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### Nominal data

|                               |                   |     |      |      |
|-------------------------------|-------------------|-----|------|------|
| Type                          | R6D560-AH05-01    |     |      |      |
| Motor                         | M6D110-IA         |     |      |      |
| Phase                         |                   | 3~  | 3~   | 3~   |
| Nominal voltage               | VAC               | 230 | 400  | 415  |
| Connection                    |                   | Δ   | Y    | Y    |
| Frequency                     | Hz                | 50  | 50   | 50   |
| Type of data definition       |                   | ml  | ml   | ml   |
| Valid for approval / standard |                   | CE  | CE   | CE   |
| Speed                         | min <sup>-1</sup> | 890 | 890  | 900  |
| Power input                   | W                 | 780 | 780  | 800  |
| Current draw                  | A                 | 2.9 | 1.68 | 1.72 |
| Min. back pressure            | Pa                | 0   | 0    | 0    |
| Min. ambient temperature      | °C                | -40 | -40  | -40  |
| Max. ambient temperature      | °C                | 60  | 60   | 55   |
| Starting current              | A                 | 9.4 | 5.4  | 5.1  |

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      |
| Efficiency category   | Static |
| Variable speed drive  | No     |
| Specific ratio*       | 1.00   |

\* Specific ratio =  $1 + p_{fs} / 100\,000\text{ Pa}$

|                                |                   | Actual | Request 2013 | Request 2015 |
|--------------------------------|-------------------|--------|--------------|--------------|
| Overall efficiency $\eta_{es}$ | %                 | 46.4   | 46.4         | 50.4         |
| Efficiency grade N             |                   | 58     | 58           | 62           |
| Power input $P_e$              | kW                | 0.78   |              |              |
| Air flow $q_v$                 | m <sup>3</sup> /h | 5255   |              |              |
| Pressure increase $p_{fs}$     | Pa                | 240    |              |              |
| Speed n                        | min <sup>-1</sup> | 890    |              |              |

Data definition with optimum efficiency.  
 The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



