



ARES

# Transformer Cooling Fans

FOR POWER AND DISTRIBUTION TRANSFORMERS

Manufacturing your designs into reality

EXPERIENCE INNOVATIVE

PARTNER QUALITY

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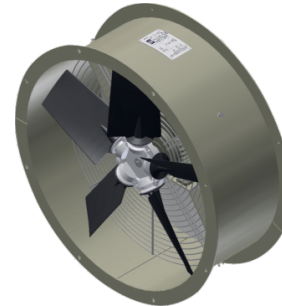




**ARES design and manufactures air forced cooling solutions for distribution and power transformers. Our axial fans are engineered especially for conditions and environments of power generation, transmission and distribution sites with wide range of options.**

| Cooling Fan Selection Chart  |                                                         |
|------------------------------|---------------------------------------------------------|
| Wing Span (mm)               | ● 460 ● 500 ● 520 ● 630 ● 710 ● 800 ● 1000 ● 1250       |
| Supply Frequency             | ● 50 Hz ● 60 Hz                                         |
| Supply Voltage (3 phase)     |                                                         |
| Sound Level                  |                                                         |
| Air Flow                     |                                                         |
| Motor Protection Class       | ● IP55 ● IP56 ● IP65 ● IP66                             |
| Operating Temperature        | ● -25...+60°C ● -40...+60°C ● -25...+70°C ● -25...+70°C |
| Protection Grids             | ■ In front of wings ■ Behind wings                      |
| Thermal Protection           | ● No ● Yes (requires external relay)                    |
| Tropical Environment         | ● No ● Yes (condensing)                                 |
| Corrosion Class              | ● C3 ● C4 ● C5 ■ Medium ■ High                          |
| Color (Motor, Casing, Grids) | RAL _____                                               |

- ✓ **ENGINEERED FOR TRANSFORMER OPERATION**
- ✓ **FULLY CLOSED MOTOR UP TO IP66**
- ✓ **EASY INSTALLATION**
- ✓ **HIGH CORROSION RESISTANCE**
- ✓ **SAFE OPERATION WITH COMPLETE GUARD GRILLES**
- ✓ **SUITABLE FOR EXTREME AMBIENT TEMPERATURES**
- ✓ **WIDE CUSTOMIZATION OPTIONS**
- ✓ **ERP DESIGN AVAILABLE**



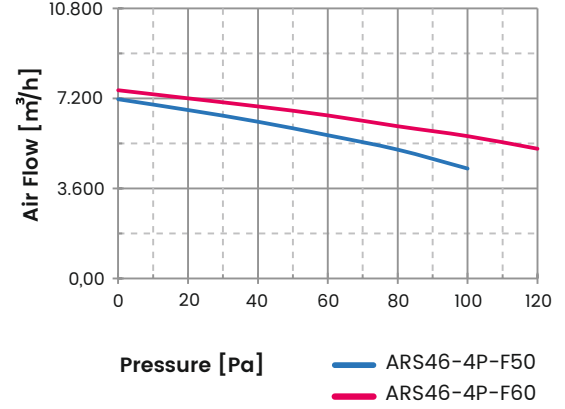
|                          |                                                  |
|--------------------------|--------------------------------------------------|
| Standard                 | IEC 60034-1, IEC 60335-2:80, ISO 5801            |
| Balance Quality          | G6.3 according to ISO 1940-1                     |
| Tolerance                | Class 2 according to DIN 24166                   |
| Mounting Position        | Horizontal & Vertical                            |
| Motor                    | Asynchronous motor with aluminium body           |
| Winding Insulation       | Class F or H                                     |
| Winding Temperature Rise | Class B                                          |
| Operation                | Indoor & Outdoor                                 |
| Corrosion Class          | C3 / C4 / C5 - Medium / High acc. to ISO 12944-2 |
| Fasteners                | Stainless Steel                                  |

### Specification

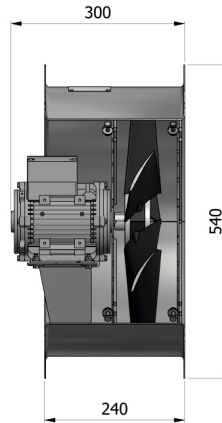
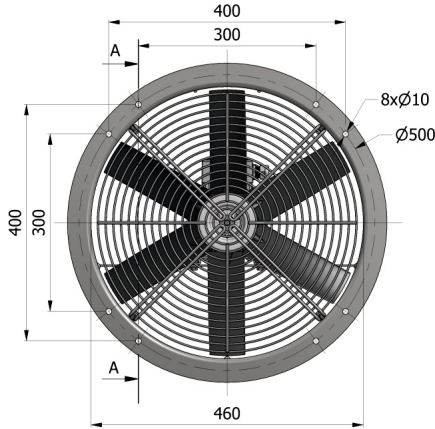
|                                         |                         |                         |
|-----------------------------------------|-------------------------|-------------------------|
| <b>Number of Poles</b>                  | 4                       |                         |
| <b>Type</b>                             | ARS46-4P-F50            | ARS46-4P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| <b>Full Load Current</b>                | 1,9 A / 1,1 A           | 2,1 A / 1,2 A           |
| <b>Input Power</b>                      | 450 W                   | 550 W                   |
| <b>Speed</b>                            | 1440 rpm                | 1728 rpm                |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 75 dB(A) / 70 dB(A)     | 79 dB(A) / 74 dB(A)     |
| <b>Air Flow</b>                         | 6.840 m <sup>3</sup> /h | 7.236 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 20 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

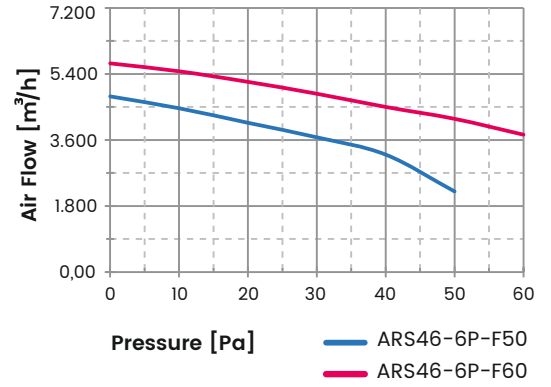


### Specification

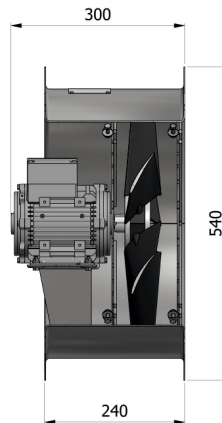
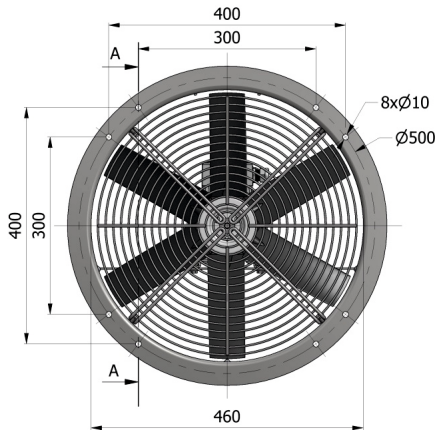
|                                         |                         |                         |
|-----------------------------------------|-------------------------|-------------------------|
| <b>Number of Poles</b>                  | 6                       |                         |
| <b>Type</b>                             | ARS46-6P-F50            | ARS46-6P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| <b>Full Load Current</b>                | 0,9 A / 0,5 A           | 1,0 A / 0,6 A           |
| <b>Input Power</b>                      | 210 W                   | 240 W                   |
| <b>Speed</b>                            | 960 rpm                 | 1152 rpm                |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 63 dB(A) / 58 dB(A)     | 66 dB(A) / 61 dB(A)     |
| <b>Air Flow</b>                         | 4.464 m <sup>3</sup> /h | 5.400 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 19 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                    |                                  |                                  |
|------------------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.



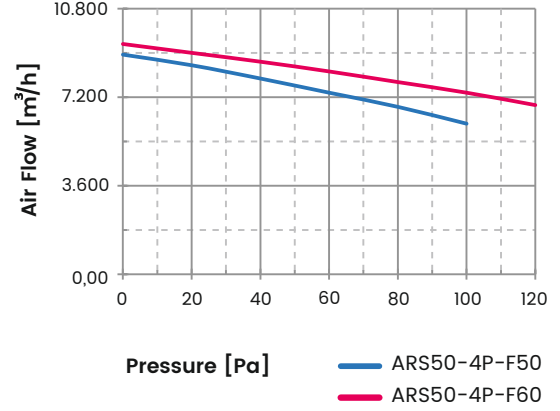


### Specification

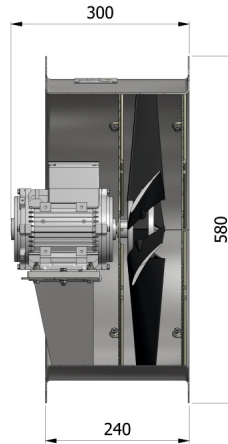
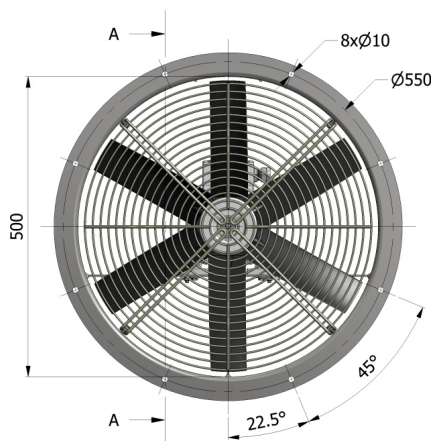
|                                         |                         |                         |
|-----------------------------------------|-------------------------|-------------------------|
| <b>Number of Poles</b>                  | 4                       |                         |
| <b>Type</b>                             | ARS50-4P-F50            | ARS50-4P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| <b>Full Load Current</b>                | 2,6 A / 1,5 A           | 2,8 A / 1,6 A           |
| <b>Input Power</b>                      | 600 W                   | 720 W                   |
| <b>Speed</b>                            | 1440 rpm                | 1728 rpm                |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 76 dB(A) / 71 dB(A)     | 80 dB(A) / 75 dB(A)     |
| <b>Air Flow</b>                         | 8.500 m <sup>3</sup> /h | 9.000 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 23 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

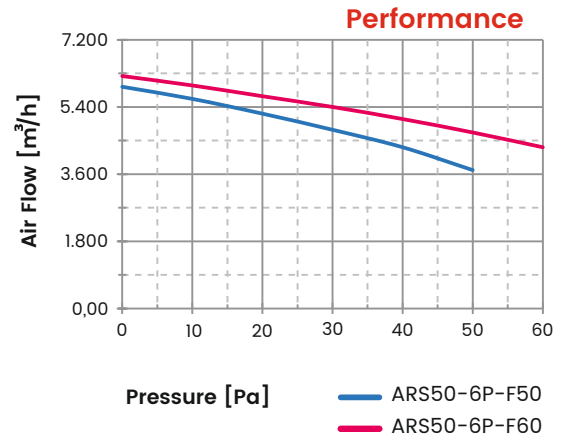
Thermal protection requires an external control unit or relay to operate.



