K3G175-CF19-13

EC centrifugal module

backward-curved, single-intake

with housing

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Nominal data

Type	**K3G175-CF19-13**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	4200
Power consumption	W	118
Current draw	A	0.9
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	1.8 kg
Size	175 mm
Motor size	55
Rotor surface	Thick-film passivated
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	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
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	On rotor side
Mode	S1
Motor mounting	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
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	Reverse polarity and locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Approval	UL 1004-3 + 60730-1; CSA C22.2 No. 77 + CAN/CSA-E60730-1

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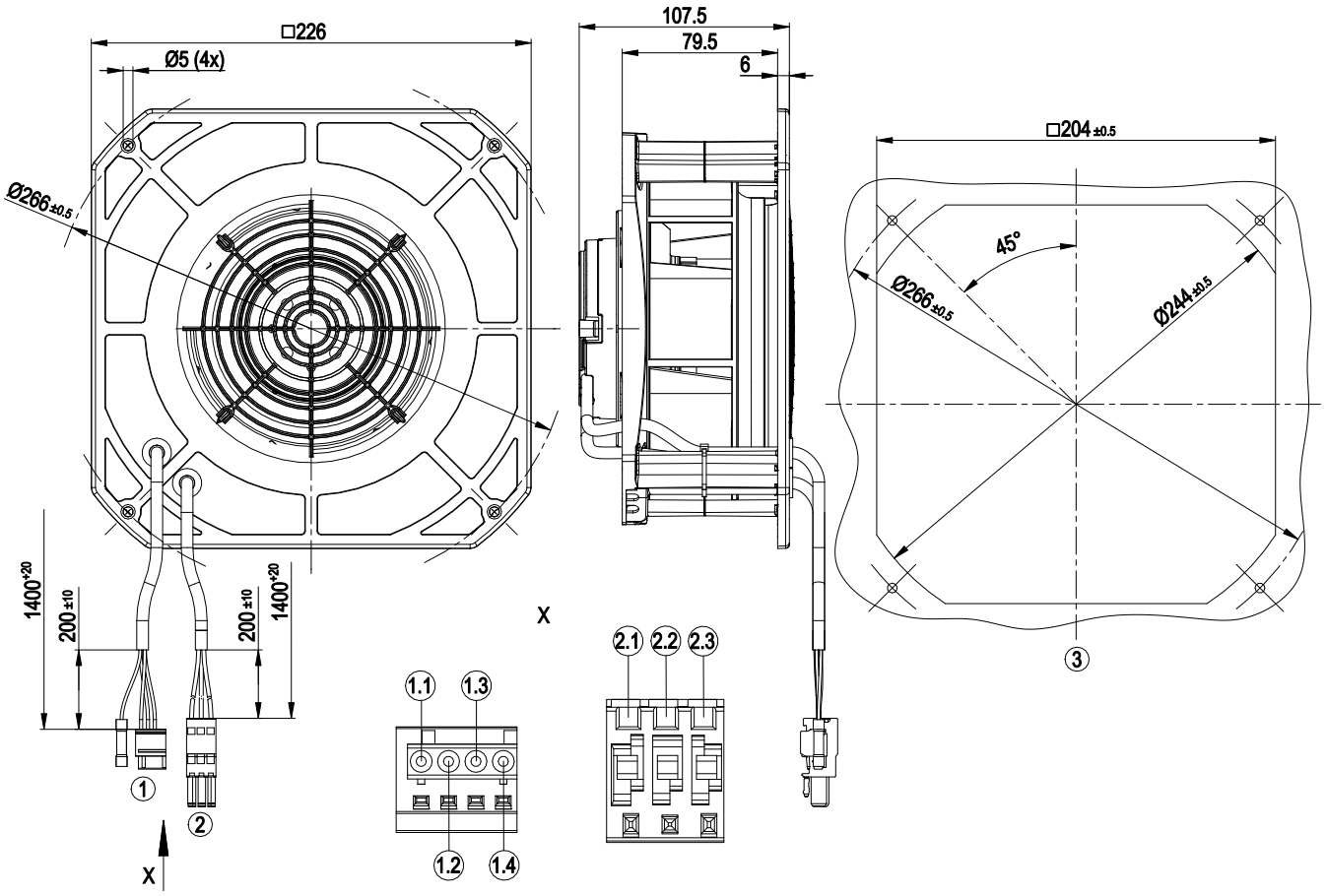
Product drawing



1	Cable AWG22, 1x connector housing WAGO multi-plug system 2734-104, 1x butt connector Weitkowitz 42451 red
1.1	0-10 V PWM (yellow)
1.2	Tach (white)
1.3	GND (blue)
1.4	not used
2	Cable AWG20, connector housing WAGO multi-plug system 769-103
2.1	PE (green/yellow)
2.2	N (blue)
2.3	L (brown)
3	Mounting dimensions

