S4D350-AN08-87

AC axial fan

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

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Nominal data

Type	**S4D350-AN08-87**
Motor	**M4D074-DF**

Phase		3~	3~	3~
Nominal voltage	VAC	400	400	460
Connection		Y	Y	Y
Frequency	Hz	50	60	60
Type of data definition		ml	ml	ml
Valid for approval / standard		CE	CE	CE
Speed (rpm)	min^{-1}	1370	1520	1600
Power input	W	170	230	255
Current draw	A	0.37	0.40	0.42
Max. back pressure	Pa	90	90	110
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	65	55	55
Starting current	A	1.1	1.1	1.22

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}	%	28.7	28.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40.1	40
05 Variable speed drive		No	

09 Power input P_e	kW	0.16
09 Air flow q_v	m^3/h	2105
09 Pressure increase p_{fs}	Pa	82
10 Speed (rpm) n	min^{-1}	1375
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-131044

AC axial fan

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with guard grille for short nozzle

Technical features

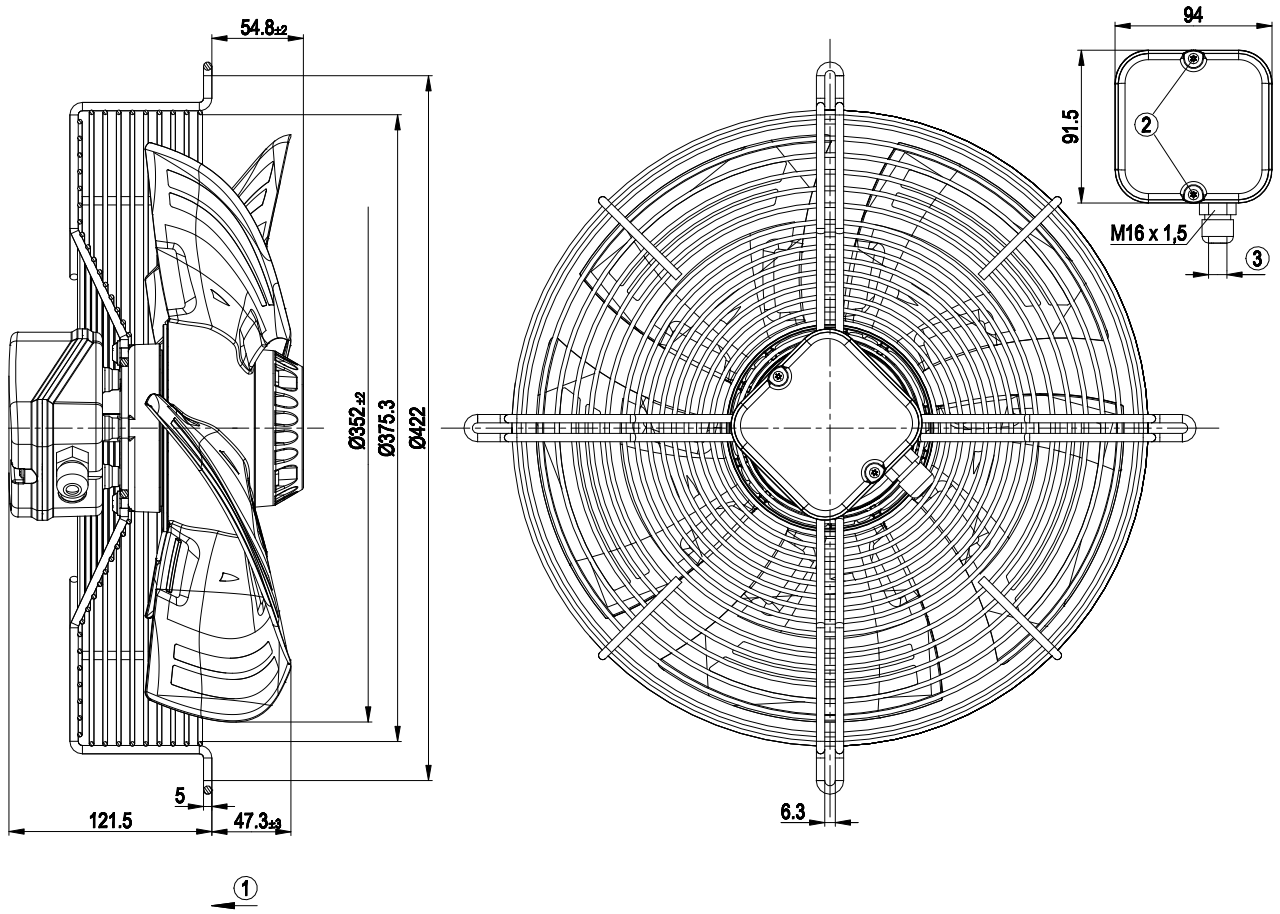
Mass	4.9 kg
Size	350 mm
Surface of rotor	Coated in black
Material of terminal box	PC / ABS plastic
Material of blades	PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H1
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
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	UL 1004-1; CSA C22.2 No.100

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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

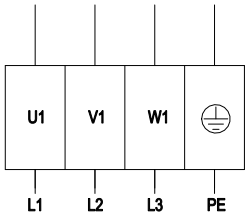
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Connection screen



