



W3G300-BV25-33 ebmpapst Datasheet

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成都锦恒荣泰电气设备有限公司

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## Nominal data

Type	W3G300-BV25-33	
Motor	M3G084-BF	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Type of data definition		fa
Speed	min <sup>-1</sup>	3940
Power input	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 = Running at free air · cs = Customer specs · cu = Customer unit  
Subject to alterations

## Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.00

\* Specific ratio =  $1 + p_b / 100\,000\text{ Pa}$

		Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	%	44.8	27.5	31.5
Efficiency grade N		53.3	36	40
Power input $P_e$	kW	0.46		
Air flow $q_v$	m <sup>3</sup> /h	2205		
Pressure increase $p_{fs}$	Pa	306		
Speed n	min <sup>-1</sup>	3720		

Data definition with optimum efficiency. LU-137152  
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



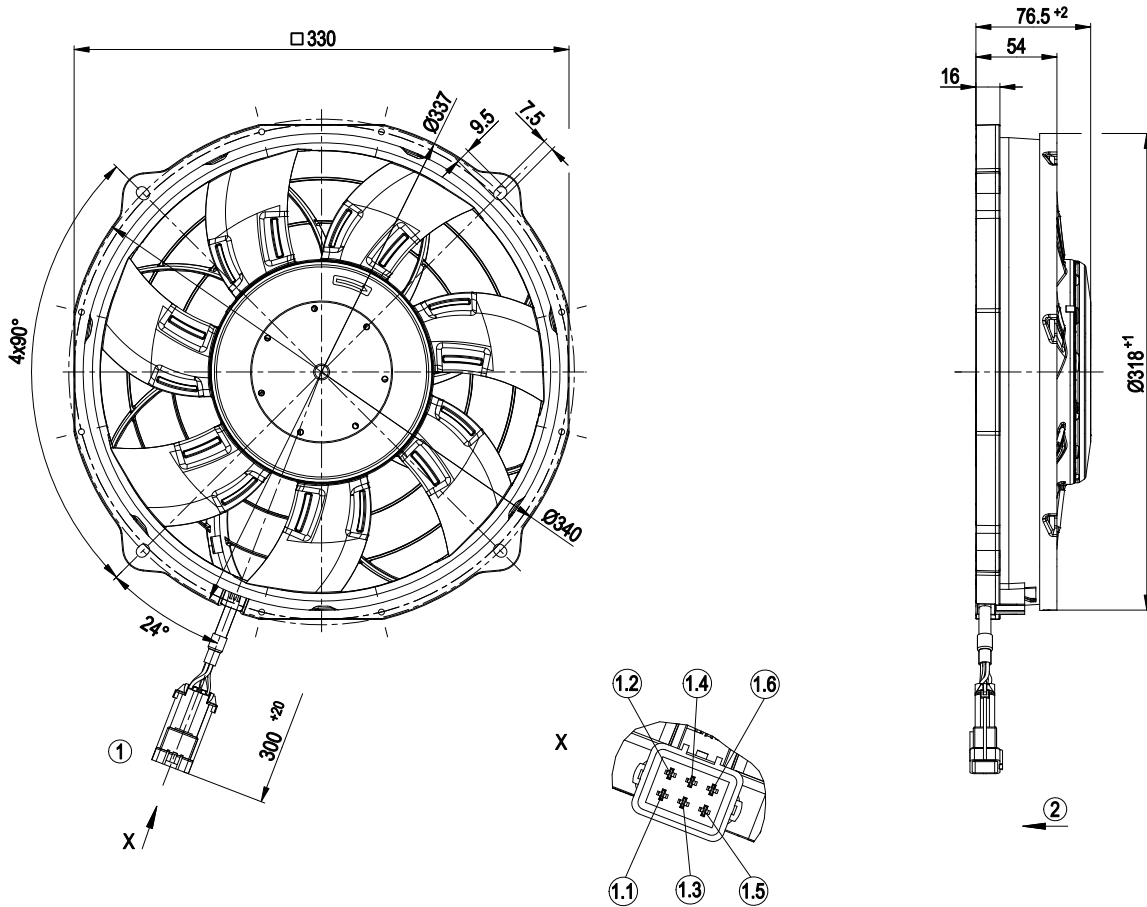
## Technical features

<b>Mass</b>	2 kg
<b>Size</b>	300 mm
<b>Material of impeller</b>	PA plastic
<b>Material of wall ring</b>	PA plastic
<b>Number of blades</b>	7
<b>Direction of air flow</b>	"V"
<b>Balance quality according to DIN ISO 1940-1</b>	G 10
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 24 KM; (motor); electronics IP 6K9K
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F4-1
<b>Note ambient temperature</b>	Over +85° C with power derating
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+110 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	-40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	None, open rotor
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing; (sealed)
<b>Life expectancies</b>	40,000 h (typical)
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Lowering input</li> <li>- Fault output (high-side switch max. 30 mA)</li> <li>- INVLIN (control input, inverse linear)</li> <li>- Output limit</li> <li>- Load dump (58 V)</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Temperature derating</li> <li>- Overvoltage detection</li> <li>- Over-temperature protected electronics</li> <li>- Line undervoltage detection</li> </ul>
<b>Electrical leads</b>	With plug; Standby current less than 500 µA
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>Cable exit</b>	Lateral

