W4S200-HK04-01

AC axial compact fan

sickle-shaped blades (S series)



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Nominal data

Type	**W4S200-HK04-01**		
Motor	**M4S068-BF**		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1370	1590
Power consumption	W	30	26
Current draw	A	0.21	0.18
Max. back pressure	Pa	50	50
Max. back pressure	in. wg	0.2	0.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	80

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

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Technical description

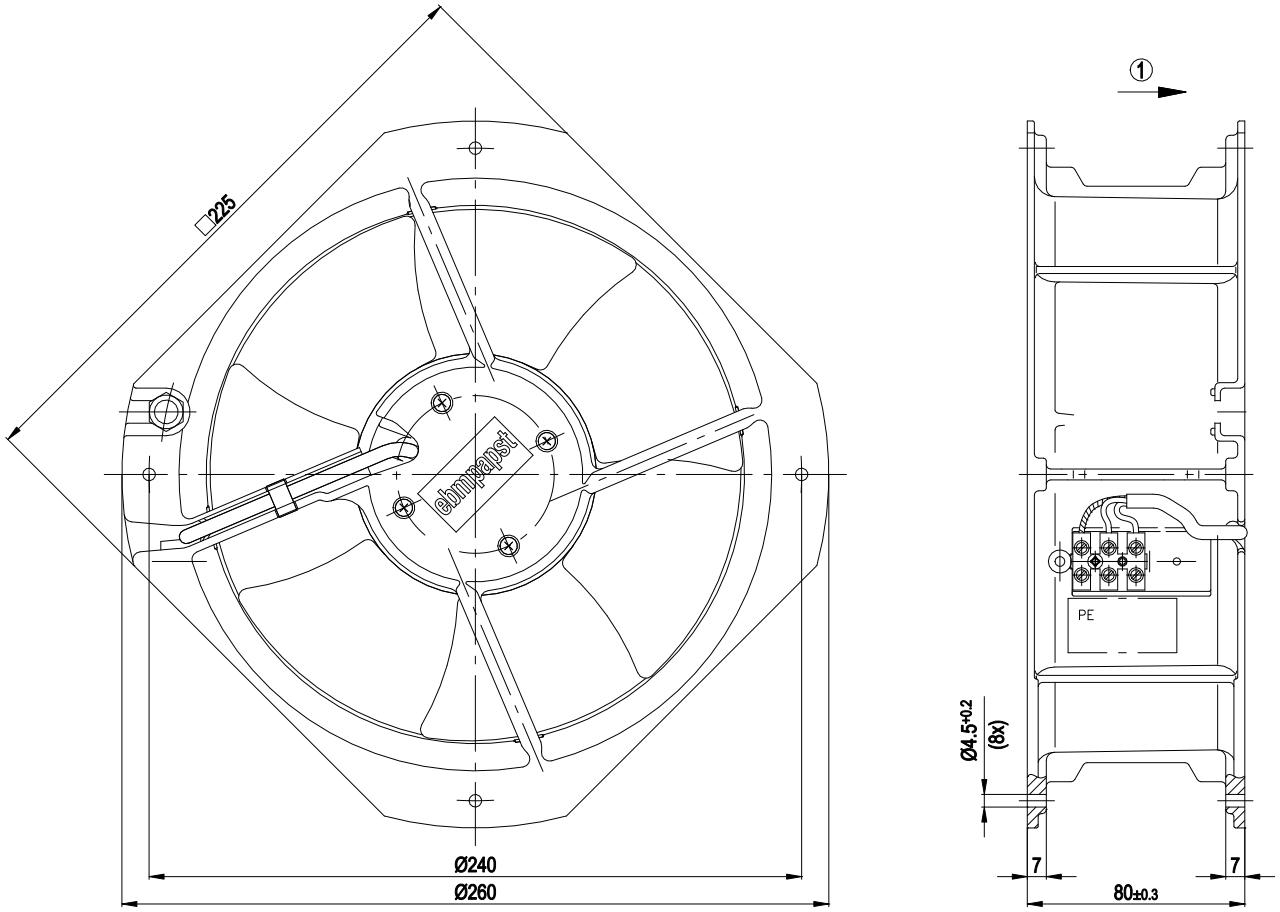
Weight	1.95 kg
Size	200 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Housing material	Die-cast aluminum
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal strip
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
Approval	EAC; UL 1004-3; CCC; VDE; CSA C22.2 No. 77

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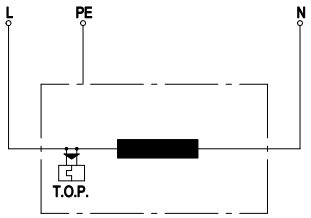
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Product drawing



