

AC axial panel fan - AxiEco

with guard grille

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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	S4D350-ZP12-01				
Motor	M4D074-DF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min ⁻¹	1320	1440	1320	1440
Power consumption	W	150	215	150	215
Current draw	A	0.54	0.63	0.31	0.36
Max. back pressure	Pa	120	140	120	140
Max. back pressure	in. wg	0.48	0.56	0.48	0.56
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	70	60	70	60
Starting current	A	1.6	1.5	0.9	0.85

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}	%	33.7	28.3	09 Power consumption P_e	kW	0.14
02 Measurement category	A			09 Air flow q_v	m³/h	2065
03 Efficiency category	Static			09 Pressure increase p_{fs}	Pa	88
04 Efficiency grade N	45.4	40		10 Speed (rpm) n	min ⁻¹	1345
05 Variable speed drive	No			11 Specific ratio*		1.00

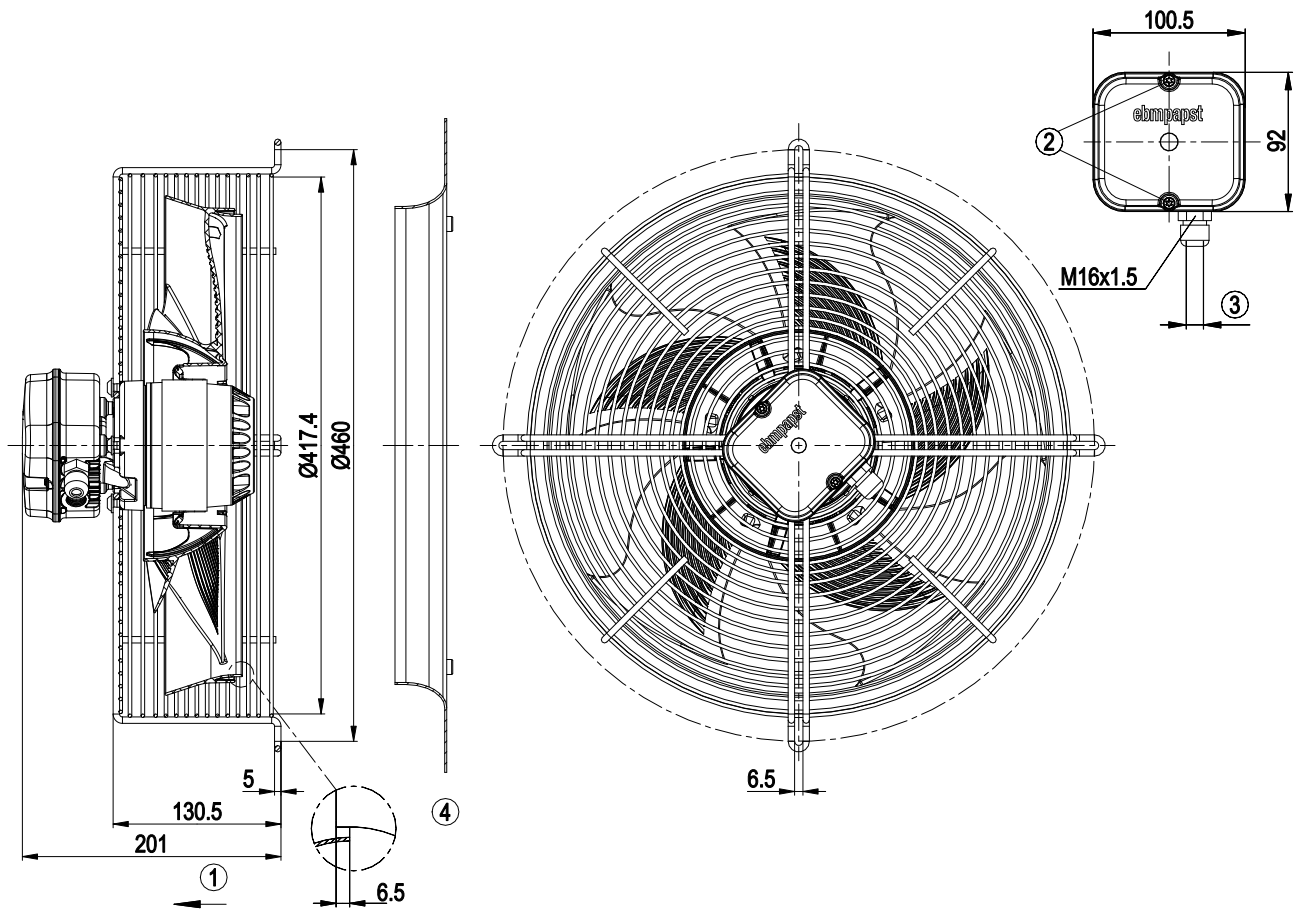
Data obtained at optimum efficiency level.
The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used 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 = $1 + p_{fs} / 100\,000\text{ Pa}$ LU-206811

