K3G146-AC15-06

EC centrifugal fan combination

forward curved

with housing

K3G146-AC15-06 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	**K3G146-AC15-06**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	910
Power input	W	60
Current draw	A	0.5
Min. back pressure	Pa	25
Min. ambient temperature	°C	-25
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	3.4 kg
Size	146 mm
Surface of rotor	Galvanised
Material of electronics housing	PP 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	Motor IP 44, electronic IP 20; Depending on installation and position
Insulation class	"F"
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, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Fault output (open collector) - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
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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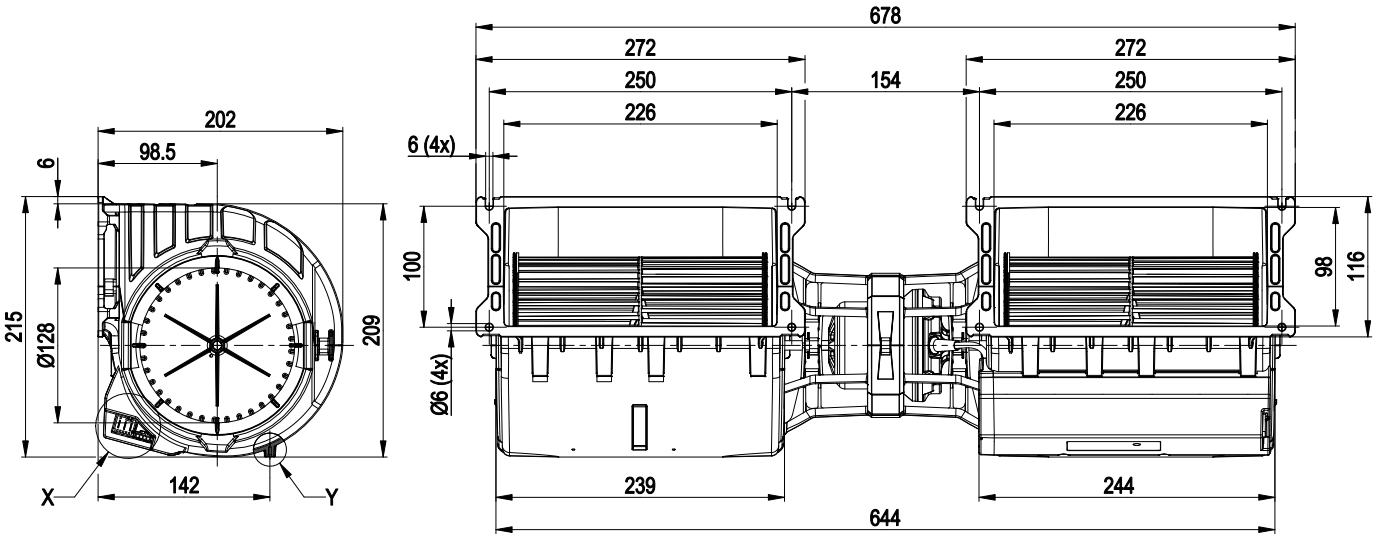
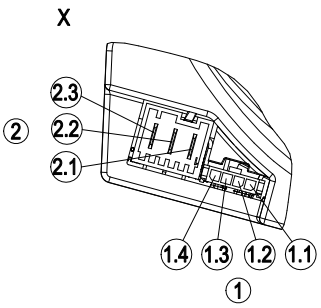
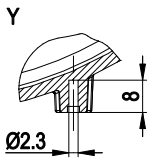
Product drawing







1	Strip Molex Micro Fit 3.0 04365 00400 (pluggable with 04364 50400)
1.1	10 V
1.2	FG/FB
1.3	0-10 V lin. / PWM
1.4	GND
2	Plug connector Lumberg 3642 03 K01 (pluggable with 3626 03 K01)
2.1	PE
2.2	L
2.3	N

