R2D225-RA26-14

AC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	**R2D225-RA26-14**
Motor	**M2D068-DF**

Phase		3~	3~	3~
Nominal voltage	VAC	400	400	480
Connection		Y	Y	Y
Frequency	Hz	50	60	60
Type of data definition		ml	ml	ml
Valid for approval / standard		CE	CE	UL 2111
Speed (rpm)	min^{-1}	2530	2700	2900
Power input	W	150	200	235
Current draw	A	0.27	0.33	0.33
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	80	55	55
Starting current	A	0.74	0.72	0.83

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data in accordance with ecodesign regulation EU 327/2011 (prEN 17166)

		Actual	Request 2015
01 Overall efficiency η_{es}	%	43.6	42.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		63	62
05 Variable speed drive		No	

09 Power input P_e	kW	0.14
09 Air flow q_v	m^3/h	705
09 Pressure increase p_{fs}	Pa	318
10 Speed (rpm) n	min^{-1}	2555
11 Specific ratio*		1.00

Data definition with optimum efficiency.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-140430

The indicated efficiency values for obtaining conformity with the Ecodesign Directive EU 327/2011 were achieved with defined air conduction components (e.g. inlet nozzles).
The dimensions are to be requested from ebm-papst. If other air guide geometries are used on the installation side, the ebm-papst evaluation loses its validity/conformity must be confirmed again.

The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2(2a) (motors completely integrated into a product).

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Technical features

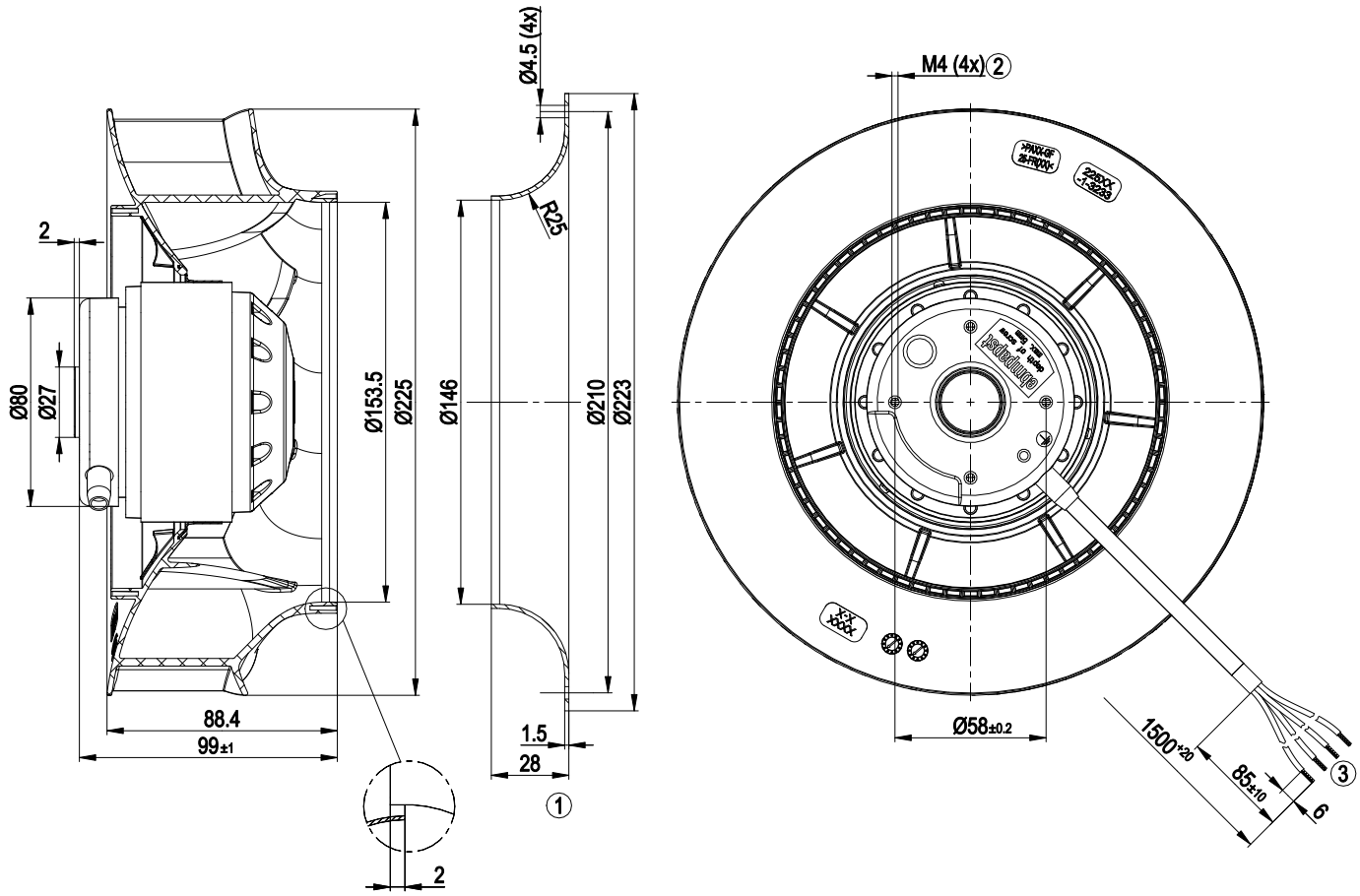
Mass	2.22 kg
Size	225 mm
Motor size	68
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity (F) / environmental protection class (H)	H1+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal switch auto reset, internally connected
Cable exit	Lateral
Safety classification	I; If a protective earth is connected. The built-in component has several local safety classifications. The final safety classification is based on the intended installation.
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 no. 77; UL 1004-3; CCC