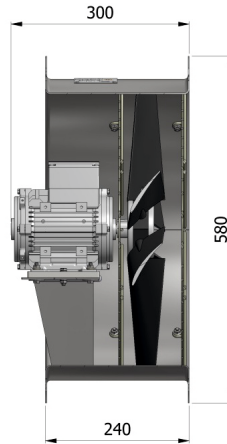
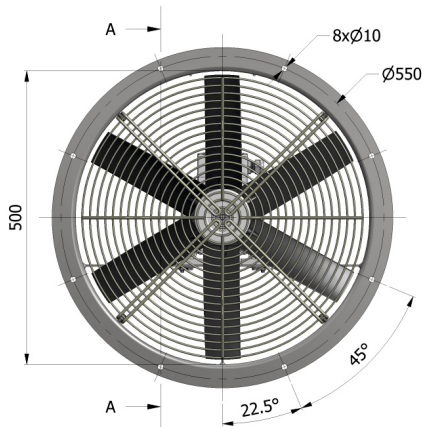
### Specification

|                                         |                         |                         |
|-----------------------------------------|-------------------------|-------------------------|
| <b>Number of Poles</b>                  | 6                       |                         |
| <b>Type</b>                             | ARS50-6P-F50            | ARS50-6P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| <b>Full Load Current</b>                | 1,0 A / 0,6 A           | 1,2 A / 0,7 A           |
| <b>Input Power</b>                      | 230 W                   | 260 W                   |
| <b>Speed</b>                            | 960 rpm                 | 1152 rpm                |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 64 dB(A) / 59 dB(A)     | 67 dB(A) / 62 dB(A)     |
| <b>Air Flow</b>                         | 5.580 m <sup>3</sup> /h | 5.904 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 21 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

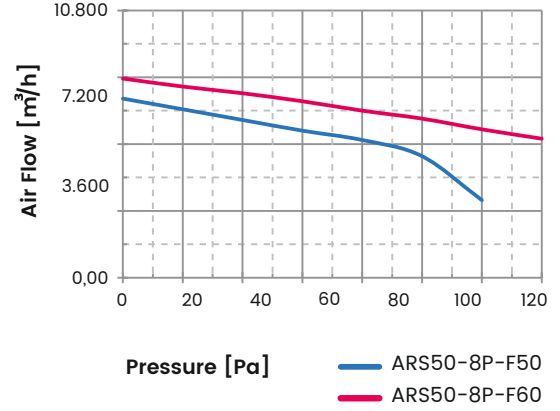


### Specification

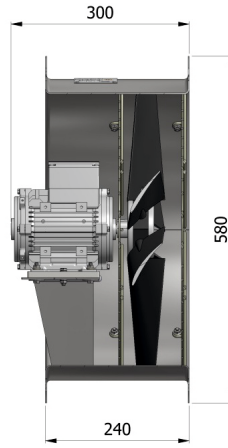
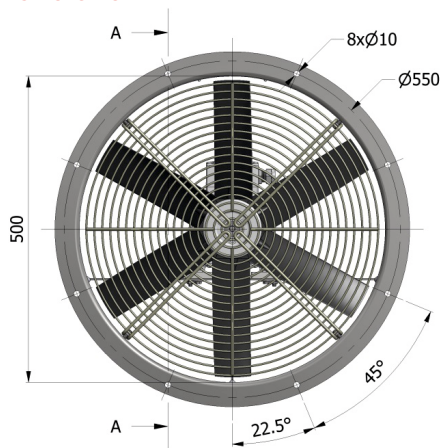
|                                         |                         |                         |
|-----------------------------------------|-------------------------|-------------------------|
| <b>Number of Poles</b>                  | 8                       |                         |
| <b>Type</b>                             | ARS50-8P-F50            | ARS50-8P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| <b>Full Load Current</b>                | 1,4 A / 0,8 A           | 1,4 A / 0,8 A           |
| <b>Input Power</b>                      | 220 W                   | 230 W                   |
| <b>Speed</b>                            | 720 rpm                 | 864 rpm                 |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 59 dB(A) / 54 dB(A)     | 61 dB(A) / 56 dB(A)     |
| <b>Air Flow</b>                         | 4.350 m <sup>3</sup> /h | 5.000 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 21 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

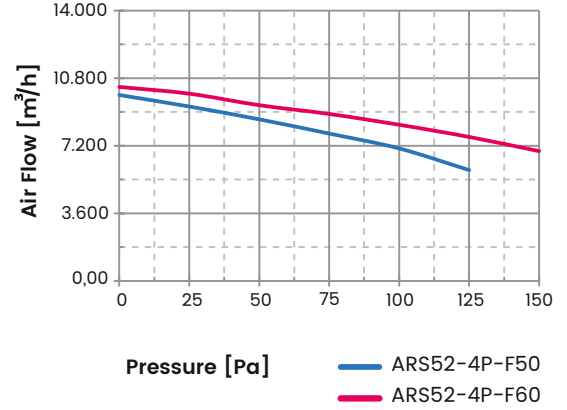


### Specification

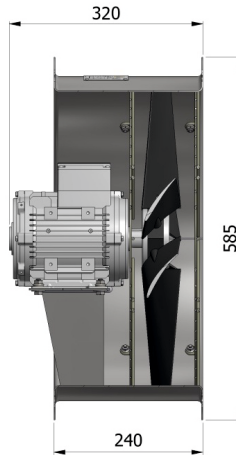
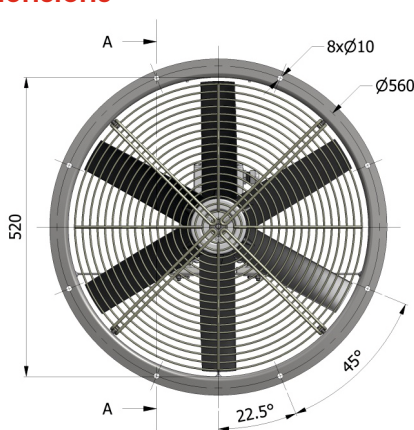
|                                         |                         |                         |
|-----------------------------------------|-------------------------|-------------------------|
| <b>Number of Poles</b>                  | 4                       |                         |
| <b>Type</b>                             | ARS52-4P-F50            | ARS52-4P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| <b>Full Load Current</b>                | 2,8 A / 1,6 A           | 2,8 A / 1,6 A           |
| <b>Input Power</b>                      | 680 W                   | 790 W                   |
| <b>Speed</b>                            | 1440 rpm                | 1728 rpm                |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 77 dB(A) / 72 dB(A)     | 81 dB(A) / 76 dB(A)     |
| <b>Air Flow</b>                         | 9.400 m <sup>3</sup> /h | 9.850 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 24 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                    |                                  |                                  |
|------------------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.



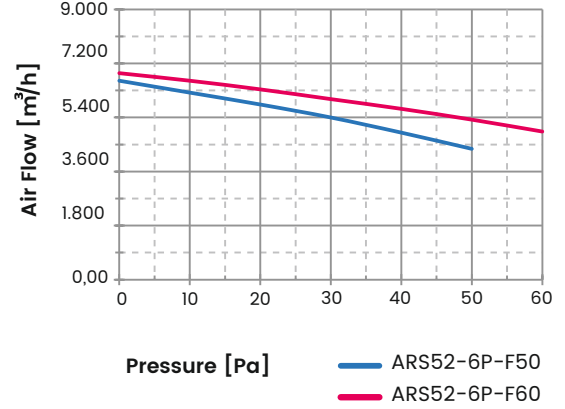


### Specification

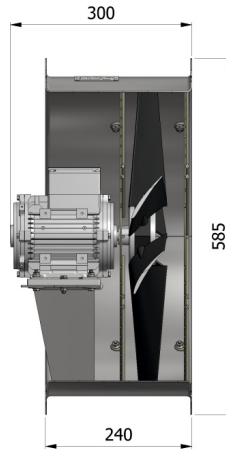
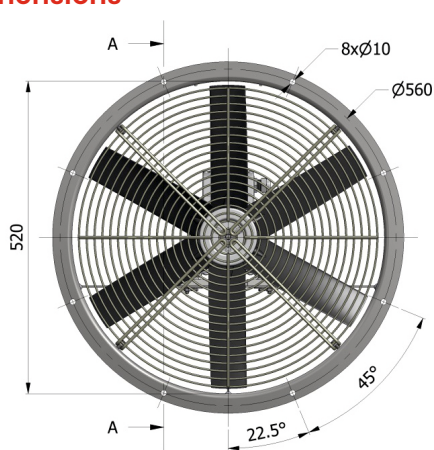
|                                         |                         |                         |
|-----------------------------------------|-------------------------|-------------------------|
| <b>Number of Poles</b>                  | 6                       |                         |
| <b>Type</b>                             | ARS52-6P-F50            | ARS52-6P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| <b>Full Load Current</b>                | 1,2 A / 0,7 A           | 1,2 A / 0,7 A           |
| <b>Input Power</b>                      | 250 W                   | 300 W                   |
| <b>Speed</b>                            | 960 rpm                 | 1152 rpm                |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 66 dB(A) / 61 dB(A)     | 69 dB(A) / 64 dB(A)     |
| <b>Air Flow</b>                         | 6.150 m <sup>3</sup> /h | 6.500 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 22 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                    |                                  |                                  |
|------------------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.

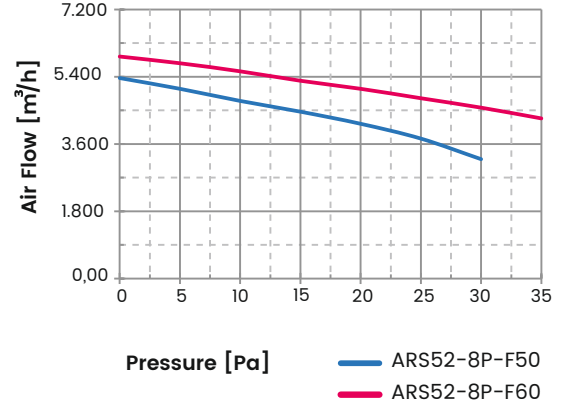


### Specification

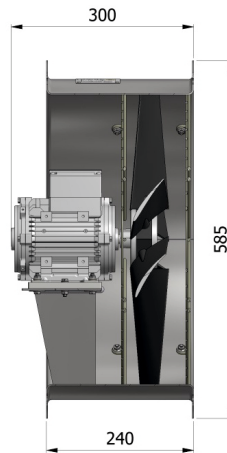
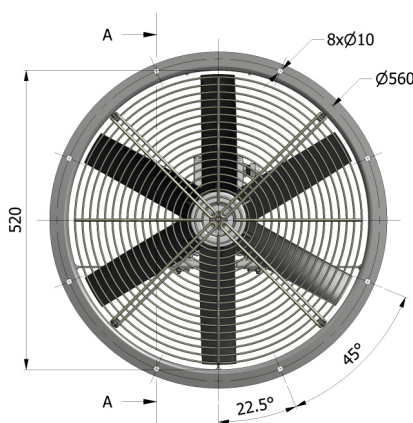
|                                  |                         |                         |
|----------------------------------|-------------------------|-------------------------|
| Number of Poles                  | 8                       |                         |
| Type                             | ARS52-8P-F50            | ARS52-8P-F60            |
| Frequency ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| Voltage (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| Full Load Current                | 1,4 A / 0,8 A           | 1,4 A / 0,8 A           |
| Input Power                      | 230 W                   | 250 W                   |
| Speed                            | 720 rpm                 | 864 rpm                 |
| Sound Pressure ( $L_{pA}1m/2m$ ) | 60 dB(A) / 55 dB(A)     | 63 dB(A) / 58 dB(A)     |
| Air Flow                         | 4.850 m <sup>3</sup> /h | 5.500 m <sup>3</sup> /h |
| Weight (varies by options)       | 22 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                             |                                        |                                    |                                  |                                  |
|-----------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| Motor Protection Class      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| Wings                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| Protection Grids            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| Color (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| Operation Ambient (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| Corrosion Class             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| Thermal Protection          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.

