W3G800-NS26-73

EC axial fan - AxiCool

sickled blades (S series)

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

Nominal data

Type	**W3G800-NS26-73**
Motor	**M3G150-FF**

Phase		3~
Nominal voltage	VAC	400
Nominal voltage range	VAC	380 .. 480
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	930
Power input	W	1570
Current draw	A	2.5
Max. back pressure	Pa	190
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	40

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data in accordance with ecodesign regulation EU 327/2011

		Actual	Request 2015
01 Overall efficiency η_{es}	%	54.9	34.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		60	40
05 Variable speed drive		Yes	

09 Power input P_{ed}	kW	1.56
09 Air flow q_v	m^3/h	16565
09 Pressure increase p_{fs}	Pa	174
10 Speed (rpm) n	min^{-1}	925
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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

LU-177905

EC axial fan - AxiCool

sickled blades (S series)

Technical features

Mass	42.4 kg
Size	800 mm
Motor size	150
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium, coated in black
Material of blades	PP plastic
Material of wall ring	PP plastic
Streamer material	PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	V
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP55
Insulation class	"F"
Humidity (F) / environmental protection class (H)	H2
Note ambient temperature	If there is a risk of ice formation, the fan is only to be operated with a heating tape in the wall ring. Contact ebm-papst for more details. As a fan only suitable for use with industrial evaporators
Max. permissible ambient motor temp. (transp./ storage)	+70 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	See fitting instructions
Condensation drainage holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing with anti-freezing grease
Technical features	- Output 10 VDC, max. 10 mA - Operation and alarm display - External 24 V input (programming) - External release input - Alarm relay - Integrated PID controller - Motor current limit - PFC, passive - RS485 MODBUS RTU - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage / phase failure detection
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-3 (household environment), except EN 61000-3-2 for professionally used devices with a total rated power greater than 1 kW
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Reverse polarity and locked-rotor protection
Protection class	I (if protective earth is connected by customer)

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

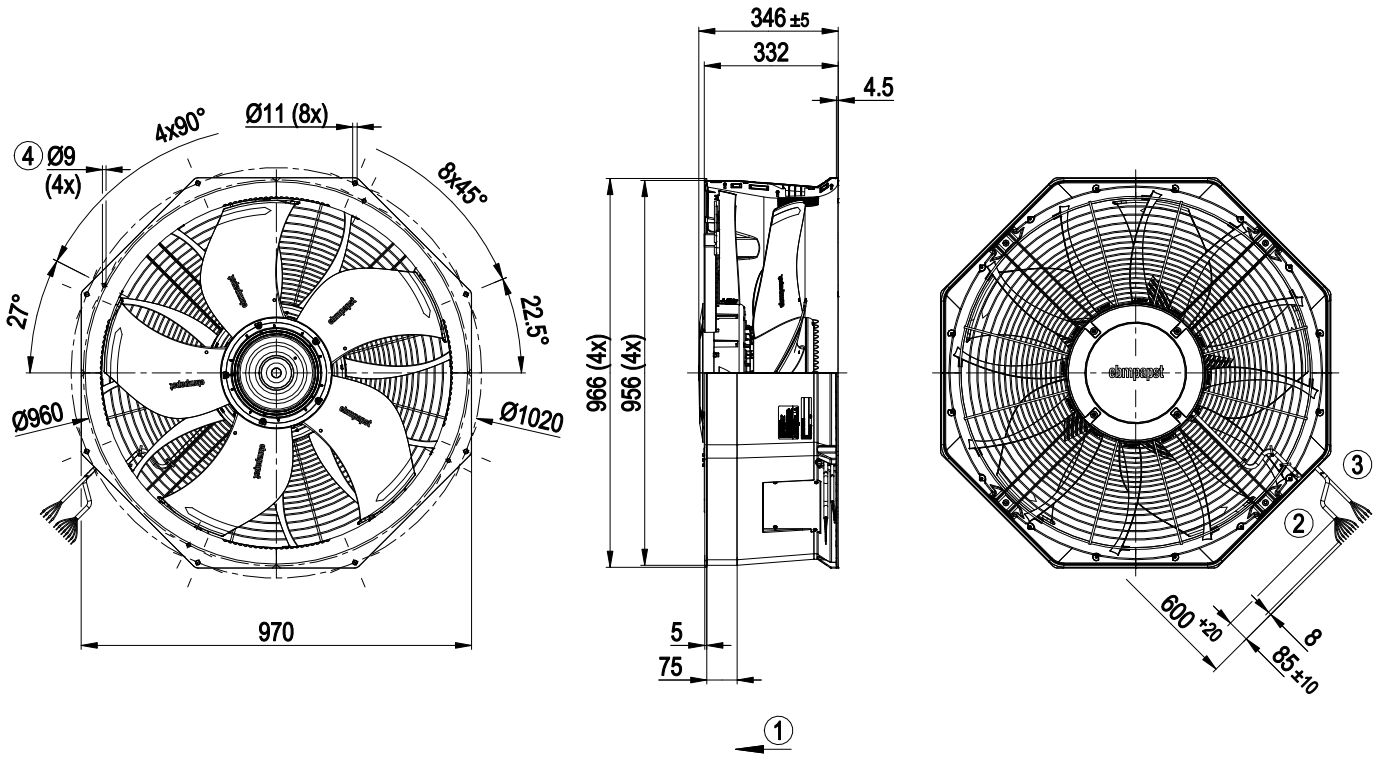
Product conforming to standard	EN 61800-5-1; CE
Approval	EAC

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

EC axial fan - AxiCool

sickled blades (S series)

Product drawing

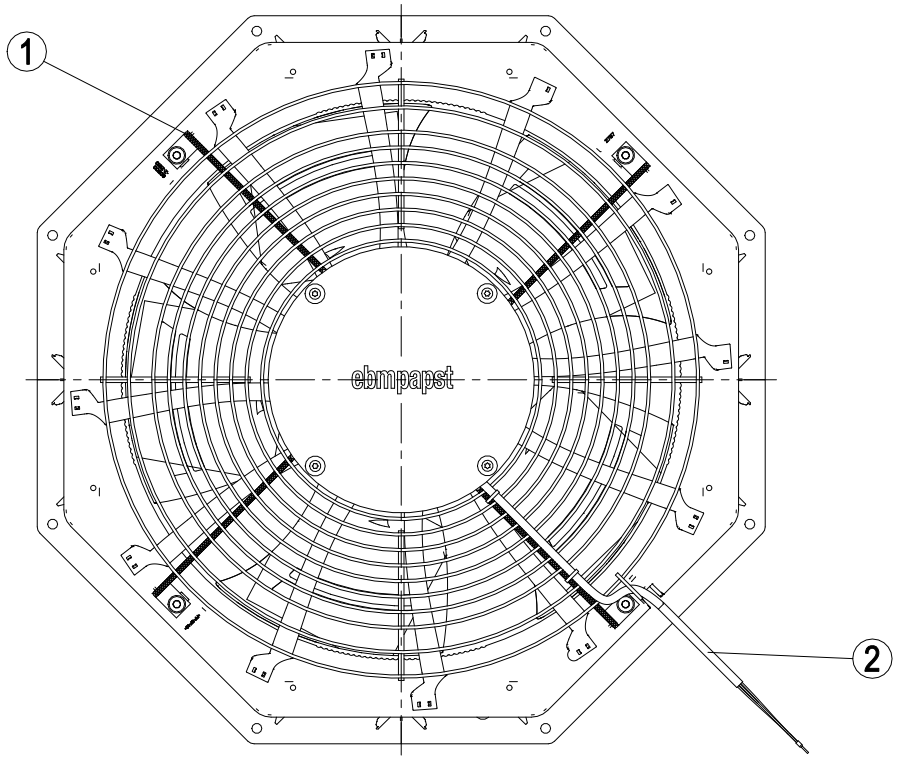


1	Direction of air flow "V"
2	Connection line silicone 8x 0.5 mm²; 8x crimped core-end sleeves
3	Connection line silicone 4G 1.5 mm², 4x crimped core-end sleeves
4	Mounting holes for FlowGrid

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

EC axial fan - AxiCool

sickled blades (S series)



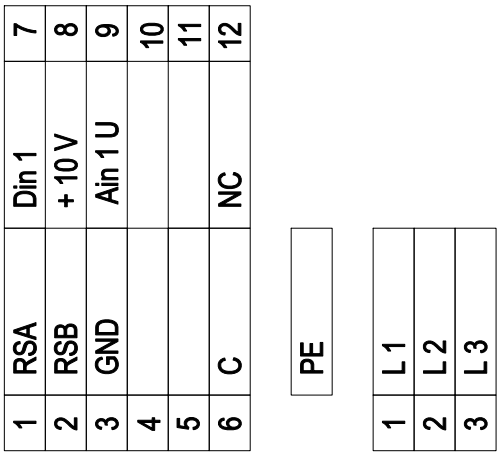
1	Installation position: shaft horizontal (install the support struts in X-position only as shown in illustration) or rotor on bottom
2	Cable exit must be at bottom right when shaft is installed in horizontal position.

