S4E315-DC44-09

AC axial fan

straight blades (A series)

with guard grille for short nozzle

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Nominal data

Type	**S4E315-DC44-09**
Motor	**M4E068-DF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ce	ce
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1340	1420
Power consumption	W	110	140
Current draw	A	0.50	0.62
Capacitor	µF	3	3
Capacitor voltage	VDB	400	400
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	-	55

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

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Technical description

Weight	3.2 kg
Fan size	315 mm
Rotor surface	Painted black
Impeller material	Sheet steel, hot-dip galvanized
Guard grille material	Steel, phosphated and coated with black plastic
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	F2-2
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 with low-temperature lubricant
Speed levels	2
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE
Approval	CCC; EAC

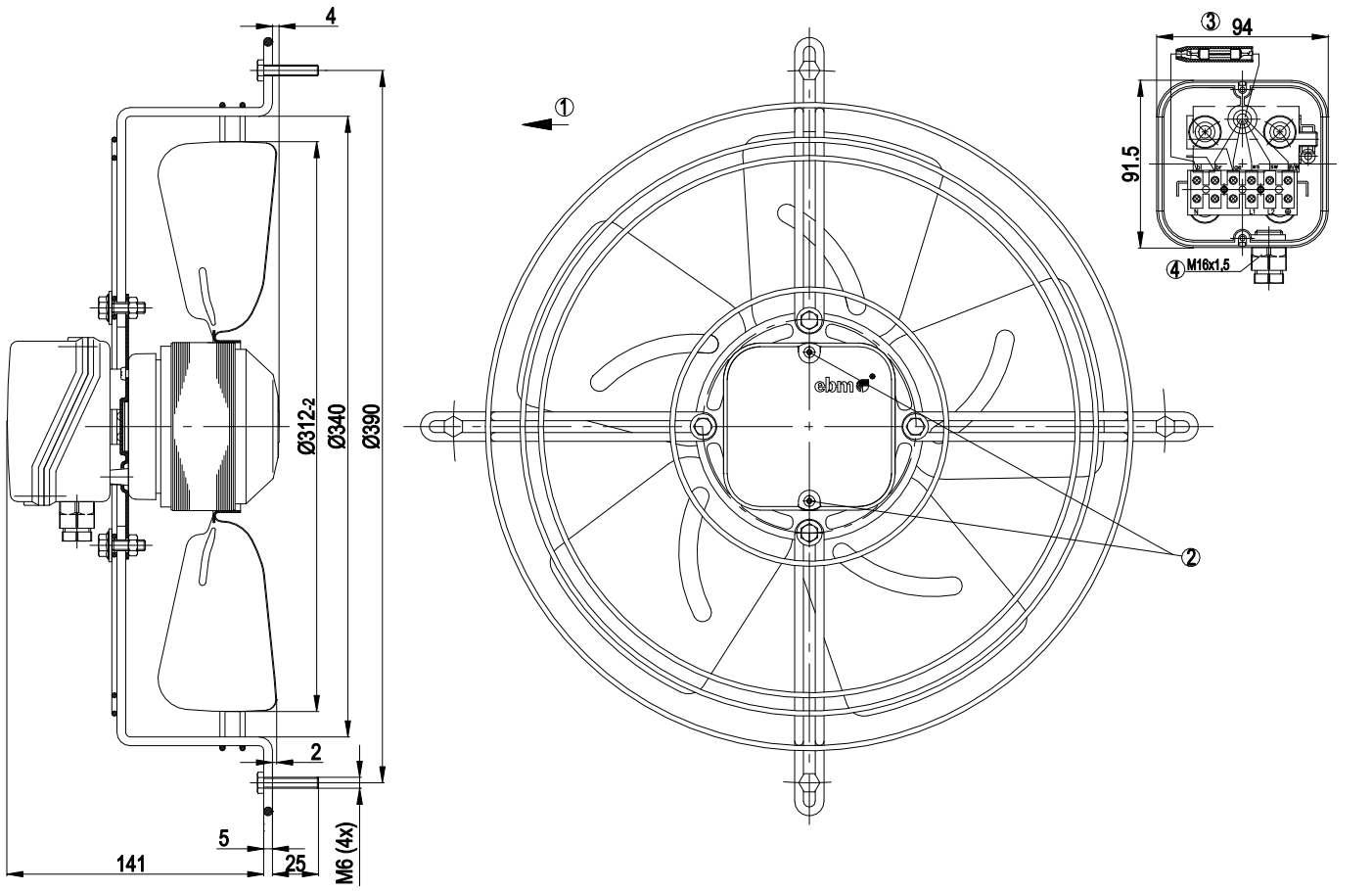
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Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.7 ± 0.2 Nm
3	Shown without terminal box cover
4	Cable diameter min. 4 mm, max. 8 mm; tightening torque 1.3±0.2 Nm

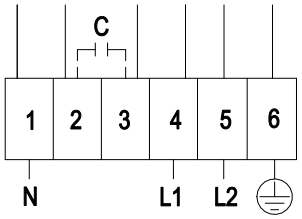
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Connection diagram



