



G1G170-AB31-51

## EC centrifugal fan

backward curved, single inlet

with housing (flange), Gas blower for gas-condensing heating



### Nominal data

Type	G1G170-AB31-51
Motor	M1G074-CF

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60

Type of data definition		ml
Speed	min <sup>-1</sup>	6530
Power input	W	410
Current draw	A	1.8
Min. back pressure	pa	2000
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
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - PFC, active - PWM control input - Over-temperature protected motor
EMC interference immunity	Acc. to EN 61000-6-2
EMC interference emission	Acc. to EN 61000-6-4 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-213
Leakage current	<= 3.5 mA
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	CE
Approval	CSA C22.2 Nr.113; UL 507





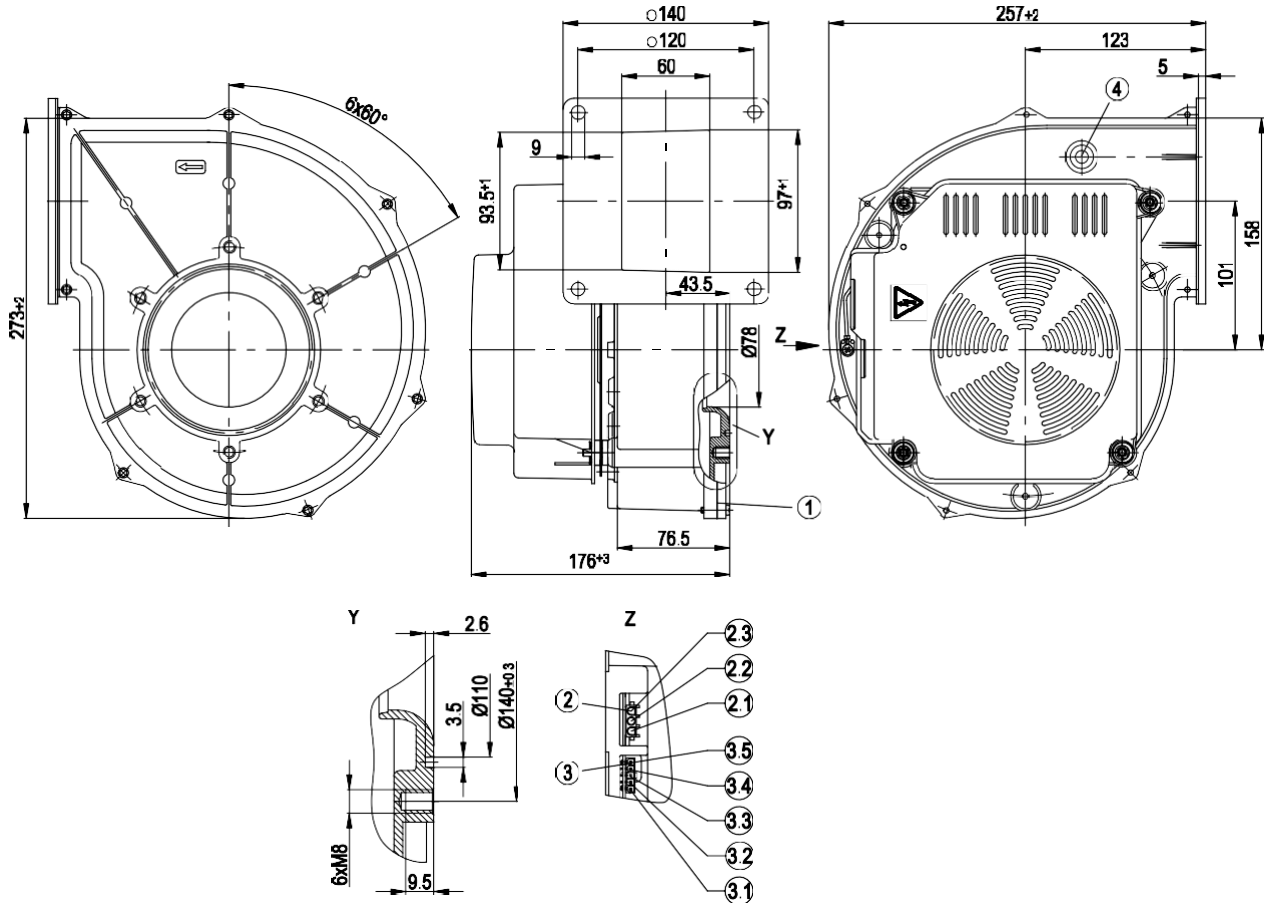
G1G170-AB31-51

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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



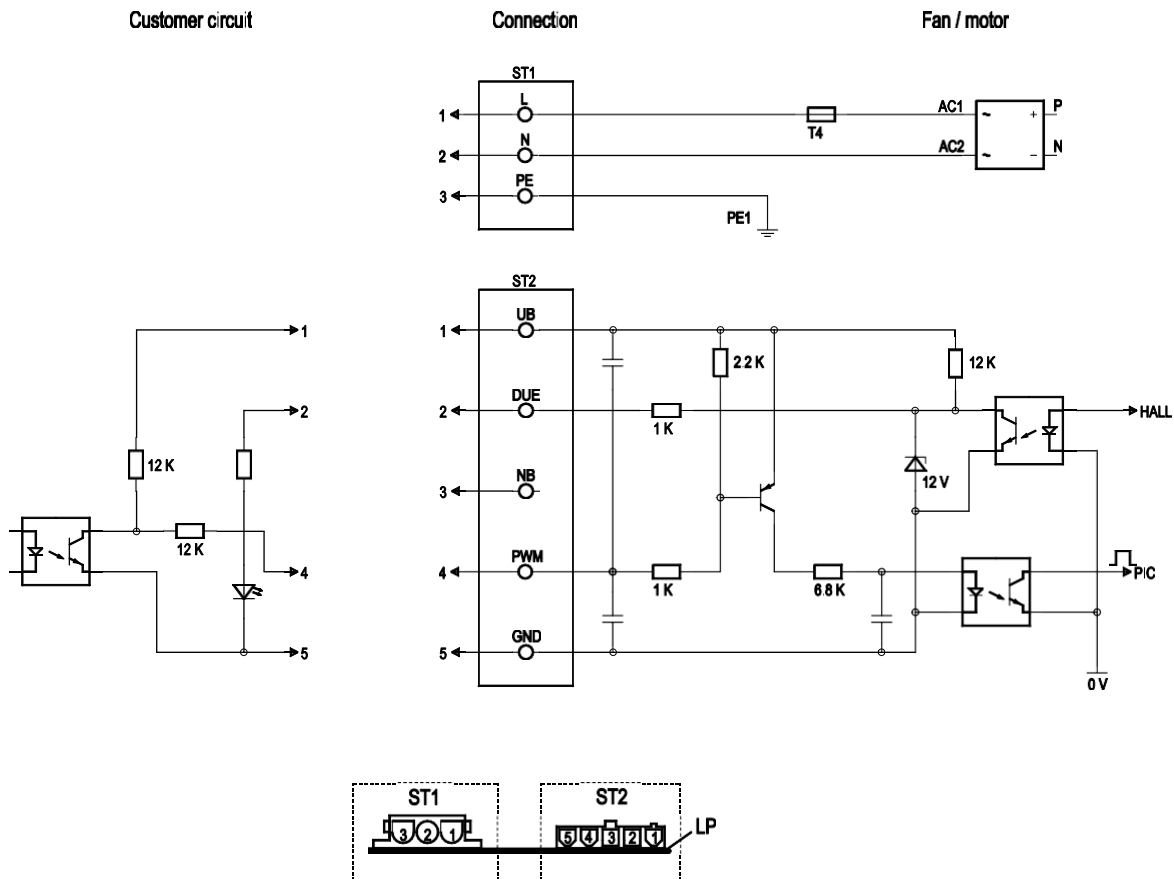
G1G170-AB31-51

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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





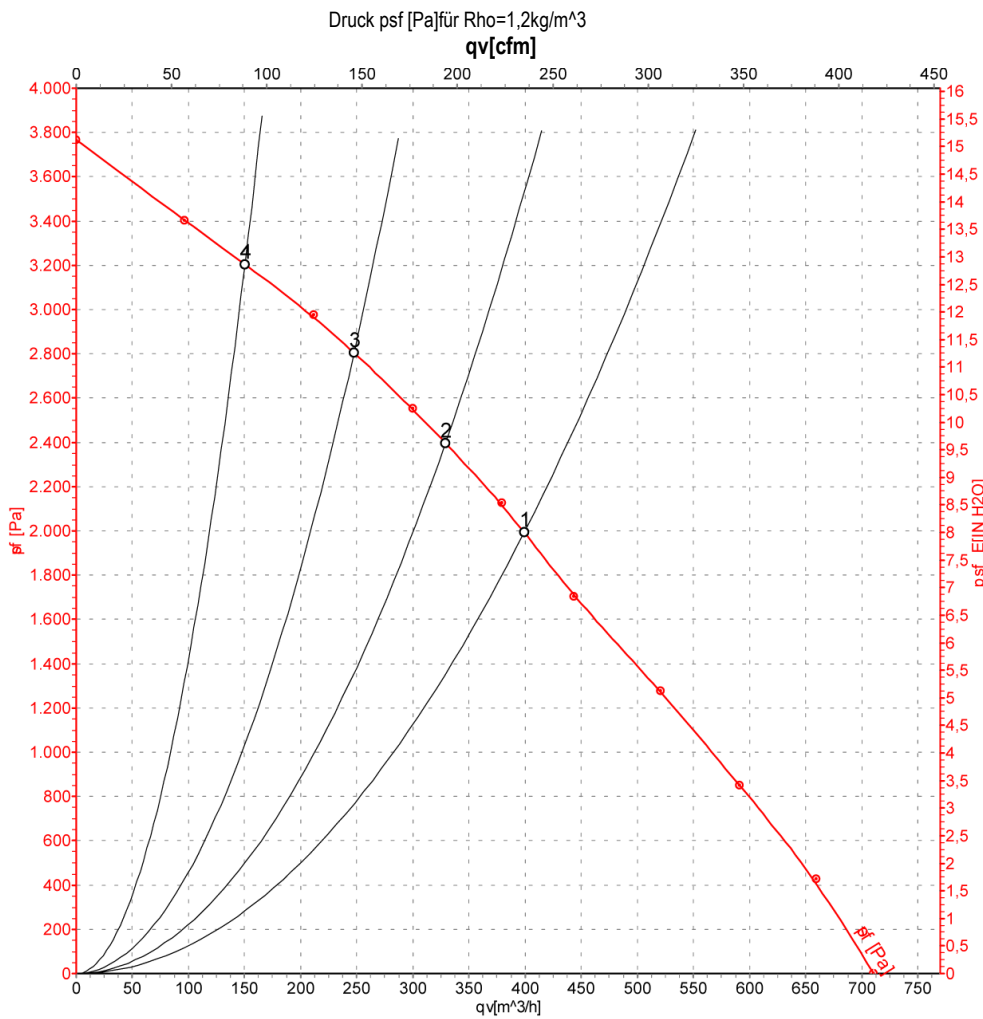
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Charts: Air flow 50 Hz



Measurement: LU-56469  
 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 <sub>e</sub>	I	qv	psf
	V	Hz	min-1	W	A	m³/h	Pa
1	230	50	6530	410	1.80	380	2000
2	230	50	6665	400	1.75	330	2400
3	230	50	6915	370	1.62	250	2800
4	230	50	7250	326	1.44	150	3200

