

K3G250-RE21-13 ebmpapst Datasheet

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Nominal data

Type	K3G250-RE21-13	
Motor	M3G055-DF	
Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	2520
Power consumption	W	160
Current draw	A	2.1
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

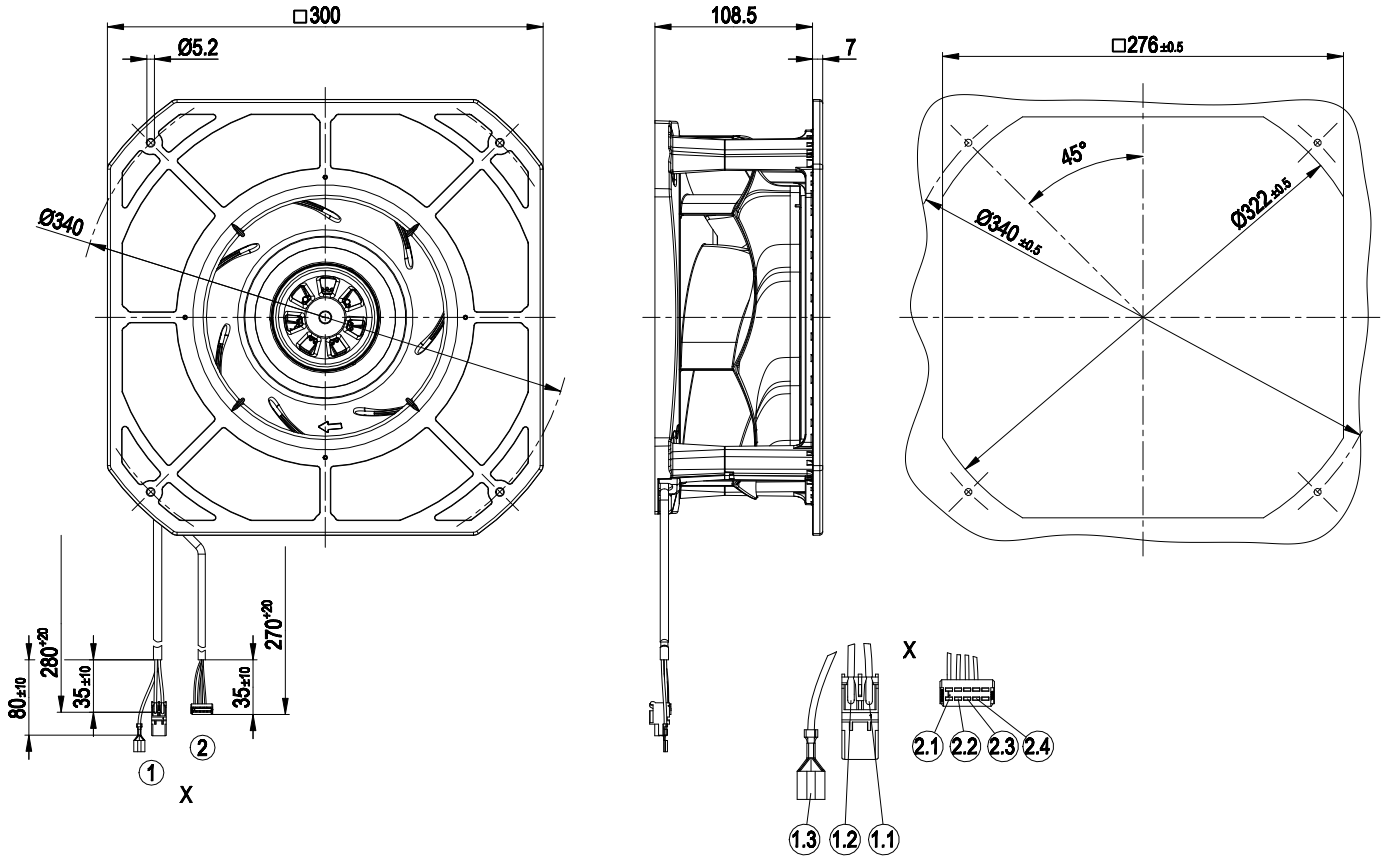
Subject to change



Technical description

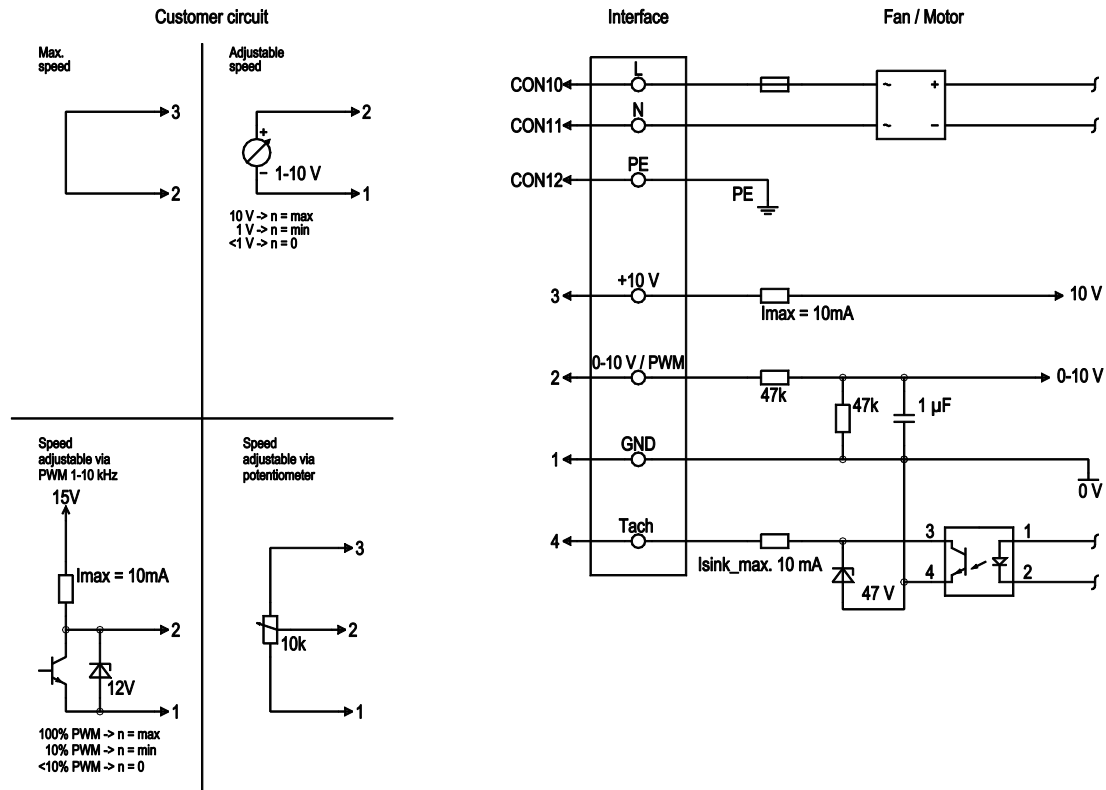
Weight	2.7 kg
Fan size	250 mm
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic
Housing material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Max. permitted 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	- Output 10 VDC, max. 10 mA - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	With plug
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77; UL 2111

Product drawing



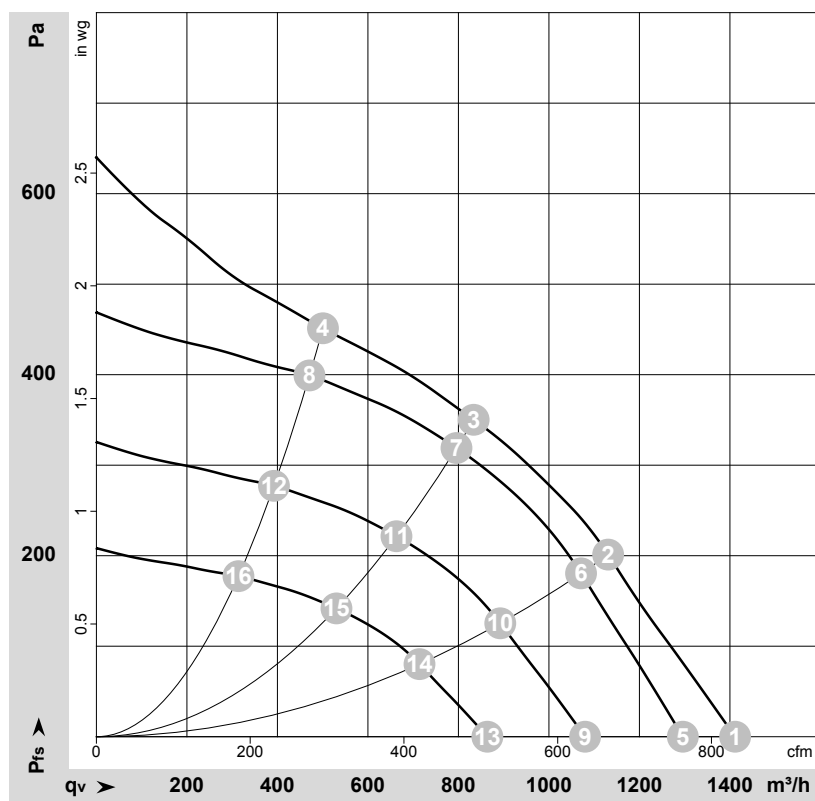
1	Cable PVC AWG20, 1x 2-pole connector housing STOCKO MFMP 9590-02-BB01-000-960-000-00, 1x flat push-on receptacle 6.3 x 0.8
1.1	blue
1.2	black
1.3	green/yellow
