

W3G300-CN02-36 ebmpapst Datasheet

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## Nominal data

Type	W3G300-CN02-36	
Motor	M3G074-CF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min <sup>-1</sup>	2020
Power consumption	W	170
Current draw	A	1.35
Max. back pressure	Pa	100
Max. back pressure	in. wg	0.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

## Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015			
01 Overall efficiency $\eta_{es}$	%	38	28.8	09 Power consumption $P_{ed}$	kW	0.16
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	1865
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	109
04 Efficiency grade N		49.2	40	10 Speed (rpm) n	min <sup>-1</sup>	2080
05 Variable speed drive		Yes		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.  
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-197333



### Technical description

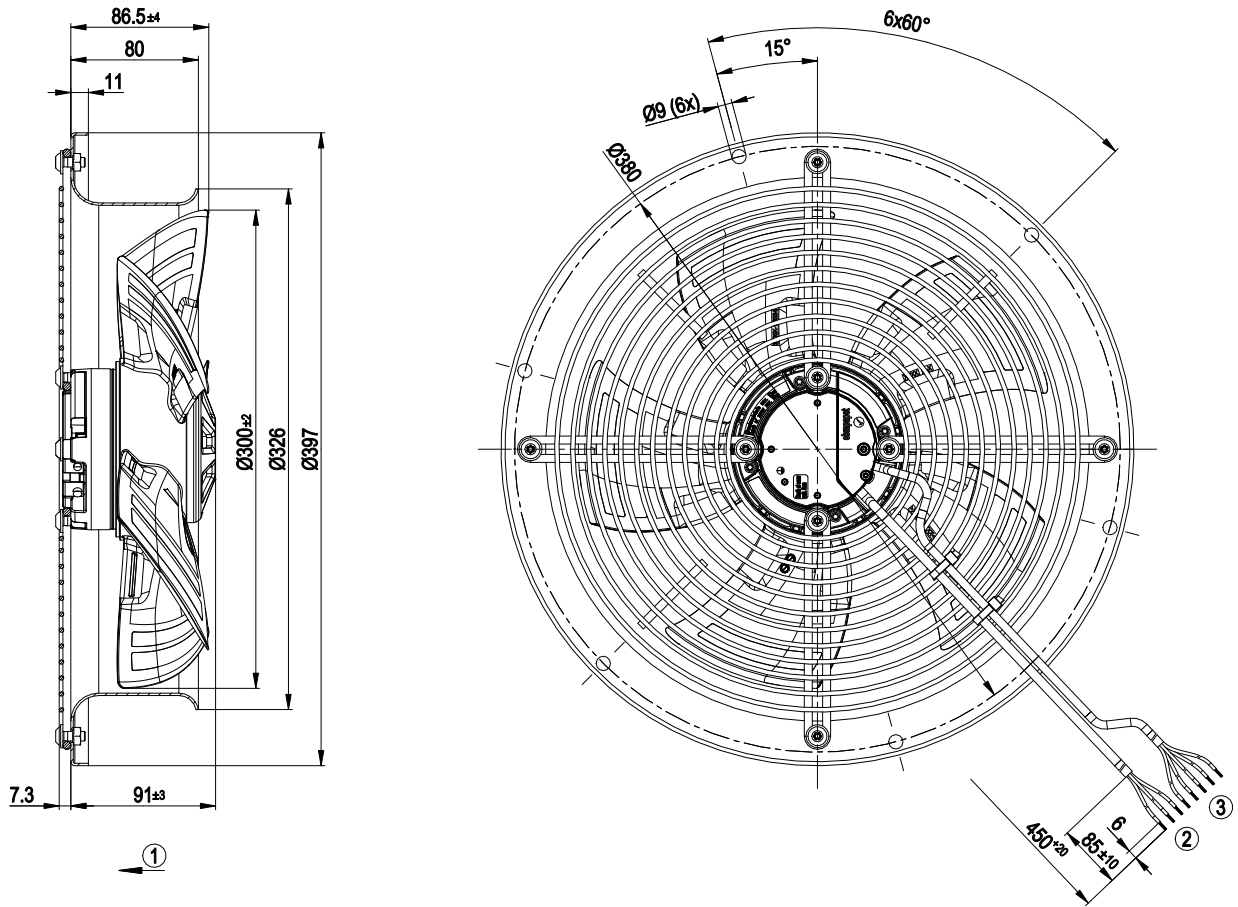
Weight	4.06 kg
Size	300 mm
Motor size	74
Rotor surface	Thick-film passivated
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Fan housing material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, 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)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal (base mounting only) or rotor on bottom; rotor on top on request
Condensation drainage holes	None, open rotor
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> <li>- Output 10 VDC, max. 10 mA</li> <li>- Auto-addressing can be activated by BUS</li> <li>- Power limiter</li> <li>- Motor current limitation</li> <li>- RS-485 MODBUS-RTU</li> <li>- Soft start</li> <li>- Control interface with SELV potential safely disconnected from the mains</li> <li>- Overvoltage detection</li> <li>- Thermal overload protection for electronics/motor</li> <li>- Line undervoltage detection</li> </ul>
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1

# EC axial fan - HyBlade

sickle-shaped blades (S series)

