

R2S175-AB56-01

AC centrifugal fan

backward-curved, single-intake



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R2S175-AB56-01		
Motor	M2S052-CA		
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 (rpm)	min ⁻¹	2350	2300
Power consumption	W	53	51
Current draw	A	0.33	0.29
Min. back pressure	Pa	0	0
Min. back pressure	inH ₂ O	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	55

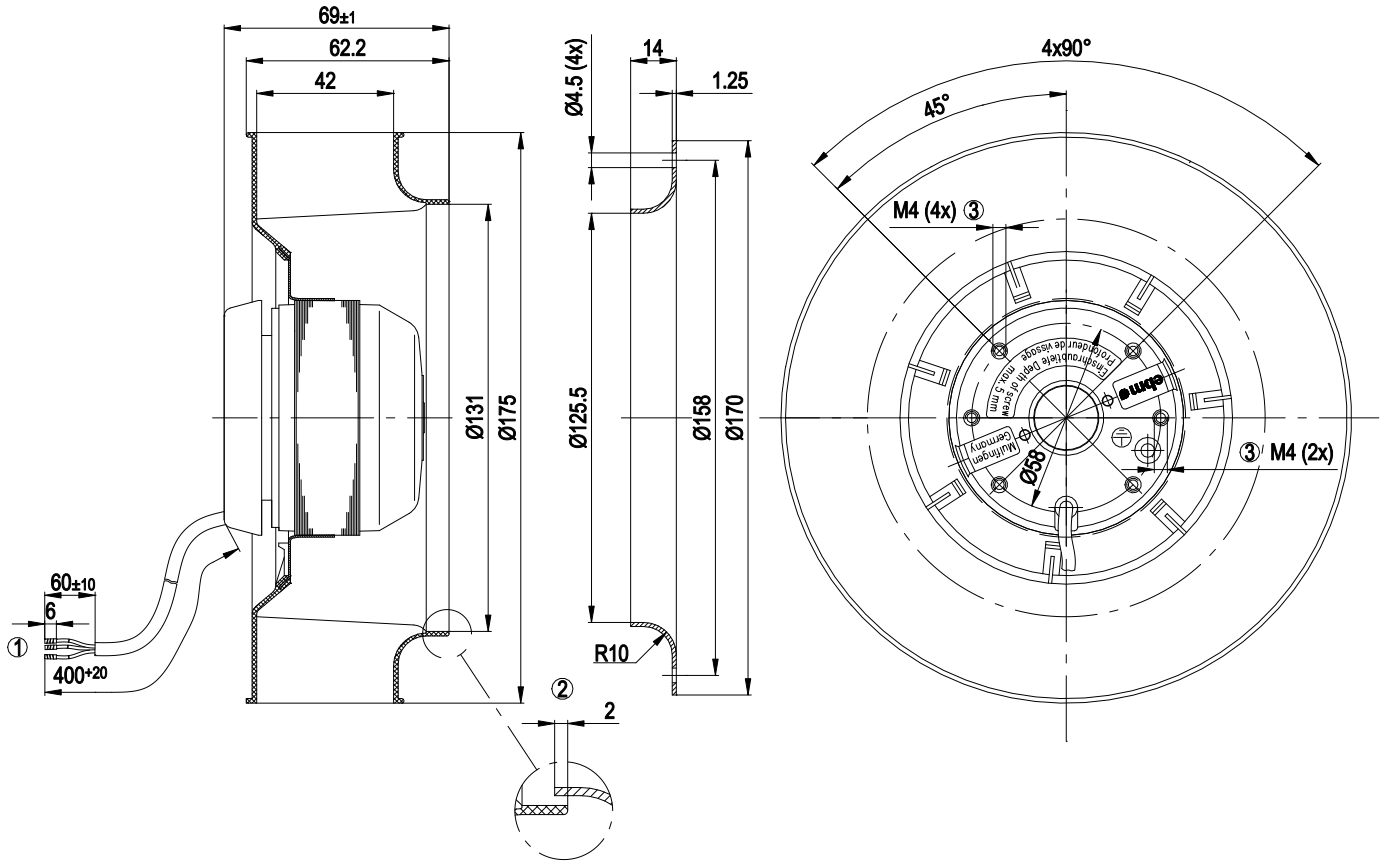
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

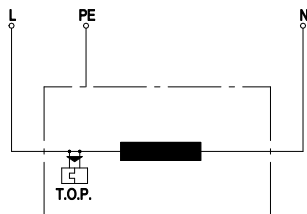
Weight	0.9 kg
Fan size	175 mm
Rotor surface	Painted black
Impeller material	PA 6 plastic, glass-fiber reinforced
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	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	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC; EAC

