W4E315-CP18-70

AC axial fan

sickled blades (S series)

with full round nozzle

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Nominal data

Type	**W4E315-CP18-70**
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 (rpm)	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

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Technical features

Mass	4.66 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 black plastic-coated
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity (F)/environmental protection class (H)	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
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
Approval	UL 2111

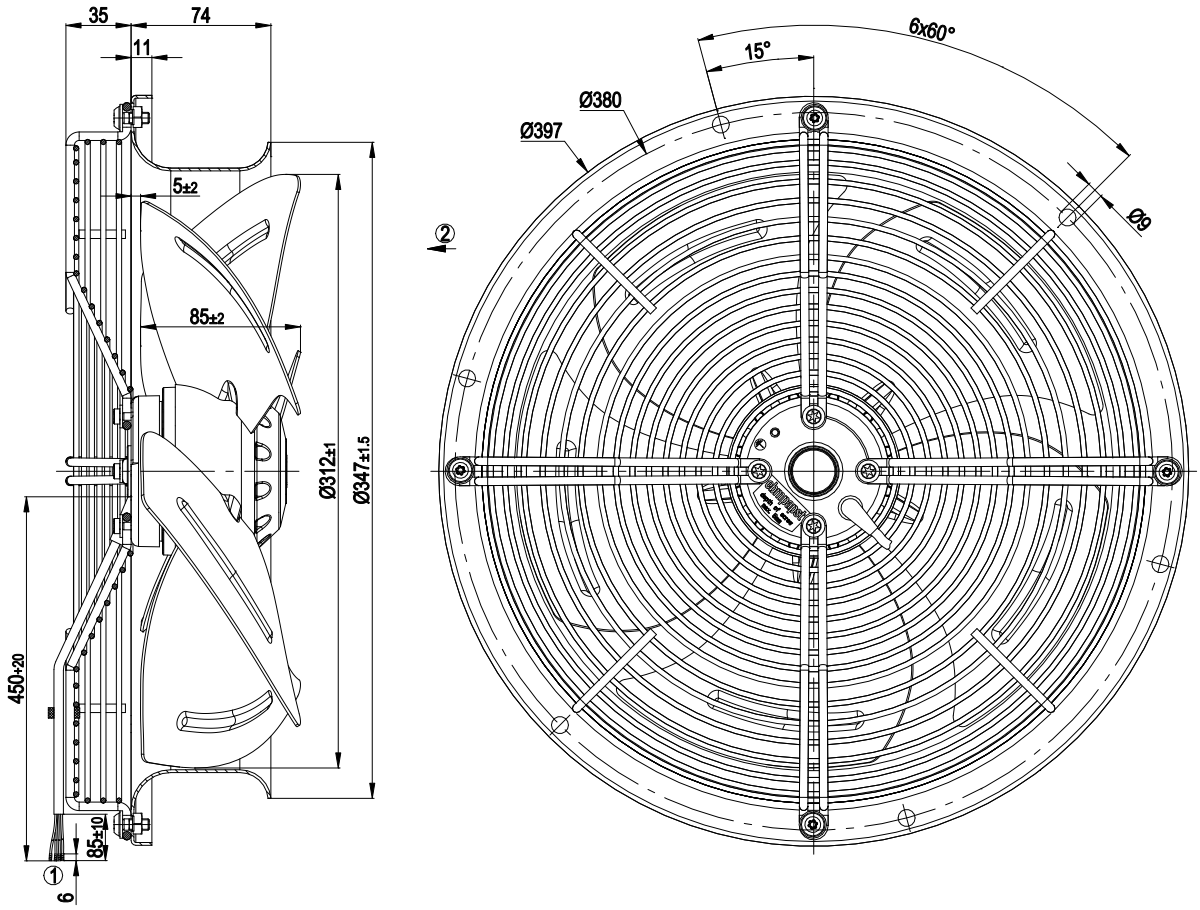
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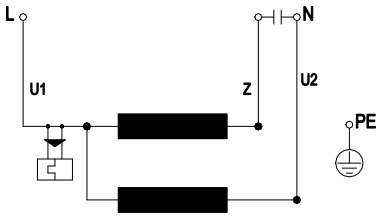
with full round nozzle

Product drawing



1	Connection line PVC, 4x brass lead tips crimped
2	Direction of air flow "V"

Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

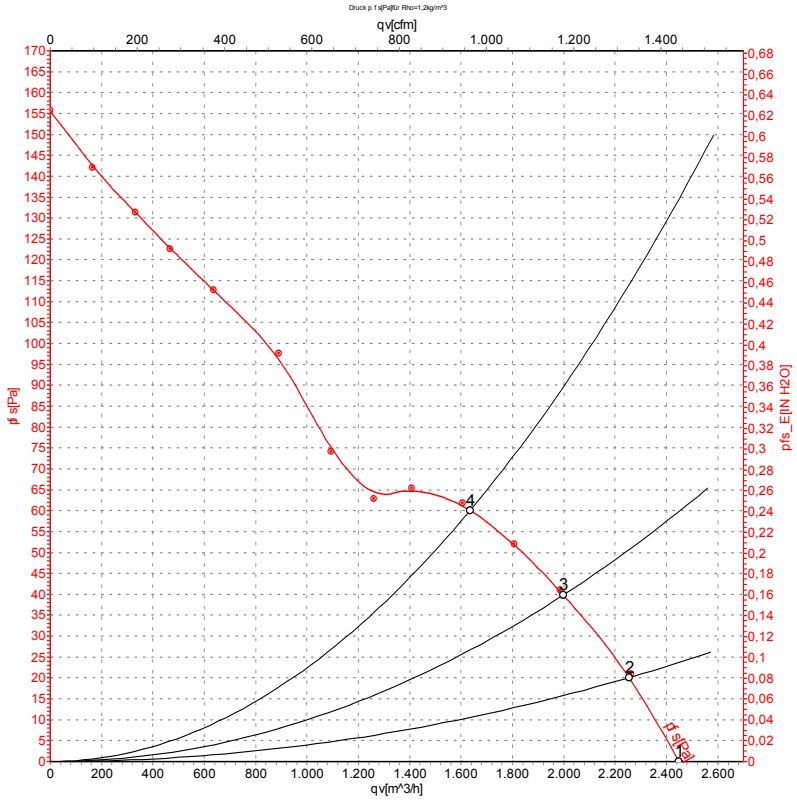
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Charts: Air flow 50 Hz



Measurement: LU-32939-1

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

	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1410	102	0.52	2450	0	1440	0.00
2	230	50	1410	107	0.53	2255	20	1325	0.08
3	230	50	1395	112	0.54	2000	40	1175	0.16
4	230	50	1380	120	0.56	1635	60	965	0.24

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

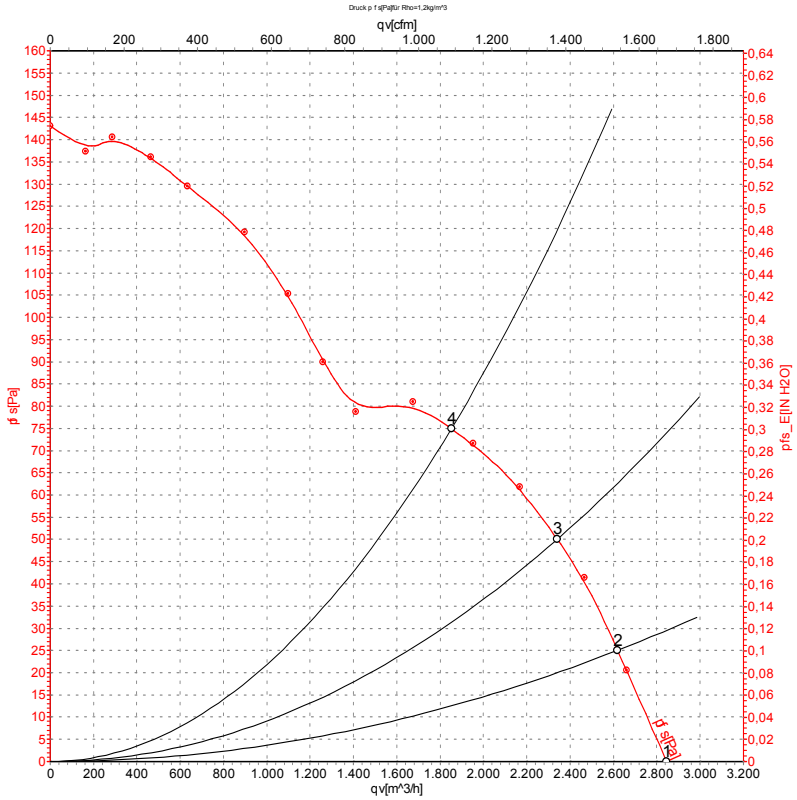
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Charts: Air flow 60 Hz



Measurement: LU-32940-1

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

	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	60	1650	120	0.53	2845	0	1675	0.00
2	230	60	1635	128	0.55	2620	25	1540	0.10
3	230	60	1610	137	0.60	2340	50	1375	0.20
4	230	60	1570	153	0.66	1850	75	1090	0.30

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

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