G1G144-AE13-50

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers



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Nominal data

Type	**G1G144-AE13-50**	
Motor	**M1G055-AI**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min-1	4300
Power consumption	W	51
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	1.44 kg
Fan size	144 mm
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"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Mode	S1
Premixing	Not suitable for premixing.
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - PWM control input
Motor protection	Reverse polarity and locked-rotor protection
Approval	EAC
Comment	Complete unit must be tested for required approvals.

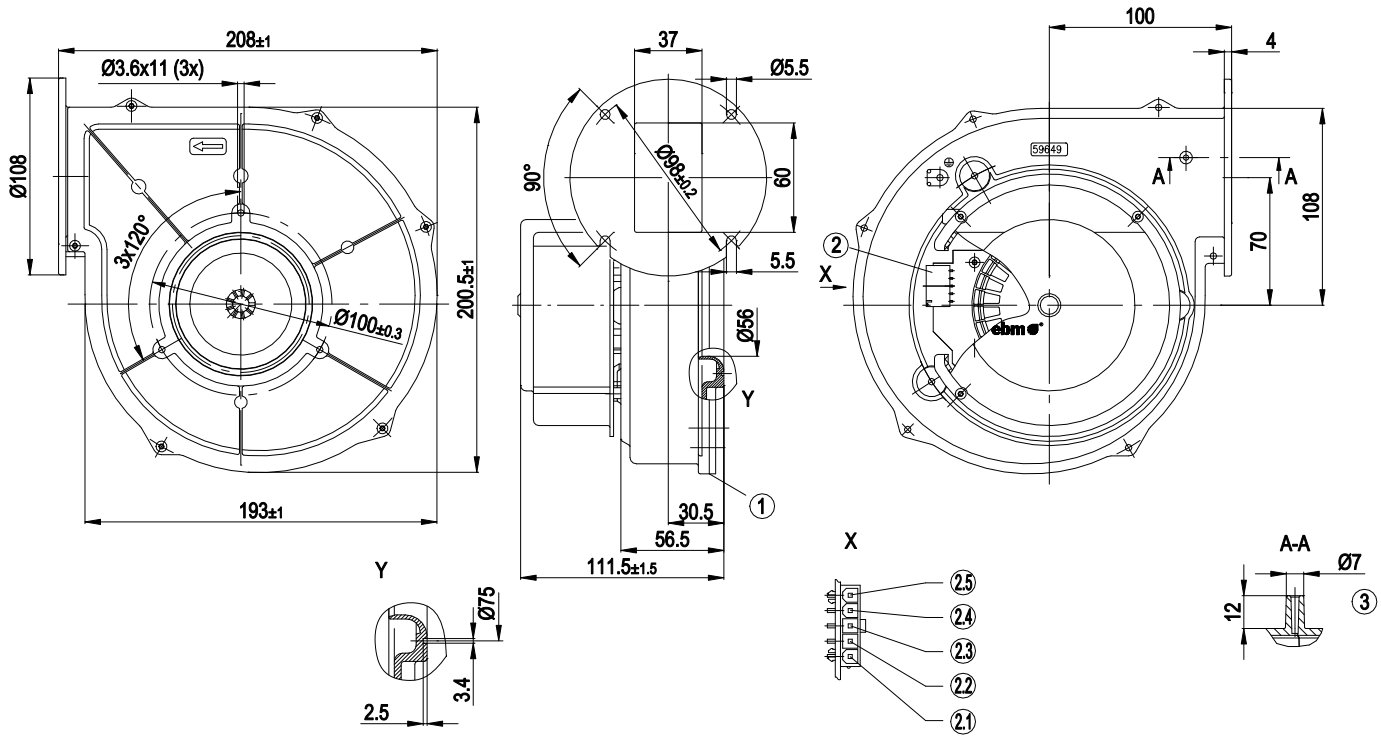
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Product drawing



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)

