R2E175-AC77-20

AC centrifugal fan

backward curved

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Nominal data

Type	**R2E175-AC77-20**
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}	2600	2900
Power input	W	55	65
Current draw	A	0.25	0.29
Motor capacitor	µF	1.5	1.5
Capacitor voltage	VDB	450	450
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	65
Starting current	A	0.45	0.46

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

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Technical features

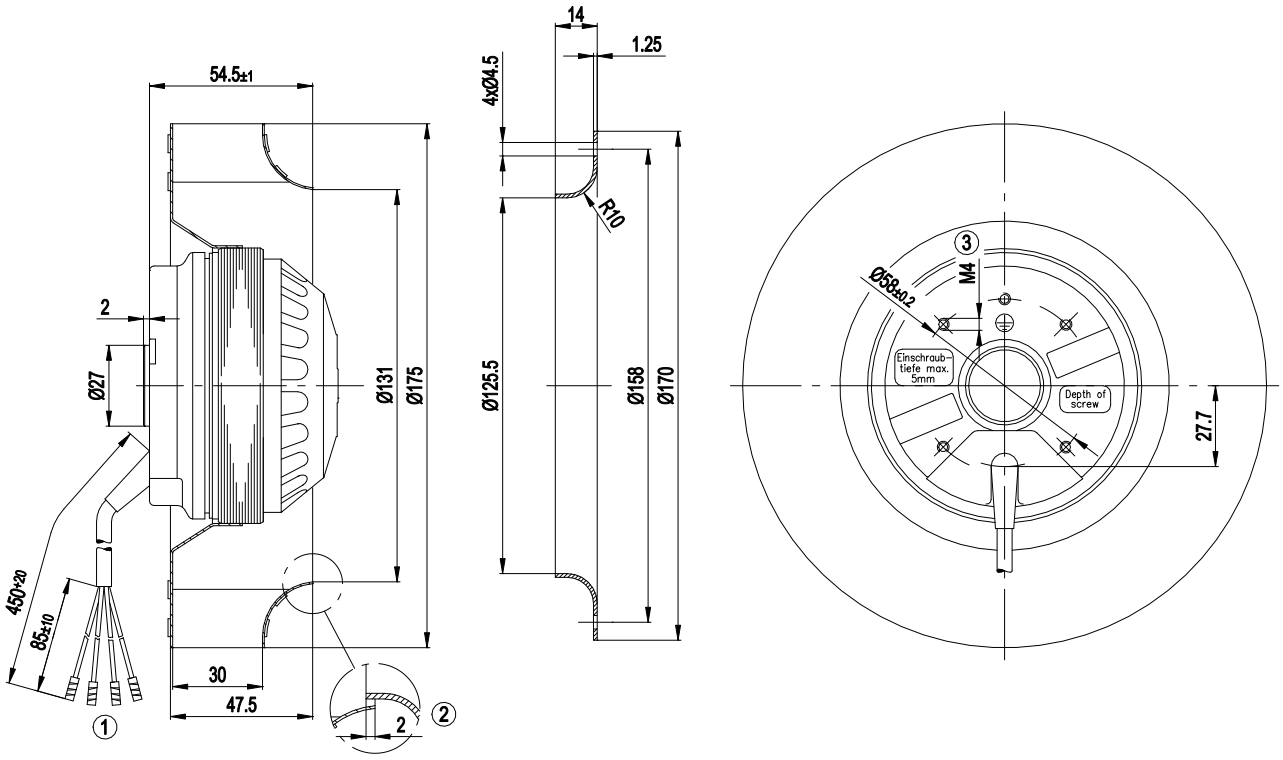
Mass	1.3 kg
Size	175 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-dip galvanised
Number of blades	16
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F2-2
Max. permissible ambient 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	EAC

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Product drawing



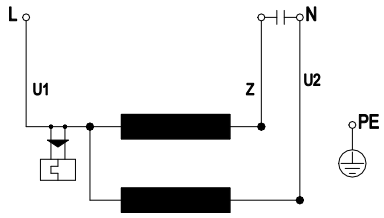
1	Connection line silicone, 4x brass lead tips crimped
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 5 mm

