K3G200-BDA8-14

EC diagonal module

backward-curved, single-intake

with support bracket



ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**K3G200-BDA8-14**
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 (EN 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	2.2 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
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	Shaft horizontal or rotor on bottom; rotor on top on request
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Hybrid bearing
Technical features	- Fault output (open collector) - 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; Requires supply with safety extra-low voltage SELV. This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	EAC

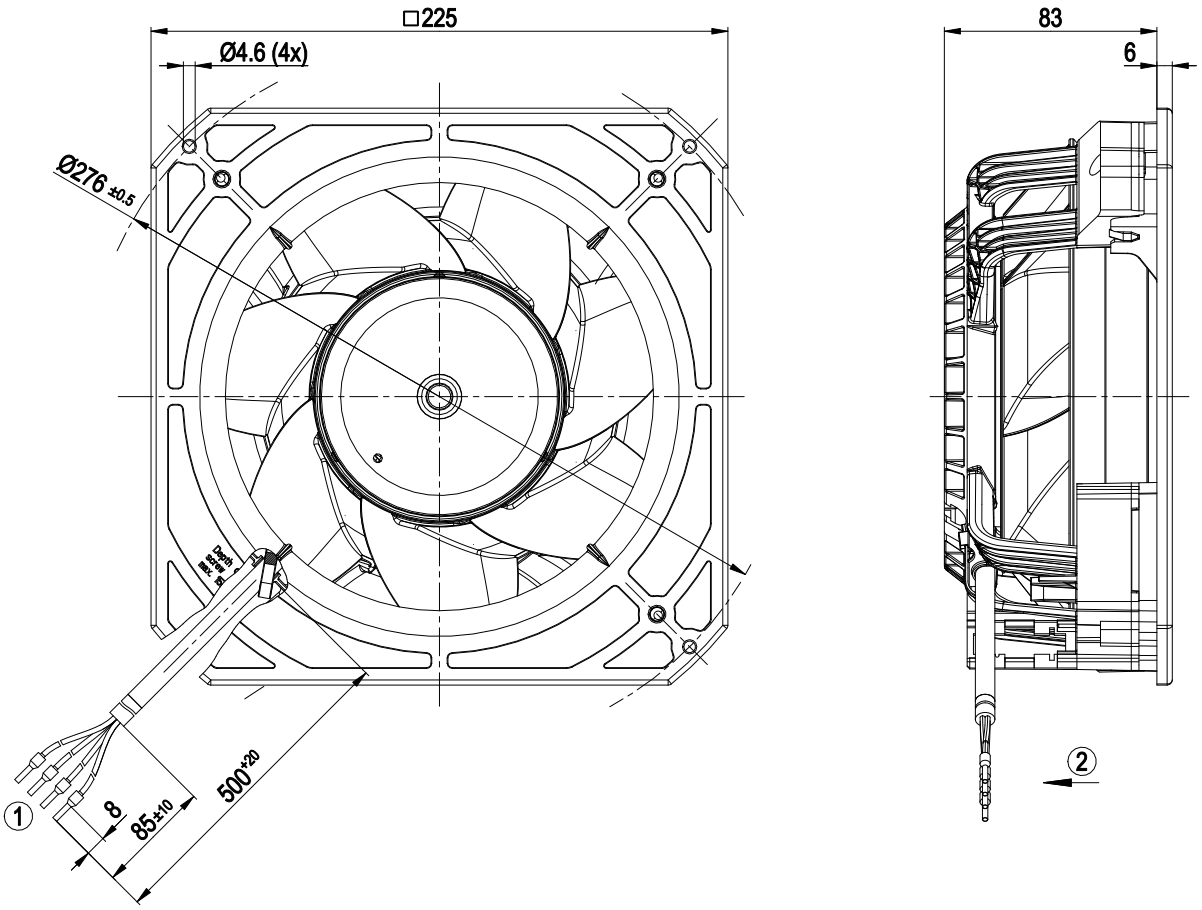
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Product drawing



1	Cable PVC AWG16
	4x wire-end ferrule
2	Airflow direction "V"

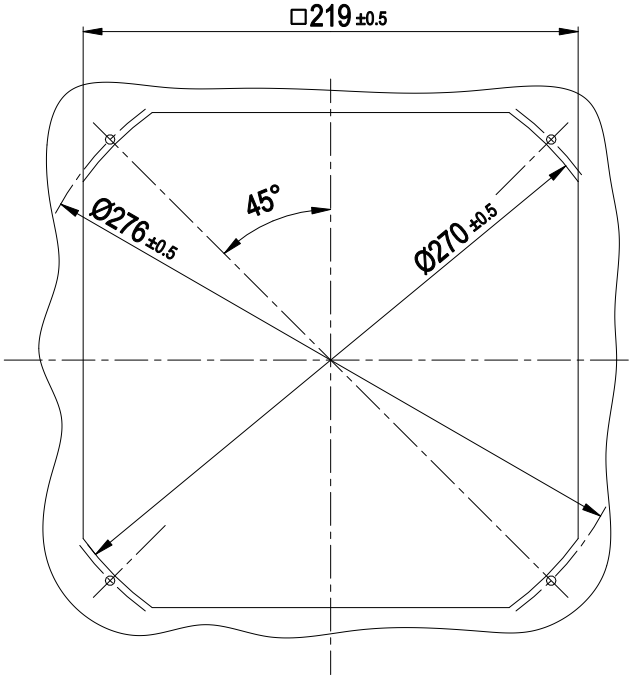
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Mounting dimensions



