

A6D630-AN09-06 ebmpapst Datasheet

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Nominal data

Type	A6D630-AN09-06						
Motor	M6D110-GF						
Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	277	400	400	480
Wiring		Δ	Δ	Δ	Y	Y	Y
Frequency	Hz	50	60	60	50	60	60
Method of obtaining data		ml	ml	ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE	CE	CE
Speed (rpm)	min ⁻¹	890	1005	1065	890	1005	1065
Power consumption	W	640	790	890	640	790	890
Current draw	A	2.51	2.65	2.77	1.45	1.53	1.6
Max. back pressure	Pa	110	70	80	110	70	80
Max. back pressure	inH ₂ O	0.44	0.28	0.32	0.44	0.28	0.32
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	60	40	40	60	40	40
Starting current	A	7.2	6.45		4.3	3.9	

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to ErP Directive

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	32.4	32.4	09 Power consumption P_e	kW	0.62
02 Measurement category		A		09 Air flow q_v	m ³ /h	7310
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	98
04 Efficiency grade N		40	40	10 Speed (rpm) n	min ⁻¹	900
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-110377



AC axial fan - HyBlade

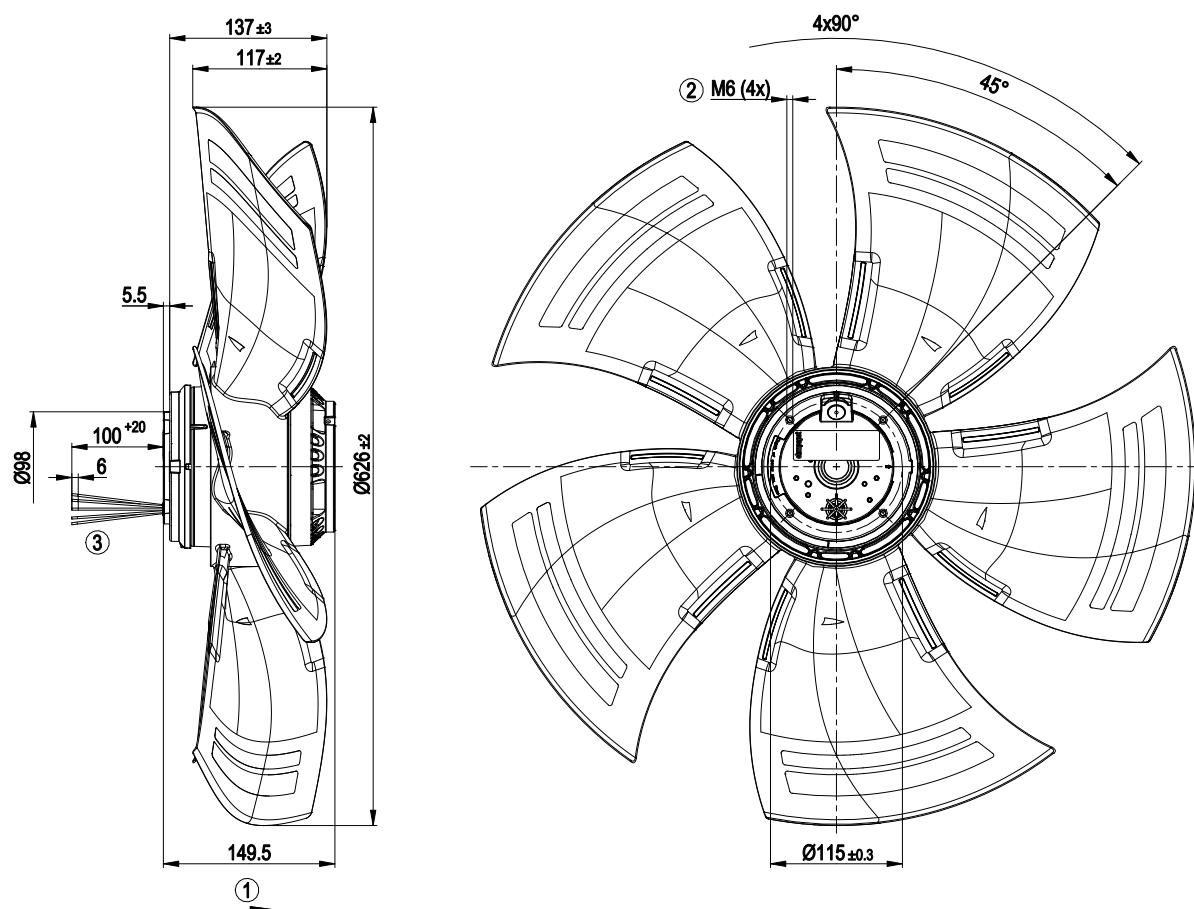
sickle-shaped blades (S series)

Technical description

Weight	9.8 kg
Fan size	630 mm
Rotor surface	Painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F4-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; CE
Approval	VDE



Product drawing

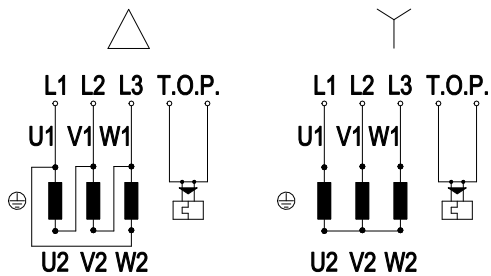


1	Direction of air flow "A"
2	Max. clearance for screw 12 mm
3	Cable PFA AWG20; 9x crimped splices

AC axial fan - HyBlade

sickle-shaped blades (S series)

