K4E146-AB85-23

AC dual centrifugal fan

forward curved, dual inlet

with housing

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Nominal data

Type	**K4E146-AB85-23**	
Motor	**M4E068-DF**	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	60
Type of data definition		fa
Valid for approval / standard		CE
Speed	min^{-1}	760
Power input	W	100
Current draw	A	0.88
Motor capacitor	µF	10
Capacitor voltage	VDB	220
Capacitor standard		P2 (CE)
Min. back pressure	Pa	0
Max. ambient temperature	°C	35

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	3.9 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 with anti-vibration on both sides
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
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
Approval	UL 1004-1; CSA C22.2 Nr.100

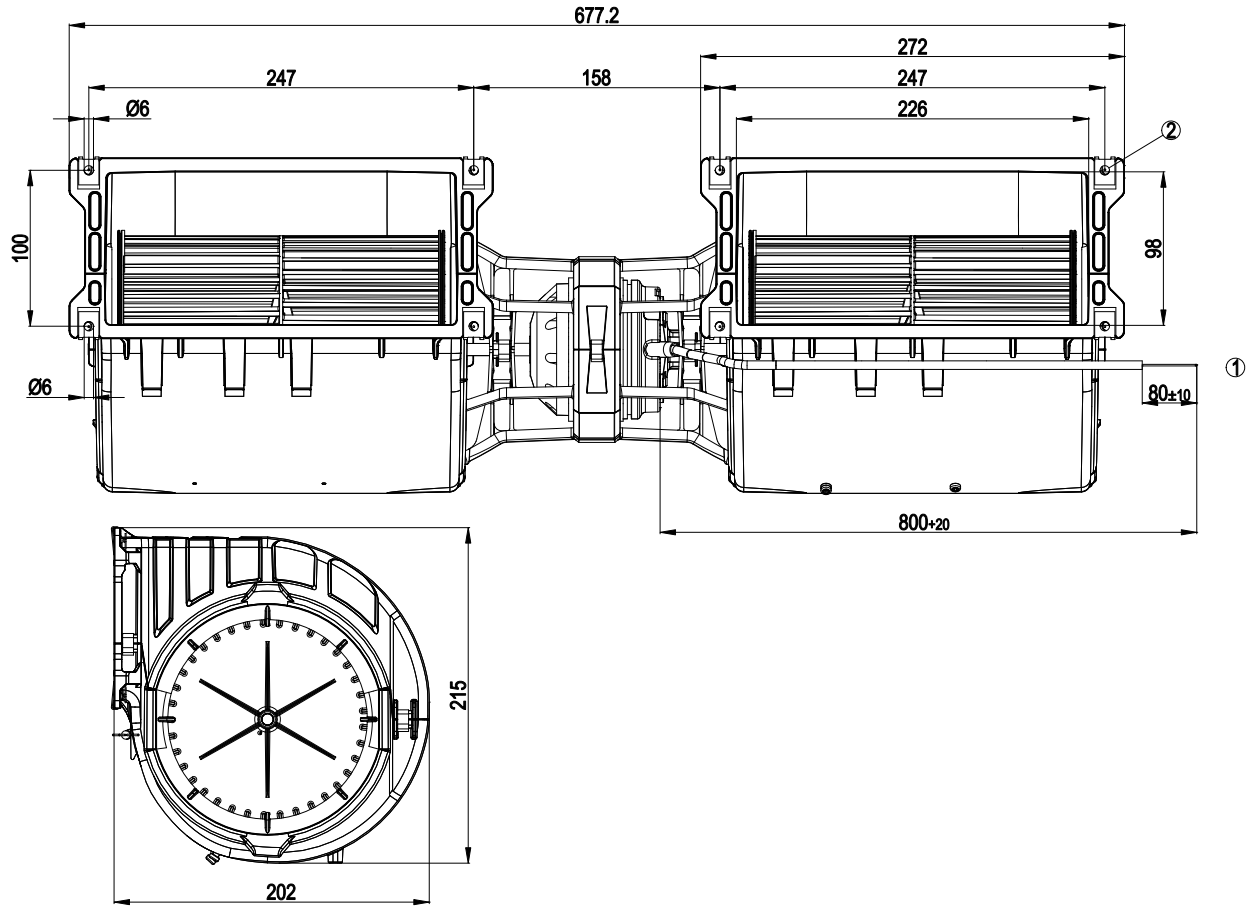
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Product drawing



