A1G300-AL02-10

EC axial fan

sickle-shaped blades (S series)

Automotive

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Nominal data

Type	**A1G300-AL02-10**
Motor	**M1G074-BF**

Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 30
Method of obtaining data		fa
Speed (rpm)	min-1	1530
Power consumption	W	48
Current draw	A	2.6
Max. back pressure	Pa	65
Max. back pressure	inH2O	0.26
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	45

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	1.5 kg
Fan size	300 mm
Rotor surface	Rotor open, painted black
Electronics housing material	Die-cast aluminum, painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP24 KM
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H4+
Ambient temperature note	Occasional start-up between -40°C and -25°C is permissible. For continuous operation at temperatures below -25°C (e.g. refrigeration applications) we recommend our fan design with special low-temperature bearings.
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing; (sealed)
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Thermal overload protection for electronics
Electrical hookup	With plug
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable

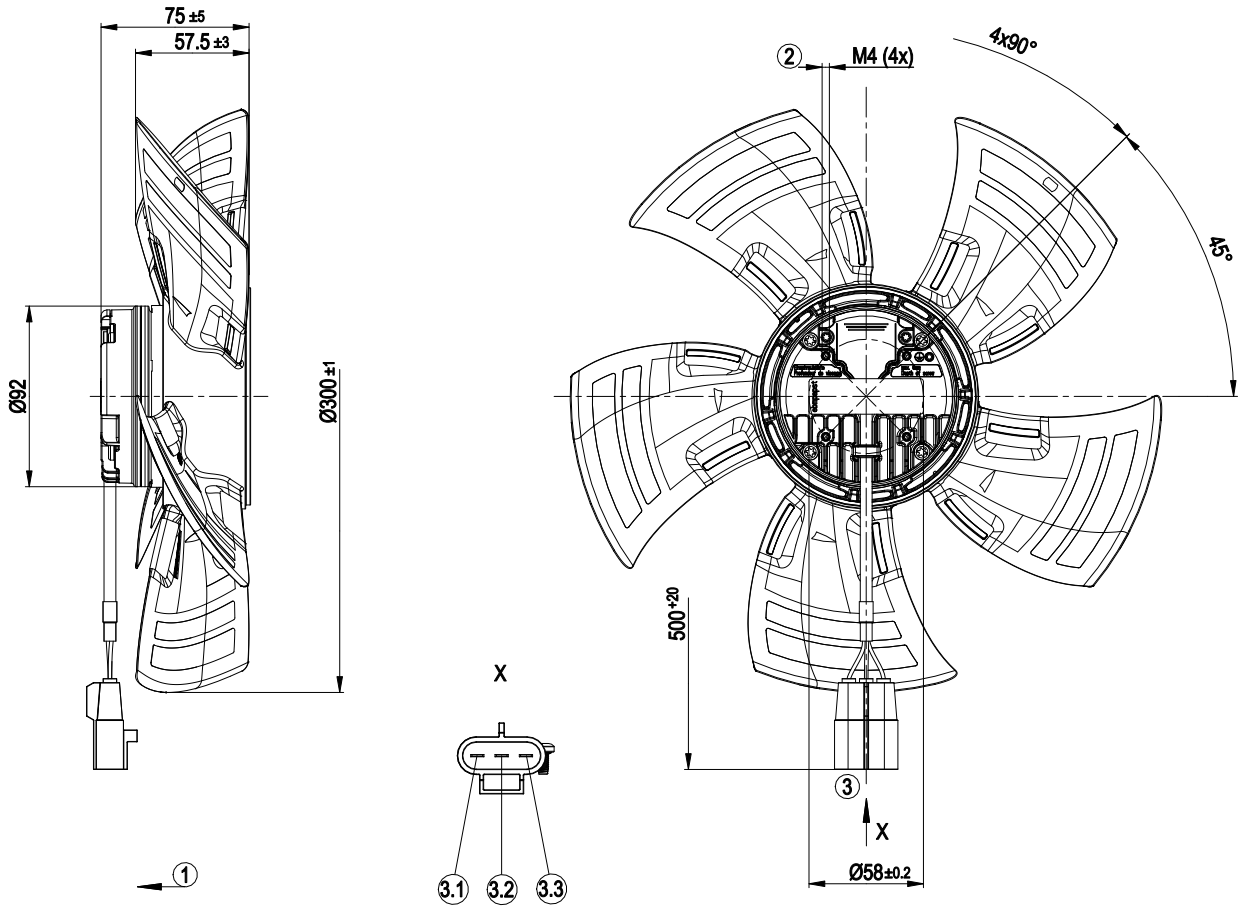
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Product drawing



1	Direction of air flow "V"
2	Max. clearance for screw 6 mm
3	Cable PVC AWG20 with 3-pole connector housing Sumitomo TS M6188-0129, 3x plug M8100-0464, 3x seal 7165-0346
3.1	GND (blue)
3.2	0-10 VDC (yellow)
3.3	UN +24 VDC (red)