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

EC axial fan - AxiCool

sickled blades (S series)

Connection screen



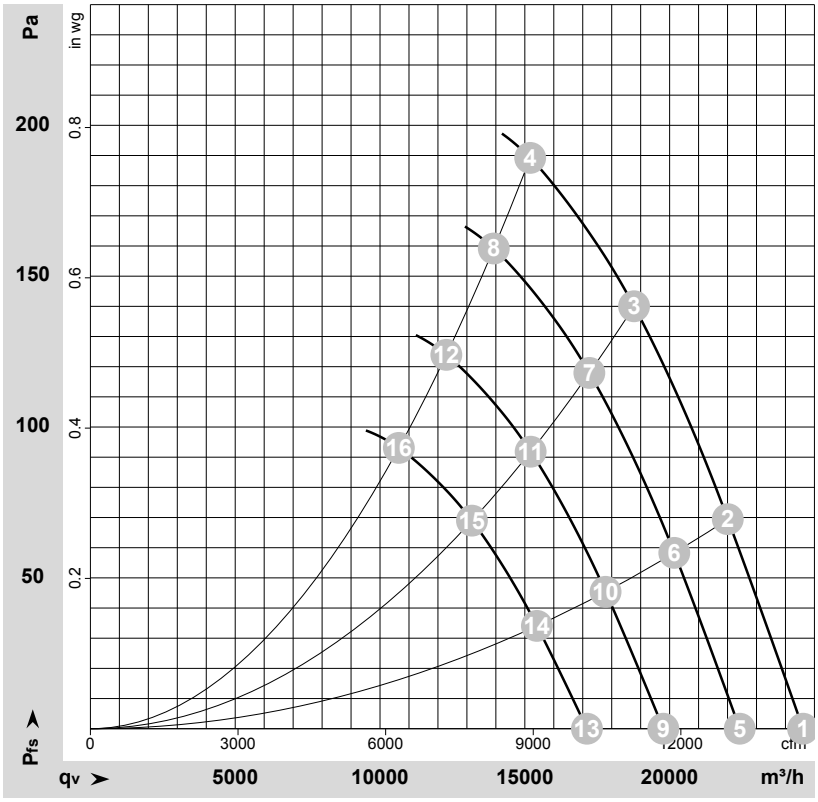
No.	Conn.	Designation	Colour	Function / assignment
KL 1	1	L1	black	Mains connection, power supply 3-phase 380-480 VAC; 50/60 Hz
KL 1	2	L2	brown	Mains connection, power supply 3-phase 380-480 VAC; 50/60 Hz
KL 1	3	L3	light blue	Mains connection, power supply 3-phase 380-480 VAC; 50/60 Hz
PE		PE	green/yellow	Earth connection, PE connection
KL 2	1	RSA	grey	Bus connection RS-485, RSA, MODBUS RTU; SELV
KL 2	2	RSB	brown	Bus connection RS-485, RSB, MODBUS RTU; SELV
KL 2	3	GND	light blue	Reference earth for control interface; SELV
KL2	4	-	-	not used
KL2	5	-	-	not used
KL2	6	C	white 1	Status relay; floating status contact; break for failure; contact rating 250 VAC / max. 2 A (AC1) / min. 10 mA
KL 2	7	Din1	green	Digital input 1 Enable electronics, Enable: Pin open or applied voltage 5-50 VDC Disable: Bridge to GND or applied voltage <1 VDC Reset function: Triggering of software reset after level change to <1 V; SELV
KL 2	8	+10 V	red	Fixed voltage output 10 VDC; +10 V -3 %, max. 10 mA, short-circuit-proof, power supply for external devices (e.g. potentiometer); SELV Alternative: +24 VDC input for parametrisation via MODBUS without mains power
KL 2	9	Ain1 U	yellow	Analogue input 1 (set value) 0-10 V, Ri=100 kΩ, parametrizable curve; SELV
KL2	10	-	-	not used
KL2	11	-	-	not used
KL2	12	NC	white 2	Status relay, floating status contact; break for failure

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

EC axial fan - AxiCool

sickled blades (S series)

Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-177905-1

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}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	400	50	930	1179	1.93	69	77	79	24605	0	14485	0.00
2	400	50	930	1365	2.19	68	76	77	22010	70	12955	0.28
3	400	50	930	1526	2.43	71	79	78	18770	140	11050	0.56
4	400	50	930	1570	2.50	79	86	87	15185	190	8940	0.76
5	400	50	850	892	1.46	67	75	76	22420	0	13195	0.00
6	400	50	850	1050	1.69	66	74	75	20160	59	11865	0.24
7	400	50	850	1180	1.88	69	77	76	17230	119	10140	0.48
8	400	50	850	1212	1.92	77	84	85	13930	159	8200	0.64
9	400	50	750	613	1.00	64	72	73	19785	0	11645	0.00
10	400	50	750	722	1.16	63	71	71	17790	46	10470	0.18
11	400	50	750	811	1.29	66	74	73	15200	92	8945	0.37
12	400	50	750	832	1.32	74	81	82	12290	124	7235	0.50
13	400	50	650	399	0.65	60	68	69	17145	0	10090	0.00
14	400	50	650	470	0.75	59	67	68	15415	34	9075	0.14
15	400	50	650	528	0.84	62	70	69	13175	69	7755	0.28
16	400	50	650	542	0.86	70	77	78	10650	93	6270	0.37

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · LwA_{out} = Sound power level outlet side
q_V = Air flow · p_{fs} = Pressure increase

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