K3G200-BDA8-02

EC diagonal module

backward-curved, single-intake

with support bracket

K3G200-BDA8-02 ebmpapst Datesheet

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Nominal data

Type	**K3G200-BDA8-02**
Motor	**M3G074-CF**

Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	5350
Power consumption	W	380
Current draw	A	8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Data according to Commission Regulation (EU) 327/2011 (prEN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	47.9	35.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		62	50
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.45
09 Air flow q_v	m^3/h	900
09 Pressure increase p_{fs}	Pa	785
10 Speed (rpm) n	min^{-1}	5355
11 Specific ratio*		1.01

Data obtained at optimum efficiency level.

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

LU-197433

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.

The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

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Technical description

Weight	2.1 kg
Size	200 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA plastic
Housing material	PA plastic
Support bracket material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1+
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
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Standstill on cable break - Thermal overload protection for electronics - Reverse polarity protection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B, household environment)
With cable	Lateral
Protection class assignment	III; Supply with safety extra-low voltage SELV. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CCC; EAC

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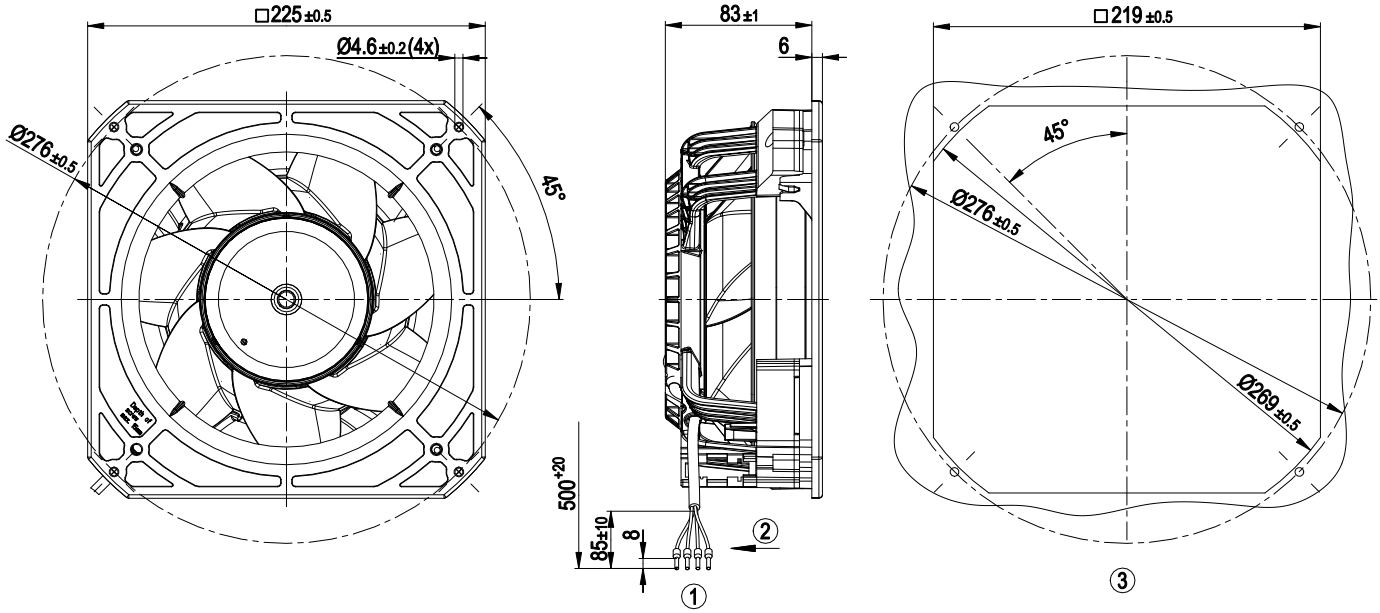
Product drawing



1	Cable PVC AWG16, 4x crimped ferrules
2	Direction of air flow "V"
3	Mounting dimensions

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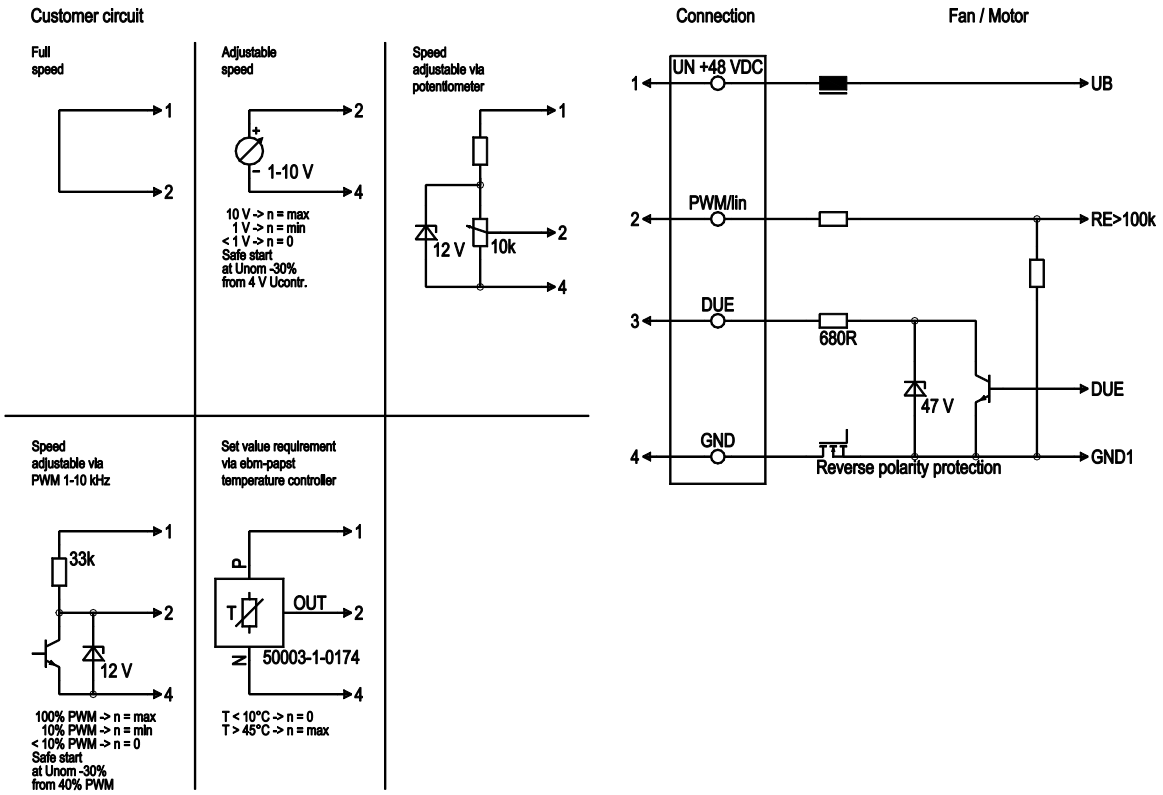
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	1	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%
	2	0-10 VDC	yellow	Control input Re > 100 K
	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference ground

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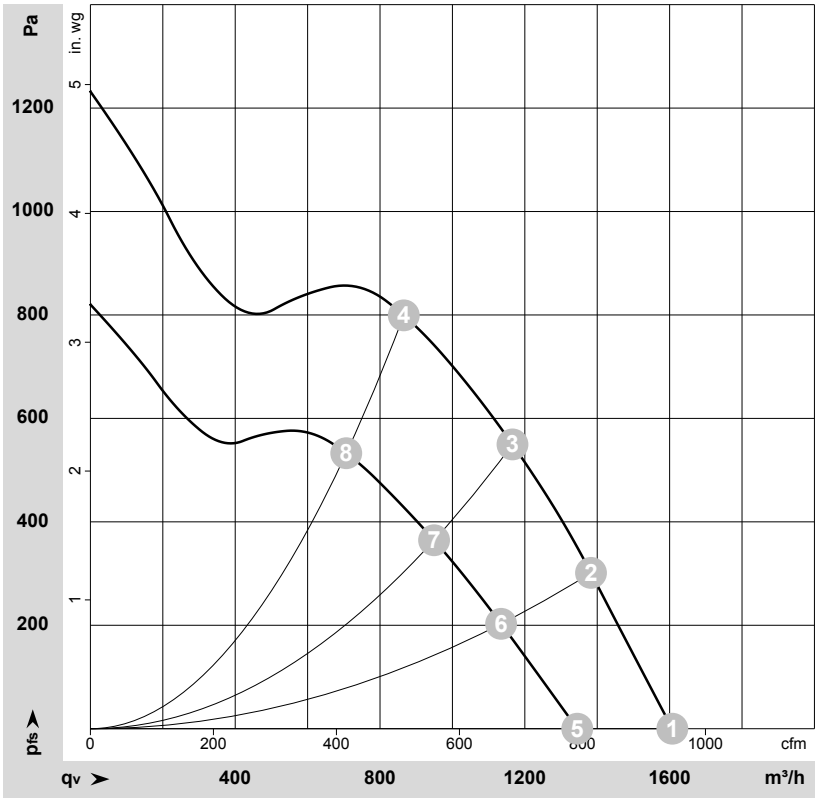
Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-197433-1
Date: 2019-02-15
Nozzle: 20211-2-2911

Measurement: LU-197461-1
Date: 2019-02-15

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

	U	n	P_{ed}	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	48	5350	380	8.00	79	86	1605	0	945	0.00
2	48	5350	428	8.89	79	86	1385	300	815	1.20
3	48	5350	456	9.50	79	86	1165	550	685	2.21
4	48	5350	449	9.34	79	86	865	800	510	3.21
5	36	4480	220	6.09			1345	0	790	0.00
6	36	4405	235	6.52			1135	203	665	0.81
7	36	4375	246	6.81			950	365	560	1.47
8	36	4380	244	6.76			705	534	415	2.14

U = Voltage · 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