W3G300-RQ28-70

EC axial fan

Automotive

W3G300-RQ28-70 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**W3G300-RQ28-70**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	27.5
Nominal voltage range	VDC	16 .. 32
Type of data definition		fa
Speed	min^{-1}	3380
Power input	W	320
Current draw	A	11.5
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	+85

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_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		42.5	26.8	30.8
Efficiency grade N		51.7	36	40
Power input P_e	kW	0.35		
Air flow q_v	m³/h	1755		
Pressure increase p_{fs}	Pa	277		
Speed n	min^{-1}	3385		

Data definition with optimum efficiency.

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Technical features

Mass	2.5 kg
Size	300 mm
Material of blades	PBT plastic
Material of wall ring	PP plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 24 KM; (Motor); electronics IP 66 / 69 K
Insulation class	"B"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+85 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Motor current limit - Control input 0-5 VDC - Control input signalground - Over-temperature protected electronics
EMC directives	ECE R10 Rev.3
Electrical leads	With plug
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Approval	E1

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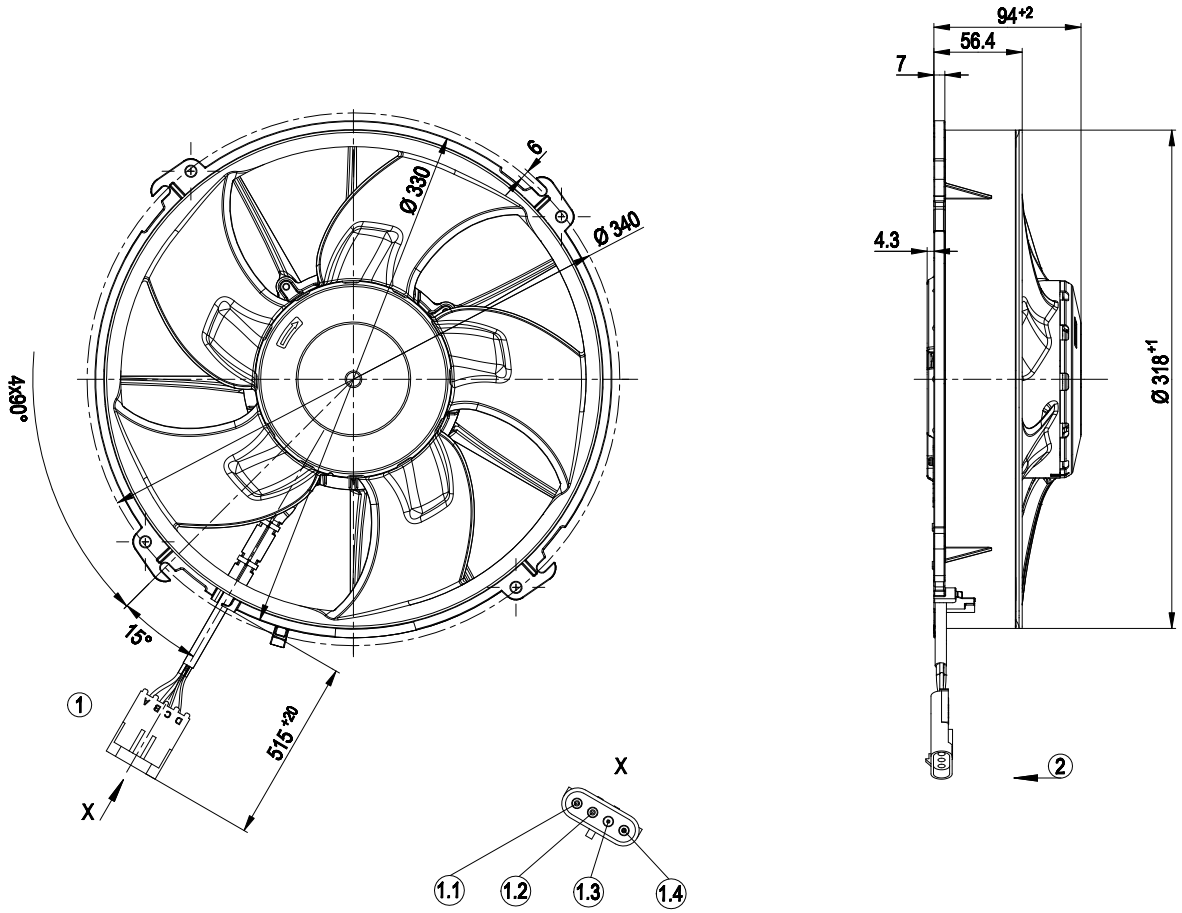
Product drawing



1	Connector shell Packard Electric 12010974
1.1	+UB (red)
1.2	PWM/LIN blue
1.3	CGND white
1.4	GND black
2	Direction of air flow "V"

