R2D180-AL10-18

AC centrifugal fan

backward-curved, single-intake

R2D180-AL10-18 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	**R2D180-AL10-18**
Motor	**M2D068-CF**

Phase		1~
Nominal voltage	VAC	400
Wiring		Y
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed	min^{-1}	2650
Power consumption	W	105
Current draw	A	0.24
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40
Starting current	A	0.65

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

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Technical description

Weight	1.8 kg
Fan size	180 mm
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	16
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F1-2
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 storage	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Approval	CCC

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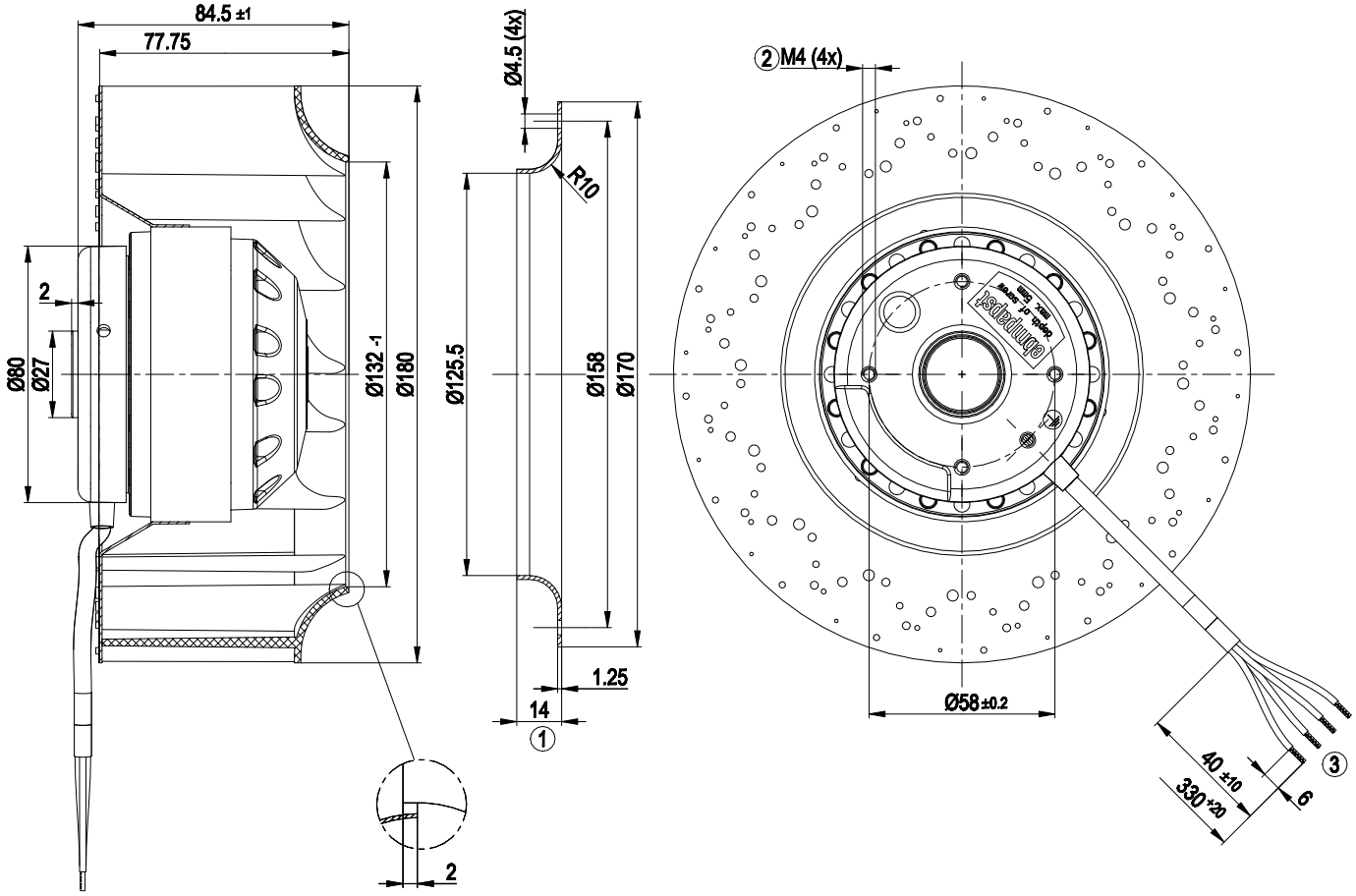
Product drawing



1	Accessory part: inlet ring 09576-2-4013, not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC 4G AWG20, 4x crimped splices

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

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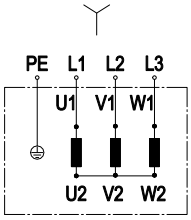
Connection diagram



