

AC axial fan

straight blades (A series)

Wall ring with guard grille

ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen

County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

County court Stuttgart · HRB 590142

Nominal data

Type	W2D170-AA04-52				
Motor	M2D068-BF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	CE
Speed	min ⁻¹	2750	3100	2750	3100
Power input	W	45	43	45	43
Current draw	A	0.23	0.16	0.13	0.09
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	55	70	55	70
Starting current	A	0.4	0.38	0.23	0.22

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations



AC axial fan

straight blades (A series)

Wall ring with guard grille

Technical features

Mass	1.8 kg
Size	170 mm
Surface of rotor	Coated in black
Material of blades	Die-cast aluminium
Material of wall ring	Die-cast aluminium
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	6
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	UL 1004-1; CSA C22.2 Nr.100

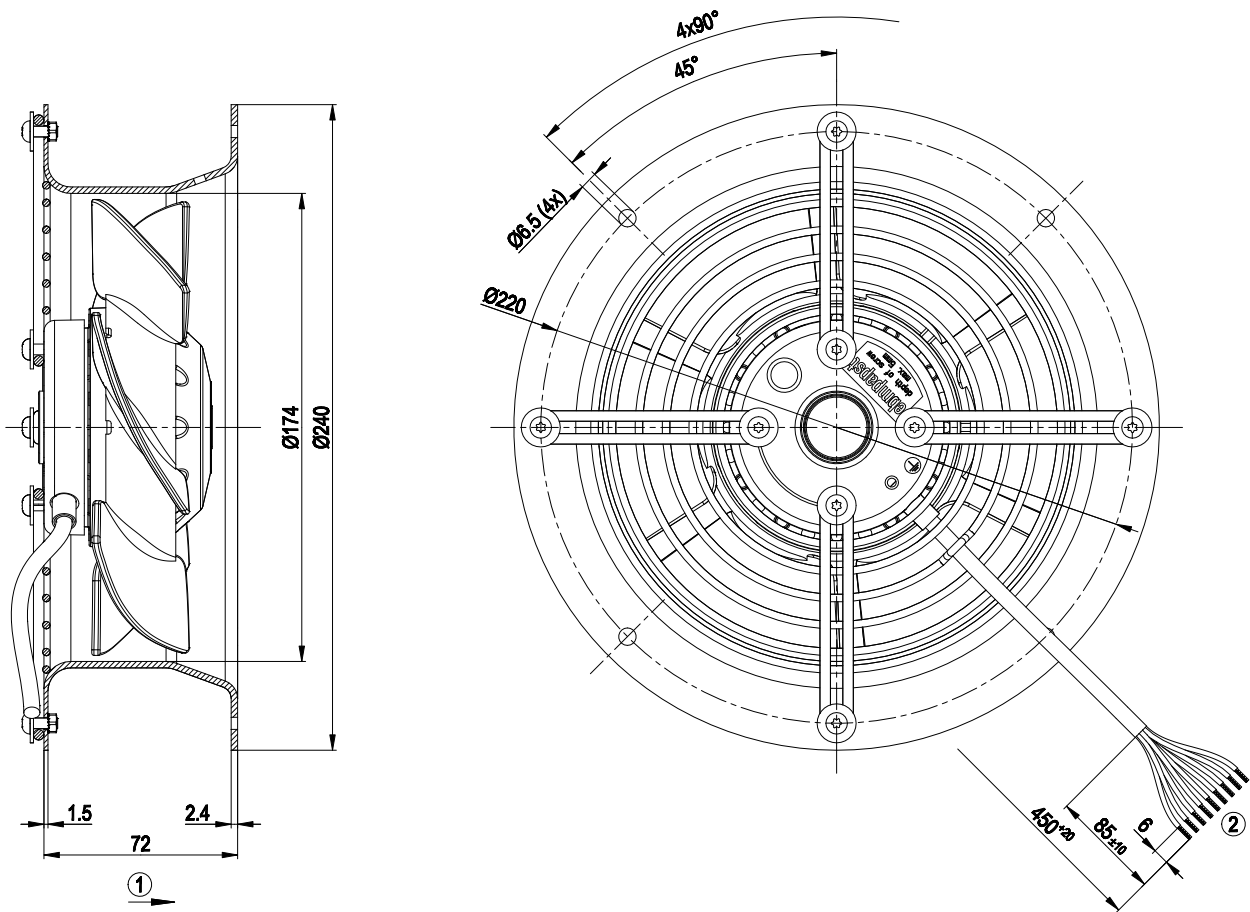


AC axial fan

straight blades (A series)

Wall ring with guard grille

Product drawing

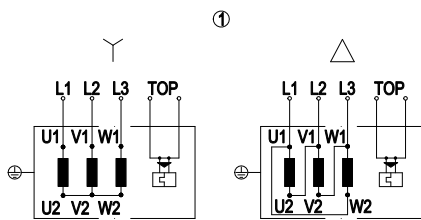


- | | |
|---|---|
| 1 | Direction of air flow "A" |
| 2 | Connection line AWG20, 9x brass lead tips crimped |

