G1G160-AB41-01

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers



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Nominal data

Type	**G1G160-AB41-01**
Motor	**M1G074-BF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4950
Power consumption	W	185
Current draw	A	1.25
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	46.8	32.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		58.2	44
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.16
09 Air flow q_v	m^3/h	135
09 Pressure increase p_{fs}	Pa	1799
10 Speed (rpm) n	min^{-1}	5895
11 Specific ratio*		1.02

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-56832

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Technical description

Weight	2.1 kg
Fan size	160 mm
Rotor surface	Painted black
Cover material	PP 30TV plastic
Impeller material	PA 6 plastic, glass-fiber reinforced
Housing material	PA 6 plastic, glass-fiber reinforced
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Cooling hole/opening	On rotor side
Mode	S1
Premixing	For fresh air only! Not suitable for gas premixing!
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Emergency operation - PWM control input - Control interface with SELV potential safely disconnected from the mains
Motor protection	Locked-rotor protection
Approval	EAC

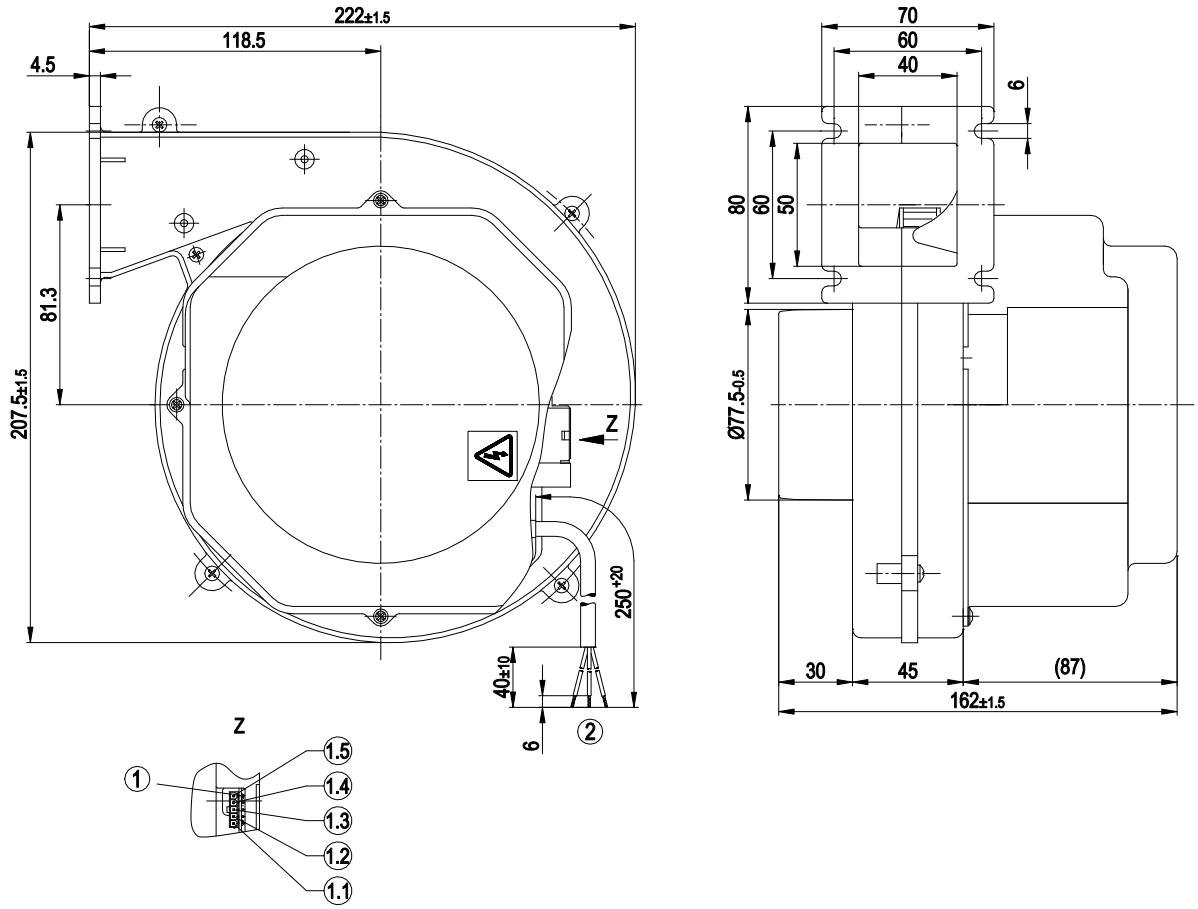
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Product drawing



