

AC centrifugal fan

backward curved, single inlet

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Nominal data

Type	R2E180-AS77-05		
Motor	M2E068-BF		
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 (rpm)	min ⁻¹	2300	2300
Power input	W	82	100
Current draw	A	0.36	0.45
Motor capacitor	µF	2	2
Capacitor voltage	VDB	450	450
Min. back pressure	Pa	5	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	35

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



Technical features

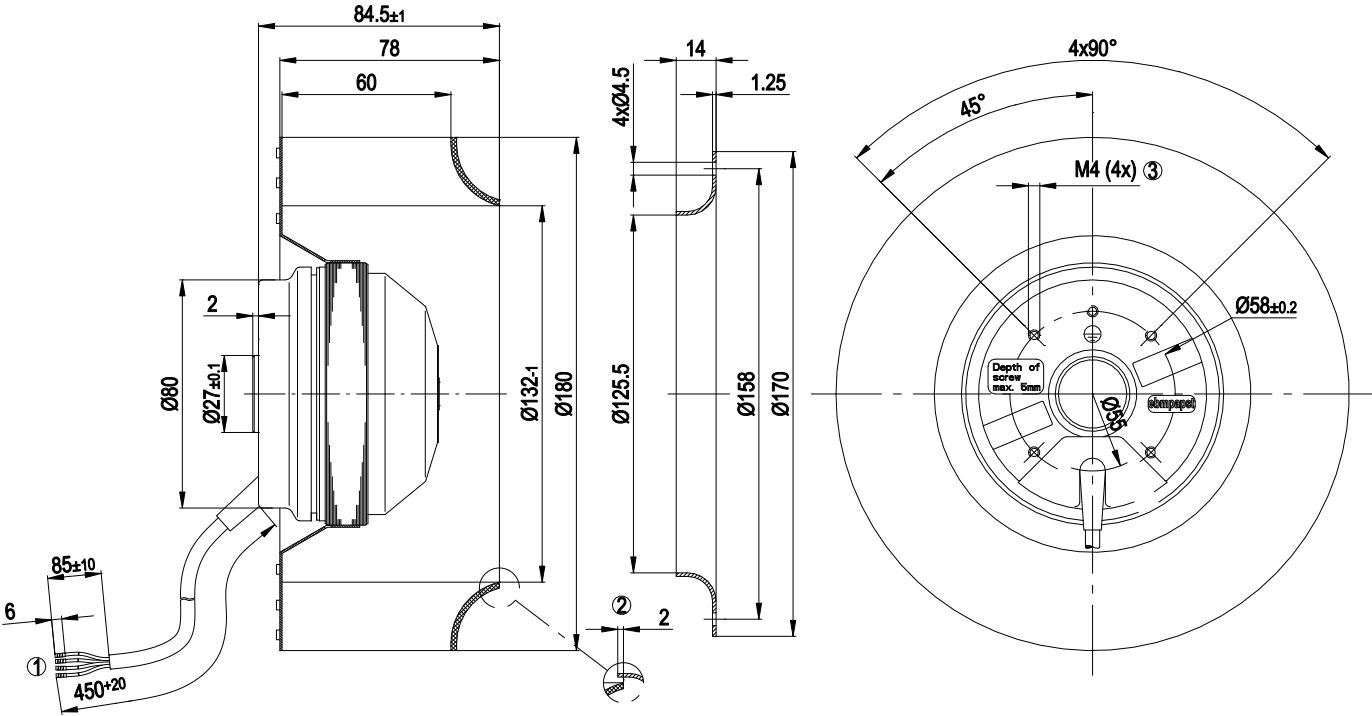
Mass	1.37 kg
Size	180 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic, black
Number of blades	16
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
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; EAC



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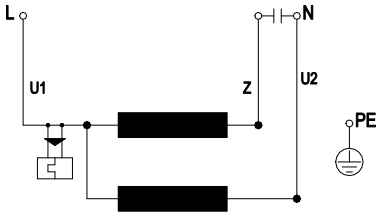
backward curved, single inlet

Product drawing



- | | |
|---|---|
| 1 | Connection line PVC 4 x 0.5 mm ² ; 4 x brass lead tips crimped |
| 2 | Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery |
| 3 | Depth of screw max. 5 mm |

