K3G250-RJ15-09

EC centrifugal module - RadiCal

backward-curved, single-intake

with housing

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Nominal data

Type	**K3G250-RJ15-09**
Motor	**M3G055-CF**

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}	1950
Power consumption	W	85
Current draw	A	1.3
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

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Technical description

Weight	1.8 kg
Size	250 mm
Motor size	55
Rotor surface	Thick-film passivated
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"
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, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Tach output - 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 motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-7 + 60730; CSA C22.2 No. 77 + CAN/CSA-E60730-1

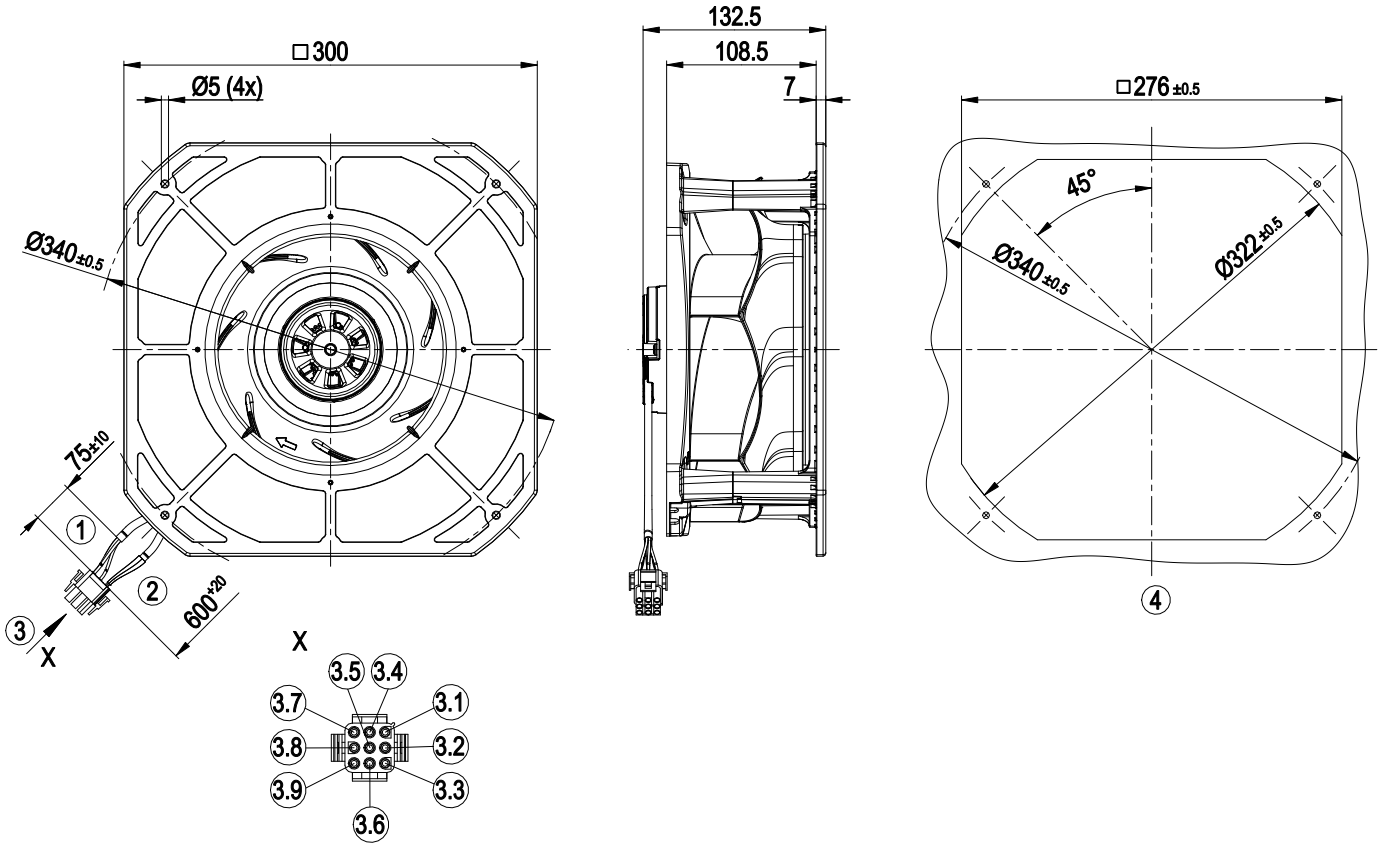
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Product drawing



1	Cable PVC AWG22
	4x plug pin TE 926886-1
2	Cable PVC AWG20
	3x plug pin TE 926886-1
3	9-pole connector housing TE 1-1863003-2
3.1	L (brown)
3.2	PE (green/yellow)
3.3	N (blue)
3.4	not used
3.5	Tach (white)
3.6	not used
3.7	0-10 V/PWM (yellow)
3.8	GND (blue)
3.9	+10 V (red)
4	Mounting dimensions

