

AC centrifugal fan

backward-curved

ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R2D190-AC26-18				
Motor	M2D068-BF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	460	460
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		fa	fa	fa	fa
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min ⁻¹	2400	2500	2500	2700
Power consumption	W	44	53	56	60
Current draw	A	0.16	0.18	0.11	0.10
Min. back pressure	Pa	0	0	0	0
Min. back pressure	in. wg	0	0	0	0
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	55	55	55	55

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

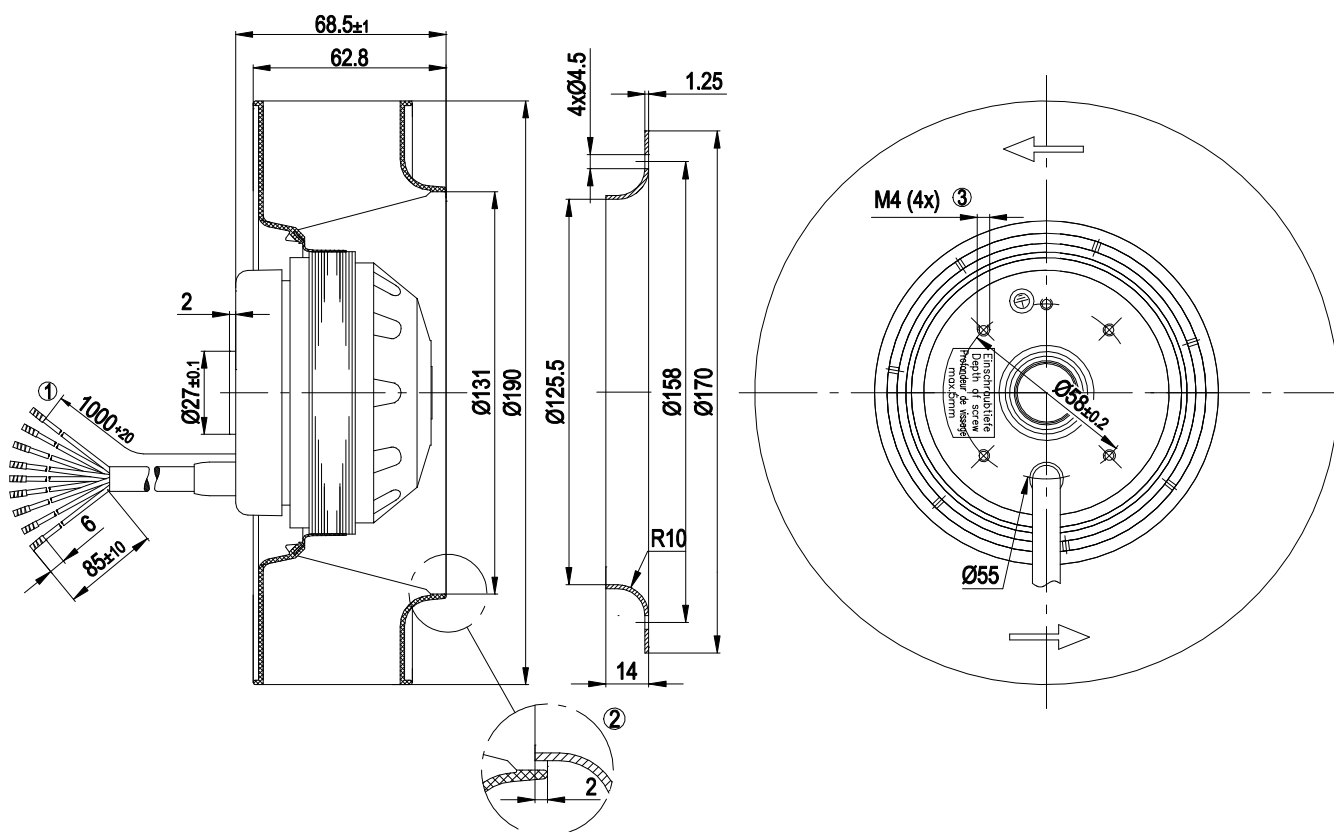


Technical description

Weight	1.26 kg
Size	190 mm
Motor size	68
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0+
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 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	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

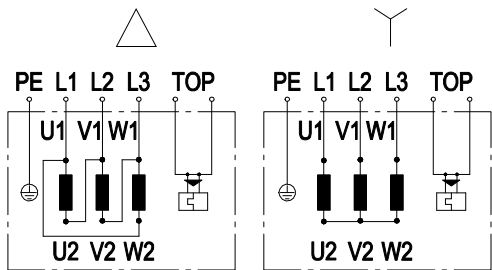


Product drawing



- | | |
|---|---|
| 1 | Cable Dipotherm 0.5 mm ² , 9x 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