Fan housing with guard grille

## Product drawing



1	Airflow direction "V"
2	Cable PVC AWG20
	3x splice
3	Cable PVC AWG22
	5x splice

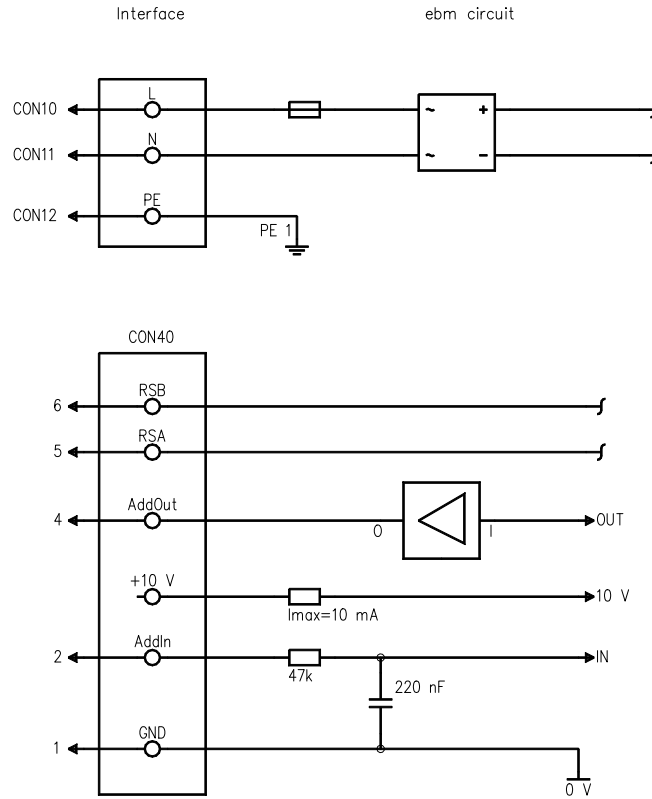


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## Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply, phase, see nameplate for voltage range
	CON11	N	blue	Power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Protective earth
CON40	6	RSB	brown	RS485 interface for MODBUS, RSB; SELV
CON40	5	RSA	white	RS485 interface for MODBUS, RSA; SELV
CON40	4	AddOut /max. 10 mA	gray	Addressing output 10 V, SELV
CON40	2	AddIn	yellow	Addressing input U <sub>max</sub> = 48 VDC, SELV
CON40	1	GND	blue	Reference ground for control interface, SELV

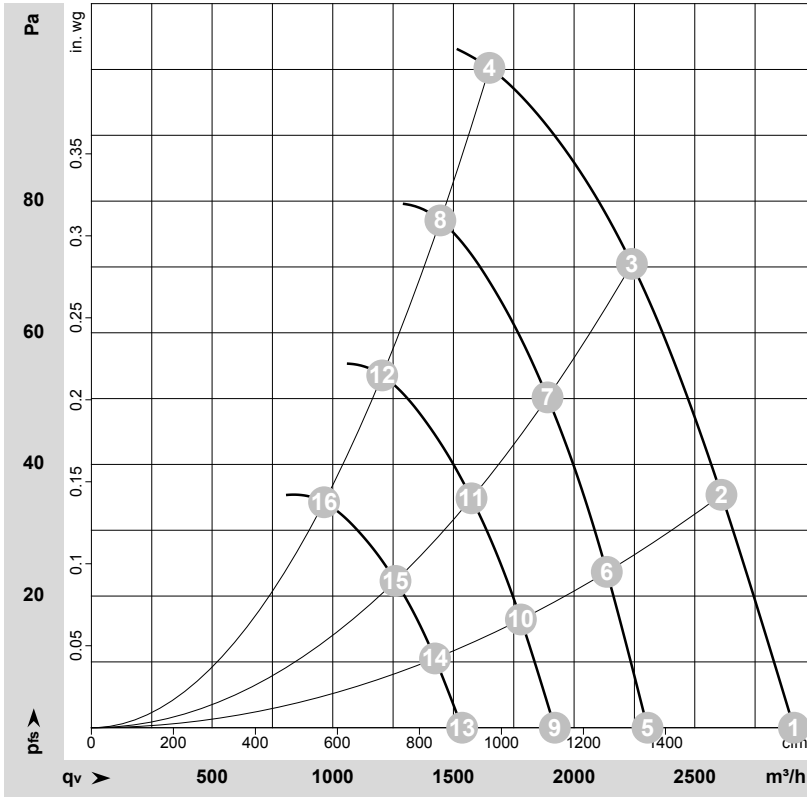


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sickle-shaped blades (S series)

Fan housing with guard grille

## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-201132-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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

	Wired	U	f	n	P <sub>ed</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	cfm	in. wg
1	1~	230	50	2275	170	1.35	69	77	2910	0	1715	0.00
2	1~	230	50	2200	170	1.35	68	75	2610	35	1535	0.14
3	1~	230	50	2135	170	1.35	65	73	2240	70	1320	0.28
4	1~	230	50	2020	170	1.35	64	72	1650	100	970	0.40
5	1~	230	50	1800	83	0.67	63	71	2305	0	1355	0.00
6	1~	230	50	1800	92	0.73	63	70	2135	24	1255	0.10
7	1~	230	50	1800	100	0.80	61	69	1890	50	1110	0.20
8	1~	230	50	1800	112	0.90	61	68	1445	77	850	0.31
9	1~	230	50	1500	48	0.39	59	66	1920	0	1130	0.00
10	1~	230	50	1500	53	0.42	58	66	1780	16	1050	0.06
11	1~	230	50	1500	58	0.46	56	64	1575	35	925	0.14
12	1~	230	50	1500	65	0.52	56	64	1205	54	710	0.22
13	1~	230	50	1200	25	0.20	53	61	1535	0	905	0.00
14	1~	230	50	1200	27	0.22	52	60	1425	11	840	0.04
15	1~	230	50	1200	30	0.24	51	58	1260	22	740	0.09
16	1~	230	50	1200	33	0.27	51	58	965	34	565	0.14

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
 q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

