W3G300-BV24-10

EC axial fan

sickle-shaped blades (S series)

Fan housing with mounting grille



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Nominal data

Type	**W3G300-BV24-10**	
Motor	**M3G084-BF**	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Speed (rpm)	min-1	3160
Power consumption	W	205
Current draw	A	7.9
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	95
-with power derating to	°C	110
Starting current	A	10

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

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	46.1	29.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		56.3	40
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.24
09 Air flow q_v	m³/h	1805
09 Pressure increase p_{fs}	Pa	197
10 Speed (rpm) n	min-1	3040
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-141130

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Technical description

Weight	2 kg
Size	300 mm
Motor size	84
Rotor surface	Cast in PA plastic
Blade 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
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H4
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing; (sealed)
Technical features	- Tach output - Power limiter - Load dump (58 V) - Motor current limitation - Control input 0-10 VDC / PWM - Temperature derating - Overvoltage detection - Thermal overload protection for electronics - Line undervoltage detection - Reverse polarity protection
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral

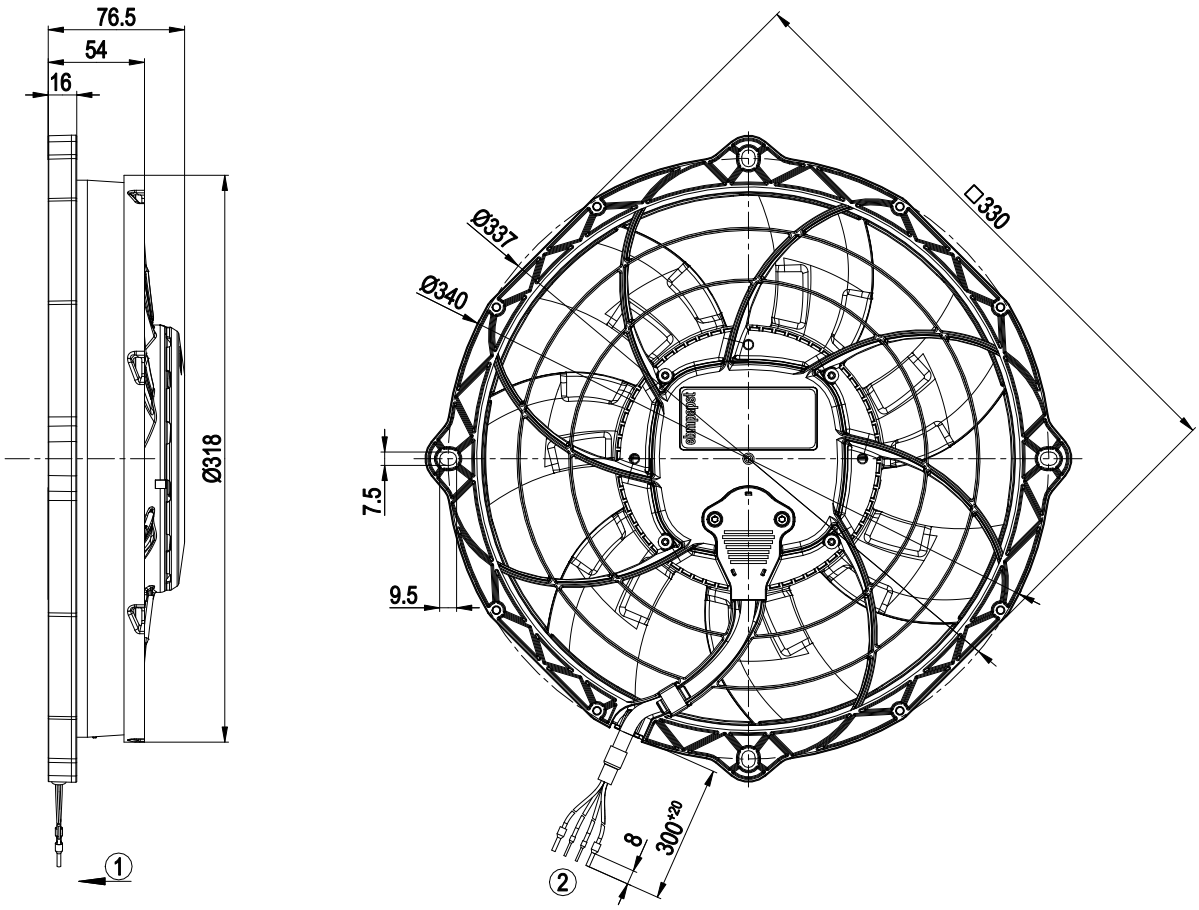
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Product drawing



