K3G097-AK32-70

EC dual centrifugal fan

forward-curved, with brushless DC motor

with housing, Automotive



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Nominal data

Type	**K3G097-AK32-70**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	13
Nominal voltage range	VDC	9 .. 15
Method of obtaining data		ml
Speed (rpm)	min-1	3750
Power consumption	W	215
Current draw	A	16
Min. back pressure	Pa	300
Min. back pressure	inH2O	1.2
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	60

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	2.3 kg
Fan size	97 mm
Impeller material	PA plastic UL94 HB (black)
Housing material	PP plastic (black)
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	F3-2
Max. permitted ambient temp. for motor (transport/storage)	+60 °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
Life expectancy	40,000 h (typical)
Technical features	-Start at 85 °C (2 min) permitted - Fault output (open collector) - Load dump protection - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Thermal overload protection for electronics
Electrical hookup	With plug; Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
Sound level	76 dB(A), sound power level according to ISO 13347

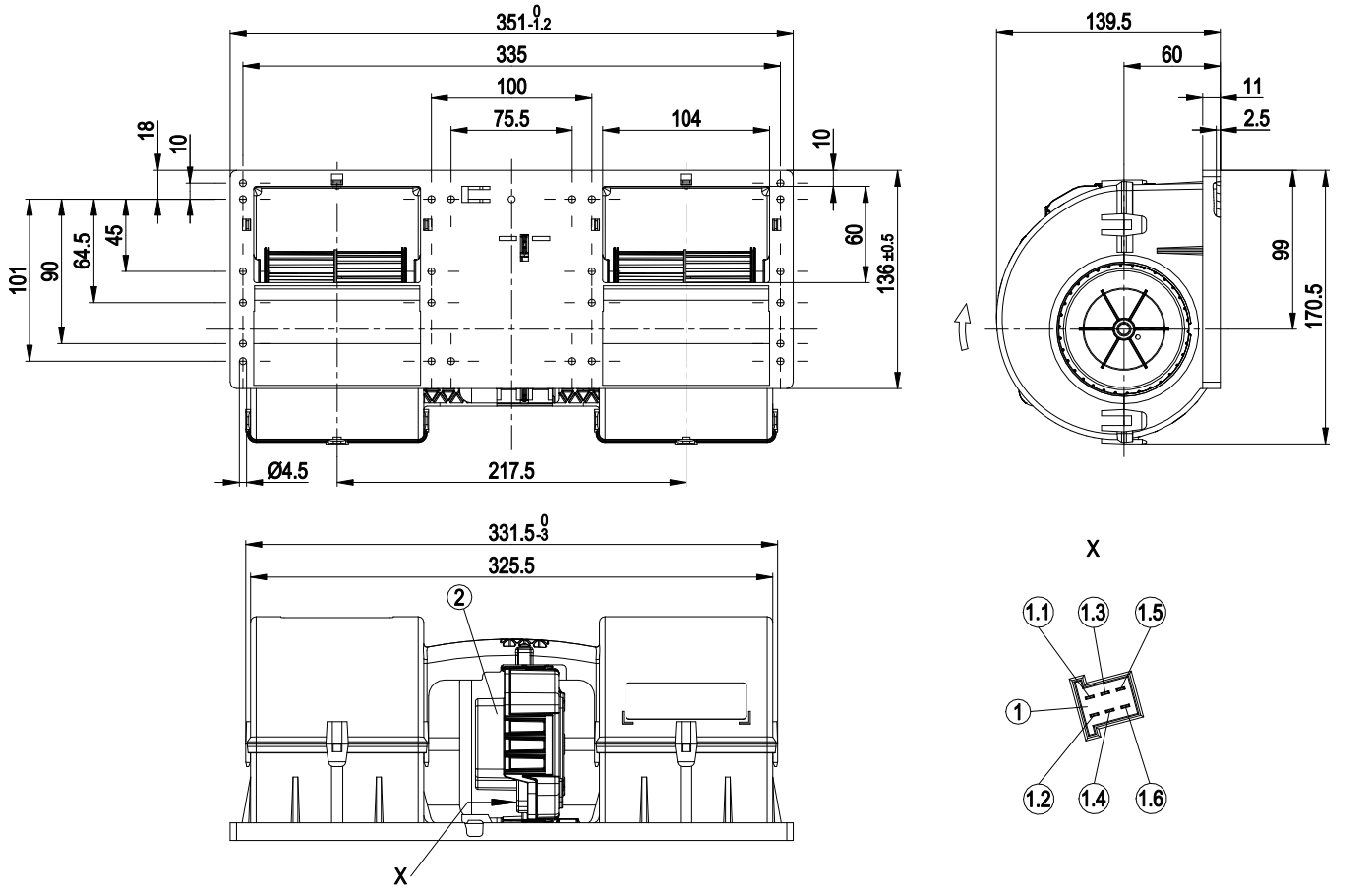
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Product drawing



1	6-pole coded header tyco Junior Power Timer
	cable (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, 100% speed
1.4	80% speed
1.5	60% speed
1.6	Not used / no function
2	Electronics cover blue (RAL 5015)

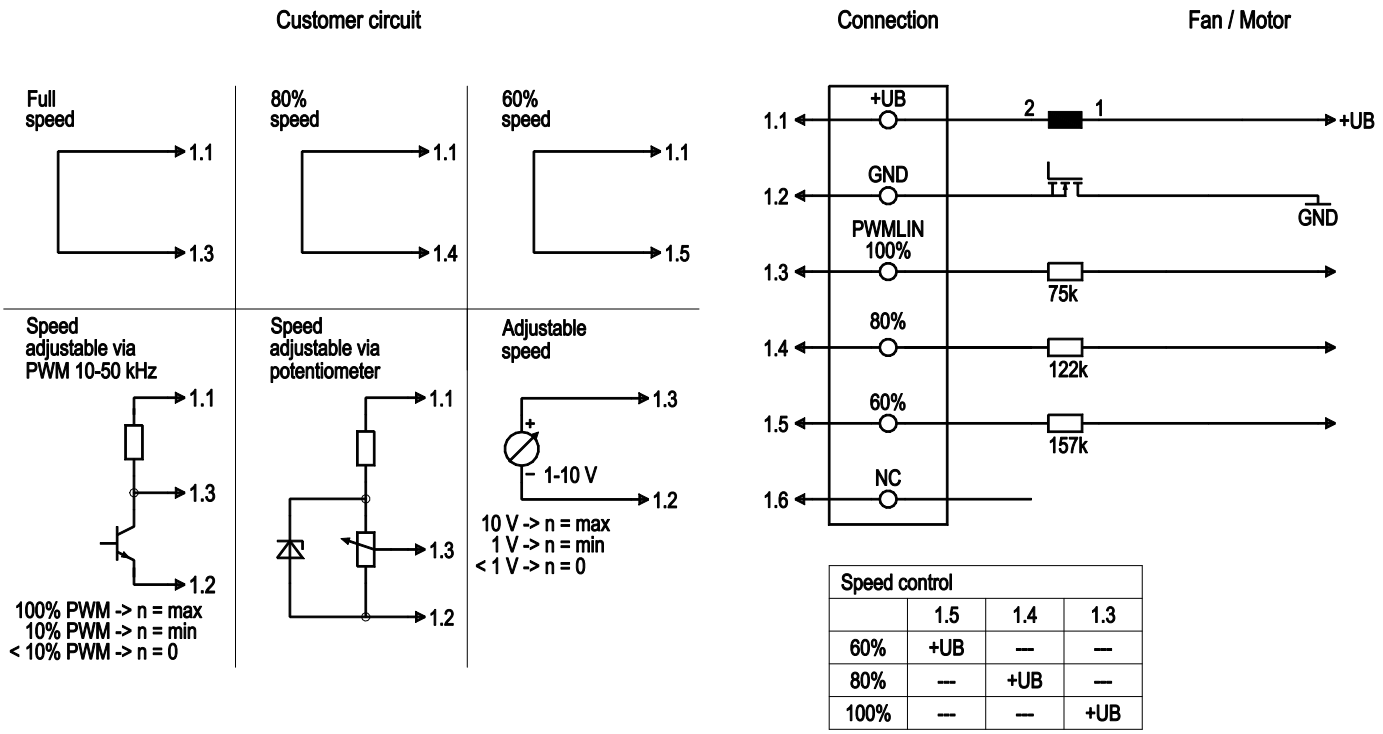
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Connection diagram



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 ground
	1.3	100%, PWM/LIN	100% speed, analog voltage control input 0-10 V or PWM
	1.4	80%	80% speed
	1.5	60%	60% speed
	1.6	NC	Not used / no function

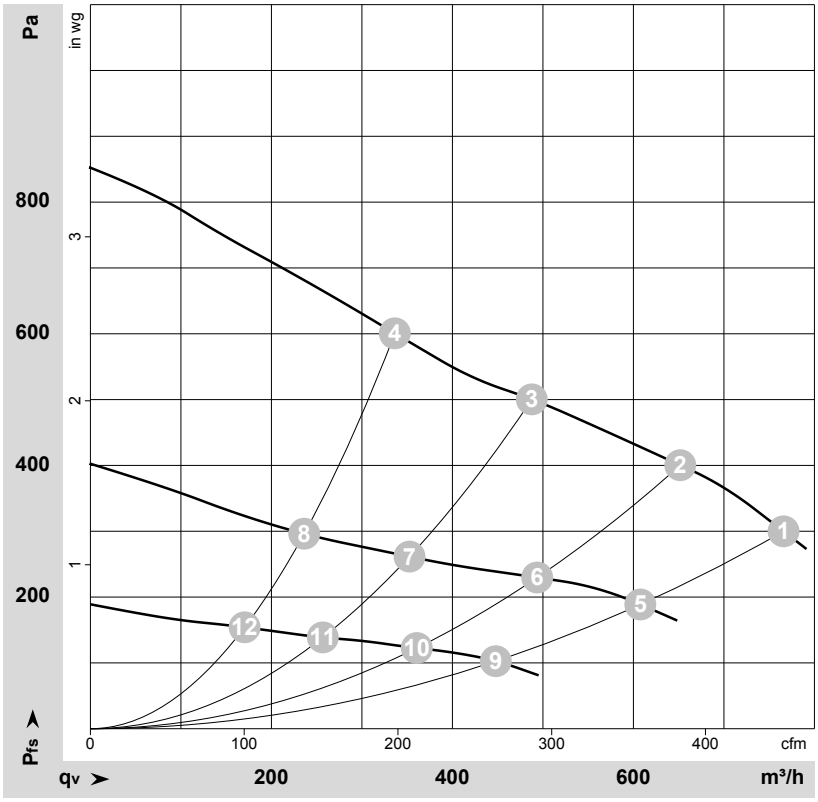
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-116210-1
Measurement: LU-112523-1
Measurement: LU-112517-1

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

	Stage	U	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
		V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	100%	13	3750	215	16.00	765	300	450	1.20
2	100%	13	4055	207	15.93	650	400	385	1.61
3	100%	13	4405	201	15.49	490	500	285	2.01
4	100%	13	4680	192	14.75	335	600	200	2.41
5	80%	13	2975	108	8.03	610	189	360	0.76
6	80%	13	3105	94	7.00	495	230	290	0.92
7	80%	13	3195	81	5.99	355	262	210	1.05
8	80%	13	3325	68	5.10	235	295	140	1.18
9	60%	13	2235	51	3.76	450	104	265	0.42
10	60%	13	2285	44	3.24	360	122	210	0.49
11	60%	13	2365	38	2.84	255	138	150	0.55
12	60%	13	2400	34	2.51	170	154	100	0.62

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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