W3G300-EQ30-43

EC axial fan

with brushless DC motor



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Nominal data

Type	**W3G300-EQ30-43**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2840
Power consumption	W	180
Current draw	A	7
Max. back pressure	Pa	250
Max. back pressure	in. wg	1
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

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}	%	45.3	29
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	0.18
09 Air flow q_v	m³/h	1610
09 Pressure increase p_{fs}	Pa	163
10 Speed (rpm) n	min^{-1}	2790
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-114624

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Technical description

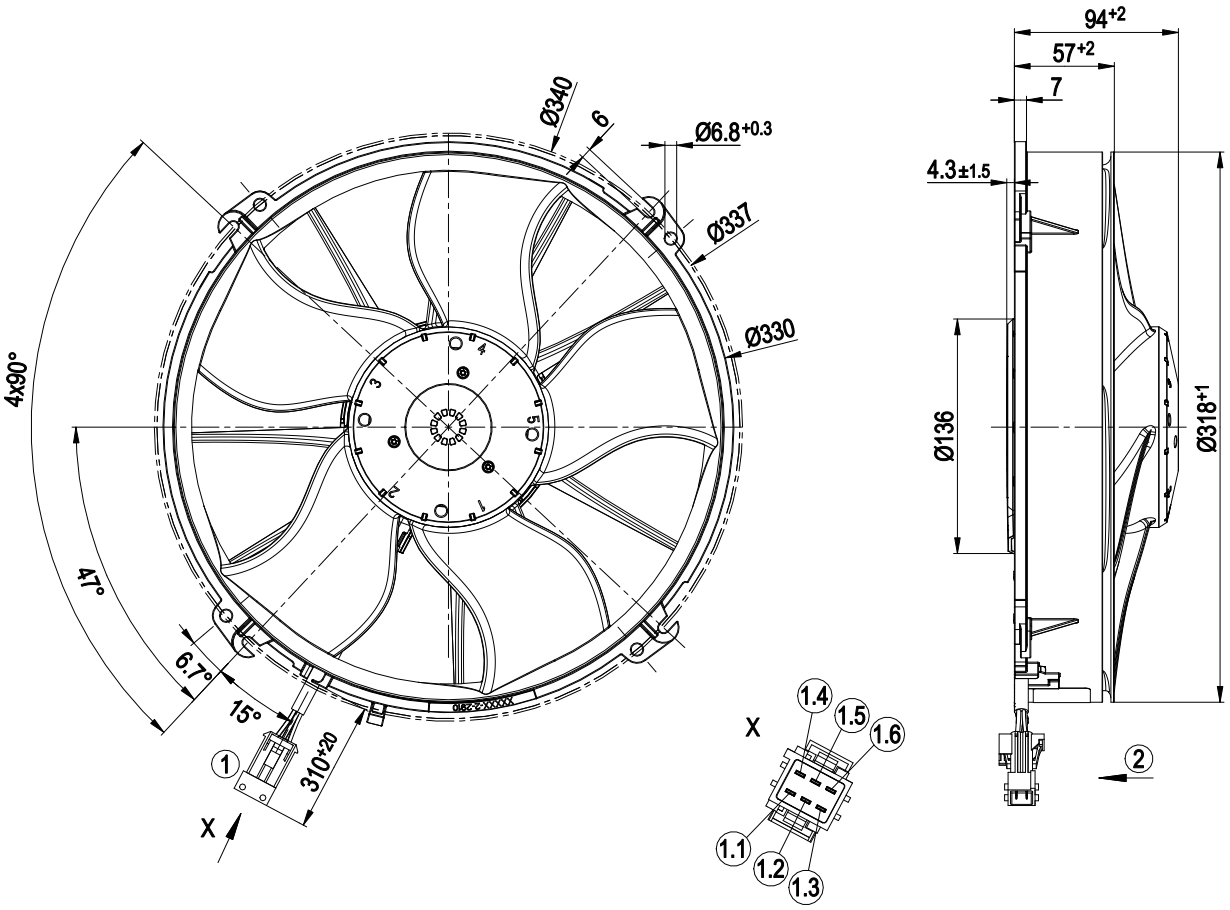
Weight	2.5 kg
Size	300 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PBT plastic
Fan housing material	PP plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	Motor IP24 KM, electronics IP6K9K
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H2
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
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
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing; (sealed)
Life expectancy	25,000 h (typical)
Technical features	- Lowering input - Tach output - Fault output (high-side switch max. 30 mA) - INVLIN (inverse linear control input) - Load dump (58 V) - Motor current limitation - Soft start - Control input 0-10 VDC/PWM - Standstill in the case of open circuit - Overvoltage detection - Thermal overload protection for electronics - Undervoltage detection
EMC regulations	According to ECE R10 Rev. 3
Electrical hookup	Connector with cable
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Approval	EAC; E1

