

K3G097-AS82-07

EC dual centrifugal fan

forward-curved, with brushless DC motor
with housing, Automotive



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Nominal data

Type	K3G097-AS82-07	
Motor	M3G084-BF	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Frequency	Hz	DC
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	4680
Power consumption	W	740
Current draw	A	28
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	70

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



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Technical description

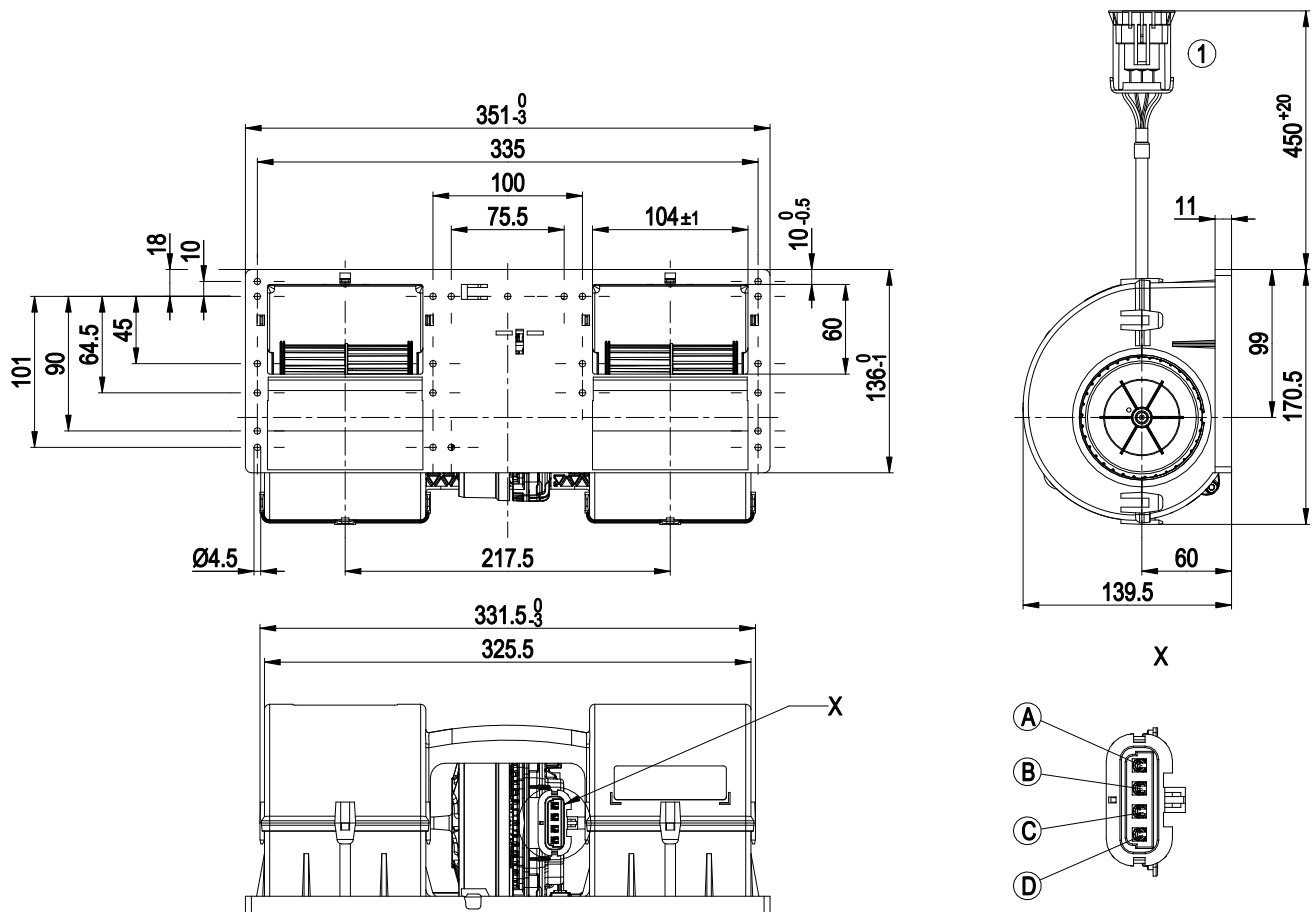
Weight	2 kg
Size	97 mm
Motor size	84
Impeller material	PA plastic
Housing material	PP plastic
Balancing grade according to DIN ISO 21940-11	G 2.5
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	Motor IP24 KM, electronics IP6K9K (mating connector installed)
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H4
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 (depending on load profile and ambient conditions)
Technical features	- Start at 85°C (2 min permissible) - Load dump (58 V) - Motor current limitation - Soft start - Control input 0-10 VDC/PWM - Temperature derating - Thermal overload protection for electronics
Electrical hookup	Connector with cable; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
Protection class assignment	III; Requires supply with safety extra-low voltage SELV. This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Approval	EAC



