R4E180-AE07-01

AC centrifugal fan

forward-curved, single-intake

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**R4E180-AE07-01**
Motor	**M4E068-EC**

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}	1050	1300
Power consumption	W	138	160
Current draw	A	0.61	0.71
Capacitor	µF	4	4
Capacitor voltage	VDB	450	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	130
Min. back pressure	inH2O	0	0.52
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	45	30
Starting current	A	0.73	0.71

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

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Technical description

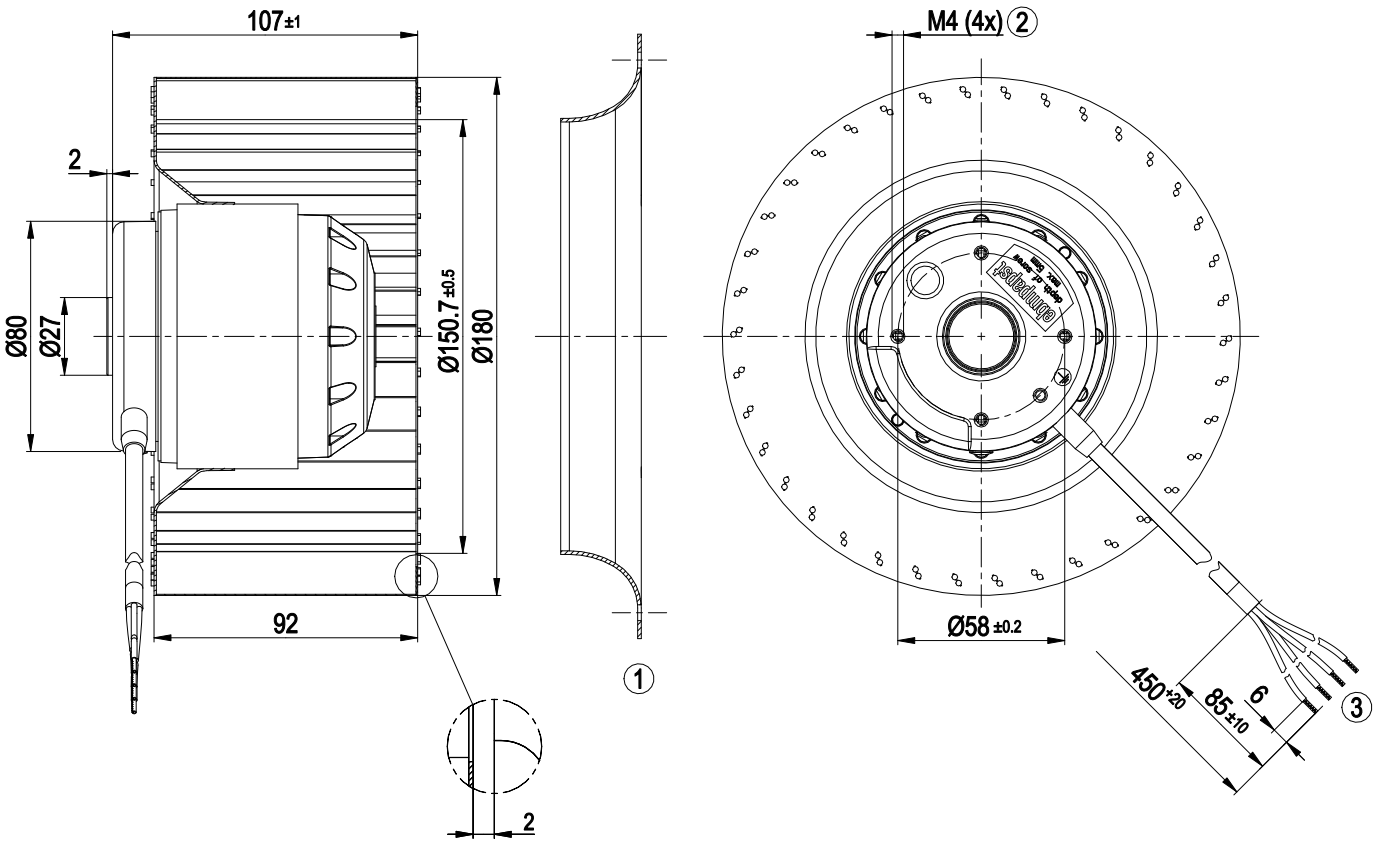
Weight	2.6 kg
Fan size	180 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

