G1G144-AF49-01

EC centrifugal fan

forward-curved, single-intake

with housing (flange), Gas blower for condensing boilers



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Nominal data

Type	**G1G144-AF49-01**
Motor	**M1G055-BD**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4800
Power consumption	W	75
Current draw	A	0.5
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

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Technical description

Weight	1.72 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	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	Any
Condensation drainage holes	None
Mode	S1
Premixing	Not suitable for premixing.
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - PWM control input
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Plug
Motor protection	Reverse polarity and locked-rotor protection
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE; UKCA
Approval	EAC
Comment	Complete unit must be tested for required approvals.

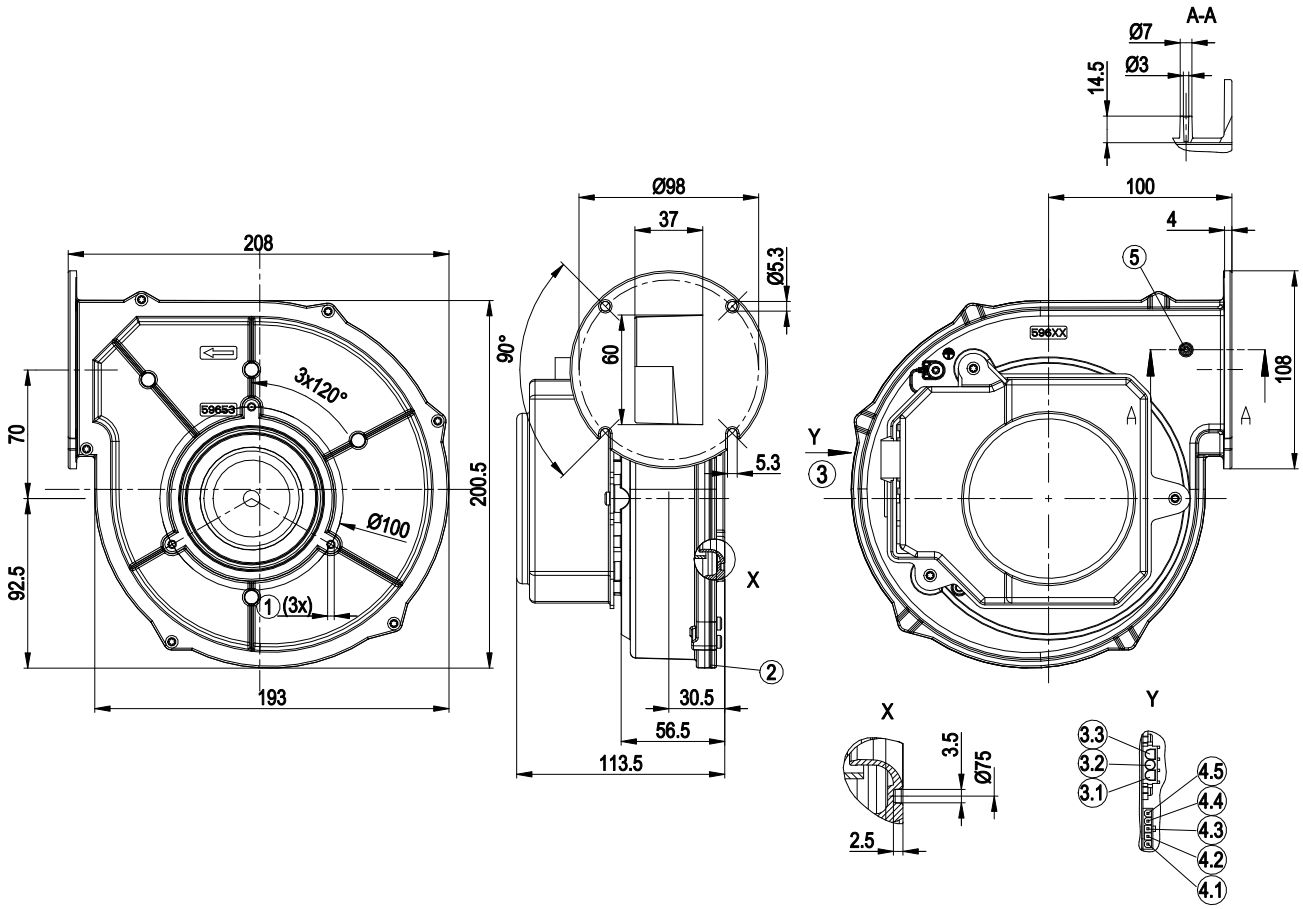
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Product drawing



1	For self-tapping M4 screws
2	Housing side parts sealed with NBR round cord (pentane-resistant)
3	3-pole header, mating connector: (not included in scope of delivery) Tyco no. 350 766-1; socket: Tyco no. 926 884-1
3.1	L
3.2	N
3.3	PE
4	5-pole header; mating connector (not included in scope of delivery): Molex no. 39-01-4050; socket: Molex no. 39-00-0059
4.1	(+)
4.2	Speed monitoring
4.3	not used
4.4	PWM input
4.5	(-) GND
5	Pressure tap sealed (drilled open if required)

