D4E133-DA56-D4

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D4E133-DA56-D4**
Motor	**M4E068-BF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1070
Power consumption	W	82
Current draw	A	0.37
Capacitor	µF	1.5
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Max. ambient temperature	°C	30

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	3.1 kg
Fan size	133 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	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing with low-temperature lubricant
Speed levels	5
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	Variable
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

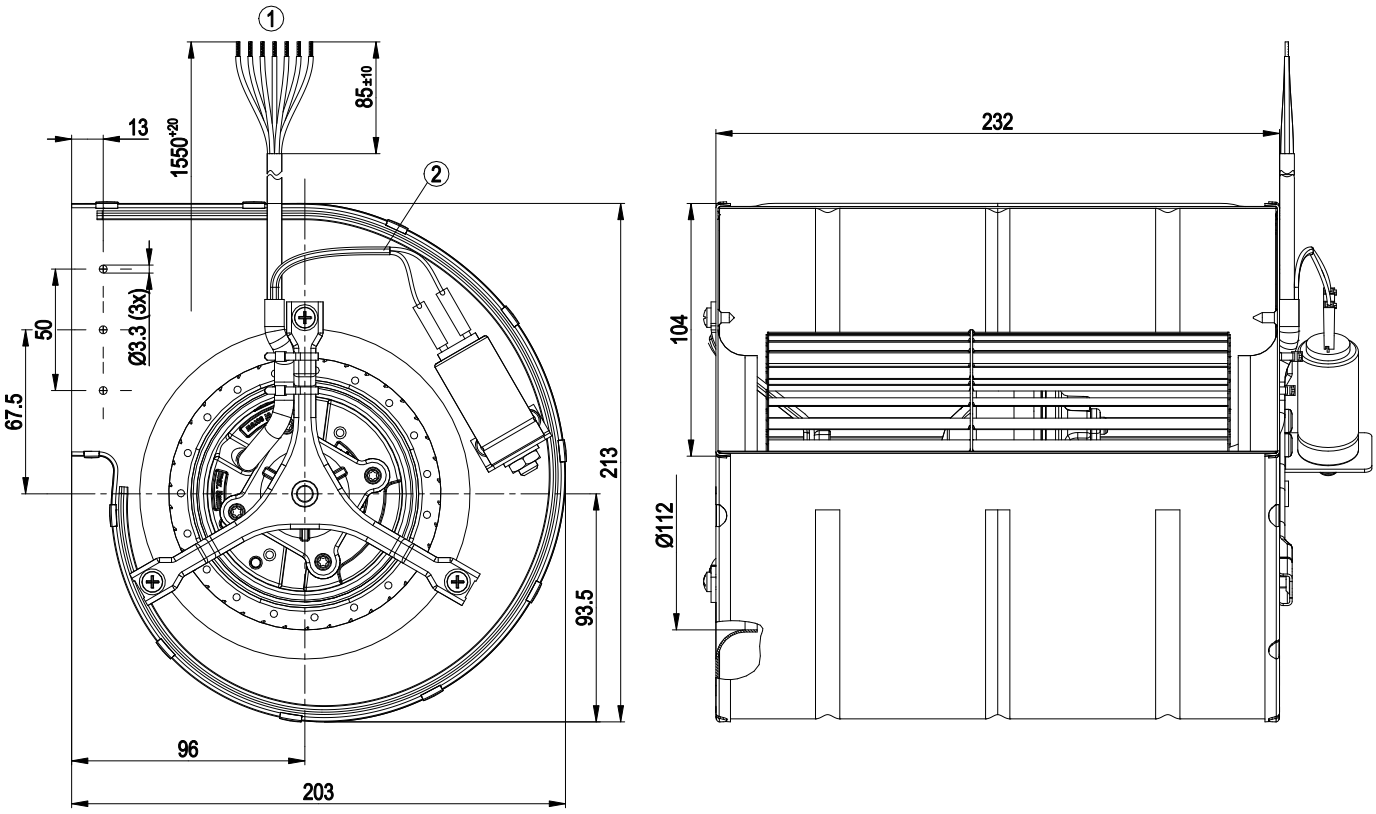
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Product drawing



1	Cable AWG20 7 x 0.5 mm², 7 x crimped splices
	All colors 6 mm stripped, except violet, 6.4 mm stripped
2	Cable AWG20 2 x 0.5 mm², 2 x flat push-on receptacles with insulating sleeves attached to capacitor

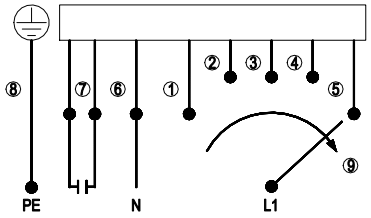
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Connection diagram



The switch must interrupt the circuit on switching.

1	Step 1(min.), red
2	Step 2, brown
3	Step 3, gray
4	Step 4, violet
5	Step 5 (max.), black
6	N, white
7	Capacitor, yellow and orange
8	Protective earth, green/yellow
9	Speed increasing

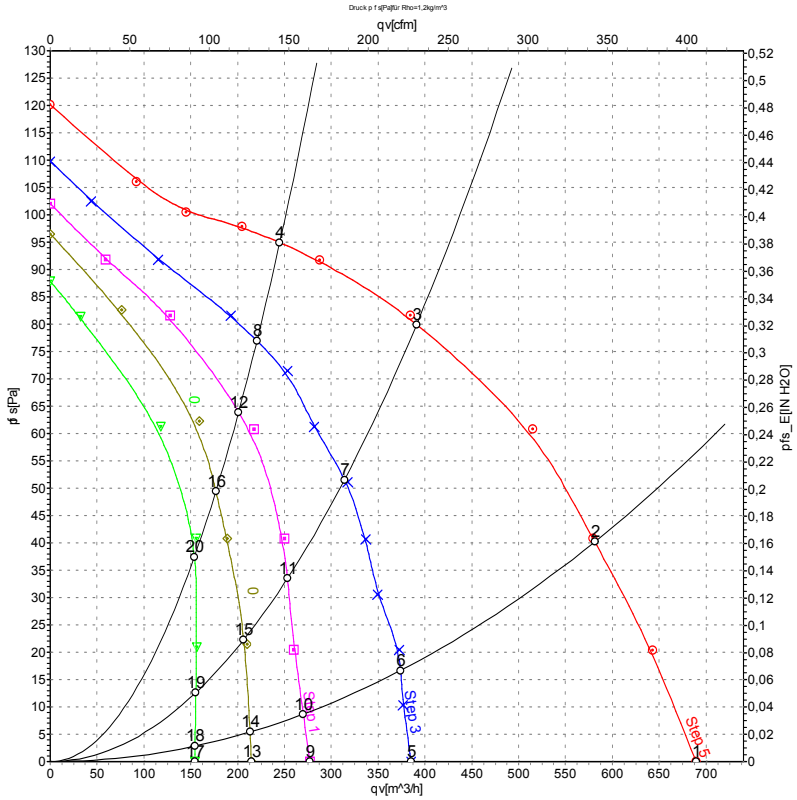
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Curves: Air performance 50 Hz



Measurement: LU-27568-1
Measurement: LU-27569-1
Measurement: LU-27570-1
Measurement: LU-27571-1
Measurement: LU-27572-1

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	1070	82	0.37	690	0	405	0.00
2	5	230	50	1220	74	0.33	580	40	340	0.16
3	5	230	50	1335	66	0.31	390	80	230	0.32
4	5	230	50	1395	63	0.31	245	95	145	0.38
5	4	230	50	625	58	0.25	385	0	225	0.00
6	4	230	50	815	56	0.24	375	17	220	0.07
7	4	230	50	1110	49	0.21	315	52	185	0.21
8	4	230	50	1260	44	0.19	220	77	130	0.31
9	3	230	50	480	50	0.22	280	0	165	0.00
10	3	230	50	610	48	0.21	270	8	160	0.03
11	3	230	50	915	44	0.19	255	34	150	0.14
12	3	230	50	1135	39	0.17	200	65	120	0.26
13	2	230	50	410	44	0.19	215	0	125	0.00
14	2	230	50	495	44	0.19	215	6	125	0.02
15	2	230	50	745	42	0.18	205	25	120	0.10
16	2	230	50	1015	37	0.16	175	50	105	0.20
17	1	230	50	295	41	0.18	155	0	90	0.00
18	1	230	50	345	40	0.18	155	3	90	0.01
19	1	230	50	495	39	0.17	155	11	90	0.04
20	1	230	50	870	36	0.16	155	42	90	0.17

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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