K1G200-AD37-02

EC diagonal module

single-intake

with support bracket



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**K1G200-AD37-02**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Status		prelim.
Speed (rpm)	min^{-1}	4140
Power consumption	W	183
Current draw	A	5.6
Max. back pressure	Pa	520
Max. back pressure	inH2O	2.09
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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	44.6	32.4
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	0.21
09 Air flow q_v	m^3/h	700
09 Pressure increase p_{fs}	Pa	430
10 Speed (rpm) n	min^{-1}	4070
11 Specific ratio*		1.00

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-126733

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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
Conformity with standards	EN 60950-1
Approval	EAC; CSA C22.2 No. 77; UL 1004-1

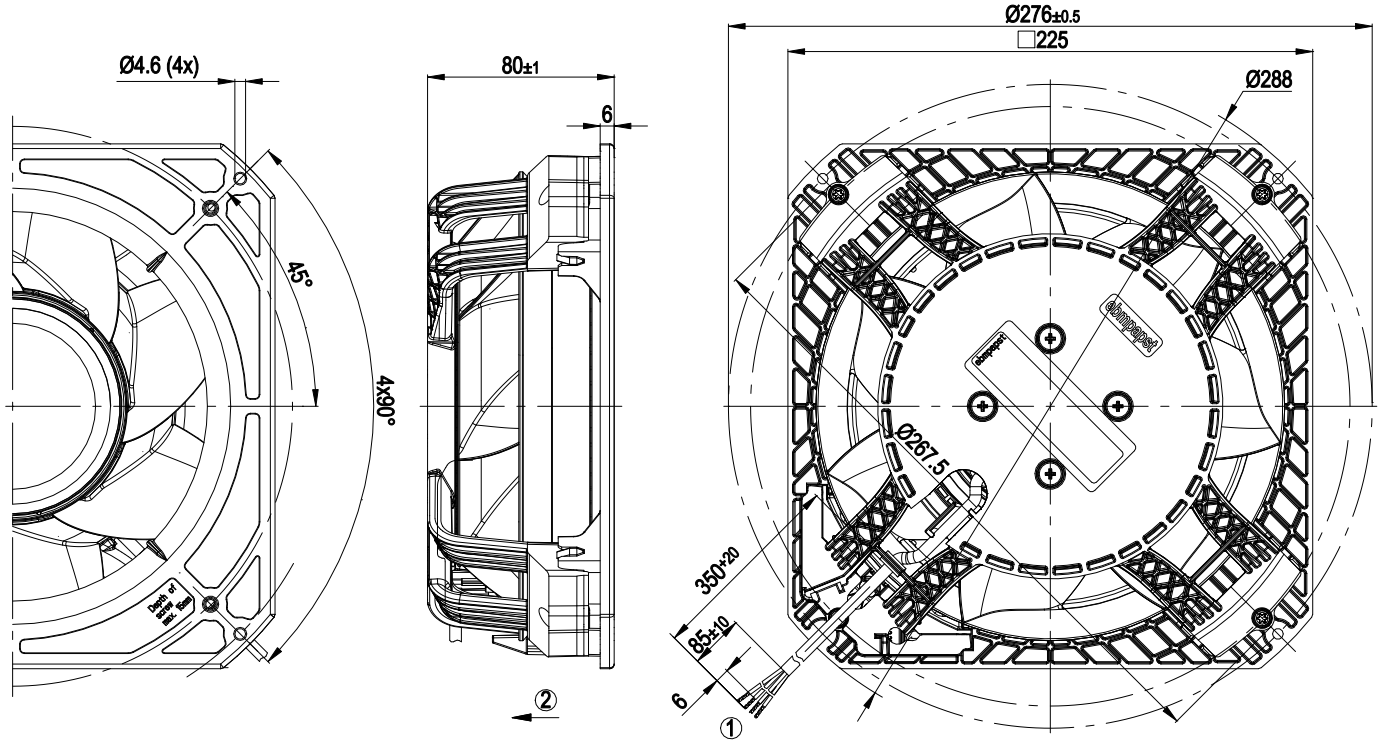
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Product drawing



