G3G160-AD52-14

EC centrifugal fan

forward curved, single inlet

with housing (flange)

G3G160-AD52-14 ebmpapst Datasheet
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County court Stuttgart · HRA 590344

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County court Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**G3G160-AD52-14**	
Motor	**M3G074-BF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
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 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	3.2 kg
Size	160 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
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	- Motor current limit - Soft start - Control input 0-10 VDC / PWM
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
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
Electrical leads	With plug
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

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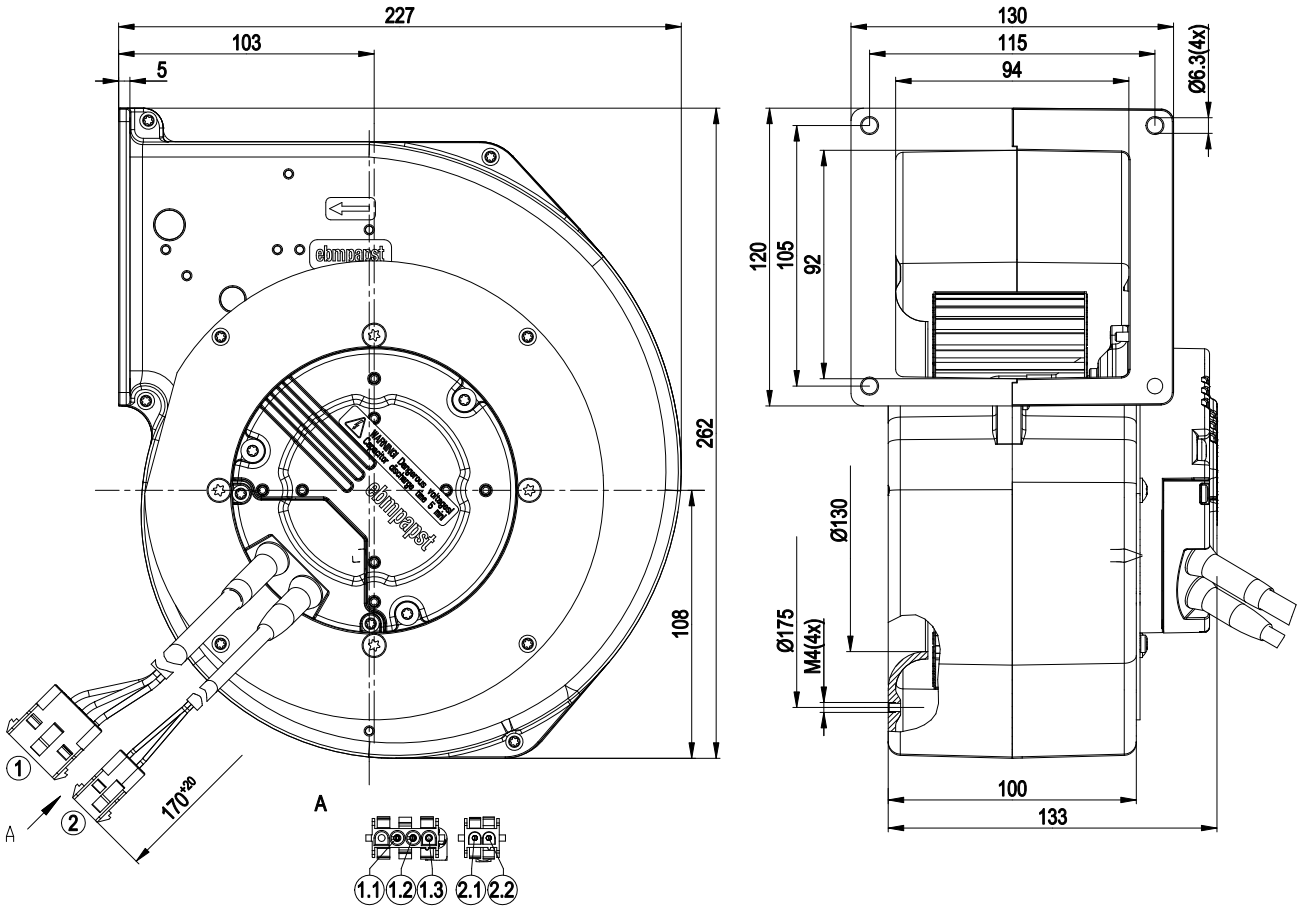
Product drawing



1	Connection line PVC AWG 18, AMP connector shell 350780-1 with 2x AMP plug pin 926887-1 and 1x AMP plug pin 350654-1 crimped
1.1	PE
1.2	L
1.3	N
2	Connection line PVC AWG 22, AMP connector shell 350778-1 with 2x AMP plug pin 926886-1 crimped
2.1	0-10V/PWM
2.2	GND

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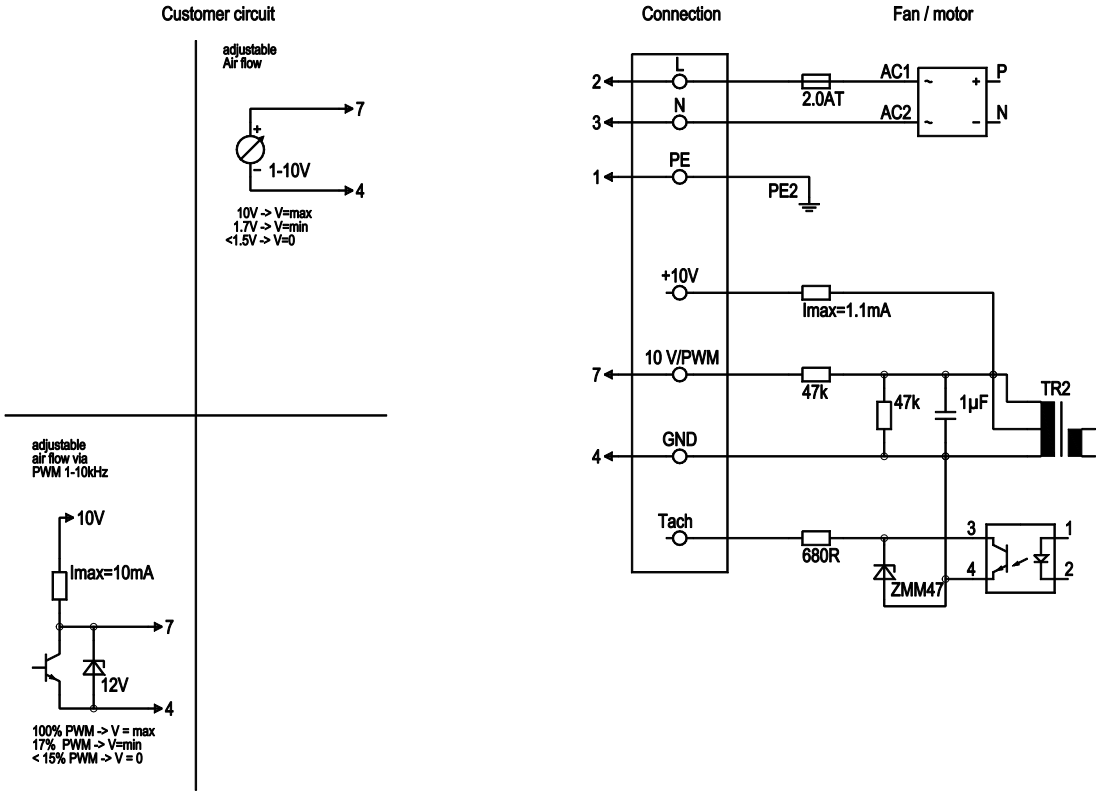
Connection screen



Line	No.	Signal	Colour	Function / assignment
	2	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	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
	4	GND	blue	GND - Connection for control interface

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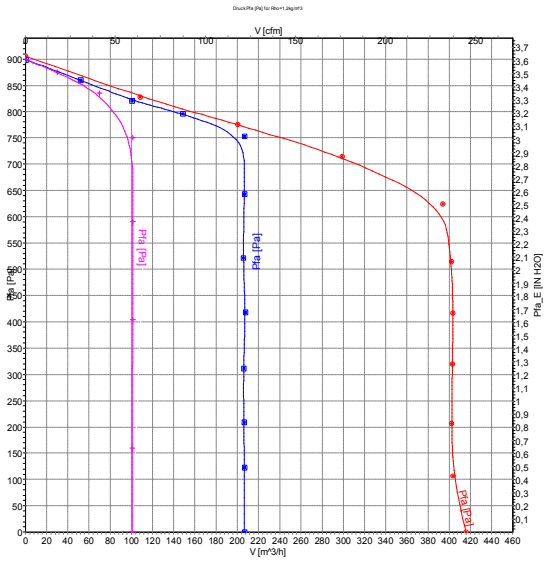
Charts: Air flow 50 Hz



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 ebm-papst. 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.