**D2E140-HR05-16**

# AC centrifugal fan

forward curved, dual inlet

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## Nominal data

| | |
|---|---|
| **Type** | **D2E140-HR05-16** |
| **Motor** | **M2E068-CF** |

| | | | |
|---|---|---|---|
| Phase | | 1~ | 1~ |
| Nominal voltage | VAC | 115 | 115 |
| Frequency | Hz | 60 | 60 |
| Type of data definition | | fa | fa |
| Valid for approval / standard | | CE | UL |
| Speed | $min^{-1}$ | 1100 | 1100 |
| Power input | W | 130 | 142 |
| Current draw | A | 1.15 | 1.25 |
| Motor capacitor | µF | 8 | 8 |
| Capacitor voltage | VDB | 220 | 220 |
| Capacitor standard | | P0 (CE) | UL |
| Min. back pressure | Pa | 0 | 0 |
| Min. ambient temperature | °C | -25 | -25 |
| Max. ambient temperature | °C | 55 | 55 |
| Starting current | A | 1.15 | 1.15 |

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

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## Technical features

| | |
|---|---|
| **Mass** | 2.3 kg |
| **Size** | 140 mm |
| **Surface of rotor** | Uncoated |
| **Material of impeller** | PP plastic, white |
| **Housing material** | PP plastic, black |
| **Motor suspension** | Motor mounted via brackets on one side |
| **Direction of rotation** | Clockwise, seen on rotor |
| **Type of protection** | IP 44 |
| **Insulation class** | "F" |
| **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 |
| **Speed steps** | 4 |
| **Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)** | < 0.75 mA |
| **Electrical leads** | Via terminal box, integrated capacitor connected via terminal box; With plug |
| **Motor protection** | Thermal overload protector (TOP) wired internally |
| **Cable exit** | Variable |
| **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 |

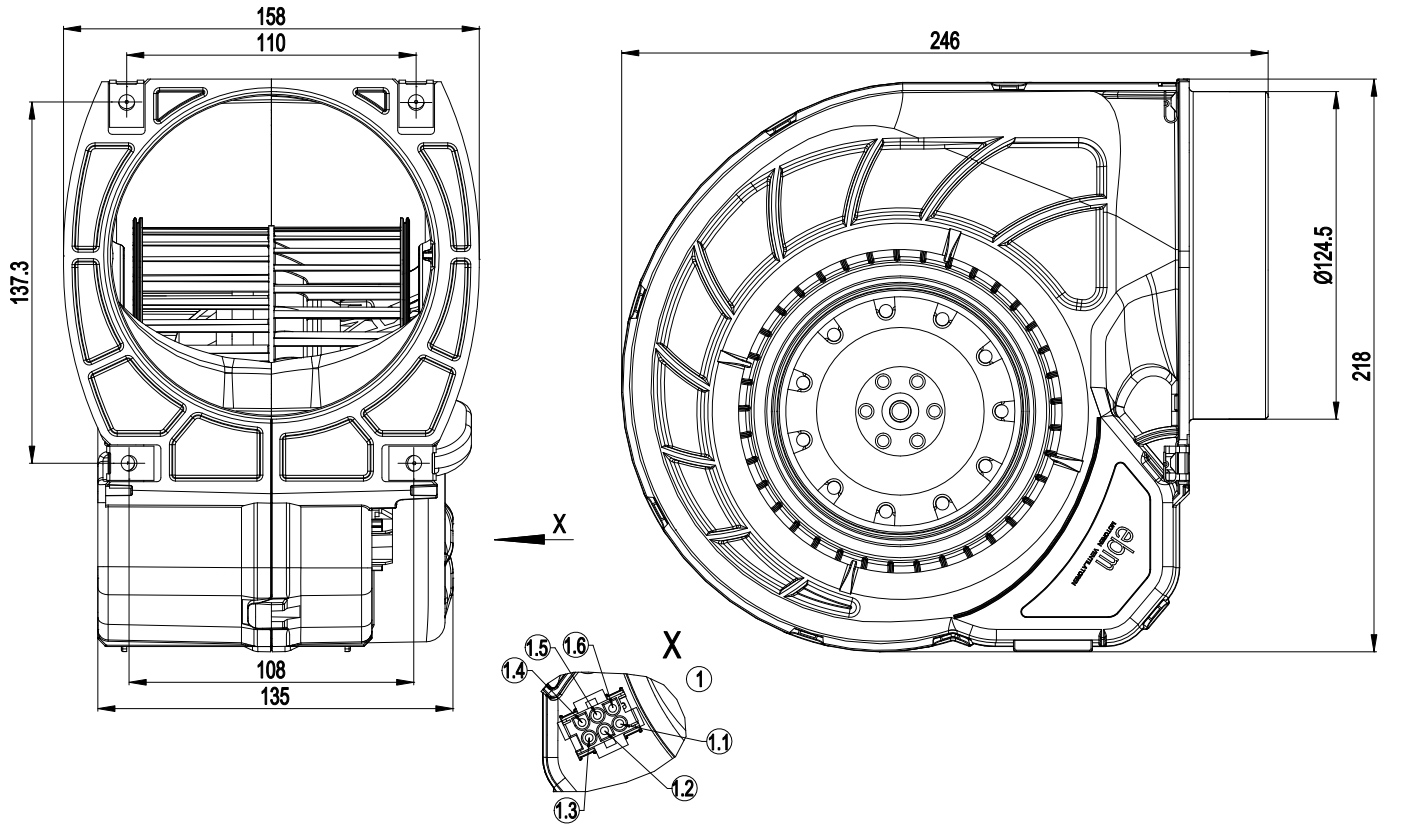


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## Product drawing




| | |
|---|---|
| 1 | Connector housing AMP Mate-N-Lok 350 715-4 |
| 1.1 | L= Stage 4 (max.) |
| 1.2 | N |
| 1.3 | Protective earth |
| 1.4 | L= Stage 3 |
| 1.5 | L = step 2 |
| 1.6 | L= Stage 1 |

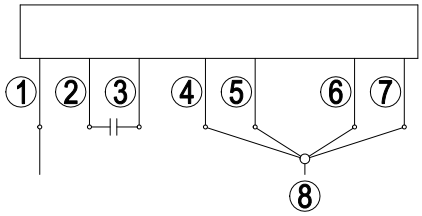


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## Connection screen




Note: fast speed (step IV); slow speed (step I); the switch must interrupt the circuit during the changeover.

| | |
|---|---|
| 1 | = N = blue |
| 2 | brown |
| 3 | yellow |
| 4 | Step I black 1 / white |
| 5 | Step II black 2 / red |
| 6 | Step III black 3 / grey |
| 7 | Step IV black 4 / black |
| 8 | L1 |

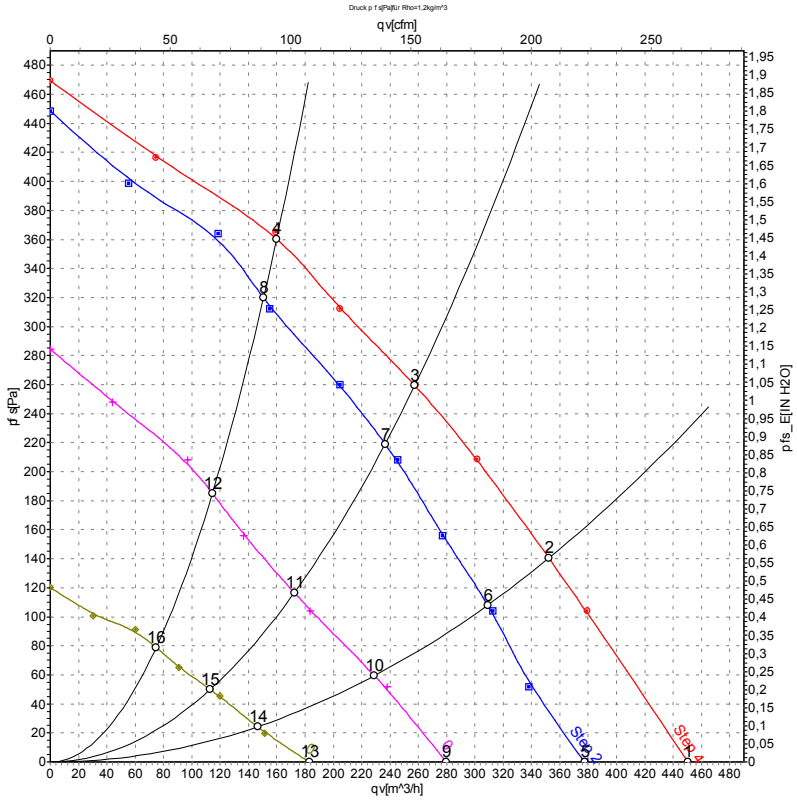


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## Charts: Air flow 60 Hz




Measurement: LU-59048
Measurement: LU-59049
Measurement: LU-59050
Measurement: LU-59051

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

| | Stage | U | f | n | $P_e$ | I | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|
| | | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa |
| 1 | 4 | 115 | 60 | 1100 | 130 | 1.15 | 450 | 0 |
| 2 | 4 | 115 | 60 | 1650 | 127 | 1.11 | 350 | 140 |
| 3 | 4 | 115 | 60 | 2105 | 121 | 1.05 | 255 | 260 |
| 4 | 4 | 115 | 60 | 2375 | 117 | 1.02 | 160 | 360 |
| 5 | 3 | 115 | 60 | 940 | 98 | 0.88 | 380 | 0 |
| 6 | 3 | 115 | 60 | 1430 | 97 | 0.87 | 310 | 109 |
| 7 | 3 | 115 | 60 | 1940 | 92 | 0.85 | 235 | 220 |
| 8 | 3 | 115 | 60 | 2245 | 88 | 0.82 | 150 | 319 |
| 9 | 2 | 115 | 60 | 730 | 74 | 0.70 | 280 | 0 |
| 10 | 2 | 115 | 60 | 1045 | 71 | 0.68 | 230 | 60 |
| 11 | 2 | 115 | 60 | 1420 | 69 | 0.67 | 170 | 116 |
| 12 | 2 | 115 | 60 | 1725 | 67 | 0.66 | 115 | 185 |
| 13 | 1 | 115 | 60 | 475 | 54 | 0.54 | 185 | 0 |
| 14 | 1 | 115 | 60 | 715 | 52 | 0.53 | 145 | 24 |
| 15 | 1 | 115 | 60 | 970 | 52 | 0.53 | 115 | 50 |
| 16 | 1 | 115 | 60 | 1135 | 51 | 0.52 | 75 | 79 |

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



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