

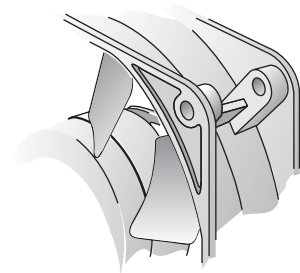
# AC Axial Fans

Series 8000 A 80 x 80 x 38 mm

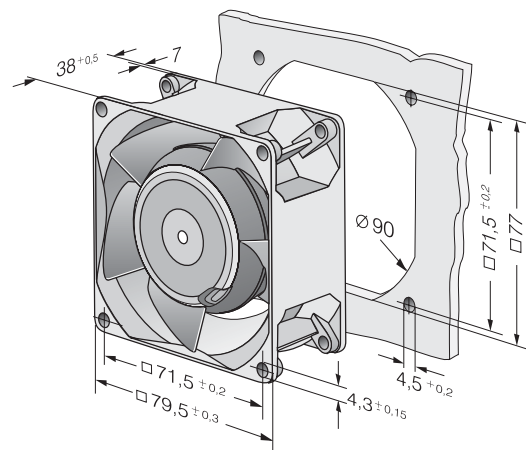
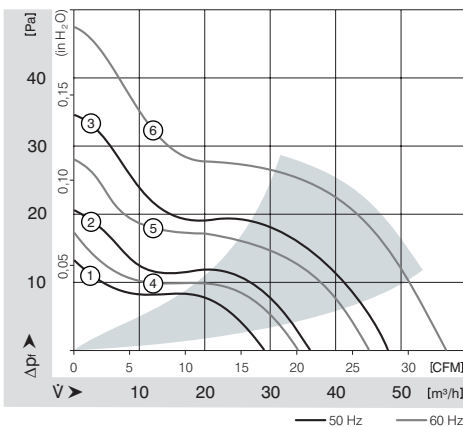


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller.
- Air intake over struts. Rotational direction CW looking at rotor.
- Electrical connection via 2 flat pins 2.8 x 0.5 mm.
- Fan housing with ground lug and screw M4 x 8 (TORX).
- Mass 490 g.
- Also available with electrical connection via leads.
- Also available with air-exhaust over struts and of rotation cw.

| Nominal Data | Air Flow          |      | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub> |     | Curve |
|--------------|-------------------|------|-----------------|-----------|-------|-----|---|-------------|---------------|-------------------|------------------------------|-----|-------|
|              | m <sup>3</sup> /h | CFM  |                 |           | V     | Hz  |   |             |               |                   | dB(A)                        | Bel |       |
| 8880 A       | 29                | 17.1 | 230             | 50        | 26    | 4.1 | □                                       | 9.0         | 1 750         | -10...+80         | 60 000 / 25 000              |     | 1     |
| 8850 A       | 36                | 21.2 | 230             | 50        | 31    | 4.6 | □                                       | 12.5        | 2 150         | -10...+70         | 52 500 / 25 000              |     | 2     |
| 8550 A       | 48                | 28.3 | 230             | 50        | 36    | 5.0 | □                                       | 12.0        | 2 700         | -10...+70         | 52 500 / 25 000              |     | 3     |
| 8556 A       | 48                | 28.3 | 230             | 50        | 37    | 5.1 | ■                                       | 12.0        | 2 800         | -40...+90         | 52 500 / 15 000              |     | 3     |
| 8830 A       | 34                | 20.0 | 115             | 60        | 29    | 4.3 | □                                       | 8.0         | 1 950         | -10...+80         | 62 500 / 25 000              |     | 4     |
| 8800 A       | 45                | 26.5 | 115             | 60        | 34    | 4.8 | □                                       | 11.0        | 2 500         | -10...+70         | 55 000 / 27 500              |     | 5     |
| 8500 A       | 57                | 33.5 | 115             | 60        | 41    | 5.5 | □                                       | 11.0        | 3 200         | -10...+75         | 55 000 / 25 000              |     | 6     |
| 8506 A       | 57                | 33.5 | 115             | 60        | 42    | 5.7 | ■                                       | 11.0        | 3 300         | -40...+95         | 55 000 / 15 000              |     | 6     |



Series 8000 A with mounting bosses



# AC Axial Fans

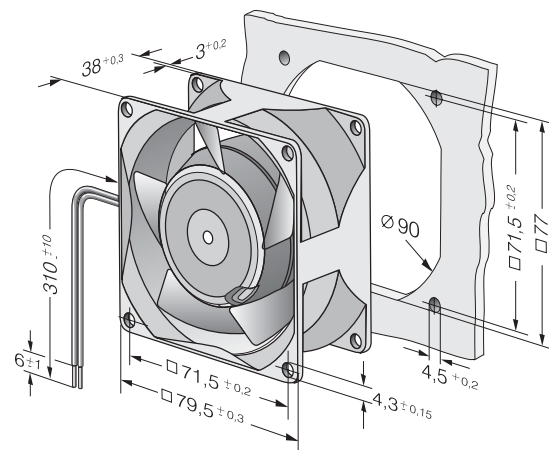
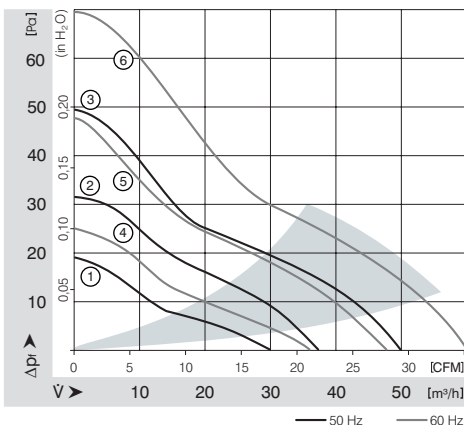
Series 8000 N 80 x 80 x 38 mm



- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CW looking at rotor.
- Electrical connection via 2 leads. Stripped and tinned ends.
- Fan housing with ground lug for screw M4 x 8 (TORX).
- Mass 490 g.

| Nominal Data |  | Air Flow          | Air Flow | Nominal Voltage | Frequency | Noise | Sinter-Sleeve Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life $L_{10}$ | Service Life $t_{max}$ | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|-------|------------------------|-------------|-------------------|-------------------|-----------------------|------------------------|-------|
| Type         |  | m <sup>3</sup> /h | CFM      | V               | Hz        | dB(A) | Bel                    | Watt        | min <sup>-1</sup> | °C                | Hours                 | Hours                  |       |
| 8880 N       |  | 30                | 17.7     | 230             | 50        | 18    | 3.3                    | 9.0         | 1 750             | -10...+80         | 60 000 / 25 000       |                        | 1     |
| 8850 N       |  | 37                | 21.8     | 230             | 50        | 24    | 3.9                    | 12.5        | 2 150             | -10...+70         | 52 500 / 25 000       |                        | 2     |
| 8550 N       |  | 50                | 29.4     | 230             | 50        | 30    | 4.4                    | 12.0        | 2 700             | -10...+70         | 52 500 / 25 000       |                        | 3     |
| 8556 N       |  | 50                | 29.4     | 230             | 50        | 31    | 4.5                    | 12.0        | 2 800             | -40...+90         | 52 500 / 15 000       |                        | 3     |
| 8830 N       |  | 36                | 21.2     | 115             | 60        | 21    | 3.7                    | 8.0         | 1 950             | -10...+80         | 62 500 / 25 000       |                        | 4     |
| 8800 N       |  | 47                | 27.7     | 115             | 60        | 28    | 4.3                    | 11.0        | 2 500             | -10...+70         | 55 000 / 27 500       |                        | 5     |
| 8500 N       |  | 61                | 35.9     | 115             | 60        | 34    | 4.8                    | 11.0        | 3 200             | -10...+75         | 55 000 / 25 000       |                        | 6     |
| 8506 N       |  | 61                | 35.9     | 115             | 60        | 35    | 5.0                    | 11.0        | 3 300             | -40...+95         | 55 000 / 15 000       |                        | 6     |

| Fan Type |        |        |        | Lead Wires  |               |
|----------|--------|--------|--------|-------------|---------------|
| 8830 N   | 8800 N | 8550 N | 8500 N | 310 mm long | AWG 18, TR 64 |
| 8880 N   |        |        |        | 310 mm long | AWG 18, TR 64 |
| 8556 N   | 8506 N |        |        | 310 mm long | AWG 22        |
| 8850 N   |        |        |        | 440 mm long | AWG 18, TR 64 |



