

R4E400-AR05-06

AC centrifugal fan

backward-curved, single-intake



R4E400-AR05-06 ebmpapst Datasheet

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Nominal data

Type	R4E400-AR05-06		
Motor	M4E094-FA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	1355	1480
Power consumption	W	375	540
Current draw	A	1.75	2.4
Capacitor	µF	8	8
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	-40	-40
Max. ambient temperature	°C	60	50
Starting current	A	3.7	3.3

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



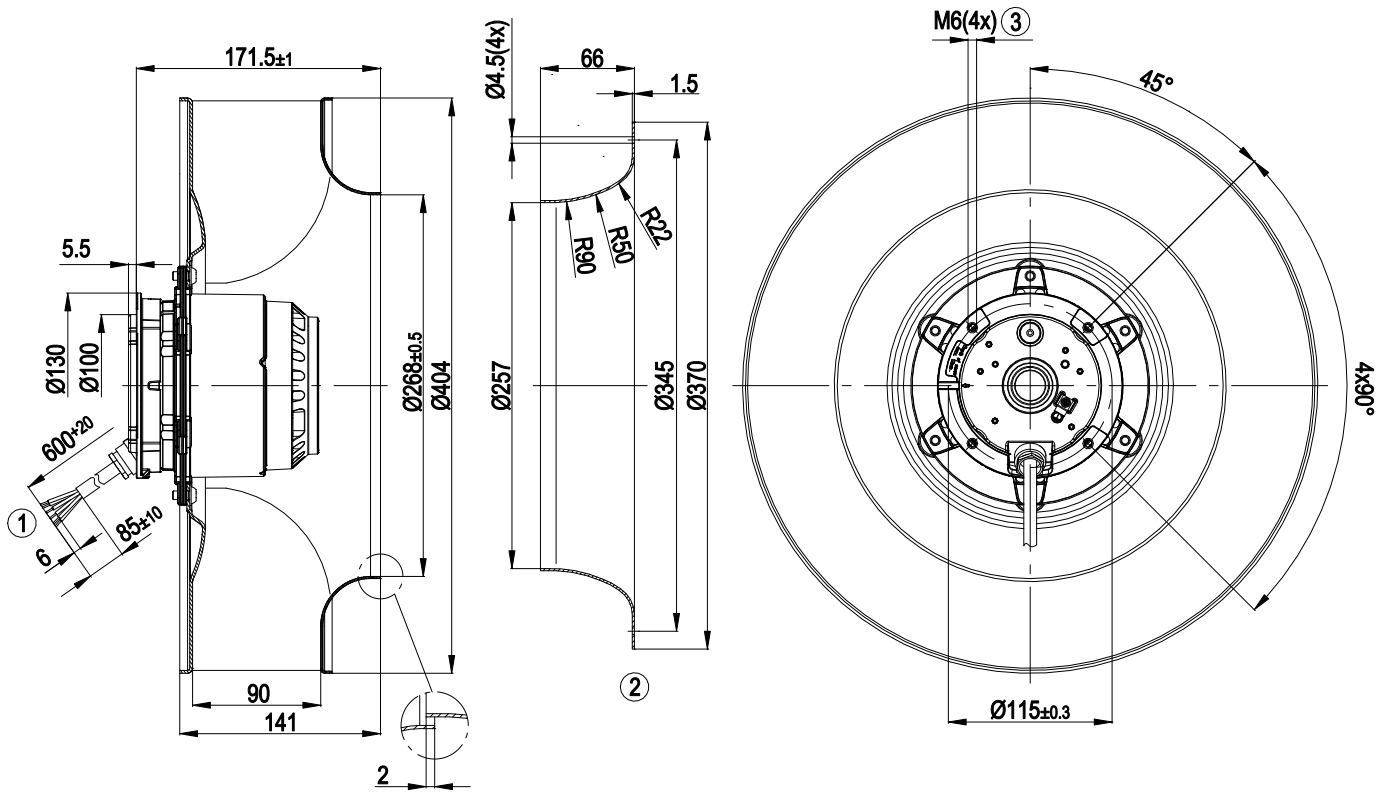
Technical description

Weight	7 kg
Fan size	400 mm
Rotor surface	Painted black
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F4-1
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)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60034-1 (2010)
Approval	EAC; CCC

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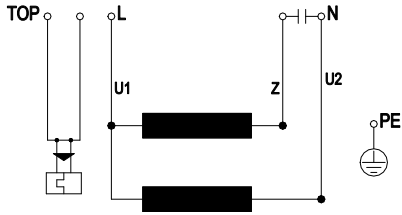
Product drawing



- | | |
|---|---|
| 1 | Cable silicone 6G 0.5 mm ² , 6x crimped splices |
| 2 | Accessory part: inlet ring 54476-2-4013 not included in scope of delivery |
| 3 | Max. clearance for screw 12 mm |



