

8300101289
VWT0450CSLFS

EC axial fan - AxiEco

Fan housing with guard grille

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Nominal data

Item	8300101289	
Motor	E06003-30	
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	525
Power consumption	W	34
Current draw	A	0.31
Max. back pressure	Pa	26
Max. back pressure	in. wg	0.1
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	450 mm
Motor size	60
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PP plastic
Fan housing 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	- 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
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; UKCA; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	UL 1004-7 + 60730-1; CSA C22.2 No. 77 + CAN/CSA-E60730-1



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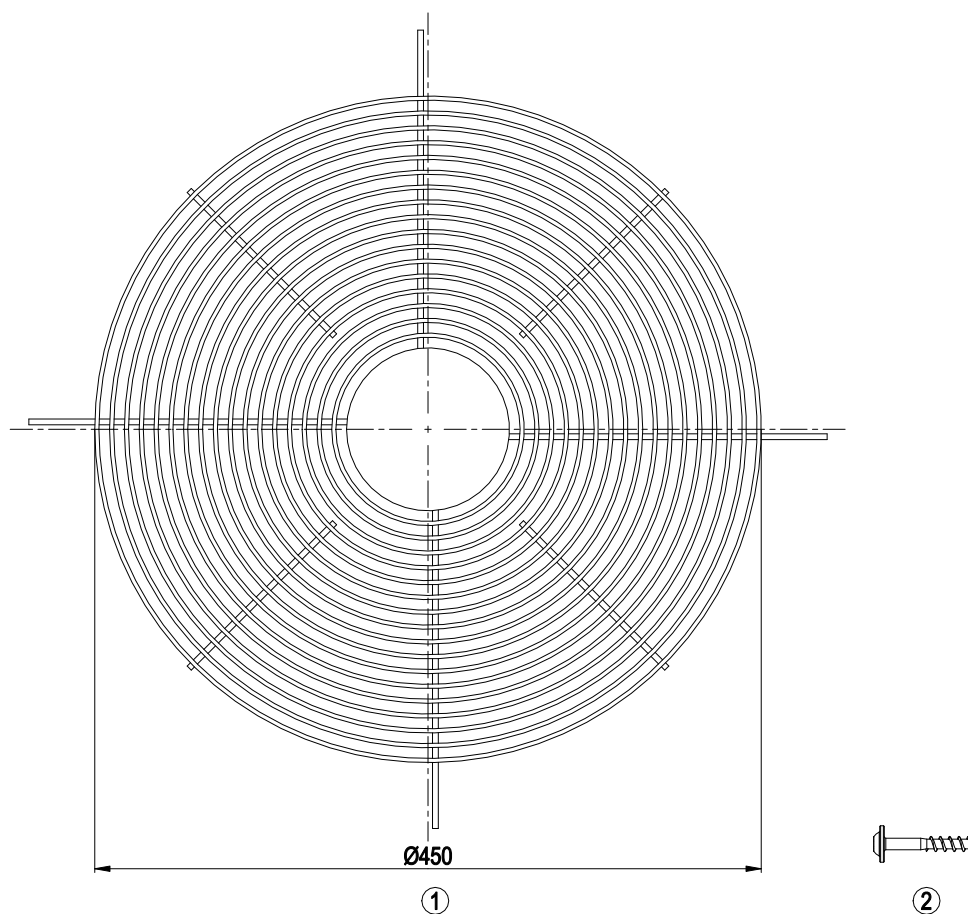
1	Airflow direction "V"
2	Cable PVC AWG20
	3x splice
3	Cable PVC AWG22
-	6x splice
	Accessory part: Guard grill 45050-2-4039 with oval head screw 60080-7-6201 (4x), can be fitted on the intake side. Not included in scope of delivery.
	The installation of accessories may change the air performance and noise values.

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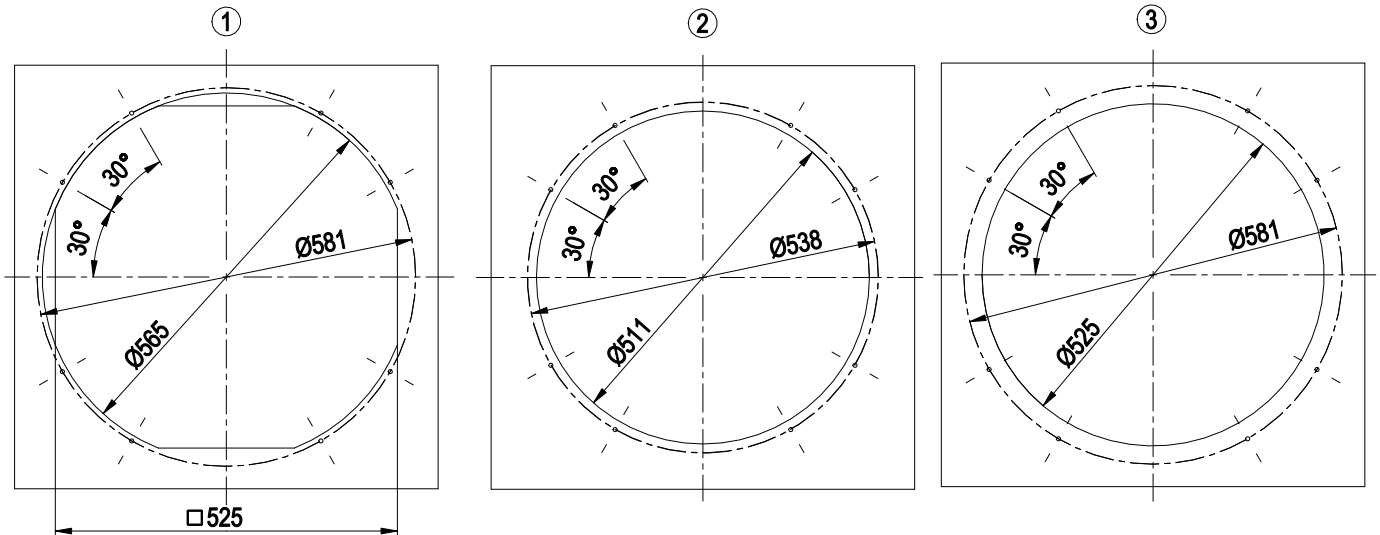
Accessory part



