

AC axial compact fan

sickle-shaped blades (S series)



W2D250-HH02-07 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	W2D250-HH02-07		
Motor	M2D068-CC		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2500	2600
Power consumption	W	106	145
Current draw	A	0.2	0.23
Max. back pressure	Pa	160	150
Max. back pressure	inH2O	0.64	0.6
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	35

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

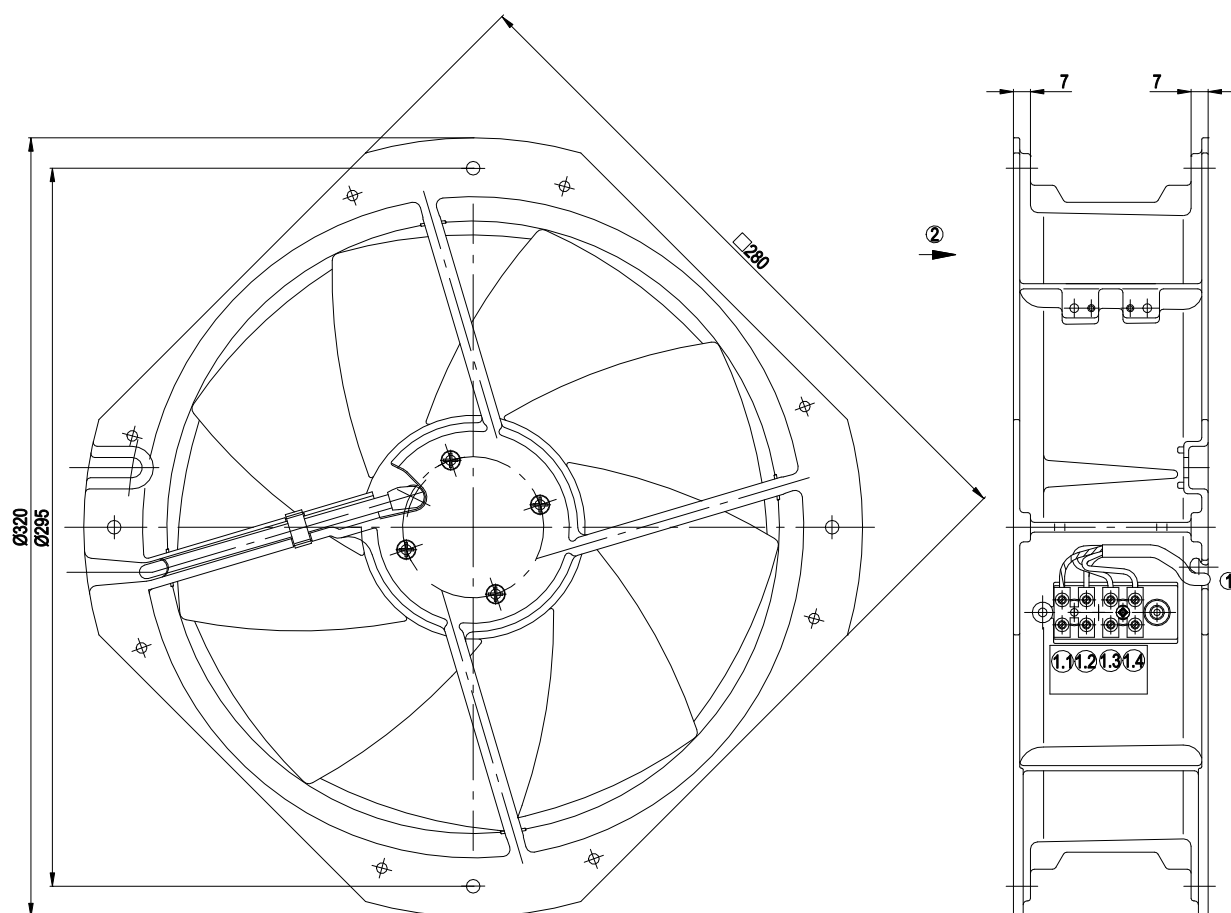


Technical description

Weight	2.7 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan 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	F5
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	Via terminal strip
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	UL 1004-1; CSA C22.2 No. 100; CCC

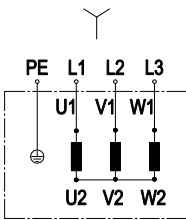


Product drawing



1	Cable PVC 4G AWG20, 4x crimped splices
1.1	PE (green/yellow)
1.2	L1=U1 (black)
1.3	L2=V1 (blue)
1.4	L3=W1 (brown)
2	Direction of air flow "V"

