

# EC centrifugal fans – RadiCal

backward curved, Ø 133

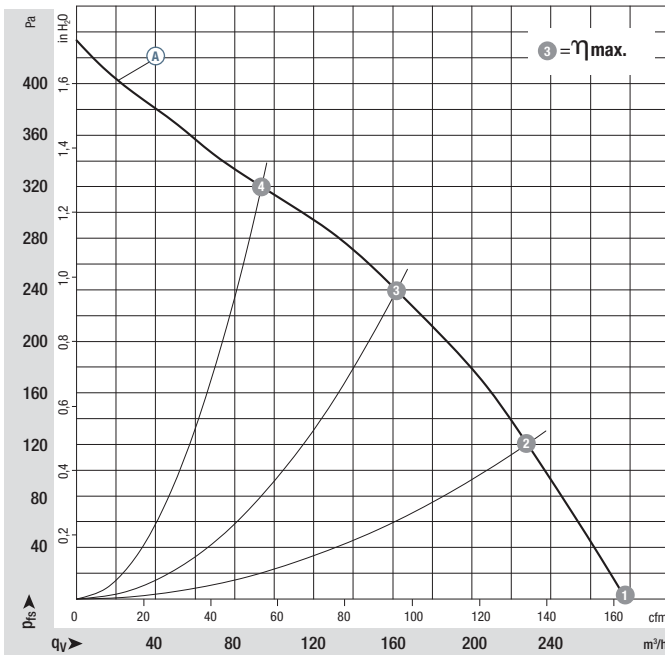


- **Material:** Housing: PA plastic 6, fibreglass-reinforced  
Impeller: PA plastic 6, fibreglass-reinforced  
Rotor: Thick layer passivated  
Electronics enclosure: Die-cast aluminium
- **Number of blades:** 7
- **Direction of rotation:** Clockwise, seen on rotor
- **Type of protection:** IP 54
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None, open rotor
- **Mode of operation:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

Nominal data		Curve	Nominal voltage range	Frequency	Speed/rpm <sup>(1)</sup>	Max. input power <sup>(1)</sup>	Max. current draw <sup>(1)</sup>	Perm. amb. temp.	Technical features and electrical connection
Type	Motor	VAC	Hz	rpm	W	A	°C		
*3G 133	M3G 045-AI	Ⓐ 1~	200-240	50/60	3770	27	0,27	-25..+60	p. 165 / H4)

subject to alterations (1) Nominal data in operating point with maximum load and 230 VAC

**Curves:  
Speed-controlled**



	n rpm	P <sub>ed</sub> W	I A	L <sub>wA</sub> dB(A)
Ⓐ 1	3930	24	0,23	66
Ⓐ 2	3800	26	0,26	63
Ⓐ 3	3770	27	0,27	61
Ⓐ 4	3835	26	0,25	65

Air performance measured as per: ISO 5801, Installation category A, with ebm-papst inlet nozzle without protection against accidental contact. Suction-side noise levels: L<sub>wA</sub> as per ISO 13347, L<sub>pA</sub> measured at 1 m distance to fan axis. The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation. With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted! For detailed information see page 172 ff.

- **Technical features:** See electrical connections p. 165
- **EMC:** Interference emission acc. to EN 61000-6-3  
Interference immunity acc. to EN 61000-6-2  
Harmonics acc. to EN 61000-3-2/3
- **Touch current:** < 3,5 mA acc. to IEC 60990 (test circuit, illustration 4)
- **Cable exit:** Variable
- **Protection class:** I (if customer has provided connection for protective earth)
- **Product conforming to standards:** EN 60335-1, CE
- **Approvals:** VDE, UL, CSA, CCC, GOST are applied for



