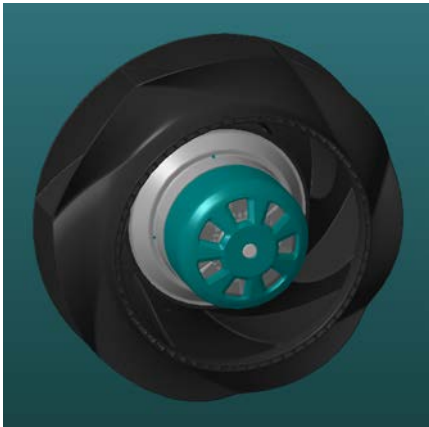


R3G190-8317076398

# EC centrifugal fan - RadiCal

backward-curved, single-intake



R3G190-8317076398 ebmpapst Datasheet  
sales@fansco.com  
www.fansco.com

## Nominal data

Type	R3G190-8317076398	
Motor	M3G055DF	
Phase		1~
Nominal voltage	VAC	220
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min <sup>-1</sup>	4166
Power consumption	W	170
Current draw	A	1.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

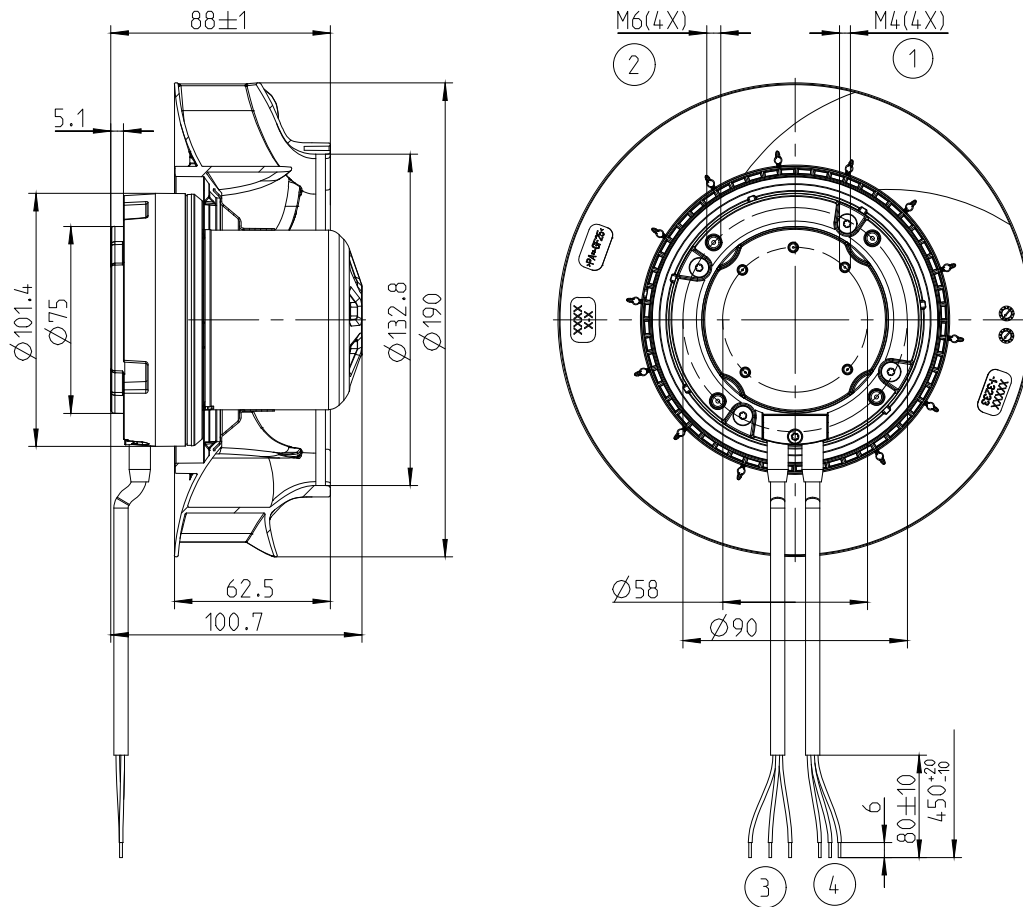
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



