

**ebm-papst Mulfingen GmbH & Co. KG**

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Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142**Nominal data**

| Type | A4D500-AM01-03 | | | | | | |
|-------------------------------|-------------------|------|------|------|------|------|------|
| Motor | M4D110-GF | | | | | | |
| Phase | | 3~ | 3~ | 3~ | 3~ | 3~ | 3~ |
| Nominal voltage | VAC | 230 | 230 | 277 | 400 | 400 | 480 |
| Connection | | Δ | Δ | Δ | Y | Y | Y |
| Frequency | Hz | 50 | 60 | 60 | 50 | 60 | 60 |
| Type of data definition | | ml | ml | ml | ml | ml | ml |
| Valid for approval / standard | | CE | CE | CE | CE | CE | CE |
| Speed | min ⁻¹ | 1350 | 1510 | 1590 | 1350 | 1510 | 1590 |
| Power input | W | 690 | 950 | 1050 | 690 | 950 | 1050 |
| Current draw | A | 2.34 | 2.77 | 2.72 | 1.35 | 1.6 | 1.57 |
| Max. back pressure | Pa | 155 | 145 | 160 | 155 | 145 | 160 |
| Min. ambient temperature | °C | -40 | -40 | -40 | -40 | -40 | -40 |
| Max. ambient temperature | °C | 65 | 60 | 60 | 65 | 60 | 60 |
| Starting current | A | 17.3 | 16.6 | | 10 | 9.6 | |

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

| | | | | | |
|-----------------------|--------|--------------------------------|-------------------|--------------|--------------|
| Installation category | A | Overall efficiency η_{es} | Actual | Request 2013 | Request 2015 |
| Efficiency category | Static | Efficiency grade N | 33.3 | 28.5 | 32.5 |
| Variable speed drive | No | Power input P_e | 40.8 | 36 | 40 |
| Specific ratio* | 1.00 | Power input P_e | kW | 0.66 | |
| | | Air flow q_v | m ³ /h | 5985 | |
| | | Pressure increase p_{fs} | Pa | 134 | |
| | | Speed n | min ⁻¹ | 1355 | |

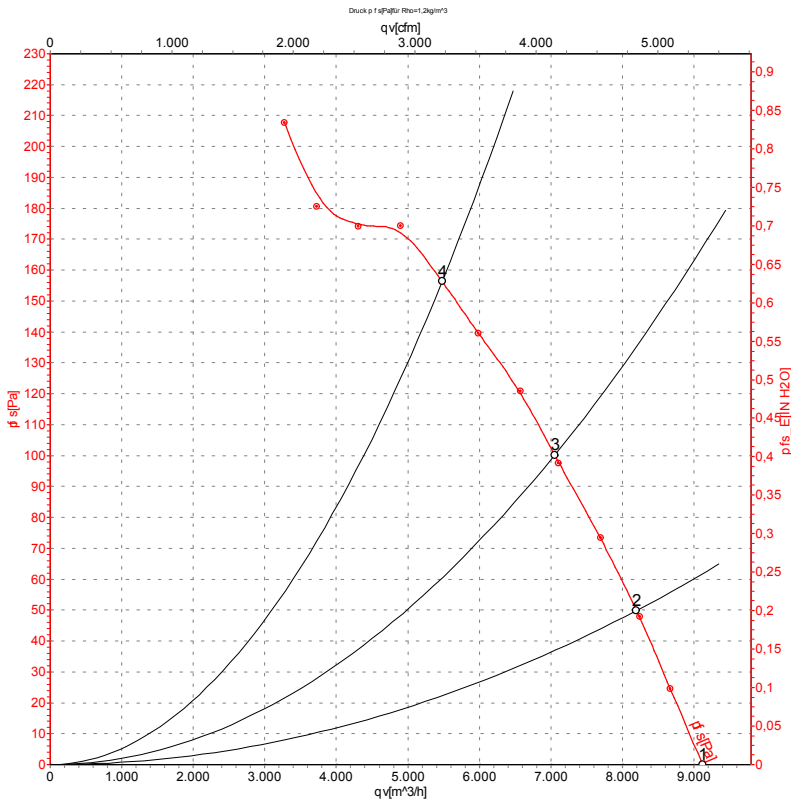
Data established at point of optimum efficiency



Technical features

| | |
|---|--|
| Mass | 9.8 kg |
| Size | 500 mm |
| Surface of rotor | Coated in black |
| Material of terminal box | PC / ABS plastic |
| Material of blades | Press-fitted sheet steel blank, sprayed with PP plastic |
| Number of blades | 5 |
| Direction of air flow | "V" |
| Direction of rotation | Counter-clockwise, seen on rotor |
| Type of protection | IP 54 |
| Insulation class | "F" |
| Humidity class | F4-1 |
| Max. permissible ambient motor temp. (transp./ storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |
| Mounting position | Shaft horizontal or rotor on bottom; rotor on top on request |
| Condensate discharge holes | Rotor-side |
| Operation mode | S1 |
| Motor bearing | Ball bearing |
| Touch current acc. IEC 60990 (measuring network Fig. 4, TN system) | <= 3.5 mA |
| Electrical leads | Via terminal box |
| Motor protection | Thermal overload protector (TOP) brought out |
| Cable exit | Axial |
| Protection class | I (if protective earth is connected by customer) |
| Product conforming to standard | EN 61800-5-1; CE |
| Approval | CSA C22.2 Nr.100; VDE; GOST; CCC; UL 1004-1 |

Charts: Air flow 50 Hz



Measurement: LU-110665

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: L_{wA} measured as per ISO 13347 / L_{pA} 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

| | Conn. | U | f | n | P _e | I | L _{pA_{in}} | L _{wA_{in}} | L _{wA_{out}} | qv | p _f |
|---|-------|-----|----|-------------------|----------------|------|------------------------------|------------------------------|-------------------------------|-------------------|----------------|
| | | V | Hz | min ⁻¹ | W | A | dB(A) | dB(A) | dB(A) | m ³ /h | Pa |
| 1 | Y | 400 | 50 | 1400 | 505 | 1.15 | 68 | 75 | 75 | 9120 | 0 |
| 2 | Y | 400 | 50 | 1380 | 567 | 1.22 | 66 | 72 | 73 | 8195 | 50 |
| 3 | Y | 400 | 50 | 1365 | 623 | 1.27 | 64 | 71 | 71 | 7055 | 100 |
| 4 | Y | 400 | 50 | 1350 | 690 | 1.35 | 65 | 72 | 72 | 5480 | 155 |

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · L_{pA_{in}} = Sound pressure level inlet side · L_{wA_{in}} = Sound power level inlet side
 L_{wA_{out}} = Sound power level outlet side · qv = Air flow · p_f = Pressure increase

