

AC axial fan

sickled blades (S series)
with full round nozzle

W4E315-CP18-31 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	W4E315-CP18-31		
Motor	M4E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min ⁻¹	1410	1650
Power input	W	102	120
Current draw	A	0.52	0.53
Motor capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	120	120
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	55
Starting current	A	1.4	1.3

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations



AC axial fan

sickled blades (S series)

with full round nozzle

Technical features

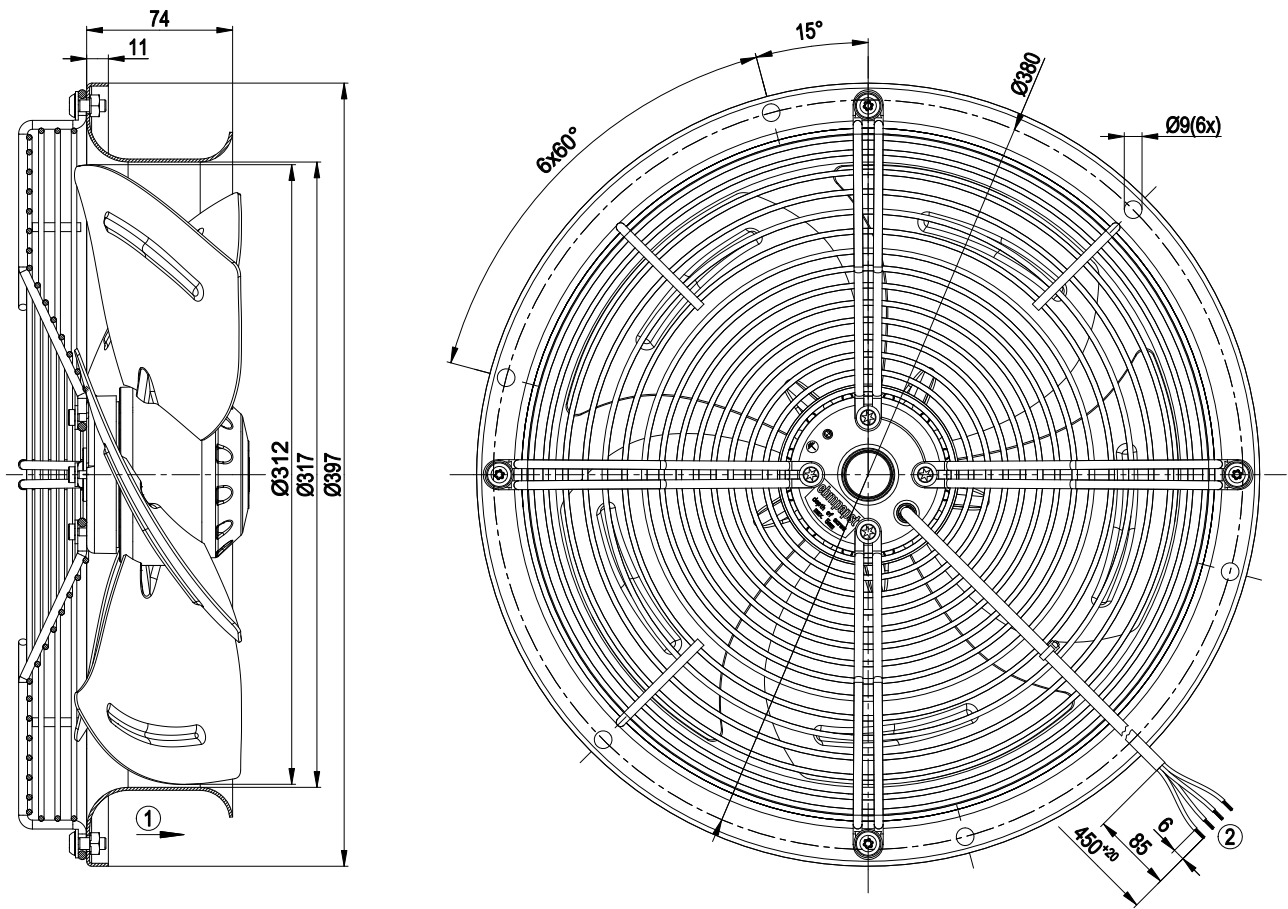
Mass	4.8 kg
Size	315 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Sheet steel, pre-galvanised and coated in black plastic
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
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
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
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE



AC axial fan

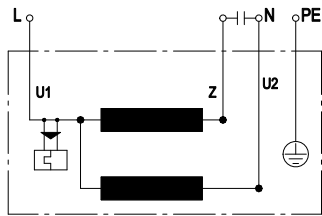
sickled blades (S series)
with full round nozzle

Product drawing



- | | |
|---|--|
| 1 | Direction of air flow "A" |
| 2 | Connection line PVC 4G 0.5mm ² , 4x brass lead tips crimped |

