K1G200-AD31-02

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	**K1G200-AD31-02**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min-1	3500
Power consumption	W	110
Current draw	A	5.4
Max. back pressure	Pa	380
Max. back pressure	inH2O	1.53
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

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

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Technical description

Weight	1.7 kg
Fan size	200 mm
Rotor surface	Painted black
Impeller material	PA6 plastic, glass-fiber reinforced
Housing material	PA6 plastic, glass-fiber reinforced
Support bracket material	PA6 plastic, glass-fiber reinforced
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
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
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	UL 1004-1; EAC; CSA C22.2 No. 77

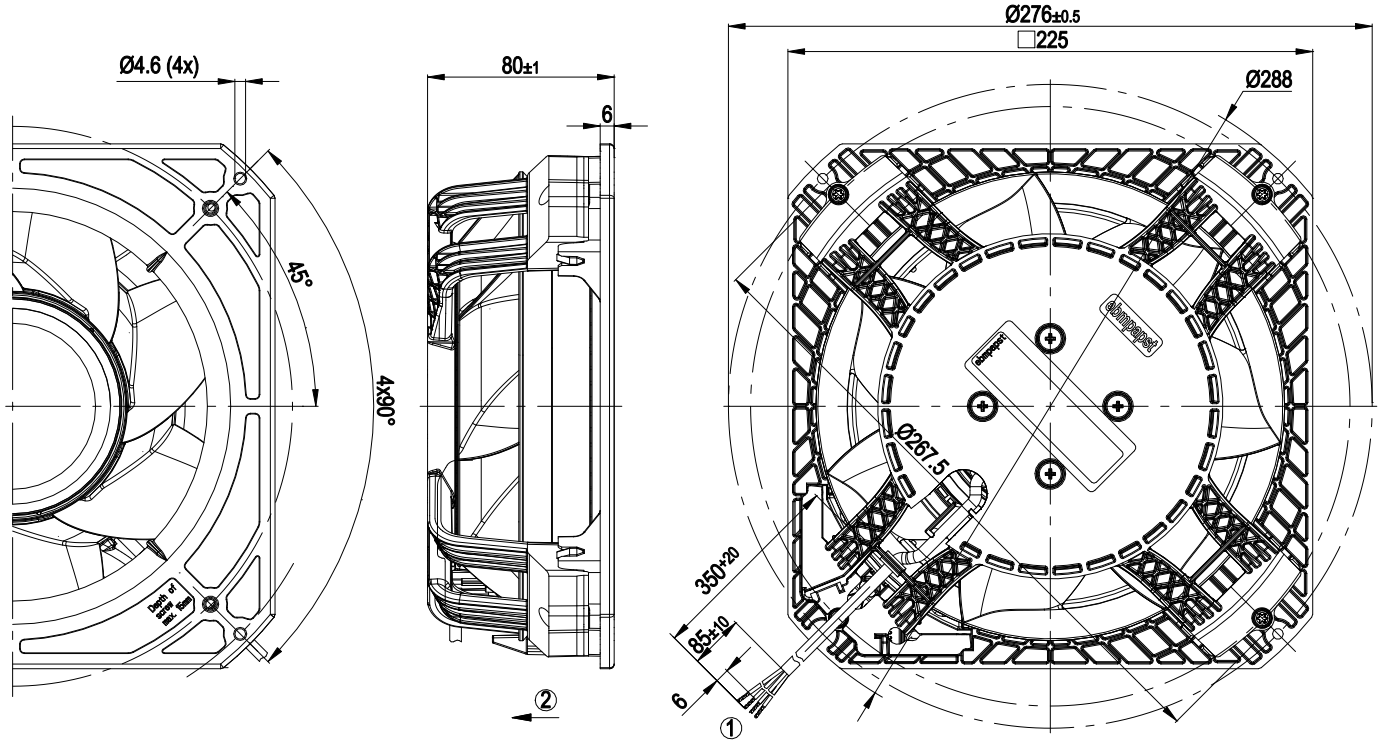
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Product drawing



