

W6D910-DB01-02 ebmpapst Datasheet

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Nominal data

Type	W6D910-DB01-02				
Motor	M6D138-NA				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	400	400	480	480
Connection		Δ	Y	Δ	Y
Frequency	Hz	50	50	60	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE
Speed	min ⁻¹	920	760	1100	900
Power input	W	2020	1390	2770	1960
Current draw	A	4.62	2.6	5.03	3.05
Max. back pressure	Pa	160	105	120	80
Max. ambient temperature	°C	60	60	45	45
Starting current	A	18.6	6.2	20	6

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

		Actual	Request 2013	Request 2015
Installation category	A			
Efficiency category	Static			
Variable speed drive	No			
Specific ratio*	1.00			
Overall efficiency η_{es}		38.4	31.5	35.5
Efficiency grade N		42.9	36	40
Power input P_e	kW	1.96		
Air flow q_v	m³/h	18720		
Pressure increase p_{fs}	Pa	145		
Speed n	min ⁻¹	925		

Data established at point of optimum efficiency

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

Technical features

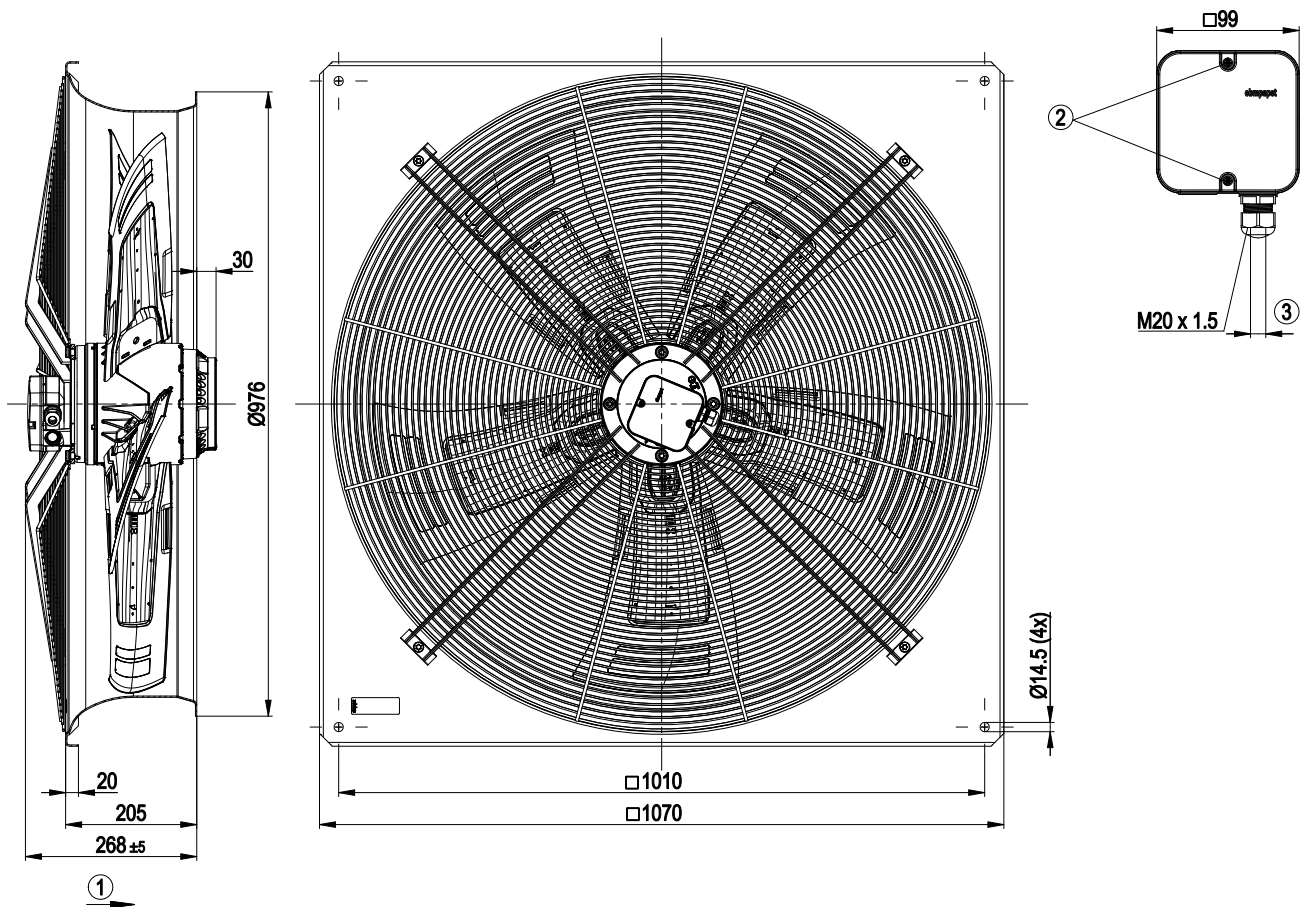
Mass	52.4 kg
Size	910 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Material of wall ring	Sheet steel, pre-galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Blade angle	-5°
Direction of air flow	"A"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	On rotor and stator sides
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034; EN 61800-5-1; CE
Approval	VDE

AC axial fan - HyBlade®

sickled blades (S series)

Wall ring with guard grille

Product drawing

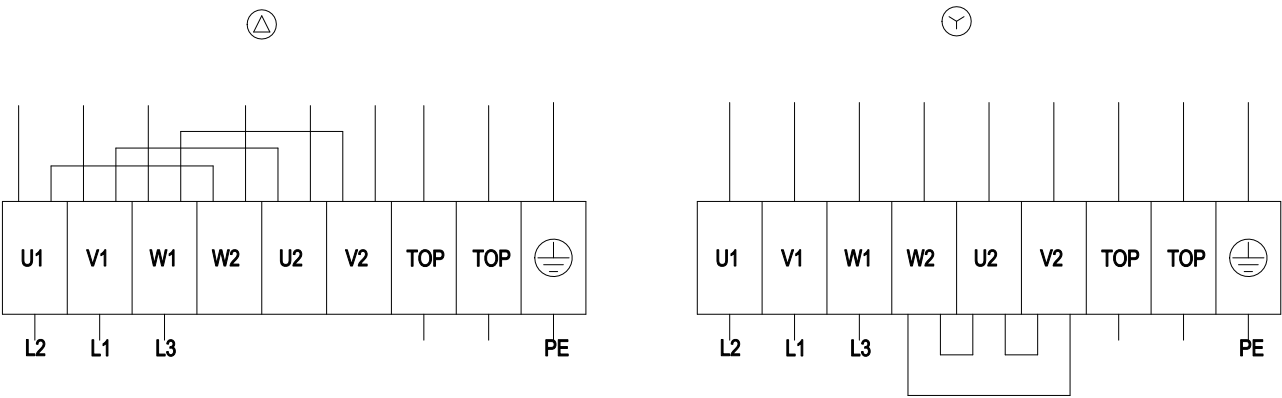


1	Direction of air flow "A"
2	Tightening torque 1.5±0.2 Nm
3	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.3 Nm

AC axial fan - HyBlade®

sickled blades (S series)
Wall ring with guard grille

Connection screen



Δ	Delta connection	Y	Star connection	L1	= V1 = blue
L2	= U1 = black	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				

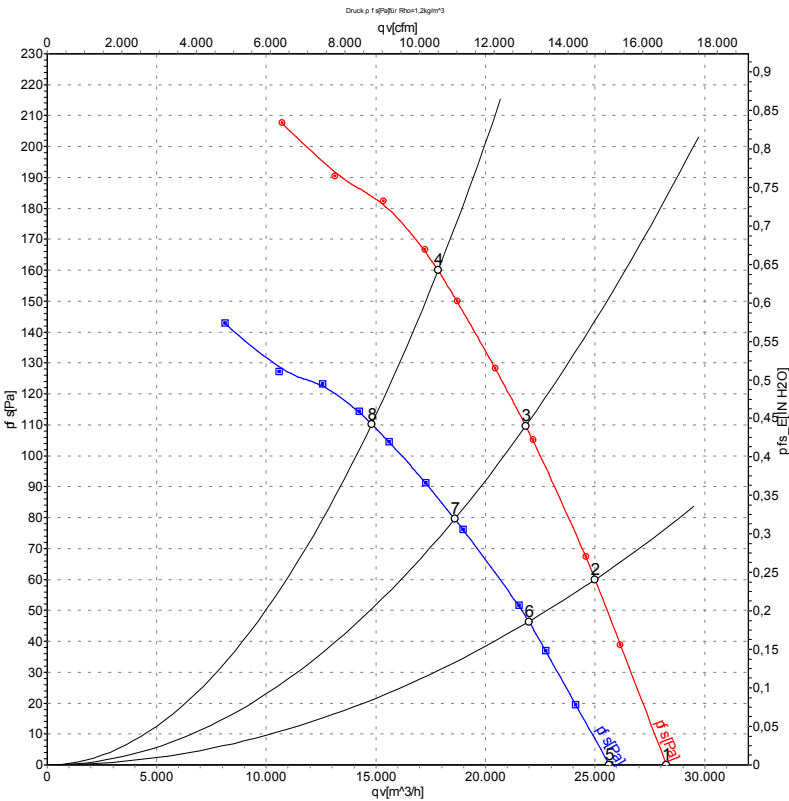


AC axial fan - HyBlade®

sickled blades (S series)

