W1G200-EA87-20

EC axial fan - ESM

sickle-shaped blades (S series)

ESM fan housing



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Nominal data

Type	**W1G200-EA87-20**	
Motor	**M1G055-BD**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1400
Power consumption	W	7
Current draw	A	0.06
Min. ambient temperature	°C	-30
Max. ambient temperature	°C	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 kg
Fan size	200 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	PP plastic
Number of blades	5
Direction of rotation	"V"
Degree of protection	IP54; only with suitable plug, to be installed by customer
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	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed selection max./min. - Soft start - Thermal overload protection for motor
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
With cable	Lateral
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	CSA C22.2 No. 77; UL 1004-3; VDE

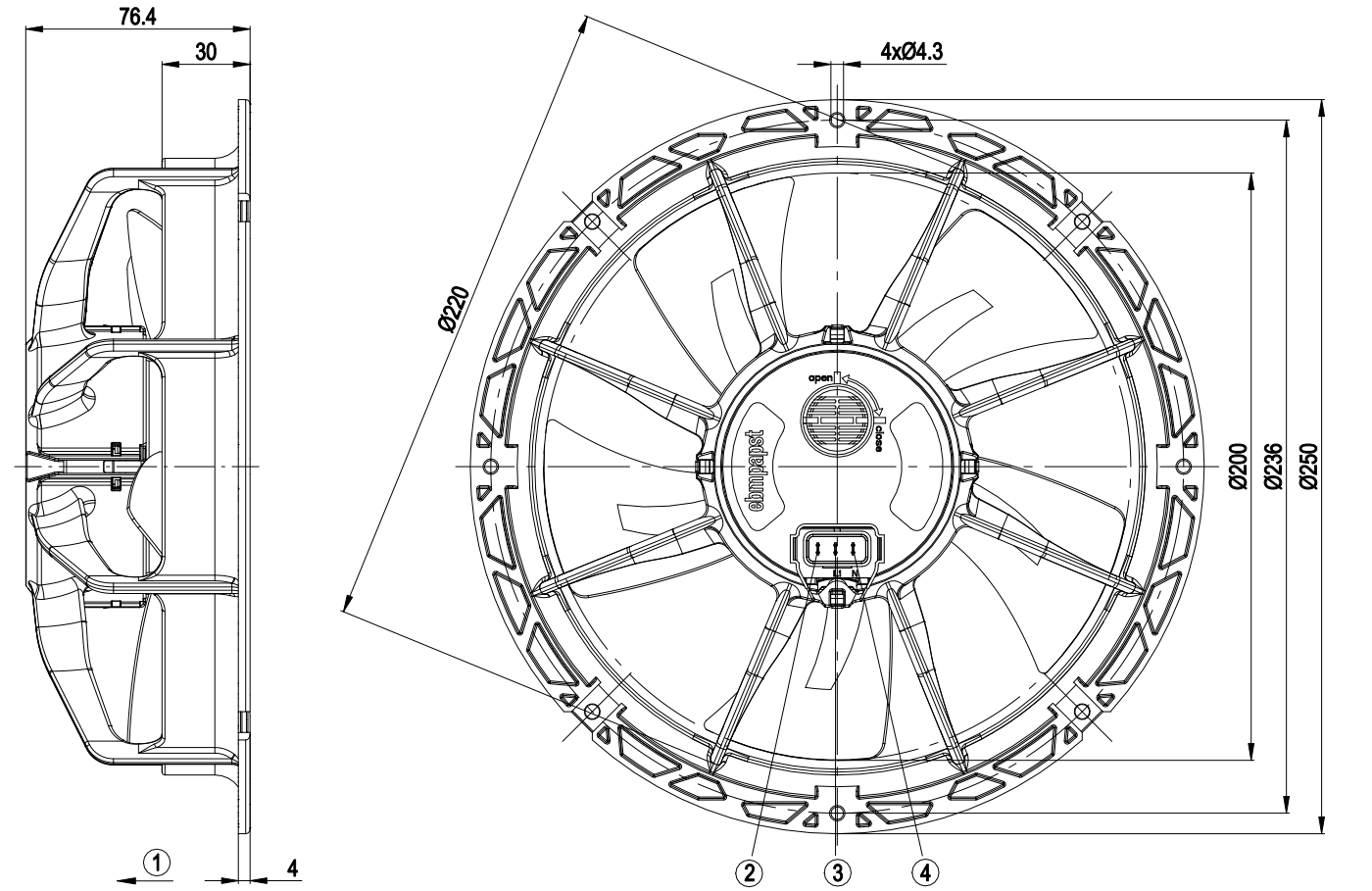
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Product drawing



1	Direction of air flow "V"
2	Pin S, speed selection (flat plug 2.8 x 0.5)
3	Pin L1, phase (flat plug 2.8 x 0.5)
4	Pin N, neutral conductor (flat plug 2.8 x 0.5)