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Product drawing



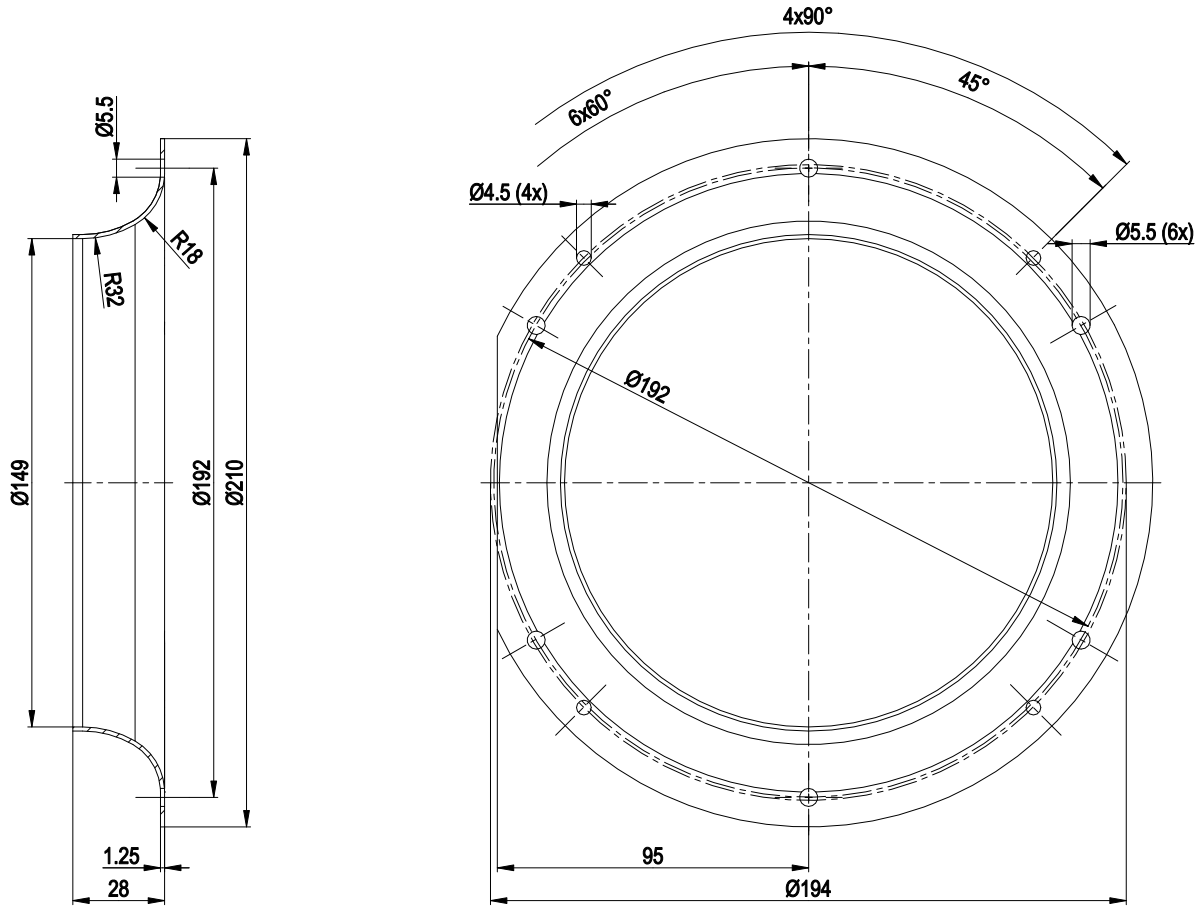
1	Accessory part: inlet ring 09597-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC 4G 0.5 mm², 4x crimped splices

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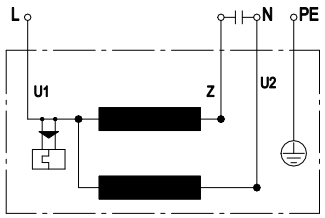
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Accessory part



