

KARTA KATALOGOWA

R3G190-RD45-17

Wentylator promieniowy EC RadiCal, łopatki zakrzywione do tyłu

Producent: ebm-papst



Zdjęcie poglądowe

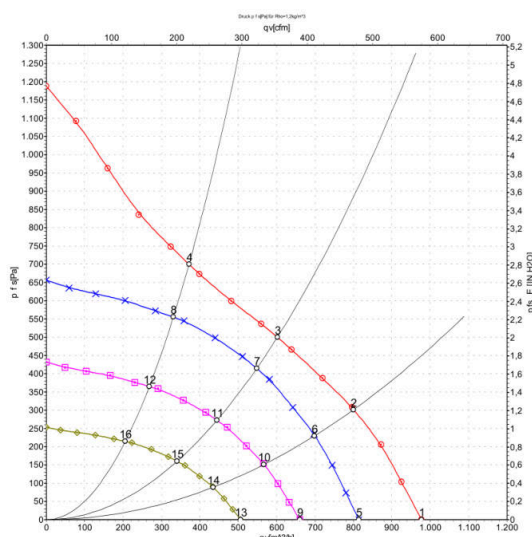
Dane znamionowe	
Napięcie znamionowe	1~ 230 V (200...240 V)
Częstotliwość	50/60 Hz
Prędkość obrotowa	4120 obr/min
Pobór mocy	169 W
Pobór prądu	1,35 A
Maks. wydajność	975 m³/h
Maks. ciśnienie statyczne	1145 Pa
Temperatura otoczenia	-25...+60 °C
Regulacja obrotów	0-10 V / PWM

Dane ErP (UE 327/2011)	
Sprawność całkowita	56 %
Przepływ w pkt. optymalnym	565 m³/h
Przyrost ciśnienia	524 Pa
Regulacja prędkości (ErP)	tak

Budowa	
Wielkość	190 mm
Silnik	M3G055-CF
Materiał wirnika	tworzywo PA
Kierunek obrotów	w prawo, patrząc na wirnik
Stopień ochrony	IP54
Klasa izolacji	B
Zabezpieczenie silnika	ochrona przed zablokowaniem wirnika
Łożyskowanie	kulkowe
Masa	1,4 kg

Charakterystyka przepływowa (50 Hz)

Charts: Air flow 50 Hz



Measurement: LU-132500-1

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: L_{WA} measured as per ISO 13347 /
L_{PA} 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.

Dane na okładce wg karty katalogowej producenta ebm-papst (oryginał na kolejnych stronach).
Wartości przy maksymalnym obciążeniu; producent zastrzega możliwość zmian.

Dobór, wycena i dostawa – zapytaj LUFTBERG

tel. +48 600 100 371 · tel. +48 604 959 199
biuro@luftberg.pl · www.luftberg.pl

R3G190-RD45-17

EC centrifugal fan - RadiCal

backward curved

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Nominal data

Type	R3G190-RD45-17	
Motor	M3G055-CF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min ⁻¹	4120
Power input	W	169
Current draw	A	1.35
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

Data according to ErP directive

		Actual	Request 2015
01 Overall efficiency η_{es}	%	56	43.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		74.9	62
05 Variable speed drive		Yes	

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

09 Power input P_{ed}	kW	0.16
09 Air flow q_v	m³/h	565
09 Pressure increase p_{fs}	Pa	524
10 Speed (rpm) n	min ⁻¹	4055
11 Specific ratio*		1.01

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$ LU-132500



R3G190-RD45-17

EC centrifugal fan - RadiCal

backward curved

Technical features

Mass	1.4 kg
Size	190 mm
Surface of rotor	Thick layer passivated
Material of impeller	PA plastic
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected motor
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	EN 60335-1; CE