1	Direction of air flow "V"

Connection diagram



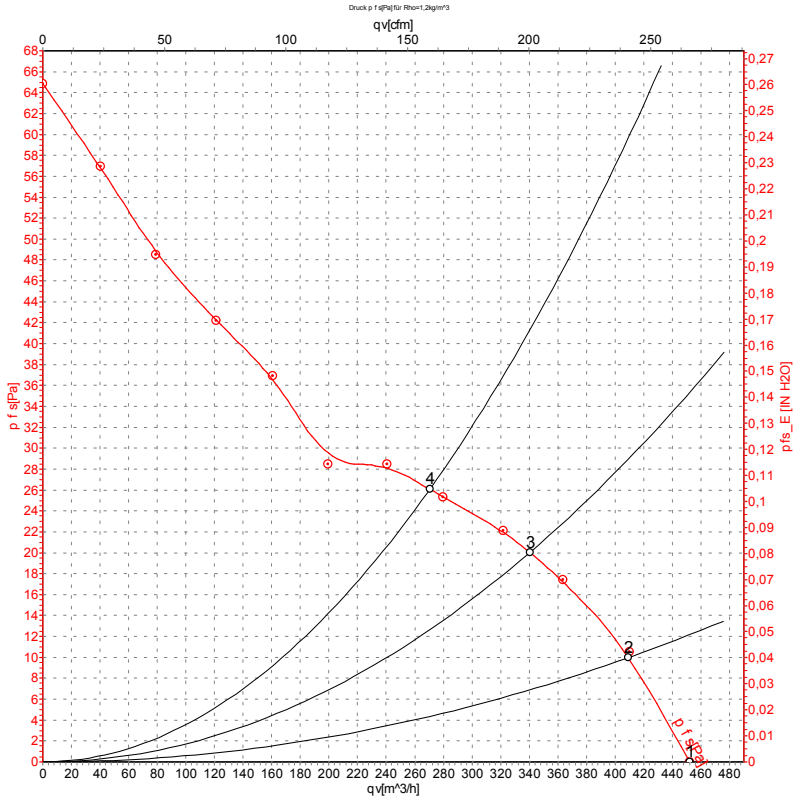
L	= blue
PE	= green/yellow
N	= brown
TOP	= thermal overload protector

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AC axial compact fan

sickle-shaped blades (S series)

Curves: Air performance 50 Hz



Measurement: LU-60315-1

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	1370	30	0.21	450	0	265	0.00
2	230	50	1365	29	0.21	410	10	240	0.04
3	230	50	1345	30	0.21	340	20	200	0.08
4	230	50	1330	31	0.22	270	26	160	0.10

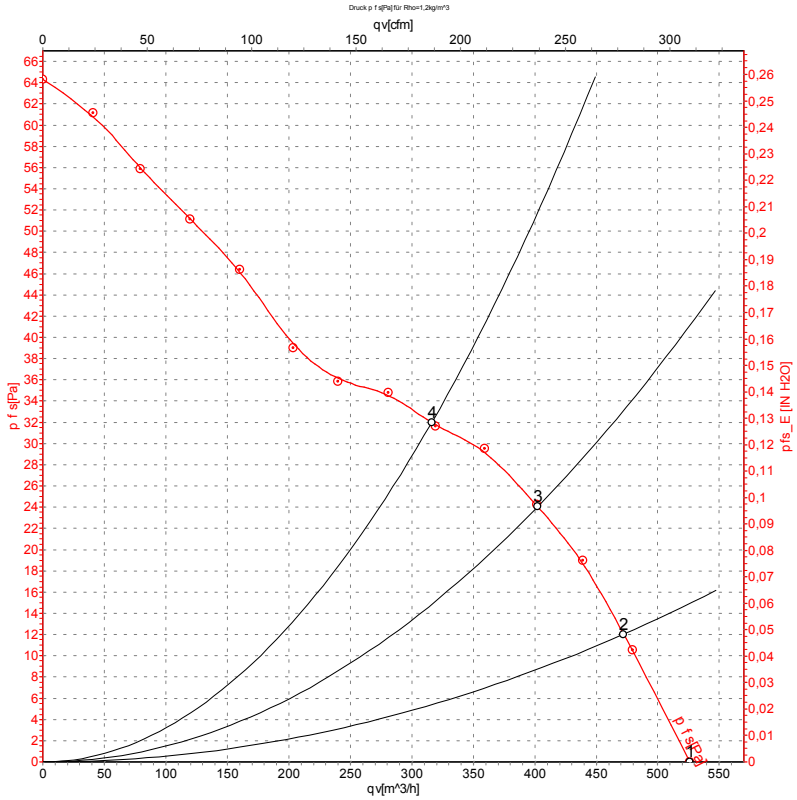
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



Measurement: LU-60316-1

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	60	1590	26	0.18	525	0	310	0.00
2	230	60	1560	27	0.18	470	12	280	0.05
3	230	60	1530	28	0.19	400	24	235	0.10
4	230	60	1495	29	0.19	315	32	185	0.13

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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