D2E133-AM83-98

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D2E133-AM83-98**
Motor	**M2E068-DF**

Phase		1~	1~
Nominal voltage	VAC	230	240
Frequency	Hz	50	50
Method of obtaining data		fa	fa
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	1500	1550
Power consumption	W	185	200
Current draw	A	0.81	0.84
Capacitor	µF	3	3
Capacitor voltage	VDB	500	500
Min. back pressure	Pa	0	0
Min. back pressure	inH2O	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	35	35
Starting current	A	0.9	0.95

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	133 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball 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

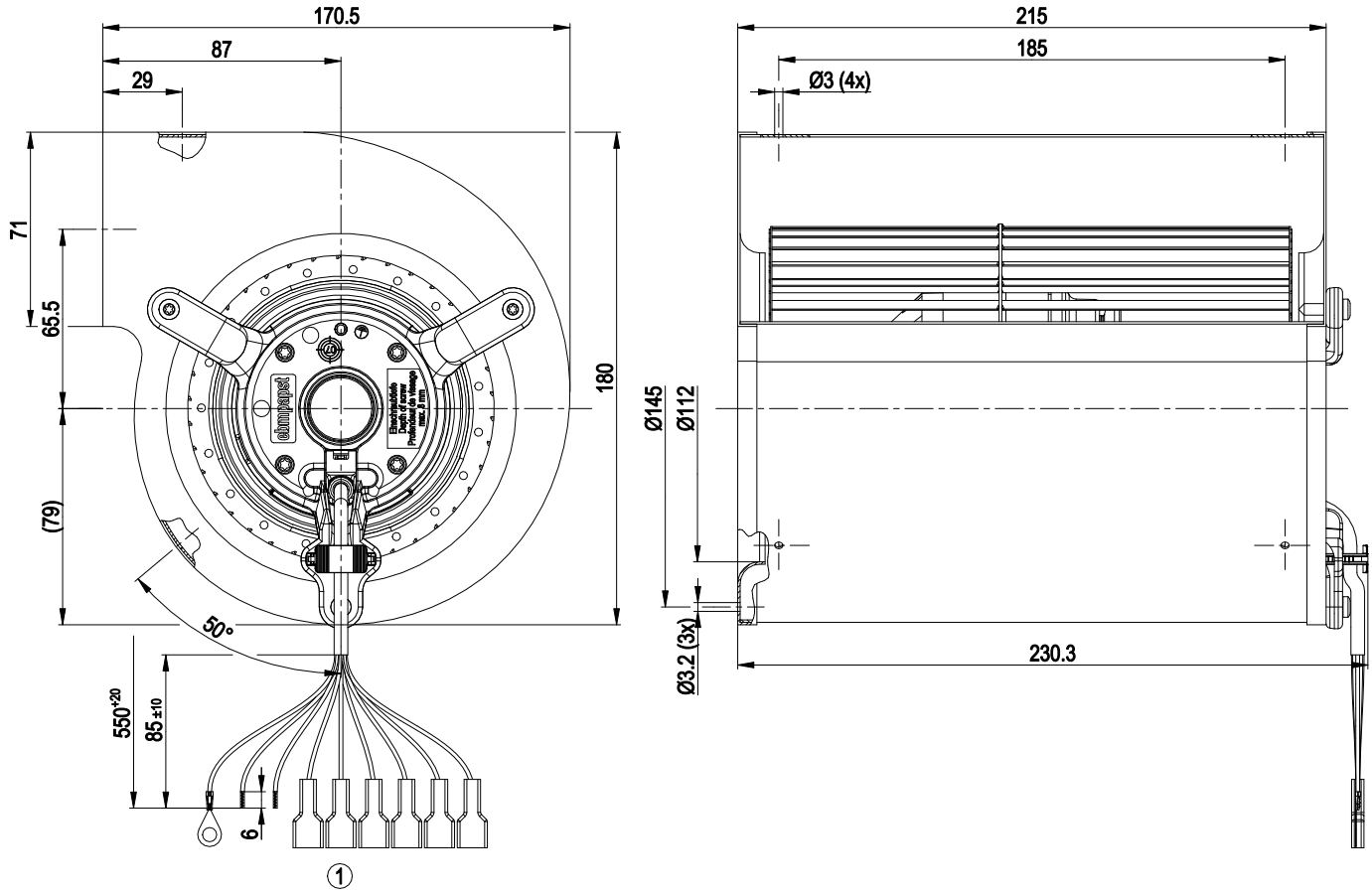
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Product drawing



