K3G200-BDA8-02

EC diagonal module

backward-curved, single-intake

with support bracket



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Nominal data

Type	**K3G200-BDA8-02**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	5470
Power consumption	W	400
Current draw	A	8.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to ErP Directive

		Actual	Req. 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 consumption 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 obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-155404

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Technical description

Weight	2.3 kg
Fan size	200 mm
Rotor surface	Painted black
Impeller material	PA plastic
Housing material	PA plastic
Support bracket material	PA plastic
Number of blades	7
Airflow direction	"V"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Standstill on cable break
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B, household environment)
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Conformity with standards	EN 60335-1
Approval	CCC; EAC

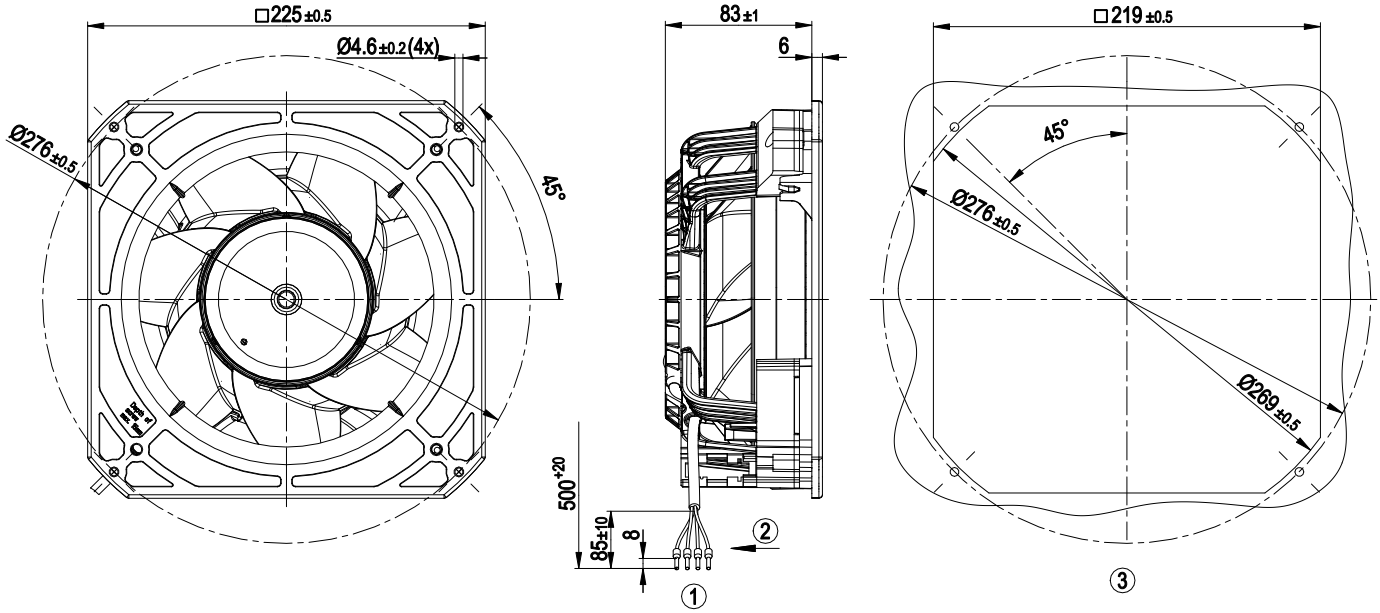
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Product drawing



