G1G144-AF45-01

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers



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Nominal data

Type	**G1G144-AF45-01**
Motor	**M1G055-BD**

Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4900
Power consumption	W	83
Current draw	A	-
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	1.6 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	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
Motor protection	Reverse polarity and locked-rotor protection
Conformity with standards	CE
Approval	EAC
Comment	Complete unit must be tested for required approvals.

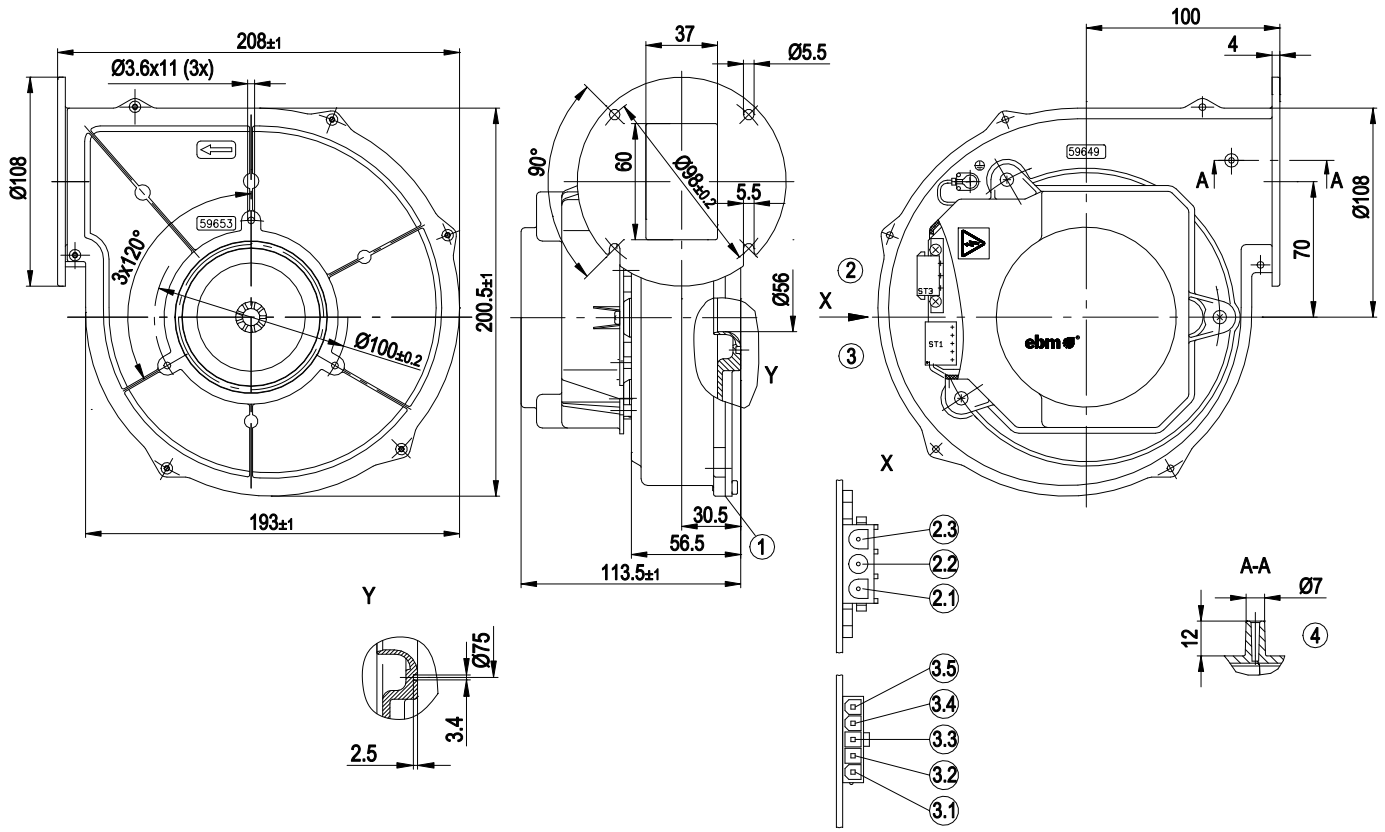
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Product drawing