Technical description

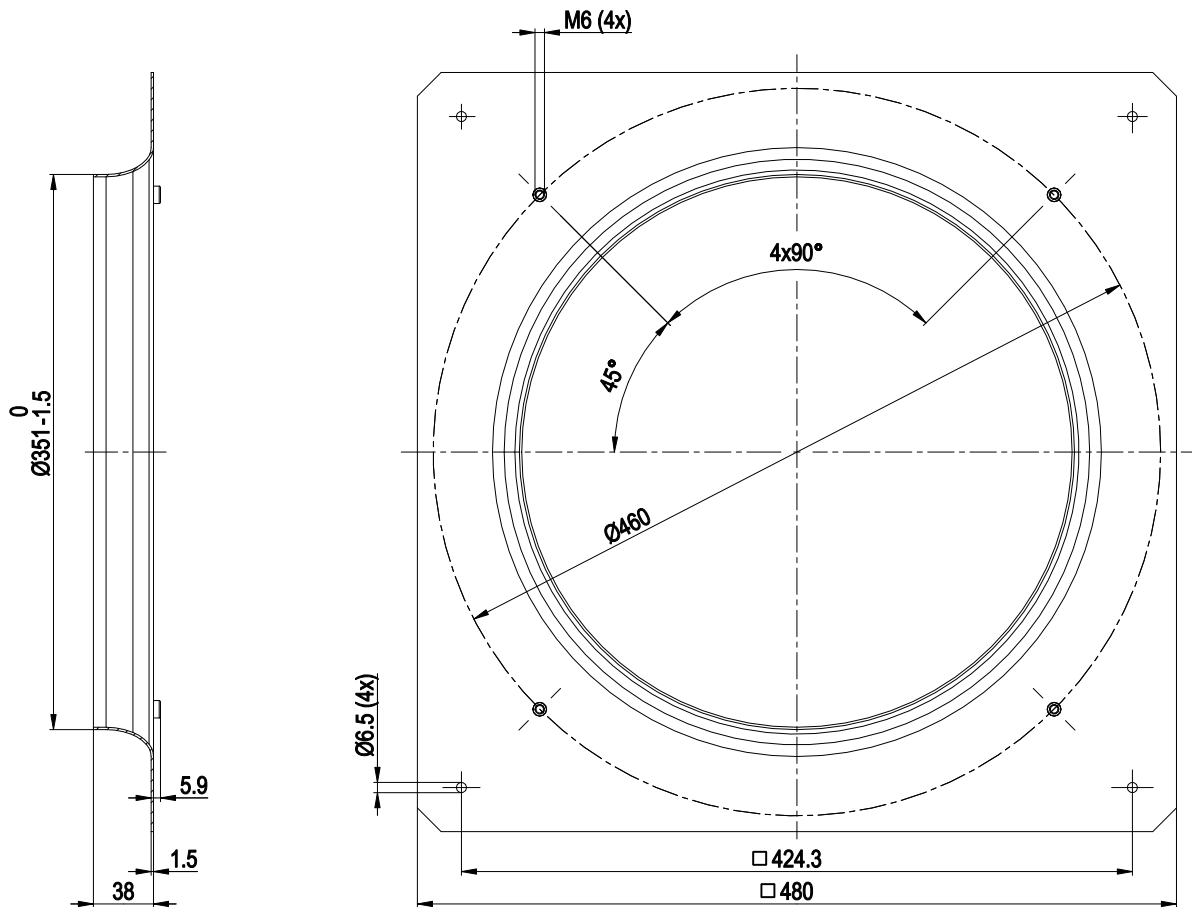
Weight	5,62
Size	350 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	PP plastic
Impeller material	PP plastic, galvanized sheet-metal plate
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal box
Motor protection	Thermal switch auto reset, lead out, with basic insulation
With cable	Axial
Protection class assignment	I; If a protective earth is connected to the PE connection point. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	EAC; CCC

