G3G144-AC29-10

EC centrifugal fan

backward curved, single inlet

with housing (flange)

G3G144-AC29-10 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

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

Nominal data

Type	**G3G144-AC29-10**	
Motor	**M3G055-BD**	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	5300
Power input	W	85
Current draw	A	0.7
Min. back pressure	Pa	570
Max. ambient temperature	°C	50

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	2.3 kg
Size	144 mm
Surface of rotor	Thick layer passivated
Material of protective cover	PA plastic
Material of impeller	PA plastic
Housing material	Die-cast aluminium
Material of guard grille	Steel, coated in grey plastic (RAL 9006)
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
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	Locked-rotor protection
Cable exit	Variable
Degree of soiling	3
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	UL 1004-7 + 60730; CSA C22.2 No.77

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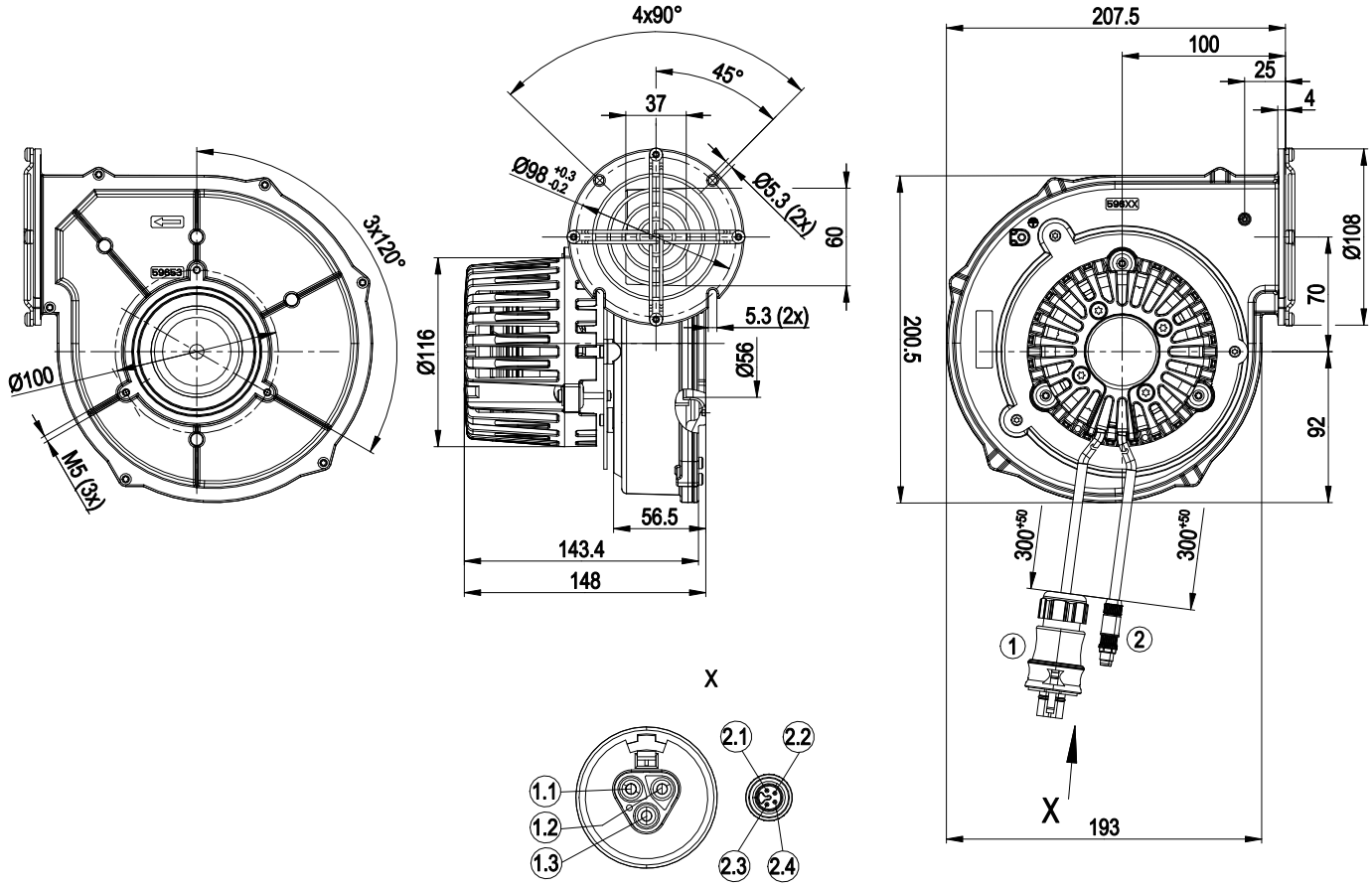
Product drawing



1	Connection line PVC AWG18 with connector housing 3-pole Wieland 96.032.4053.1
1.1	PE (green/yellow)
1.2	N (blue)
1.3	L (black)
2	Connection line PVC AWG22, 1x connector housing 4-pole Weidmüller SAIS-4-IDC M8 small
2.1	GND (blue)
2.2	PWM (yellow)
2.3	+10 V (red)
2.4	Tach (white)