1	Guard grill 45050-2-4039
2	Oval head screw 60080-7-6201 (4x)



Mounting dimensions



All 8 holes on the relevant pitch circle must always be used for all types of fastening.

1 intake-side mounting on flange

2 intake-side mounting on suction nozzle

The Ø6.5 mm holes must be pierced from the underside with a mandrel or similar tool.

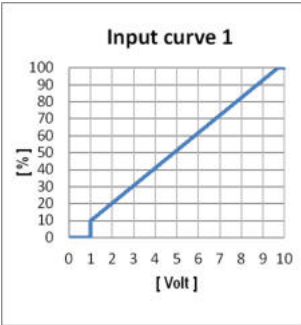
We recommend using M6 cheese-head screws with hexagon socket (DIN 912/DIN EN ISO 4762) for fastening.

3 outlet-side mounting on flange

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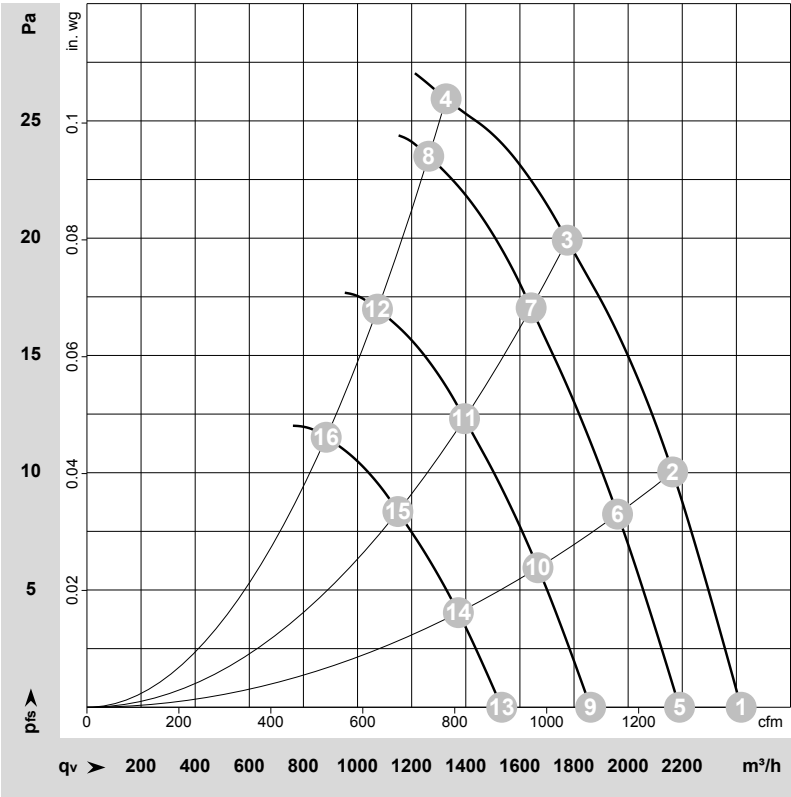
Connection diagram



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=10 mA Short-circuit-proof, power supply for external devices, SELV
	CTRL	-	gray	No function
	CTRL	-	brown	No function



Curves: Air performance 50 Hz



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

Measurement: LU-228116-1

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 _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	550	29	0.27	47	52	52	55	2420	0	1425	0.00
2	1~	230	50	550	32	0.29	45	50	51	53	2165	10	1275	0.04
3	1~	230	50	540	34	0.31	44	49	50	52	1775	20	1045	0.08
4	1~	230	50	525	34	0.31	43	49	49	52	1325	26	780	0.10
5	1~	230	50	500	22	0.20	44	49	49	52	2190	0	1290	0.00
6	1~	230	50	500	24	0.22	42	48	48	51	1960	8	1155	0.03
7	1~	230	50	500	27	0.24	42	47	48	50	1640	17	965	0.07
8	1~	230	50	500	29	0.26	42	48	48	51	1265	24	745	0.10
9	1~	230	50	425	13	0.12	40	45	45	48	1860	0	1095	0.00
10	1~	230	50	425	15	0.13	38	44	44	47	1665	6	980	0.02
11	1~	230	50	425	16	0.15	37	43	43	46	1395	12	820	0.05
12	1~	230	50	425	18	0.16	38	43	44	47	1075	17	630	0.07
13	1~	230	50	350	7.4	0.07	35	40	40	43	1535	0	900	0.00
14	1~	230	50	350	8.2	0.08	33	39	39	42	1375	4	810	0.02
15	1~	230	50	350	9.2	0.08	33	38	39	41	1150	8	675	0.03
16	1~	230	50	350	9.8	0.09	33	39	39	42	885	12	520	0.05

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

