

G1G170-AB31-51

EC centrifugal fan

backward curved, single inlet

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



ebm-papst Landshut GmbH

Hofmark-Aich-Str. 25 · D-84030 Landshut

Phone+49 871 707-0

Fax+49 871 707-465

sales@fansco.com

www.fansco.com

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 ⁻¹	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



EC centrifugal fan

backward curved, single inlet

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

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	<ul style="list-style-type: none"> - 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 61000-3-2/3
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

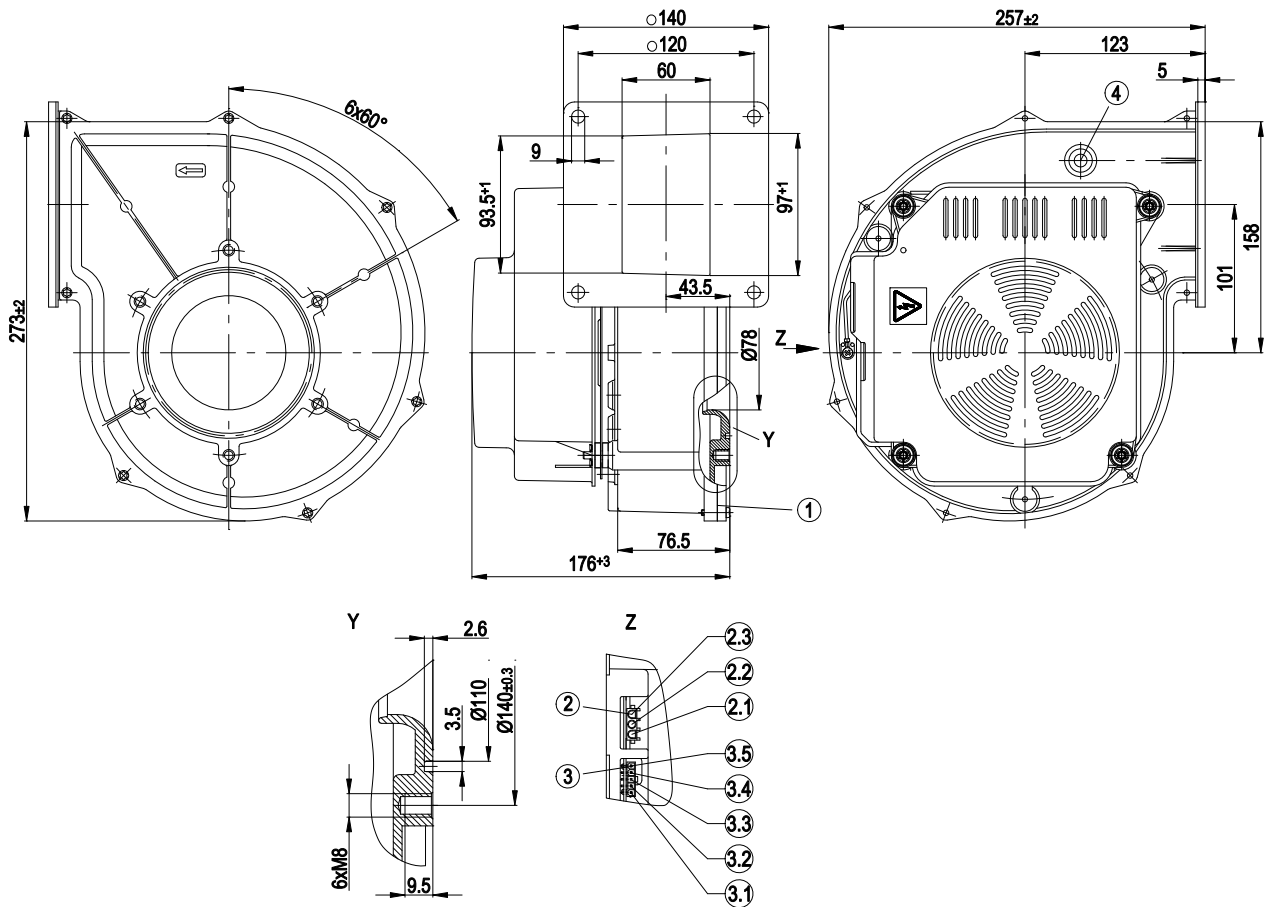


