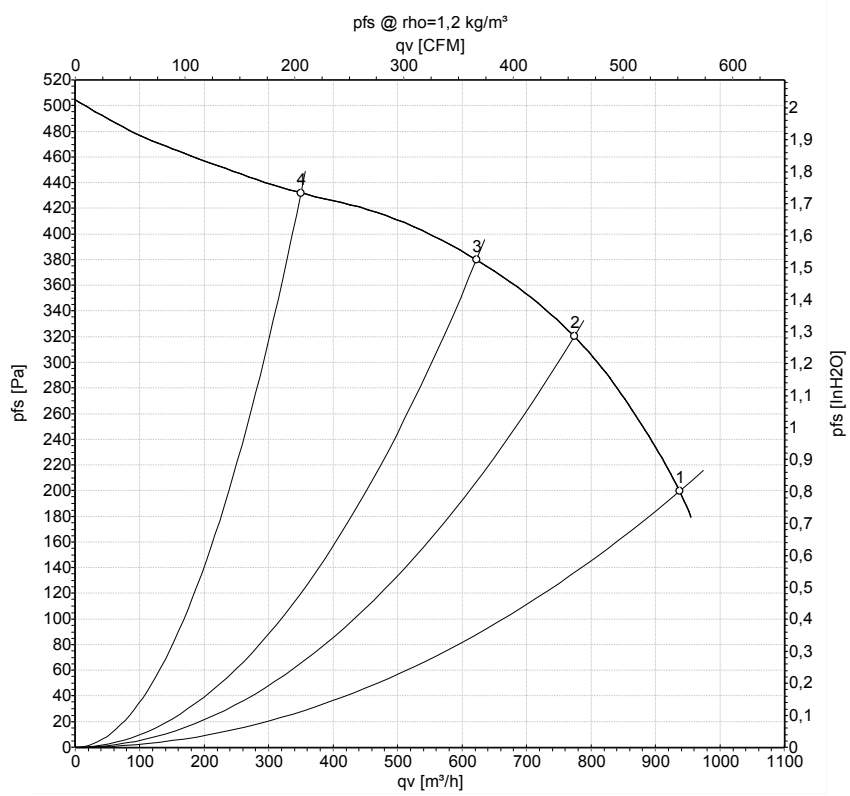
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Curves: Air performance 50 Hz



Measurement: LU-45841-1

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

	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	2100	330	1.44	940	200	550	0.80
2	230	50	2350	283	1.23	775	320	455	1.28
3	230	50	2510	244	1.06	620	380	365	1.53
4	230	50	2685	192	0.84	350	430	205	1.73

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

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