W3G300-QX26-40

EC axial fan

with brushless DC motor

Automotive

W3G300-QX26-40 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	**W3G300-QX26-40**
Motor	**M3G084-BF**

Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4400
Power consumption	W	630
Current draw	A	24
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	60

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

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Technical description

Weight	2.26 kg
Size	300 mm
Motor size	84
Impeller material	PA plastic
Fan housing material	PA plastic
Number of blades	7
Airflow direction	V
Balancing grade according to DIN ISO 21940-11	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
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
Max. permitted ambient temp. for motor (transport/storage)	+80 °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	25,000 h (typical)
Technical features	- Tach output - Fault output (open collector) - Load dump (58 V) - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Temperature derating - Thermal overload protection for electronics
Electrical hookup	Connector with cable; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Protection class assignment	0; Built-in component with basic insulation, protection class is based on the intended installation. This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Approval	EAC; E1
Comment	Type approval number – 057606

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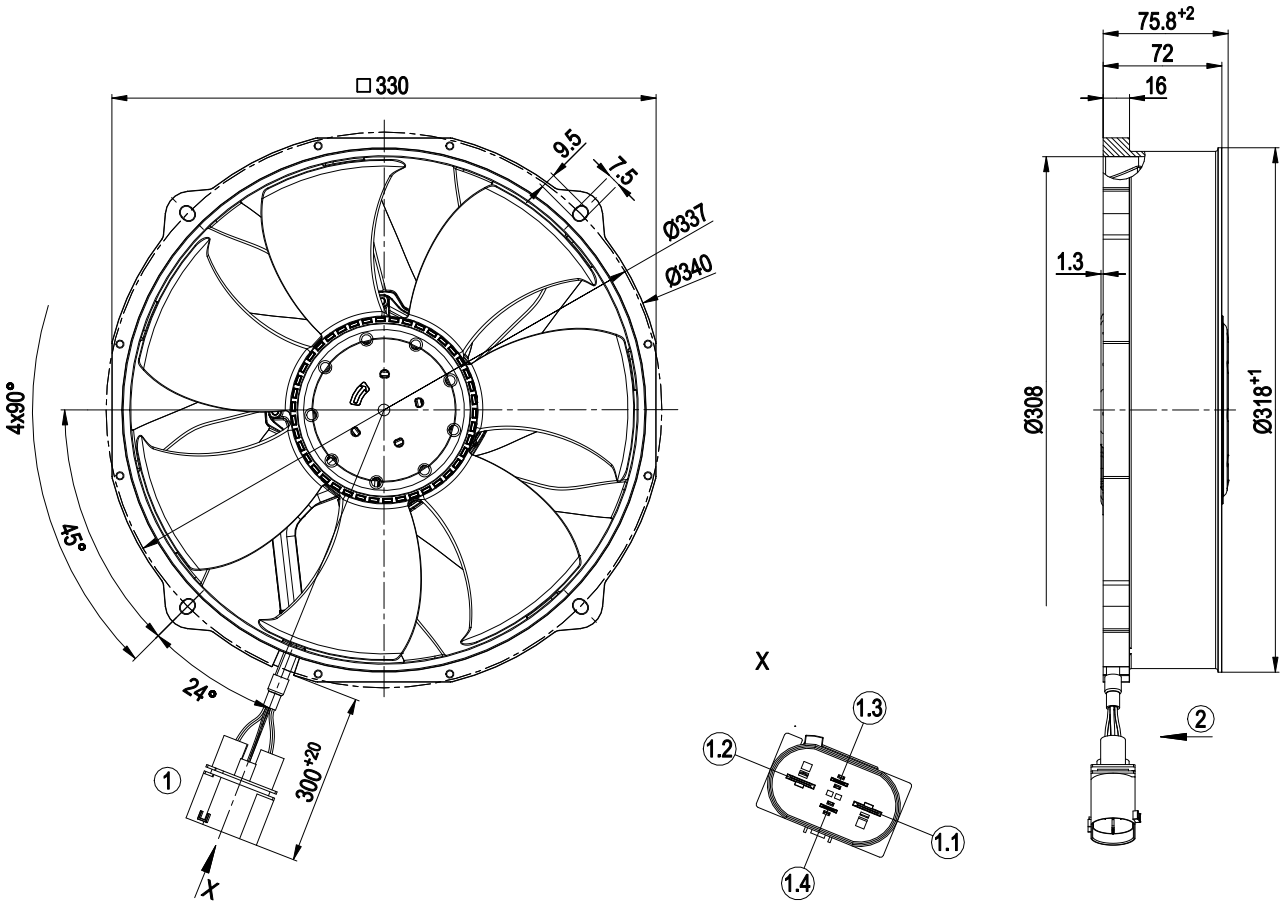
Product drawing



