D4E146-AU60-64

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D4E146-AU60-64**	
Motor	**M4E068-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1280
Power consumption	W	87
Current draw	A	0.38
Capacitor	µF	2
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	60
Min. back pressure	inH2O	0.24
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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	3.3 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	Calotte bearing
Speed levels	5
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

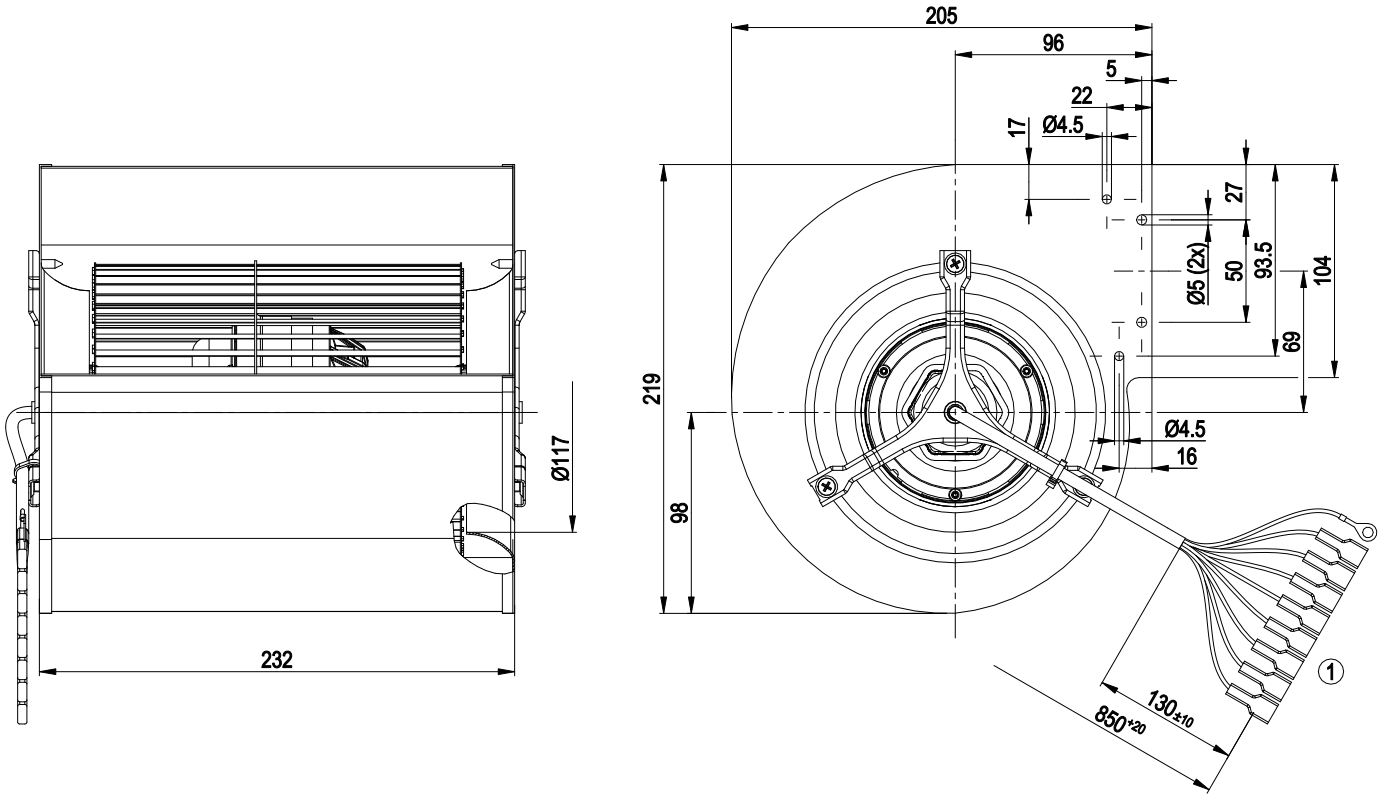
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Product drawing