Connection screen

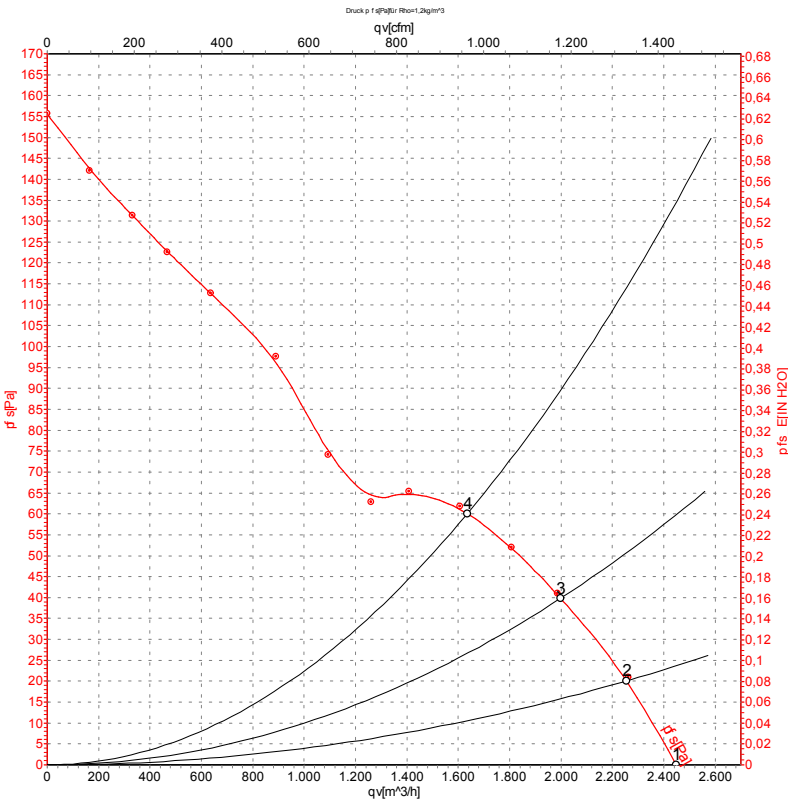


U1	blue	Z	brown	U2	black
PE	green/yellow				



AC axial fan
sickled blades (S series)
with full round nozzle

Charts: Air flow 50 Hz



Measurement: LU-32939

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	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	50	1410	102	0.52	2450	0
2	230	50	1410	107	0.53	2255	20
3	230	50	1395	112	0.54	2000	40
4	230	50	1380	120	0.56	1635	60

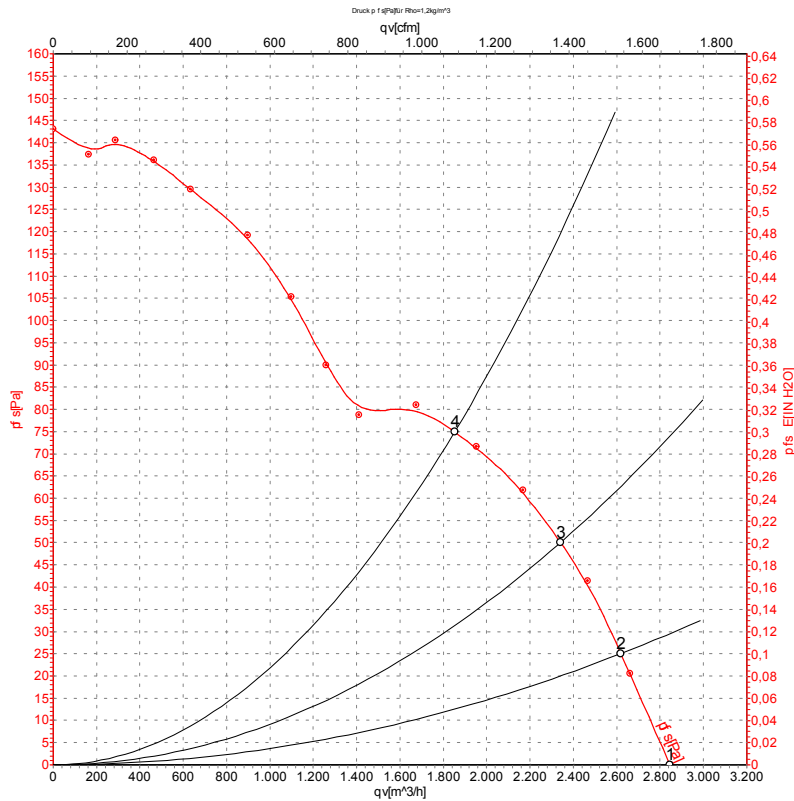
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



AC axial fan

sickled blades (S series)
with full round nozzle

Charts: Air flow 60 Hz



Measurement: LU-32940

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	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	60	1650	120	0.53	2845	0
2	230	60	1635	128	0.55	2620	25
3	230	60	1610	137	0.60	2340	50
4	230	60	1570	153	0.66	1850	75

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

