

R2D190-AC22-12

AC centrifugal fan

backward-curved

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R2D190-AC22-12		
Motor	M2D068-BF		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		ml	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2550	2770
Power consumption	W	56	62
Current draw	A	0.13	0.11
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	55
Starting current	A	0.25	0.24

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

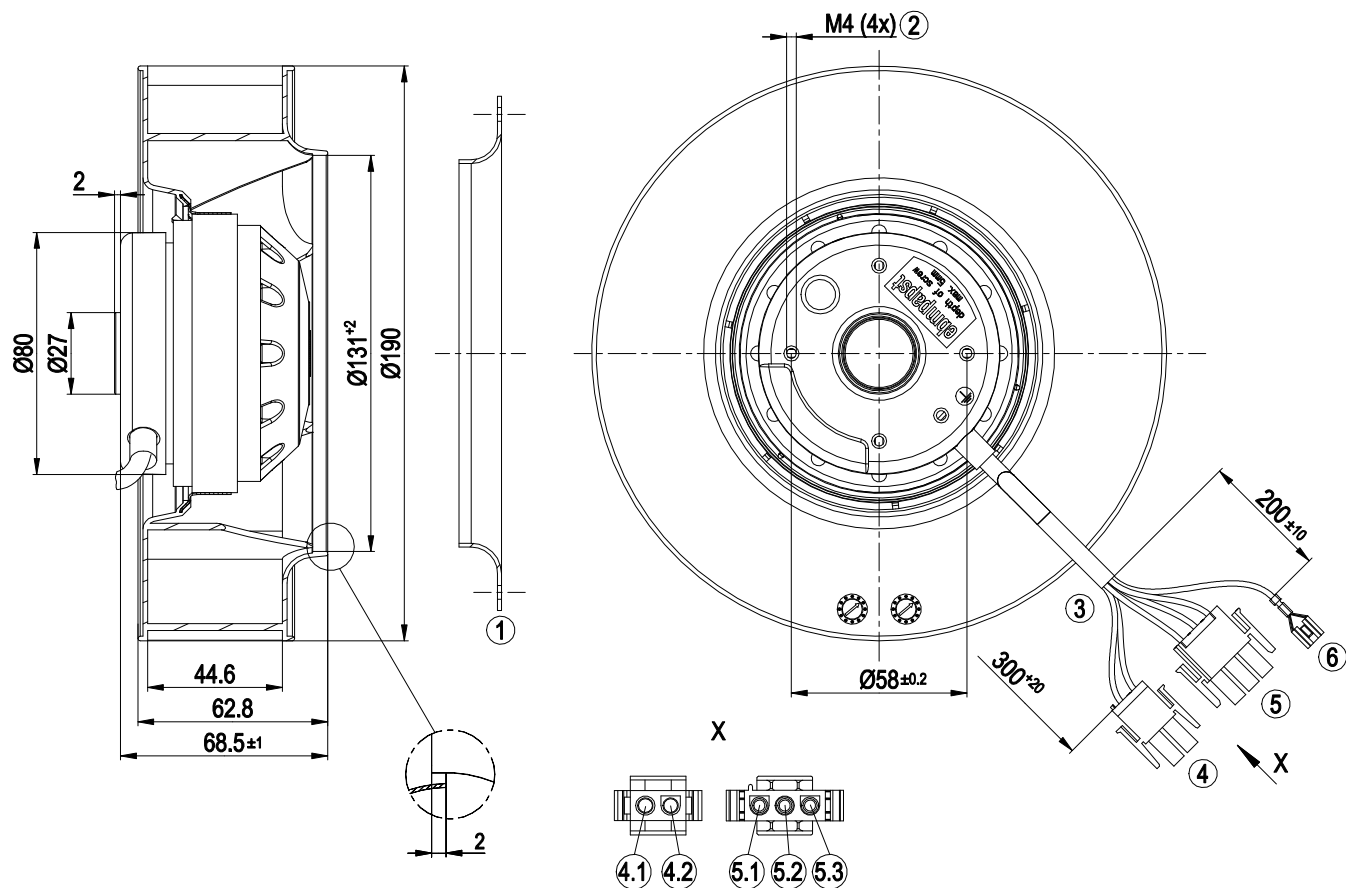


Technical description

Weight	1.25 kg
Size	190 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA 6.6 plastic, glass-fiber reinforced
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1+; F2-2
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
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) with basic insulation
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC; CSA C22.2 No. 100; UL 1004-1

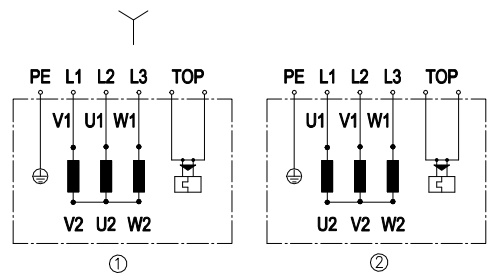


Product drawing



1	Accessory part: inlet ring 09576-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20 (green/yellow AWG18)
4	2-pole connector housing tyco 1-1703061-3
	2x plug pin tyco 926885-1
4.1	TOP
4.2	TOP
5	3-pole connector housing tyco 2178473-3
5	3x plug pin tyco 926885-1
5.1	L3
5.2	L2
5.3	L1
6	PE (green-yellow), flat push-on receptacle 6.3x0.8, lockable

Connection diagram

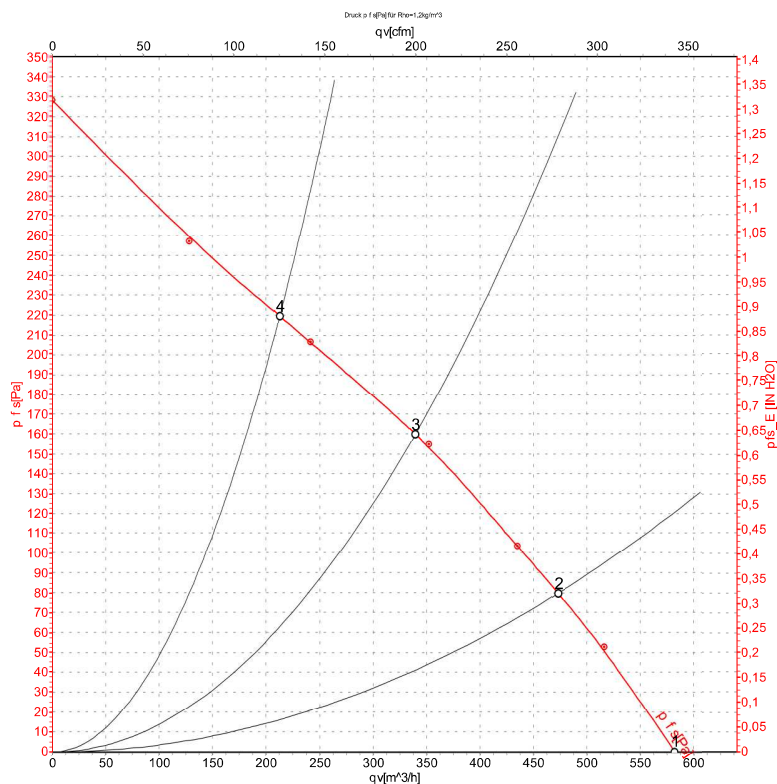


Change of rotation direction by reversing two phases

	Three-phase motor
Y	Star connection
1	Counterclockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	= U1 = black
L2	= V1 = blue
L3	= W1 = brown
PE	green/yellow
TOP	2x gray



Curves: Air performance 50 Hz



Measurement: LU-54992-1

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.

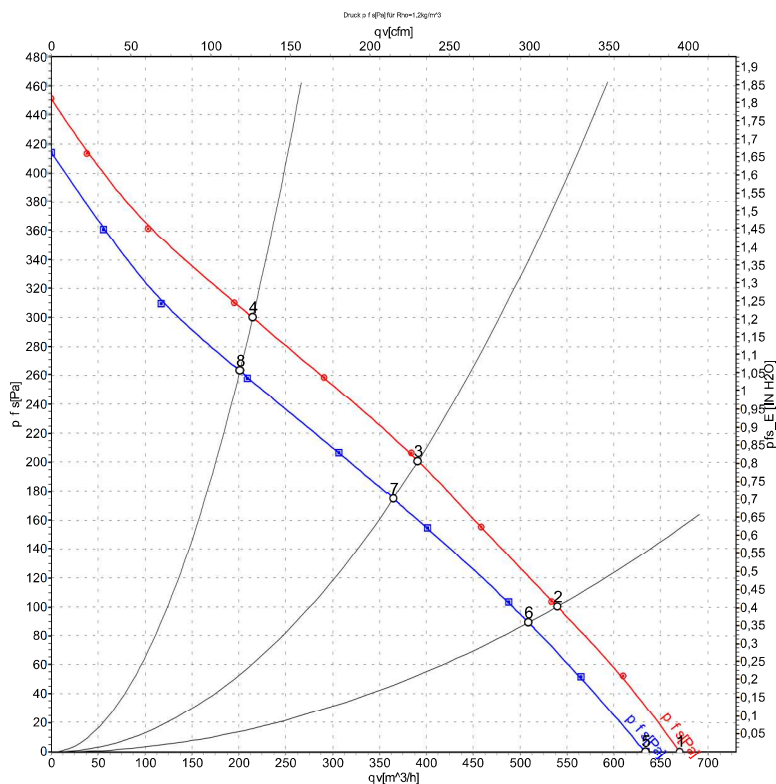
Measured values

	U	f	n	P _e	I	q _v	P _{fs}	q _v	P _{ts}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	400	50	2550	56	0.13	580	0	340	0.00
2	400	50	2475	60	0.13	475	80	280	0.32
3	400	50	2420	63	0.13	340	161	200	0.65
4	400	50	2460	61	0.13	215	220	125	0.88

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



Curves: Air performance 60 Hz



Measurement: LU-54995-1
Measurement: LU-54993-1

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	m³/h	Pa	cfm	in. wg
1	460	60	2930	73	0.13	670	0	395	0.00
2	460	60	2850	79	0.13	540	100	315	0.40
3	460	60	2745	85	0.13	390	200	230	0.80
4	460	60	2815	80	0.13	215	300	125	1.20
5	400	60	2770	62	0.11	630	0	370	0.00
6	400	60	2665	67	0.11	510	89	300	0.36
7	400	60	2565	72	0.12	365	175	215	0.70
8	400	60	2630	68	0.12	200	263	120	1.06

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

