K3G190-RC05-15

EC centrifugal module - RadiCal

backward-curved

with housing



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Nominal data

Type	**K3G190-RC05-15**
Motor	**M3G055-BI**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	3200
Power consumption	W	83
Current draw	A	0.75
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	1.6 kg
Fan size	190 mm
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"
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. 1.1 mA - Fault output (open collector) - 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
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
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	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

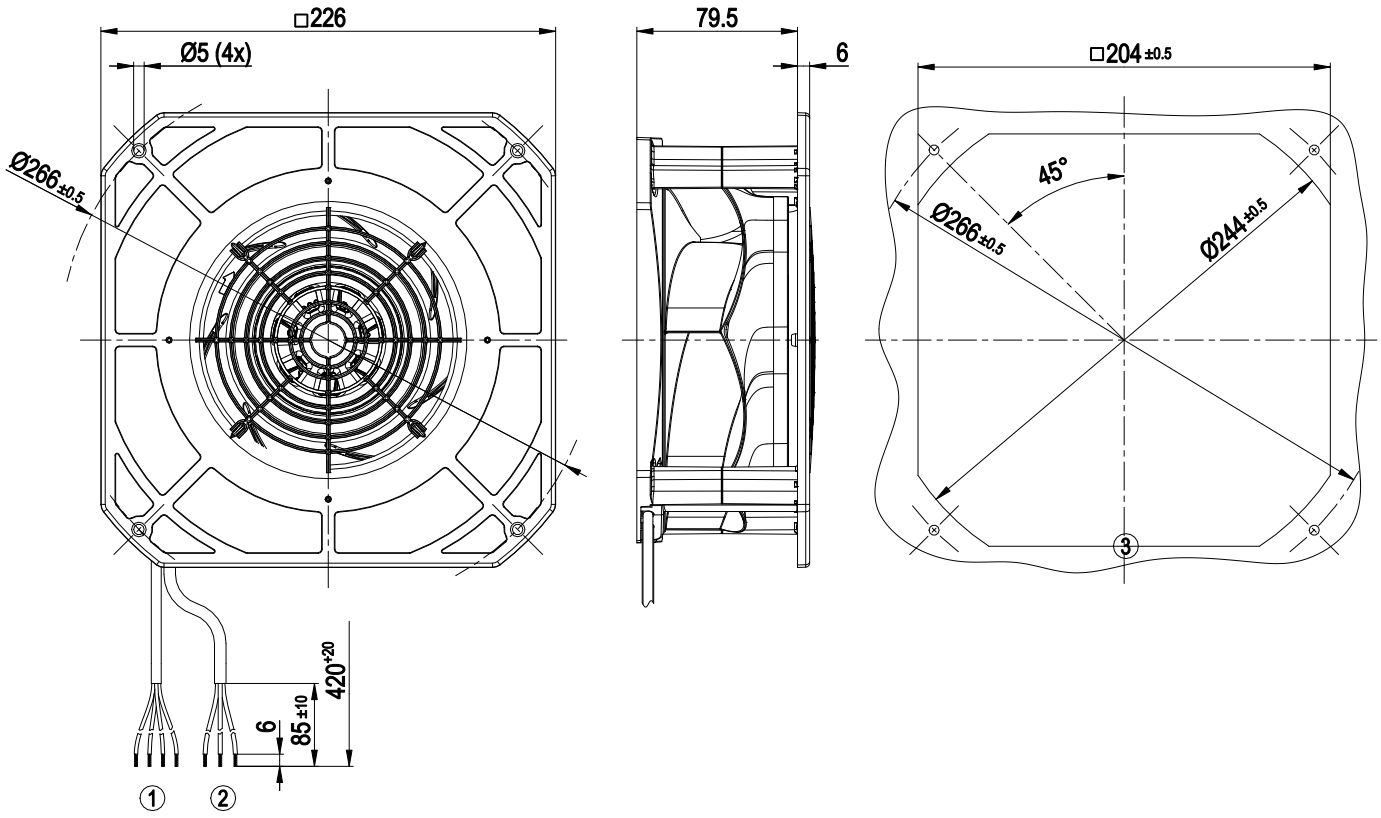
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Product drawing