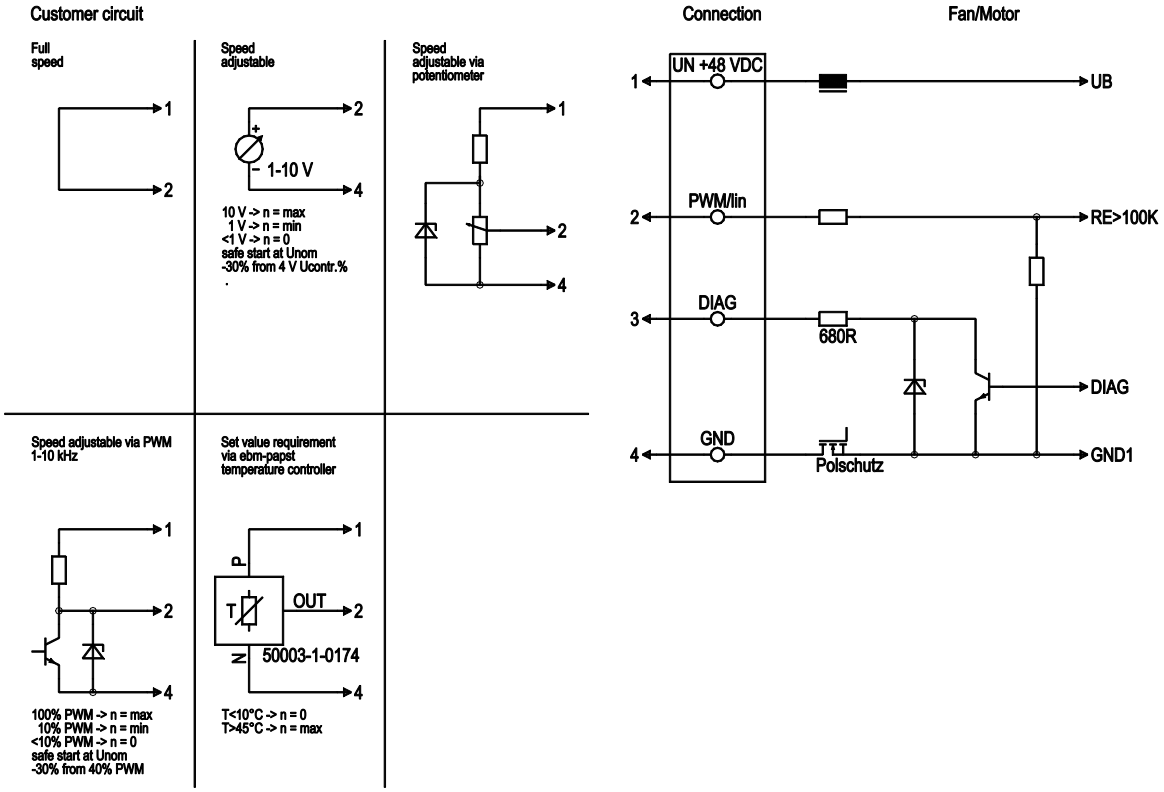
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Connection diagram



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	DIAG	white	Fan good/Fan bad: Open collector, Fan good: Control voltage > 1 V / 10% PWM, speed > n min Fan bad: Control voltage < 0.8 V / 8% PWM, speed < n min, Isink max = 10 mA
	4	GND	blue	Reference ground

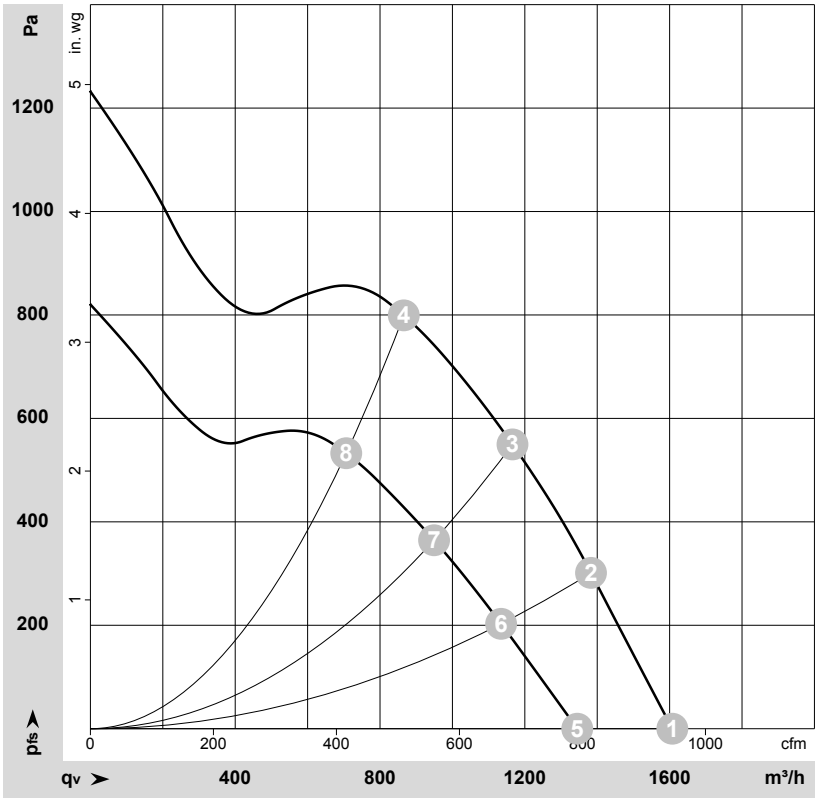
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-197433-1
Measurement: LU-197461-1

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

	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

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