S4E400-AQ12-21

AC axial fan

sickle-shaped blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S4E400-AQ12-21**
Motor	**M4E074-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1400
Power consumption	W	150
Current draw	A	0.66
Capacitor	µF	5
Capacitor voltage	VDB	400
Max. back pressure	Pa	70
Max. back pressure	in. wg	0.28
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	30.4	28.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		41.5	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.17
09 Air flow q_v	m^3/h	2750
09 Pressure increase p_{fs}	Pa	74
10 Speed (rpm) n	min^{-1}	1300
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 Pa

LU-200571

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Technical description

Weight	5.43 kg
Size	400 mm
Motor size	74
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
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)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

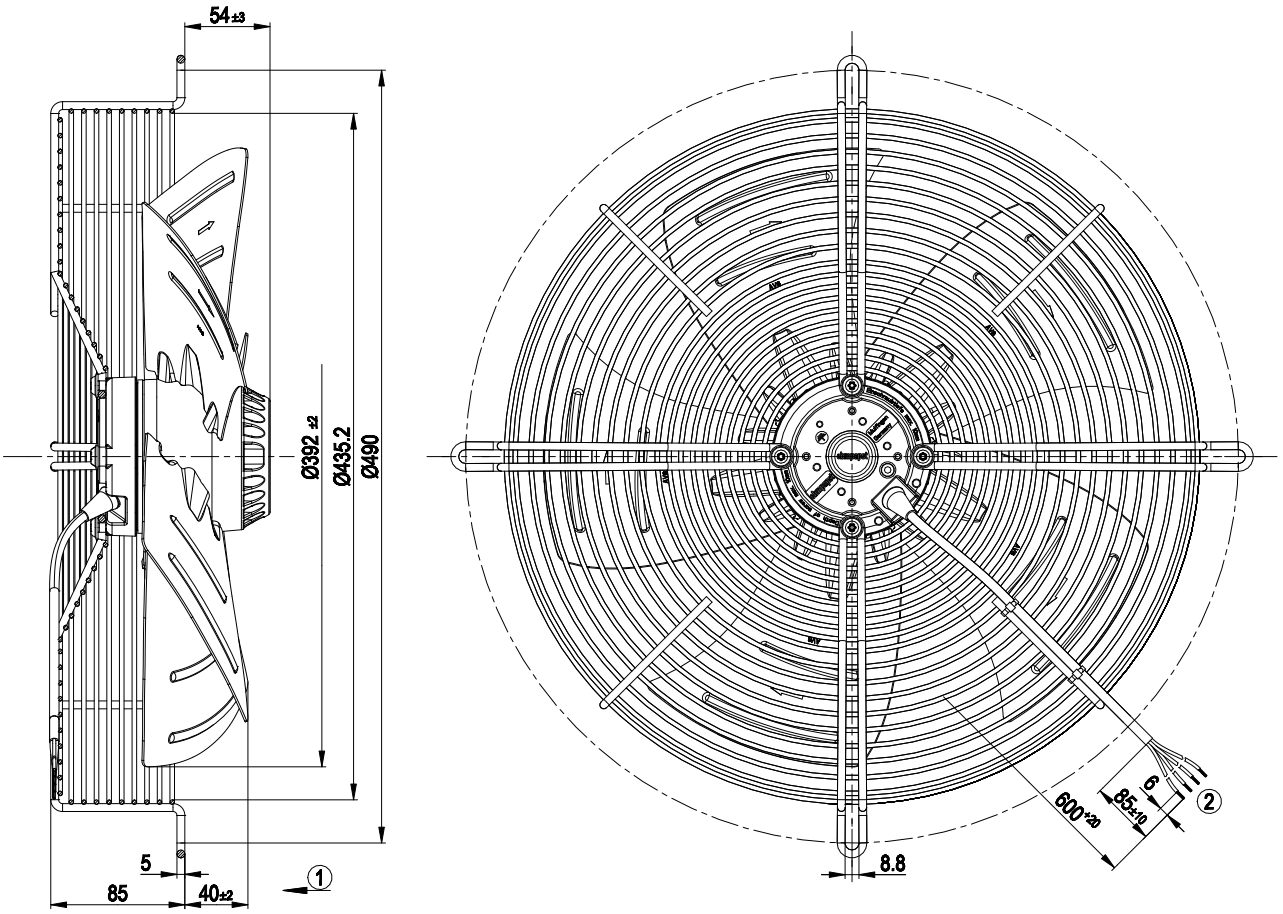
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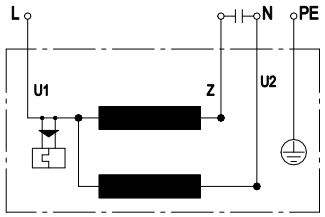
with guard grille for short nozzle

Product drawing



1	Direction of air flow "V"
2	Cable silicone 4G 0.5 mm², 4 x crimped splices

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

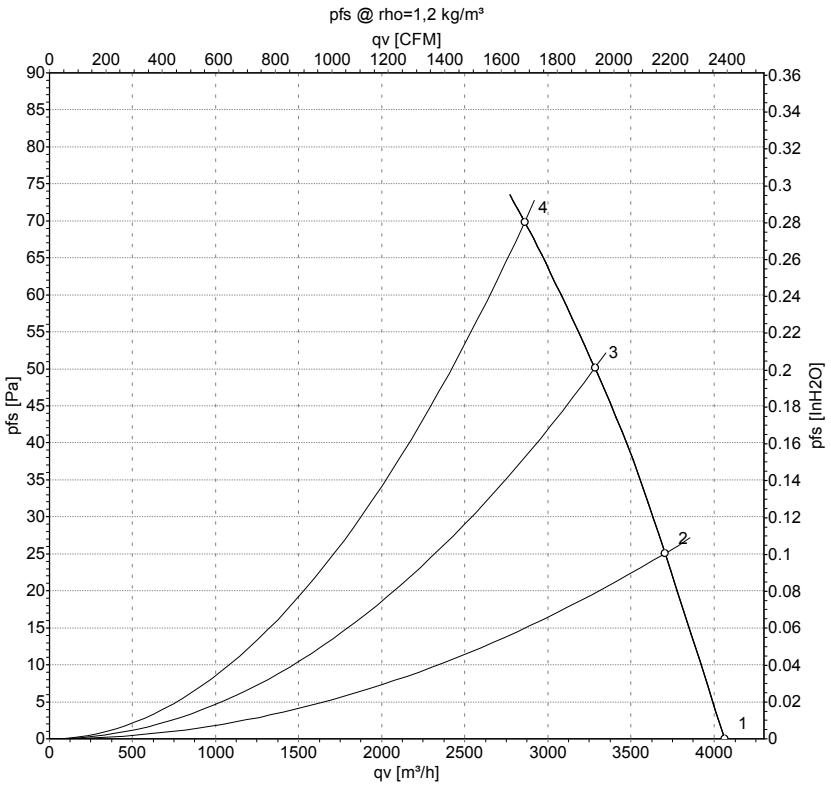
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Curves: Air performance 50 Hz



Measurement: LU-33842-1

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

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	50	1400	150	0.66	4065	0	2390	0.00
2	230	50	1385	158	0.69	3705	25	2180	0.10
3	230	50	1360	171	0.75	3285	50	1930	0.20
4	230	50	1340	184	0.80	2860	70	1685	0.28

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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