2	Cable PVC AWG22, 1x 5-pole connector housing STOCKO MFMP 7238-005-060-960-000-00-G
2.1	white
2.2	blue
2.3	red
2.4	yellow

Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

Curves: Air performance 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-142364-1

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	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	CFM	inH ₂ O
1	115	50	2615	135	1.76	1410	0	830	0.00
2	115	50	2535	155	2.01	1130	200	665	0.80
3	115	50	2520	160	2.10	835	350	490	1.41
4	115	50	2545	147	1.93	500	450	295	1.81
5	115	50	2400	104	1.36	1295	0	765	0.00
6	115	50	2400	131	1.71	1070	181	630	0.73
7	115	50	2400	140	1.80	795	319	470	1.28
8	115	50	2400	123	1.61	470	400	275	1.61
9	115	50	2000	60	0.79	1080	0	635	0.00
10	115	50	2000	76	0.99	890	126	525	0.51
11	115	50	2000	81	1.04	665	222	390	0.89
12	115	50	2000	71	0.93	390	278	230	1.12
13	115	50	1600	31	0.40	865	0	510	0.00
14	115	50	1600	39	0.51	715	80	420	0.32
15	115	50	1600	41	0.53	530	142	310	0.57
16	115	50	1600	36	0.48	315	178	185	0.71

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

