K3G200-BDA8-11

EC diagonal module

single-intake

with support bracket

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**K3G200-BDA8-11**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	5350
Power consumption	W	380
Current draw	A	8
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 Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	47.8	36
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		61.8	50
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.46
09 Air flow q_v	m³/h	900
09 Pressure increase p_{fs}	Pa	796
10 Speed (rpm) n	min^{-1}	5400
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-188837

EC diagonal module

single-intake

with support bracket

Technical description

Weight	2.3 kg
Size	200 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA plastic
Housing material	PA plastic
Support bracket material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	None
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Hybrid bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Standstill on cable break - Thermal overload protection for electronics - Reverse polarity protection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B, household environment)
With cable	Lateral
Conformity with standards	EN 60335-1
Approval	EAC

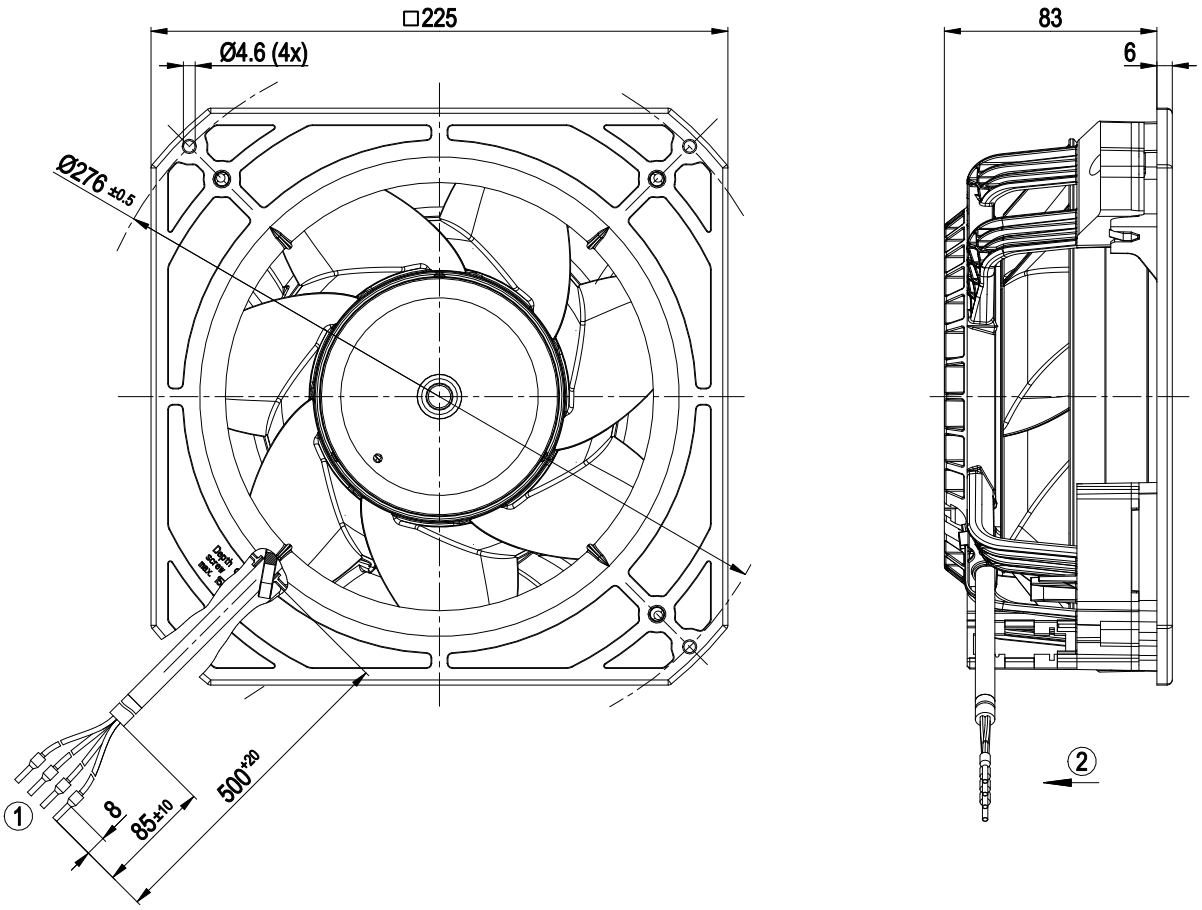
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC diagonal module