1	Cable PVC AWG20, 4x crimped splices
2	Direction of air flow "V"

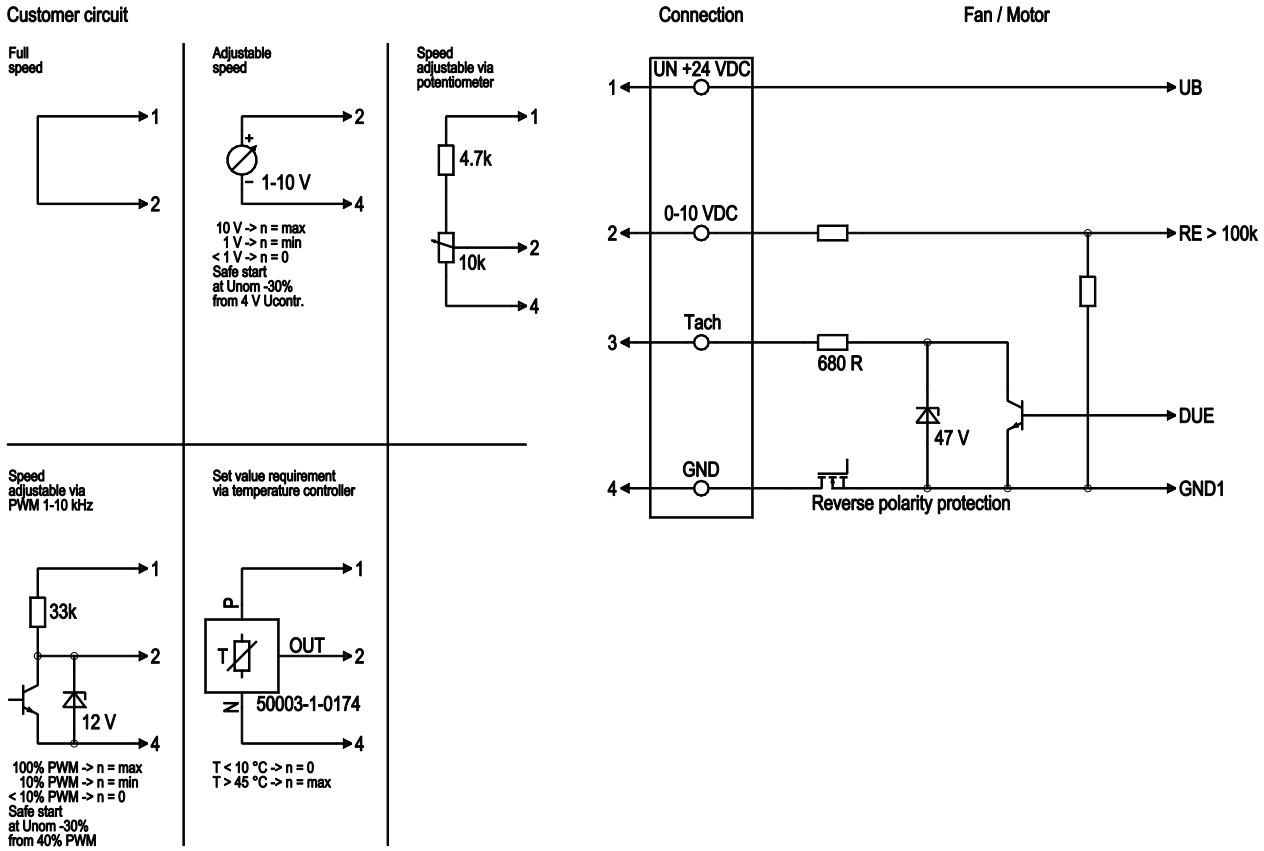
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100k
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

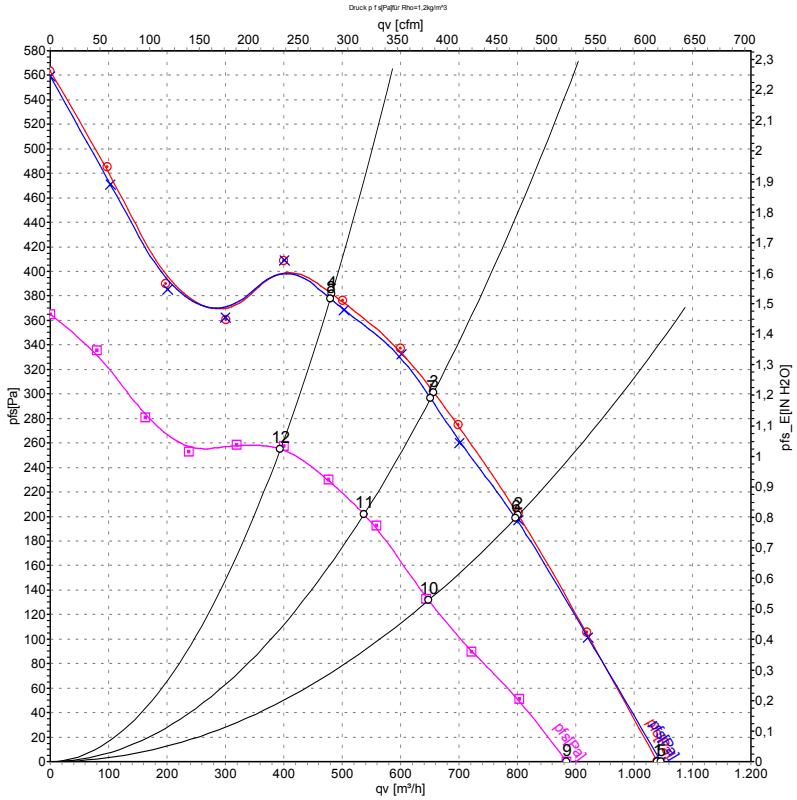
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Curves: Air performance



Measurement: LU-126731-1
Measurement: LU-126725-1
Measurement: LU-126732-1

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}	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	28	3500	110	5.16	69	77	1040	0	610	0.00
2	28	3505	127	5.96	67	75	800	200	470	0.80
3	28	3500	128	6.01	68	75	655	300	385	1.20
4	28	3510	125	5.87	68	76	480	380	285	1.53
5	24	3500	110	5.40	69	77	1045	0	615	0.00
6	24	3510	127	6.24	67	75	795	200	470	0.80
7	24	3510	129	6.31	68	75	650	300	385	1.20
8	24	3510	125	6.15	69	76	480	380	285	1.53
9	16	2990	66	4.59	65	73	885	0	520	0.00
10	16	2890	70	4.90	63	71	650	130	380	0.52
11	16	2875	71	4.93	64	71	535	202	315	0.81
12	16	2895	70	4.89	66	73	395	257	230	1.03

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

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