R4E280-AA01-05

AC centrifugal fan

backward-curved, single-intake

R4E280-AA01-05 ebmpapst Datasheet
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Nominal data

Type	**R4E280-AA01-05**
Motor	**M4E068-DF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1350	1530
Power consumption	W	90	125
Current draw	A	0.40	0.55
Capacitor	µF	3	3
Capacitor voltage	VDB	450	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	inH2O	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	35	30
Starting current	A	0.72	0.7

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	3.2 kg
Fan size	280 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Number of blades	8
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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	None
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	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

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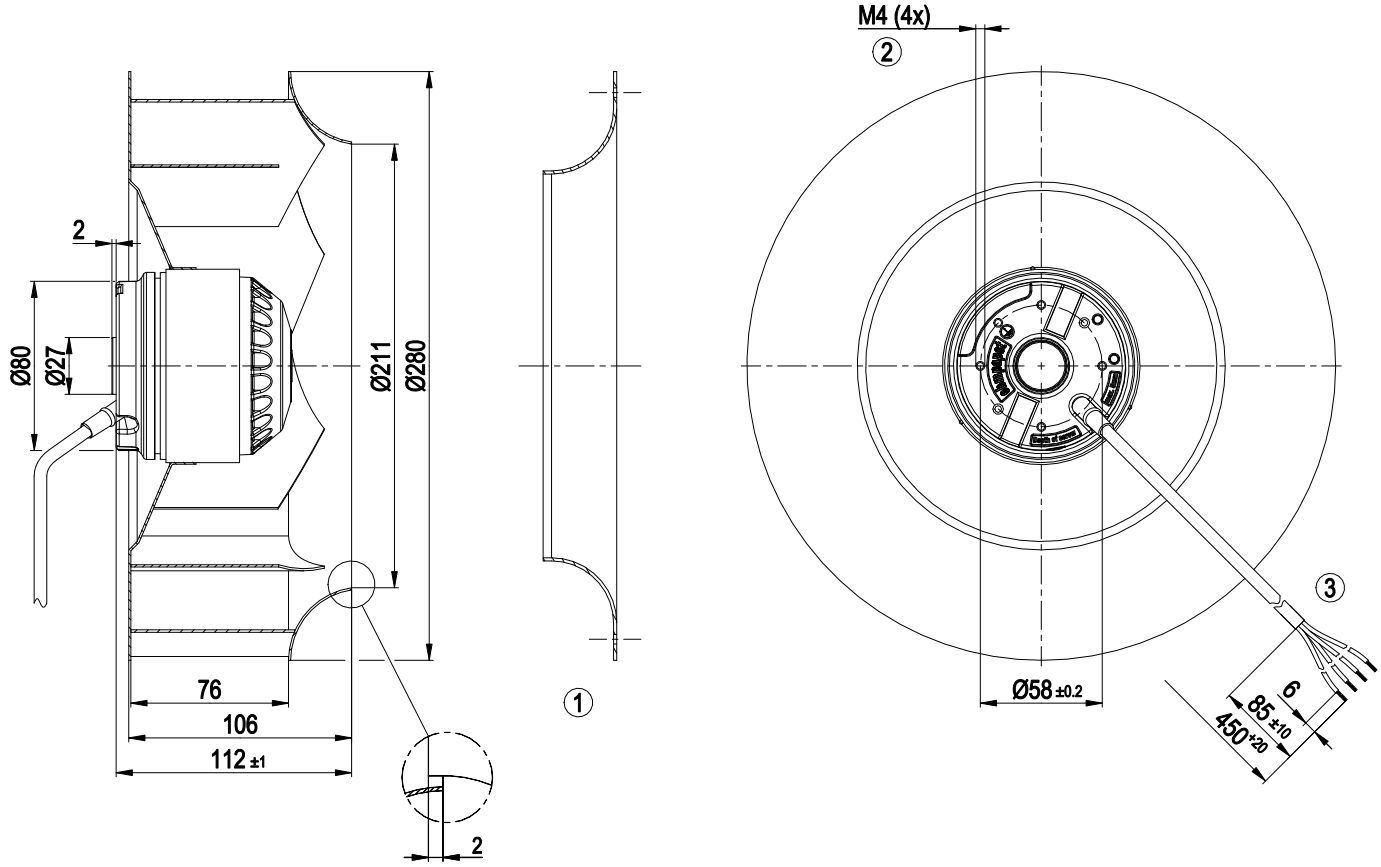
Product drawing



