K3G146-AC15-13

EC centrifugal fan combination

forward-curved

with housing

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Nominal data

Type	**K3G146-AC15-13**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	910
Power consumption	W	60
Current draw	A	0.5
Min. back pressure	Pa	25
Min. back pressure	in. wg	0.1
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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	3.4 kg
Size	146 mm
Motor size	55
Rotor surface	Thick-film passivated
Electronics housing 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	Motor IP44, electronics IP20; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0+
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, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for motor
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Plug
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-7 + 60730-1; CSA C22.2 No. 77 + CAN/CSA-E60730-1

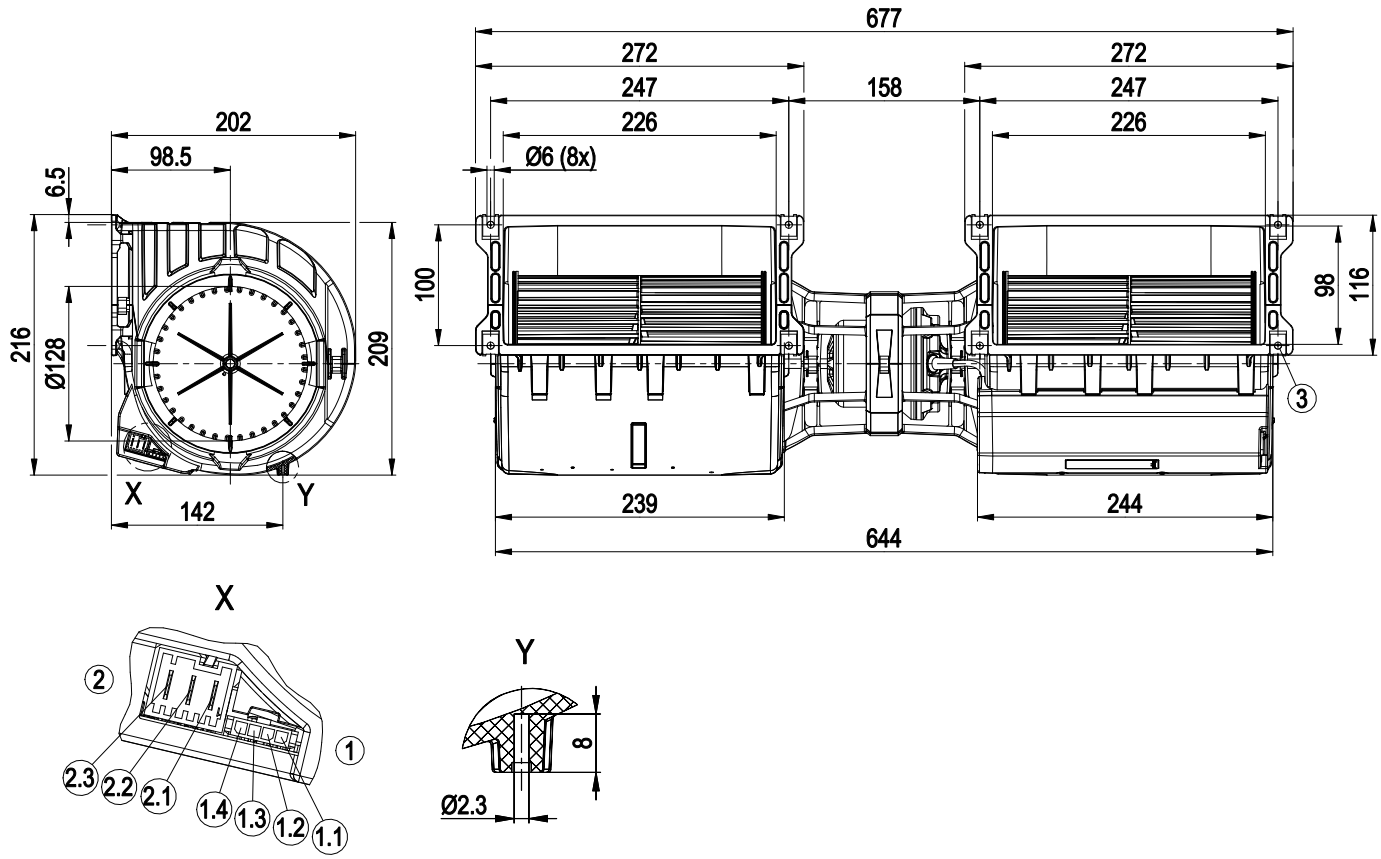
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Product drawing



