G3G146-AB72-01

EC centrifugal fan

forward curved, single inlet

with housing (flange)



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Nominal data

Type	**G3G146-AB72-01**	
Motor	**M3G074-CF**	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed	min^{-1}	2390
Power input	W	170
Current draw	A	2.1
Min. back pressure	Pa	0
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

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Technical features

Mass	3.5 kg
Size	146 mm
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, hot-galvanised
Housing material	Die-cast aluminium
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
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	Continuous operation (S1)
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Control input 0-10 VDC / PWM - Soft start - Over-temperature protected electronics / motor
EMC interference immunity	Acc. to EN 61000-6-2
EMC interference emission	Acc. to EN 55022 (Class B)
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
Approval	UL 2111; CSA C22.2 Nr.77

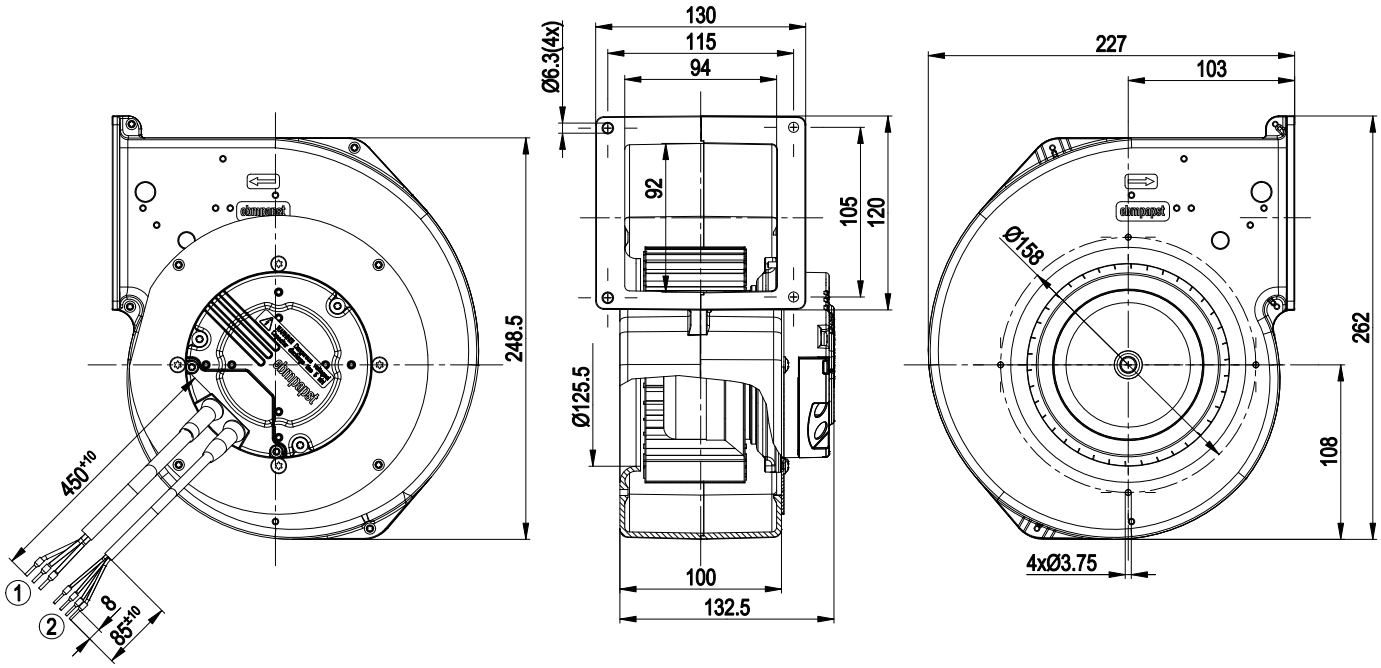
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Product drawing