# AC Axial Fans

Series 8000 TA 76 Ø x 37 mm

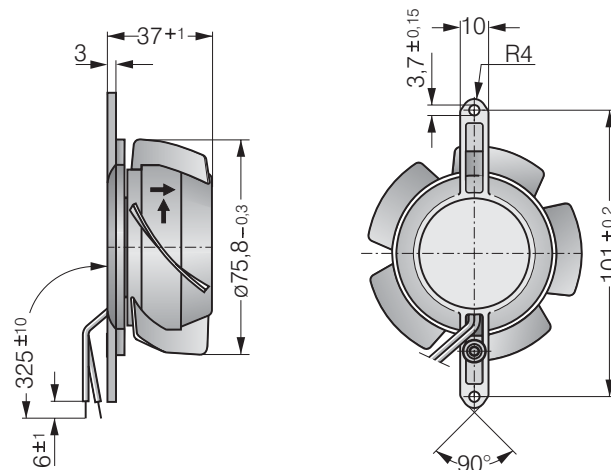


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller and mounting bracket of metal.
- Air intake over mounting bracket. Rotational direction CW looking at rotor.
- Electrical connection via 2 leads. Stripped and tinned ends.
- Mass 370 g.

| Nominal Data | Air Flow          |      | Nominal Voltage | Frequency | Noise | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub><br>at 40 °C |    | Curve |
|--------------|-------------------|------|-----------------|-----------|-------|---|-------------|---------------|-------------------|--|----|-------|
|              | m <sup>3</sup> /h | CFM  |                 |           |       |   |             |               |                   | V  | Hz |       |
| 8880 TA      | 23                | 13.5 | 230             | 50        | 15    | □                                       | 9.0         | 1 650         | -10...+80         | 60 000 / 25 000                          |    | -     |
| 8850 TA      | 30                | 17.7 | 230             | 50        | 19    | □                                       | 12.0        | 2 100         | -10...+70         | 52 500 / 25 000                          |    | -     |
| 8550 TA      | 38                | 22.4 | 230             | 50        | 25    | □                                       | 12.0        | 2 650         | -10...+70         | 52 500 / 25 000                          |    | -     |
| 8556 TA      | 38                | 22.4 | 230             | 50        | 26    | ■                                       | 12.0        | 2 750         | -40...+90         | 52 500 / 15 000                          |    | -     |
| 8830 TA      | 26                | 15.3 | 115             | 60        | 18    | □                                       | 8.0         | 1 850         | -10...+80         | 62 500 / 25 000                          |    | -     |
| 8800 TA      | 34                | 20.0 | 115             | 60        | 23    | □                                       | 11.0        | 2 450         | -10...+70         | 55 000 / 27 500                          |    | -     |
| 8500 TA      | 45                | 26.5 | 115             | 60        | 30    | □                                       | 11.0        | 3 150         | -10...+75         | 55 000 / 25 000                          |    | -     |
| 8506 TA      | 45                | 26.5 | 115             | 60        | 31    | ■                                       | 11.0        | 3 250         | -40...+95         | 55 000 / 15 000                          |    | -     |

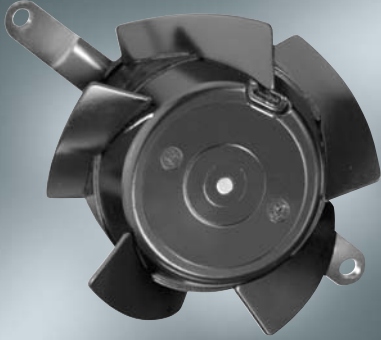
The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 76.5 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 8000 A is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

| Fan Type |         |         |         | Lead Wires  |               |
|----------|---------|---------|---------|-------------|---------------|
| 8880 TA  | 8850 TA | 8830 TA | 8800 TA | 325 mm long | AWG 18, TR 64 |
| 8550 TA  | 8500 TA |         |         | 325 mm long | AWG 18, TR 64 |
| 8556 TA  | 8506 TA |         |         | 325 mm long | AWG 18        |



# AC Axial Fans

Series 8000 TV 76 Ø x 37 mm

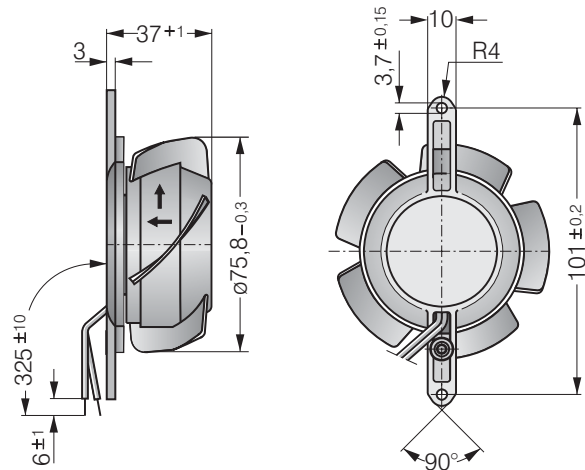


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller and mounting bracket of metal.
- Air exhaust over struts. Rotational direction CW looking at rotor.
- Electrical connection via 2 leads. Stripped and tinned ends.
- Mass 370 g.

| Nominal Data | Air Flow          |      | Nominal Voltage | Frequency | Noise | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub><br>at 40 °C |    | Curve |
|--------------|-------------------|------|-----------------|-----------|-------|---|-------------|---------------|-------------------|--|----|-------|
|              | m <sup>3</sup> /h | CFM  |                 |           |       |   |             |               |                   | V  | Hz |       |
| 8880 TV      | 24                | 14.1 | 230             | 50        | 15    | □                                       | 9.0         | 1 650         | -10...+80         | 60 000 / 25 000                          |    | -     |
| 8850 TV      | 31                | 18.2 | 230             | 50        | 20    | □                                       | 12.0        | 2 100         | -10...+70         | 52 500 / 25 000                          |    | -     |
| 8550 TV      | 40                | 23.5 | 230             | 50        | 27    | □                                       | 12.0        | 2 650         | -10...+70         | 52 500 / 25 000                          |    | -     |
| 8556 TV      | 40                | 23.5 | 230             | 50        | 28    | ■                                       | 12.0        | 2 750         | -40...+90         | 52 500 / 15 000                          |    | -     |
| 8830 TV      | 27                | 15.9 | 115             | 60        | 18    | □                                       | 8.0         | 1 850         | -10...+80         | 62 500 / 25 000                          |    | -     |
| 8800 TV      | 36                | 21.2 | 115             | 60        | 24    | □                                       | 11.0        | 2 450         | -10...+70         | 55 000 / 27 500                          |    | -     |
| 8500 TV      | 47                | 27.7 | 115             | 60        | 32    | □                                       | 11.0        | 3 150         | -10...+75         | 55 000 / 25 000                          |    | -     |
| 8506 TV      | 47                | 27.7 | 115             | 60        | 33    | ■                                       | 11.0        | 3 250         | -40...+95         | 55 000 / 15 000                          |    | -     |

The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 76.5 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 8000 N is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

| Fan Type |         |         |         | Lead Wires  |               |
|----------|---------|---------|---------|-------------|---------------|
| 8880 TV  | 8850 TV | 8830 TV | 8800 TV | 325 mm long | AWG 18, TR 64 |
| 8550 TV  | 8500 TV |         |         | 325 mm long | AWG 18, TR 64 |
| 8556 TV  | 8506 TV |         |         | 325 mm long | AWG 18        |



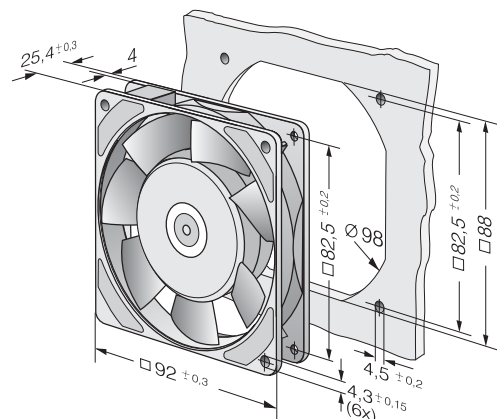
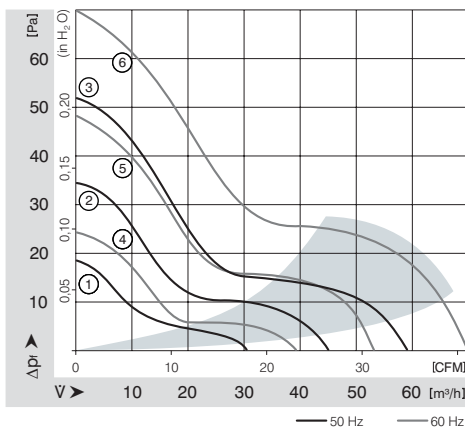
# AC Axial Fans

Series 3900 92 x 92 x 25 mm



- AC fans with internal rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing, impeller of mineral-reinforced plastic PA.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Electrical connection via 2 flat pins 2.8 x 0.5 mm.
- Fan housing with ground lug for screw M4.
- Mass 280 g.

| Nominal Data | Air Flow          |      | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub><br>at 40 °C |     | Curve |
|--------------|-------------------|------|-----------------|-----------|-------|-----|---|-------------|---------------|-------------------|--|-----|-------|
|              | m <sup>3</sup> /h | CFM  |                 |           | V     | Hz  |   |             |               |                   | dB(A)                                    | Bel |       |
| 3950 L       | 31                | 18.2 | 230             | 50        | 24    | 3.8 | □                                       | 6.0         | 1 550         | -10...+80         | 70 000 / 27 500                          | 1   |       |
| 3956 L       | 31                | 18.2 | 230             | 50        | 24    | 3.8 | ■                                       | 6.0         | 1 550         | -40...+80         | 70 000 / 27 500                          | 1   |       |
| 3950 M       | 45                | 26.5 | 230             | 50        | 29    | 4.2 | □                                       | 6.0         | 2 150         | -10...+80         | 70 000 / 27 500                          | 2   |       |
| 3956 M       | 45                | 26.5 | 230             | 50        | 29    | 4.2 | ■                                       | 6.0         | 2 150         | -40...+80         | 70 000 / 27 500                          | 2   |       |
| 3950         | 59                | 34.7 | 230             | 50        | 35    | 4.7 | □                                       | 11.0        | 2 650         | -20...+80         | 55 000 / 20 000                          | 3   |       |
| 3956         | 59                | 34.7 | 230             | 50        | 35    | 4.7 | ■                                       | 11.0        | 2 650         | -40...+80         | 55 000 / 20 000                          | 3   |       |
| 3900 L       | 39                | 23.0 | 115             | 60        | 27    | 4.0 | □                                       | 5.0         | 1 850         | -10...+80         | 70 000 / 27 500                          | 4   |       |
| 3906 L       | 39                | 23.0 | 115             | 60        | 27    | 4.0 | ■                                       | 5.0         | 1 850         | -40...+80         | 70 000 / 27 500                          | 4   |       |
| 3900 M       | 53                | 31.2 | 115             | 60        | 34    | 4.6 | □                                       | 5.0         | 2 600         | -10...+80         | 70 000 / 27 500                          | 5   |       |
| 3906 M       | 53                | 31.2 | 115             | 60        | 34    | 4.6 | ■                                       | 5.0         | 2 600         | -40...+80         | 70 000 / 27 500                          | 5   |       |
| 3900         | 70                | 41.2 | 115             | 60        | 40    | 5.1 | □                                       | 9.0         | 3 150         | -20...+80         | 60 000 / 22 500                          | 6   |       |
| 3906         | 70                | 41.2 | 115             | 60        | 40    | 5.1 | ■                                       | 9.0         | 3 150         | -40...+80         | 60 000 / 22 500                          | 6   |       |



# AC Axial Fans

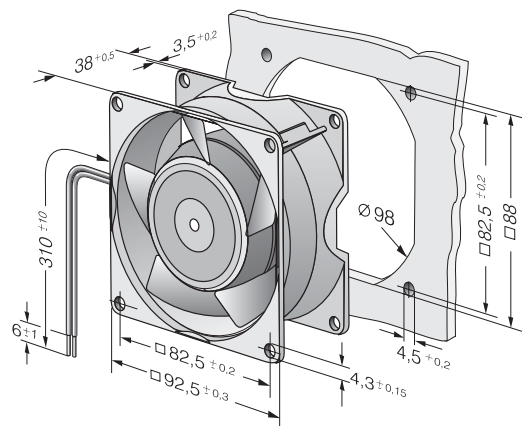
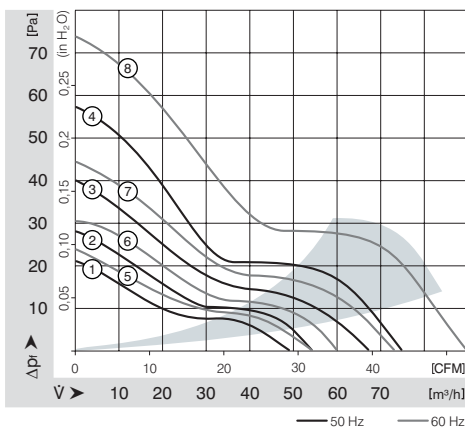
Series 3000 92 x 92 x 38 mm



- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CW looking at rotor.
- Electrical connection via 2 leads. Stripped and tinned ends.
- Fan housing with ground lug and screw M4 x 8 (TORX).
- Mass 420 g.

| Nominal Data |  | Air Flow          | Air Flow | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life L <sub>10</sub> | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|-------|-----|------------------------|-------------|-------------------|-------------------|------------------------------|-------|
| Type         |  | m <sup>3</sup> /h | CFM      | V               | Hz        | dB(A) | Bel | □/■                    | Watt        | min <sup>-1</sup> | °C                | Hours                        | Hours |
| 3850         |  | 49                | 28.8     | 230             | 50        | 24    | 3.7 | □                      | 9.0         | 1 750             | -10...+75         | 60 000 / 27 500              | 1     |
| 3856         |  | 54                | 31.8     | 230             | 50        | 26    | 3.9 | ■                      | 9.0         | 1 950             | -40...+90         | 60 000 / 20 000              | 2     |
| 3550         |  | 67                | 39.4     | 230             | 50        | 32    | 4.4 | □                      | 9.0         | 2 300             | -10...+80         | 60 000 / 25 000              | 3     |
| 3556         |  | 67                | 39.4     | 230             | 50        | 33    | 4.5 | ■                      | 9.0         | 2 400             | -40...+90         | 60 000 / 20 000              | 3     |
| 3650         |  | 75                | 44.1     | 230             | 50        | 36    | 4.8 | □                      | 12.0        | 2 650             | -10...+55         | 52 500 / 37 500              | 4     |
| 3656         |  | 75                | 44.1     | 230             | 50        | 37    | 4.9 | ■                      | 12.0        | 2 700             | -40...+75         | 52 500 / 22 500              | 4     |
| 3800         |  | 54                | 31.8     | 115             | 60        | 26    | 3.9 | □                      | 8.0         | 1 900             | -10...+80         | 62 500 / 25 000              | 5     |
| 3806         |  | 60                | 35.3     | 115             | 60        | 29    | 4.2 | ■                      | 8.0         | 2 150             | -40...+95         | 62 500 / 17 500              | 6     |
| 3500         |  | 73                | 43.0     | 115             | 60        | 35    | 4.6 | □                      | 8.0         | 2 500             | -10...+80         | 62 500 / 25 000              | 7     |
| 3506         |  | 73                | 43.0     | 115             | 60        | 36    | 4.7 | ■                      | 8.0         | 2 600             | -40...+95         | 62 500 / 17 500              | 7     |
| 3600         |  | 89                | 52.4     | 115             | 60        | 41    | 5.1 | □                      | 11.0        | 3 100             | -10...+65         | 55 000 / 30 000              | 8     |
| 3606         |  | 89                | 52.4     | 115             | 60        | 42    | 5.2 | ■                      | 11.0        | 3 200             | -40...+75         | 55 000 / 25 000              | 8     |

| Fan Type             | Lead Wires  |               |
|----------------------|-------------|---------------|
| With Sleeve bearings | 310 mm long | AWG 18, TR 64 |
| With Ball bearings   | 310 mm long | AWG 18        |



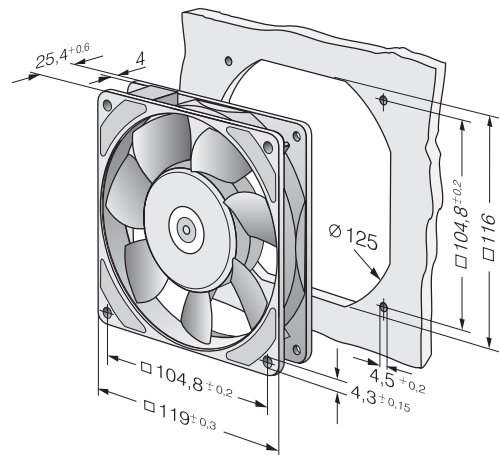
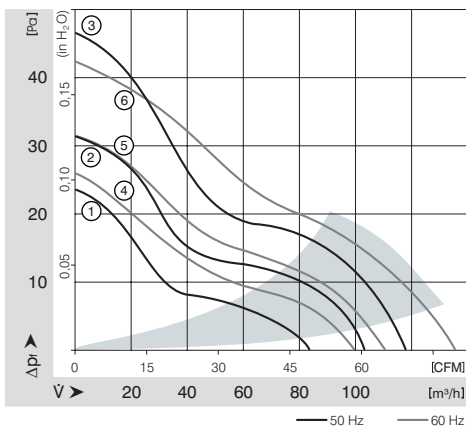
# AC Axial Fans