1	Cable FLRYW 2x 6.0 mm², 2x 1.0 mm²
	4-pole connector housing Aptiv F353200, 2x flat plug FCI 60170261, 2x flat plug TE 964310-1, 2x seal FCI 60993308, 2x seal TE 1394511-1
1.1	+ UB
1.2	GND
1.3	PWM/LIN
1.4	Diagnostic output
	4-pole mating connector Aptiv F004200, 2x flat plug FCI 60070261, 2x flat plug TE 927831-1, 2x seal FCI 60993308, 2x seal TE 1394511-1
2	Airflow direction "V"

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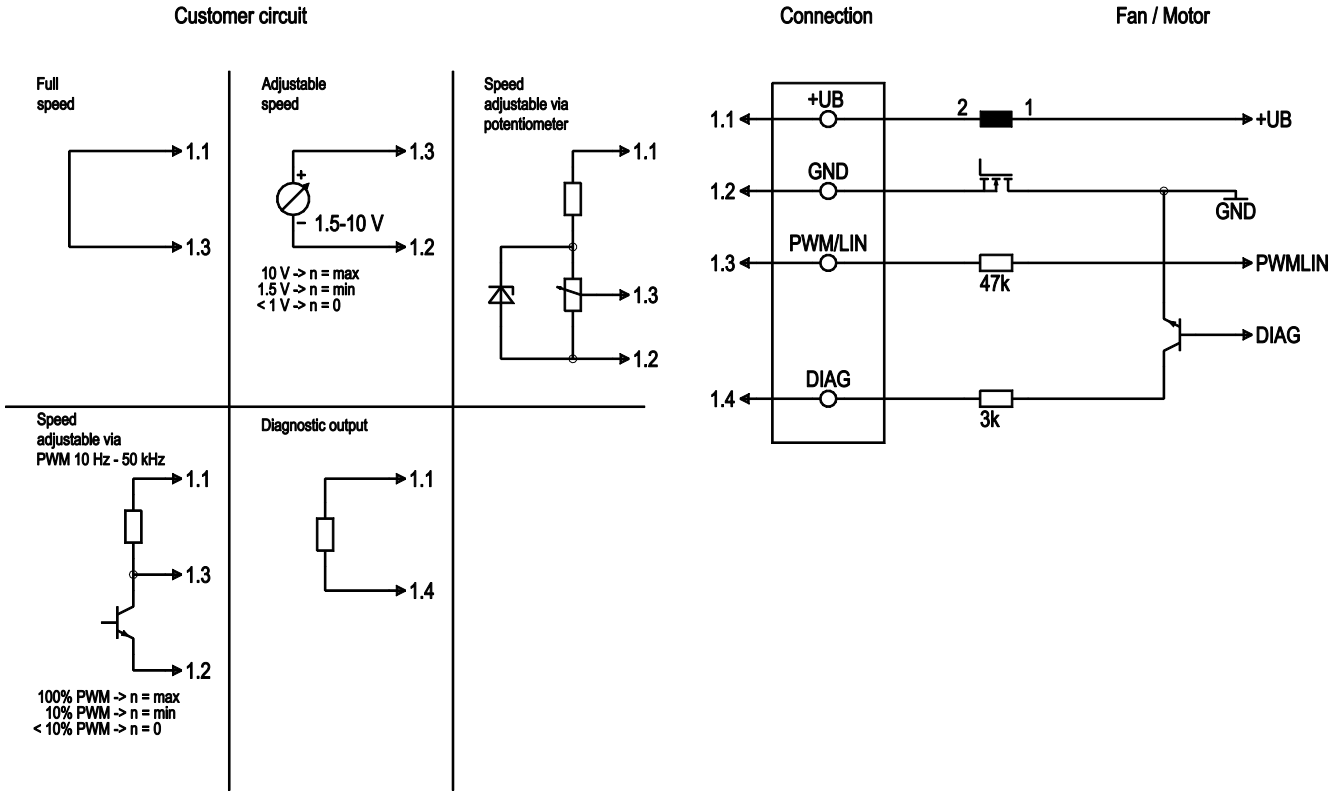
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	1.1	+UB	black	Power supply
	1.2	GND	brown	Power supply GND, reference ground
	1.3	PWM/LIN	yellow	Analog voltage control input 0-10 V or PWM
	1.4	DIAG	white	Diagnostic output, 2 pulses per revolution