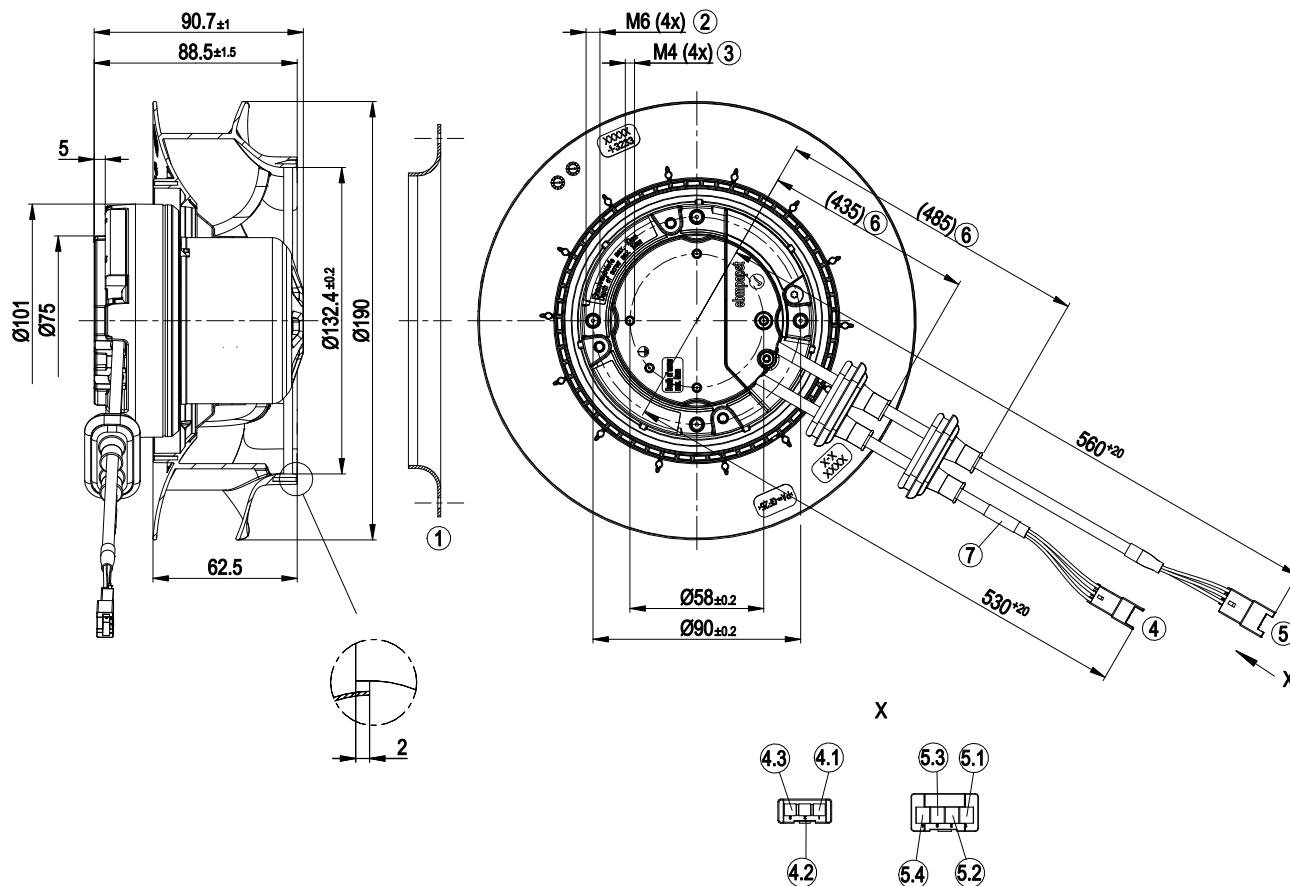


R3G190-RD45-17

EC centrifugal fan - RadiCal

backward curved

Product drawing



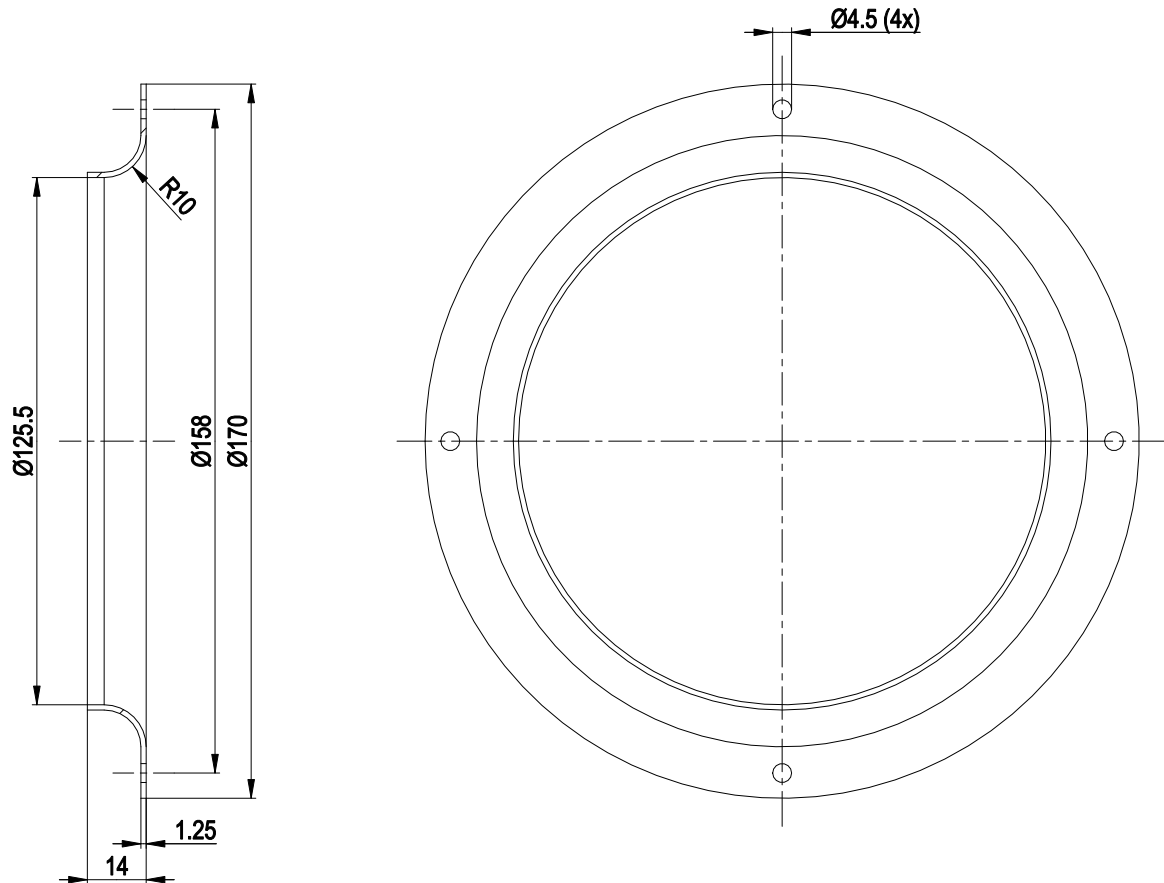
1	Accessory part: Inlet nozzle 09576-2-4013 not included in scope of delivery
2	Thread reach max. 10 mm
3	Thread reach max. 5 mm
4	Connection line PVC AWG20, connector housing 3-pole JST XARR-03VF, 3x plug pin JST SXAM-01T-P0.6
4.1	L (black)
4.2	N (blue)
4.3	PE (green/yellow)
