

R2D250-RA10-12

AC centrifugal fan - RadiCal

backward-curved



ASIA PACIFIC SHENGRUI LIMITED

Phone +00852 56261528

info@apacfan.com

www.apacfan.com

Nominal data

Type	R2D250-RA10-12			
Motor	M2D068-EC			
Phase		3~	3~	3~
Nominal voltage	VAC	400	400	460
Wiring		Y	Y	Y
Frequency	Hz	50	60	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		-	-	-
Speed (rpm)	min ⁻¹	2500	2600	2750
Power consumption	W	200	270	300
Current draw	A	0.33	0.43	0.41
Min. back pressure	Pa	0	0	0
Min. back pressure	in. wg	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	80	40	60
Starting current	A	0.95	0.88	

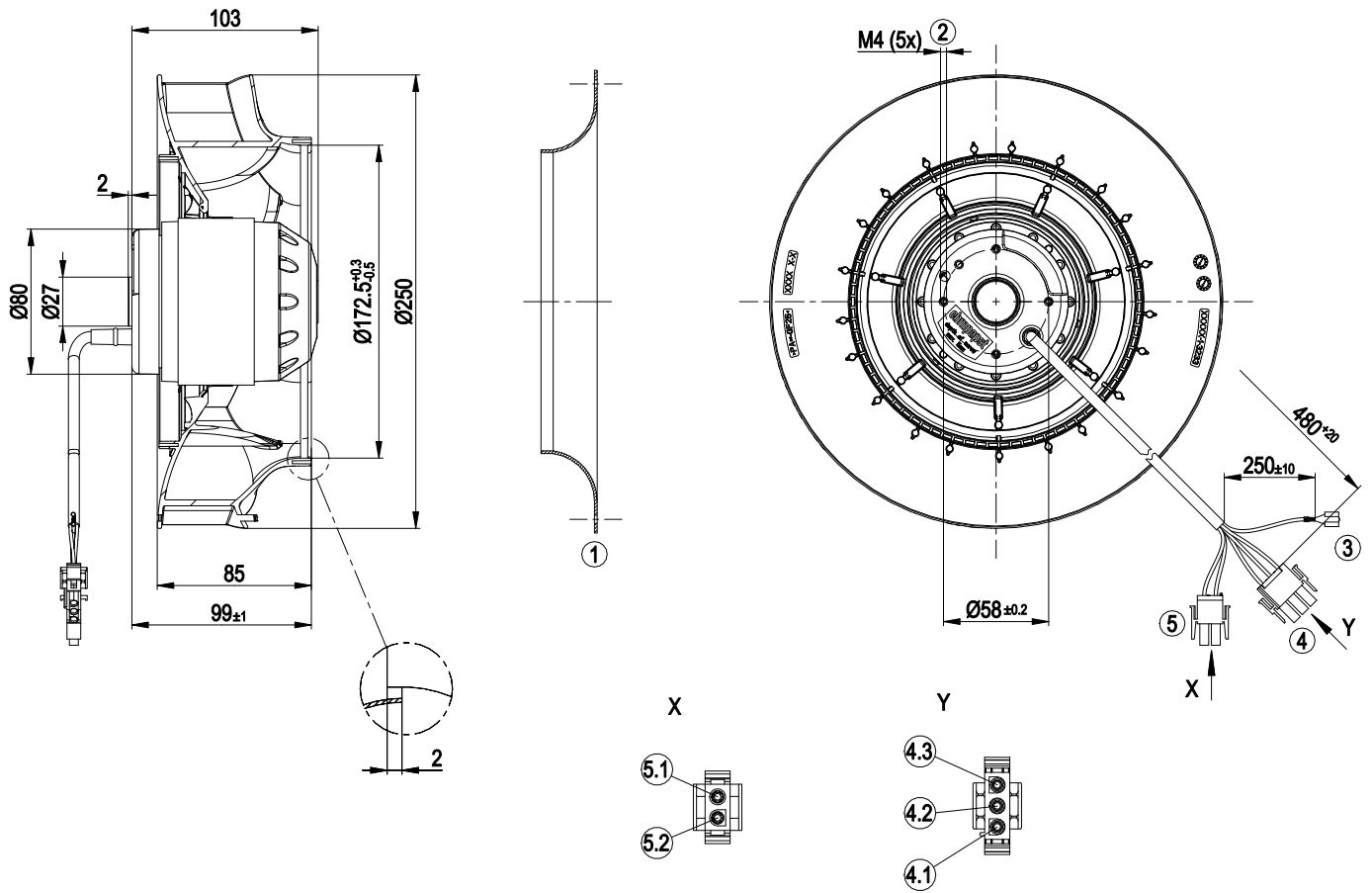
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