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Product drawing



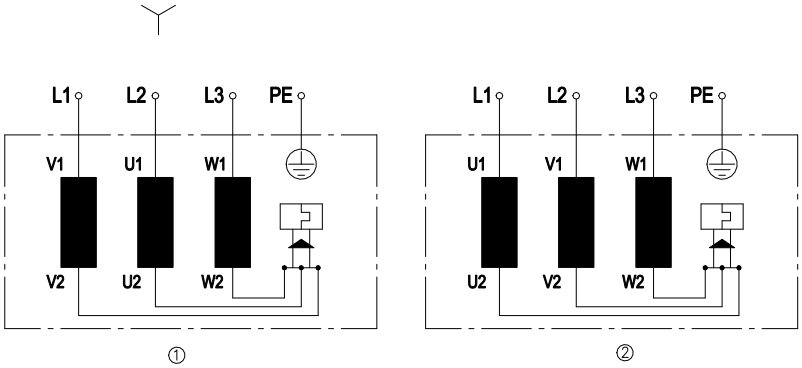
1	Accessory part: Inlet nozzle 96358-2-4013 not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line PFA AWG20 (green/yellow AWG18), 4x lead tips crimped

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Connection screen



Change direction of rotation by reversing two phases

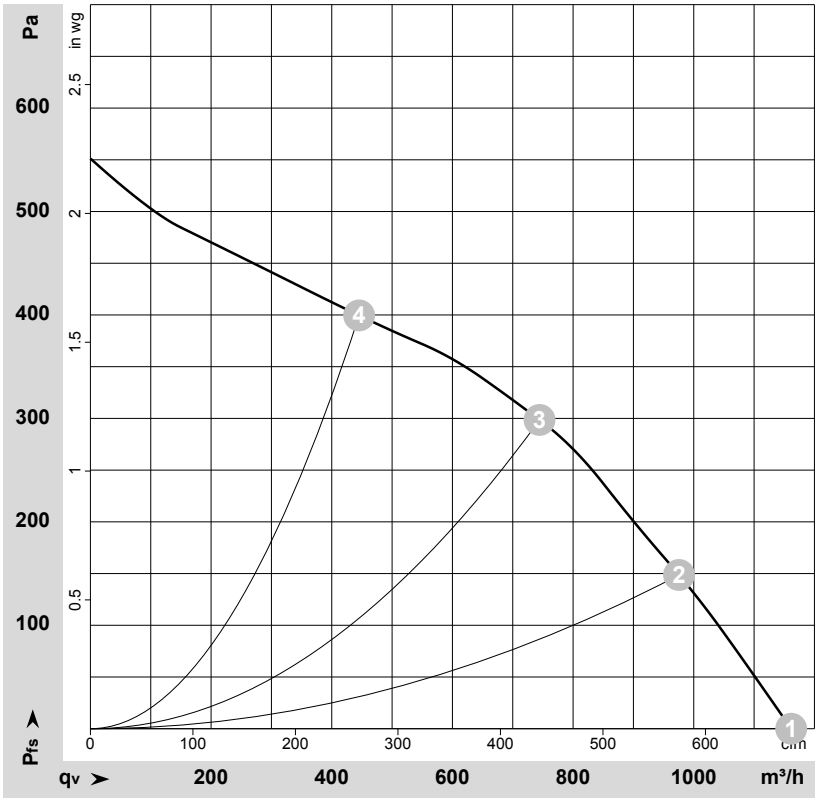
Y	Star connection
1	Anti-clockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	=U1=black
L2	=V1=blue
L3	=W1=brown
PE	green / yellow
	Three-phase motor