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

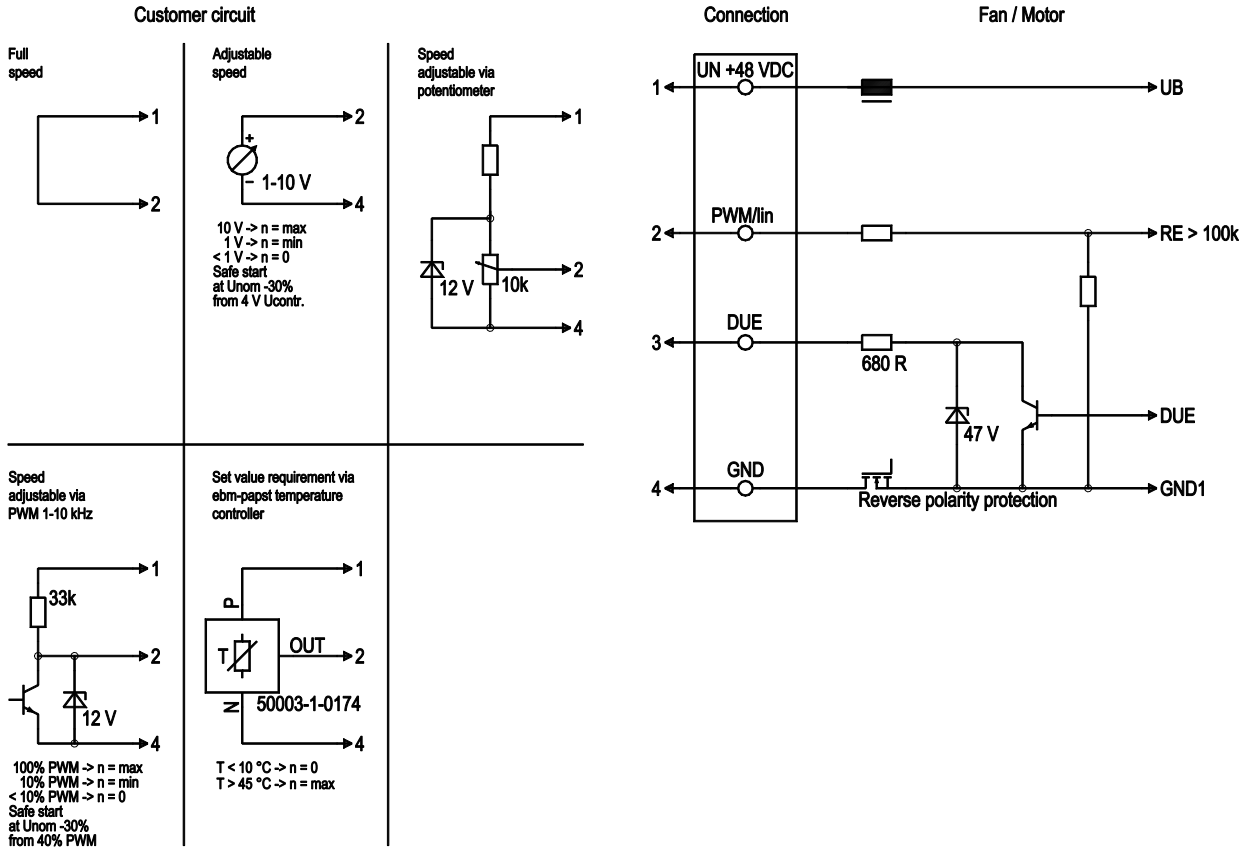
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +48 VDC	red	Power supply 48 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

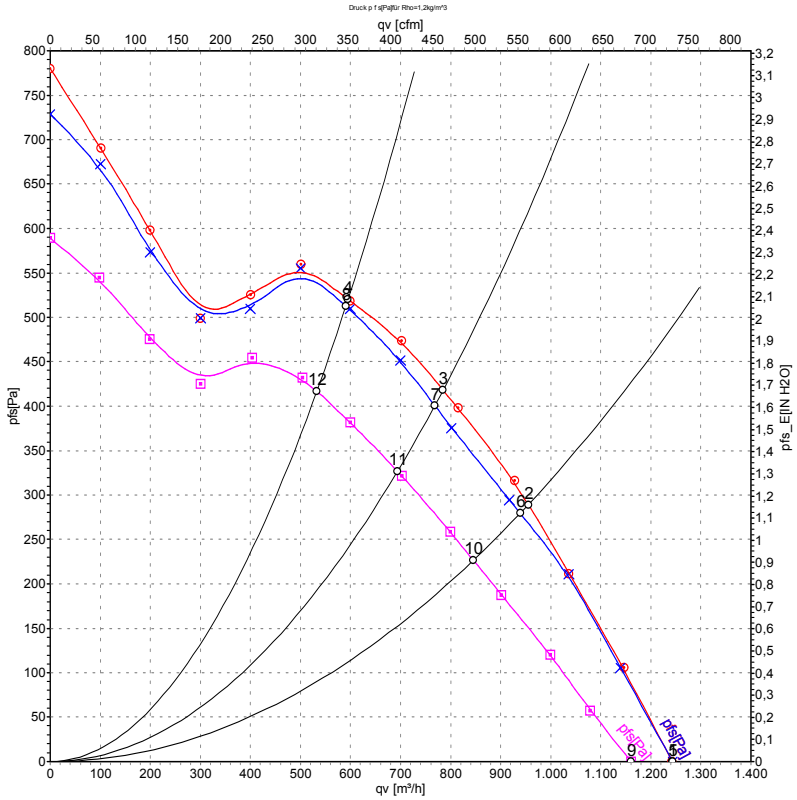
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Curves: Air performance



Measurement: LU-126734-1
Measurement: LU-126733-1
Measurement: LU-126737-1

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	57	4140	183	5.96	73	81	1245	0	730	0.00
2	57	4140	229	6.54	71	79	955	290	560	1.16
3	57	4140	233	6.59	72	80	785	418	460	1.68
4	57	4135	225	6.52	73	81	595	520	350	2.09
5	48	4140	183	5.60	73	81	1245	0	730	0.00
6	48	4080	212	6.46	71	79	940	279	555	1.12
7	48	4060	213	6.52	71	79	770	400	450	1.61
8	48	4105	211	6.43	73	80	590	514	350	2.06
9	36	3865	144	4.98	71	79	1160	0	685	0.00
10	36	3665	148	5.26	68	76	845	227	500	0.91
11	36	3650	148	5.29	69	76	695	327	410	1.31
12	36	3685	147	5.23	69	77	535	417	315	1.67

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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