K3G190-RY53-05

EC centrifugal module - RadiCal

backward-curved, single-intake

with housing

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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**K3G190-RY53-05**
Motor	**M3G074-CF**

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}	3700
Power consumption	W	115
Current draw	A	0.95
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	1.9 kg
Size	190 mm
Motor size	74
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic
Housing material	PA plastic
Guard grille 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
Cooling hole/opening	On rotor side
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 electronics/motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Connector with cable
Motor protection	Electronic motor protection
With cable	Variable
Protection class assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Conformity with standards	EN 60335-1; EN 60034-1; EN 60204-1; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1

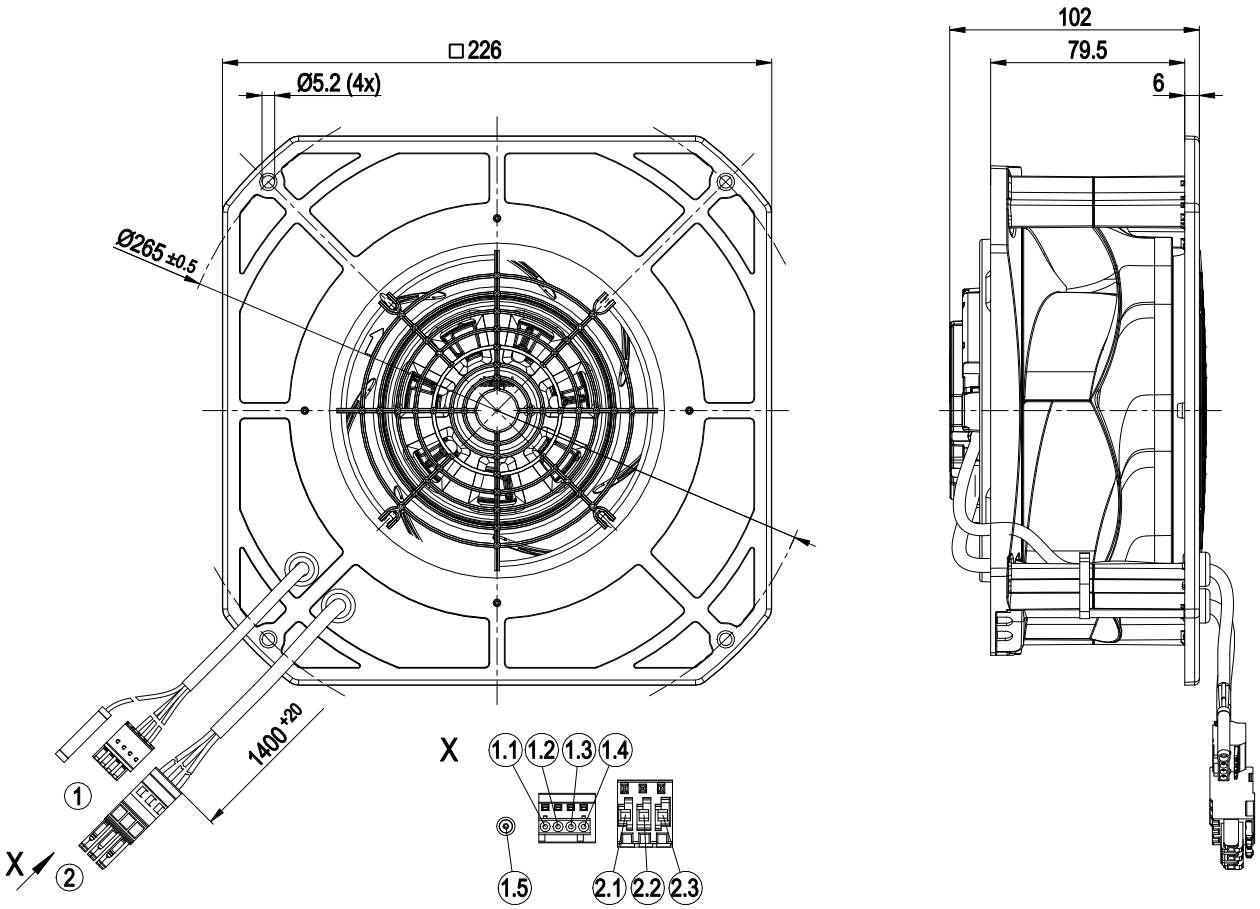
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Product drawing



1	Cable PVC AWG22
	4-pole connector housing WAGO 2734-104, 3x splice
1.1	not used
1.2	GND
1.3	Tach
1.4	0-10 V/PWM
1.5	1x end connector (+10 V)
2	Cable PVC AWG20
	3-pole connector housing WAGO 769-103/K000-0001, 3x splice
2.1	PE
2.2	N
2.3	L

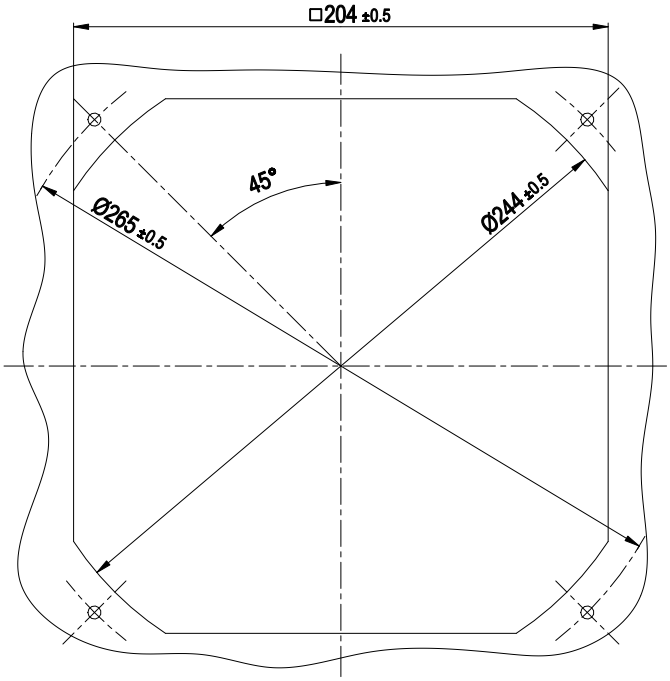
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Mounting dimensions



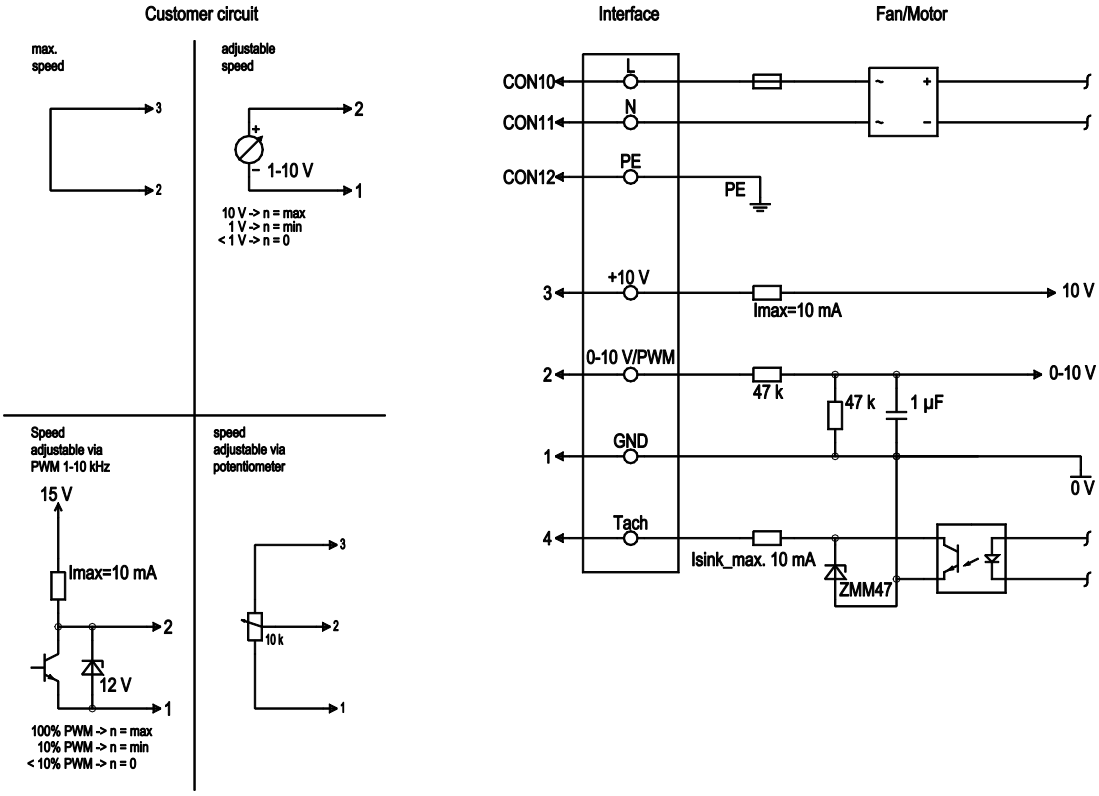
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, voltage range see nameplate, 50/60 Hz
	CON11	N	blue	Supply connection, power supply, neutral conductor, voltage range see nameplate, 50/60 Hz
	CON12	PE	green/yellow	Ground connection
	1	GND	blue	Reference ground for control interface, SELV
	2	0-10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, 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
	4	Tacho	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV

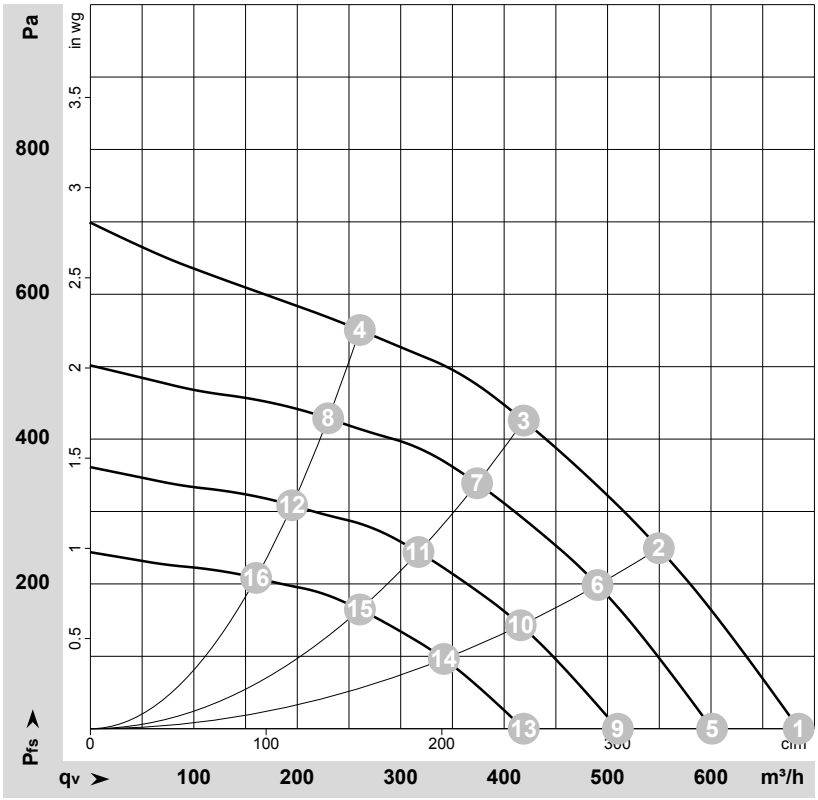
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-181877-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	50	3760	98	0.83	685	0	405	0.00
2	230	50	3695	111	0.93	550	250	325	1.00
3	230	50	3700	115	0.95	420	425	245	1.71
4	230	50	3740	103	0.87	260	550	155	2.21
5	230	50	3300	66	0.56	600	0	355	0.00
6	230	50	3300	79	0.66	490	200	290	0.80
7	230	50	3300	81	0.68	375	340	220	1.36
8	230	50	3300	71	0.60	230	429	135	1.72
9	230	50	2800	41	0.34	510	0	300	0.00
10	230	50	2800	48	0.41	415	144	245	0.58
11	230	50	2800	50	0.42	315	245	185	0.98
12	230	50	2800	43	0.37	195	309	115	1.24
13	230	50	2300	22	0.19	420	0	245	0.00
14	230	50	2300	27	0.22	340	97	200	0.39
15	230	50	2300	28	0.23	260	165	155	0.66
16	230	50	2300	24	0.20	160	208	95	0.84

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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