

EC centrifugal fan

backward curved, single inlet

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



G1G160-AB41-02 ebmpapst Datasheet

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Nominal data

Type	G1G160-AB41-02	
Motor	M1G074-BF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Speed	min ⁻¹	4950
Power input	W	185
Current draw	A	1.25
Max. ambient temperature	°C	70

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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.02

* Specific ratio = $1 + p_b / 100\,000\text{ Pa}$

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		46.8	25.6	32.6
Efficiency grade N		58.2	37	44
Power input P_e	kW	0.16		
Air flow q_v	m ³ /h	135		
Pressure increase p_{fs}	Pa	1799		
Speed n	min ⁻¹	5895		

Data established at point of optimum efficiency



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Technical features

Mass	1.88 kg
Size	160 mm
Surface of rotor	Coated in black
Material of protective cover	PP plastic 30TV
Material of impeller	PA plastic 6, fibreglass-reinforced
Housing material	PA plastic 6, fibreglass-reinforced
Direction of rotation	Counter-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
Condensate discharge holes	Rotor-side
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- PWM control input - Motor current limit - Tach output
Motor protection	Locked-rotor protection

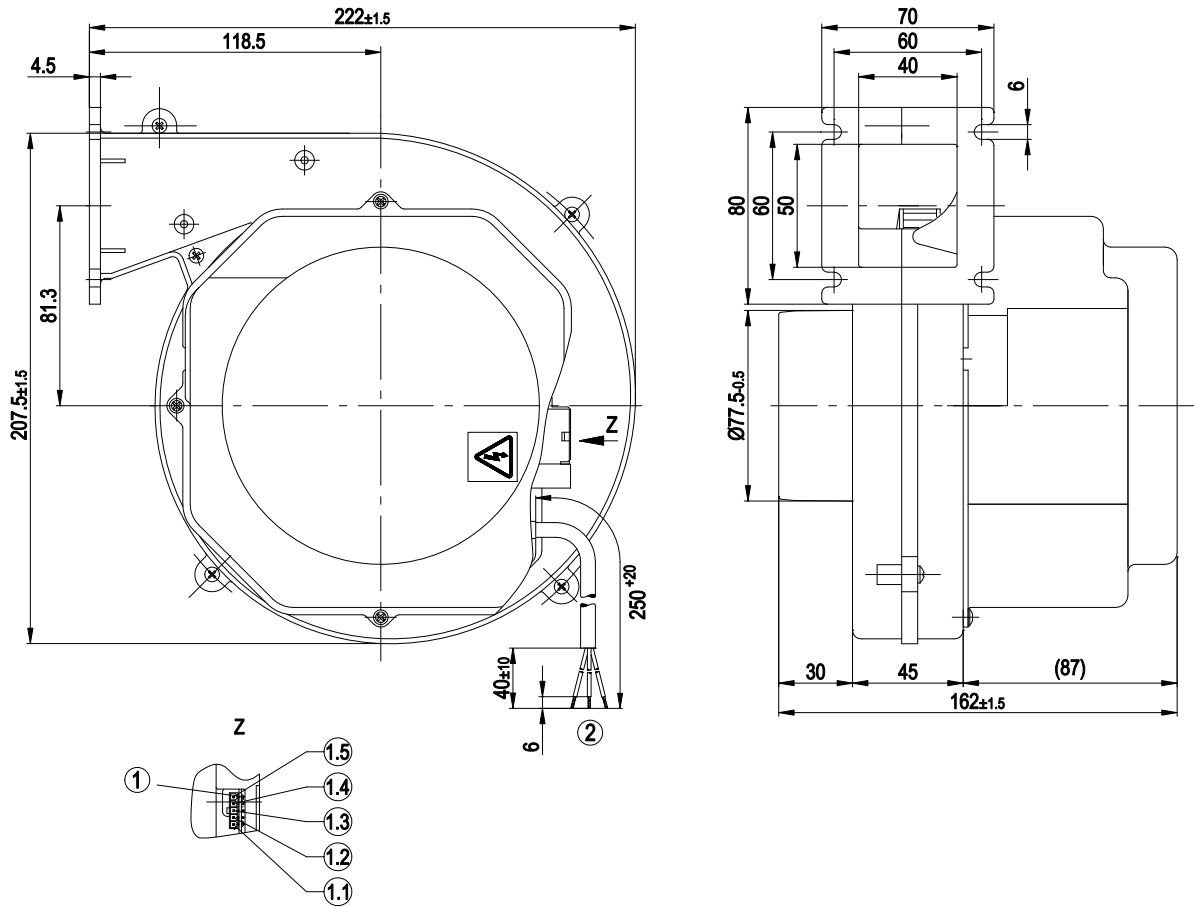


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Product drawing



Z	View Z
1	5-pole strip; mating connector (not included in delivery) Molex No. 39-01-4050, female connector Molex No. 39-00-0059
1.1	(+)
1.2	Speed monitoring
1.3	N.C.
1.4	PWM
1.5	(-)
2	Connection line PVC 3G0.5; 3 x brass lead tips crimped

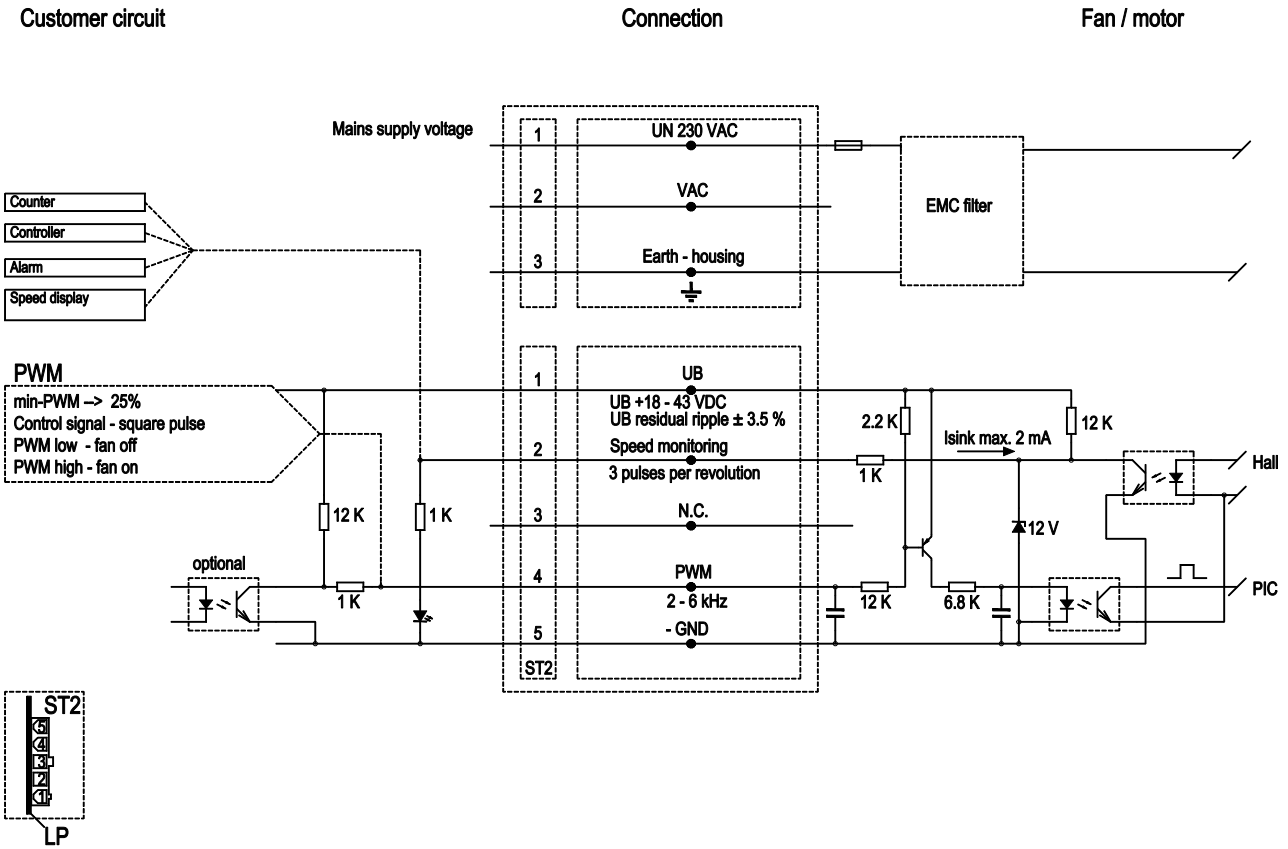


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Connection screen

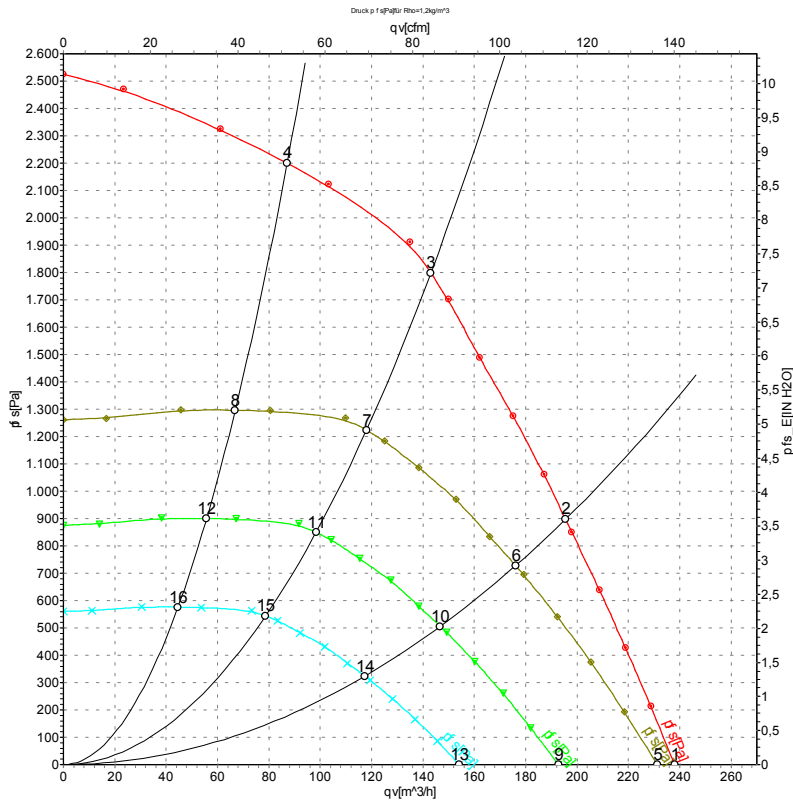


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Charts: Air flow 50 Hz



Measurement: LU-56832

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 _{ed}	I	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	50	4950	185	1.25	240	0
2	230	50	5330	178	1.19	195	900
3	230	50	5815	165	1.11	145	1800
4	230	50	6250	147	0.98	85	2200
5	230	50	4800	169	1.13	230	0
6	230	50	4800	130	0.87	175	728
7	230	50	4800	93	0.62	120	1224
8	230	50	4800	67	0.45	65	1296
9	230	50	4000	98	0.65	195	0
10	230	50	4000	75	0.50	145	506
11	230	50	4000	54	0.36	100	850
12	230	50	4000	39	0.26	55	900
13	230	50	3200	50	0.33	155	0
14	230	50	3200	39	0.26	115	324
15	230	50	3200	27	0.19	80	544
16	230	50	3200	20	0.13	45	576

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