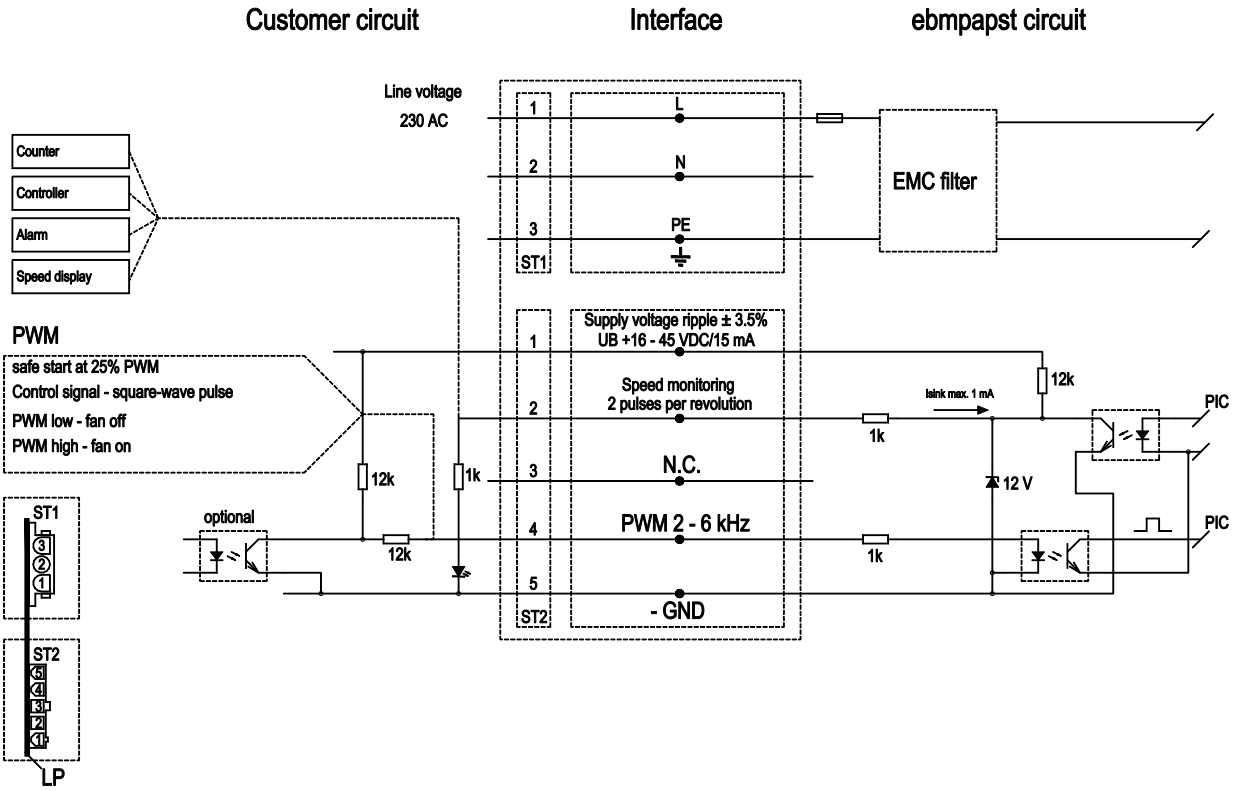
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Connection diagram



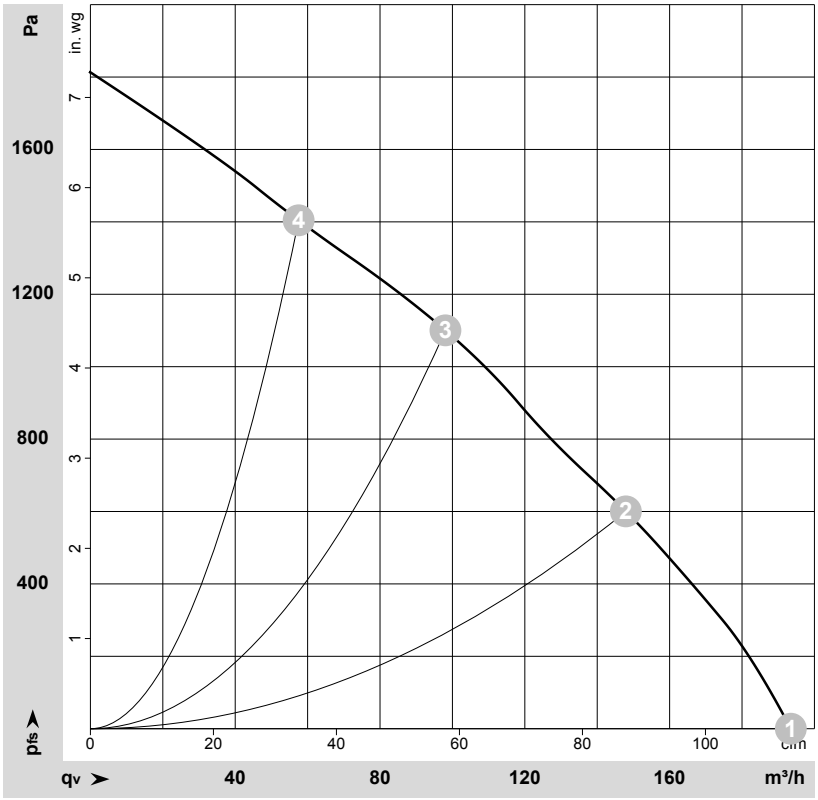
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-36462-1

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

	Wired	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	in. wg
1	1~	230	50	4800	75	0.50	195	0	115	0.00
2	1~	230	50	4950	73	0.50	150	600	85	2.41
3	1~	230	50	5390	67	0.45	100	1100	60	4.42
4	1~	230	50	5890	59	0.40	60	1400	35	5.62

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

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