K3G200-BDA4-04

EC diagonal module

single inlet

with support bracket

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ErP2015 EXCEEDS THE NORM

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	min^{-1}	5140
Power input	W	339
Current draw	A	7.1
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

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.01

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		47.5	31.6	34.6
Efficiency grade N		62.9	47	50
Power input P_e	kW	0.34		
Air flow q_v	m^3/h	800		
Pressure increase p_{fs}	Pa	660		
Speed n	min^{-1}	4915		

Data established at point of optimum efficiency

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Technical features

Mass	2.26 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 44; Depending on installation and position
Insulation class	"B"
Humidity class	F2-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
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

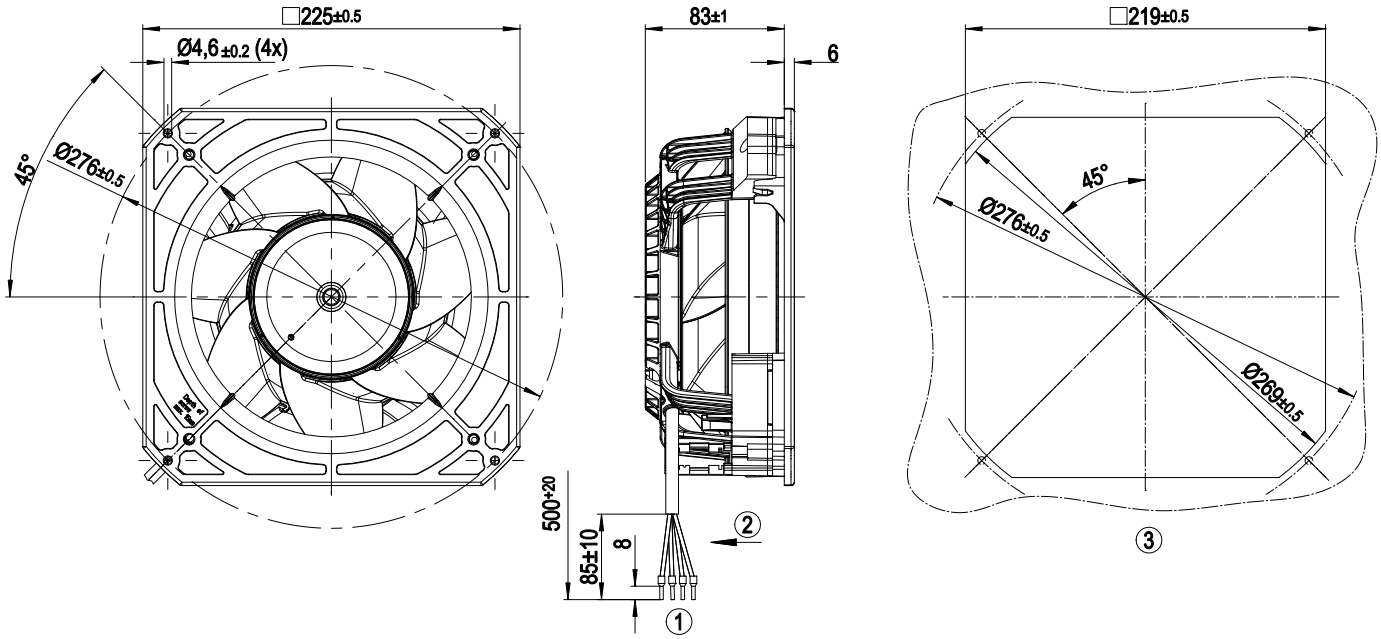
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Product drawing



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

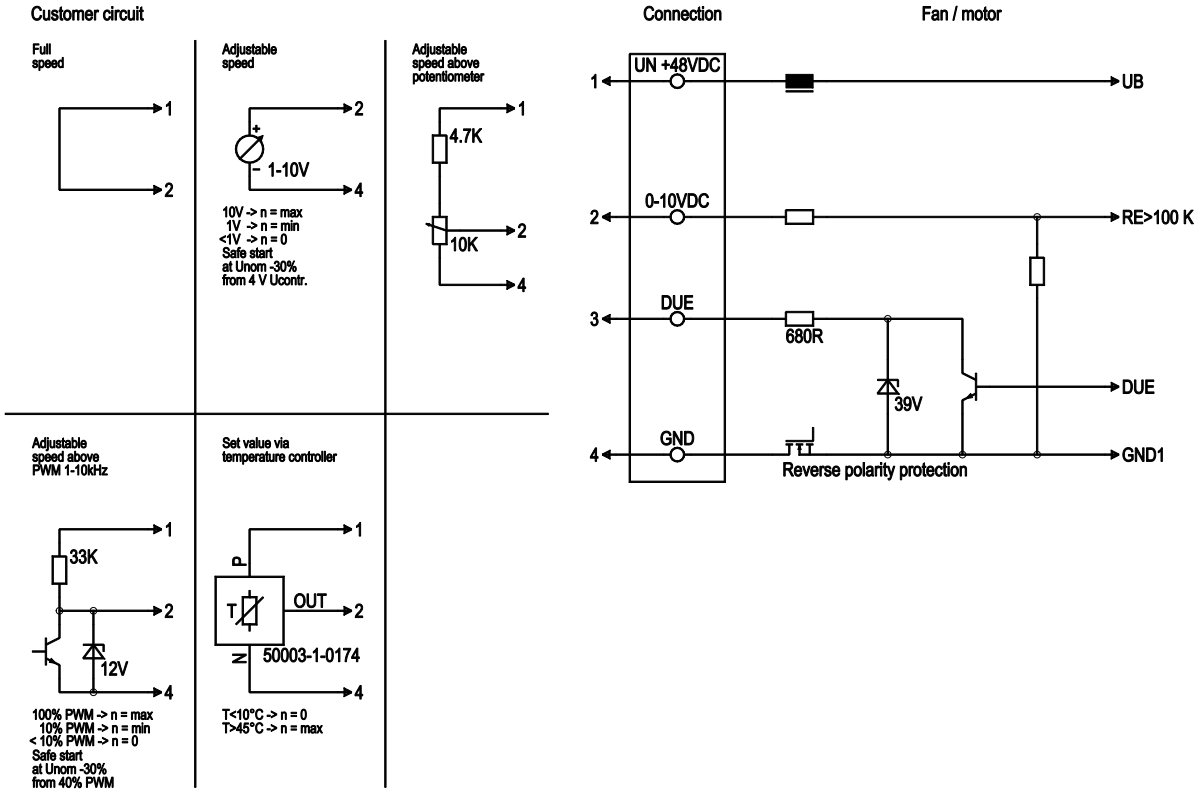
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Connection screen



Line	No.	Signal	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

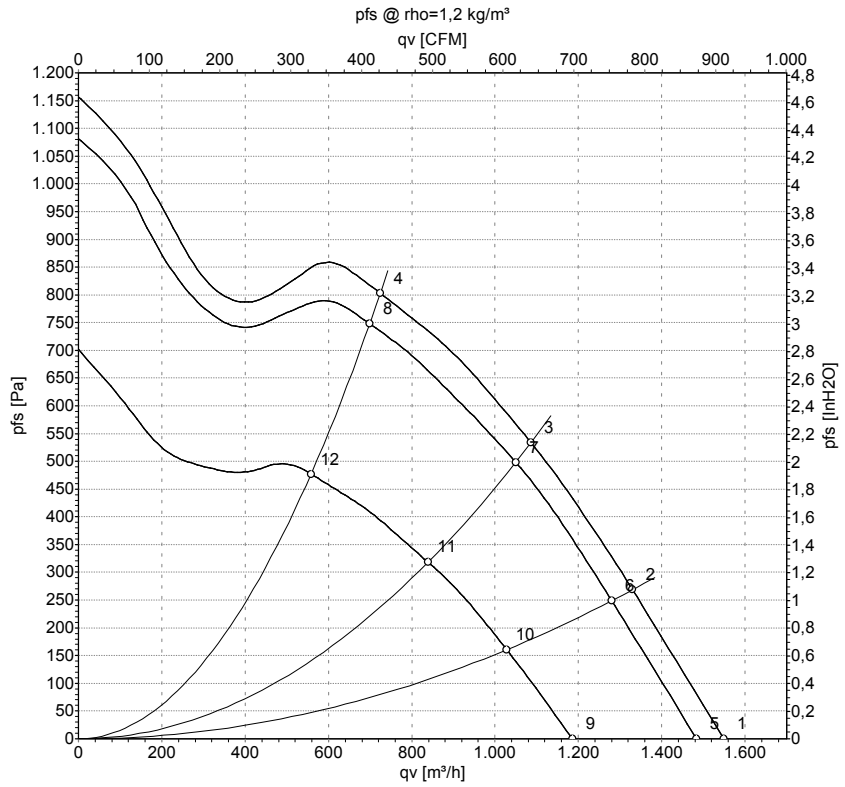
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Charts: Air flow



Measurement: LU-144454
Measurement: LU-144450
Measurement: LU-144460

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}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	57	5190	344	6.02			1550	0
2	57	5125	369	6.48			1330	269
3	57	5075	389	6.82			1085	534
4	57	5110	379	6.64			725	803
5	48	5140	339	7.10	76	85	1485	0
6	48	4930	331	6.89	74	83	1280	250
7	48	4895	349	7.26	73	82	1050	500
8	48	4930	341	7.10	75	84	700	750
9	36	4010	163	4.52			1185	0
10	36	3970	176	4.88			1030	161
11	36	3940	184	5.12			840	318
12	36	3960	180	5.00			560	477

U = Supply voltage · n = Speed · 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

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