

EC axial fan - HyBlade

sickle-shaped blades (S series), single-intake

ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.fansco.com

www.fansco.com

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	S1G315-DN01-01		
Motor	M1G055-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Nominal voltage range	VAC	200 .. 240	200 .. 240
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	ml
Speed (rpm)	min ⁻¹	1300	950
Power consumption	W	73	28
Current draw	A	0.6	
Max. back pressure	Pa	50	
Max. back pressure	in. wg	0.2	
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	35	35

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

Subject to change

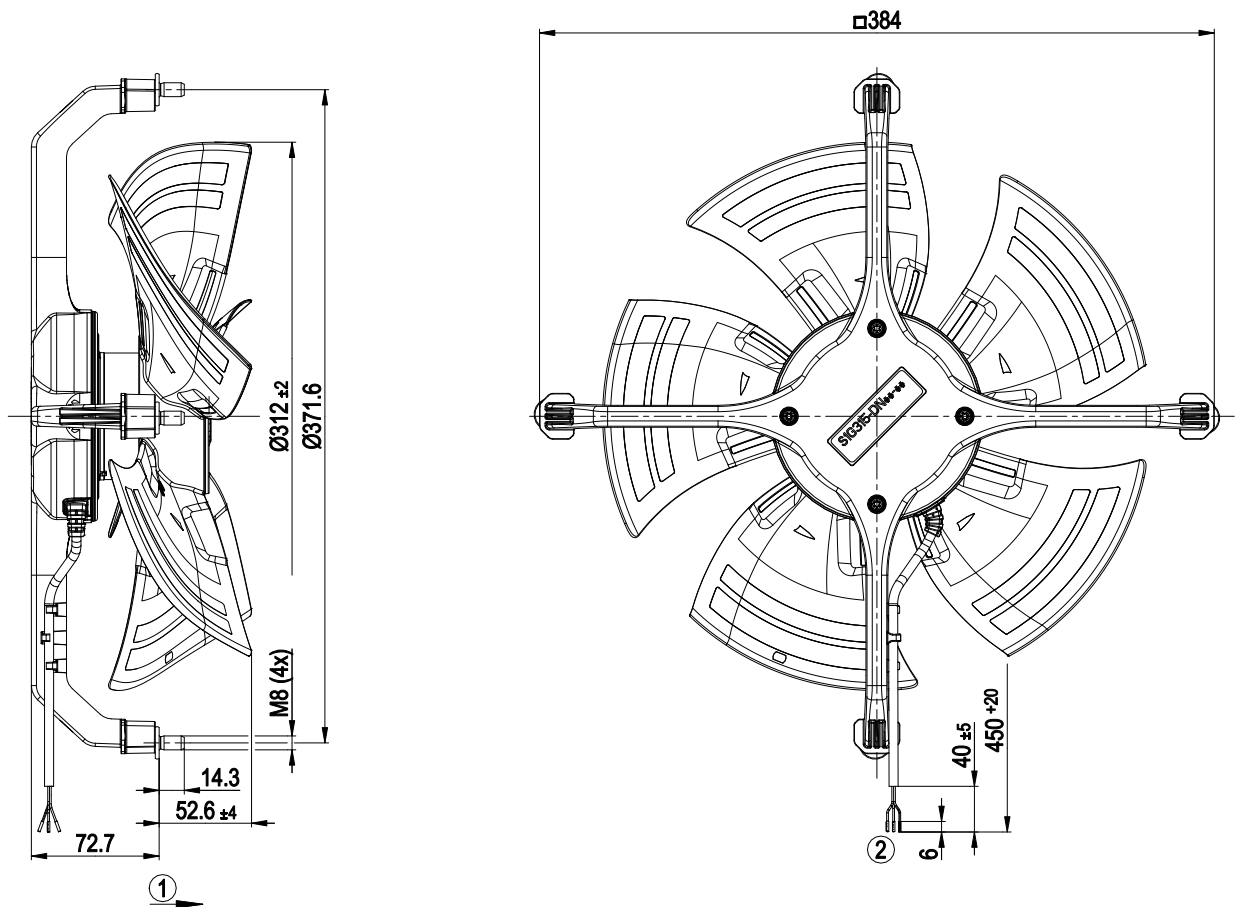


Technical description

Size	315 mm
Motor size	55
Rotor surface	Thick-film passivated
Blade material	PP plastic
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1+
Max. permitted ambient temp. for motor (transport/storage)	+70 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing with low-temperature lubricant
Technical features	- Speed setting input (230 V) - Motor current limitation - Soft start - Thermal overload protection for motor
Speed levels	2
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	≤ 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class assignment	II; This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection. If there is a PE connection point on the housing, it must not be visible after installation.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE



Product drawing

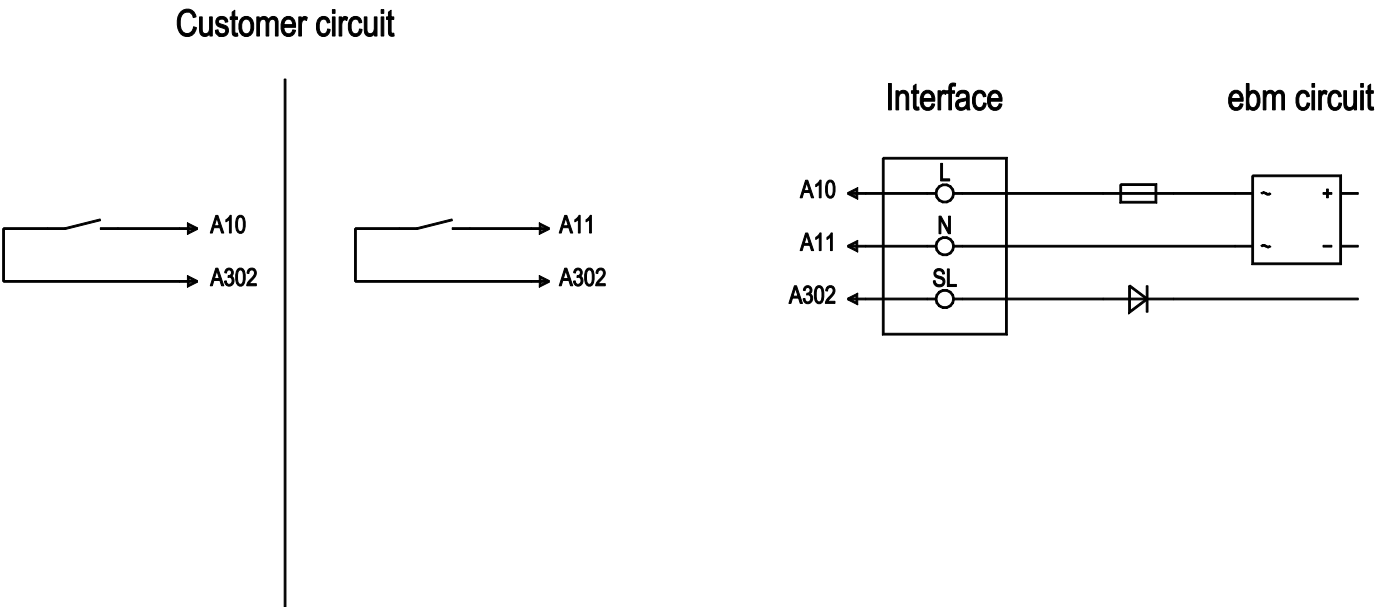


- | | |
|---|---------------------------|
| 1 | Direction of air flow "A" |
| 2 | Cable PVC AWG18 |
| | 3x splice |

EC axial fan - HyBlade

sickle-shaped blades (S series), single-intake

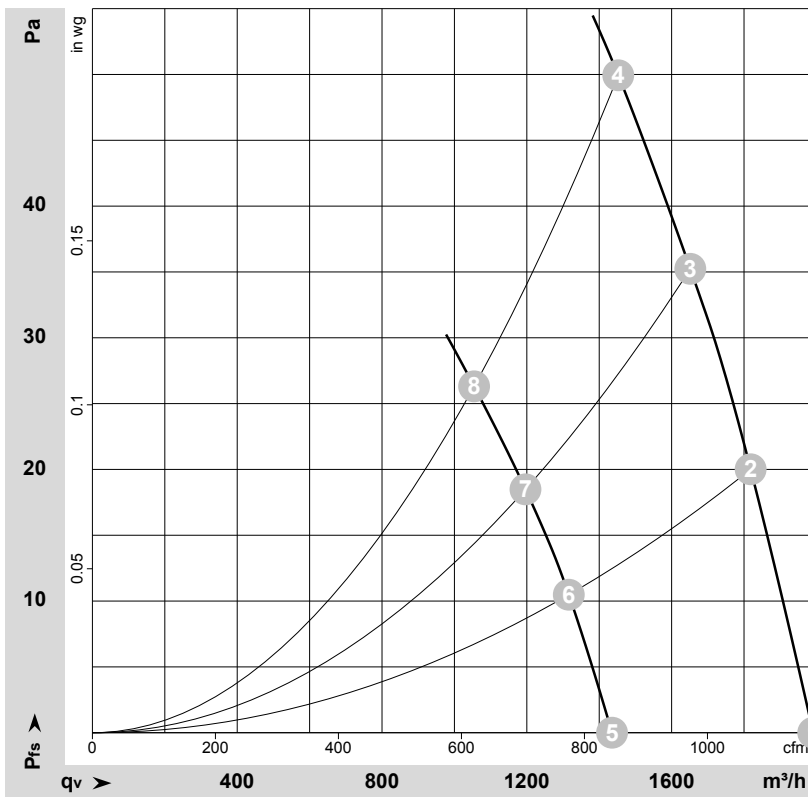
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	A10	L	black	Supply connection, power supply, phase, voltage range see nameplate, 50/60 Hz
	A11	N	blue	Supply connection, power supply, neutral conductor, voltage range see nameplate, 50/60 Hz
	A302	SL	brown	Speed selection: switch open speed 1, switch closed speed 2



Curves: Air performance 50 Hz



$$\rho = 1.174 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-183992-1
Measurement: LU-184162-1

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 _{ed}	I	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	1	230	50	1300	57	0.52	58	66	1990	0	1170	0.00
2	1	230	50	1300	63	0.57	57	65	1820	20	1070	0.08
3	1	230	50	1300	66	0.60	55	64	1650	35	970	0.14
4	1	230	50	1300	73	0.60	54	62	1455	50	855	0.20
5	2	230	50	950	23	0.23			1435	0	845	0.00
6	2	230	50	950	25	0.25			1315	11	775	0.04
7	2	230	50	950	26	0.25			1195	19	705	0.08
8	2	230	50	950	28	0.26			1055	27	620	0.11

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_v = Air flow · p_{fs} = Pressure increase

