D4E146-AU60-64

AC centrifugal fan

forward curved, dual inlet

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
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	1280
Power input	W	87
Current draw	A	0.38
Motor capacitor	µF	2
Capacitor voltage	VDB	400
Capacitor standard		P2 (CE)
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

Mass	3.3 kg
Size	146 mm
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor mounted anti-vibration on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Calotte bearing
Speed steps	5
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

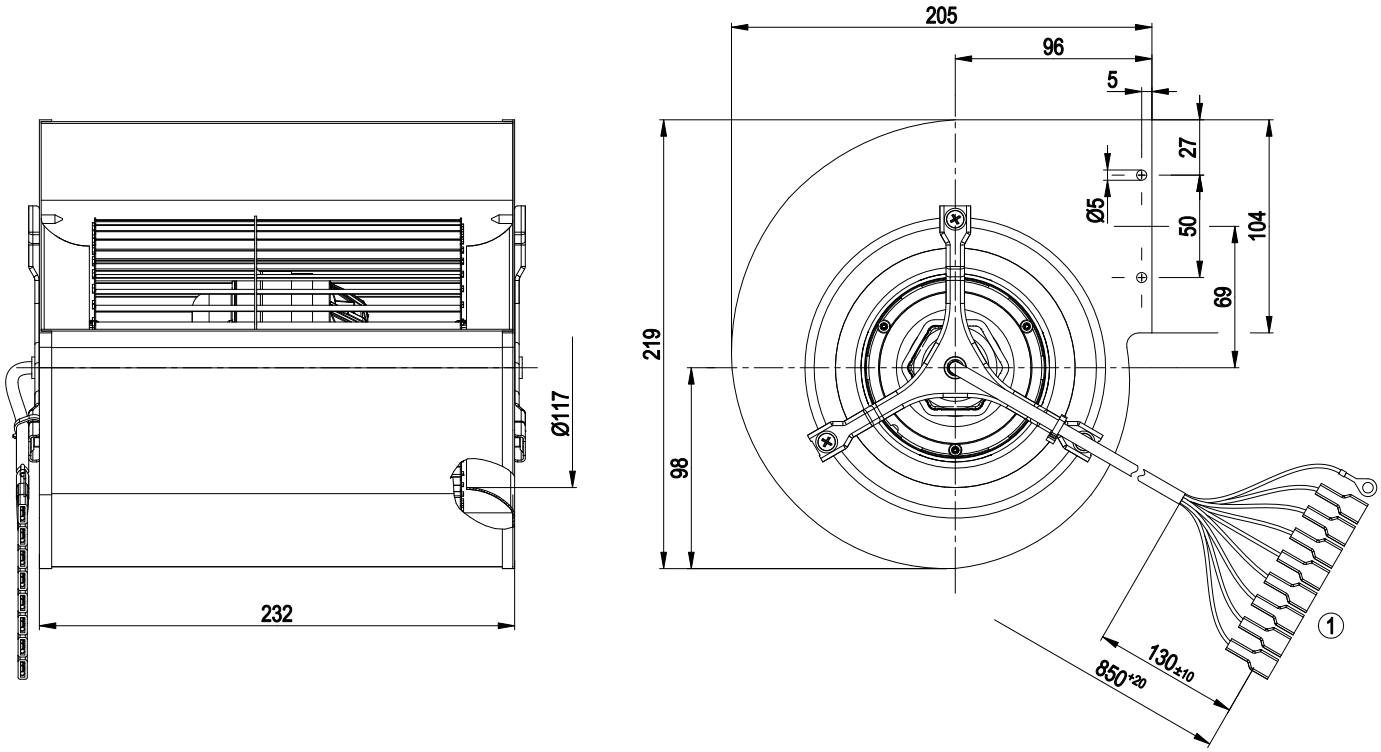
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Product drawing



1	Connection line ETFE AWG22, 8x receptacle for tabs 6.3x0.8 with insulating sleeve and 1x contact stud crimped

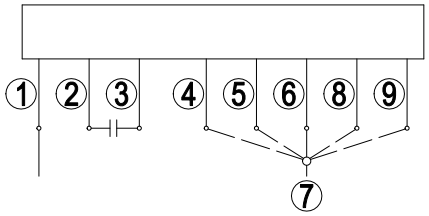
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Connection screen



Note: Fast speed (step IV); slow 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 / grey
7	L1
8	Step IV black 4 / orange
9	Step V black 5 / black

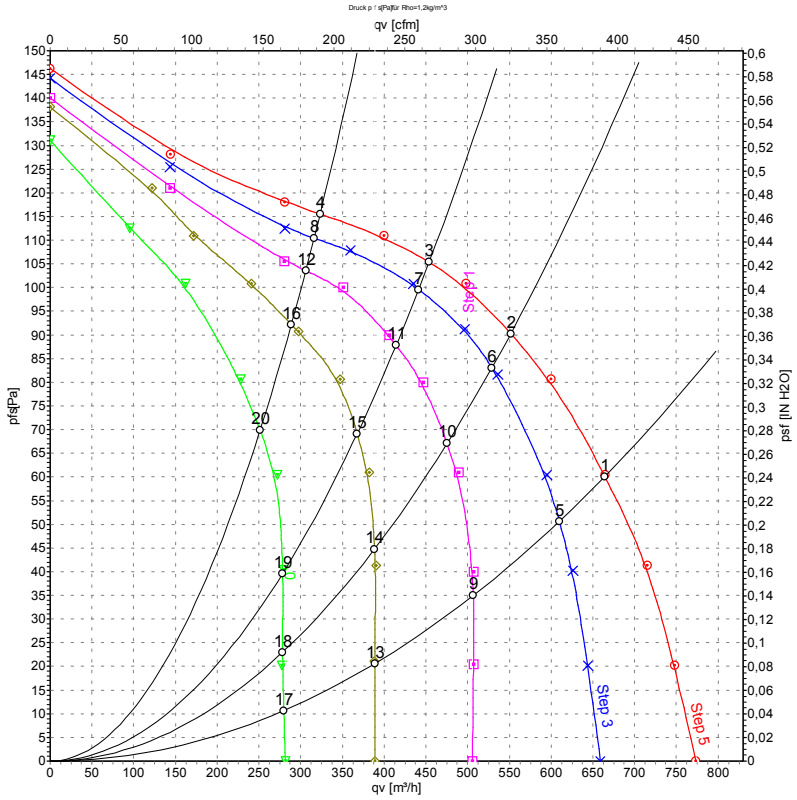
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Charts: Air flow 50 Hz



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

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Stage	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	5	230	50	1280	87	0.38	665	60
2	5	230	50	1335	80	0.35	550	90
3	5	230	50	1370	75	0.33	455	105
4	5	230	50	1410	70	0.31	325	115
5	4	230	50	1180	82	0.36	610	51
6	4	230	50	1285	74	0.32	530	83
7	4	230	50	1340	68	0.30	440	100
8	4	230	50	1385	62	0.27	315	110
9	3	230	50	975	76	0.33	505	35
10	3	230	50	1160	68	0.30	475	67
11	3	230	50	1265	61	0.27	415	88
12	3	230	50	1345	54	0.24	305	104
13	2	230	50	765	68	0.30	390	20
14	2	230	50	935	64	0.29	390	45
15	2	230	50	1120	58	0.26	370	69
16	2	230	50	1275	49	0.23	290	92
17	1	230	50	530	59	0.26	280	10
18	1	230	50	670	58	0.26	280	23
19	1	230	50	855	55	0.25	280	40
20	1	230	50	1095	48	0.22	250	70

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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