D4E146-AU70-69

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D4E146-AU70-69**
Motor	**M4E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1220
Power consumption	W	97
Current draw	A	0.43
Capacitor	µF	2
Capacitor voltage	VDB	450
Capacitor standard		S2 (CE)
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

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	3.4 kg
Fan size	146 mm
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Speed levels	2
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

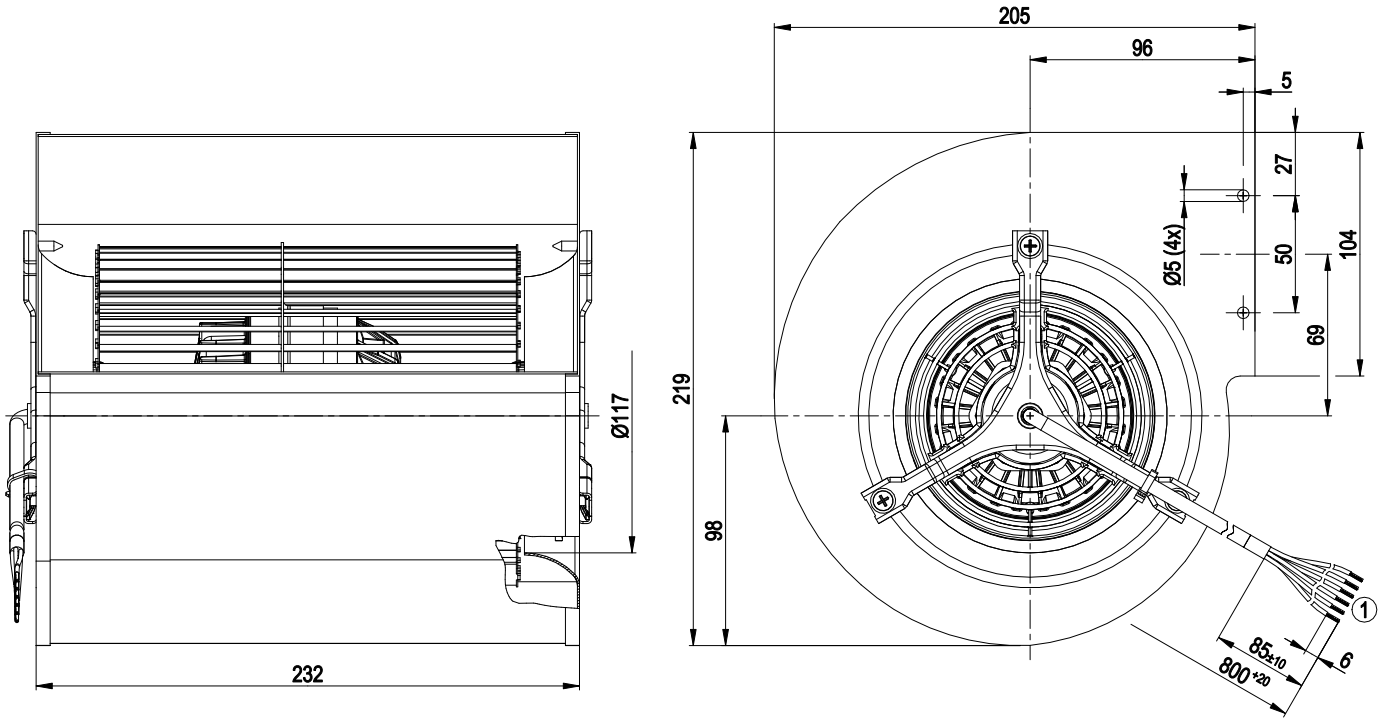
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Product drawing



1	Cable ETFE AWG22 (5x), AWG 20 (1x), 6x crimped splices

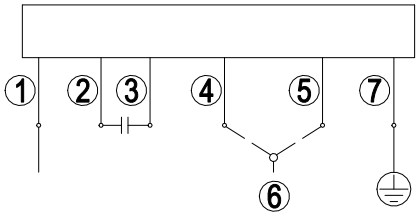
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Connection diagram



Note: High speed (step II); low speed (step I)

1	blue (N)	2	brown (capacitor)	3	yellow (capacitor)
4	Step I white	5	Step II black	6	L1
7	green/yellow (PE)				

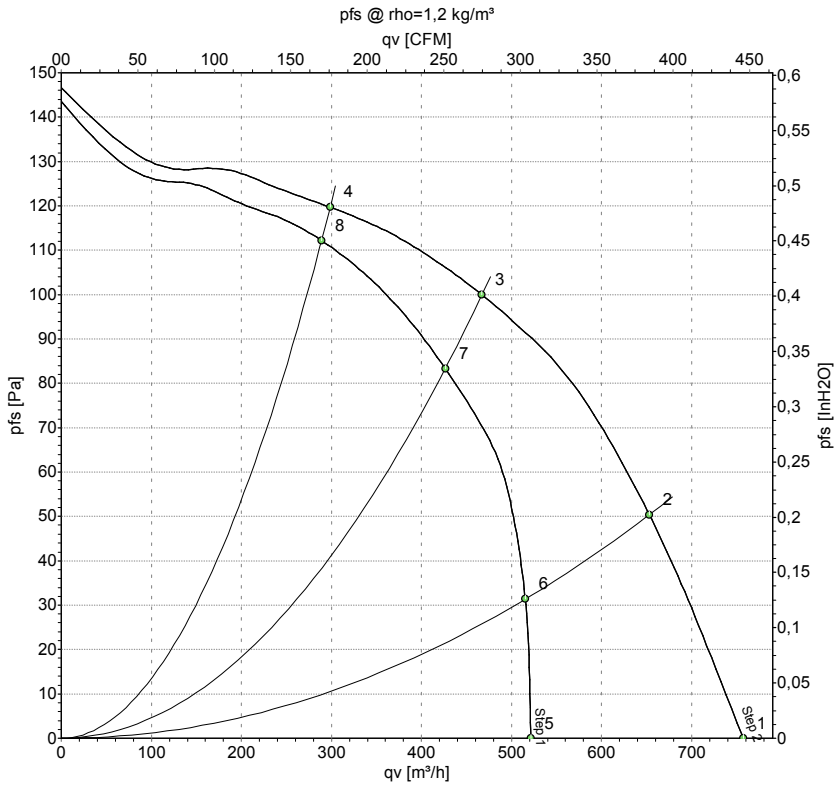
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Curves: Air performance 50 Hz



Measurement: LU-69562-1
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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

	Stage	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	2	230	50	1220	97	0.43	755	0	445	0.00
2	2	230	50	1310	86	0.38	655	50	385	0.20
3	2	230	50	1380	75	0.33	465	100	275	0.40
4	2	230	50	1425	67	0.30	300	120	175	0.48
5	1	230	50	845	83	0.36	520	0	305	0.00
6	1	230	50	1030	76	0.33	515	31	305	0.12
7	1	230	50	1260	63	0.28	425	83	250	0.33
8	1	230	50	1365	52	0.23	290	112	170	0.45

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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