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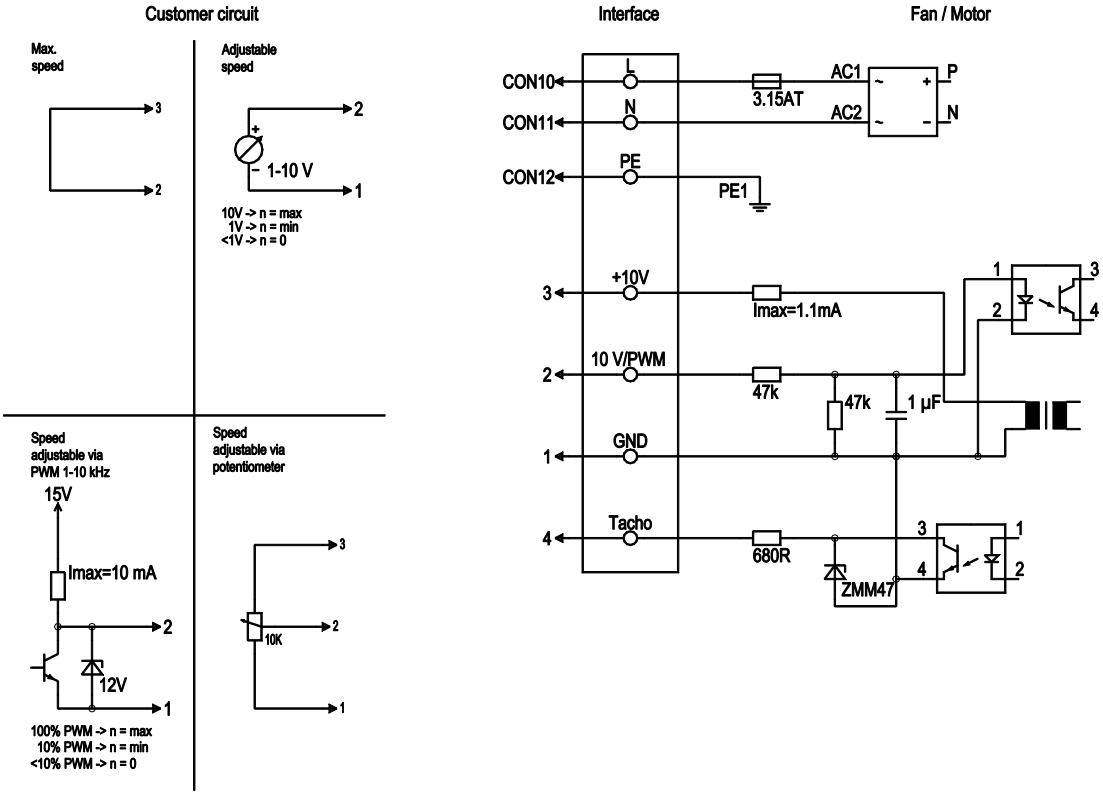
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated

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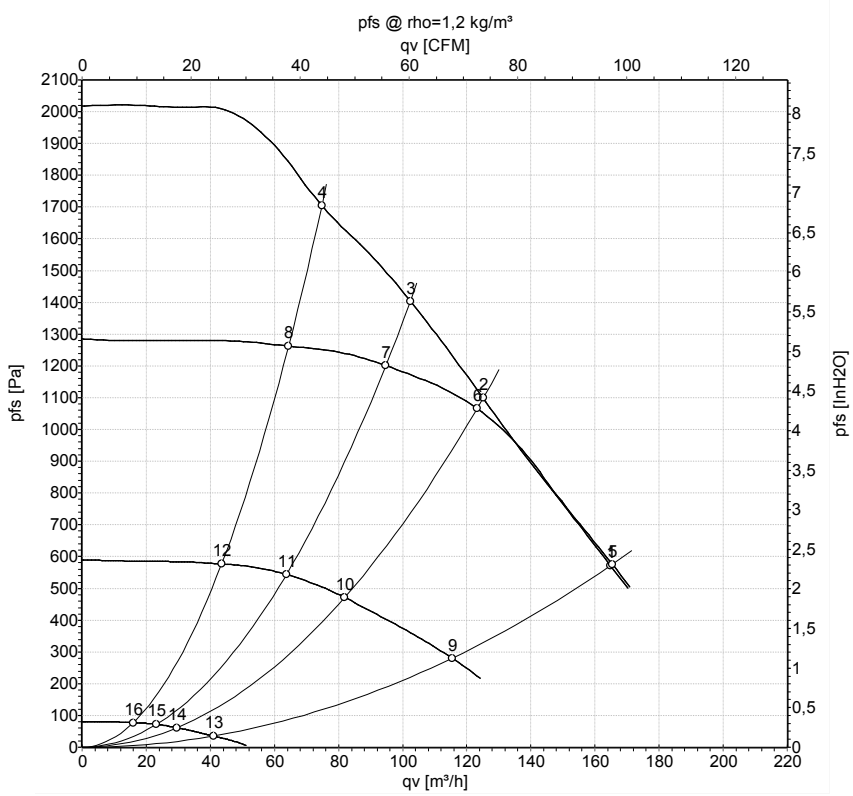
Charts: Air flow 50 Hz



Measurement: LU-166588-1

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.

Measured values

	U	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	5300	85	0.70	165	570	95	2.29
2	230	50	5685	85	0.70	125	1100	75	4.42
3	230	50	6000	85	0.70	100	1400	60	5.62
4	230	50	6450	85	0.70	75	1700	45	6.82
5	230	50	5300	85	0.70	165	570	95	2.29
6	230	50	5605	78	0.65	125	1068	70	4.29
7	230	50	5555	66	0.55	95	1202	55	4.83
8	230	50	5555	54	0.45	65	1262	40	5.07
9	230	50	3740	32	0.27	115	282	70	1.13
10	230	50	3745	27	0.24	80	472	50	1.89
11	230	50	3740	24	0.21	65	545	40	2.19
12	230	50	3750	20	0.19	45	577	25	2.32
13	230	50	1385	5.0	0.07	40	35	25	0.14
14	230	50	1385	5.0	0.07	30	61	20	0.24
15	230	50	1390	5.0	0.07	25	72	15	0.29
16	230	50	1390	5.0	0.07	15	77	10	0.31

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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