K3G097-AF25-43

EC dual centrifugal fan

forward-curved, dual-intake

with housing, Automotive



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Nominal data

Type	**K3G097-AF25-43**	
Motor	**M3G084-BF**	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Status		prelim.
Speed (rpm)	min^{-1}	3550
Power consumption	W	370
Current draw	A	14.2
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
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

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Technical description

Weight	2 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	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 (typical)
Technical features	- Lowering input - Error output (high-side switch) - INVLIN (inverse linear control input) - Load dump (58 V) - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Temperature derating - Overvoltage detection - Thermal overload protection for electronics - Line undervoltage detection
Electrical hookup	With plug; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
Sound level	81 dB(A), sound power level according to ISO 13347
Comment	E1 approval in preparation

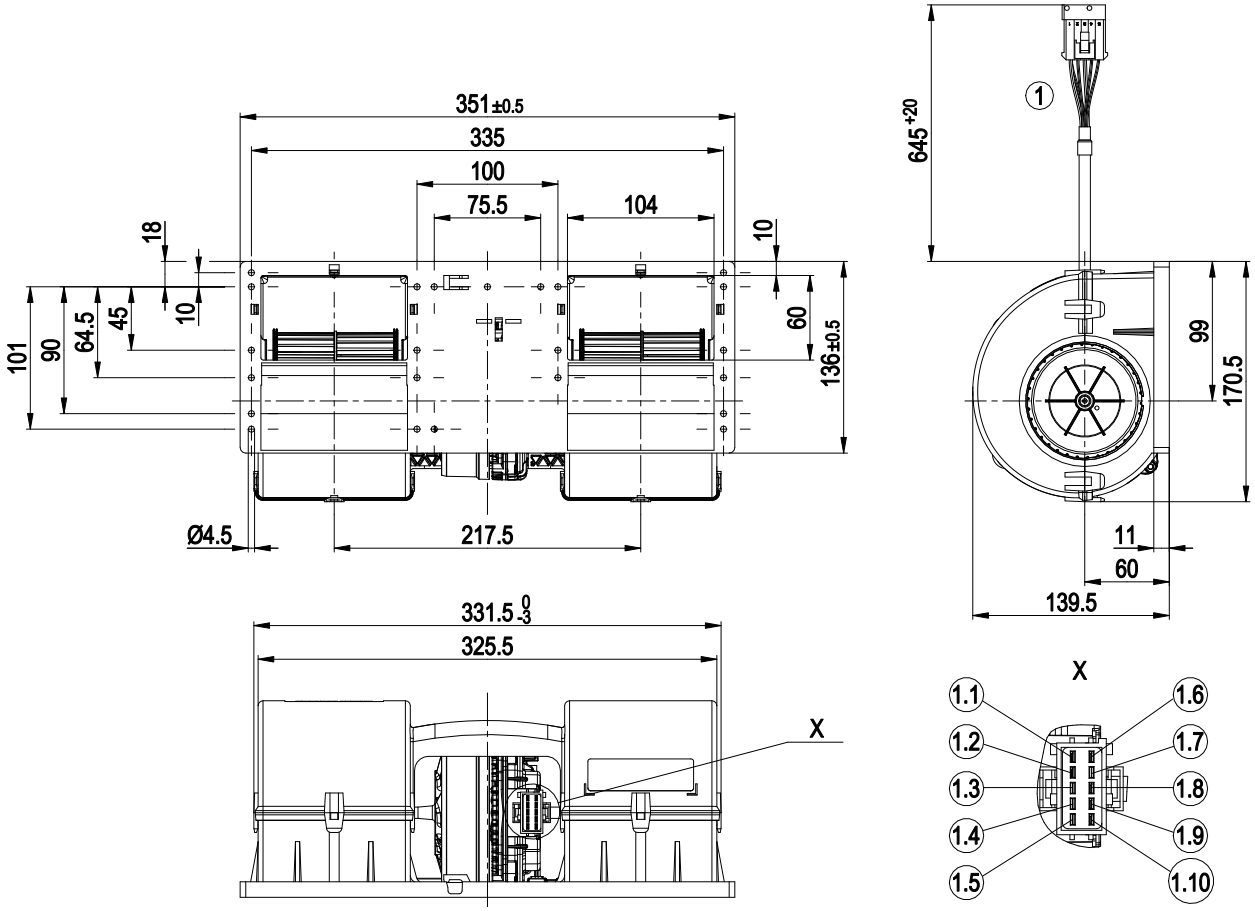
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Product drawing



1	Cable with 10-pole coded plug tyco Junior Power Timer 1-965423-1
	Mating connector TE 1-967240-1 not included in scope of delivery
1.1	+ UB
1.2	ABSENK
1.3	not used
1.4	not used
1.5	not used
1.6	PWM/LIN
1.7	not used
1.8	GND
1.9	INVLIN
1.10	Diagnostic output

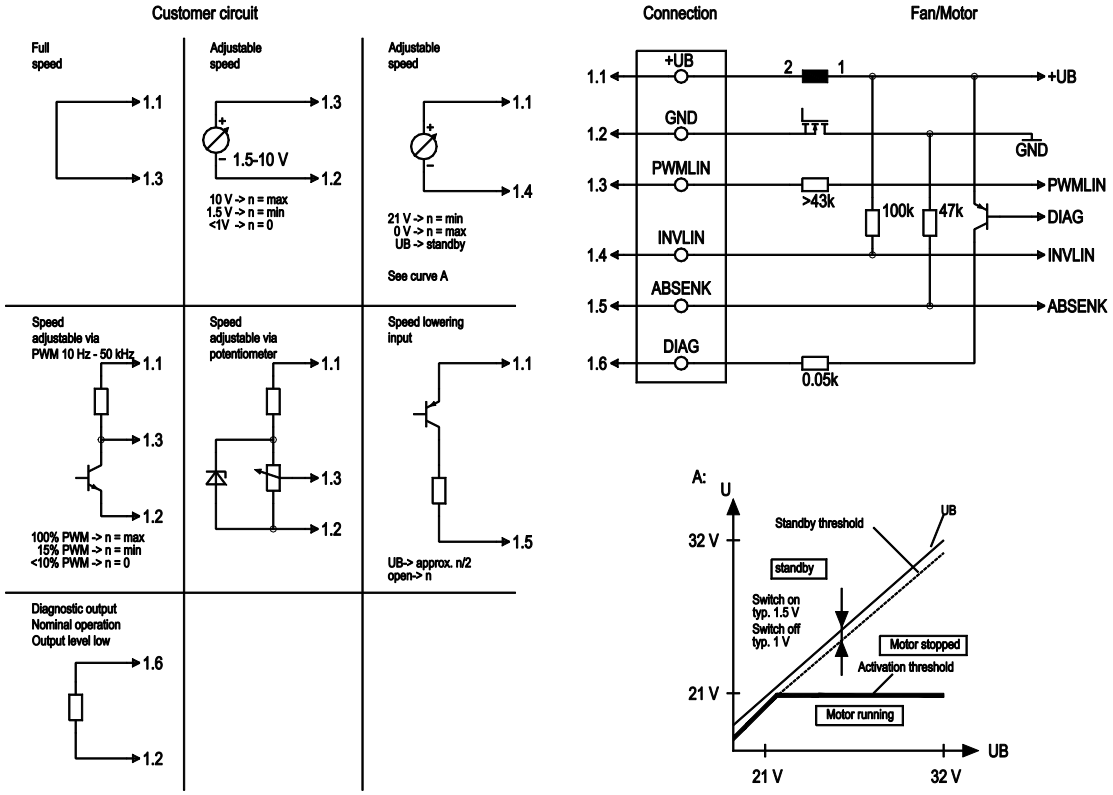
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Connection diagram



No.	Conn.	Designation	Function/assignment
	1.1	+UB	Power supply
	1.2	GND	Power supply GND, reference ground
	1.3	PWMLIN	Analog 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

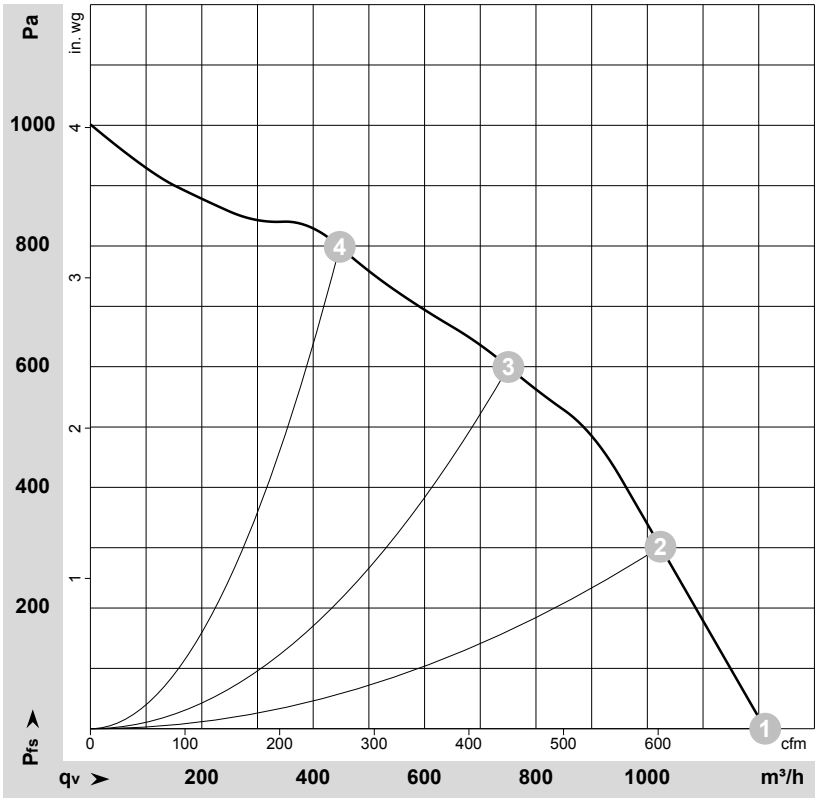
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-181855-1

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	3550	370	14.20	70	82	1210	0	715	0.00
2	26	4170	361	13.84	70	80	1025	300	605	1.20
3	26	4900	334	12.85	70	81	750	600	440	2.41
4	26	5435	265	10.16	72	82	450	800	265	3.21

U = Power supply · 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

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