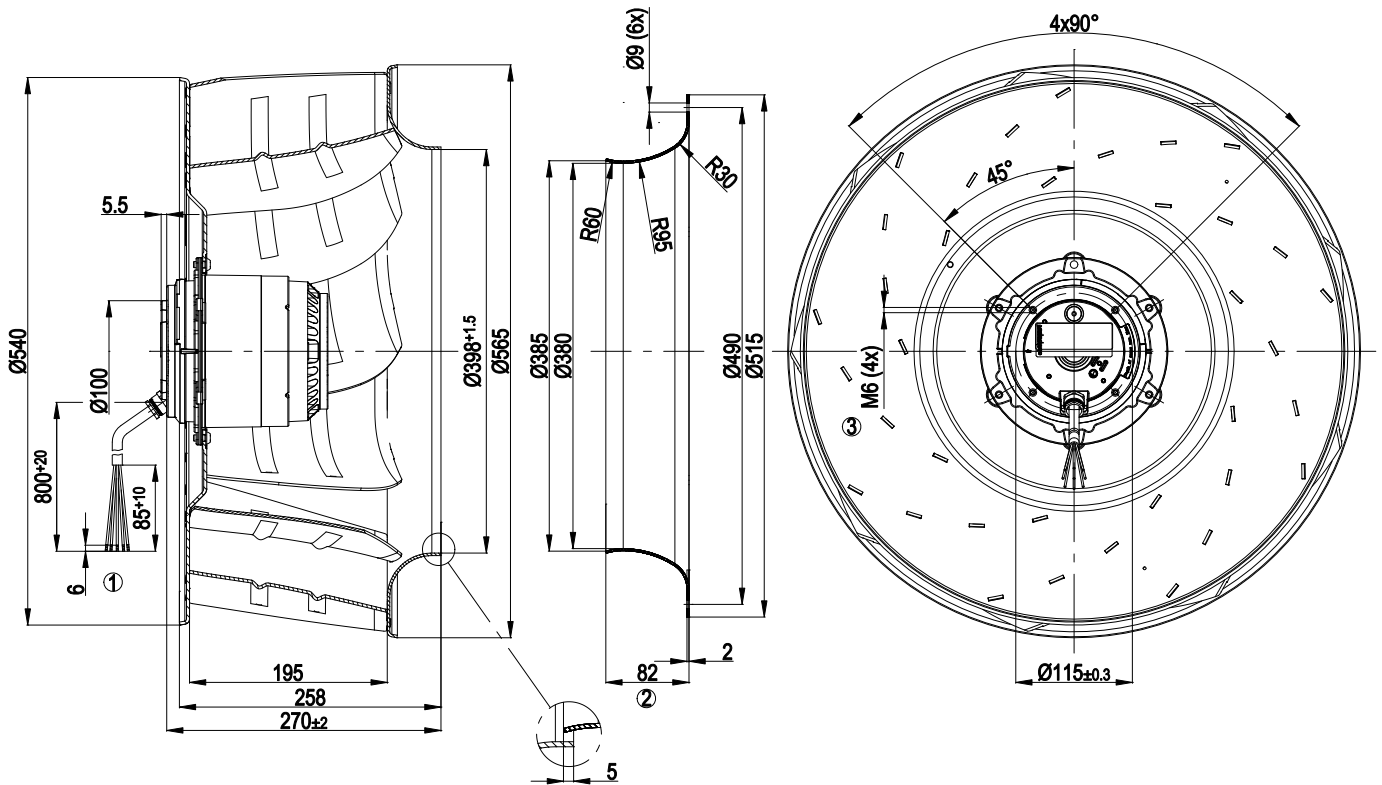
## Technical features

|                                                                    |                                                              |
|--------------------------------------------------------------------|--------------------------------------------------------------|
| Mass                                                               | 16.5 kg                                                      |
| Size                                                               | 560 mm                                                       |
| Surface of rotor                                                   | Cast in aluminium                                            |
| Material of impeller                                               | Aluminium sheet                                              |
| Number of blades                                                   | 9                                                            |
| Direction of rotation                                              | Clockwise, seen on rotor                                     |
| Type of protection                                                 | IP 54                                                        |
| Insulation class                                                   | "F"                                                          |
| Humidity class                                                     | F3-1                                                         |
| 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                                                    |
| Motor protection                                                   | Thermal overload protector (TOP) brought out                 |
| Protection class                                                   | I (if protective earth is connected by customer)             |
| Product conforming to standard                                     | EN 61800-5-1; CE                                             |
| Approval                                                           | CCC; GOST; VDE; UL 1004-1; CSA C22.2 Nr.100                  |

## AC centrifugal fan

backward curved, single inlet

## Product drawing

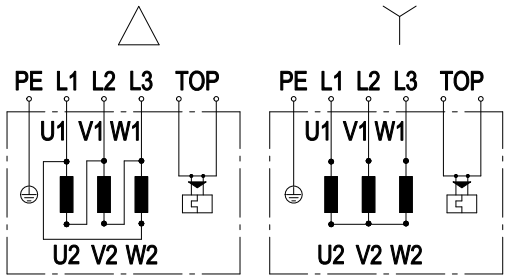


- |   |                                                                                                                      |
|---|----------------------------------------------------------------------------------------------------------------------|
| 1 | Connection line silicone 9 x 0.75 mm <sup>2</sup> , 9 x brass lead tips crimped                                      |
| 2 | Accessory part: Inlet nozzle 63071-2-4013, 64001-2-4013, 64030-2-4013 not included in the standard scope of delivery |
| 3 | Depth of screw max. 12 mm                                                                                            |

