W3G300-RQ42-61

EC axial fan

with brushless DC motor

Automotive



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W3G300-RQ42-61**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	13
Nominal voltage range	VDC	9 .. 15
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2670
Power consumption	W	162
Current draw	A	12.5
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

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	2.5 kg
Size	300 mm
Motor size	74
Impeller material	PA plastic
Fan housing material	PP plastic
Number of blades	5
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
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H2
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)	+70 °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	- Lowering input - Load dump protection - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Thermal overload protection for electronics - Reverse polarity protection
EMC regulations	According to ECE R10 Rev. 3
Electrical hookup	Connector with cable; Standby current less than 500 µA
With cable	Lateral
Approval	E1
Comment	Type approval number – 036433

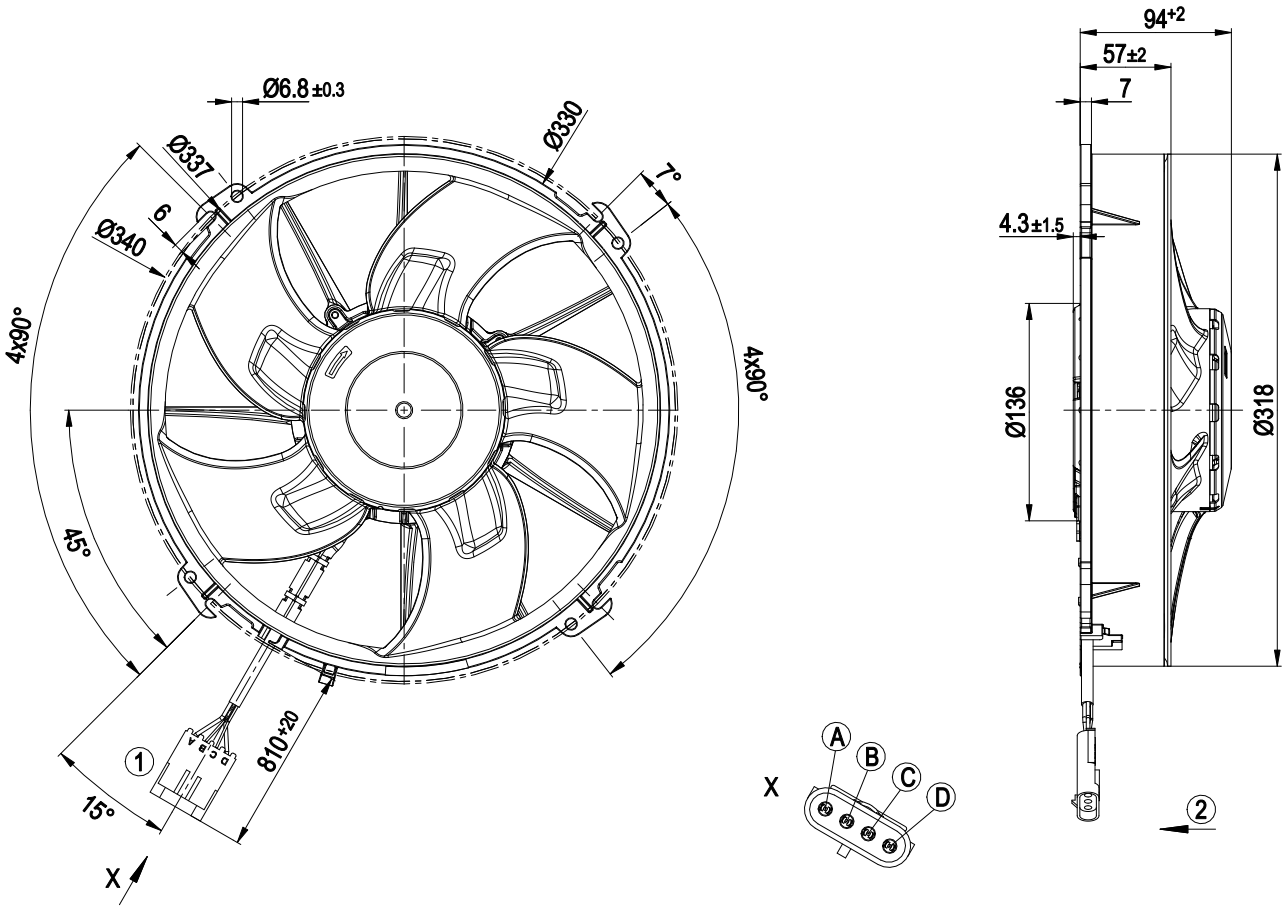
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Product drawing



