W3G300-BV25-33

EC axial fan

with brushless DC motor

Automotive



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Nominal data

Type	**W3G300-BV25-33**	
Motor	**M3G084-BF**	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3940
Power consumption	W	380
Current draw	A	14.6
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	85/110

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
Fan size	300 mm
Impeller 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	IP24 KM; (motor); electronics IP6K9K
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F4-1
Ambient temperature note	Over +85 °C with power derating
Max. permitted ambient temp. for motor (transport/storage)	+110 °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	- Lowering input - Fault output (high-side switch max. 30 mA) - INVLIN (inverse linear control input) - Power limiter - Load dump (58 V) - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Temperature derating - Overvoltage detection - Thermal overload protection for electronics - Line undervoltage detection
Electrical hookup	With plug; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral

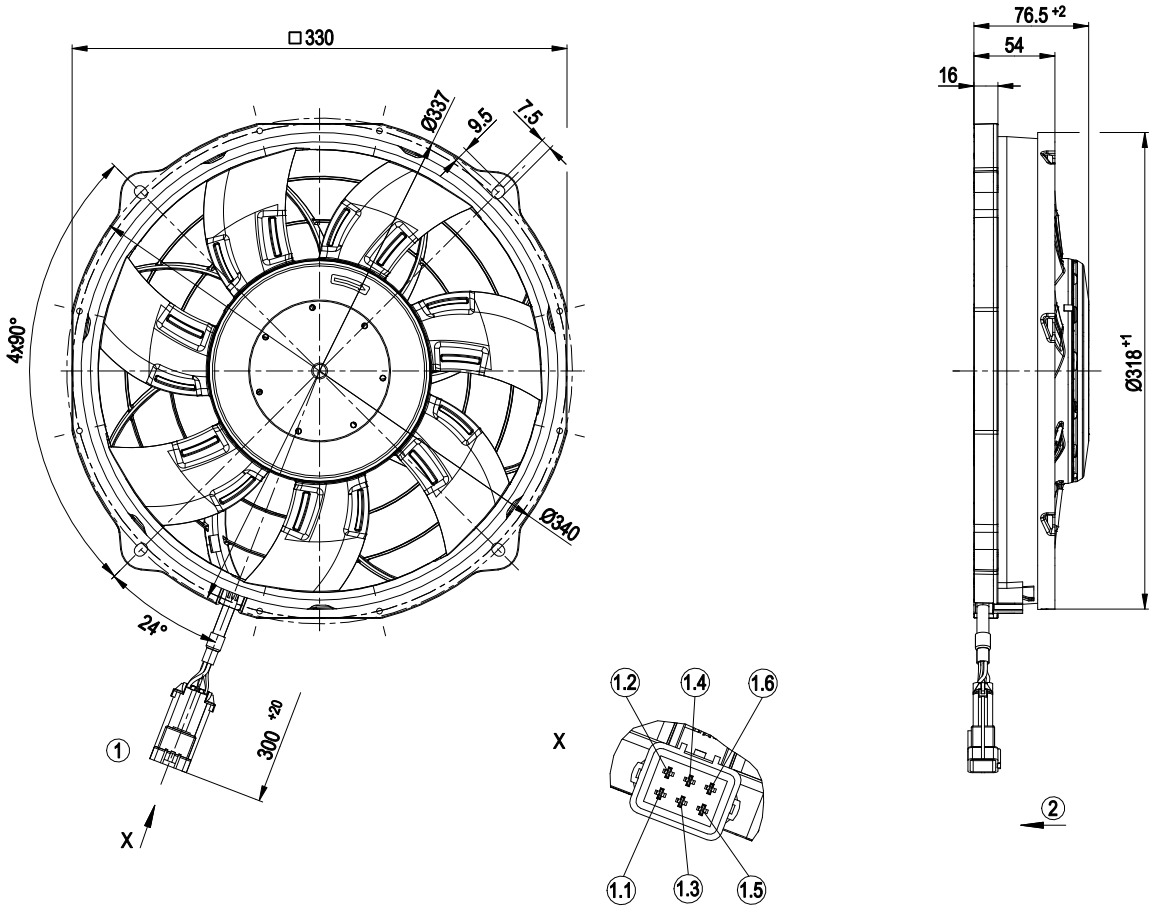
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Product drawing



1	Cable with 6-pole coded plug Delphi 12185126
	Mating connector Delphi 15344052, locking cover 12185000 not included in scope of delivery
1.1	+ UB (black)
1.2	GND (brown)
1.3	PWM/LIN (yellow)
1.4	Reverse (blue)
1.5	INVLIN (orange)
1.6	Diagnostic output (white)
2	Direction of air flow "V"

