

R4E180-AB01-05

AC centrifugal fan

forward curved, single inlet



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Nominal data

Type	R4E180-AB01-05		
Motor	M4E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min ⁻¹	1250	1300
Power input	W	110	145
Current draw	A	0.49	0.64
Motor capacitor	µF	3	3
Capacitor voltage	VDB	450	450
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	40

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

R4E180-AB01-05

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Technical features

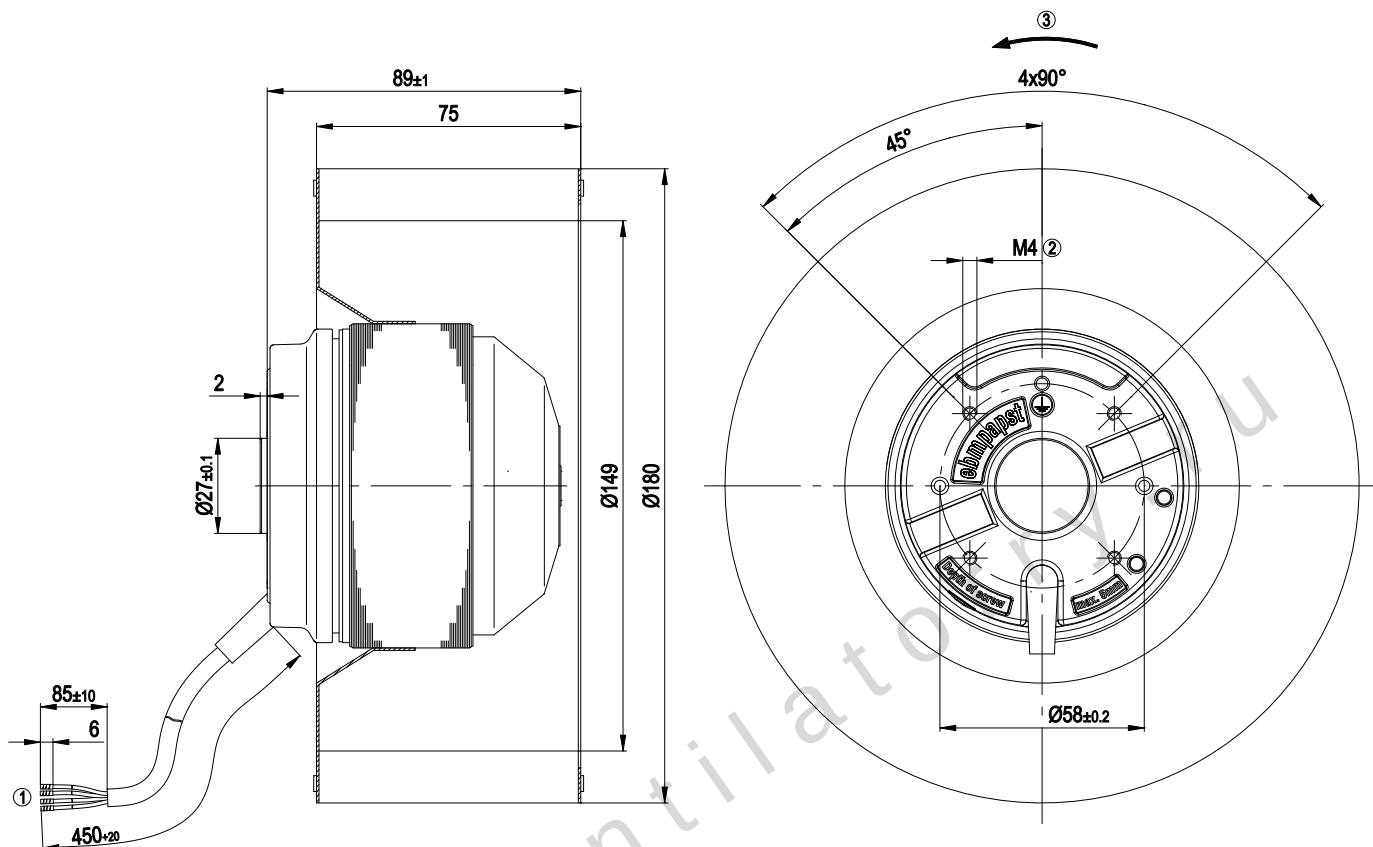
Mass	2.1 kg
Size	180 mm
Material of impeller	Sheet steel, galvanized
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC

R4E180-AB01-05

AC centrifugal fan

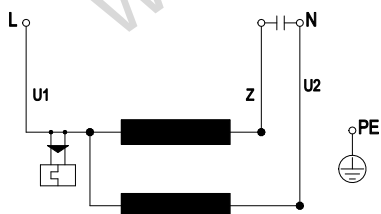
forward curved, single inlet

Product drawing



- | | |
|---|---|
| 1 | Connection line PVC, 4x brass lead tips crimped |
| 2 | Screw depth max. 5 mm |
| 3 | Direction of rotation clockwise, seen on rotor |

Connection screen



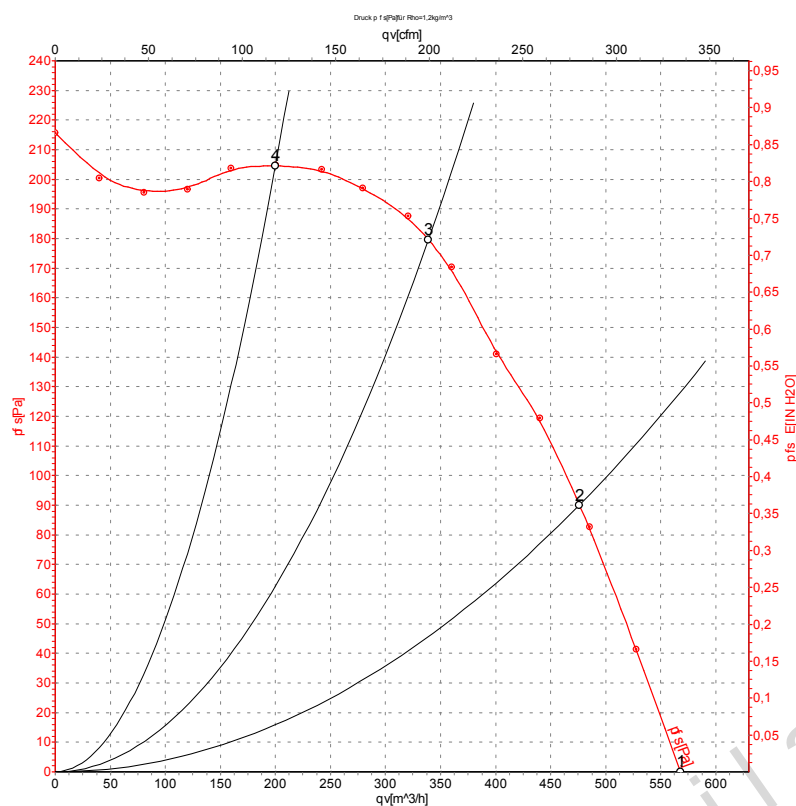
U1	blue	Z	brown	U2	black
PE	green/yellow				

R4E180-AB01-05

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Charts: Air flow 50 Hz



Measurement: LU-105029

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: L_{WA} measured as per ISO 13347 /
L_{pA} measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	50	1250	110	0.49	570	0
2	230	50	1310	96	0.42	475	90
3	230	50	1380	83	0.37	340	180
4	230	50	1425	74	0.34	200	205

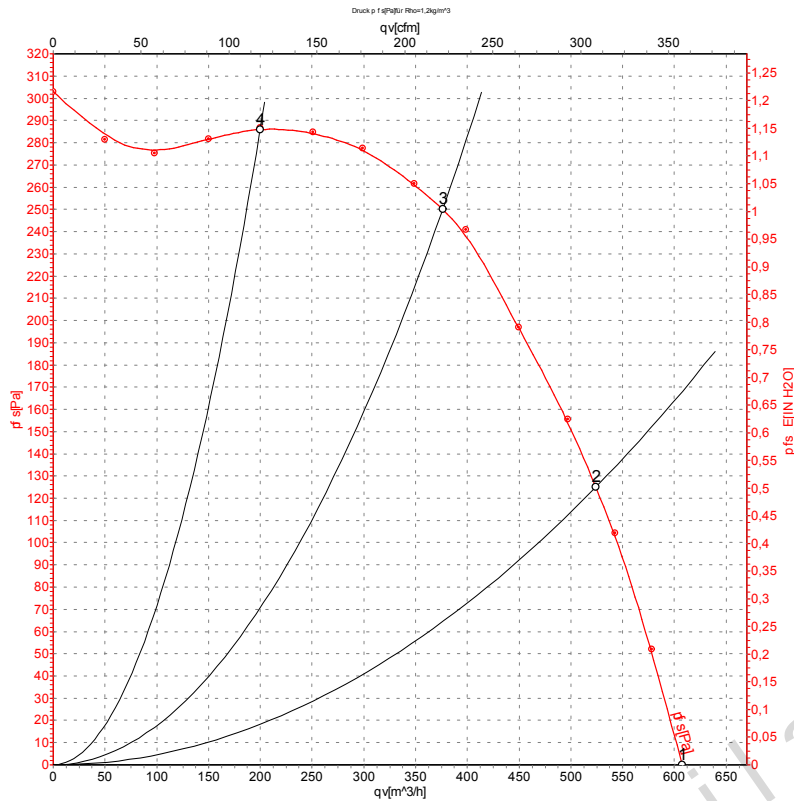
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

R4E180-AB01-05

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Charts: Air flow 60 Hz



Measurement: LU-105031

Air performance measured as per ISO 5801
Installation category A. For detailed
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contact ebm-papst. Suction-side noise
levels: L_{WA} measured as per ISO 13347 /
L_{pA} measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	60	1300	145	0.64	610	0
2	230	60	1460	127	0.55	525	125
3	230	60	1595	110	0.49	375	250
4	230	60	1690	95	0.42	200	287

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase