

K3G097-AK34-43

EC dual centrifugal fan

forward-curved, dual-intake
with housing, Automotive



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Amtsgericht (court of registration) Stuttgart · HRB 590142



Nominal data

Type	K3G097-AK34-43	
Motor	M3G074-CF	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	3600
Power consumption	W	325
Current draw	A	12.5
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	85

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	44.9	33.5
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		55.4	44
05 Variable speed drive		Yes	

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

09 Power consumption P_e	kW	0.22
09 Air flow q_v	m ³ /h	510
09 Pressure increase p_{fs}	Pa	625
10 Speed (rpm) n	min ⁻¹	4845
11 Specific ratio*		1.01

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

LU-171155



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Technical description

Weight	2.3 kg
Fan size	97 mm
Impeller material	PA plastic
Housing material	PP plastic
Number of blades	34
Balancing grade according to DIN ISO 1940-1	G 2.5
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP24 KM
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-2
Max. permitted ambient temp. for motor (transport/storage)	+85 °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 - Tach output - Fault output (high-side switch max. 30 mA) - INVLIN (inverse linear control input) - Power limit - Load dump (58 V) - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Thermal overload protection for electronics - Line undervoltage detection
EMC regulations	According to ECE R10 Rev. 3
Electrical hookup	With plug; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
Approval	EAC; E1
Sound level	76 dB(A), sound power level according to ISO 13347
Comment	Type approval number – 036432

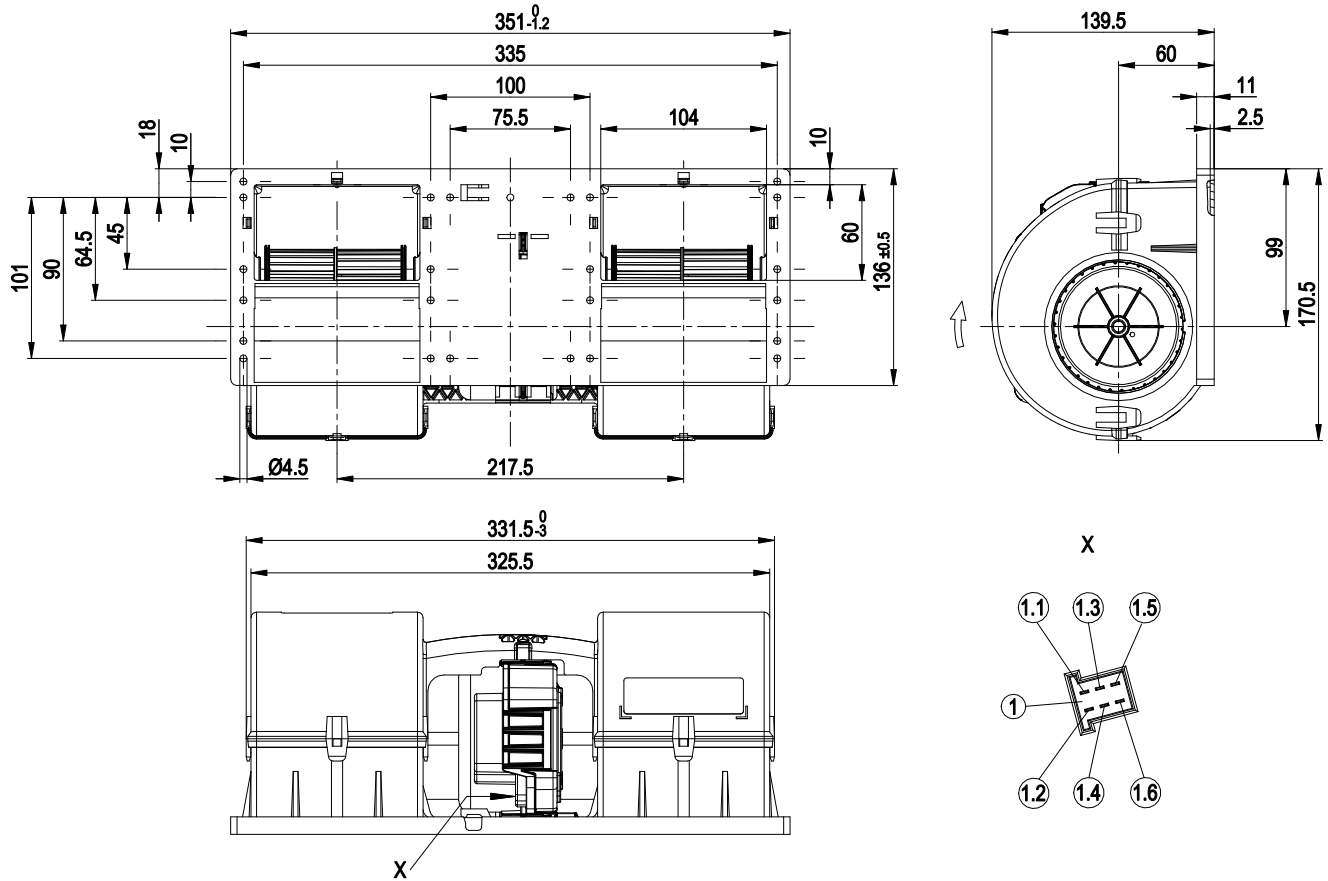


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Product drawing



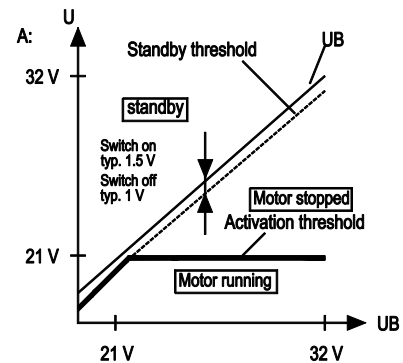
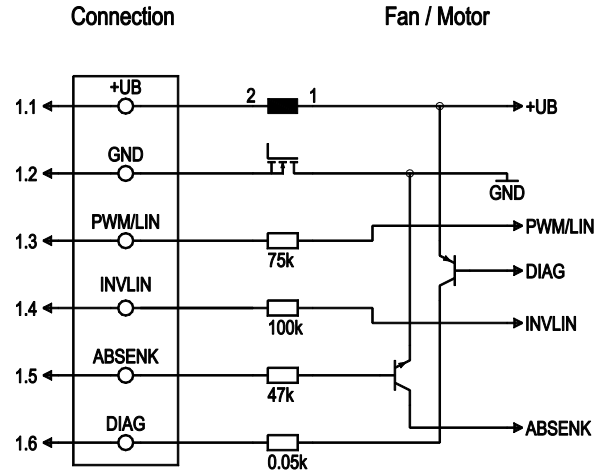
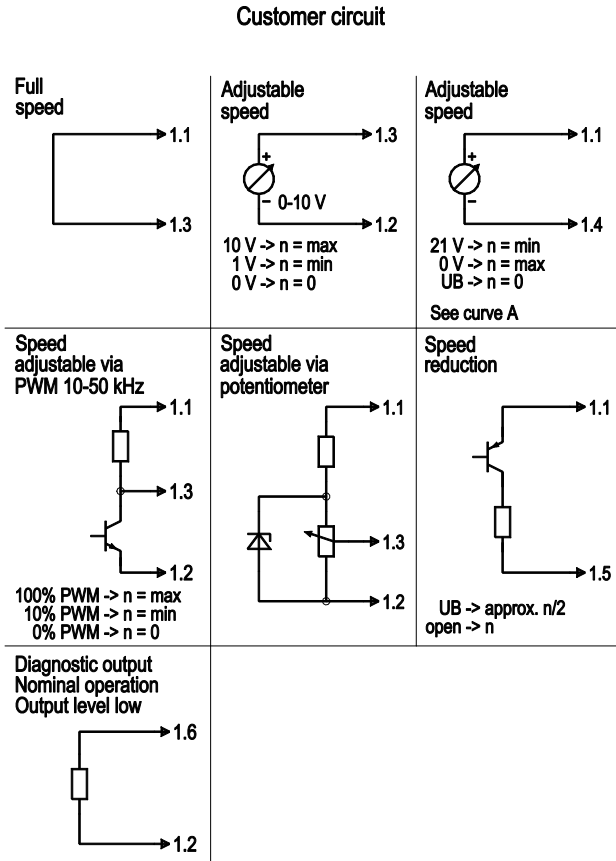
1	6-pole coded header tyco Junior Power Timer, cable (460 mm) with mating connector part no. 02001-4-1021 not included in scope of delivery.
1.1	+ UB
1.2	GND
1.3	PWM/LIN
1.4	INVLIN
1.5	ABSENK
1.6	Diagnostic output



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Connection diagram

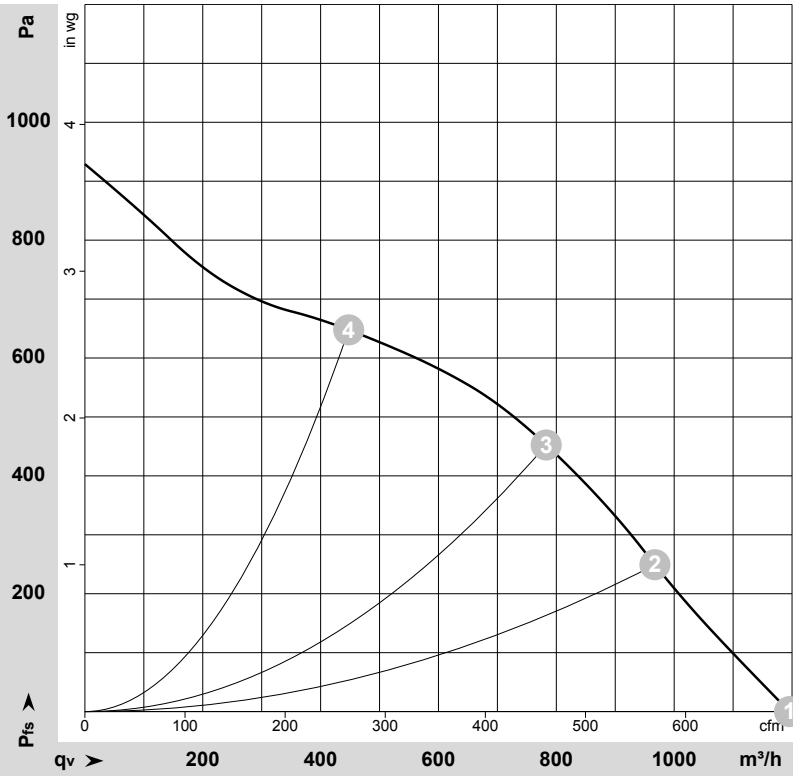


No.	Conn.	Designation	Function/assignment
	1.1	+UB	Power supply
	1.2	GND	Power supply GND, reference ground
	1.3	PWM/LIN	Analog voltage control input 0-10 V or PWM
	1.4	INV LIN	Control input, inverse linear
	1.5	ABSENK	Lowering input
	1.6	DIAG	Diagnostic output

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Curves: Air performance



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-171155-1

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	m³/h	Pa	CFM	inH ₂ O
1	26	3600	325	12.50	1195	0	705	0.00
2	26	3945	281	10.82	965	250	570	1.00
3	26	4350	266	10.21	785	450	460	1.81
4	26	4895	207	7.93	450	650	265	2.61

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