# AC centrifugal fan

backward curved, single inlet

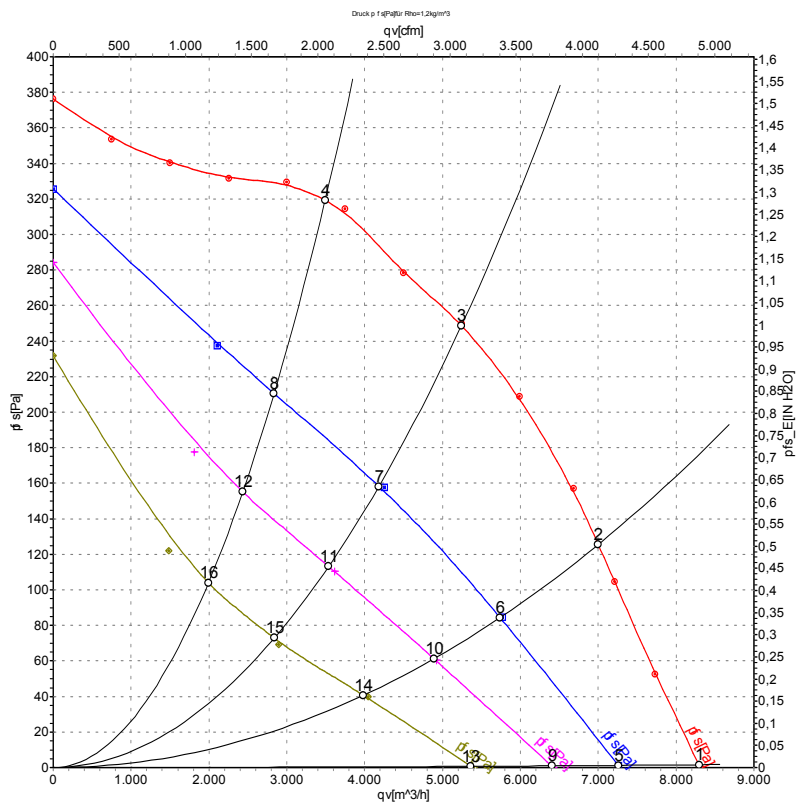
Connection screen



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



## Charts: Air flow 50 Hz



Measurement: LU-104086  
 Measurement: LU-105563  
 Measurement: LU-105564  
 Measurement: LU-105550

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

|    | Conn. | U   | f  | n                 | P <sub>e</sub> | I    | LpA <sub>in</sub> | LwA <sub>in</sub> | LwA <sub>out</sub> | qv   | p <sub>fs</sub> |
|----|-------|-----|----|-------------------|----------------|------|-------------------|-------------------|--------------------|------|-----------------|
|    |       | V   | Hz | min <sup>-1</sup> | W              | A    | dB(A)             | dB(A)             | dB(A)              | m³/h | Pa              |
| 1  | Y     | 400 | 50 | 930               | 557            | 1.46 | 68                | 75                | 80                 | 8310 | 0               |
| 2  | Y     | 400 | 50 | 905               | 699            | 1.59 | 63                | 71                | 76                 | 7000 | 125             |
| 3  | Y     | 400 | 50 | 890               | 780            | 1.68 | 61                | 69                | 74                 | 5240 | 250             |
| 4  | Y     | 400 | 50 | 900               | 718            | 1.59 | 62                | 69                | 75                 | 3495 | 320             |
| 5  | Y     | 230 | 50 | 805               | 404            | 1.29 | 63                | 71                | 75                 | 7255 | 0               |
| 6  | Y     | 230 | 50 | 735               | 475            | 1.48 | 57                | 65                | 71                 | 5740 | 86              |
| 7  | Y     | 230 | 50 | 705               | 507            | 1.58 | 54                | 63                | 68                 | 4180 | 160             |
| 8  | Y     | 230 | 50 | 745               | 462            | 1.45 | 57                | 66                | 71                 | 2835 | 210             |
| 9  | Y     | 180 | 50 | 705               | 319            | 1.29 | 60                | 67                | 72                 | 6405 | 0               |
| 10 | Y     | 180 | 50 | 620               | 352            | 1.42 | 52                | 60                | 66                 | 4890 | 62              |
| 11 | Y     | 180 | 50 | 590               | 365            | 1.47 | 50                | 58                | 64                 | 3535 | 113             |
| 12 | Y     | 180 | 50 | 635               | 345            | 1.39 | 53                | 61                | 67                 | 2435 | 154             |
| 13 | Y     | 140 | 50 | 585               | 227            | 1.19 | 53                | 61                | 67                 | 5365 | 0               |
| 14 | Y     | 140 | 50 | 500               | 238            | 1.25 | 46                | 55                | 61                 | 3985 | 41              |
| 15 | Y     | 140 | 50 | 470               | 243            | 1.29 | 44                | 53                | 58                 | 2840 | 71              |
| 16 | Y     | 140 | 50 | 515               | 237            | 1.24 | 47                | 55                | 61                 | 1995 | 103             |

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side  
 LwA<sub>out</sub> = Sound power level outlet side · qv = Air flow · p<sub>fs</sub> = Pressure increase