R4E180-AB01-35

AC centrifugal fan

forward-curved, single-intake

R4E180-AB01-35 ebmpapst Datasheet
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Nominal data

Type	**R4E180-AB01-35**		
Motor	**M4E068-DF**		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ce	ce
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1230	1270
Power consumption	W	110	140
Current draw	A	0.48	0.61
Capacitor	µF	3	3
Capacitor voltage	VDB	450	500
Min. back pressure	Pa		0
Min. back pressure	inH2O		0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	40
Starting current	A	0.72	0.7

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

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Technical description

Fan size	180 mm
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	Temperature limiter manual reset
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

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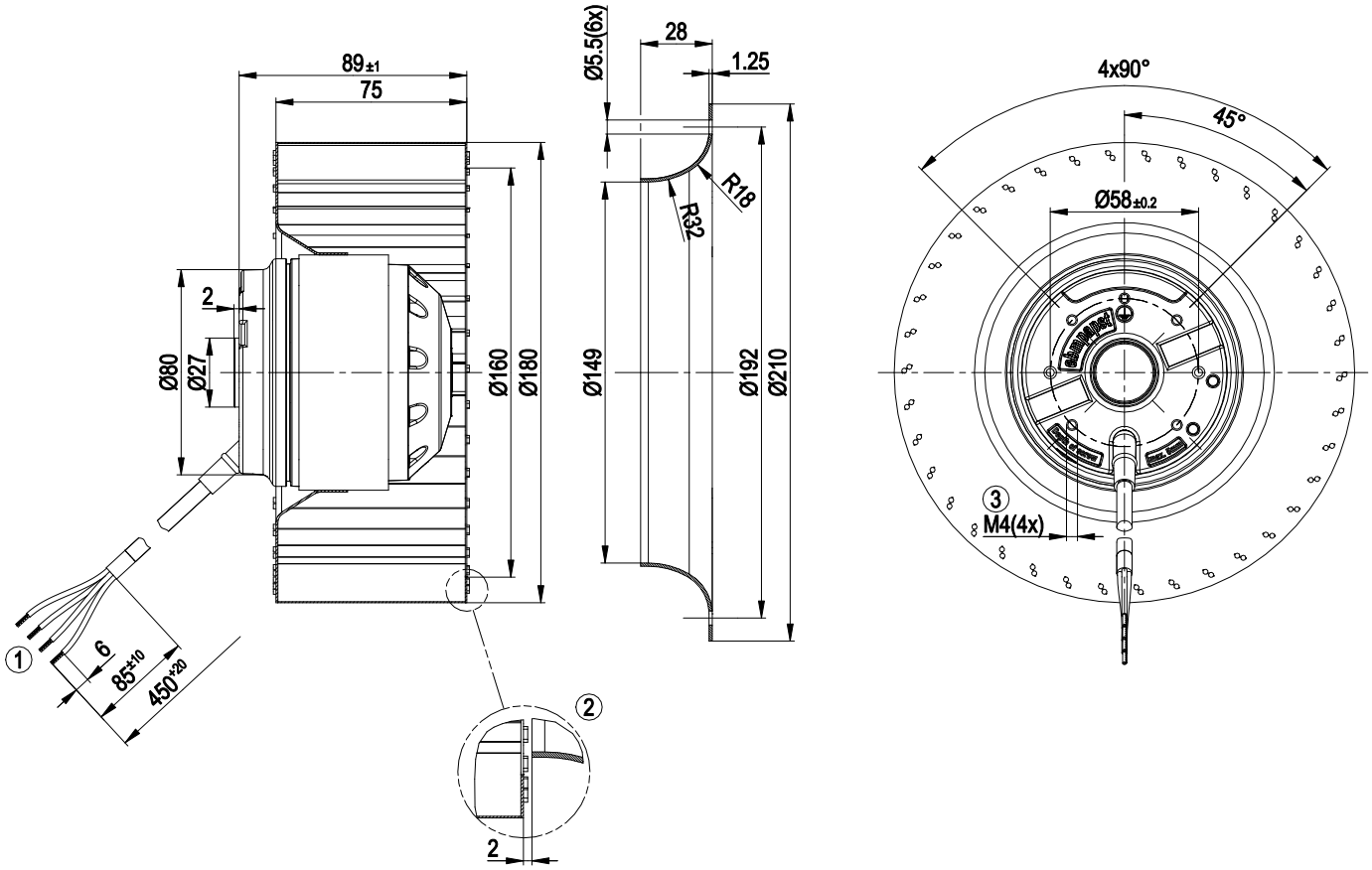
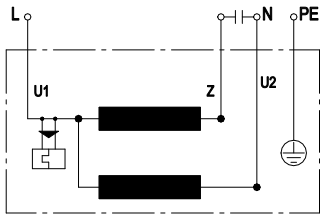
Product drawing



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

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

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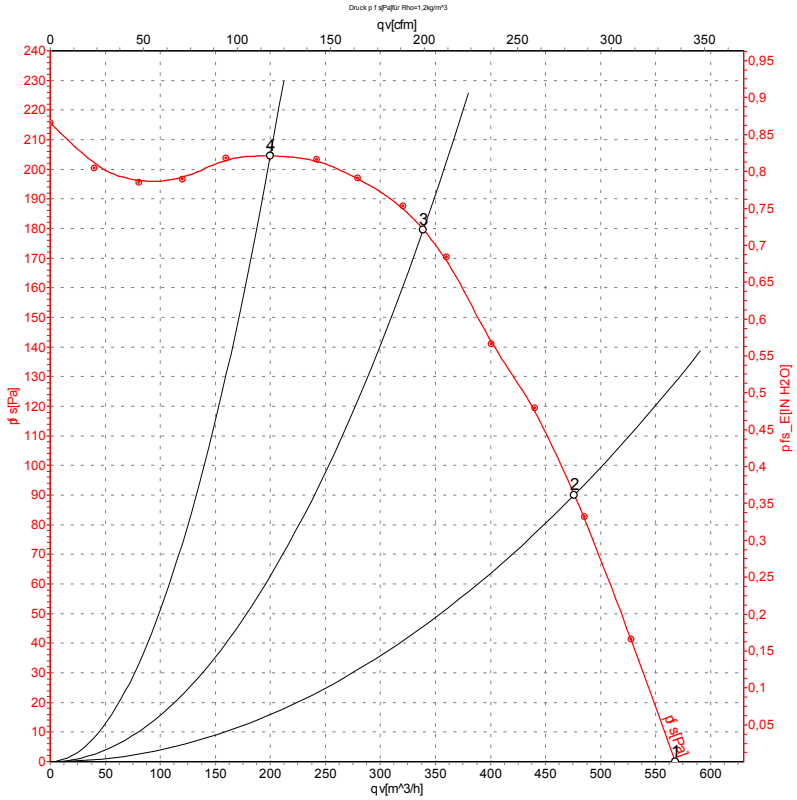
Curves: Air performance 50 Hz



Measurement: LU-105029-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1250	110	0.49	570	0	335	0.00
2	230	50	1310	96	0.42	475	90	280	0.36
3	230	50	1380	83	0.37	340	180	200	0.72
4	230	50	1425	74	0.34	200	205	120	0.82

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

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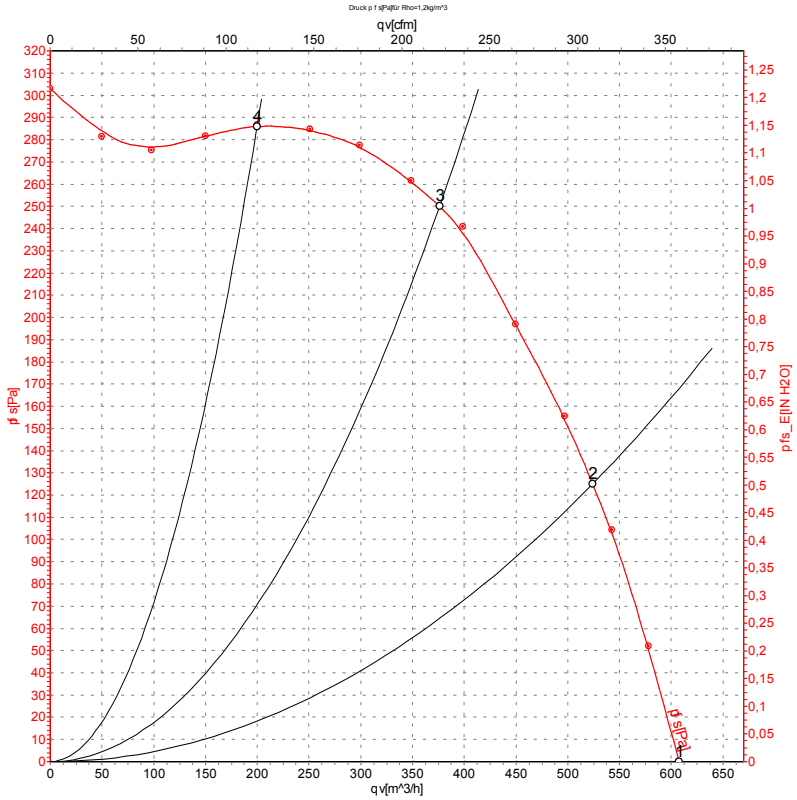
Curves: Air performance 60 Hz



Measurement: LU-105031-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	60	1300	145	0.64	610	0	360	0.00
2	230	60	1460	127	0.55	525	125	310	0.50
3	230	60	1595	110	0.49	375	250	220	1.00
4	230	60	1690	95	0.42	200	287	120	1.15

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