

8300101333
VVY0350CSNFS

EC axial panel fan - AxiEco

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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Item	8300101333	
Motor	E07433-29	
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	1500
Power consumption	W	170
Current draw	A	1.4
Max. back pressure	Pa	155
Max. back pressure	in. wg	0.62
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

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

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	51.3	28.8	09 Power consumption P_{ed}	kW	0.16
02 Measurement category		A		09 Air flow q_v	m ³ /h	2340
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	116
04 Efficiency grade N		62.5	40	10 Speed (rpm) n	min ⁻¹	1535
05 Variable speed drive		Yes		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

* Specific ratio = $1 + p_s / 100\,000\text{ Pa}$

LU-227890

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).

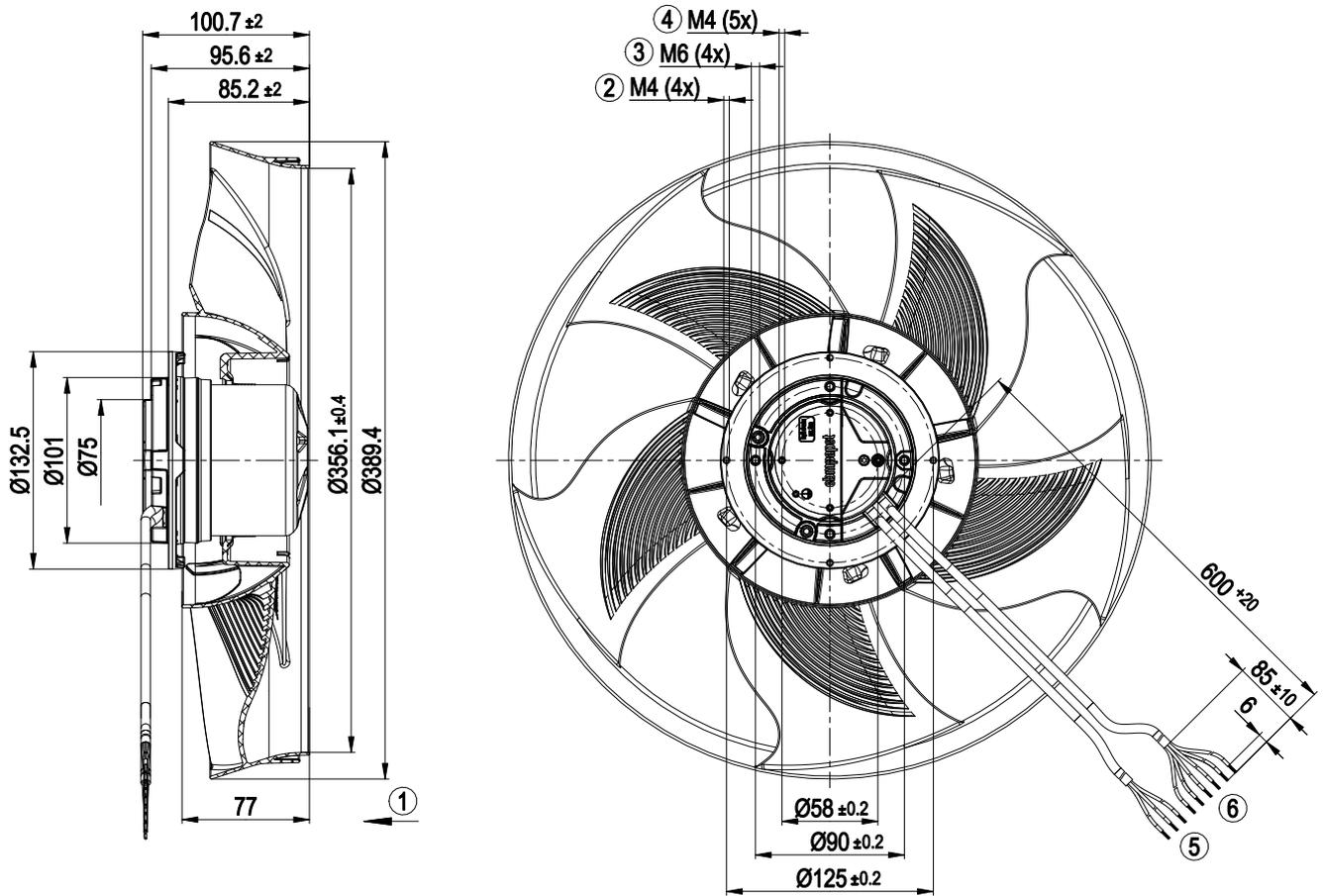
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Technical description

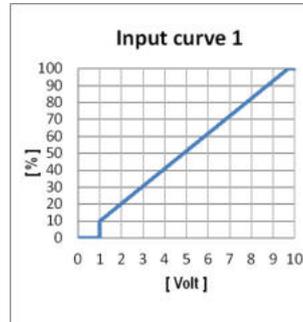
Size	350 mm
Motor size	74
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PP plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	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	<ul style="list-style-type: none">- 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
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1

Product drawing



1	Airflow direction "V"
2	Max. clearance for screw 10 mm
3	Max. clearance for screw 10 mm
4	Max. clearance for screw 5 mm
5	Supply line (PWR) PVC AWG20 3x splice
6	Control wire (CTRL) PVC AWG22 6x splice

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, $R_i=100\text{ K}\Omega$, $f_{\text{PWM}}=1\text{ kHz}..10\text{ kHz}$, 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, $U_{\text{max}}=50\text{ VDC}$, $I_{\text{max}}=10\text{ mA}$, function: Tach output 1 pulse/revolution, SELV Function parameterizable at factory (see table Optional interface functions)
	CTRL	Vout	red	Voltage output 10 VDC $\pm 3\%$, $I_{\text{max}}=10\text{ mA}$ Short-circuit-proof, power supply for external devices, SELV
	CTRL	-	gray	No function
	CTRL	-	brown	No function

Terminal/plug assignment

	configurable IO mode	electrical specification					
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, $f_{\text{PWM}} = 1\text{ k}..10\text{ kHz}$, 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	Voltage 10 VDC, SELV					

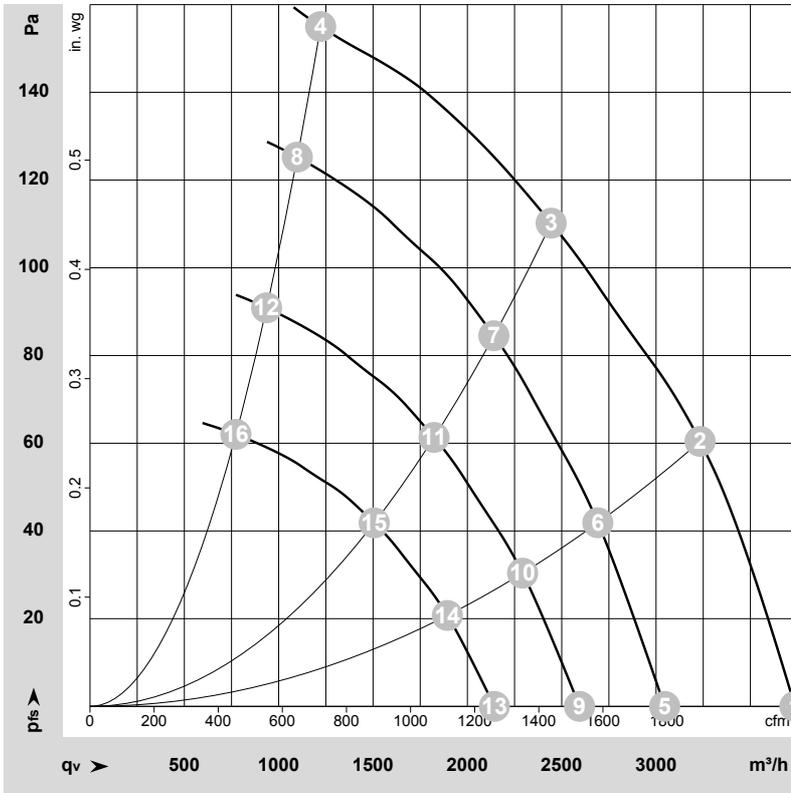
	INPUT	OUTPUT	
source: set value	<input type="checkbox"/>		
switch: parameter set: #1 / #2	<input type="checkbox"/>		
switch: direction of rotation: cw / ccw	<input type="checkbox"/>		
switch: enable/disable input	<input type="checkbox"/>		
configurable function	<input type="checkbox"/>		
signal: tach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

Basic (B4)

Factory configuration option upon request

- o Factory configuration option

Curves: Air performance 50 Hz



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

Measurement: LU-227890-1
Date: 2023-03-07
Nozzle: 35100-2-4013

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}	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	1~	230	50	1655	146	1.24	66	72	3735	0	2200	0.00
2	1~	230	50	1620	170	1.40	64	70	3235	60	1905	0.24
3	1~	230	50	1540	170	1.40	60	68	2445	110	1440	0.44
4	1~	230	50	1500	170	1.40	63	71	1220	155	720	0.62
5	1~	230	50	1350	79	0.67	60	67	3045	0	1795	0.00
6	1~	230	50	1350	96	0.81	59	66	2690	42	1585	0.17
7	1~	230	50	1350	112	0.94	57	64	2140	85	1260	0.34
8	1~	230	50	1350	123	1.03	61	68	1100	126	645	0.51
9	1~	230	50	1150	49	0.41	56	63	2595	0	1525	0.00
10	1~	230	50	1150	60	0.50	55	62	2295	31	1350	0.12
11	1~	230	50	1150	69	0.58	53	60	1825	61	1075	0.24
12	1~	230	50	1150	76	0.64	57	64	935	91	550	0.37
13	1~	230	50	950	28	0.23	52	58	2145	0	1260	0.00
14	1~	230	50	950	34	0.28	50	57	1895	21	1115	0.08
15	1~	230	50	950	39	0.33	48	55	1505	42	885	0.17
16	1~	230	50	950	43	0.36	52	59	775	62	455	0.25

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
q_v = Air flow · P_{fs} = Pressure increase