Change of rotation direction by reversing two phases

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

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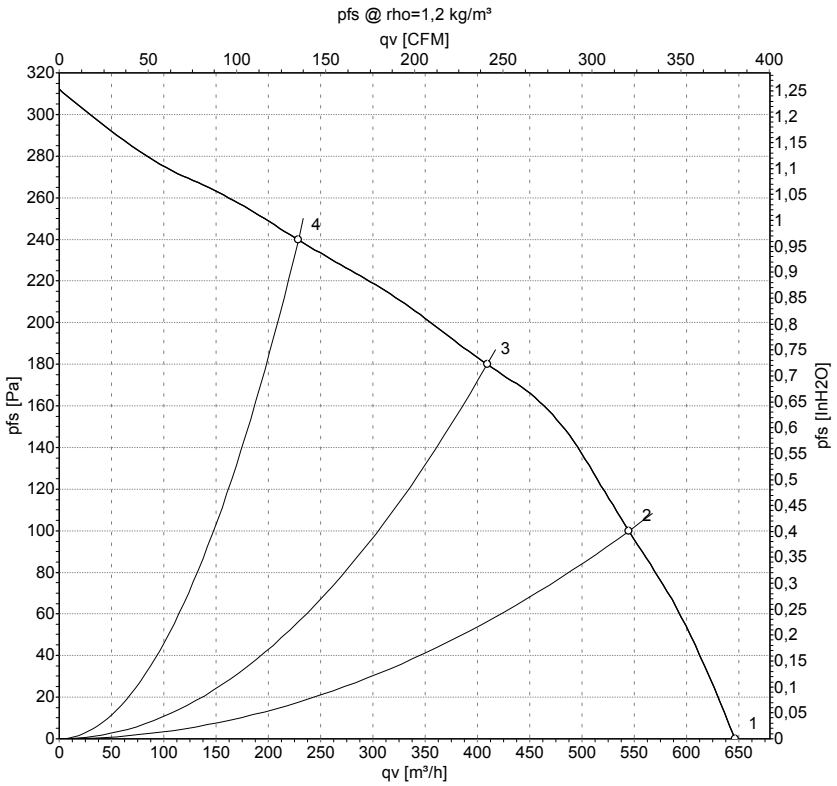
Curves: Air performance 50 Hz



Measurement: LU-61394

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	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 = Power supply · f = Frequency · n = Speed · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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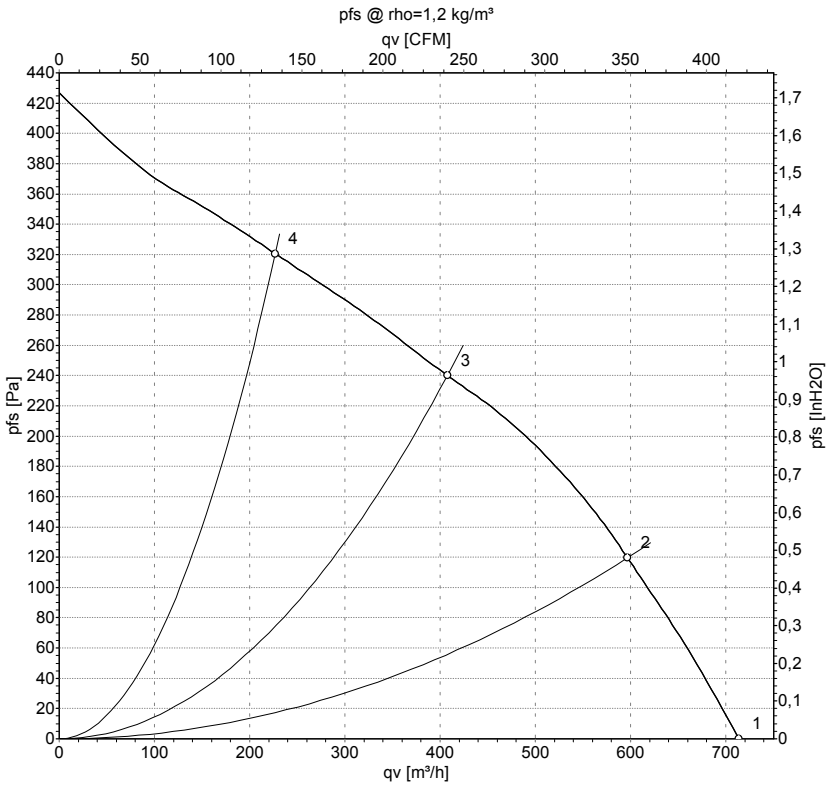
Curves: Air performance 60 Hz



Measurement: LU-61396

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	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 = Power supply · f = Frequency · n = Speed · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase