R2E180-AS77-05

AC centrifugal fan

backward-curved, single-intake

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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
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed	min^{-1}	2300	2300
Power consumption	W	82	100
Current draw	A	0.36	0.45
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 = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Weight	1.37 kg
Fan size	180 mm
Rotor surface	Painted black
Impeller material	PA plastic, black
Number of blades	16
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F1-2
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor storage	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	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC; EAC

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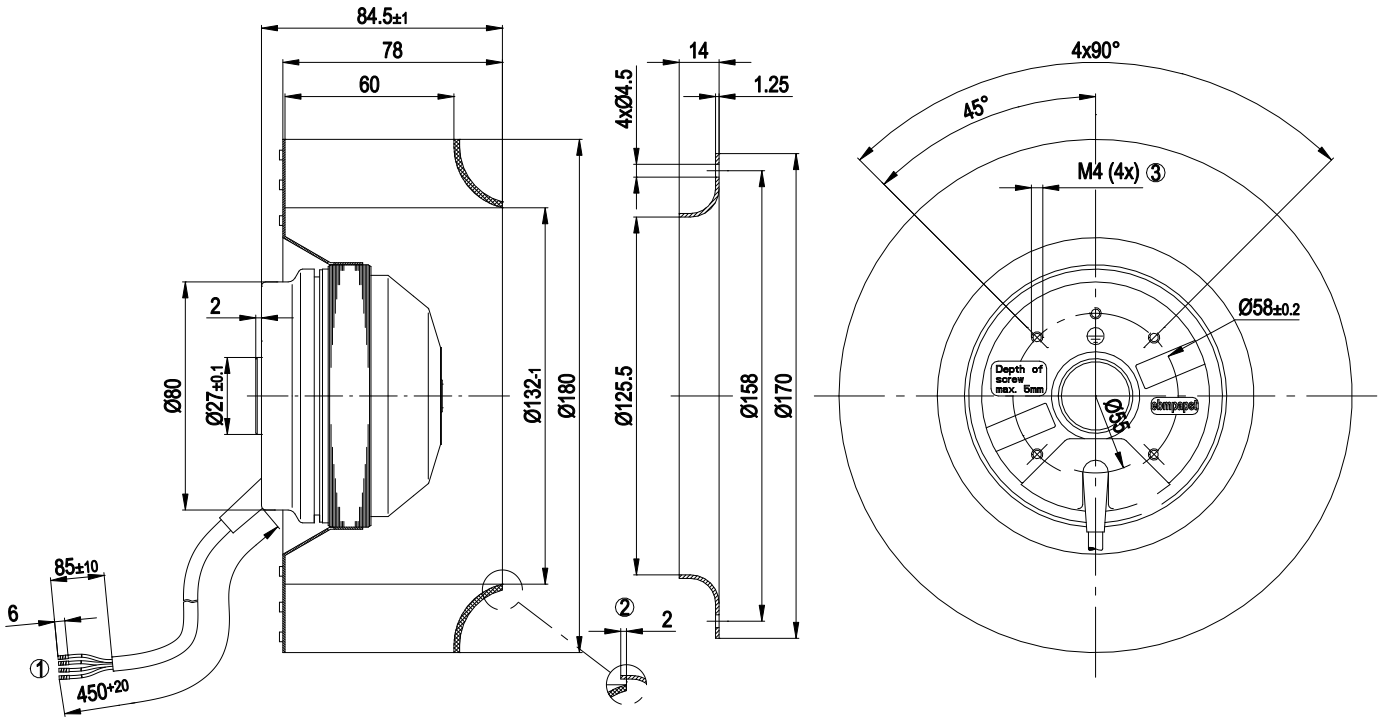
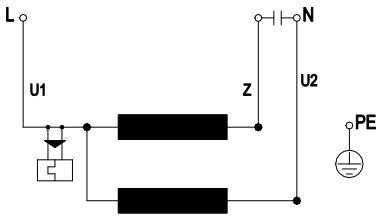
Product drawing



