

K3G200-BDA4-04 ebmpapst Datasheet  
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## Nominal data

Type	K3G200-BDA4-04	
Motor	M3G074-CF	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
State		prelim.
Speed (rpm)	min <sup>-1</sup>	5050
Power input	W	320
Current draw	A	6.7
Max. back pressure	Pa	750
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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 $\eta_{es}$	%	47.5	34.6	09 Power input $P_e$	kW	0.34
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	800
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	660
04 Efficiency grade N		62.9	50	10 Speed (rpm) $n$	min <sup>-1</sup>	4915
05 Variable speed drive		Yes		11 Specific ratio <sup>*</sup>		1.01

Data definition with optimum efficiency.

The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

<sup>\*</sup> Specific ratio =  $1 + p_{fs} / 100\,000\text{ Pa}$ 

LU-144450



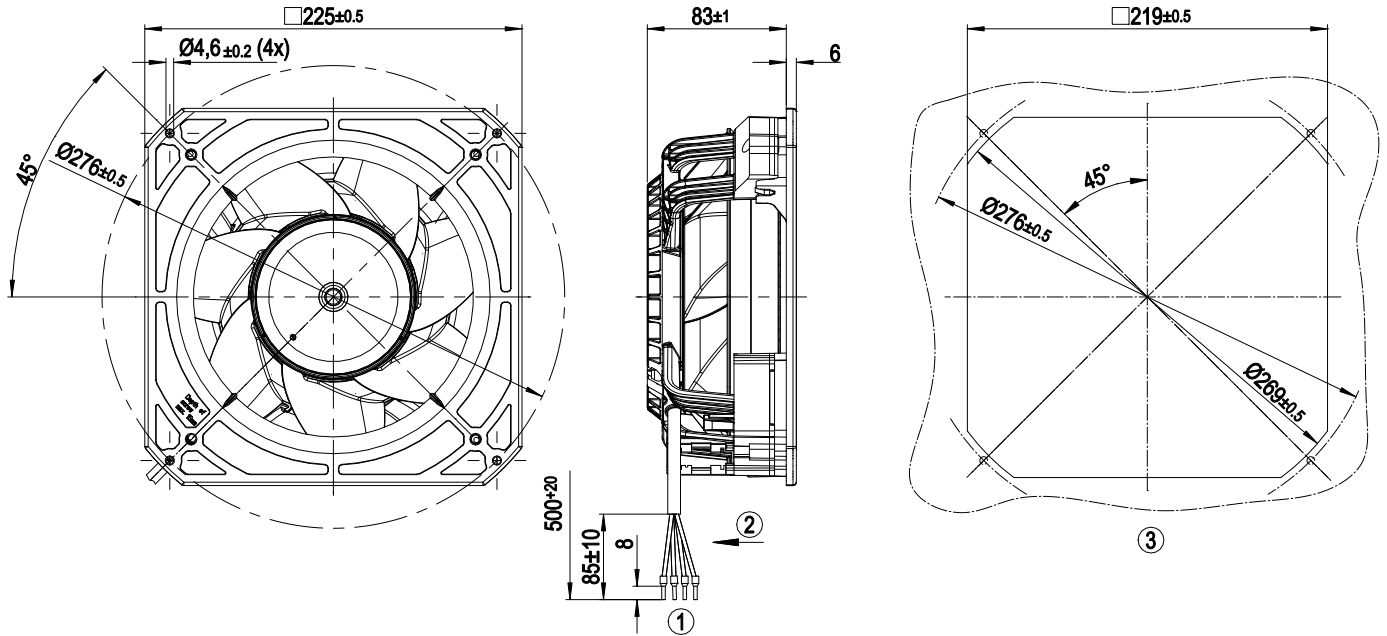
### Technical features

<b>Mass</b>	2.26 kg
<b>Size</b>	200 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</b>	PA plastic
<b>Housing material</b>	PA plastic
<b>Material of support bracket</b>	PA plastic
<b>Number of blades</b>	7
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"B"
<b>Humidity (F)/environmental protection class (H)</b>	F2-1
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Tach output</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Over-temperature protected electronics</li> </ul>
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2 (industrial environment)
<b>EMC interference emission</b>	Acc. to EN 55022 (Class B, household environment)
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>Cable exit</b>	Lateral
<b>Product conforming to standard</b>	EN 60335-1
<b>Approval</b>	CCC

