R4E355-AN09-10

AC centrifugal fan

backward-curved

R4E355-AN09-10 ebmpapst Datasheet
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Nominal data

Type	**R4E355-AN09-10**	
Motor	**M4E094-FA**	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	60
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1620
Power consumption	W	460
Current draw	A	4.15
Capacitor	µF	30
Capacitor voltage	VDB	220
Capacitor standard		S2 (CE)
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Max. ambient temperature	°C	80

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	7 kg
Fan size	355 mm
Rotor surface	Painted black
Impeller material	Sheet aluminum
Number of blades	5
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) internally connected
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 (2004)
Approval	CSA C22.2 No. 100; UL 1004-1

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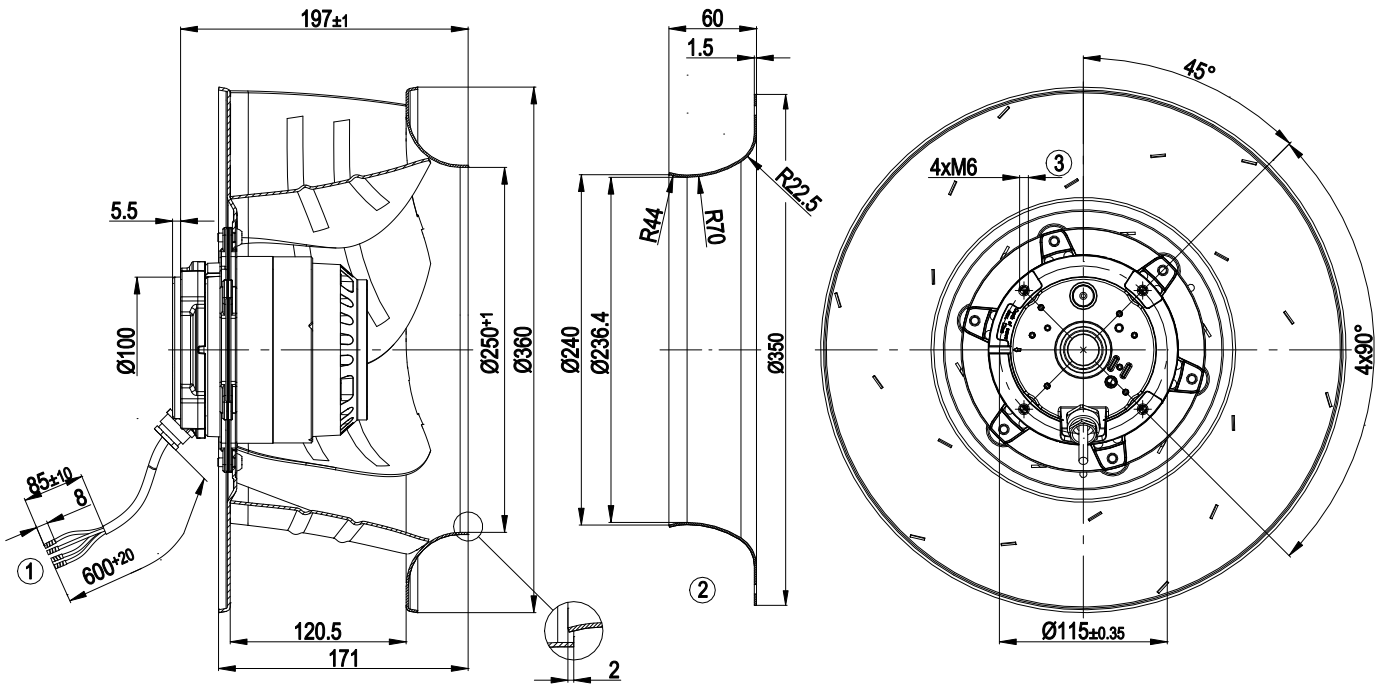
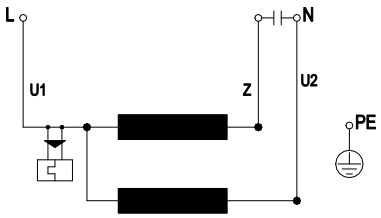
Product drawing



1	Cable PFA, 4x crimped splices
2	Accessory part: Inlet ring 35560-2-4013, not included in scope of delivery. Other inlet rings on request.
3	Max. clearance for screw 12 mm,