## Technical description

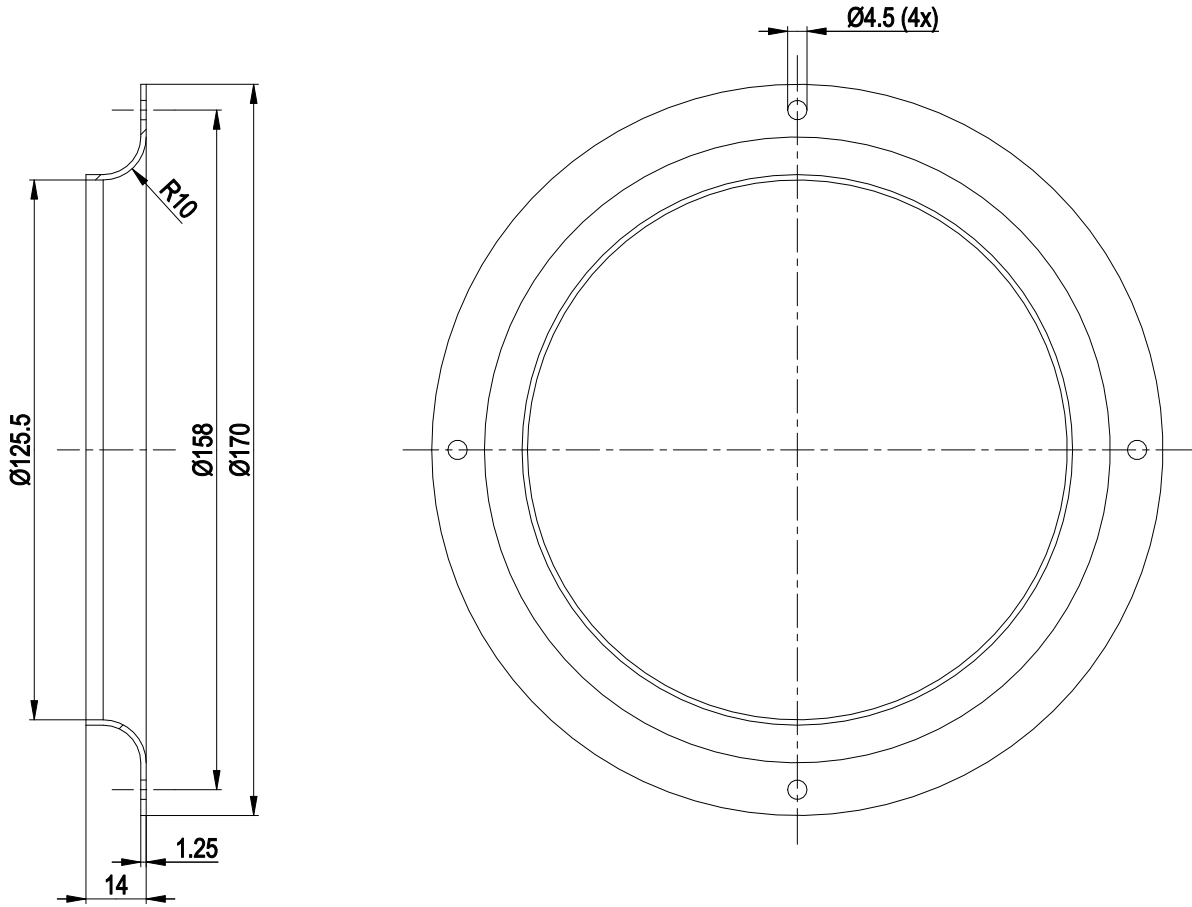
Weight	1.5 kg
Fan size	190 mm
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44 (Air inlet upward or horizontal)
Insulation class	"B"
Moisture (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	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> <li>- Tach output</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- PWM control input</li> </ul>
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	GB12350
Approval	CCC;