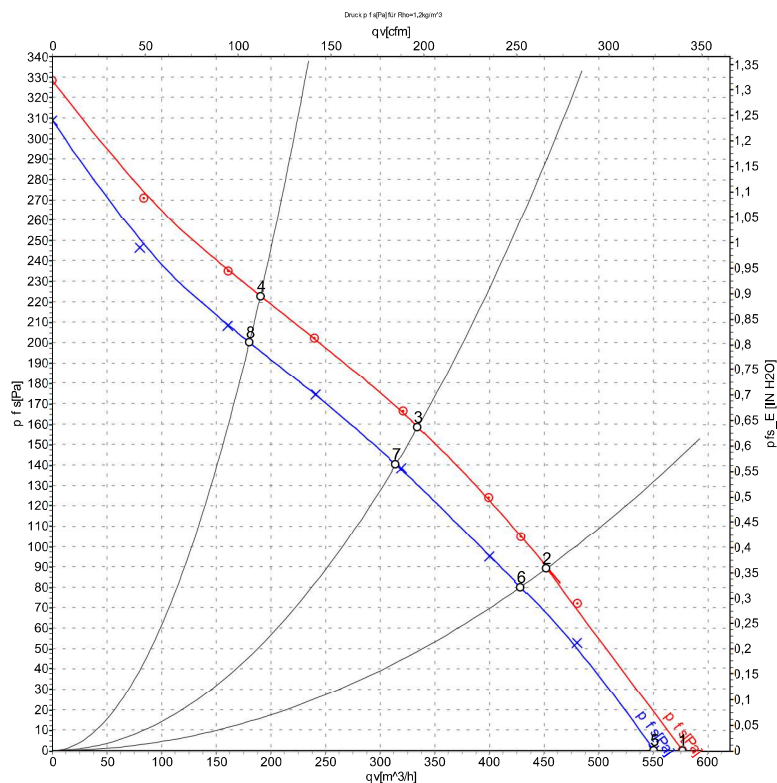


Note: Change of rotation direction by reversing two phases

Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2x gray
PE	green/yellow				



Curves: Air performance 50 Hz



Measurement: LU-64941-1
Measurement: LU-64940-1

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.

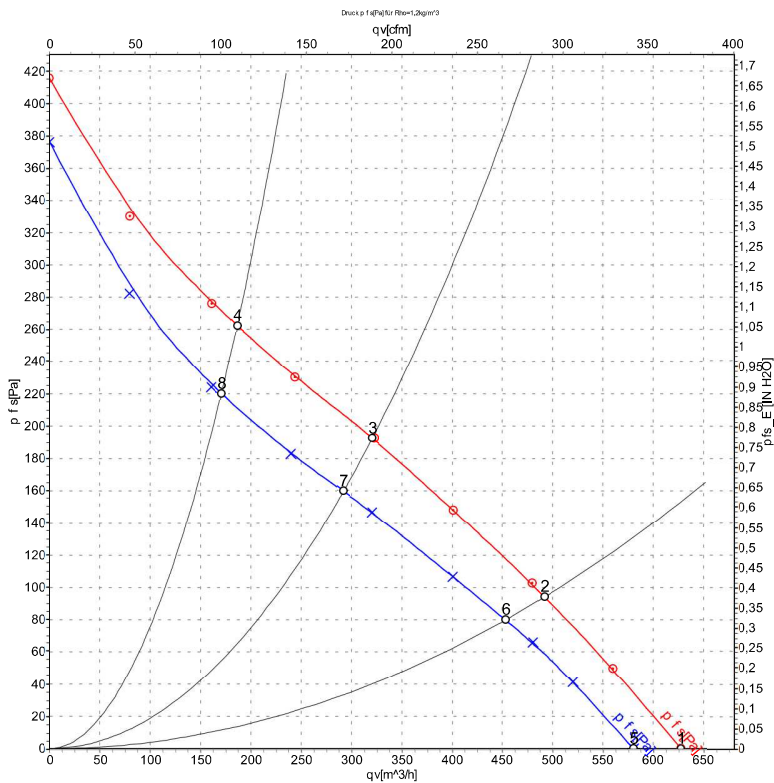
Measured values

	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	in. wg
1	460	50	2500	56	0.11	575	0	340	0.00
2	460	50	2445	60	0.11	450	88	265	0.35
3	460	50	2390	62	0.11	335	159	195	0.64
4	460	50	2450	60	0.11	190	223	110	0.90
5	400	50	2400	44	0.09	550	0	325	0.00
6	400	50	2310	48	0.09	430	80	250	0.32
7	400	50	2245	51	0.09	315	140	185	0.56
8	400	50	2315	48	0.09	180	200	105	0.80

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-64944-1
Measurement: LU-64942-1

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	in. wg
1	460	60	2700	60	0.10	630	0	370	0.00
2	460	60	2615	66	0.10	490	95	290	0.38
3	460	60	2510	70	0.10	320	193	190	0.77
4	460	60	2625	65	0.10	185	262	110	1.05
5	400	60	2500	53	0.10	580	0	340	0.00
6	400	60	2380	57	0.09	455	80	265	0.32
7	400	60	2305	60	0.10	290	160	170	0.64
8	400	60	2410	56	0.09	170	220	100	0.88

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