1	Connection line AWG18, 3 x crimped core-end sleeves
2	Control line AWG22, 4 x crimped core-end sleeves

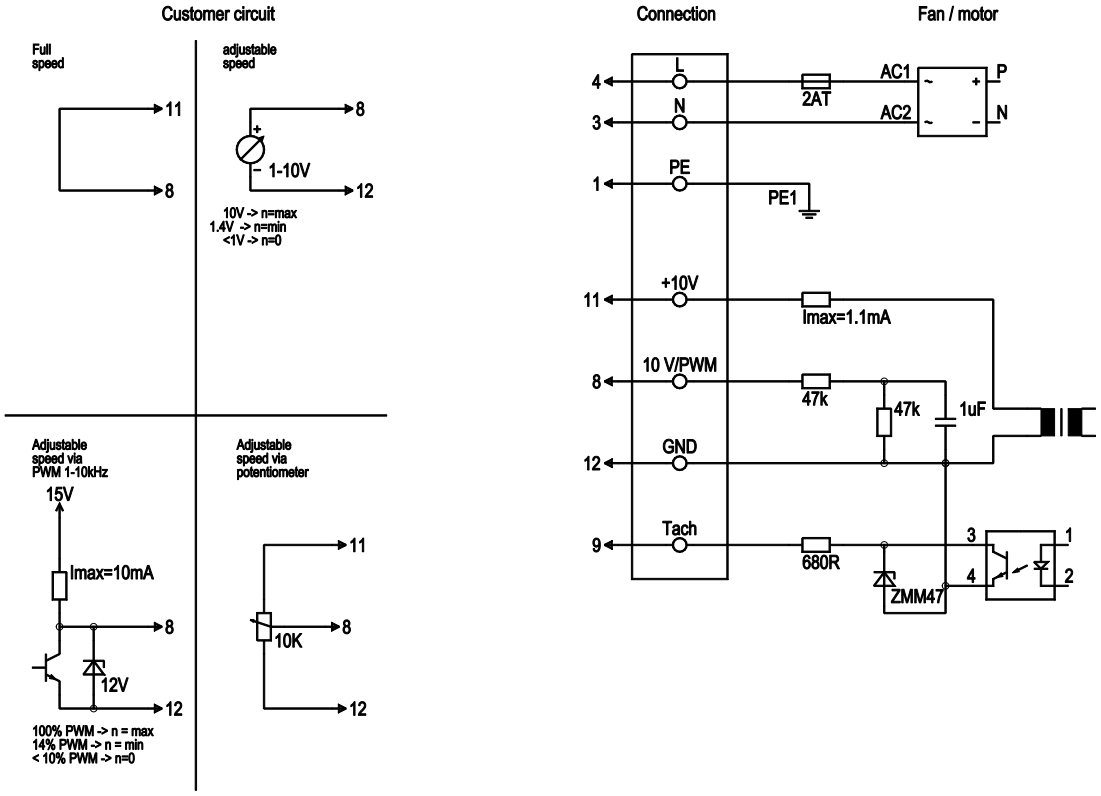
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Connection screen



Line	No.	Signal	Colour	Function / assignment
	4	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
	8	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max 1.1 mA	red	Voltage output 10 V / max. 1.1 mA, electrically isolated
	12	GND	blue	GND - Connection for control interface

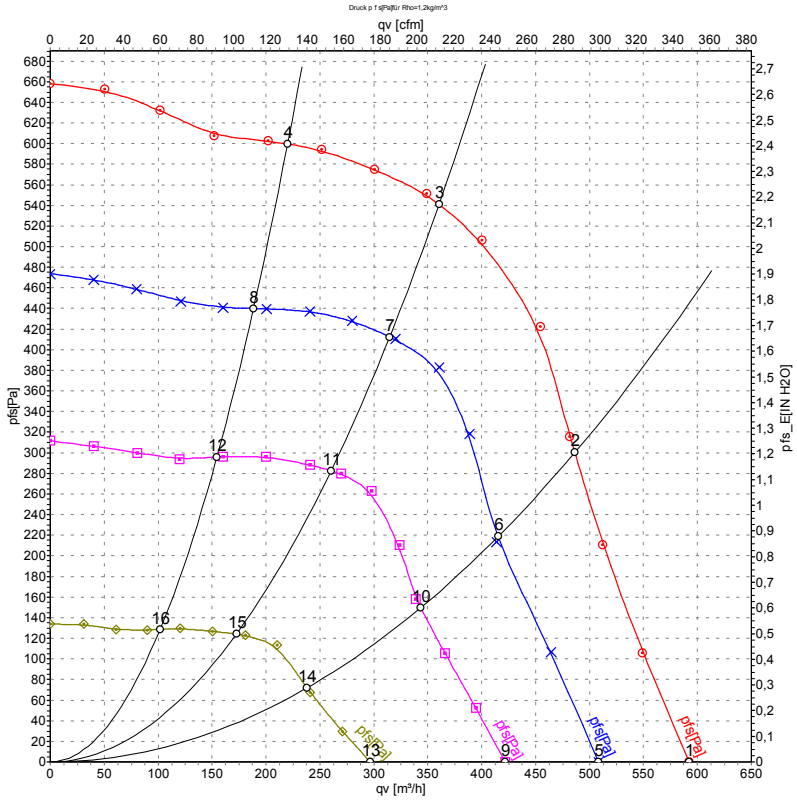
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Charts: Air flow 50 Hz



Measurement: LU-119429
Measurement: LU-75520
Measurement: LU-75521
Measurement: LU-75522

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	115	50	2390	170	2.10	590	0
2	115	50	2805	170	2.10	485	300
3	115	50	3090	143	1.84	360	540
4	115	50	3275	110	1.44	220	600
5	115	50	2115	110	1.44	510	0
6	115	50	2470	111	1.46	415	211
7	115	50	2735	97	1.29	315	413
8	115	50	2825	71	0.97	190	440
9	115	50	1770	66	0.91	420	0
10	115	50	2060	66	0.91	345	148
11	115	50	2285	60	0.83	260	283
12	115	50	2335	44	0.63	155	296
13	115	50	1245	26	0.40	295	0
14	115	50	1435	26	0.40	240	71
15	115	50	1525	22	0.34	175	124
16	115	50	1570	18	0.29	100	128

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

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