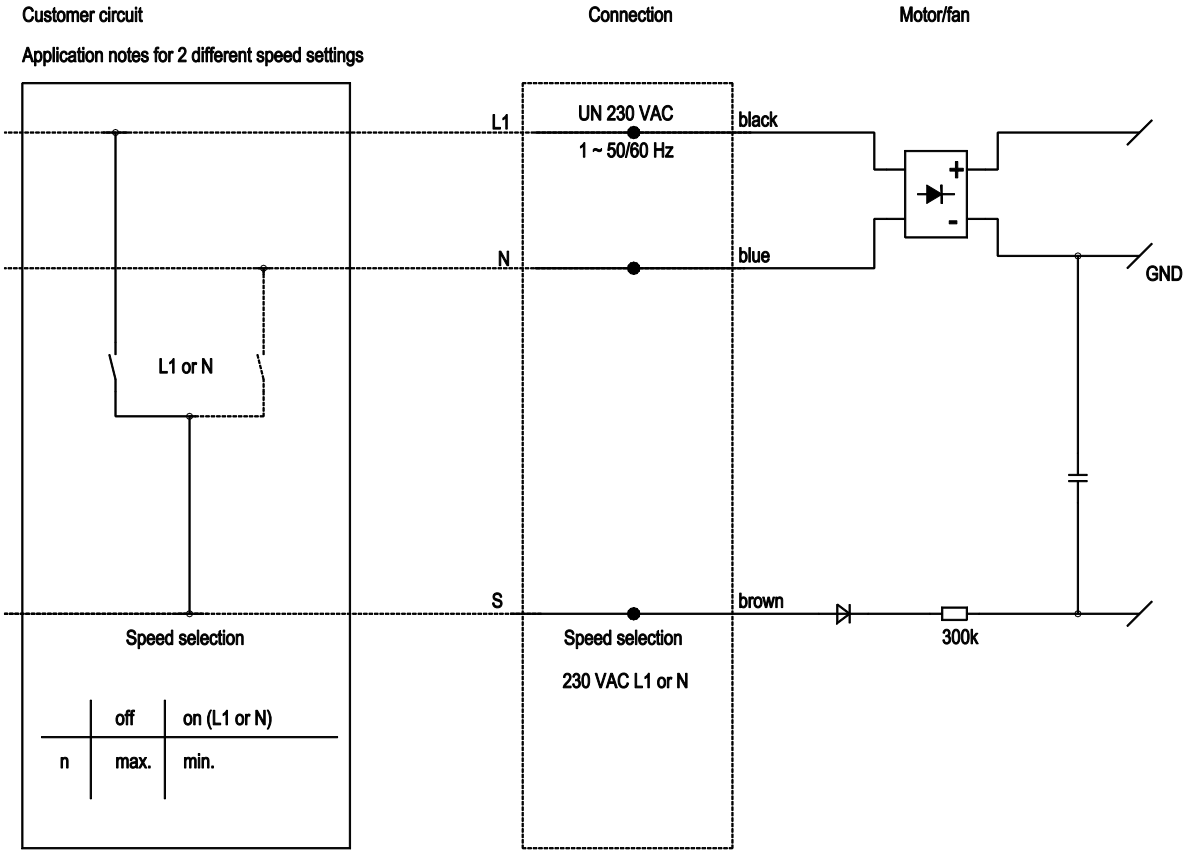
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Connection diagram



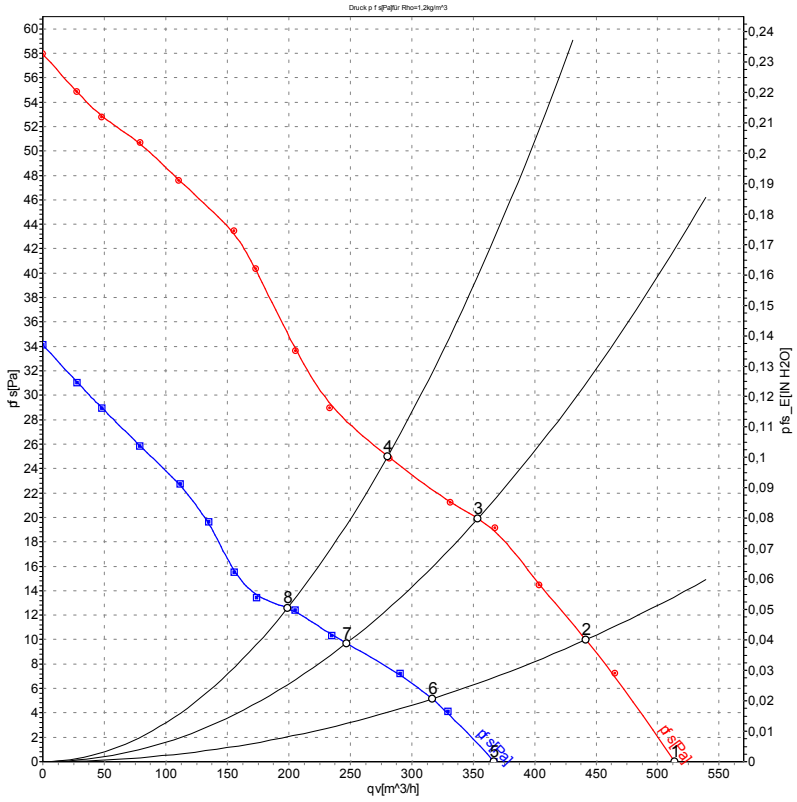
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Curves: Air performance 50 Hz



Measurement: LU-54084-1
Measurement: LU-54085-1

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}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	1400	7.0	0.06	43	51	515	0	305	0.00
2	230	50	1400	8.1	0.07	41	49	440	10	260	0.04
3	230	50	1400	9.0	0.07	45	54	355	20	210	0.08
4	230	50	1400	8.9	0.07	48	57	280	25	165	0.10
5	230	50	1000	4.4	0.04	33	42	365	0	215	0.00
6	230	50	1000	4.4	0.04	32	41	315	5	185	0.02
7	230	50	1000	4.5	0.04	36	44	245	10	145	0.04
8	230	50	1000	4.6	0.04	38	47	200	13	115	0.05

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

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