1	Accessory part: Inlet ring 10040-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC 4G 0.5 mm², 4x crimped splices

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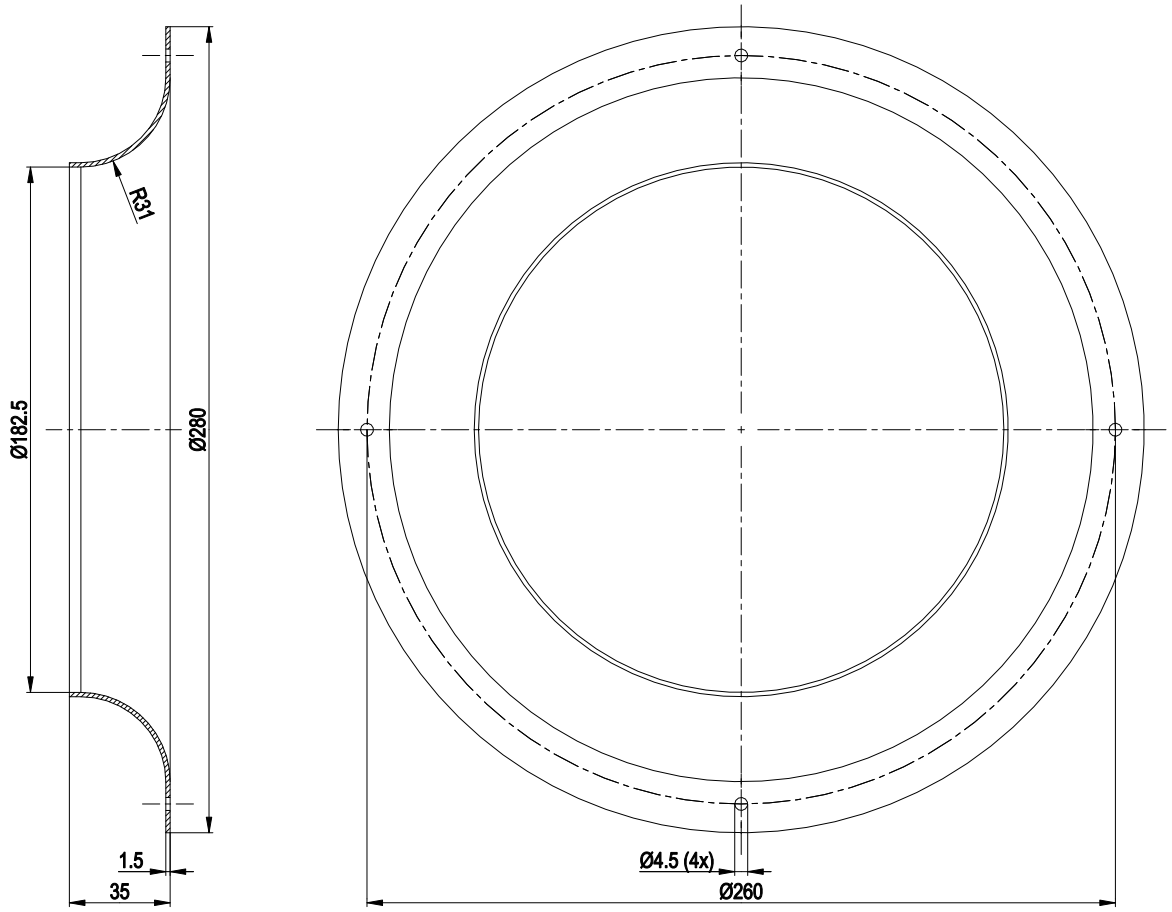
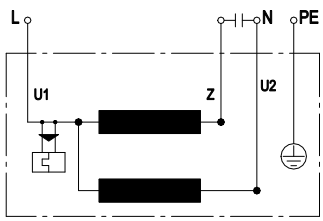
Accessory part



