K4E146-AB73-29

AC dual centrifugal fan

forward curved, dual inlet

with housing



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Nominal data

Type	**K4E146-AB73-29**
Motor	**M4E068-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed	min^{-1}	750
Power input	W	85
Current draw	A	0.38
Motor capacitor	µF	2.5
Capacitor voltage	VDB	450
Capacitor standard		P2 (CE)
Min. back pressure	Pa	0
Max. ambient temperature	°C	50

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	4.1 kg
Size	146 mm
Surface of rotor	Partially cast in aluminium
Material of impeller	PA plastic, black
Housing material	PP plastic, black
Motor suspension	Motor mounted vibration-free on both sides
Direction of rotation	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	Ball 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	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

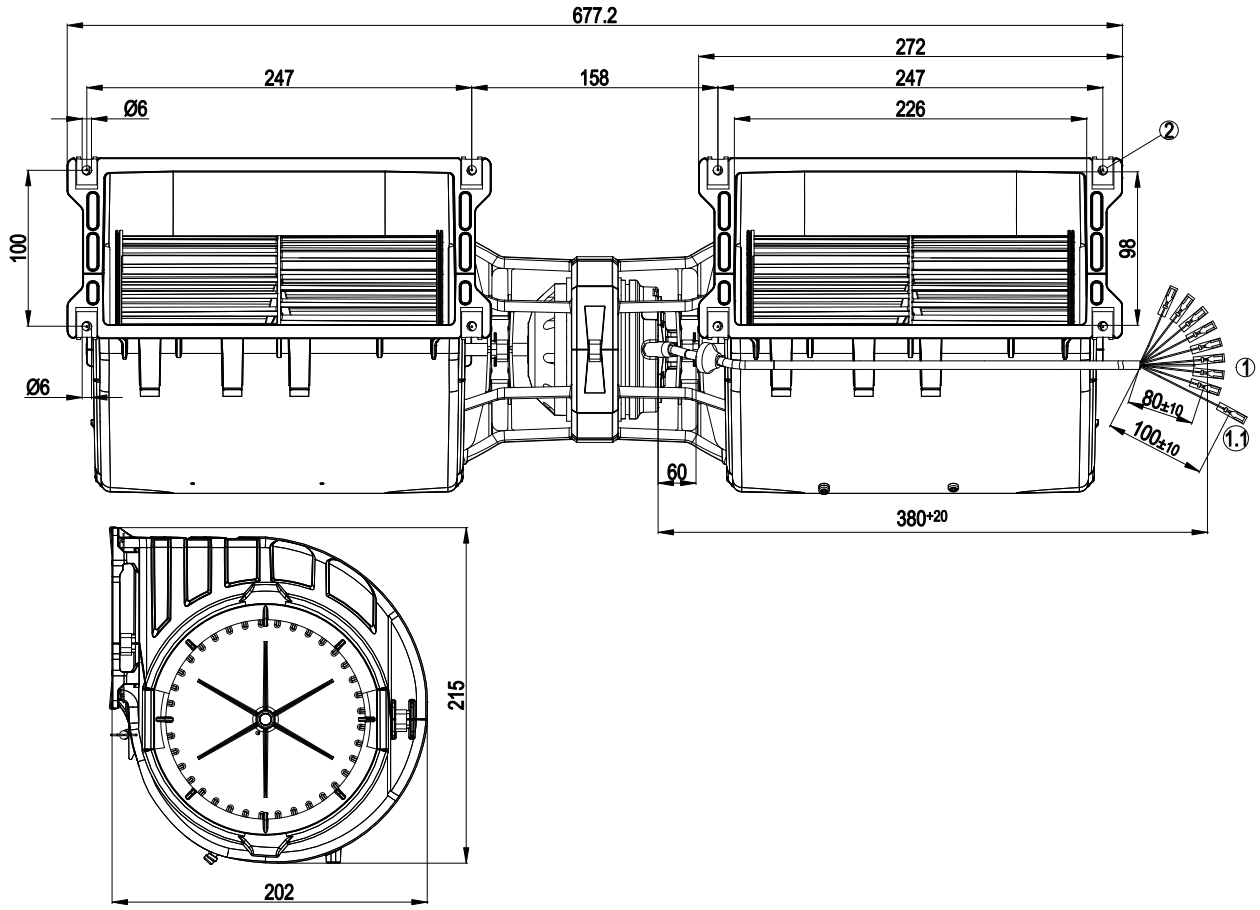
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Product drawing



1	Connection line PFA 9G AWG20, 9 x receptacle for tabs (AMP 5-160303-2) crimped
1.1	Protective earth
2	8x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)
	Line routing:
	1) max. bending angle: ±15° (relative to the centre axis of the side cable exit on the stator bush)
	2) Route line without tension
	3) Provide strain relief

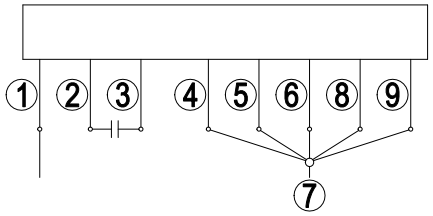
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Connection screen



Note: Fast speed (step V); slow speed (step I)

1	= N = blue	2	brown	3	yellow
4	Step I white	5	Step II red	6	Step III grey
7	L1	8	Step IV orange	9	Step V black

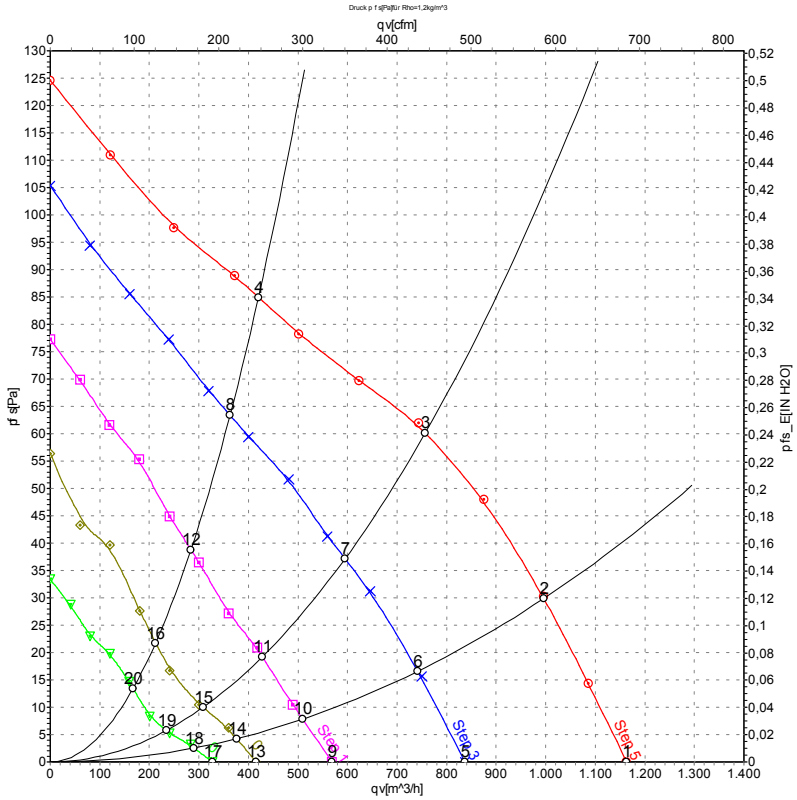
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Charts: Air flow 50 Hz



Measurement: LU-103355
Measurement: LU-73391
Measurement: LU-73392
Measurement: LU-73393
Measurement: LU-73395

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	LpA_{in}	LwA_{in}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	5	230	50	750	85	0.38	46	57	1165	0
2	5	230	50	900	82	0.36	45	55	995	30
3	5	230	50	1070	75	0.33	45	55	755	60
4	5	230	50	1235	66	0.29	46	56	420	85
5	4	230	50	540	65	0.29			835	0
6	4	230	50	685	62	0.28			740	17
7	4	230	50	850	59	0.27			595	37
8	4	230	50	1060	52	0.24			365	63
9	3	230	50	365	50	0.23			570	0
10	3	230	50	470	49	0.23			510	8
11	3	230	50	605	47	0.22			430	19
12	3	230	50	835	43	0.21			285	39
13	2	230	50	290	14	0.16			415	0
14	2	230	50	350	14	0.16			375	4
15	2	230	50	455	14	0.16			310	10
16	2	230	50	635	14	0.15			215	22
17	1	230	50	225	9.3	0.13			325	0
18	1	230	50	285	9.4	0.13			290	3
19	1	230	50	360	9.4	0.13			235	6
20	1	230	50	490	9.5	0.13			165	14

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase

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