

W3G400-CN04-32

EC axial fan - HyBlade®

sickled blades (S series)

Wall ring with guard grille, Automotive

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	W3G400-CN04-32	
Motor	M3G074-CF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
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	Yes
Specific ratio*	1.00

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

		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 definition with optimum efficiency.

LU-137607

The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



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Technical features

Size	400 mm
Material of impeller	PP-GF40 plastic
Material of wall ring	Sheet steel, pre-galvanised and coated in black 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
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	PTC resistor
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Approval	CCC

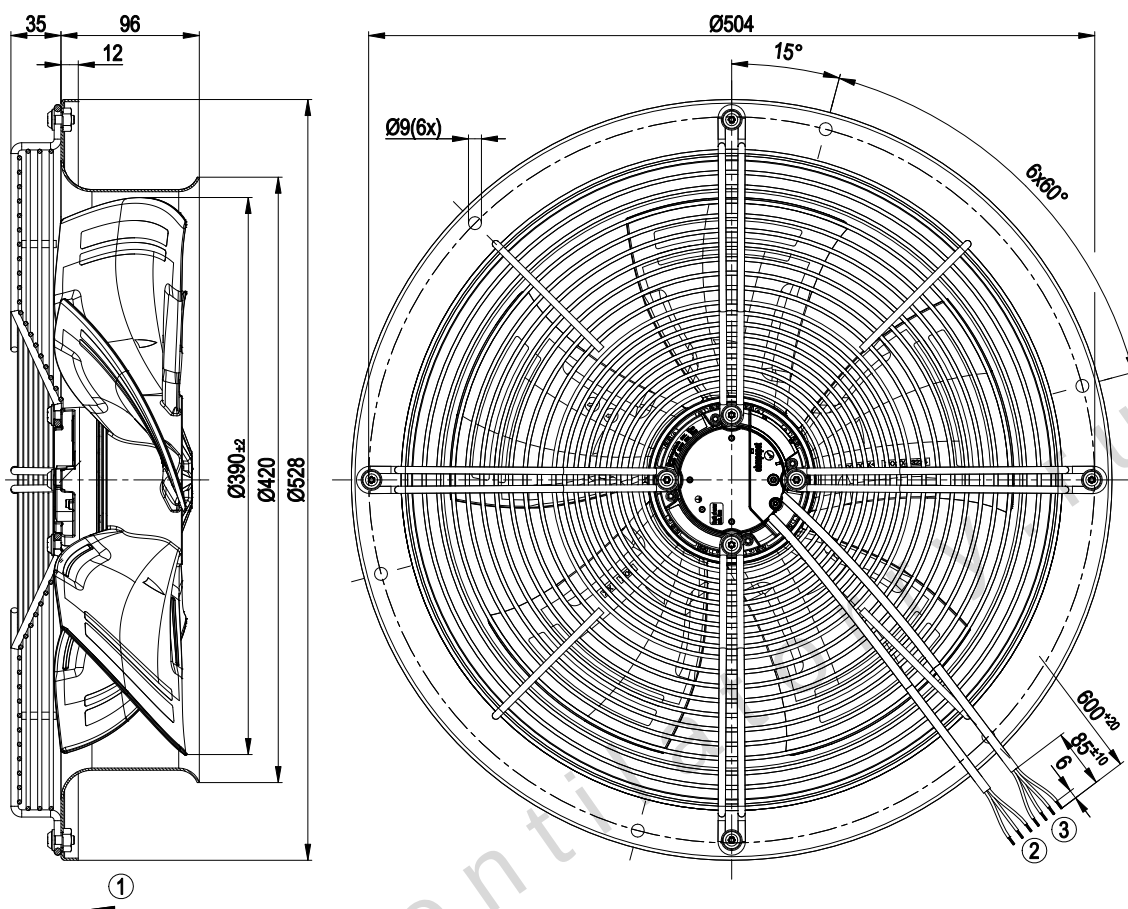
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Product drawing



1	Direction of air flow "V"
2	Connection line PVC 3G AWG20, 3x brass lead tips crimped
3	Connection line PVC 4X AWG22, 4x brass lead tips crimped

