K3G250-RD17-09

EC centrifugal module - RadiCal

backward curved

with housing

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**K3G250-RD17-09**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	1955
Power input	W	80
Current draw	A	0.7
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	2.4 kg
Size	250 mm
Surface of rotor	Thick layer passivated
Material of impeller	PA plastic
Housing material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

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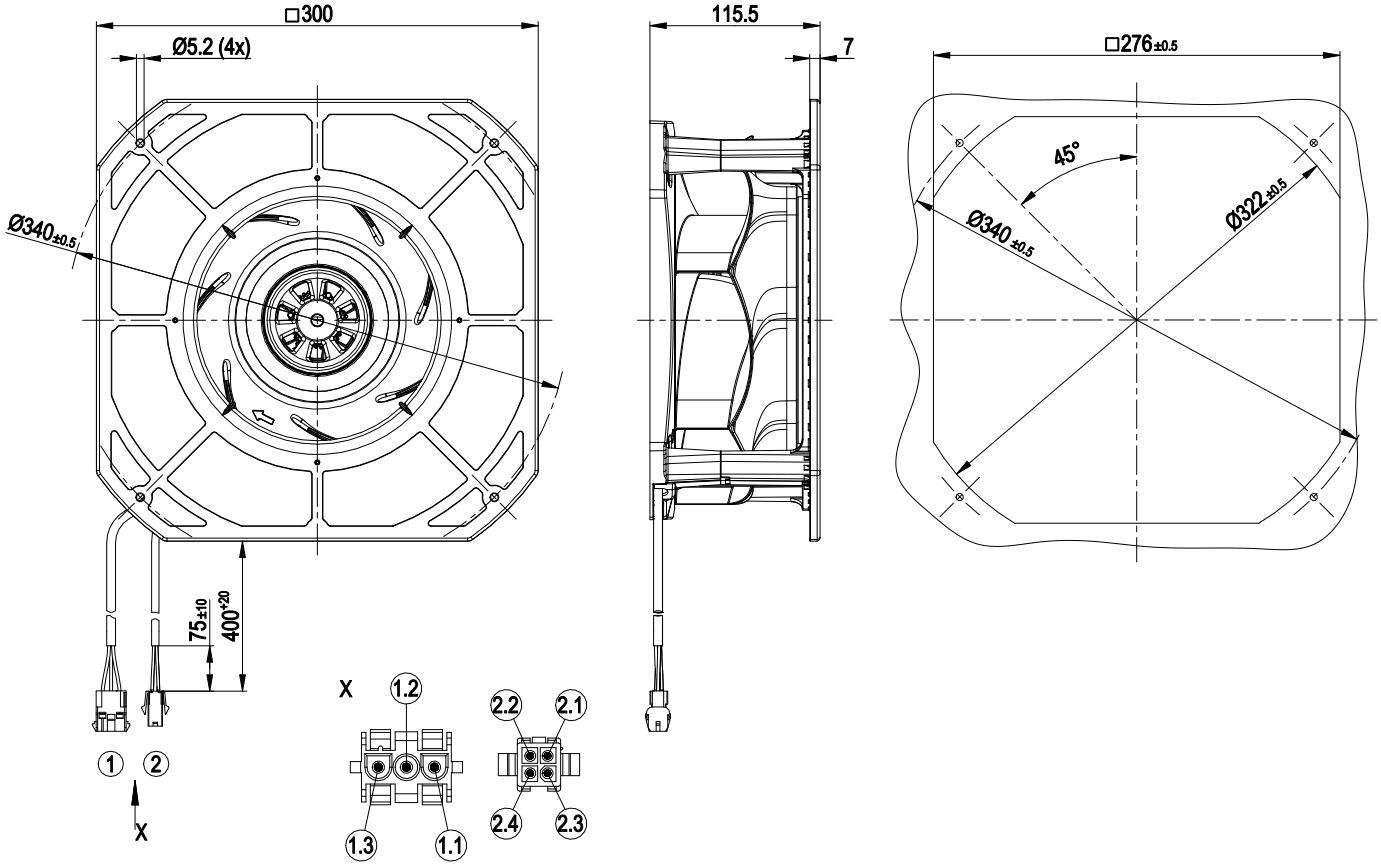
Product drawing



1	Connection line PVC AWG20, connector housing 3-pole tyco 2178474-2, 3x plug pin tyco 926885-1
1.1	black
1.2	green/yellow
1.4	blue
2	Connection line PVC AWG22 with 4-pole connector housing tyco 172159-1, 4x plug pin tyco 170360-1
2.1	red
2.2	yellow
2.3	white
2.4	blue

