

KARTA KATALOGOWA

R4D500-RA03-01

Wentylator promieniowy AC RadiCal, łopatki zakrzywione do tyłu, jednostronnie ssący

Producent: ebm-papst



Zdjęcie poglądowe

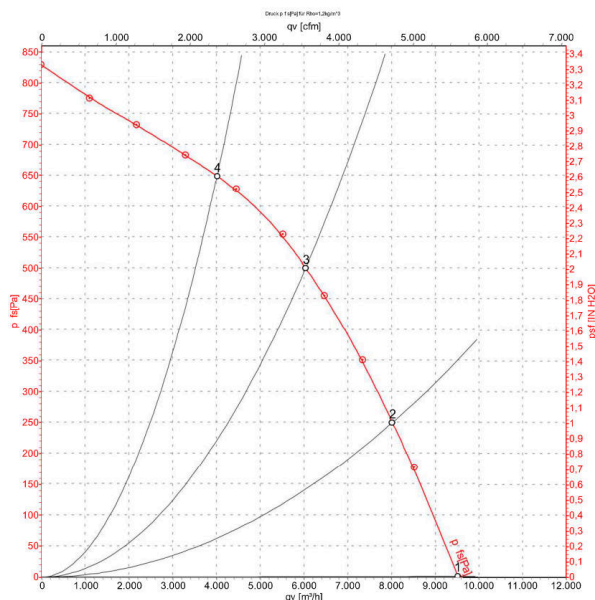
Dane znamionowe	
Napięcie znamionowe	3~ 230 V Δ / 400 V Y
Częstotliwość	50 Hz
Prędkość obrotowa	1370 obr/min
Pobór mocy	1520 W
Pobór prądu	5,04 / 2,91 A
Maks. wydajność	9510 m³/h
Maks. ciśnienie statyczne	650 Pa
Temperatura otoczenia	-40...+55 °C

Dane ErP (UE 327/2011)	
Sprawność całkowita	53,4 %
Przepływ w pkt. optymalnym	5520 m³/h
Przyrost ciśnienia	527 Pa
Regulacja obrotów	nie

Budowa	
Średnica wirnika	500 mm
Materiał wirnika	tworzywo PP
Liczba łopatek	7
Stopień ochrony	IP54
Zabezpieczenie silnika	termik (TOP)
Masa	21,5 kg

Charakterystyka przepływowa

Curves: Air performance 50 Hz



Measurement: LU-136742-1

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.

Dane na podstawie karty producenta ebm-papst (oryginał na kolejnych stronach).

Dwie wartości odpowiadają połączeniu Δ / Y (kolumny karty producenta); producent zastrzega możliwość zmian.

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R4D500-RA03-01

AC centrifugal fan - RadiCal

backward-curved, single-intake

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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R4D500-RA03-01		
Motor	M4D138-HF		
Phase		3~	3~
Nominal voltage	VAC	230	400
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1370	1370
Power consumption	W	1520	1520
Current draw	A	5.04	2.91
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	55
Starting current	A	24	14

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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	53.4	53.4	09 Power consumption P_e	kW	1.51
02 Measurement category		A		09 Air flow q_v	m ³ /h	5520
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	527
04 Efficiency grade N		62	62	10 Speed (rpm) n	min ⁻¹	1370
05 Variable speed drive		No		11 Specific ratio*		1.01

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-136742



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Technical description

Weight	21.5 kg
Size	500 mm
Motor size	138
Rotor surface	Cast in aluminum
Impeller material	PP plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
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 and stator sides
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010); CE
Approval	VDE; EAC

