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Nominal data

Type	W1G300-EC24-03/AF01	
Motor	M1G074-CF	
Nominal voltage	VDC	26
Nominal voltage range	VDC	18 .. 32
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	3040
Power consumption	W	245
Current draw	A	10.5
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	85

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

EC axial fan

with brushless DC motor

Automotive

Technical description

Weight	2.95 kg
Fan size	300 mm
Electronics housing material	Die-cast aluminum, painted black
Impeller material	PBT plastic
Housing material	Die-cast aluminum
Fan housing material	PP plastic
Guard grille material	S235JR phosphatiert(RAL 9005)
Number of blades	5
Motor suspension	Motor vibration-damped on both sides
Airflow direction	"V"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP24 KM; (motor); electronics IP 66 / 69 K
Insulation class	"B"
Ambient temperature note	Above +70°C with power derating; External sources of heat above 85°C can affect the service life
Max. permitted ambient temp. for motor (transport/storage)	+90 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Load dump (58 V) - Motor current limitation - Soft start - Control input 0-10 VDC/PWM - Temperature derating - Overvoltage detection - Thermal overload protection for electronics - Line undervoltage detection
Speed levels	3
EMC regulations	According to ECE R10 Rev. 5
Electrical hookup	Integrated connector (pluggable directly on fan)
Motor protection	Locked-rotor protection
Approval	EAC

