EC axial fan

sickle-shaped blades (S series)

ESM fan housing

Nominal data

Type	**W1G200-EF60-02**			
Motor	**M1G055-BD**			
Nominal voltage	VDC	24	24	24
Nominal voltage range	VDC	16 .. 28	16 .. 28	16 .. 28
Method of obtaining data		ml		
Speed (rpm)	min^{-1}	2200	1400	900
Power consumption	W	35		
Current draw	A	1.6		
Max. back pressure	Pa	60		
Max. back pressure	in. wg	0.24		
Min. ambient temperature	°C	-30	-30	-30
Max. ambient temperature	°C	50	50	50

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

W1G200-EF60-02 ebmpapst Datasheet FansCo sales@fansco.com www.fansco.com

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Technical description

Weight	0.92 kg
Size	200 mm
Motor size	55
Blade material	PA plastic
Fan housing material	PP plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, 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	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed setting input - Speed monitoring Hall IC - Motor current limitation - Emergency operation - RS485 MODBUS-RTU - Special function Automatic speed switching - Special function Automatic speed switching and reversal of rotation - Thermal overload protection for motor - Reverse polarity protection
Speed levels	3
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89
Approval	CSA C22.2 No. 77; EAC; UL 1004-3; VDE

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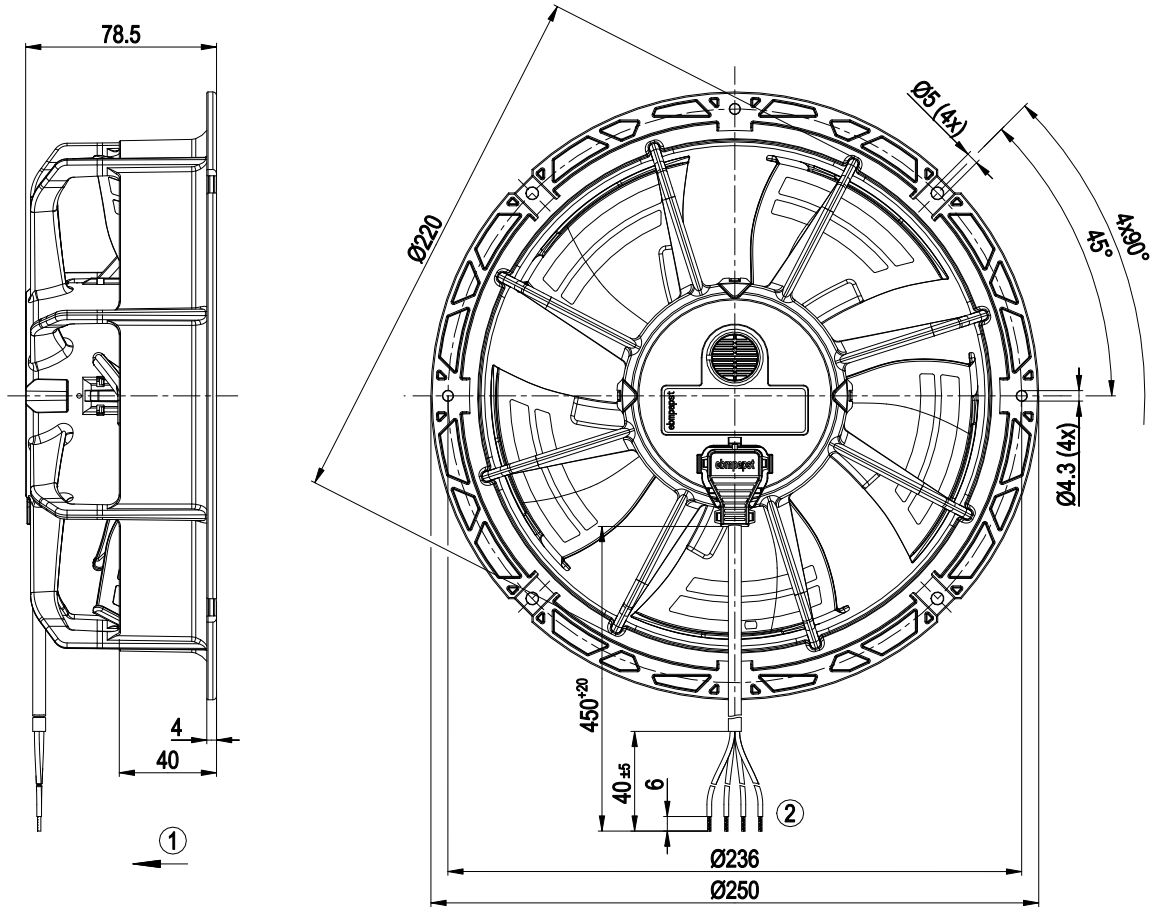
Product drawing