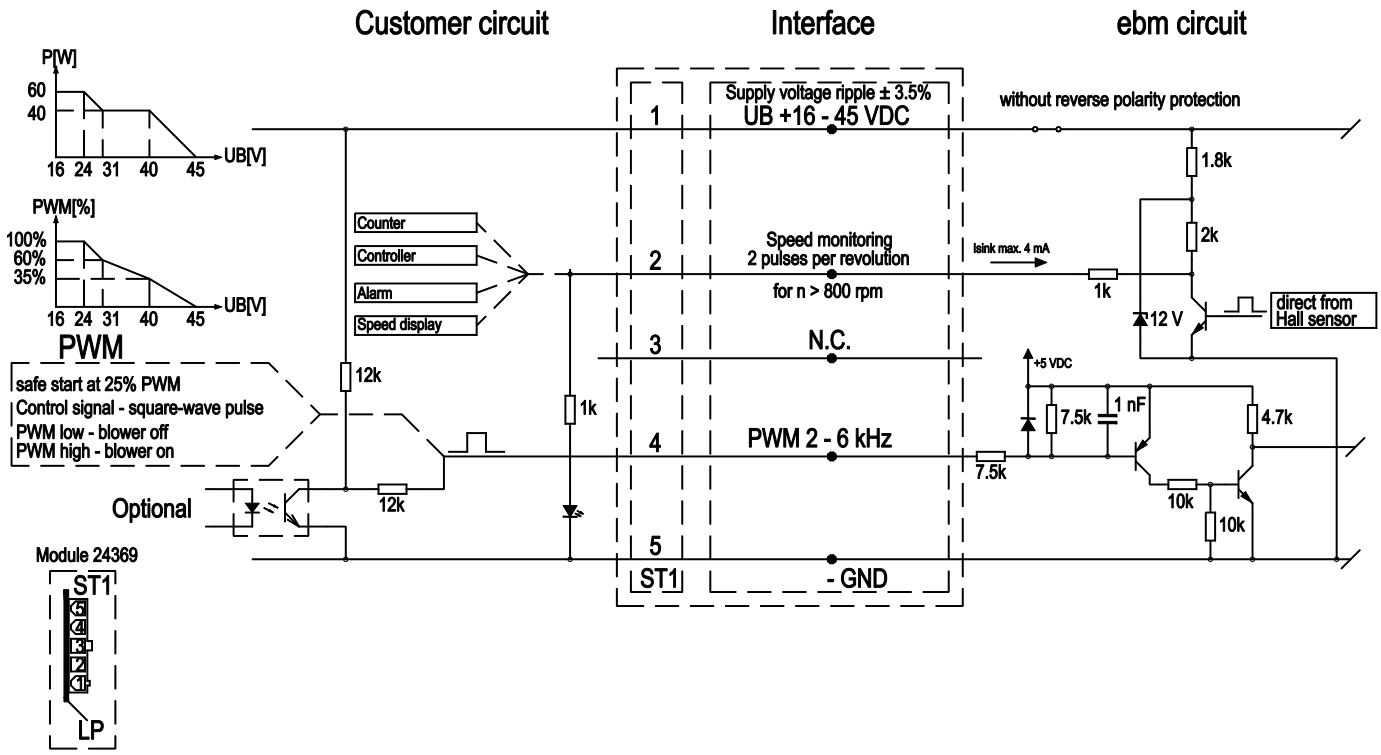
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Connection diagram



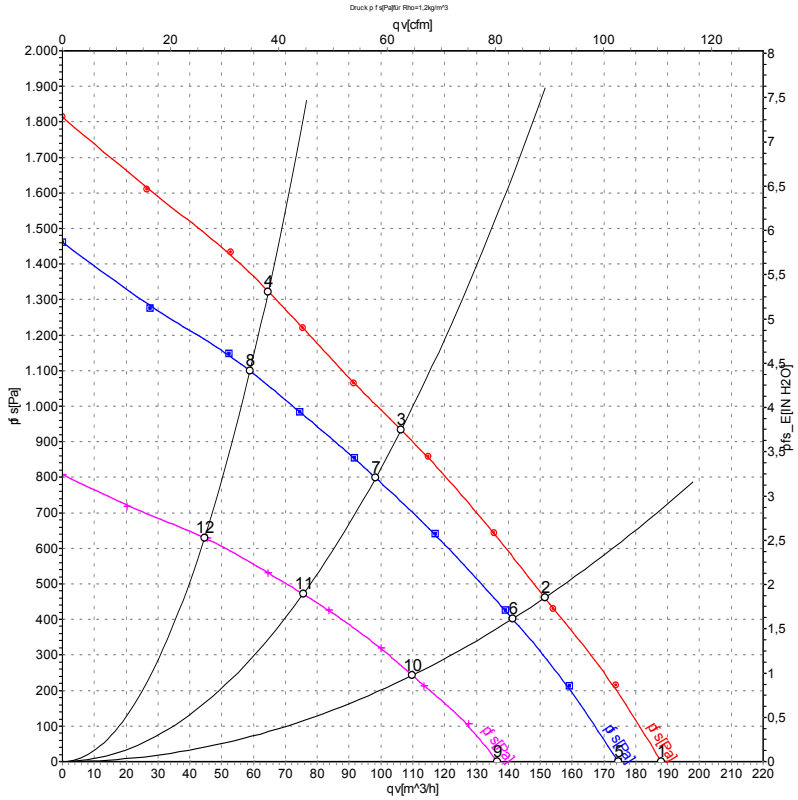
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Curves: Air performance



Measurement: LU-54468-1
Measurement: LU-54467-1
Measurement: LU-54469-1

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	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	28	4615	64	2.81	190	0	110	0.00
2	28	4695	63	2.72	150	460	90	1.85
3	28	5085	58	2.44	105	934	60	3.75
4	28	5600	52	2.11	65	1322	40	5.31
5	24	4300	51	2.50	175	0	105	0.00
6	24	4395	50	2.41	140	400	85	1.61
7	24	4700	46	2.16	100	800	60	3.21
8	24	5100	40	1.86	60	1100	35	4.42
9	16	3395	25	1.73	135	0	80	0.00
10	16	3440	24	1.69	110	242	65	0.97
11	16	3640	21	1.49	75	472	45	1.89
12	16	3875	18	1.28	45	633	25	2.54

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

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