

R2E120-AO16-09 ebmpapst Datasheet

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Nominal data

Type	R2E120-AO16-09		
Motor	M2E068-CF		
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	2300	2200
Power consumption	W	87	112
Current draw	A	0.39	0.5
Capacitor	μF	2	2
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	inH ₂ O	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	80	65
Starting current	A	0.6	0.59

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



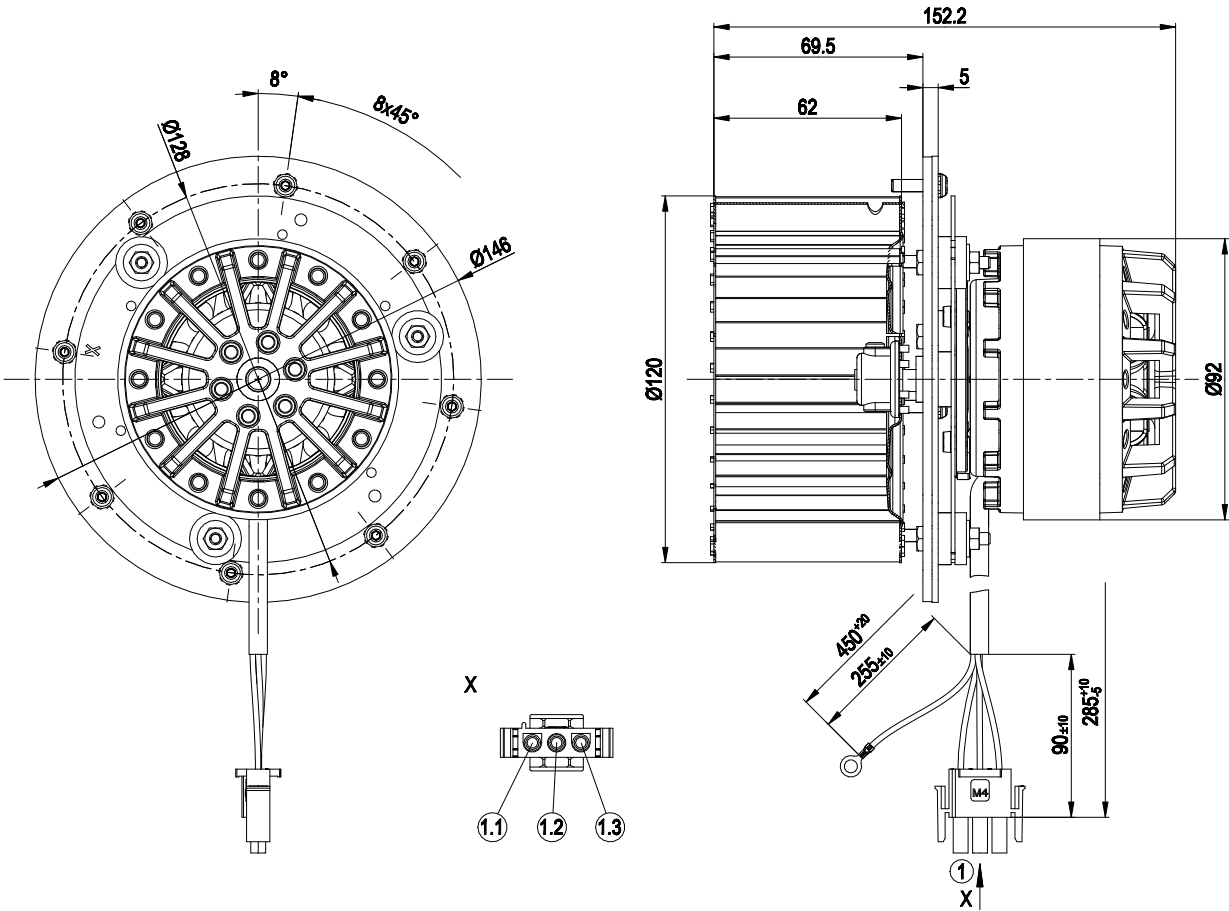
Technical description

Weight	1.8 kg
Fan size	120 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP00
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	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	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC

AC centrifugal fan

backward-curved

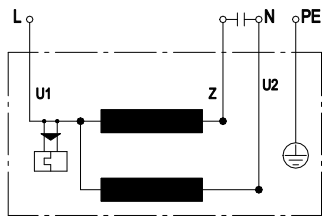
Product drawing



1	Cable silicone 4G0.5mm ² , 1x AMP ring terminal 320551-0 and 1x AMP connector housing 1-480700-0
1.1	L (blue)
1.2	N (black)
1.3	Z (brown)



Connection diagram



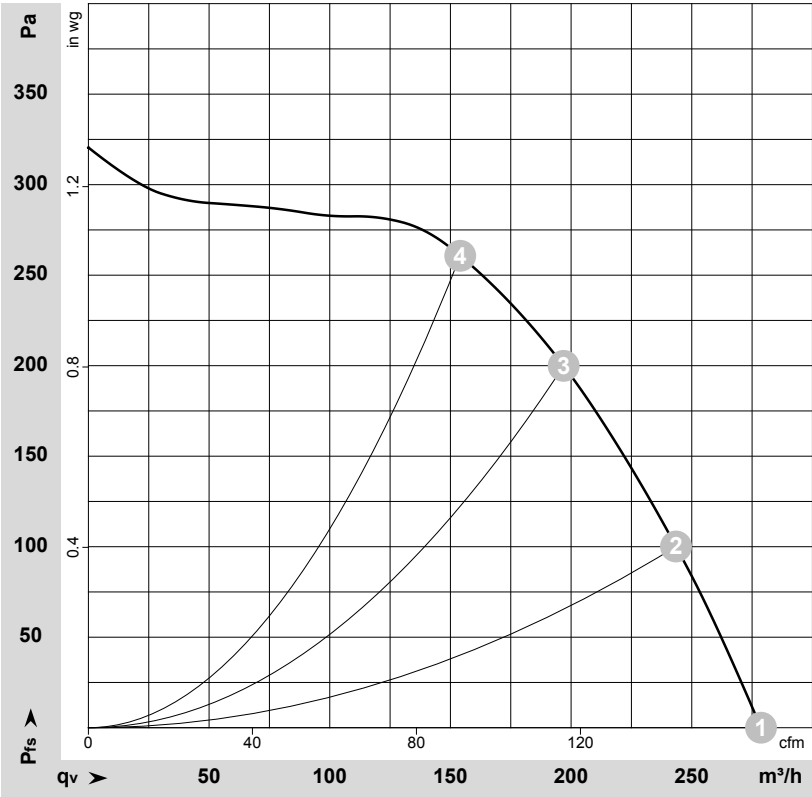
U1	blue	Z	brown	U2	black
PE	green/yellow				



AC centrifugal fan

backward-curved

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-151910-1

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	inH ₂ O
1	230	50	2300	87	0.39	280	0	165	0.00
2	230	50	2465	75	0.33	245	100	145	0.40
3	230	50	2595	64	0.28	195	200	115	0.80
4	230	50	2670	58	0.25	155	260	90	1.04

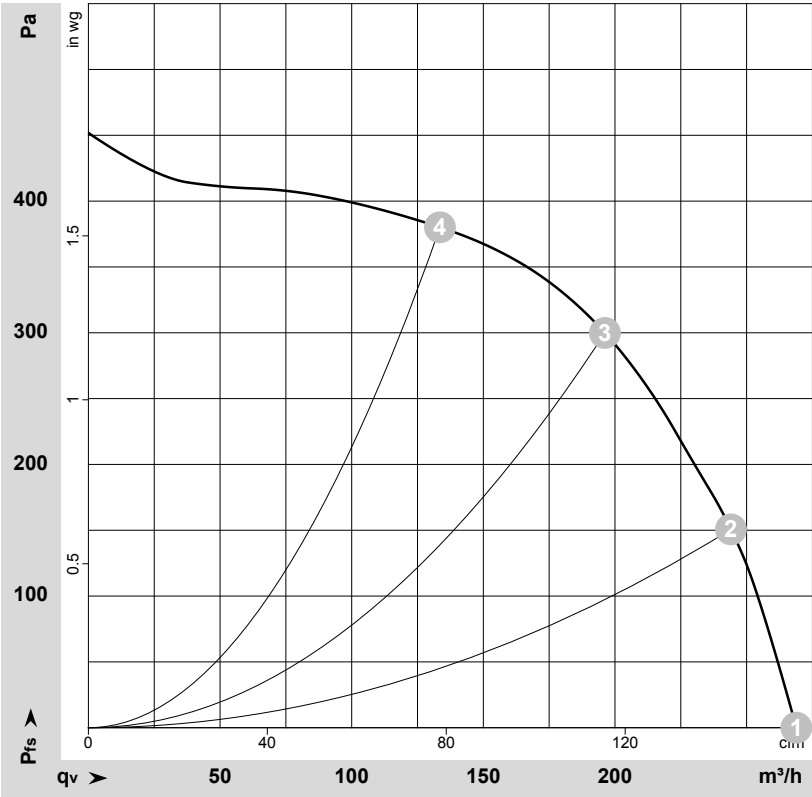
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



AC centrifugal fan

backward-curved

Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-151912-1

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	inH ₂ O
1	230	60	2200	112	0.50	270	0	160	0.00
2	230	60	2670	96	0.42	245	150	145	0.60
3	230	60	2940	81	0.36	195	300	115	1.20
4	230	60	3160	67	0.30	135	380	80	1.53

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