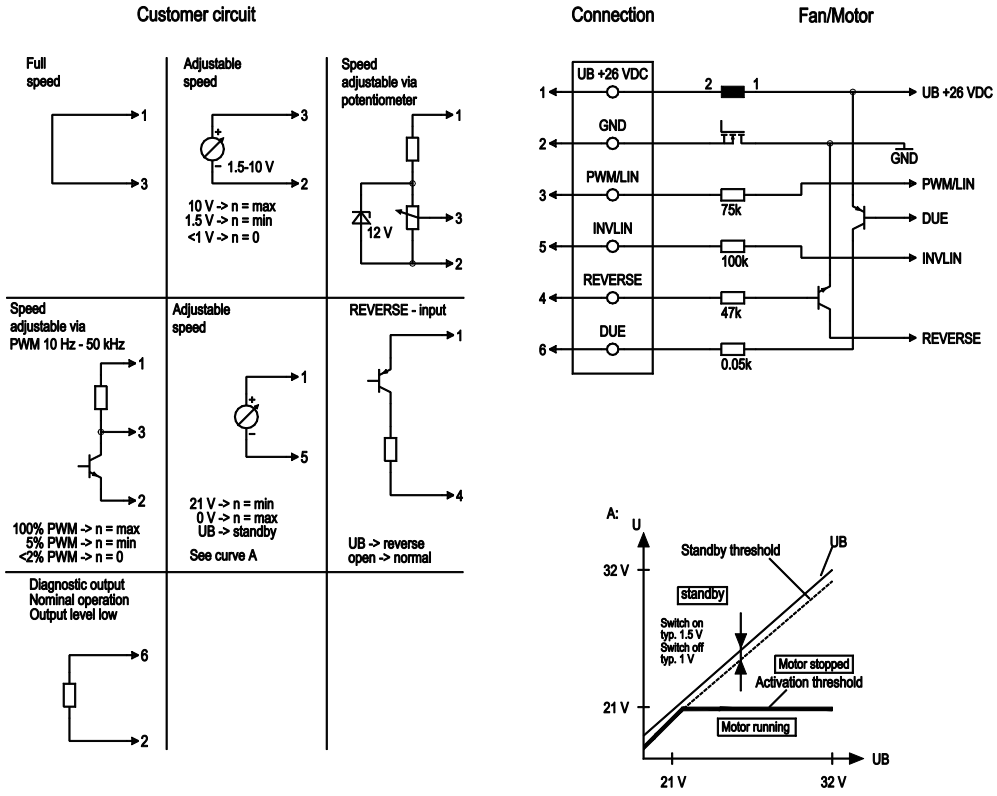
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Connection diagram



No.	Conn.	Designation	Function/assignment
	1	UB +26 VDC	Power supply 26 VDC
	2	GND	Power supply GND, reference ground
	3	PWM/LIN	Analog voltage control input 0-10 V or PWM
	4	REVERSE	Input reversal of rotation
	5	INVLIN	Control input, inverse linear
	6	DUE	Diagnostic output

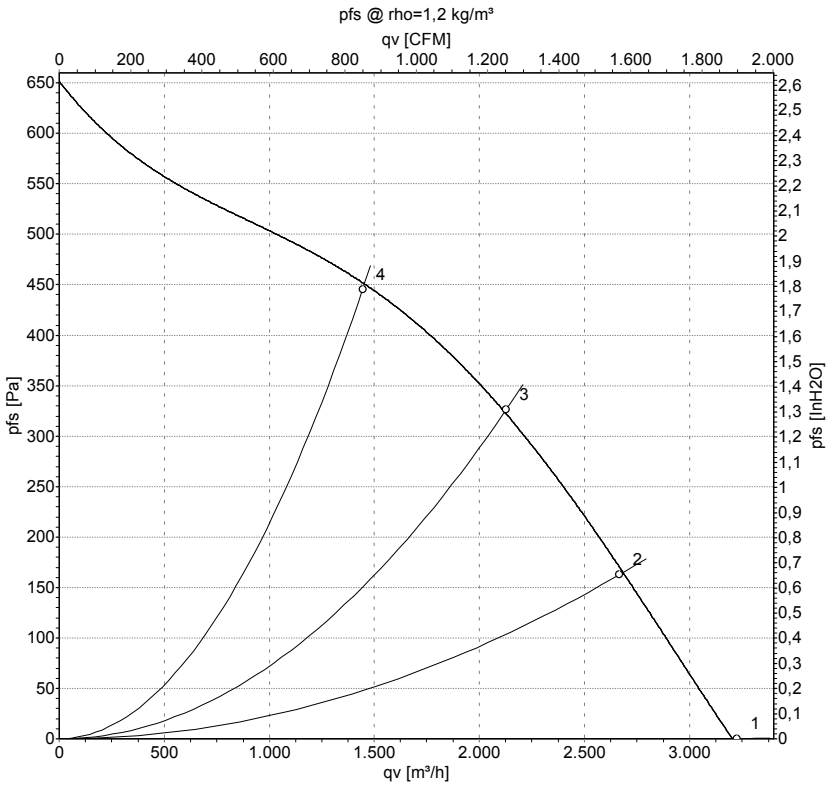
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Curves: Air performance



Measurement: LU-141116-1

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}	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	26	3940	380	14.60	79	87	3225	0	1900	0.00
2	26	3815	408	15.68	79	87	2665	160	1570	0.64
3	26	3715	462	17.74	78	85	2130	325	1250	1.30
4	26	3630	495	19.01	81	88	1445	445	850	1.79

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

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