1	Airflow direction "V"
2	Cable PVC AWG20
	4x splice

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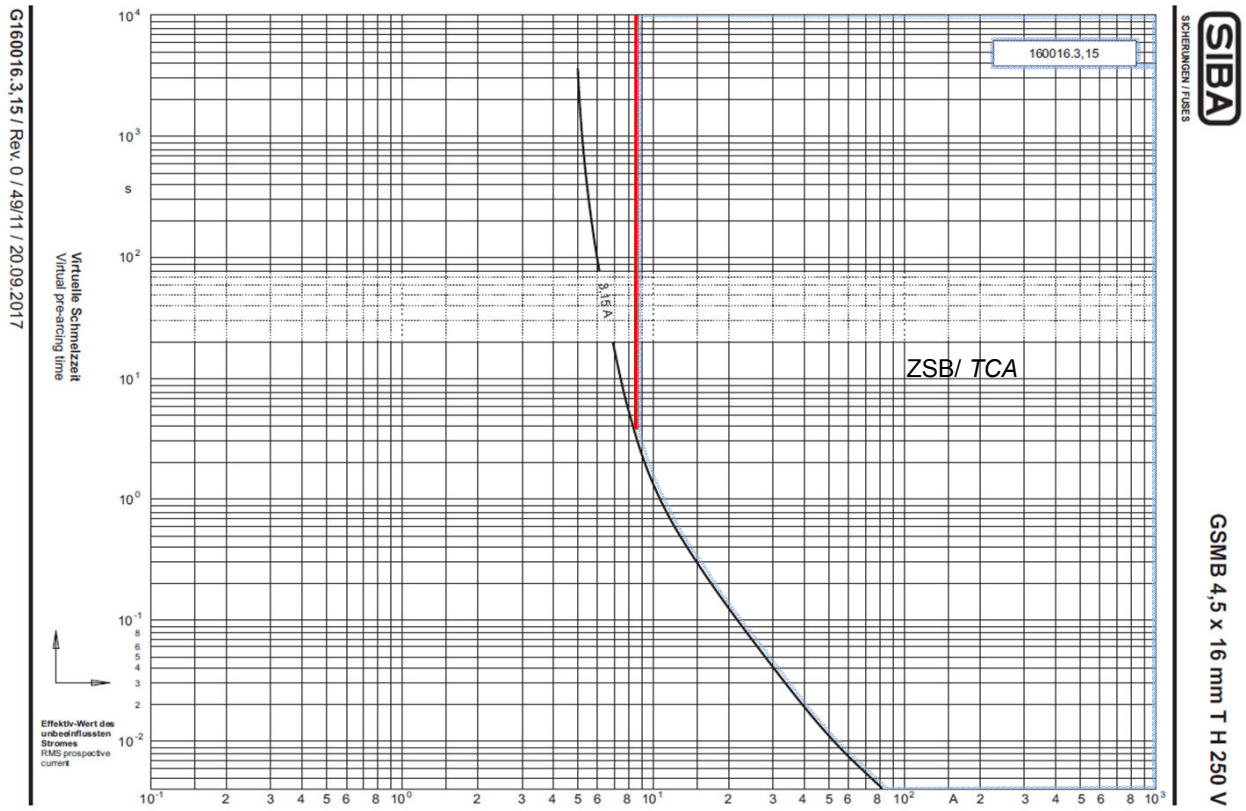
Anforderungen an das Netzteil
Power supply requirements

Nennspannung: *rated voltage*	24VDC
Spannungsbereich: *voltage range*	16VDC - 28VDC
Mindeststrom im Fehlerfall: *minimum current in case of failure*	8,7A für min. 5s **Tu=23°C** oder innerhalb des geforderten Zeit-/ Strombereiches (ZSB) im unteren Schaubild (an der Anschlussleitung gemessen) *8,7A for min. 5s* ***T A =23° C*** *or within the required time/ current area (TCA)* *in the chart below (measured at the connecting line)*

Es handelt sich bei allen Angaben um typische Werte.
all general information are typical values



Quelle: Datenblatt SIBA GSMB 4,5 x 16mm T H 250V
G60016 / Rev. 5 / 45 / 18.11.2011
source: *datasheet SIBA GSMB 4,5 x 16mm T H 250V*
G60016 / Rev. 5 / 45 / 18.11.2011