1	Cable ETFE AWG22, 8x flat push-on receptacle 6.3 x 0.8 with insulating sleeve and 1x crimped ring terminal

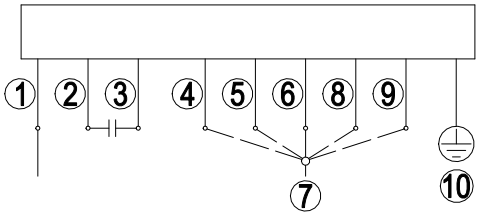
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Connection diagram



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

1	= N = blue
2	brown
3	yellow
4	Step I black 1 / white
5	Step II black 2 / red
6	Step III black 3 / gray
7	L1
8	Step IV black 4 / orange
9	Step V black 5 / black
10	PE (green/yellow)

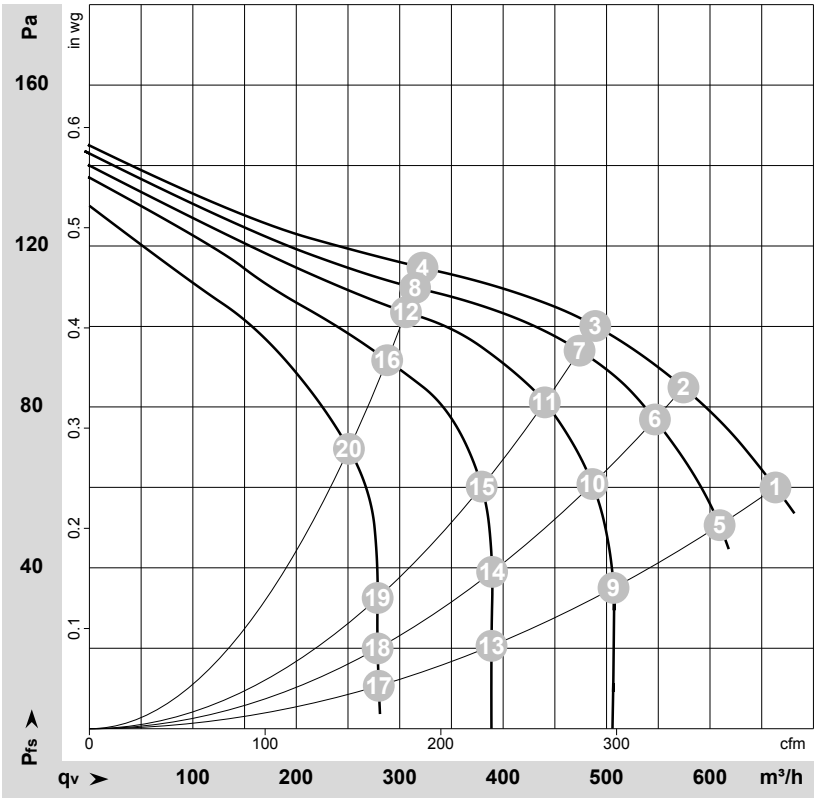
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-49125-1
Measurement: LU-49126-1
Measurement: LU-49127-1
Measurement: LU-49128-1
Measurement: LU-49129-1

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

	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	5	230	50	1280	87	0.38	665	60	390	0.24
2	5	230	50	1325	82	0.36	575	85	340	0.34
3	5	230	50	1360	77	0.34	490	100	290	0.40
4	5	230	50	1410	70	0.31	320	115	190	0.46
5	4	230	50	1180	82	0.36	610	51	360	0.20
6	4	230	50	1265	75	0.33	545	77	320	0.31
7	4	230	50	1320	70	0.31	475	94	280	0.38
8	4	230	50	1385	62	0.27	315	110	185	0.44
9	3	230	50	855	80	0.35	505	13	300	0.05
10	3	230	50	1135	69	0.31	485	62	285	0.25
11	3	230	50	1235	64	0.28	440	82	260	0.33
12	3	230	50	1345	54	0.24	305	103	180	0.41
13	2	230	50	795	67	0.30	390	25	230	0.10
14	2	230	50	845	66	0.29	390	31	230	0.12
15	2	230	50	1080	60	0.27	380	62	225	0.25
16	2	230	50	1275	49	0.23	290	92	170	0.37
17	1	230	50	525	59	0.26	280	9	165	0.04
18	1	230	50	580	58	0.26	280	15	165	0.06
19	1	230	50	575	58	0.26	280	15	165	0.06
20	1	230	50	1095	48	0.22	250	70	150	0.28

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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