EC centrifugal module - RadiCal®

backward curved, single inlet

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	**K3G225-RH21-02**	
Motor	**M3G055-CF**	
Phase		1~
Nominal voltage	VAC	115
Type of data definition		ml
Speed	min^{-1}	2200
Power input	W	94
Current draw	A	1.3
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	2.1 kg
Size	225 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	PA6 plastic, fibreglass-reinforced
Housing material	PA6 plastic, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
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	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1
Approval	CCC; UL 2111; CSA C22.2 Nr.77

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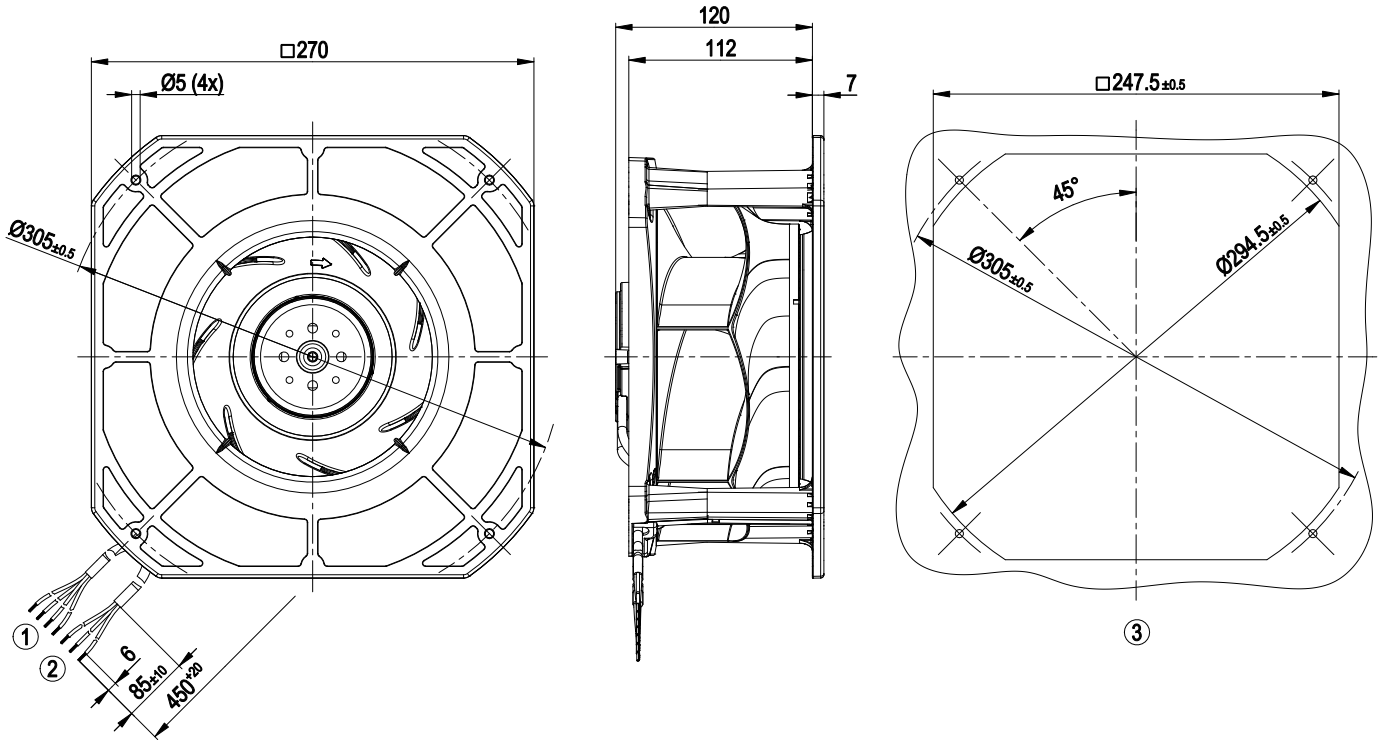
Product drawing



