

K4E146-AB73-17

AC centrifugal fan combination

forward-curved, dual-intake

with housing



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	K4E146-AB73-17		
Motor	M4E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	50
Method of obtaining data		cs	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1135	750
Power consumption	W	71	85
Current draw	A	0.31	0.38
Capacitor	µF	2.5	2.5
Capacitor voltage	VDB	450	450
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	68	0
Min. back pressure	in. wg	0.27	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	50
Starting current	A	0.43	

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



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Technical description

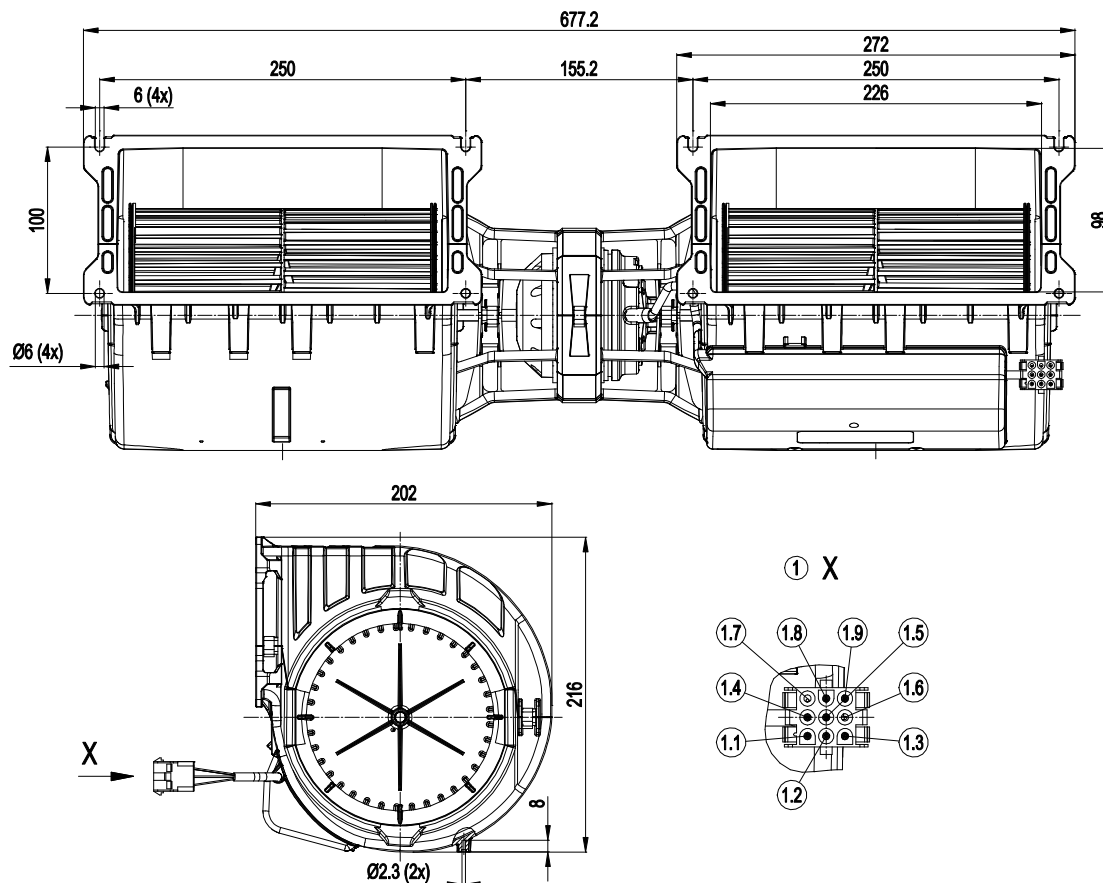
Weight	4.2 kg
Size	146 mm
Motor size	68
Rotor surface	Partly cast in aluminum
Terminal box material	PP plastic
Impeller material	PP plastic
Housing material	PP plastic
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
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	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



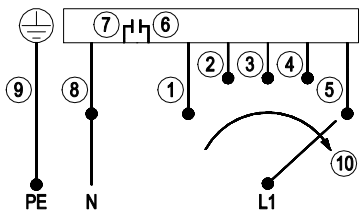
1	Coded plug system: 9-pole connector housing tyco 927231-5, 7x plug pin tyco 926886-1
1.1	Step 1 (min.)
1.2	Step 2
1.3	Step 3
1.4	Step 4
1.5	Step 5 (max.)
1.6	-
1.7	-
1.8	N
1.9	PE



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Connection diagram



The switch must interrupt the circuit when switching.

