K3G200-BD46-04

EC diagonal module

backward-curved, single-intake

with support bracket

K3G200-BD46-04 ebmpapst Datesheet

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Nominal data

Type	**K3G200-BD46-04**
Motor	**M3G074-CF**

Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4100
Power consumption	W	170
Current draw	A	7.0
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}	%	48.7	31.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		66.8	50
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.18
09 Air flow q_v	m^3/h	725
09 Pressure increase p_{fs}	Pa	399
10 Speed (rpm) n	min^{-1}	4010
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

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

LU-155608

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	2.24 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	IP44; 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
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Reverse polarity protection
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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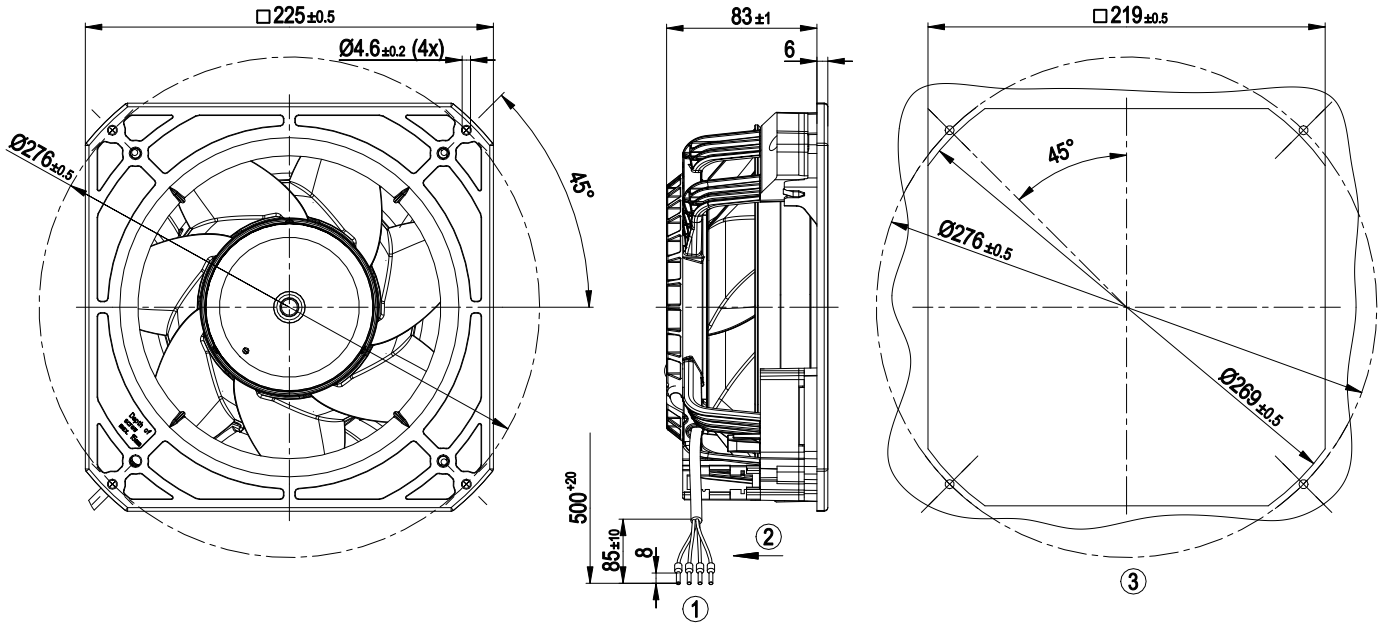
Product drawing



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

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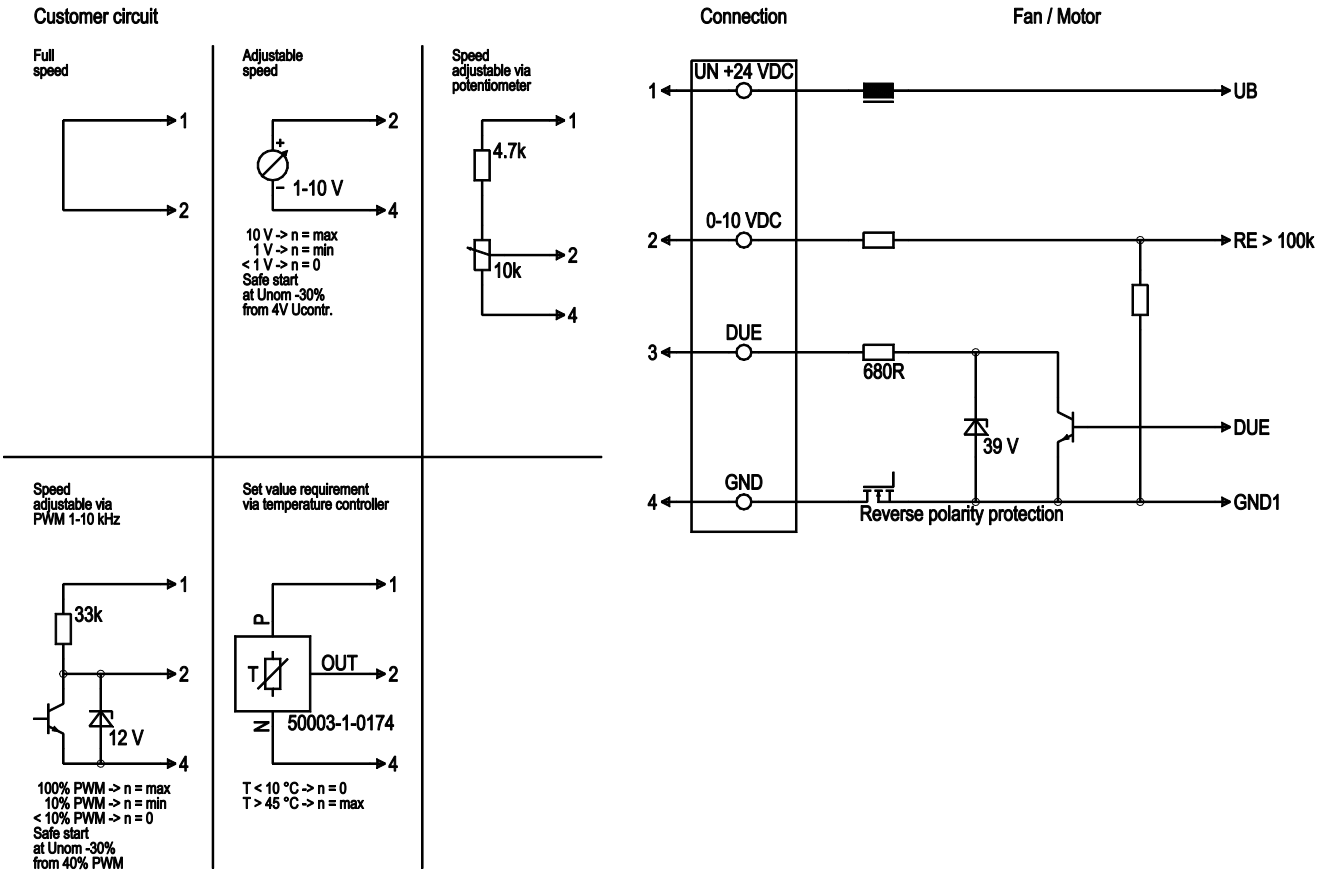
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	1	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%
	2	0-10 VDC	yellow	Control input Re > 100k
	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference ground

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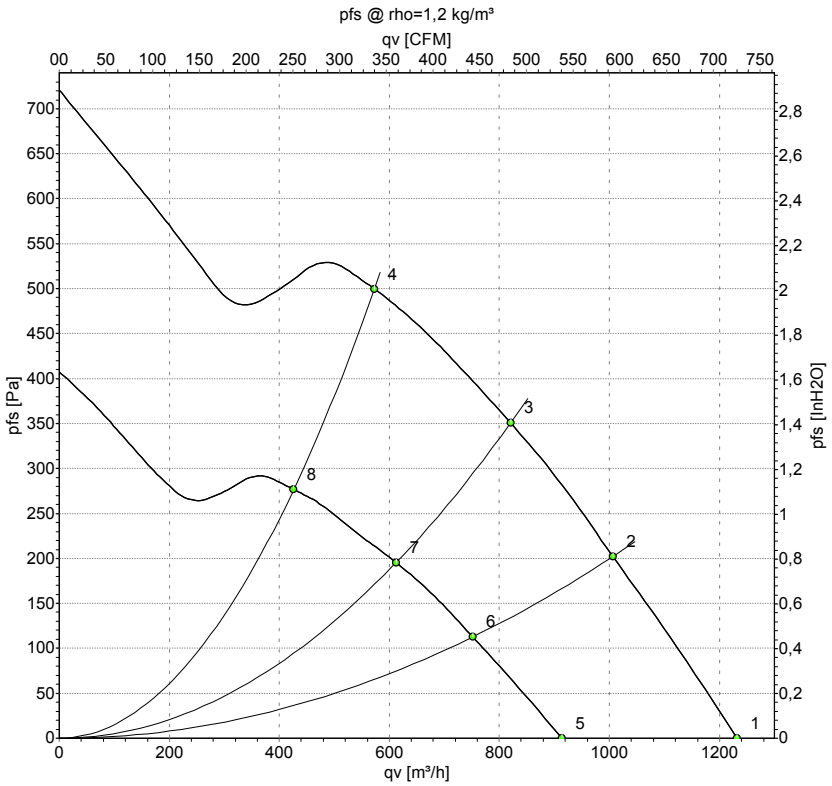
Curves: Air performance



Measurement: LU-155608-1
Measurement: LU-155627-1

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	24-28	4120	170	7.00*	73	80	1230	0	725	0.00
2	24-28	4025	180	7.52*	70	77	1005	200	590	0.80
3	24-28	4005	187	7.80*	69	76	820	350	485	1.41
4	24-28	4045	187	7.78*	71	78	575	500	335	2.01
5	16	3075	71	4.41	65	73	915	0	540	0.00
6	16	3025	77	4.82	62	70	750	113	445	0.45
7	16	3005	79	4.96	62	69	610	196	360	0.79
8	16	3015	78	4.90	64	71	425	277	250	1.11

U = Voltage · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · * = Current measured at nominal voltage · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase