G1G144-AG43-05

EC centrifugal fan

backward-curved, single-intake

with housing (flange), Gas blower for condensing boilers

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Nominal data

Type	**G1G144-AG43-05**	
Motor	**M1G055-BD**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4020
Power consumption	W	43
Current draw	A	2.0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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	1.8 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"
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
Cooling hole/opening	On rotor side
Mode	S1
Premixing	Not suitable for premixing.
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
Electrical hookup	With plug
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Protection class	I (if protective earth is connected by customer to the housing's connection point)
Conformity with standards	EN 60335-1, motor does not have factory-installed overheating protection
Comment	Complete unit must be tested for required approvals.

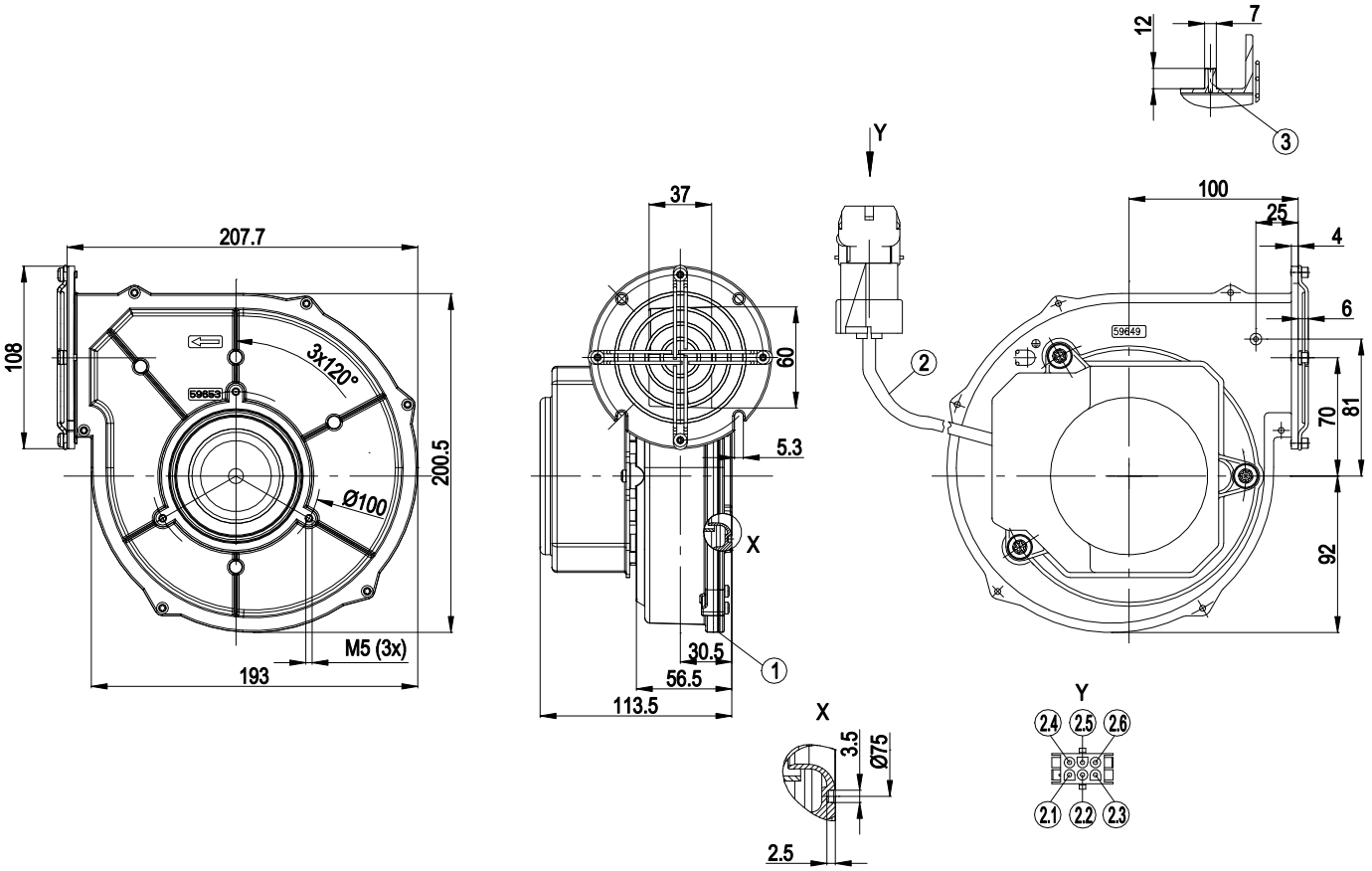
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Product drawing



