K3G200-BDA1-02

EC diagonal module

single inlet

with support bracket

K3G200-BDA1-02 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**K3G200-BDA1-02**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
State		prelim.
Speed (rpm)	min^{-1}	4060
Power input	W	185
Current draw	A	7.7
Max. back pressure	Pa	450
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	65

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

		Actual	Request 2015
01 Overall efficiency η_{es}	%	45.2	31.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		63.3	50
05 Variable speed drive		Yes	

09 Power input P_e	kW	0.19
09 Air flow q_v	m^3/h	700
09 Pressure increase p_{fs}	Pa	409
10 Speed (rpm) n	min^{-1}	3975
11 Specific ratio*		1.00

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

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

LU-144434

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Technical features

Mass	2.24 kg
Size	200 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Housing material	PA plastic
Material of support bracket	PA plastic
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B, household environment)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Product conforming to standard	EN 60335-1
Approval	EAC

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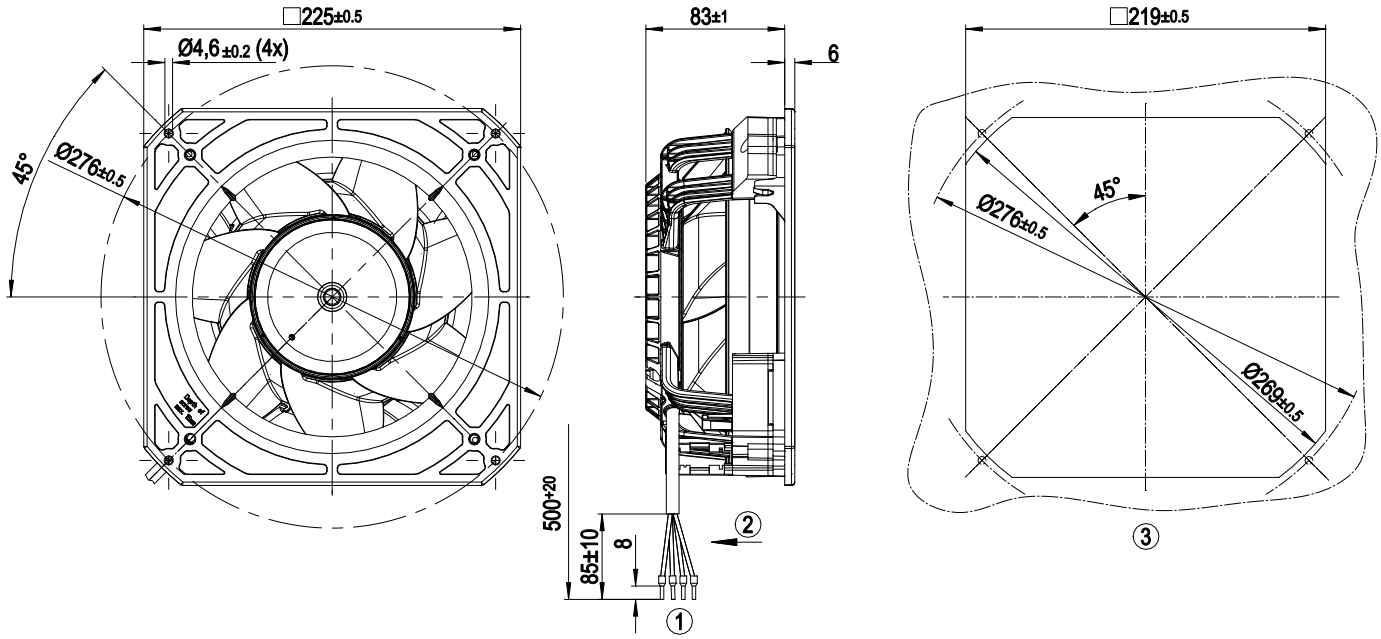
Product drawing



