

D4E160-DA01-22

## AC centrifugal fan

forward curved, dual inlet

with housing (flange)

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## Nominal data

|                               |                   |      |      |
|-------------------------------|-------------------|------|------|
| Type                          | D4E160-DA01-22    |      |      |
| Motor                         | M4E068-DF         |      |      |
| Phase                         |                   | 1~   | 1~   |
| Nominal voltage               | VAC               | 230  | 230  |
| Frequency                     | Hz                | 50   | 60   |
| Type of data definition       |                   | fa   | fa   |
| Valid for approval / standard |                   | CE   | CE   |
| Speed                         | min <sup>-1</sup> | 1100 | 1100 |
| Power input                   | W                 | 120  | 145  |
| Current draw                  | A                 | 0.53 | 0.64 |
| Motor capacitor               | μF                | 3    | 3    |
| Capacitor voltage             | VDB               | 450  | 450  |
| Min. back pressure            | Pa                | 0    | 0    |
| Min. ambient temperature      | °C                | -25  | -25  |
| Max. ambient temperature      | °C                | 60   | 40   |
| Starting current              | A                 | 0.72 | 0.72 |

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

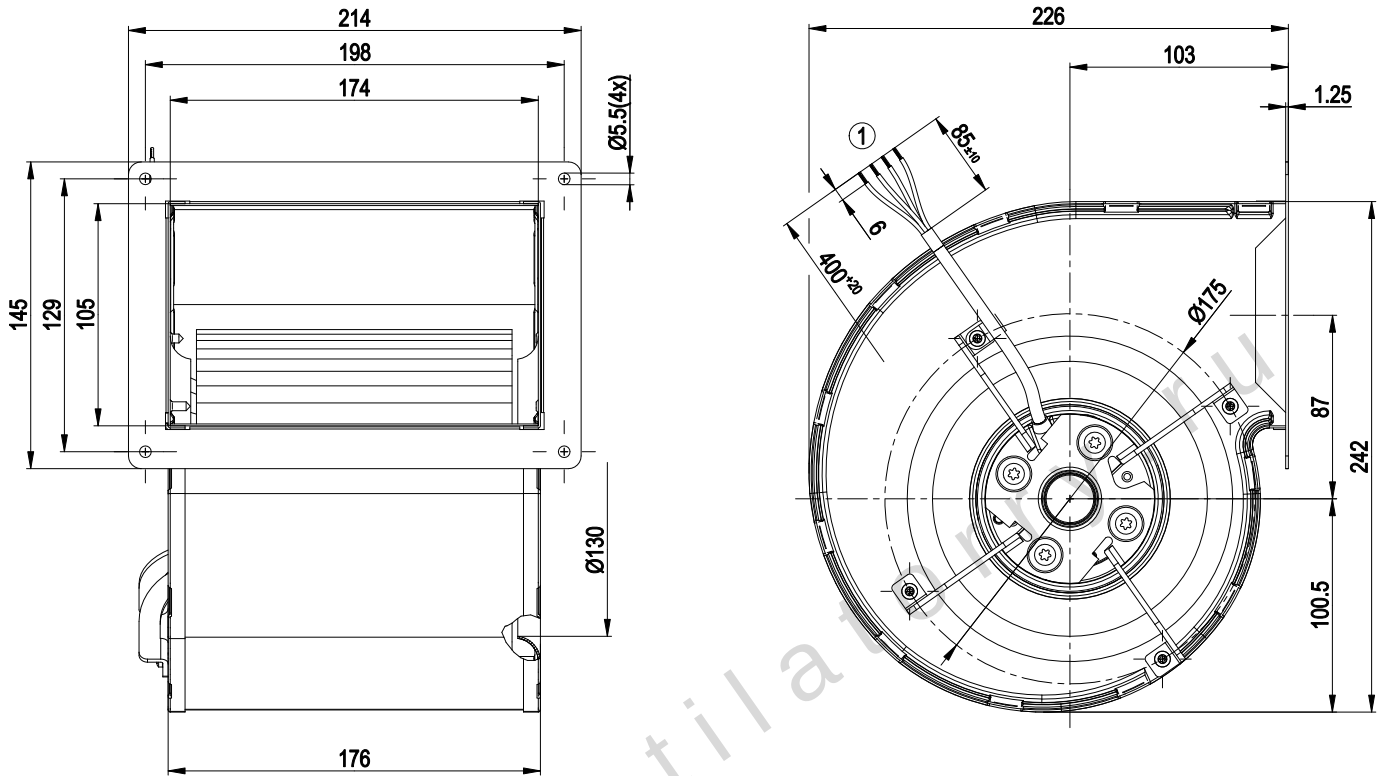
|                                                                    |                                                       |
|--------------------------------------------------------------------|-------------------------------------------------------|
| Mass                                                               | 4 kg                                                  |
| Size                                                               | 160 mm                                                |
| Material of impeller                                               | Sheet steel, galvanised                               |
| Housing material                                                   | Sheet steel, galvanised                               |
| Motor suspension                                                   | Motor anti-vibration mounted on one side via brackets |
| Direction of rotation                                              | Counter-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) wired internally     |
| Protection class                                                   | I (if protective earth is connected by customer)      |
| Product conforming to standard                                     | EN 60335-1; CE                                        |
| Approval                                                           | CCC                                                   |

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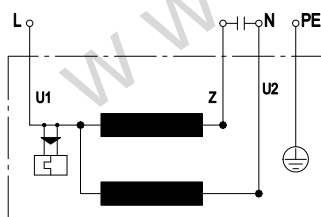
forward curved, dual inlet  
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## Product drawing



- |   |                                                                        |
|---|------------------------------------------------------------------------|
| 1 | Connection line PVC 4G 0.5mm <sup>2</sup> , 4x brass lead tips crimped |
|---|------------------------------------------------------------------------|

## Connection screen



|    |              |   |       |    |       |
|----|--------------|---|-------|----|-------|
| U1 | blue         | Z | brown | U2 | black |
| PE | green/yellow |   |       |    |       |

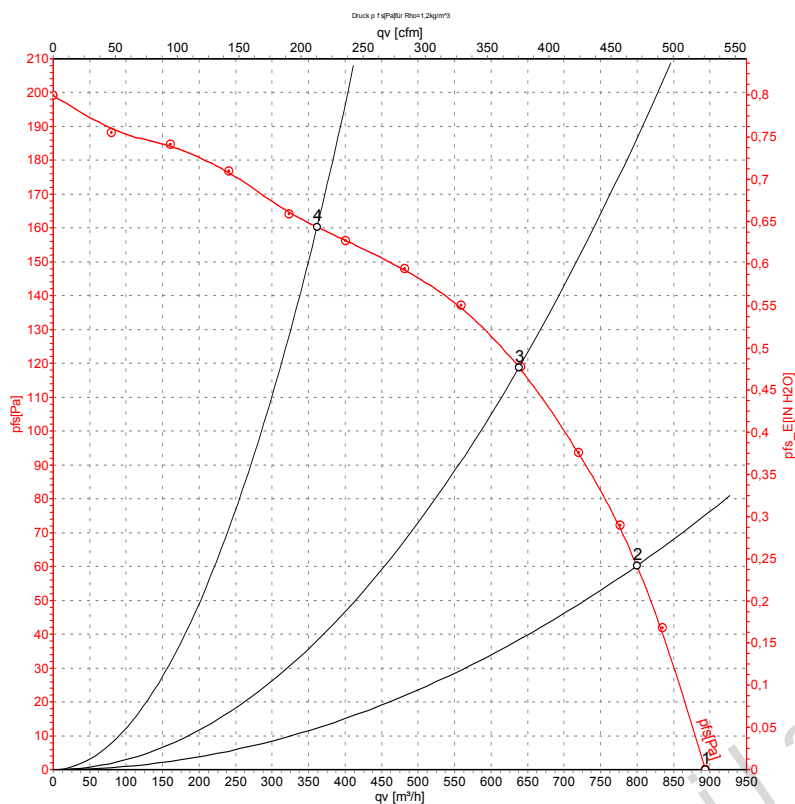
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# AC centrifugal fan