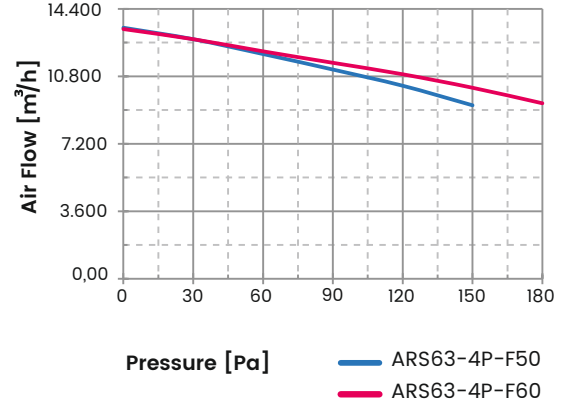


### Specification

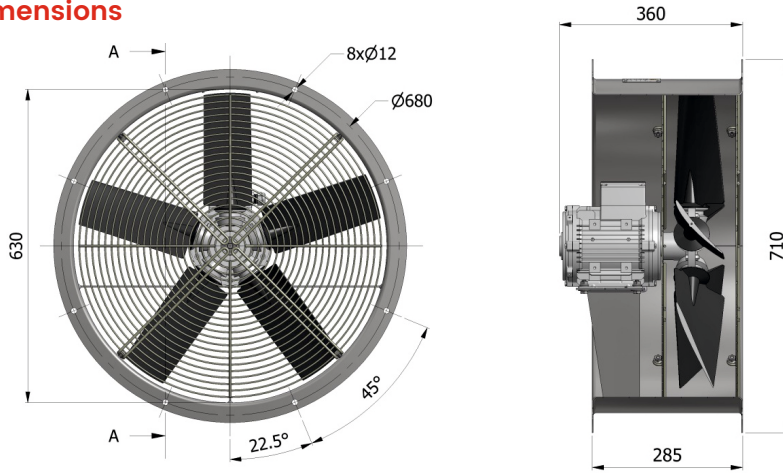
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 4                        |                          |
| <b>Type</b>                             | ARS63-4P-F50             | ARS63-4P-F60             |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 3,3 A / 1,9 A            | 3,3 A / 1,9 A            |
| <b>Input Power</b>                      | 830 W                    | 900 W                    |
| <b>Speed</b>                            | 1440 rpm                 | 1728 rpm                 |
| <b>Sound Pressure</b> ( $L_{pA1m/2m}$ ) | 78 dB(A) / 73 dB(A)      | 83 dB(A) / 78 dB(A)      |
| <b>Air Flow</b>                         | 13.100 m <sup>3</sup> /h | 13.400 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 31 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

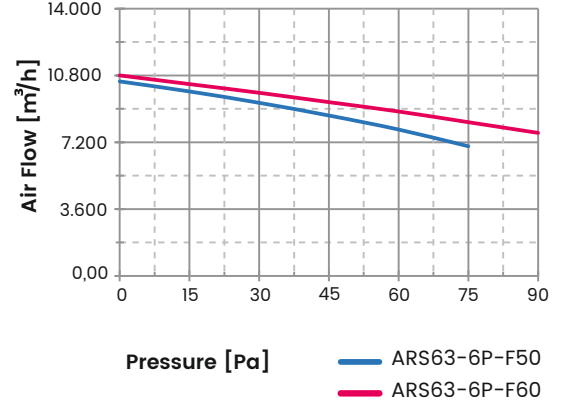


### Specification

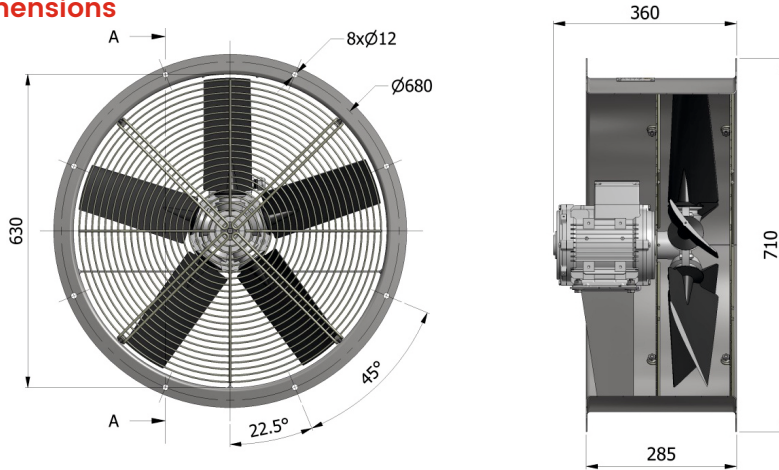
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 6                        |                          |
| <b>Type</b>                             | ARS63-6P-F50             | ARS63-6P-F60             |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 1,9 A / 1,1 A            | 1,9 A / 1,1 A            |
| <b>Input Power</b>                      | 450 W                    | 480 W                    |
| <b>Speed</b>                            | 960 rpm                  | 1150 rpm                 |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 67 dB(A) / 62 dB(A)      | 72 dB(A) / 67 dB(A)      |
| <b>Air Flow</b>                         | 10.100 m <sup>3</sup> /h | 10.450 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 29 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                    |                                  |                                  |
|------------------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.



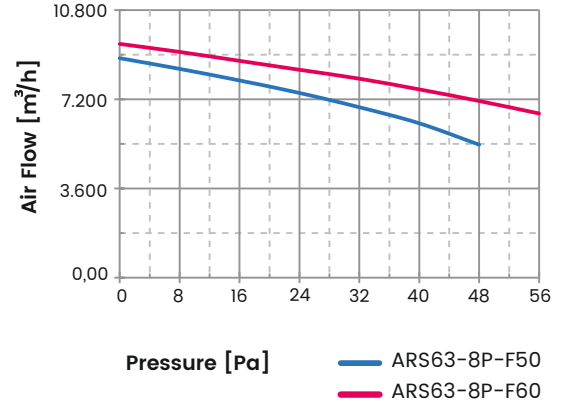


### Specification

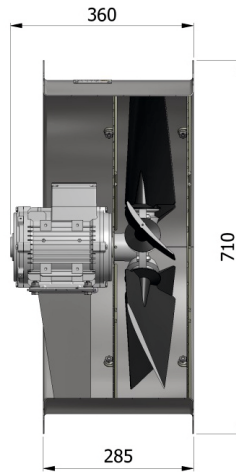
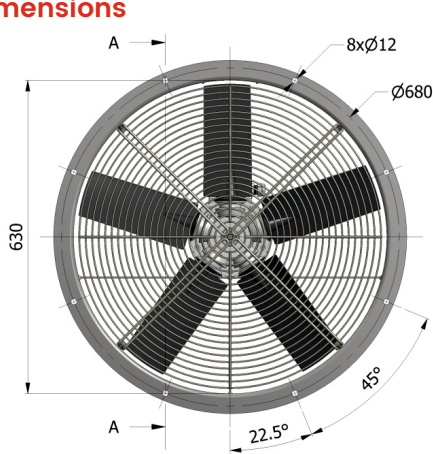
|                                         |                         |                         |
|-----------------------------------------|-------------------------|-------------------------|
| <b>Number of Poles</b>                  | 8                       |                         |
| <b>Type</b>                             | ARS63-8P-F50            | ARS63-8P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                   | 60 Hz                   |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y  | 278V $\Delta$ / 480V Y  |
| <b>Full Load Current</b>                | 1,7 A / 1,0 A           | 1,7 A / 1,0 A           |
| <b>Input Power</b>                      | 280 W                   | 370 W                   |
| <b>Speed</b>                            | 720 rpm                 | 864 rpm                 |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 61 dB(A) / 56 dB(A)     | 65 dB(A) / 60 dB(A)     |
| <b>Air Flow</b>                         | 8.450 m <sup>3</sup> /h | 9.050 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 30 kg                   |                         |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

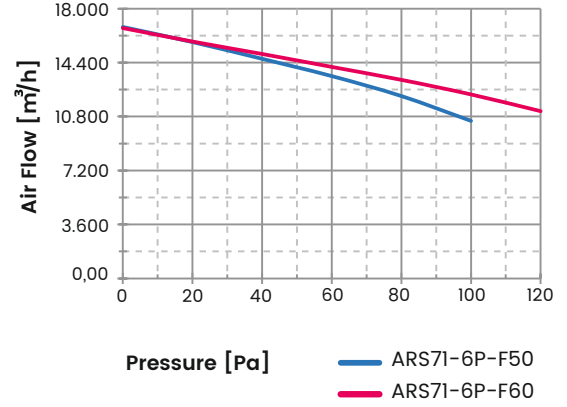


### Specification

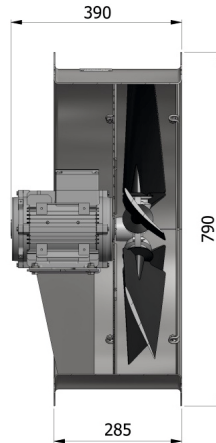
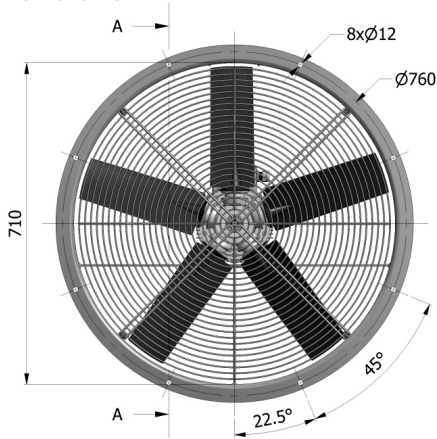
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 6                        |                          |
| <b>Type</b>                             | ARS71-6P-F50             | ARS71-6P-F60             |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 3,7 A / 2,1 A            | 3,7 A / 2,1 A            |
| <b>Input Power</b>                      | 830 W                    | 880 W                    |
| <b>Speed</b>                            | 960 rpm                  | 1152 rpm                 |
| <b>Sound Pressure</b> ( $L_{pA1m/2m}$ ) | 75 dB(A) / 70 dB(A)      | 78 dB(A) / 73 dB(A)      |
| <b>Air Flow</b>                         | 16.000 m <sup>3</sup> /h | 16.300 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 41 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

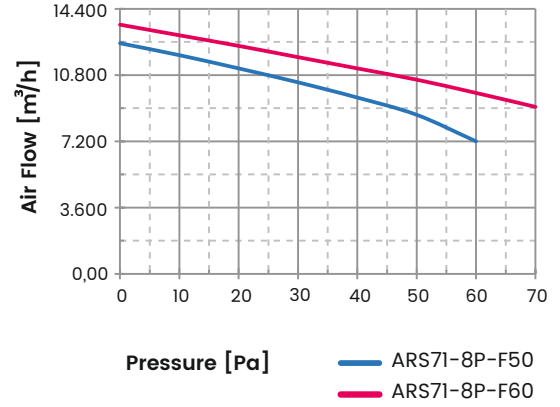


### Specification

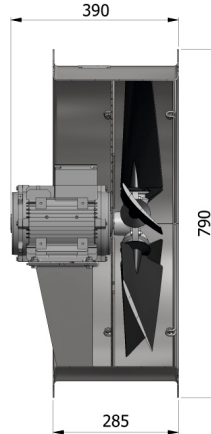
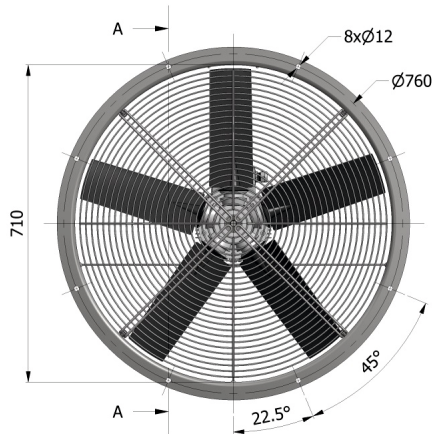
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 8                        |                          |
| <b>Type</b>                             | ARS71-8P-F50             | ARS71-8P-F60             |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 2,1 A / 1,2 A            | 2,3 A / 1,3 A            |
| <b>Input Power</b>                      | 460 W                    | 560 W                    |
| <b>Speed</b>                            | 720 rpm                  | 864 rpm                  |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 67 dB(A) / 62 dB(A)      | 71 dB(A) / 66 dB(A)      |
| <b>Air Flow</b>                         | 11.800 m <sup>3</sup> /h | 12.600 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 41 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

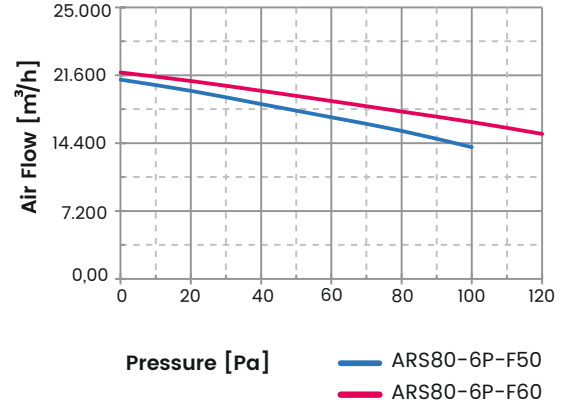


### Specification

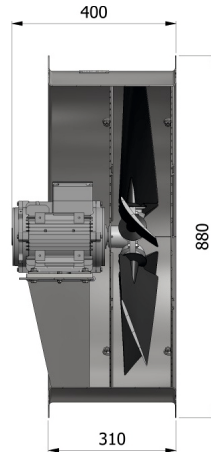
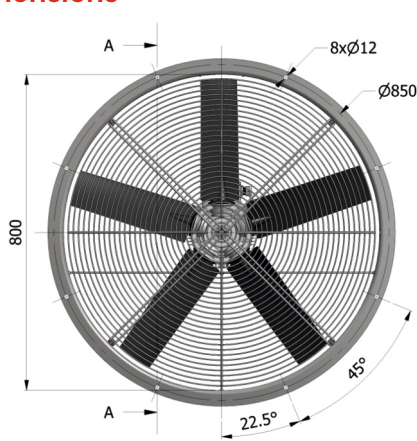
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 6                        |                          |
| <b>Type</b>                             | ARS80-6P-F50             | ARS80-6P-F60             |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 5,0 A / 2,9 A            | 5,2 A / 3,0 A            |
| <b>Input Power</b>                      | 900 W                    | 1100 W                   |
| <b>Speed</b>                            | 960 rpm                  | 1152 rpm                 |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 76 dB(A) / 71 dB(A)      | 81 dB(A) / 76 dB(A)      |
| <b>Air Flow</b>                         | 19.850 m <sup>3</sup> /h | 20.450 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 50 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.



