G1G144-AE13-01

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers

G1G144-AE13-01 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	**G1G144-AE13-01**
Motor	**M1G055-AI**

Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4350
Power consumption	W	54
Current draw	A	2.5
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70
Min. temp. of flow medium	°C	-25
Max. temp. of flow medium	°C	+80

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

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Technical description

Weight	1.47 kg
Size	144 mm
Motor size	55
Rotor surface	Thick-film passivated
Cover material	PP plastic
Impeller material	PA plastic
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP00
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	Any
Condensation drainage holes	On rotor side
Mode	S1
Premixing	Not suitable for premixing.
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - PWM control input
Electrical hookup	Plug
Motor protection	Reverse polarity and locked-rotor protection
Protection class assignment	III; Requires supply with safety extra-low voltage SELV. This component to be built-in can have several local protection classes. This specification relates to the basic design of this component. The final protection class is based on the intended installation and connection of the components.
Comment	Complete unit must be tested for required approvals.

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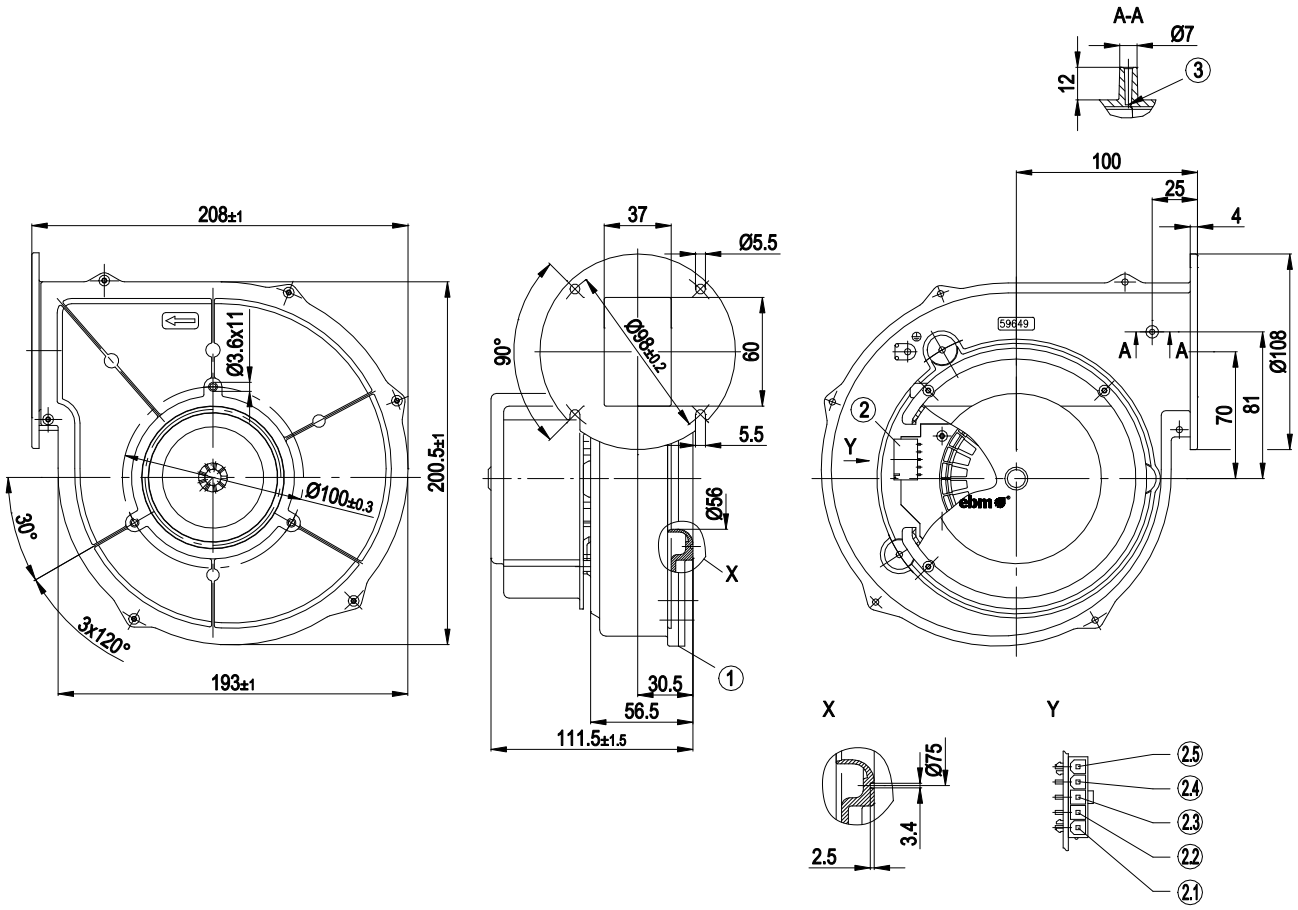
Product drawing



A-A	Section A-A
X	Detail X
Y	View Y
1	Housing side parts sealed with NBR round cord (pentane-resistant)
2	5-pole header, mating connector (not included in scope of delivery): Molex no. 39-01-4050; socket: Molex no. 39-00-0059
2.1	(+)
2.2	Speed monitoring
2.3	N.C.
2.4	PWM
2.5	(-)
3	Pressure tap sealed (drilled open if required)

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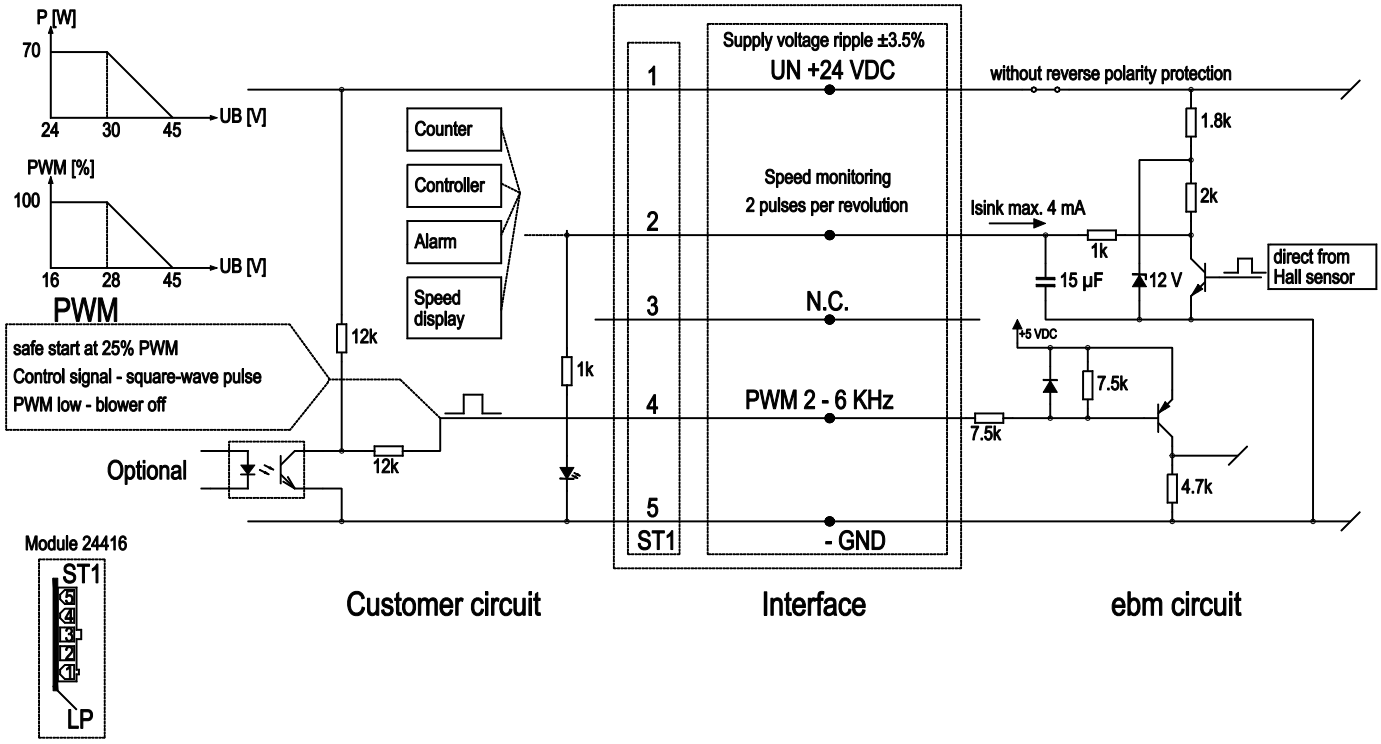
Connection diagram



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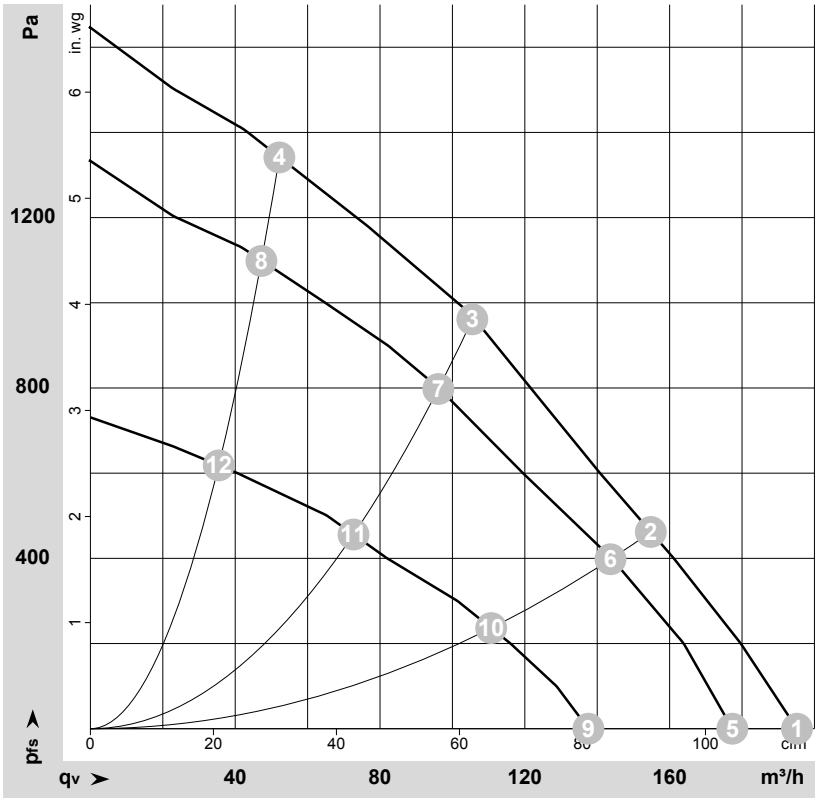
Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-38724-1
Measurement: LU-38723-1
Measurement: LU-38725-1

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	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	28	4655	68	2.83	195	0	115	0.00
2	28	4785	66	2.69	155	462	90	1.85
3	28	5190	61	2.43	105	969	60	3.89
4	28	5755	50	1.95	50	1342	30	5.39
5	24	4350	54	2.50	175	0	105	0.00
6	24	4440	52	2.43	145	400	85	1.61
7	24	4720	47	2.14	95	800	55	3.21
8	24	5190	37	1.69	45	1100	30	4.42
9	16	3380	25	1.70	140	0	80	0.00
10	16	3440	24	1.64	110	236	65	0.95
11	16	3610	21	1.46	75	456	45	1.83
12	16	3905	17	1.19	35	618	20	2.48

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