R2E180-AH05-40

AC circulation blower for hot air

backward-curved, single-intake

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Nominal data

Type	**R2E180-AH05-40**
Motor	**M2E068-DF**

Phase		1~	1~
Nominal voltage	VAC	240	240
Nominal voltage range	VAC	200 .. 240	200 .. 240
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2650	2850
Power consumption	W	125	165
Current draw	A	0.55	0.7
Capacitor	µF	3	3
Capacitor voltage	VDB	400	400
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	90	90

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

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Technical description

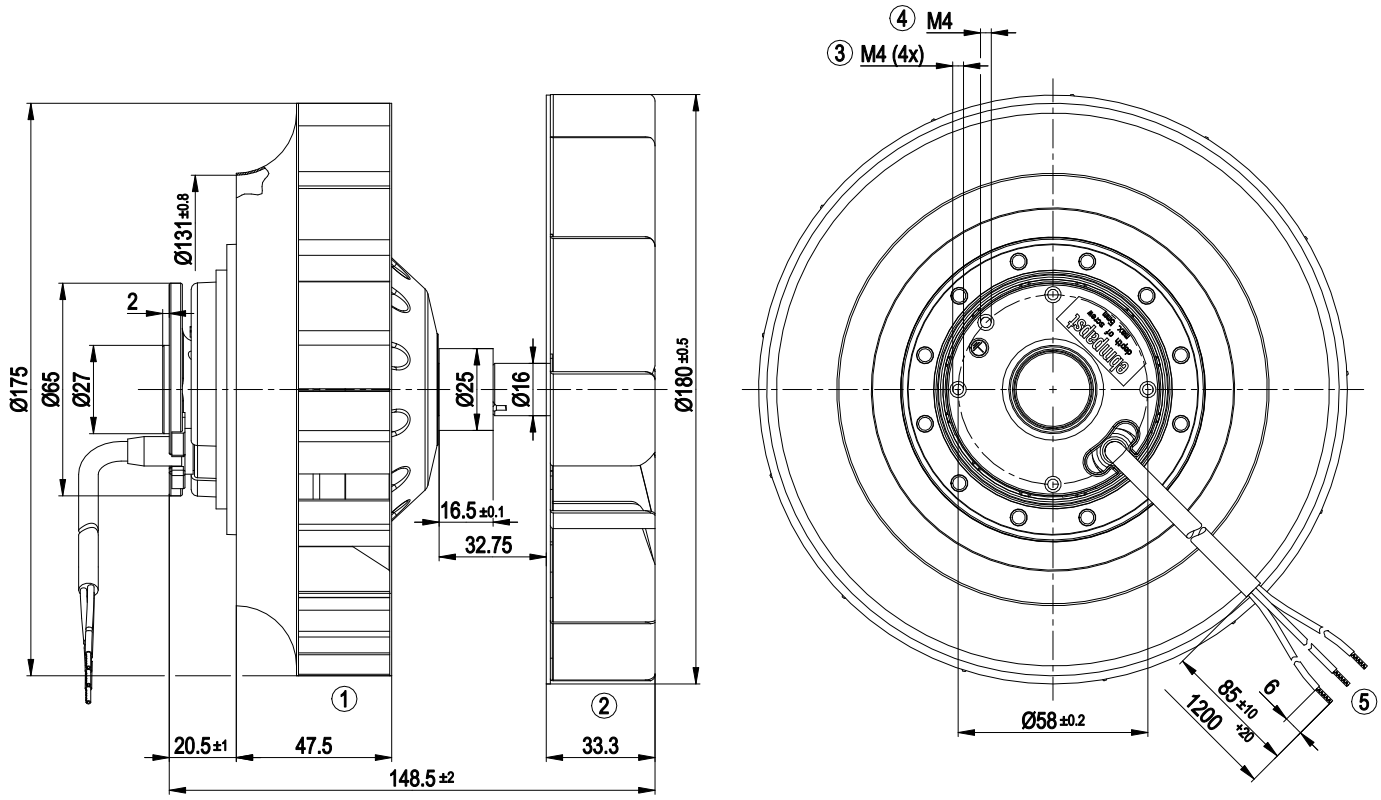
Weight	2.6 kg
Fan size	180 mm
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal
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	Axial
Protection class	I (if protective earth is connected by customer to the housing's connection point)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-1; CSA C22.2 No. 100

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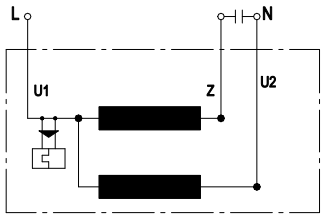
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Product drawing



1	Centrifugal fan impeller (sheet steel, galvanized)
2	Centrifugal fan impeller (stainless steel)
3	Max. clearance for screw 4 mm
4	Max. clearance for screw 4 mm
5	Cable PFA AWG20, 3x crimped splices