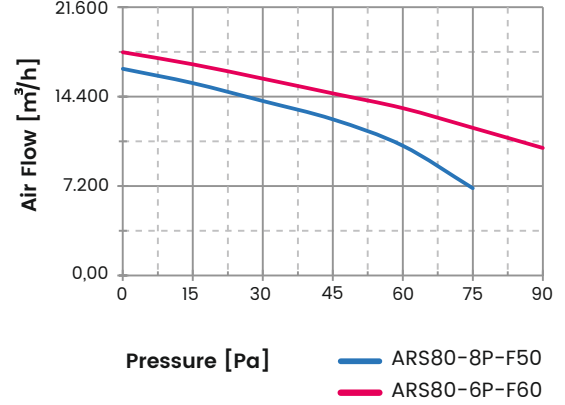


### Specification

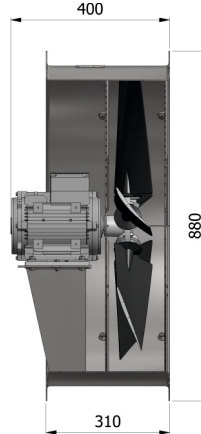
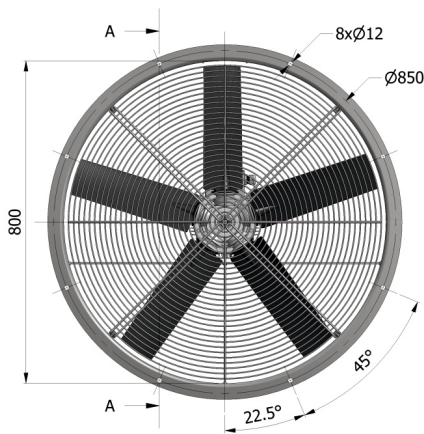
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 8                        |                          |
| <b>Type</b>                             | ARS80-8P-F50             | ARS80-8P-F60             |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 3,0 A / 1,7 A            | 3,1 A / 1,8 A            |
| <b>Input Power</b>                      | 600 W                    | 800 W                    |
| <b>Speed</b>                            | 720 rpm                  | 864 rpm                  |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 67 dB(A) / 62 dB(A)      | 72 dB(A) / 67 dB(A)      |
| <b>Air Flow</b>                         | 15.650 m <sup>3</sup> /h | 16.700 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 50 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

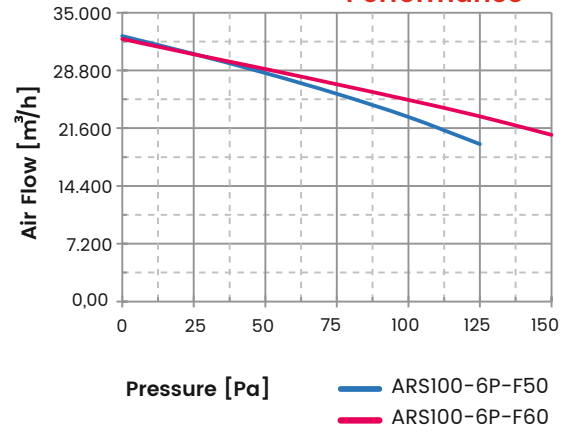


### Specification

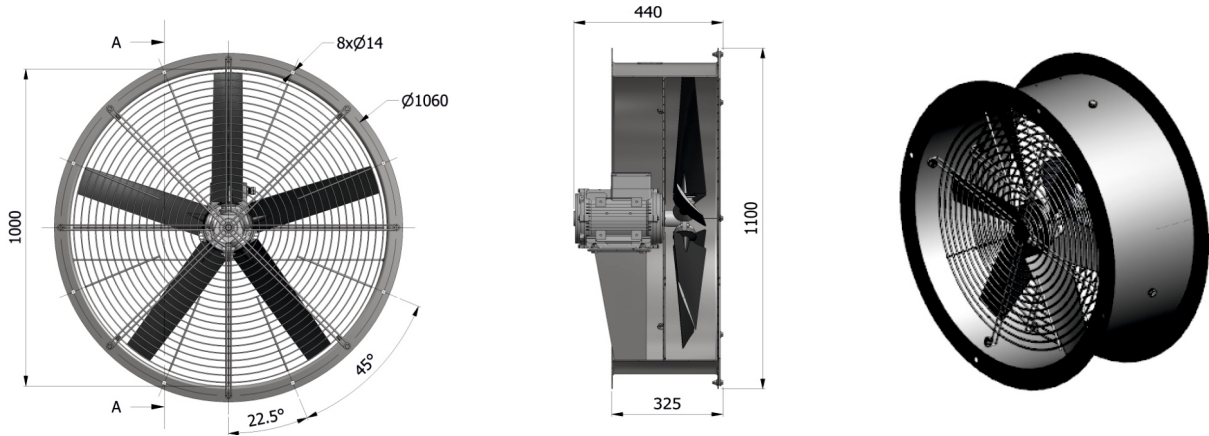
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 6                        |                          |
| <b>Type</b>                             | ARS100-6P-F50            | ARS100-6P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 6,6 A / 3,8 A            | 6,6 A / 3,8 A            |
| <b>Input Power</b>                      | 1500 W                   | 1750 W                   |
| <b>Speed</b>                            | 960 rpm                  | 1152 rpm                 |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 79 dB(A) / 74 dB(A)      | 87 dB(A) / 82 dB(A)      |
| <b>Air Flow</b>                         | 31.100 m <sup>3</sup> /h | 30.300 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 63 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                    |                                  |                                  |
|------------------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.

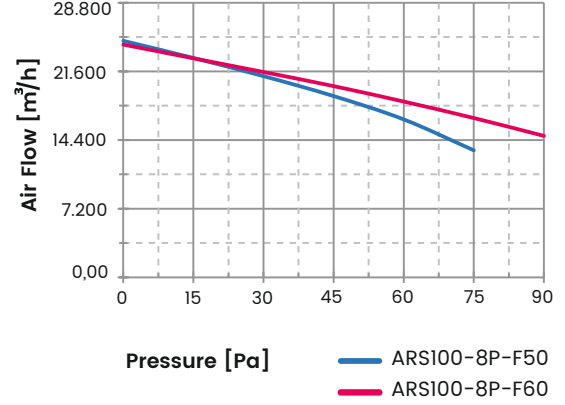


### Specification

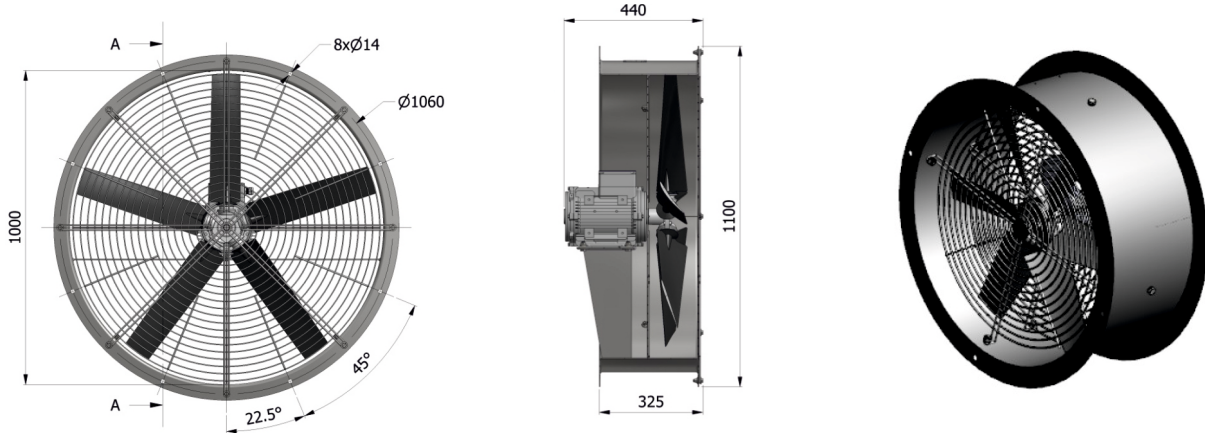
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 8                        |                          |
| <b>Type</b>                             | ARS100-8P-F50            | ARS100-8P-F60            |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 3,8 A / 2,2 A            | 3,8 A / 2,2 A            |
| <b>Input Power</b>                      | 750 W                    | 800 W                    |
| <b>Speed</b>                            | 720 rpm                  | 864 rpm                  |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 72 dB(A) / 67 dB(A)      | 76 dB(A) / 71 dB(A)      |
| <b>Air Flow</b>                         | 23.000 m <sup>3</sup> /h | 22.450 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 62 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                    |                                  |                                  |
|------------------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.

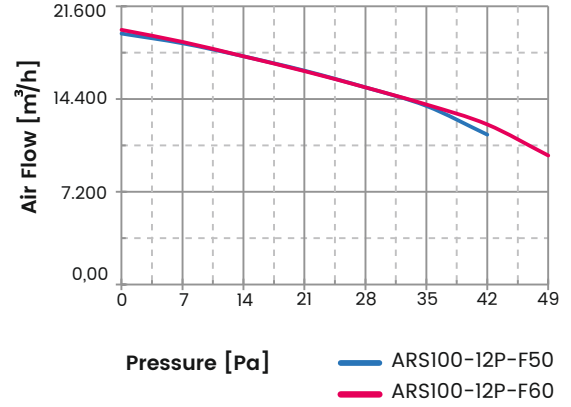


### Specification

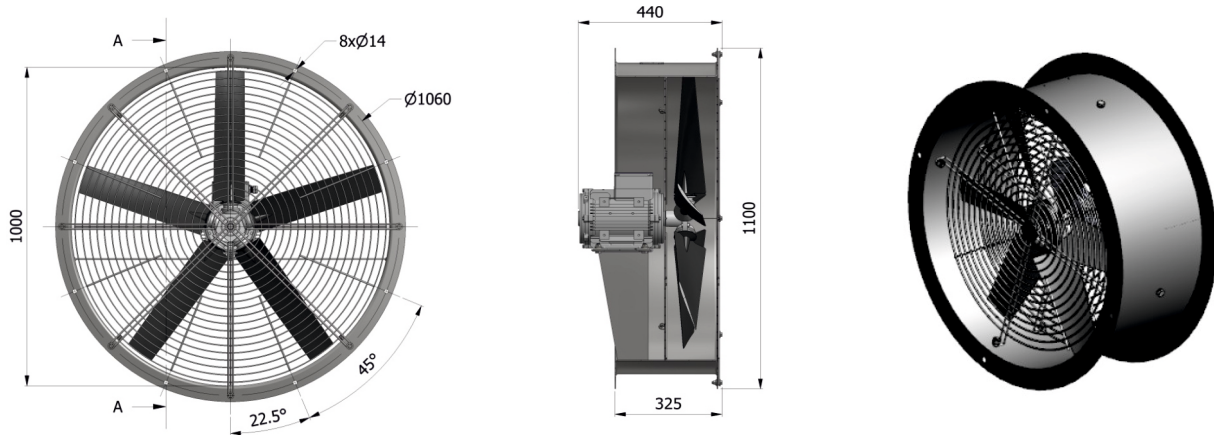
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 12                       |                          |
| <b>Type</b>                             | ARS100-12P-F50           | ARS100-12P-F60           |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 3,3 A / 1,9 A            | 3,3 A / 1,9 A            |
| <b>Input Power</b>                      | 560 W                    | 620 W                    |
| <b>Speed</b>                            | 480 rpm                  | 576 rpm                  |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 63 dB(A) / 58 dB(A)      | 66 dB(A) / 61 dB(A)      |
| <b>Air Flow</b>                         | 18.650 m <sup>3</sup> /h | 18.700 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 62 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                    |                                  |                                  |
|------------------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.



