EC axial fan - ESM

W1G200-EG57-15 ebmpapst Datasheet
sales@fansco.com
www.fansco.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	**W1G200-EG57-15**
Motor	**M1G055-AI**

Phase		1~	1~
Nominal voltage	VAC	230	230
Nominal voltage range	VAC	200 .. 240	200 .. 240
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	ml
Speed (rpm)	min^{-1}	1250	900
Power consumption	W	8	4
Current draw	A	0.08	
Max. back pressure	Pa	22	
Max. back pressure	in. wg	0.09	
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

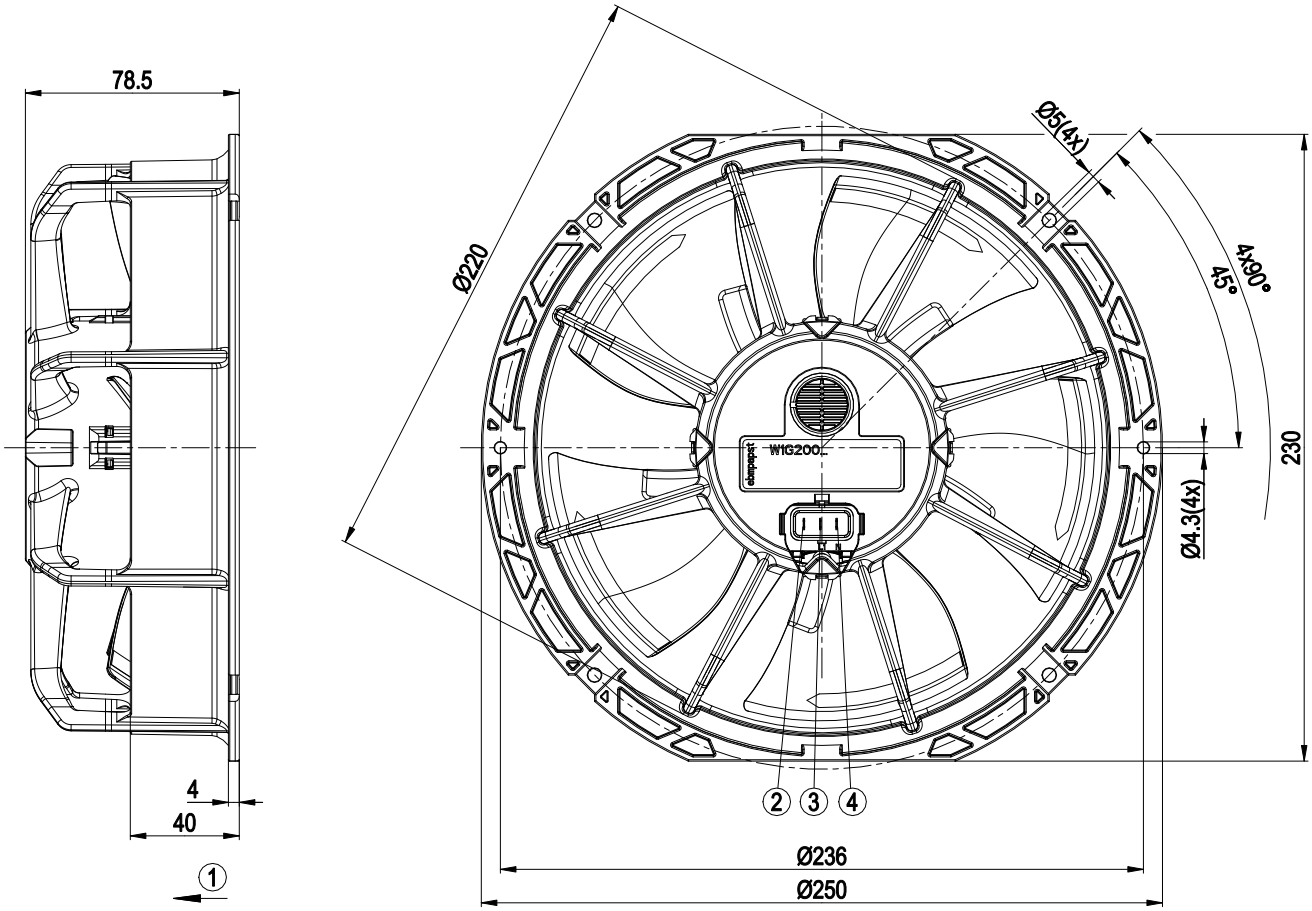
EC axial fan - ESM

Technical description

Weight	1 kg
Size	200 mm
Motor size	55
Blade material	PP plastic
Fan housing material	PP plastic
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP55; 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	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed setting input (230 V) - Power limiter - Motor current limitation - Soft start - Thermal overload protection for motor
Speed levels	2
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)
Electrical hookup	Plug
With cable	Lateral
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; EN 60034-1; EN 60204-1; CE
Approval	VDE; EAC

