

AC centrifugal module

backward curved, single inlet

with housing

K2D250-RA32-10 ebmpapst Datasheet

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Nominal data

Type	K2D250-RA32-10			
Motor	M2D068-EC			
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	CE
Speed (rpm)	min ⁻¹	2450	2600	3000
Power input	W	190	260	310
Current draw	A	0.3	0.41	0.39
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	35	35
Starting current	A	0.82	0.82	0.92

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



Technical features

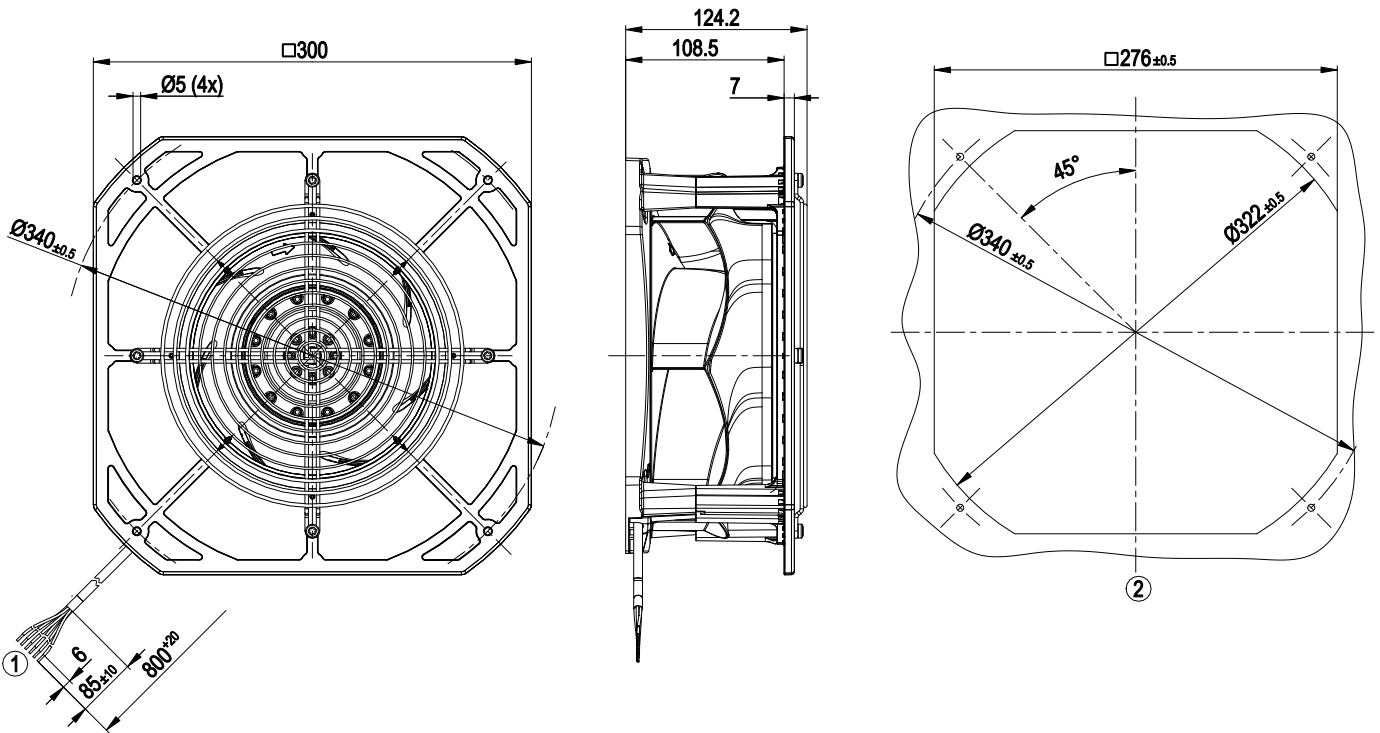
Mass	3.8 kg
Size	250 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Housing material	PA plastic
Material of guard grille	Steel, coated with grey plastic (RAL 9006)
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity (F)/environmental protection class (H)	F2-2
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	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 No.100; UL 1004-1

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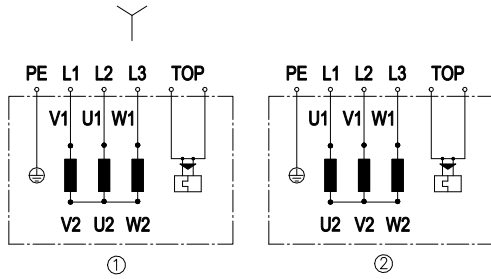
Product drawing



- | | |
|---|--|
| 1 | Connection line PFA AWG20 (green/yellow AWG18), 6x lead tips crimped |
| 2 | Mounting dimensions |



Connection screen



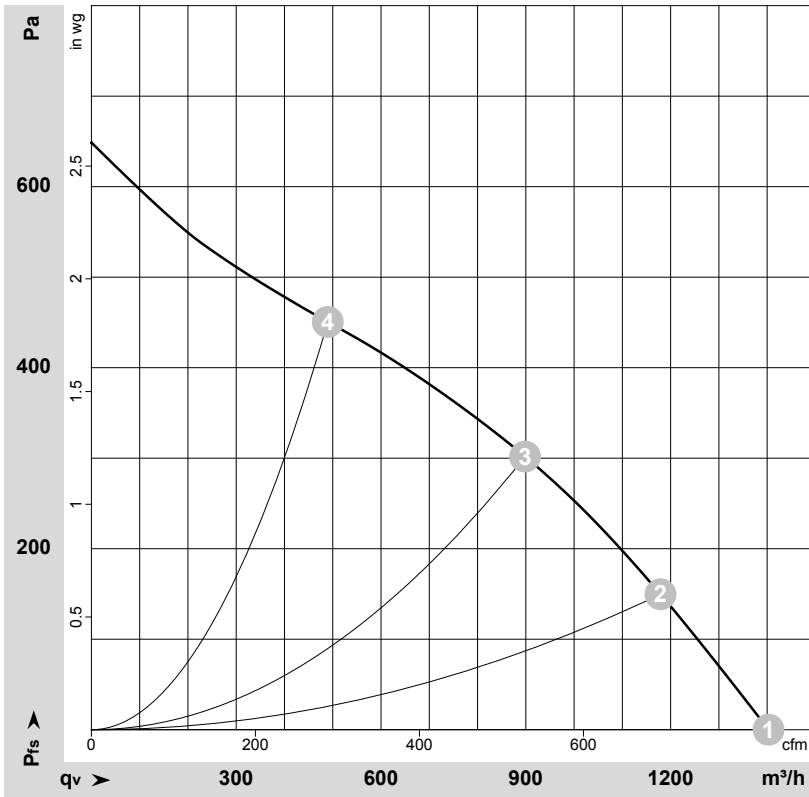
Change direction of rotation by reversing two phases

	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

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Charts: Air flow 50 Hz



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

Measurement: LU-169474-1

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: 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.

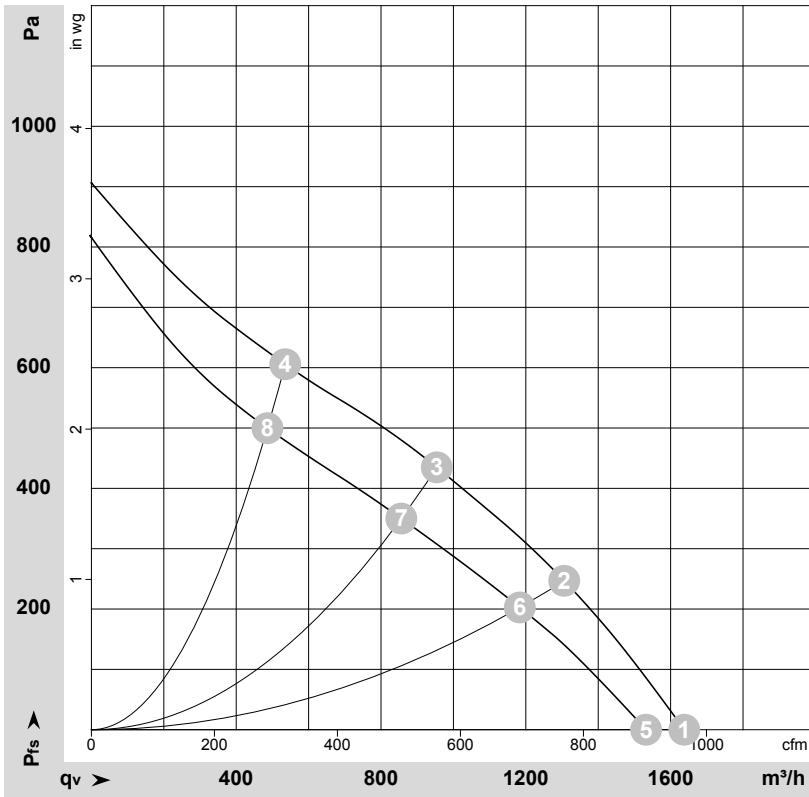
Measured values

	Conn.	U	f	n	P _e	I	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH2O
1	Y	400	50	2610	144	0.24	1405	0	825	0.00
2	Y	400	50	2515	171	0.28	1180	150	695	0.60
3	Y	400	50	2450	190	0.30	900	300	530	1.20
4	Y	400	50	2520	170	0.27	490	450	290	1.81

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · p_e = Pressure increase



Charts: Air flow 60 Hz



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

Measurement: LU-169361-1
Measurement: LU-169473-1

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

	Conn.	U	f	n	P _e	I	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH2O
1	Y	480	60	3040	237	0.32	1640	0	965	0.00
2	Y	480	60	2870	290	0.38	1305	247	770	0.99
3	Y	480	60	2800	310	0.39	955	435	560	1.75
4	Y	480	60	2895	275	0.36	535	606	315	2.43
5	Y	400	60	2850	213	0.33	1530	0	900	0.00
6	Y	400	60	2620	252	0.39	1185	200	695	0.80
7	Y	400	60	2600	260	0.41	855	350	505	1.41
8	Y	400	60	2650	239	0.36	485	500	285	2.01

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · P_{fs} = Pressure increase