1	Header Molex Micro Fit 3.0 04365 00400 (pluggable with 04364 50400)
1.1	10 V
1.2	Tach
1.3	0-10 V lin. / PWM
1.4	GND
2	Connector Lumberg 3642 03 K01 (pluggable with 3626 03 K01)
2.1	PE
2.2	L
2.3	N
3	8x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus material thickness of attachment)

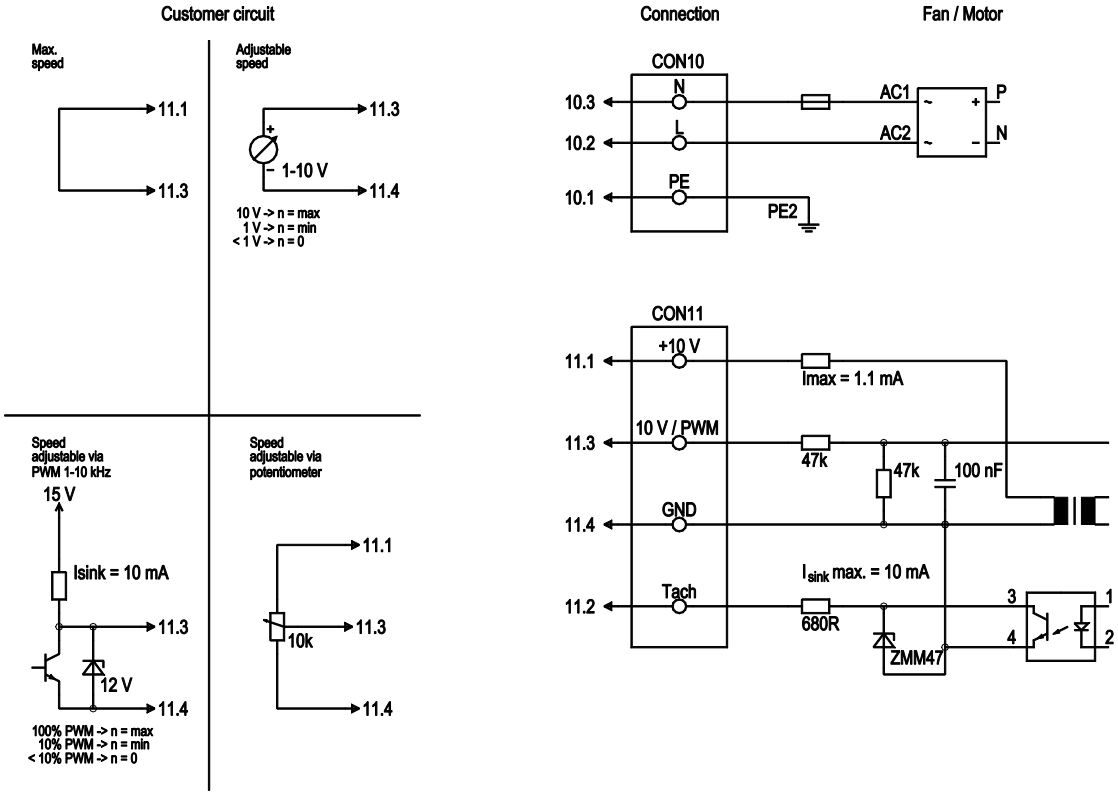
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
CON10	10.1	PE	green/yellow	Protective earth
CON10	10.2	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
CON10	10.3	N	blue	Neutral conductor
CON11	11.1	10 V/max. 1.1 mA	red	Voltage output 10 V, 1.1 mA, electrically isolated, not short-circuit-proof
CON11	11.2	Tach	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA
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

