

K4E146-AB73-18

AC centrifugal fan combination

forward curved, dual inlet
with housing



K4E146-AB73-18 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	K4E146-AB73-18	
Motor	M4E068-DF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		cs
Valid for approval / standard		CE
Speed	min ⁻¹	1135
Power input	W	71
Current draw	A	0.31
Motor capacitor	µF	2.5
Capacitor voltage	VDB	450
Capacitor standard		P2 (CE)
Min. back pressure	Pa	68
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	0.43

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



AC centrifugal fan combination

forward curved, dual inlet

with housing

Technical features

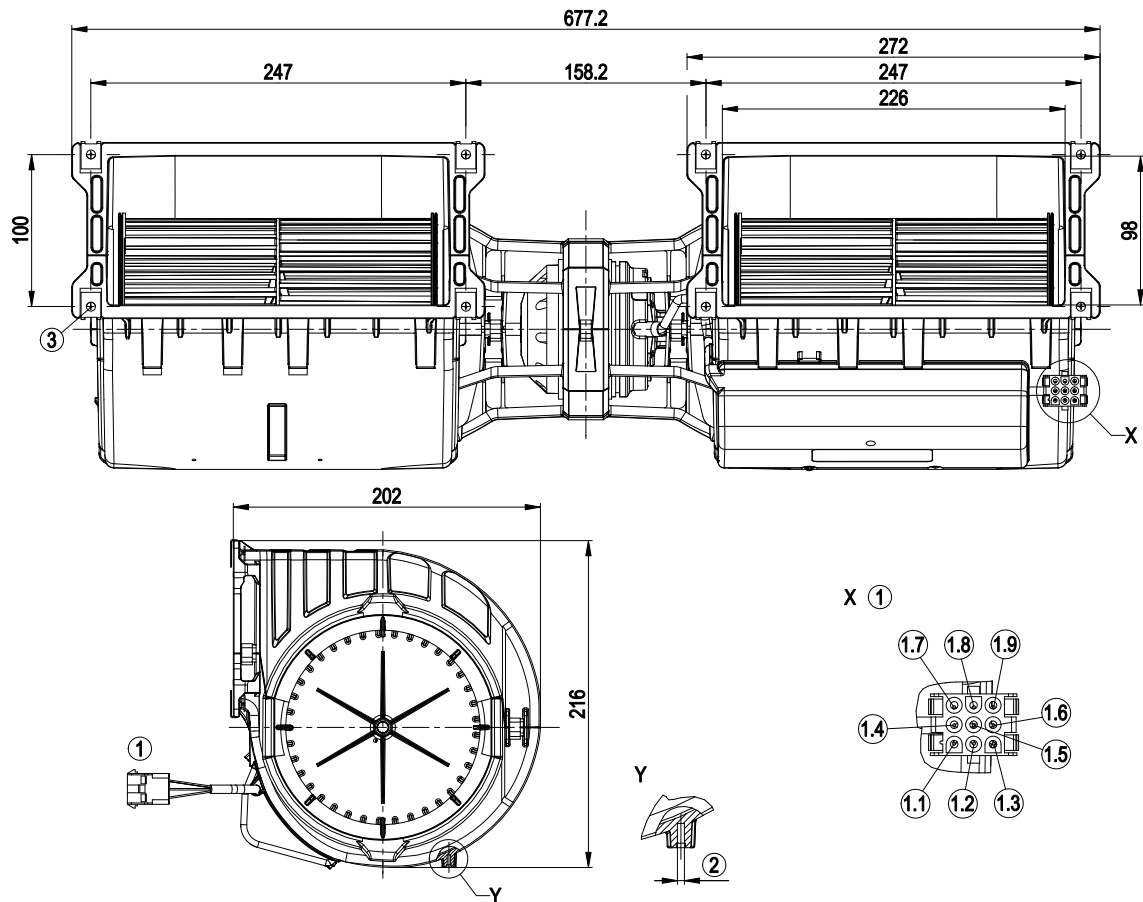
Mass	4.2 kg
Size	146 mm
Surface of rotor	Partially cast in aluminium
Material of terminal box	PA plastic
Material of impeller	PA plastic
Housing material	PP plastic
Motor suspension	Motor mounted anti-vibration on both sides
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending 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) brought out
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE



AC centrifugal fan combination

forward curved, dual inlet
with housing

Product drawing

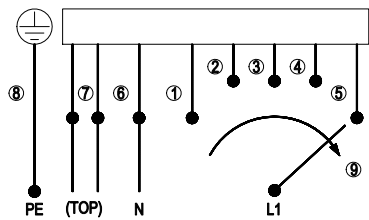


1	Coded plug system: Connector housing 9-pole Tyco 927231-5, 9x plug pin Tyco 926886-1
1.1	Step 1 (min.)
1.2	Step 2
1.3	Step 3
1.4	Step 4
1.5	Step 5 (max.)
1.6	(TOP)
1.7	(TOP)
1.8	N
1.9	Protective earth
2	For M3 screw threads, depth of screw max. 8 mm
3	8x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

AC centrifugal fan combination

forward curved, dual inlet
with housing

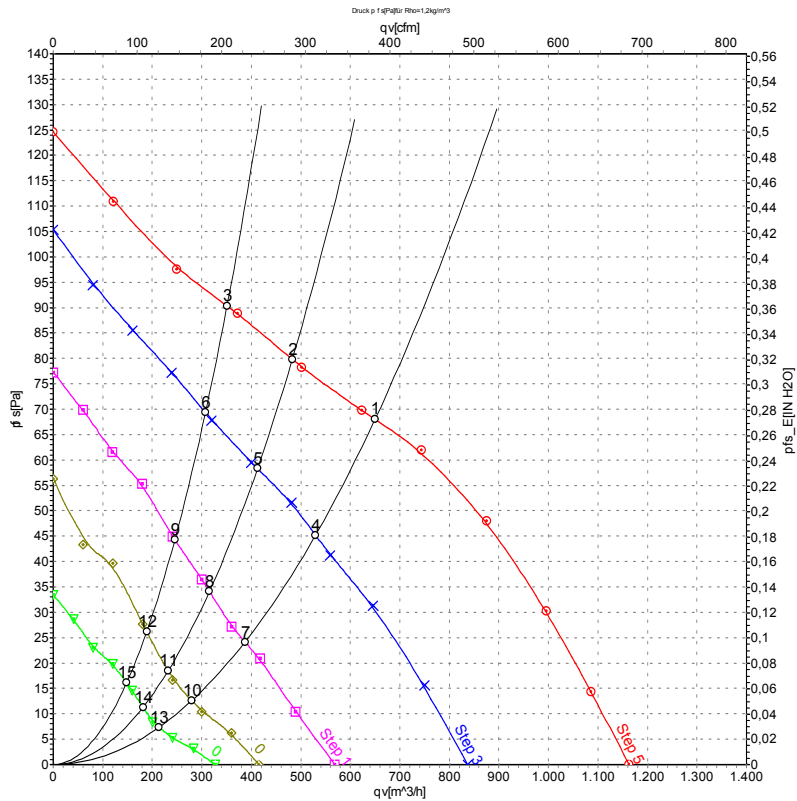
Connection screen



1	Stage 1(min.), white
2	Stage 2, red
3	Stage 3, grey
4	Stage 4, orange
5	Stage 5 (max.), black
6	N blue
7	2x yellow (TOP)
8	green/yellow (PE)
9	Speed increase



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: L_{wA} measured as per ISO 13347 /
 L_{pA} 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}	LwA _{out}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa
1	5	230	50	1135	71	0.31	45	55	55	650	68
2	5	230	50	1205	68	0.30	46	56	57	485	80
3	5	230	50	1265	64	0.28	46	56	56	350	90
4	4	230	50	915	57	0.26				530	45
5	4	230	50	1015	54	0.25				415	58
6	4	230	50	1110	51	0.23				310	69
7	3	230	50	670	46	0.22				385	24
8	3	230	50	785	44	0.21				315	34
9	3	230	50	890	42	0.20				245	44
10	2	230	50	505	14	0.16				280	13
11	2	230	50	590	14	0.15				230	18
12	2	230	50	690	14	0.15				190	26
13	1	230	50	390	9.4	0.13				215	7
14	1	230	50	455	9.5	0.13				180	11
15	1	230	50	535	9.5	0.13				150	16

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 · LwA_{out} = Sound power level outlet side
 qv = Air flow · p_{fs} = Pressure increase