W3G300-BV13-62

EC axial fan

with brushless DC motor

Automotive



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Nominal data

Type	**W3G300-BV13-62**	
Motor	**M3G084-BF**	
Nominal voltage	VDC	13
Nominal voltage range	VDC	9 .. 16
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3450
Power consumption	W	275
Current draw	A	21.0
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 kg
Size	300 mm
Motor size	84
Impeller material	PA plastic
Fan housing material	PA plastic
Number of blades	7
Airflow direction	V
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)	+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)
Technical features	- Soft start - Control input 0-10 VDC / PWM - Standstill on cable break - Thermal overload protection for electronics - Reverse polarity protection
Electrical hookup	Connector with cable
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral

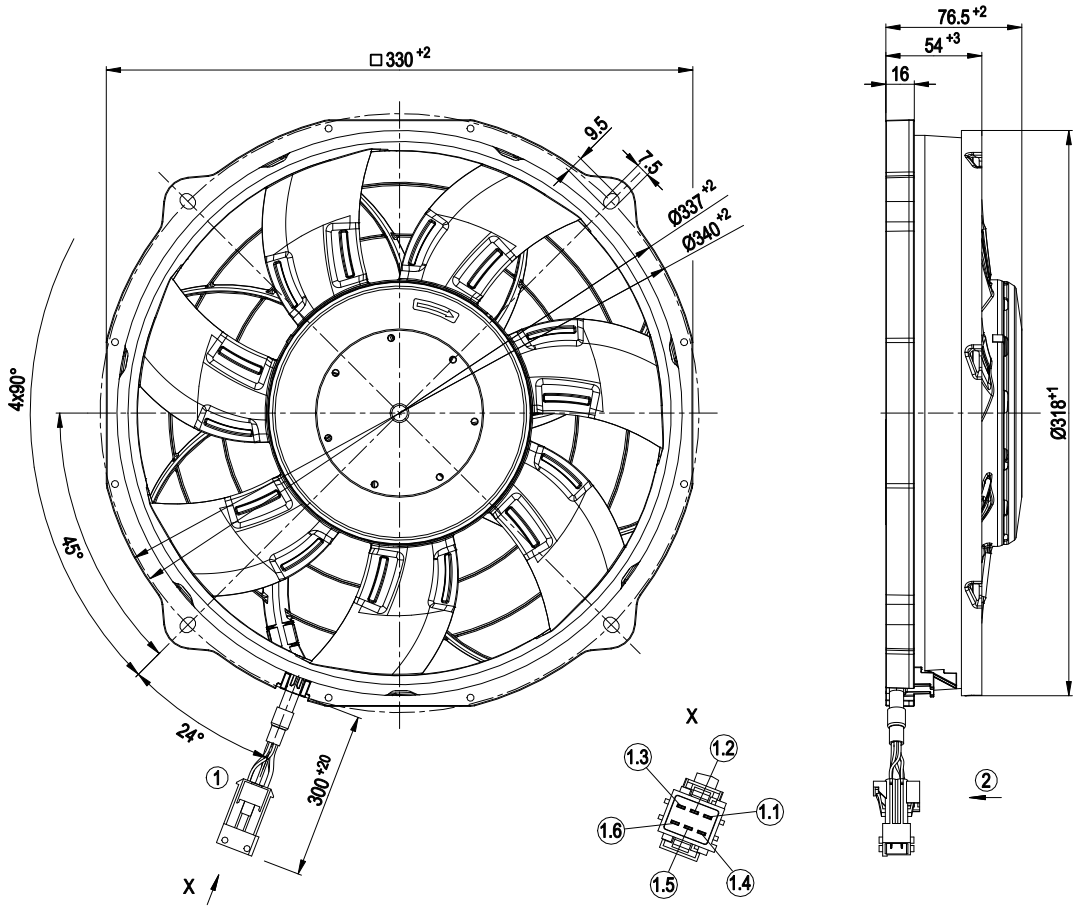
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Product drawing



1	Cable FLRYW 2x 3 mm², 4x 0.75 mm²
	6-pole connector housing TE 1-962349-1, 2x flat plug TE 2-962916-1, 3x flat plug TE 1-962915-1 1x seal TE 963205-1, 2x seal TE 828905-1, 3x seal TE 828904-1, 1x dummy plug TE 828922-1
1.1	+ UB
1.2	GND
1.3	PWM/LIN
1.4	Not used / no function
1.5	ABSENK
1.6	Diagnostic output
	6-pole mating connector TE 1-963212-1, 3x receptacle TE 929939-1, 2x receptacle TE 929937-1, 1x dummy plug TE 828922-1
2	Airflow direction "V"