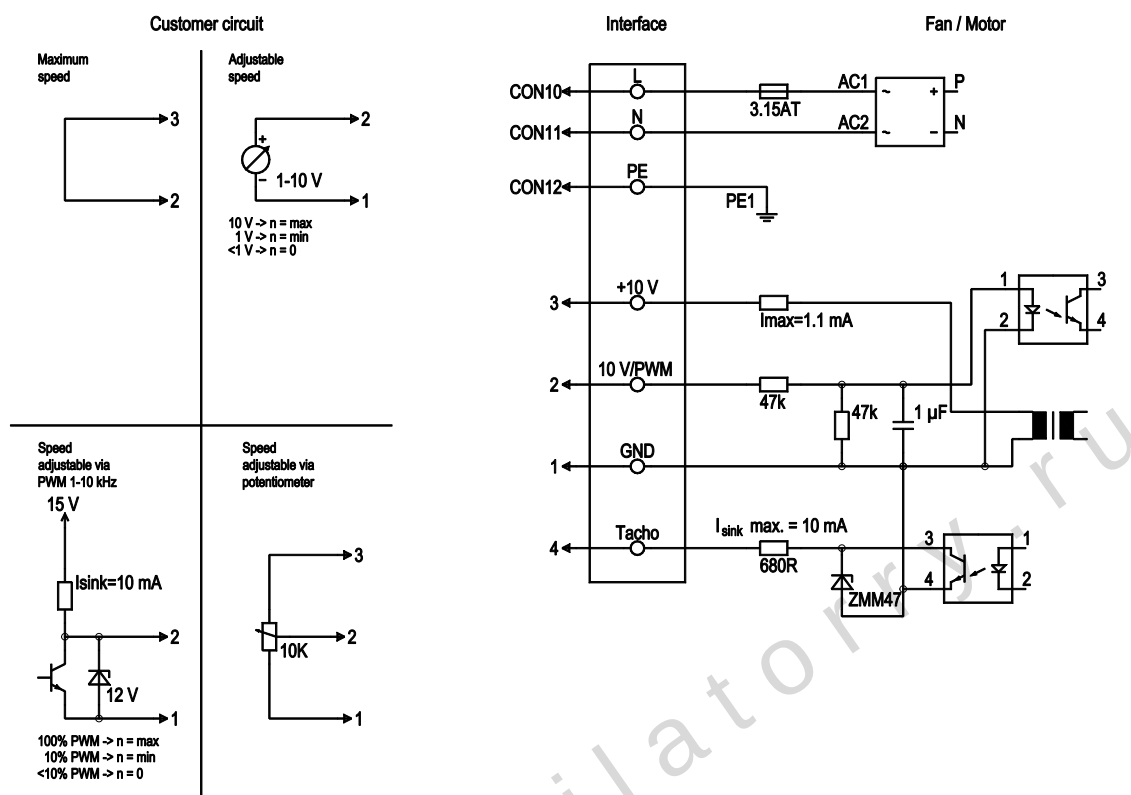
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Connection screen



No.	Conn.	Designation	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 10 V / 1.1 mA, electrically isolated, not short-circuit-proof, $I_{sink} = 10 \text{ mA}$
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, $I_{sink \text{ max.}} = 10 \text{ mA}$

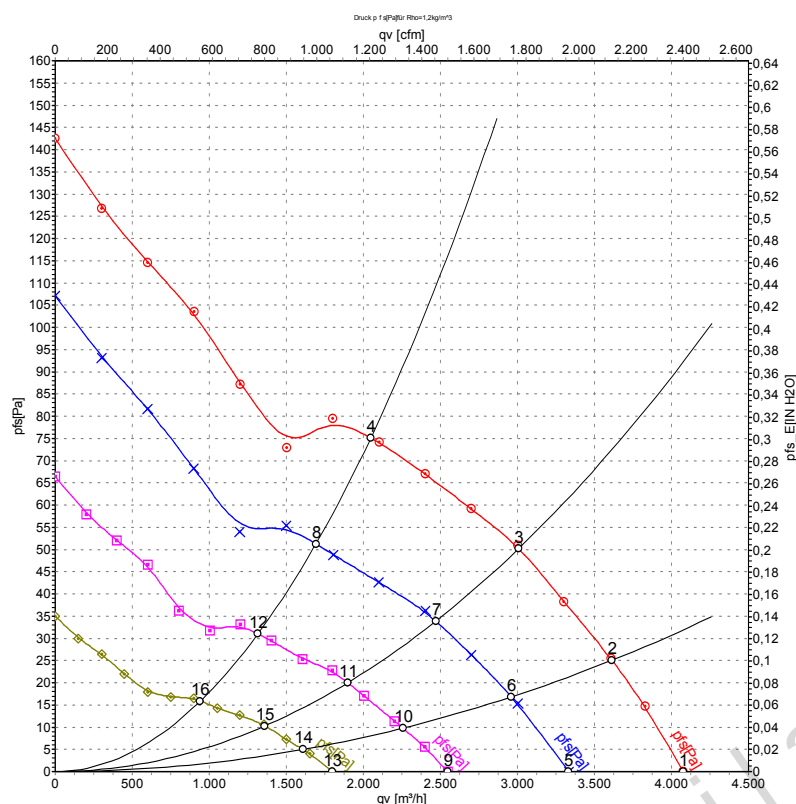
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Charts: Air flow 50 Hz



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: L_{WA} measured as per ISO 13347 /
 L_{pA} 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)	m³/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

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