K3G133-RA07-08

EC centrifugal module - RadiCal

backward-curved

with housing

K3G133-RA07-08 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	**K3G133-RA07-08**
Motor	**M3G045-AI**

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}	4060
Power consumption	W	35
Current draw	A	0.35
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

EC centrifugal module - RadiCal

backward-curved

with housing

Technical description

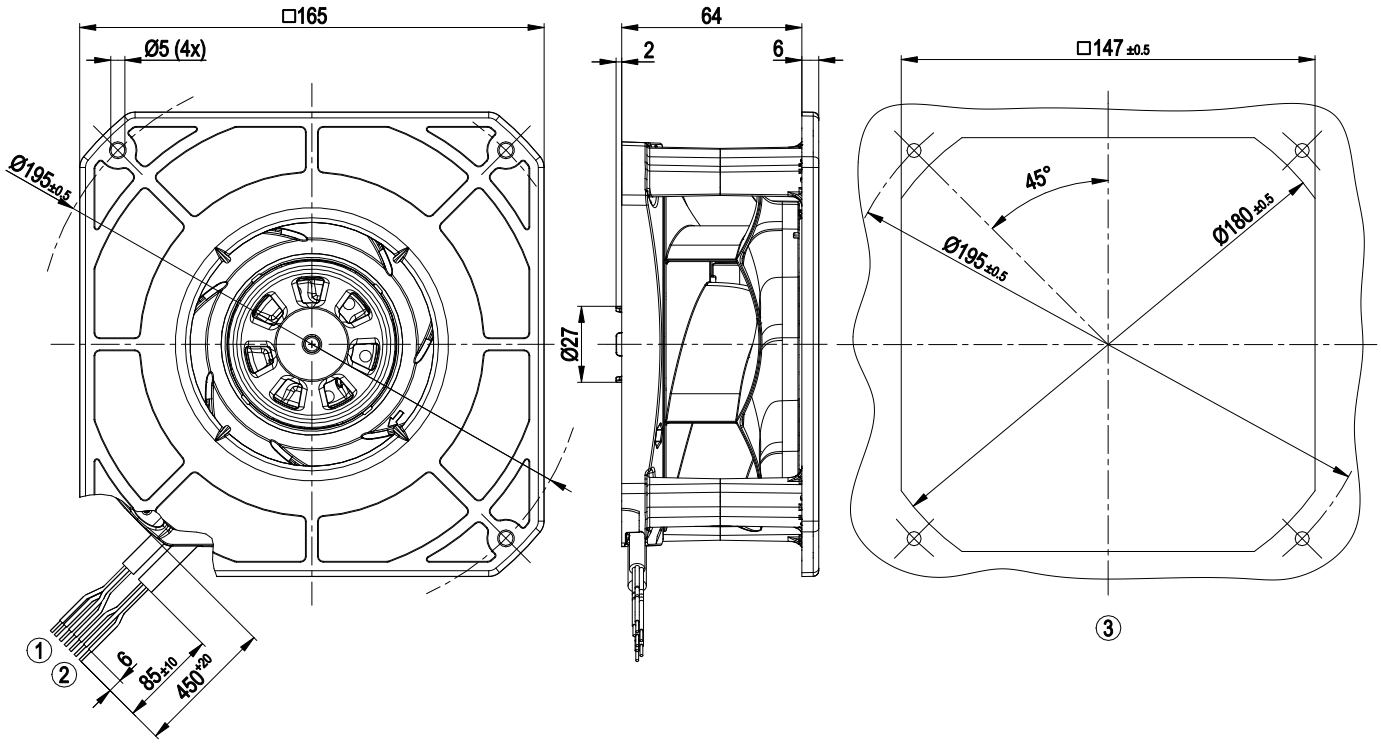
Weight	0.8 kg
Fan size	133 mm
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic
Housing material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / 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
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Power limit - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from supply - 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	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1

