

G1G170-AB53-01

EC centrifugal fan

backward curved, single inlet
with housing (flange), Gas blower for gas-condensing heating



Nominal data

Type	G1G170-AB53-01	
Motor	M1G074-CF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		rfa
Speed	min ⁻¹	5830
Power input	W	360
Current draw	A	1.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55
Min. temp. of flow medium	°C	-25
Max. temp. of flow medium	°C	80

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

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Technical features

Mass	4.7 kg
Size	170 mm
Surface of rotor	Coated in black
Material of protective cover	Polyflam RPP 374-ND CS1 (UL 97-V0)
Material of impeller	Aluminium sheet
Housing material	Die-cast aluminium
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none">- PFC, active- PWM control input- Motor current limit- Tach output- Over-temperature protected motor
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-4 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
Leakage current	<= 3.5 mA
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Approval	CSA C22.2 Nr.113; UL 507

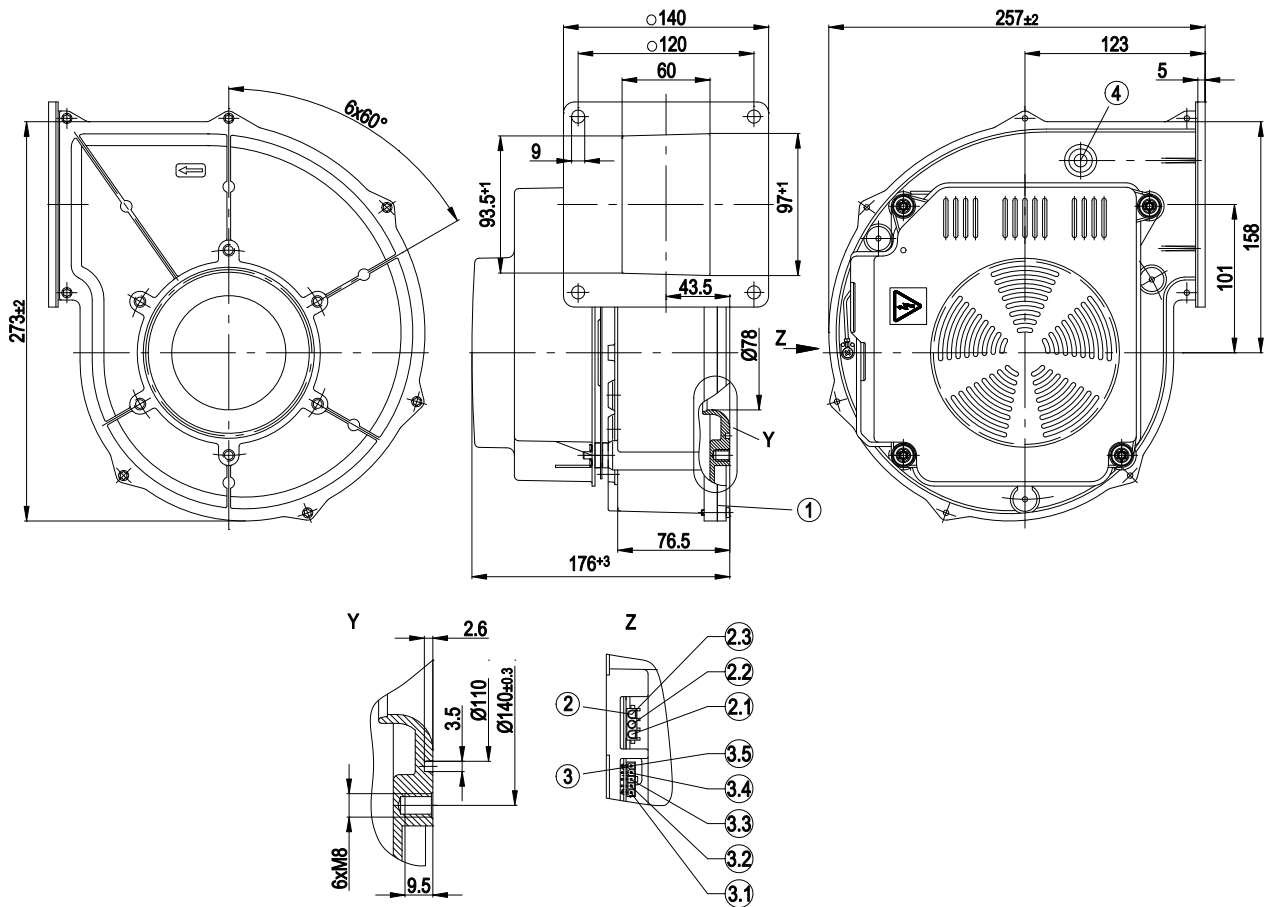
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Product drawing

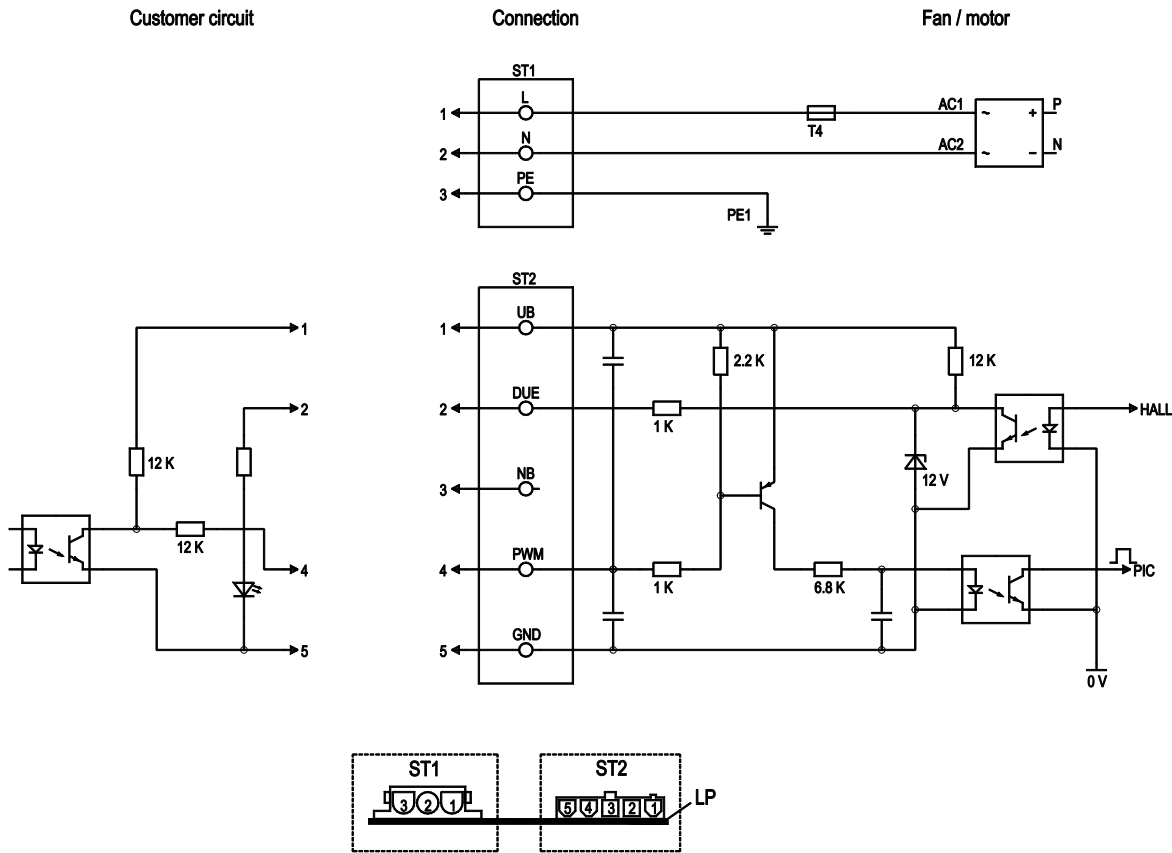


1	Housing side parts sealed with NBR round cord (pentane-resistant)
2	3-pole strip; mating connector (not included in delivery): tyco No. 350 766-1; female connector: No. 926 884-1
2.1	L
2.2	N
2.3	PE
3	5-pole strip; mating connector (not included in delivery) Molex No. 39-01-4050, female connector Molex No. 39-00-0059
3.1	(+)
3.2	Speed monitoring
3.3	Not assigned
3.4	PWM input
3.5	(-)
4	Bleeder connection for pressure relief possible
Z	View Z

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Connection screen

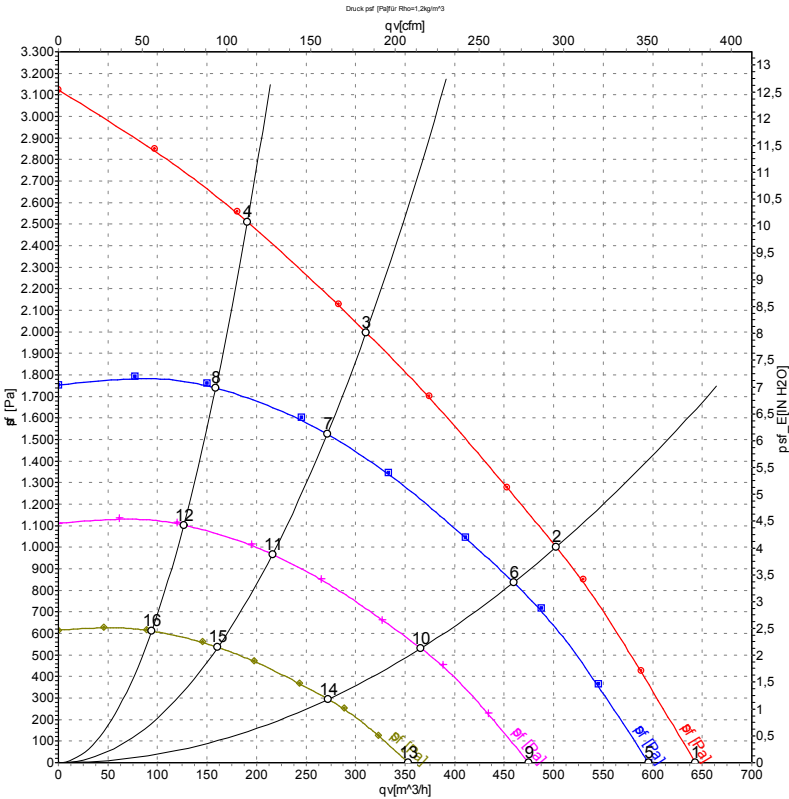


No.	Pin	Signal	Function / assignment
ST1	1, 2, 3	L, N, PE	Power supply 230 VAC, 50-60 Hz, neutral conductor, protective earth
ST2	1	UB	External voltage 24-45 VDC
ST2	2	DUE	Speed monitoring output connection, monitoring circuit output, 3 pulses per revolution, current source 1 mA
ST2	3	N.C	Not assigned
ST2	4	PWM	PWM - 2 - 6 kHz control input, PWM on n = 100%, PWM low n = 0%
ST2	5	GND	GND - Connection for control interface

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Charts: Air flow 50 Hz



Measurement: LU-57509

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: L_{WA} measured as per ISO 13347 /
L_{pA} 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 _e	I	qv	p _{st}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	50	5830	360	1.60	645	0
2	230	50	5905	346	1.52	505	1000
3	230	50	6175	308	1.35	310	2000
4	230	50	6480	268	1.18	190	2500
5	230	50	5400	287	1.26	595	0
6	230	50	5400	265	1.16	460	838
7	230	50	5400	206	0.91	270	1527
8	230	50	5400	156	0.68	160	1747
9	230	50	4300	145	0.63	475	0
10	230	50	4300	134	0.59	365	531
11	230	50	4300	104	0.46	215	968
12	230	50	4300	79	0.34	125	1108
13	230	50	3200	60	0.26	355	0
14	230	50	3200	55	0.24	270	294
15	230	50	3200	43	0.19	160	536
16	230	50	3200	32	0.14	95	614