R2D225-AP02-09

AC centrifugal fan

backward-curved, single-intake

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Nominal data

Type	**R2D225-AP02-09**
Motor	**M2D068-DF**

Phase		3~	3~	3~
Nominal voltage	VAC	400	400	480
Wiring		Y	Y	Y
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		-	-	UL 2111
Speed (rpm)	min^{-1}	2650	2950	3100
Power consumption	W	115	160	180
Current draw	A	0.22	0.27	0.27
Min. back pressure	Pa	0	0	0
Min. back pressure	inH2O	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	55	40	40
Starting current	A	0.76	0.73	

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	2.2 kg
Fan size	225 mm
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	11
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	F2-1
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) internally connected
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	CSA C22.2 No. 77; UL 2111

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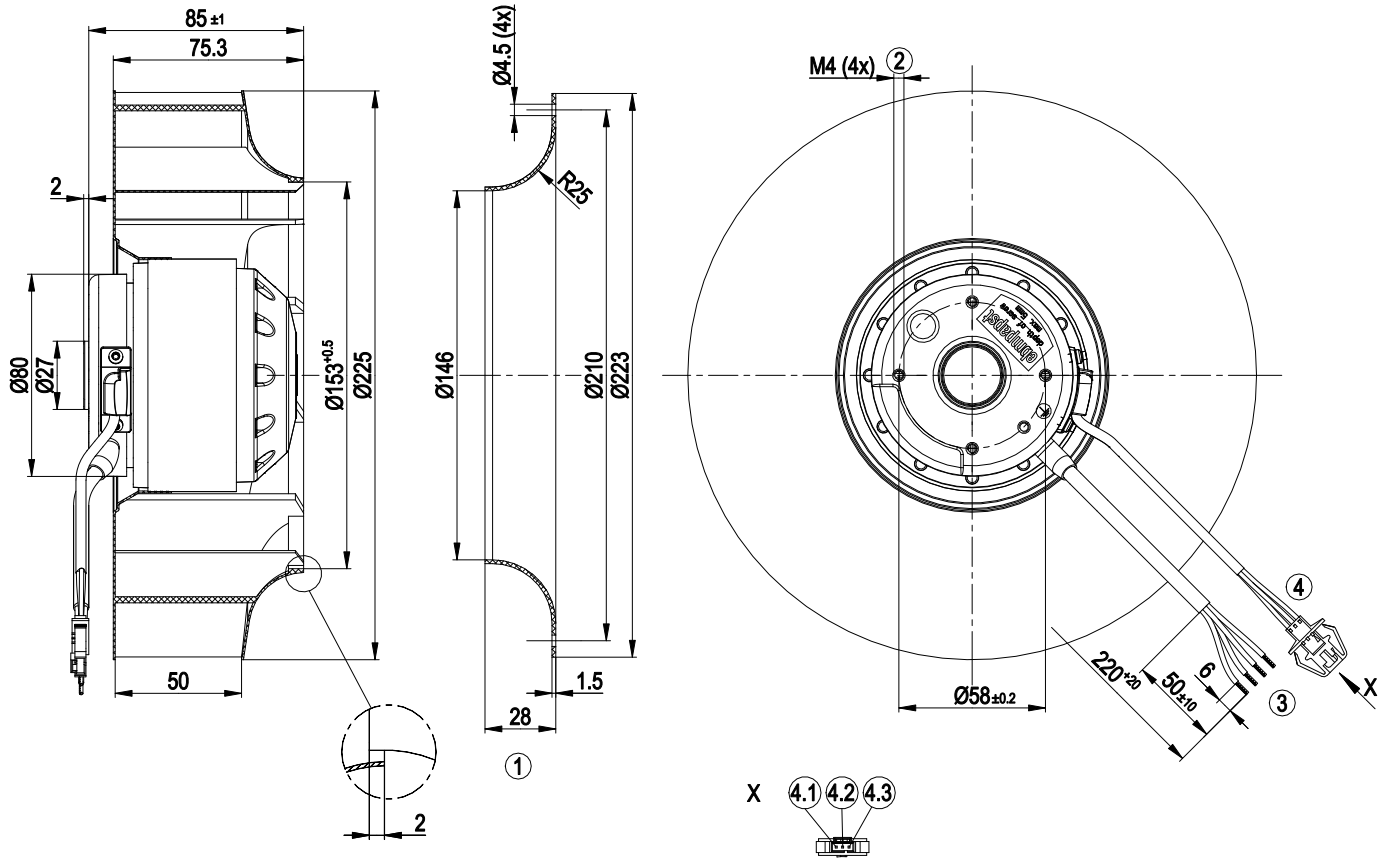
Product drawing



1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20, 4x crimped splices
4	Hall IC cable Raychem 3X AWG24, connector housing Molex no. 70107-0037 with 3x plug pin Molex no. 16-02-0078 crimped
4.1	+5 V (red)
4.2	out (white)
4.3	0 V (black)

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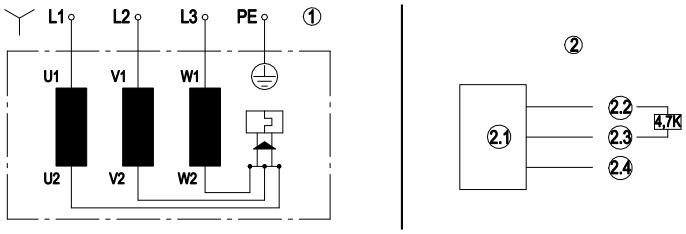
Connection diagram



