8300101308

VUB0500CSNFS

EC axial panel fan - AxiEco

with inlet ring and air inlet grille

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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Nominal data

Item	**8300101308**
Motor	**E07432-29**

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}	630
Power consumption	W	85
Current draw	A	0.7
Max. back pressure	Pa	55
Max. back pressure	in. wg	0.22
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	Thick-film passivated
Impeller material	PP plastic
Inlet ring material	ABS plastic
Flowgrid material	PP plastic
Number of blades	5
Airflow direction	A
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Locked-rotor detection - Tach output - Speed control - 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 assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Conformity with standards	EN 60335-1; EN 60034-1; EN 60204-1; CE; UKCA
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.

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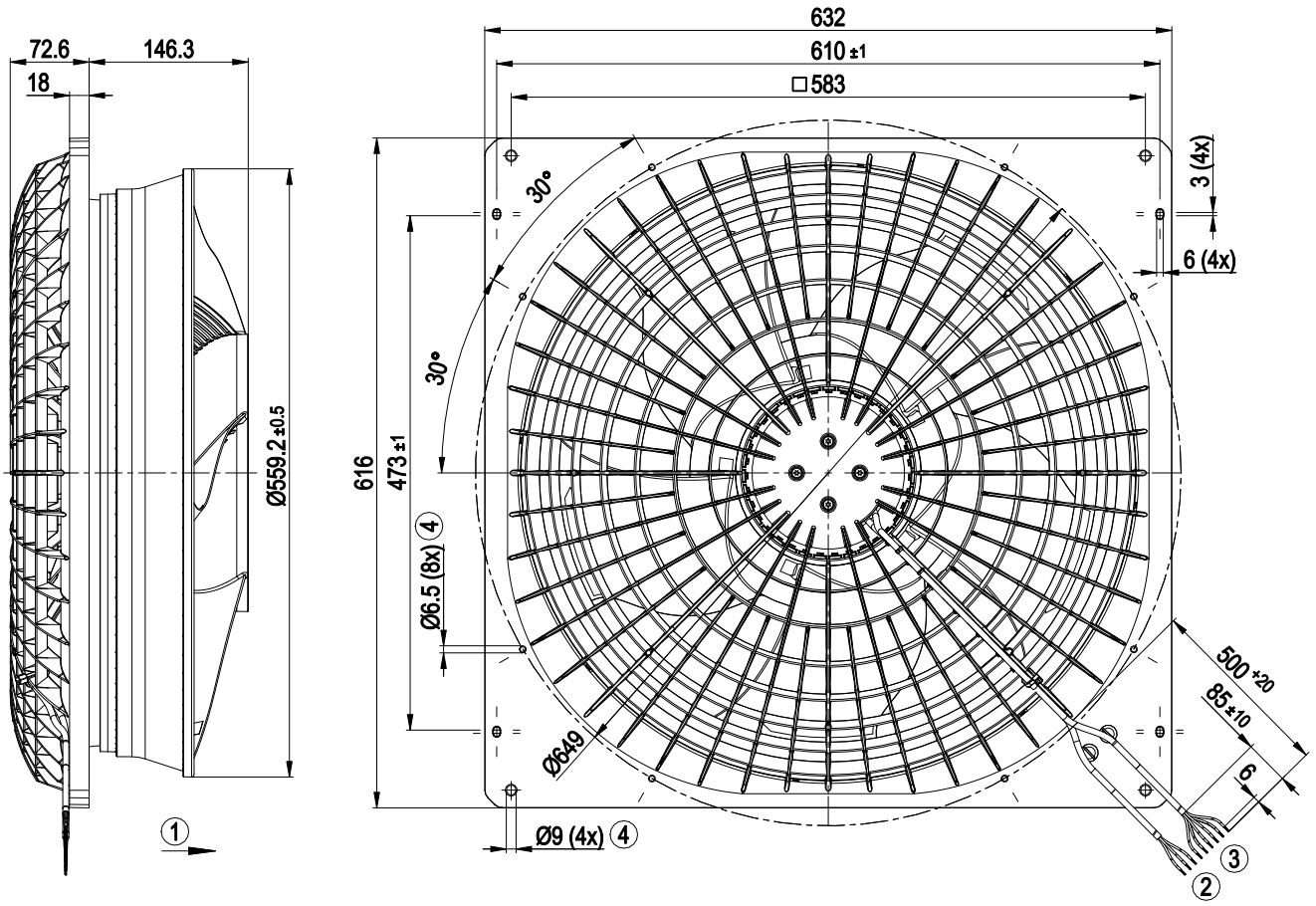
Product drawing



1	Direction of air flow "A"
2	Supply line (PWR) PVC AWG20
	3x splice
3	Control wire (CTRL) PVC AWG22
	6x splice
4	Fastening holes are provided and must be opened subsequently if necessary

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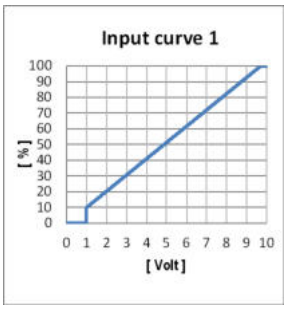
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	PWR	L	black	Power supply, phase, see nameplate for voltage range
	PWR	N	blue	Power supply, neutral conductor, see nameplate for voltage range
	PWR	PE	green/yellow	Protective earth
	CTRL	GND	blue	Reference ground for control interface, SELV
	CTRL	IO1	yellow	Factory setting: Analog input 0-10 V/PWM, Ri=100 KΩ, fPWM=1 kHz..10 kHz, Function: Speed set value Characteristic curve parameterizable (see "Input curve 1"), SELV Function parameterizable at the factory (see Optional interface functions table)
	CTRL	IO2	white	Factory setting: Open collector output, Umax=50 VDC, Imax= 10 mA, function: Tach output 1 pulse/revolution, SELV Function parameterizable at factory (see table Optional interface functions)
	CTRL	Vout	red	Voltage output 10 VDC +/-3%, Imax=1.1 mA Not short-circuit-proof, power supply for external devices, SELV