Product drawing



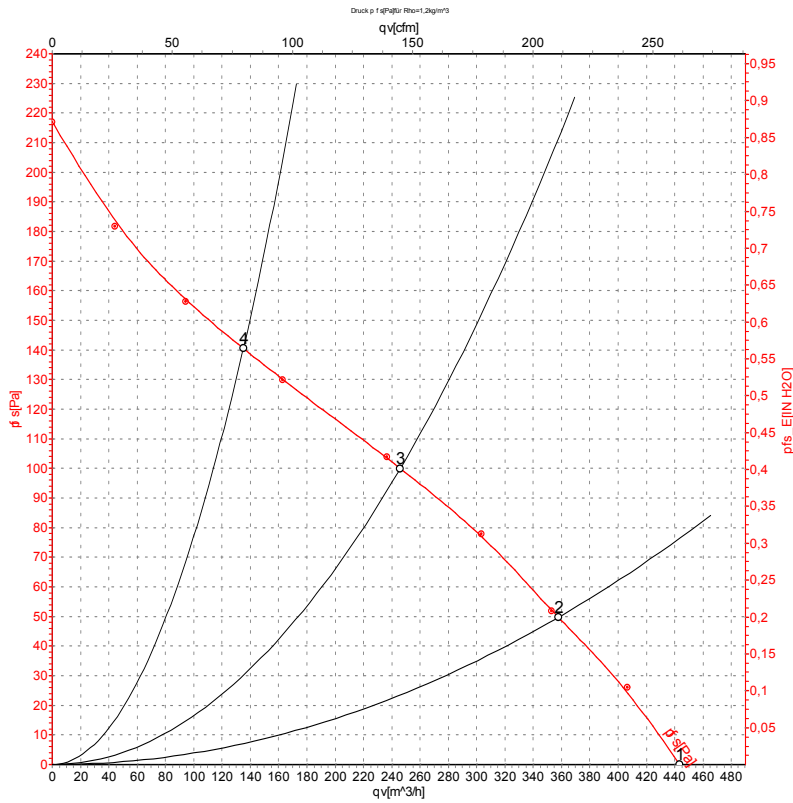
1	Cable PVC, 3 x crimped splices
2	Accessory part: Inlet ring 09576-2-4013, not included in scope of delivery
3	Max. clearance for screw 5 mm

Connection diagram



L	= blue
PE	= green/yellow
N	= brown
TOP	= thermal overload protector

Curves: Air performance 50 Hz



Measurement: LU-44427-1

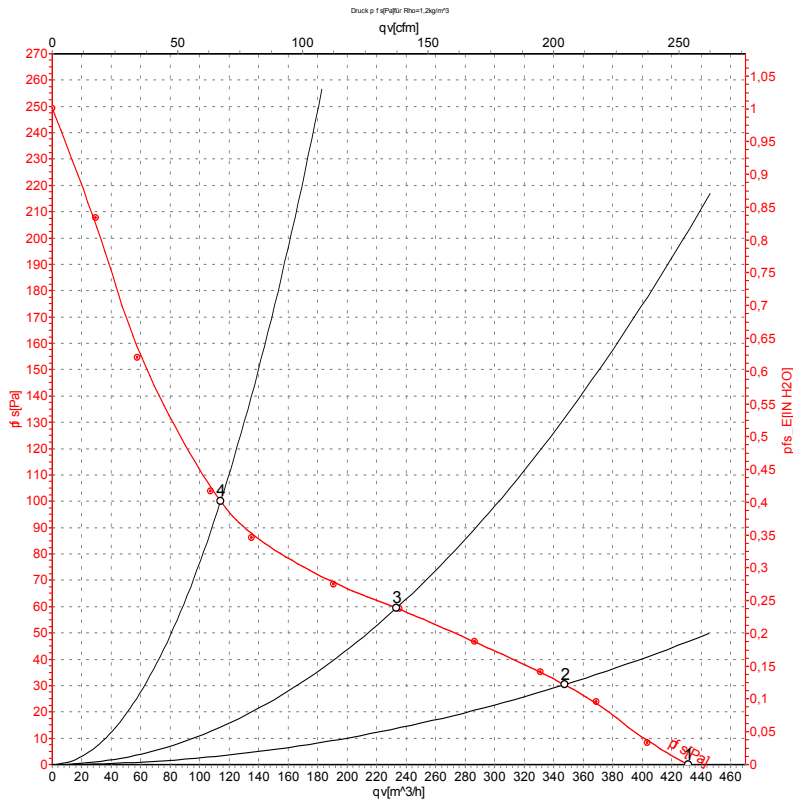
Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the 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	inH ₂ O
1	230	50	2350	53	0.33	445	0	260	0.00
2	230	50	2245	54	0.33	360	50	210	0.20
3	230	50	2120	57	0.34	245	100	145	0.40
4	230	50	2175	55	0.34	135	140	80	0.56

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

Curves: Air performance 60 Hz



Measurement: LU-44428-1

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	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	CFM	inH ₂ O
1	230	60	2300	51	0.29	430	0	255	0.00
2	230	60	2060	53	0.30	345	30	205	0.12
3	230	60	1775	55	0.31	235	60	135	0.24
4	230	60	1825	54	0.30	115	100	65	0.40

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



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