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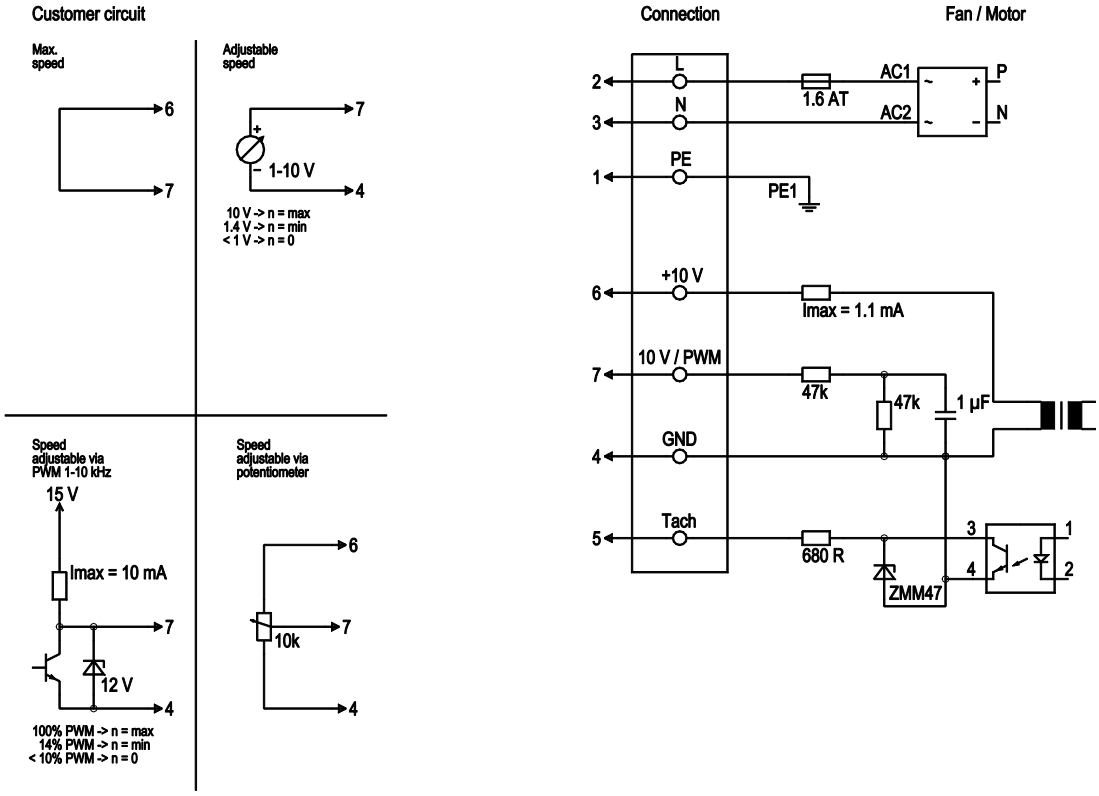
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	PE	green/yellow	Protective earth
1	2	L	brown	Power supply 230 VAC, 50/60 Hz
1	3	N	blue	Neutral conductor
2	4	GND	blue	GND connection for control interface
2	5	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
2	6	10 V	red	Voltage output 10 V / 1 mA, electrically isolated
2	7	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated

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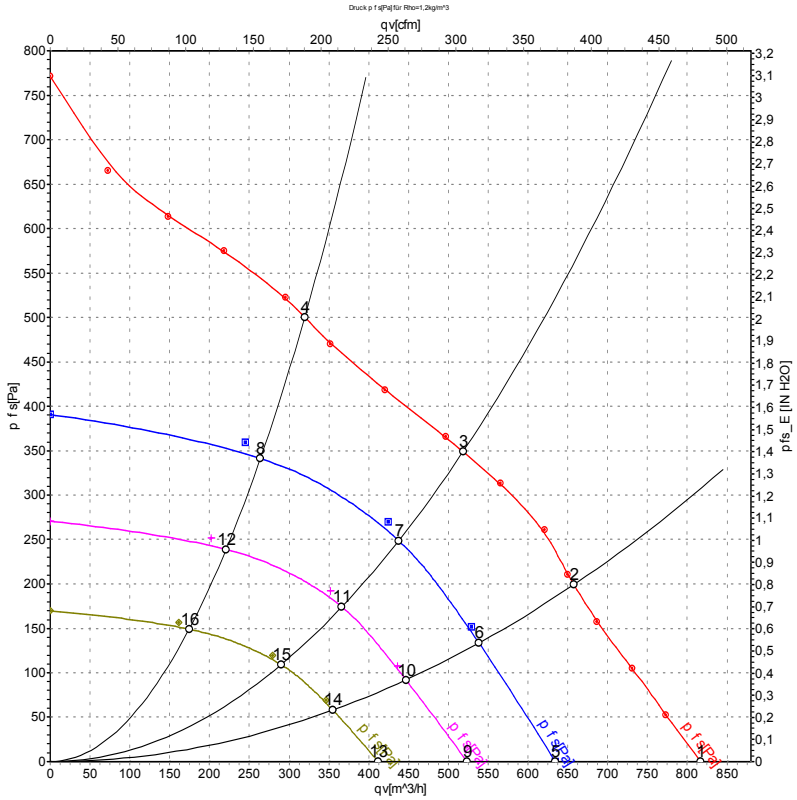
Curves: Air performance 50 Hz



Measurement: LU-117353-1
Measurement: LU-119194-1
Measurement: LU-119195-1
Measurement: LU-119196-1

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	in. wg
1	230	50	4485	99	0.72	72	80	815	0	480	0.00
2	230	50	4280	112	0.82	69	77	660	200	385	0.80
3	230	50	4200	118	0.90	68	75	520	350	305	1.41
4	230	50	4200	117	0.86	71	79	320	500	190	2.01
5	230	50	3500	50	0.39	68	75	635	0	375	0.00
6	230	50	3500	60	0.48	66	72	540	138	315	0.55
7	230	50	3500	71	0.56	64	71	440	255	260	1.02
8	230	50	3500	69	0.53	67	75	265	350	155	1.41
9	230	50	2900	30	0.24	63	70	525	0	310	0.00
10	230	50	2900	37	0.30	60	67	445	94	265	0.38
11	230	50	2900	43	0.34	60	67	365	178	215	0.71
12	230	50	2900	42	0.33	62	69	220	244	130	0.98
13	230	50	2300	18	0.16	57	65	410	0	240	0.00
14	230	50	2300	21	0.17	55	63	355	60	210	0.24
15	230	50	2300	25	0.21	54	62	290	112	170	0.45
16	230	50	2300	22	0.19	55	63	175	153	100	0.61

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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