

EC axial fan

with brushless DC motor
Automotive

W3G300-QY24-29 ebmpapst Datasheet
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Nominal data

Type	W3G300-QY24-29	
Motor	M3G084-BF	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Status		prelim.
Speed (rpm)	min ⁻¹	3450
Power consumption	W	265
Current draw	A	10.2
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	85

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



Technical description

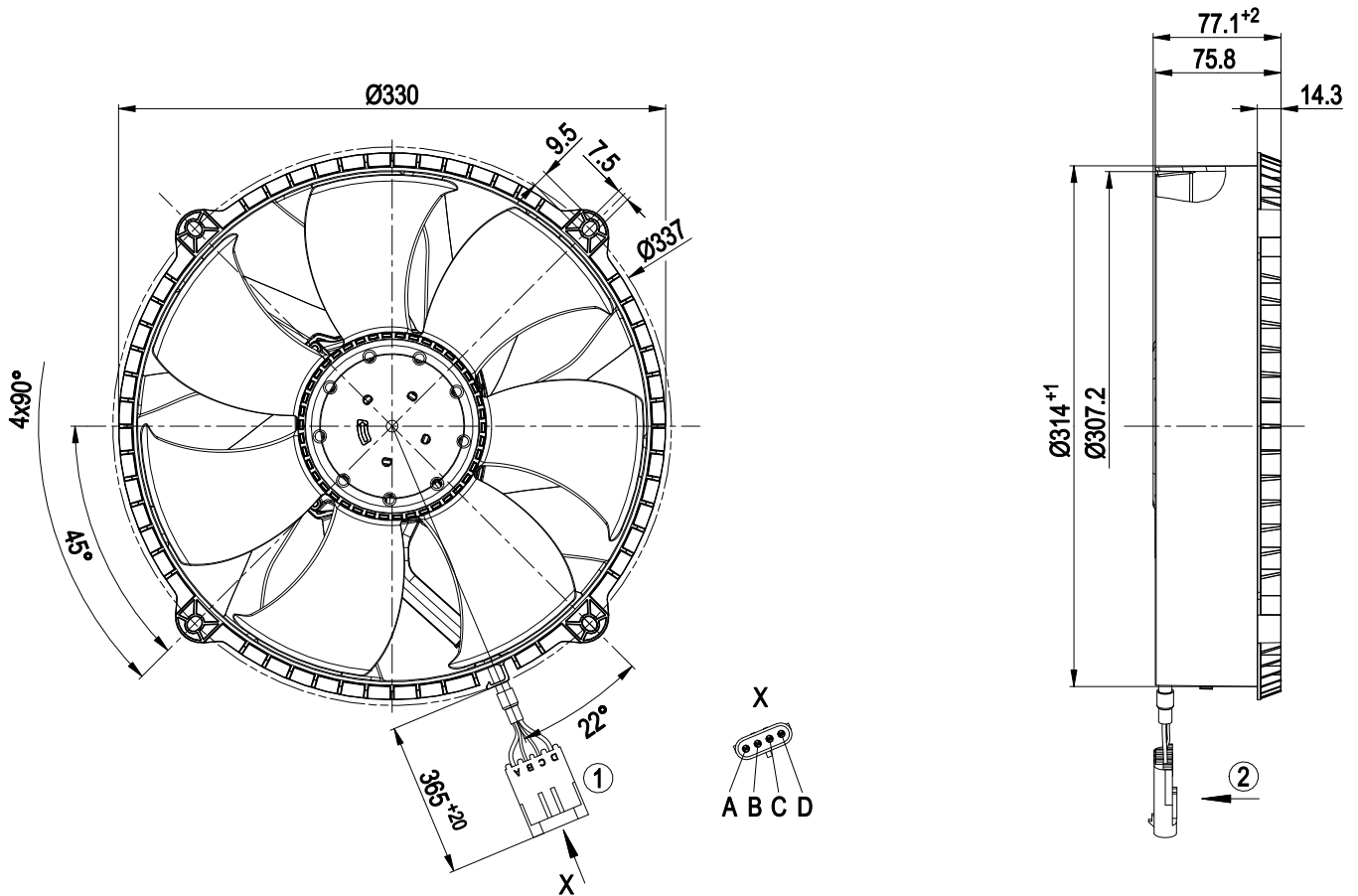
Weight	2.2 kg
Size	300 mm
Motor size	84
Blade material	PA plastic
Fan housing material	PA plastic
Number of blades	7
Airflow direction	V
Balancing grade according to DIN ISO 1940-1	G 10
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	Motor IP24 KM, electronics IP6K9K (mating connector installed)
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H4
Max. permitted ambient temp. for motor (transport/storage)	+85 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing; (sealed)
Life expectancy	40,000 h (typical)
Technical features	- Load dump protection - Motor current limitation - Soft start - Control input 0-5 VDC - Temperature derating - Reverse polarity protection
Electrical hookup	Connector with cable; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral

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Product drawing

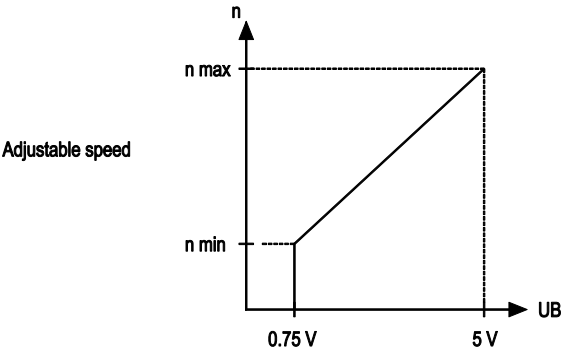
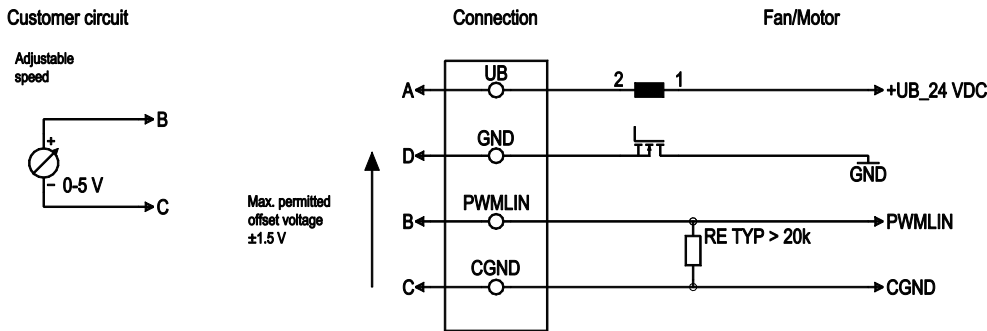


1	Cable FLRYW 2x 3 mm ² , 2x 0.75 mm ²
	4-pole connector housing Aptiv 12010974, 2x plug pin Aptiv 12089040, 2x plug pin Aptiv 12124582, 2x seal Aptiv 15324982, 2x seal Aptiv 15324983
A	+
B	PWM/LIN
C	CGND
D	GND
	4-pole mating connector Aptiv 12015797, 2x plug pin Aptiv 15408312, 2x plug pin Aptiv 12124580, 2x seal Aptiv 15324982, 2x seal Aptiv 15324983
2	Airflow direction "V"



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Connection diagram

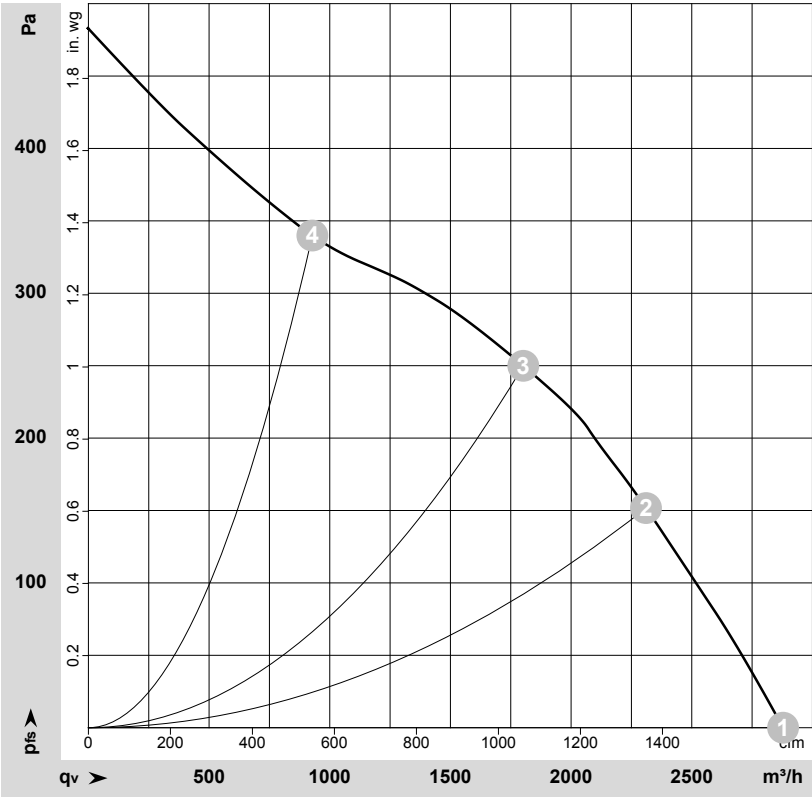


No.	Conn.	Designation	Function/assignment
	A	+UB 24 VDC	Power supply 24 VDC
	D	GND	Power supply, GND
	B	PWM/LIN	Analog voltage control input 0-5 V
	C	CGND	Reference ground for control input, permitted offset $\pm 1.5\text{ V}$



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Curves: Air performance



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

Measurement: LU-191672-1

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

	U	n	P _{ed}	I	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
	V	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	26	3450	265	10.20	78	85	2880	0	1695	0.00
2	26	3205	270	10.40	76	83	2310	150	1360	0.60
3	26	3110	270	10.40	75	83	1800	250	1060	1.00
4	26	3050	270	10.40	80	88	930	340	545	1.36

U = Voltage · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side · q_v = Air flow
p_{fs} = Pressure increase

