R4E280-AD08-22

AC centrifugal fan

backward-curved, single-intake

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

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

Nominal data

Type	**R4E280-AD08-22**
Motor	**M4E068-DF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	UL 2111
Speed (rpm)	min^{-1}	1390	1600	1600
Power consumption	W	75	100	110
Current draw	A	0.35	0.45	0.47
Capacitor	µF	2.5	2.5	2.5
Capacitor voltage	VDB	450	450	450
Capacitor standard				UL
Min. back pressure	Pa	0	0	0
Min. back pressure	inH2O	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	45	40	40

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

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Technical description

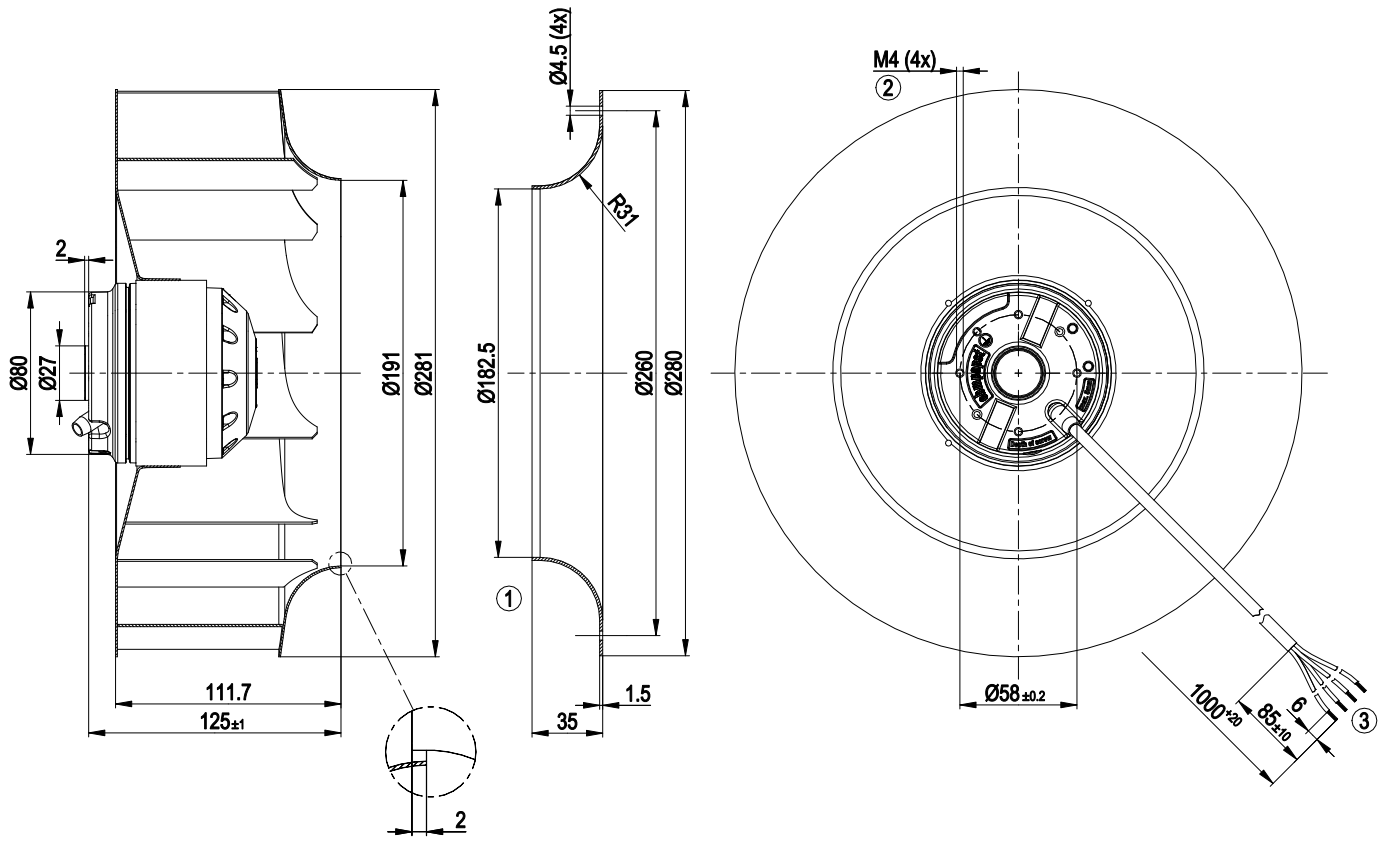
Weight	3.3 kg
Fan size	280 mm
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F2-2
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	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 No. 77

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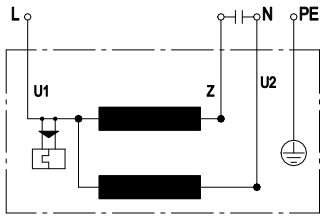
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Product drawing