Mass of centrifugal fan



Mass of centrifugal module with support basket

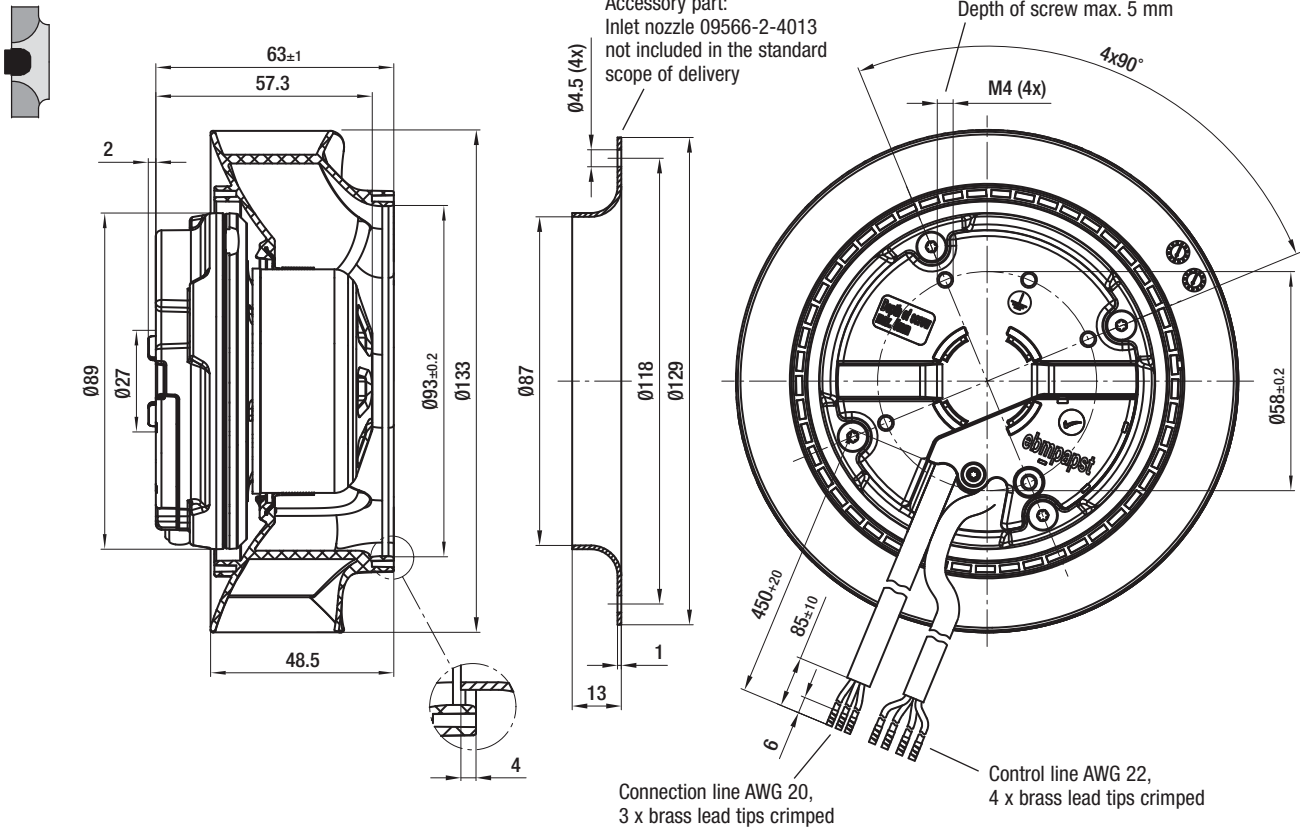
Centrifugal fan	kg	Centrifugal module w. support basket	kg
R3G 133-RA01 -03	0,5	K3G 133-RA01 -03	0,75

