

W4D350-CN08-38 ebmpapst Datasheet

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Nominal data

Type	W4D350-CN08-38		
Motor	M4D074-DF		
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	min ⁻¹	1370	1520
Power input	W	170	230
Current draw	A	0.37	0.40
Max. back pressure	Pa	90	90
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	50
Starting current	A	1.1	1.1

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 2013	Request 2015
Overall efficiency η_{es}	%	28.7	24.6	28.6
Efficiency grade N		40.1	36	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.



Technical features

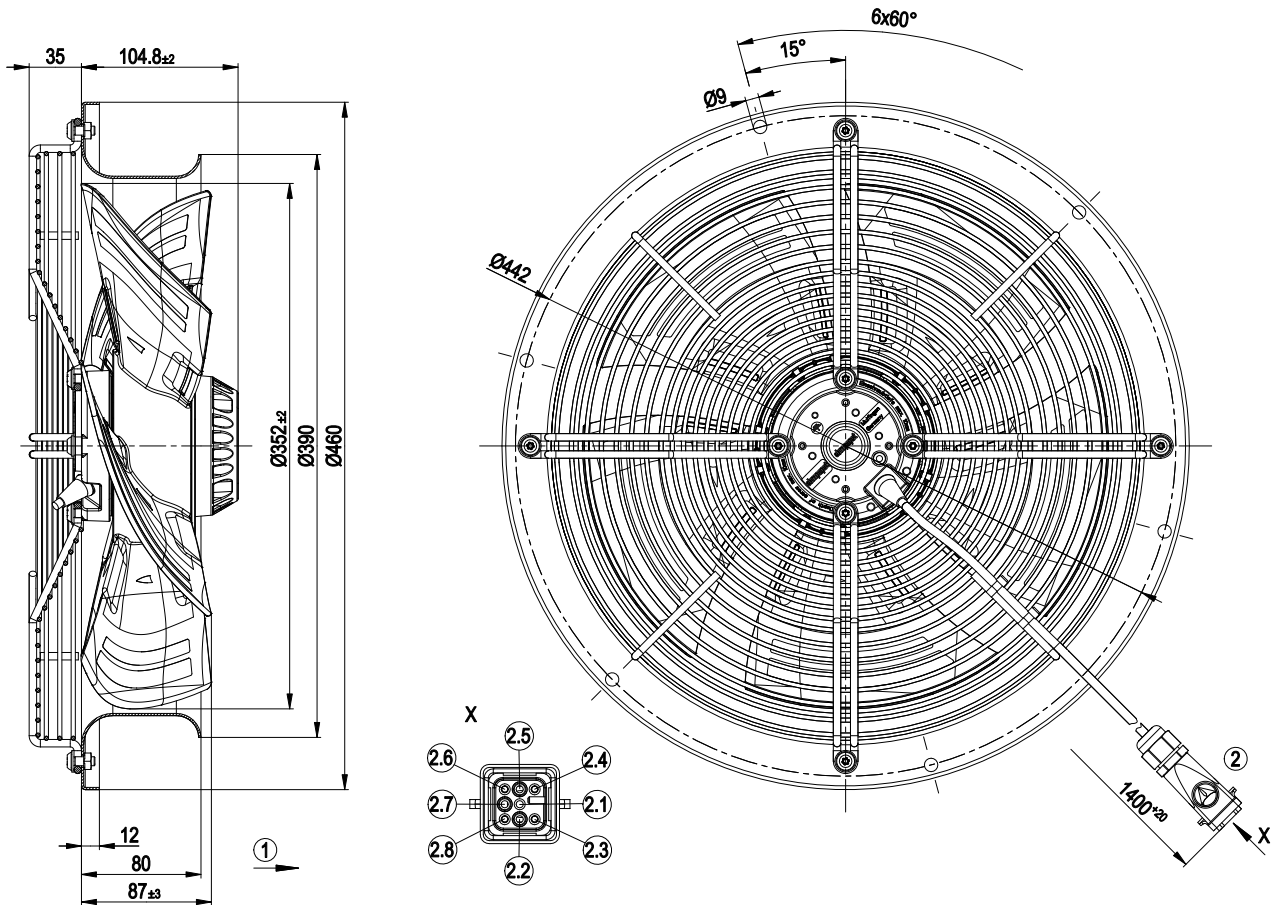
Mass	6.2 kg
Size	350 mm
Surface of rotor	Coated in black
Material of blades	PP plastic
Material of wall ring	Sheet steel, pre-galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F2-2
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
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1
Approval	CSA C22.2 Nr.100; UL 1004-1

AC axial fan - HyBlade®

sickled blades (S series)

Wall ring with guard grille

Product drawing



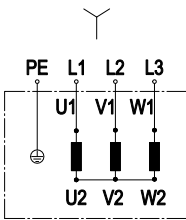
1	Direction of air flow "A"
2	Connection line silicone 4G 0.5mm ² , with connector shell Amphenol C14610A0070002 F and 4x plug pin Amphenol TN01-016-0002-1 crimped
2.1	Not assigned
2.2	Not assigned
2.3	black (U1)
2.4	blue (V1)
2.5	Not assigned
2.6	brown (W1)
2.7	Not assigned
2.8	green/yellow (PE)

AC axial fan - HyBlade®

sickled blades (S series)