AC axial fan

straight blades (A series)
Wall ring with guard grille

Connection screen



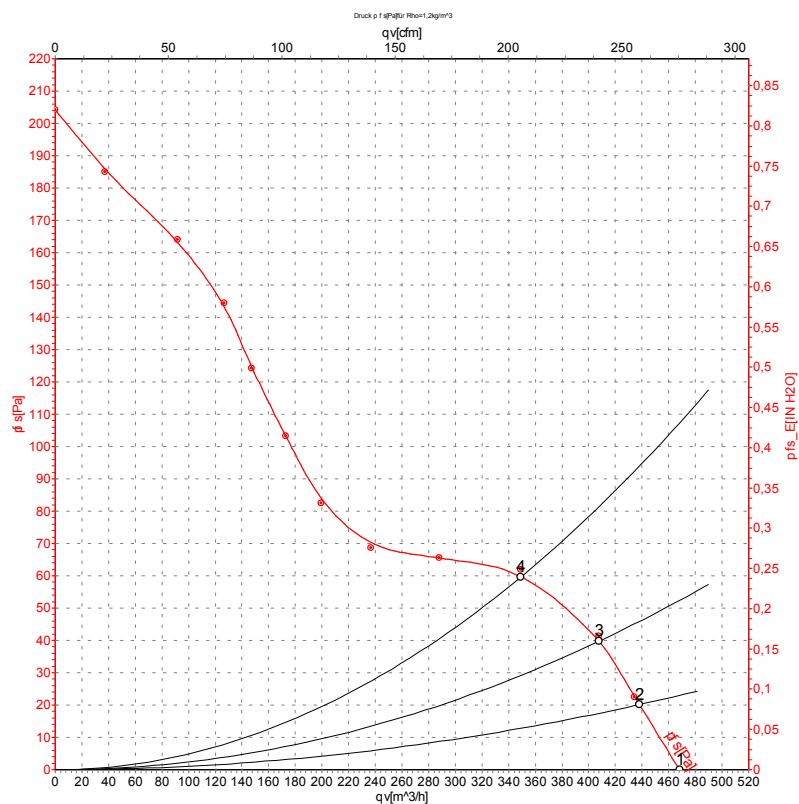
1	Three-phase motor
Y	Star connection
Δ	Delta connection
L1	= U1 = black 2
L2	= V1 = black 1
L3	= W1 = black 3
V2	= black4
U2	= black5
W2	= black6
TOP	(Thermal overload protector) 2x yellow



AC axial fan

straight blades (A series)
Wall ring with guard grille

Charts: Air flow 50 Hz



Measurement: LU-25208

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: LwA measured as per ISO 13347 /
LpA measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	400	50	2710	42	0.12	470	0
2	400	50	2705	42	0.12	440	20
3	400	50	2685	43	0.12	410	40
4	400	50	2675	44	0.12	350	60

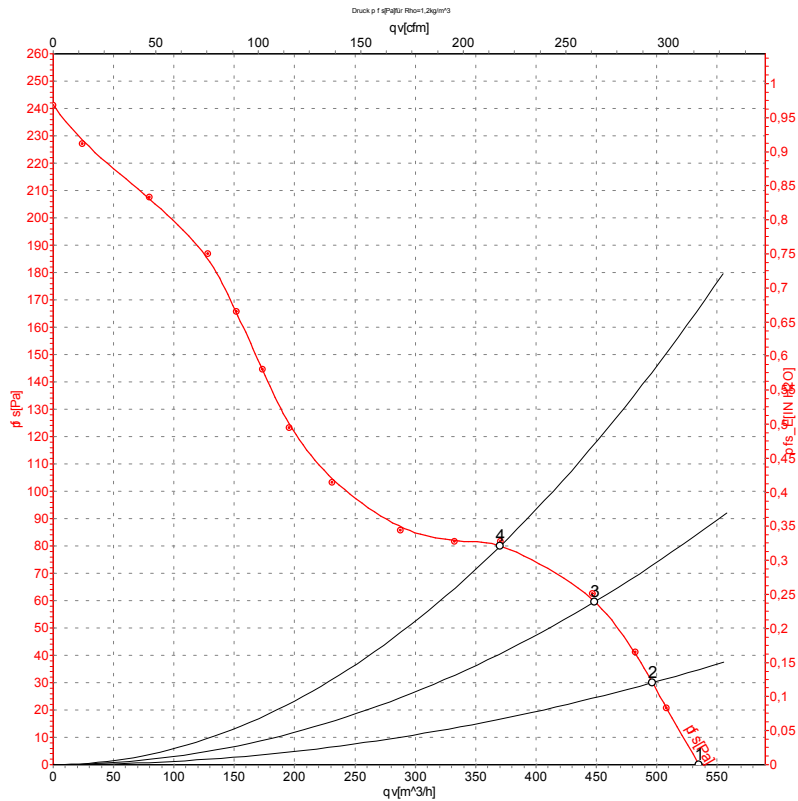
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



AC axial fan

straight blades (A series)
Wall ring with guard grille

Charts: Air flow 60 Hz



Measurement: LU-25209

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: LwA measured as per ISO 13347 /
LpA measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	400	60	3100	39	0.09	535	0
2	400	60	3065	41	0.09	495	30
3	400	60	3015	43	0.09	450	60
4	400	60	3000	44	0.09	370	80

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ebm-papst:](#)

[W2D170-AA04-52](#)