# EC diagonal module

single inlet  
with support bracket

## Product drawing



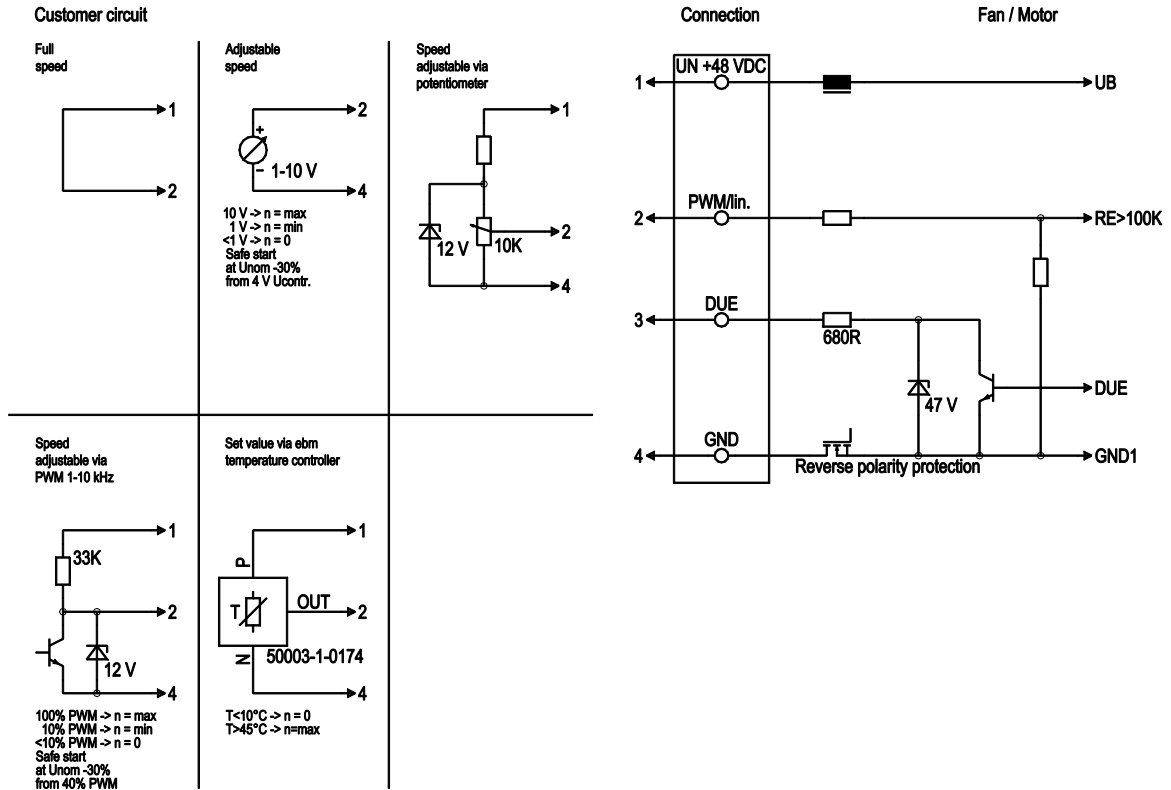
1	Connection line PVC AWG16, 4x crimped core-end sleeves
2	Direction of air flow "V"
3	Mounting dimensions



# EC diagonal module

single inlet  
with support bracket

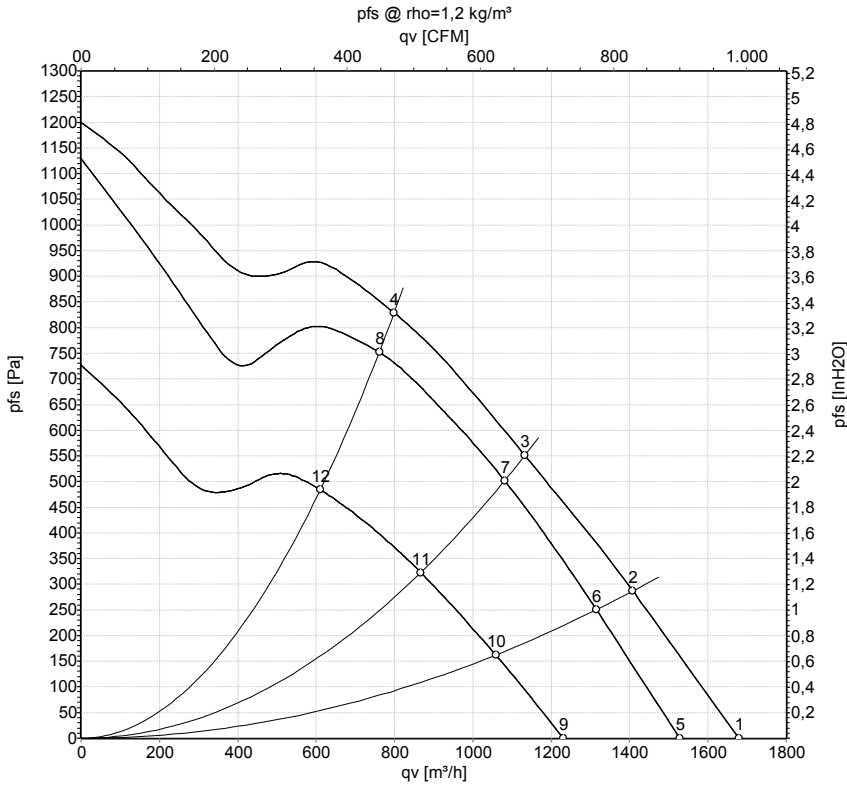
## Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	1	Un +48 VDC	red	Power supply 48 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



## Charts: Air flow



Measurement: LU-134471-1  
 Measurement: LU-134469-1  
 Measurement: LU-134474-1

Air performance measured as per ISO 5801  
 Installation category A. For detailed  
 information on the measuring set-up, please  
 contact ebmpapst. Suction-side noise  
 levels: L<sub>wA</sub> measured as per ISO 13347 /  
 L<sub>pA</sub> 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 <sub>ed</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
	V	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	cfm	inH <sub>2</sub> O
1	57	5550	410	7.20	79	87	1680	0	990	0.00
2	57	5360	413	7.25	77	84	1410	287	830	1.15
3	57	5235	418	7.34	75	83	1135	551	665	2.21
4	57	5260	414	7.27	76	84	800	829	470	3.33
5	48	5050	320	6.70	77	86	1530	0	900	0.00
6	48	5005	343	7.15	75	84	1315	250	775	1.00
7	48	4975	361	7.52	73	82	1080	500	635	2.01
8	48	5025	362	7.54	75	84	760	750	450	3.01
9	36	4065	171	4.75	72	80	1230	0	725	0.00
10	36	4035	183	5.10	69	78	1060	162	625	0.65
11	36	4000	193	5.36	68	76	865	323	510	1.30
12	36	4040	190	5.27	70	78	610	485	360	1.95

U = Supply voltage · n = Speed (rpm) · P<sub>ed</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

