K3G200-BDA1-04

EC diagonal module

single inlet

with support bracket

K3G200-BDA1-04 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**K3G200-BDA1-04**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
State		prelim.
Speed	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	+60

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*	1.00

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		45.2	28.9	31.9
Efficiency grade N		63.3	47	50
Power input P_e	kW	0.19		
Air flow q_v	m^3/h	700		
Pressure increase p_{fs}	Pa	409		
Speed n	min^{-1}	3975		

Data established at point of optimum efficiency

ebmpapst

EC diagonal module

single inlet

with support bracket

Technical features

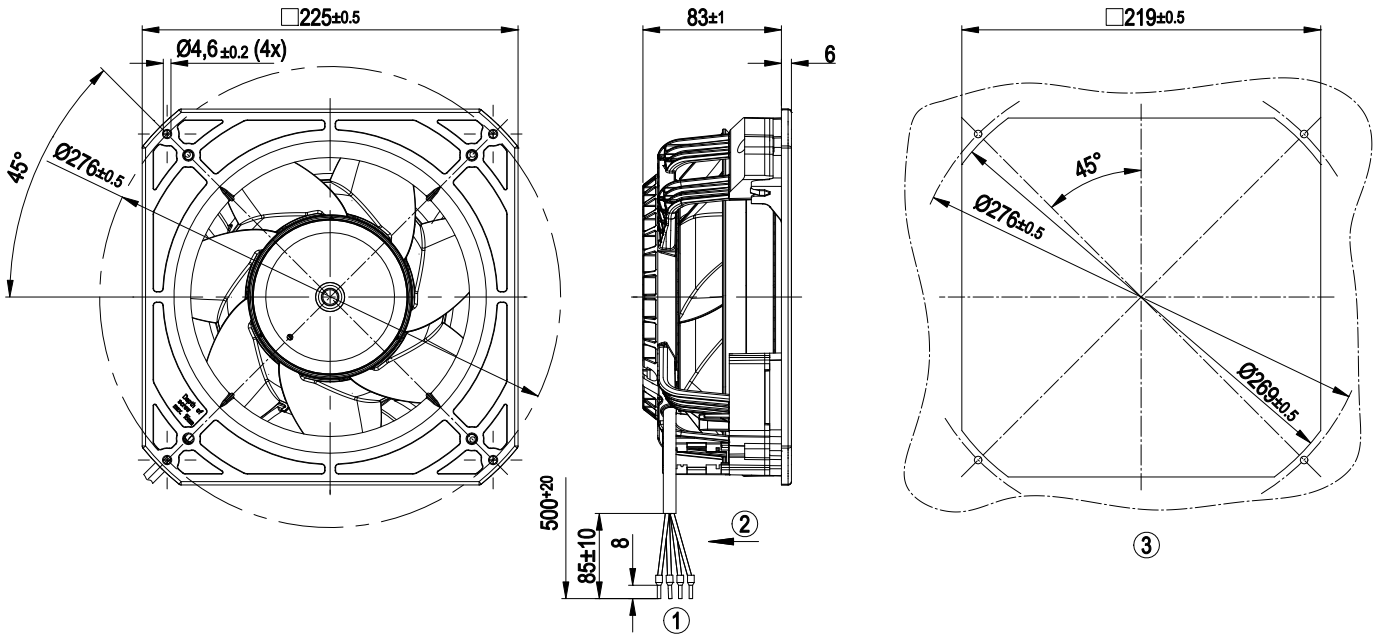
Mass	2.24 kg
Size	200 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Housing material	PA plastic
Material of support bracket	PA plastic
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation 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

EC diagonal module

single inlet

with support bracket

Product drawing



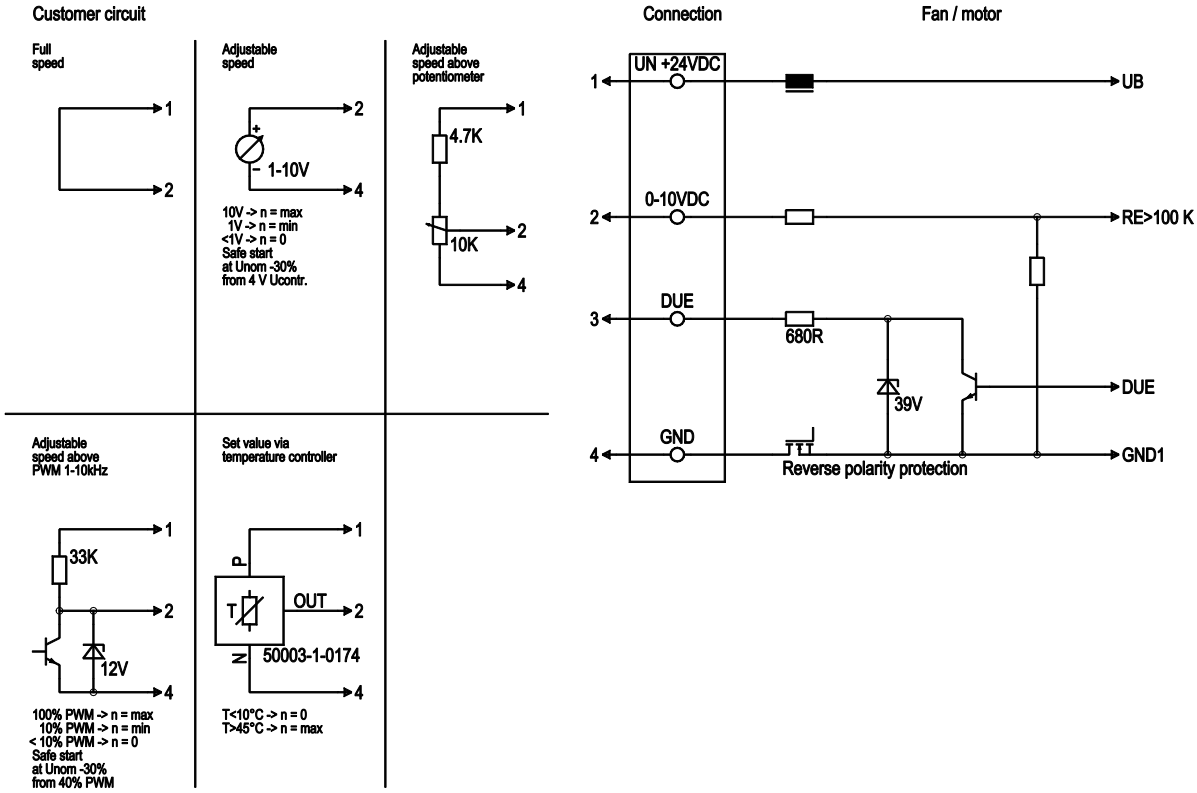
1	Connection line PVC AWG16, 4x crimped core-end sleeves
2	Direction of air flow "V"
3	Mounting dimensions

EC diagonal module

single inlet

with support bracket

Connection screen



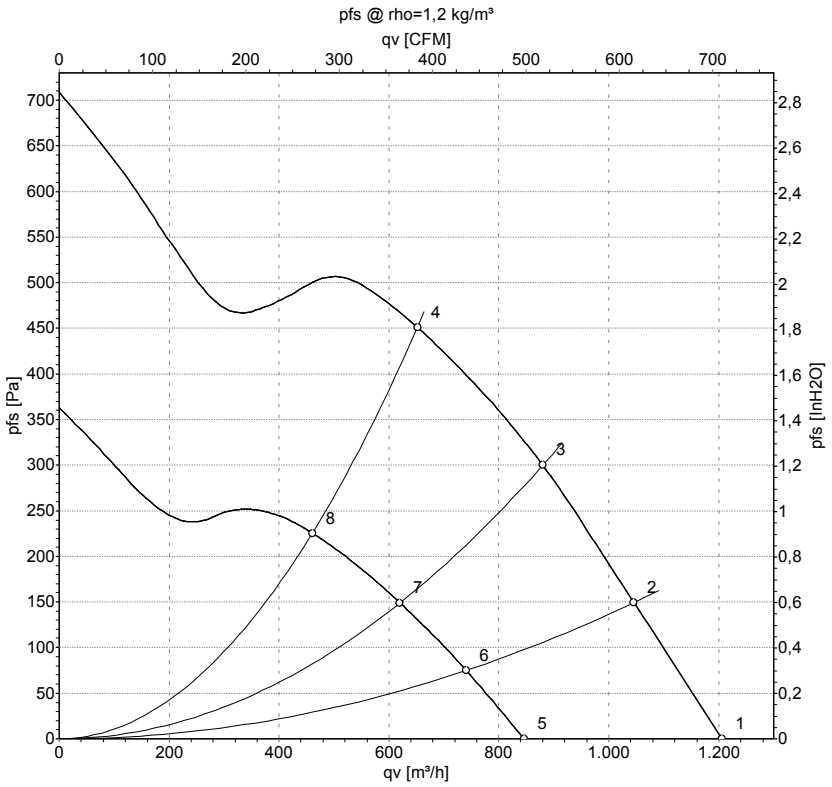
Line	No.	Signal	Colour	Function / assignment
	1	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %
	2	0-10 VDC	yellow	Control input Re>100 K
	3	Tach	white	Speed monitoring output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference mass

EC diagonal module

single inlet

with support bracket

Charts: Air flow



Measurement: LU-144434
Measurement: LU-144444

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	24-28	4060	185	7.70*	72	80	1205	0
2	24-28	3980	188	7.85*	69	78	1045	150
3	24-28	3965	198	8.25*	68	77	880	300
4	24	3975	199	8.29*	69	78	650	450
5	16	2855	71	4.42			845	0
6	16	2850	76	4.74			740	76
7	16	2835	79	4.94			620	149
8	16	2835	80	4.98			460	226

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · * = Current measured at rated voltage · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
qv = Air flow · p_{fs} = Pressure increase