K3G250-RE07-12

EC centrifugal module - RadiCal

backward-curved, single-intake

with housing

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**K3G250-RE07-12**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed	min^{-1}	2510
Power consumption	W	170
Current draw	A	1.4
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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	57.8	43.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		76.7	62
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.16
09 Air flow q_v	m^3/h	800
09 Pressure increase p_{fs}	Pa	380
10 Speed n	min^{-1}	2535
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-153273

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Technical description

Weight	2.75 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
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	VDE

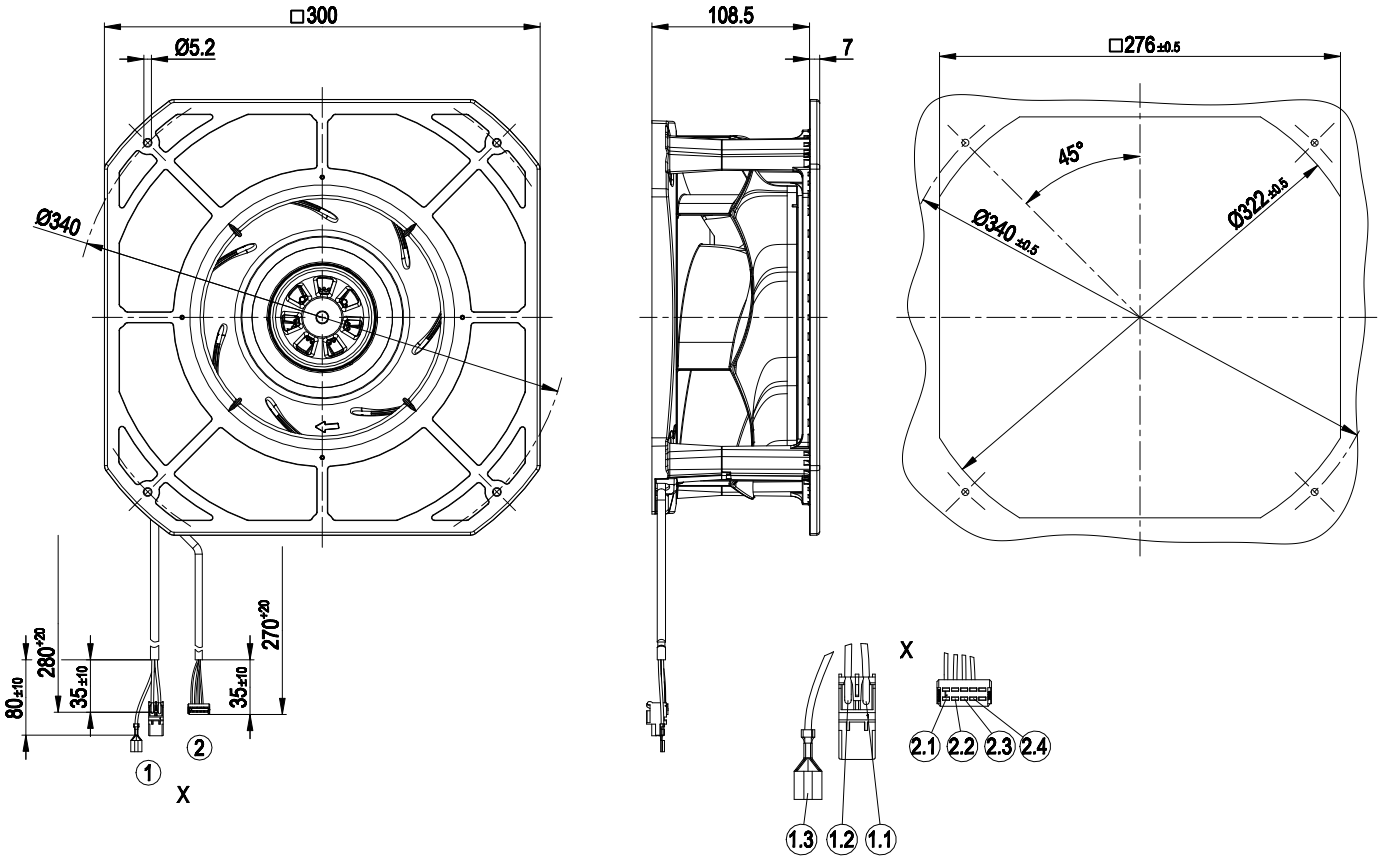
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Product drawing



