K3G160-AD01-06

EC centrifugal fan combination

forward curved, dual inlet

with housing

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**K3G160-AD01-06**
Motor	**M3G074-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	1300
Power input	W	240
Current draw	A	1.8
Min. back pressure	Pa	50
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	45.7	26	33
Efficiency grade N		56.7	37	44
Power input P_{ed}	kW	0.18		
Air flow q_v	m^3/h	1200		
Pressure increase p_{fs}	Pa	217		
Speed n	min^{-1}	1710		

Data definition with optimum efficiency. LU-150971
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

Mass	6.3 kg
Size	160 mm
Surface of rotor	Galvanised
Material of electronics housing	PP plastic
Material of impeller	Sheet steel, galvanised
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 interference emission	Acc. to EN 61000-6-3 (household environment), except EN 61000-3-2
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	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

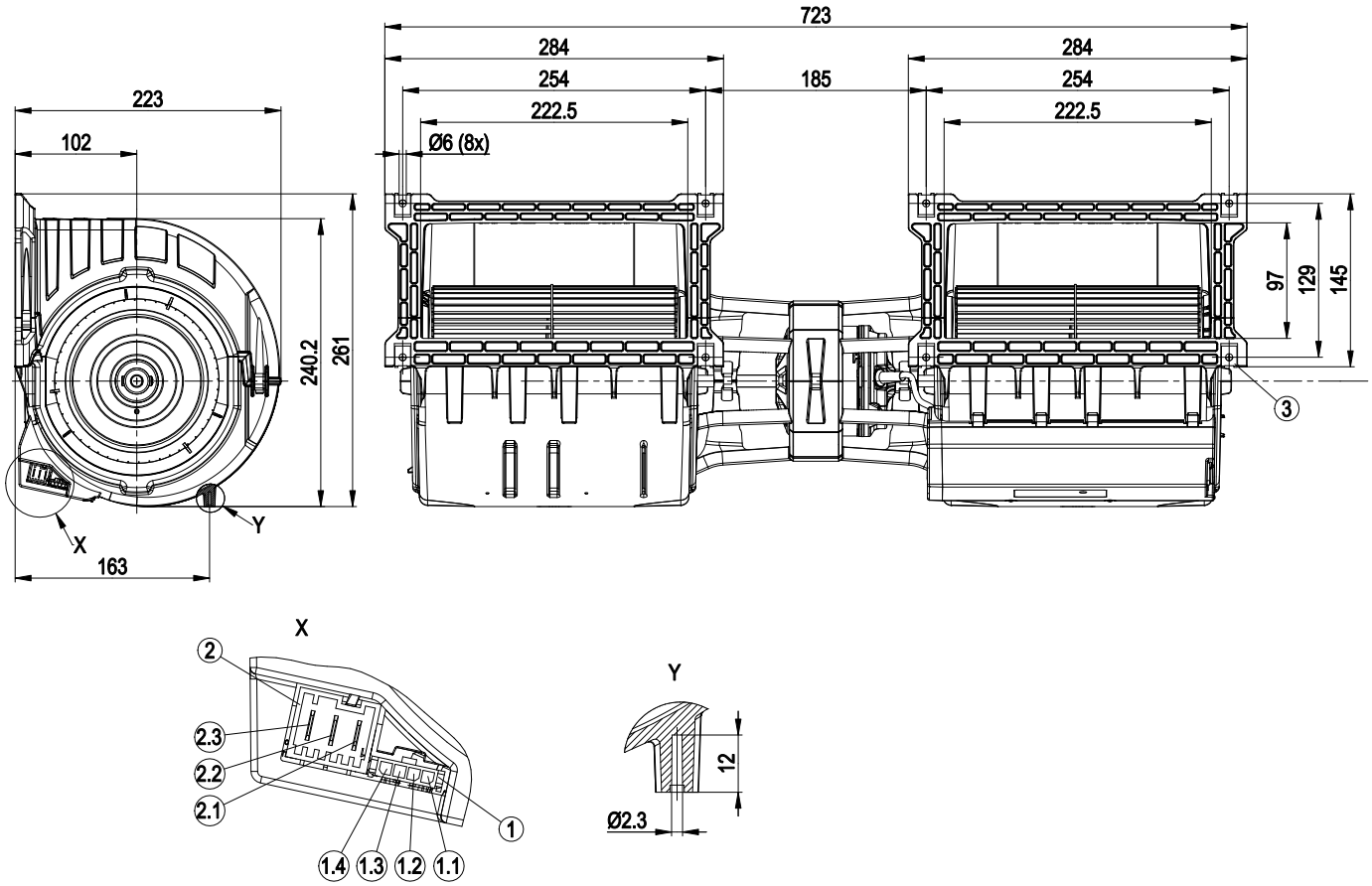
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Product drawing



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
3	8x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