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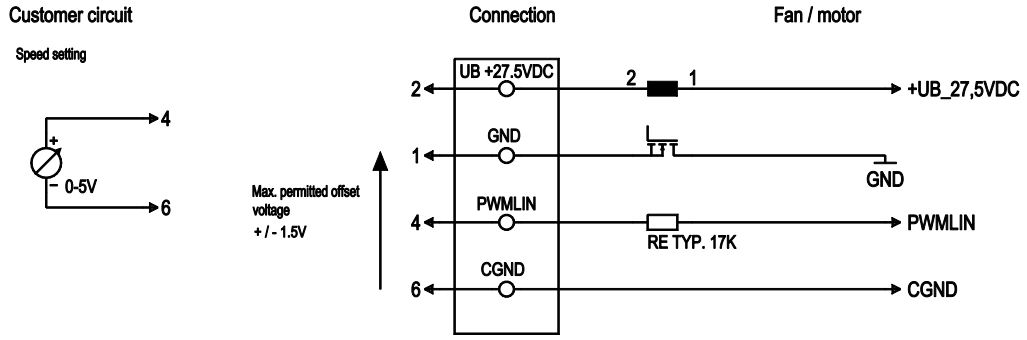
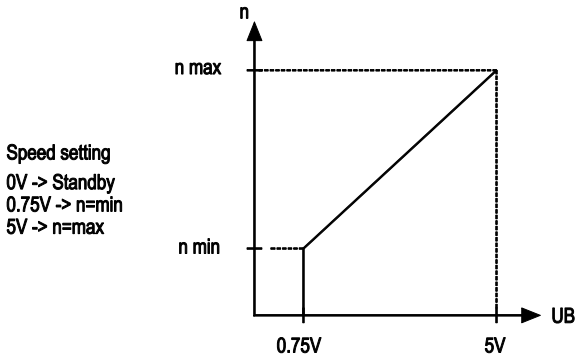
Connection screen





Line	No.	Signal	Colour	Function / assignment
	2	+ UB 27.5 VDC	red	Power supply 27.5 VDC
	1	GND	black	Power supply GND
	4	PWMLIN	blue	Control input analogue voltage 0 - 5 V
	6	CGND	white	Reference ground control input

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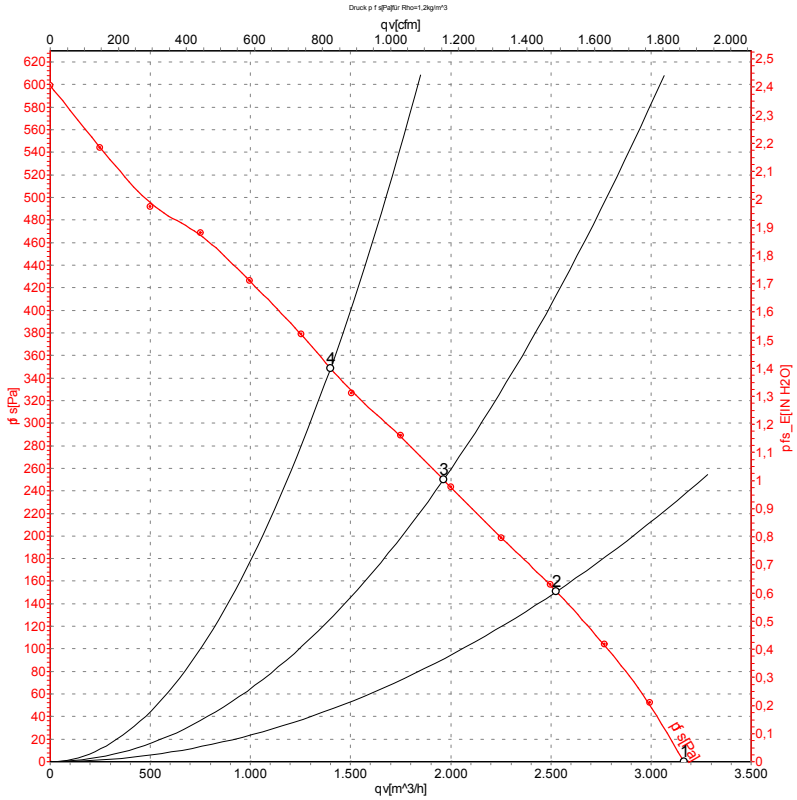
Charts: Air flow



Measurement: LU-122953

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_{ed}	I	LpA_{in}	qv	p_{fs}
	V	min^{-1}	W	A	dB(A)	m^3/h	Pa
1	27.5	3380	320	11.50	76	3165	0
2	27.5	3380	334	12.14	77	2525	150
3	27.5	3380	344	12.46	79	1965	250
4	27.5	3370	375	13.63	81	1400	350

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · qv = Air flow · p_{fs} = Pressure increase