Connection screen



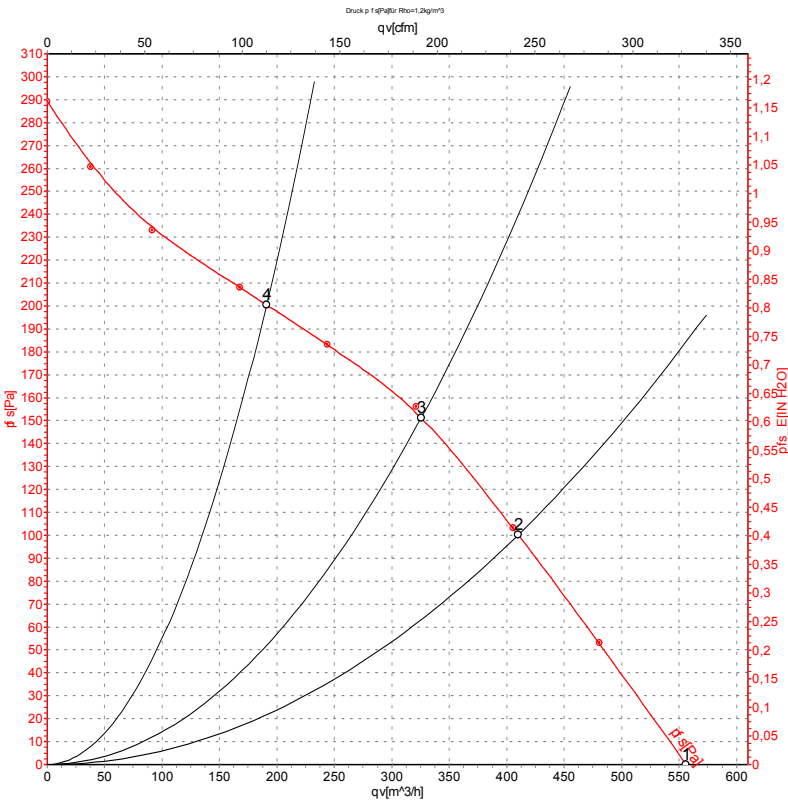
U1	blue	Z	brown	U2	black
PE	green/yellow				



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Charts: Air flow 50 Hz



Measurement: LU-20835-1

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: LwA measured as per ISO 13347 /
LpA 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	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	82	0.36	555	0	325	0.00
2	230	50	2265	84	0.37	410	100	240	0.40
3	230	50	2315	82	0.36	325	150	190	0.60
4	230	50	2470	76	0.33	190	200	110	0.80

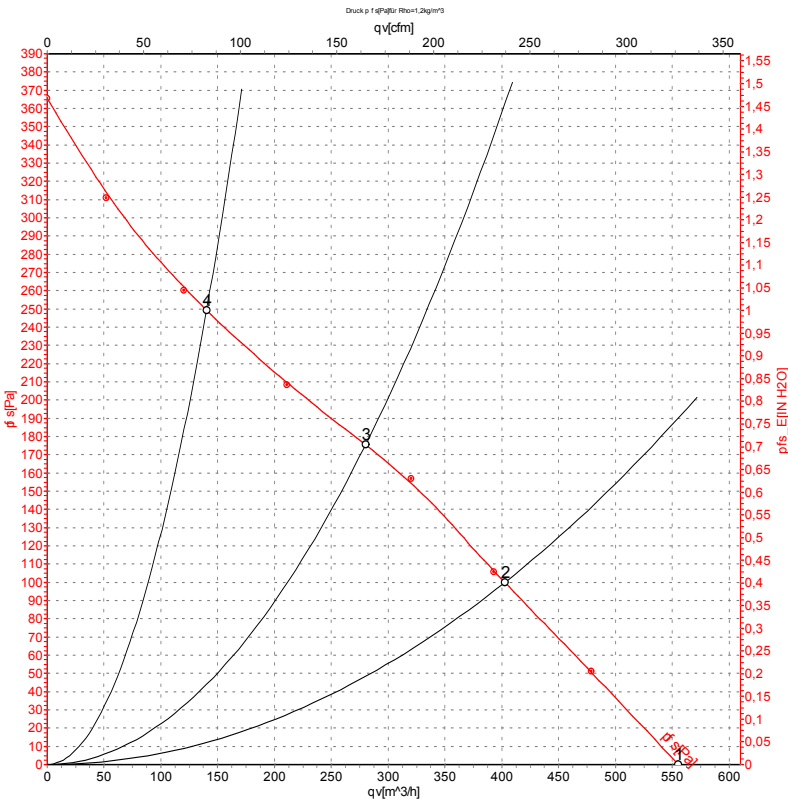
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Charts: Air flow 60 Hz



Measurement: LU-20836-1

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	q _v	p _{1s}	q _v	p _{1s}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	CFM	inH ₂ O
1	230	60	2300	100	0.45	555	0	325	0.00
2	230	60	2240	104	0.45	405	100	235	0.40
3	230	60	2400	101	0.44	280	175	165	0.70
4	230	60	2715	95	0.41	140	250	80	1.00

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · p_{1s} = Pressure increase



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