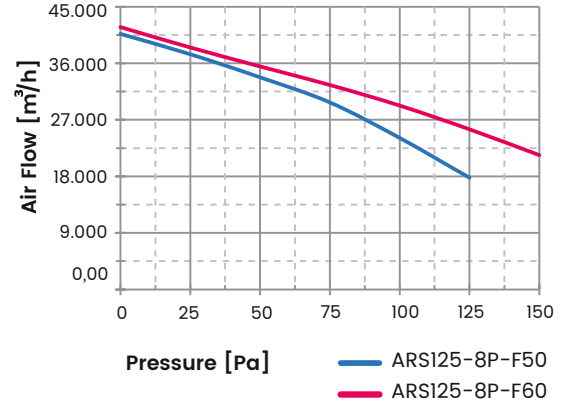


### Specification

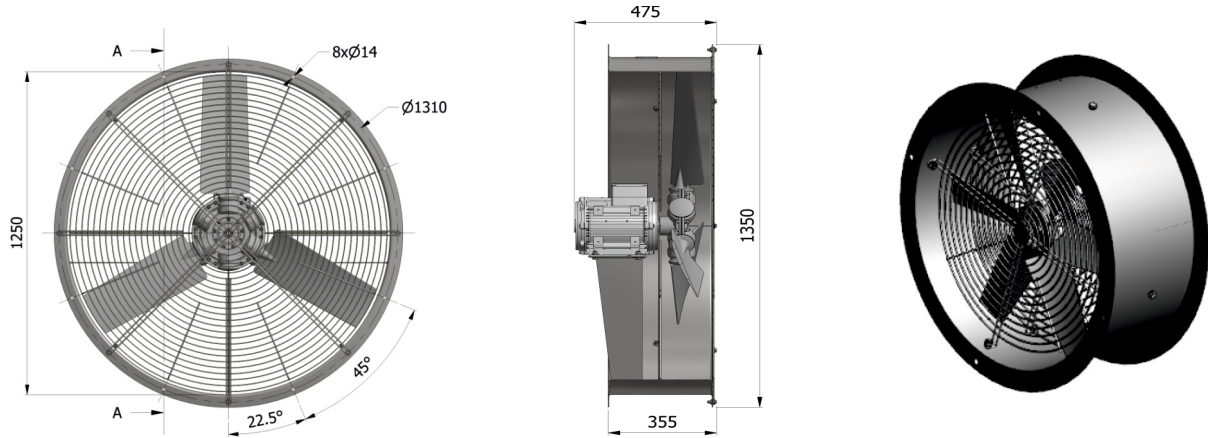
|                                               |                          |                          |
|-----------------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                        | 8                        |                          |
| <b>Type</b>                                   | ARS125-8P-F50            | ARS125-8P-F60            |
| <b>Frequency</b> (± 2%)                       | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph.±5%)                      | 230V Δ / 400V Y          | 278V Δ / 480V Y          |
| <b>Full Load Current</b>                      | 7,7 A / 4,4 A            | 7,7 A / 4,4 A            |
| <b>Input Power</b>                            | 1600 W                   | 1800 W                   |
| <b>Speed</b>                                  | 720 rpm                  | 864 rpm                  |
| <b>Sound Pressure</b> (L <sub>pA</sub> 1m/2m) | 75 dB(A) / 70 dB(A)      | 78 dB(A) / 73 dB(A)      |
| <b>Air Flow</b>                               | 40.950 m <sup>3</sup> /h | 41.500 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)             | 88 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                  |                                    |                                  |
|------------------------------------|----------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56    | <input type="checkbox"/> IP65      | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide |                                  | <input type="checkbox"/> Aluminium |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          |                                  | <input type="checkbox"/> Front     |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032 | <input type="checkbox"/> RAL7033   | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70 | <input type="checkbox"/> -40~+60   | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4      | <input type="checkbox"/> C5        | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                  | <input type="checkbox"/> Yes       |                                  |

Thermal protection requires an external control unit or relay to operate.

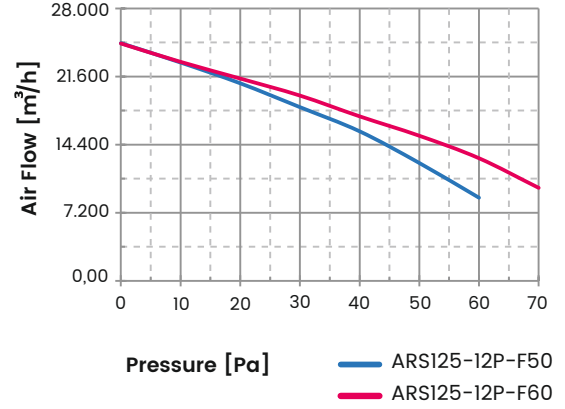


### Specification

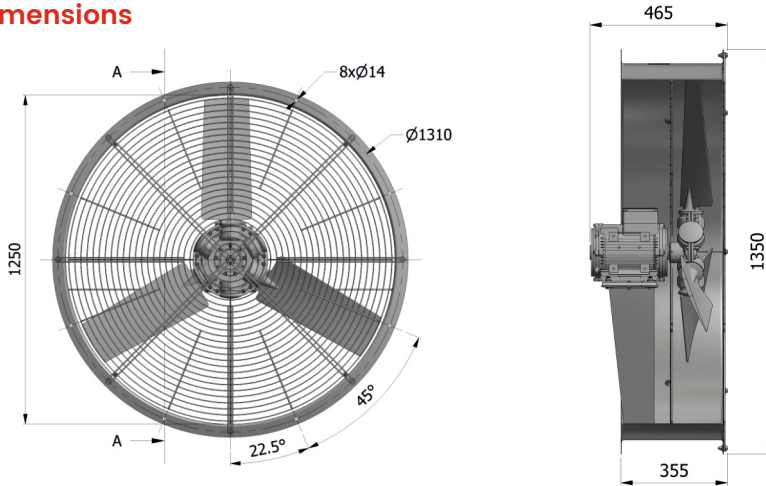
|                                         |                          |                          |
|-----------------------------------------|--------------------------|--------------------------|
| <b>Number of Poles</b>                  | 12                       |                          |
| <b>Type</b>                             | ARS125-12P-F50           | ARS125-12P-F60           |
| <b>Frequency</b> ( $\pm 2\%$ )          | 50 Hz                    | 60 Hz                    |
| <b>Voltage</b> (3ph. $\pm 5\%$ )        | 230V $\Delta$ / 400V Y   | 278V $\Delta$ / 480V Y   |
| <b>Full Load Current</b>                | 3,5 A / 2,0 A            | 3,5 A / 2,5 A            |
| <b>Input Power</b>                      | 600 W                    | 700 W                    |
| <b>Speed</b>                            | 480 rpm                  | 576 rpm                  |
| <b>Sound Pressure</b> ( $L_{pA}1m/2m$ ) | 64 dB(A) / 59 dB(A)      | 68 dB(A) / 63 dB(A)      |
| <b>Air Flow</b>                         | 24.700 m <sup>3</sup> /h | 24.500 m <sup>3</sup> /h |
| <b>Weight</b> (varies by options)       | 85 kg                    |                          |

Air flow and sound pressure level (spl) are given for free blowing operation with inlet & outlet guard grids. SPL values at 1m are measured from side of the fan. SPL values at 2m are calculated by inverse square law.

### Performance



### Fan Dimensions



### Configuration

|                                    |                                        |                                    |                                  |                                  |
|------------------------------------|----------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <b>Motor Protection Class</b>      | <input type="checkbox"/> IP55          | <input type="checkbox"/> IP56      | <input type="checkbox"/> IP65    | <input type="checkbox"/> IP66    |
| <b>Wings</b>                       | <input type="checkbox"/> GFR Polyamide | <input type="checkbox"/> Aluminium |                                  |                                  |
| <b>Protection Grids</b>            | <input type="checkbox"/> Rear          | <input type="checkbox"/> Front     |                                  |                                  |
| <b>Color</b> (housing,motor,grids) | <input type="checkbox"/> RAL7031       | <input type="checkbox"/> RAL7032   | <input type="checkbox"/> RAL7033 | <input type="checkbox"/> Other   |
| <b>Operation Ambient</b> (°C)      | <input type="checkbox"/> -25~+60       | <input type="checkbox"/> -25~+70   | <input type="checkbox"/> -40~+60 | <input type="checkbox"/> -40~+70 |
| <b>Corrosion Class</b>             | <input type="checkbox"/> C3            | <input type="checkbox"/> C4        | <input type="checkbox"/> C5      | Medium/High                      |
| <b>Thermal Protection</b>          | <input type="checkbox"/> No            |                                    | <input type="checkbox"/> Yes     |                                  |

Thermal protection requires an external control unit or relay to operate.



## Temperature Controller

### For Dry Type Medium Voltage Transformers

Developed for winding temperature control of resin or dry type MV transformers. It is based on high level electromagnetic interference, also standardized. There are 4 PT100 sensor inputs. The transformer core temperature or the ambient temperature can also be measured from the 4th sensor input if the 3-phase transformer requests the winding temperatures individually as well as it can be measured. There are 4 relay outputs, ALARM, FAULT, TRIP and FAN.

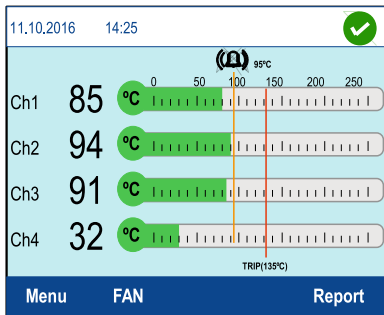
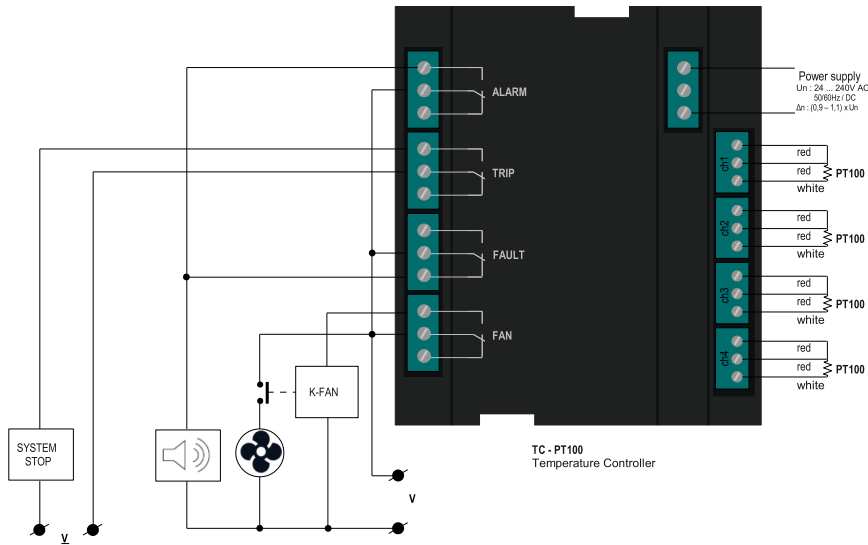
The design, hardware and software were entirely made by ARES TRAFO engineers. The state-of-the-art technology has been incorporated into this device and features have been added that make it easier for the user to use both menus and features. The device has a color LCD display (TFT). As a memory, the device has its own recording ares and records error reports.

All information and warnings that you need to know about the device are described in the user manual. Please read this booklet carefully before commissioning your system and your own reports.

All information and warnings that you need know about the device are described in the user manual. Please do not make anything about the topics that are not being understood without making any contact with our company.

### Features

- 24-240 VAC-Vdc 50/60 Hz ultra wide feed input
- Easy menu design with Turkish, English and Russian language support
- Color LCD display (320x240 pixel x2.4")
- It has 4 Pt100 (3-Wires) RTD sensor inputs
- Sensor inputs are resistant to electromagnetic interference
- Cable lengths in Pt100 are not included in the calculation
- It measures temperature between -10°C and 205°C and has  $\pm 1\%$  measurement accuracy
- 1 ALARM relay output
- 1 TRIP relay output
- There is a relay output (FAULT) for errors in one device memory (the last 40 records)
- 3VA supply available
- Intelligent Fan operation and stop algorithm saves energy in transformer cooling
- Continuously monitors temperature sensors for faults. It detects errors "Sensor cable is broken", "Sensor cable short circuit", "Sensor not attached"
- Error detection in case of data recording center failure
- Password Protection protects the Setting menu against unauthorized users
- There is a button for making the alarm silent or for Manual Fan control



### General

The device that is developed to protect the windings of MV transformers and high-power motors equipped with today's technology, is quite well equipped in terms of function richness and has added a new product to its sector with its advanced software. Additionally, the microprocessor inside is very fast and uses the operating system. This ensures that all operations can be synchronized simultaneously. Displaying the error and temperature values that may occur on the main screen during device operation is as follows.