1	Connection line PFA, 9x brass lead tips crimped
2	8x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

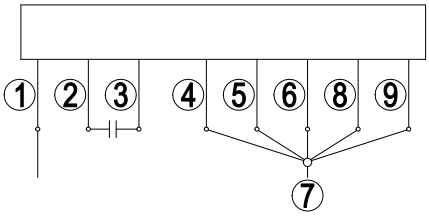
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Connection screen



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

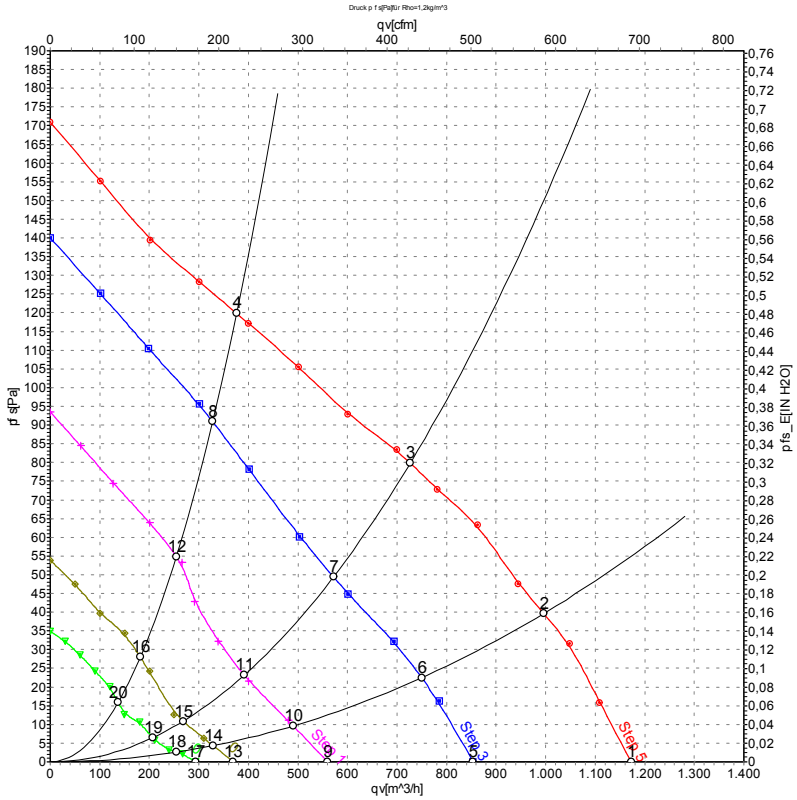
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Charts: Air flow 60 Hz



Measurement: LU-73897
Measurement: LU-73899
Measurement: LU-73900
Measurement: LU-73901
Measurement: LU-73902

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	115	60	760	100	0.88	1170	0
2	5	115	60	975	99	0.86	995	40
3	5	115	60	1210	95	0.82	725	80
4	5	115	60	1450	87	0.76	375	120
5	4	115	60	565	70	0.67	855	0
6	4	115	60	725	68	0.65	750	22
7	4	115	60	955	64	0.63	570	49
8	4	115	60	1265	57	0.59	325	91
9	3	115	60	370	49	0.51	560	0
10	3	115	60	500	49	0.51	490	10
11	3	115	60	665	47	0.50	390	23
12	3	115	60	970	43	0.48	255	55
13	2	115	60	270	40	0.43	370	0
14	2	115	60	350	40	0.43	330	4
15	2	115	60	470	39	0.43	270	11
16	2	115	60	700	37	0.42	180	28
17	1	115	60	190	36	0.40	295	0
18	1	115	60	260	36	0.40	255	3
19	1	115	60	360	36	0.40	205	6
20	1	115	60	550	35	0.39	135	16

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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