

AC axial fan - HyBlade®

sickled blades (S series), single inlet
with guard grille for short nozzle

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Nominal data

Type	S6E450-AM13-50		
Motor	M6E074-EI		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min ⁻¹	750	700
Power input	W	125	150
Current draw	A	0.56	0.66
Motor capacitor	µF	3	3
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Max. back pressure	Pa	40	38
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	50
Starting current	A	0.68	0.68

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



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Technical features

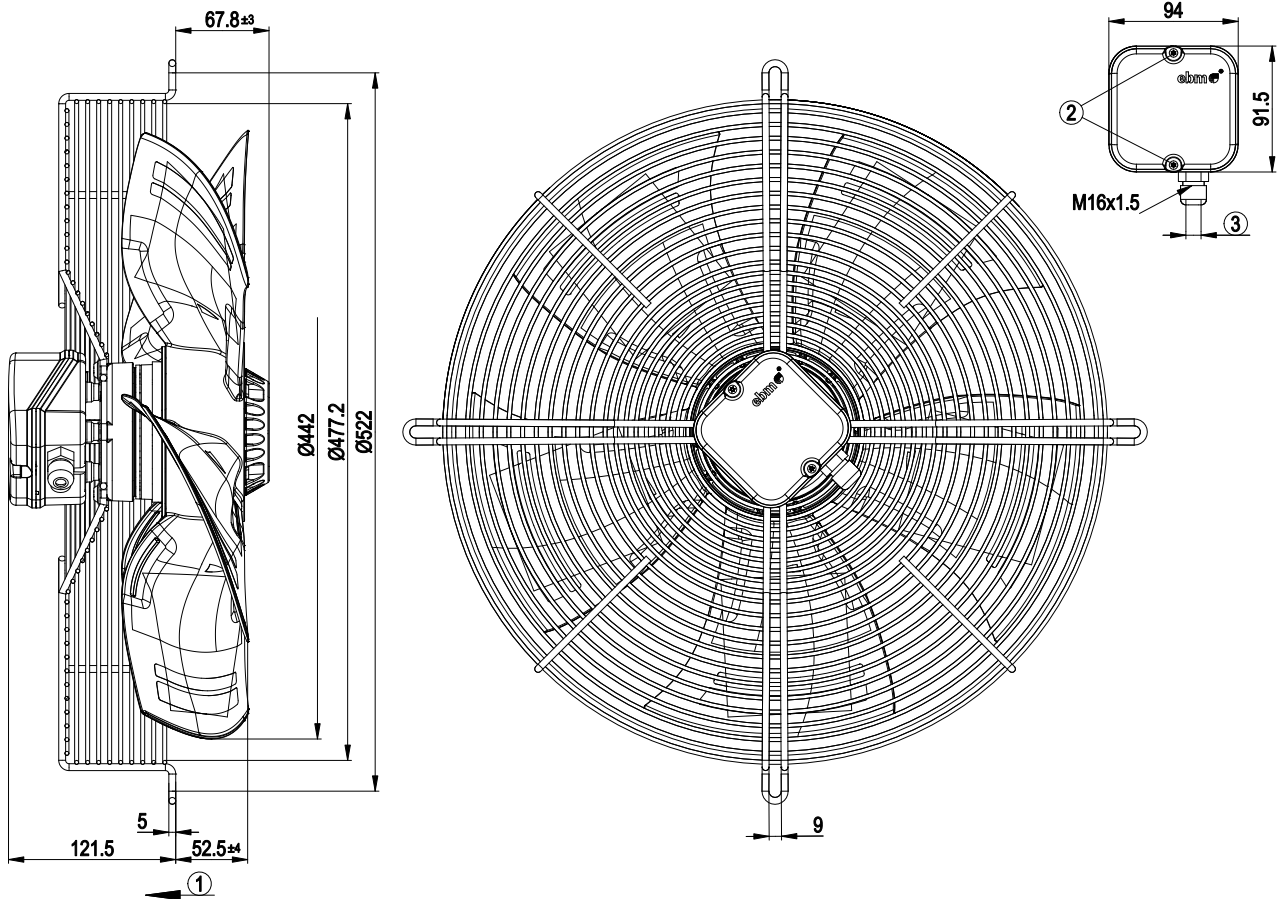
Mass	6.1 kg
Size	450 mm
Surface of rotor	Coated in black
Material of terminal box	PC / ABS plastic
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F1-2
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
Electrical leads	Via terminal box, integrated capacitor connected via terminal box
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	EAC



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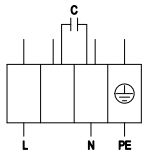
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Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.5 ± 0.1 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm

