D4E146-AU46-54

AC centrifugal fan

forward-curved, dual-intake

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Nominal data

Type	**D4E146-AU46-54**
Motor	**M4E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ce
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1250
Power consumption	W	90
Current draw	A	0.41
Capacitor	µF	2
Capacitor voltage	VDB	450
Capacitor standard		S2 (CE)
Min. back pressure	Pa	40
Min. back pressure	inH2O	0.16
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

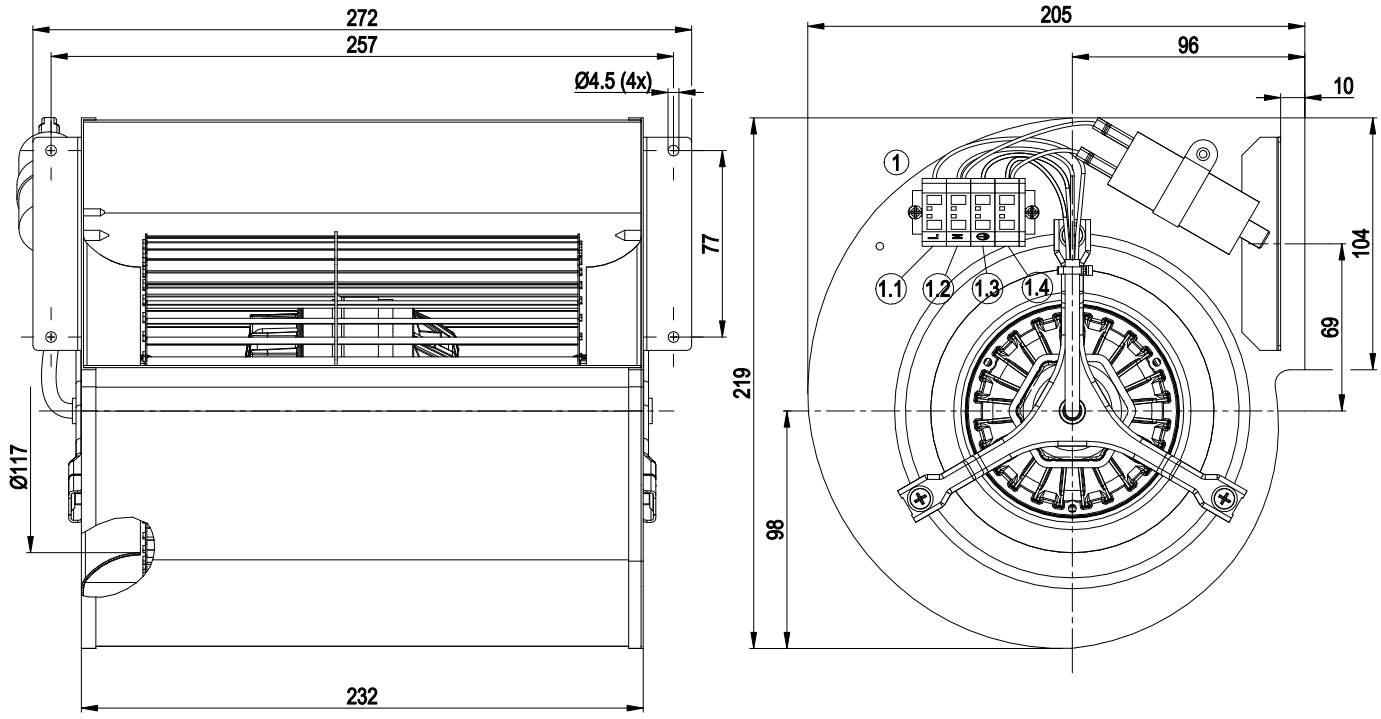
Weight	3.7 kg
Fan size	146 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
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
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Capacitor mounted
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; CE

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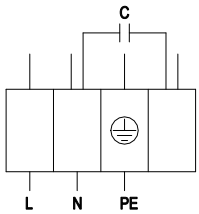
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Product drawing



1	Cable ETFE AWG22, with terminal strip WAGO 261-009
1.1	blue
1.2	black + capacitor
1.3	green/yellow
1.4	brown + capacitor

Connection diagram



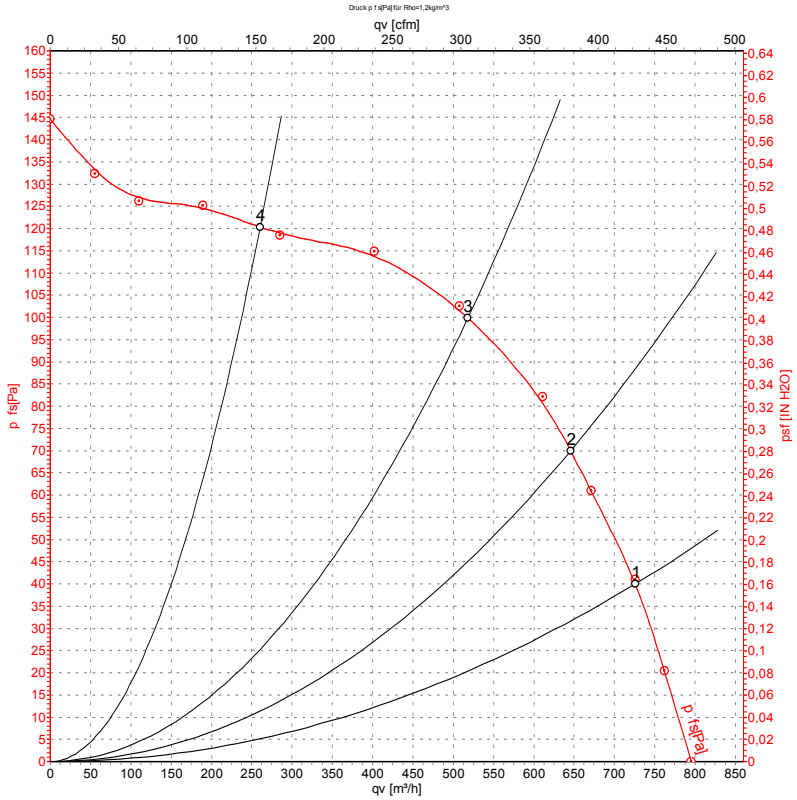
L	blue	N	black	PE	green/yellow

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Curves: Air performance 50 Hz



Measurement: LU-44080-1

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	1250	90	0.41	725	40	425	0.16
2	230	50	1305	86	0.38	645	70	380	0.28
3	230	50	1365	78	0.34	520	100	305	0.40
4	230	50	1430	67	0.31	260	120	155	0.48

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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