

8300100743
VWA0630BSPLS

EC axial panel fan - AxiBlade

sickle-shaped blades (S series)
Fan housing with guard grille

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Item	8300100743	
Motor	E09001-55	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed (rpm)	min ⁻¹	810
Power consumption	W	360
Current draw	A	2.2
Max. back pressure	Pa	100
Max. back pressure	in. wg	0.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Data according to Commission Regulation (EU) 327/2011 (prEN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	48.6	30.6	09 Power consumption P_{ed}	kW	0.32
02 Measurement category		A		09 Air flow q_v	m³/h	6485
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	79
04 Efficiency grade N		58	40	10 Speed (rpm) n	min ⁻¹	805
05 Variable speed drive		Yes		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.
The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

* Specific ratio = $1 + p_g / 100\,000\text{ Pa}$ LU-224054

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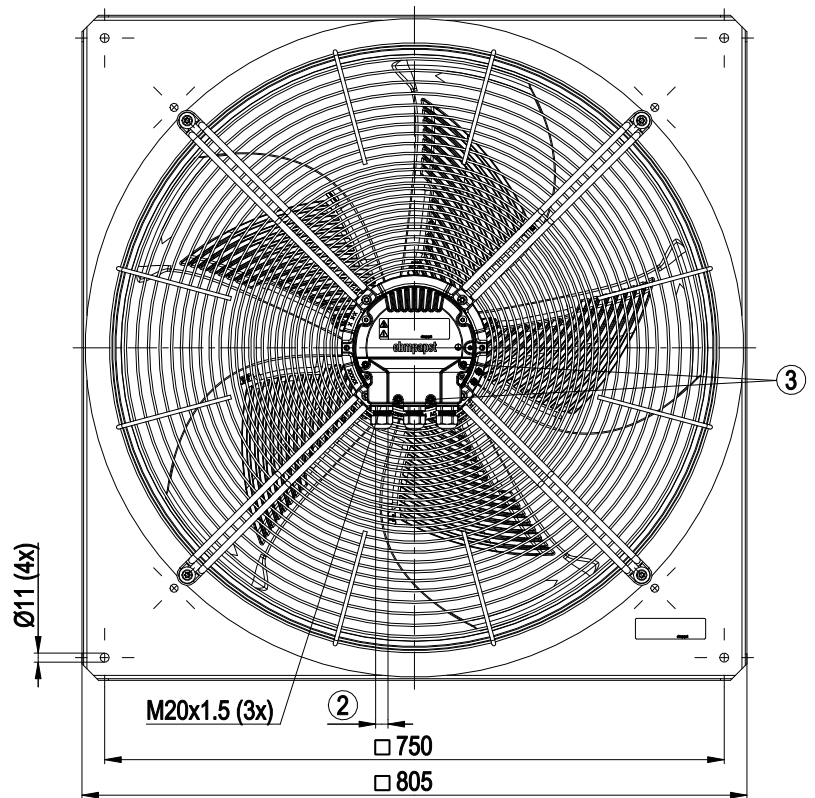
Fan housing with guard grille

Technical description

Size	630 mm
Motor size	90
Rotor surface	Painted black
Terminal box material	PA plastic
Electronics housing material	Die-cast aluminum, painted gray
Impeller material	PP plastic
Fan housing 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
Blade pitch	0°
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP55
Insulation class	"F"
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
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing; (sealed)
Technical features	- Locked-rotor detection - Speed control - Alarm relay - Power limiter - Motor current limitation - PFC, passive - Soft start - Control interface with SELV potential safely disconnected from the mains - Temperature derating - Thermal overload protection for electronics/motor - Line undervoltage / phase failure detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Terminal box
Motor protection	Electronic motor protection
Protection class assignment	I; If a protective earth is connected. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 60335-1; EN 61800-5-1; CE; UKCA
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1

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1	Airflow direction "V"
2	Cable diameter min. 4 mm, max. 10 mm, tightening torque 4 ± 0.6 Nm
	(The tightening torque is designed for PVC cables. If the cable materials are different, the tightening torque may have to be adjusted)
3	Tightening torque 2 ± 0.3 Nm

