R4D200-AD04-09

AC centrifugal fan

forward-curved

R4D200-AD04-09 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R4D200-AD04-09**
Motor	**M4D068-GA**

Phase		3~
Nominal voltage	VAC	400
Wiring		Y
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1300
Power consumption	W	290
Current draw	A	0.56
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55
Starting current	A	1.48

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	33.6	32.3
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		45.3	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.14
09 Air flow q_v	m^3/h	700
09 Pressure increase p_{fs}	Pa	243
10 Speed (rpm) n	min^{-1}	1420
11 Specific ratio*		1.00

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 Pa

LU-109697

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Technical description

Weight	3.6 kg
Fan size	200 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized and painted black
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	EAC

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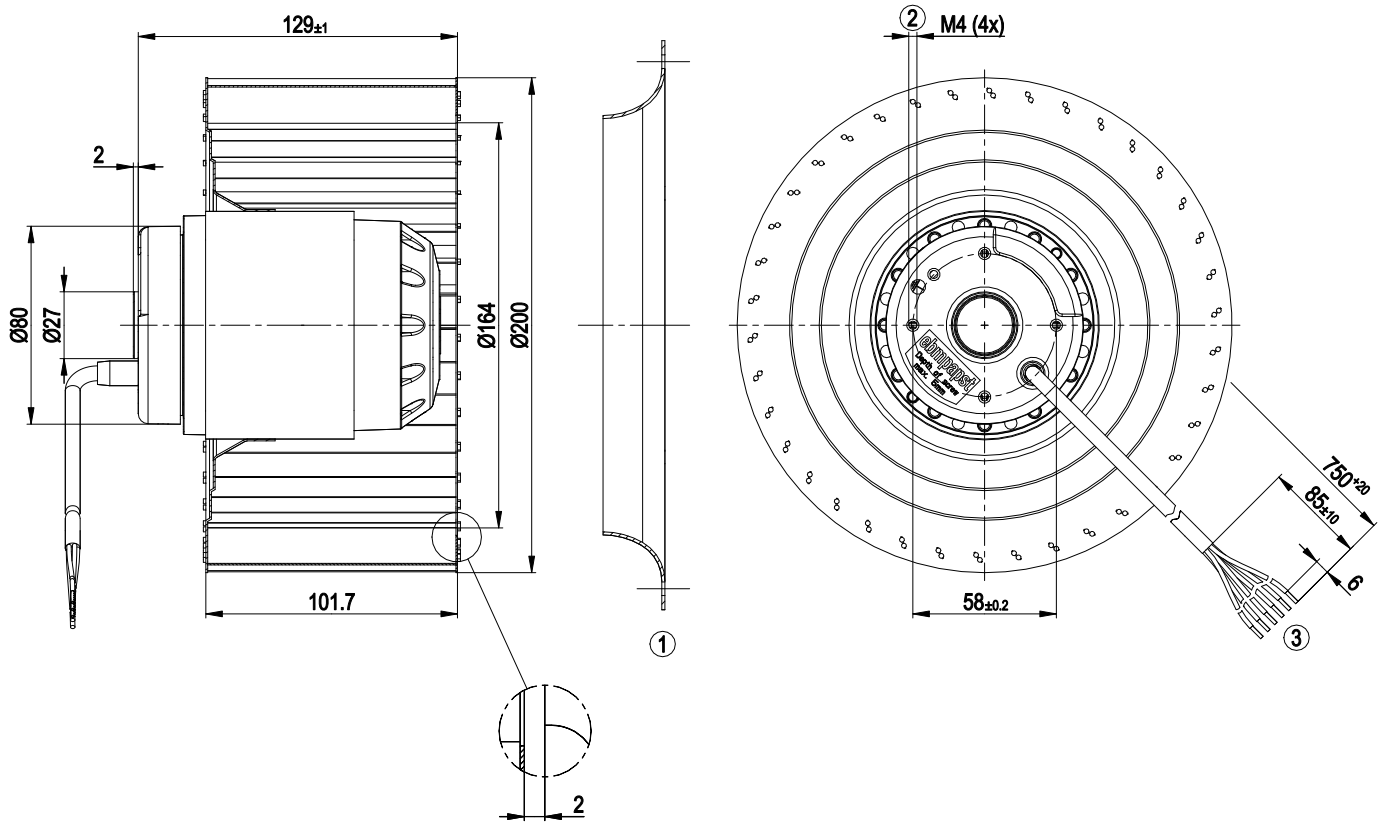
Product drawing