5	Connection line PVC AWG22, connector housing 4-pole JST XARR-04VF, 3x plug pin JST SXAM-01T-P0.6
5.1	0-10 V PWM (yellow)
5.2	GND (blue)
5.3	Tach (white)
5.4	not used
6	The exact position of the grommet cannot be confirmed
7	Heat shrink tube, white

R3G190-RD45-17

EC centrifugal fan - RadiCal

backward curved

Accessory part



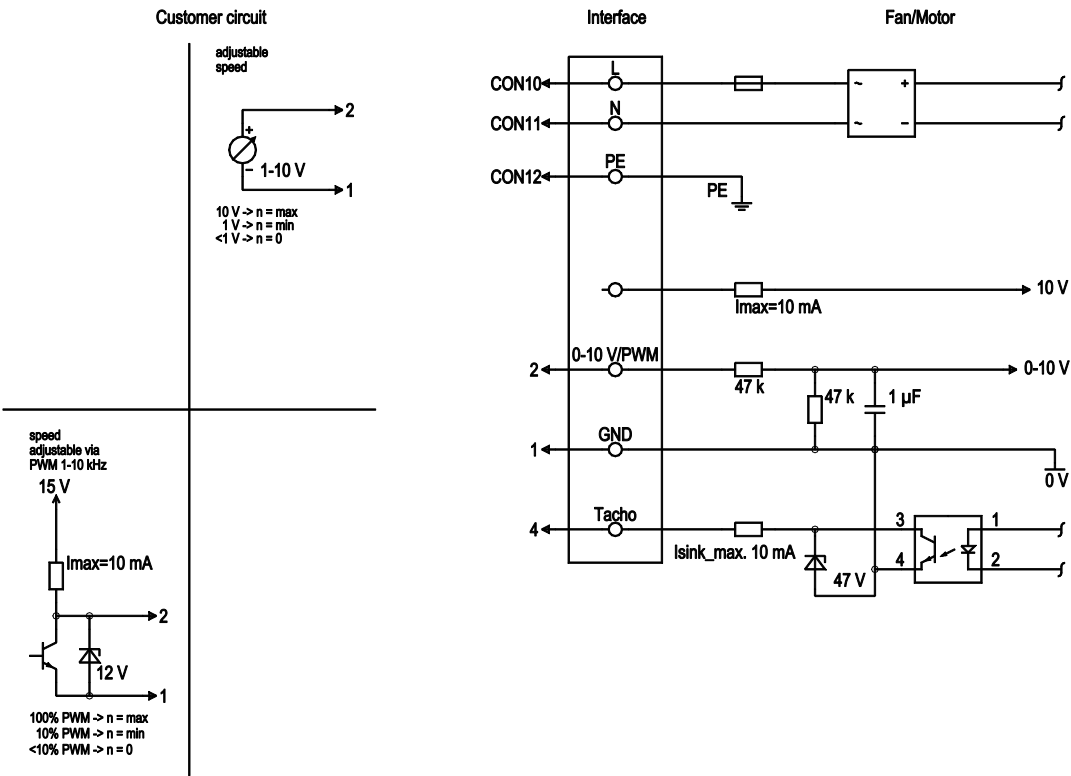
1 Accessory part: Inlet nozzle 09576-2-4013 not included in scope of delivery