Series 9900 119 x 119 x 25 mm



- AC fans with external rotor shaded-pole motor. Protected against overloading by thermal cutout.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Electrical connection via 2 flat pins 2.8 x 0.5 mm.
- Fan housing with ground lug and screw M4 x 8 (TORX).
- Mass 800 g.

| Nominal Data | Air Flow          |      | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub> |     | Curve |
|--------------|-------------------|------|-----------------|-----------|-------|-----|---|-------------|---------------|-------------------|------------------------------|-----|-------|
|              | m <sup>3</sup> /h | CFM  |                 |           | V     | Hz  |   |             |               |                   | dB(A)                        | Bel |       |
| 9956 L       | 84                | 49.4 | 230             | 50        | 29    | 4.4 | ■                                       | 9.5         | 1850          | -40...+80         | 57 500 / 22 500              |     | 1     |
| 9956 M       | 104               | 61.2 | 230             | 50        | 35    | 4.7 | ■                                       | 10.0        | 2250          | -40...+80         | 57 500 / 22 500              |     | 2     |
| 9950         | 117               | 68.9 | 230             | 50        | 37    | 5.0 | □                                       | 14.0        | 2450          | -20...+70         | 47 500 / 22 500              |     | 3     |
| 9956         | 117               | 68.9 | 230             | 50        | 37    | 5.0 | ■                                       | 14.0        | 2450          | -40...+70         | 47 500 / 22 500              |     | 3     |
| 9906 L       | 100               | 58.9 | 115             | 60        | 34    | 4.6 | ■                                       | 8.0         | 2100          | -40...+80         | 62 500 / 25 000              |     | 4     |
| 9906 M       | 111               | 65.3 | 115             | 60        | 37    | 5.0 | ■                                       | 8.0         | 2450          | -40...+80         | 62 500 / 25 000              |     | 5     |
| 9900         | 135               | 79.5 | 115             | 60        | 42    | 5.4 | □                                       | 12.0        | 2850          | -20...+70         | 52 500 / 25 000              |     | 6     |
| 9906         | 135               | 79.5 | 115             | 60        | 42    | 5.4 | ■                                       | 12.0        | 2850          | -40...+70         | 52 500 / 25 000              |     | 6     |



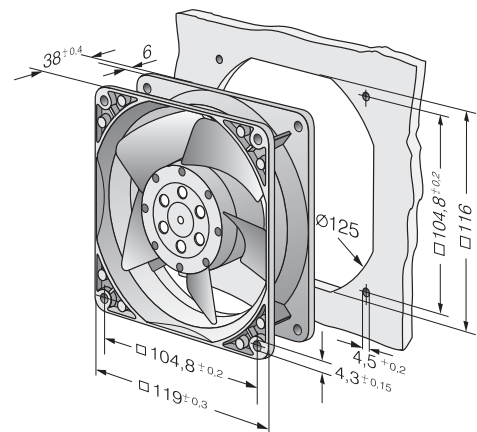
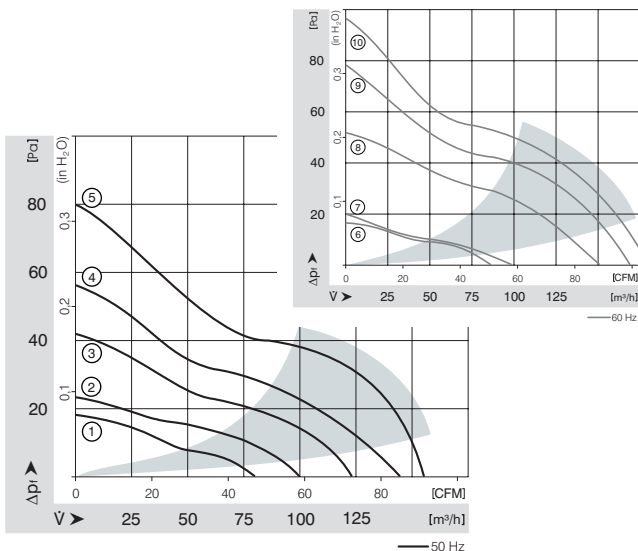
# AC Axial Fans

Series 4000 N 119 x 119 x 38 mm



- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller
- Air intake over struts. Rotational direction CW looking at rotor. Types 4890 N and 4840 N air exhaust over struts.
- Electrical connection via 2 flat pins 3.0 x 0.5 mm.
- Also available: Models with mounting bosses and single leads.
- Fan housing with ground lug for screw M 4 and UNC.
- Mass 550 g.

| Nominal Data |  | Air Flow          | Air Flow | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life L <sub>10</sub><br>at 40 °C | at t <sub>max</sub> | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|-------|-----|---|-------------|-------------------|-------------------|--|---------------------|-------|
| Type         |  | m <sup>3</sup> /h | CFM      | V               | Hz        | dB(A) | Bel | □/■                                     | Watt        | min <sup>-1</sup> | °C                | Hours                                    | Hours               |       |
| 4890 N       |  | 80                | 47.1     | 230             | 50        | 25    | 4.0 | □                                       | 11.0        | 1 550             | -10...+70         | 55 000 / 27 500                          |                     | 1     |
| 4850 N       |  | 100               | 58.9     | 230             | 50        | 32    | 4.4 | □                                       | 10.0        | 1 800             | -10...+70         | 57 500 / 27 500                          |                     | 2     |
| 4580 N       |  | 123               | 72.4     | 230             | 50        | 41    | 5.2 | □                                       | 18.0        | 2 350             | -10...+55         | 40 000 / 27 500                          |                     | 3     |
| 4550 N       |  | 145               | 85.3     | 230             | 50        | 44    | 5.4 | □                                       | 16.5        | 2 550             | -10...+55         | 42 500 / 30 000                          |                     | 4     |
| 4650 N       |  | 160               | 94.2     | 230             | 50        | 46    | 5.4 | □                                       | 19.0        | 2 650             | -10...+55         | 37 500 / 27 500                          |                     | 5     |
| 4656 N       |  | 160               | 94.2     | 230             | 50        | 47    | 5.5 | ■                                       | 19.0        | 2 650             | -40...+85         | 37 500 / 15 000                          |                     | 5     |
| 4840 N       |  | 85                | 50.0     | 115             | 60        | 26    | 4.1 | □                                       | 10.0        | 1 650             | -10...+75         | 57 500 / 25 000                          |                     | 6     |
| 4800 N       |  | 97                | 57.1     | 115             | 60        | 32    | 4.3 | □                                       | 9.0         | 1 750             | -10...+75         | 60 000 / 27 500                          |                     | 7     |
| 4530 N       |  | 151               | 88.9     | 115             | 60        | 45    | 5.4 | □                                       | 16.0        | 2 700             | -10...+65         | 42 500 / 25 000                          |                     | 8     |
| 4500 N       |  | 169               | 99.5     | 115             | 60        | 48    | 5.7 | □                                       | 15.0        | 3 000             | -10...+65         | 47 500 / 25 000                          |                     | 9     |
| 4600 N       |  | 180               | 105.9    | 115             | 60        | 50    | 5.7 | □                                       | 18.0        | 3 100             | -10...+60         | 40 000 / 25 000                          |                     | 10    |
| 4606 N       |  | 180               | 105.9    | 115             | 60        | 51    | 5.8 | ■                                       | 18.0        | 3 100             | -40...+90         | 40 000 / 15 000                          |                     | 10    |



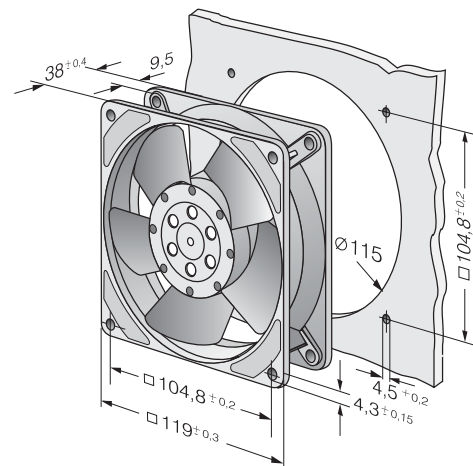
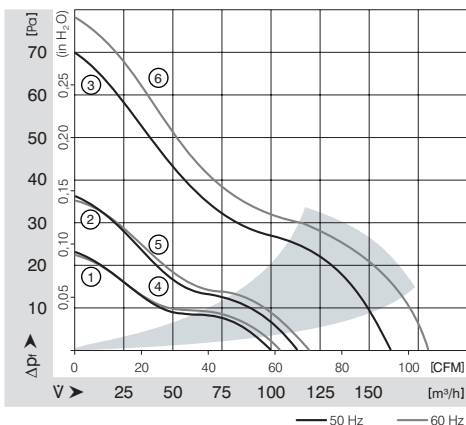
# AC Axial Fans

