K3G175-RC05-03

EC centrifugal module - RadiCal

backward curved

with housing

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Nominal data

Type	**K3G175-RC05-03**
Motor	**M3G055-BI**

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}	3740
Power input	W	85
Current draw	A	0.80
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	1.4 kg
Size	175 mm
Motor size	55
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	IP54
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	Rotor-side
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
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 no. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1; EAC

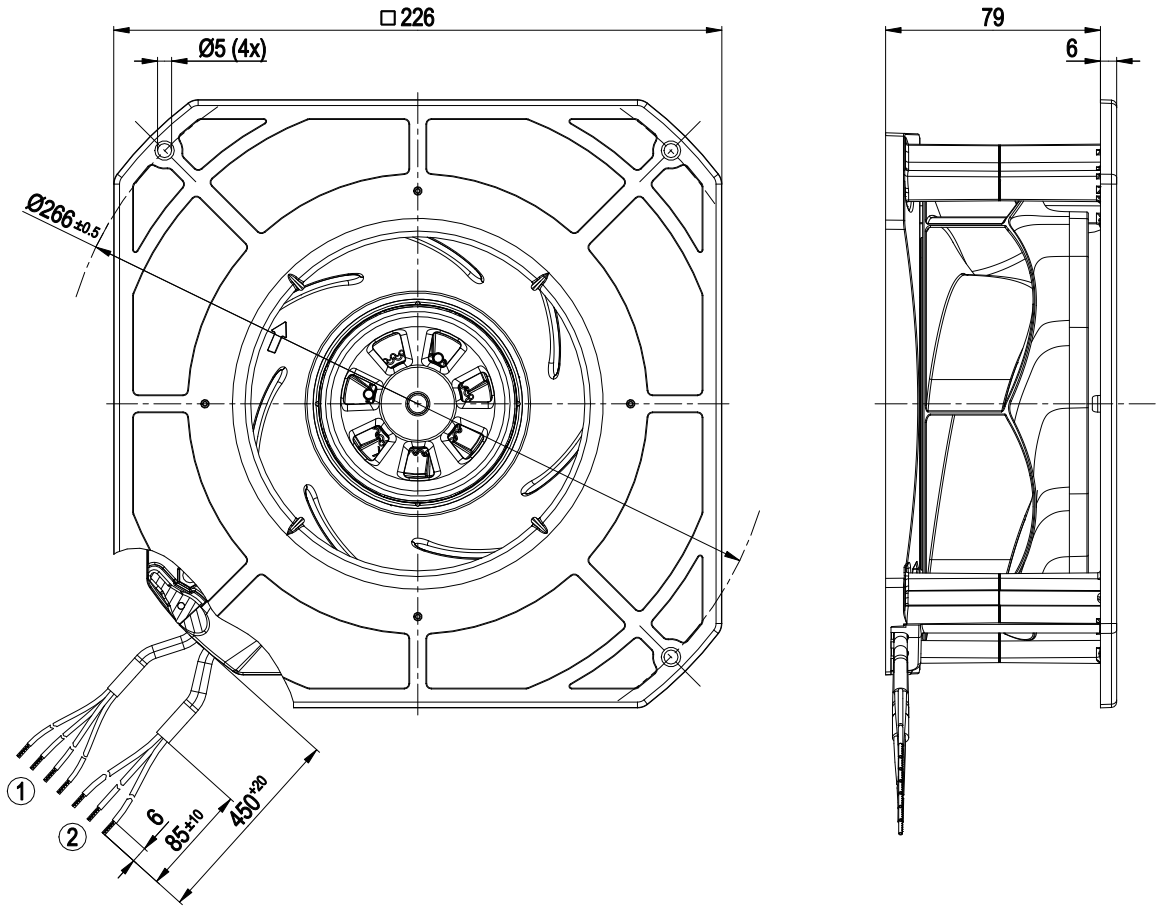
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Product drawing