Connection diagram



Note: Change of rotation direction by reversing two phases

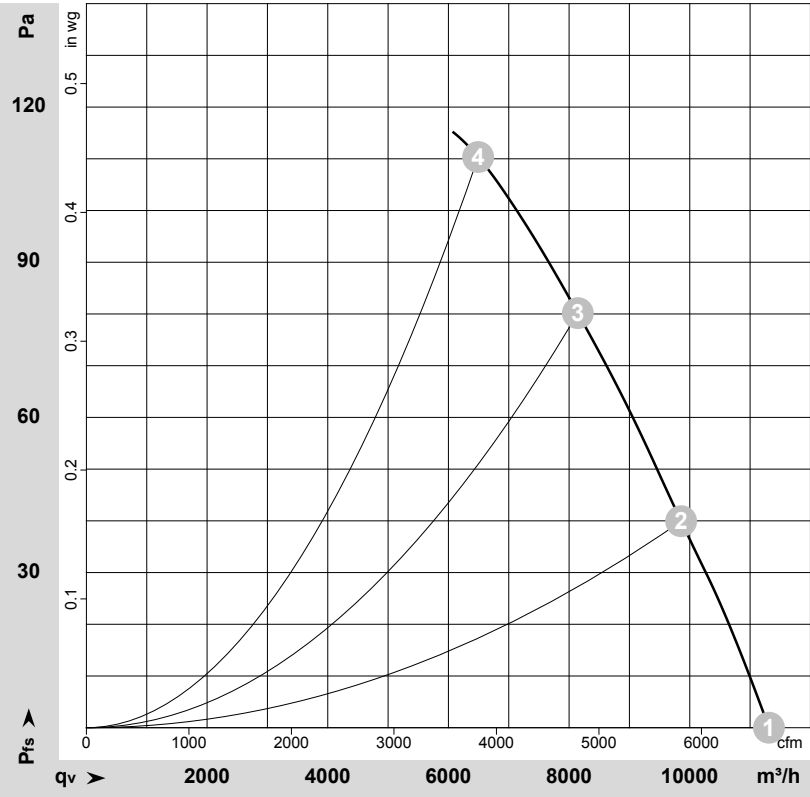
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	gray



AC axial fan - HyBlade

sickle-shaped blades (S series)

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-110377-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

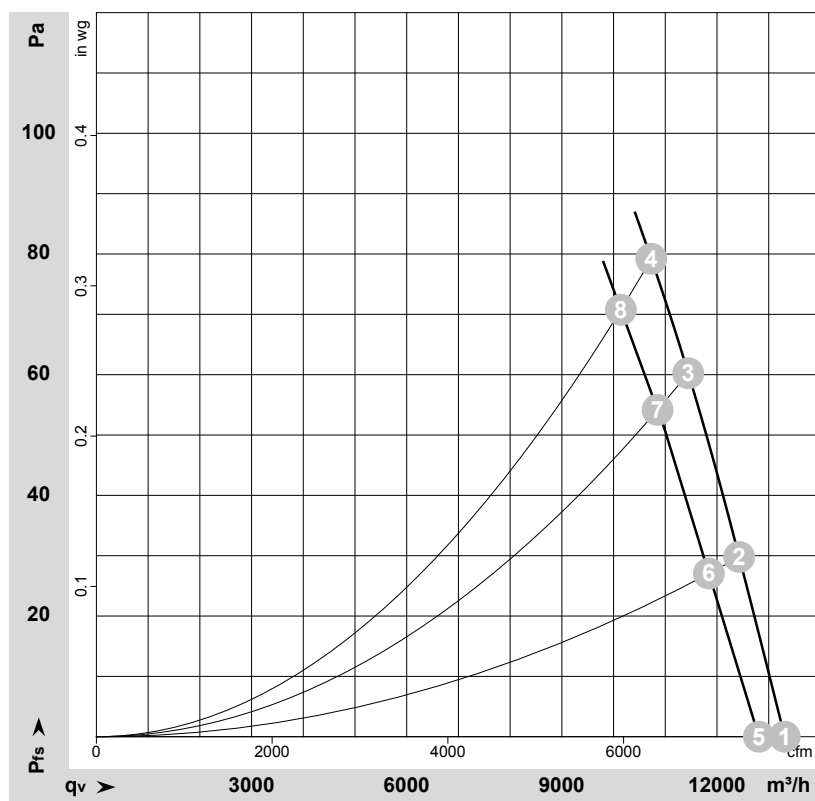
Measured values

	Wired	U	f	n	P _e	I	LpA _{in}	LwA _{in}	LwA _{out}	qv	p _{fs}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m ³ /h	Pa	CFM	inH ₂ O
1	Y	400	50	935	447	1.24	64	69	69	11315	0	6660	0.00
2	Y	400	50	915	528	1.27	60	66	65	9855	40	5800	0.16
3	Y	400	50	905	598	1.36	59	65	65	8145	80	4795	0.32
4	Y	400	50	890	640	1.45	61	68	68	6495	110	3820	0.44

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase



Curves: Air performance 60 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-110384-1
Measurement: LU-111442-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P _e	I	LpA _{in}	LwA _{in}	LwA _{out}	qv	p _{fs}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa	CFM	inH ₂ O
1	Y	480	60	1105	706	1.35	67	73	73	13310	0	7835	0.00
2	Y	480	60	1090	773	1.42	65	71	71	12430	30	7315	0.12
3	Y	480	60	1080	840	1.48	63	69	69	11445	60	6735	0.24
4	Y	480	60	1065	890	1.60	62	69	68	10730	80	6315	0.32
5	Y	400	60	1065	638	1.24	66	72	72	12810	0	7540	0.00
6	Y	400	60	1040	701	1.32	64	70	70	11845	27	6970	0.11
7	Y	400	60	1020	763	1.41	61	68	68	10850	54	6385	0.22
8	Y	400	60	1005	790	1.53	61	68	67	10140	70	5970	0.28

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