1	Connection line PVC AWG16, 4x crimped core-end sleeves
2	Direction of air flow "V"
3	Mounting dimensions

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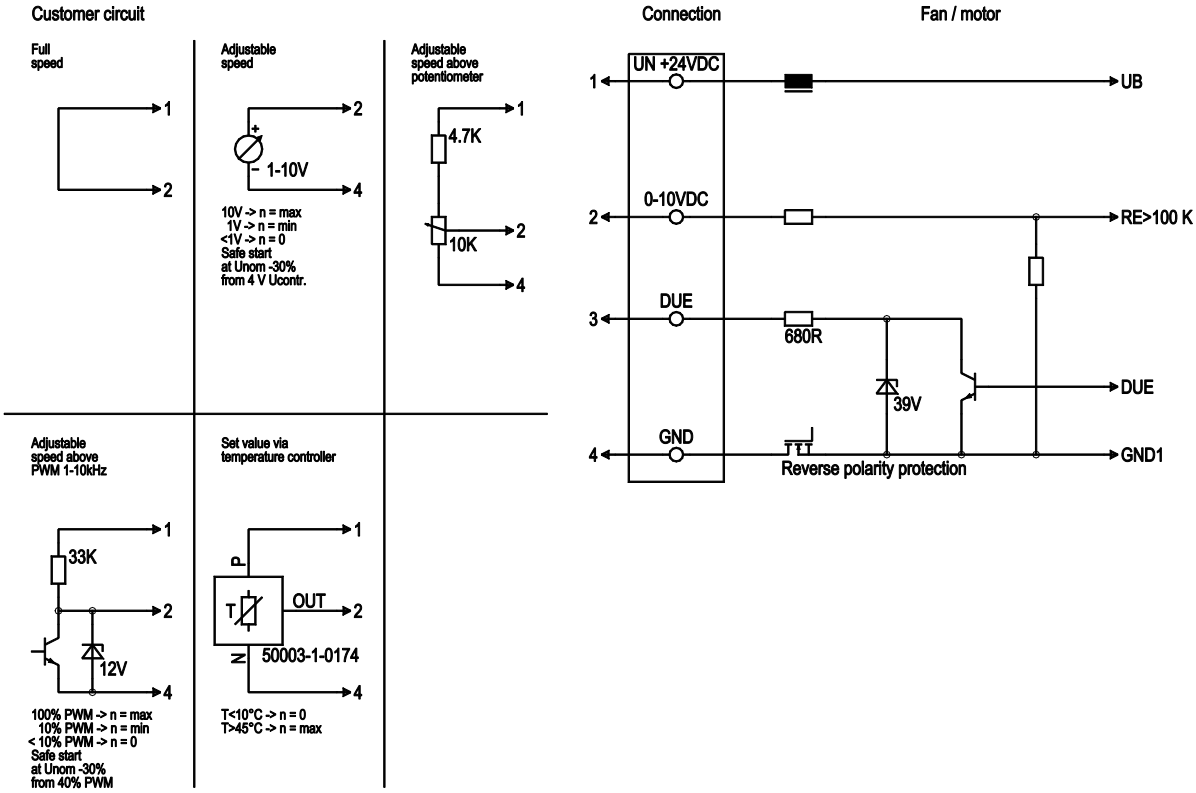
Connection screen



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

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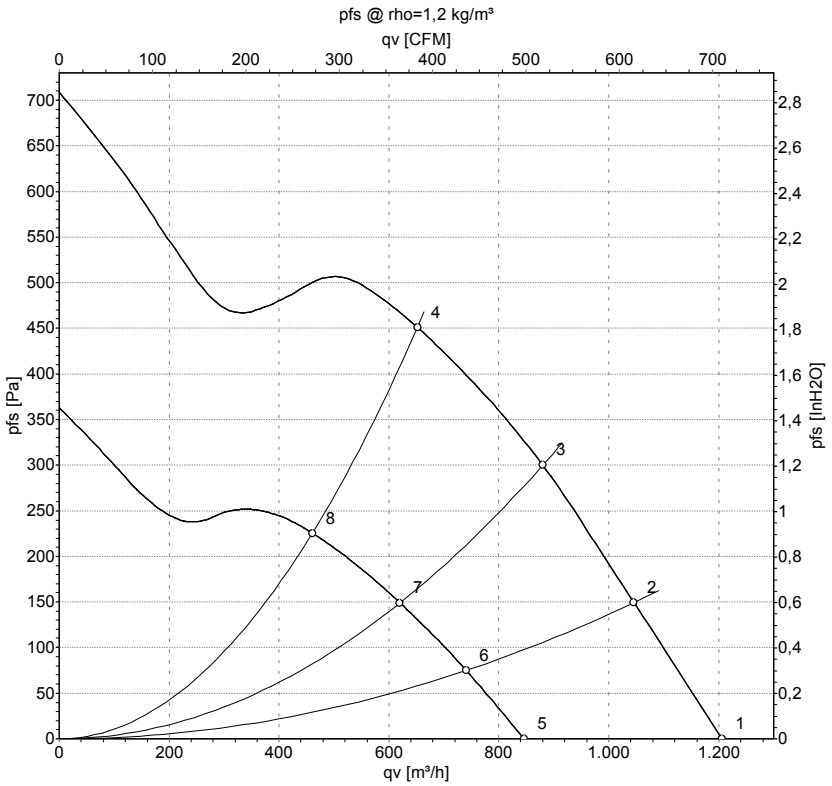
Charts: Air flow



Measurement: LU-144434-1
Measurement: LU-144444-1

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	n	P_{ed}	I	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	24-28	4060	185		72	80	1205	0	710	0.00
2	24-28	3980	188		69	78	1045	150	615	0.60
3	24-28	3965	198		68	77	880	300	520	1.20
4	24	3975	199		69	78	650	450	385	1.81
5	16	2855	71	4.42			845	0	500	0.00
6	16	2850	76	4.74			740	76	435	0.31
7	16	2835	79	4.94			620	149	365	0.60
8	16	2835	80	4.98			460	226	270	0.91

U = Supply voltage · n = Speed (rpm) · 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