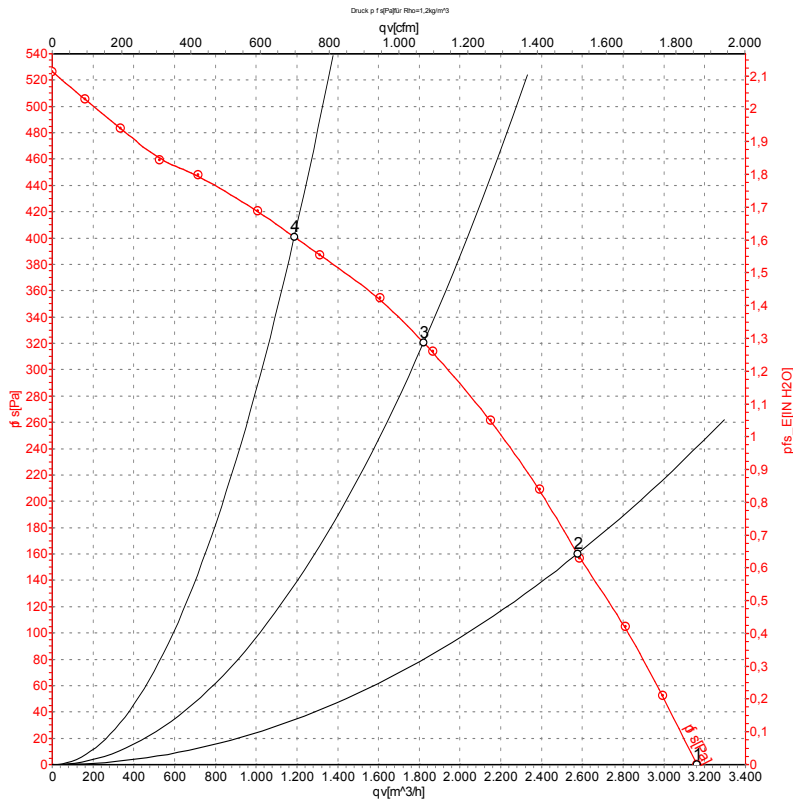
Connection diagram



TOP	2x gray	U1	blue	Z	brown
U2	black	PE	green/yellow		



Curves: Air performance 50 Hz



Measurement: LU-57482-1

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.

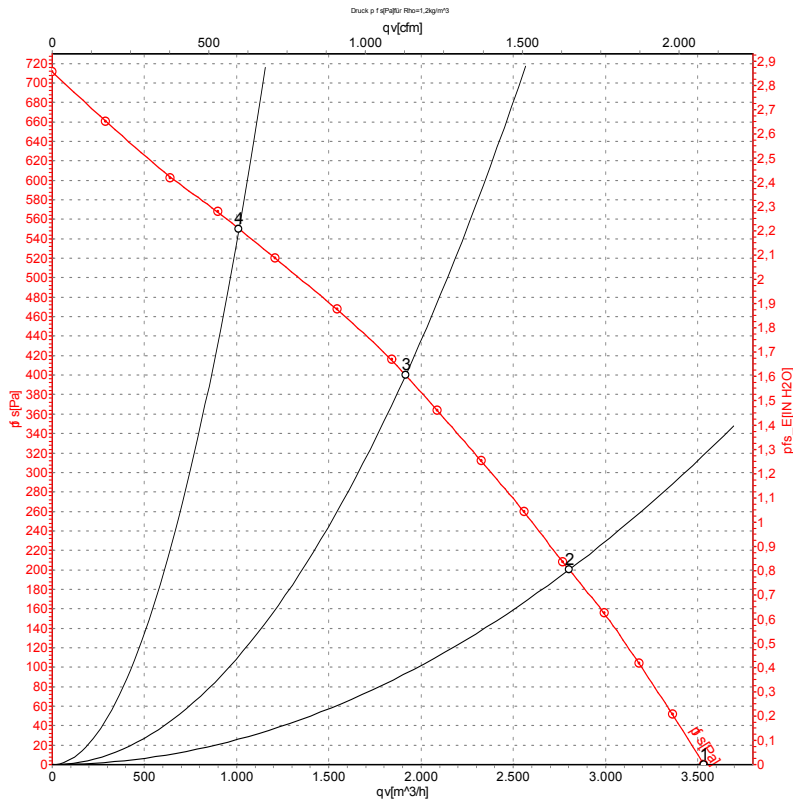
Measured values

	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	1380	326	1.58	3165	0	1860	0.00
2	230	50	1360	362	1.72	2575	160	1515	0.64
3	230	50	1355	375	1.75	1820	320	1070	1.28
4	230	50	1375	341	1.62	1185	400	700	1.61

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-57483-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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	1565	483	2.11	3535	0	2080	0.00
2	230	60	1480	540	2.40	2805	200	1650	0.80
3	230	60	1495	533	2.35	1915	400	1130	1.61
4	230	60	1575	471	2.05	1010	550	595	2.21

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