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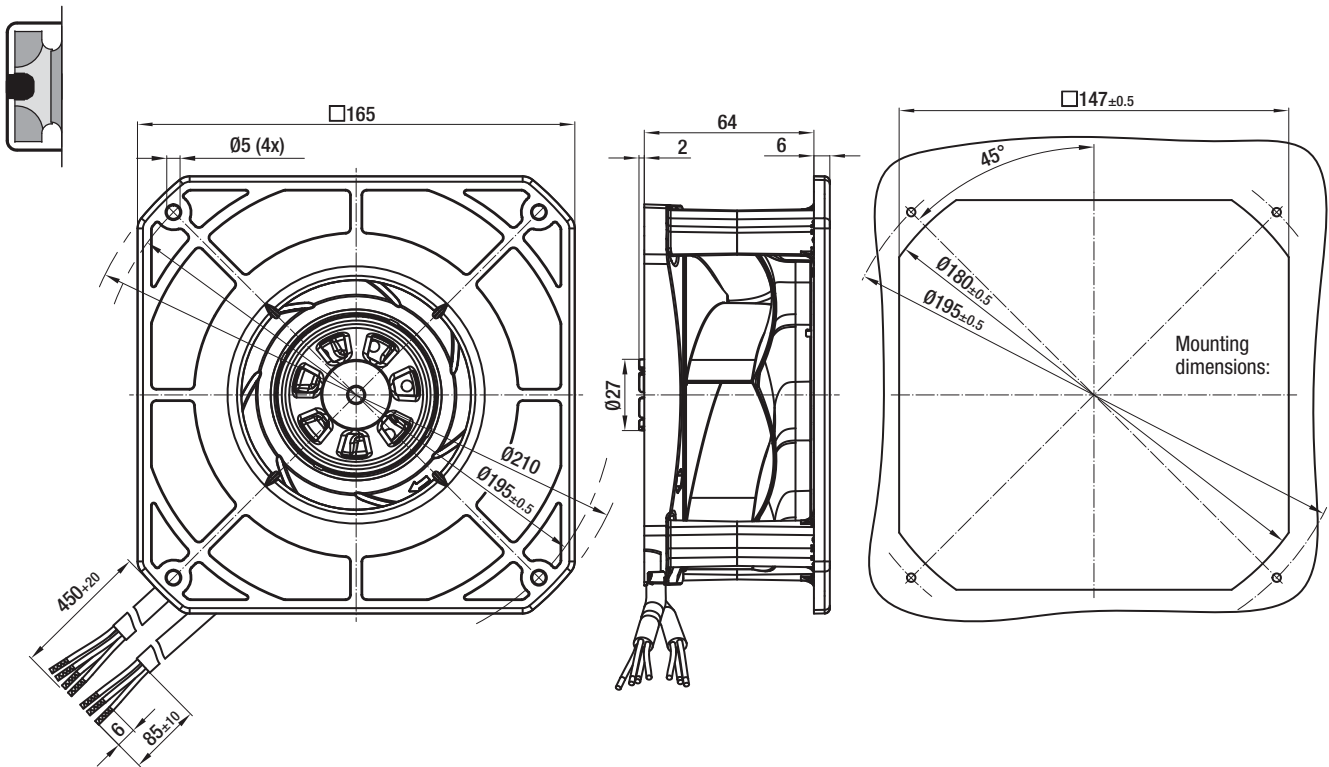
backward curved, Ø 133, speed-controlled



