K1G250-AA21-02

EC diagonal module - ESM

with support bracket

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Nominal data

Type	**K1G250-AA21-02**
Motor	**M1G055-BI**

Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min^{-1}	1700	1200
Power consumption	W	30	
Current draw	A	0.43	
Max. back pressure	Pa	110	
Max. back pressure	in. wg	0.44	
Min. ambient temperature	°C	-30	-30
Max. ambient temperature	°C	50	50

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	1.1 kg
Size	250 mm
Motor size	55
Rotor surface	Thick-film passivated
Impeller material	PA plastic
Support bracket material	PA plastic
Number of blades	5
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP55
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	Any
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed selection max./min. - ESM+ expandable with plug-in module - Soft start - Thermal overload protection for motor
Speed levels	2
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-3 (household environment)
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	II
Conformity with standards	CE
Approval	UL 1004-3; VDE; EAC; CSA C22.2 No. 77

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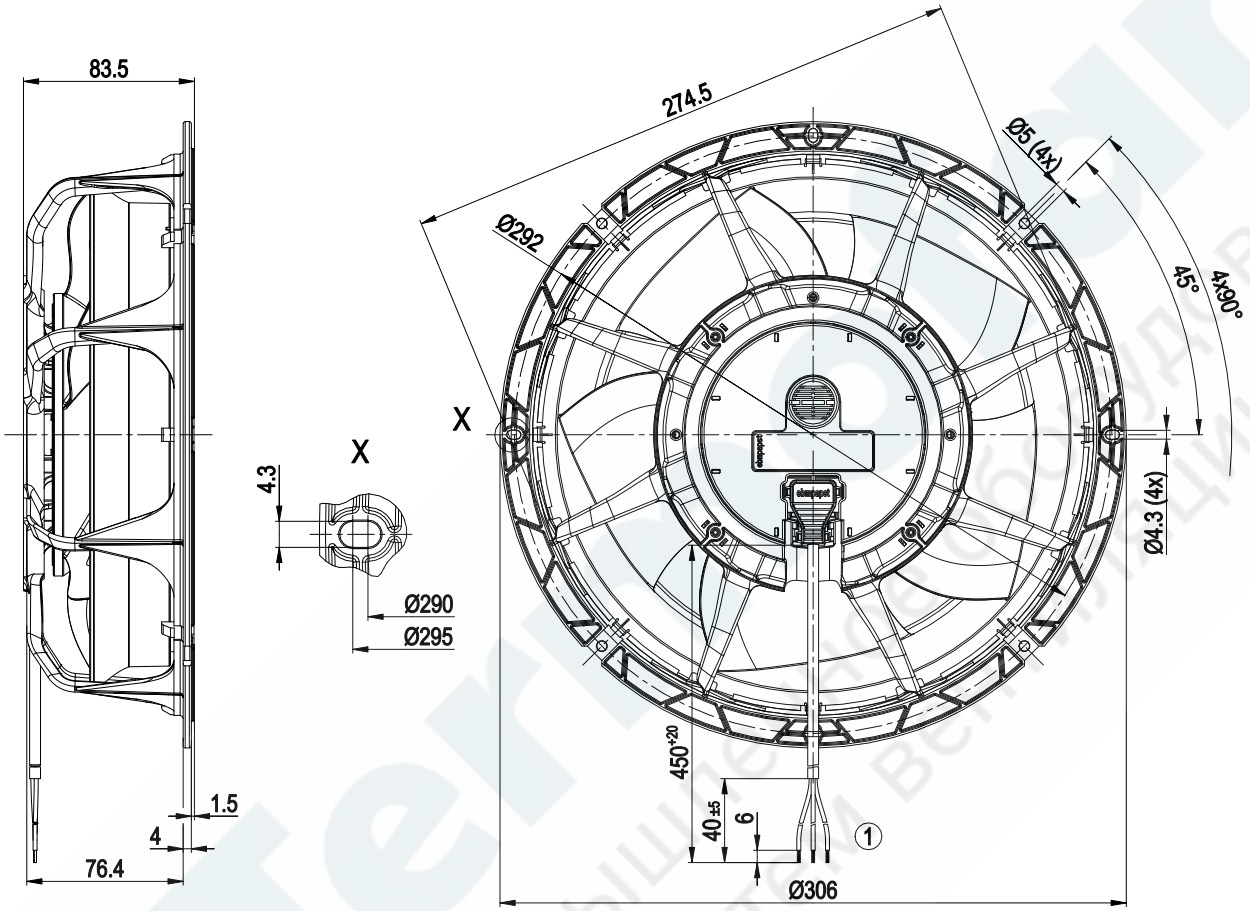
Product drawing



1	Cable PVC AWG20		3x splice

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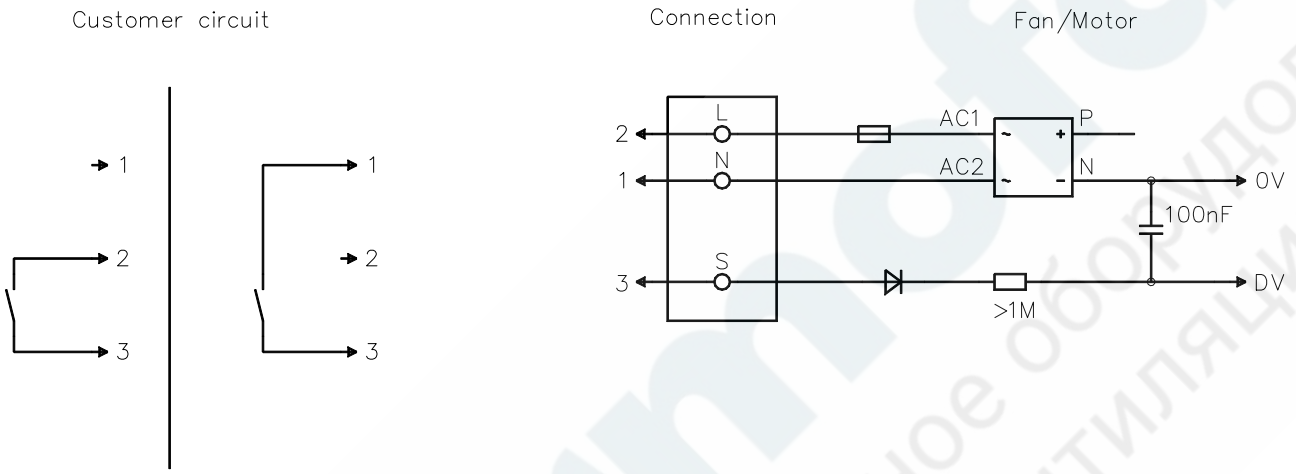
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	N		blue	Neutral conductor
2	L		black	Power supply 115 VAC, 50-60 Hz, see nameplate for voltage range
3	S		brown	Speed selection: switch open speed 1 (fast), switch closed speed 2 (slow)

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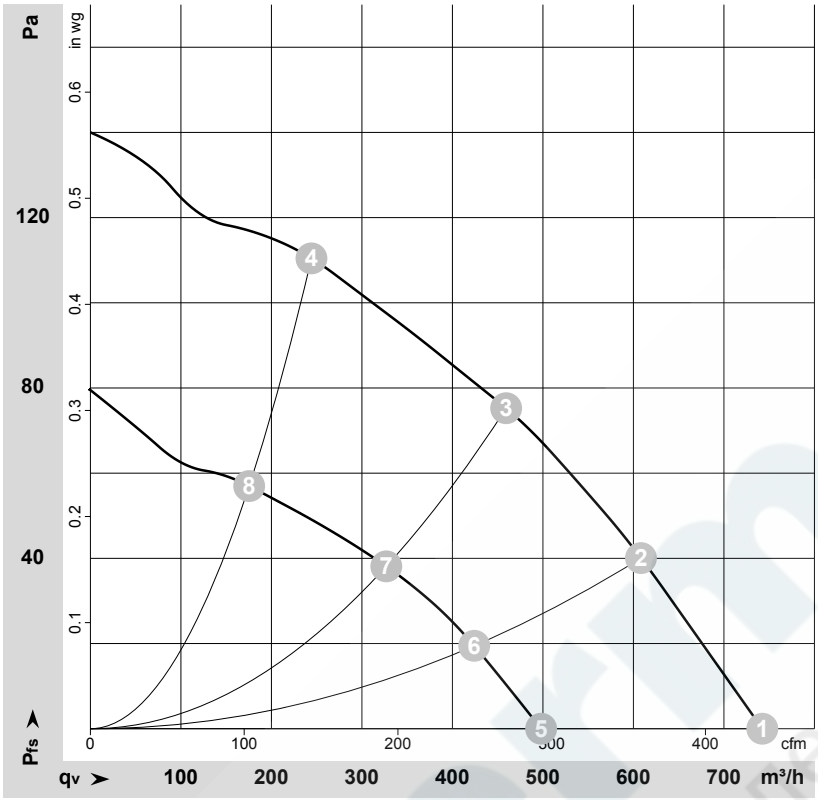
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-179695-1
Measurement: LU-177821-1

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

	Stage	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	1	115	50	1700	19	0.29	53	60	740	0	435	0.00
2	1	115	50	1700	23	0.35	50	58	610	40	360	0.16
3	1	115	50	1700	28	0.41	50	58	460	75	270	0.30
4	1	115	50	1700	30	0.43	53	61	245	110	145	0.44
5	2	115	50	1200	9.0	0.14	44	52	500	0	295	0.00
6	2	115	50	1200	10.0	0.17	42	49	425	19	250	0.08
7	2	115	50	1200	12	0.19	42	50	325	38	190	0.15
8	2	115	50	1200	13	0.21	45	53	175	57	105	0.23

U = Voltage · f = Frequency · 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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