

EC axial fan

with brushless DC motor



W3G300-BV26-40 ebmpapst Datasheet
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Nominal data

Type	W3G300-BV26-40	
Motor	M3G084-BF	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Type of data definition		fa
Speed (rpm)	min ⁻¹	4370
Power input	W	510
Current draw	A	19.5
Min. ambient temperature	°C	-40
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

		Actual	Request 2015
01 Overall efficiency η_{es}	%	42.5	32.5
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		50	40
05 Variable speed drive		Yes	

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

09 Power input P_e	kW	0.65
09 Air flow q_v	m ³ /h	2405
09 Pressure increase p_{fs}	Pa	378
10 Speed (rpm) n	min ⁻¹	4150
11 Specific ratio*		1.00

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

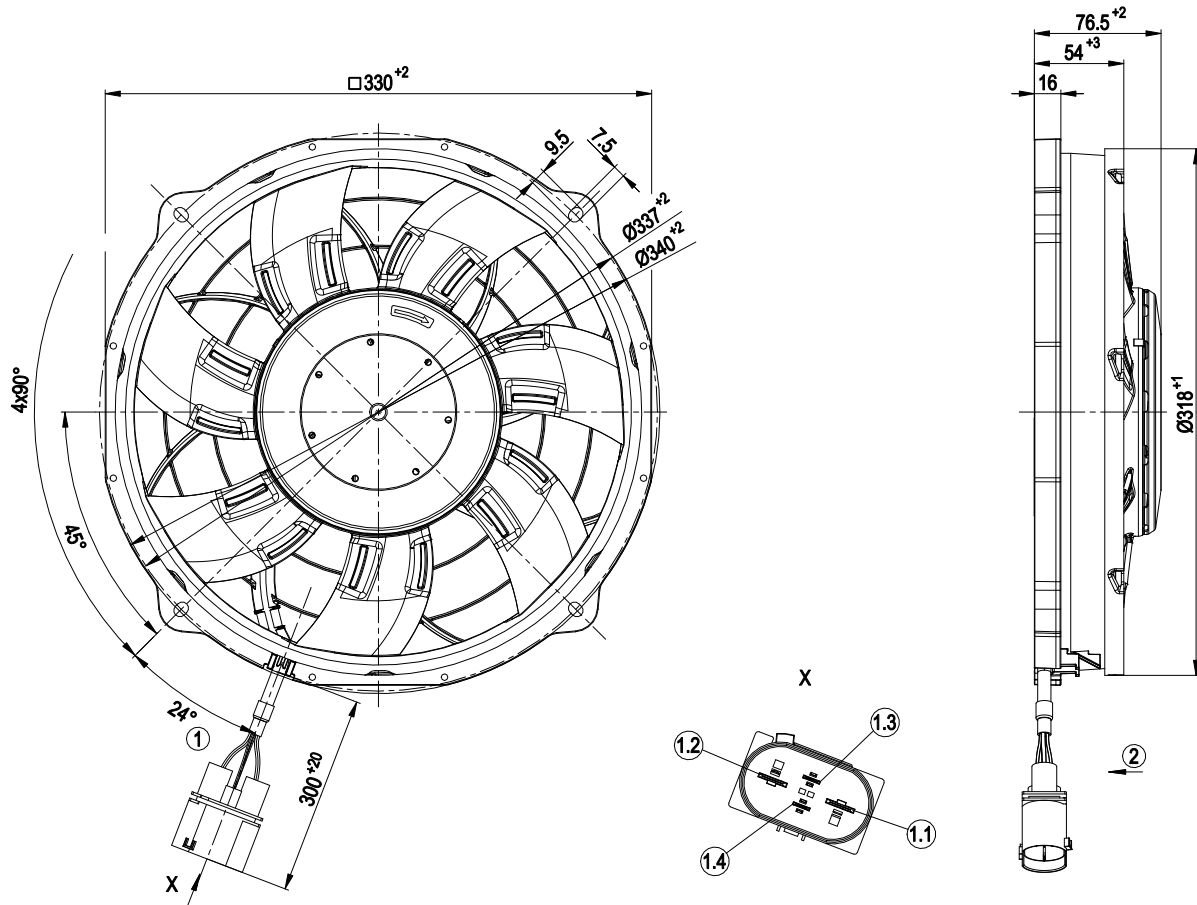
LU-168713



Technical features

Mass	2 kg
Size	300 mm
Material of impeller	Plastic, PA UL94 HB (black)
Material of wall ring	Plastic, PA UL94 HB (black)
Number of blades	7
Direction of air flow	"V"
Balance quality according to DIN ISO 1940-1	G 10
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 24 KM; (motor); electronics IP 6K9K
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H4
Max. permissible ambient motor temp. (transp./ storage)	+60 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing; (sealed)
Life expectancies	25,000 h (typical)
Technical features	<ul style="list-style-type: none"> - Tach output - Fault output (open collector) - Load dump (58 V) - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Temperature derating - Over-temperature protected electronics
EMC directives	As per ECE R10 Rev. 5
Electrical leads	With plug; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Approval	EAC; E1
Noise level	89 dB(A), sound power level as per ISO 13347
Remark	Type approval number – 057606