Connection diagram



Change of rotation direction by reversing two phases

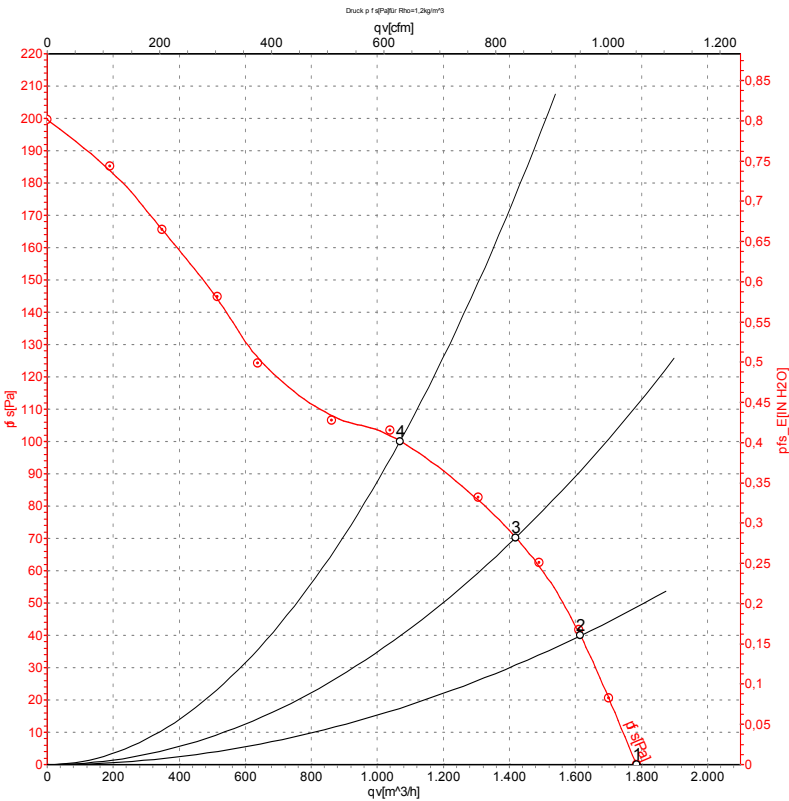
	Three-phase motor	Y	Star connection	L1	black
L2	blue	L3	brown	PE	green/yellow



AC axial compact fan

sickle-shaped blades (S series)

Curves: Air performance 50 Hz



Measurement: LU-36296-1

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	qv	p _{fs}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	CFM	inH2O
1	400	50	2500	106	0.20	1785	0	1050	0.00
2	400	50	2425	117	0.21	1615	40	950	0.16
3	400	50	2370	125	0.22	1420	70	835	0.28
4	400	50	2300	135	0.23	1070	100	630	0.40

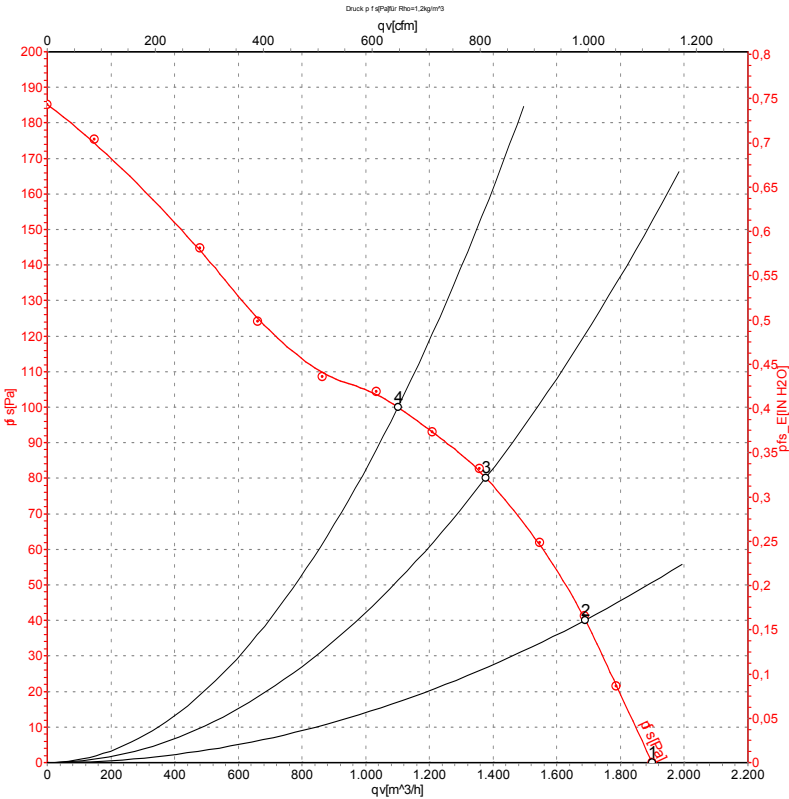
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



AC axial compact fan

sickle-shaped blades (S series)

Curves: Air performance 60 Hz



Measurement: LU-36297-1

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	qv	p _{fs}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	CFM	inH ₂ O
1	400	60	2600	145	0.23	1900	0	1120	0.00
2	400	60	2515	154	0.25	1690	40	995	0.16
3	400	60	2390	165	0.26	1375	80	810	0.32
4	400	60	2315	172	0.27	1100	100	650	0.40

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

