R2D190-AC08-09

AC centrifugal fan

backward curved, single inlet

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Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

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Nominal data

Type	**R2D190-AC08-09**
Motor	**M2D068-BF**

Phase		3~	3~
Nominal voltage	VAC	415	415
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min^{-1}	2500	2700
Power input	W	43	53
Current draw	A	0.09	0.09
Min. back pressure	Pa	0	0
Max. ambient temperature	°C	55	55

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

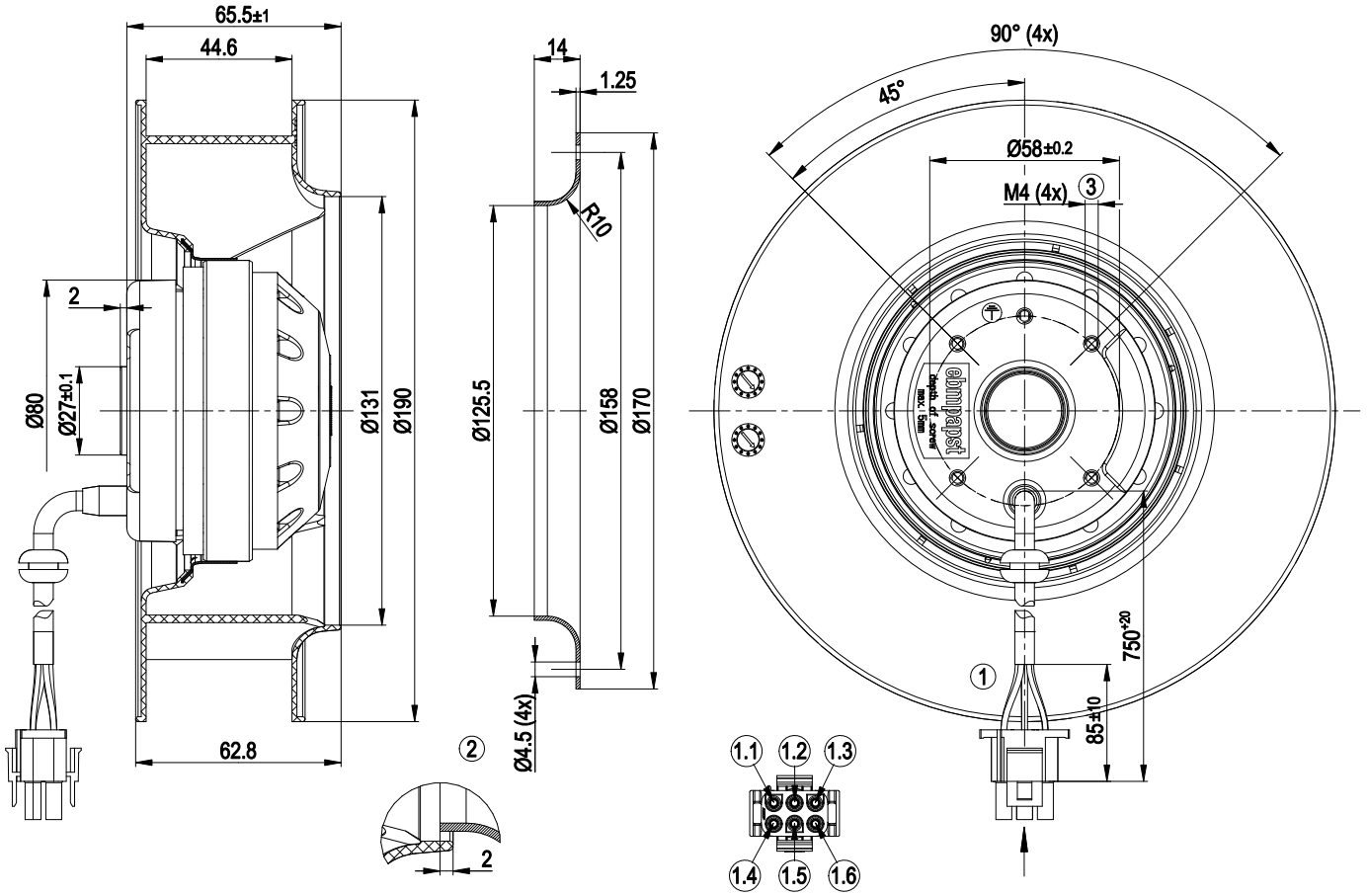
Mass	1.3 kg
Size	190 mm
Surface of rotor	Coated in black
Material of impeller	Plastic PA6, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity class	F2-2
Max. permissible 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
Leakage current	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	UL 1004-1; CSA C22.2 Nr.100

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Product drawing



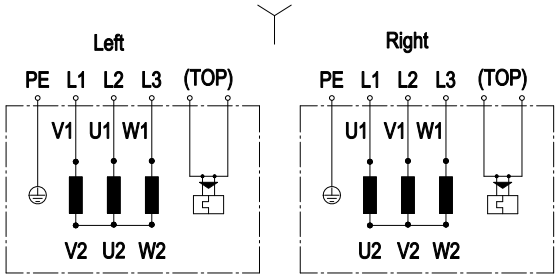
1	Connection line PFA6G AWG20, AMP connector shell 350715-4 with 6x AMP plug pin 926885-1
1.1	black
1.2	Blue
1.3	brown
1.4	green/yellow
1.5	grey
1.6	grey
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 5 mm

