A6D630-AN01-07

AC axial fan

sickled blades (S series)

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A6D630-AN01-07**
Motor	**M6D110-GF**

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}	890	690	1070	820
Power input	W	600	400	810	550
Current draw	A	1.2	0.68	1.35	0.8
Max. back pressure	Pa	105	56	55	35
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	65	65	55	55
Starting current	A	4	1.33		

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 2015
01 Overall efficiency η_{es}	%	32.3	32.3
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40	40
05 Variable speed drive		No	

09 Power input P_e	kW	0.61
09 Air flow q_v	m^3/h	7050
09 Pressure increase p_{fs}	Pa	101
10 Speed n	min^{-1}	885
11 Specific ratio*		1.00

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

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-105365

ebmpapst

AC axial fan

sickled blades (S series)

Technical features

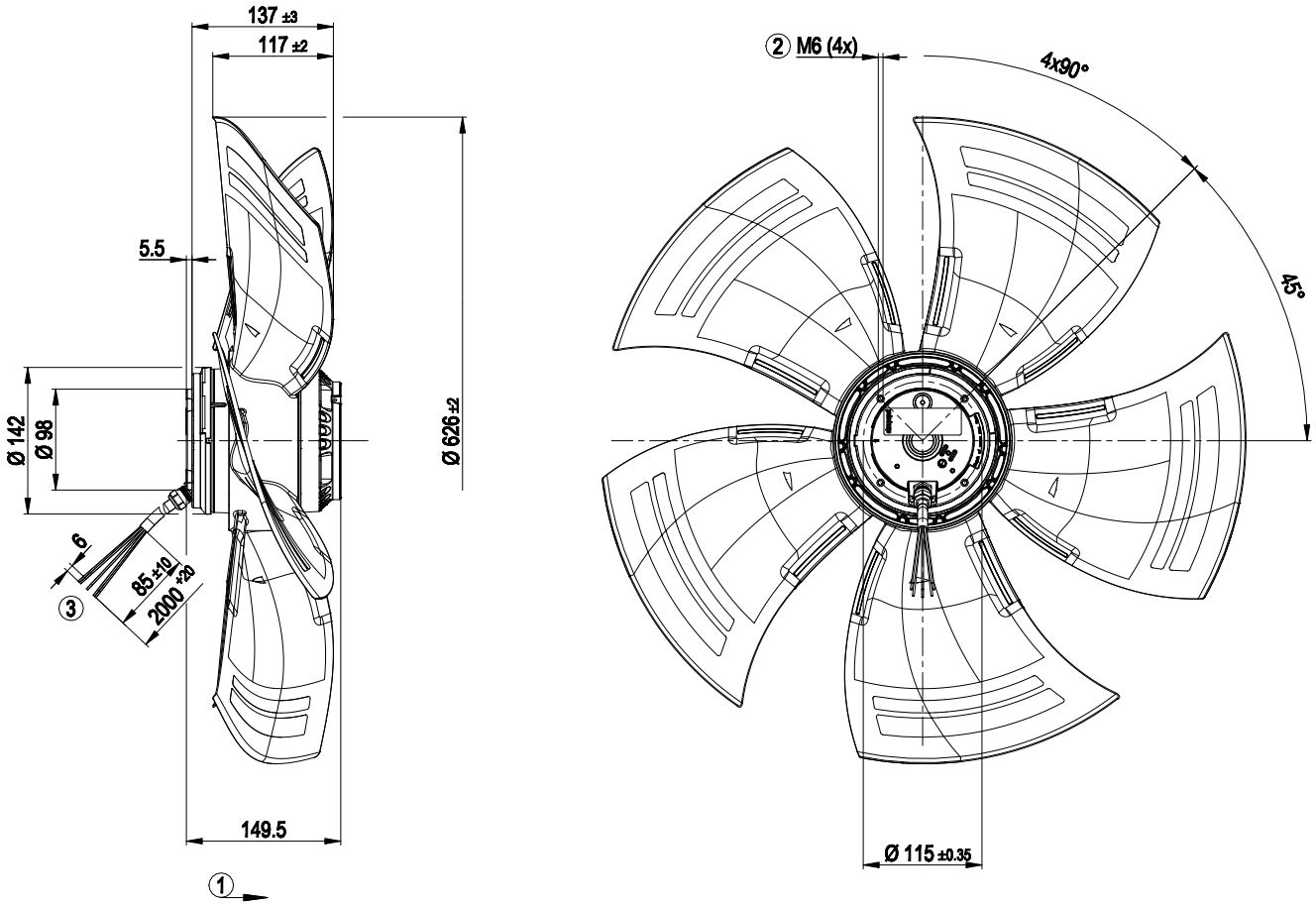
Mass	10 kg
Size	630 mm
Surface of rotor	Coated in black
Material of terminal box	PP plastic
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F4-1
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)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	VDE

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

sickled blades (S series)

Product drawing



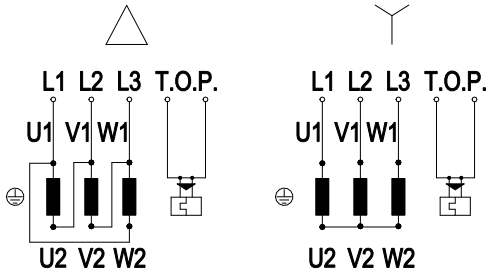
1	Direction of air flow "A"
2	Depth of screw max. 12 mm
3	Connection line silicone 9G 0.75mm², 9x brass lead tips crimped

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

sickled blades (S series)

