

R2D190-AD18-11 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	R2D190-AD18-11			
Motor	M2D068-CF			
Phase		3~	3~	3~
Nominal voltage	VAC	400	460	460
Wiring		Y	Y	Y
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	UL
Speed (rpm)	min ⁻¹	2600	3050	3050
Power consumption	W	46	70	72
Current draw	A	0.1	0.11	0.12
Min. back pressure	Pa	0	0	0
Min. back pressure	in. wg	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	55	55	55
Starting current	A	0.3	0.35	0.35

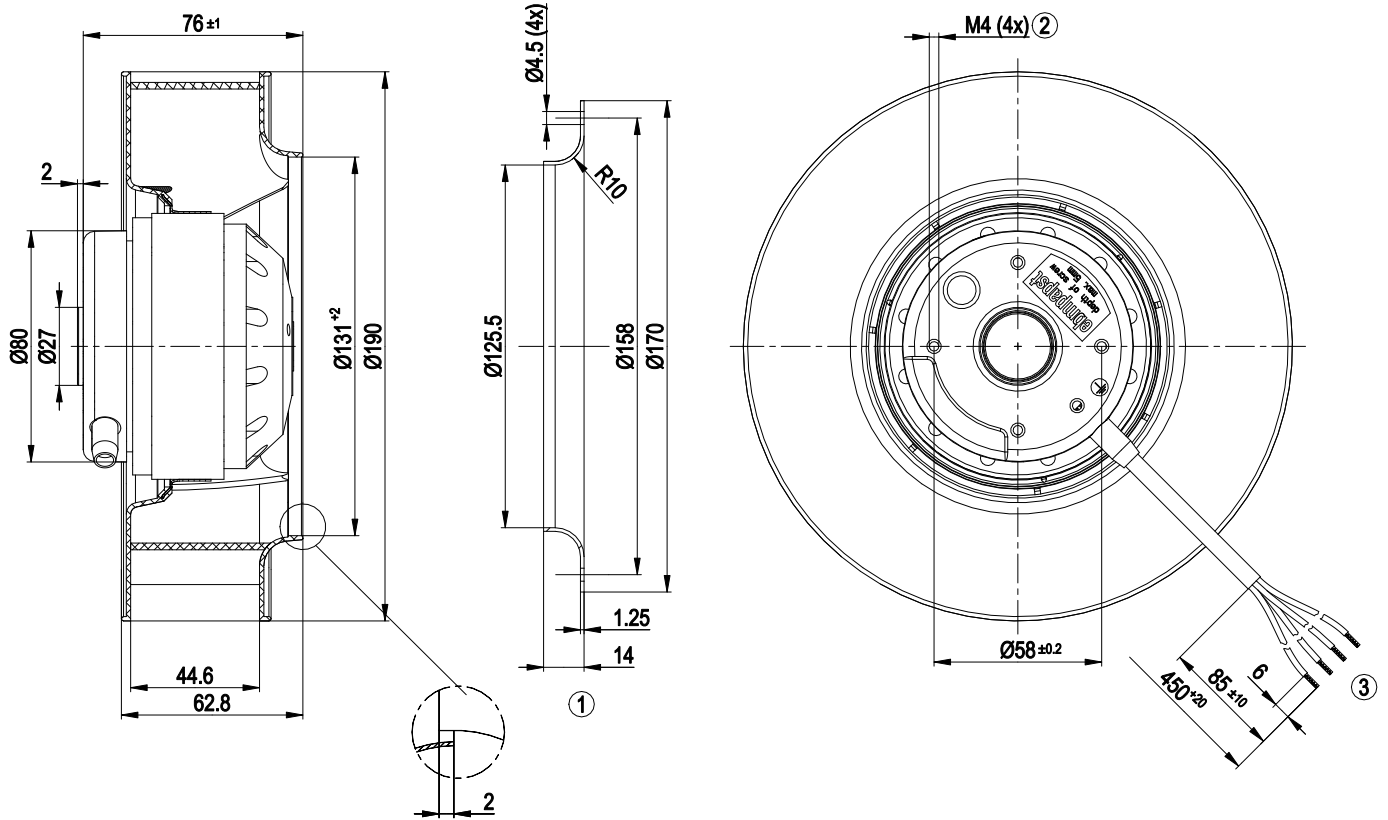
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

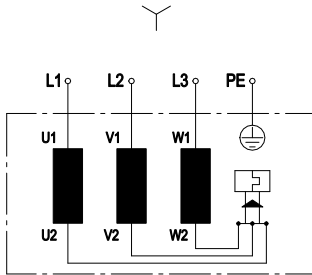
Weight	1.6 kg
Size	190 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F2-2; H1+
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) internally connected
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-3; CSA C22.2 No. 77

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 4G AWG20, 4x crimped splices