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Connection screen



Note: Direction of rotation changes when two phases are reversed

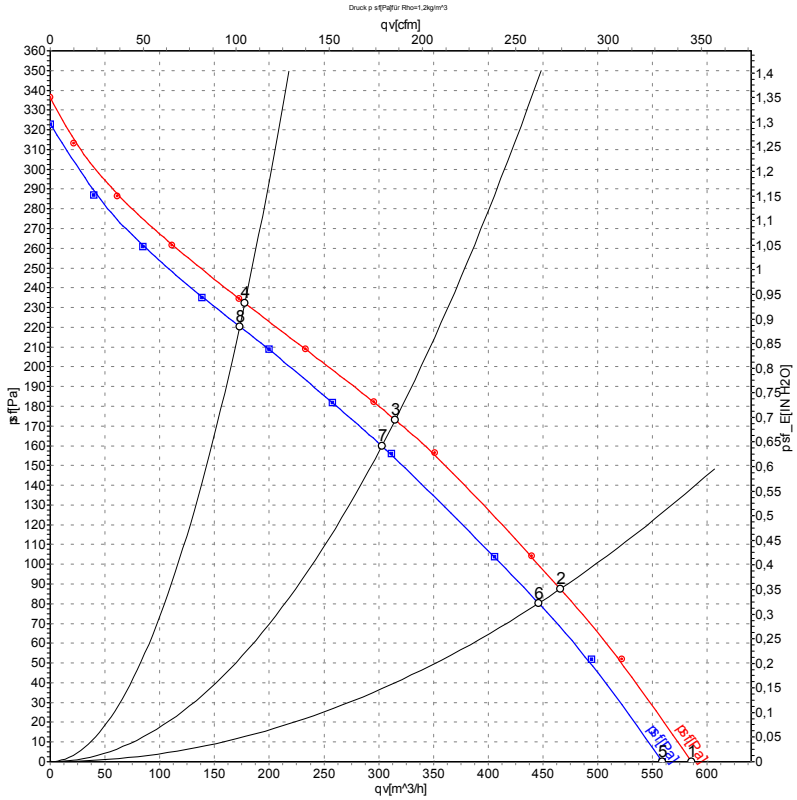
Y	Star connection	L1	= U1 = black	L2	= V1 = blue
L3	= W1 = brown	TW	2 x grey	PE	green/yellow

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Charts: Air flow 50 Hz



Measurement: LU-50948
Measurement: LU-50798

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

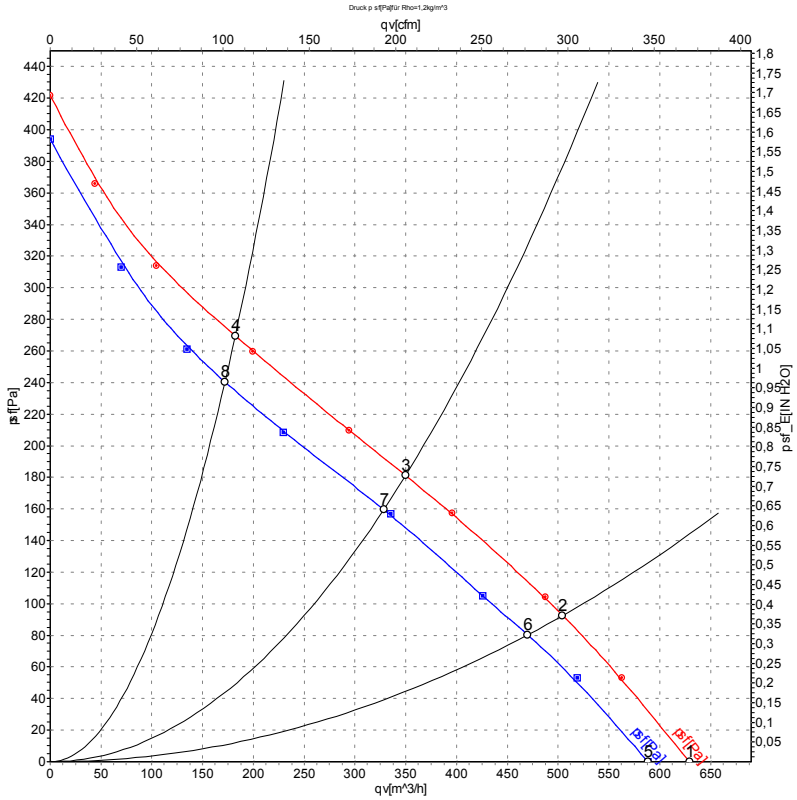
	U	f	n	P_e	I	qv	p_{sf}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	440	50	2550	51	0.11	585	0
2	440	50	2455	55	0.11	465	88
3	440	50	2400	58	0.11	315	173
4	440	50	2460	54	0.10	180	232
5	400	50	2450	43	0.09	560	0
6	400	50	2375	47	0.09	445	80
7	400	50	2310	50	0.09	305	160
8	400	50	2385	46	0.09	175	220

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Charts: Air flow 60 Hz



Measurement: LU-50949
Measurement: LU-50800

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_{sf}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	440	60	2700	58	0.09	630	0
2	440	60	2615	63	0.10	505	93
3	440	60	2525	67	0.10	350	181
4	440	60	2635	62	0.10	180	269
5	400	60	2600	53	0.09	590	0
6	400	60	2475	58	0.10	470	80
7	400	60	2375	61	0.10	330	160
8	400	60	2490	57	0.09	170	240

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