1	Airflow direction "V"
2	Cable PFA AWG16 (black, brown), AWG18 (yellow, white)
	4x wire-end ferrule

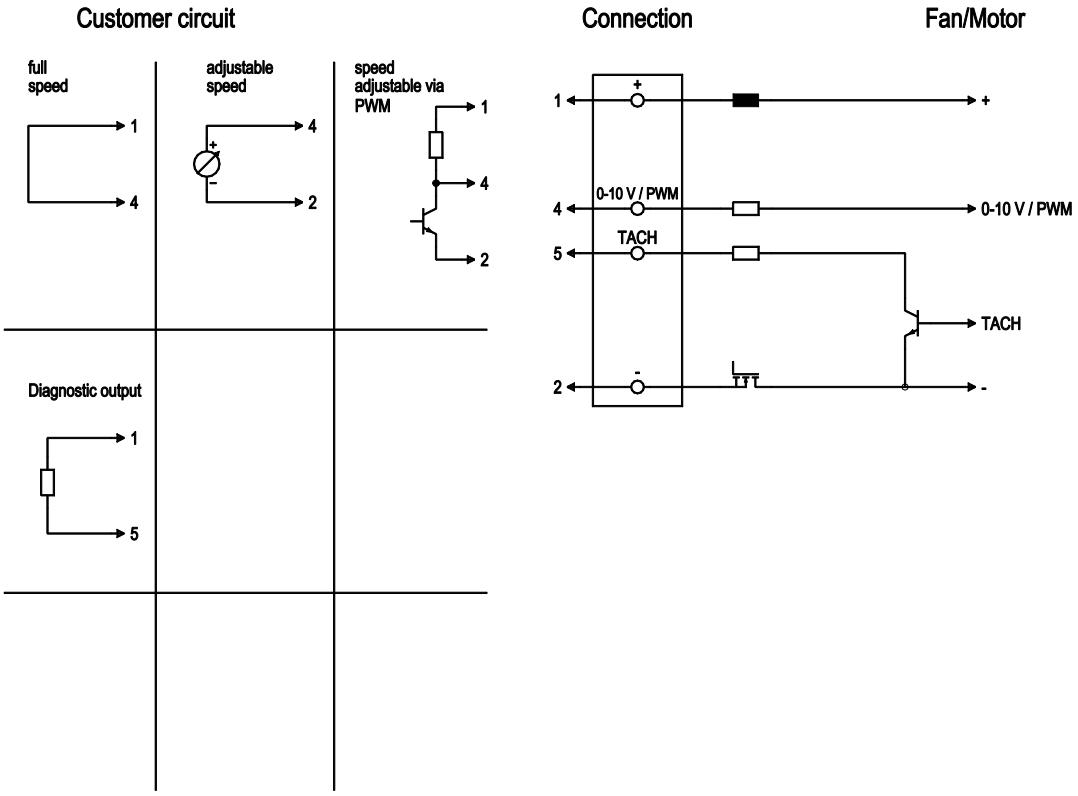
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1		+	black	Power supply +
2		-	brown	Power supply -
4		0-10 V / PWM	yellow	Control input: Ri > 36 kΩ 0-10 V (typ. <1 V ->n = 0; 1.5 V ->n = min.; >9.5 V ->n = max.) or PWM (>10 V; 10 Hz - 50 kHz; typ. < 10% -> n = 0; 15% -> n = min.; > 100% -> n = max.)
5		Tacho	white	Tach output: open collector, 1 pulse per revolution, Isink max = 10 mA, Ri = 470 Ω

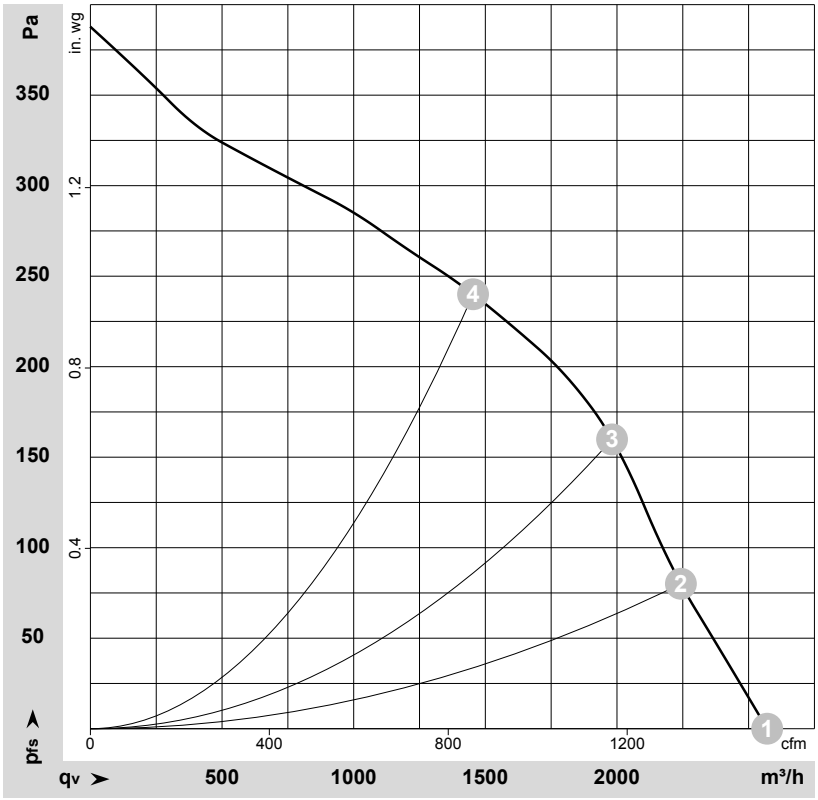
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Curves: Air performance



ρ = 1.181 kg/m³ ± 2 %

Measurement: LU-141130-1

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	3160	205	7.90	74	82	2570	0	1515	0.00
2	26	3155	217	8.35	73	81	2245	80	1320	0.32
3	26	3085	240	9.24	73	81	1980	160	1165	0.64
4	26	2960	244	9.36	73	80	1455	240	855	0.96

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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