

R2E097-AD01-05 ebmpapst Datasheet

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Nominal data

Type	R2E097-AD01-05		
Motor	M2E042-CA		
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	2050	2300
Power consumption	W	35	37
Current draw	A	0.16	0.17
Capacitor	μF	1.5	1.5
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	55

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



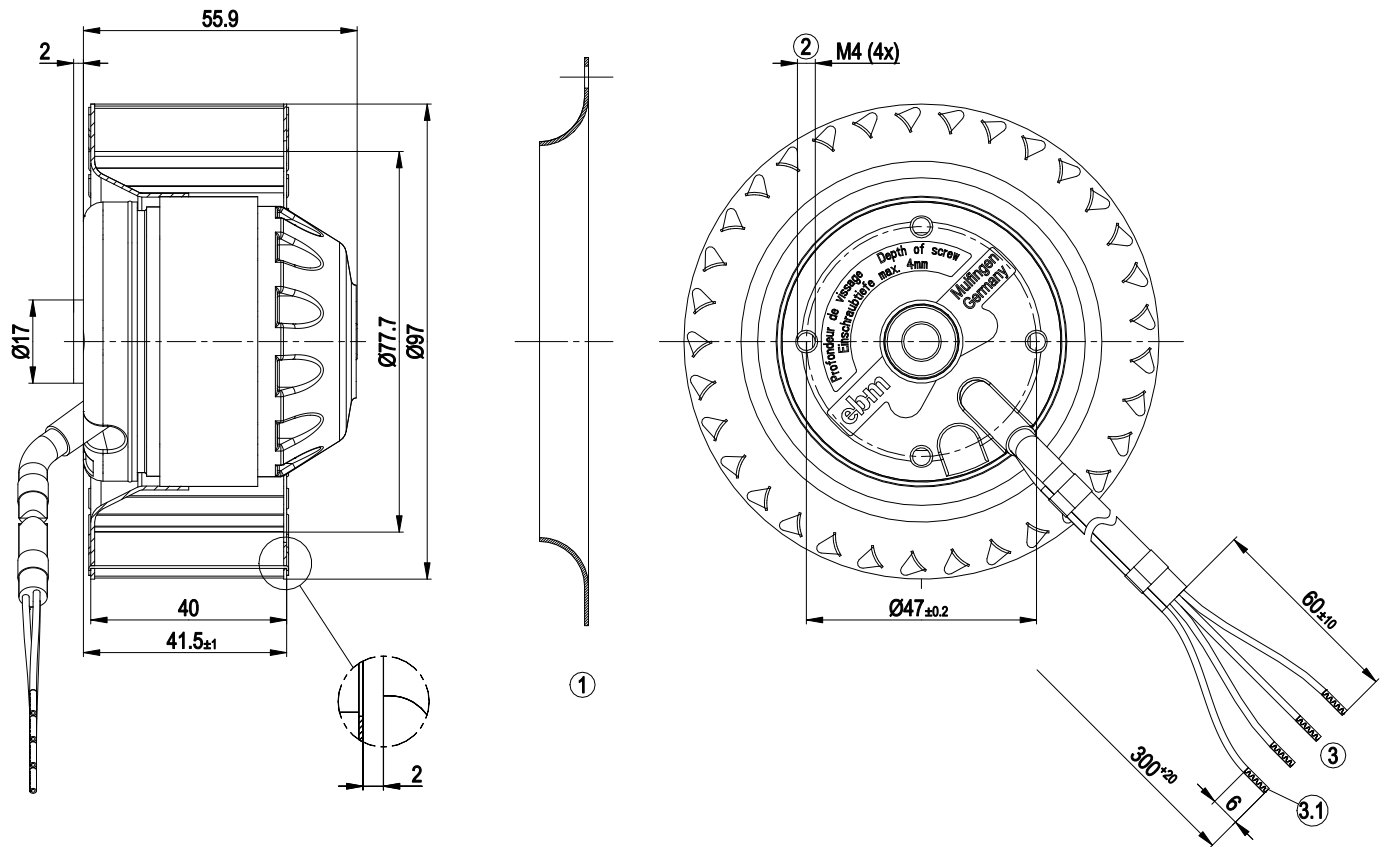
Technical description

Weight	0.58 kg
Size	97 mm
Motor size	42
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
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
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC; EAC