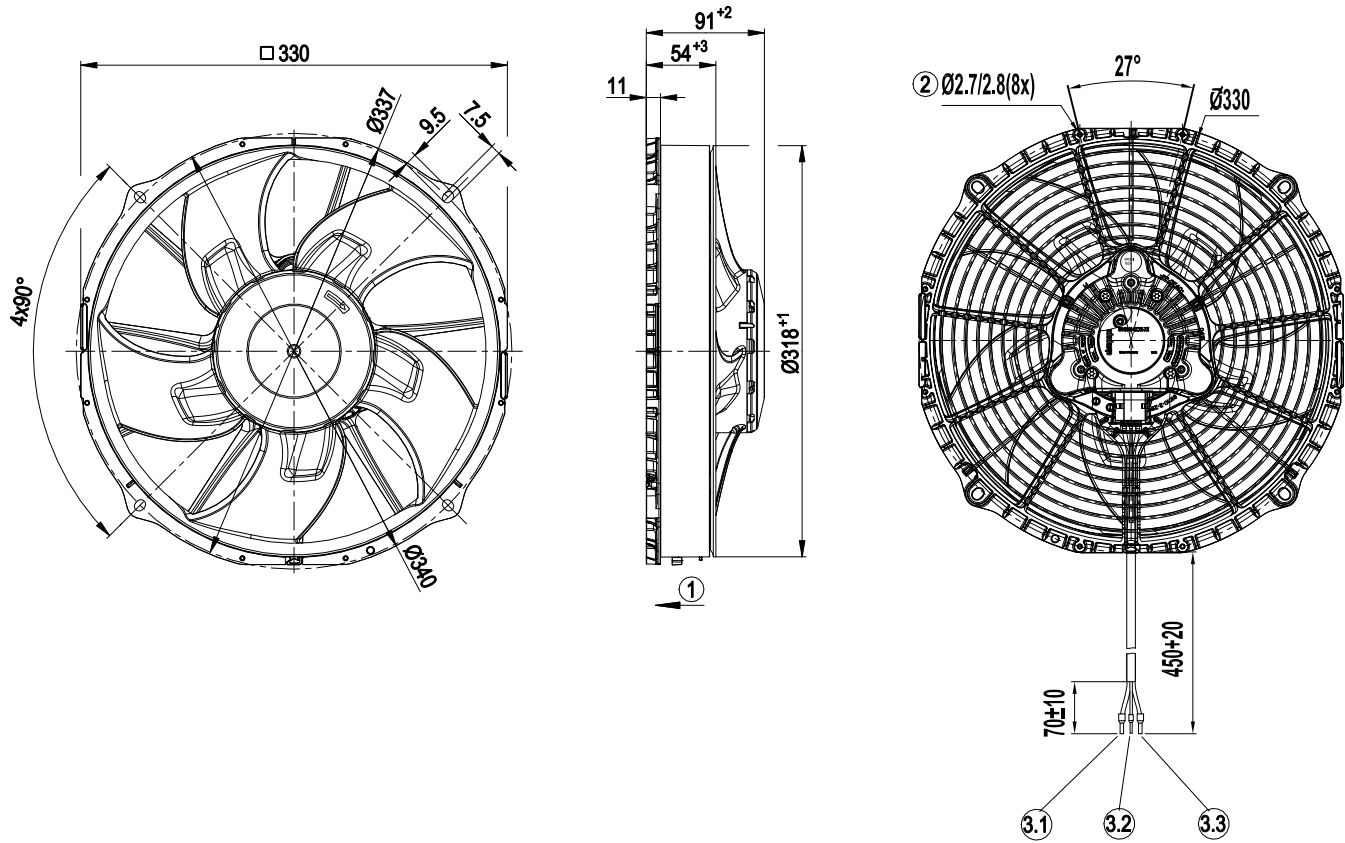


EC axial fan

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Product drawing



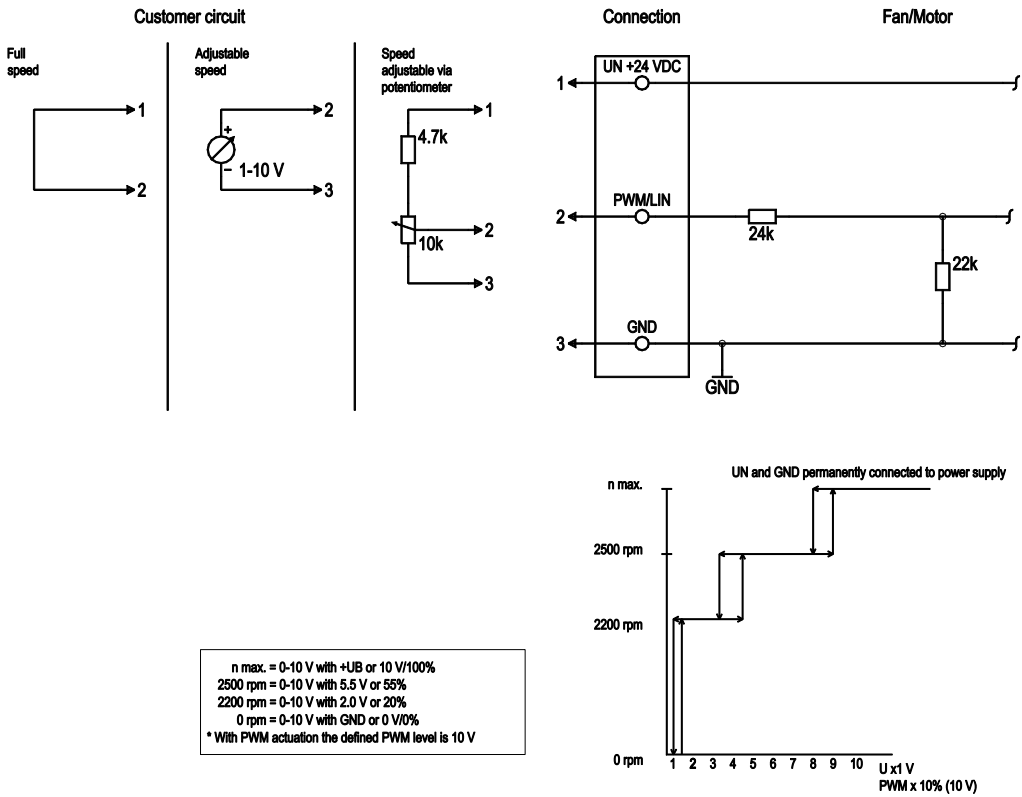
1	Direction of air flow "V"
2	on both sides for screws for fastening plastics, Ø 3.5 mm
3	connector: 3 brass lead tips, 2*V3AE0052, 1* V3AE0041
3.1	+ UB(Black)
3.2	PWM/LIN(yellow)
3.3	GND(brown)

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Connection diagram



No.	Colour	Designation	Function/assignment
1	black	UN +24 VDC	Power supply 24 VDC, maximum ripple 3.5%
2	yellow	PWM/LIN	Control input analog voltage 0-10 V or PWM (1-10 kHz/10 V signal level)/three speed levels
3	brown	GND	Reference ground

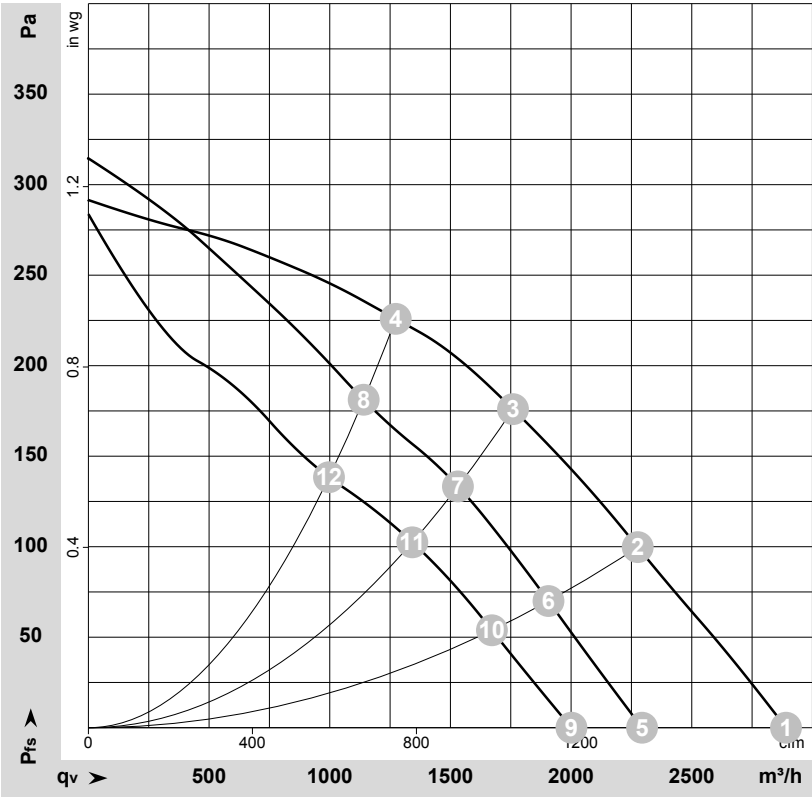


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Curves: Air performance



$\rho = 1.15\ kg/m^3 \pm 2\ \%$

Measurement: LU-167920-1
Measurement: LU-159645-1
Measurement: LU-159646-1

Air performance measured according to ISO 5801 installation category A, but without guard grille. For detailed information on the measurement setup, please have a contact with 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	26	3040	245	10.50	74	81	2890	0	1700	0.00
2	26	2920	241	10.44	74	82	2275	100	1340	0.40
3	26	2885	238	10.36	75	83	1760	175	1035	0.70
4	26	2795	237	10.22	75	84	1275	225	750	0.90
5	26	2500	128	5.16	69	76	2295	0	1350	0.00
6	26	2500	147	6.00	70	78	1905	70	1120	0.28
7	26	2500	156	6.39	71	79	1530	135	900	0.54
8	26	2500	164	6.75	72	81	1140	181	670	0.73
9	26	2200	89	3.51	66	73	2000	0	1180	0.00
10	26	2200	101	3.99	67	75	1670	54	985	0.22
11	26	2200	106	4.20	68	76	1340	102	790	0.41
12	26	2200	111	4.43	68	77	995	138	585	0.55

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