1	Cable PVC 4x 0.5 mm², 4x crimped splices
2	Accessory part: inlet ring 09576-2-4013, 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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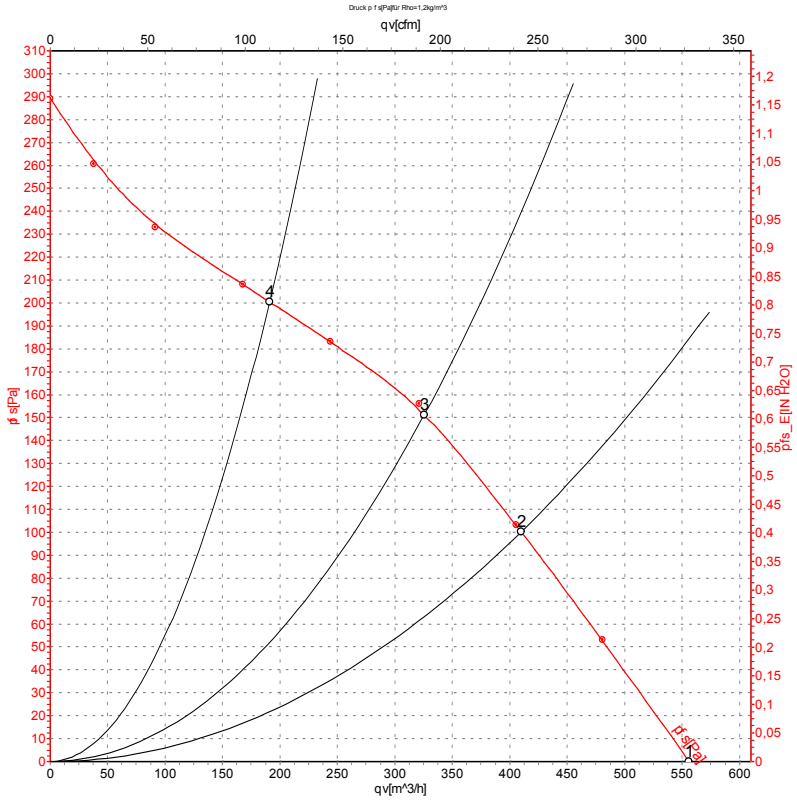
Curves: Air performance 50 Hz



Measurement: LU-20835

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}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	2300	82	0.36	555	0
2	230	50	2265	84	0.37	410	100
3	230	50	2315	82	0.36	325	150
4	230	50	2470	76	0.33	190	200

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

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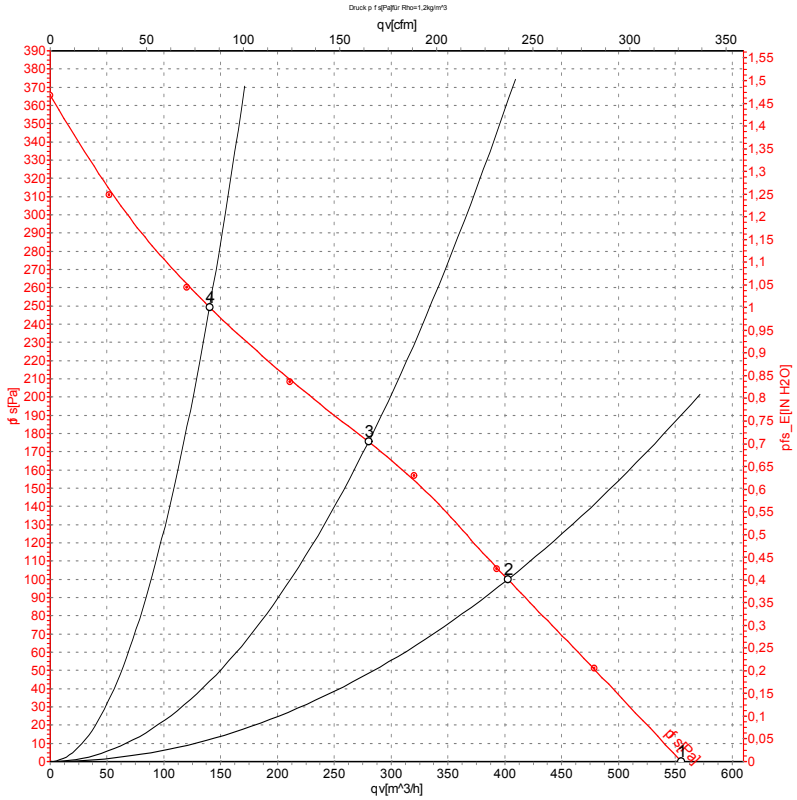
Curves: Air performance 60 Hz



Measurement: LU-20836

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}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	60	2300	100	0.45	555	0
2	230	60	2240	104	0.45	405	100
3	230	60	2400	101	0.44	280	175
4	230	60	2715	95	0.41	140	250

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

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