1	Cable AWG20, 1x ring terminal Ø5.2, 2x wire-end splice, 6x flat push-on receptacle 6.3x0.8 with insulating sleeve

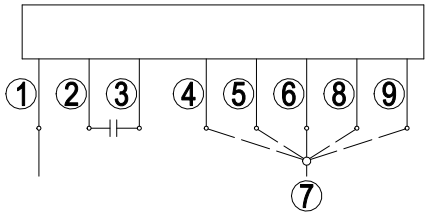
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Connection diagram



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

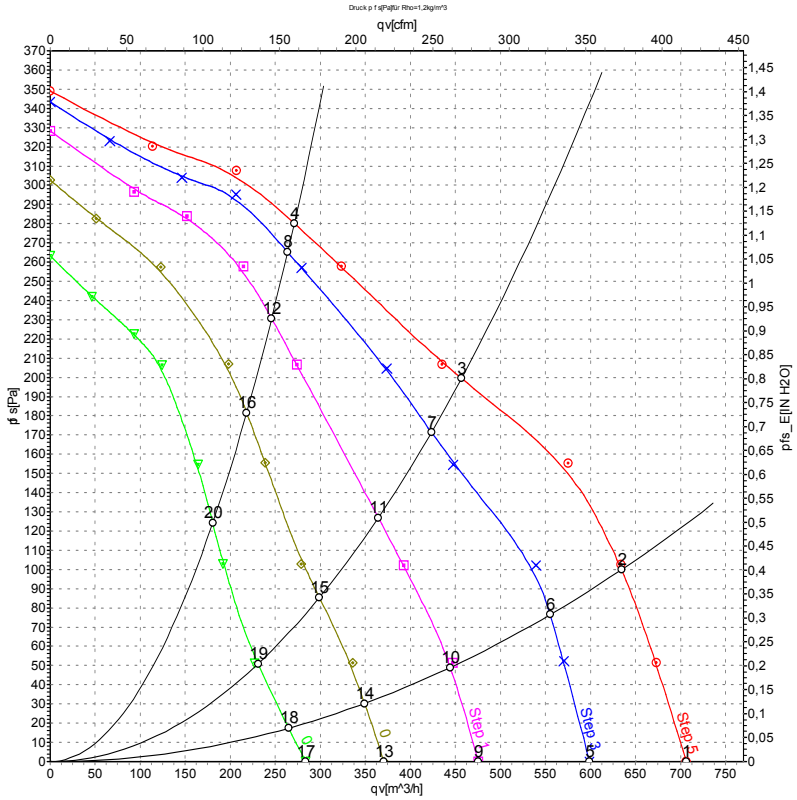
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Curves: Air performance 50 Hz



Measurement: LU-32769-1
Measurement: LU-32770-1
Measurement: LU-32771-1
Measurement: LU-32772-1
Measurement: LU-32773-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	5	230	50	1500	185	0.81	705	0	415	0.00
2	5	230	50	1885	170	0.74	635	100	375	0.40
3	5	230	50	2285	148	0.64	455	200	270	0.80
4	5	230	50	2590	123	0.53	270	280	160	1.12
5	4	230	50	1295	145	0.64	600	0	355	0.00
6	4	230	50	1650	137	0.61	555	76	325	0.31
7	4	230	50	2155	118	0.54	425	171	250	0.69
8	4	230	50	2520	96	0.45	265	265	155	1.06
9	3	230	50	1050	119	0.53	475	0	280	0.00
10	3	230	50	1380	114	0.51	445	54	260	0.22
11	3	230	50	1850	102	0.47	365	127	215	0.51
12	3	230	50	2345	82	0.40	245	231	145	0.93
13	2	230	50	845	98	0.45	370	0	220	0.00
14	2	230	50	1095	95	0.44	350	32	205	0.13
15	2	230	50	1505	89	0.42	300	85	175	0.34
16	2	230	50	2080	75	0.37	220	182	130	0.73
17	1	230	50	640	83	0.38	285	0	165	0.00
18	1	230	50	765	81	0.37	265	17	155	0.07
19	1	230	50	985	78	0.36	230	47	135	0.19
20	1	230	50	1730	69	0.33	180	124	105	0.50

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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