AC centrifugal fan

forward-curved, single-intake

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R4D200-AD04-11**
Motor	**M4D068-GA**

Phase		3~
Nominal voltage	VAC	230
Wiring		Δ
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	0.96
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	75
Starting current	A	2.55

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

ebmpapst

AC centrifugal fan

forward-curved, single-intake

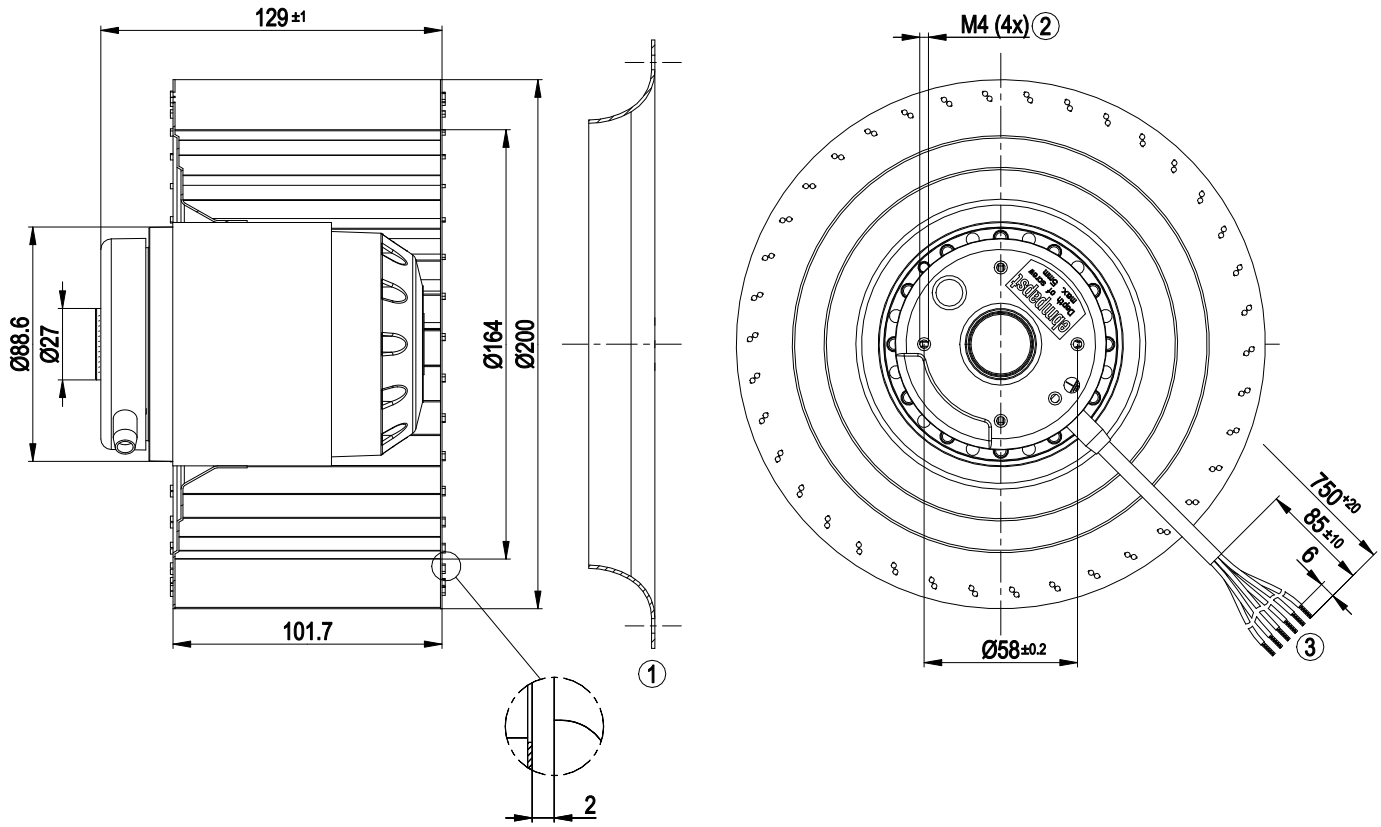
Technical description

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	"F"
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	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-1; CSA C22.2 No. 100

AC centrifugal fan

forward-curved, single-intake

Product drawing

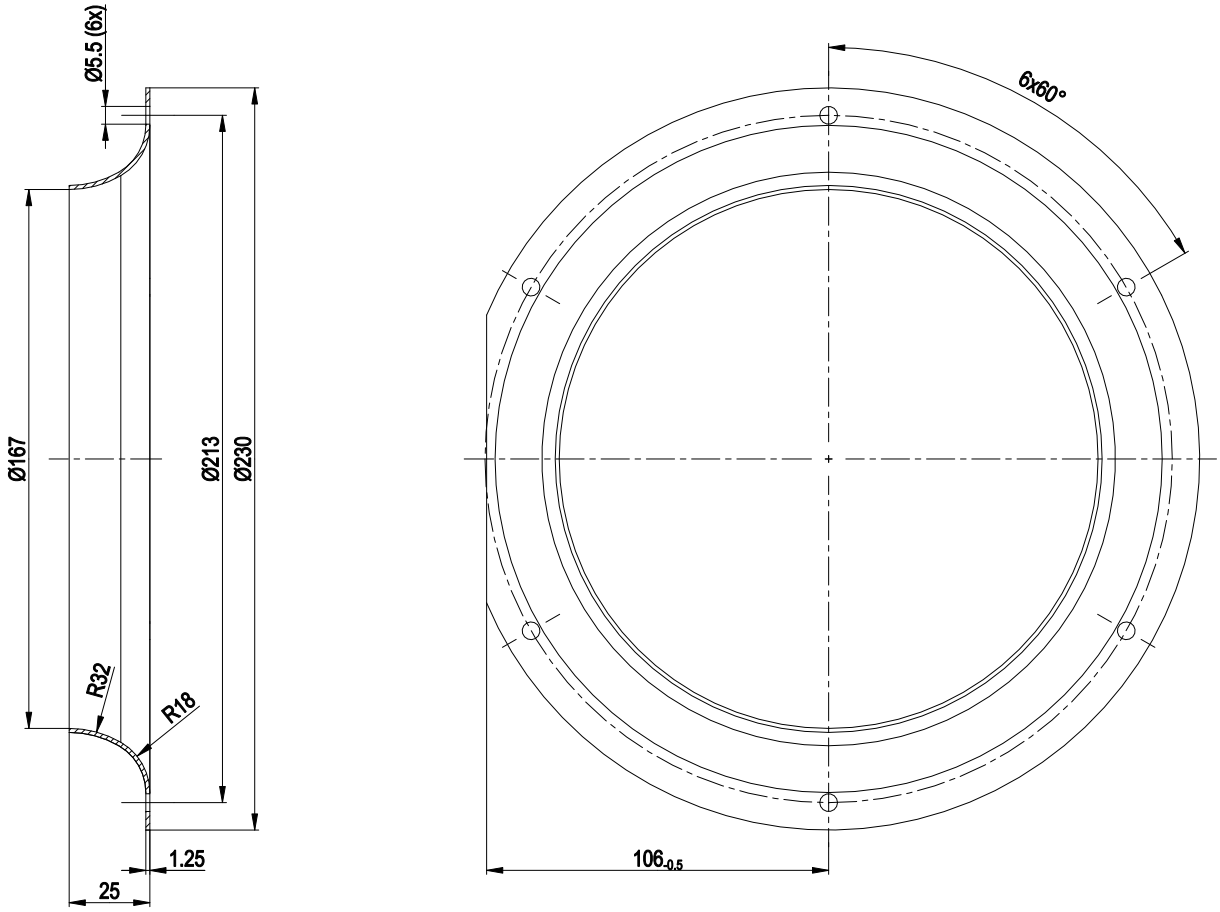


1	Accessory part: inlet ring 09604-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable silicone 6G 0.5 mm², 6x crimped splices

AC centrifugal fan

forward-curved, single-intake

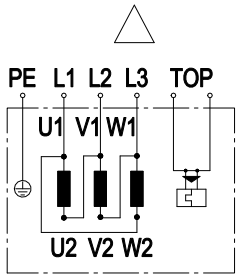
Accessory part



AC centrifugal fan

forward-curved, single-intake

Connection diagram



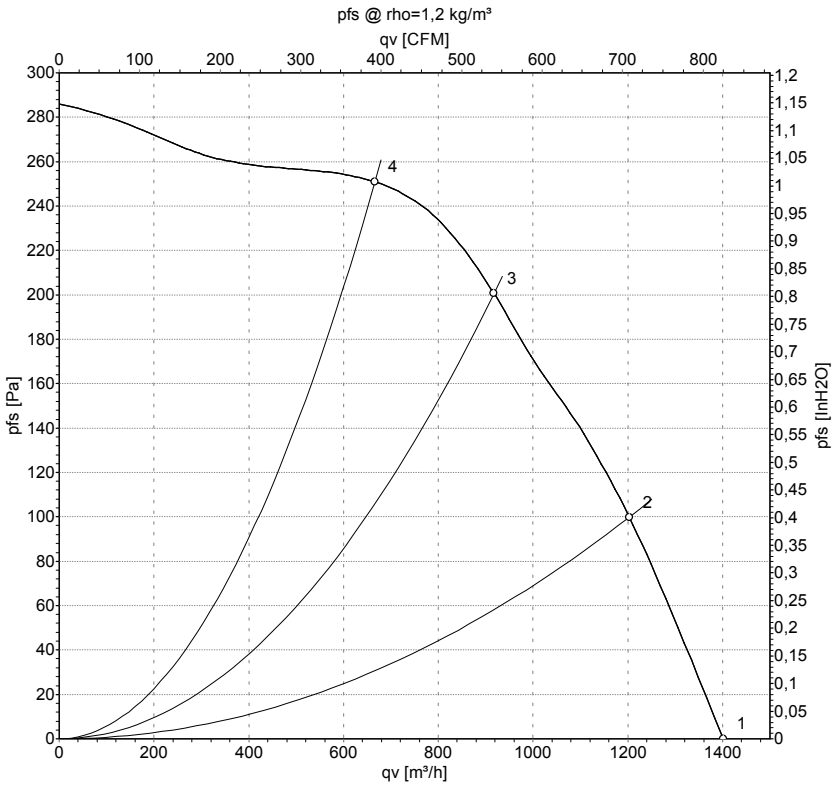
Note: Change of rotation direction by reversing two phases

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

AC centrifugal fan

forward-curved, single-intake

Curves: Air performance 50 Hz



Measurement: LU-147925-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Δ	230	50	1300	290	0.96	1400	0	825	0.00
2	Δ	230	50	1355	232	0.85	1205	100	710	0.40
3	Δ	230	50	1400	178	0.78	915	200	540	0.80
4	Δ	230	50	1430	134	0.71	665	250	390	1.00

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase