K3G097-AK36-55

EC dual centrifugal fan

forward-curved, dual-intake

with housing, Automotive



ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**K3G097-AK36-55**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	13
Nominal voltage range	VDC	9 .. 15
Method of obtaining data		ml
Speed (rpm)	min^{-1}	3570
Power consumption	W	335
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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	44.6	34.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		54.5	44
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.27
09 Air flow q_v	m³/h	600
09 Pressure increase p_{fs}	Pa	644
10 Speed (rpm) n	min^{-1}	4920
11 Specific ratio*		1.01

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-68238

EC dual centrifugal fan

forward-curved, dual-intake

with housing, Automotive

Technical description

Weight	2.3 kg
Size	97 mm
Motor size	74
Impeller material	PA plastic UL94 HB (black)
Housing material	PP plastic (black)
Balancing grade according to DIN ISO 21940-11	G 2.5
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	Motor IP24 KM
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+70 °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	- Fault output (open collector) - Power limiter - Load dump protection - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Thermal overload protection for electronics
Electrical hookup	Standby current less than 500 µA
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Approval	EAC
Sound level	76 dB(A), sound power level according to ISO 13347

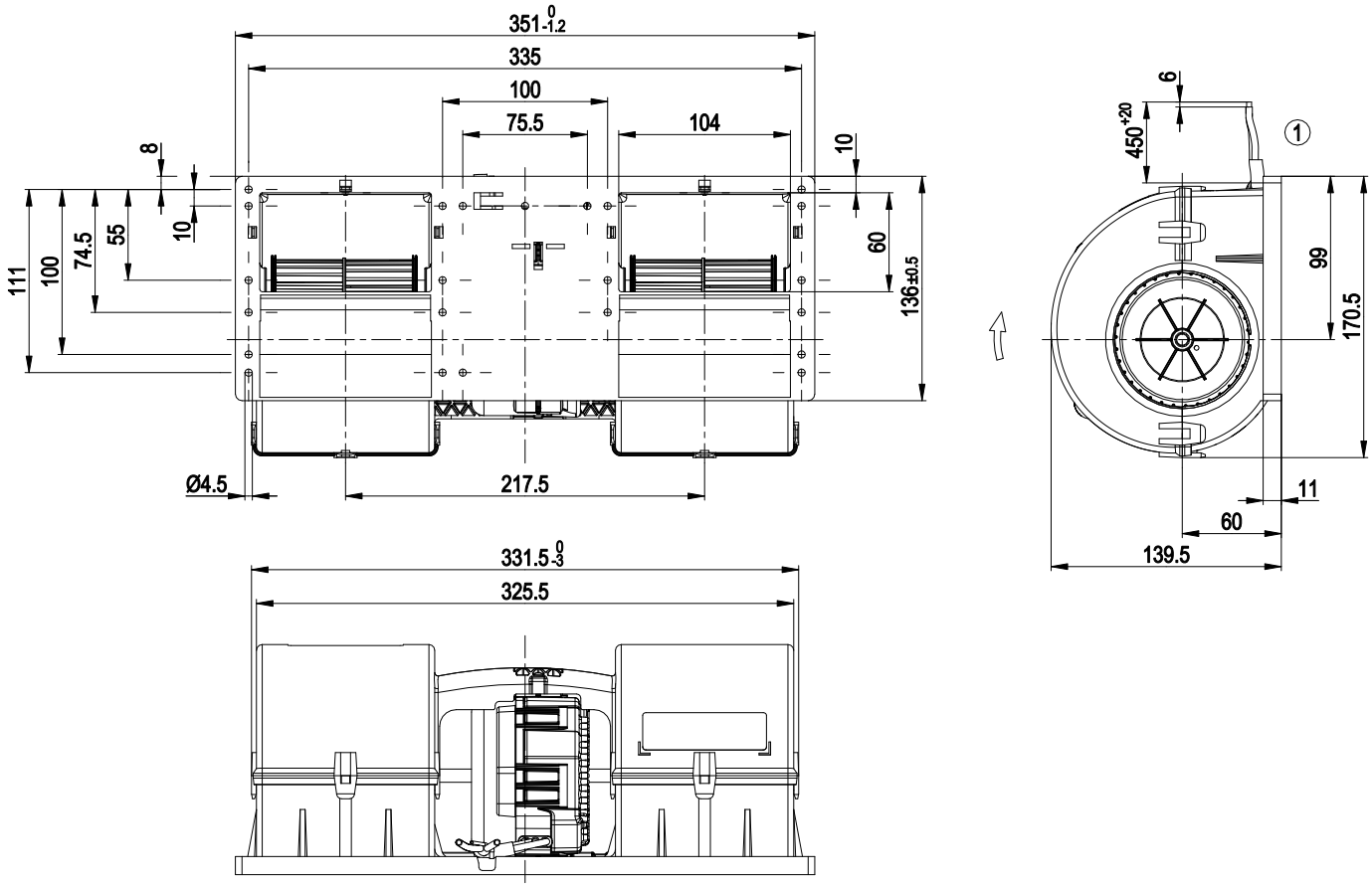
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC dual centrifugal fan

forward-curved, dual-intake

with housing, Automotive

Product drawing



1	Cable FLRY 2x 4.0 mm², FLRY 1x 0.75 mm², 3x stripped and tin-plated wire ends
	+ UB (black)
	PWM/LIN (yellow)
	GND (brown)