R3G190-RD45-17

EC centrifugal fan - RadiCal

backward curved

Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Mains connection, power supply, phase, see type plate for voltage range
	CON11	N	blue	Mains connection, power supply, neutral conductor, see type plate for voltage range
	CON12	PE	green/yellow	Earth connection
	2	0- 10V PWM	yellow	0-10 V/PWM control input, R _i =100 kΩ, SELV
	4	Tach	white	Speed monitoring output, open collector, 1 pulse per revolution, I _{sink max} = 10 mA, SELV
	1	GND	blue	Signal ground for control interface, SELV

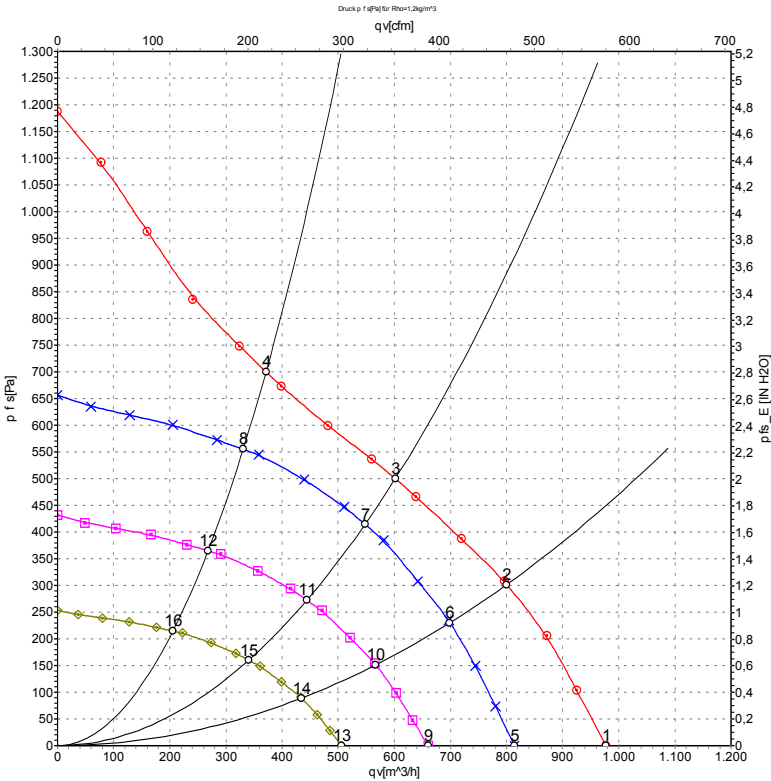


R3G190-RD45-17

EC centrifugal fan - RadiCal

backward curved

Charts: Air flow 50 Hz



Measurement: LU-132500-1

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: L_{wA} measured as per ISO 13347 / L_{pA} 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	LpA _{in}	LwA _{in}	q _v	P _{ts}	q _v	P _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa	cfm	inH ₂ O
1	230	50	4440	161	1.35	72	81	975	0	575	0.00
2	230	50	4235	165	1.35	67	75	800	300	470	1.20
3	230	50	4120	169	1.35	63	72	600	500	355	2.01
4	230	50	4150	160	1.35	66	74	370	700	220	2.81
5	230	50	3700	93	0.81	69	77	815	0	480	0.00
6	230	50	3700	110	0.93	64	72	700	233	410	0.94
7	230	50	3700	125	1.06	61	70	550	415	325	1.67
8	230	50	3700	114	0.97	64	72	330	556	195	2.23
9	230	50	3000	50	0.43	64	73	660	0	390	0.00
10	230	50	3000	59	0.50	59	68	565	153	335	0.61
11	230	50	3000	67	0.57	56	65	445	273	260	1.10
12	230	50	3000	61	0.52	59	67	270	365	160	1.47
13	230	50	2300	22	0.19	58	67	505	0	300	0.00
14	230	50	2300	26	0.22	53	62	435	90	255	0.36
15	230	50	2300	30	0.26	51	59	340	160	200	0.64
16	230	50	2300	27	0.23	54	61	205	215	120	0.86

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_v = Air flow
p_{ts} = Pressure increase

