



R2D250-RA10-16 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Limited partnership · Headquarters Muldingen
County court Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen
County court Stuttgart · HRB 590142

Nominal data

Type	R2D250-RA10-16		
Motor	M2D068-EC		
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed (rpm)	min ⁻¹	2500	2600
Power input	W	200	270
Current draw	A	0.33	0.43
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	80	40
Starting current	A	0.95	0.88

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

Data according to ErP directive

		Actual	Request 2015			
01 Overall efficiency η_{es}	%	43.9	43.9	09 Power input P_e	kW	0.19
02 Measurement category		A		09 Air flow q_v	m ³ /h	900
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	342
04 Efficiency grade N		62	62	10 Speed (rpm) n	min ⁻¹	2505
05 Variable speed drive		No		11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

* Specific ratio = $1 + p_g / 100\,000\text{ Pa}$

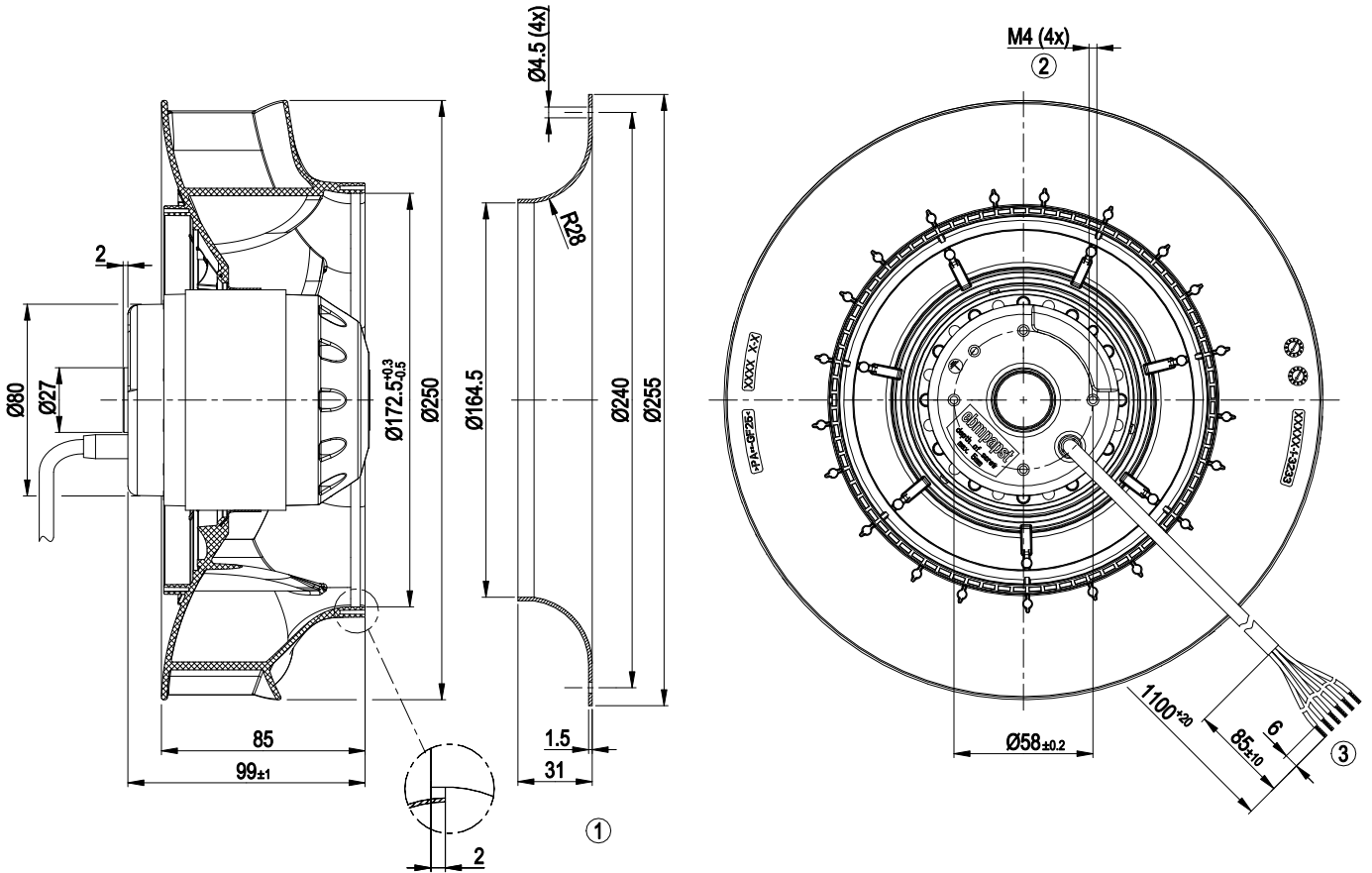
LU-132665



Technical features

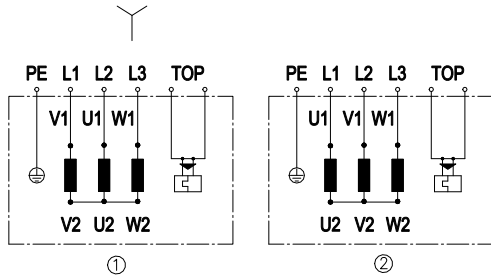
Mass	2.8 kg
Size	250 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0+
Max. permissible 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
Motor protection	Thermal overload protector (TOP) brought out, basic insulation
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

Product drawing



- | | |
|---|--|
| 1 | Accessory part: Inlet nozzle 96359-2-4013, not included in scope of delivery |
| 2 | Thread reach max. 5 mm |
| 3 | Connection line silicone 6G 0.5 mm ² , 6x lead tips crimped |

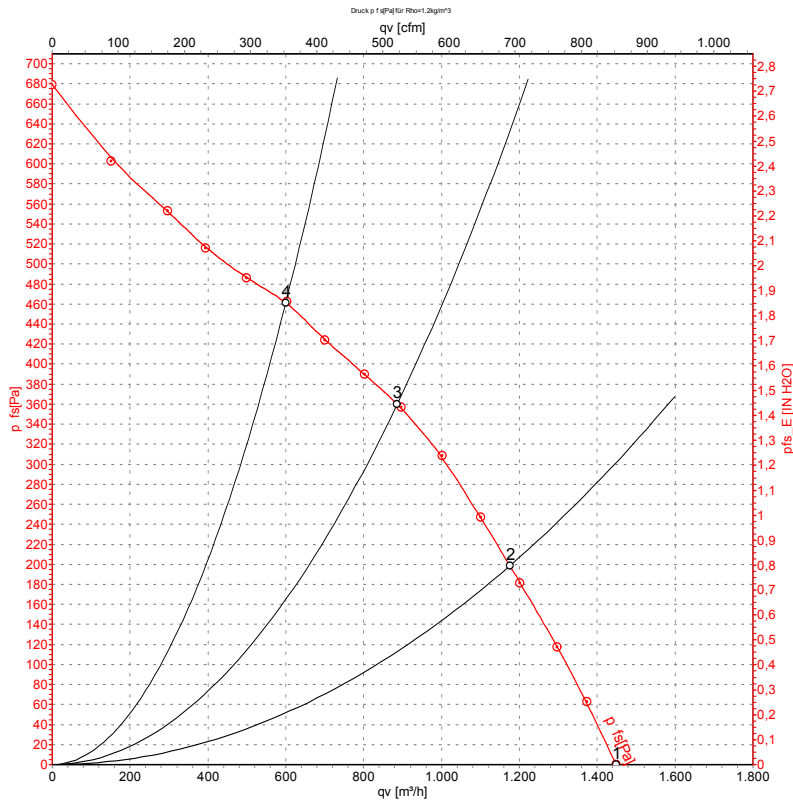
Connection screen



Change direction of rotation by reversing two phases

	Three-phase motor
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
TOP	2x grey

Charts: Air flow 50 Hz



Measurement: LU-132665-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: L_{wA} measured as per ISO 13347 / L_{pA} 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.

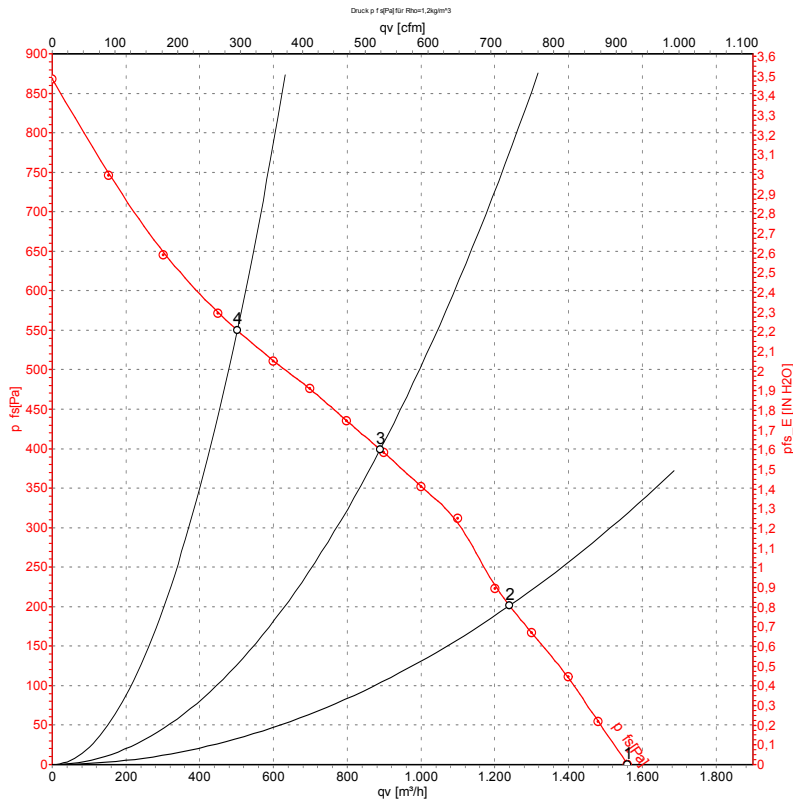
Measured values

	U	f	n	P _e	I	q _v	p _{1s}	q _v	p _{1s}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	400	50	2625	159	0.27	1450	0	855	0.00
2	400	50	2515	194	0.32	1175	200	690	0.80
3	400	50	2500	200	0.33	885	360	520	1.45
4	400	50	2535	182	0.30	600	460	355	1.85

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · p_{1s} = Pressure increase



Charts: Air flow 60 Hz



Measurement: LU-132667-1

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: L_{wA} measured as per ISO 13347 / L_{pA} 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	q _v	p _{1s}	q _v	p _{1s}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	400	60	2825	230	0.36	1560	0	920	0.00
2	400	60	2630	270	0.43	1240	200	730	0.80
3	400	60	2600	270	0.43	890	400	525	1.61
4	400	60	2710	247	0.39	500	550	295	2.21

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · p_{1s} = Pressure increase