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Product drawing



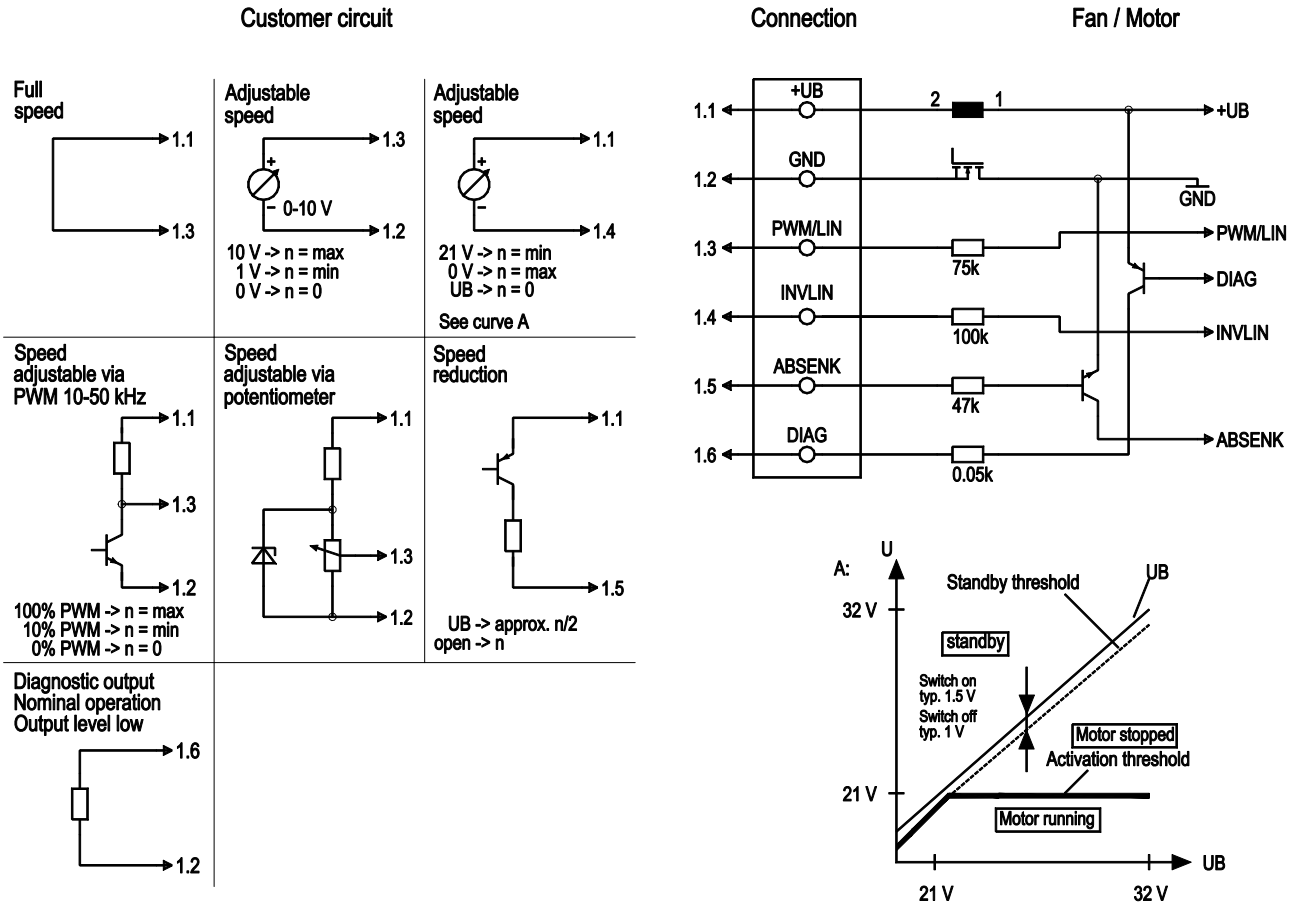
1	Cable FLRY-Y 2x 2.35 mm², FLRY-Y 4x 1.55 mm²
	6-pole connector housing TE 1-962349-1, 2x flat plug TE 2-962916-1, 4x flat plug TE 1-962915-1 1x seal TE 963205-1, 2x seal TE 828905-1, 4x seal TE 828904-1
	Cable with mating connector, part no. 02002-4-1021 not included in scope of delivery
1.1	+ UB
1.2	GND
1.3	PWM/LIN
1.4	INVLIN
1.5	ABSENK
1.6	Diagnostic output
2	Airflow direction "V"