single-intake

with support bracket

Product drawing



1	Cable PVC AWG16
	4x wire-end ferrule
2	Airflow direction "V"

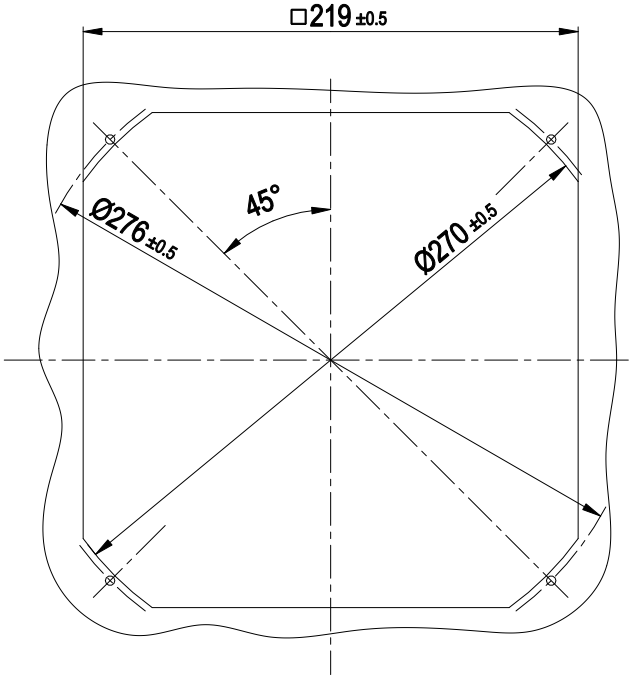
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC diagonal module

single-intake

with support bracket

Mounting dimensions



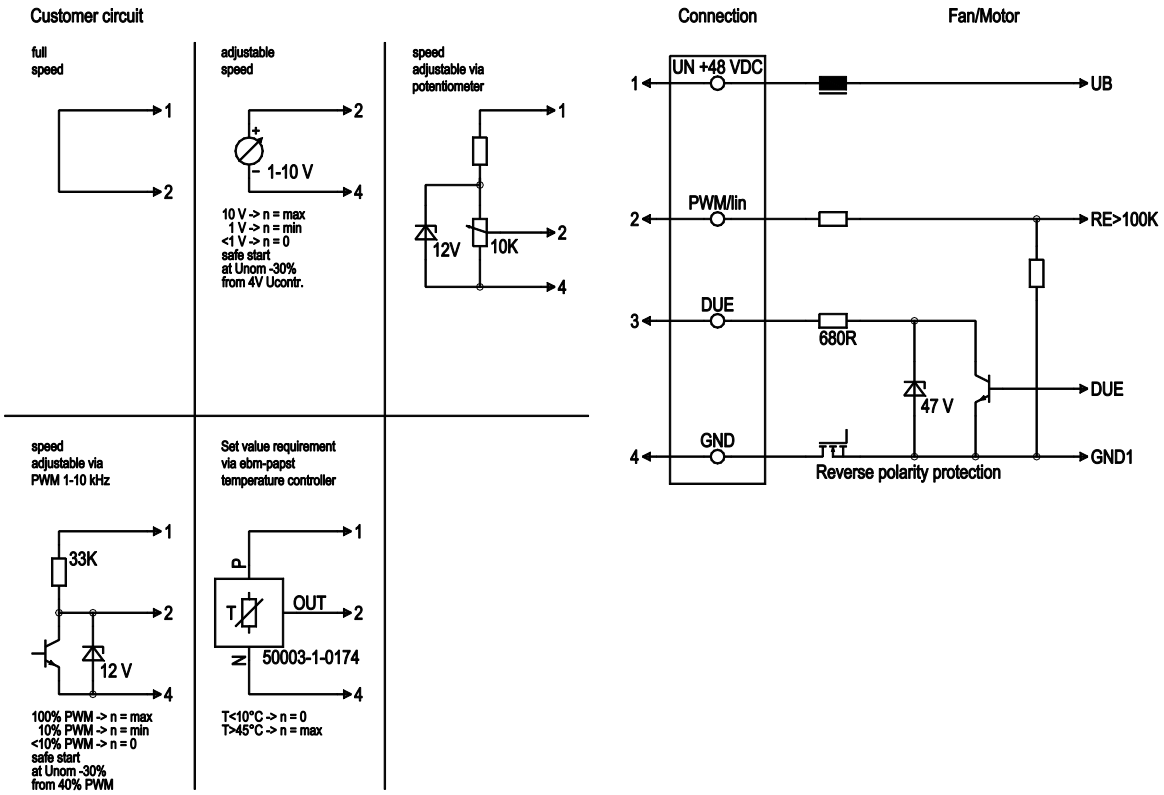
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC diagonal module

