R2D180-AL10-13

AC centrifugal fan

backward curved, single inlet

Nominal data

Type	**R2D180-AL10-13**
Motor	**M2D068-CF**

Phase		1~	1~
Nominal voltage	VAC	400	400
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min^{-1}	2650	2900
Power input	W	105	135
Current draw	A	0.24	0.23
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	35
Starting current	A	0.65	0.63

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	1.8 kg
Size	180 mm
Surface of rotor	Uncoated
Material of impeller	PA plastic
Number of blades	16
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity class	F0
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
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Cable exit	Lateral
Protection class	Built-in component with basic insulation, protection rating results from installation according to intended use
Product conforming to standard	EN 60335-1, motor does not have factory-installed overheating protection; CE

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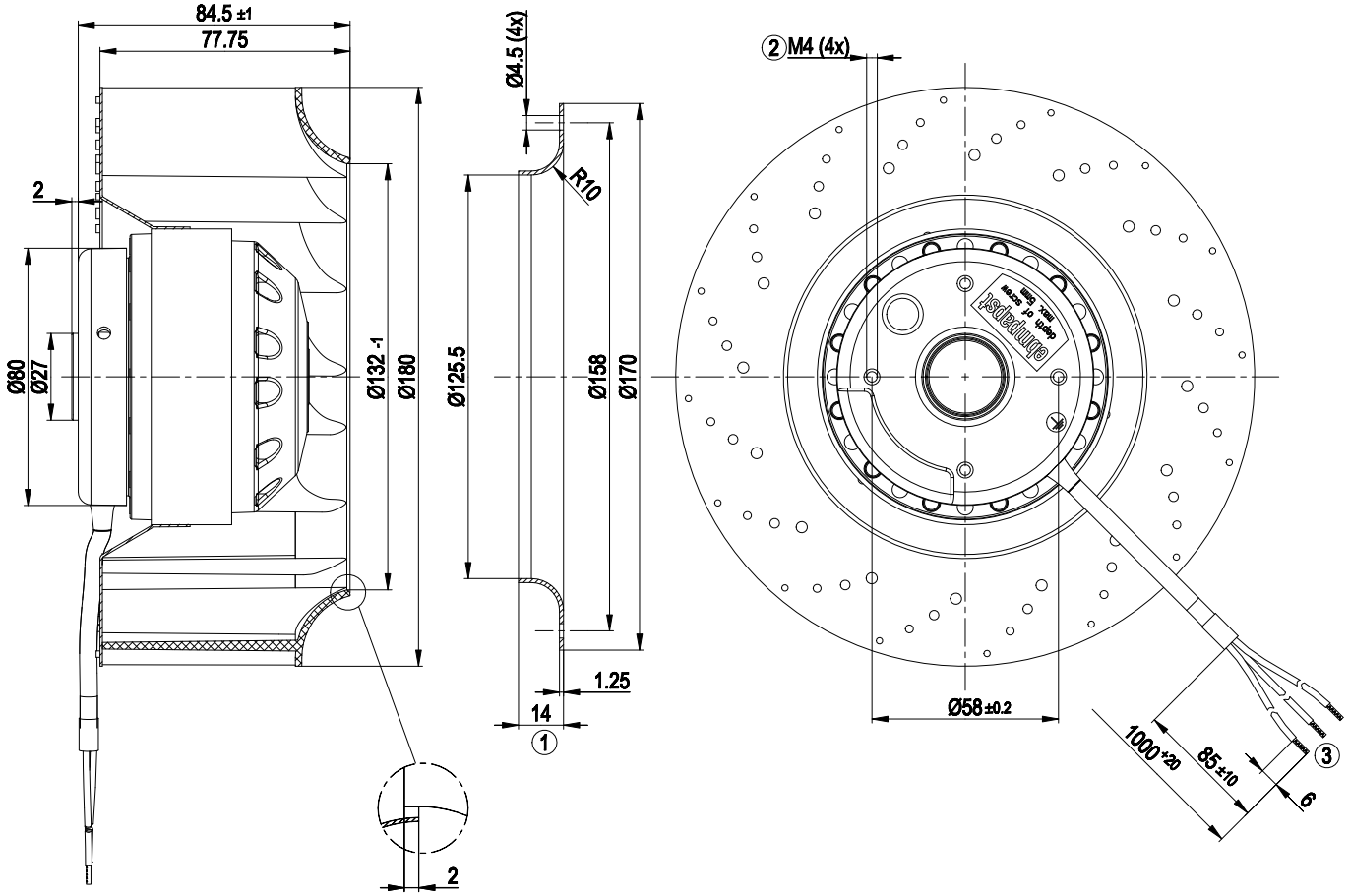
Product drawing



1	Accessory part: inlet nozzle 09576-2-4013, not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line AWG20, 3x lead tips crimped

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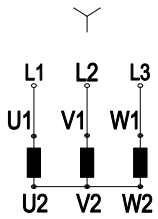
Connection screen