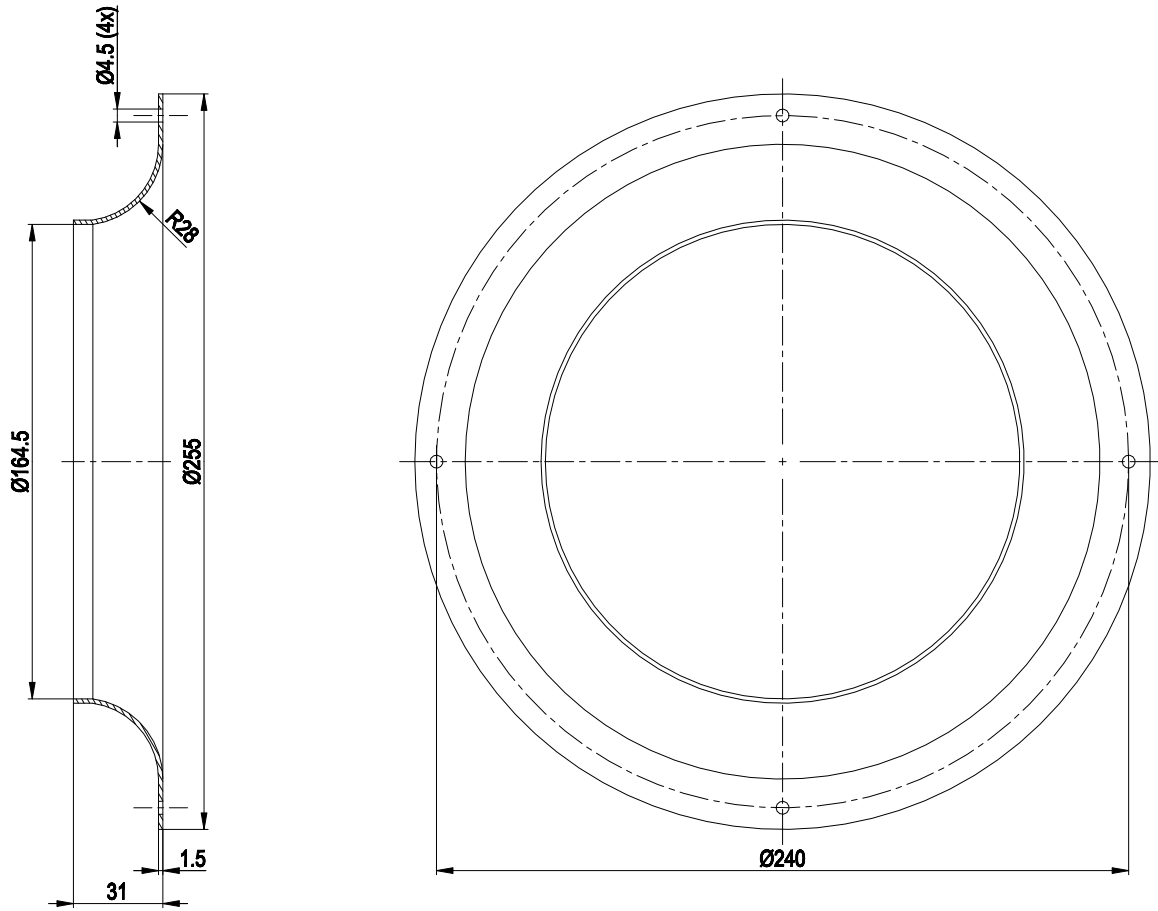
Weight	2.818 kg
Size	250 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1+
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 bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Comment on CE	Commissioning not permitted in the European Economic Area
Approval	CCC; CSA C22.2 No. 100; UL 1004-1

Product drawing



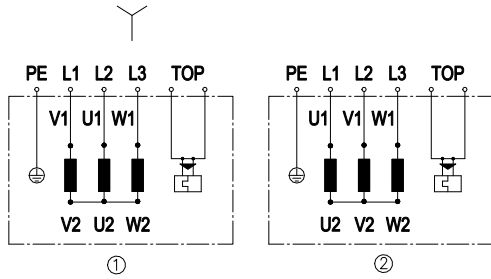
1	Accessory part: Inlet ring 96359-2-4013, not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PFA 6G AWG20, 5x plug pin AMP 926885-1 and 1x flat push-on receptacle 6.3x0.8 crimped
4	3-pole connector housing tyco 2178473-3
4.1	L3 (brown)
4.2	L2 (blue)
4.3	L1 (black)
5	2-pole connector housing tyco 1-1703061-3
5.1	TOP (gray)
5.2	TOP (gray)