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

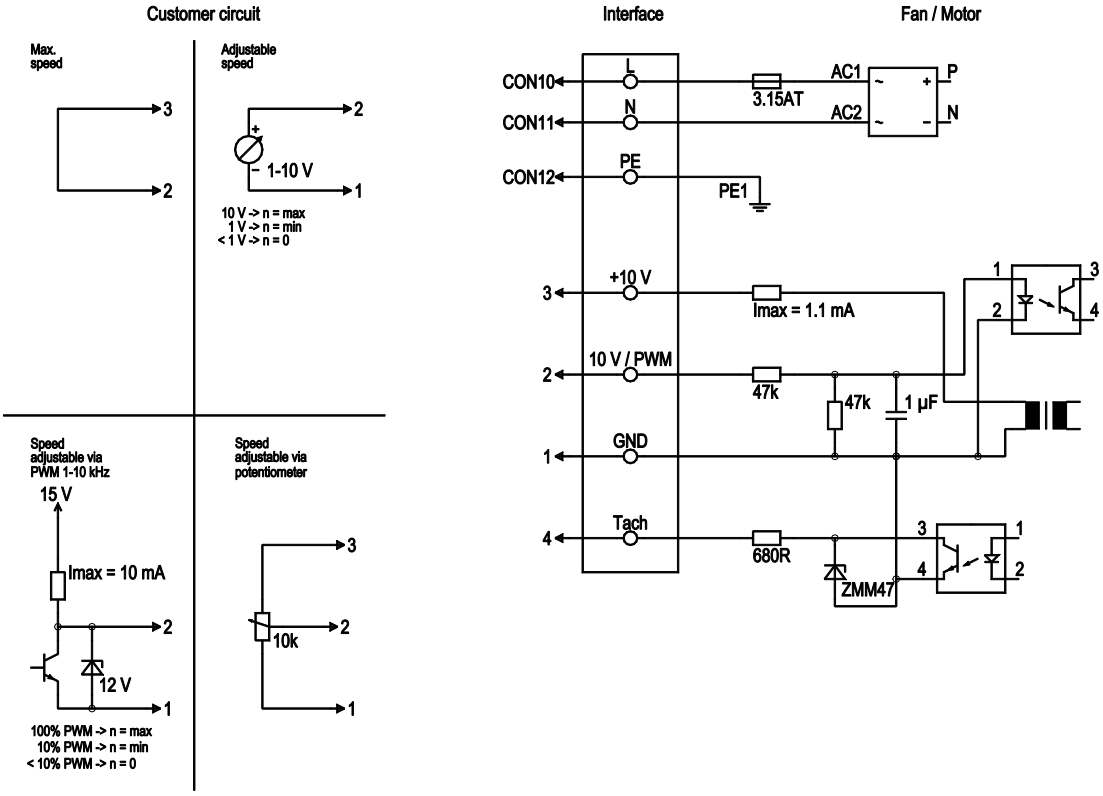
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0- 10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof.
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

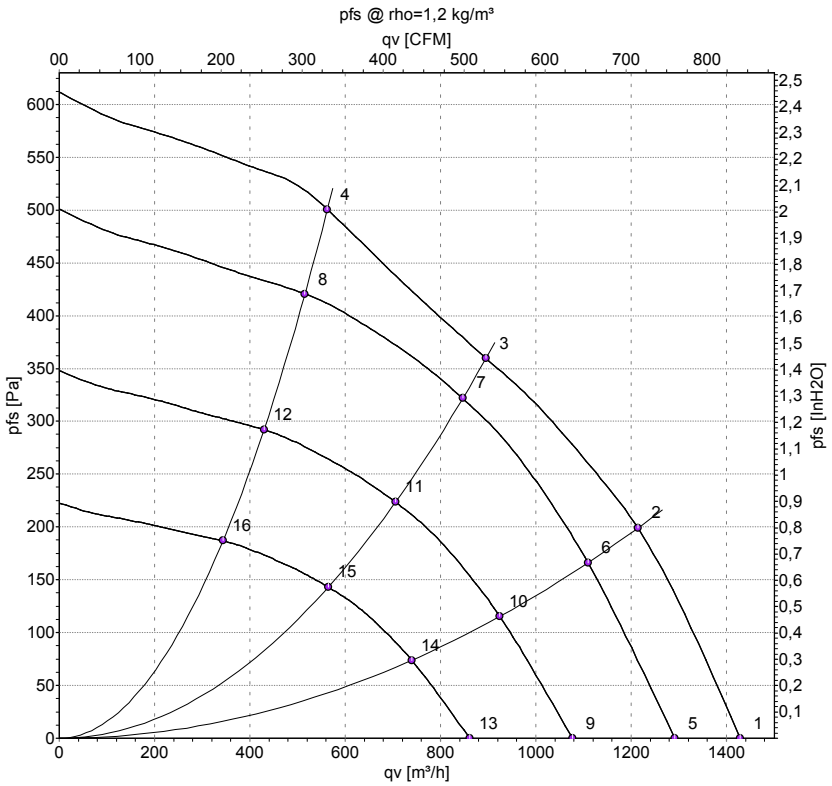
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Curves: Air performance 50 Hz



Measurement: LU-154717-1

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}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	2655	143	1.18	68	76	1430	0
2	230	50	2630	170	1.40	64	72	1215	200
3	230	50	2510	170	1.40	60	67	895	360
4	230	50	2620	168	1.39	65	73	560	500
5	230	50	2400	105	0.87	66	73	1290	0
6	230	50	2400	129	1.07	62	69	1110	168
7	230	50	2400	144	1.19	59	66	845	322
8	230	50	2400	129	1.07	63	70	515	421
9	230	50	2000	61	0.51	61	69	1075	0
10	230	50	2000	75	0.62	57	65	925	116
11	230	50	2000	83	0.69	54	62	705	224
12	230	50	2000	75	0.62	59	66	430	292
13	230	50	1600	31	0.26	55	63	860	0
14	230	50	1600	38	0.32	52	59	740	75
15	230	50	1600	43	0.35	48	56	565	143
16	230	50	1600	38	0.32	53	60	345	187

U = Power supply · f = Frequency · n = Speed · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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