Connection screen



Note: Direction of rotation changes when two phases are reversed

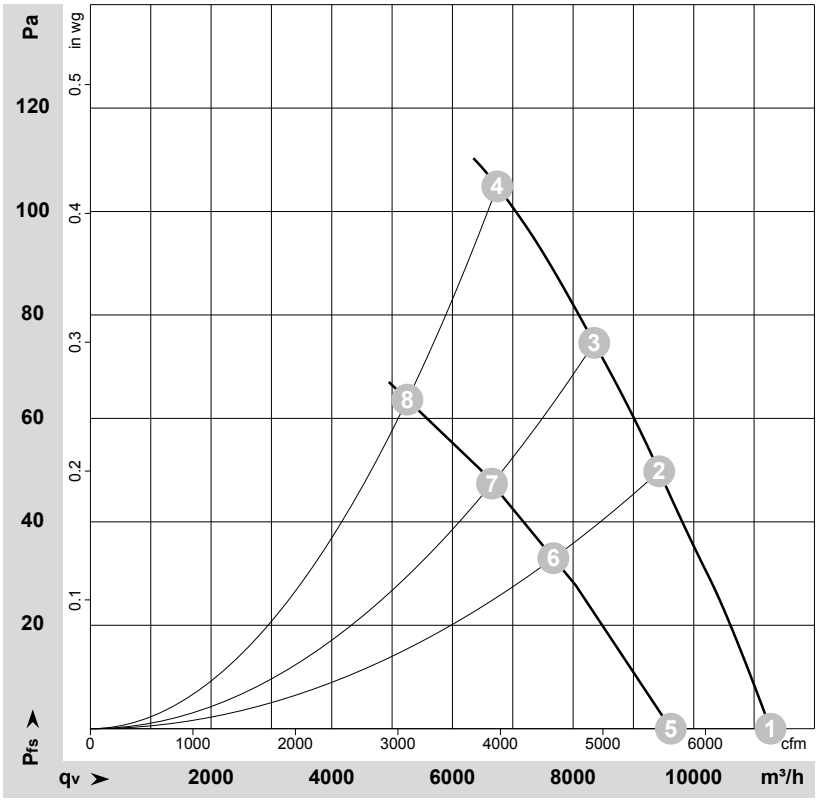
Δ	Delta-connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	grey

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

sickled blades (S series)

Charts: Air flow 50 Hz



ρ = 1,15 kg/m³ ± 2%

Measurement: LU-105365
Measurement: LU-107570

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)	m^3/h	Pa
1	Δ	400	50	930	439	1.07	64	70	69	11270	0
2	Δ	400	50	905	532	1.15	59	66	65	9425	50
3	Δ	400	50	895	574	1.19	59	65	64	8350	75
4	Δ	400	50	890	600	1.20	61	68	67	6745	105
5	Y	400	50	790	319	0.56	59	65	65	9620	0
6	Y	400	50	730	365	0.63	55	61	60	7675	33
7	Y	400	50	705	385	0.66	53	60	59	6655	47
8	Y	400	50	690	400	0.68	55	62	62	5255	64

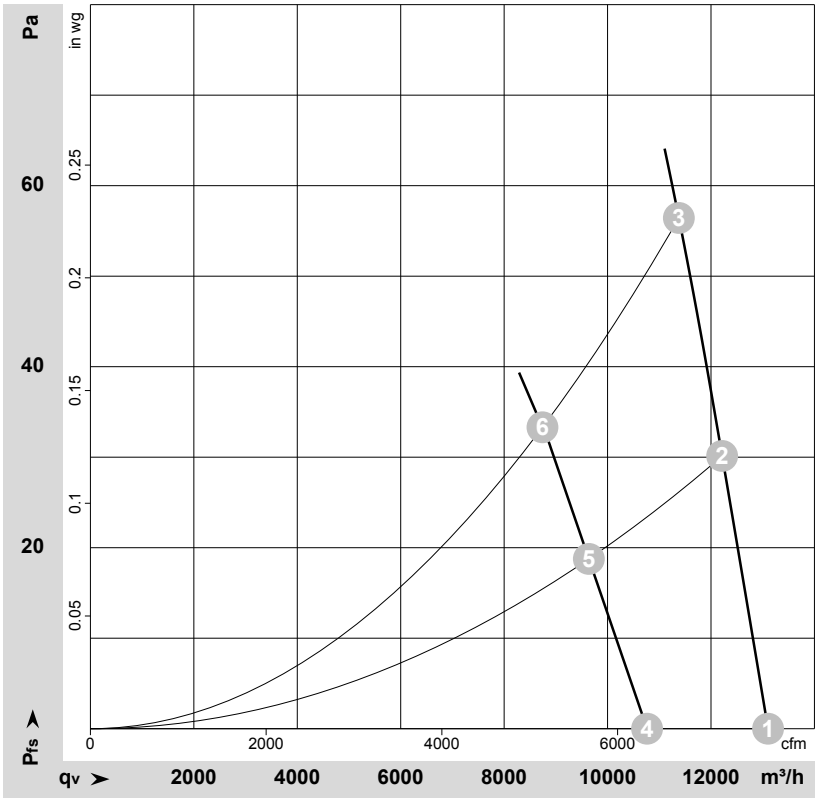
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

sickled blades (S series)

Charts: Air flow 60 Hz



ρ = 1,15 kg/m³ ± 2%

Measurement: LU-105784
Measurement: LU-114171

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)	m^3/h	Pa
1	Δ	480	60	1095	684	1.18	68	74	74	13105	0
2	Δ	480	60	1080	759	1.24	66	72	72	12215	30
3	Δ	480	60	1070	810	1.35	64	70	70	11380	55
4	Y	480	60	895	491	0.71	63	69	68	10765	0
5	Y	480	60	850	518	0.74	60	66	66	9640	19
6	Y	480	60	820	550	0.80	58	64	64	8740	33

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

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com