Series 4000 Z 119 x 119 x 38 mm



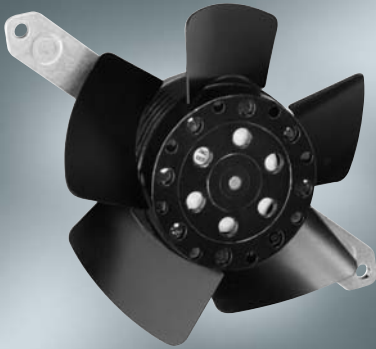
- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CW looking at rotor.
- Electrical connection via 2 flat pins 2.8 x 0.5 mm.
- Also available: Models with mounting bosses and single leads.
- Fan housing with ground lug and screw M4 x 8 (TORX).
- Mass 540 g.

| Nominal Data | Air Flow          |       | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub><br>at 40 °C |     | Curve |
|--------------|-------------------|-------|-----------------|-----------|-------|-----|---|-------------|---------------|-------------------|--|-----|-------|
|              | m <sup>3</sup> /h | CFM   |                 |           | V     | Hz  |   |             |               |                   | dB(A)                                    | Bel |       |
| 4850 Z       | 100               | 58.9  | 230             | 50        | 26    | 4.0 | □                                       | 13.0        | 1 700         | -10...+65         | 50 000 / 27 500                          | 1   |       |
| 4856 Z       | 100               | 58.9  | 230             | 50        | 26    | 4.0 | ■                                       | 13.0        | 1 700         | -40...+75         | 50 000 / 20 000                          | 1   |       |
| 4580 Z       | 115               | 67.7  | 230             | 50        | 30    | 4.3 | □                                       | 13.0        | 1 900         | -10...+65         | 50 000 / 27 500                          | 2   |       |
| 4586 Z       | 115               | 67.7  | 230             | 50        | 30    | 4.3 | ■                                       | 13.0        | 1 900         | -40...+75         | 50 000 / 20 000                          | 2   |       |
| 4650 Z       | 160               | 94.2  | 230             | 50        | 40    | 5.3 | □                                       | 19.0        | 2 650         | -10...+50         | 37 500 / 30 000                          | 3   |       |
| 4656 Z       | 160               | 94.2  | 230             | 50        | 40    | 5.3 | ■                                       | 19.0        | 2 650         | -40...+75         | 37 500 / 17 500                          | 3   |       |
| 4800 Z       | 105               | 61.6  | 115             | 60        | 28    | 4.1 | □                                       | 12.0        | 1 800         | -10...+70         | 52 500 / 25 000                          | 4   |       |
| 4806 Z       | 105               | 61.6  | 115             | 60        | 28    | 4.1 | ■                                       | 12.0        | 1 800         | -40...+75         | 52 500 / 17 500                          | 4   |       |
| 4530 Z       | 120               | 70.6  | 115             | 60        | 32    | 4.4 | □                                       | 12.0        | 2 000         | -10...+70         | 52 500 / 25 000                          | 5   |       |
| 4536 Z       | 120               | 70.6  | 115             | 60        | 32    | 4.4 | ■                                       | 12.0        | 2 000         | -40...+75         | 52 500 / 17 500                          | 5   |       |
| 4600 Z       | 180               | 105.9 | 115             | 60        | 45    | 5.6 | □                                       | 18.0        | 3 100         | -10...+60         | 40 000 / 25 000                          | 6   |       |
| 4606 Z       | 180               | 105.9 | 115             | 60        | 45    | 5.6 | ■                                       | 18.0        | 3 100         | -40...+85         | 40 000 / 15 000                          | 6   |       |



# AC Axial Fans

Series 4600 TA 113 Ø x 37 mm

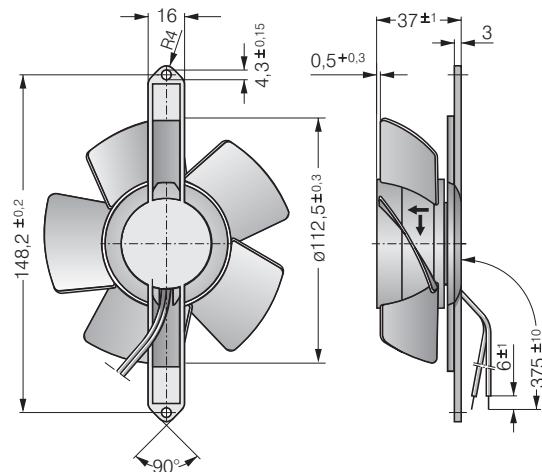


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller and mounting bracket of metal.
- Air intake over mounting bracket. Rotational direction CW looking at rotor.
- Electrical connection via 2 leads. Stripped and tinned ends.
- Mass 430 g.

| Nominal Data | Air Flow          |      | Nominal Voltage | Frequency | Noise | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub><br>at 40 °C |    | Curve |
|--------------|-------------------|------|-----------------|-----------|-------|---|-------------|---------------|-------------------|--|----|-------|
|              | m <sup>3</sup> /h | CFM  |                 |           |       |   |             |               |                   | V  | Hz |       |
| 4650 TA      | 138               | 81.2 | 230             | 50        | 41    | □                                       | 19.0        | 2 550         | -10...+45         | 37 500 / 32 500                          | -  |       |
| 4656 TA      | 138               | 81.2 | 230             | 50        | 42    | ■                                       | 19.0        | 2 550         | -40...+75         | 37 500 / 17 500                          | -  |       |
| 4600 TA      | 147               | 86.5 | 115             | 60        | 43    | □                                       | 18.0        | 2 900         | -10...+50         | 40 000 / 32 500                          | -  |       |
| 4606 TA      | 147               | 86.5 | 115             | 60        | 44    | ■                                       | 18.0        | 2 900         | -40...+80         | 40 000 / 17 500                          | -  |       |

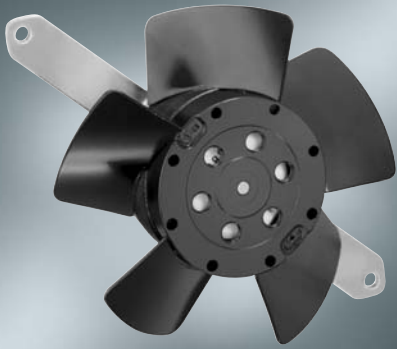
The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 109 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 4600 N is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

| Fan Type | Lead Wires    |
|----------|---------------|
| 4650 TA  | 4600 TA       |
| 4656 TA  | 4606 TA       |
|          | AWG 22, TR 32 |
|          | AWG 18        |



# AC Axial Fans

Series 4600 TZ 108 Ø x 37 mm

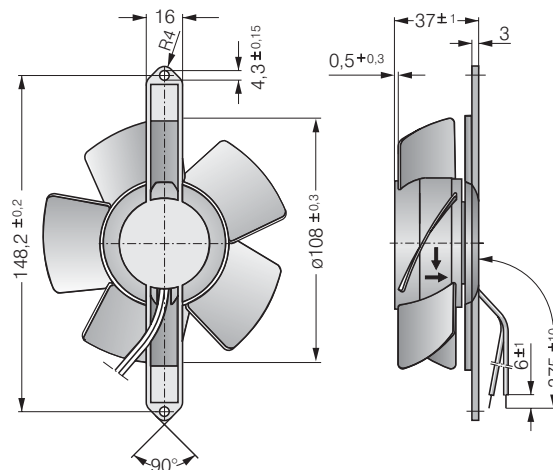


- AC fans with external rotor shaded-pole motor. Impedance protected against overloading.
- Impeller and mounting bracket of metal.
- Air exhaust over struts. Rotational direction CW looking at rotor.
- Electrical connection via 2 leads. Stripped and tinned ends.
- Mass 430 g.

| Nominal Data | Air Flow          |      | Nominal Voltage | Frequency | Noise | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life L <sub>10</sub> |                     | Curve |
|--------------|-------------------|------|-----------------|-----------|-------|---|-------------|-------------------|-------------------|------------------------------|---------------------|-------|
|              | m <sup>3</sup> /h | CFM  |                 |           |       |   |             |                   |                   | at 40 °C                     | at t <sub>max</sub> |       |
| Type         | m <sup>3</sup> /h | CFM  | V               | Hz        | dB(A) | □/■                                     | Watt        | min <sup>-1</sup> | °C                | Hours                        | Hours               |       |
| 4650 TZ      | 125               | 73.6 | 230             | 50        | 42    | □                                       | 19.0        | 2 600             | -10...+50         | 37 500 / 37 500              | -                   | -     |
| 4656 TZ      | 125               | 73.6 | 230             | 50        | 42    | ■                                       | 19.0        | 2 600             | -40...+65         | 37 500 / 20 000              | -                   | -     |
| 4600 TZ      | 140               | 82.4 | 115             | 60        | 45    | □                                       | 18.0        | 2 950             | -10...+50         | 40 000 / 32 500              | -                   | -     |
| 4606 TZ      | 140               | 82.4 | 115             | 60        | 45    | ■                                       | 18.0        | 2 950             | -40...+75         | 40 000 / 17 500              | -                   | -     |

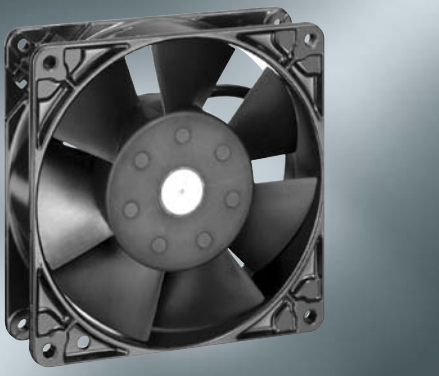
The air flow and noise level of fans without external housing depends on the installation conditions. The stated air flow and noise has been measured with an orifice 109 mm Ø at a distance of approx. 17 mm from the mounting bracket. Under exceptionally favourable mounting conditions, the air flow of fan series 4000 Z is achievable. The noise in the optimal operating range can only be measured for these fans in a specific application.

| Fan Type | Lead Wires               |
|----------|--------------------------|
| 4650 TZ  | 4600 TZ<br>AWG 22, TR 32 |
| 4656 TZ  | 4606 TZ<br>AWG 18        |



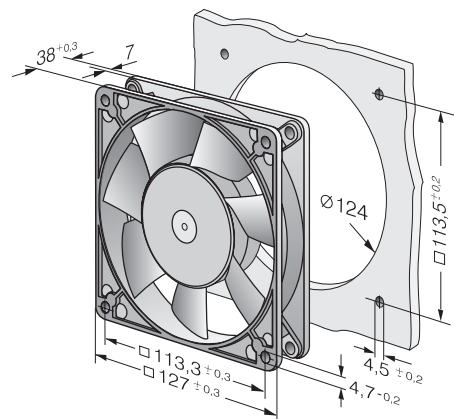
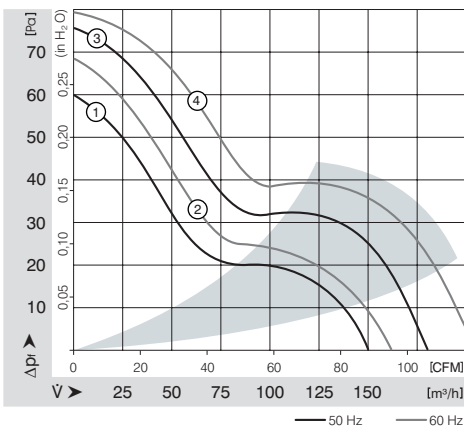
# AC Axial Fans

Series 5900 127 x 127 x 38 mm



- AC fans with internal rotor shaded-pole motor. Impedance protected against overloading.
- Metal fan housing and impeller of fibreglass reinforced plastic PA.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Electrical connection via 2 flat pins 2.8 x 0.8 mm.
- Fan housing with ground lug and screw M4 x 6.
- Mass 570 g.

| Nominal Data |  | Air Flow          | Air Flow | Nominal Voltage | Frequency | Noise | Sinter-Sleeve Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life L <sub>10</sub> | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|-------|------------------------|-------------|-------------------|-------------------|------------------------------|-------|
| Type         |  | m <sup>3</sup> /h | CFM      | V               | Hz        | dB(A) | Bel                    | Watt        | min <sup>-1</sup> | °C                | Hours                        | Hours |
| 5988         |  | 150               | 88.3     | 230             | 50        | 37    | 4.9                    | 13.0        | 2 250             | -30...+55         | 35 000 / 20 000              | 1     |
| 5950         |  | 180               | 105.9    | 230             | 50        | 43    | 5.4                    | 18.0        | 2 700             | -20...+50         | 40 000 / 32 500              | 3     |
| 5958         |  | 180               | 105.9    | 230             | 50        | 44    | 5.5                    | 18.0        | 2 750             | -30...+60         | 40 000 / 25 000              | 3     |
| 5938         |  | 162               | 95.3     | 115             | 60        | 40    | 4.9                    | 12.0        | 2 500             | -30...+55         | 35 000 / 20 000              | 2     |
| 5900         |  | 206               | 121.2    | 115             | 60        | 46    | 5.7                    | 17.0        | 3 050             | -20...+55         | 42 500 / 30 000              | 4     |
| 5908         |  | 206               | 121.2    | 115             | 60        | 47    | 5.8                    | 17.0        | 3 100             | -30...+75         | 42 500 / 20 000              | 4     |



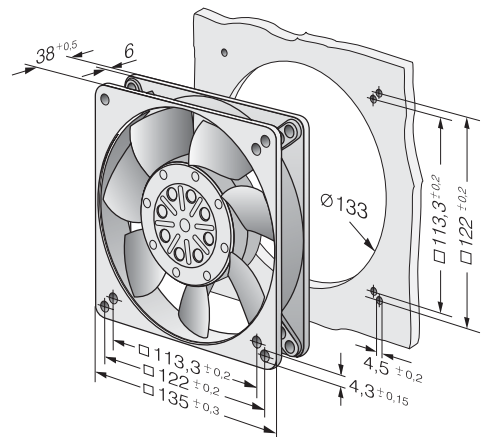
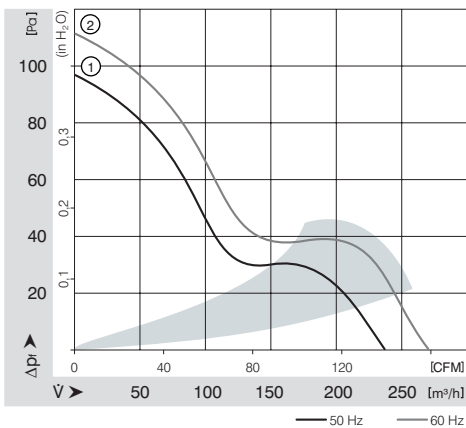
# AC Axial Fans

Series 5600 135 x 135 x 38 mm



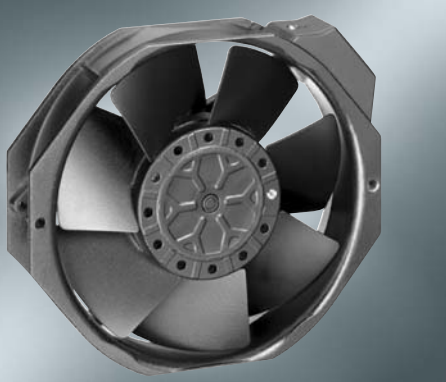
- AC fans with external rotor shaded-pole motor.  
Protected against overloading by thermal cutout.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Electrical connection via 2 flat pins 2.8 x 0.5 mm.
- Fan housing with ground lug and screw M4 x 8 (TORX).
- Mass 800 g.

| Nominal Data |  | Air Flow          | Air Flow | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life L <sub>10</sub><br>at 40 °C | at t <sub>max</sub> | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|-------|-----|---|-------------|-------------------|-------------------|--|---------------------|-------|
| Type         |  | m <sup>3</sup> /h | CFM      | V               | Hz        | dB(A) | Bel | □ / ■                                   | Watt        | min <sup>-1</sup> | °C                | Hours                                    | Hours               |       |
| 5656 S       |  | 235               | 138.3    | <b>230</b>      | <b>50</b> | 46    | 5.9 | ■                                       | 30.0        | 2 700             | -35...+70         | 45 000 / 20 000                          |                     | 1     |
| 5606 S       |  | 270               | 158.9    | <b>115</b>      | <b>60</b> | 50    | 6.2 | ■                                       | 26.0        | 3 100             | -35...+80         | 47 500 / 20 000                          |                     | 2     |



