8300100522

VVY0250XUNCZ

EC axial fan

sickle-shaped blades (S series), with brushless DC motor

Automotive

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Nominal data

Item	**8300100522**
Motor	**E07406-15**

Nominal voltage	VDC	27
Nominal voltage range	VDC	16 .. 32
Method of obtaining data		fa
Status		prelim.
Speed (rpm)	min^{-1}	2900
Power consumption	W	110
Current draw	A	4.0
Max. back pressure	Pa	130
Max. back pressure	in. wg	0.52
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

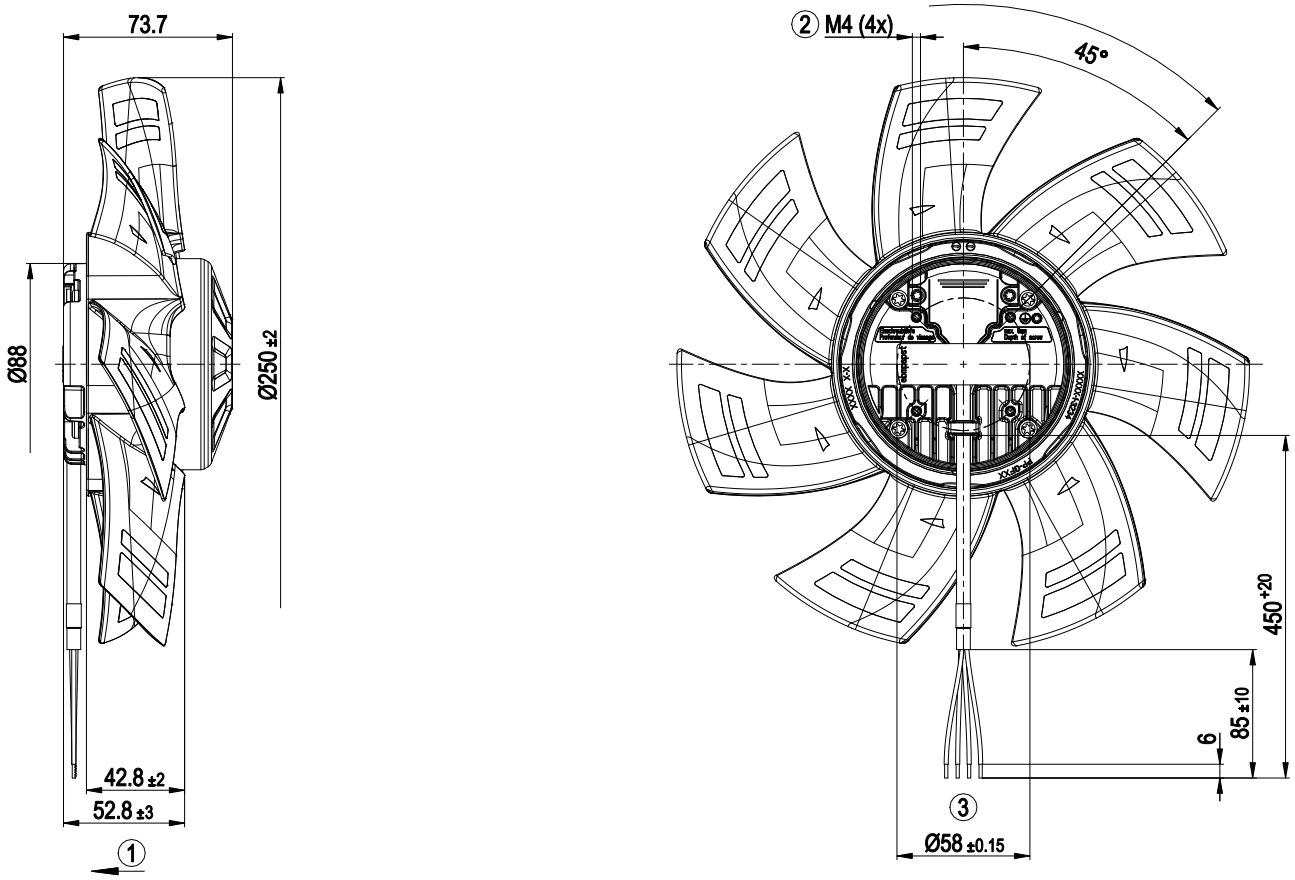
Weight	1.44 kg
Size	250 mm
Motor size	74
Rotor surface	Galvanized
Electronics housing material	Die-cast aluminum, painted black
Impeller material	PP plastic
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	Motor IP24 KM, electronics IP6K9K (mating connector installed)
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H4
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	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Thermal overload protection for electronics - Reverse polarity protection
With cable	Variable
Protection class assignment	III; Requires supply with safety extra-low voltage SELV. 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 components' intended installation and connection.
Approval	EAC