Z	View Z
1	5-pole header; mating connector (not included in scope of delivery): Molex no. 39-01-4050; socket: Molex no. 39-00-0059
1.1	(+)
1.2	Speed monitoring
1.3	N.C.
1.4	PWM
1.5	(-)
2	Cable PVC 3G 0.5 mm²; 3x crimped splices

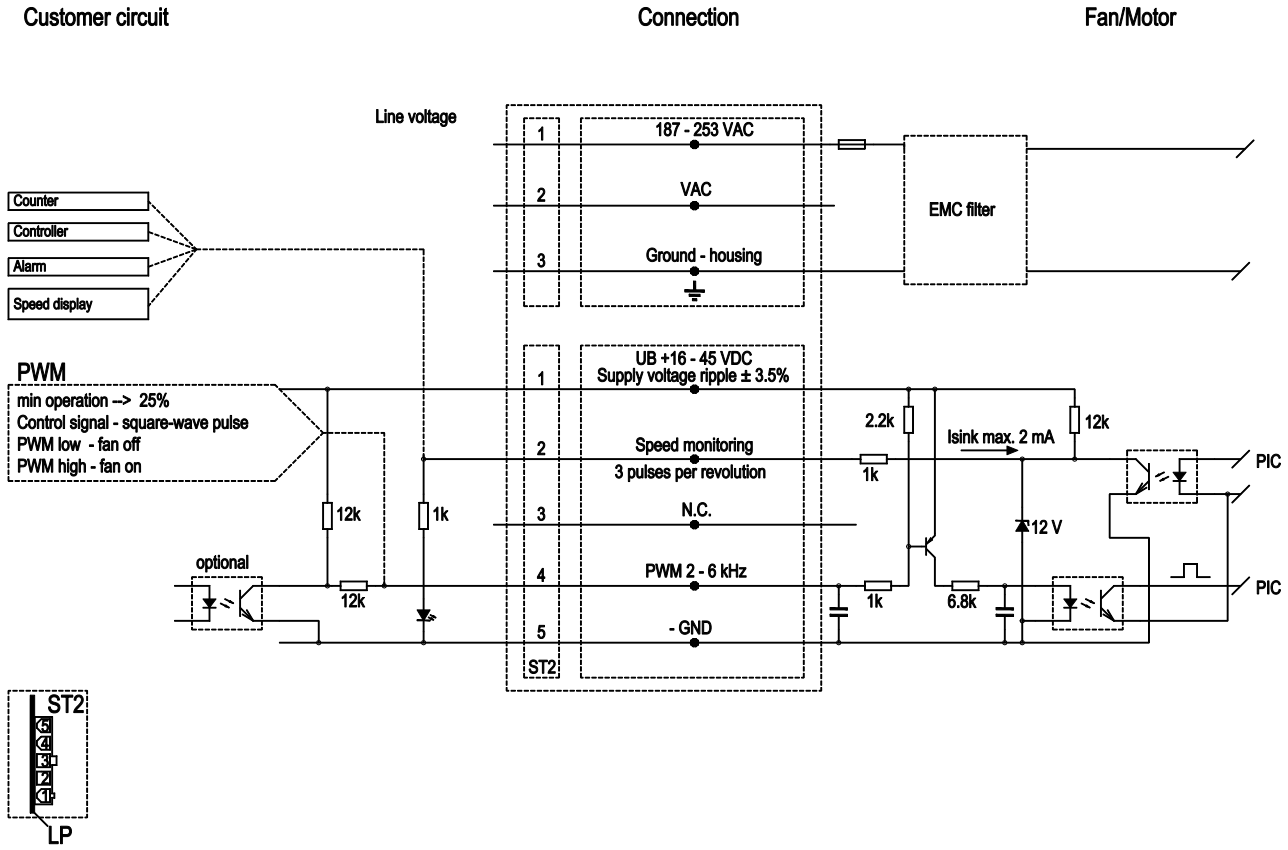
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Connection diagram



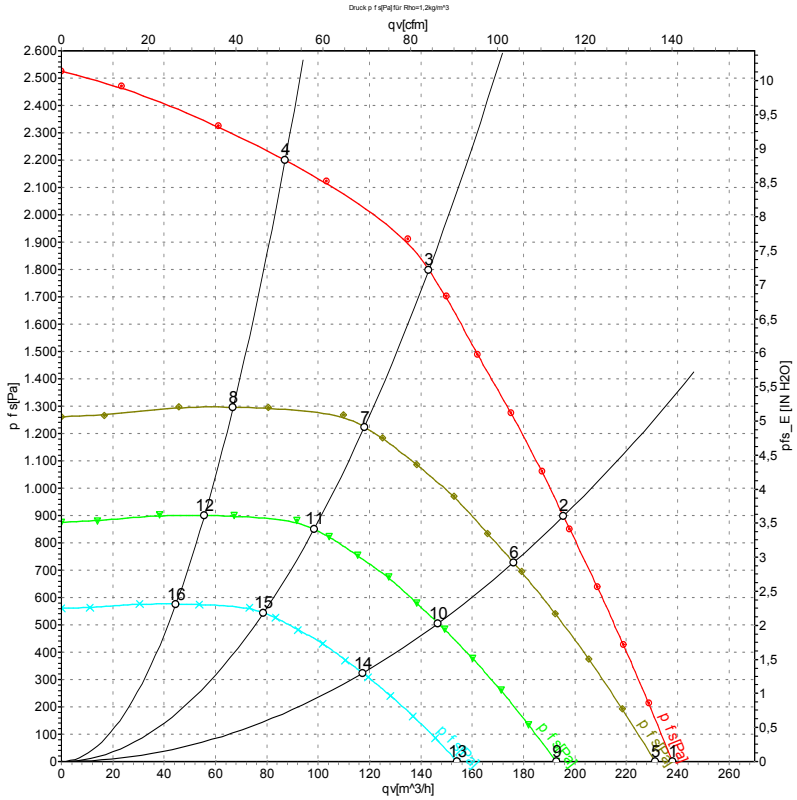
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Curves: Air performance 50 Hz



Measurement: LU-56832-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	4950	185	1.25	240	0	140	0.00
2	230	50	5330	178	1.19	195	900	115	3.61
3	230	50	5815	165	1.11	145	1800	85	7.23
4	230	50	6250	147	0.98	85	2200	50	8.83
5	230	50	4800	169	1.13	230	0	135	0.00
6	230	50	4800	130	0.87	175	728	105	2.92
7	230	50	4800	93	0.62	120	1224	70	4.91
8	230	50	4800	67	0.45	65	1296	40	5.20
9	230	50	4000	98	0.65	195	0	115	0.00
10	230	50	4000	75	0.50	145	506	85	2.03
11	230	50	4000	54	0.36	100	850	60	3.41
12	230	50	4000	39	0.26	55	900	35	3.61
13	230	50	3200	50	0.33	155	0	90	0.00
14	230	50	3200	39	0.26	115	324	70	1.30
15	230	50	3200	27	0.19	80	544	45	2.18
16	230	50	3200	20	0.13	45	576	25	2.31

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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