# AC Axial Fans

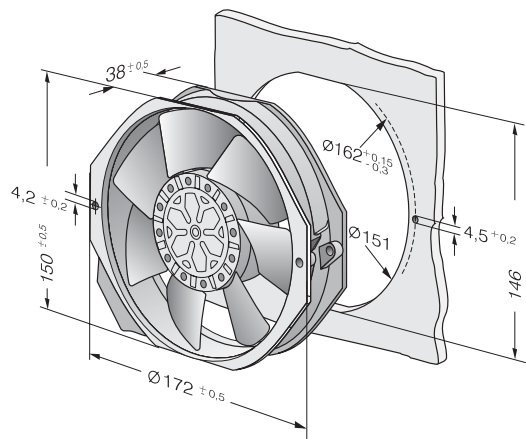
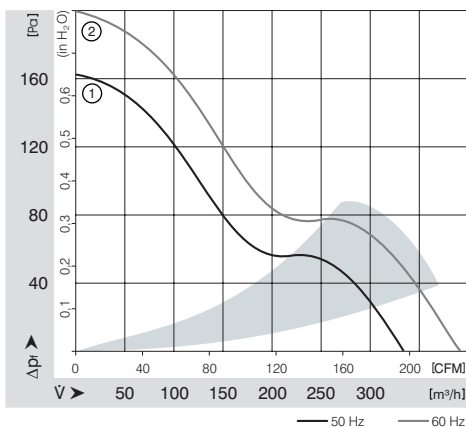
Series 7000 150 x 172 x 38 mm



- AC fans with external rotor capacitor motor. Protected against overloading by integrated thermal cutout.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Electrical connection via 2 flat pins 2.8 x 0.5 mm.
- Fan housing with ground lug and screw M4 x 6.
- Mass 900 g.

| Nominal Data |  | Air Flow          | Air Flow | Nominal Voltage | Frequency | Noise | Sinter-Sleeve Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life L <sub>10</sub> | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|-------|------------------------|-------------|-------------------|-------------------|------------------------------|-------|
| Type         |  | m <sup>3</sup> /h | CFM      | V               | Hz        | dB(A) | Bel                    | Watt        | min <sup>-1</sup> | °C                | Hours                        | Hours |
| 7056 ES      |  | 330               | 194.2    | <b>230</b>      | <b>50</b> | 52    | 6.4                    | 29.0        | 2 800             | -30...+65         | 60 000 / 32 000              | 1     |
| 7006 ES      |  | 390               | 229.5    | <b>115</b>      | <b>60</b> | 57    | 6.8                    | 24.0        | 3 300             | -30...+80         | 55 000 / 18 000              | 2     |

Minimum ambient temperature -15 °C, admissible for a short time at -30 °C; without reaching dew point.



# AC Axial Fans

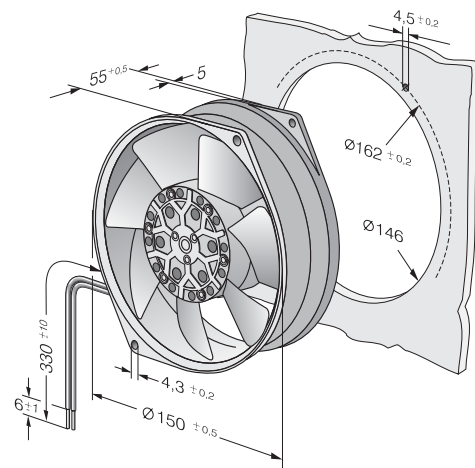
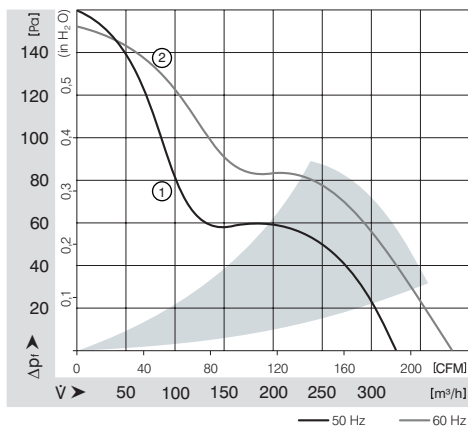
Series 7800 150 Ø x 55 mm



- AC fans with external rotor shaded-pole motor. Protected against overloading by integrated thermal cutout.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Electrical connection via 2 leads. Stripped and tinned ends.
- Fan housing with ground lug and screw M4 x 6.
- Mass 1000 g.

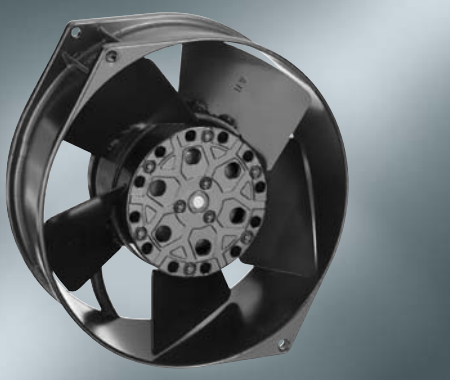
| Nominal Data | Air Flow          |       | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub> |     | Curve |
|--------------|-------------------|-------|-----------------|-----------|-------|-----|---|-------------|---------------|-------------------|------------------------------|-----|-------|
|              | m <sup>3</sup> /h | CFM   |                 |           | V     | Hz  |   |             |               |                   | dB(A)                        | Bel |       |
| 7855 ES      | 325               | 191.3 | 230             | 50        | 48    | 6.0 | ■                                       | 45.0        | 2 800         | -30...+50         | 40 000 / 21 000              |     | 1     |
| 7856 ES      | 325               | 191.3 | 230             | 50        | 48    | 6.0 | ■                                       | 45.0        | 2 800         | -30...+70         | 40 000 / 12 000              |     | 1     |
| 7805 ES      | 380               | 223.7 | 115             | 60        | 52    | 6.4 | ■                                       | 38.0        | 3 250         | -30...+75         | 40 000 / 19 000              |     | 2     |
| 7806 ES      | 380               | 223.7 | 115             | 60        | 52    | 6.4 | ■                                       | 38.0        | 3 250         | -30...+90         | 40 000 / 12 500              |     | 2     |

Minimum ambient temperature -15 °C, admissible for a short time at -30 °C; without reaching dew point.



# AC Axial Fans

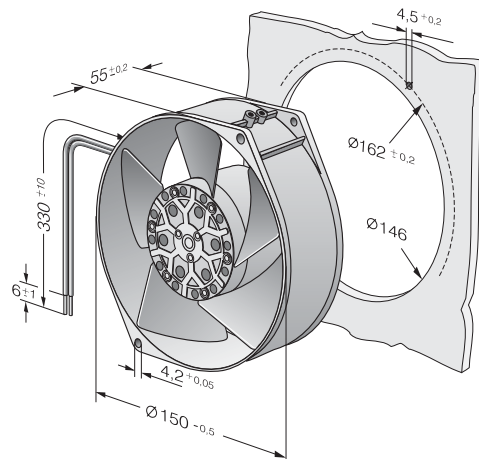
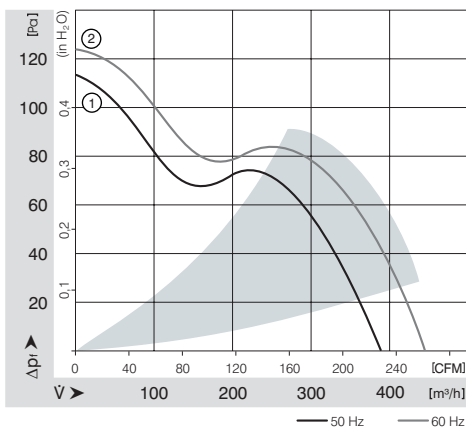
Series 7400 150 Ø x 55 mm



- AC fans with external rotor shaded-pole motor. Protected against overloading by integrated thermal cutout.
- Metal fan housing and impeller.
- Air intake over struts. Rotational direction CCW looking at rotor.
- Electrical connection via 2 leads. Stripped and tinned ends.
- Fan housing with ground lug and screw M4 x 6.
- Mass 1000 g.

| Nominal Data |  | Air Flow          | Air Flow | Nominal Voltage | Frequency | Noise | Sinter-Sleeve Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life L <sub>10</sub> | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|-------|------------------------|-------------|-------------------|-------------------|------------------------------|-------|
| Type         |  | m <sup>3</sup> /h | CFM      | V               | Hz        | dB(A) | Bel                    | Watt        | min <sup>-1</sup> | °C                | Hours                        | Hours |
| 7450 ES      |  | 390               | 229.5    | 230             | 50        | 58    | 6.8                    | 47.0        | 2 700             | -30...+60         | 40 000 / 18 000              | 1     |
| 7400 ES      |  | 445               | 261.9    | 115             | 60        | 60    | 6.9                    | 46.0        | 3 050             | -30...+80         | 38 000 / 15 000              | 2     |

Minimum ambient temperature -15 °C, admissible for a short time at -30 °C; without reaching dew point.