Wall ring with guard grille

Connection screen



Change direction of rotation by reversing two phases

	Three-phase motor	Y	Star connection	L1	black
L2	blue	L3	brown	PE	green/yellow

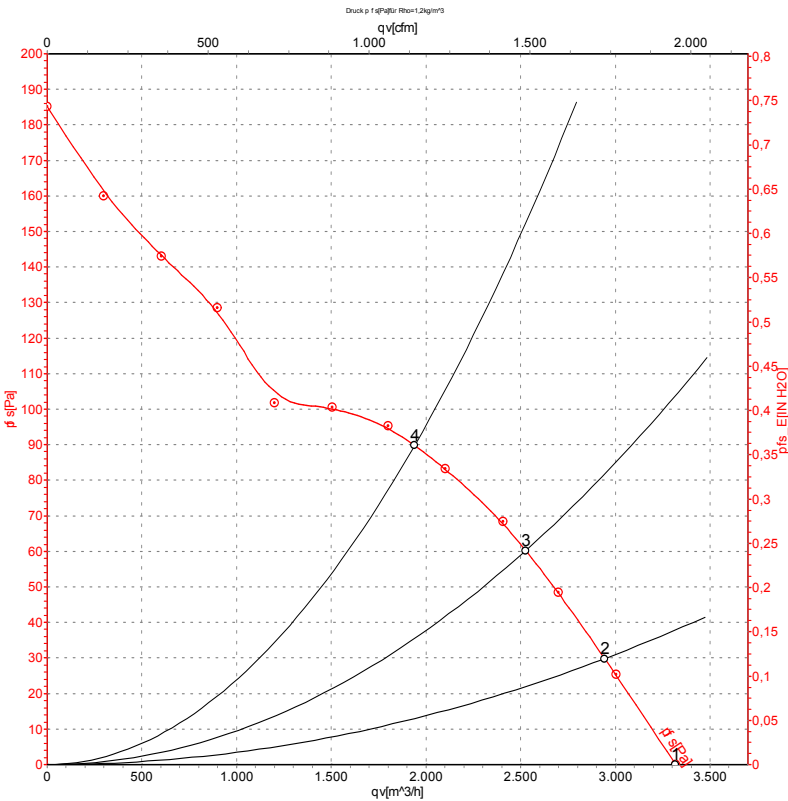


AC axial fan - HyBlade®

sickled blades (S series)

Wall ring with guard grille

Charts: Air flow 50 Hz



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.

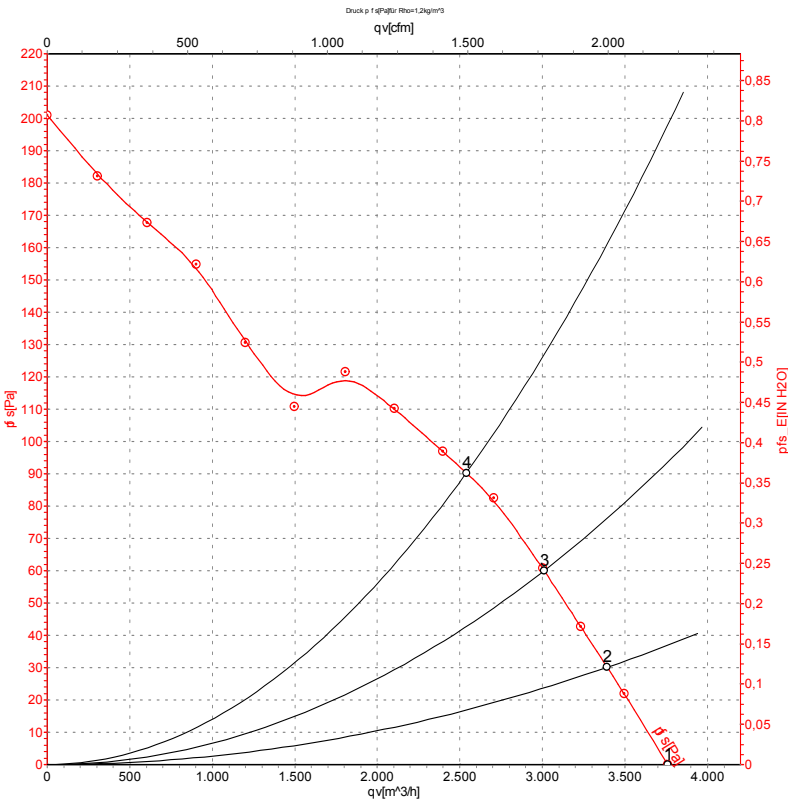
Measured values

	Conn.	U	f	n	P _e	I	LpA _{in}	LwA _{in}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /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 · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
qv = Air flow · p_{fs} = Pressure increase



Charts: Air flow 60 Hz



Air performance measured as per ISO 5801
Installation category A. For detailed
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levels: L_{wA} measured as per ISO 13347 /
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Measured values

	Conn.	U	f	n	P _e	I	LpA _{in}	LwA _{in}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa
1	Y	400	60	1600	185	0.36	64	72	3760	0
2	Y	400	60	1575	200	0.36	62	69	3390	30
3	Y	400	60	1550	214	0.37	60	67	3010	60
4	Y	400	60	1520	230	0.40	58	66	2540	90

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

