D3G146-AG61-10

EC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D3G146-AG61-10**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	2000
Power input	W	176
Current draw	A	1.3
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Min. temp. of flow medium	°C	-25
Max. temp. of flow medium	°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	3.1 kg
Size	146 mm
Material of impeller	Sheet steel, hot-galvanised
Housing material	PP plastic, black
Direction of rotation	Counter-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	- Output 10 VDC, max. 1.1 mA - Tach output - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected motor
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
Approval	UL 2111; CSA C22.2 Nr.77

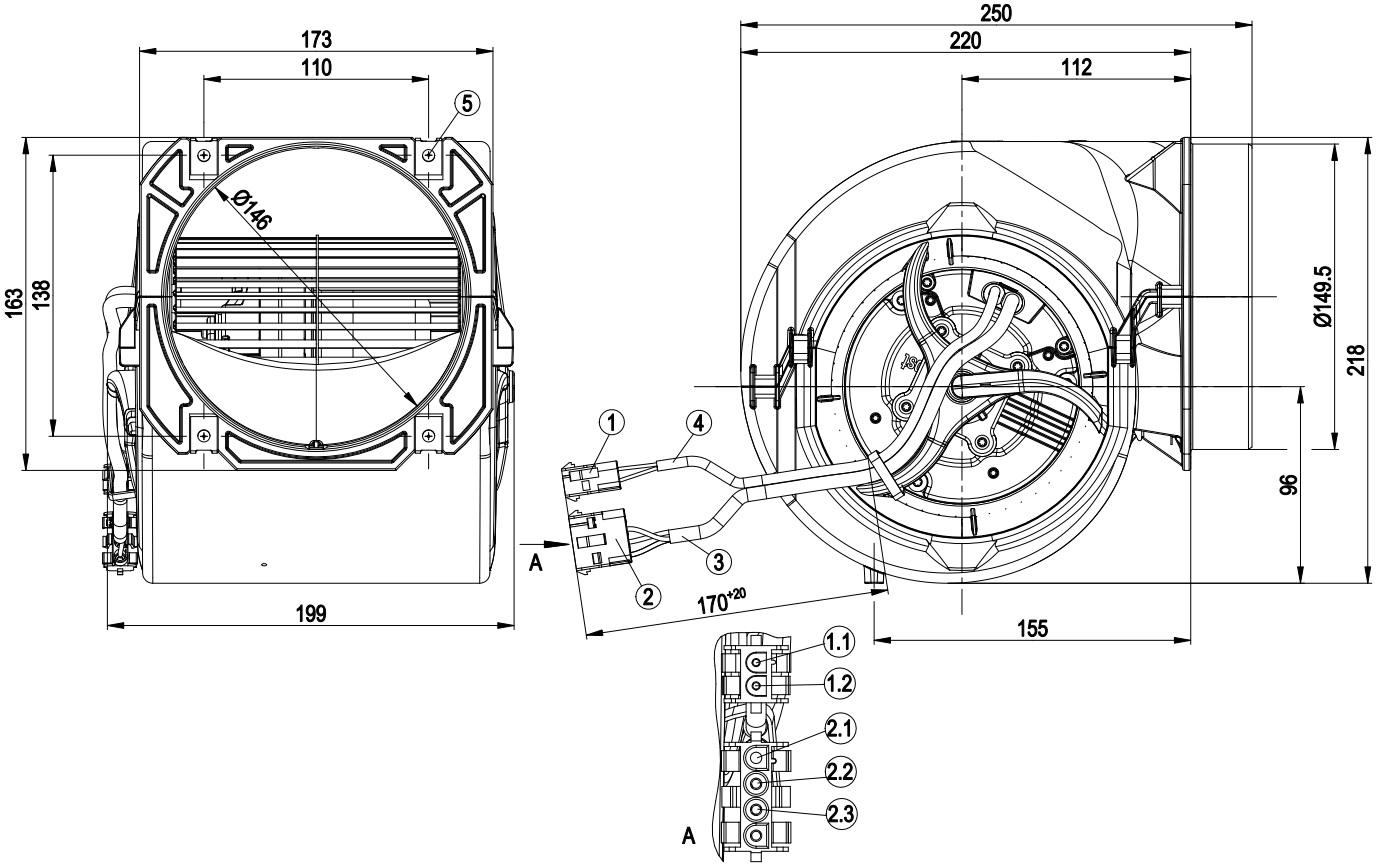
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Product drawing



No.	Pin	Signal	Function / assignment
		1	Connector housing AMP350 778-1, plug pin AMP926 886-1 (2 x)
		1.1	Blue
		1.2	yellow
		2	Connector housing AMP350 780-1, plug pin AMP926 887-1 (2x) and plug pin AMP350 654-1 (1x)
		2.1	Blue
		2.2	black
		2.3	green/yellow
		3	Connection line 2 x AWG22
		4	Connection line 3 x AWG18
		5	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

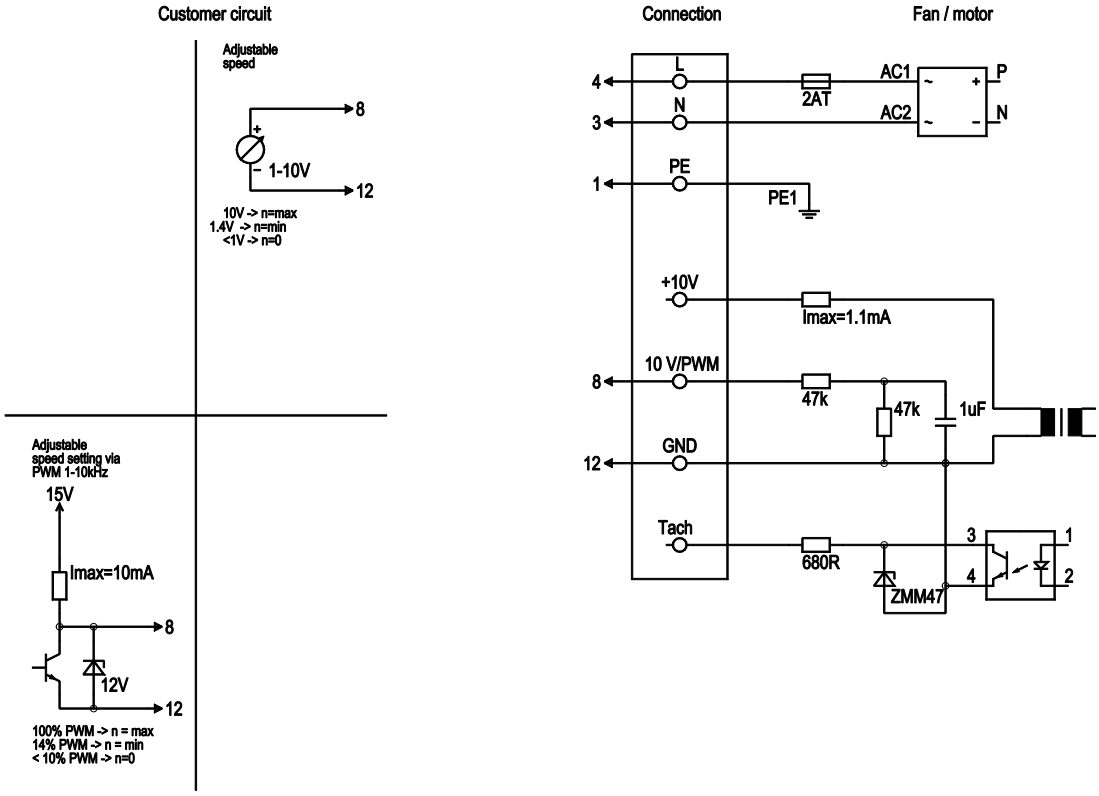
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Connection screen



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
	12	GND	blue	GND - Connection for control interface

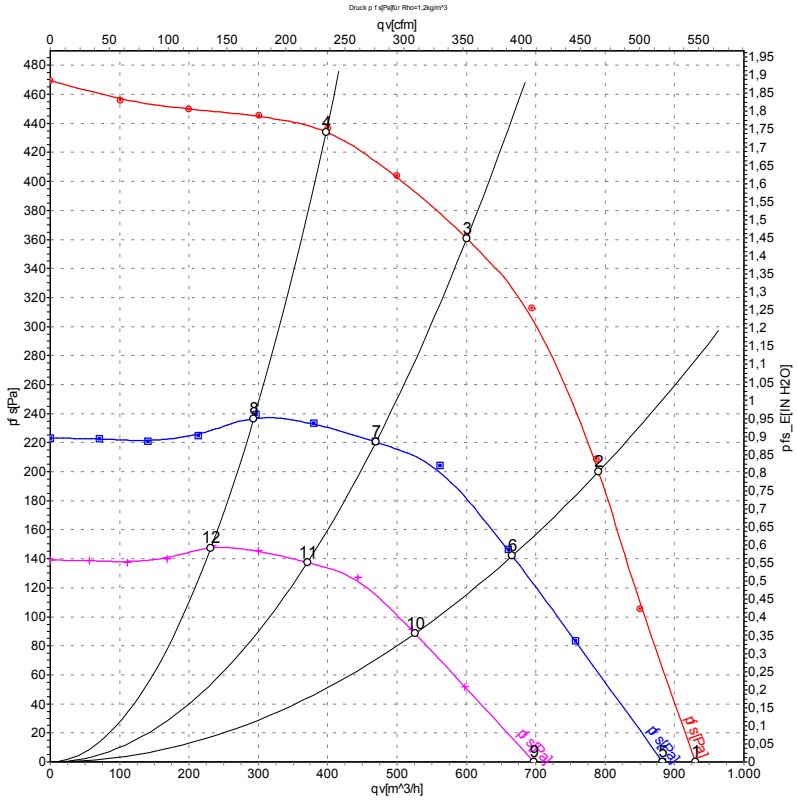
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Charts: Air flow 50 Hz



Measurement: LU-117305

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	230	50	2000	176	1.30	930	0
2	230	50	2260	173	1.26	790	200
3	230	50	2430	145	1.07	600	360
4	230	50	2570	110	0.82	395	435
5	230	50	1900	150	1.08	885	0
6	230	50	1900	103	0.75	665	143
7	230	50	1900	69	0.51	470	221
8	230	50	1900	45	0.33	295	239
9	230	50	1500	74	0.53	695	0
10	230	50	1500	51	0.37	525	89
11	230	50	1500	34	0.25	370	138
12	230	50	1500	22	0.16	230	149

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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