K3G097-AK34-65

EC dual centrifugal fan

forward curved, dual inlet

with housing, Automotive



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Nominal data

Type	**K3G097-AK34-65**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Type of data definition		fa
Speed (rpm)	min^{-1}	3830
Power input	W	394
Current draw	A	15.2
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	70

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 (EN 17166)

		Actual	Request 2015
01 Overall efficiency η_{es}	%	45.5	33.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		55.6	44
05 Variable speed drive		Yes	

09 Power input P_e	kW	0.25
09 Air flow q_v	m³/h	705
09 Pressure increase p_{fs}	Pa	526
10 Speed (rpm) n	min^{-1}	4505
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

LU-74436

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Technical features

Mass	2.1 kg
Size	97 mm
Motor size	74
Material of impeller	Plastic, PA UL94 HB (black)
Housing material	Plastic, PP (black)
Balance quality according to DIN ISO 1940-1	G 6.3
Direction of rotation	Clockwise, seen on rotor
Type of protection	Motor IP24 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
Condensation drainage holes	None, open rotor
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Life expectancies	40,000 h (typical)
Technical features	- Start at 85 °C (2 min.) permitted -Load dump (58 V) - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Over-temperature protected electronics - Line undervoltage detection
EMC directives	According to ECE R10 Rev. 3
Electrical connection	Plug; Standby current less than 500 µA
Motor protection	Passive reverse polarity and locked-rotor protection
Approval	R10; EAC
Noise level	76 dB(A), sound power level according to ISO 13347
Remark	Not approved at maximum back pressure for continuous operation at 85°C; type approval number - 036432

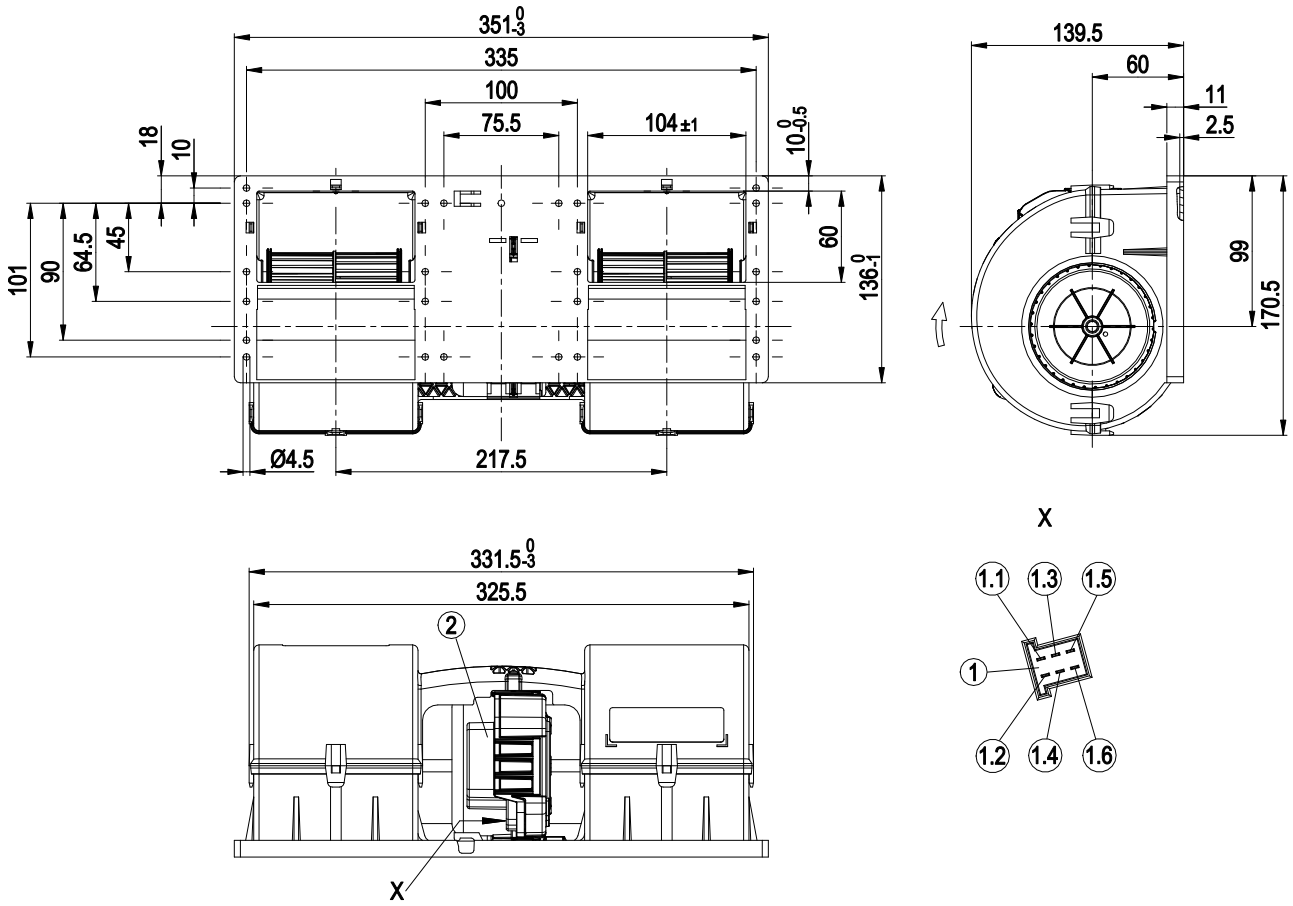
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Product drawing



1	6-pole strip TE Junior Power Timer WE_9901118
1.1	+ UB
1.2	GND
1.3	PWM/LIN, 100% speed
1.4	80% speed
1.5	60% speed
1.6	not used / no function
	Accessory part: Connection line (460 mm) with mating connector, part no. 02001-4-1021 not included in scope of delivery 6-pole mating connector TE 929504-2, 4x plug contact TE 927771-1, 2x plug contact TE 927768-1
2	Electronics cover blue (RAL 5015)

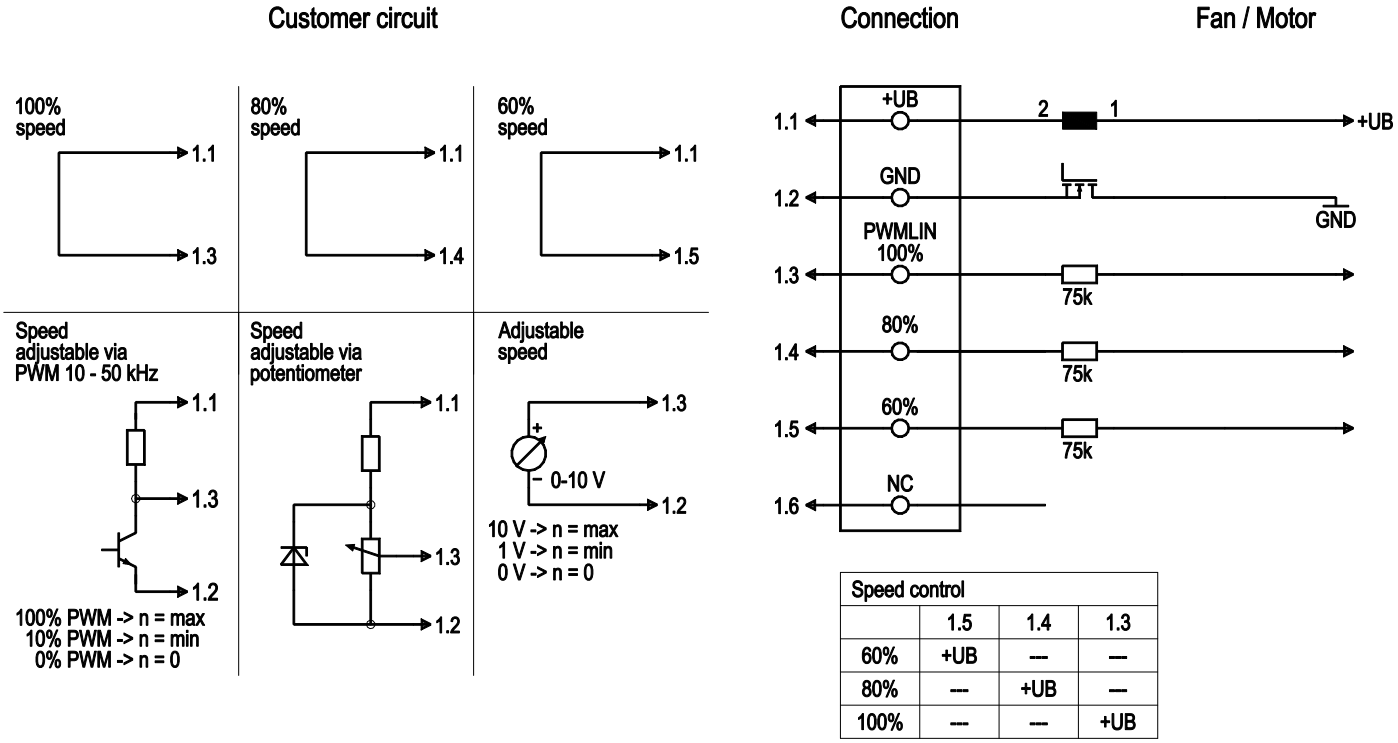
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Connection screen



Speed control			
	1.5	1.4	1.3
60%	+UB	---	---
80%	---	+UB	---
100%	---	---	+UB

No.	Conn.	Designation	Function / assignment
	1.1	+UB	Power supply
	1.2	GND	Power supply GND, reference earth
	1.3	100%, PWM/LIN	100% speed, control input 0-10 V analogue voltage or PWM
	1.4	80%	80% speed
	1.5	60%	60% speed
	1.6	NC	Not used / no function

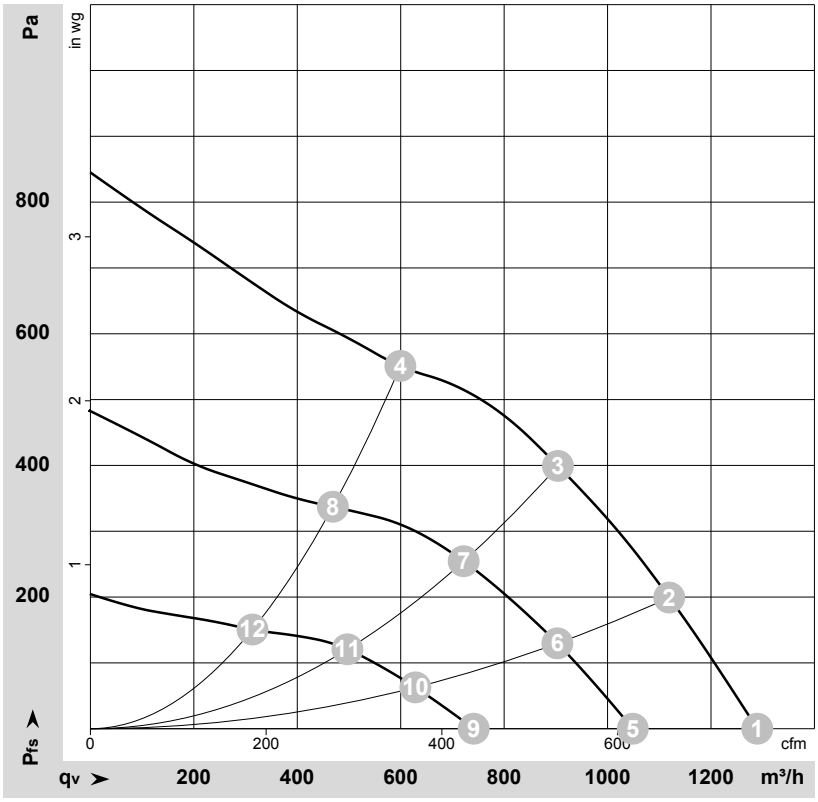
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Charts: Air flow



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-74436-1
Measurement: LU-74437-1
Measurement: LU-74438-1

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

	Stage	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	100%	26	3830	394	15.20	1290	0	760	0.00
2	100%	26	4075	353	13.53	1120	200	660	0.80
3	100%	26	4320	294	11.29	905	400	530	1.61
4	100%	26	4670	233	8.92	600	550	355	2.21
5	80%	26	3145	215	8.28	1050	0	615	0.00
6	80%	26	3315	188	7.24	905	130	530	0.52
7	80%	26	3470	155	5.97	720	255	425	1.02
8	80%	26	3670	118	4.51	470	337	275	1.35
9	60%	26	2245	79	3.06	740	0	435	0.00
10	60%	26	2325	68	2.61	630	63	370	0.25
11	60%	26	2415	56	2.15	495	121	295	0.49
12	60%	26	2490	42	1.63	315	150	185	0.60

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

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