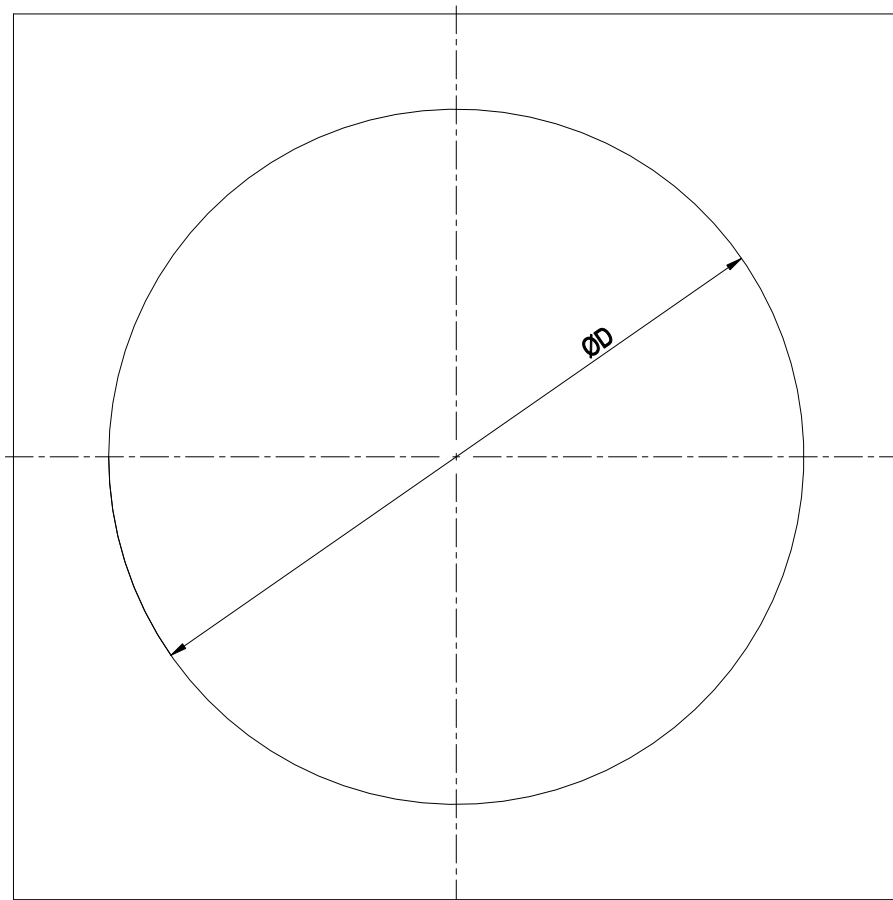
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Mounting dimensions



Diameter of the necessary recess for mounting the fan housing in the end device

BG630: D = Ø785 mm

BG710: D = Ø830 mm

BG800: D = Ø950 mm

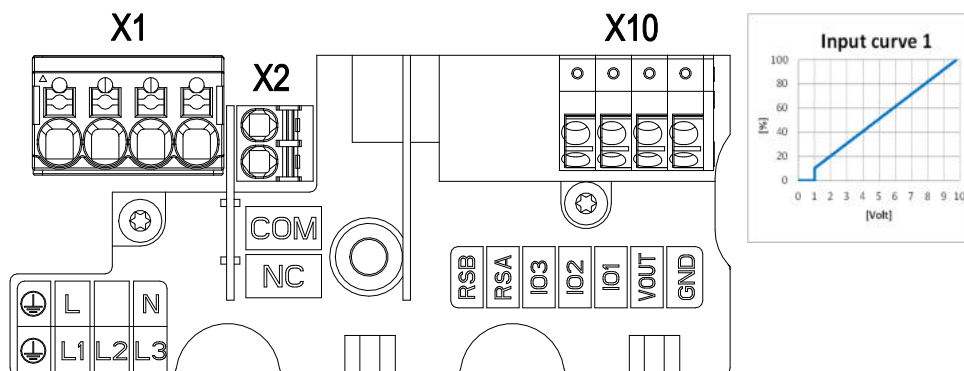
BG910: D = Ø1050 mm

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Connection diagram



No.	Conn.	Designation	Function/assignment
X1	PWR	PE	Protective earth
X1	PWR	L	Power supply, phase, see nameplate for voltage range
X1	PWR	N	Power supply, neutral conductor, see nameplate for voltage range
X2	CTRL	COM	Status relay, floating status contact, common connection, contact rating 250 VAC / 2 A (AC1) / min. 10 mA, reinforced insulation on supply side and on control interface side
X2	CTRL	NC	Status relay, floating status contact, break for failure
X10	CTRL	GND	Reference ground for control interface, SELV
X10	CTRL	Vout	Voltage output 10 VDC +/-3%, I _{max} =10 mA Short-circuit-proof, power supply for external devices, SELV
X10	CTRL	IO1	Factory setting: Analog input 0-10 V / PWM, R _i =100 kΩ, function: set value Characteristic curve parameterizable (see input characteristic curve "Input curve 1"), SELV Function parameterizable at the factory (see table Optional interface functions)
X10	CTRL	IO2	Factory setting: Open collector output, U _{max} =50 VDC, I _{max} =20 mA, function:Tacho output 1 pulse/revolution, SELV Function parameterizable at factory (see table Optional interface functions)

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	INPUT				OUTPUT			
source: set value								
switch: parameter set: #1 / #2								
switch: direction of rotation: cw / ccw								
switch: enable/disable input								
configurable function								
signal: tach out								
signal: diagnostics out								
signal: alarm out								
signal: run monitoring								
signal: status								
signal: configurable function								