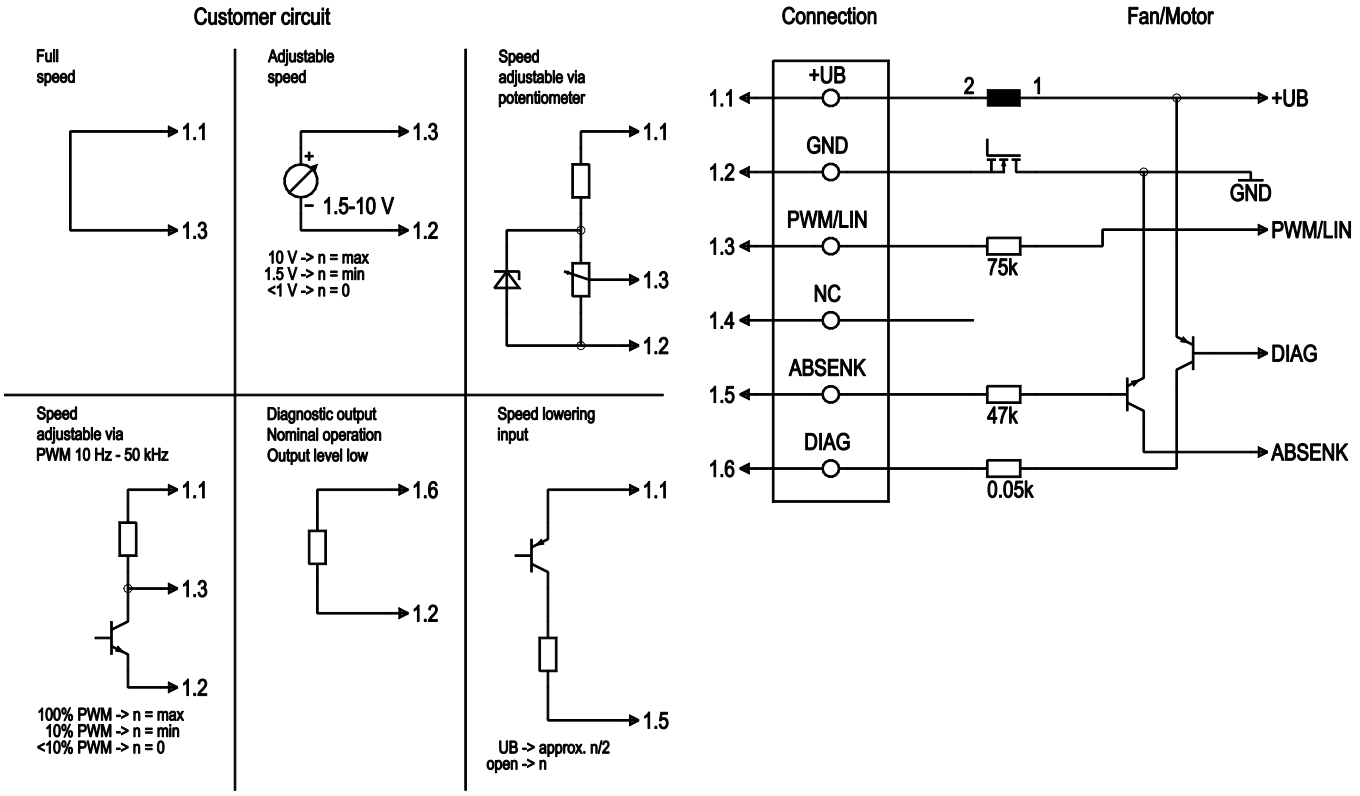
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Connection diagram



No.	Conn.	Designation	Function/assignment
	1.1	+UB	Power supply
	1.2	GND	Power supply GND, reference ground
	1.3	PWM/LIN	Analog voltage control input 0-10 V or PWM
	1.4	NC	Not used / no function
	1.5	ABSENK	Lowering input
	1.6	DIAG	Diagnostic output

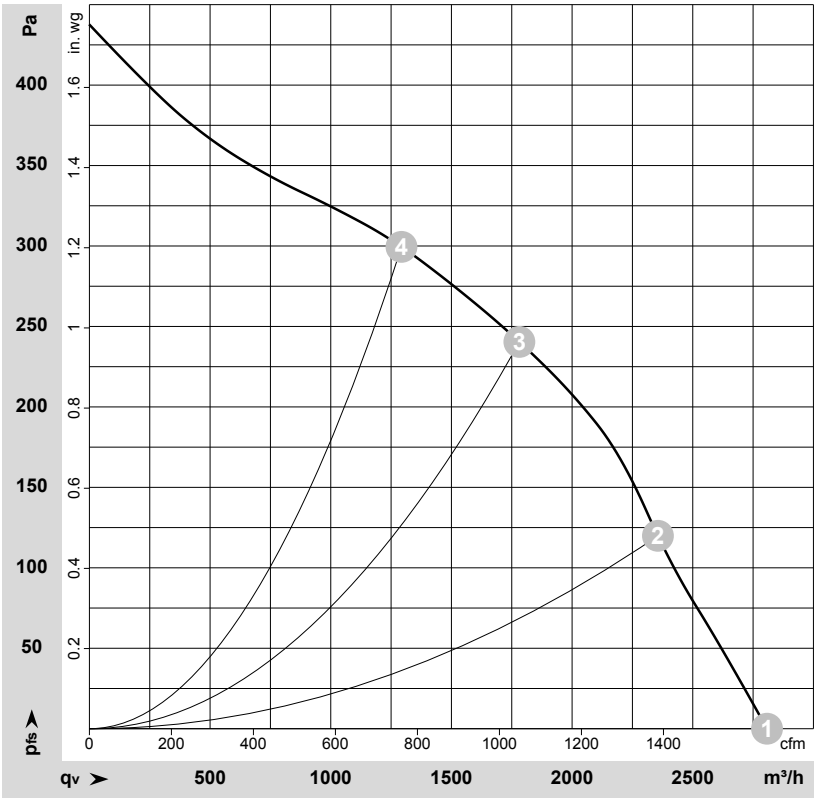
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-181112-1

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	13	3450	275	21.00	76	84	2810	0	1655	0.00
2	13	3360	304	23.50	76	84	2355	120	1385	0.48
3	13	3165	320	24.50	74	82	1780	240	1050	0.96
4	13	3070	320	24.50	74	82	1295	300	760	1.20

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

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