single-intake

with support bracket

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	DIAG	white	Fan Good/Fan Bad: Open collector, Fan Bad = high, Isink max = 10 mA
	4	GND	blue	Reference ground

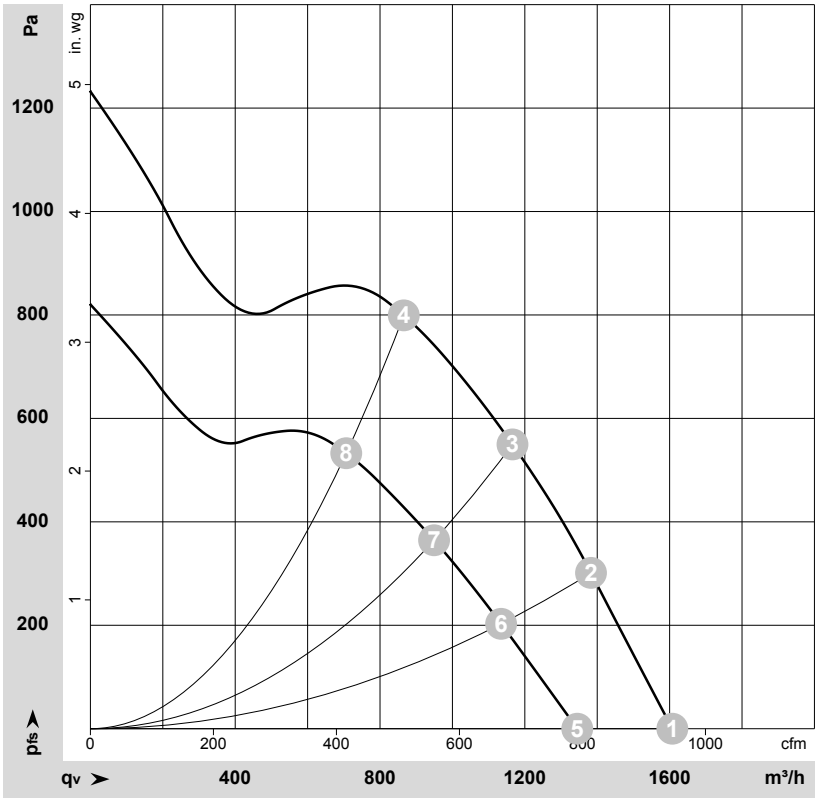
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC diagonal module

single-intake

with support bracket

Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-197433-1
Measurement: LU-197461-1

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	in. wg
1	48	5350	380	8.00	79	86	1605	0	945	0.00
2	48	5355	428	8.89	79	86	1385	300	815	1.20
3	48	5350	456	9.50	79	86	1165	550	685	2.21
4	48	5355	449	9.34	79	86	865	800	510	3.21
5	36	4480	220	6.09			1345	0	790	0.00
6	36	4405	235	6.52			1135	203	665	0.81
7	36	4375	246	6.81			950	365	560	1.47
8	36	4380	244	6.76			705	534	415	2.14

U = Voltage · 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

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com