1	Housing side parts sealed with NBR round cord (pentane-resistant)
2	Cable PVC AWG20 with 6-pole connector housing tyco 350781-1, 4x plug pin tyco 926885-1
2.1	UN +24 VDC
2.2	GND
2.3	0-10 VDC
2.4	Tach
2.5	not used
2.6	not used
3	Pressure tap sealed (drilled open if required)

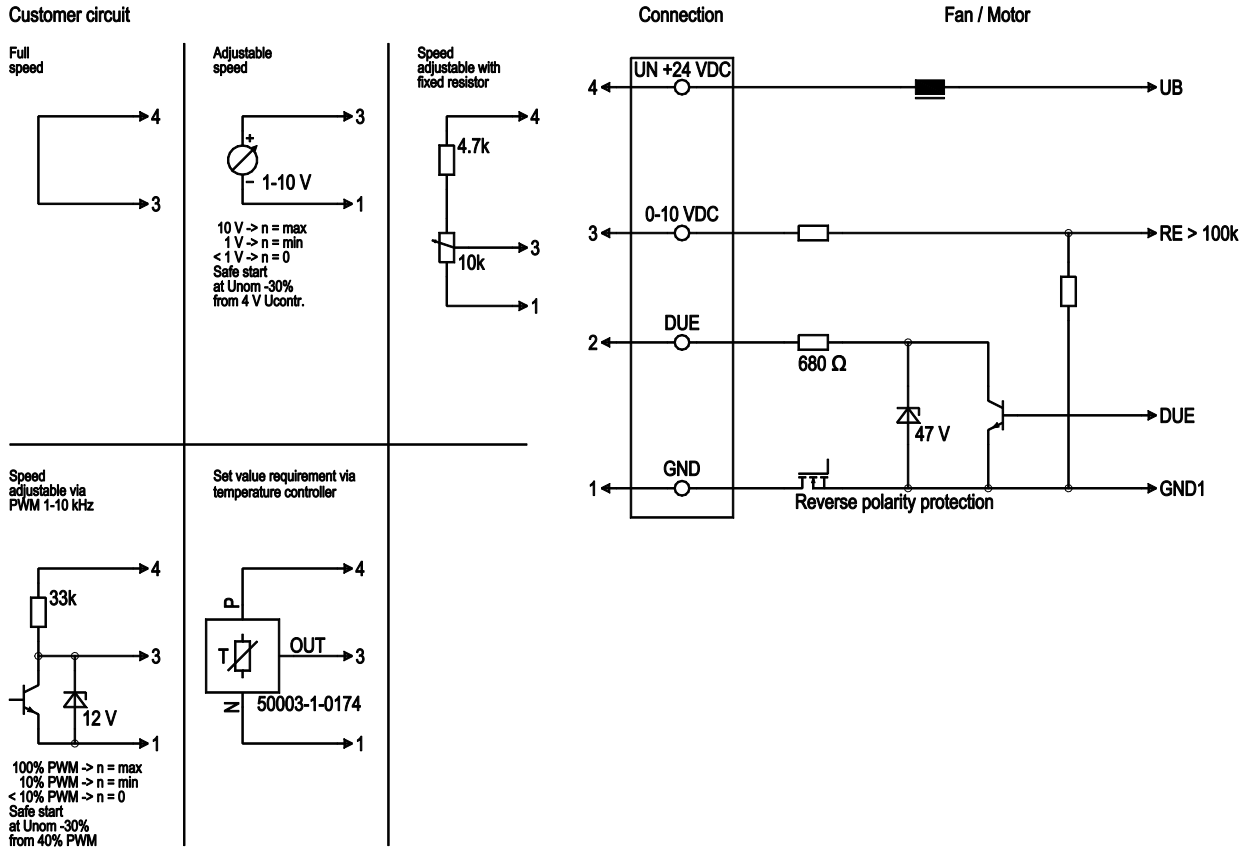
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	GND	blue	Reference ground
1	2	Tach	white	Tach output, 2 pulses per revolution, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100k
1	4	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%