EC centrifugal fan

backward curved, single inlet

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

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

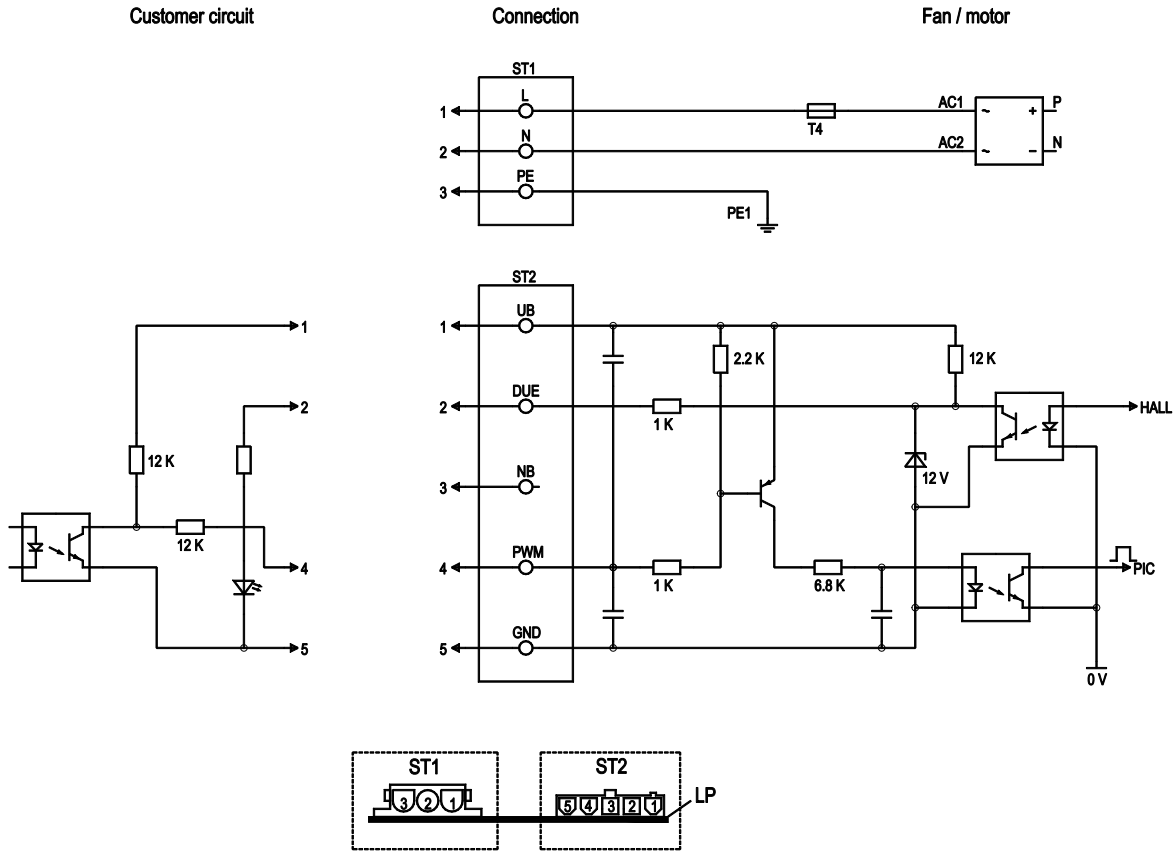


EC centrifugal fan

backward curved, single inlet

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

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

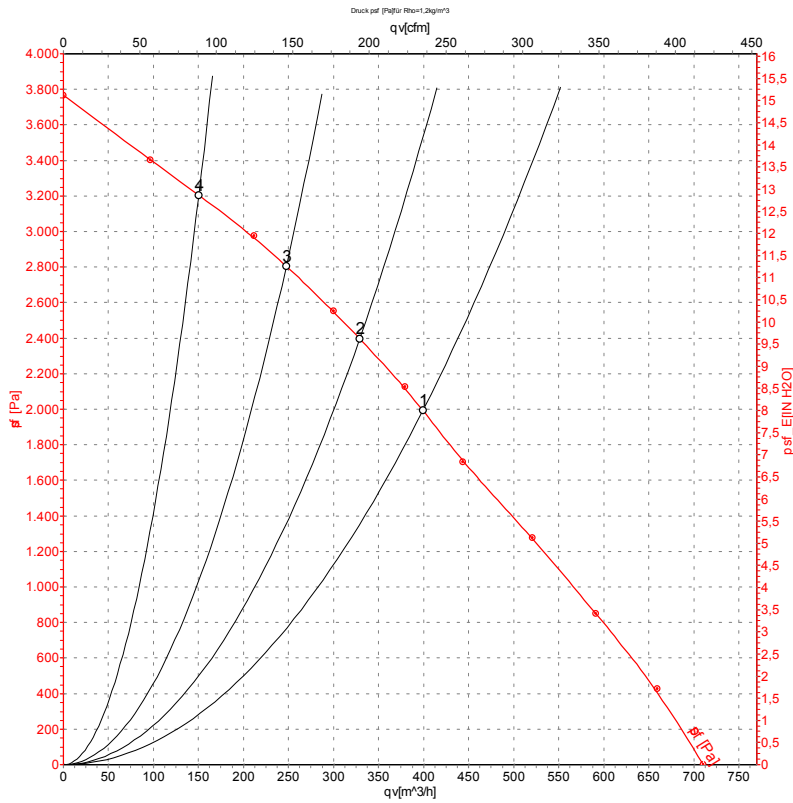


EC centrifugal fan

backward curved, single inlet

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

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: 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	q _v	p _{sf}
	V	Hz	min ⁻¹	W	A	m ³ /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