1	Connection line PVC AWG22
	4x lead tip
2	Connection line PVC AWG20
	3x lead tip

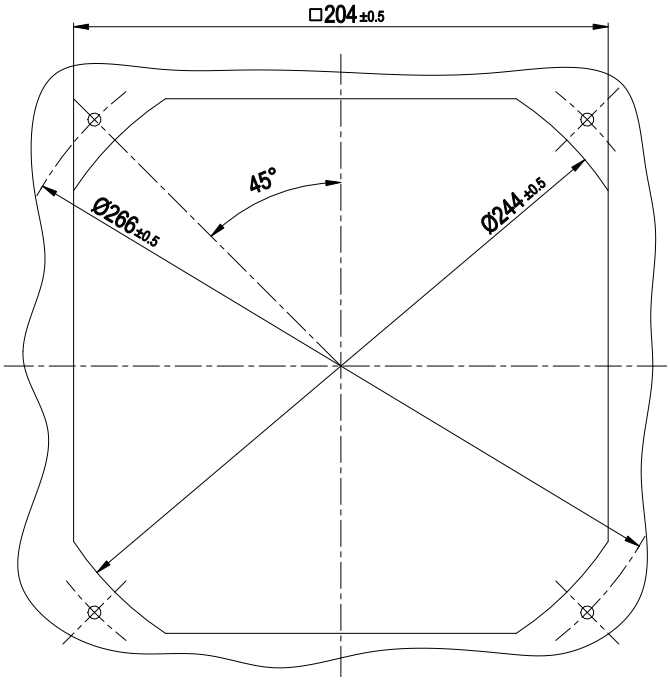
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Mounting dimensions



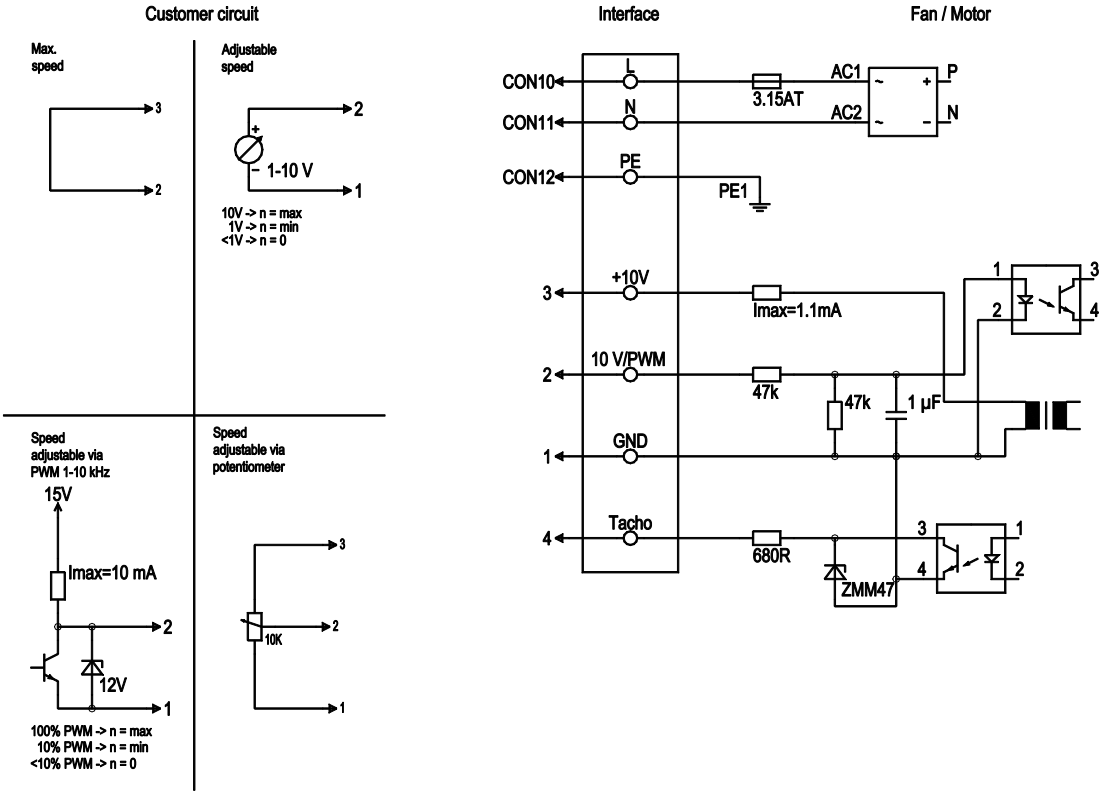
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Connection screen