1	Accessory part: inlet ring 09604-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC 6x 0.5 mm², 6x crimped splices

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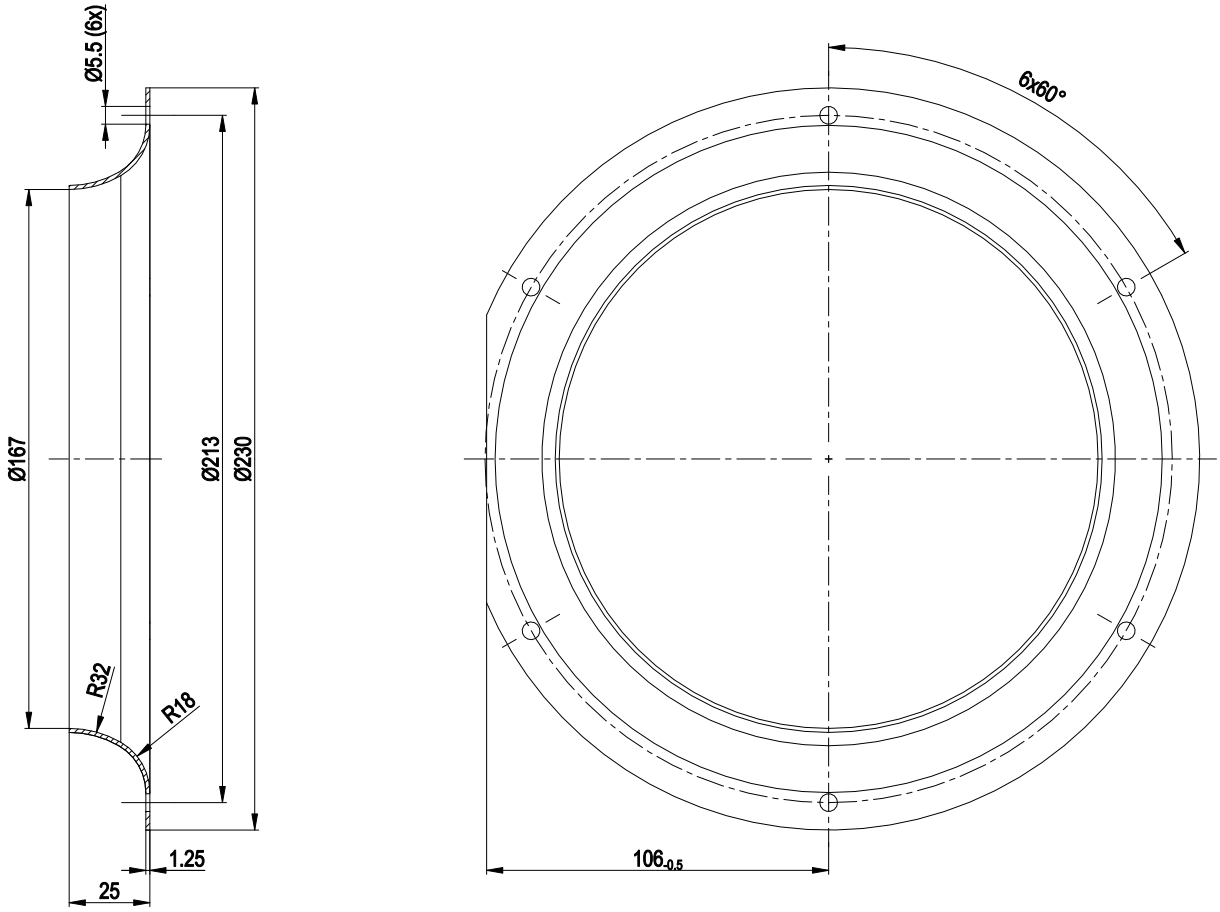
Accessory part



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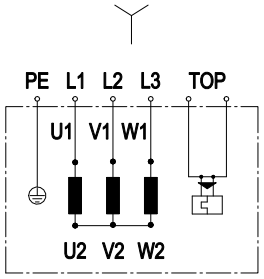
Connection diagram



Note: Change of rotation direction by reversing two phases

Y	Star connection	L1	= U1 = black	L2	= V1 = blue
L3	= W1 = brown	PE	green/yellow	TOP	2x gray

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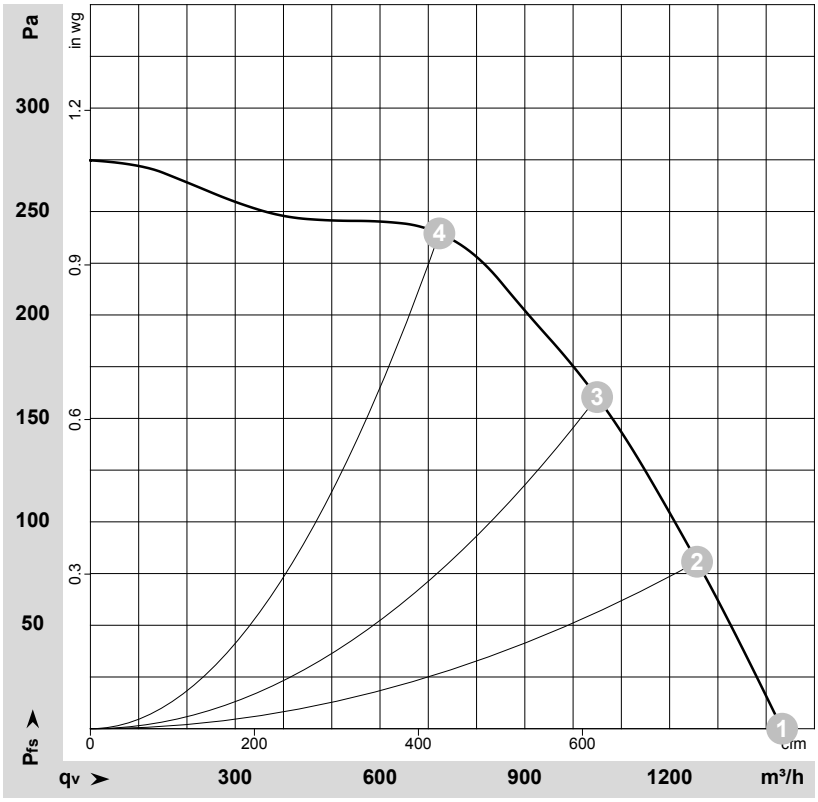
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-109697-1

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

	Wired	U	f	n	P_e	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	Y	400	50	1300	290	0.56	72	78	1435	0	845	0.00
2	Y	400	50	1325	255	0.50	70	76	1255	80	740	0.32
3	Y	400	50	1370	206	0.45	67	73	1050	160	620	0.64
4	Y	400	50	1415	144	0.40	64	71	725	240	425	0.96

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = 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