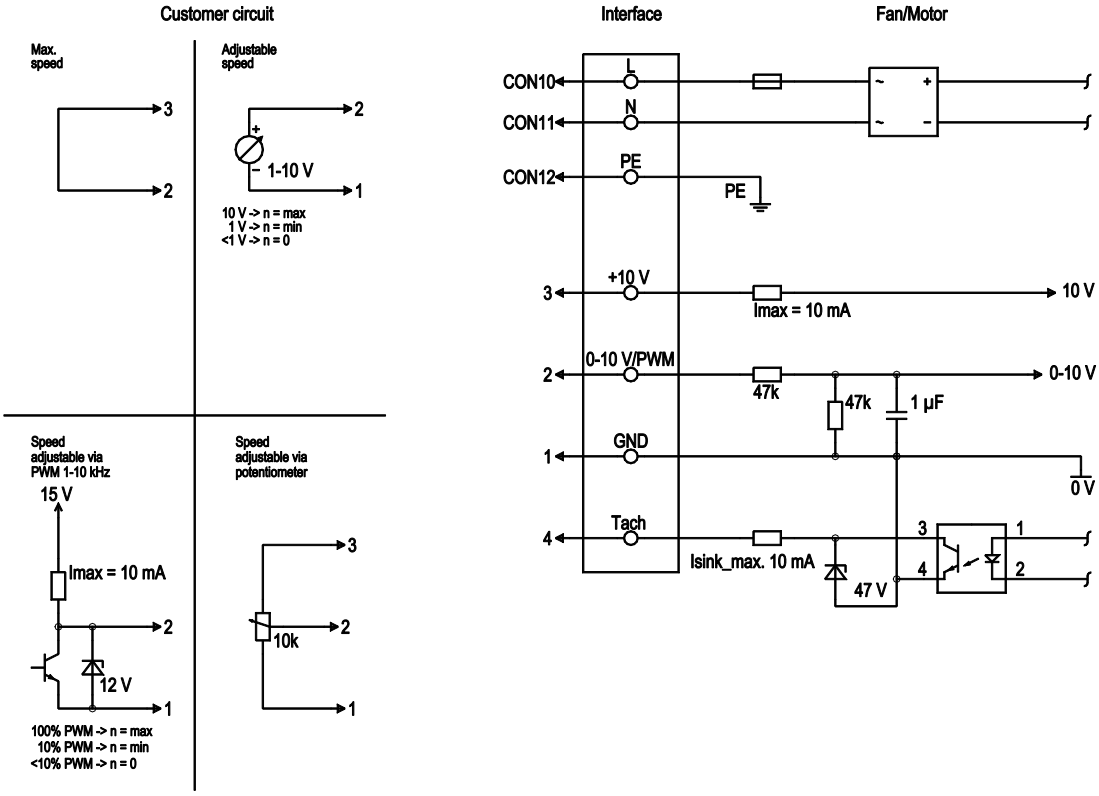
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	brown	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

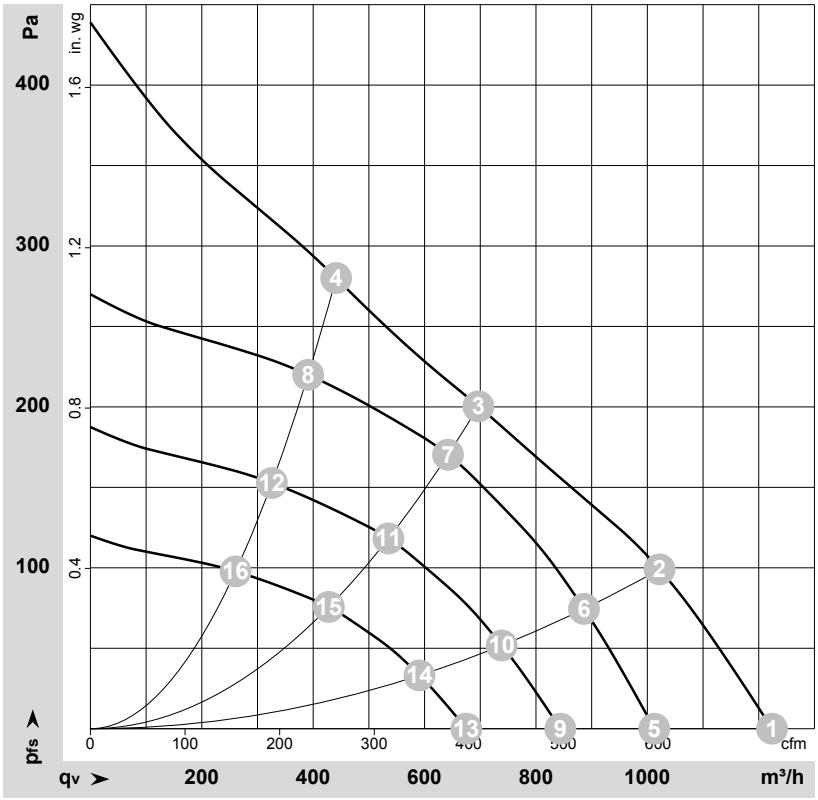
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-192952-1

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

	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~	115	50	2175	70	1.12	71	79	1225	0	720	0.00
2	1~	115	50	2075	85	1.30	62	70	1020	100	600	0.40
3	1~	115	50	1950	85	1.30	54	63	695	200	410	0.80
4	1~	115	50	2030	85	1.30	57	65	440	280	260	1.12
5	1~	115	50	1800	39	0.63	66	74	1010	0	595	0.00
6	1~	115	50	1800	53	0.83	59	67	885	75	520	0.30
7	1~	115	50	1800	63	0.99	52	60	640	172	380	0.69
8	1~	115	50	1800	57	0.89	54	62	390	220	230	0.88
9	1~	115	50	1500	23	0.37	62	69	845	0	495	0.00
10	1~	115	50	1500	31	0.48	54	62	740	52	435	0.21
11	1~	115	50	1500	36	0.57	47	55	535	119	315	0.48
12	1~	115	50	1500	33	0.52	49	57	325	153	190	0.61
13	1~	115	50	1200	12	0.19	56	64	675	0	395	0.00
14	1~	115	50	1200	16	0.25	49	57	590	33	350	0.13
15	1~	115	50	1200	19	0.29	41	50	430	76	250	0.31
16	1~	115	50	1200	17	0.26	44	52	260	98	155	0.39

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

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