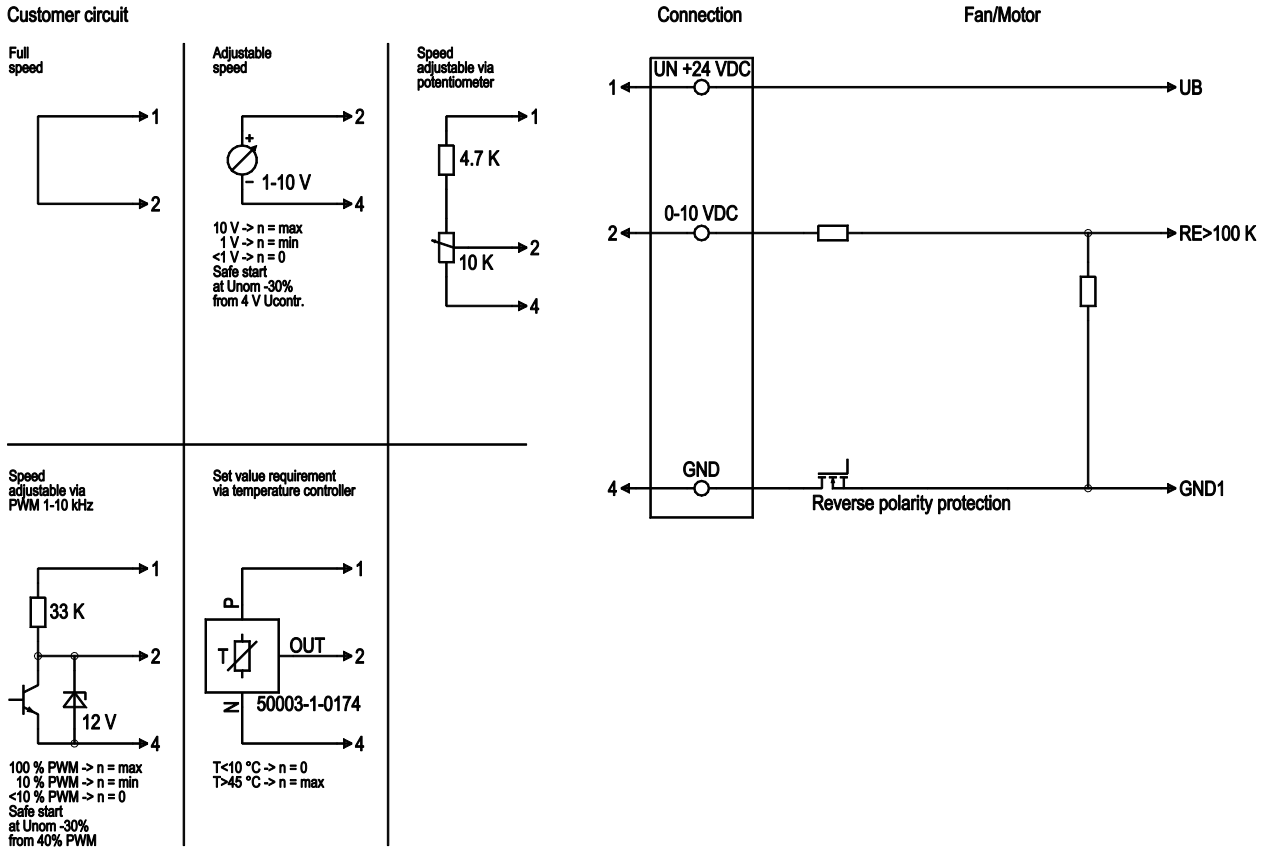
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	4	GND	blue	Reference ground

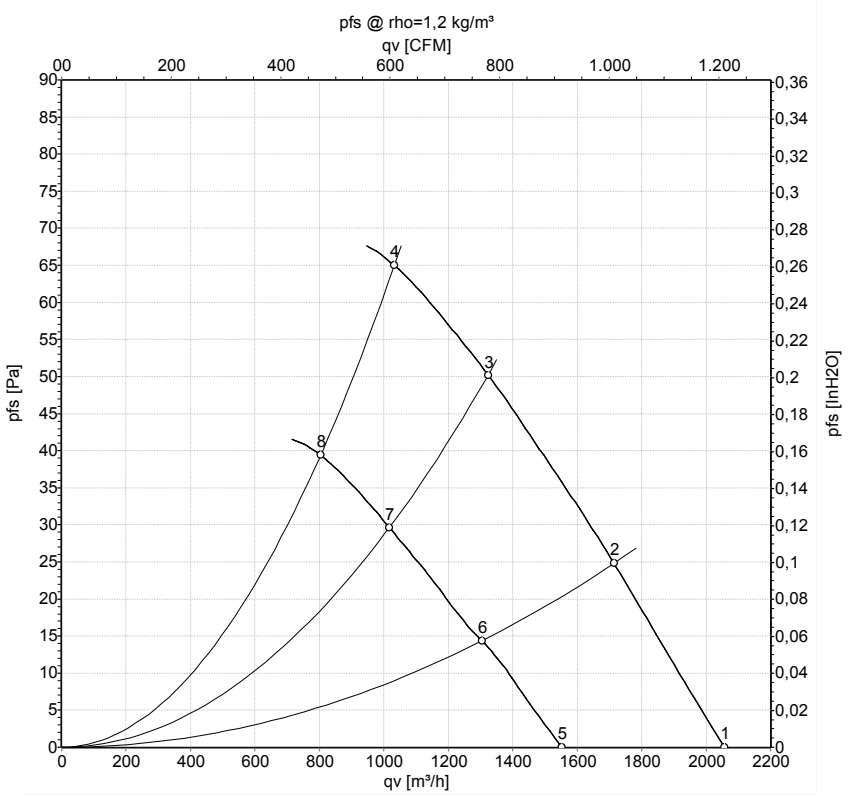
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Curves: Air performance



Measurement: LU-162556-1
Measurement: LU-162738-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	24-30	1530	48		55	61	2055	0	1210	0.00
2	24-30	1460	51		55	62	1715	25	1010	0.10
3	24-30	1405	52		55	64	1325	50	780	0.20
4	24-30	1370	54		55	64	1030	65	605	0.26
5	16	1155	21	1.68			1550	0	915	0.00
6	16	1120	22	1.83			1305	14	770	0.06
7	16	1085	24	1.97			1015	30	600	0.12
8	16	1060	25	2.06			805	39	475	0.16

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side · q_V = Air flow
p_{fs} = Pressure increase

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