1	Cable PVC AWG16, 4x crimped ferrules
2	Direction of air flow "V"
3	Mounting dimensions

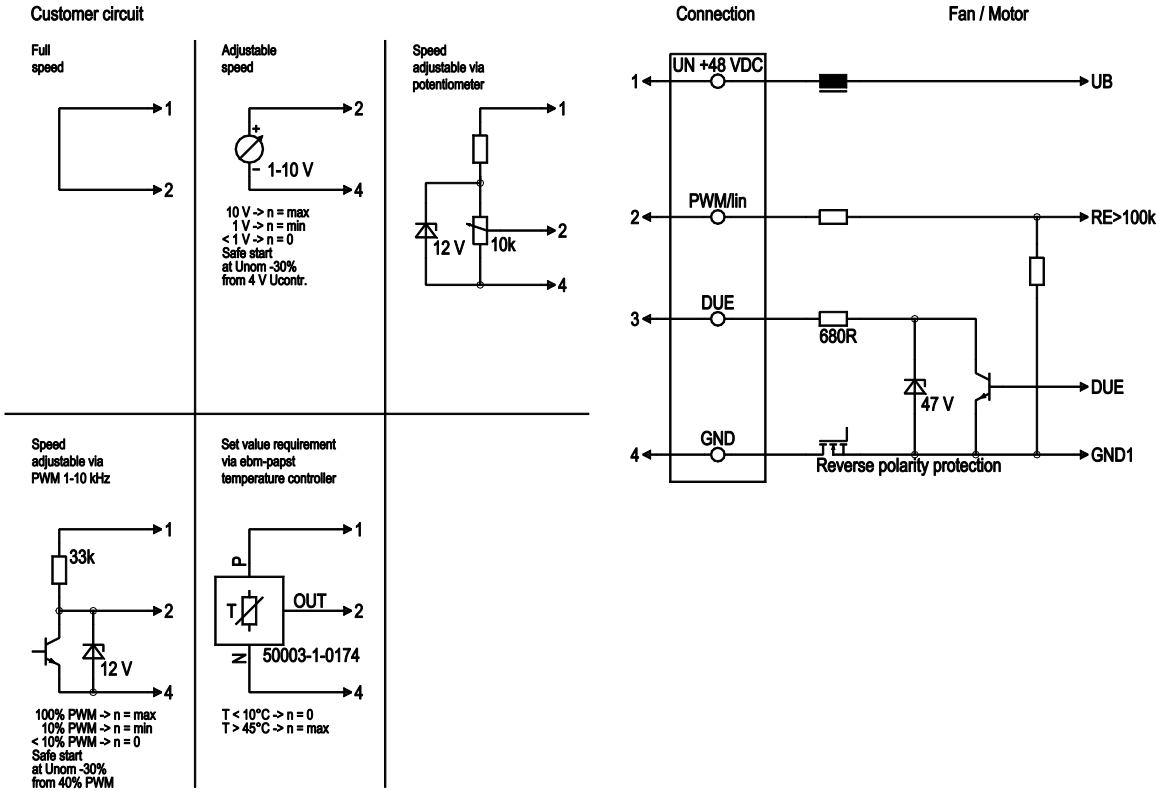
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Connection diagram



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

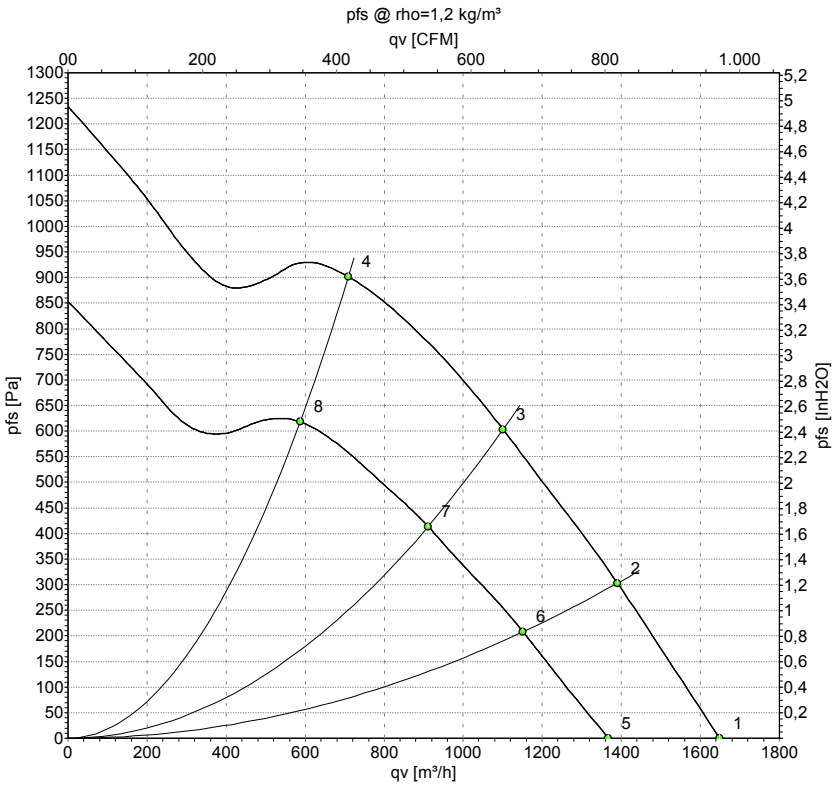
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Curves: Air performance



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

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

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 = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side · q_V = Air flow
p_{fs} = Pressure increase

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