W2G130-AA31-01

EC axial compact fan

sickle-shaped blades (S series), with brushless DC motor

Nominal data

Type	**W2G130-AA31-01**	
Motor	**M2G055-BD**	
Nominal voltage	VDC	12
Nominal voltage range	VDC	6 .. 16
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2950
Power consumption	W	16
Current draw	A	1.1
Max. back pressure	Pa	60
Max. back pressure	in. wg	0.24
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

EC axial compact fan

sickle-shaped blades (S series), with brushless DC motor

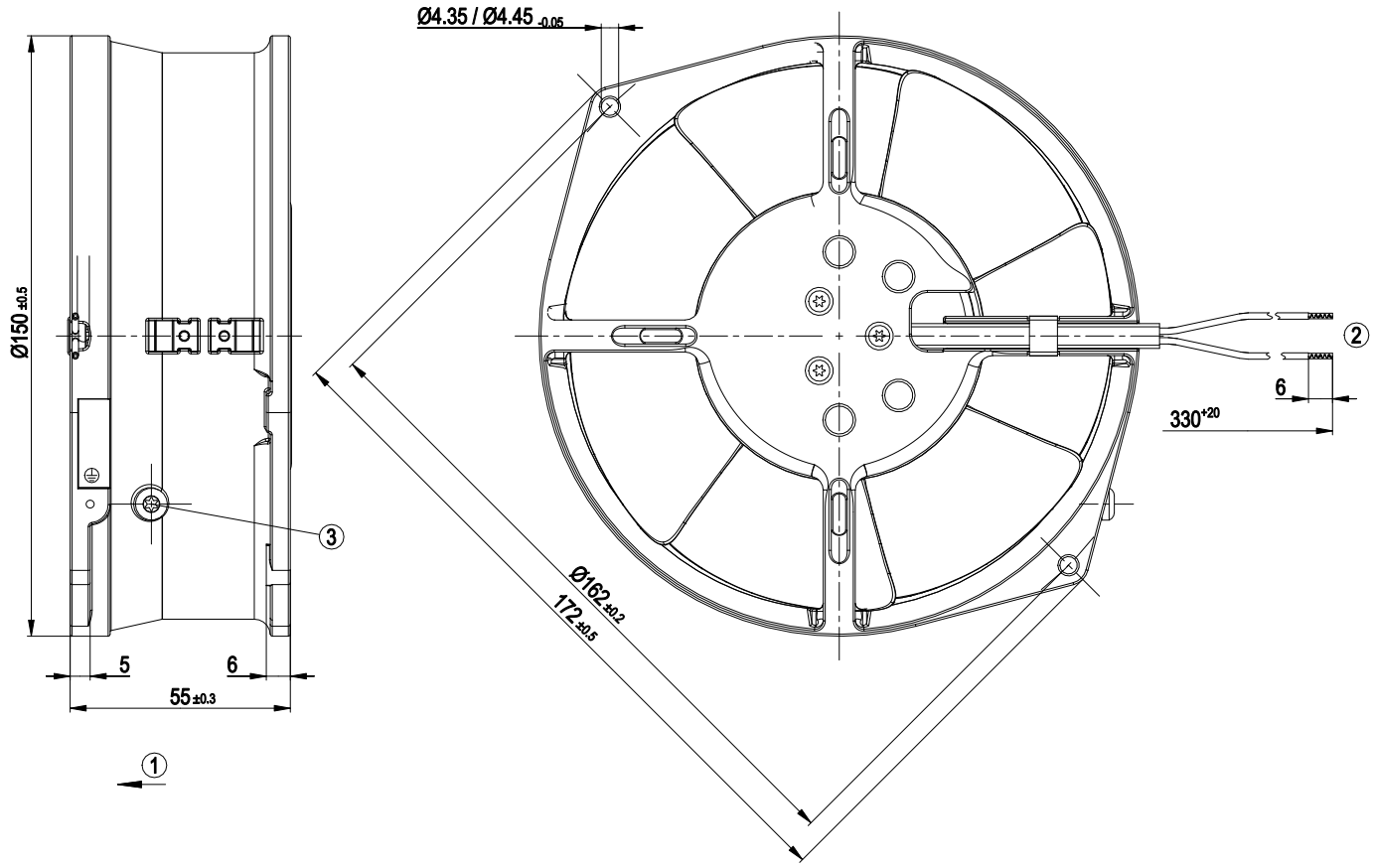
Technical description

Weight	0.9 kg
Size	130 mm
Motor size	55
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Die-cast aluminum, painted black
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, 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
Motor mounting	Ball bearing
Technical features	- Tach output - Motor current limitation
Motor protection	Reverse polarity and locked-rotor protection
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	UL 507; EAC

EC axial compact fan

sickle-shaped blades (S series), with brushless DC motor

Product drawing

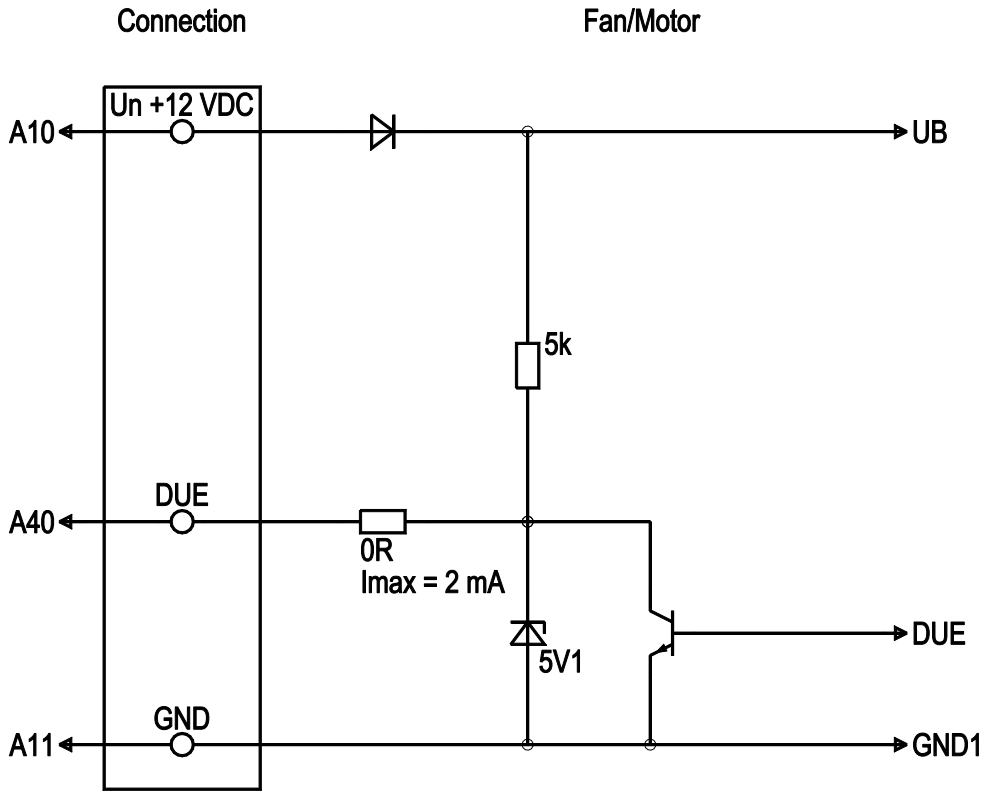


1	Airflow direction "V"
2	Cable PVC AWG20, 2x crimped splices
3	M4 screw for fastening ground connector

EC axial compact fan

sickle-shaped blades (S series), with brushless DC motor

Connection diagram

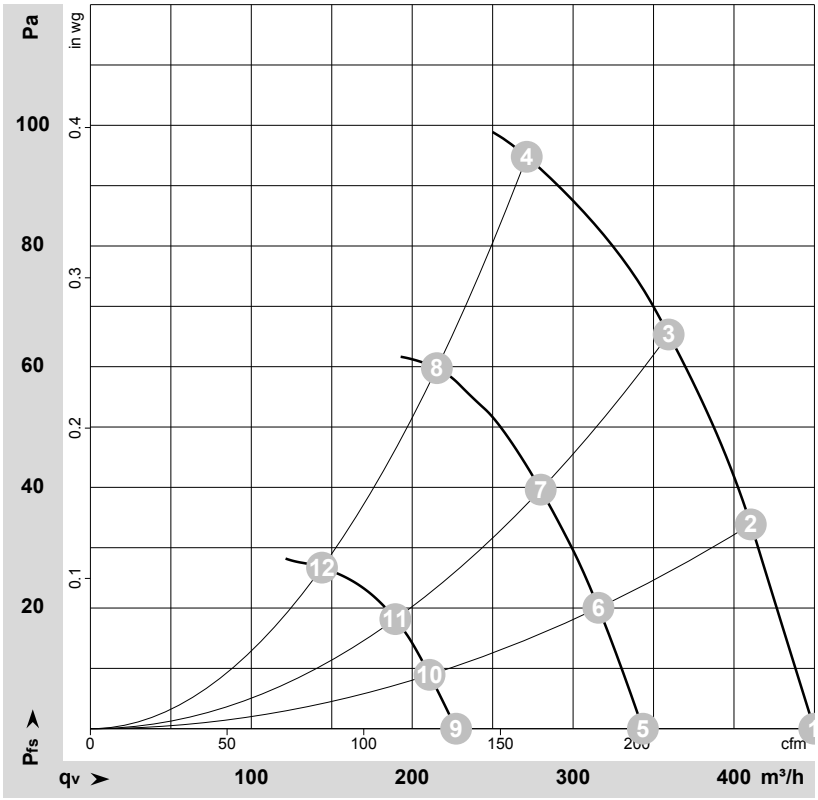


No.	Conn.	Designation	Color	Function/assignment
1	A10	UN +12 VDC	red	Power supply 12 VDC, maximum ripple 3.5%
2	A40	DUE	white	Tach output, 2 pulses per revolution, Isink max = 2 mA, Isource = 2 mA
3	A11	GND	blue	Reference ground

EC axial compact fan

sickle-shaped blades (S series), with brushless DC motor

Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-24332-1
Measurement: LU-24331-1
Measurement: LU-24333-1

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	16	3850	27	1.70	450	0	265	0.00
2	16	3785	29	1.78	410	34	240	0.14
3	16	3700	30	1.85	360	65	210	0.26
4	16	3670	30	1.90	270	95	160	0.38
5	12	2950	16	1.10	345	0	200	0.00
6	12	2925	16	1.20	315	20	185	0.08
7	12	2895	16	1.23	280	40	165	0.16
8	12	2865	16	1.26	215	60	125	0.24
9	8	1990	5.0	0.65	225	0	135	0.00
10	8	1970	5.0	0.65	210	9	125	0.04
11	8	1945	5.0	0.67	190	18	110	0.07
12	8	1935	6.0	0.72	145	27	85	0.11

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