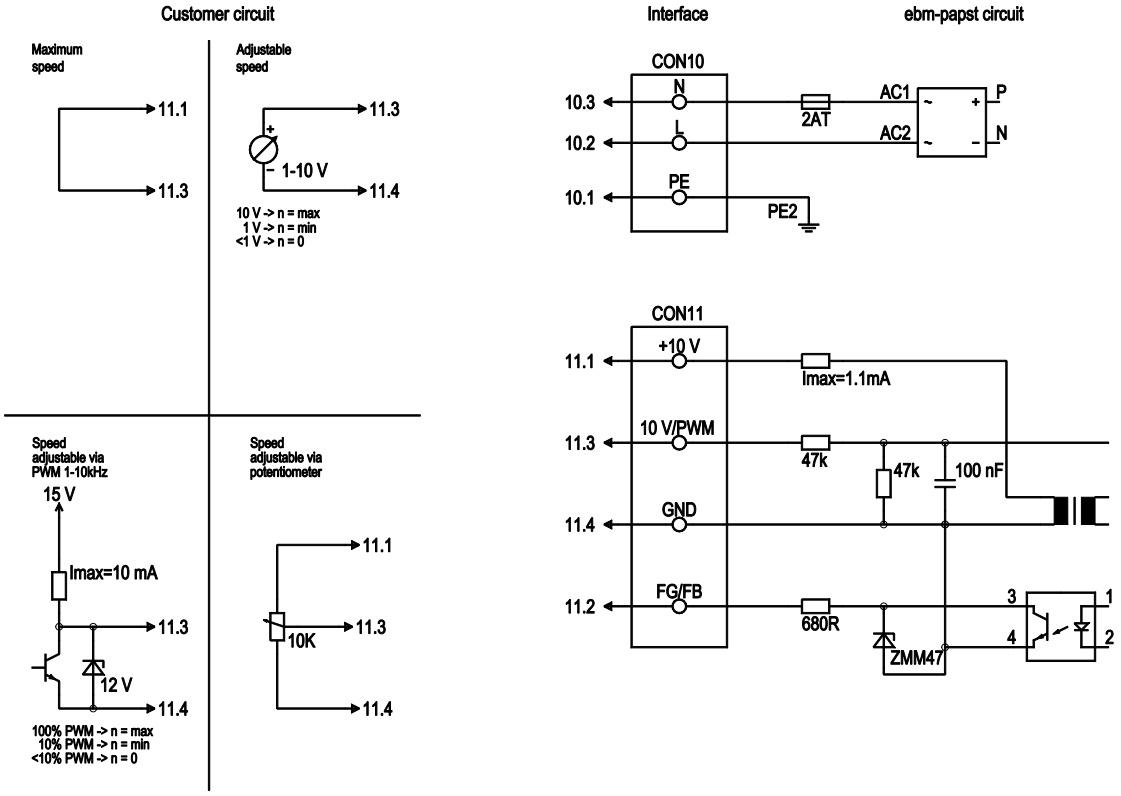
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Connection screen



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

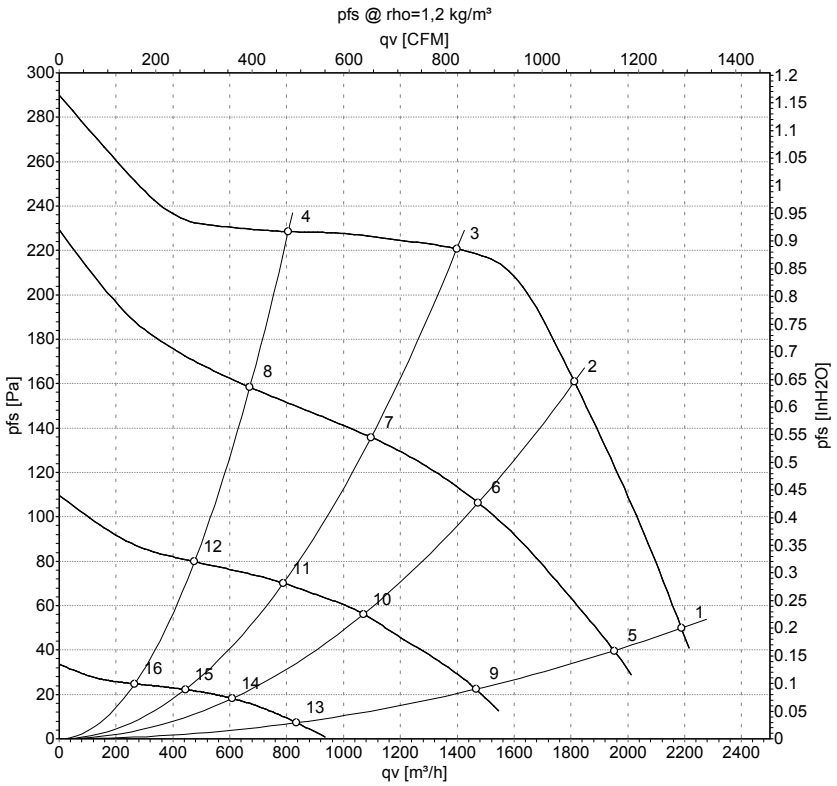
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Charts: Air flow 50 Hz



Measurement: LU-150971

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	1300	240	1.80	60	71	2190	50
2	230	50	1560	240	1.80	58	69	1810	160
3	230	50	1710	209	1.70	58	69	1400	220
4	230	50	1705	129	1.10	58	69	805	225
5	230	50	1160	169	1.40			1950	40
6	230	50	1270	128	1.07			1475	106
7	230	50	1350	103	0.85			1095	136
8	230	50	1430	77	0.64			670	158
9	230	50	875	71	0.60			1465	23
10	230	50	940	53	0.44			1070	57
11	230	50	975	42	0.36			790	70
12	230	50	1020	31	0.27			475	80
13	230	50	515	17	0.16			835	7
14	230	50	540	13	0.13			610	18
15	230	50	560	11	0.11			445	22
16	230	50	575	9.0	0.09			265	25

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

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