1	Cable, 2x Raychem Spec. 44 AWG20, 2x Raychem Spec. 44 AWG14
	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	+ UB
B	PWM/LIN
C	ABSENK
D	GND
	4-pole mating connector Aptiv 12015797, 2x socket Aptiv 15408312, 2x socket Aptiv 12124580, 2x seal Aptiv 15324982, 2x seal Aptiv 15324983
2	Airflow direction "V"

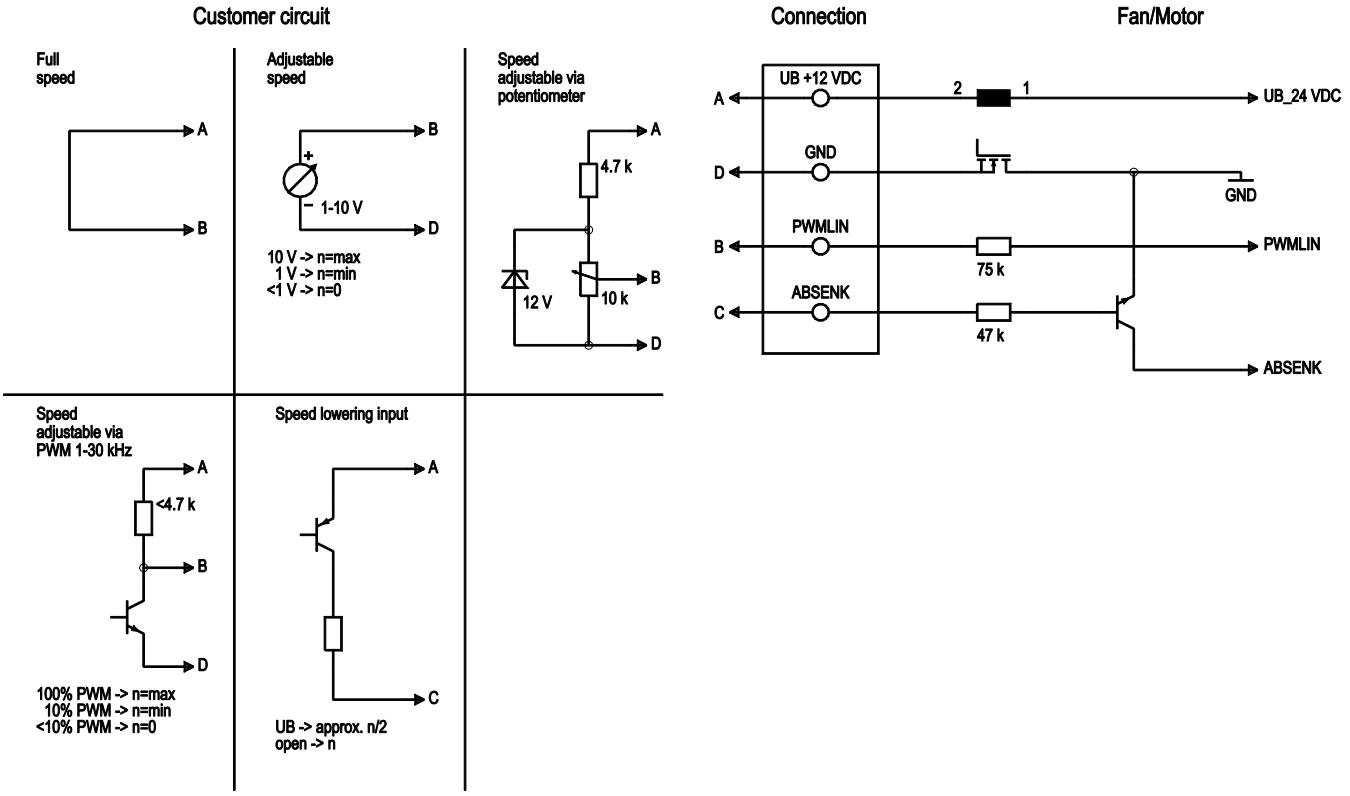
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Connection diagram



No.	Conn.	Designation	Function/assignment
1	A	UB +12 VDC	Power supply 12 VDC
2	D	GND	Reference ground for control interface
3	B	PWM/LIN	Analog voltage control input 0-10 V or PWM
4	C	ABSENK	Lowering input

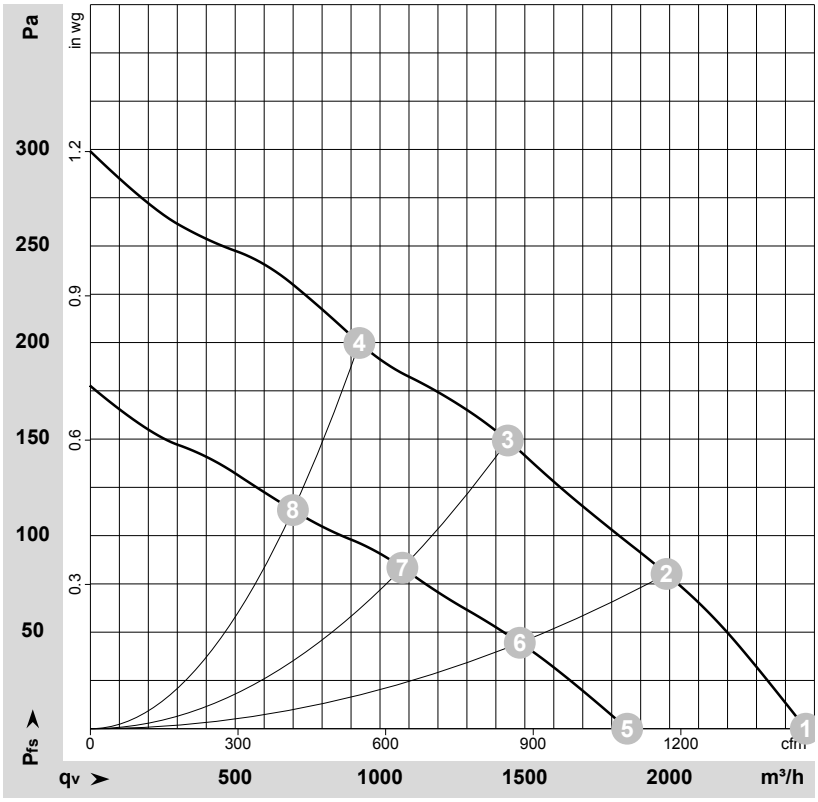
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-117684-1
Measurement: LU-117686-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	13	2670	162	12.50	2470	0	1455	0.00
2	13	2640	166	12.73	1990	80	1170	0.32
3	13	2610	170	13.05	1440	150	850	0.60
4	13	2565	181	13.88	930	200	545	0.80
5	9	2020	70	7.73	1855	0	1090	0.00
6	9	2000	72	8.00	1485	45	875	0.18
7	9	1985	74	8.19	1075	83	635	0.33
8	9	1935	78	8.73	700	113	410	0.45

U = Voltage · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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