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Product drawing



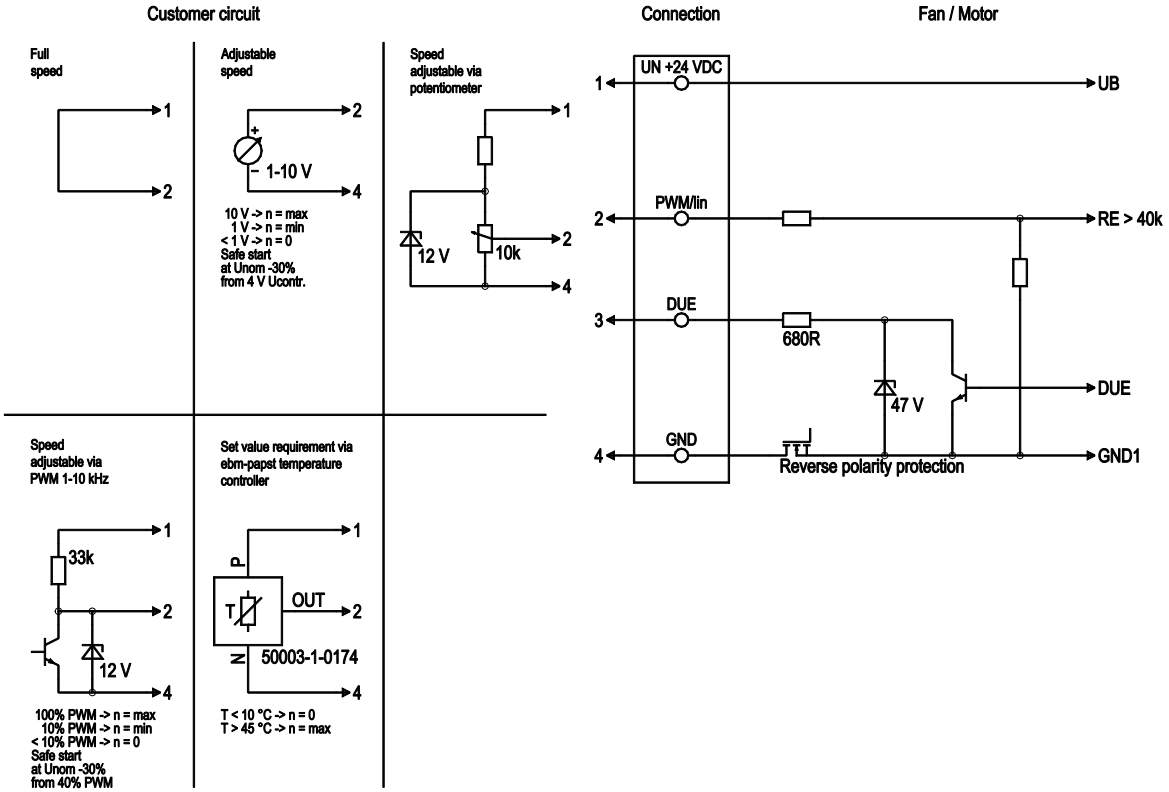
1	Airflow direction "V"
2	Max. clearance for screw 6 mm
3	Cable FLRYW 4x 0.75 mm²
	4x splice

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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	1	UN +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%
	2	PWM/LIN	yellow	Control input Re > 40k
	3	DUE	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference ground

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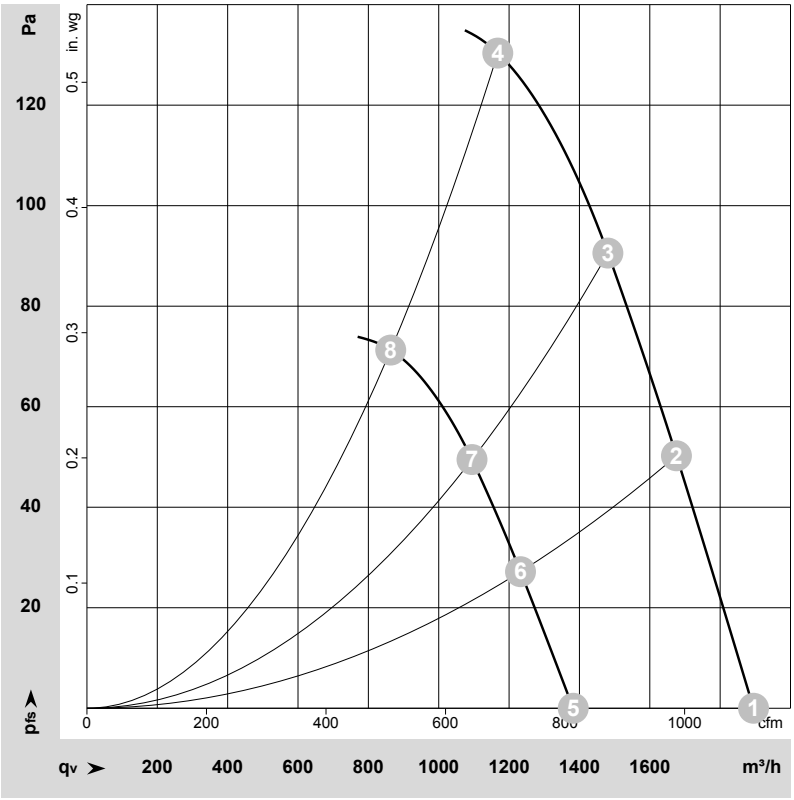
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-220810-1
Measurement: LU-215057-1

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

	U	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	27-32	2900	110	4.00*	66	72	1895	0	1115	0.00
2	27-32	2770	115	4.30*	65	72	1675	50	985	0.20
3	27-32	2695	120	4.40*	65	72	1480	90	870	0.36
4	27-32	2625	123	4.60*	69	76	1170	130	685	0.52
5	16	2120	46	2.87			1380	0	815	0.00
6	16	2050	49	3.07			1230	27	725	0.11
7	16	2005	52	3.21			1095	50	645	0.20
8	16	1965	53	3.32			865	72	510	0.29

U = Voltage · n = Speed (rpm) · P_e = Power consumption · I = Current draw · * = Current measured at nominal voltage · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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