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Product drawing

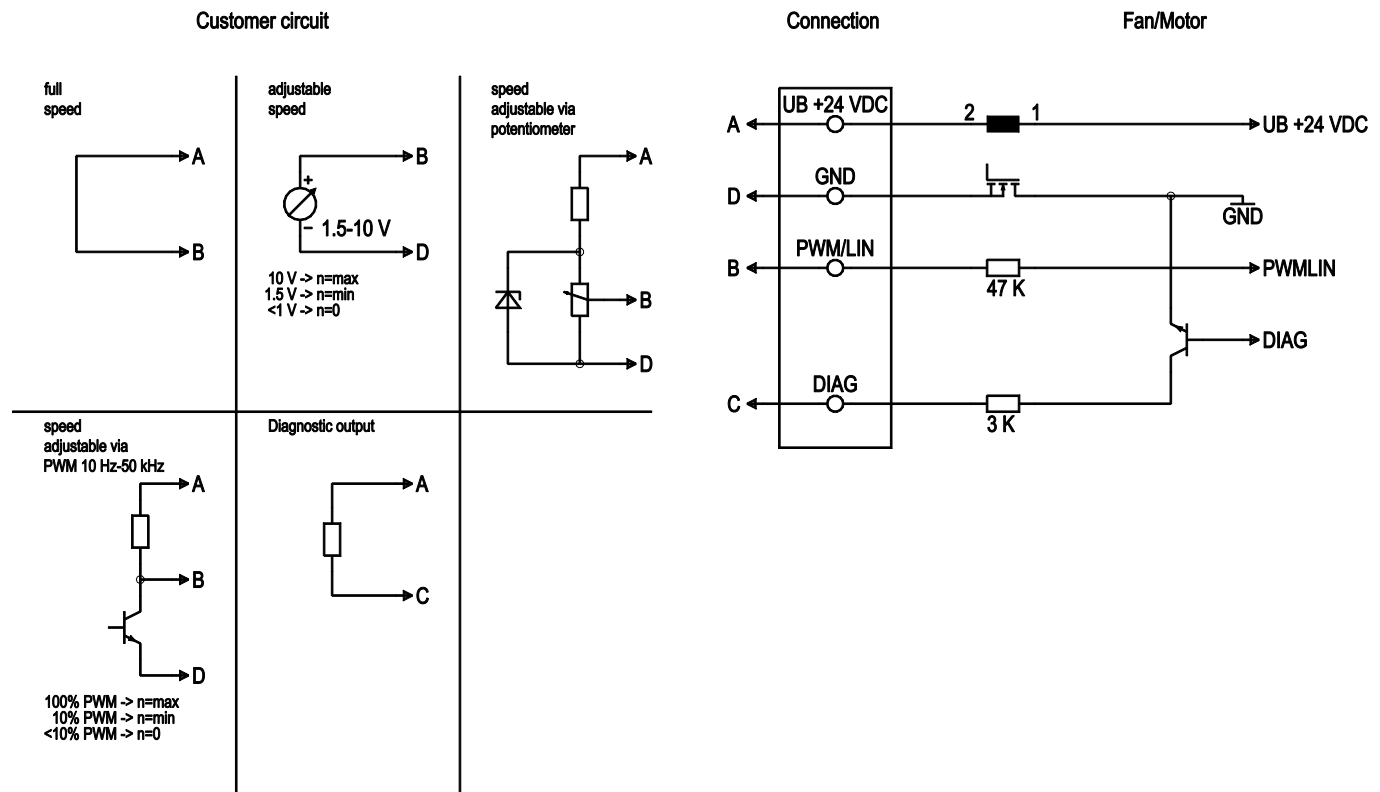


1	Cable FLRYW 2x 4 mm ² , 2x 0.75 mm ²
	4-pole connector housing Aptiv 12129600, 2x flat plug Aptiv 12048254, 2x flat plug Aptiv 12048159, 2x seal Aptiv 15324981, 2x seal Aptiv 15324985
A	+ UB
D	GND
B	PWM/LIN
C	Diagnostic output
	4-pole mating connector Aptiv 12129565, TPA (Terminal Position Assurance) 15300016, 2x flat plug Aptiv 12077413, 2x flat plug Aptiv 12077411, 2x seal Aptiv 15324981, 2x seal Aptiv 15324985

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Connection diagram

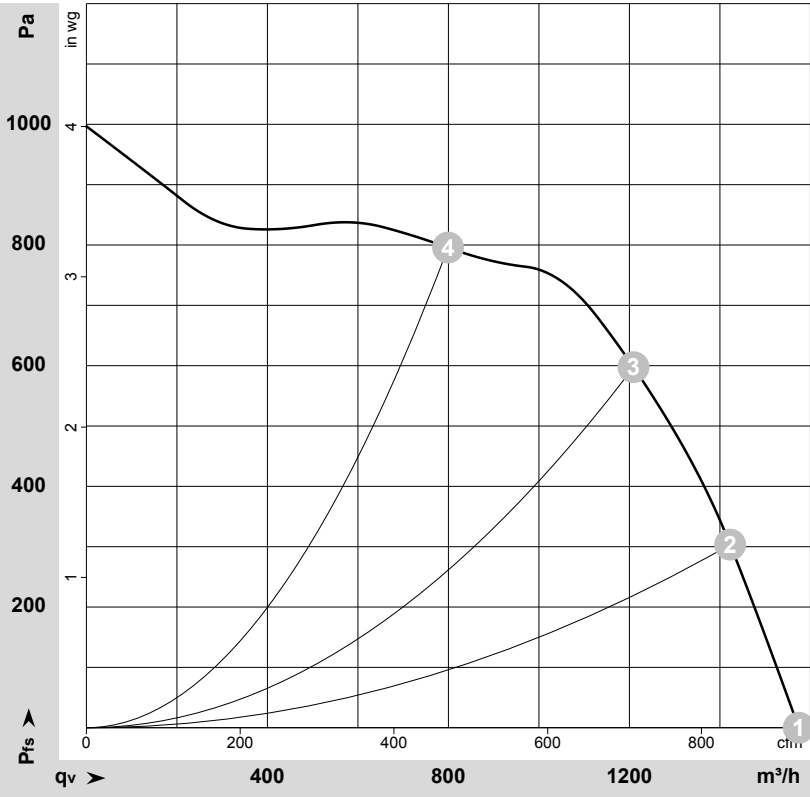


No.	Conn.	Designation	Function/assignment
	A	UB +24 VDC	Power supply 24 VDC
	D	GND	Power supply GND, reference ground
	B	PWM/LIN	Analog voltage control input 0-10 V or PWM
	C	DIAG	Fan OK: high, fan error: low, Isink max = 10 mA

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Curves: Air performance



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

Measurement: LU-175168-1

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	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	4680	740	28.00	78	88	1575	0	925	0.00
2	26	5025	740	28.00	76	87	1425	300	840	1.20
3	26	5380	659	25.31	75	85	1210	600	710	2.41
4	26	5500	441	16.92	73	84	800	800	470	3.21

U = Voltage · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side · q_v = Air flow
p_{fs} = Pressure increase