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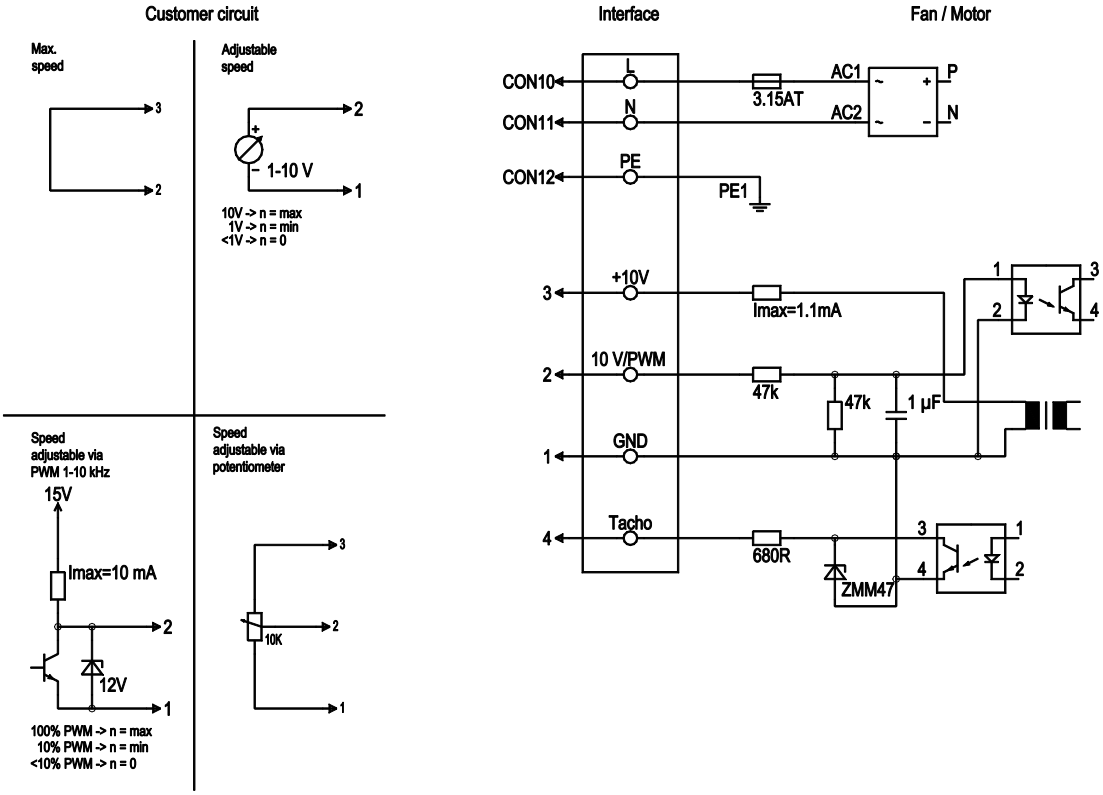
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see type plate 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	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated

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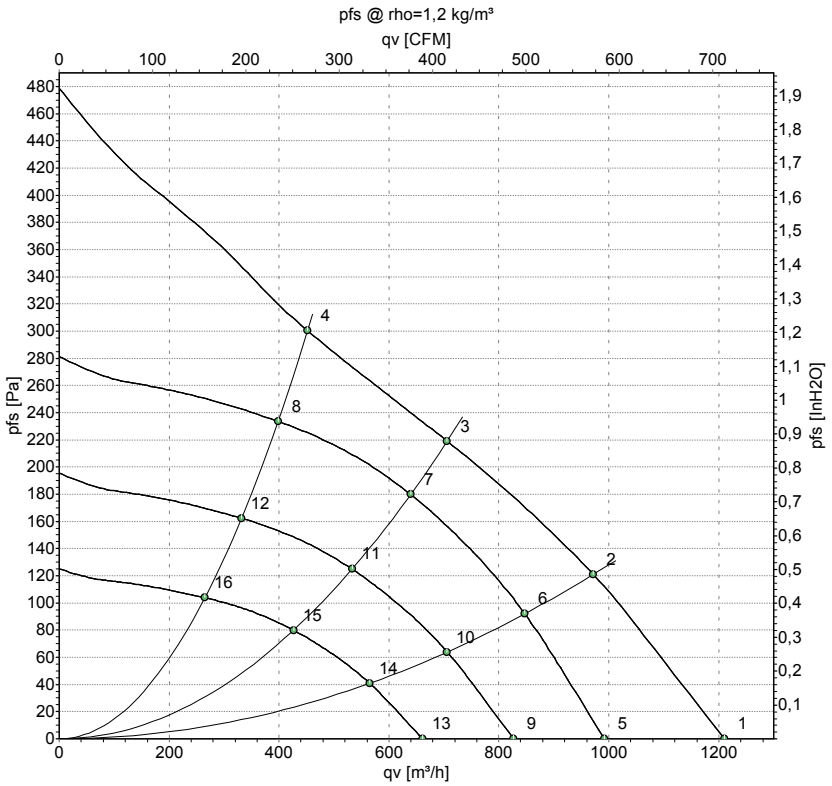
Charts: Air flow 50 Hz



Measurement: LU-153278-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	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	inH2O
1	230	50	2195	80	0.70	63	71	1210	0	710	0.00
2	230	50	2065	80	0.70	58	66	970	120	570	0.48
3	230	50	1955	80	0.70	53	61	705	220	415	0.88
4	230	50	2040	80	0.70	60	67	450	300	265	1.20
5	230	50	1800	45	0.42	58	66	990	0	585	0.00
6	230	50	1800	55	0.52	55	62	845	92	500	0.37
7	230	50	1800	63	0.59	51	58	640	180	375	0.72
8	230	50	1800	58	0.54	56	64	400	234	235	0.94
9	230	50	1500	26	0.24	54	61	825	0	485	0.00
10	230	50	1500	32	0.30	50	58	705	64	415	0.26
11	230	50	1500	36	0.34	46	54	535	125	315	0.50
12	230	50	1500	33	0.31	52	60	330	162	195	0.65
13	230	50	1200	13	0.12	48	56	660	0	390	0.00
14	230	50	1200	16	0.15	44	52	565	41	335	0.16
15	230	50	1200	19	0.17	41	48	425	80	250	0.32
16	230	50	1200	17	0.16	46	54	265	104	155	0.42

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow p_{fs} = Pressure increase