1	Accessory part: inlet ring 96360-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20, 4x crimped splices

Connection diagram



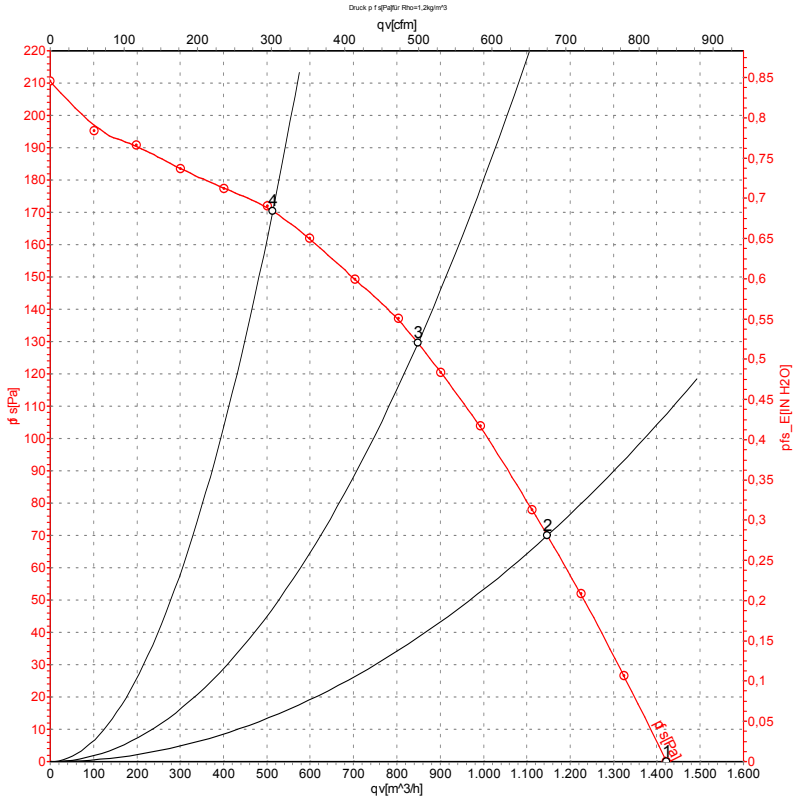
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Curves: Air performance 50 Hz



Measurement: LU-107229-1

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	1390	75	0.35	1425	0	840	0.00
2	230	50	1360	84	0.38	1145	70	675	0.28
3	230	50	1335	90	0.40	850	130	500	0.52
4	230	50	1360	85	0.38	515	170	305	0.68

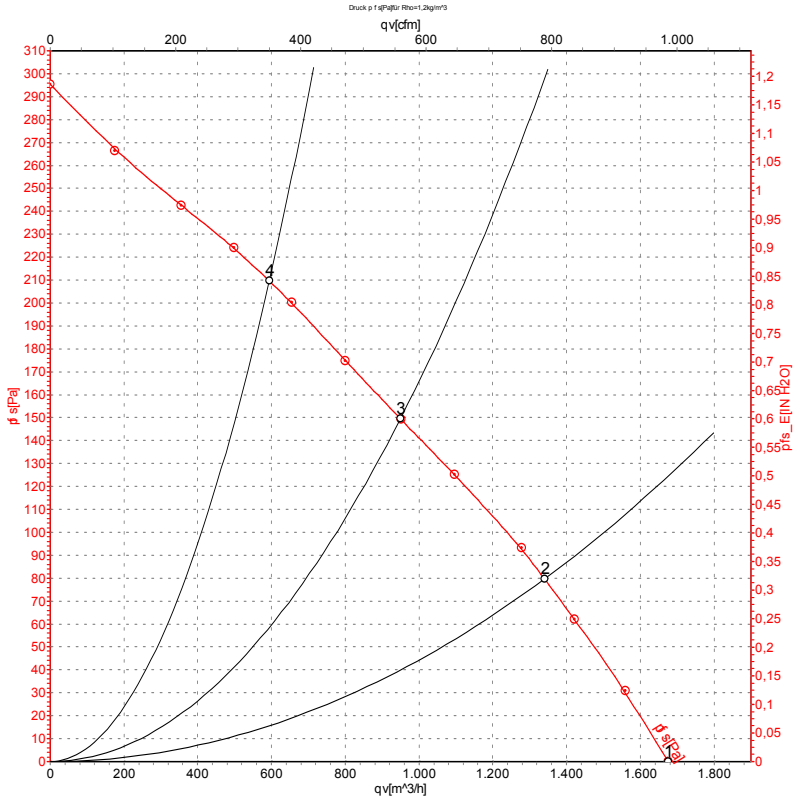
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



Measurement: LU-107231-1

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	1600	100	0.45	1675	0	985	0.00
2	230	60	1530	111	0.48	1340	80	790	0.32
3	230	60	1455	120	0.52	950	150	560	0.60
4	230	60	1515	114	0.49	595	210	350	0.84

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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