**Product drawing**



	Accessory part: inlet ring 09576-2-4013 not included in scope of delivery
1	Max. clearance for screw 6mm
2	Max. clearance for screw 10mm
3	Cable PVC 3x 0.25 mm <sup>2</sup> , 3x tinning thread
4	Cable PVC 3x 0.5 mm <sup>2</sup> , 3x tinning thread

## Accessory part

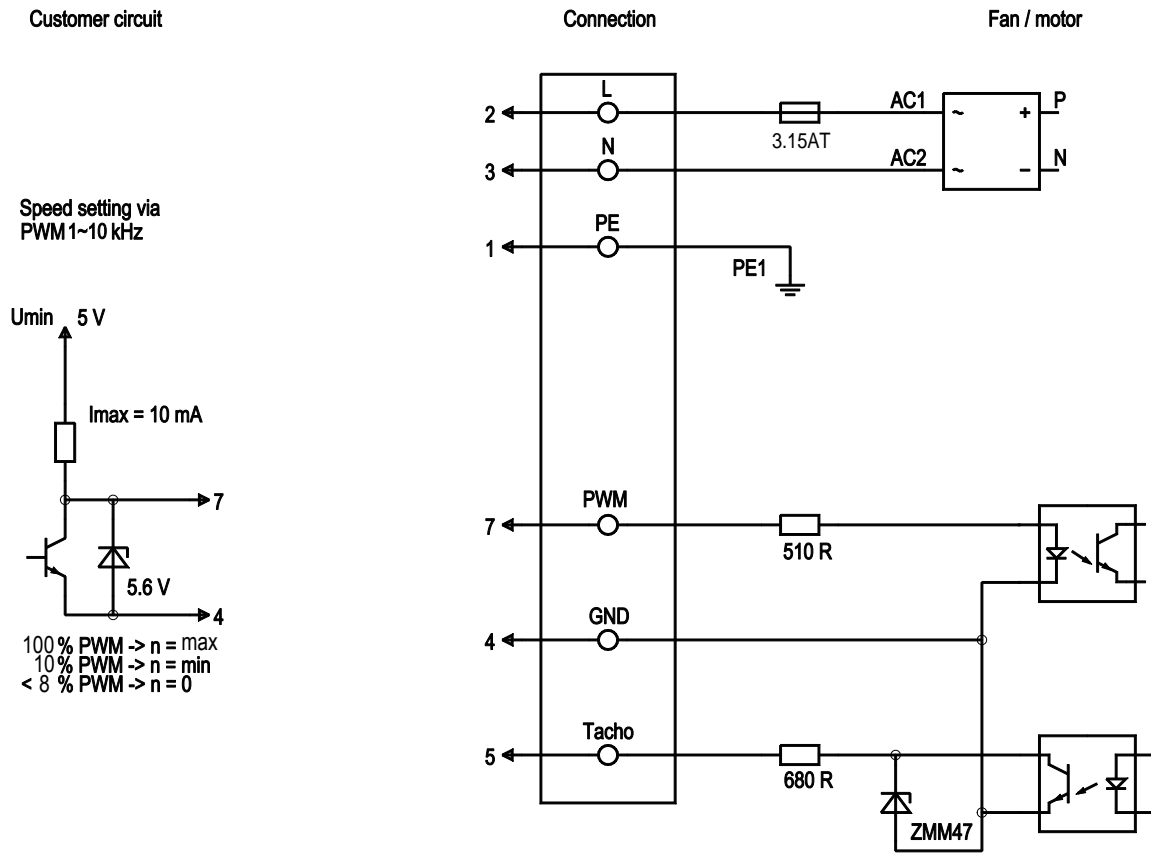


1 Accessory part: inlet ring 09576-2-4013 not included in scope of delivery

# EC centrifugal fan - RadiCal

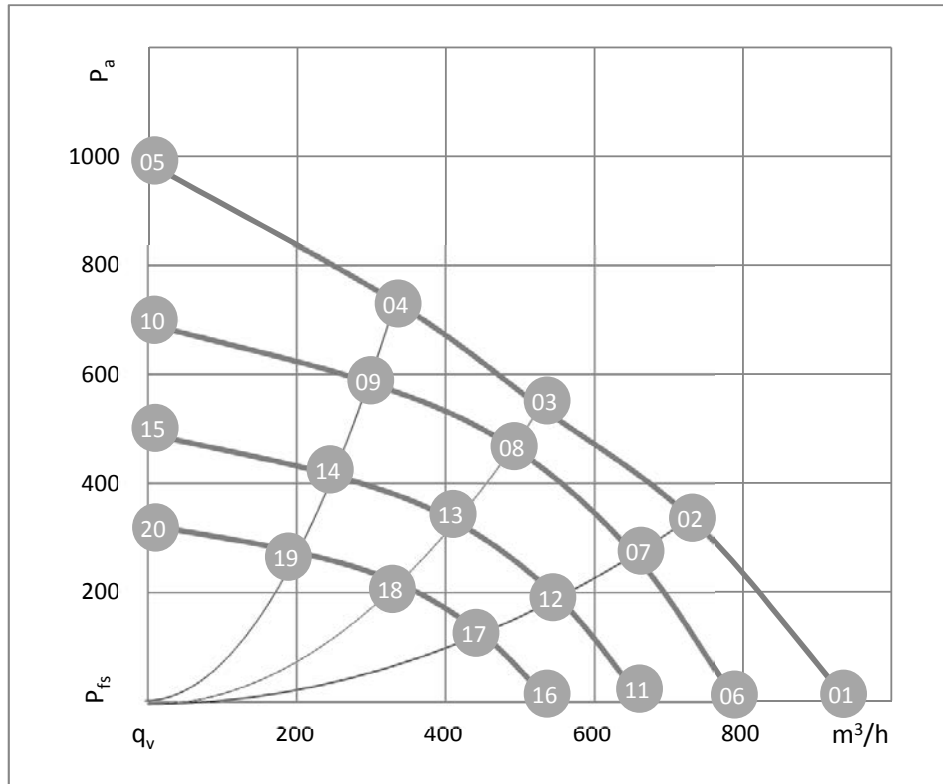
backward-curved, single-intake

## Connection diagram



Line	No.	Signal	Colour	Function / assignment
	1	PE	green/yellow	Protective earth
	2	L	brown	Power supply 220 VAC, 50 - 60 Hz
	3	N	blue	Neutral conductor
	4	GND	blue	GND - Connection for control interface
	5	Tacho	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated
	7	PWM	yellow	PWM control input, electrically isolated

## Curves: Air performance 50 Hz



$\rho = 1.2 \text{ kg/m}^3 \pm 2 \%$

Test ID:8947

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

