G1G108-AB41-12

EC centrifugal fan

forward-curved, single-intake

with housing (flange)



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Nominal data

Type	**G1G108-AB41-12**	
Motor	**M1G055-BD**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3000
Power consumption	W	42
Current draw	A	1.0
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	1.4 kg
Fan size	108 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Number of blades	30
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP22
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
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
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B, household environment)
Electrical hookup	With plug
Motor protection	Reverse polarity and locked-rotor protection
With cable	Axial
Conformity with standards	EN 60335-1

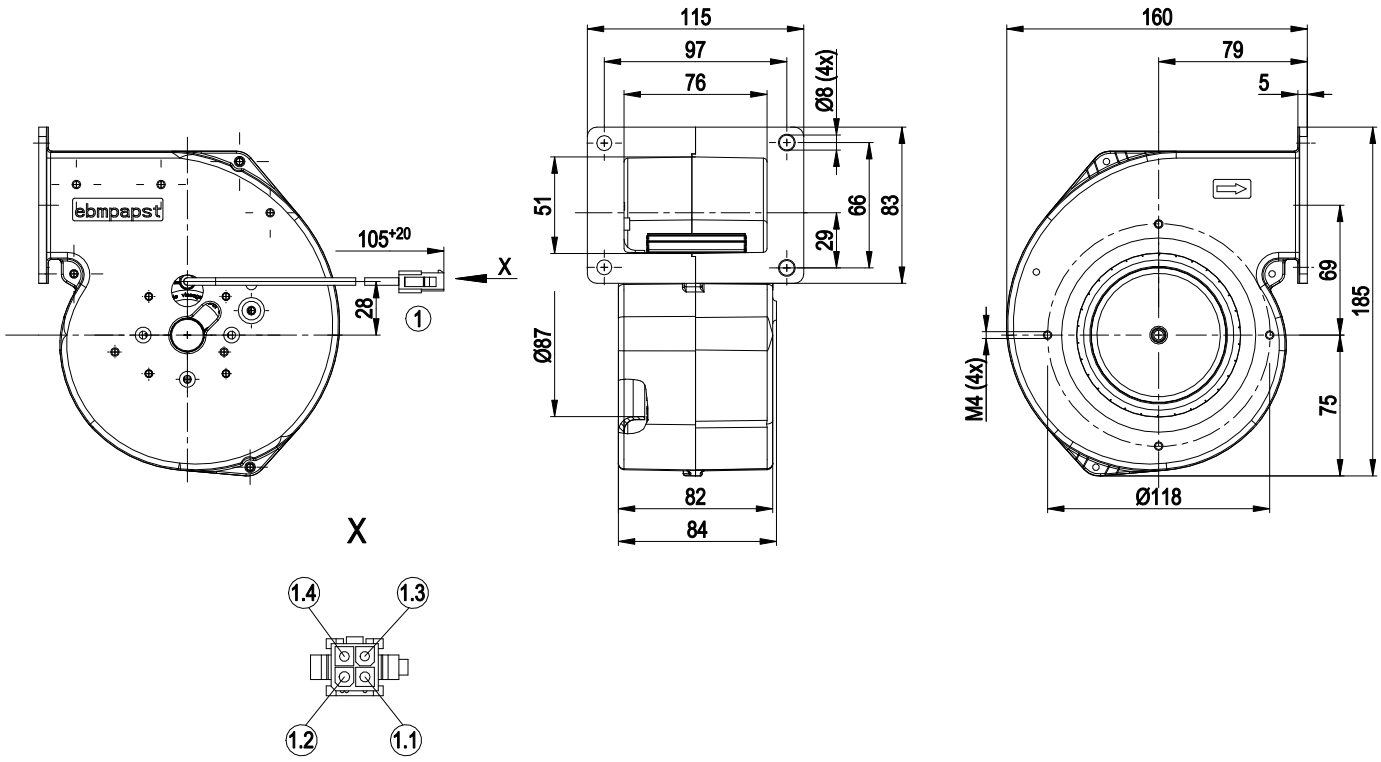
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Product drawing



1	Cable PVC AWG20 with connector housing Molex no. 39-01-2046
1.1	red (+)
1.2	blue (-)
1.3	yellow (control input)
1.4	white (S)

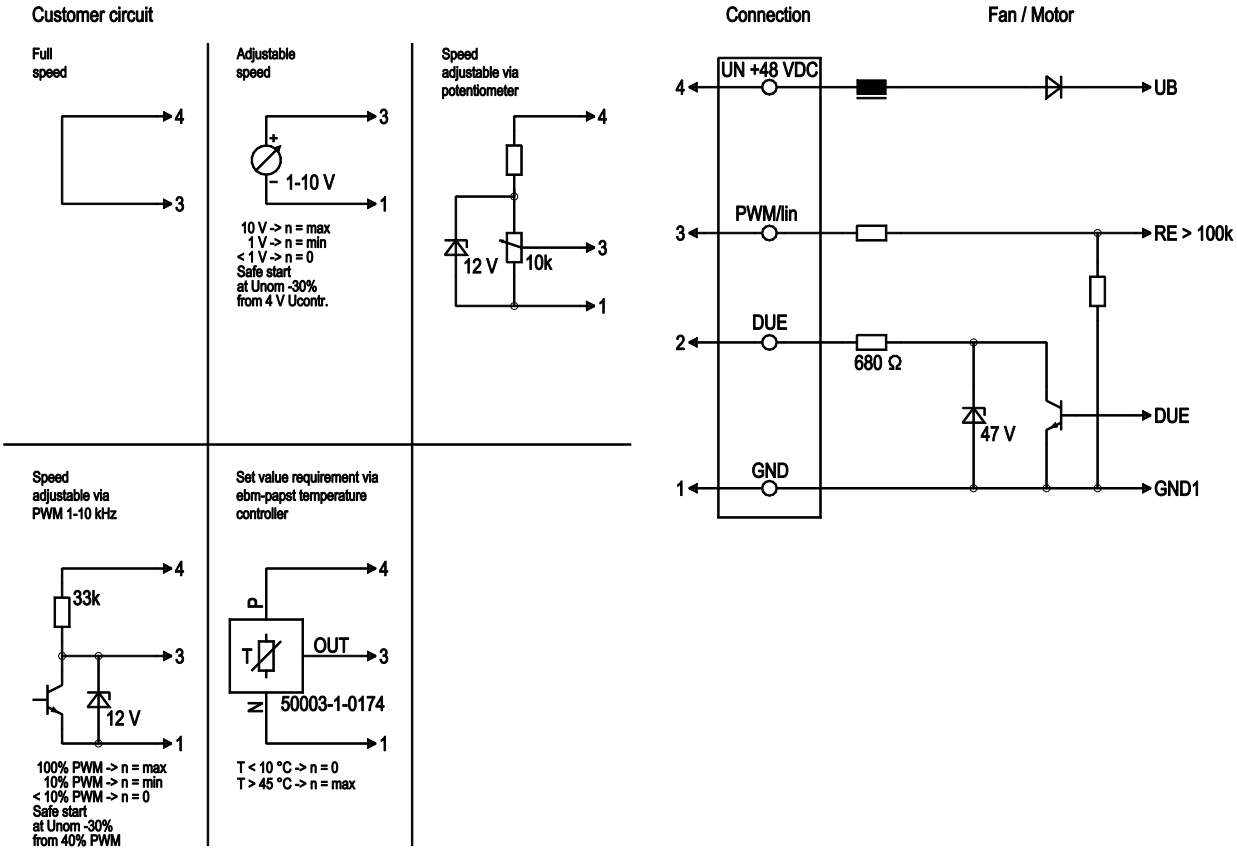
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	GND	blue	Reference ground
1	2	DUE	white	Tach output, 2 pulses per revolution, Isink max = 10 mA
1	3	PWM/LIN	yellow	Control input Re > 100k
1	4	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%

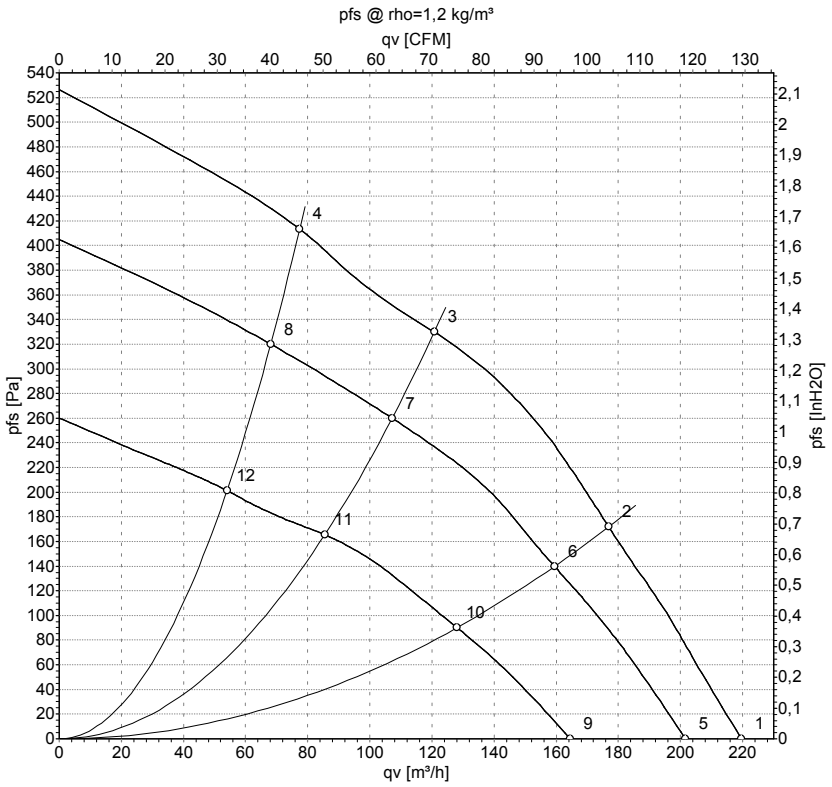
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Curves: Air performance



Measurement: LU-53526-1
Measurement: LU-53525-1
Measurement: LU-53527-1

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	57	3200	52	1.04	220	0	130	0.00
2	57	3500	48	0.93	175	172	105	0.69
3	57	3845	40	0.78	120	330	70	1.32
4	57	4050	35	0.68	75	416	45	1.67
5	48	3000	42	1.00	200	0	120	0.00
6	48	3160	35	0.80	160	140	95	0.56
7	48	3425	28	0.65	105	260	65	1.04
8	48	3585	25	0.58	70	320	40	1.28
9	36	2425	23	0.70	165	0	95	0.00
10	36	2585	19	0.60	130	90	75	0.36
11	36	2765	16	0.51	85	166	50	0.67
12	36	2880	14	0.46	55	202	30	0.81

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

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