

A4D710-AF01-01

# AC axial fan - HyBlade®

sickled blades (S series), single inlet



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## Nominal data

<b>Type</b>	A4D710-AF01-01		
<b>Motor</b>	M4D138-LA		
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Δ	Y
Frequency	Hz	50	50
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1350	1095
Power input	W	2380	1660
Current draw	A	4.5	2.76
Max. back pressure	Pa	250	160
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	60
Starting current	A	19	

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 =  $1 + p_s / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	36.7	32	36
Efficiency grade N	40.7	36	40
Power input $P_e$	kW	2.34	
Air flow $q_v$	m <sup>3</sup> /h	13480	
Pressure increase $p_{fs}$	Pa	231	
Speed n	min <sup>-1</sup>	1355	

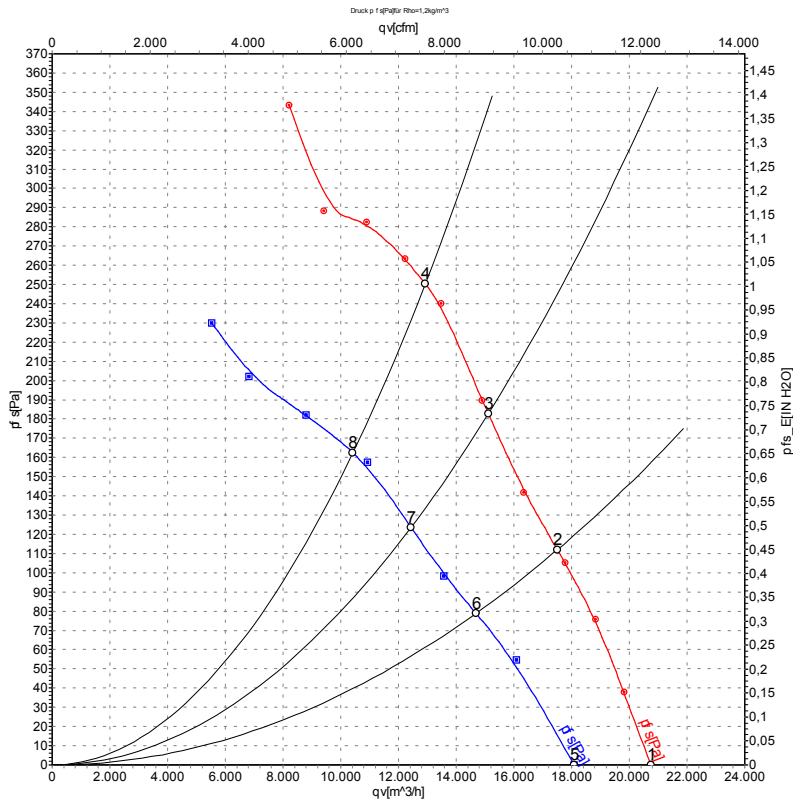
Data established at point of optimum efficiency



## Technical features

Mass	24.1 kg
Size	710 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Number of blades	5
Blade angle	-10°
Direction of air flow	"V"
Direction of rotation	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

## Charts: Air flow 50 Hz



Measurement: LU-122073  
Measurement: LU-122081

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 <sub>e</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	LwA <sub>out</sub>	qv	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	Δ	400	50	1415	1570	3.45	73	80	80	20740	0
2	Δ	400	50	1380	1995	3.92	75	81	81	17510	110
3	Δ	400	50	1365	2227	4.24	77	83	83	15110	180
4	Δ	400	50	1350	2380	4.50	79	86	86	12930	250
5	Y	400	50	1240	1230	2.09	70	77	77	18090	0
6	Y	400	50	1165	1474	2.50	69	76	76	14690	79
7	Y	400	50	1125	1590	2.71	71	78	77	12430	124
8	Y	400	50	1095	1660	2.76	74	81	80	10420	160

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · LwA<sub>out</sub> = Sound power level outlet side · qv = Air flow · p<sub>fs</sub> = Pressure increase