Product drawing



1	Airflow direction "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm
4	Accessory part: Inlet ring 35100-2-4013 not included in scope of delivery

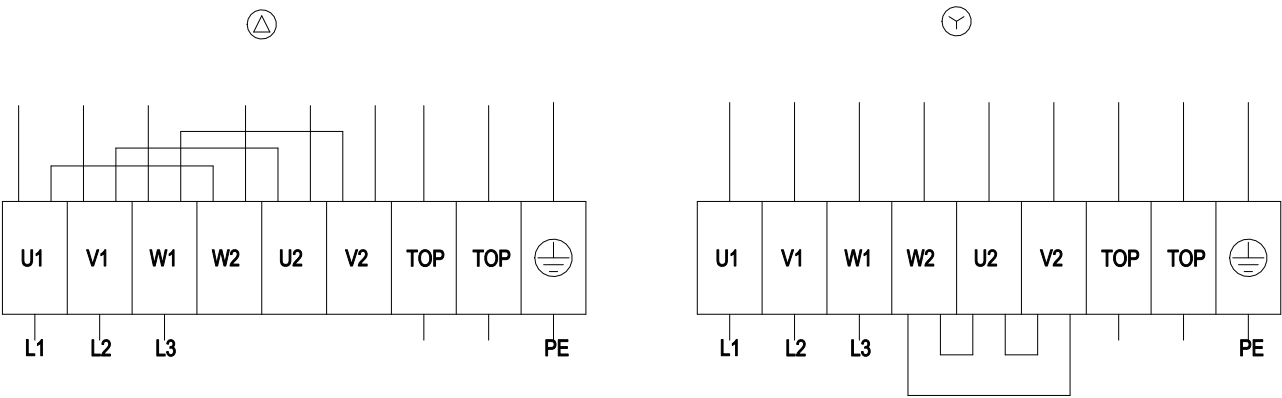
Accessory part



Inlet ring 35100-2-4013

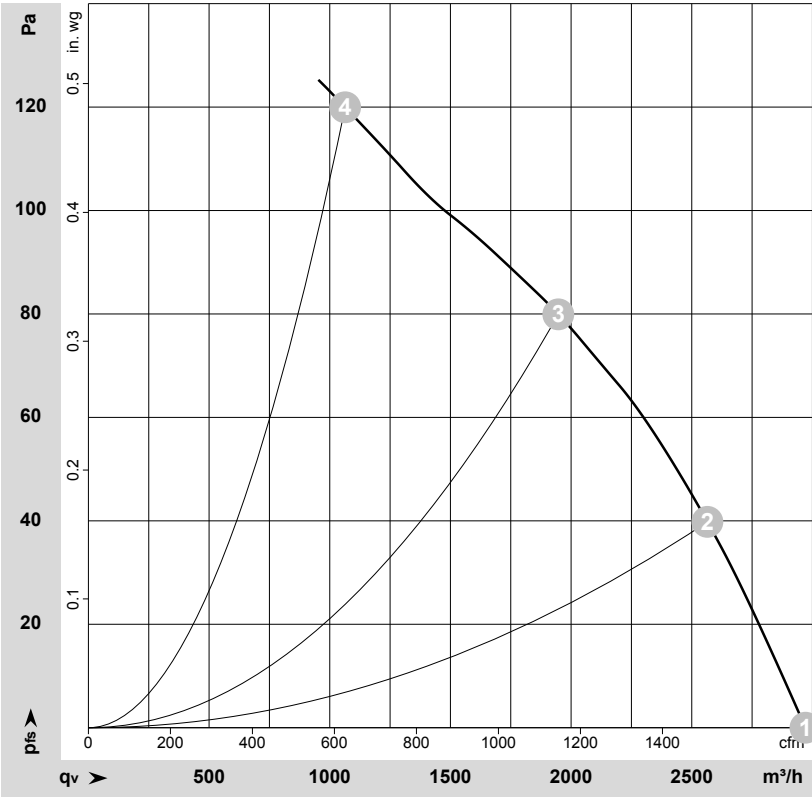
with guard grille

Connection diagram



Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

Curves: Air performance 50 Hz



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

Measurement: LU-206813-1
Date: 2020-06-19
Nozzle: 35100-2-4013

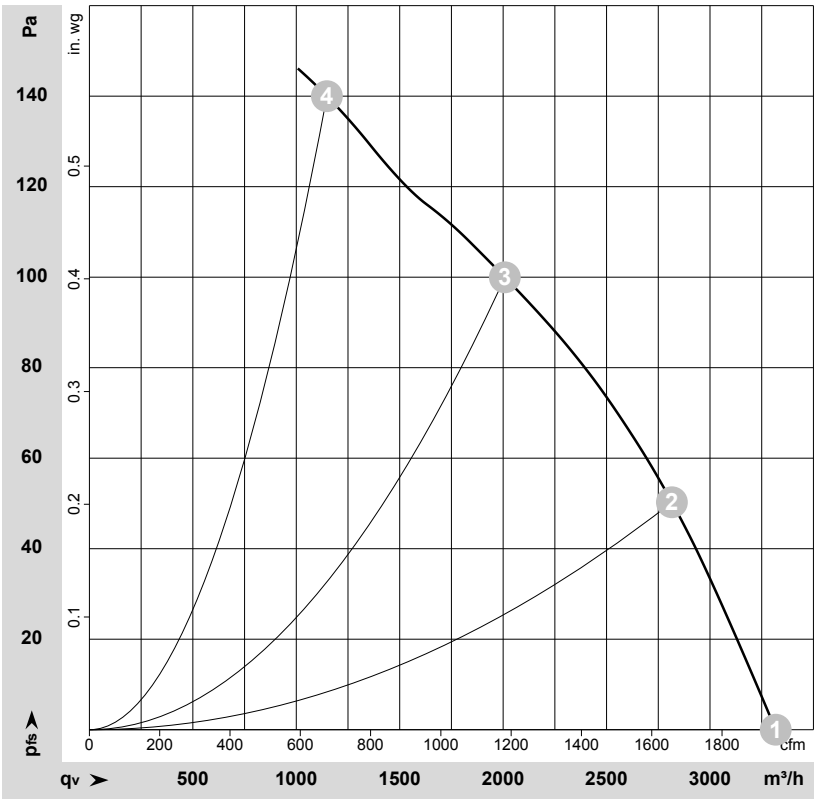
Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the 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 _{is}	q _v	p _{is}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	Y	400	50	1385	117	0.28	61	66	2970	0	1750	0.00
2	Y	400	50	1360	132	0.29	59	65	2565	40	1510	0.16
3	Y	400	50	1340	146	0.30	57	63	1945	80	1145	0.32
4	Y	400	50	1320	150	0.31	60	67	1065	120	625	0.48

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_{is} = Pressure increase

Curves: Air performance 60 Hz



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

Measurement: LU-206893-1
Date: 2020-06-19

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 _{is}	q _v	p _{is}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	Y	400	60	1550	166	0.30	63	69	3320	0	1955	0.00
2	Y	400	60	1500	189	0.33	61	67	2815	50	1655	0.20
3	Y	400	60	1455	208	0.35	59	66	2010	100	1180	0.40
4	Y	400	60	1440	215	0.36	62	69	1150	140	675	0.56

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_{is} = Pressure increase