	Accessory part: inlet ring 09597-2-4013 not included in scope of delivery

Connection diagram



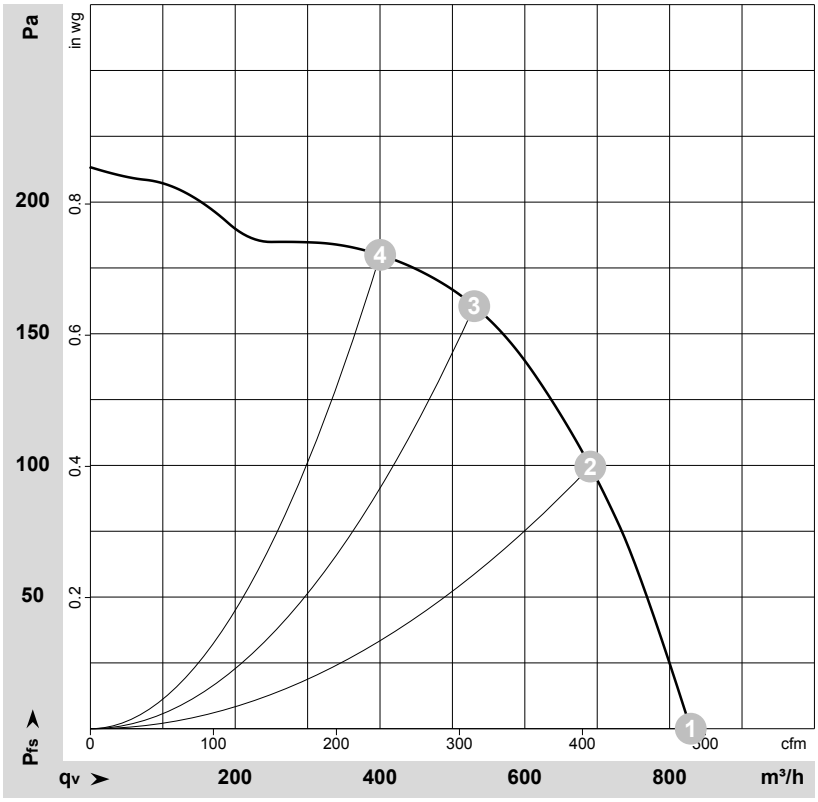
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-157486-1

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	1050	138	0.61	830	0	490	0.00
2	230	50	1230	120	0.52	690	100	405	0.40
3	230	50	1315	106	0.46	530	160	310	0.64
4	230	50	1360	98	0.43	400	180	235	0.72

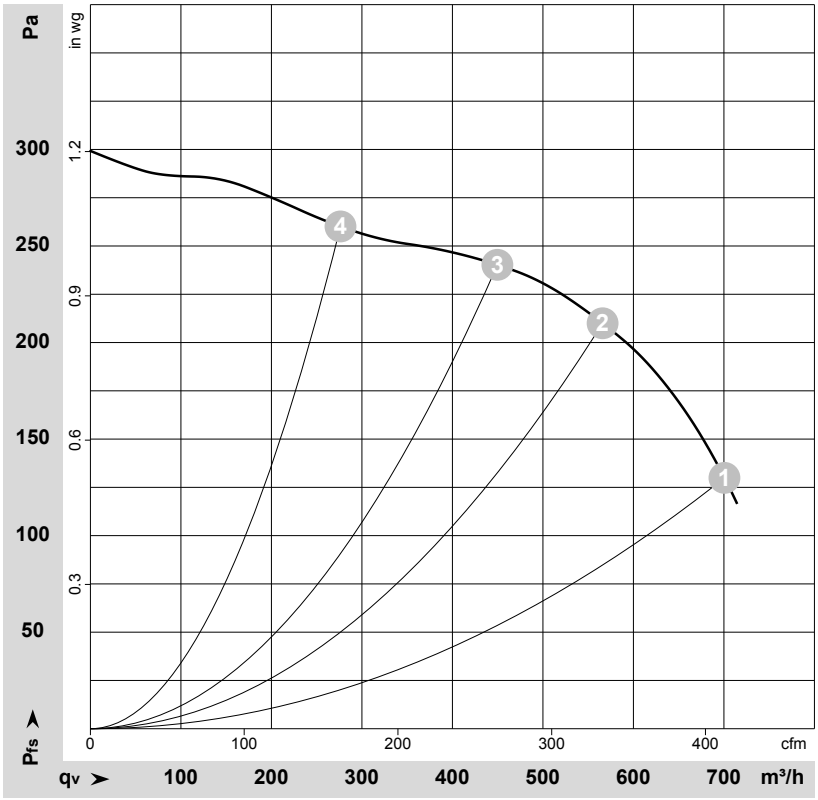
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-157490-1

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	60	1300	160	0.71	700	130	415	0.52
2	230	60	1485	152	0.68	565	210	335	0.84
3	230	60	1560	147	0.66	450	240	265	0.96
4	230	60	1640	134	0.62	275	260	160	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

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