# AC Axial Fans

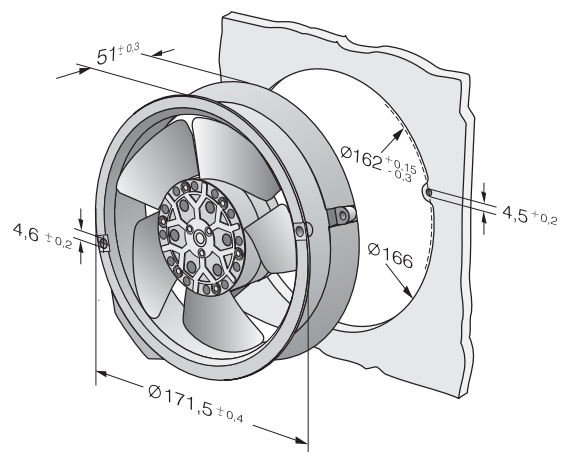
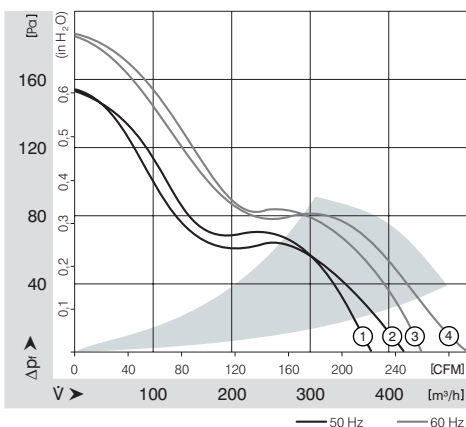
Series 6000 172 Ø x 51 mm



- AC fans with external rotor capacitor motor. Protected against overloading by integrated thermal cutout.
- Metal fan housing and impeller.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Electrical connection via 2 flat pins 2.8 x 0.5 mm.
- Fan housing with ground lug and screw M4 x 6.
- Mass 1000 g.

| Nominal Data | Air Flow          |       | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings<br>Ball Bearings | Power Input | Nominal Speed | Temperature Range | Service Life L <sub>10</sub> |     | Curve |
|--------------|-------------------|-------|-----------------|-----------|-------|-----|---|-------------|---------------|-------------------|------------------------------|-----|-------|
|              | m <sup>3</sup> /h | CFM   |                 |           | V     | Hz  |   |             |               |                   | dB(A)                        | Bel |       |
| 6058 ES      | 375               | 220.7 | 230             | 50        | 54    | 5.9 | ■                                       | 24.0        | 2 800         | -30...+70         | 48 000 / 32 000              |     | 1     |
| 6078 ES      | 420               | 247.2 | 230             | 50        | 54    | 6.3 | ■                                       | 26.0        | 2 800         | -30...+75         | 37 500 / 20 000              |     | 2     |
| 6008 ES      | 440               | 259.0 | 115             | 60        | 58    | 6.4 | ■                                       | 26.0        | 3 300         | -30...+70         | 42 000 / 28 000              |     | 3     |
| 6028 ES      | 500               | 284.3 | 115             | 60        | 58    | 6.7 | ■                                       | 29.0        | 3 300         | -30...+75         | 40 000 / 20 000              |     | 4     |

Minimum ambient temperature -15 °C, admissible for a short time at -30 °C; without reaching dew point.



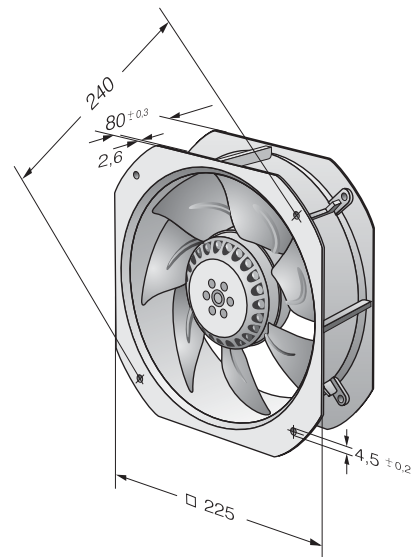
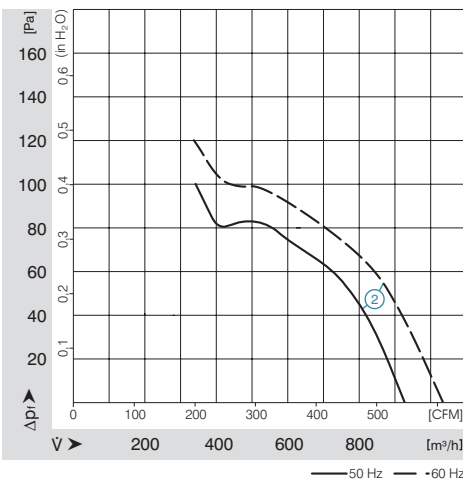
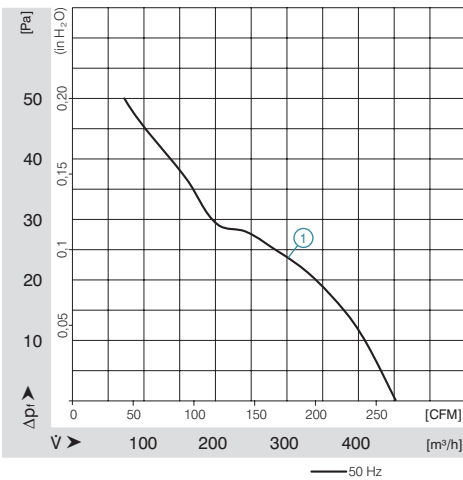
# AC Axial Fans

W\*\* 200 Ø 225 x 225 x 80 mm



- External-single-phase motor.\*
- External-current motor.\*\*
- Integrated thermal monitor.
- Fan housing of die-cast aluminium.
- Impeller of sheet steel, welded onto rotor.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Connection leads
- W2E 200: wired with capacitor on terminal strip.
- W4S 200: terminal strip.
- Mass 2000 g.

| Nominal Data     |  | Air Flow          | Air Flow | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings | Power Input | Nominal Speed     | Temperature Range | Service Life L <sub>10</sub> | at t <sub>max</sub> | Curve |
|------------------|--|-------------------|----------|-----------------|-----------|-------|-----|------------------------|-------------|-------------------|-------------------|------------------------------|---------------------|-------|
| Type             |  | m <sup>3</sup> /h | CFM      | V DC            | Hz        | dB(A) | Bel | □/■                    | Watt        | min <sup>-1</sup> | °C                | Hours                        | Hours               |       |
| W2E200-HK86-01*  |  | 1030              | 606.2    | 115             | 60        | 61    | 4.1 | ■                      | 80.0        | 2800              | -25...+65         | 60 000 / 58 000              |                     | 2     |
| W2E200-HK38-01*  |  | 925               | 544.4    | 230             | 50        | 59    | 4.6 | ■                      | 64.0        | 2550              | -25...+60         | 63 000 / 60 000              |                     | 2     |
| W4S200-HK04-01** |  | 450               | 264.9    | 230             | 50        | 40    | 5.0 | ■                      | 30.0        | 1370              | -25...+70         | 85 000 / 80 000              |                     | 1     |



# AC Axial Fans

W2E 250 280 x 280 x 80 mm



- External single-phase motor.
- Fan housing of die-cast aluminium.
- Impeller of sheet steel, welded onto rotor.
- Air exhaust over struts. Rotational direction CCW looking at rotor.
- Connection leads with terminal strip, wired with capacitor on terminal strip.
- Integrated thermal monitor.
- Mass 2000 g.
- Class F insulated.

| Nominal Data    |                   | Air Flow | Air Flow | Nominal Voltage | Frequency | Noise |     | Sinter-Sleeve Bearings | Power Input       | Nominal Speed | Temperature Range | Service Life L <sub>10</sub> |       | Curve |
|-----------------|-------------------|----------|----------|-----------------|-----------|-------|-----|------------------------|-------------------|---------------|-------------------|------------------------------|-------|-------|
| Type            | m <sup>3</sup> /h | CFM      | V DC     | Hz              | dB(A)     | Bel   | □/■ | Watt                   | min <sup>-1</sup> | °C            | Hours             | at t <sub>max</sub>          | Hours |       |
| W2E 250-HL06-01 | 1865              | 1077.1   | 230      | 50              | 69        | 4.1   | ■   | 127.0                  | 2 550             | -15...+60     | 63 000 / 70 000   |                              |       | 3     |