Connection diagram



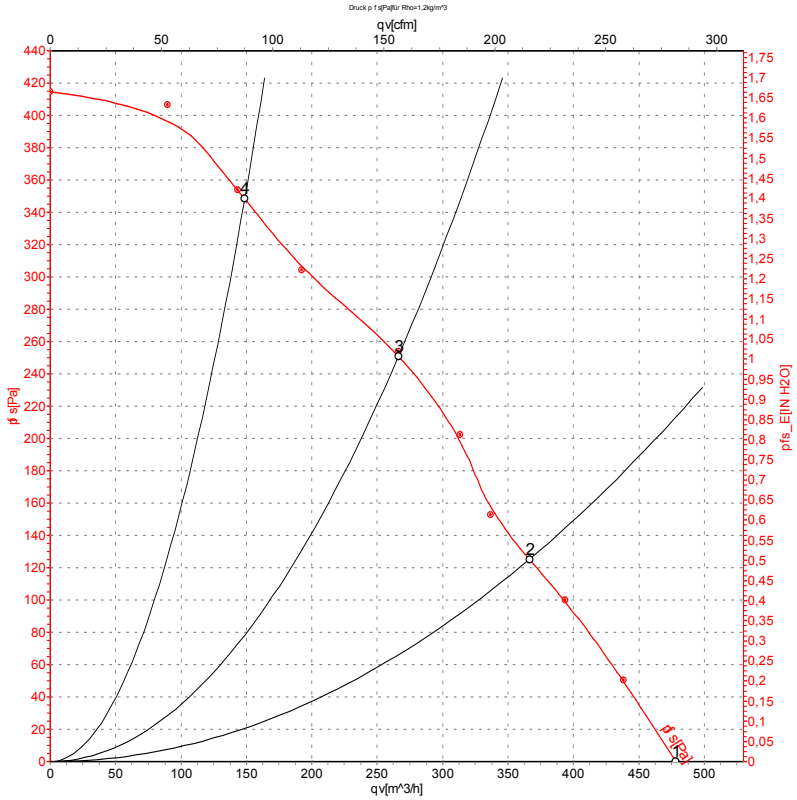
U1	blue	Z	brown	U2	black

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Curves: Air performance 50 Hz



Measurement: LU-18195-1

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	240	50	2650	125	0.55	480	0	285	0.00
2	240	50	2645	115	0.52	365	125	215	0.50
3	240	50	2685	109	0.50	265	250	155	1.00
4	240	50	2700	106	0.49	150	350	90	1.41

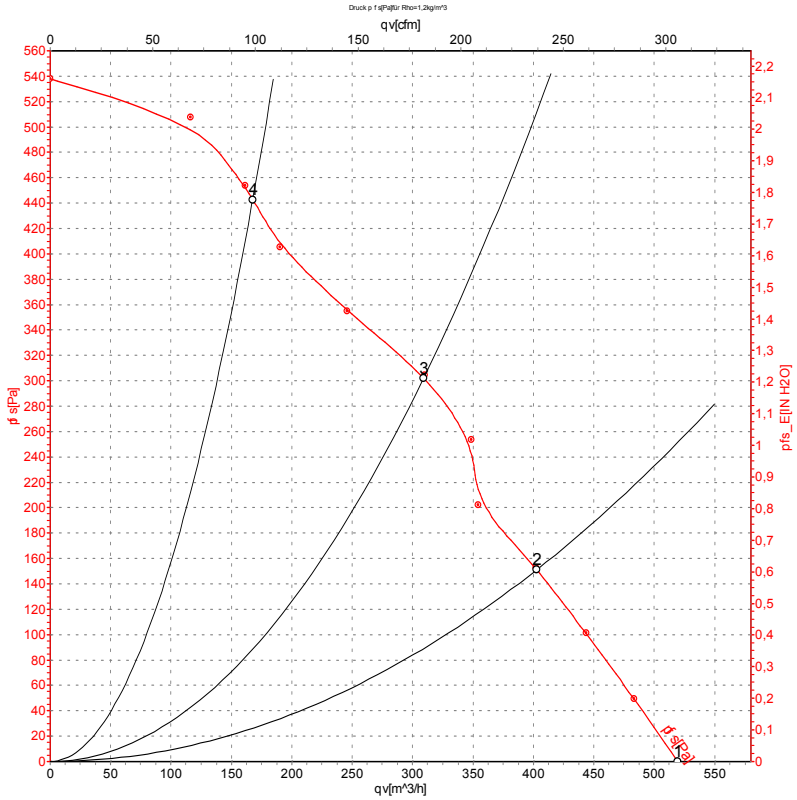
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



Measurement: LU-18196-1

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	240	60	2850	165	0.70	520	0	305	0.00
2	240	60	2925	152	0.66	405	150	235	0.60
3	240	60	3000	144	0.62	310	300	180	1.20
4	240	60	3035	138	0.60	170	440	100	1.77

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