1	Step 1 (min.)	2	Step 2	3	Step 3
4	Step 4	5	Step 5 (max.)	6	Capacitor
7	Capacitor	8	N	9	Protective earth
10	Speed increasing				

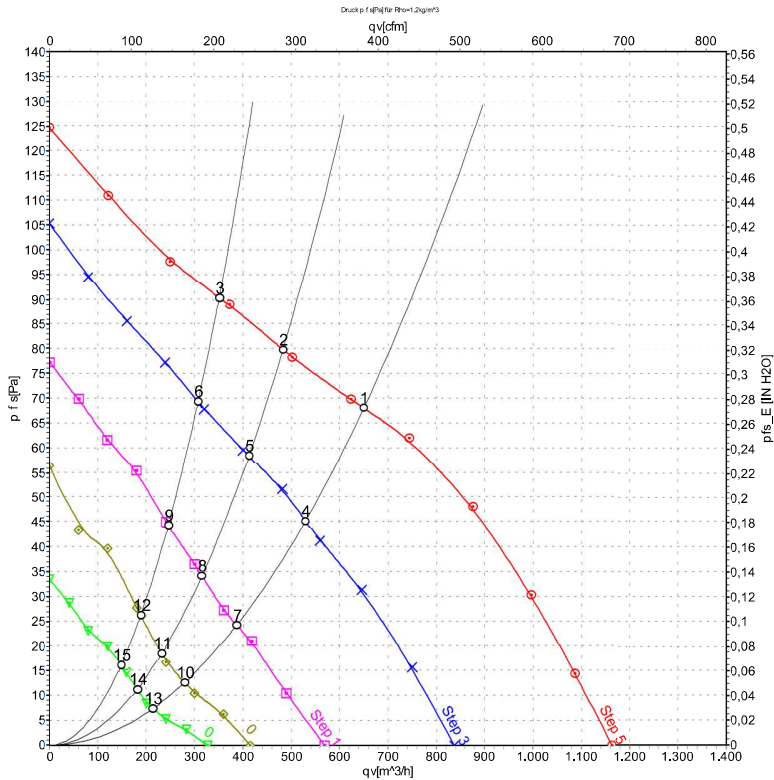


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Curves: Air performance 50 Hz



Measurement: LU-103355-1
 Measurement: LU-73391-1
 Measurement: LU-73392-1
 Measurement: LU-73393-1
 Measurement: LU-73395-1

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	LpA _{in}	LwA _{in}	LwA _{out}	q _v	p _{ts}	q _v	p _{ts}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa	cfm	in. wg
1	5	230	50	1135	71	0.31	45	55	55	650	68	385	0.27
2	5	230	50	1205	68	0.30	46	56	57	485	80	285	0.32
3	5	230	50	1265	64	0.28	46	56	56	350	90	205	0.36
4	4	230	50	915	57	0.26				530	45	310	0.18
5	4	230	50	1015	54	0.25				415	58	245	0.23
6	4	230	50	1110	51	0.23				310	69	180	0.28
7	3	230	50	670	46	0.22				385	24	230	0.10
8	3	230	50	785	44	0.21				315	34	185	0.14
9	3	230	50	890	42	0.20				245	44	145	0.18
10	2	230	50	505	14	0.16				280	13	165	0.05
11	2	230	50	590	14	0.15				230	18	135	0.07
12	2	230	50	690	14	0.15				190	26	110	0.10
13	1	230	50	390	9.4	0.13				215	7	125	0.03
14	1	230	50	455	9.5	0.13				180	11	105	0.04
15	1	230	50	535	9.5	0.13				150	16	85	0.06

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
 LwA_{out} = Sound power level outlet side · q_v = Air flow · p_{ts} = Pressure increase