Wall ring with guard grille

Charts: Air flow 50 Hz



Measurement: LU-117505
Measurement: LU-119168

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.

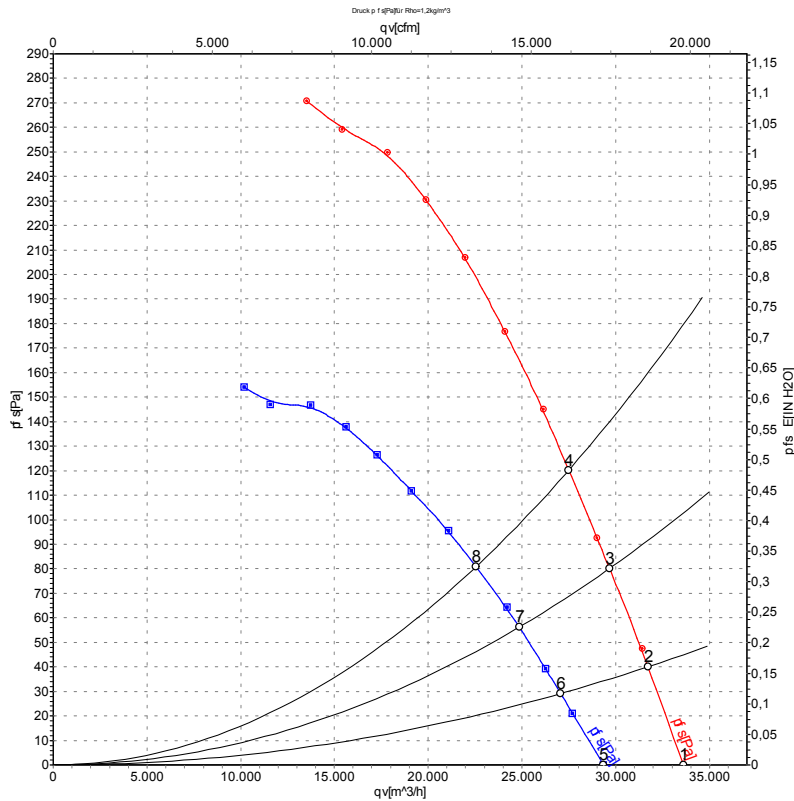
Measured values

	Conn.	U	f	n	P _e	I	LpA _{in}	LwA _{in}	LwA _{out}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa
1	Δ	400	50	955	1288	3.97	72	79	79	28260	0
2	Δ	400	50	940	1577	4.18	69	77	76	25000	60
3	Δ	400	50	930	1800	4.40	69	76	76	21830	110
4	Δ	400	50	920	2020	4.62	72	79	78	17840	160
5	Y	400	50	865	1000	1.88	69	76	76	25660	0
6	Y	400	50	825	1186	2.18	66	73	73	21980	46
7	Y	400	50	795	1305	2.40	65	72	72	18600	80
8	Y	400	50	760	1390	2.60	66	74	73	14810	110

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
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase



Charts: Air flow 60 Hz



Measurement: LU-117508
Measurement: LU-118399

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
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standard set-up, the specific values have to
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Measured values

	Conn.	U	f	n	P _e	I	LpA _{in}	LwA _{in}	LwA _{out}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa
1	Δ	480	60	1130	2114	4.34	76	84	83	33610	0
2	Δ	480	60	1120	2334	4.59	75	82	82	31720	40
3	Δ	480	60	1115	2541	4.80	74	81	81	29670	80
4	Δ	480	60	1100	2770	5.03	74	81	81	27500	120
5	Y	480	60	995	1586	2.45	73	80	80	29350	0
6	Y	480	60	965	1738	2.68	70	78	78	27060	29
7	Y	480	60	935	1856	2.87	69	76	76	24860	56
8	Y	480	60	900	1960	3.05	68	75	75	22550	81

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