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Connection diagram



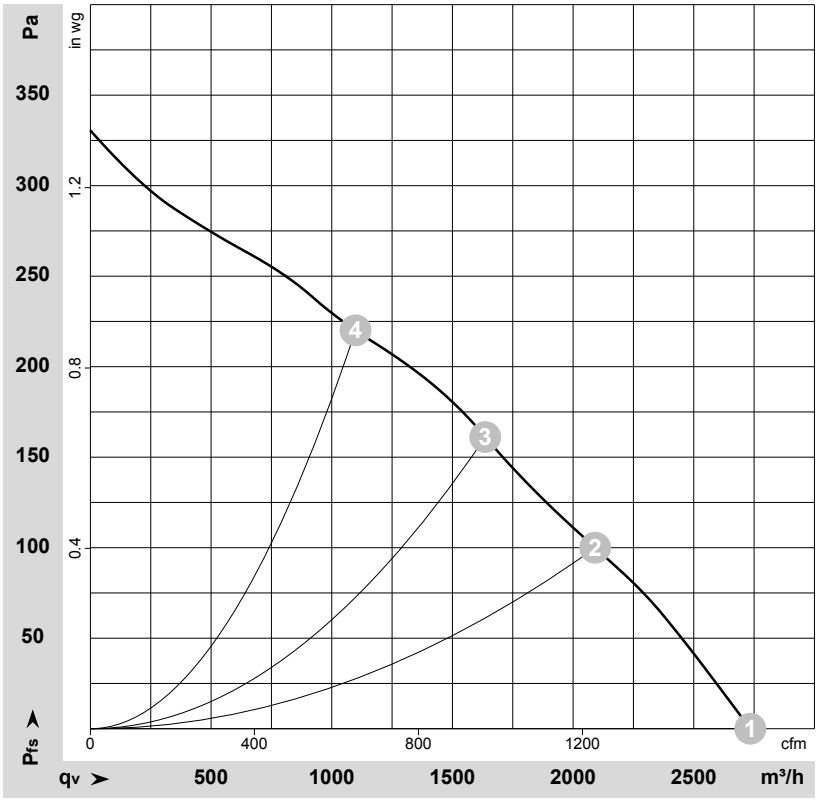
No.	Conn.	Designation	Function/assignment
	1.1	+UB	Power supply
	1.2	GND	Power supply GND, reference ground
	1.3	PWM/LIN	Analog voltage control input 0-10 V or PWM
	1.4	INVLIN	Control input, inverse linear
	1.5	ABSENK	Lowering input
	1.6	DIAG	Diagnostic output

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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-66741-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	26	2840	180	7.00	2735	0	1610	0.00
2	26	2805	188	7.24	2090	100	1230	0.40
3	26	2790	190	7.30	1635	160	965	0.64
4	26	2695	208	8.02	1100	220	645	0.88

U = Voltage · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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