K3G097-AK68-82

EC dual centrifugal fan

forward-curved, dual-intake

with housing, for rail applications



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Nominal data

Type	**K3G097-AK68-82**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	26
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4800
Power consumption	W	740
Current draw	A	28.5
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	2.6 kg
Size	97 mm
Motor size	74
Impeller material	PA plastic UL94 V0
Housing material	PA plastic UL94 V0
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	Motor IP24 KM, electronics IP6K9K
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing; (sealed)
Life expectancy	25,000 h (typical)
Technical features	- Fault output (open collector) - Load dump (58 V) - Motor current limitation - 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 - Thermal overload protection for electronics
EMC regulations	According to ECE R10 Rev. 3
Electrical hookup	Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Approval	E1
Comment	At maximum back pressure not approved for continuous operation at 85°C; type approval number 036432

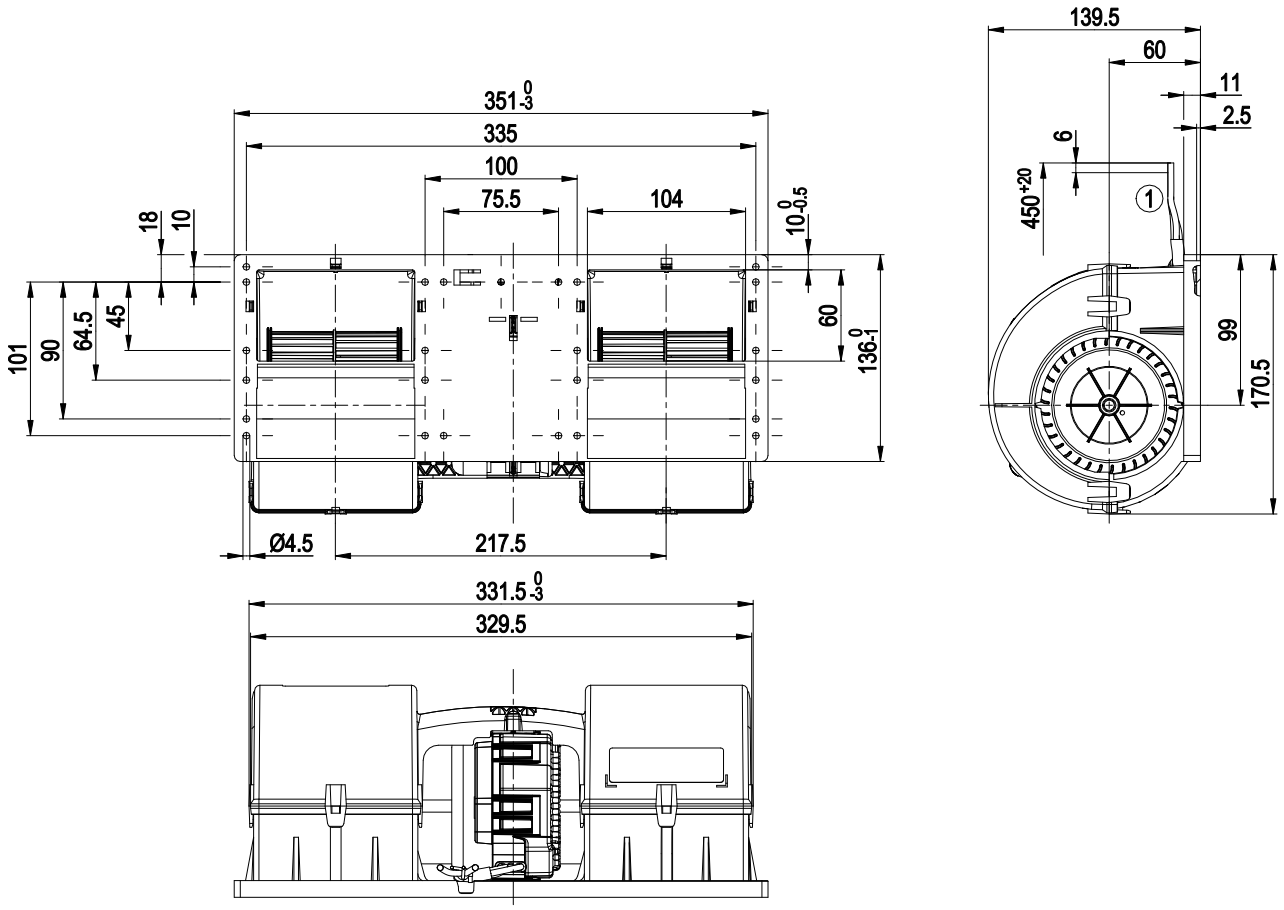
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Product drawing



1	Cable Betatherm 2x 0.75 mm², 2x 4 mm², tin-plated wire ends

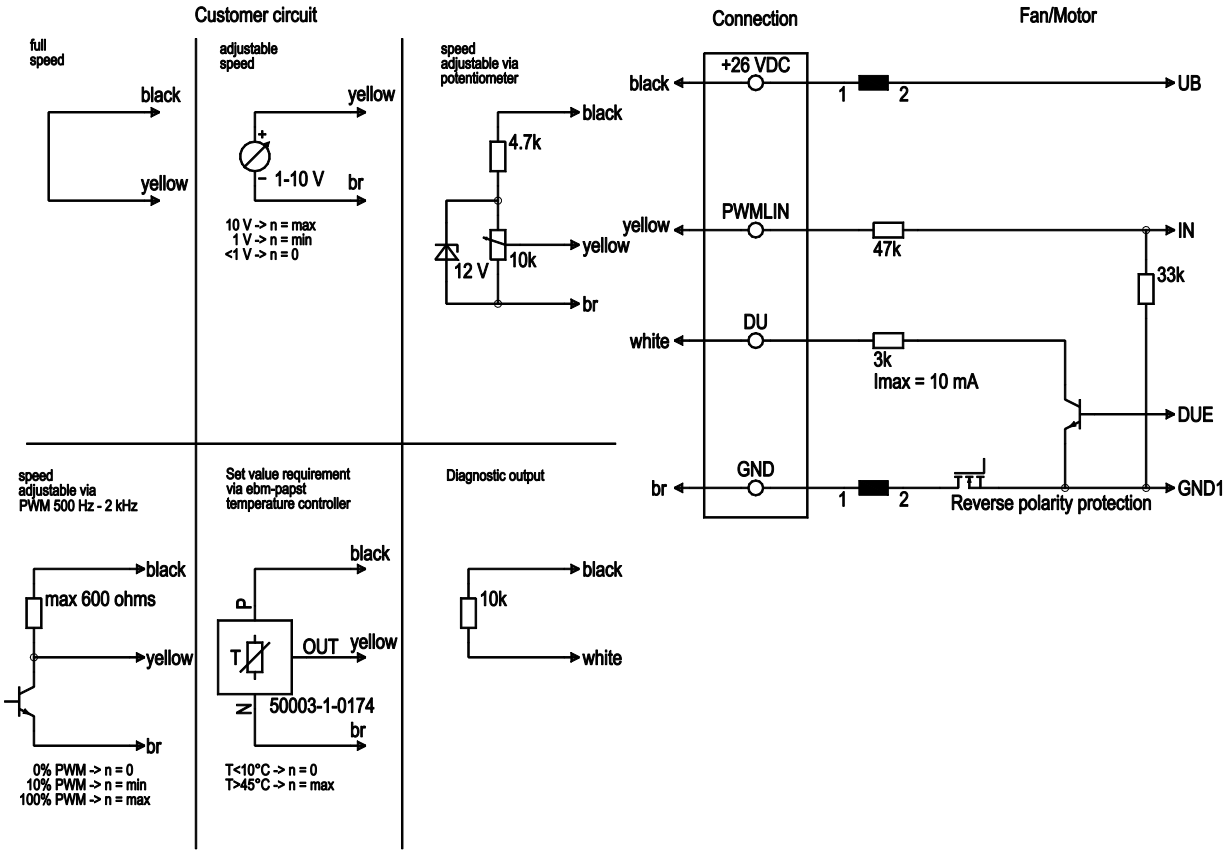
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	-	+26 VDC	black	Power supply 26 VDC
	-	GND	brown	Power supply GND, reference ground
	-	PWM/LIN	yellow	Control input Re > 100 k
	-	DU	white	Fan OK: high, fan error: low, Isink max=10 mA

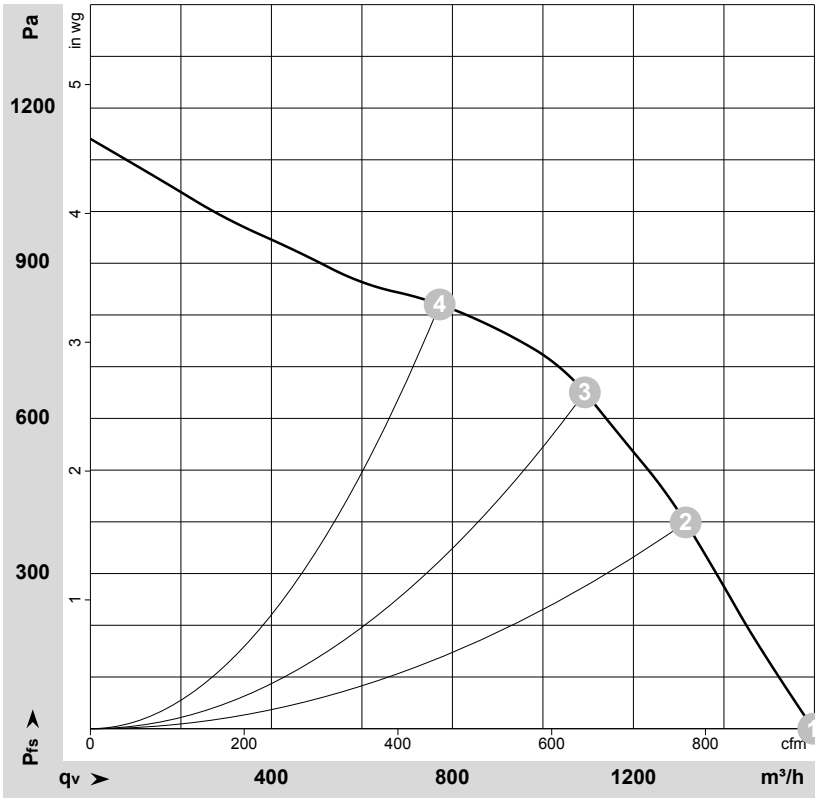
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-127030-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	26	4800	740	28.50	1595	0	940	0.00
2	26	5150	650	24.93	1315	400	775	1.61
3	26	5385	569	21.84	1095	650	645	2.61
4	26	5640	447	17.17	770	820	455	3.29

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

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