

AC axial fan

sickled blades (S series), single inlet

Wall ring with guard grille

W4D350-CN08-37 ebmpapst Datasheet

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Nominal data

Type	W4D350-CN08-37				
Motor	M4D074-DF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	265	400	460
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE
Speed	min ⁻¹	1370	1600	1370	1600
Power input	W	170	255	170	255
Current draw	A	0.64	0.73	0.37	0.42
Max. back pressure	Pa	90	110	90	110
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	65	55	65	55
Starting current	A	1.9	1.95	1.1	1.22

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

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

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

		Actual	Request 2015
Overall efficiency η_{es}	%	28.7	28.6
Efficiency grade N		40.1	40
Power input P_e	kW	0.16	
Air flow q_v	m ³ /h	2105	
Pressure increase p_{fs}	Pa	82	
Speed n	min ⁻¹	1375	

Data definition with optimum efficiency. LU-131044
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



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Technical features

Mass	6.26 kg
Size	350 mm
Surface of rotor	Coated in black
Material of terminal box	ABS plastic
Material of blades	PP plastic
Material of wall ring	Sheet steel, pre-galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F1-2
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; rotor on top on request
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
Electrical leads	Via terminal box
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

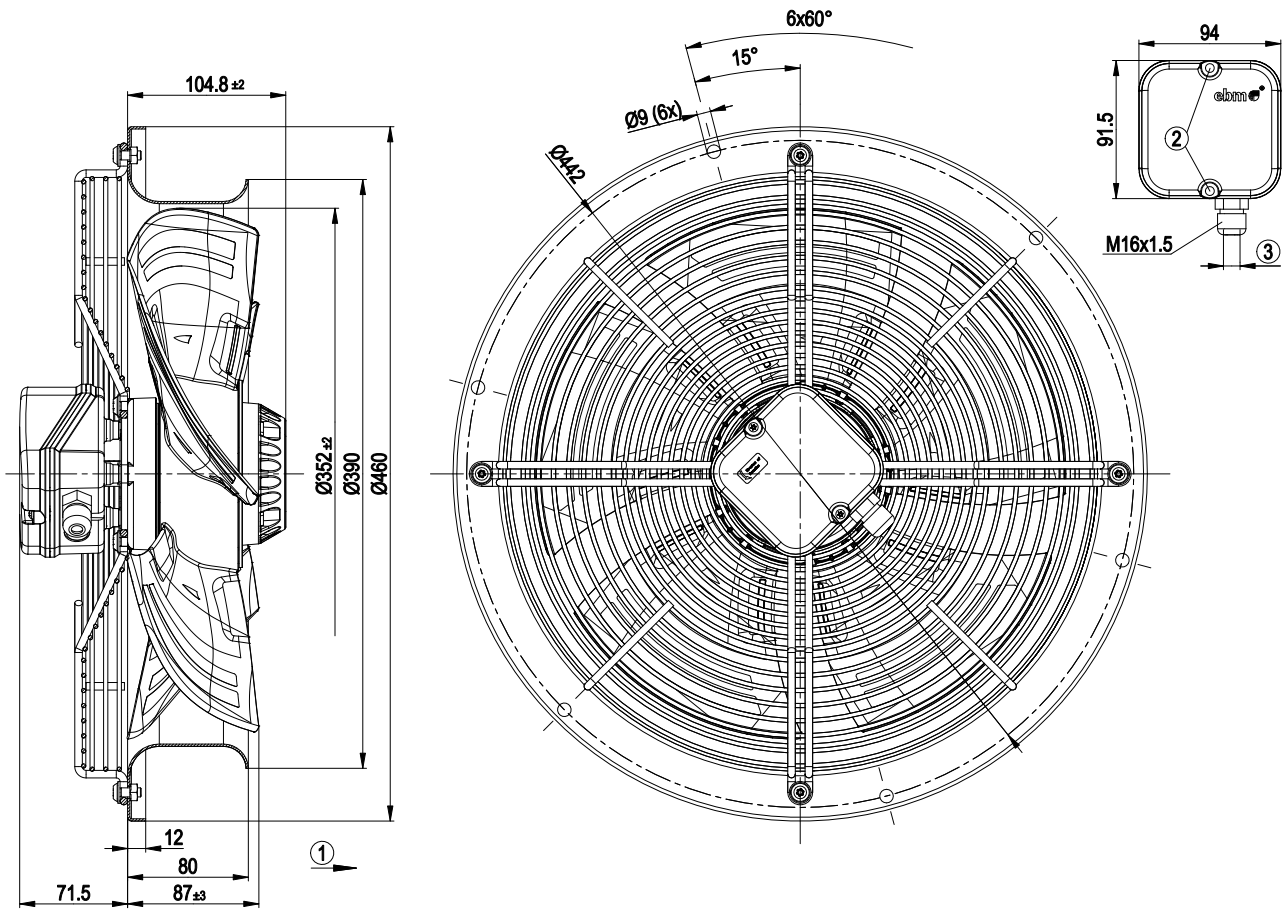


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Product drawing



1	Direction of air flow "A"
2	Tightening torque 0.5±0.1 Nm
3	Cable diameter: max. 7.5 mm, tightening torque 1.3±0.2 Nm

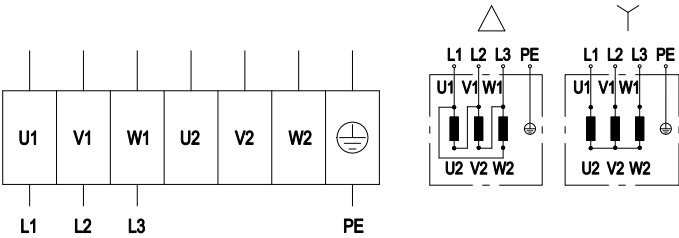


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Connection screen

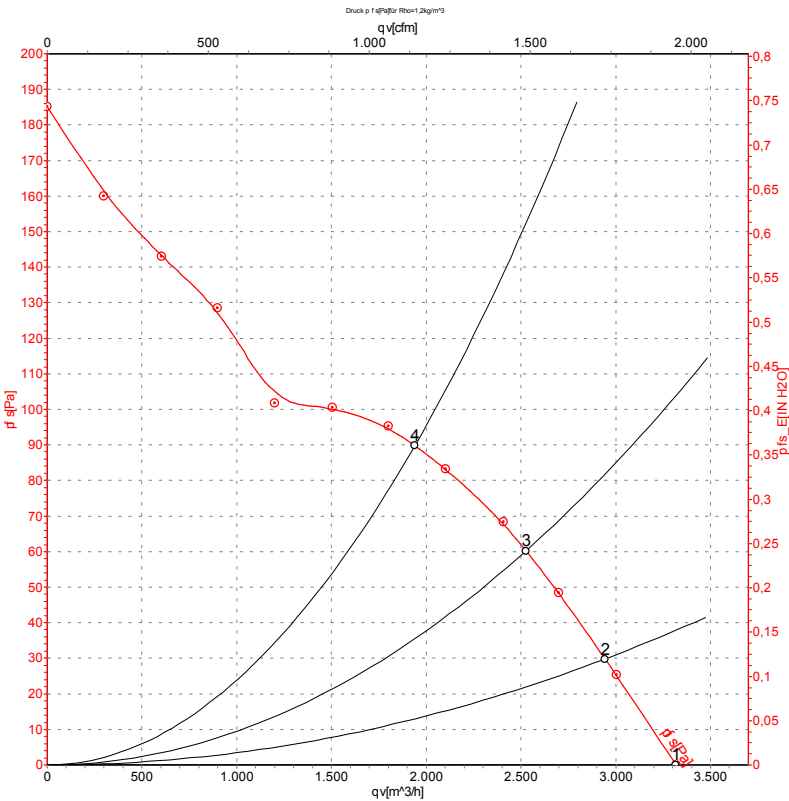


	Three-phase motor	Y	Star connection	Δ	Delta connection
L1	= U1 = blue	L2	= V1 = black	L3	= W1 = brown
U2	= white	V2	= green	W2	= yellow
PE	PE (green/yellow)				



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Charts: Air flow 50 Hz



Measurement: LU-131044

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	L _{pA_{in}}	L _{wA_{in}}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	Y	400	50	1400	140	0.36	61	69	3320	0
2	Y	400	50	1395	147	0.36	59	66	2945	30
3	Y	400	50	1380	157	0.36	56	64	2525	60
4	Y	400	50	1370	170	0.37	55	64	1940	90

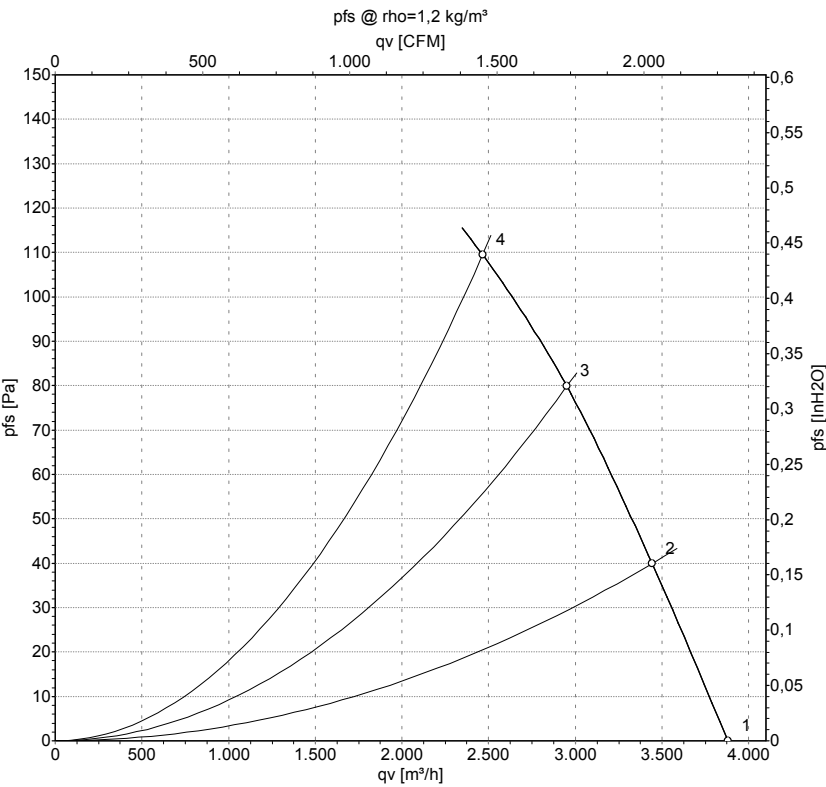
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · L_{pA_{in}} = Sound pressure level inlet side · L_{wA_{in}} = Sound power level inlet side
qv = Air flow · p_{fs} = Pressure increase



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Charts: Air flow 60 Hz Y



Measurement: LU-137385

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	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa
1	Y	460	60	1655	199	0.37	3880	0
2	Y	460	60	1635	218	0.39	3445	40
3	Y	460	60	1615	237	0.40	2950	80
4	Y	460	60	1600	255	0.42	2465	110

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