Connection screen

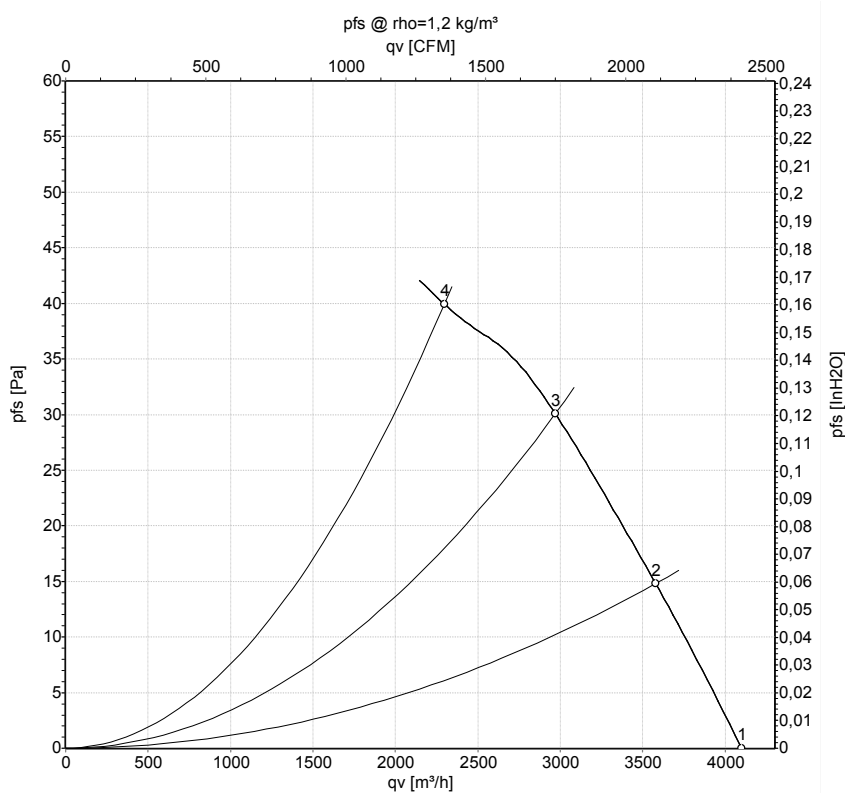


PE	green / yellow	L	black	N	blue
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Charts: Air flow 50 Hz



Measurement: LU-163934

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.

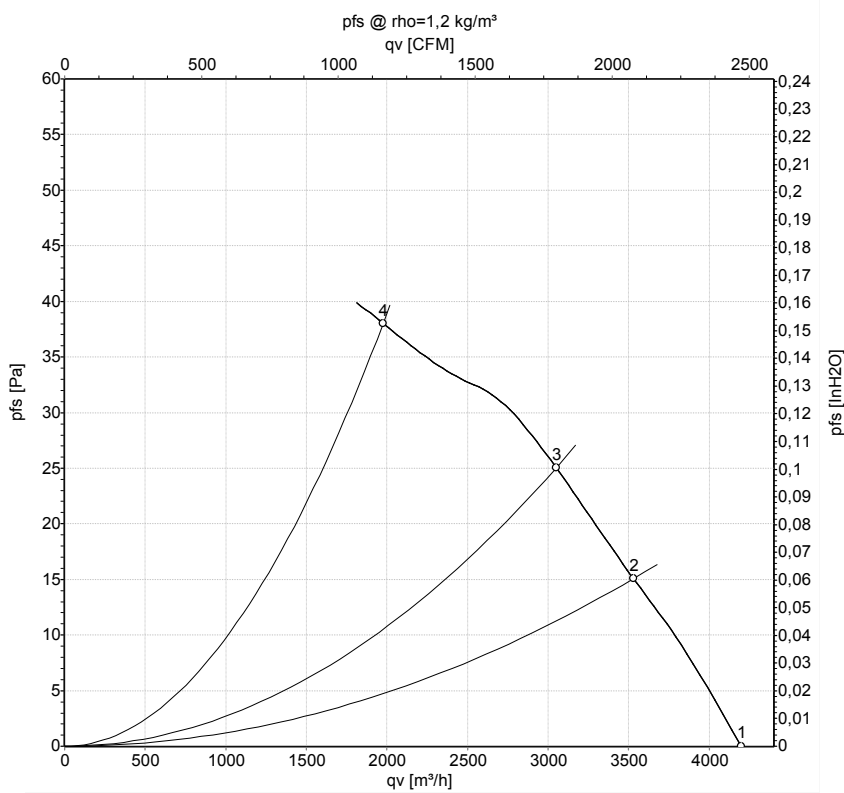
Measured values

	U	f	n	P _e	I	LpA _{in}	LwA _{in}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	230	50	840	110	0.48	57	63	4100	0
2	230	50	810	115	0.51	54	60	3580	15
3	230	50	785	119	0.52	51	57	2970	30
4	230	50	750	125	0.56	50	57	2295	40

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



Measurement: LU-164002

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

	U	f	n	P_e	I	$L_{pA_{in}}$	$L_{wA_{in}}$	qv	p_{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	230	60	855	145	0.63	57	64	4200	0
2	230	60	805	146	0.63	55	61	3530	15
3	230	60	770	147	0.64	53	59	3050	25
4	230	60	700	150	0.66	50	57	1975	38

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · $L_{pA_{in}}$ = Sound pressure level inlet side · $L_{wA_{in}}$ = Sound power level inlet side · qv = Air flow
 p_{fs} = Pressure increase