# EC axial fan

with brushless DC motor  
Automotive

Product drawing



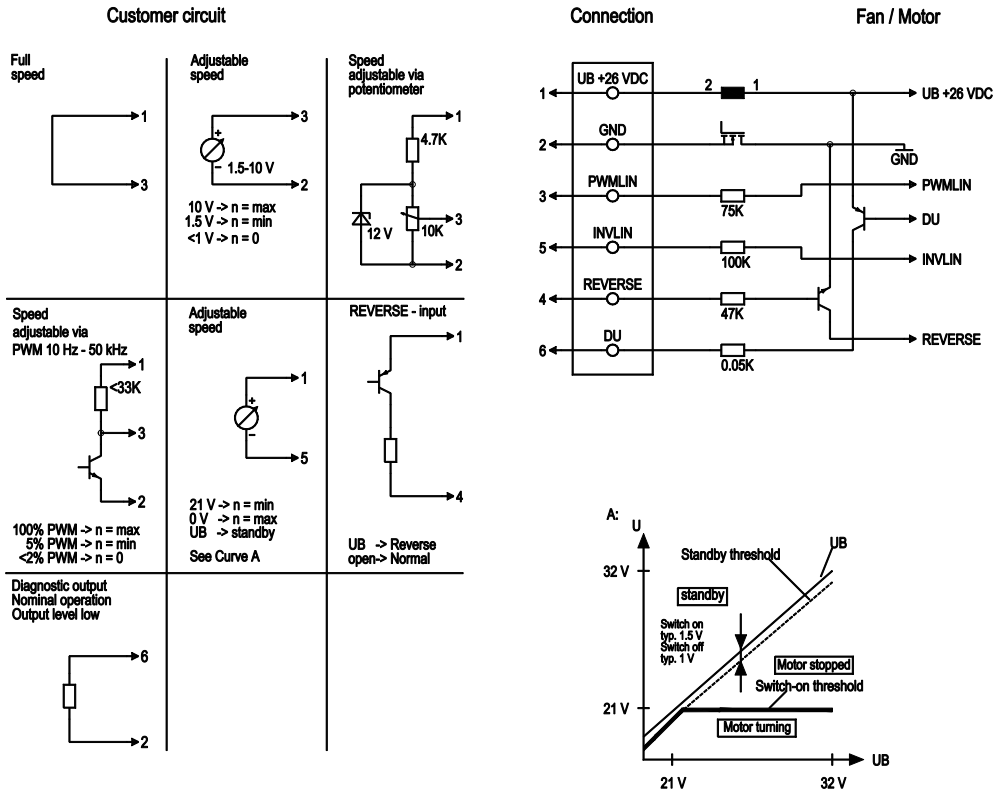
1	Connection line with Delphi plug 12185126, 6-pole, coded
	Mating connector Delphi 15344052, locking cover 12185000 not included in scope of delivery
1.1	+ UB (black)
1.2	GND (brown)
1.3	PWM/LIN (yellow)
1.4	Reverse (blue)
1.5	INVLIN (orange)
1.6	Diagnostic output (white)
2	Direction of air flow "V"



# EC axial fan

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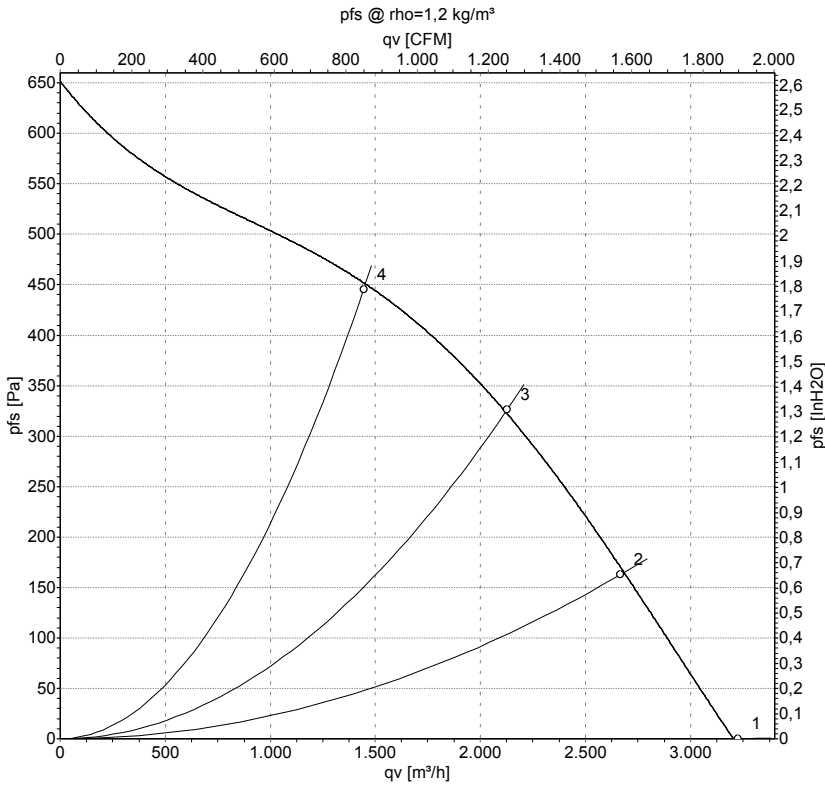
## Connection screen



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



## Charts: Air flow



Measurement: LU-141116

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	n	P <sub>ed</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	p <sub>fs</sub>
	V	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m³/h	Pa
1	26	3940	380	14.60	79	87	3225	0
2	26	3815	408	15.68	79	87	2665	160
3	26	3715	462	17.74	78	85	2130	325
4	26	3630	495	19.01	81	88	1445	445

U = Supply voltage · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · qv = Air flow · p<sub>fs</sub> = Pressure increase