## ARS-145 TEMPERATURE PROTECTION RELAY

- PT100 INPUTS:4
- RELAY OUTPUTS:4
- RS-485 MODBUS PORT
- 19-150VDC SUPPLY

### DESCRIPTION

ARS-145 is a precision unit designed for the temperature protection of dry type or resin filled MV transformers. The unit offers a high degree of protection against electromagnetic disturbances.

The unit has 4 temperature inputs of PT100 type. Three of them are used for the transformer protection. The fourth input may be used as core temperature protection or ambient temperature monitoring.

Alarm and trip levels of the unit are independently adjustable for first 3 sensors and the fourth sensor input.

Alarm levels are adjusted using the program mode. If no operation is performed, then the unit will exit program mode in 3 minutes.

The unit offers a cable compensation function in order to prevent long cables from impairing the measurement precision.

The unit has 4 dry contact relay outputs rated 6A.

**FAN:** Provides cooler fan control

**TRIP:** High temperature failure relay

**ALARM:** Pre-alarm relay

**FAULT:** Sensor or internal failure indicator

The unit offers an automatic self test feature. The self test consist on the verification of sensor inputs and internal memory integrity.

The standard isolated RS-485 MODBUS RTU communication port is not affected by ground potential differences and allows safe transfer of information to remote management and automation systems.

The supply input is isolated from sensor connections. The unit has 2 supply options, being 19-150VDC or 85-305VAC.



### FEATURES

1 deggers C measurement precision

4xPT100 analog inputs

Allows cable length compensation

Automatic detection of sensor failures

Automatic and manual self test

4xrelay outputs, 5A/250 VAC

Fully isolated RS-485 serial port

MODBUS-RTU communication

Recording of maximum temperatures

Front panel programmable

2 alarm thresholds for channels 1-2-3

2 alarm thresholds for channels 4

Easy to read, 3 digit 14 mm led display

Wide supply voltage range: 19-150 VDC

AC supply version available (85-305 VAC)

Reduced panel depth, easy to install

Wide operating temperature range, -20 to +70°C

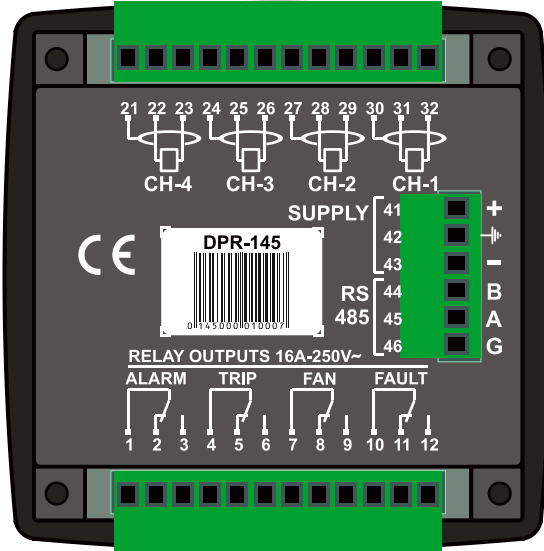
Sealed front panel (IP65 with gasket)

2 part connection system

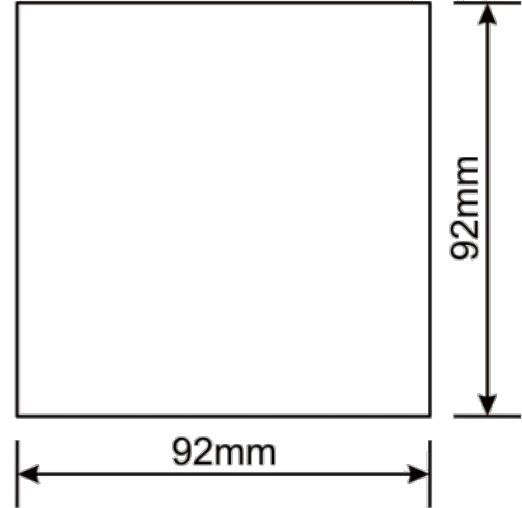




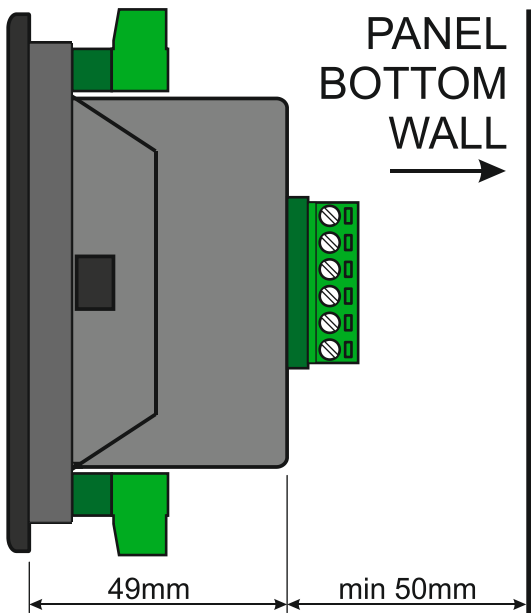
BACK PANEL



PANEL CUT-OUT



INSTALLATION TOLERANCES



TECHNICAL SPECIFICATIONS

Supply Input:

DC Version: 19-150 VDC

AC Version: 85-305 VAC (88-450 VDC)

Measuring Inputs: 4 x PT100 (3 terminals)

Accuracy: 1%+1 digit

Measurement Range: -40 to +250°C

Power Consumption: <4 VA

Relay Outputs: 5A @ 250V AC

Serial Port:

Signal Type: RS-485

Protocol: Modbus RTU

Data Rate: 2400-115200b, adjustable

Isolation: 1000V AC, 1 minute

Operating Temperature range: -20°C to +70°C

Max Relative Humidity: 95% non condensing

Protection: IP 65 (front panel, with gasket)

IP 30 (back panel)

Enclosure: Flame retardant, ROHS compliant, high temperature ABS/PC (UL94-V0)

Installation: Panel mount, rear retaining plastic brackets.

Dimensions: 102x102x53 mm (WxHxD)

Panel Cut-out: 92x92 mm

Weight: 200 gr (approx)

EU Directives:

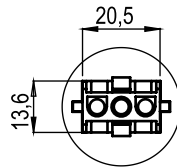
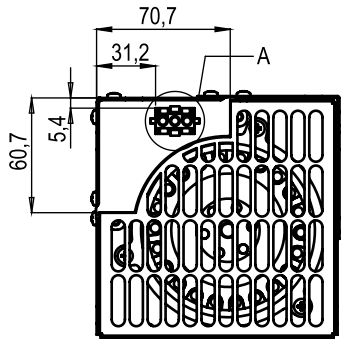
2006/95/EC (LVD)

2004/108/EC (EMC)

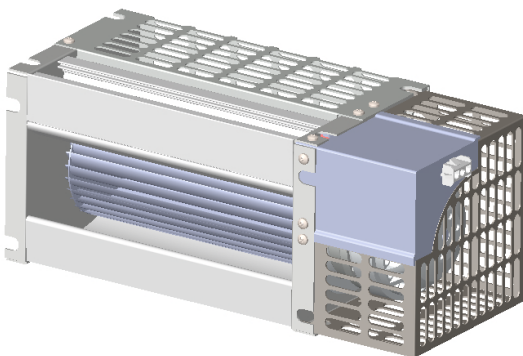
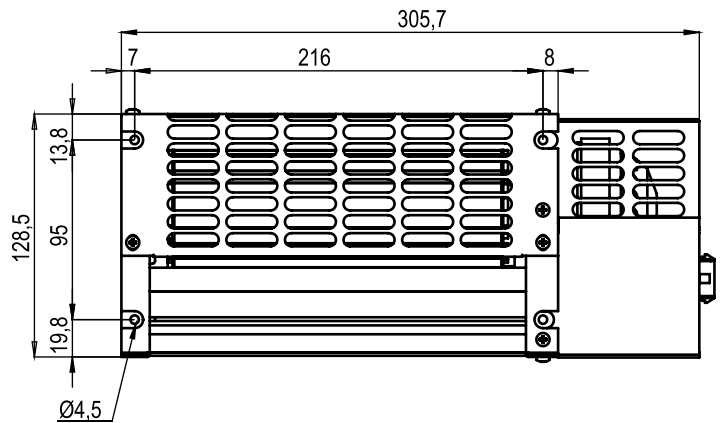
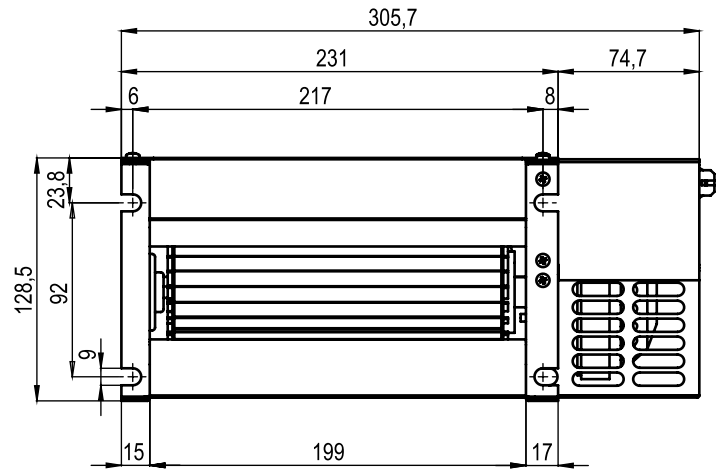
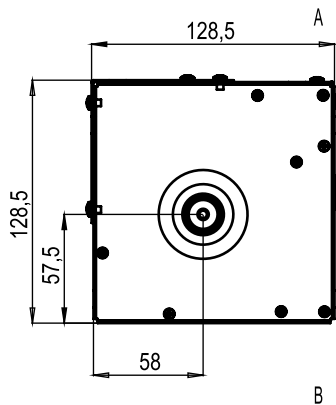
Reference Standards:

EN 61010 (safety)

EN 61326 (EMC)

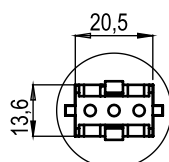
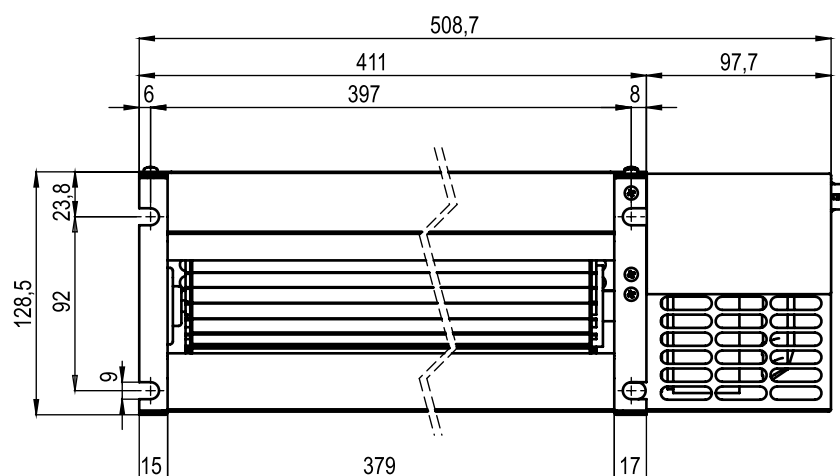
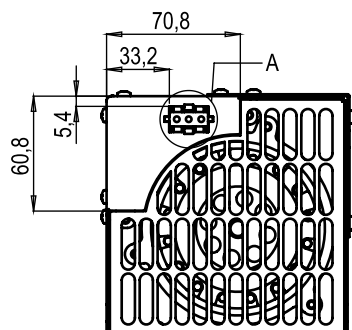