Accessory part



Accessory part: inlet ring 96359-2-4013 not included in scope of delivery

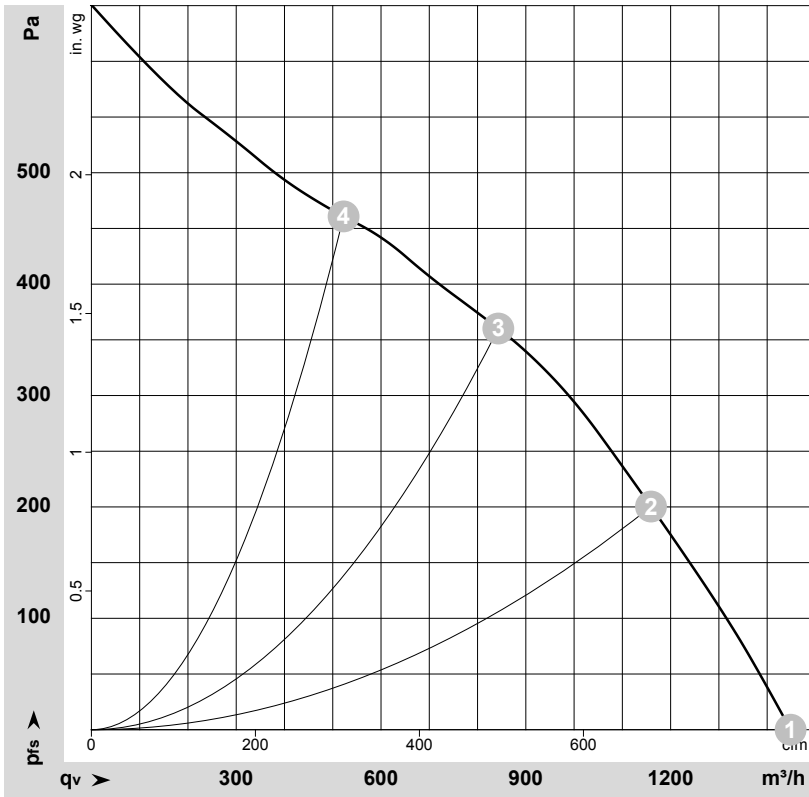
Connection diagram



Change of rotation direction by reversing two phases

	Three-phase motor
Y	Star connection
1	Counterclockwise 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 gray

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-132665-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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.

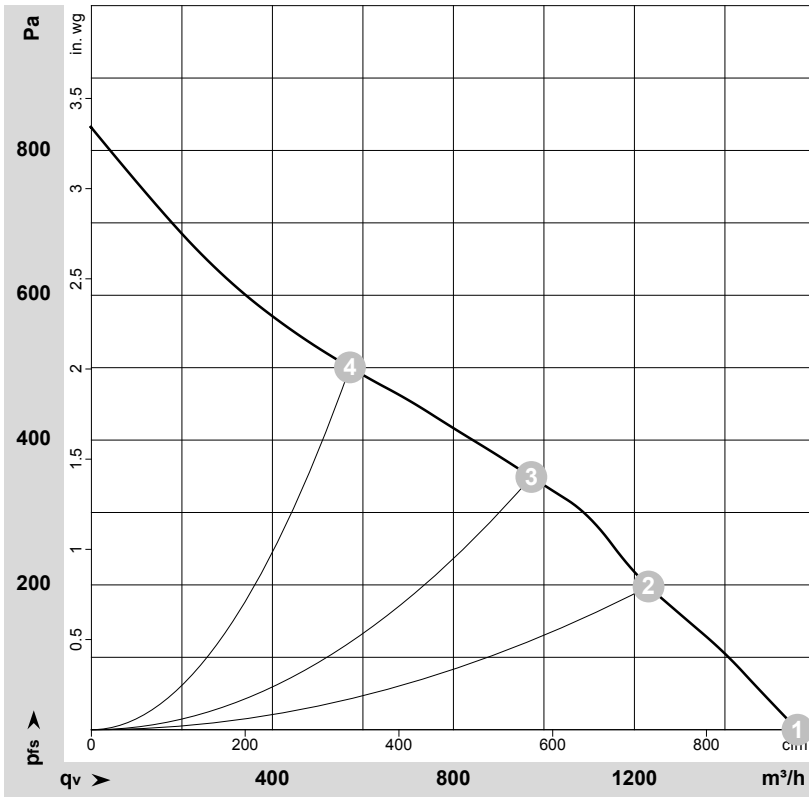
Measured values

	Wired	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	2625	159	0.27	68	76	1450	0	855	0.00
2	Y	400	50	2515	195	0.32	63	71	1160	200	680	0.80
3	Y	400	50	2500	200	0.33	60	67	845	360	495	1.45
4	Y	400	50	2550	177	0.30	65	72	520	460	305	1.85

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
 q_v = Air flow · P_{fs} = Pressure increase



Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-132667-1

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

	Wired	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	60	2825	230	0.36	70	78	1560	0	920	0.00
2	Y	400	60	2625	270	0.43	64	71	1230	200	725	0.80
3	Y	400	60	2600	270	0.43	60	68	970	350	570	1.41
4	Y	400	60	2680	254	0.40	65	72	570	500	335	2.01

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
 q_v = Air flow · P_{fs} = Pressure increase