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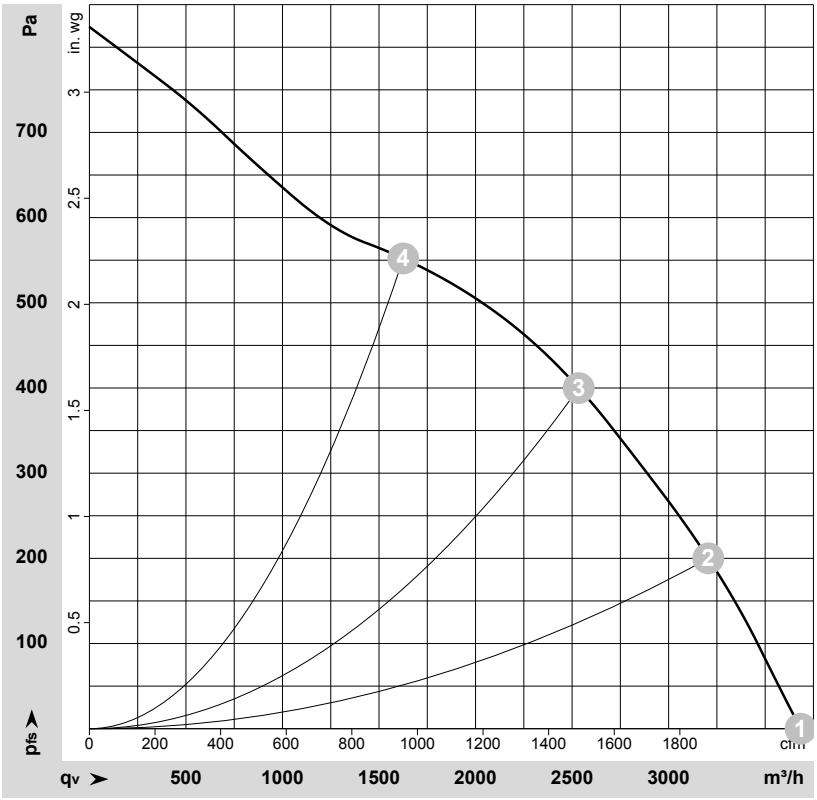
Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-195661-1

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	4400	630	24.00	83	92	3685	0	2170	0.00
2	26	4250	673	25.85	82	91	3205	200	1885	0.80
3	26	4065	675	25.97	82	90	2535	400	1490	1.61
4	26	4065	679	26.08	84	92	1625	550	955	2.21

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