K3G250-RZ27-10

ACCESS BUSINESS GROUP LLC

SKY - WSA3253

EC centrifugal fan - RadiCal

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.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	**K3G250-RZ27-10**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	100 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed (rpm)	min^{-1}	1750
Power consumption	W	75
Current draw	A	1.05-0.65
Min. ambient temperature	°C	-10
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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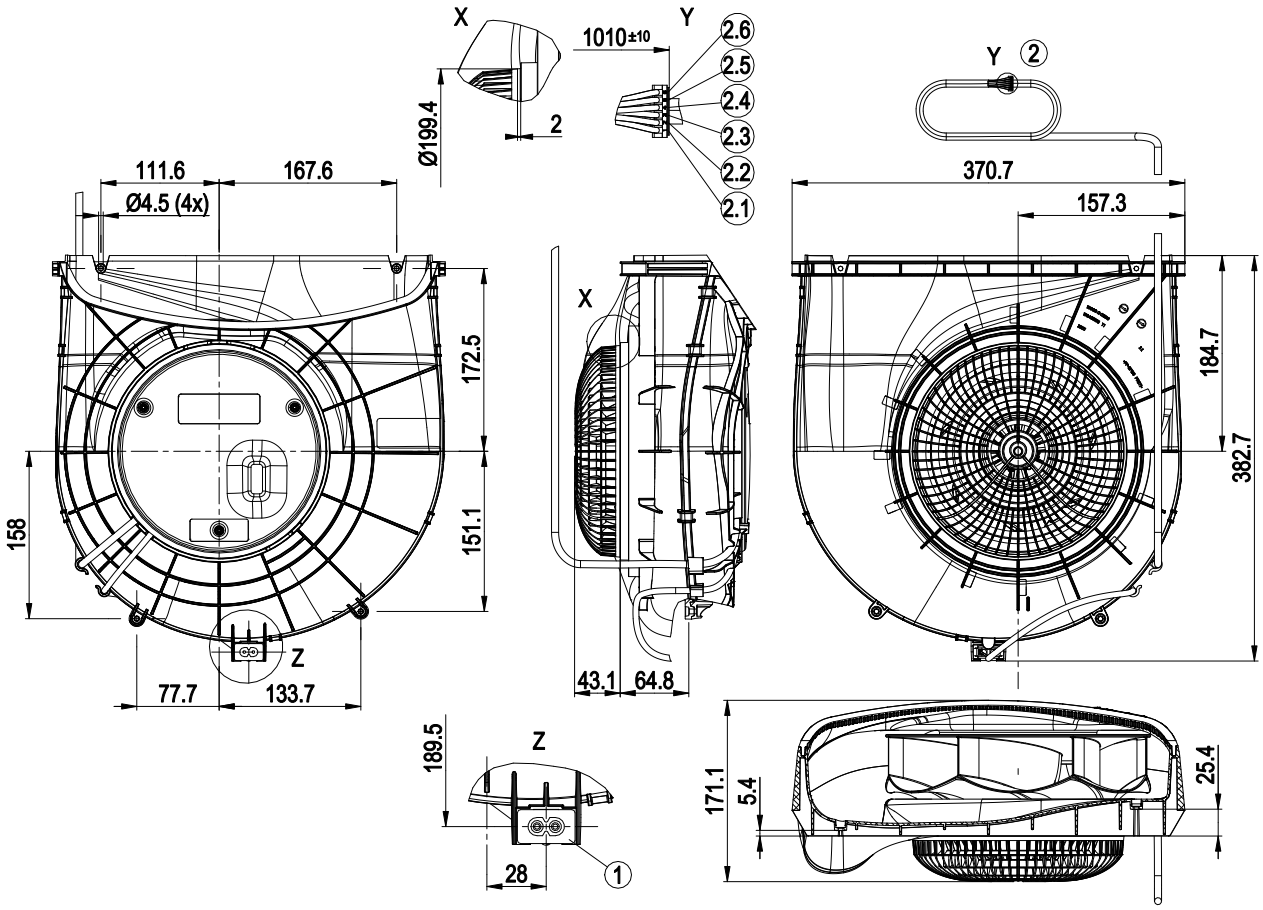
Technical description