1	Cable PVC AWG22, 4x crimped splices
2	Cable PVC AWG20, 3x crimped splices
3	Mounting dimensions

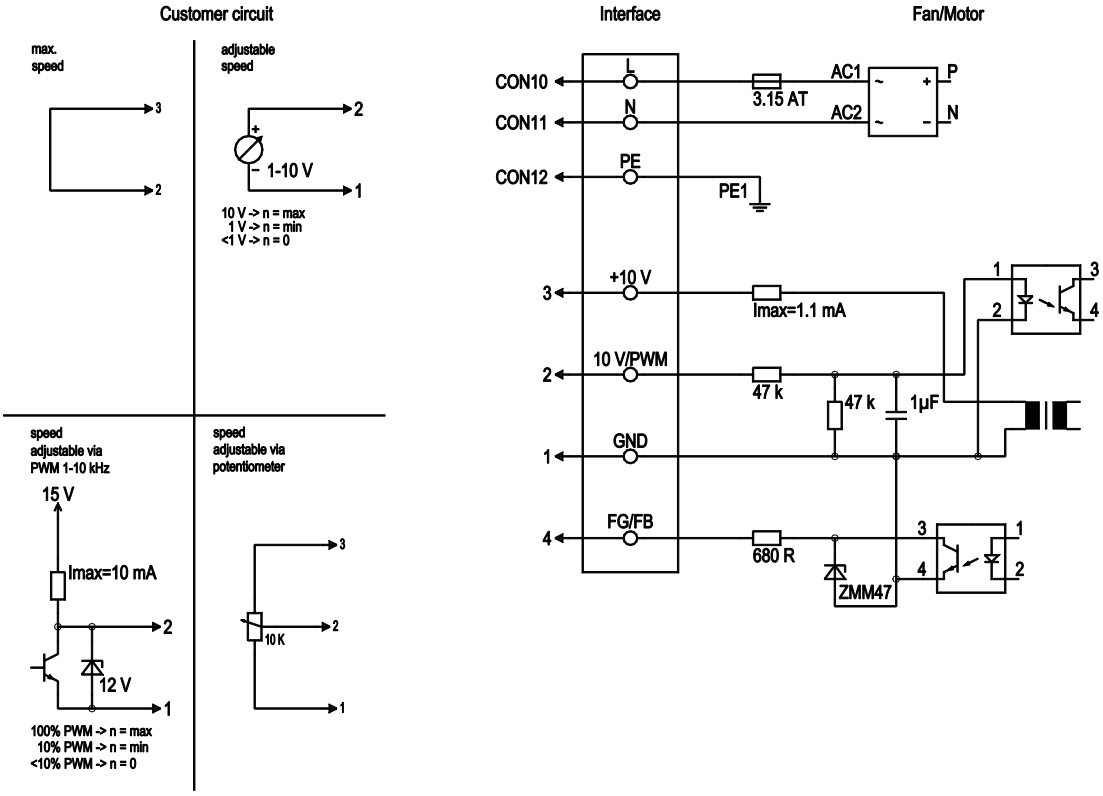
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Connection diagram



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 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	FG/FB	white	Fan good / fan bad: open collector, fan good = high, electrically isolated

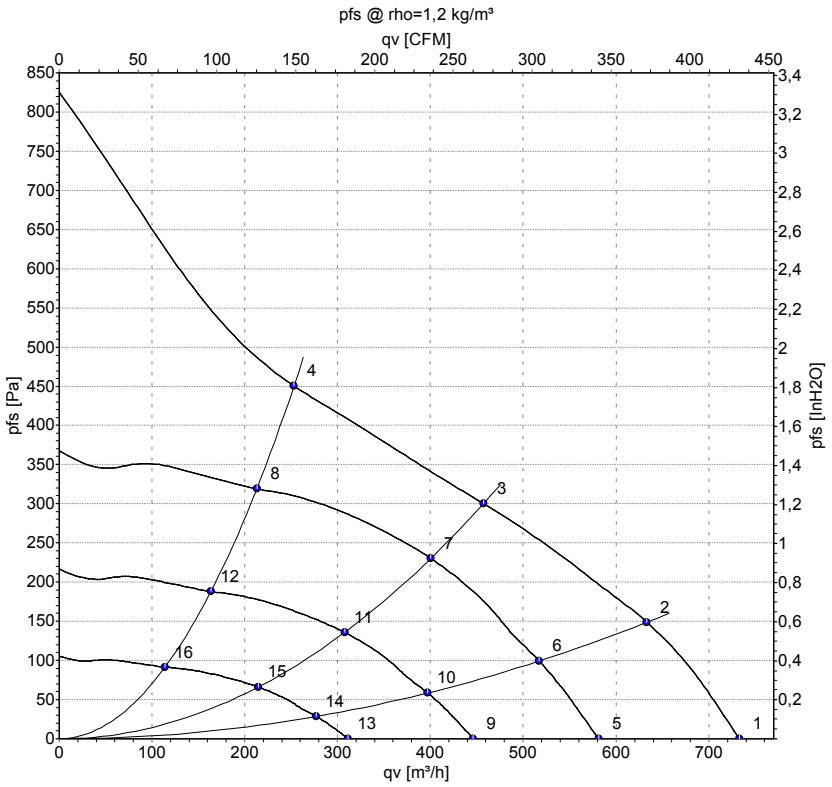
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Curves: Air performance 50 Hz



Measurement: LU-152954-1

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}	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	3530	83	0.75	66	73	735	0	430	0.00
2	230	50	3430	83	0.75	60	68	635	150	375	0.60
3	230	50	3200	83	0.75	58	66	455	300	270	1.20
4	230	50	3325	83	0.75	61	70	255	450	150	1.81
5	230	50	2800	49	0.45			580	0	340	0.00
6	230	50	2800	52	0.47			515	100	305	0.40
7	230	50	2800	57	0.52			400	230	235	0.92
8	230	50	2800	53	0.49			215	319	125	1.28
9	230	50	2150	24	0.25			445	0	265	0.00
10	230	50	2150	26	0.25			395	59	235	0.24
11	230	50	2150	28	0.28			310	136	180	0.55
12	230	50	2150	26	0.27			165	188	95	0.75
13	230	50	1500	10.0	0.10			310	0	185	0.00
14	230	50	1500	11	0.11			275	29	165	0.12
15	230	50	1500	12	0.12			215	66	125	0.26
16	230	50	1500	11	0.12			115	91	65	0.37

U = Power supply · 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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