D4E146-AU60-78

AC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D4E146-AU60-78**
Motor	**M4E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	1280
Power input	W	87
Current draw	A	0.38
Motor capacitor	µF	2
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	60
Min. ambient temperature	°C	-30
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	3.4 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 (F)/environmental protection class (H)	H0 - dry environment
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

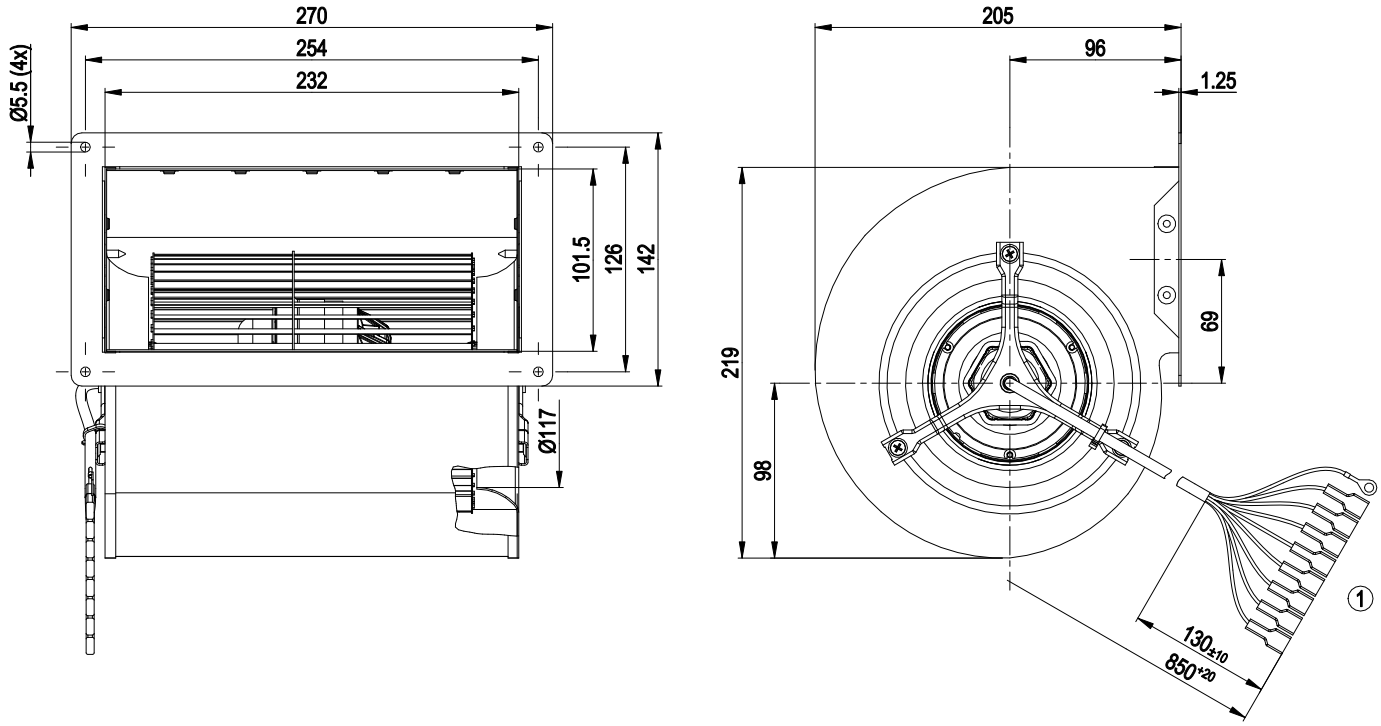
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Product drawing



1	Connection line ETFE 8x AWG22, 1x AWG20, 8x threaded pin 6.3x0.8, 8x insulating sleeve 105-001 B6, 1x contact stud 5.2x8.7x15.7 crimped

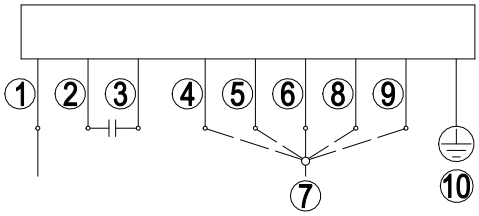
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Connection screen



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
10	PE (green/yellow)

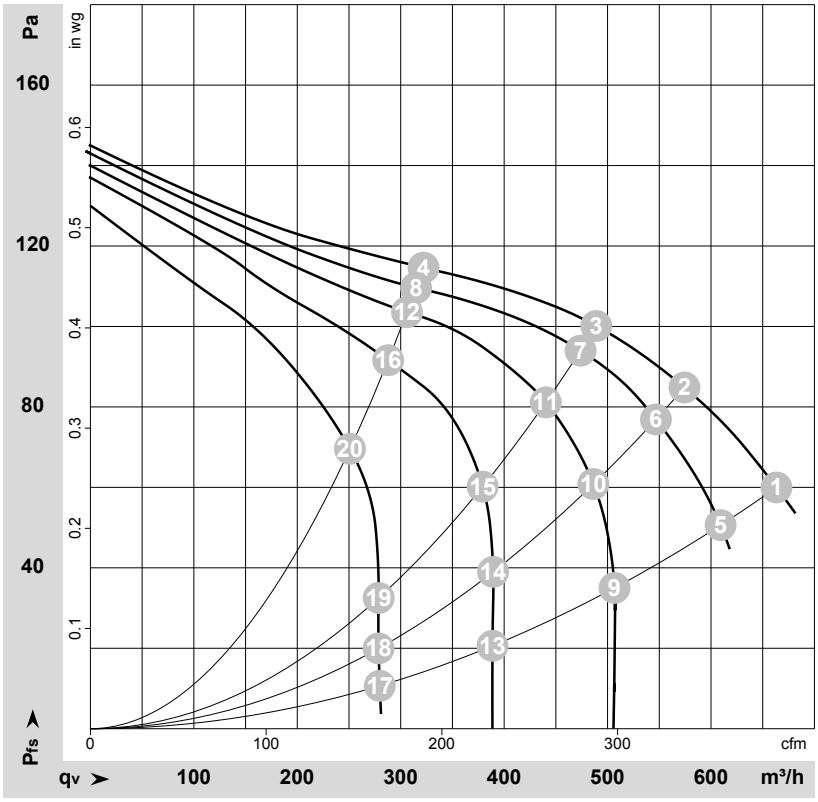
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Charts: Air flow 50 Hz



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 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	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 = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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