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

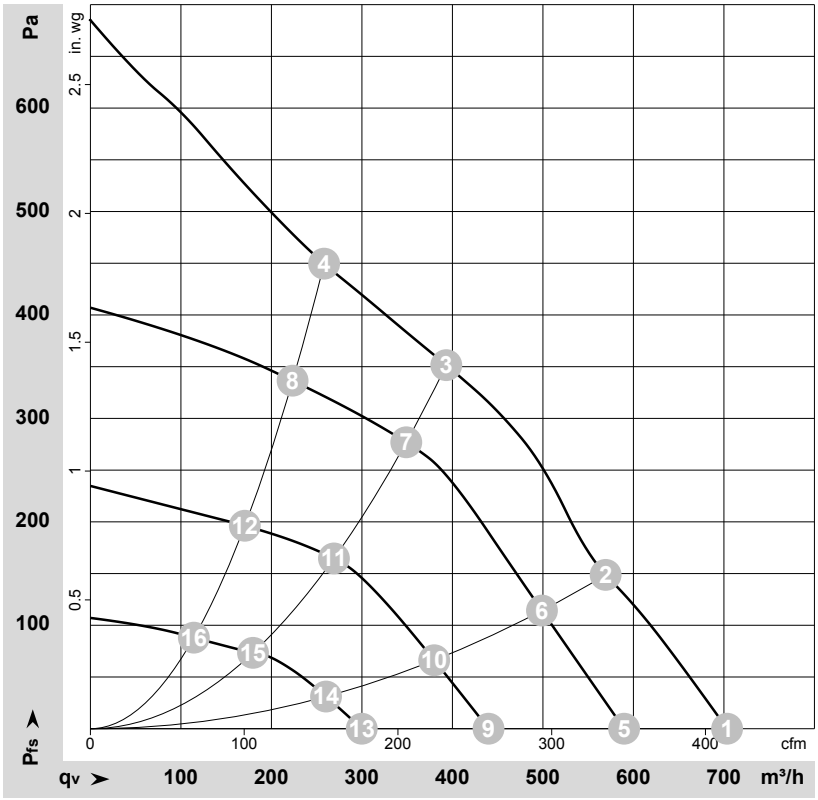
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-155217-1
Measurement: LU-159483-1
Measurement: LU-159485-1
Measurement: LU-159487-1

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

	Conn.	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~	230	50	4050	85	0.80	70	77	705	0	415	0.00
2	1~	230	50	3815	85	0.80	64	72	570	150	335	0.60
3	1~	230	50	3740	85	0.80	59	67	395	350	230	1.41
4	1~	230	50	3825	85	0.80	62	70	260	450	150	1.81
5	1~	230	50	3395	49	0.47	64	73	590	0	345	0.00
6	1~	230	50	3330	54	0.50	61	68	500	114	295	0.46
7	1~	230	50	3290	54	0.50	55	63	350	278	205	1.12
8	1~	230	50	3355	51	0.49	57	66	225	337	130	1.35
9	1~	230	50	2530	22	0.25	59	66	440	0	260	0.00
10	1~	230	50	2505	24	0.24	53	60	380	67	225	0.27
11	1~	230	50	2500	26	0.26	48	56	270	166	160	0.67
12	1~	230	50	2530	24	0.25	51	59	170	196	100	0.79
13	1~	230	50	1725	9.0	0.11	49	58	300	0	175	0.00
14	1~	230	50	1710	9.0	0.12	43	52	260	32	155	0.13
15	1~	230	50	1675	9.0	0.11	37	46	180	73	105	0.29
16	1~	230	50	1685	9.0	0.11	41	49	115	88	65	0.35

Conn. = Connection · 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

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