EC centrifugal module - RadiCal

backward-curved

with housing

Product drawing



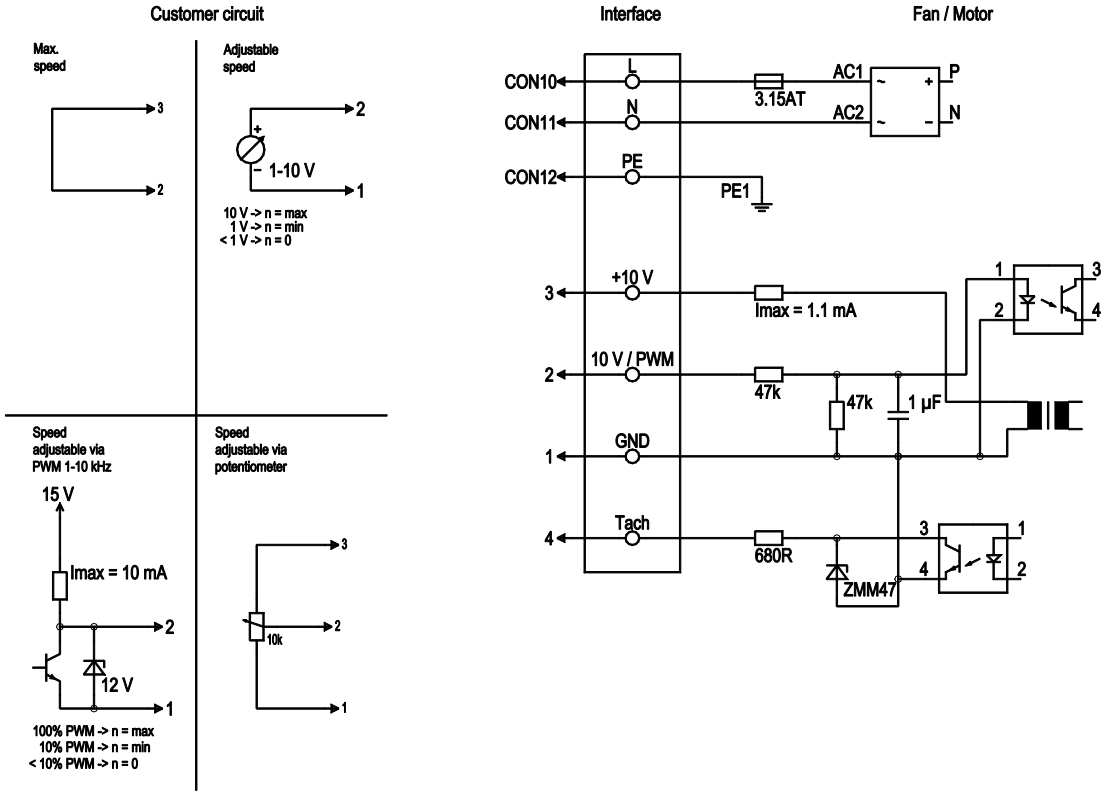
1	Cable PVC AWG22, 4x crimped splices
2	Cable PVC AWG20, 3x crimped splices
3	Mounting dimensions

EC centrifugal module - RadiCal

backward-curved

with housing

Connection diagram



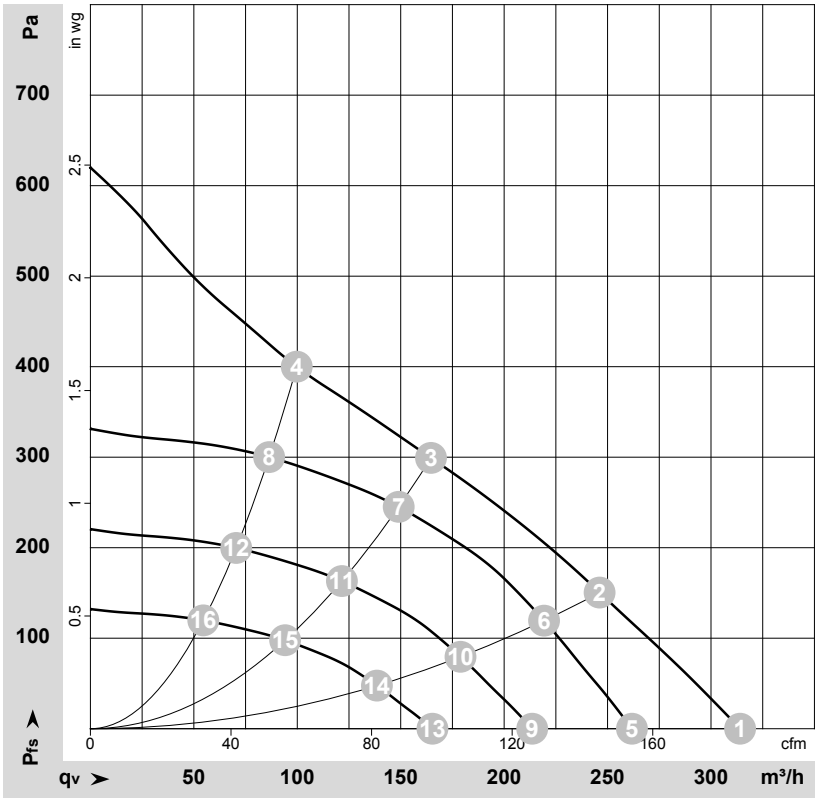
No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	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

EC centrifugal module - RadiCal

backward-curved

with housing

Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-171217-1

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}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	4560	35	0.35	63	71	315	0	185	0.00
2	230	50	4265	35	0.35	59	67	245	150	145	0.60
3	230	50	4060	35	0.35	57	65	165	300	95	1.20
4	230	50	4375	35	0.35	62	70	100	400	60	1.61
5	230	50	3800	21	0.19	58	66	260	0	155	0.00
6	230	50	3800	26	0.23	56	64	220	119	130	0.48
7	230	50	3800	27	0.24	54	62	150	246	90	0.99
8	230	50	3800	24	0.22	58	66	85	301	50	1.21
9	230	50	3100	12	0.10	53	61	215	0	125	0.00
10	230	50	3100	14	0.13	51	59	180	79	105	0.32
11	230	50	3100	15	0.13	49	57	120	163	70	0.65
12	230	50	3100	13	0.12	53	61	70	200	40	0.80
13	230	50	2400	5.0	0.05	47	55	165	0	95	0.00
14	230	50	2400	7.0	0.06	45	53	140	48	80	0.19
15	230	50	2400	7.0	0.06	43	51	95	98	55	0.39
16	230	50	2400	6.0	0.05	46	54	55	120	30	0.48

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
qv = Air flow · p_{fs} = Pressure increase