S3G400-AN04-52

EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner: Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**S3G400-AN04-52**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed	min^{-1}	1080
Power input	W	140
Current draw	A	1.15
Max. back pressure	Pa	75
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	+60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive integrated	Integrated
Specific ratio*	1,00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		36,8	24,1	28,1
Efficiency grade N		48,7	36	40
Power input P_{ed}	kW	0,13		
Air flow q_v	m^3/h	2700		
Pressure increase p_{fs}	Pa	58		
Speed n	min^{-1}	1095		

Data established at point of optimum efficiency

EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Technical features

Size	400 mm
Material of terminal box	ABS plastic, black
Material of impeller	PP-GF40 plastic
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 54
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor
Electrical leads	Via terminal box
Motor protection	PTC resistor
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)

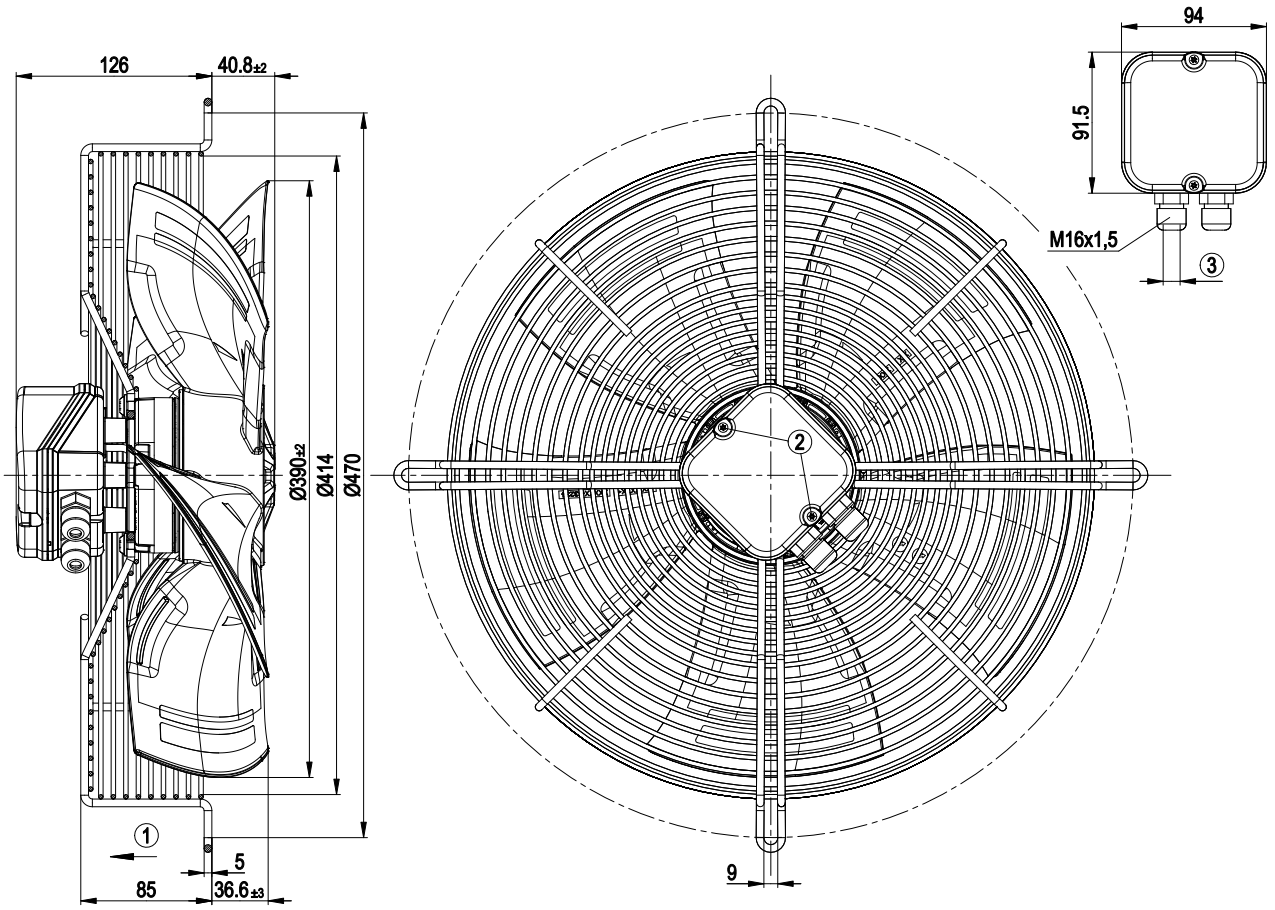
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.8±0.15 Nm
3	Cable diameter: max. 7.5 mm; tightening torque 2±0.3 Nm

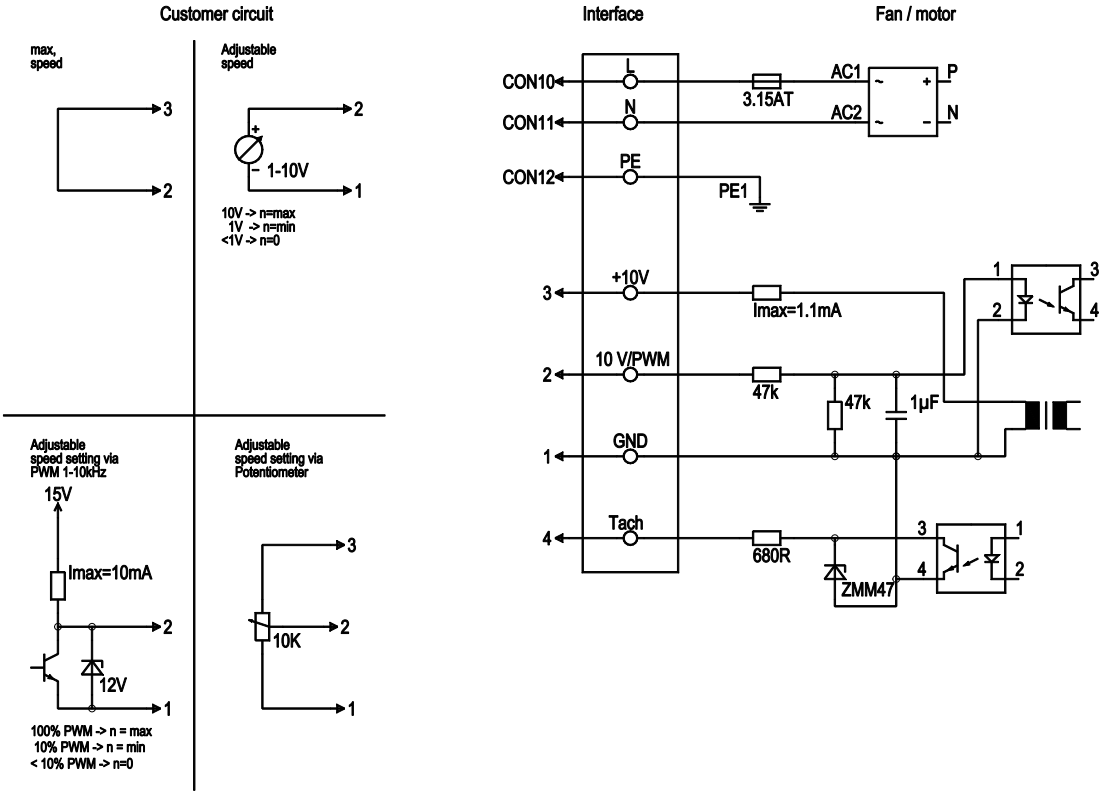
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Connection screen



Line	No.	Signal	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND - Connection for control interface
	2	0- 10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10V/ 1.1mA, electrically isolated, not short-circuit-proof.
	4	Tacho	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

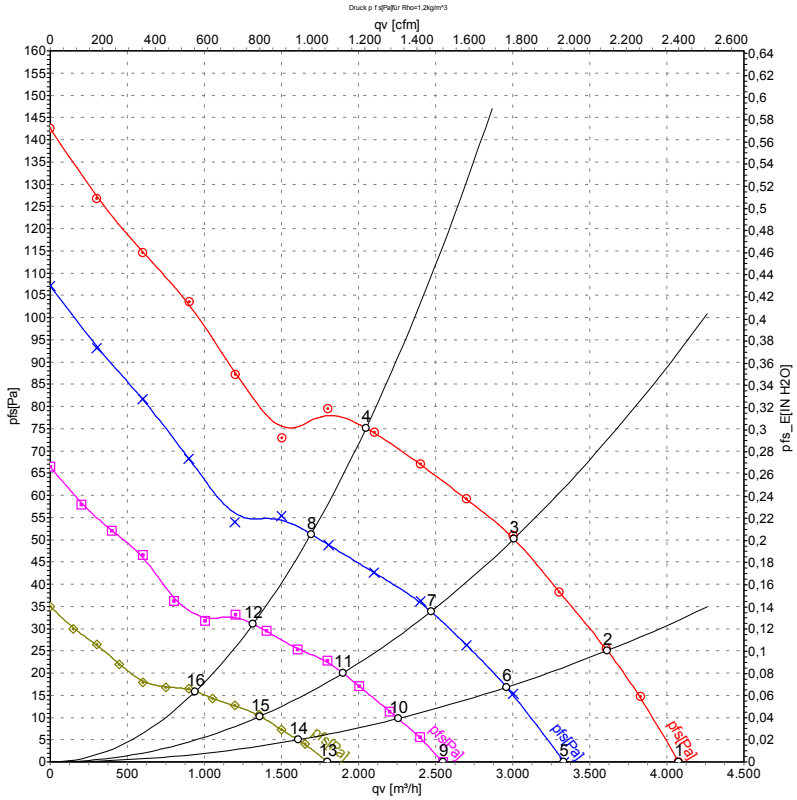
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Charts: Air flow 50 Hz



Measurement: LU-137607
Measurement: LU-137608
Measurement: LU-137609
Measurement: LU-137610

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_{ed}	I	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	1135	116	0.97	62	69	4075	0
2	230	50	1115	126	1.05	60	67	3615	25
3	230	50	1100	131	1.07	56	64	3010	50
4	230	50	1080	140	1.15	59	67	2050	75
5	230	50	930	64	0.60			3330	0
6	230	50	915	70	0.61			2960	17
7	230	50	905	73	0.64			2470	34
8	230	50	890	78	0.69			1690	51
9	230	50	710	31	0.29			2545	0
10	230	50	705	33	0.31			2255	10
11	230	50	700	35	0.32			1900	20
12	230	50	690	37	0.34			1315	31
13	230	50	510	13	0.13			1795	0
14	230	50	505	14	0.13			1610	5
15	230	50	500	15	0.15			1360	10
16	230	50	495	15	0.15			940	16

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com