Change in direction of rotation by reversing 2 phases

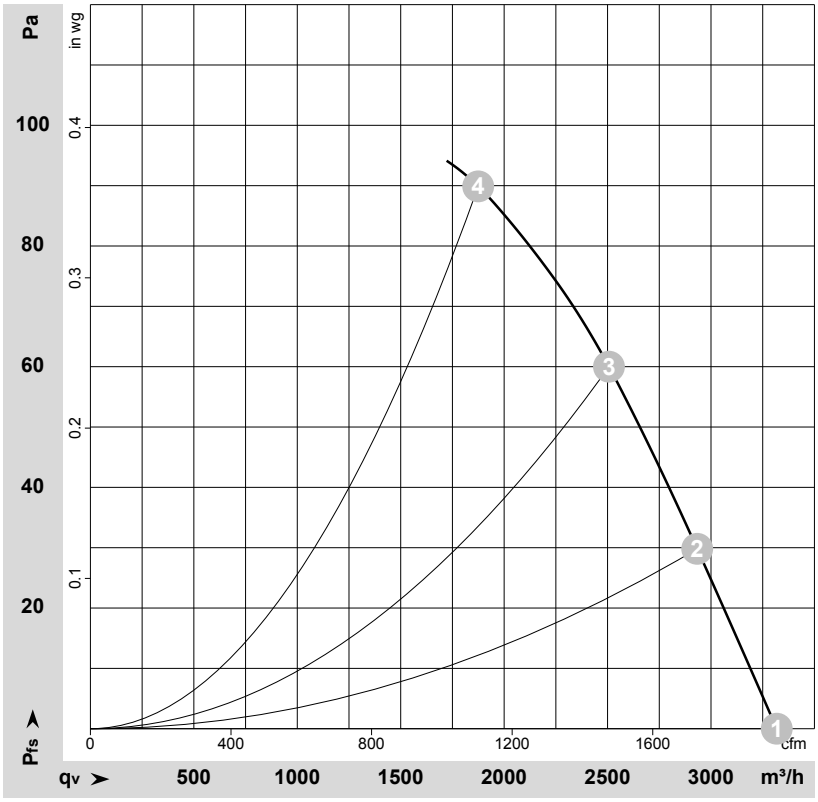
1	Three-phase motor star connection
U1	= L1 = black
V1	= L2 = blue
W1	= L3 = brown
	PE (green/yellow)

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-131044-1

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}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	Y	400	50	1405	136	0.34	61	69	3320	0	1955	0.00
2	Y	400	50	1395	148	0.35	59	66	2935	30	1725	0.12
3	Y	400	50	1380	158	0.35	56	64	2505	60	1475	0.24
4	Y	400	50	1370	170	0.37	56	64	1875	90	1105	0.36

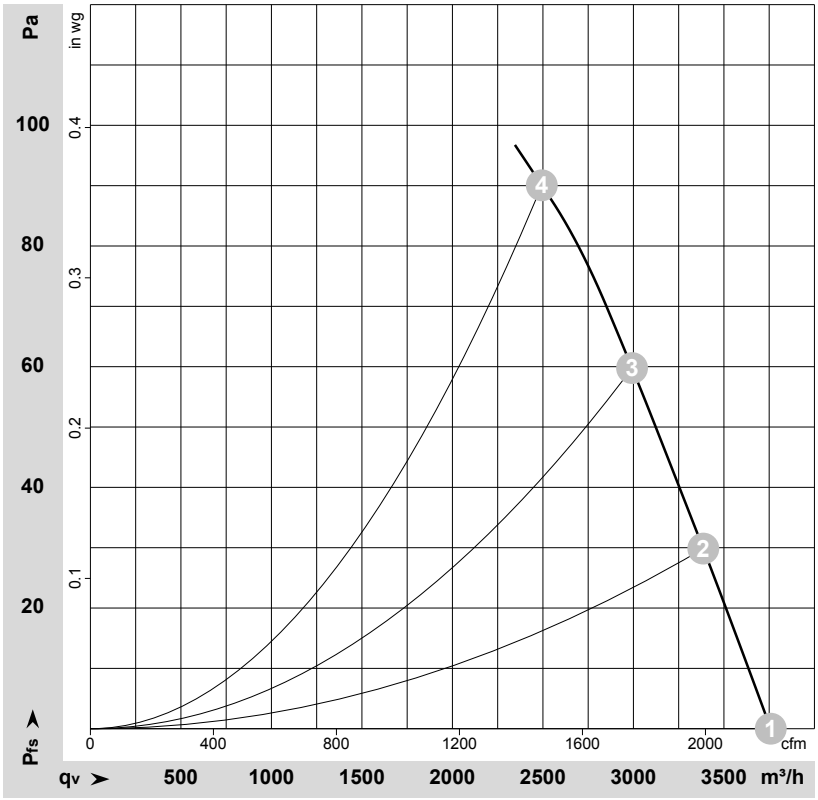
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
q_V = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-131047-1

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}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	Y	400	60	1595	184	0.33	64	72	3760	0	2210	0.00
2	Y	400	60	1575	200	0.35	62	69	3385	30	1995	0.12
3	Y	400	60	1550	215	0.37	60	67	2995	60	1760	0.24
4	Y	400	60	1520	230	0.40	58	66	2495	90	1470	0.36

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

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