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

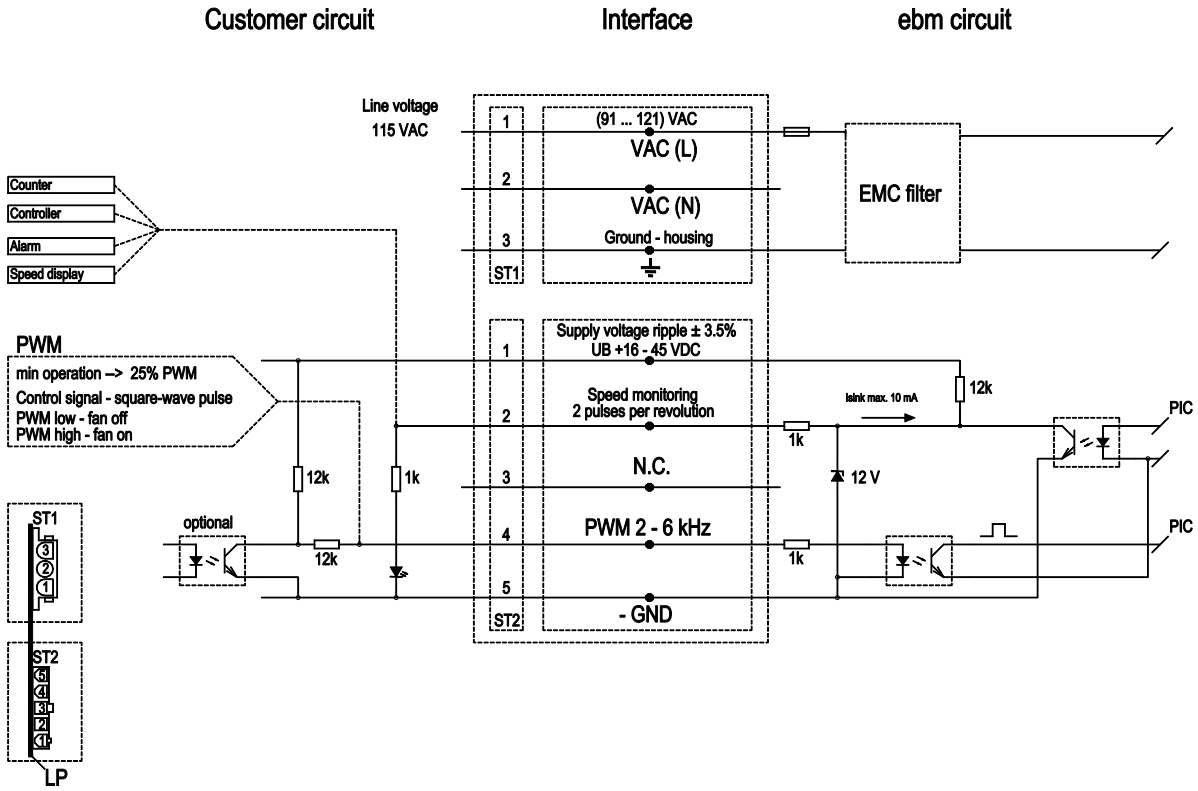
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Connection diagram



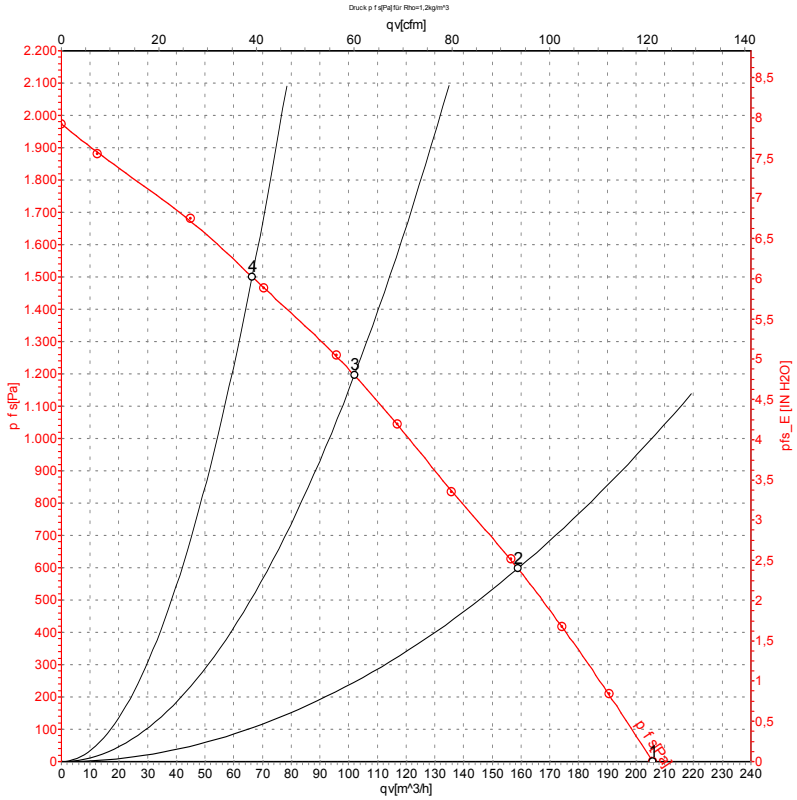
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Curves: Air performance 50 Hz



Measurement: LU-39625-1

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	115	50	4900	83	1.05	205	0	120	0.00
2	115	50	5065	80	1.01	160	600	95	2.41
3	115	50	5545	73	0.93	100	1200	60	4.82
4	115	50	6000	66	0.84	65	1500	40	6.02

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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