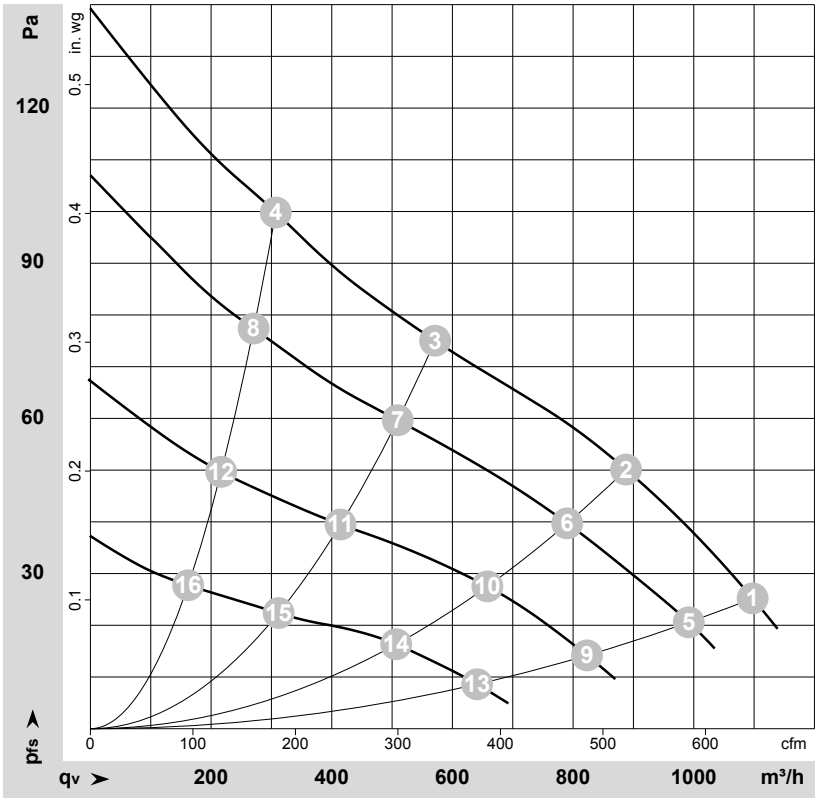
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-132605-1
Measurement: LU-132537-1
Measurement: LU-132538-1
Measurement: LU-132540-1

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

	Wired	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	1~	230	50	910	60	0.50	45	58	1100	25	645	0.10
2	1~	230	50	1030	52	0.48	43	56	890	50	525	0.20
3	1~	230	50	1180	41	0.38	44	56	570	75	335	0.30
4	1~	230	50	1340	31	0.29	47	59	305	100	180	0.40
5	1~	230	50	830	44	0.39			990	21	585	0.08
6	1~	230	50	920	38	0.35			790	40	465	0.16
7	1~	230	50	1045	29	0.28			510	60	300	0.24
8	1~	230	50	1170	22	0.21			270	77	160	0.31
9	1~	230	50	695	25	0.24			825	14	485	0.06
10	1~	230	50	760	22	0.20			660	28	385	0.11
11	1~	230	50	855	17	0.16			415	39	245	0.16
12	1~	230	50	945	13	0.12			215	50	130	0.20
13	1~	230	50	545	12	0.12			640	9	375	0.04
14	1~	230	50	595	11	0.11			505	16	300	0.06
15	1~	230	50	650	9.0	0.09			310	22	185	0.09
16	1~	230	50	710	7.0	0.08			160	28	95	0.11

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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