K3G097-AF22-02

EC centrifugal fan combination

forward curved, dual inlet

with housing, Automotive



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Nominal data

Type	**K3G097-AF22-02**	
Motor	**M3G084-BF**	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Type of data definition		ml
Speed (rpm)	min^{-1}	3500
Power input	W	325
Current draw	A	12.5
Min. back pressure	Pa	0
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 in accordance with ecodesign regulation EU 327/2011

		Actual	Request 2015
01 Overall efficiency η_{es}	%	47.5	34.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		57.4	44
05 Variable speed drive		Yes	

09 Power input P_e	kW	0.27
09 Air flow q_v	m³/h	700
09 Pressure increase p_{fs}	Pa	599
10 Speed (rpm) n	min^{-1}	4770
11 Specific ratio*		1.01

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

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

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Technical features

Mass	2 kg
Size	97 mm
Material of impeller	PA plastic
Housing material	PP plastic
Number of blades	34
Balance quality according to DIN ISO 1940-1	G 2.5
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 24 KM
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H1
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; (sealed)
Life expectancies	40,000 h (typical)
Technical features	- Lowering input - Fault output (high-side switch max. 30 mA) - INVLIN (control input, inverse linear) -Load dump (58 V) - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Temperature derating - Overvoltage detection - Over-temperature protected electronics - Line undervoltage detection
EMC directives	As per ECE R10 Rev. 5
Electrical leads	With plug; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
Approval	EAC; E1
Noise level	81 dB(A), sound power level as per ISO 13347
Remark	Type approval number – 057907

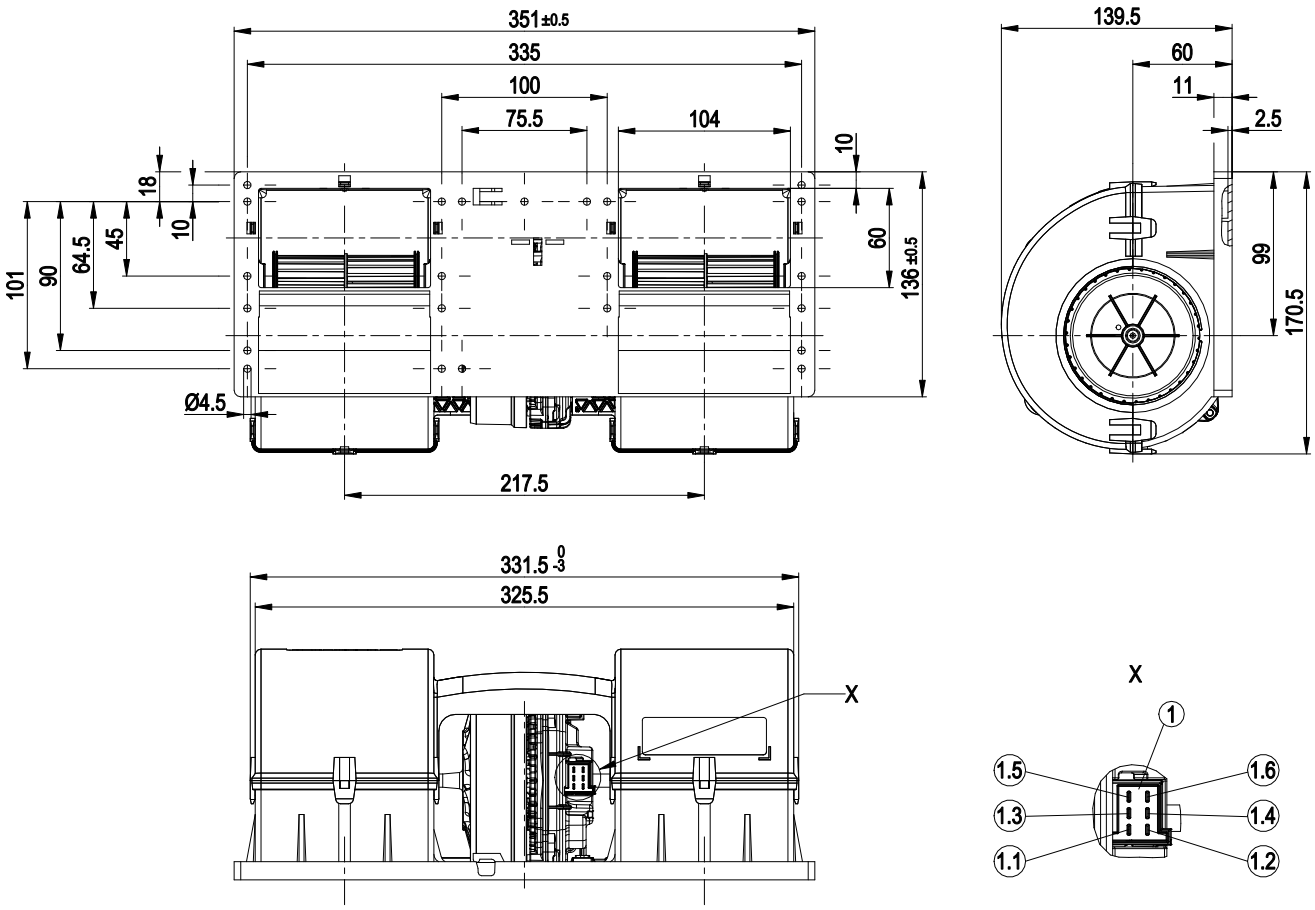
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Product drawing