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

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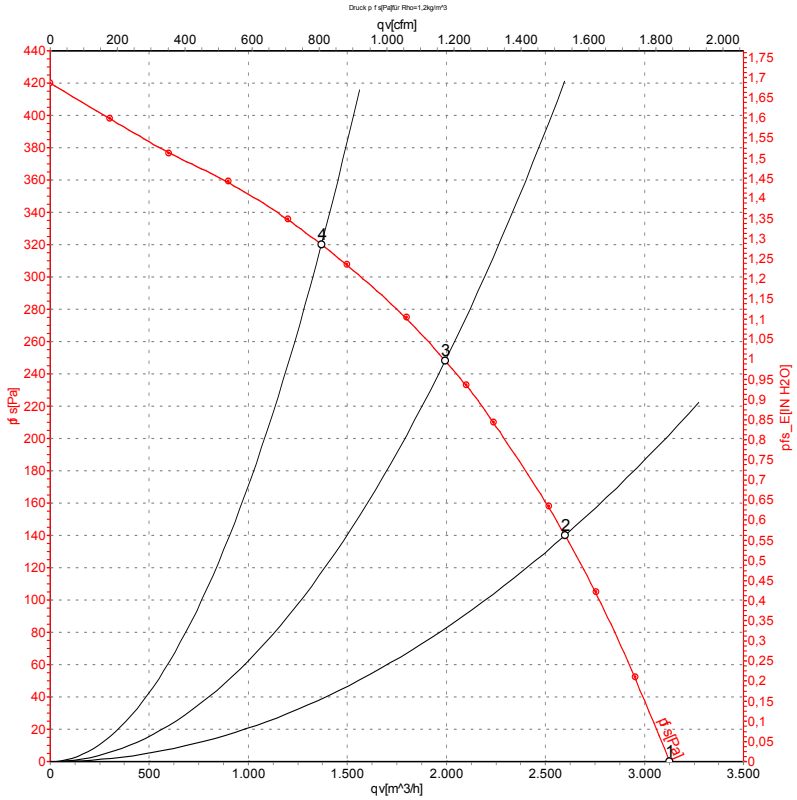
Curves: Air performance 50 Hz



Measurement: LU-66001-1

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	115	50	1435	312	4.08	3130	0	1840	0.00
2	115	50	1420	351	4.26	2600	140	1530	0.56
3	115	50	1410	370	4.30	1995	250	1175	1.00
4	115	50	1420	347	4.20	1370	320	805	1.28

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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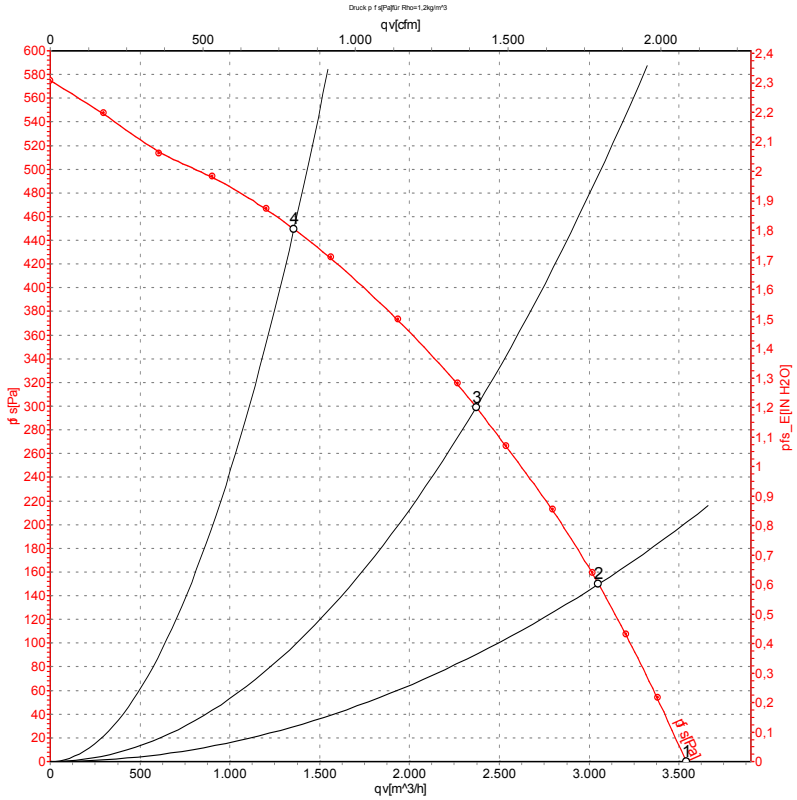
Curves: Air performance 60 Hz



Measurement: LU-58312-1

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	115	60	1670	378	3.44	3540	0	2085	0.00
2	115	60	1645	431	3.89	3050	150	1795	0.60
3	115	60	1620	460	4.15	2370	300	1395	1.20
4	115	60	1650	413	3.74	1355	450	800	1.81

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