

# EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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## Nominal data

Type	G3G160-AD52-01	
Motor	M3G074-BF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Speed (rpm)	min <sup>-1</sup>	2870
Power consumption	W	170
Current draw	A	1.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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 $\eta_{es}$	%	43.8	32.8	09 Power consumption $P_{ed}$	kW	0.17
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	395
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	600
04 Efficiency grade N		55	44	10 Speed (rpm) $n$	min <sup>-1</sup>	2870
05 Variable speed drive		Yes		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 =  $1 + p_g / 100\,000\text{ Pa}$ 

LU-72532



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## Technical description

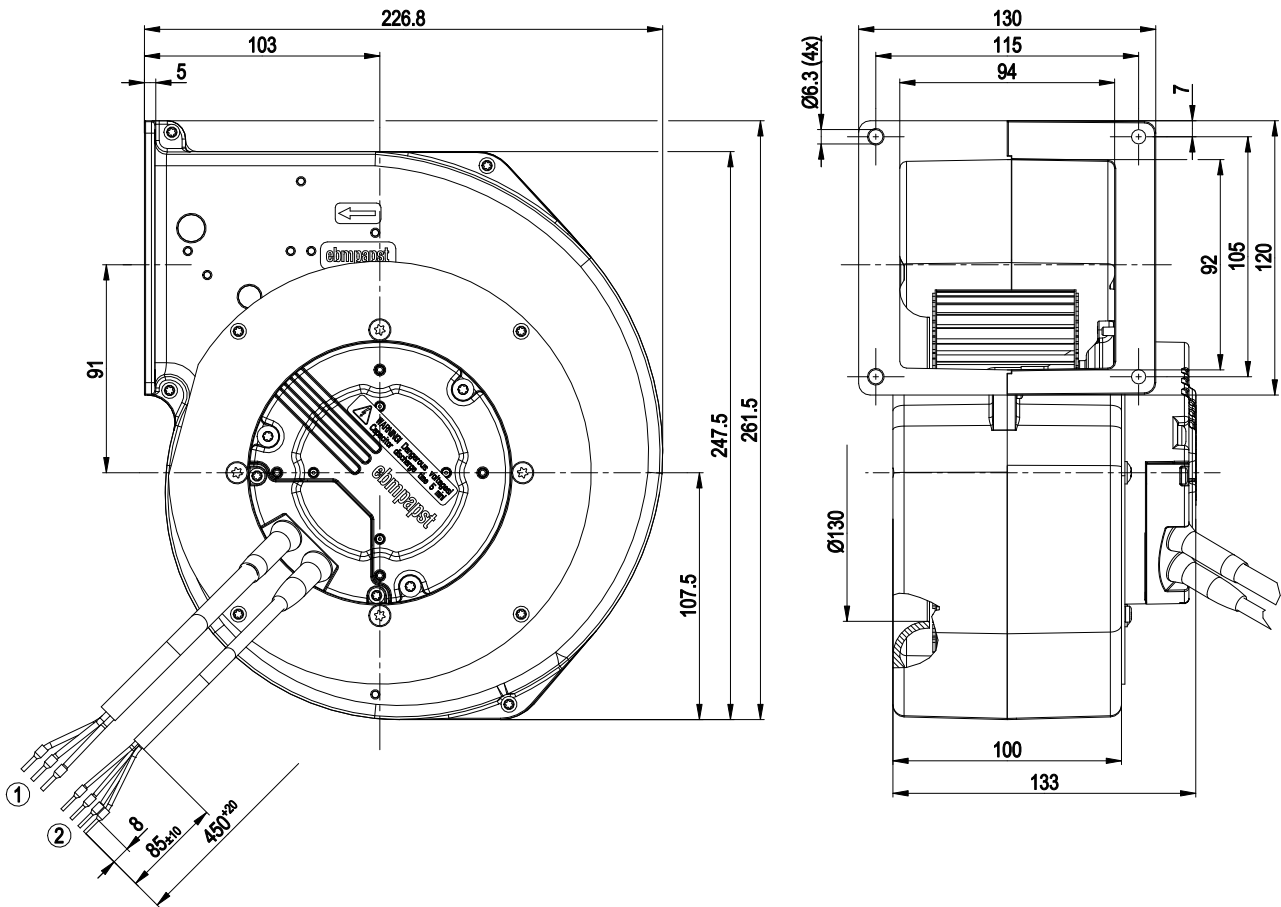
<b>Weight</b>	3.5 kg
<b>Size</b>	160 mm
<b>Motor size</b>	74
<b>Rotor surface</b>	Thick-film passivated
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Die-cast aluminum
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on top; rotor on bottom on request
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Control input 0-10 VDC / PWM</li> <li>- Output 10 VDC, max. 1.1 mA</li> <li>- Tach output</li> <li>- Soft start</li> <li>- Motor current limitation</li> </ul>
<b>EMC immunity to interference</b>	According to EN 61000-6-2
<b>EMC circuit feedback</b>	According to EN 61000-3-2/3
<b>EMC interference emission</b>	According to EN 61000-6-3 (household environment)
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	<= 3.5 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE
<b>Approval</b>	CCC; EAC