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-140430-1

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

	Conn.	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Y	400	50	2645	122	0.24	66	74	1160	0	685	0.00
2	Y	400	50	2560	142	0.26	62	69	975	150	575	0.60
3	Y	400	50	2530	150	0.27	57	65	745	300	440	1.20
4	Y	400	50	2595	130	0.24	61	69	445	400	260	1.61

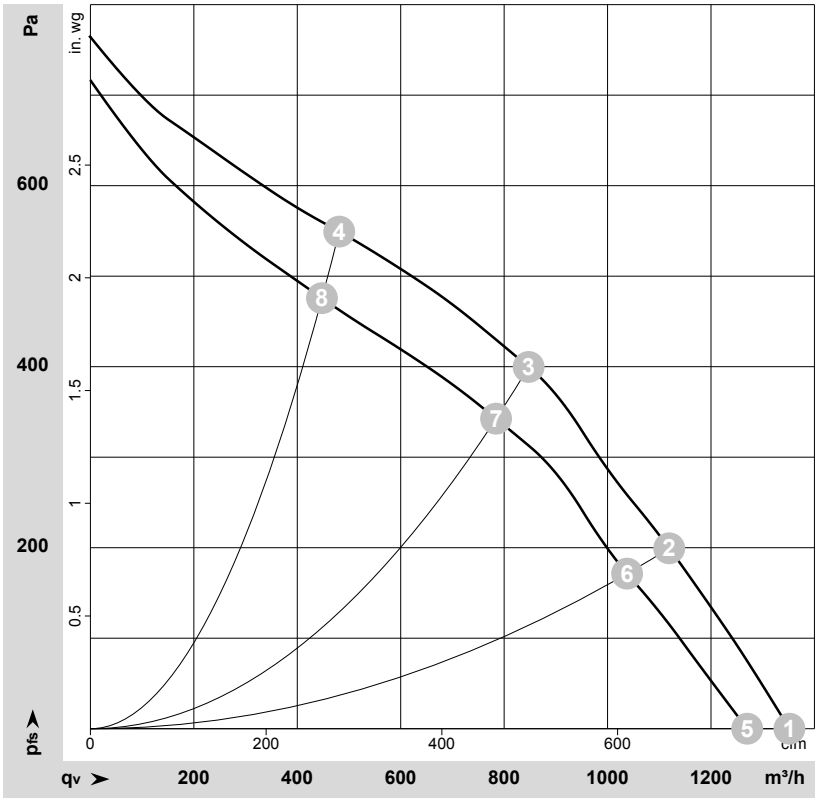
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
q_V = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-140437-1
Measurement: LU-140433-1

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

	Conn.	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Y	480	60	3065	192	0.28	70	78	1350	0	795	0.00
2	Y	480	60	2935	226	0.32	66	74	1120	200	660	0.80
3	Y	480	60	2900	235	0.32	61	69	845	400	500	1.61
4	Y	480	60	3025	202	0.29	65	74	480	550	285	2.21
5	Y	400	60	2880	171	0.28			1270	0	745	0.00
6	Y	400	60	2720	198	0.32			1040	171	610	0.69
7	Y	400	60	2700	200	0.33			785	343	460	1.38
8	Y	400	60	2810	180	0.29			450	476	265	1.91

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
q_V = Air flow · p_{fs} = Pressure increase

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