1	Strip tyco Junior Power Timer, 6-pole, coded, connection line (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

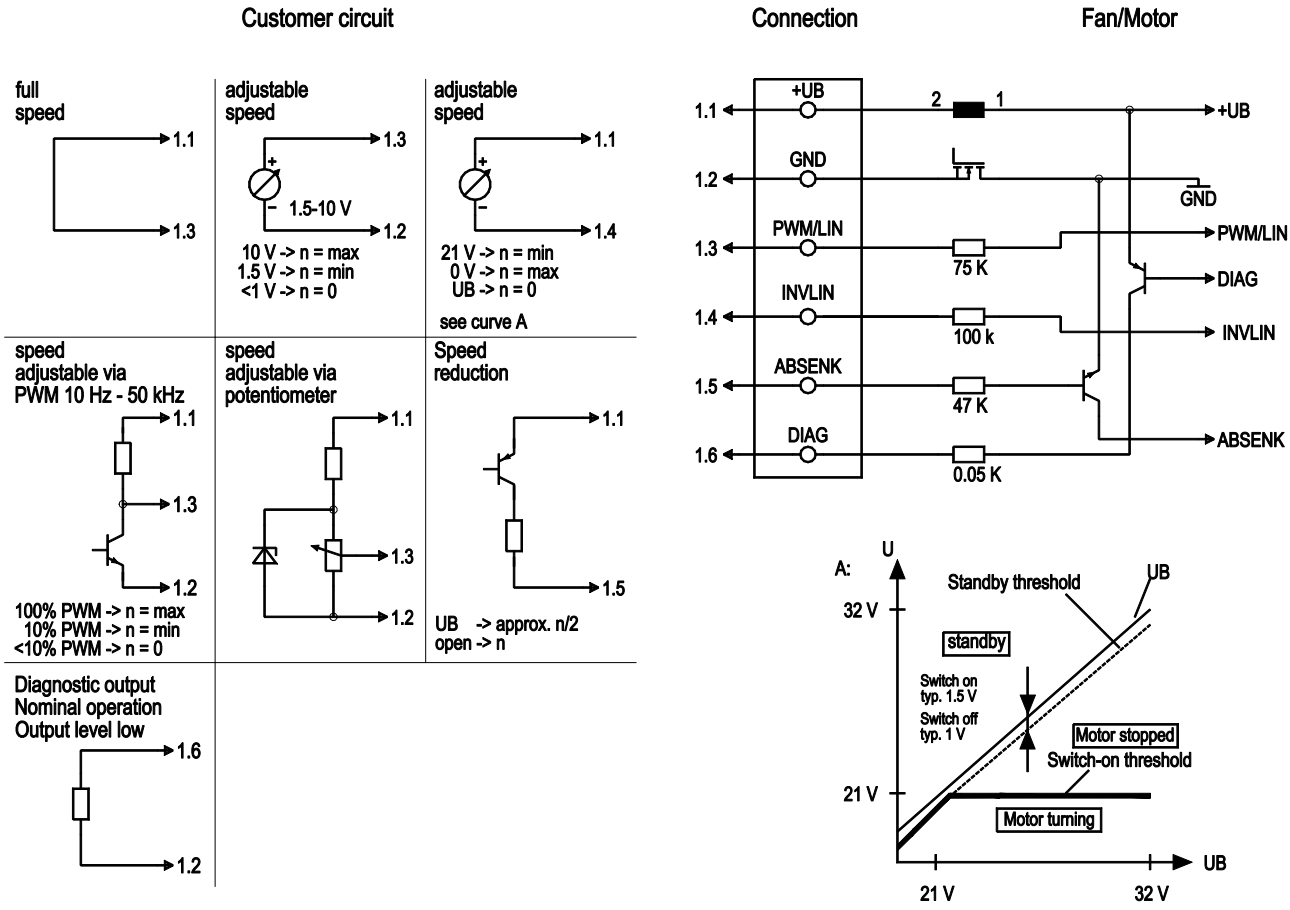
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Connection screen



No.	Conn.	Designation	Function / assignment
	1.1	+UB	Power supply
	1.2	GND	Power supply GND, reference earth
	1.3	PWM/LIN	Analogue 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

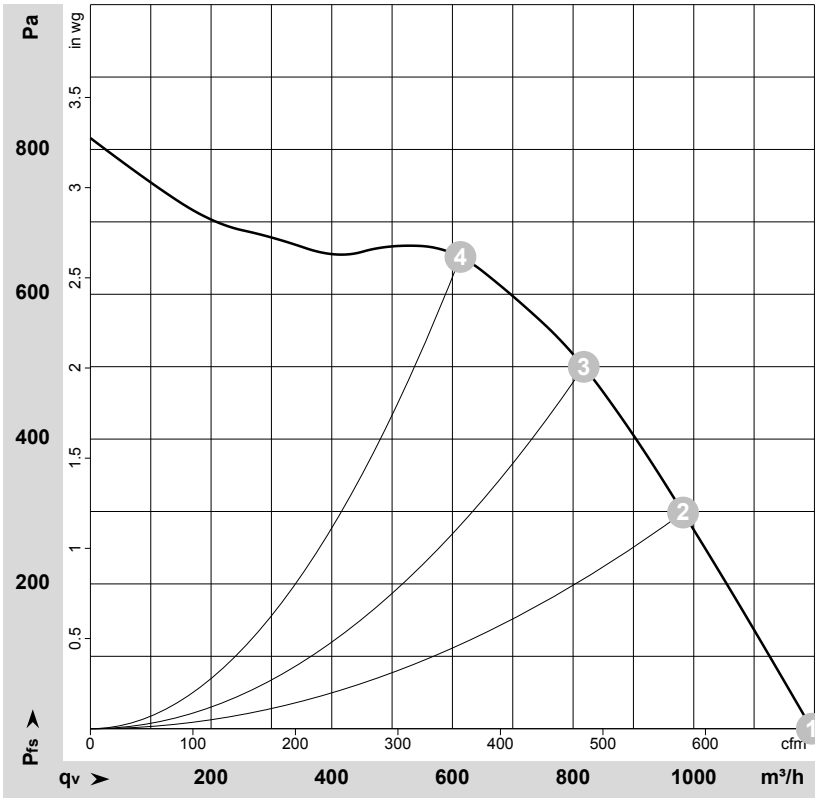
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Charts: Air flow



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-175827-1

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}	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	3500	325	12.50	71	81	1195	0	705	0.00
2	26	4045	301	11.55	70	80	980	300	580	1.20
3	26	4460	283	10.87	70	80	820	500	480	2.01
4	26	4965	270	10.37	70	80	615	650	360	2.61

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

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