Note: High speed (step II); low speed (step I)

1	= N = blue	2	brown	3	yellow
4	Step I white	5	Step II black	6	PE

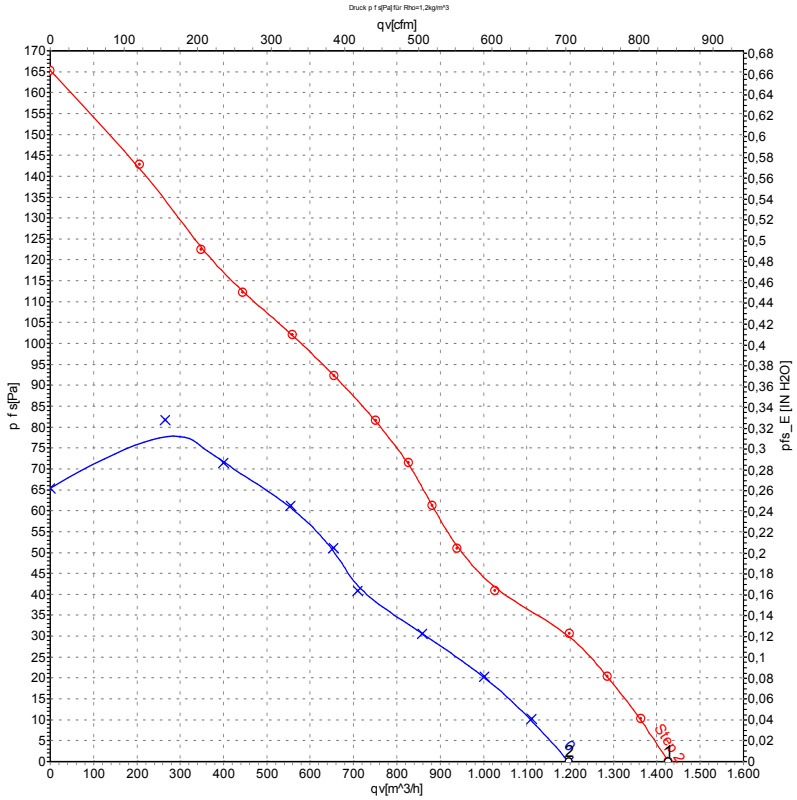
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Curves: Air performance 50 Hz



Measurement: LU-30261-1
Measurement: LU-30262-1

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

	Stage	U	f	n	P_e	I	q_V	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	cfm	inH2O
1	2	230	50	1340	110	0.50	1425	840	0.00
2	1	230	50	1125	99	0.43	1195	705	0.00

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow

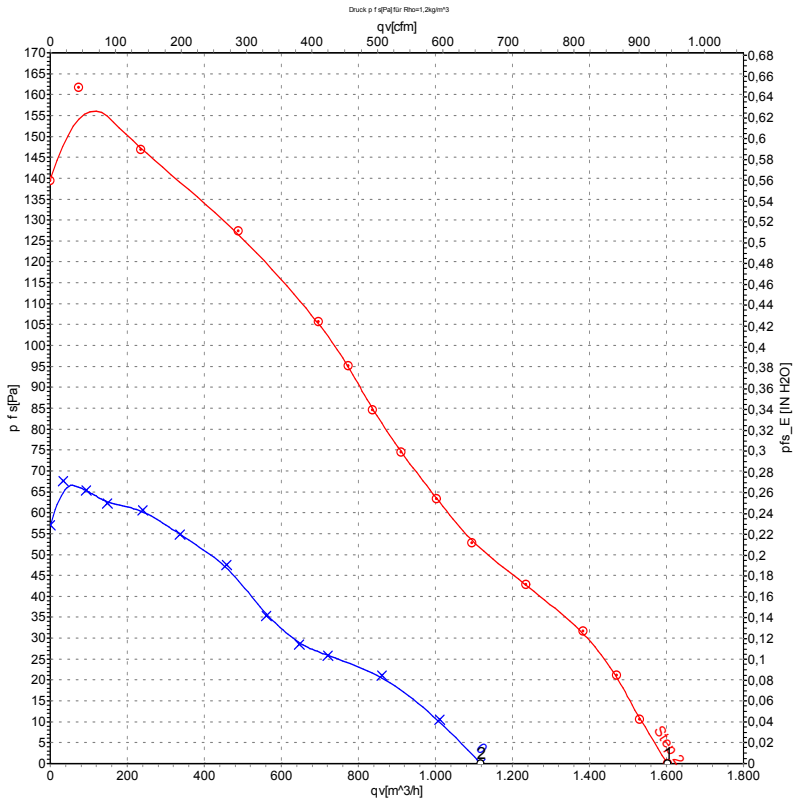
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Curves: Air performance 60 Hz



Measurement: LU-50073-1
Measurement: LU-50074-1

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

	Stage	U	f	n	P_e	I	q_V	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	cfm	inH2O
1	2	230	60	1420	140	0.62	1600	945	0.00
2	1	230	60	1010	103	0.45	1120	660	0.00

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow

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