Weight	3.3 kg
Size	250 mm
Motor size	55
Rotor surface	Thick-film passivated
Impeller material	PA plastic
Housing material	PP plastic
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	Motor IP54, electronics IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - PWM control input - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Connector with cable
Motor protection	Electronic motor protection
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 113; UL 507; CCC

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Product drawing

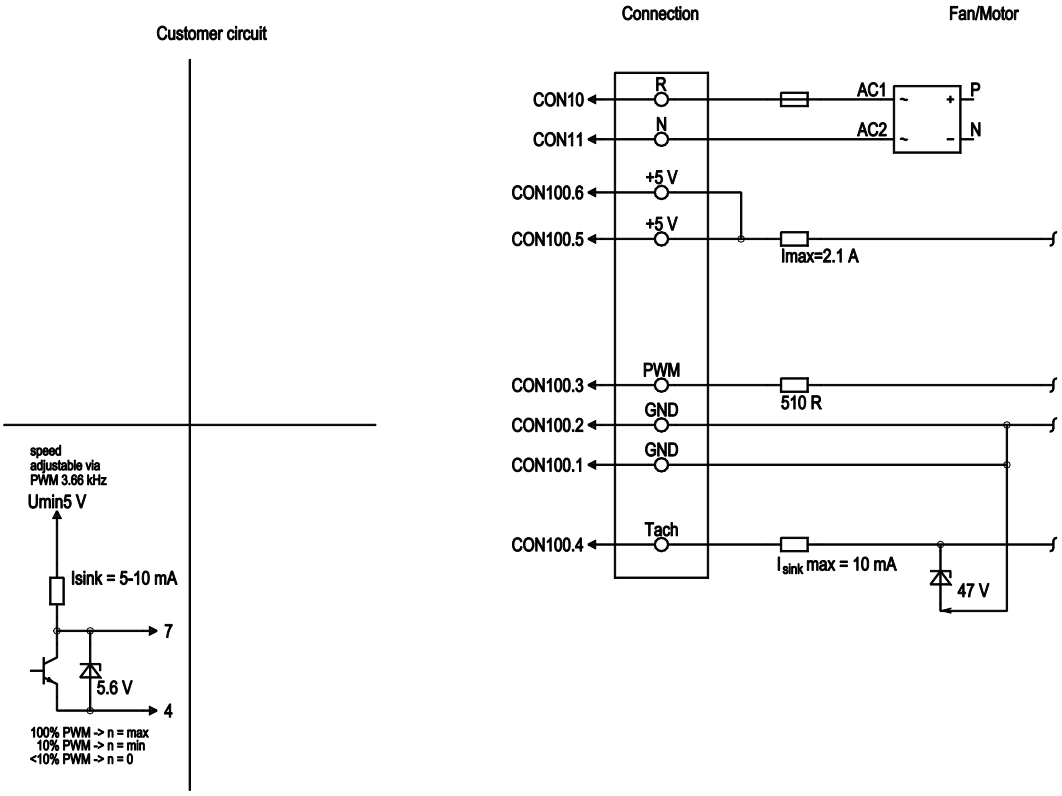


1	2-pole connector housing Schurter 2578-X-7700-A-415B Material 6163.0016
2	Cable PVC AWG24, 6-pole connector housing JST PAP-06V-S, 6x socket JST SPHD-001G-P0.5
2.1	GND (blue)
2.2	GND (blue)
2.3	PWM (yellow)
2.4	Tach (white)
2.5	+5 V (red)
2.6	+5 V (red)