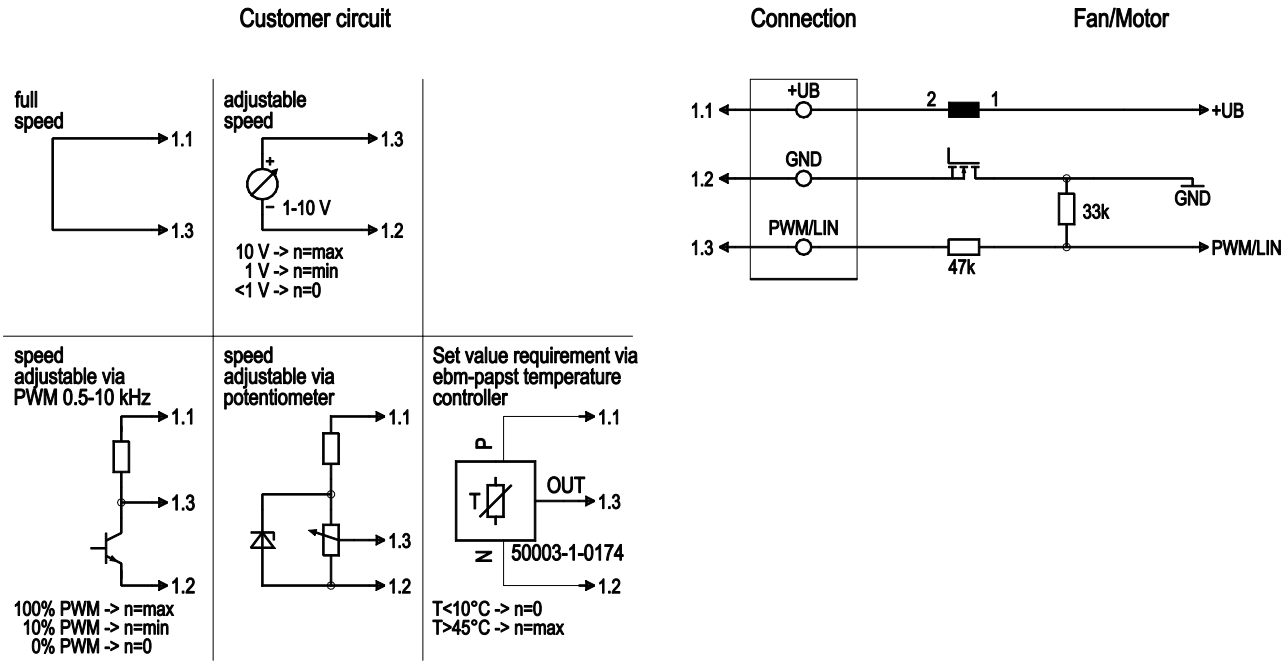
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC dual centrifugal fan

forward-curved, dual-intake

with housing, Automotive

Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	1.1	+UB	black	Power supply
	1.2	GND	brown	Power supply GND, reference ground
	1.3	PWM/LIN	yellow	Control input Re > 100k

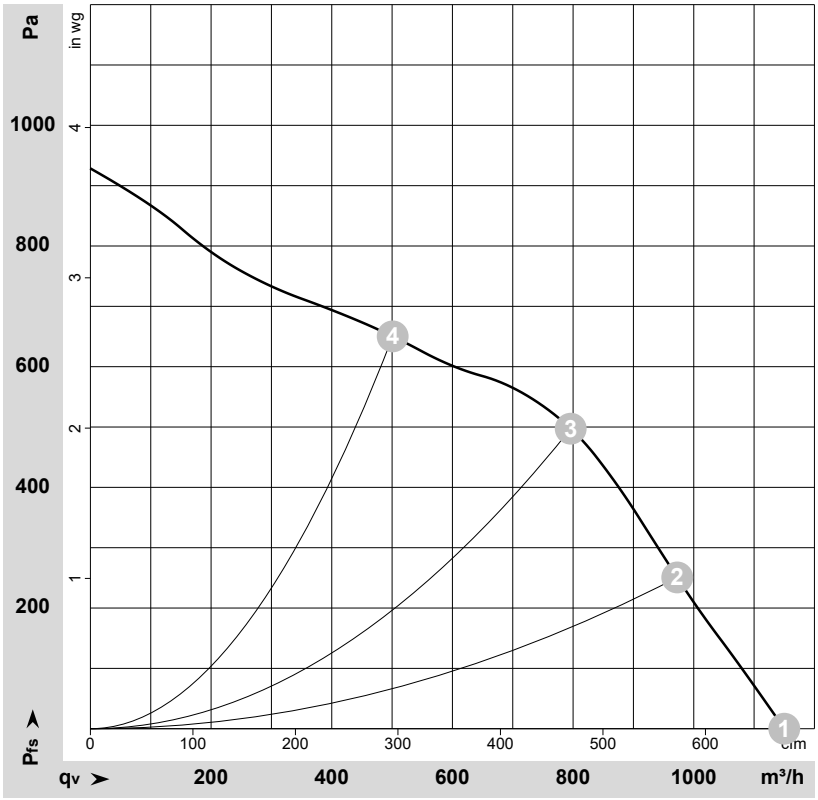
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC dual centrifugal fan

forward-curved, dual-intake

with housing, Automotive

Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-121049-1

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	13	3570	335	25.70	1150	0	675	0.00
2	13	3970	308	23.56	975	250	575	1.00
3	13	4405	304	23.20	795	500	470	2.01
4	13	4820	251	19.36	500	650	295	2.61

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

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com