G1G170-AB05-81

EC centrifugal fan

backward curved, single inlet

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



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Nominal data

Type	**G1G170-AB05-81**
Motor	**M1G074-CF**

Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50/60
Type of data definition		fa
Speed (rpm)	min^{-1}	5730
Power input	W	345
Current draw	A	4.0
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 · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	4.4 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"
Humidity (F)/environmental protection class (H)	F0
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
Premix	If gas is premixed in the blower, a special blower must be used. Contact us for details.
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Motor current limit - Control input 0-10 VDC / PWM - Over-temperature protected motor
EMC interference immunity	Acc. to EN 61000-6-2
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
Approval	CSA C22.2 No.113; UL 507

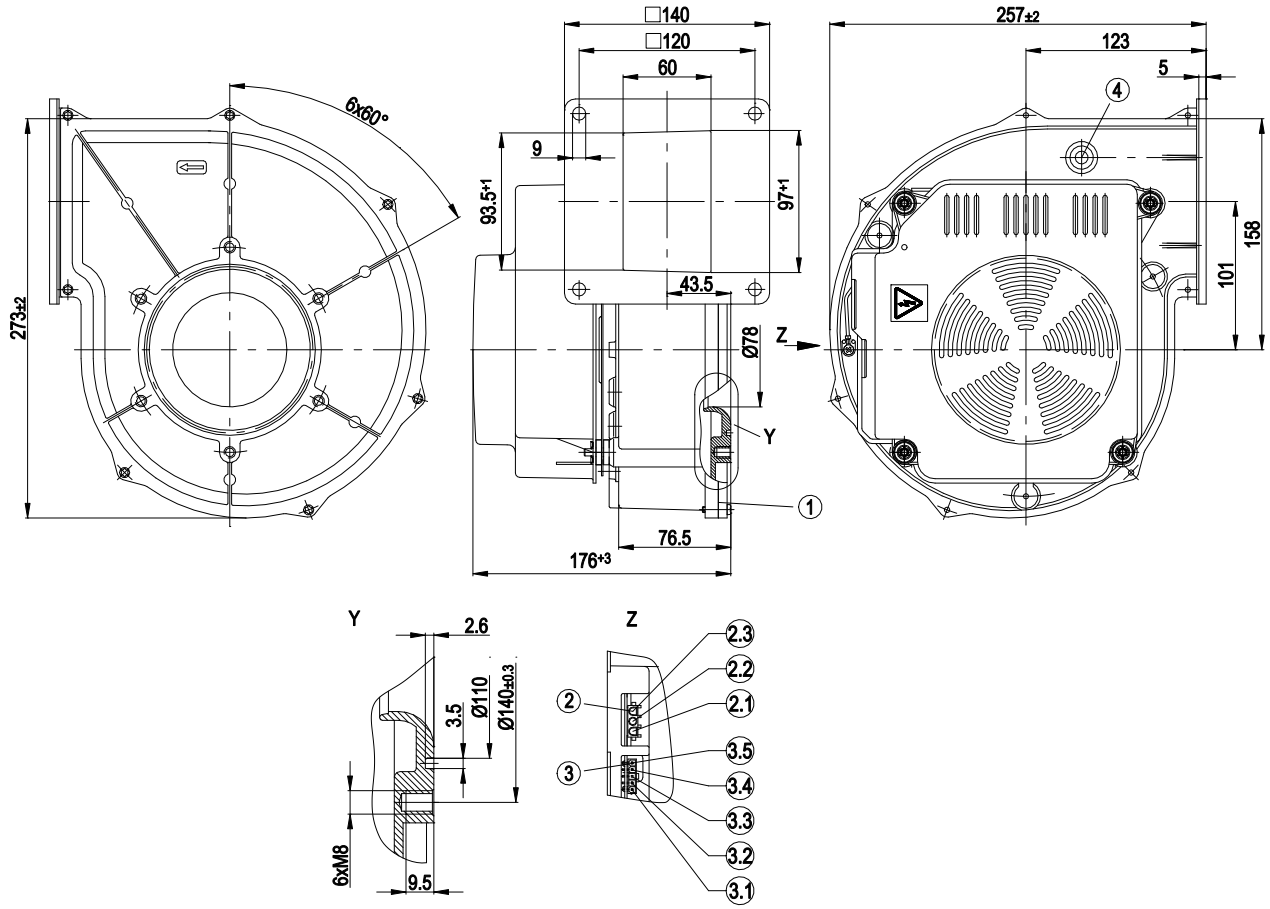
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Product drawing



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	10V output, max. 10mA
3.2	Speed monitoring
3.3	Lin control input
3.4	PWM input
3.5	(-)
4	Bleeder connection for pressure relief possible
5	View Z

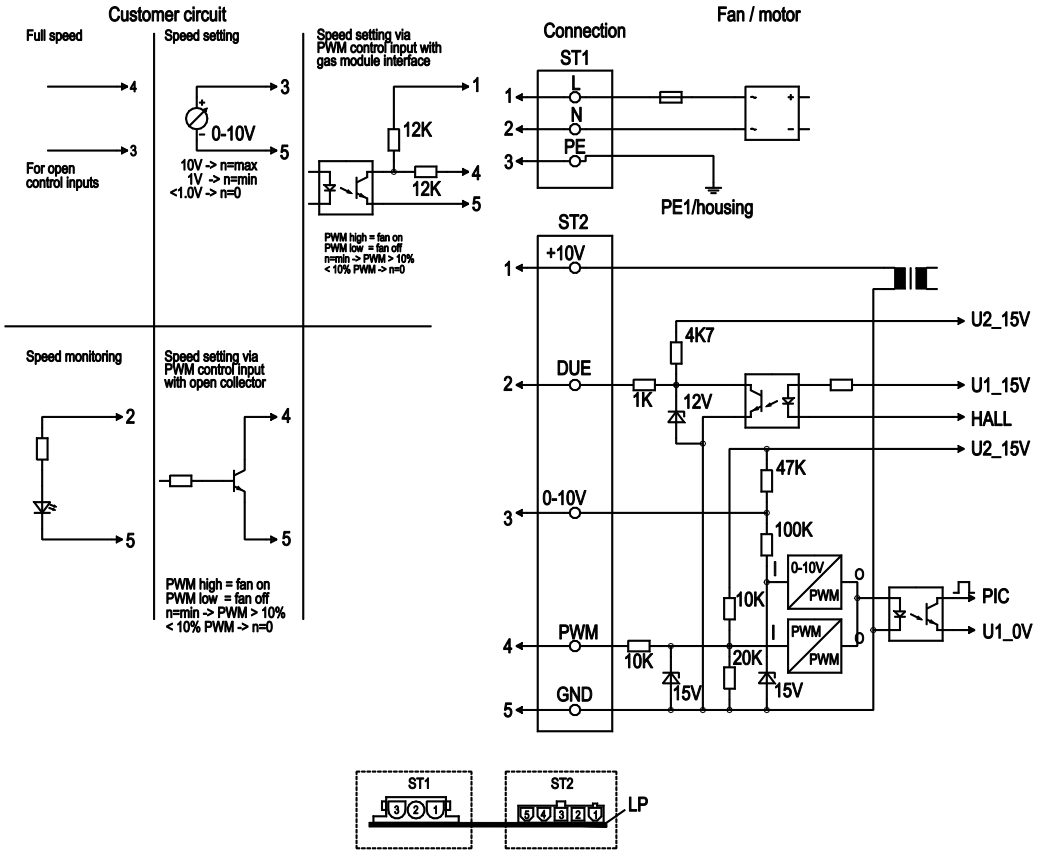
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Connection screen



No.	Conn.	Designation	Function / assignment
ST1	1, 2, 3	L, N, PE	Power supply 115 VAC, 50-60 Hz, phase, neutral, protective earth
ST2	1	10V/ max. 10mA	Voltage output 10 VAC (+/-3%), max. 10 mA, power supply for ext. devices (e.g. potentiometer), SELV
ST2	2	Tach	Speed monitoring, 3 pulses per revolution, SELV
ST2	3	0-10V	Control input 0-10 V, impedance 100k, SELV
ST2	4	PWM	Control input PWM, 1-6 kHz, SELV
ST2	5	GND	GND - Connection for control interface, SELV

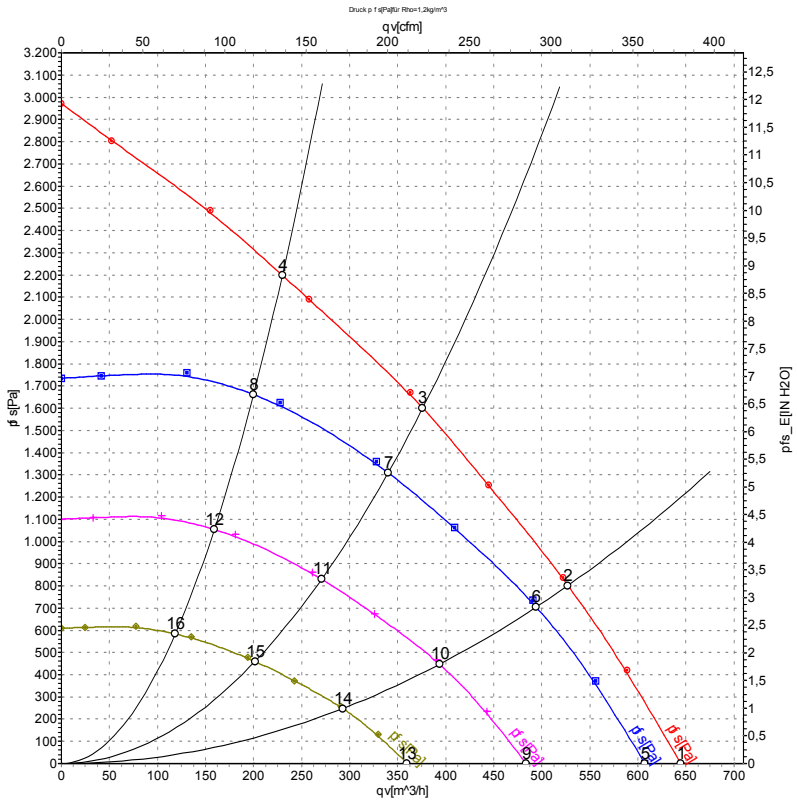
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Charts: Air flow 50 Hz



Measurement: LU-48962-1

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}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	115	50	5730	345	4.00	645	0	380	0.00
2	115	50	5750	342	3.97	525	800	310	3.21
3	115	50	5970	317	3.70	375	1600	220	6.42
4	115	50	6205	292	3.42	230	2200	135	8.83
5	115	50	5400	288	3.33	605	0	355	0.00
6	115	50	5400	283	3.28	495	715	290	2.87
7	115	50	5400	235	2.75	340	1314	200	5.28
8	115	50	5400	193	2.26	200	1664	120	6.68
9	115	50	4300	145	1.68	485	0	285	0.00
10	115	50	4300	143	1.66	395	454	230	1.82
11	115	50	4300	119	1.39	270	834	160	3.35
12	115	50	4300	98	1.14	160	1055	95	4.24
13	115	50	3200	60	0.69	360	0	210	0.00
14	115	50	3200	59	0.68	295	251	170	1.01
15	115	50	3200	49	0.57	200	462	120	1.85
16	115	50	3200	40	0.47	120	584	70	2.34

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

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