Index	U	f	n	P <sub>ed</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
	v	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	cfm	in.wg
01	220	50	4524	167	1.39	72	80	941	0	554	0.00
02	220	50	4249	167	1.41	68	76	733	332	431	1.33
03	220	50	4089	166	1.41	66	74	529	539	311	2.16
04	220	50	4249	167	1.41	65	72	334	731	197	2.94
05	220	50	4536	101	0.89			0	987	0	3.96
06	220	50	3800	99	0.82	68	75	791	0	465	0.00
07	220	50	3800	120	1.01	65	72	655	267	385	1.07
08	220	50	3800	134	1.13	63	71	492	465	289	1.87
09	220	50	3800	120	1.01	63	70	300	584	176	2.34
10	220	50	3800	60	0.52			0	693	0	2.78
11	220	50	3200	59	0.49	64	71	666	0	392	0.00
12	220	50	3200	71	0.60	61	68	552	189	325	0.76
13	220	50	3200	80	0.67	59	67	414	330	244	1.32
14	220	50	3200	71	0.60	58	66	253	414	149	1.66
15	220	50	3200	36	0.31			0	491	0	1.97
16	220	50	2600	32	0.26	58	66	541	0	318	0.00
17	220	50	2600	38	0.32	55	63	448	125	264	0.50
18	220	50	2600	43	0.36	54	61	336	218	198	0.87
19	220	50	2600	38	0.32	53	61	201	275	118	1.10
20	220	50	2600	19	0.17			0	324	0	1.30