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## Product drawing



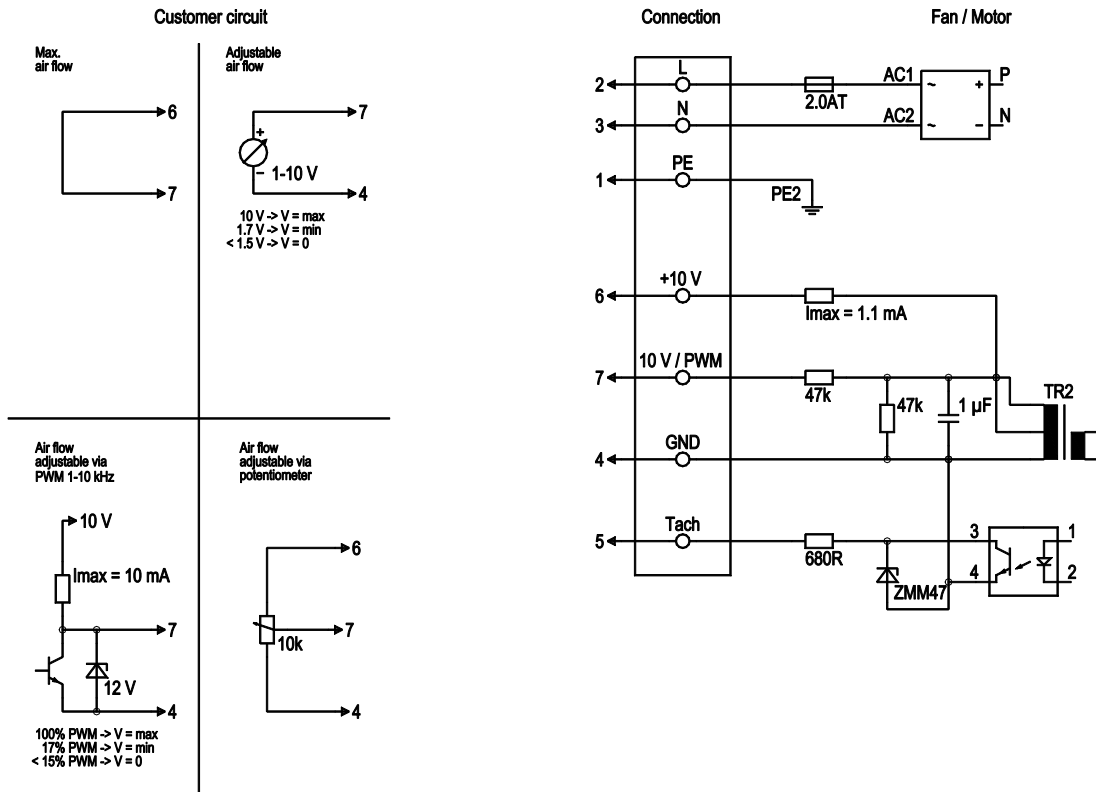
- |   |                                       |
|---|---------------------------------------|
| 1 | Cable PVC AWG 22, 4x crimped ferrules |
| 2 | Cable PVC AWG 18, 3x crimped ferrules |



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## Connection diagram



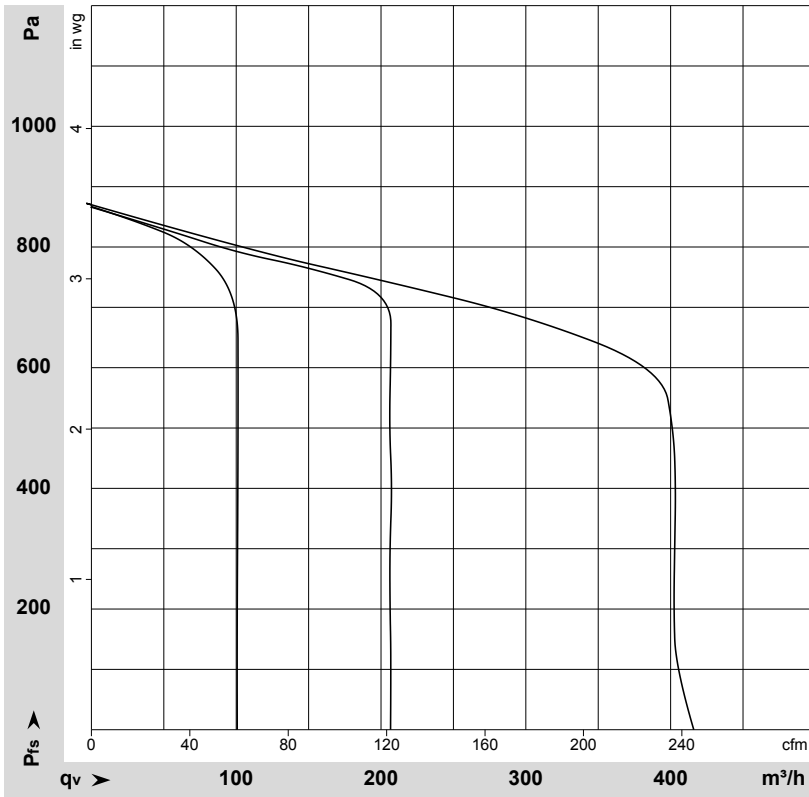
No.	Conn.	Designation	Color	Function/assignment
	2	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	7	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	5	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	6	10V / max 1.1 mA	red	Voltage output 10 V / 1 mA, electrically isolated
	4	GND	blue	GND connection for control interface



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## Curves: Air performance 50 Hz



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

Measurement: LU-72532-1  
Measurement: LU-72533-1  
Measurement: LU-72534-1

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.