EC axial fan - ESM

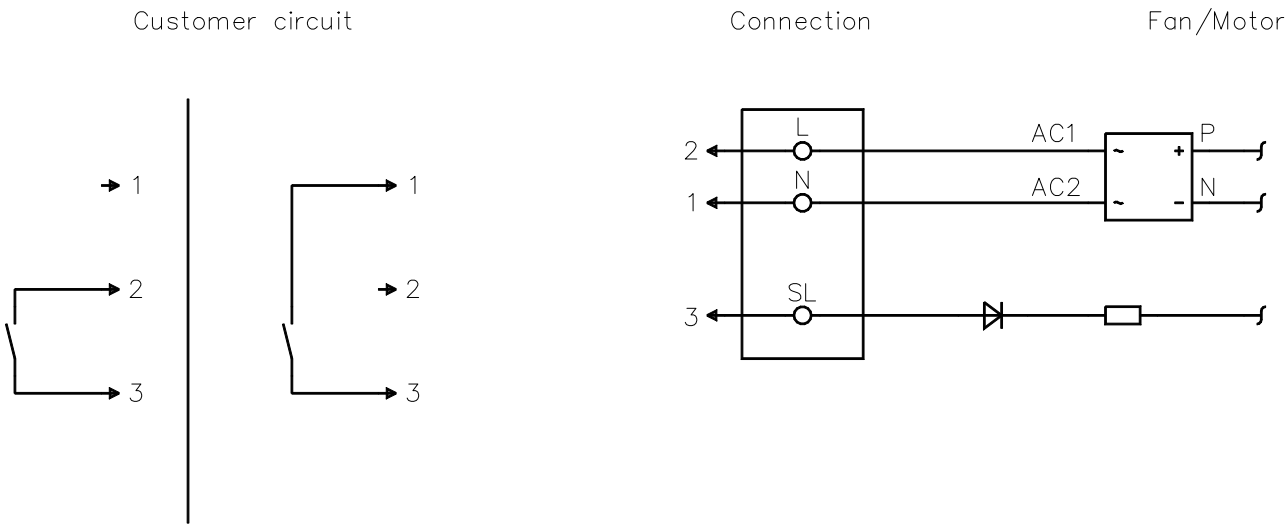
Product drawing



1	Airflow direction "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)

EC axial fan - ESM

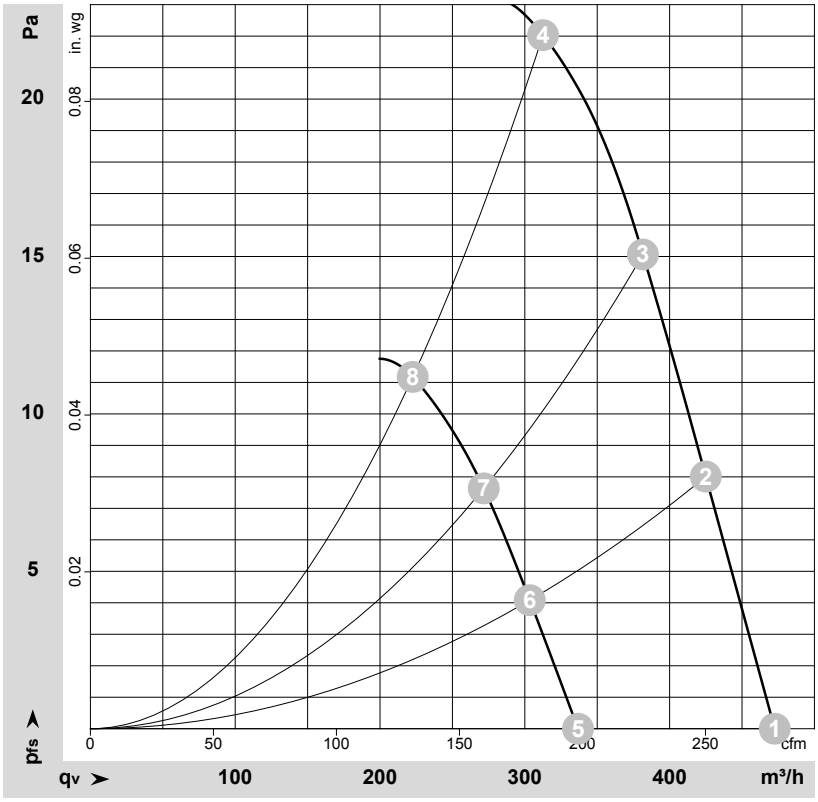
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	N		blue	Power supply, neutral conductor, see nameplate for voltage range
2	L		black	Power supply, phase, see nameplate for voltage range
3	SL		brown	Speed selection: switch open speed 1, switch closed speed 2

EC axial fan - ESM

Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-192828-1
Measurement: LU-193596-1

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	Wired	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	1~	230	50	1250	7.0	0.07	38	46	475	0	280	0.00
2	1	1~	230	50	1250	7.0	0.07	37	44	425	8	250	0.03
3	1	1~	230	50	1250	8.0	0.08	36	44	380	15	225	0.06
4	1	1~	230	50	1250	8.0	0.08	39	47	315	22	185	0.09
5	2	1~	230	50	900	3.00	0.04	30	38	335	0	200	0.00
6	2	1~	230	50	900	3.00	0.04	28	36	305	4	180	0.02
7	2	1~	230	50	900	4.0	0.04	28	36	270	8	160	0.03
8	2	1~	230	50	900	4.0	0.04	32	40	225	11	130	0.04

Wired = Wiring · 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