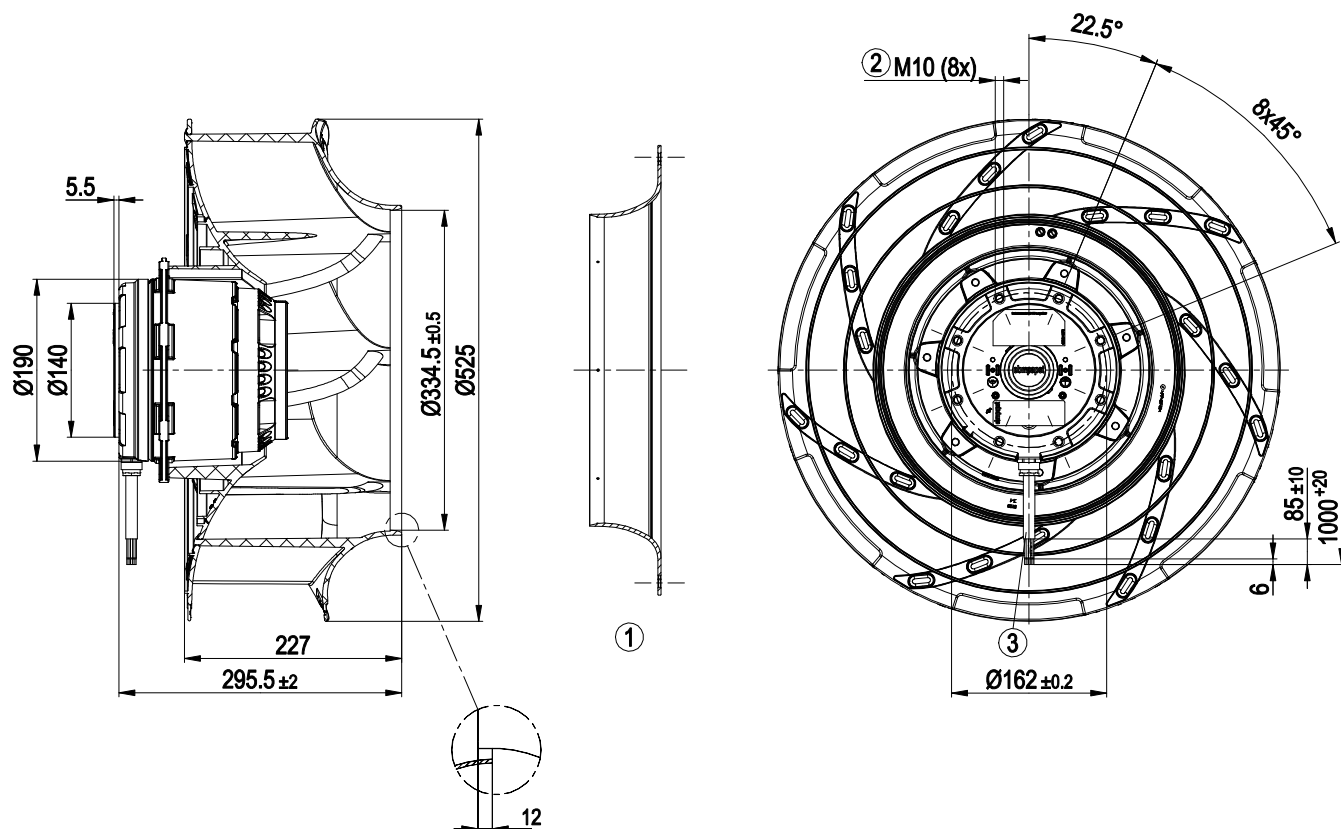


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Product drawing



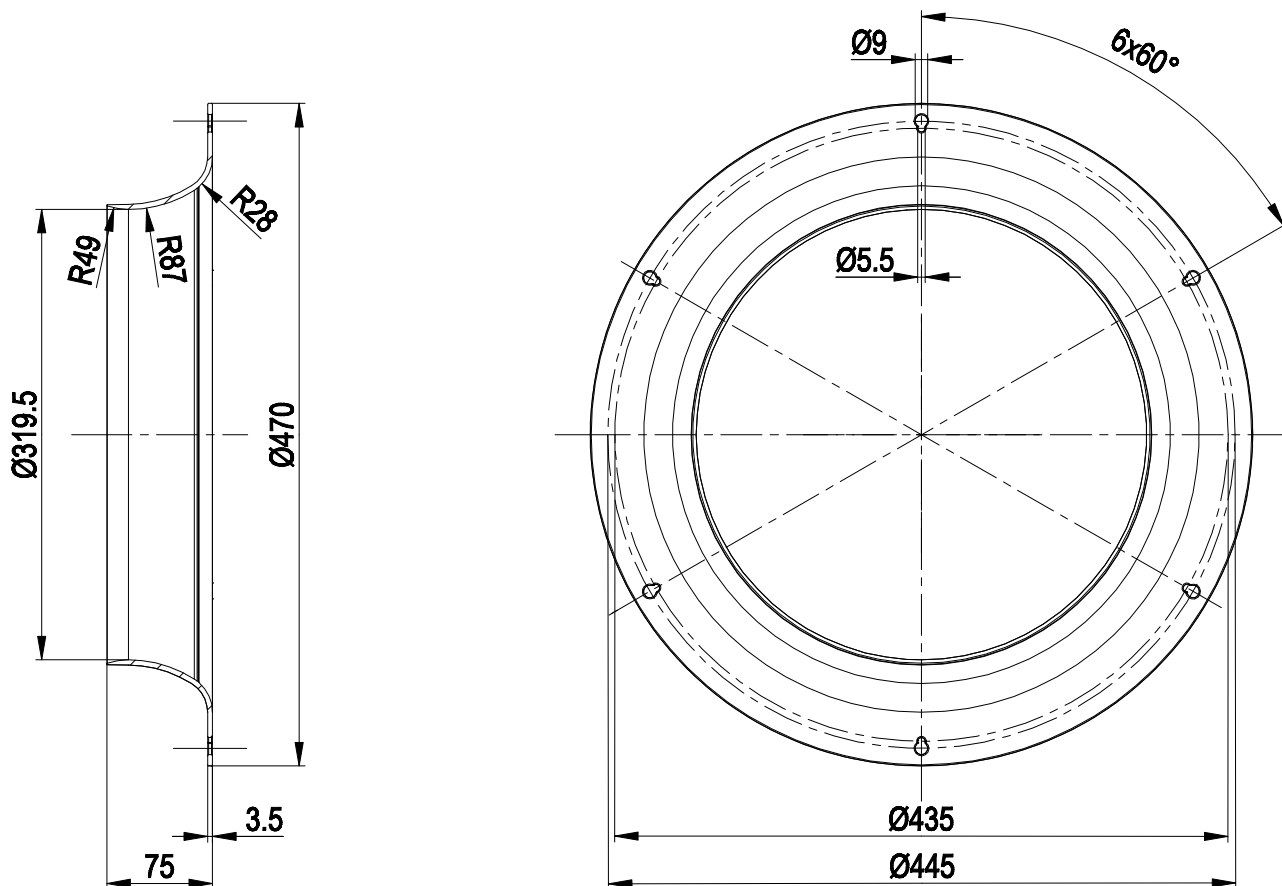
- | | |
|---|--|
| 1 | Accessory part: inlet ring 50901-2-2943 not included in scope of delivery. |
| 2 | Max. clearance for screw 18 mm |
| 3 | Cable halogen-free, 9x 0.75 mm ² , 9x crimped splices |