AC centrifugal fan

forward-curved, single-intake

Product drawing



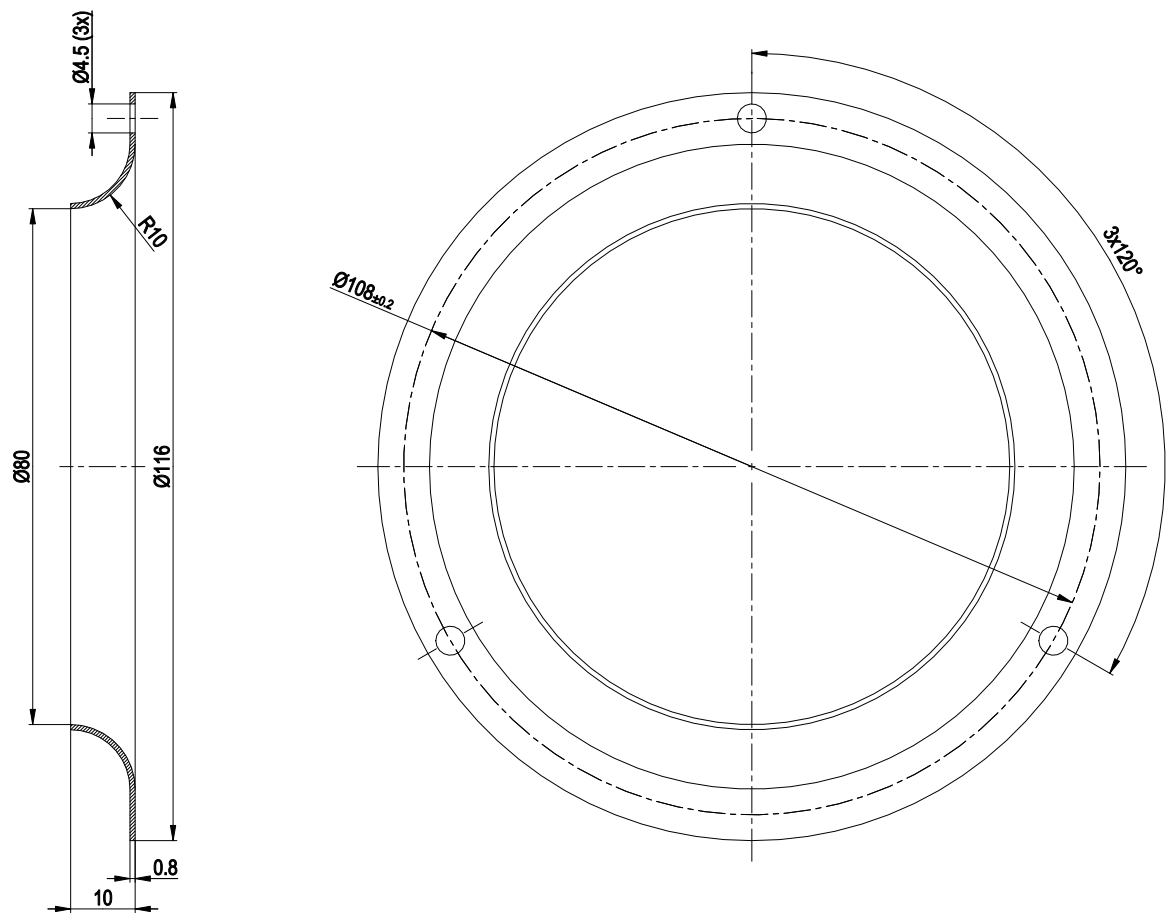
1	Accessory part: inlet ring 09563-2-4013, not included in scope of delivery
2	Max. clearance for screw 4 mm
3	Cable PVC 3x 0.25 mm², 3x crimped splices
3.1	Cable AWG20 (green/yellow), 1x crimped splice



AC centrifugal fan

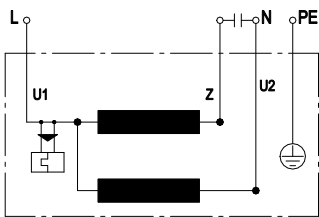
forward-curved, single-intake

Accessory part



1 Accessory part: Inlet ring 09563-2-4013 not included in scope of delivery

Connection diagram



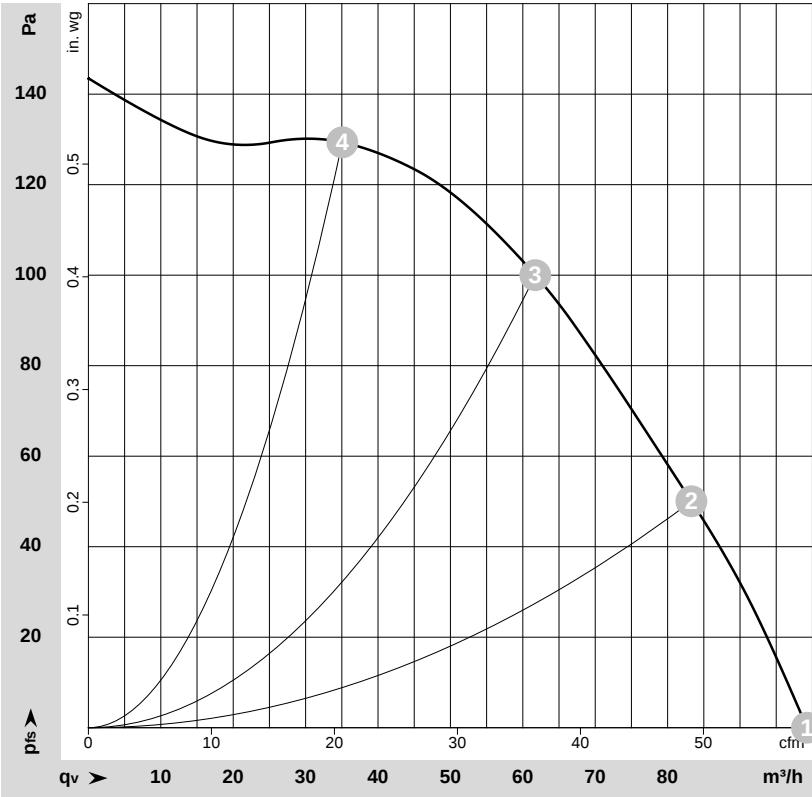
U1	blue	Z	brown	U2	black
PE	green/yellow				



AC centrifugal fan

forward-curved, single-intake

Curves: Air performance 50 Hz



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

Measurement: LU-104599-1

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

	Wired	U	f	n	P _e	I	q _v	p _{ts}	q _v	p _{ts}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	1~	230	50	2050	35	0.16	100	0	60	0.00
2	1~	230	50	2165	33	0.15	85	50	50	0.20
3	1~	230	50	2320	33	0.14	60	100	35	0.40
4	1~	230	50	2460	32	0.14	35	130	20	0.52

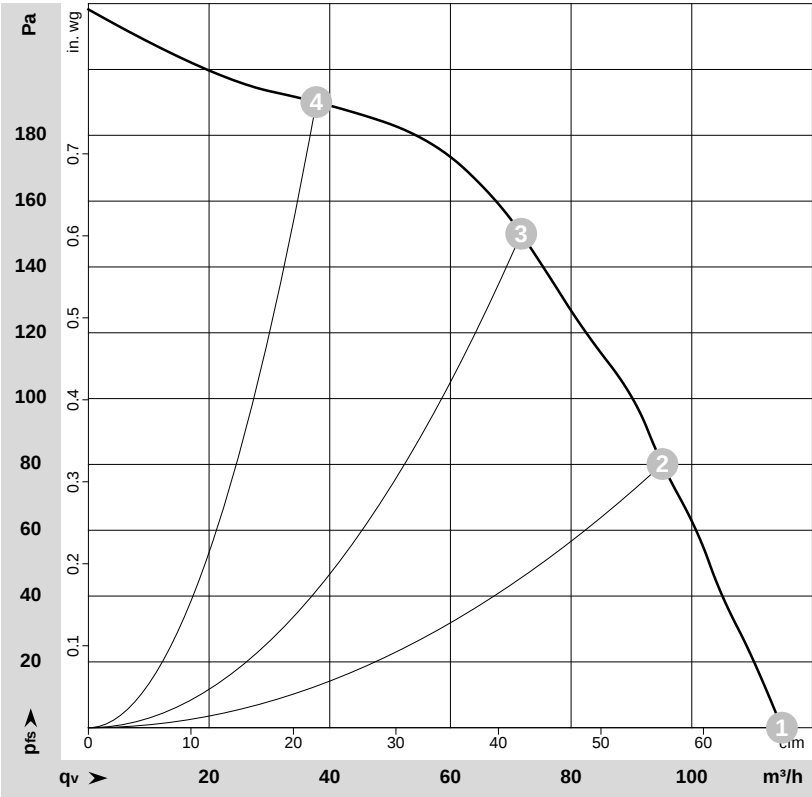
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{ts} = Pressure increase



AC centrifugal fan

forward-curved, single-intake

Curves: Air performance 60 Hz



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

Measurement: LU-104601-1

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

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	1~	230	60	2300	37	0.17	115	0	70	0.00
2	1~	230	60	2550	34	0.15	95	80	55	0.32
3	1~	230	60	2790	32	0.15	70	150	40	0.60
4	1~	230	60	3005	31	0.14	40	190	20	0.76

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