Note: Change of rotation direction by reversing two phases

1	Fan connection diagram
L1	black
L2	blue
L3	brown
PE	green/yellow
2	Hall IC circuit
2.1	Hall IC
2.2	red (+5 V)
2.3	white (out)
2.4	black (0 V)

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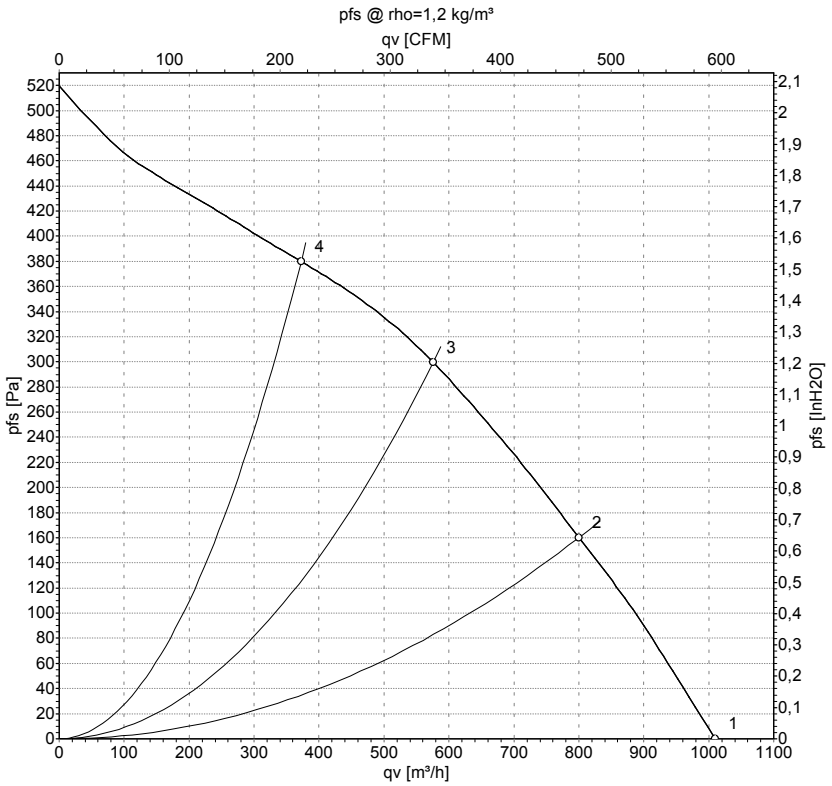
Curves: Air performance 50 Hz



Measurement: LU-122984-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	400	50	2650	115	0.22	1010	0	595	0.00
2	400	50	2590	132	0.24	800	160	470	0.64
3	400	50	2580	133	0.24	575	300	340	1.20
4	400	50	2630	121	0.23	370	380	220	1.53

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

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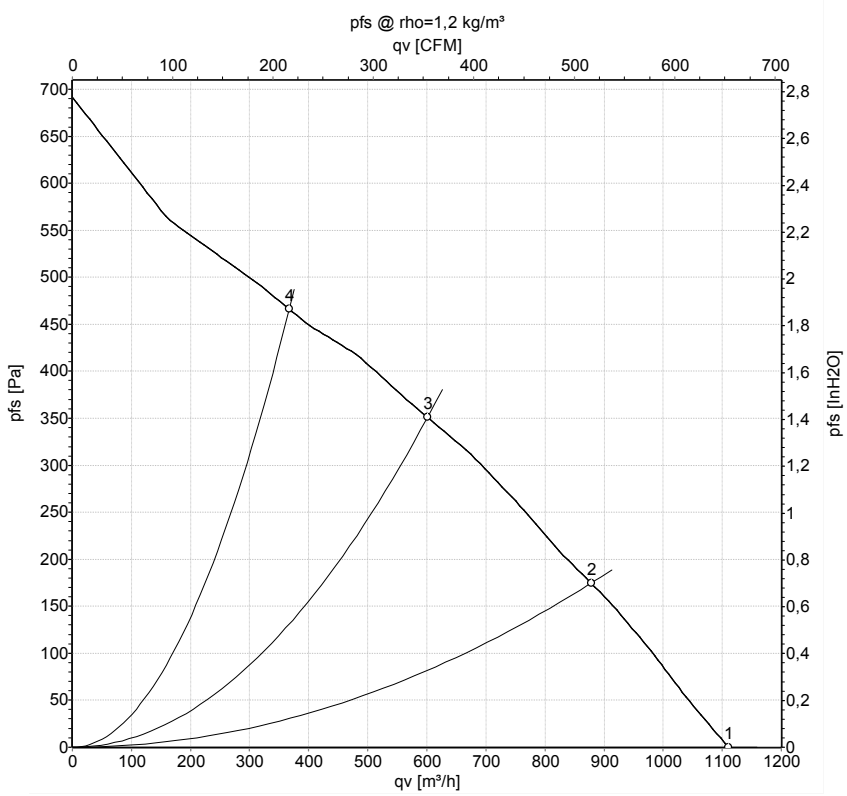
Curves: Air performance 60 Hz



Measurement: LU-122986-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	400	60	2950	160	0.27	1110	0	655	0.00
2	400	60	2795	185	0.30	880	175	515	0.70
3	400	60	2775	189	0.30	600	351	355	1.41
4	400	60	2890	167	0.27	365	466	215	1.87

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

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