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Connection screen



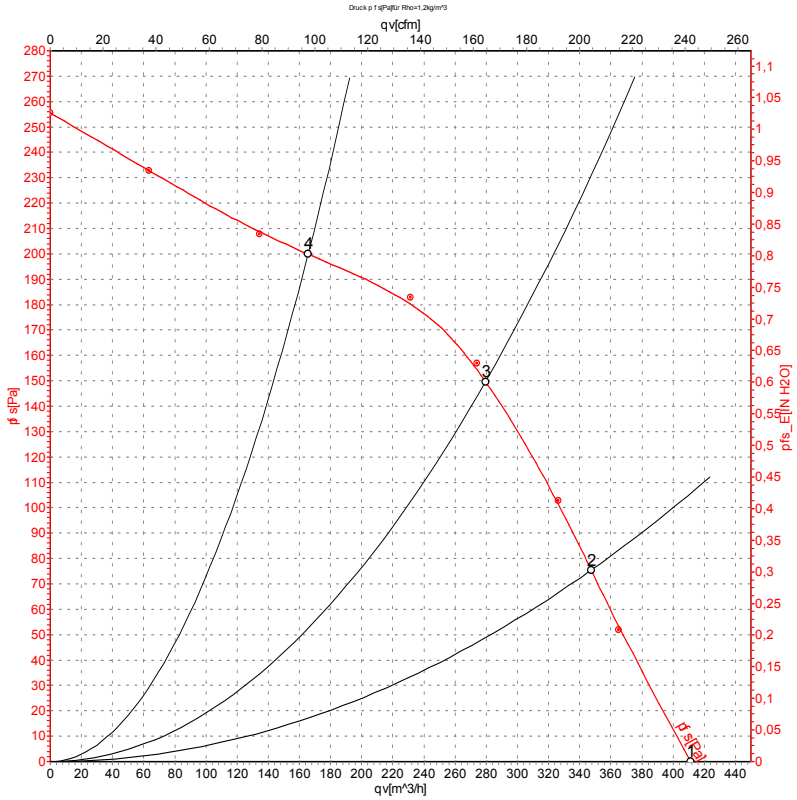
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-4742-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	2600	55	0.25	410	0	240	0.00
2	230	50	2580	57	0.27	345	75	205	0.30
3	230	50	2570	58	0.27	280	150	165	0.60
4	230	50	2625	56	0.27	165	200	100	0.80

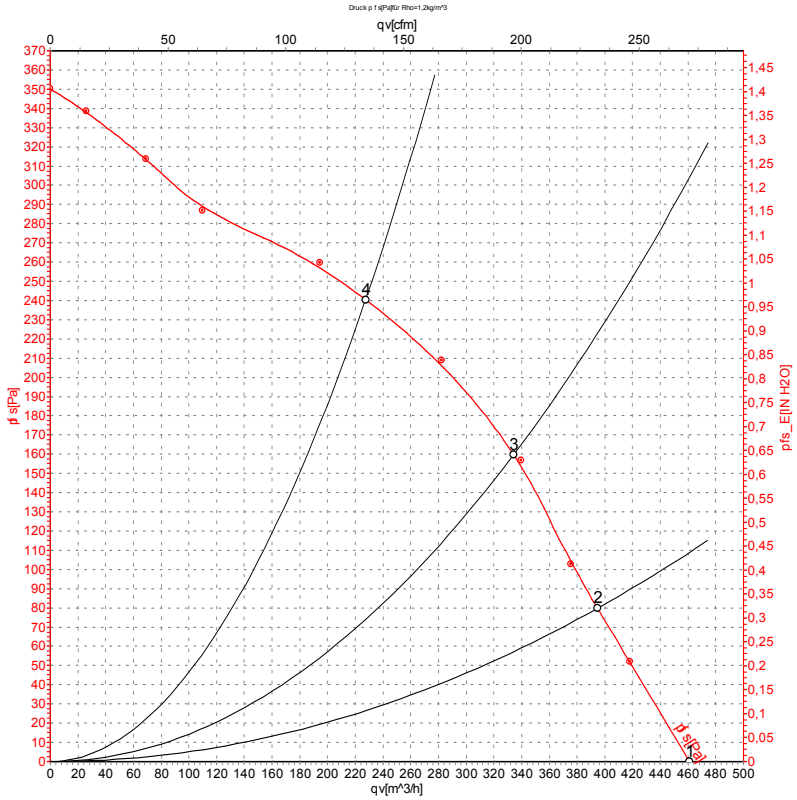
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-4739-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	60	2900	65	0.29	460	0	270	0.00
2	230	60	2875	69	0.30	395	80	230	0.32
3	230	60	2855	69	0.30	335	160	195	0.64
4	230	60	2900	68	0.29	230	240	135	0.96

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

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