K1G220-AF90-02

EC diagonal module - ESM

backward-curved

with support bracket

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Nominal data

Type	**K1G220-AF90-02**
Motor	**M1G055-BD**

Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min^{-1}	1600	1200
Power consumption	W	32	
Current draw	A	0.5	
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	1.4 kg
Fan size	220 mm
Rotor surface	Galvanized
Impeller material	PA plastic
Support bracket material	PA plastic
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
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
EMC circuit feedback	According to EN 61000-3-2/3
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	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	VDE; UL 1004-3; EAC; CSA C22.2 No. 77

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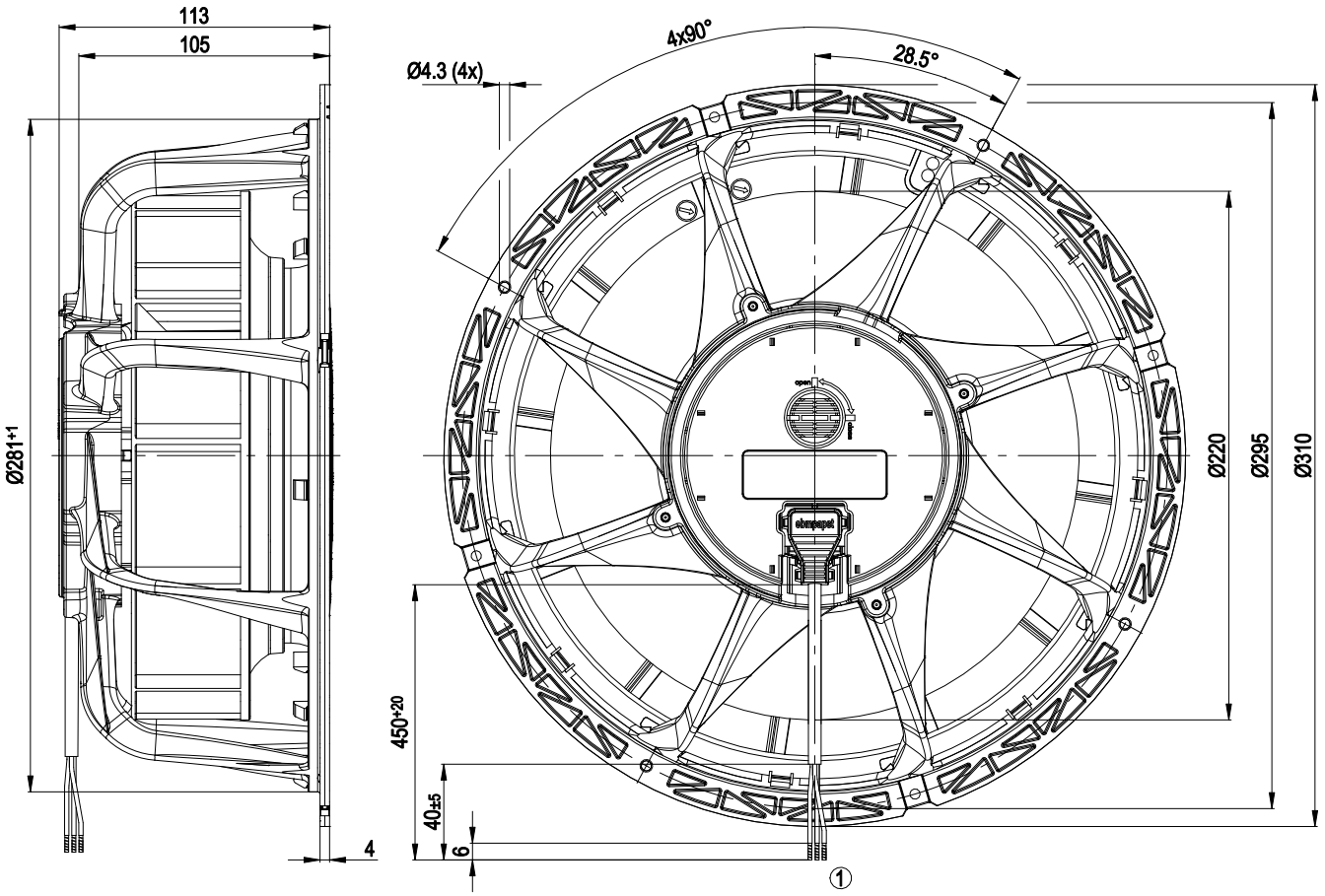
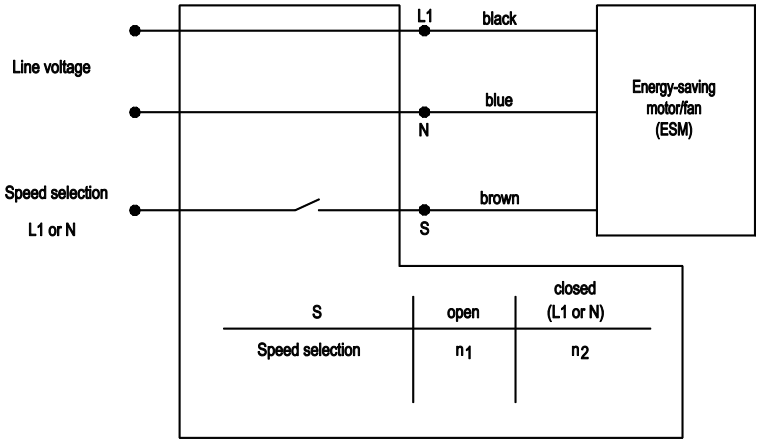
Product drawing



1	Cable AWG20, 3x crimped splices

Connection diagram



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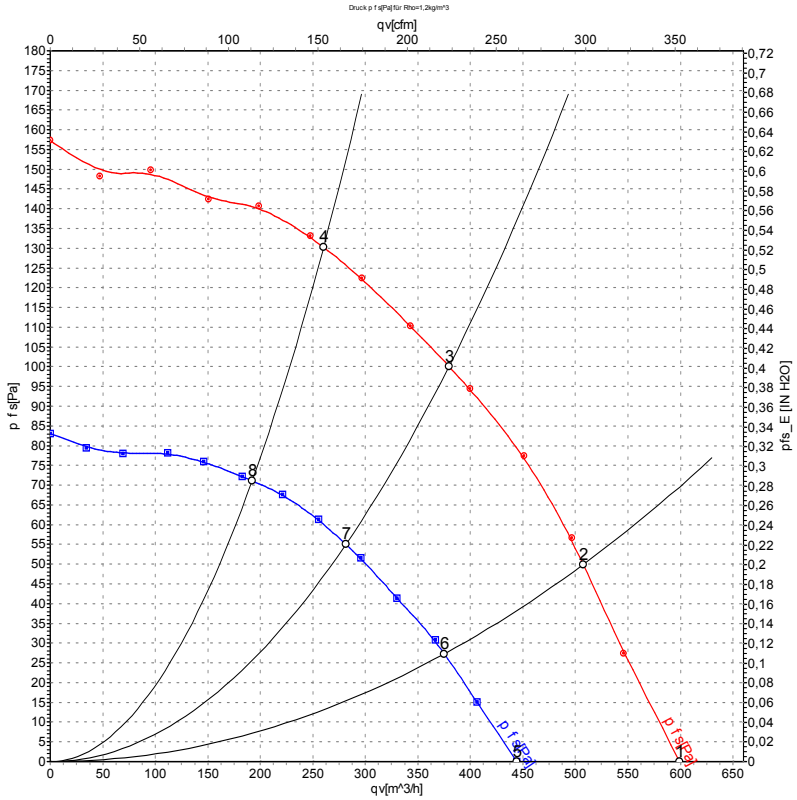
Curves: Air performance 50 Hz



Measurement: LU-116724-1

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	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	inH2O
1	115	50	1600	18	0.25	51	59	600	0	355	0.00
2	115	50	1600	26	0.37	50	57	510	50	300	0.20
3	115	50	1600	32	0.50	48	55	380	100	225	0.40
4	115	50	1600	30	0.44	48	56	260	130	155	0.52
5	115	50	1200	7.2	0.10	44	52	445	0	260	0.00
6	115	50	1200	11	0.15	43	50	375	27	220	0.11
7	115	50	1200	12	0.18	41	48	280	55	165	0.22
8	115	50	1200	12	0.18	41	50	190	71	115	0.29

U = Power supply · 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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