Note: Direction of rotation changes when two phases are reversed

Y	Star connection	L1	black	L2	blue
L3	brown				

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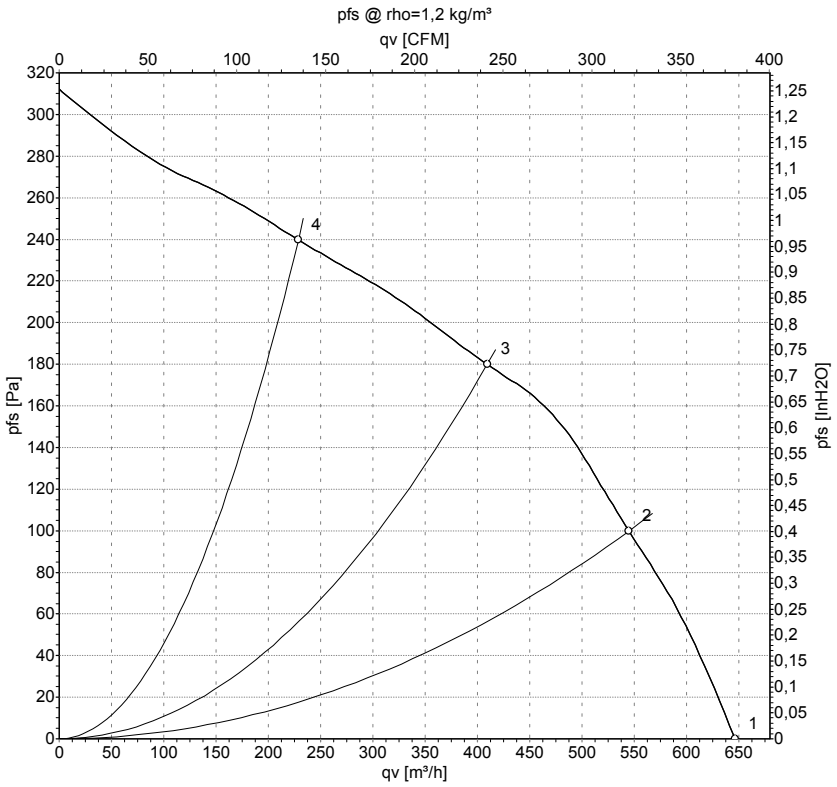
Charts: Air flow 50 Hz



Measurement: LU-61394

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_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	400	50	2650	105	0.24	645	0
2	400	50	2645	107	0.24	545	100
3	400	50	2680	100	0.24	410	180
4	400	50	2770	82	0.23	230	240

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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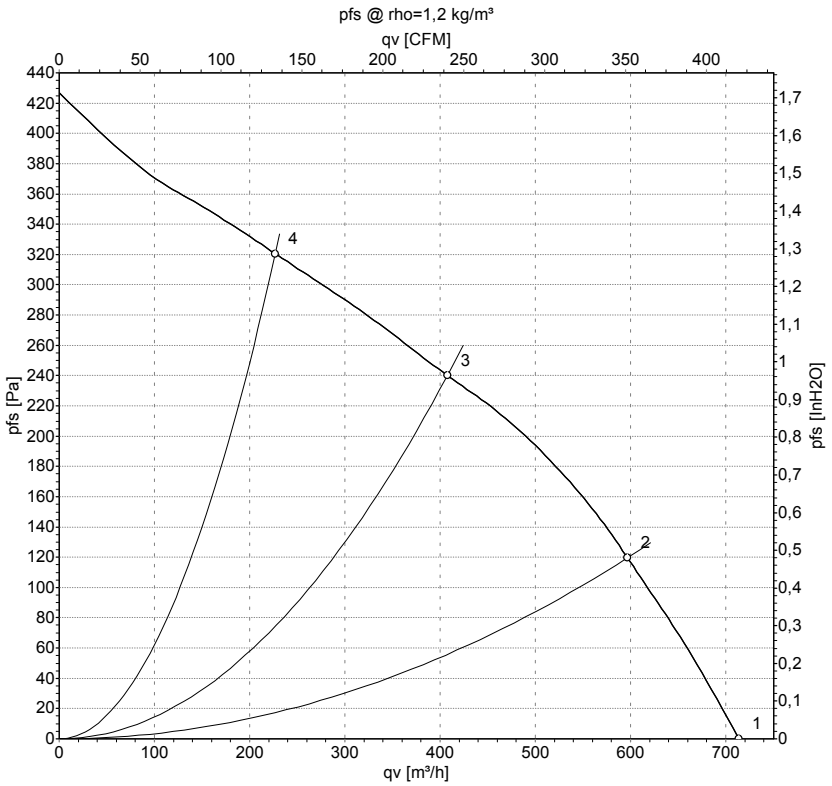
Charts: Air flow 60 Hz



Measurement: LU-61396

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_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	400	60	2900	135	0.23	715	0
2	400	60	2910	137	0.23	595	120
3	400	60	3005	123	0.21	410	240
4	400	60	3175	94	0.18	225	320

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase