W2D200-HH04-12

AC axial compact fan

sickled blades (S series)

for railway applications

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Nominal data

Type	**W2D200-HH04-12**
Motor	**M2D068-BC**

Phase		3~	3~
Nominal voltage	VAC	400	400
Nominal voltage range	VAC	380 .. 440	380 .. 440
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed (rpm)	min^{-1}	2500	2650
Power input	W	52	62
Current draw	A	0.11	0.11
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	60
Starting current	A	0.23	0.22

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

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Technical features

Mass	2.1 kg
Size	200 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Die-cast aluminium
Number of blades	9
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity (F)/environmental protection class (H)	F3-2
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
Condensate discharge 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 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 61373, Cat. 1B: 2010
Approval	EAC

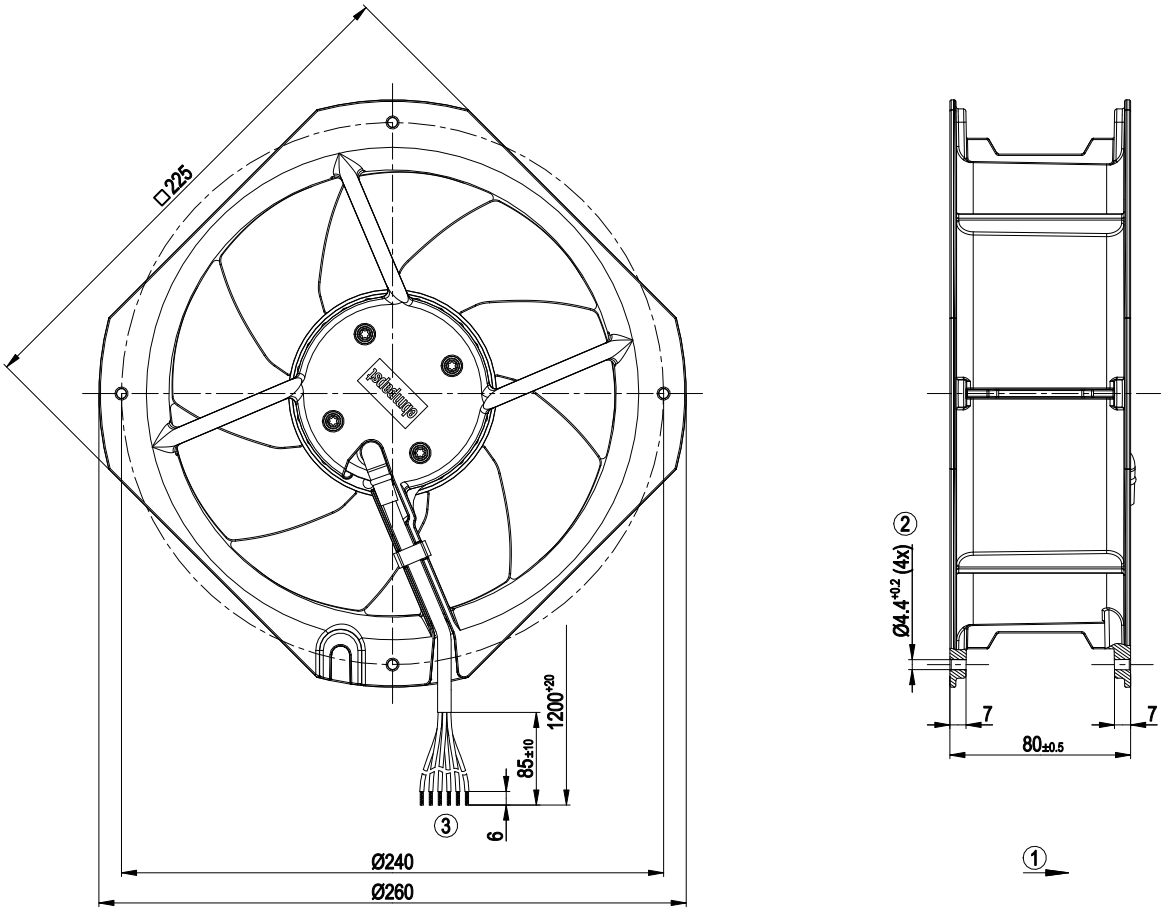
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Product drawing



1	Direction of air flow "V"
2	For self-tapping M5 screws
3	Connection line halogen-free, BETAtrans® 3 GKW flex, black 6G 0.5 mm², 6x lead tips crimped

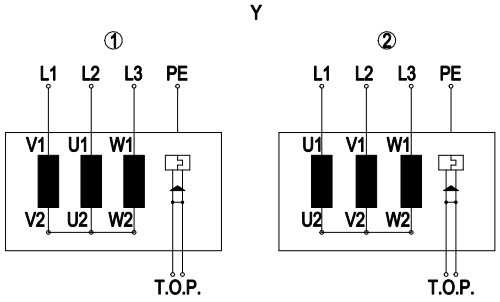
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Connection screen