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## Charts: Air flow 50 Hz



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<sub>WA</sub> measured as per ISO 13347 /  
L<sub>pA</sub> 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 <sub>e</sub> | I    | qv   | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m³/h | Pa              |
| 1 | 230 | 50 | 1100              | 120            | 0.53 | 895  | 0               |
| 2 | 230 | 50 | 1205              | 112            | 0.49 | 800  | 60              |
| 3 | 230 | 50 | 1305              | 96             | 0.42 | 640  | 120             |
| 4 | 230 | 50 | 1395              | 81             | 0.36 | 360  | 160             |

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

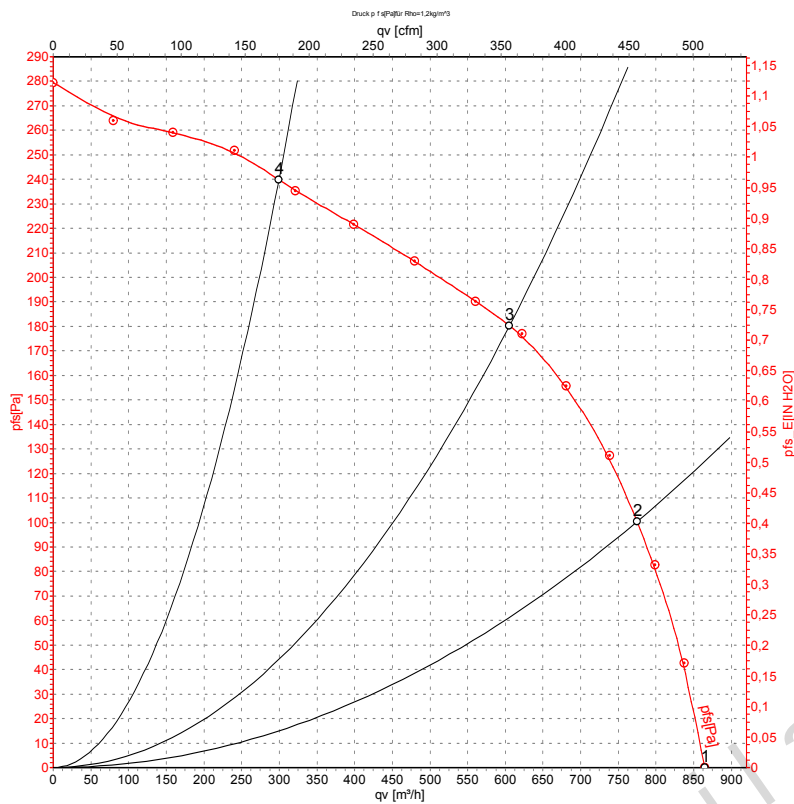
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# AC centrifugal fan

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## Charts: Air flow 60 Hz



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<sub>WA</sub> measured as per ISO 13347 /  
L<sub>pA</sub> measured with 1m distance to fan axis.  
The values given are valid under the  
measuring conditions mentioned above and  
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## Measured values

|   | U   | f  | n                 | P <sub>e</sub> | I    | qv                | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|-------------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m <sup>3</sup> /h | Pa              |
| 1 | 230 | 60 | 1100              | 145            | 0.64 | 865               | 0               |
| 2 | 230 | 60 | 1330              | 136            | 0.59 | 775               | 100             |
| 3 | 230 | 60 | 1510              | 122            | 0.53 | 605               | 180             |
| 4 | 230 | 60 | 1650              | 104            | 0.46 | 300               | 240             |

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase