W3G500-XS04-10

EC axial fan - AxiEco

Fan housing with guard grille

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Nominal data

Type	**W3G500-XS04-10**
Motor	**M3G074-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	660
Power consumption	W	98
Current draw	A	0.9
Max. back pressure	Pa	59
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

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Technical description

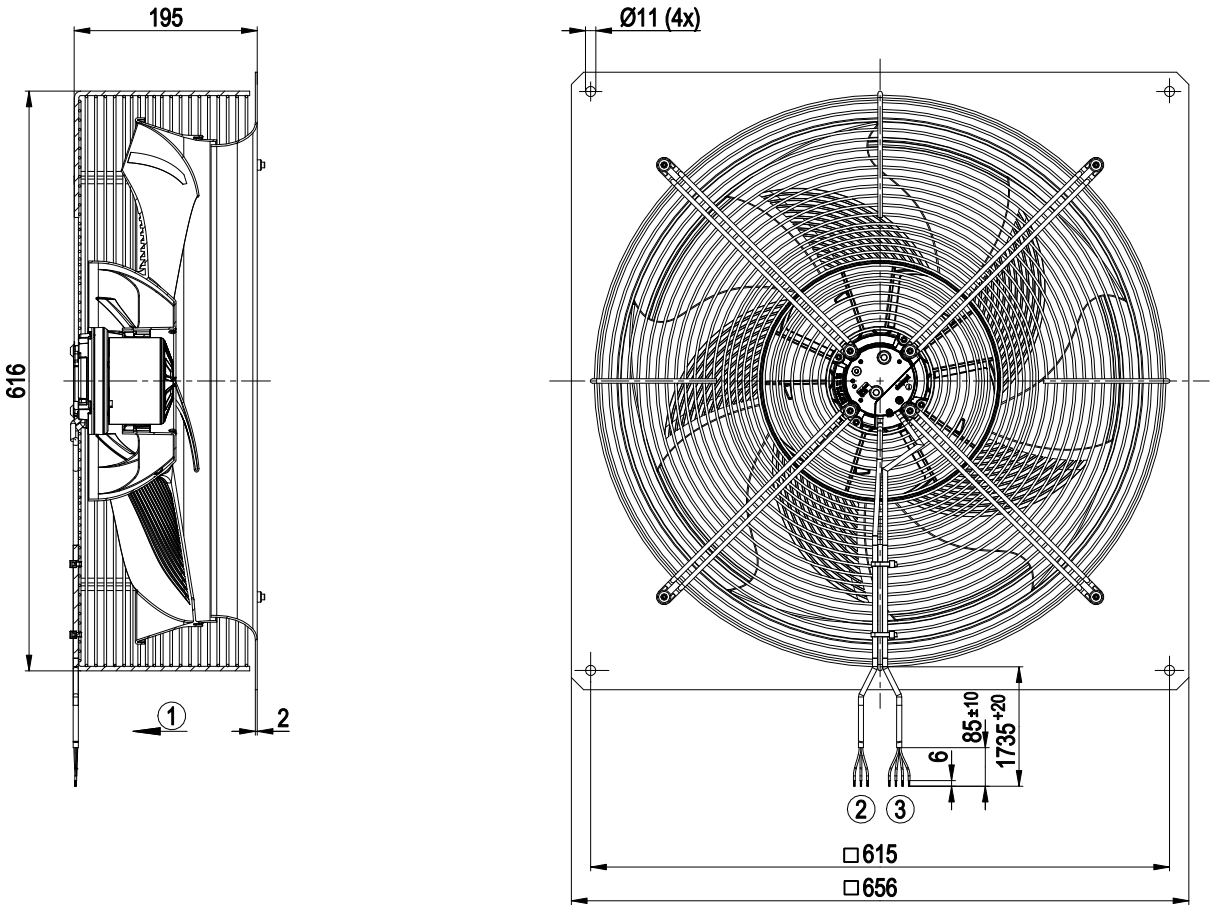
Size	500 mm
Motor size	74
Rotor surface	Galvanized
Blade material	PA plastic
Inlet ring material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H2
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing made of stainless steel; (sealed)
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE

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Product drawing



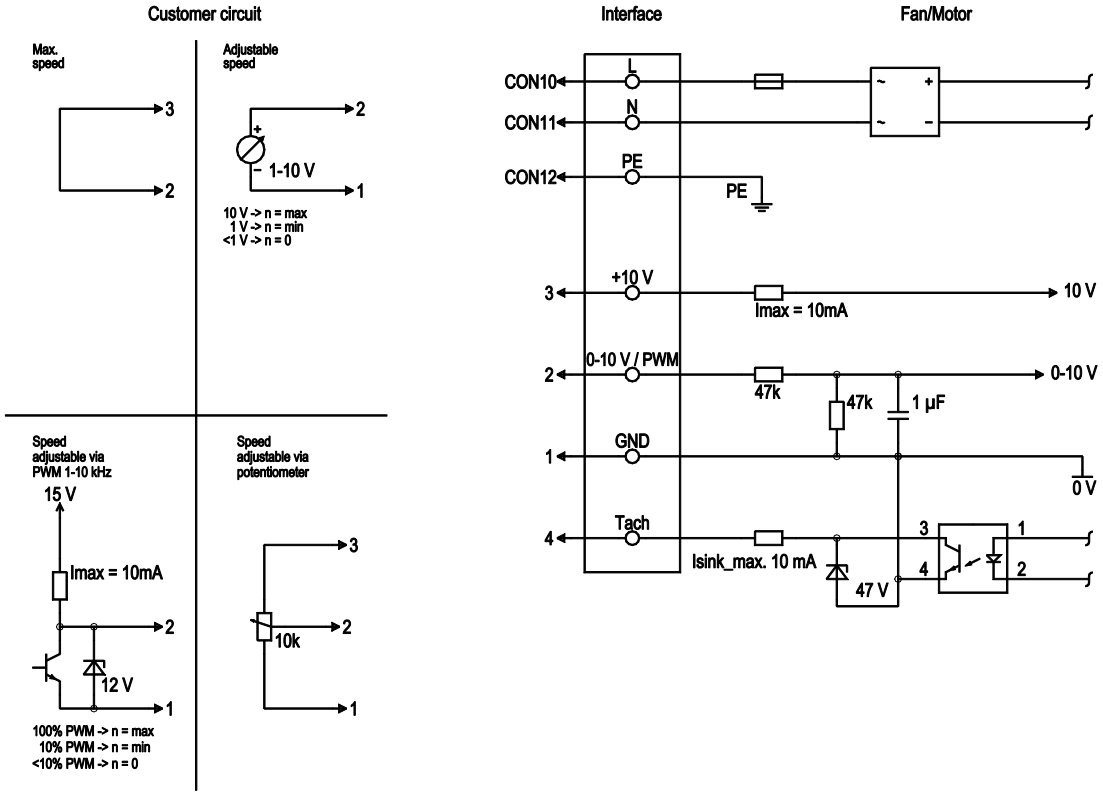
1	Airflow direction "V"
2	Cable PVC AWG20
	3x splice
3	Cable PVC AWG22
	4x splice

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Connection diagram



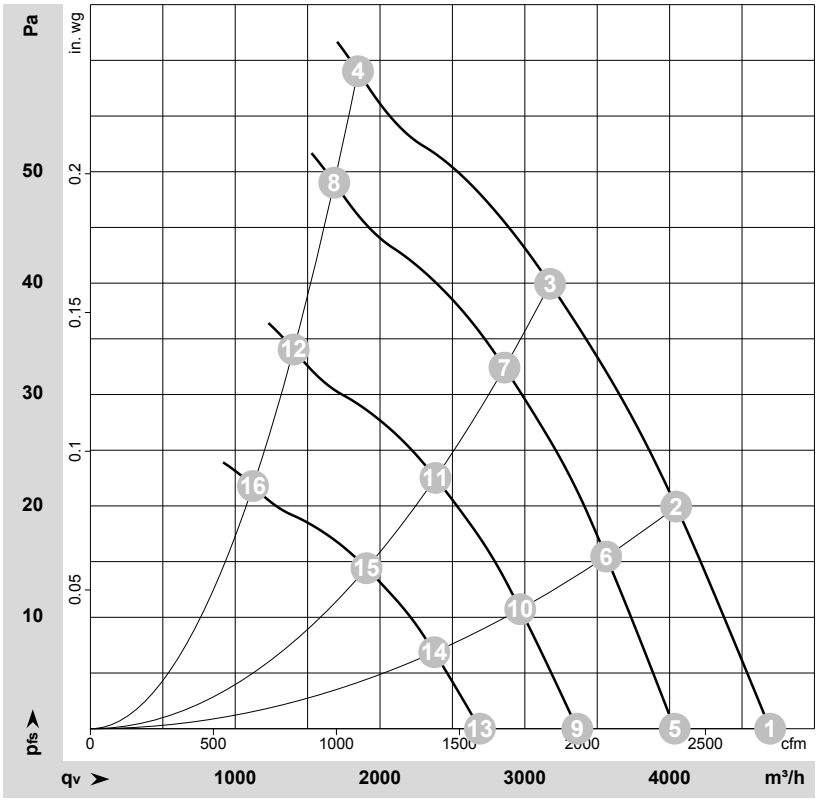
No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-215227-1

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

	Wired	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	1~	230	50	700	79	0.72	53	61	63	4695	0	2765	0.00
2	1~	230	50	680	89	0.80	51	58	60	4045	20	2380	0.08
3	1~	230	50	665	96	0.85	49	56	59	3175	40	1870	0.16
4	1~	230	50	660	98	0.90	51	58	63	1850	59	1090	0.24
5	1~	230	50	600	50	0.46	50	57	59	4035	0	2375	0.00
6	1~	230	50	600	60	0.54	47	55	57	3560	16	2095	0.06
7	1~	230	50	600	70	0.62	46	54	56	2860	32	1685	0.13
8	1~	230	50	600	75	0.66	48	56	60	1685	49	990	0.20
9	1~	230	50	500	29	0.26	45	52	55	3365	0	1980	0.00
10	1~	230	50	500	35	0.31	43	50	52	2970	11	1745	0.04
11	1~	230	50	500	41	0.36	42	49	52	2385	23	1405	0.09
12	1~	230	50	500	43	0.38	44	51	56	1405	34	825	0.14
13	1~	230	50	400	15	0.14	39	47	49	2690	0	1585	0.00
14	1~	230	50	400	18	0.16	37	44	47	2375	7	1395	0.03
15	1~	230	50	400	21	0.18	36	44	46	1905	14	1120	0.06
16	1~	230	50	400	22	0.20	38	46	50	1125	22	660	0.09

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

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