Y	Star connection, three-phase motor
1	Counter-clockwise operation
L1	blue
L2	black
L3	brown
PE	green/yellow
TOP	grey
2	Clockwise operation
L1	black
L2	blue
L3	brown
PE	green/yellow
TOP	grey

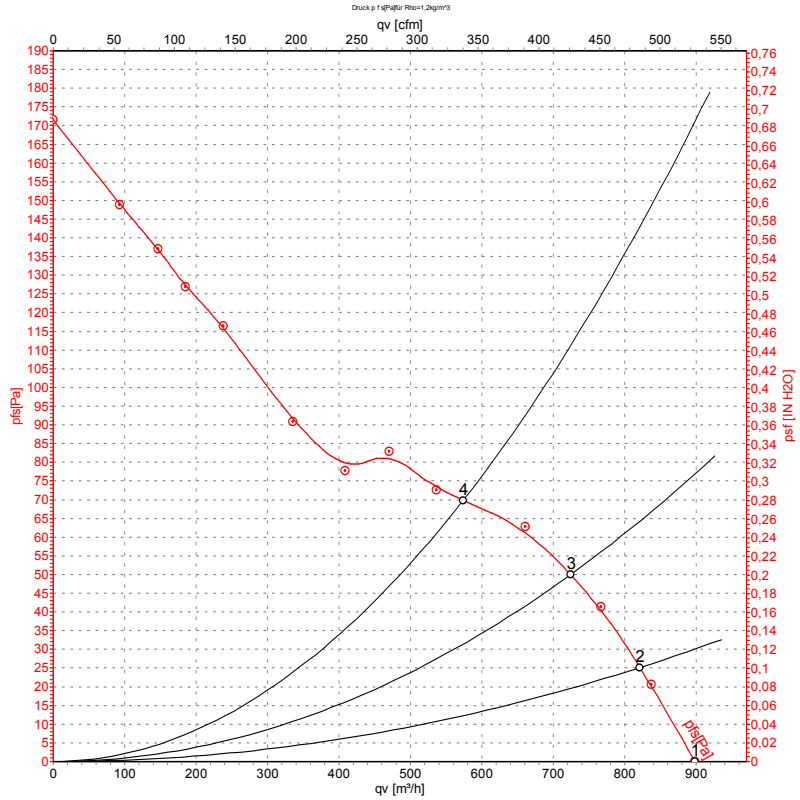
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Charts: Air flow 50 Hz



Measurement: LU-21426-1

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

	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	400	50	2500	52	0.11	900	0	530	0.00
2	400	50	2450	56	0.11	820	25	485	0.10
3	400	50	2400	58	0.11	725	50	425	0.20
4	400	50	2350	61	0.11	575	70	340	0.28

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

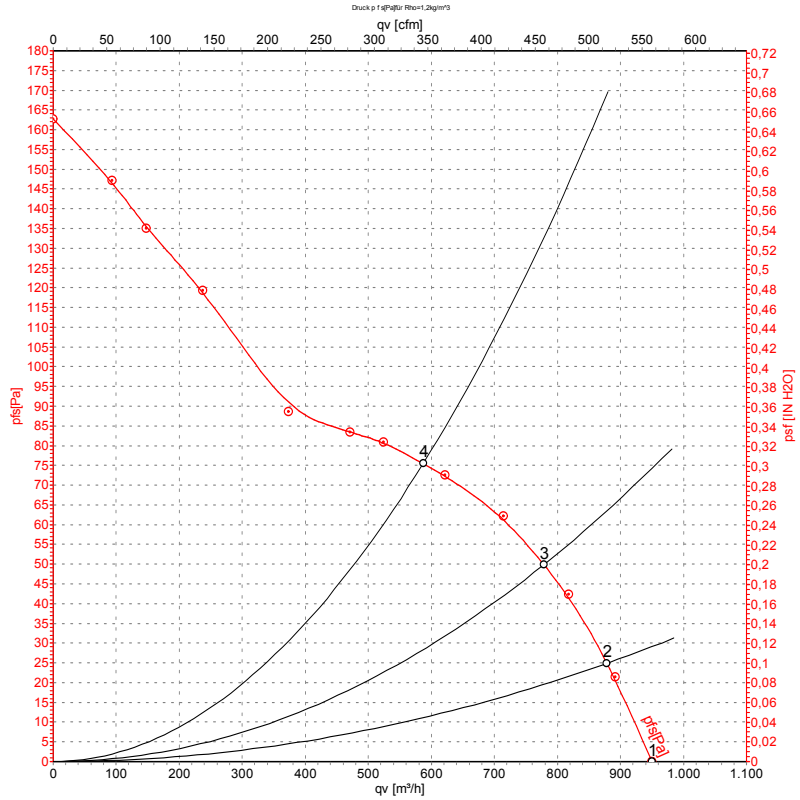
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Charts: Air flow 60 Hz



Measurement: LU-21427-1

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

	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	400	60	2650	62	0.11	950	0	560	0.00
2	400	60	2585	66	0.11	880	25	515	0.10
3	400	60	2505	70	0.11	780	50	460	0.20
4	400	60	2410	73	0.12	585	75	345	0.30

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

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