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Terminal/plug assignment

Basic (B4)
Factory configuration option upon request

○ *Factory configuration option*

	configurable IO mode	electrical specification	INPUT: source: set value	INPUT: switch: parameter set: #1 / #2	INPUT: switch: direction of rotation: cw / ccw	INPUT: switch: enable/disable input	INPUT: configurable function	OUTPUT: signal: tach out	OUTPUT: signal: diagnostics out	OUTPUT: signal: alarm out	OUTPUT: signal: run monitoring	OUTPUT: signal: status	OUTPUT: signal: configurable function
IO1	○ **Din1 (high active):** digital input	active: parameterizable voltage x-30 VDC not active: pin open or parameterizable voltage <x VDC, SELV		○	○	○	○						
	○ **Ain1 0-10 V/PWM:** analog input	Ri = 100 kΩ, characteristic curve parameterizable, f_{PWM} = 1k..10 kHz, SELV	○				○						
IO2	○ **Tach out** (open collector)	Umax=50 VDC, Imax=10 mA, SELV						○					
	○ **Diagnostics out** (open collector)	Umax=50 VDC, Imax=10 mA, SELV							○				
	○ **Alarm out** (open collector)	Umax=50 VDC, Imax=10 mA, SELV								○			
	○ **Open collector**	Umax=50 VDC, Imax=10 mA, SELV									○	○	○
Vout	Voltage output	Voltage10 VDC, SELV											

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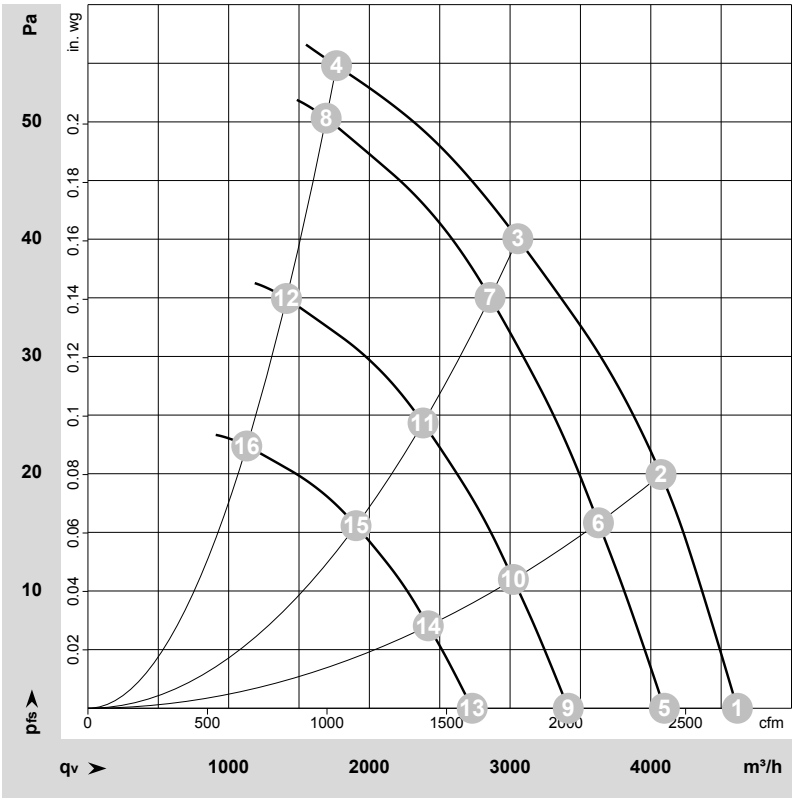
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-229432-1
Date: 2023-10-30
Nozzle: 8217117858

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	m^3/h	Pa	cfm	in. wg
1	1~	230	50	675	66	0.56	56	63	64	67	4615	0	2715	0.00
2	1~	230	50	675	81	0.67	53	60	62	64	4075	20	2395	0.08
3	1~	230	50	640	85	0.70	49	56	59	61	3055	40	1800	0.16
4	1~	230	50	630	85	0.70	49	57	60	62	1765	55	1040	0.22
5	1~	230	50	600	46	0.39	53	60	61	64	4095	0	2410	0.00
6	1~	230	50	600	57	0.47	50	57	59	61	3630	16	2135	0.06
7	1~	230	50	600	69	0.57	47	55	57	59	2860	35	1680	0.14
8	1~	230	50	600	74	0.62	48	56	59	61	1695	50	995	0.20
9	1~	230	50	500	27	0.23	48	55	57	59	3415	0	2010	0.00
10	1~	230	50	500	33	0.27	46	53	54	57	3025	11	1780	0.04
11	1~	230	50	500	40	0.33	43	50	53	55	2380	24	1400	0.10
12	1~	230	50	500	43	0.36	44	51	54	56	1410	35	830	0.14
13	1~	230	50	400	14	0.12	42	50	51	53	2730	0	1605	0.00
14	1~	230	50	400	17	0.14	40	47	49	51	2420	7	1425	0.03
15	1~	230	50	400	21	0.17	37	44	47	49	1905	16	1120	0.06
16	1~	230	50	400	22	0.18	38	46	49	50	1130	22	665	0.09

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

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