## R3G 133-RA01-03 (Centrifugal fan)



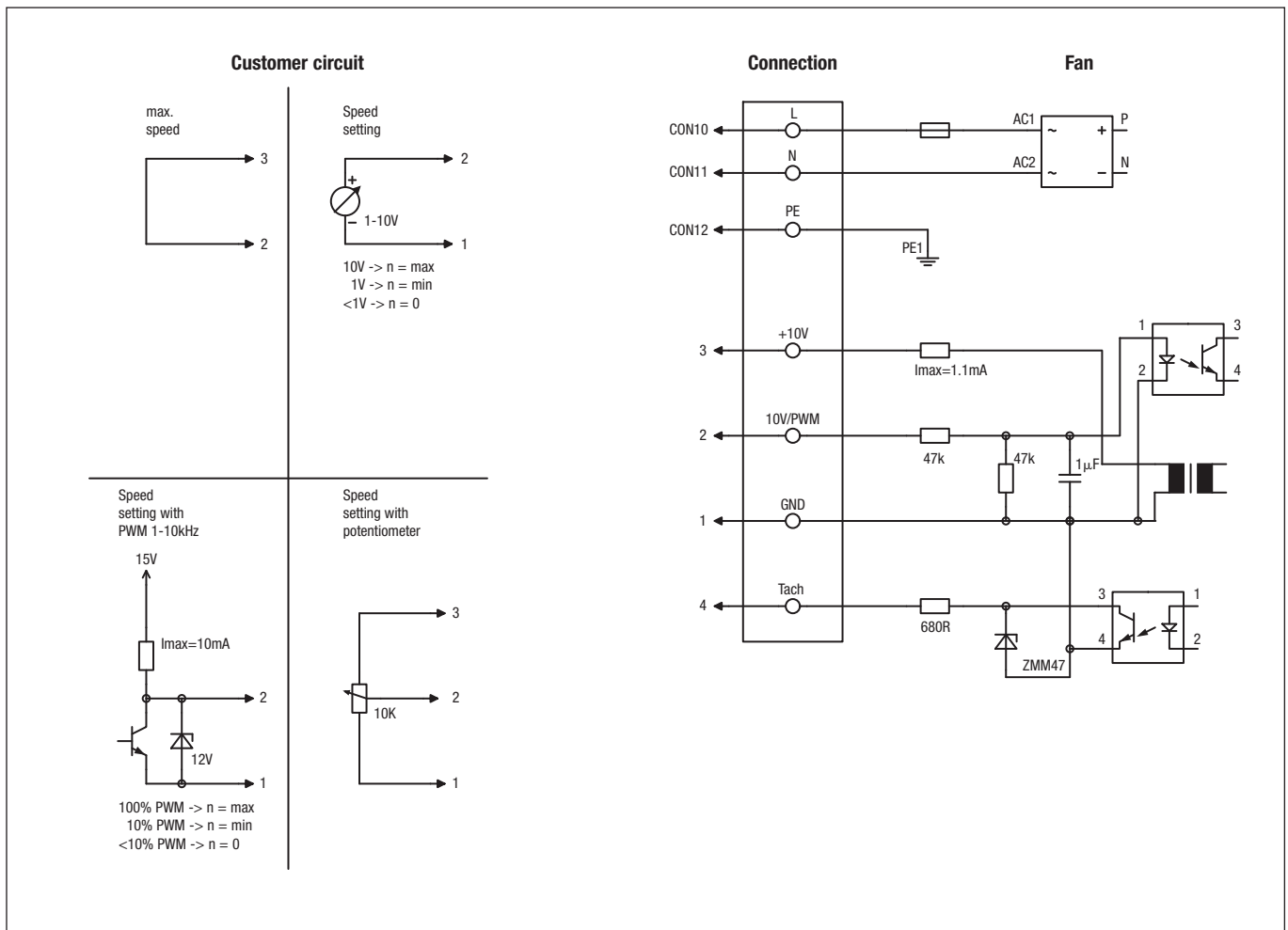
## K3G 133-RA01-03 (Centrifugal module with support basket)



# Electrical connections EC H4)

## Technical features (M3G 045 / M3G 055 Speed-controlled; M3G 074):

- Control input 0-10 VDC / PWM
- Output 10 VDC max. 1,1 mA
- Tach output
- Over-temperature protected electronics / motor
- Motor current limitation
- Locked-rotor protection
- Soft start



Line	Connection	Colour	Assignment / function
CON10	L	black	Power supply 230 VAC, 50 - 60 Hz, see type plate 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 V / 1.1 mA, electrically isolated, not short-circuit-proof
4	Tach	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated