K3G097-AK68-85

EC dual centrifugal fan

forward curved, with brushless DC motor

with housing, Automotive



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Nominal data

Type	**K3G097-AK68-85**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Type of data definition		fa
Speed (rpm)	min^{-1}	4600
Power input	W	690
Current draw	A	26.5
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	60

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}	%	44	35.4
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		52.6	44
05 Variable speed drive		Yes	

09 Power input P_e	kW	0.43
09 Air flow q_v	m^3/h	750
09 Pressure increase p_{fs}	Pa	831
10 Speed (rpm) n	min^{-1}	5660
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-127030

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Technical features

Mass	2.4 kg
Size	97 mm
Material of impeller	PA plastic
Housing material	PA 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)	F3-2
Max. permissible ambient motor temp. (transp./ storage)	+85 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Life expectancies	25,000 h (typical)
Technical features	- Fault output (open collector) -Load dump (58 V) - Motor current limit - Soft start - Set value input Lin 0-10 VDC / PWM (1.4, V corresponds to V=min, 10 V corresponds to V=max) - Overvoltage detection - Over-temperature protected electronics
EMC directives	According to ECE R10 Rev. 3
Electrical leads	With plug; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Approval	EAC; E1
Noise level	76 dB(A), sound power level according to ISO 13347
Remark	Type approval number – 036432

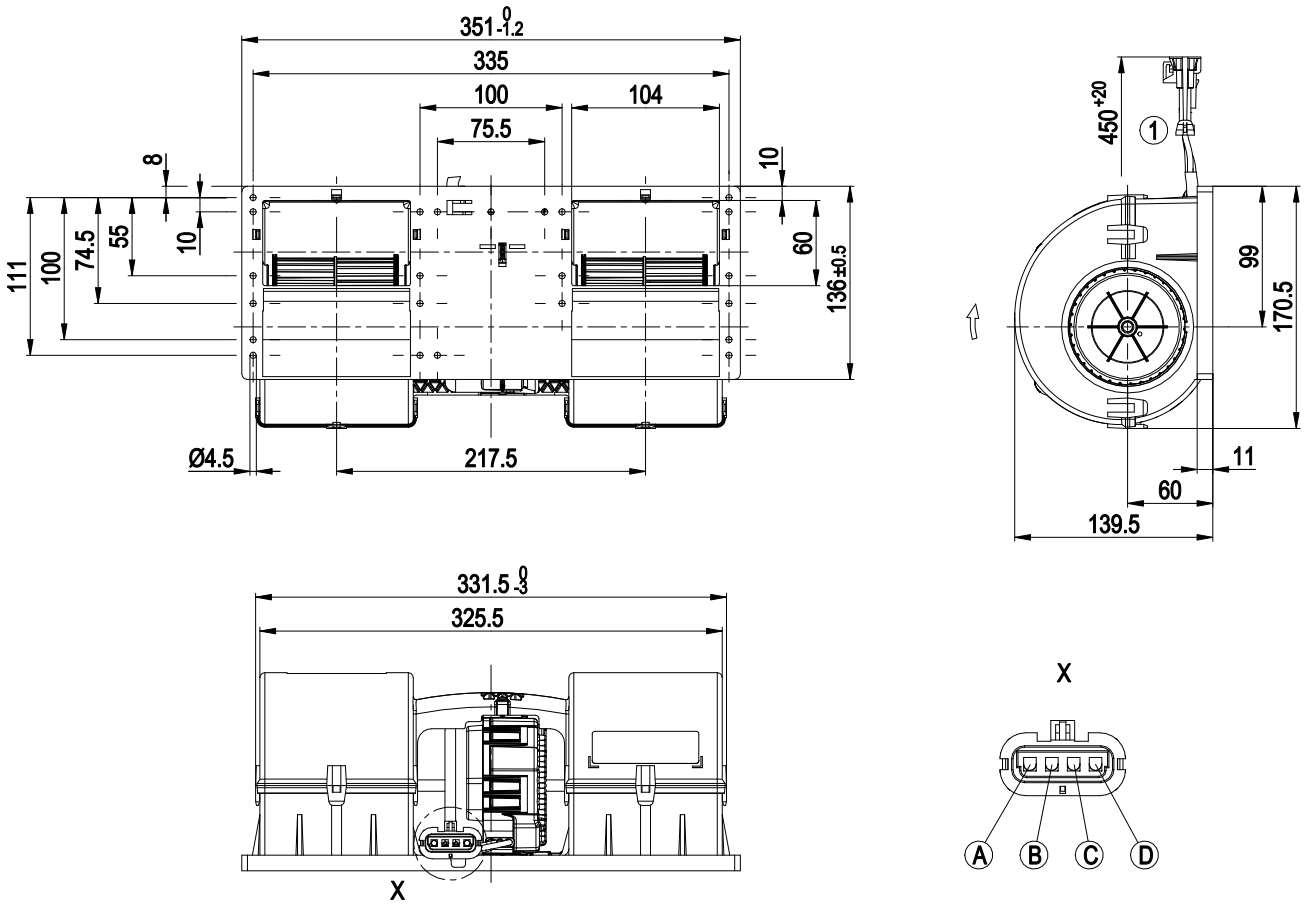
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Product drawing



1	Connection line with 4-pole connector Packard Electric 12010974, coded
A	+ UB
B	PWM/LIN
C	Diagnostic output
D	GND

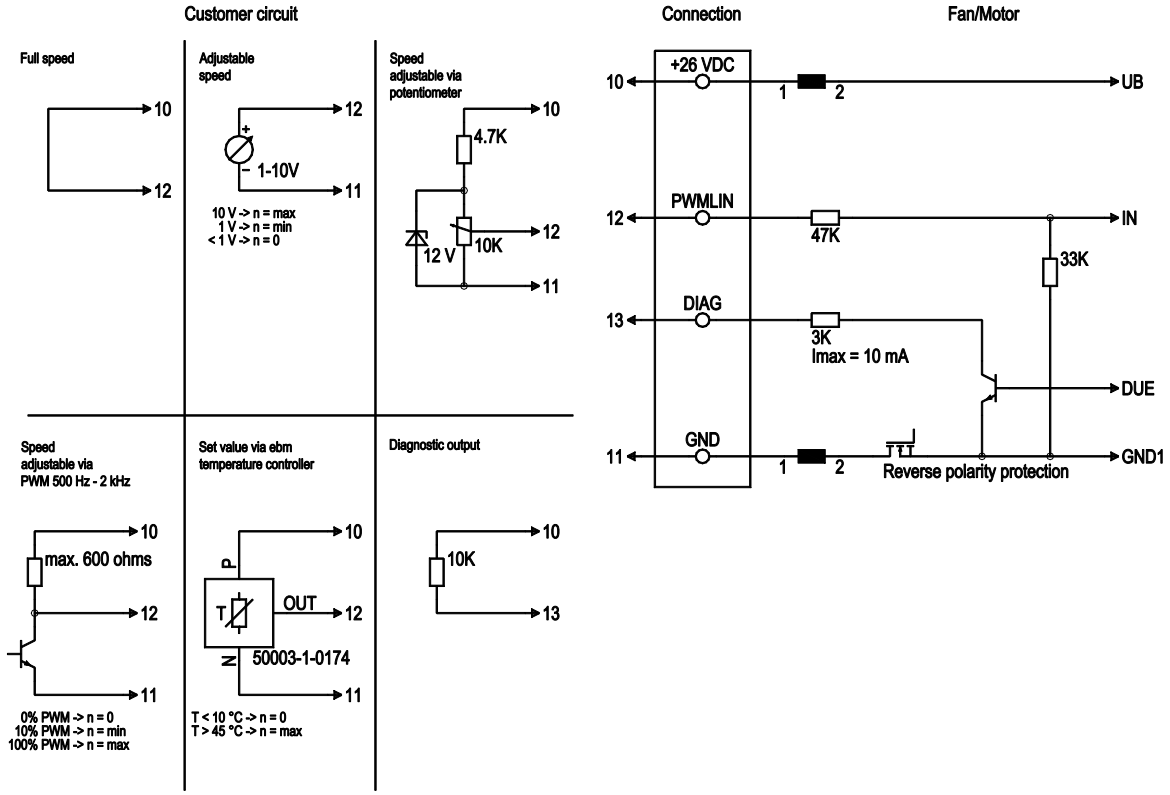
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
10	A	+26 VDC	black	Power supply 26 VDC
11	D	GND	brown	Power supply GND, reference earth
12	B	PWM/LIN	yellow	Control input Re > 100 k
13	C	DIAG	white	Fan OK: high, fan error: low, Isink max=10 mA

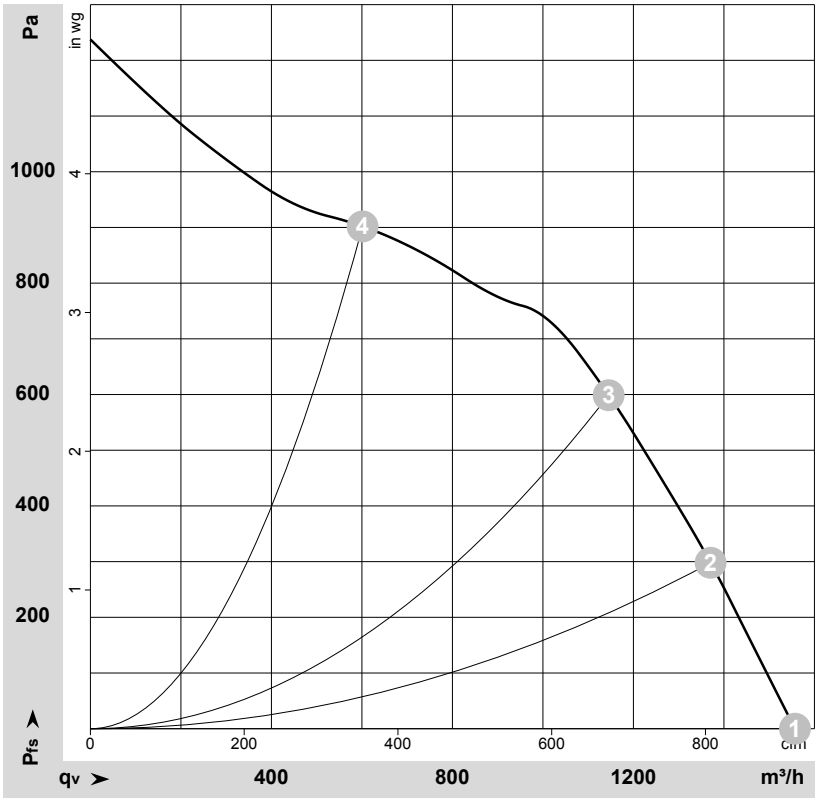
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Charts: Air flow



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-126249-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	26	4600	690	26.50	1555	0	915	0.00
2	26	4940	644	24.70	1370	300	805	1.20
3	26	5265	574	22.01	1145	600	675	2.41
4	26	5715	369	14.17	600	900	355	3.61

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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