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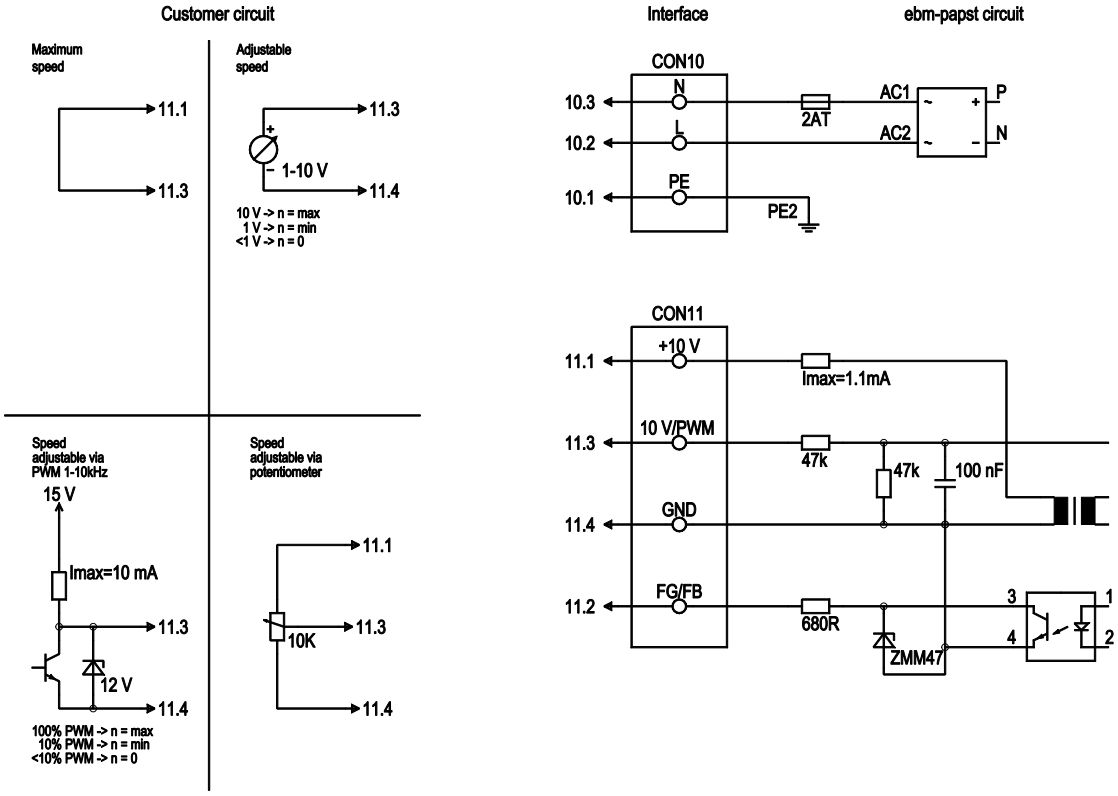
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
CON10	10.1	PE	green/yellow	Protective earth
CON10	10.2	L	blue	Neutral conductor
CON10	10.3	N	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
CON11	11.1	10 V/max. 1.1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, not short-circuit-proof
CON11	11.2	FG/FB	white	Fan good/fan bad: open collector, fan good = low, electrically isolated
CON11	11.3	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
CON11	11.4	GND	blue	GND - Connection for control interface

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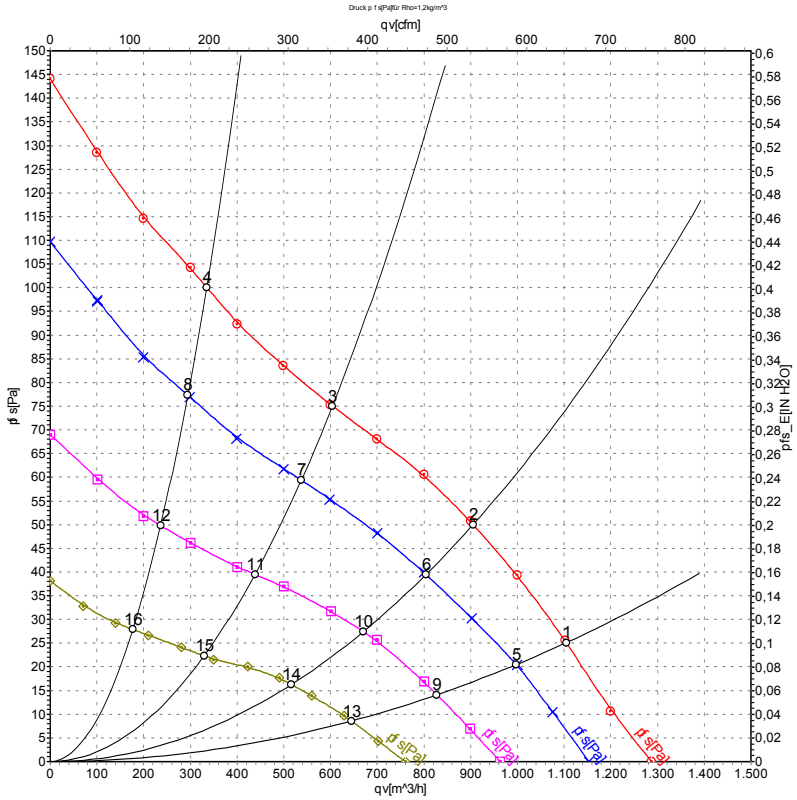
Charts: Air flow 50 Hz



Measurement: LU-132605
Measurement: LU-132537
Measurement: LU-132538
Measurement: LU-132540

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

	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	910	60	0.50	44	57	1105	25
2	230	50	1025	53	0.45	43	56	905	50
3	230	50	1160	42	0.37	44	56	605	75
4	230	50	1320	32	0.28	46	58	335	100
5	230	50	825	44	0.40			995	21
6	230	50	910	38	0.35			805	40
7	230	50	1030	30	0.28			535	59
8	230	50	1160	23	0.22			295	77
9	230	50	695	25	0.24			830	14
10	230	50	755	22	0.20			670	28
11	230	50	845	17	0.16			440	40
12	230	50	935	13	0.13			235	50
13	230	50	545	13	0.12			645	9
14	230	50	590	11	0.11			515	16
15	230	50	645	8.8	0.09			330	22
16	230	50	705	6.7	0.08			175	28

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = 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