K3G200-BDA8-05

EC centrifugal module

backward curved, single inlet

with support bracket

K3G200-BDA8-05 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

Nominal data

Type	**K3G200-BDA8-05**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed (rpm)	min^{-1}	5470
Power input	W	400
Current draw	A	8.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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}	%	47.9	35.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		62.2	50
05 Variable speed drive		Yes	

09 Power input P_e	kW	0.43
09 Air flow q_v	m^3/h	905
09 Pressure increase p_{fs}	Pa	750
10 Speed (rpm) n	min^{-1}	5320
11 Specific ratio*		1.01

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-155404

EC centrifugal module

backward curved, single inlet

with support bracket

Technical features

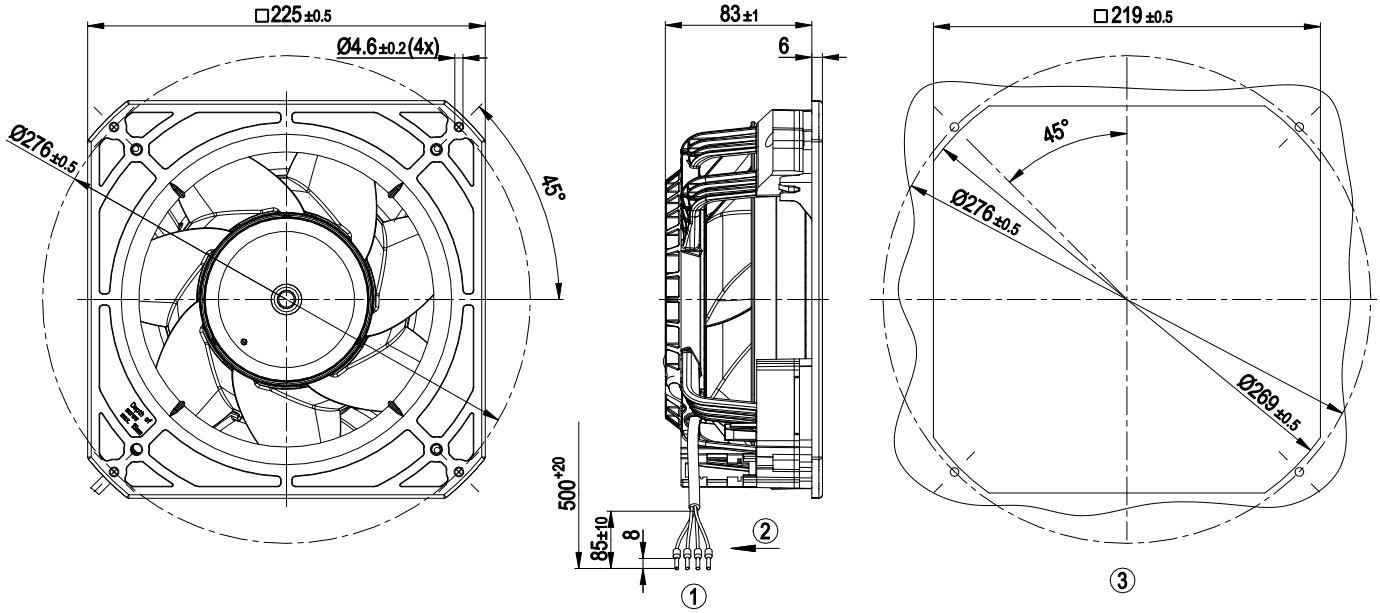
Mass	2.3 kg
Size	200 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Housing material	PA plastic
Material of support bracket	PA plastic
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0 - dry environment
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 - Standstill upon cable break
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Product conforming to standard	EN 60335-1
Approval	CCC; EAC

EC centrifugal module

backward curved, single inlet

with support bracket

Product drawing



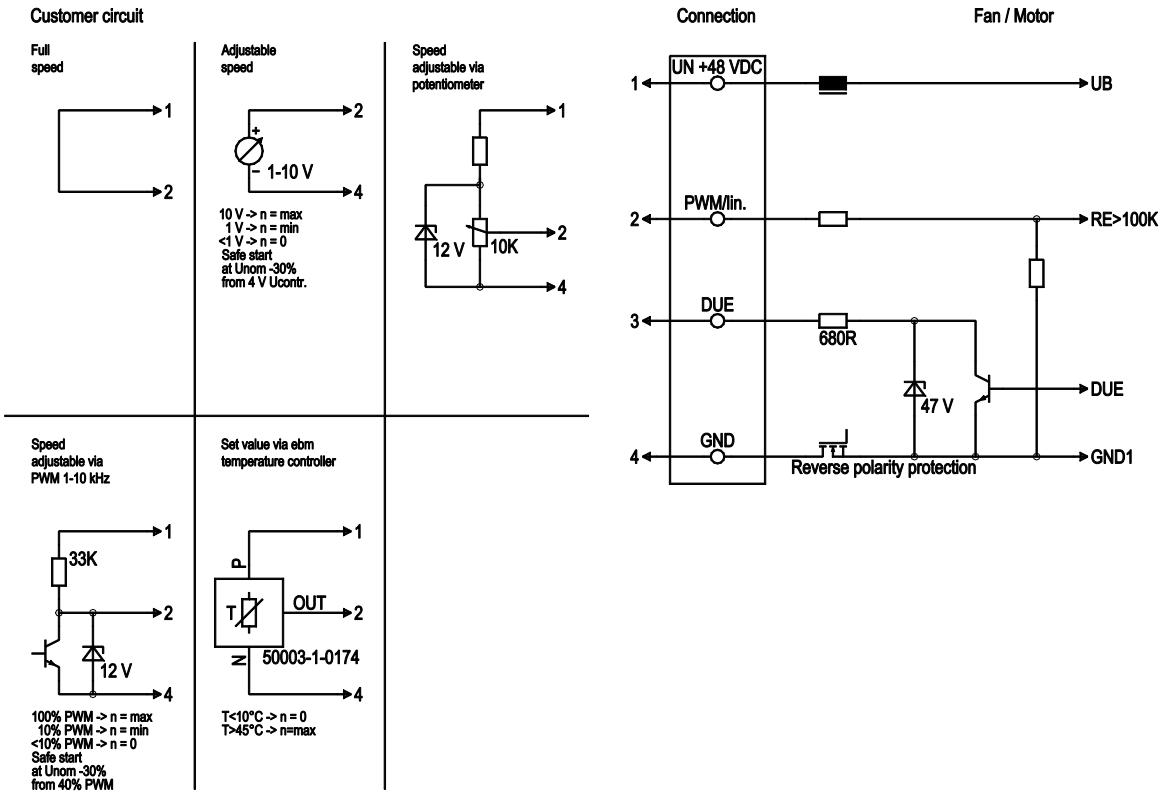
1	Connection line PVC AWG16, 4x crimped core-end sleeves
2	Direction of air flow "V"
3	Mounting dimensions

EC centrifugal module

backward curved, single inlet

with support bracket

Connection screen



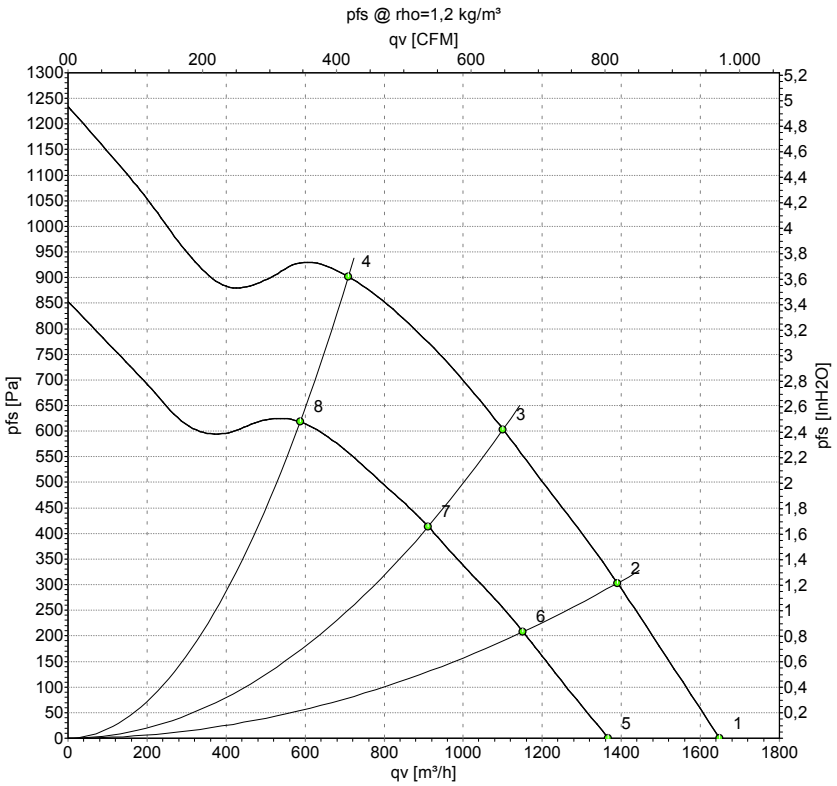
No.	Conn.	Designation	Colour	Function / assignment
	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
	2	0-10 VDC	yellow	Control input Re>100 K
	3	Tach	white	Speed monitoring output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference mass

EC centrifugal module

backward curved, single inlet

with support bracket

Charts: Air flow



Measurement: LU-155404-1
Measurement: LU-155408-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	48-57	5470	400		80	88	1650	0	970	0.00
2	48-57	5365	426		77	85	1390	300	820	1.20
3	48-57	5310	438		76	83	1100	600	650	2.41
4	48-57	5355	431		79	87	710	900	420	3.61
5	36	4545	227	6.30	75	83	1365	0	805	0.00
6	36	4460	239	6.65	72	80	1150	208	675	0.84
7	36	4405	247	6.88	71	78	910	415	535	1.67
8	36	4445	242	6.72	74	82	590	622	345	2.50

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 · q_V = Air flow · p_{fs} = Pressure increase