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Connection diagram

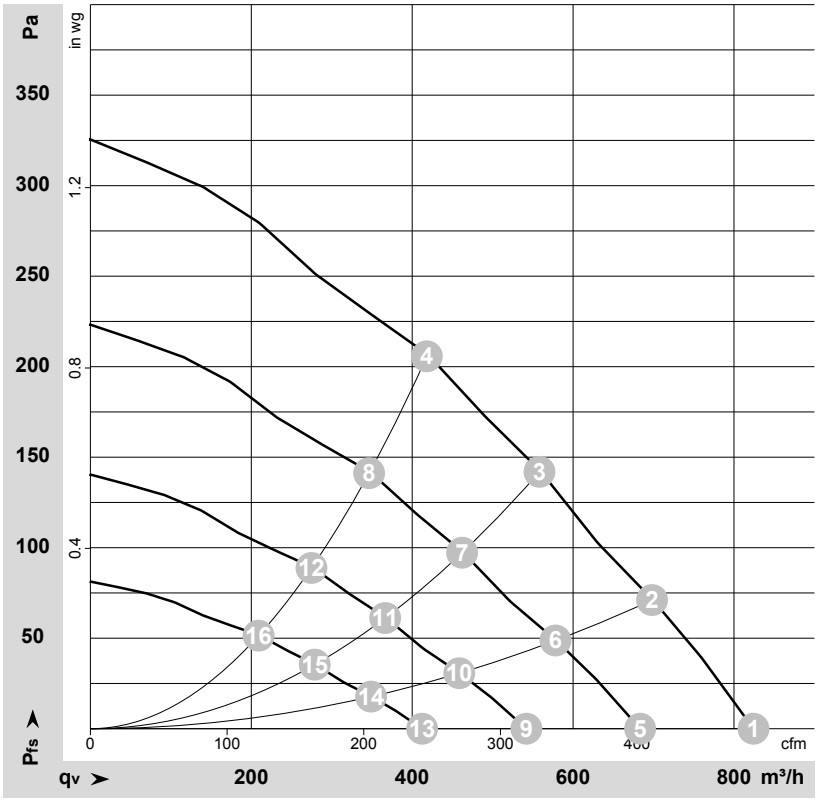


No.	Conn.	Designation	Function/assignment
	L	CON10	Power supply, phase, see nameplate for voltage range
	N	CON11	Power supply, neutral conductor, see nameplate for voltage range
	GND	CON100.1	Reference ground for control interface, SELV
	GND	CON100.2	Reference ground for control interface, SELV
	PWM	CON100.3	PWM control input, Ri=510 Ω, SELV, Isink=5-10 mA
	Tacho	CON100.4	Tach output: open collector, 1 pulse per revolution, SELV
	+5V	CON100.5	Fixed voltage output 5 VDC +/-5%, Imax. 1.05 A, short-circuit-proof, power supply for ext. devices (e.g. potentiometers), SELV
	+5V	CON100.6	Fixed voltage output 5 VDC +/-5%, Imax. 1.05 A, short-circuit-proof, power supply for ext. devices (e.g. potentiometers), SELV

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-180097-1

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}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	230	50	1750	68	0.58	61	68	70	825	0	485	0.00
2	230	50	1750	73	0.62	58	65	68	700	72	410	0.29
3	230	50	1750	75	0.65	56	63	66	560	140	330	0.56
4	230	50	1750	73	0.61	55	63	65	420	207	245	0.83
5	230	50	1450	39	0.33	56	63	66	685	0	400	0.00
6	230	50	1450	41	0.35	53	60	63	580	49	340	0.20
7	230	50	1450	43	0.36	51	59	61	460	98	270	0.39
8	230	50	1450	41	0.35	51	58	61	345	142	205	0.57
9	230	50	1150	19	0.16	50	57	60	540	0	320	0.00
10	230	50	1150	21	0.17	47	55	57	460	31	270	0.12
11	230	50	1150	21	0.18	46	53	55	365	62	215	0.25
12	230	50	1150	21	0.17	45	53	55	275	89	160	0.36
13	230	50	875	9.0	0.07	43	50	53	410	0	240	0.00
14	230	50	875	9.0	0.08	41	48	50	350	18	205	0.07
15	230	50	875	9.0	0.08	39	46	49	280	36	165	0.14
16	230	50	875	9.0	0.08	38	46	48	210	52	125	0.21

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
LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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