Connection diagram

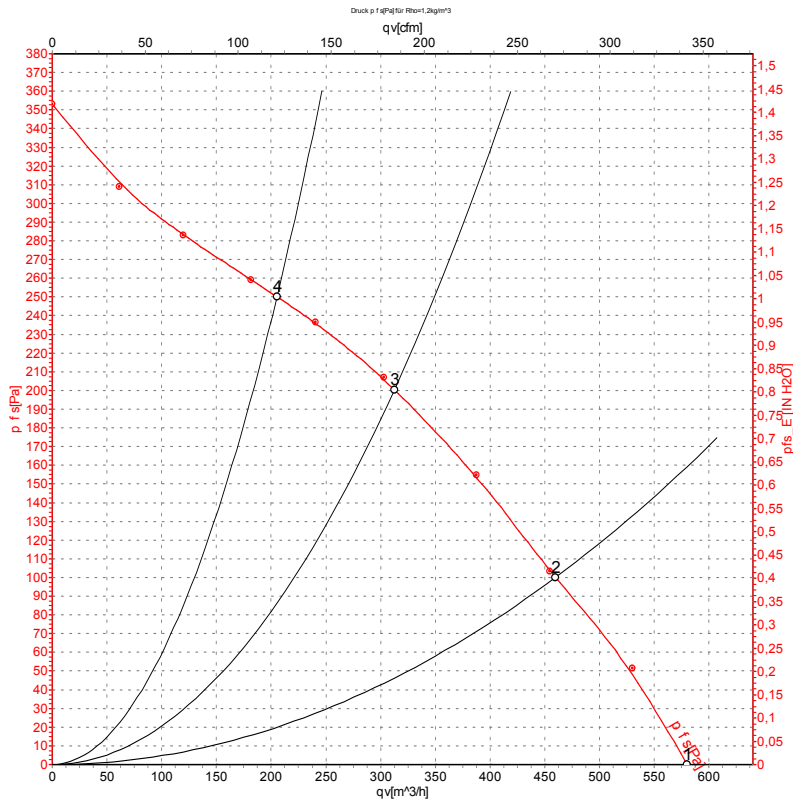


Change of rotation direction by reversing two phases

	Three-phase motor	Y	Star connection	L1	=U1=black
L2	=V1=blue	L3	=W1=brown	PE	green/yellow



Curves: Air performance 50 Hz



Measurement: LU-62845-1

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.

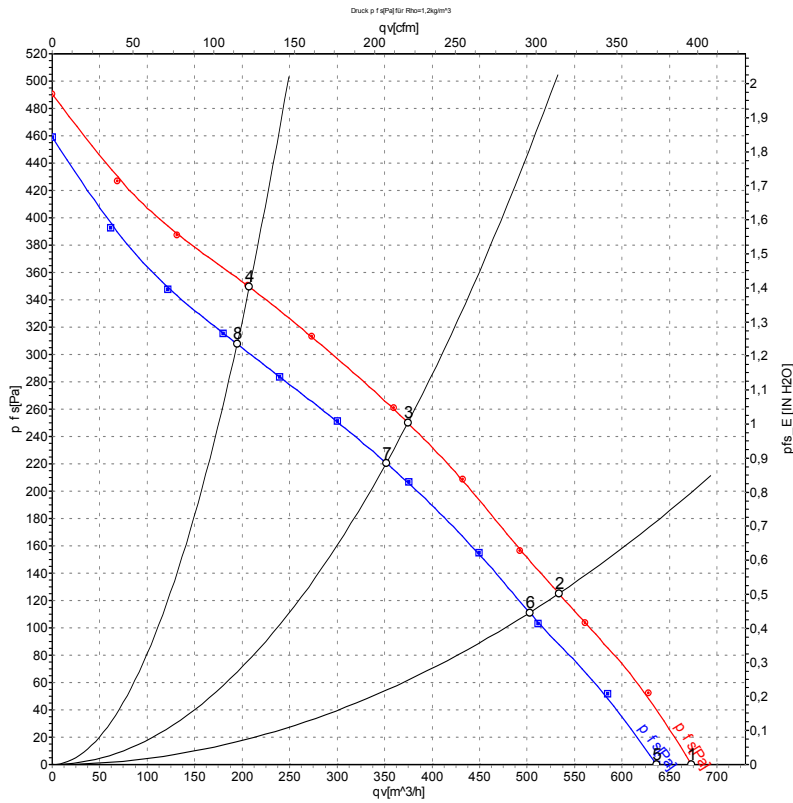
Measured values

	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	400	50	2600	46	0.10	580	0	340	0.00
2	400	50	2590	51	0.10	460	100	270	0.40
3	400	50	2550	55	0.10	310	200	185	0.80
4	400	50	2585	51	0.10	205	250	120	1.00

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-58705-1
Measurement: LU-62846-1

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	3050	70	0.11	670	0	395	0.00
2	460	60	3020	75	0.11	535	125	315	0.50
3	460	60	2945	82	0.12	375	250	220	1.00
4	460	60	3015	75	0.11	210	350	120	1.41
5	400	60	2900	64	0.11	640	0	375	0.00
6	400	60	2820	70	0.11	505	110	295	0.44
7	400	60	2735	75	0.12	350	221	205	0.89
8	400	60	2830	69	0.11	195	308	115	1.24

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