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Accessory part

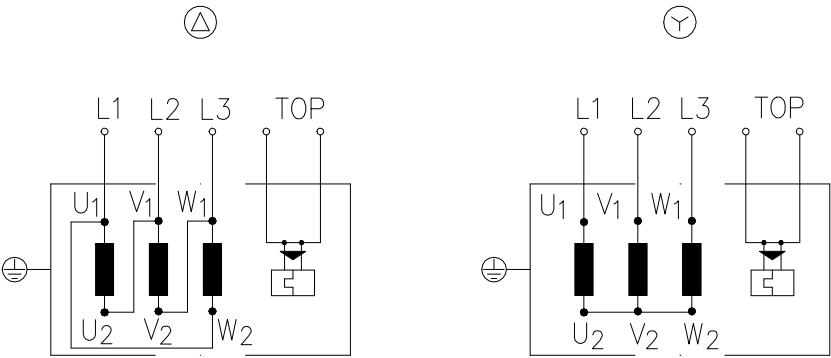


1 Accessory part: inlet ring 50901-2-2943

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Connection diagram



Change of rotation direction by reversing two phases

Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

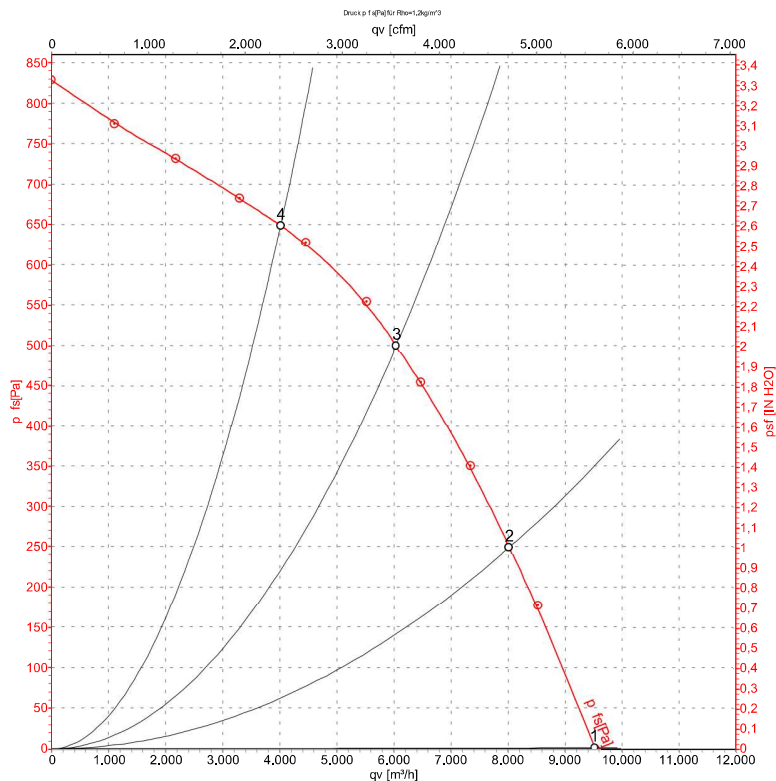


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Measured values

	Wired	U	f	n	P _e	I	L _{wA} _{in}	q _v	p _{ts}	q _v	p _{ts}
		V	Hz	min ⁻¹	W	A	dB(A)	m³/h	Pa	cfm	in. wg
1	Y	400	50	1410	1125	2.44	81	9510	0	5595	0.00
2	Y	400	50	1390	1350	2.71	77	8020	250	4720	1.00
3	Y	400	50	1370	1520	2.91	73	6040	500	3555	2.01
4	Y	400	50	1380	1385	2.75	73	4010	650	2360	2.61

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · L_{wA}_{in} = Sound power level intake side · q_v = Air flow · p_{ts} = Pressure increase