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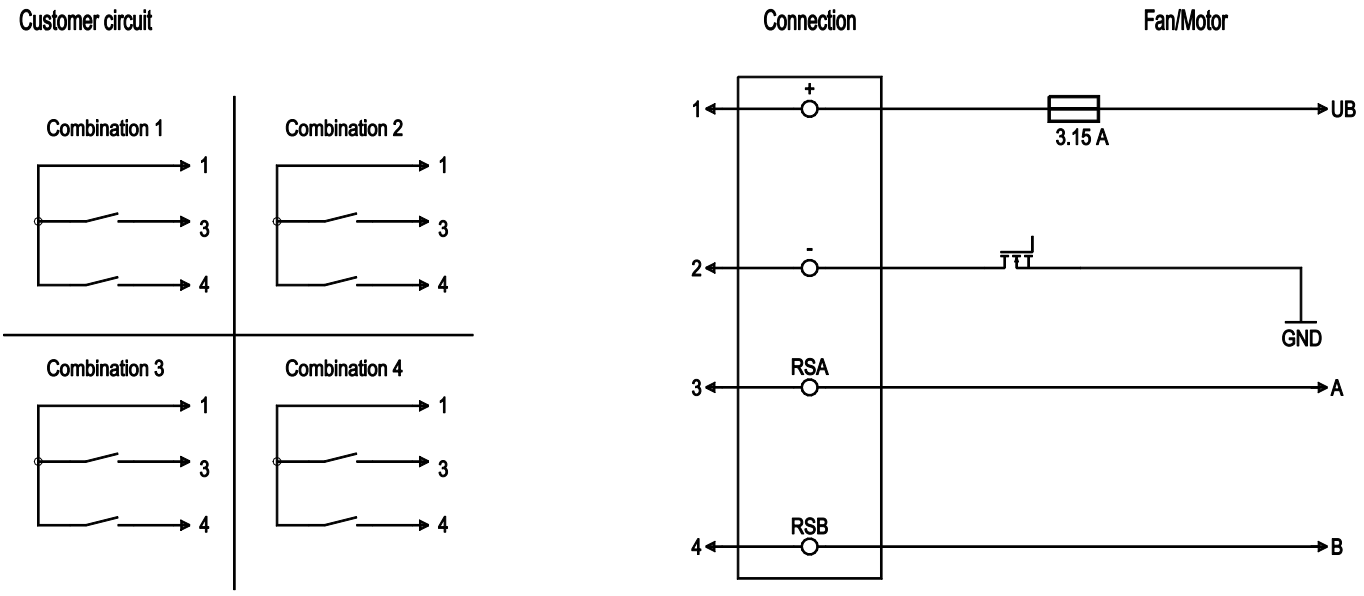
Connection diagram



Switch closed = 1
Switch open = 0

Combination	RSA	RSB	Function
1	0	0	MODBUS
2	0	1	Speed level 1
3	1	0	Speed level 2
4	1	1	Speed level 3

No.	Conn.	Designation	Color	Function/assignment
1	+		red	Power supply, see nameplate for voltage range
2	-		blue	Power supply, see nameplate for voltage range
3	RSA		white	RS-485 interface for MODBUS RSA/switching input
4	RSB		brown	RS-485 interface for MODBUS RSB/switching input

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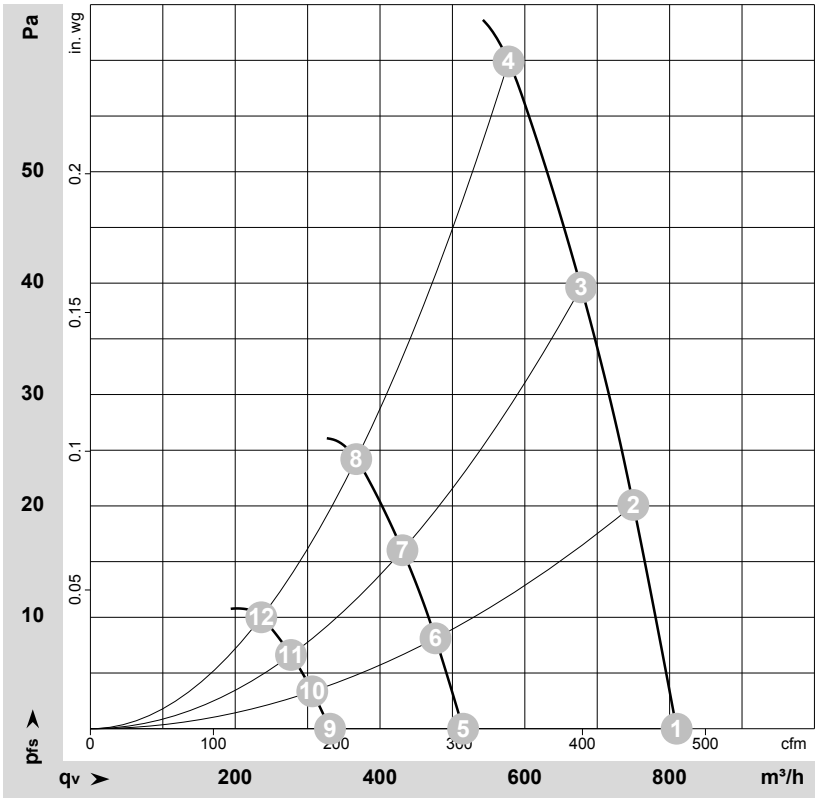
Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-188387-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	24	2200	29	1.31	56	64	810	0	475	0.00
2	24	2200	31	1.45	56	64	750	20	440	0.08
3	24	2200	33	1.57	56	63	680	40	400	0.16
4	24	2200	35	1.60	56	64	580	60	340	0.24
5	24	1400	7.0	0.34	45	52	515	0	305	0.00
6	24	1400	8.0	0.37	45	52	475	8	280	0.03
7	24	1400	9.0	0.40	44	52	430	16	255	0.06
8	24	1400	9.0	0.42	45	53	365	24	215	0.10
9	24	900	2.00	0.09	34	41	330	0	195	0.00
10	24	900	2.00	0.10	33	41	305	3	180	0.01
11	24	900	2.00	0.11	33	41	275	7	165	0.03
12	24	900	2.00	0.11	34	42	235	10	140	0.04

U = Voltage · 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