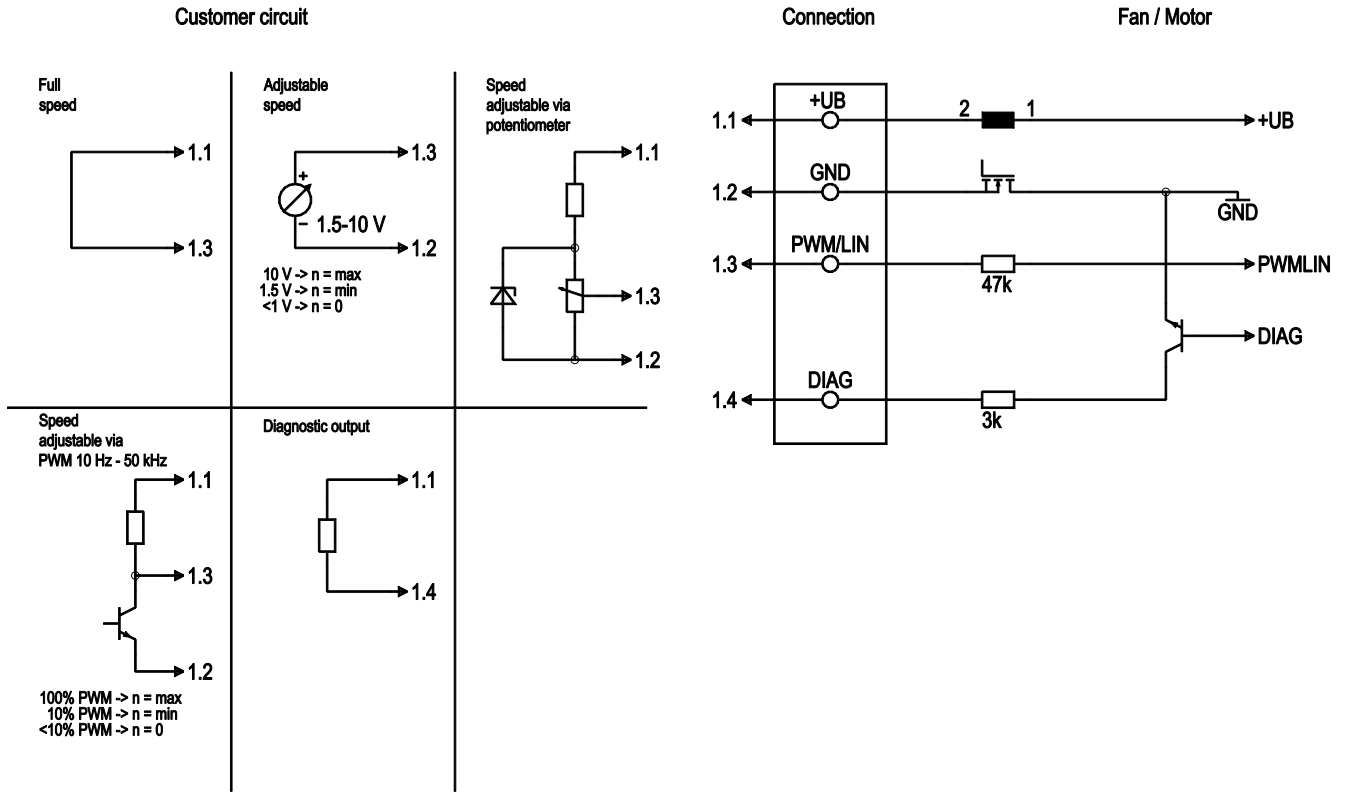
Product drawing



1	Connection line with plug FCI 30531001, 4-pole, coded, mating connector FCI 60411901/30432101 (not included in scope of delivery)
1.1	+ UB (black)
1.2	GND (brown)
1.3	PWM/LIN (yellow)
1.4	Diagnostic output (white)
2	Direction of air flow "V"



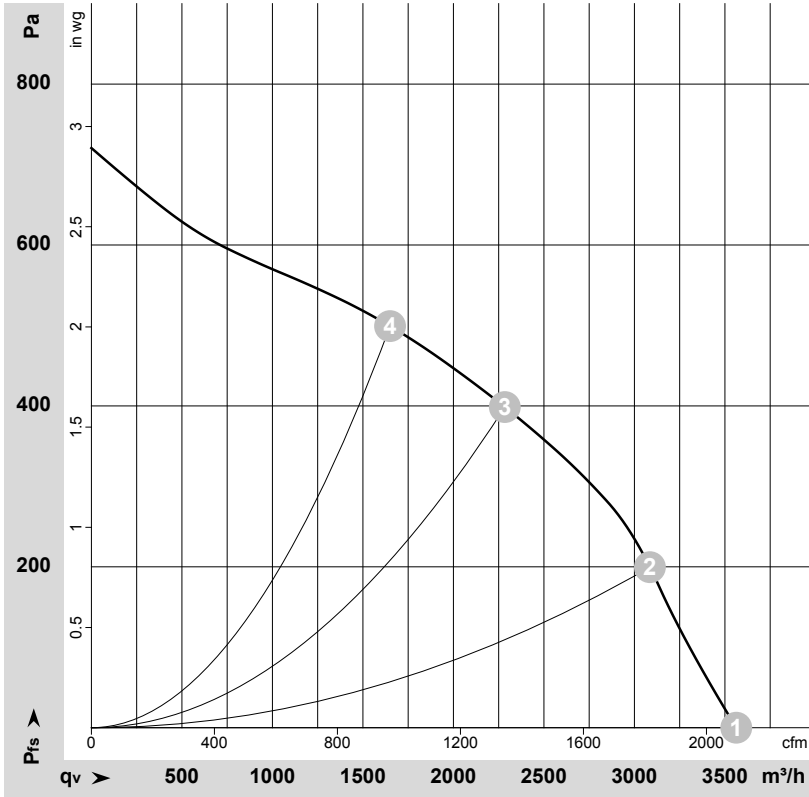
Connection screen



No.	Conn.	Designation	Function / assignment
	1.1	+UB	Power supply
	1.2	GND	Power supply GND, reference earth
	1.3	PWM/LIN	Analogue voltage control input 0-10 V or PWM
	1.4	DIAG	Diagnostic output, 2 pulses per revolution



Charts: Air flow



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

Measurement: LU-168713-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	n	P _{ed}	I	q _v	p _{fs}	q _v	p _{fs}
	V	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	26	4370	510	19.50	3565	0	2095	0.00
2	26	4375	621	23.87	3085	200	1815	0.80
3	26	4130	656	25.26	2285	400	1345	1.61
4	26	4000	665	25.55	1650	500	970	2.01

U = Supply voltage · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