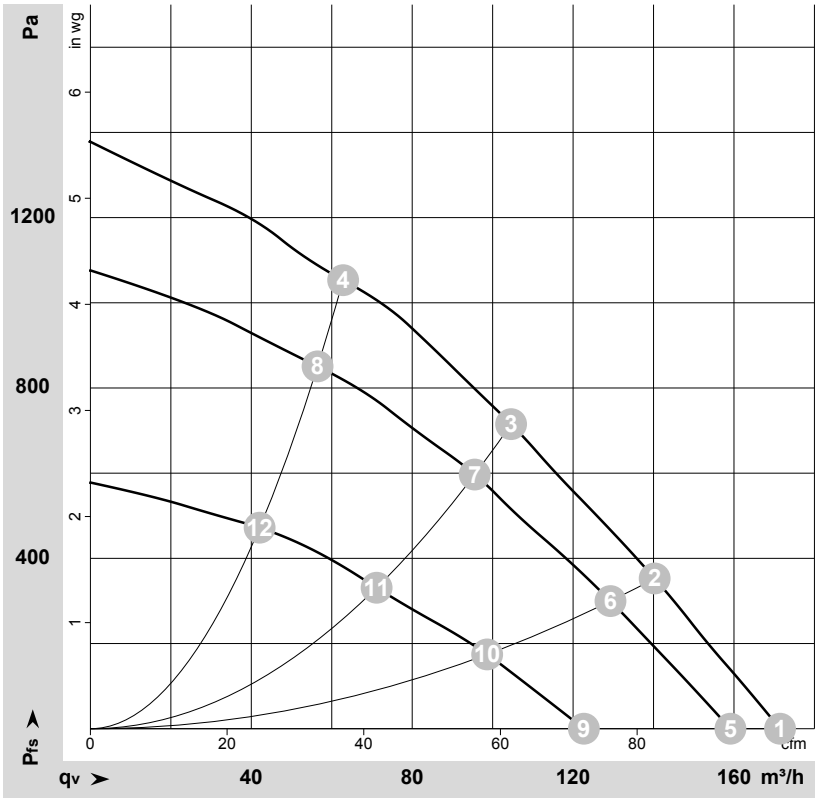
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-72264-1
Measurement: LU-72262-1
Measurement: LU-72266-1

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	4320	53	2.23	170	0	100	0.00
2	28	4475	51	2.14	140	353	80	1.42
3	28	4740	49	2.00	105	716	60	2.87
4	28	5145	43	1.73	65	1053	35	4.23
5	24	4020	43	2.00	160	0	95	0.00
6	24	4135	41	1.94	130	300	75	1.20
7	24	4330	38	1.78	95	600	55	2.41
8	24	4595	33	1.52	55	850	35	3.41
9	16	3115	20	1.37	125	0	70	0.00
10	16	3175	19	1.30	100	176	60	0.71
11	16	3270	17	1.19	70	331	40	1.33
12	16	3430	15	1.03	40	473	25	1.90

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

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