	Accessory part: inlet ring 96360-2-4013 not included in scope of delivery

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

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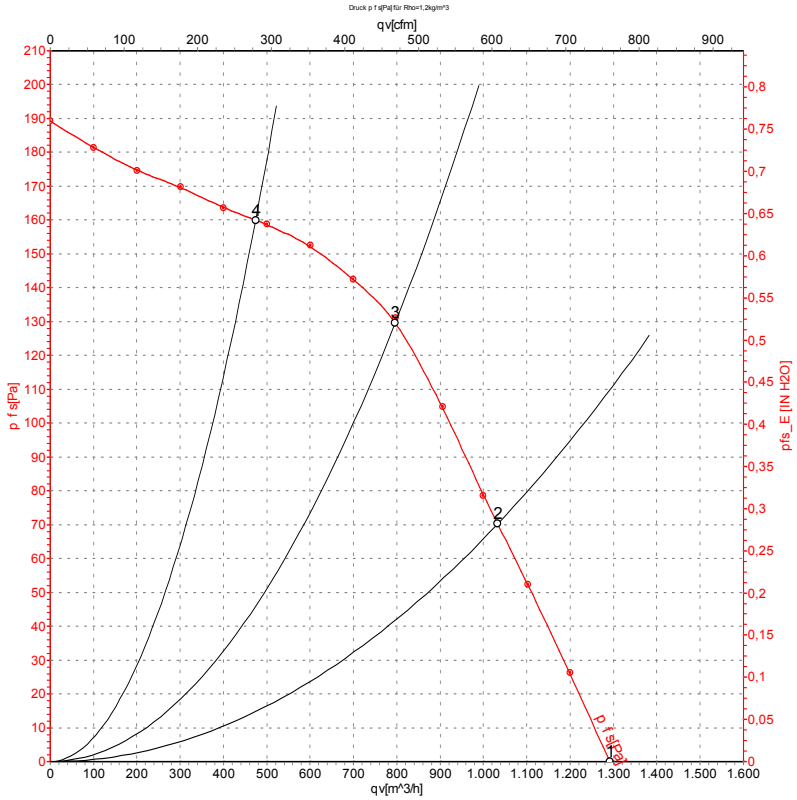
Curves: Air performance 50 Hz



Measurement: LU-61007-1

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

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1350	90	0.40	1290	0	760	0.00
2	230	50	1325	97	0.42	1035	70	610	0.28
3	230	50	1325	98	0.43	795	130	470	0.52
4	230	50	1350	93	0.41	475	160	280	0.64

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

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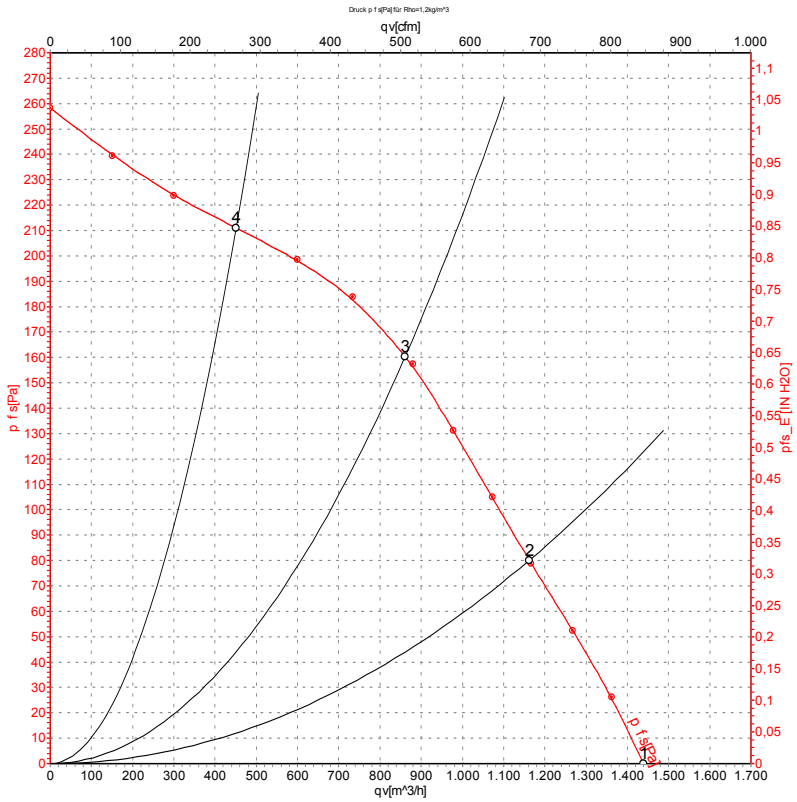
Curves: Air performance 60 Hz



Measurement: LU-61008-1

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

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	60	1530	125	0.55	1440	0	850	0.00
2	230	60	1465	132	0.57	1160	80	685	0.32
3	230	60	1470	132	0.57	860	161	505	0.65
4	230	60	1535	125	0.54	450	211	265	0.85

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