Factory configuration option upon request

electrical specification

IO1	◦ Din1 (high active): digital input	active: parametrizable voltage x - 30 VDC not active: pin open or parametrizable voltage < x VDC, SELV Rt = 100 kΩ, characteristic curve parameterizable, $f_{PWM} = 1 \text{ k} - 10 \text{ kHz}$, SELV
	◦ Ain1 0-10 V/PWM: analog input	
	◦ Tach out (open collector)	
	◦ Diagnostics out (open collector)	
	◦ Alarm out (open collector)	
IO2	◦ Open collector	Umax = 50 VDC, Imax = 20 mA, SELV
		Umax = 50 VDC, Imax = 20 mA, SELV
		Umax = 50 VDC, Imax = 20 mA, SELV
COM NC	Relais	250 VAC / 2 A (AC1)
Vout	Voltage output	Voltage 10 VDC, SELV

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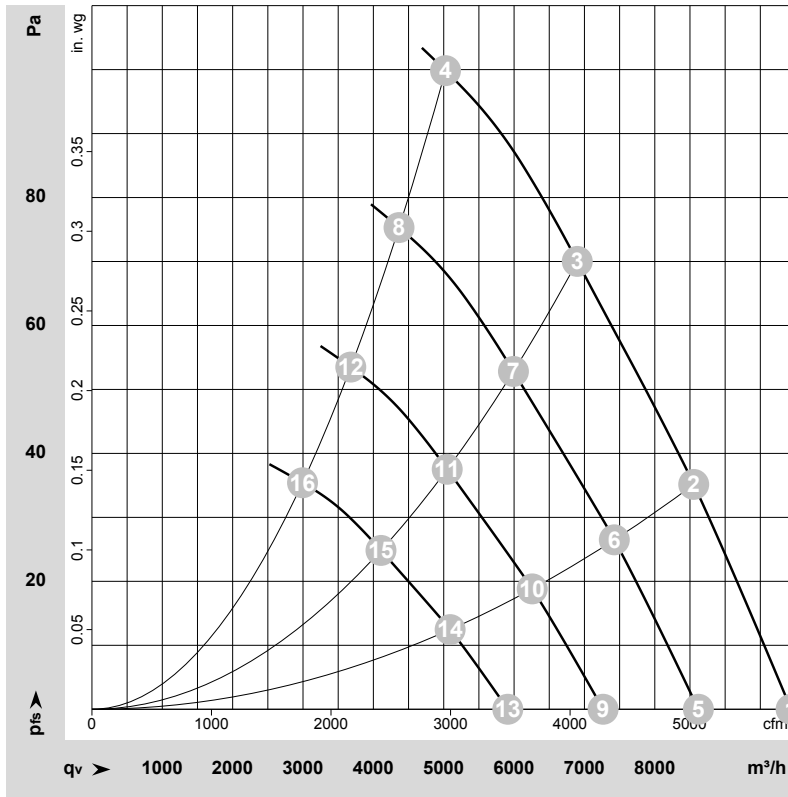
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Curves: Air performance 50 Hz



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

Measurement: LU-224054-1
Date: 2022-12-02
Housing: 15703-2-4037

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 _e	I	LpA _{in}	LwA _{in}	LwA _{out}	LwA	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	dB	m³/h	Pa	cfm	in. wg
1	1~	230	50	810	193	1.27	62	68	69	72	9935	0	5850	0.00
2	1~	230	50	810	256	1.64	59	66	66	69	8555	35	5035	0.14
3	1~	230	50	810	313	1.97	60	67	67	70	6900	70	4060	0.28
4	1~	230	50	810	360	2.20	67	75	75	78	5025	100	2960	0.40
5	1~	230	50	700	126	0.83	58	65	65	68	8620	0	5075	0.00
6	1~	230	50	700	168	1.07	56	62	63	65	7425	27	4370	0.11
7	1~	230	50	700	205	1.29	57	63	63	66	5990	53	3525	0.21
8	1~	230	50	700	234	1.46	64	71	71	74	4365	75	2570	0.30
9	1~	230	50	590	76	0.50	54	60	61	64	7265	0	4275	0.00
10	1~	230	50	590	100	0.64	52	58	58	61	6260	19	3685	0.08
11	1~	230	50	590	123	0.77	52	59	59	62	5050	38	2970	0.15
12	1~	230	50	590	140	0.87	60	67	67	70	3680	54	2165	0.22
13	1~	230	50	480	41	0.27	49	55	56	59	5910	0	3480	0.00
14	1~	230	50	480	54	0.35	46	53	53	56	5090	13	2995	0.05
15	1~	230	50	480	66	0.42	47	54	54	57	4110	25	2420	0.10
16	1~	230	50	480	76	0.47	54	62	62	65	2995	35	1760	0.14

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = 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