1	Connection line AWG22, 4x crimped core-end sleeves
2	Connection line AWG20, 3x lead tips crimped
3	Mounting dimensions

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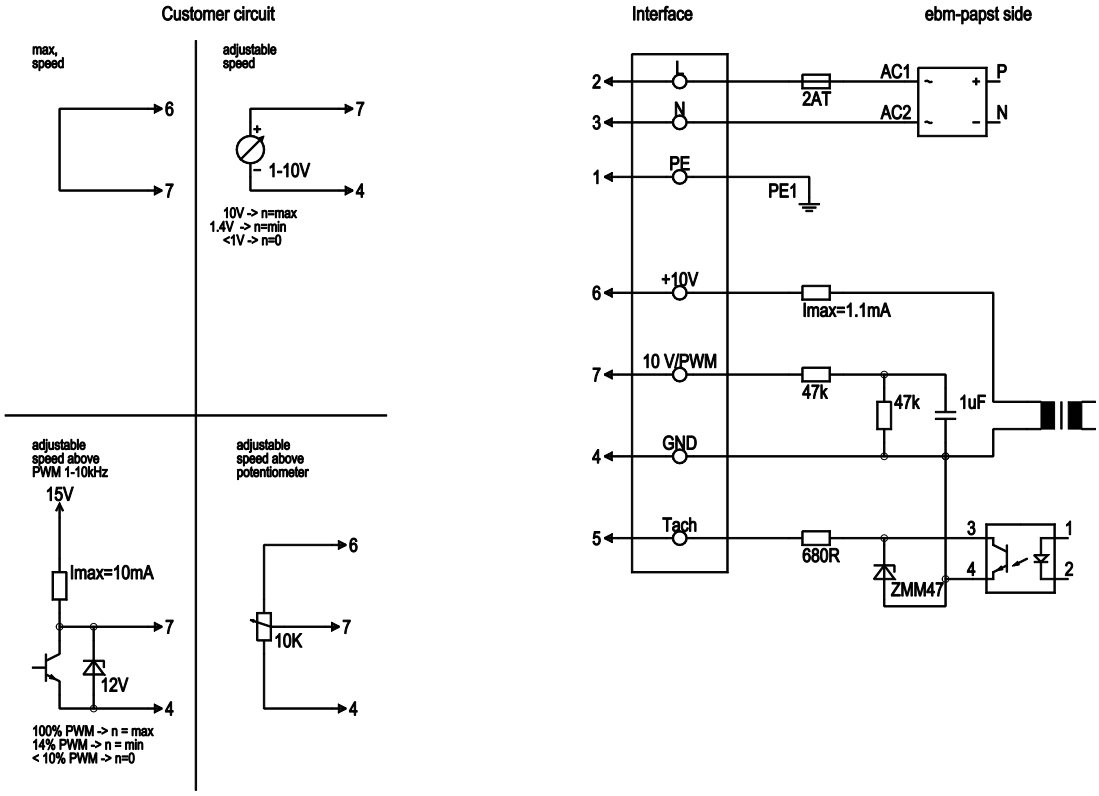
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	1	PE	green/yellow	Protective earth
	2	L	brown	Power supply 115 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	4	GND	blue	GND - Connection for control interface
	5	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	6	10V/ max. 1,1mA	red	Voltage output 10 V/ 1.1 mA, electrically isolated
	7	0-10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated

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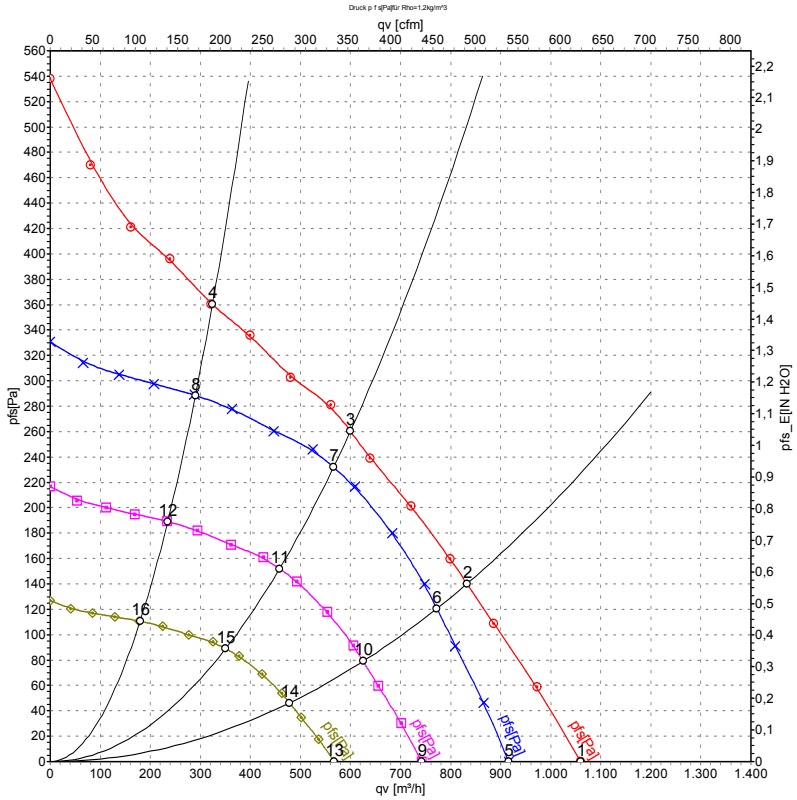
Charts: Air flow 50 Hz



Measurement: LU-135440

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	115	50	2430	81	1.12	1060	0
2	115	50	2265	88	1.23	835	140
3	115	50	2200	94	1.30	600	260
4	115	50	2345	85	1.18	325	360
5	115	50	2100	52	0.73	915	0
6	115	50	2100	71	0.98	770	121
7	115	50	2100	78	1.08	565	232
8	115	50	2100	61	0.85	290	289
9	115	50	1700	28	0.39	740	0
10	115	50	1700	37	0.52	625	79
11	115	50	1700	42	0.57	460	152
12	115	50	1700	32	0.45	235	189
13	115	50	1300	12	0.17	565	0
14	115	50	1300	17	0.23	480	46
15	115	50	1300	19	0.26	350	89
16	115	50	1300	14	0.20	180	111

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase