

R4E310-AF12-05

AC centrifugal fan

backward curved

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R4E310-AF12-05		
Motor	M4E074-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1430	1670
Power consumption	W	105	150
Current draw	A	0.47	0.67
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	50

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



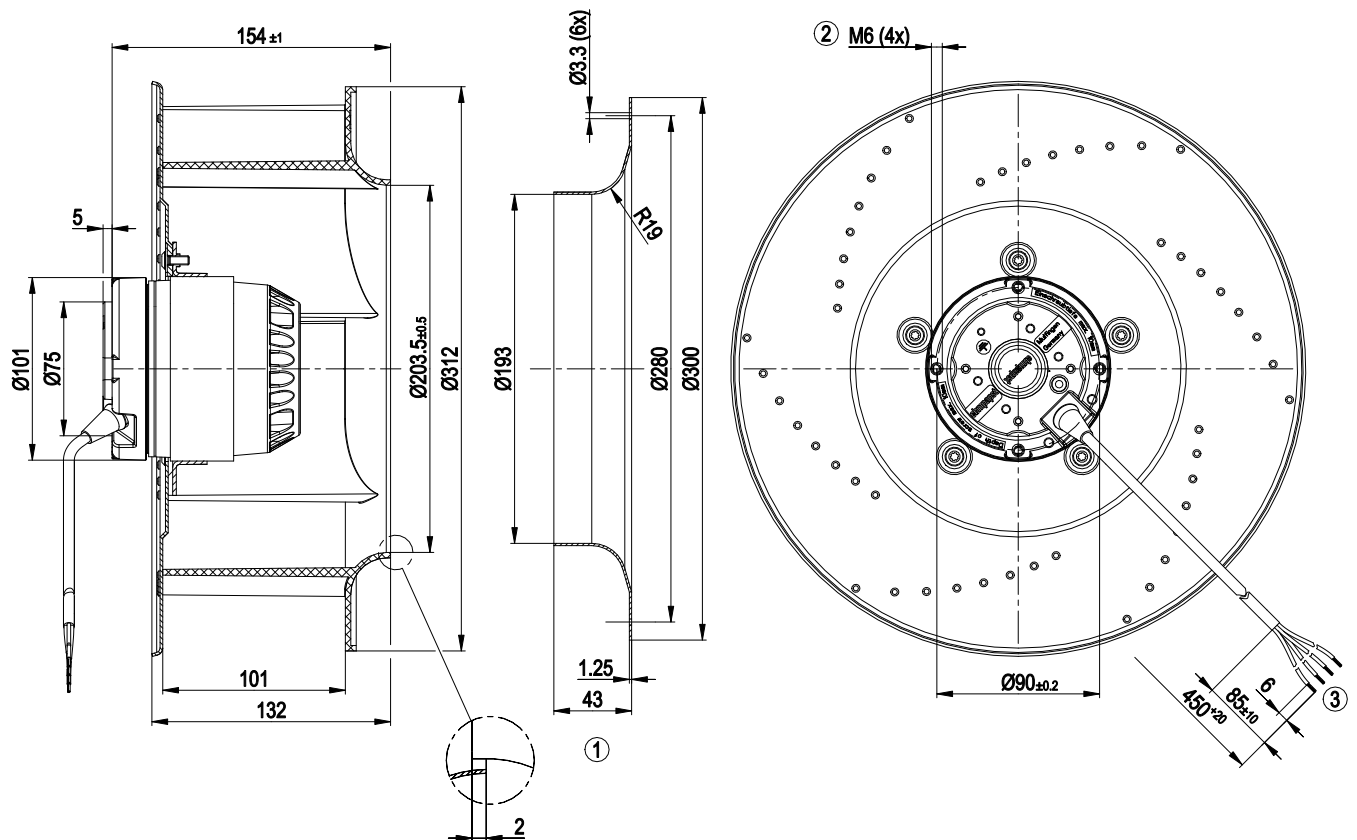
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Technical description

Weight	3.7 kg
Fan size	310 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Degree of protection	Depending on installation position acc. to EN 60034-5
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	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) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC

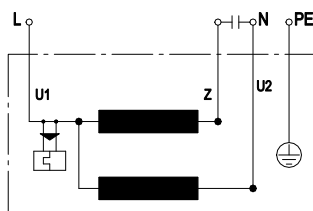


Product drawing



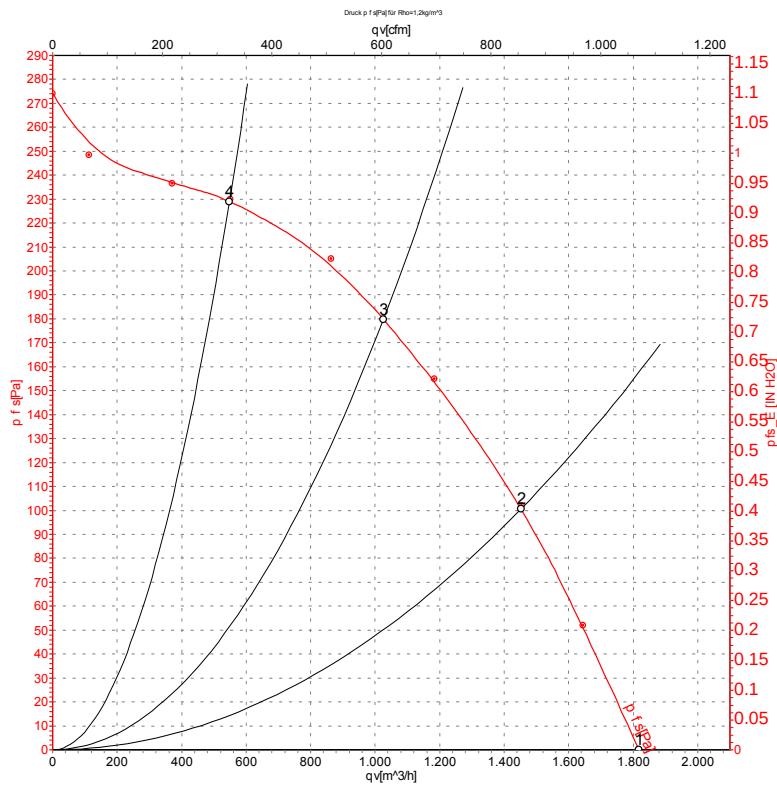
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|---|---|
| 1 | Connection line PVC 4G 0.5 mm ² , 4 crimped wire end sleeves |
| 2 | Accessory part: inlet ring 09621-2-4013, not included in scope of delivery. |
| 3 | Max. clearance for screw 10 mm |

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

Curves: Air performance 50 Hz



Measurement: LU-28260-1

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 must be checked in the installed unit.

Measured values

	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	230	50	1430	105	0.47	1815	0	1070	0.00
2	230	50	1410	120	0.53	1450	100	855	0.40
3	230	50	1400	126	0.56	1025	180	605	0.72
4	230	50	1410	119	0.53	550	230	325	0.92

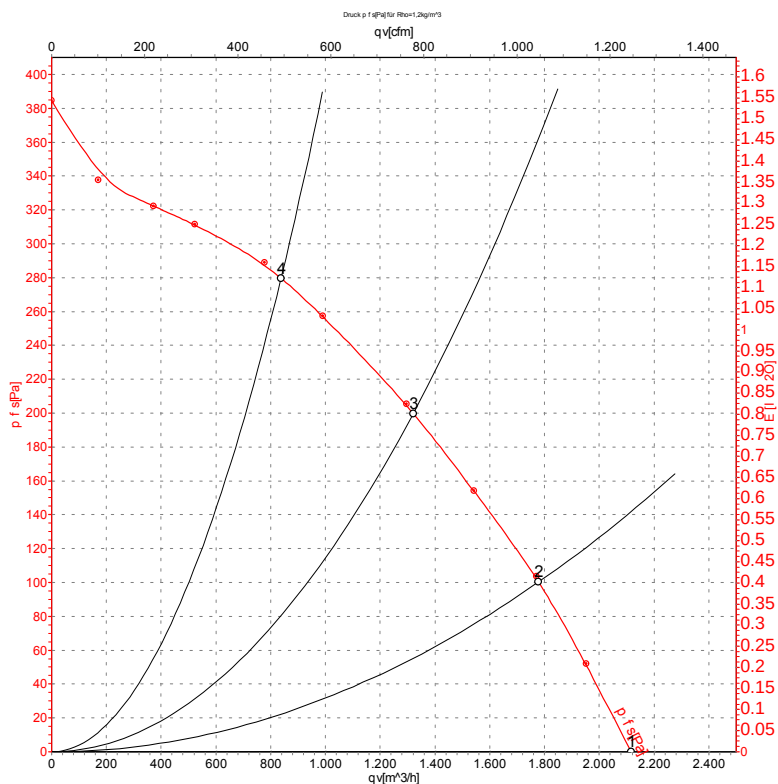
U = Power supply · f = Frequency · n = Speed (rpm) · P

e = Power consumption · I = Current draw · q_v = Air flow · p

fs = Pressure increase



Curves: Air performance 60 Hz



Measurement: LU-28261-1

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 must be checked in the installed unit.

Measured values

	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	230	60	1670	150	0.67	2115	0	1245	0.00
2	230	60	1620	173	0.76	1780	100	1045	0.40
3	230	60	1590	183	0.80	1320	200	775	0.80
4	230	60	1580	184	0.81	840	280	495	1.12

U = Power supply · f = Frequency · n = Speed (rpm) · P

e = Power consumption · I = Current draw · q_v = Air flow · p

f_s = Pressure increase

