

EC centrifugal fan

forward curved, single inlet

with housing (flange)

G3G160-AD52-18 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Limited partnership · Headquarters Muldingen
County court Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen
County court Stuttgart · HRB 590142



Nominal data

Type	G3G160-AD52-18	
Motor	M3G074-BF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Speed	min ⁻¹	2870
Power input	W	170
Current draw	A	1.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.01

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		43.7	25.8	32.8
Efficiency grade N		54.9	37	44
Power input P_{ed}	kW	0.17		
Air flow q_v	m ³ /h	395		
Pressure increase p_{fs}	Pa	600		
Speed n	min ⁻¹	2870		

Data established at point of optimum efficiency



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Technical features

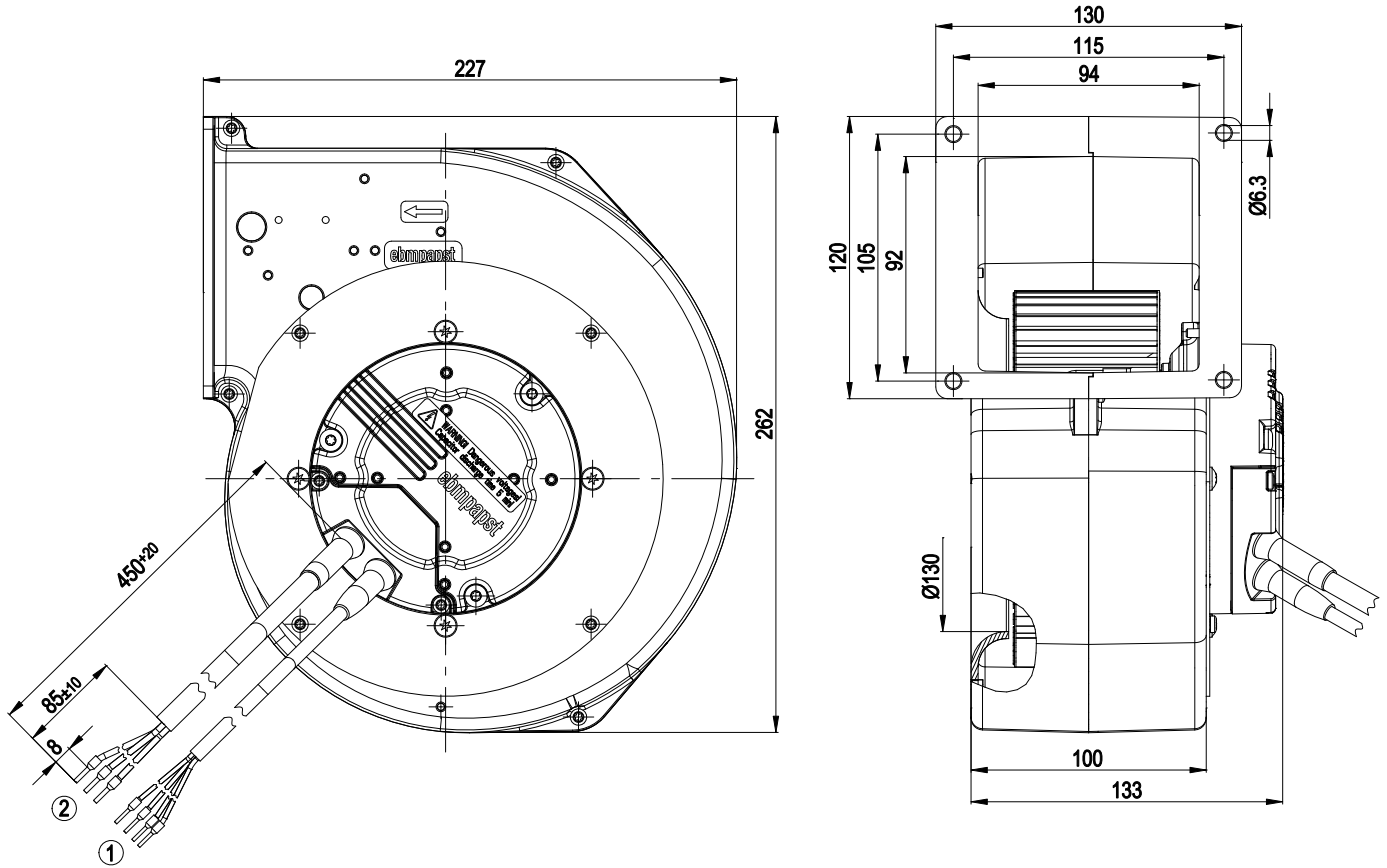
Mass	3.3 kg
Size	160 mm
Material of impeller	Sheet steel, galvanised
Housing material	Die-cast aluminium
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> - Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
EMC interference immunity	Acc. to EN 61000-6-2
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE



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Product drawing



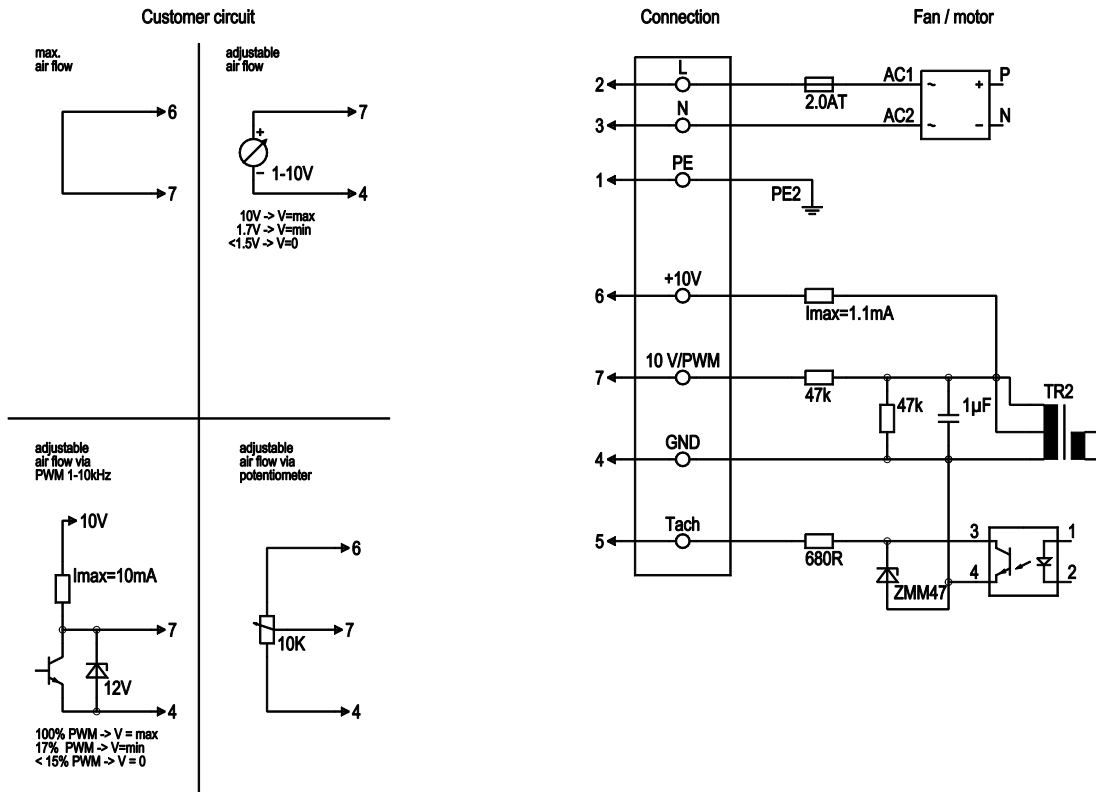
- | | |
|---|---|
| 1 | Connection line PVC AWG 22, 4x crimped core-end sleeves |
| 2 | Connection line PVC AWG 18, 3x crimped core-end sleeves |



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Connection screen



Line	No.	Signal	Colour	Function / assignment
	2	L	black	Power supply 230 VAC, 50-60 Hz, see type plate 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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Charts: Air flow 50 Hz

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

Air performance measured as per ISO 5801
 Installation category A. For detailed
 information on the measuring set-up, please
 contact ebmpapst. Suction-side noise
 levels: LwA measured as per ISO 13347 /
 LpA measured with 1m distance to fan axis.
 The values given are valid under the
 measuring conditions mentioned above and
 may vary according to the actual installation
 situation. With any deviation from the
 standard set-up, the specific values have to
 be checked and reviewed with the unit
 installed.

