G1G140-AW13-20

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G1G140-AW13-20**	
Motor	**M1G055-CF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min-1	2000
Power consumption	W	67
Current draw	A	1.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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	2.2 kg
Size	140 mm
Motor size	55
Rotor surface	Painted black
Impeller material	PP plastic
Housing material	Die-cast aluminum
Motor suspension	Motor mounted on support plate for one-sided vibration damping
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	Shaft horizontal, outlet at top left
Condensation drainage holes	None
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Conformity with standards	EN 60950-1

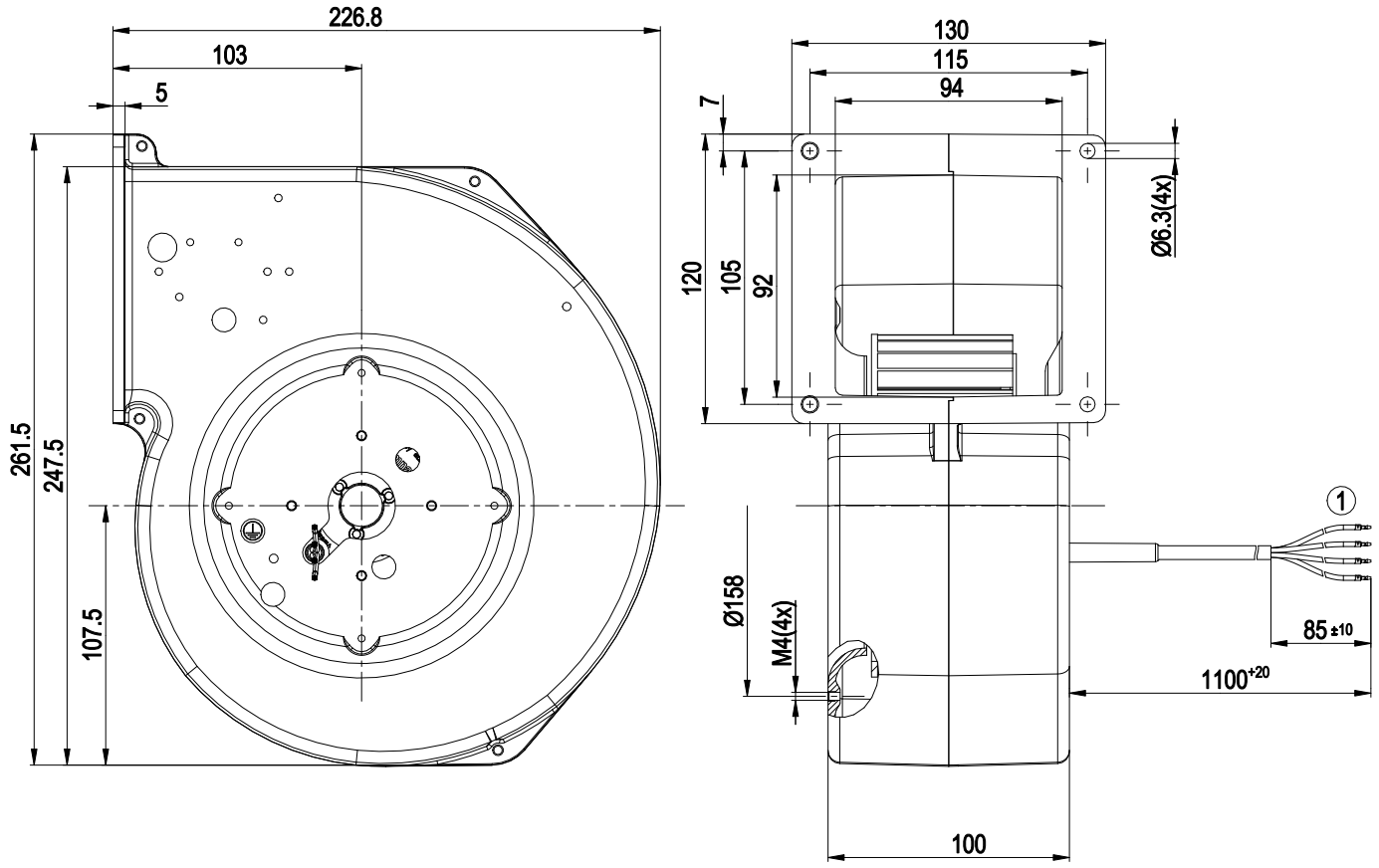
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Product drawing



1	Cable PVC AWG20, tin-plated wire ends

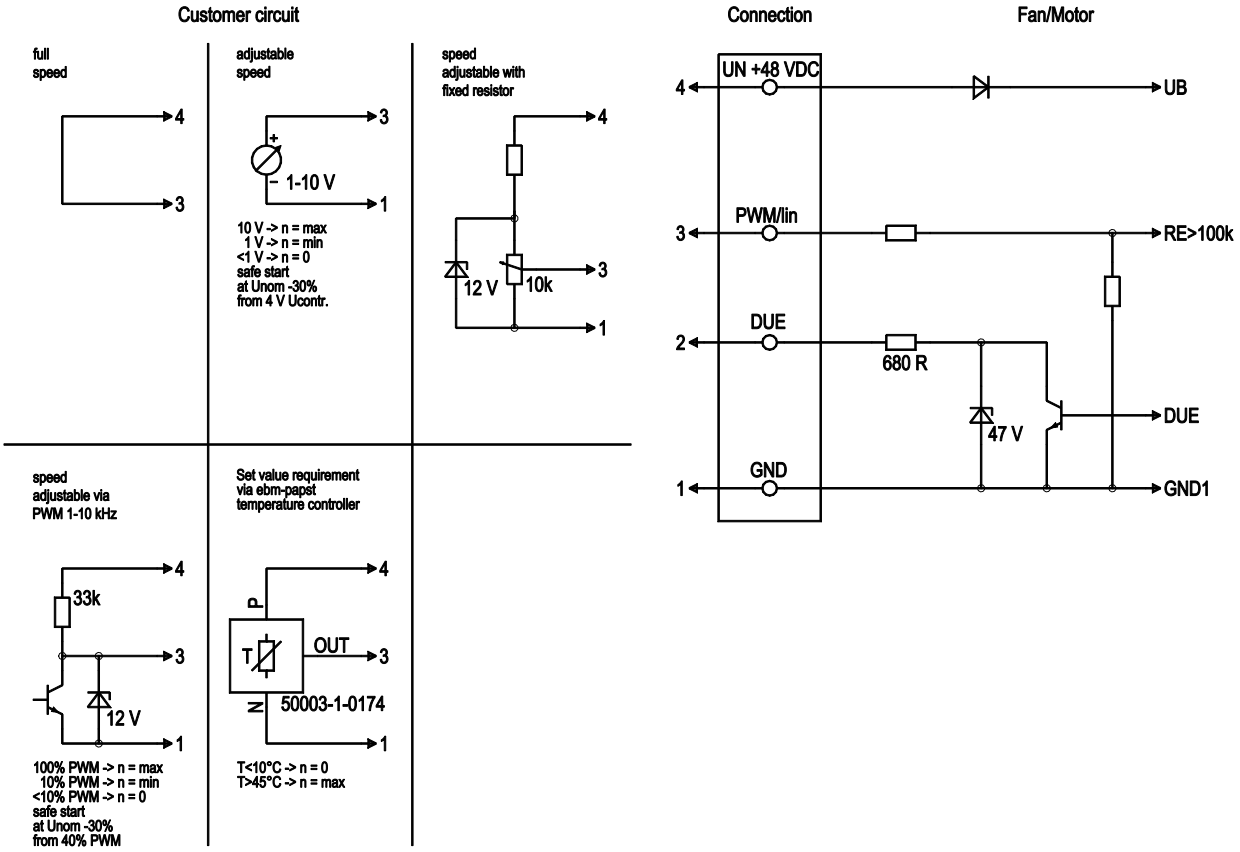
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Connection diagram



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 > 100 K
1	4	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%

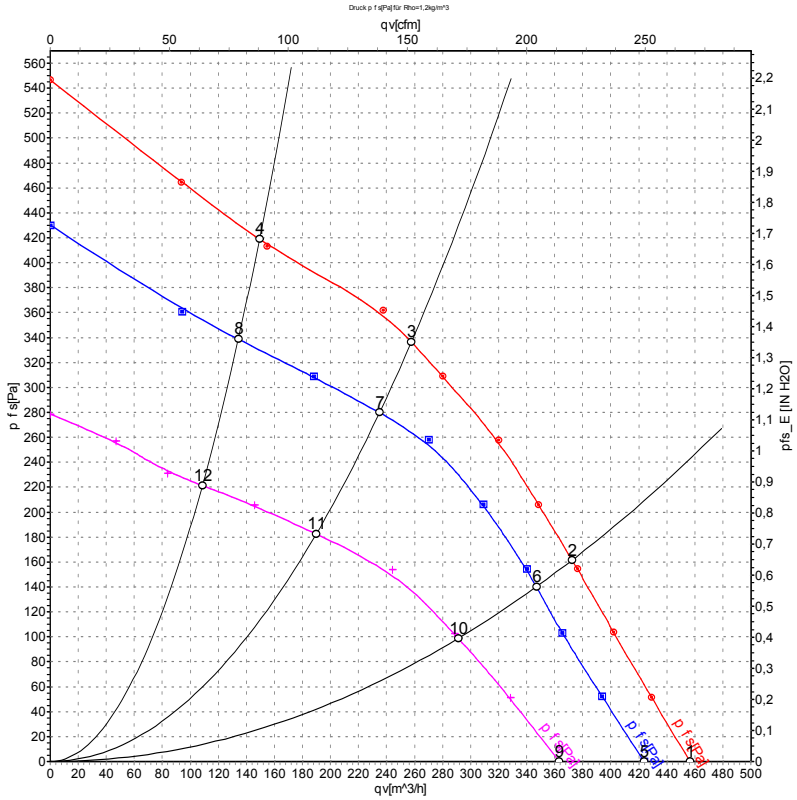
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Curves: Air performance



Measurement: LU-46114-1
Measurement: LU-46113-1
Measurement: LU-46115-1

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	56	2170	85	1.82	455	0	270	0.00
2	56	2350	78	1.62	370	162	220	0.65
3	56	2690	70	1.39	260	336	150	1.35
4	56	3010	60	1.18	150	418	90	1.68
5	48	2000	67	1.60	420	0	245	0.00
6	48	2190	63	1.47	345	140	205	0.56
7	48	2485	54	1.23	235	280	140	1.12
8	48	2715	44	1.01	135	338	80	1.36
9	36	1740	43	1.30	365	0	215	0.00
10	36	1850	38	1.16	290	99	170	0.40
11	36	2040	30	0.93	190	182	110	0.73
12	36	2200	24	0.77	110	221	65	0.89

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

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