DETAIL A  
SCALE 1 : 2

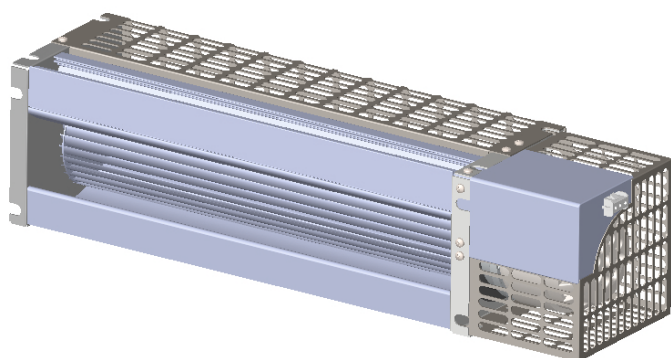
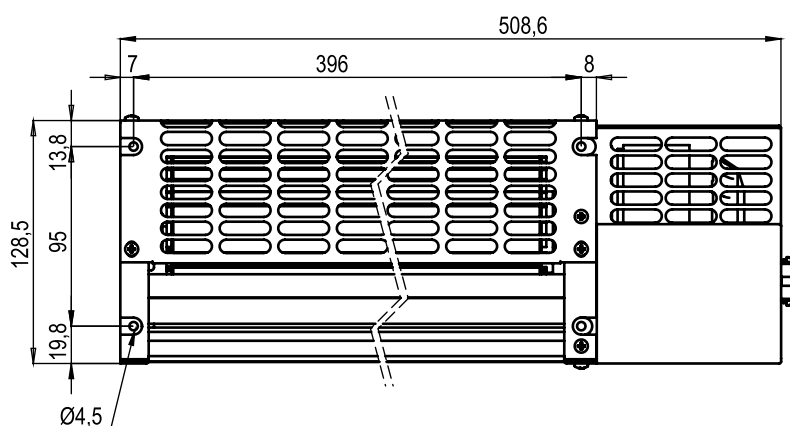
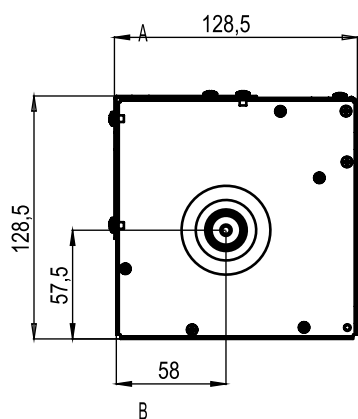


|                |      |
|----------------|------|
| Voltage(V)     | 230  |
| Frequency (Hz) | 50   |
| Power (W)      | 60   |
| Current (mA)   | 0,26 |
| Speed(rpm)     | 2450 |
| Airflow(m³/h)  | 515  |
| Capacitor (uF) | 1,5  |

**INULATION CLASS (H)**

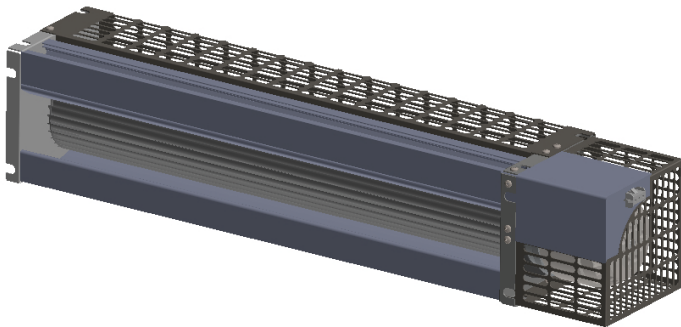
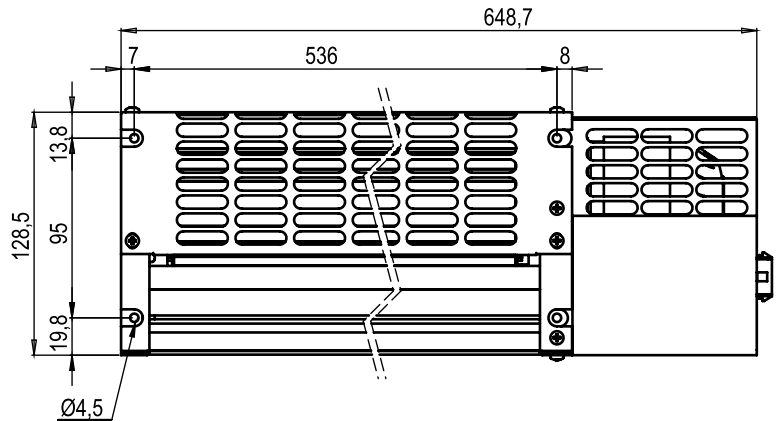
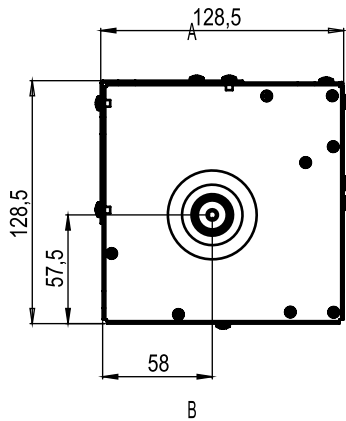
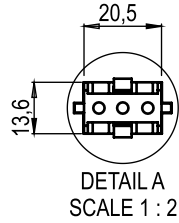
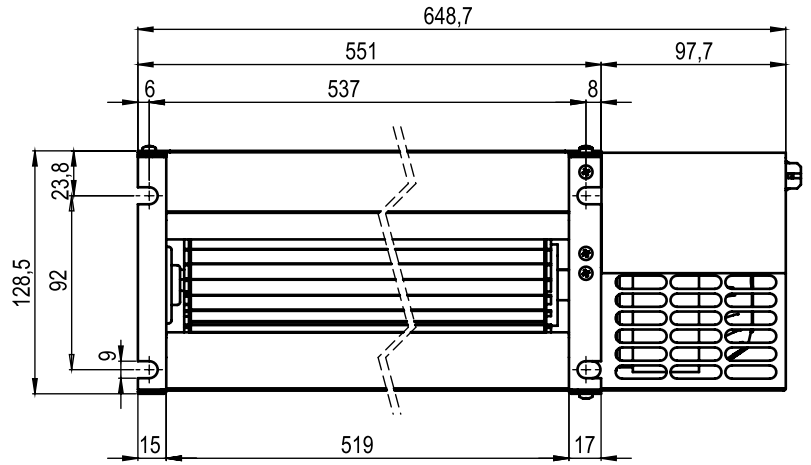
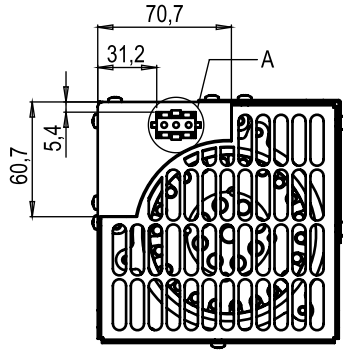


DETAIL A  
SCALE 1 : 2



|                |      |
|----------------|------|
| Voltage(V)     | 230  |
| Frequency (Hz) | 50   |
| Power (W)      | 105  |
| Current (mA)   | 0,45 |
| Speed(rpm)     | 2620 |
| Airflow(m³/h)  | 865  |
| Capacitor (uF) | 3    |

**INULATION CLASS (H)**

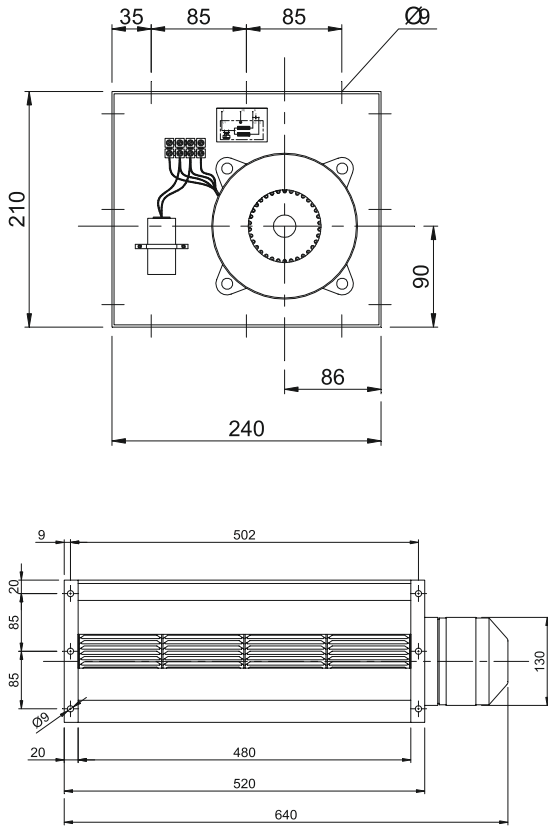


|                |      |
|----------------|------|
| Voltage(V)     | 230  |
| Frequency (Hz) | 50   |
| Power (W)      | 170  |
| Current (mA)   | 0,73 |
| Speed(rpm)     | 2580 |
| Airflow(m³/h)  | 1235 |
| Capacitor (uF) | 6    |

**INULATION CLASS (H)**



### Fan Dimensions

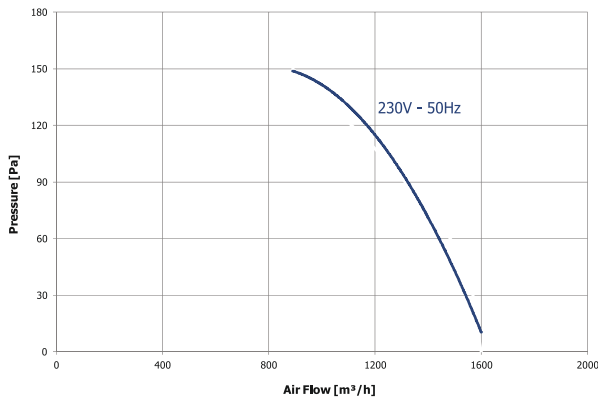


### Technical Data

|                                       |                                       |                        |
|---------------------------------------|---------------------------------------|------------------------|
| <b>Standard</b>                       | IEC 60034-1, IEC 60335-2:80, ISO 5801 |                        |
| <b>Tolerance</b>                      | Class 2 acc. to DIN 24166             |                        |
| <b>Balance Quality</b>                | G6.3 acc. to ISO 1940-1               |                        |
| <b>Number of Poles</b>                | 4                                     |                        |
| <b>Voltage (1P)</b>                   | 230 V                                 |                        |
| <b>Frequency</b>                      | 50 Hz                                 | 60 Hz                  |
| <b>Power</b>                          | 230 W                                 | 380 W                  |
| <b>Current (<math>\pm 5\%</math>)</b> | 1.2 A                                 | 1.9 A                  |
| <b>Speed</b>                          | 1440 rpm                              | 1680 rpm               |
| <b>Noise (LpA@1m)</b>                 | 69 dbA                                | 72 dbA                 |
| <b>Air Flow</b>                       | 1600 m <sup>3</sup> /h                | 1800 m <sup>3</sup> /h |
| <b>Installation Position</b>          | Horizontal                            |                        |
| <b>Operation</b>                      | Indoor                                |                        |
| <b>Operating Temperature</b>          | -25~+50°C                             |                        |
| <b>Motor Insulation Class</b>         | F                                     |                        |
| <b>Thermal Protection</b>             | Yes (no external wiring required)     |                        |
| <b>Condensator</b>                    | Yes (12µf 400V)                       |                        |
| <b>Weight</b>                         | 10 kg                                 |                        |



### Characteristic Curve



### Customization Options

#### Motor<sup>1</sup>

Protection Class

☒ IP44

#### Fasteners<sup>2</sup>

Material

☐ Zinc Coated  
☒ Stainless Steel

#### Wings<sup>2</sup>

Material

☒ Aluminum  
☐ Plastic

#### Corrosion Class

Powder Coating

☐ C3 medium  
☒ C4 medium  
☐ C5 medium

#### Housing

Material

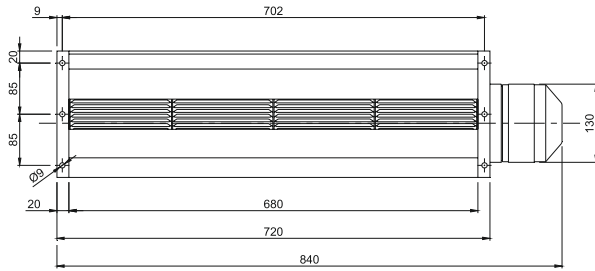
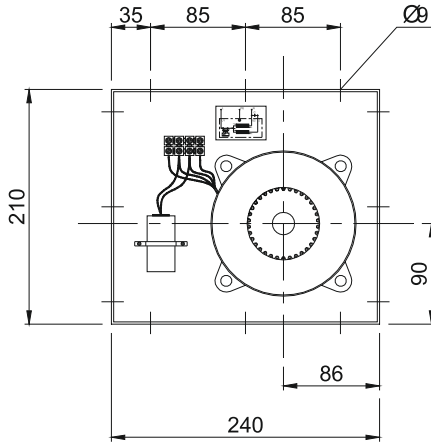
☐ Galvanized Steel  
☒ Aluminum  
☐ Stainless Steel

<sup>1</sup> : aluminum, RAL9005  
<sup>2</sup> : delivered unpainted

Color

☐ RAL9005  
☐ RAL7032  
☐ Custom Color  
☒ Unpainted

## Fan Dimensions

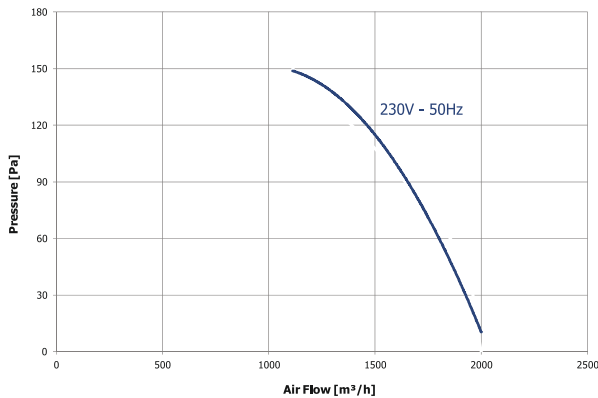


## Technical Data

|                               |                                       |           |
|-------------------------------|---------------------------------------|-----------|
| <b>Standard</b>               | IEC 60034-1, IEC 60335-2:80, ISO 5801 |           |
| <b>Tolerance</b>              | Class 2 acc. to DIN 24166             |           |
| <b>Balance Quality</b>        | G6.3 acc. to ISO 1940-1               |           |
| <b>Number of Poles</b>        | 4                                     |           |
| <b>Voltage (1P)</b>           | 230 V                                 |           |
| <b>Frequency</b>              | 50 Hz                                 | 60 Hz     |
| <b>Power</b>                  | 260 W                                 | 425 W     |
| <b>Current (± 5%)</b>         | 1.3 A                                 | 2.0 A     |
| <b>Speed</b>                  | 1400 rpm                              | 1600 rpm  |
| <b>Noise (LpA@1m)</b>         | 70 dbA                                | 74 dbA    |
| <b>Air Flow</b>               | 2000 m³/h                             | 2200 m³/h |
| <b>Installation Position</b>  | Horizontal                            |           |
| <b>Operation</b>              | Indoor                                |           |
| <b>Operating Temperature</b>  | -25~+50°C                             |           |
| <b>Motor Insulation Class</b> | F                                     |           |
| <b>Thermal Protection</b>     | Yes (no external wiring required)     |           |
| <b>Condansator</b>            | Yes (12µf 400V)                       |           |
| <b>Weight</b>                 | 11 kg                                 |           |



## Characteristic Curve



## Customization Options

### Motor<sup>1</sup>

Protection  
Class

☒ IP44

### Fasteners<sup>2</sup>

Material

☐ Zinc Coated  
☒ Stainless Steel

### Wings<sup>2</sup>

Material

☒ Aluminum  
☐ Plastic

### Corrosion Class

Powder  
Coating

☐ C3 medium  
☒ C4 medium  
☐ C5 medium

### Housing

Material

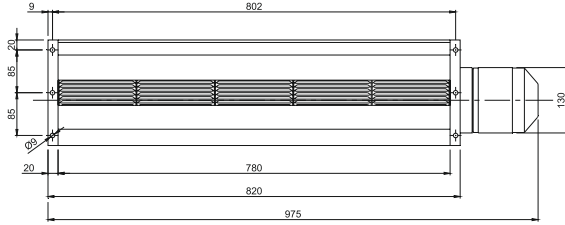
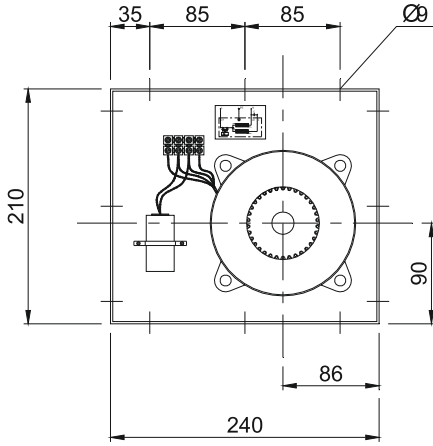
☐ Galvanized Steel  
☒ Aluminum  
☐ Stainless Steel

<sup>1</sup> : aluminum, RAL9005  
<sup>2</sup> : delivered unpainted

Color

☐ RAL9005  
☐ RAL7032  
☐ Custom Color  
☒ Unpainted

### Fan Dimensions

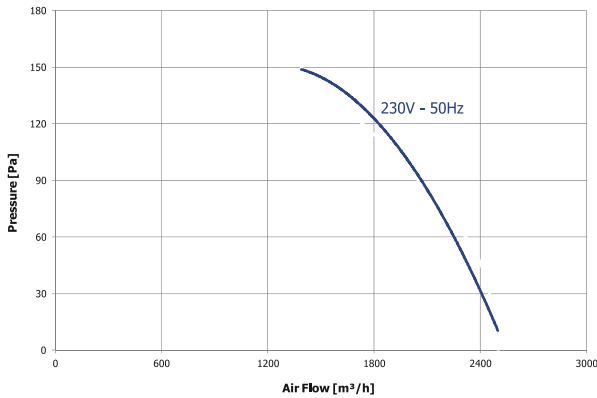


### Technical Data

|                               |                                       |           |
|-------------------------------|---------------------------------------|-----------|
| <b>Standard</b>               | IEC 60034-1, IEC 60335-2:80, ISO 5801 |           |
| <b>Tolerance</b>              | Class 2 acc. to DIN 24166             |           |
| <b>Balance Quality</b>        | G6.3 acc. to ISO 1940-1               |           |
| <b>Number of Poles</b>        | 4                                     |           |
| <b>Voltage (1P)</b>           | 230 V                                 |           |
| <b>Frequency</b>              | 50 Hz                                 | 60 Hz     |
| <b>Power</b>                  | 350 W                                 | 600 W     |
| <b>Current (± 5%)</b>         | 1.7 A                                 | 3.0 A     |
| <b>Speed</b>                  | 1450 rpm                              | 1700 rpm  |
| <b>Noise (LpA@1m)</b>         | 71 dbA                                | 75 dbA    |
| <b>Air Flow</b>               | 2500 m³/h                             | 2800 m³/h |
| <b>Installation Position</b>  | Horizontal                            |           |
| <b>Operation</b>              | Indoor                                |           |
| <b>Operating Temperature</b>  | -25~+50°C                             |           |
| <b>Motor Insulation Class</b> | F                                     |           |
| <b>Thermal Protection</b>     | Yes (no external wiring required)     |           |
| <b>Condansator</b>            | Yes (16µf 400V)                       |           |
| <b>Weight</b>                 | 14 kg                                 |           |



### Characteristic Curve



### Customization Options

#### Motor<sup>1</sup>

Protection Class

☒ IP44

#### Fasteners<sup>2</sup>

Material

☐ Zinc Coated  
☒ Stainless Steel

#### Wings<sup>2</sup>

Material

☒ Aluminum  
☐ Plastic

#### Corrosion Class

Powder Coating

☐ C3 medium  
☒ C4 medium  
☐ C5 medium

#### Housing

Material

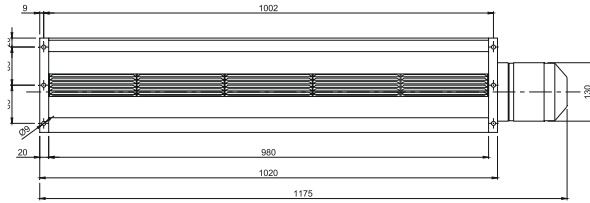
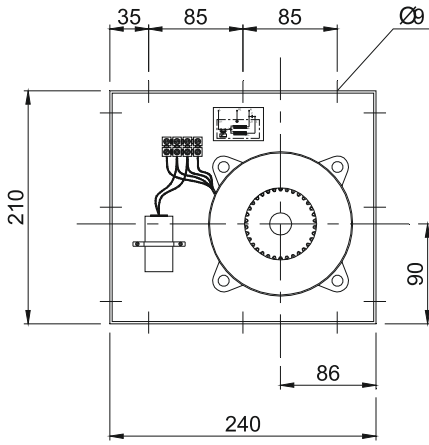
☐ Galvanized Steel  
☒ Aluminum  
☐ Stainless Steel

<sup>1</sup> : aluminum, RAL9005  
<sup>2</sup> : delivered unpainted

Color

☐ RAL9005  
☐ RAL7032  
☐ Custom Color  
☒ Unpainted

### Fan Dimensions

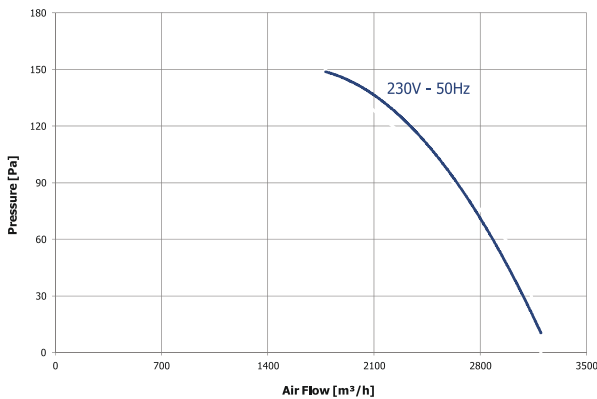


### Technical Data

|                               |                                       |           |
|-------------------------------|---------------------------------------|-----------|
| <b>Standard</b>               | IEC 60034-1, IEC 60335-2:80, ISO 5801 |           |
| <b>Tolerance</b>              | Class 2 acc. to DIN 24166             |           |
| <b>Balance Quality</b>        | G6.3 acc. to ISO 1940-1               |           |
| <b>Number of Poles</b>        | 4                                     |           |
| <b>Voltage (1P)</b>           | 230 V                                 |           |
| <b>Frequency</b>              | 50 Hz                                 | 60 Hz     |
| <b>Power</b>                  | 400 W                                 | 670 W     |
| <b>Current (± 5%)</b>         | 2.0 A                                 | 3.1 A     |
| <b>Speed</b>                  | 1430 rpm                              | 1660 rpm  |
| <b>Noise (LpA@1m)</b>         | 72 dbA                                | 77 dbA    |
| <b>Air Flow</b>               | 3200 m³/h                             | 3500 m³/h |
| <b>Installation Position</b>  | Horizontal                            |           |
| <b>Operation</b>              | Indoor                                |           |
| <b>Operating Temperature</b>  | -25~+50°C                             |           |
| <b>Motor Insulation Class</b> | F                                     |           |
| <b>Thermal Protection</b>     | Yes (no external wiring required)     |           |
| <b>Condansator</b>            | Yes (16µf 400V)                       |           |
| <b>Weight</b>                 | 15 kg                                 |           |



### Characteristic Curve



### Customization Options

#### Motor<sup>1</sup>

Protection  
Class

☒ IP44

#### Fasteners<sup>2</sup>

Material

☐ Zinc Coated  
☒ Stainless Steel

#### Wings<sup>2</sup>

Material

☒ Aluminum  
☐ Plastic

#### Corrosion Class

Powder  
Coating

☐ C3 medium  
☒ C4 medium  
☐ C5 medium

#### Housing

Material

☐ Galvanized Steel  
☒ Aluminum  
☐ Stainless Steel

<sup>1</sup> : aluminum, RAL9005  
<sup>2</sup> : delivered unpainted

Color

☐ RAL9005  
☐ RAL7032  
☐ Custom Color  
☒ Unpainted









ARES

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